Chicago Midway International Airport Air Traffic Procedural Changes Environmental Assessment

Final
Appendices

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Contents

Appendix A ACRONYMS, ABBREVIATIONS AND GLOSSARY OF TERMS A-1

Appendix B REFERENCES B-1

Appendix C LIST OF PREPARERS C-1

Appendix D AIR TRAFFIC PROCEDURES D-1

Appendix E AIRCRAFT NOISE ANALYSIS E-1

E.1 BASICS OF NOISE E-1
E.1.1 Introduction to Acoustics and Noise Terminology E-1
E.1.2 The Effects of Aircraft Noise on People E-8
E.1.3 Community Annoyance E-10
E.1.4 Noise/Land Use Compatibility Guidelines E-11
E.2 INTEGRATED NOISE MODEL (INM) TECHNICAL REPORT E-12
E.2.1 Noise Metric E-12
E.2.2 Noise Model E-12
E.2.3 Comparability of Conditions E-12
E.2.4 Noise Modeling Input Data E-13
E.3 NOISE INTEGRATED ROUTING SYSTEM (NIRS) TECHNICAL REPORT E-35
E.3.1 Noise Modeling Methodology and Data Inputs E-35
E.3.2 Study Area E-36
E.3.3 Airport Layout E-37
E.3.4 Aircraft Operations E-39
E.3.5 Runway Utilization E-43
E.3.6 Flight Tracks E-45
E.3.7 Meteorological Conditions E-45
E.3.8 Modeling Locations E-45

Appendix F INVENTORY OF POTENTIAL DEPARTMENT OF TRANSPORTATION ACT, SECTION 4(f) RESOURCES AND NOISE EXPOSURE F-1

Appendix G INVENTORY OF HISTORIC RESOURCES AND NOISE EXPOSURE G-1

Appendix H COORDINATION AND CONSULTATION H-1

H.1 PUBLIC INVOLVEMENT H-1
H.1.1 Draft EA Publication and Public Comment Period H-1
H.1.2 Draft EA Public Hearing H-2
H.1.3 Final EA Publication H-2
H.2 LETTERS TO GOVERNMENT AGENCIES, AND ELECTED OFFICIALS H-4
H.2.1 Sample Notice of Availability H-4
H.2.2 List of Government Agency and Elected Official Document Recipients H-6
H.3 PUBLIC NOTICES H-8
H.4 COMMENTS AND RESPONSES H-13

Figures

Figure E.1-1 Variations in the A-Weighted Sound Level Over Time E-3
Figure E.1-2 Sound Exposure Level E-4
Figure E.1-3 Daily Noise Dose E-6
Figure E.1-4 Examples of Day-Night Average Sound Levels, DNL E-7

Figure E.1-5 Outdoor Speech Intelligibility E-8
Figure E.1-6 Sleep Interference E-9
Figure E.1-7 Percentage of People "Highly Annoyed" E-10
Figure E.1-8 Community Reaction as a Function of Outdoor DNL E-11

Tables

Table A-1 Acronyms A-1
Table A-2 Glossary of Terms A-3
Table E.2-1 Midway Airport Summary of Modeled Annual Operations E-13
Table E.2-2 Midway Airport Summary of Modeled Annual Operations E-13
Table E.2-3 Midway Airport Summary of Day-Night Operational Distributions E-14
Table E.2-4 Midway Airport Average Day Operations by Aircraft Type E-15
Table E.2-5 Midway Airport Runway Use – Existing Conditions (2012) E-16
Table E.2-6 Midway Airport Runway Use – Future Conditions (2018) E-16
Table E.2-7 New Flight Procedures Utilization E-18
Table E.2-8 Midway Airport Arrival Flight Track Utilization by Aircraft Category – Existing (2012) and Future (2018) Conditions E-19
Table E.2-9 Midway Airport Departure Flight Track Utilization by Aircraft Category – Existing (2012) and Future (2018) Conditions E-24
Table E.2-10 Midway Airport Eastbound Departures Reassigned to New INM Tracks – Future Conditions (2018) E-29
Table E.2-11 INM Stage Length Categories E-30
Table E.2-12 Midway Airport Departure Trip Length Distribution – Existing (2012) and Future (2018) Conditions E-30
Table E.3-9 INM – NIRS Flight Track Associations – ARRIVALS E-45
Table E.3-10 INM – NIRS Flight Track Associations - DEPARTURES E-66

Appendix A ACRONYMS, ABBREVIATIONS AND GLOSSARY OF TERMS

Table A-1 Acronyms

Acronym	Full Phrase
AAD	Average Annual Day
ACCRI	Aviation Climate change Research Initiative
ACHP	Advisory Council on Historic Preservation
ADS	Automatic Dependent Surveillance
AEE	FAA Office of Environment and Energy
AFE	Above Field Elevation
AGL	Above Ground Level
APE	Area of Potential Effect
ARTCC	Air Route Traffic Control Center
ATC	Air Traffic Control
ATCT	Air Traffic Control Tower
ATO	Air Traffic Organization
C90	Chicago Terminal Radar Approach Control
CAA	Federal Clean Air Act of 1979
CDA	The City of Chicago Department of Aviation
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CGT	Chicago Heights VOR
CH_4	Methane
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CVA	Davenport VOR
CY	Calendar Year
dB	Decibel
DME	Distance Measuring Equipment
DNL	Day-Night Average Sound Level
DNR	Department of Natural Resources
DOI	Department of Interior
DOT	Department of Transportation
EA	Environmental Assessment
EIS	Environmental Impact Statement
EJ	Environmental Justice
EO	Executive Order
EPA	Environmental Protection Agency
ESA	United States Endangered Species Act of 1973
FAA	Federal Aviation Administration
FICON	Federal Agency Committee on Noise
FMS	Flight Management System
FWA	Fort Wayne VOR
GA	General Aviation
GAO	General Accounting Office
GHG	Greenhouse Gas
GIS	Geographic Information System
GPS	Global Positioning System
HFC	Hydro Fluorocarbons
HHS	Department of Health and Human Services
HUD	United States Department of Housing and Urban Development
ICAO	International Civil Aviation Organization
IFR	Instrument Flight Rules
ILS	Instrument Landing System

IMC	Instrument Meteorological Conditions
INM	Integrated Noise Model
IPCC	Intergovernmental Panel on Climate Change
JO	Joint Order
JOT	Joliet VOR
L/R	Left/Right
L_{eq}	Equivalent Sound Level
LFD	Litchfield VOR
L_{max}	Maximum Sound Level
LOC	Localizer
LWCF	Land and Water Conservation Fund
MBTA	Migratory Bird Treaty Act of 1918
MDW	Midway International Airport
MNFI	Michigan Natural Features Inventory
MOU	Memoranda of Understanding
MSL	Mean Sea Level
MT	Metric Tons
MT CO_2e	Metric Tons of Carbon Dioxide Equivalent
N2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NAS	National Airspace System
NASA	National Aeronautics and Space Administration
NATCA	National Air Traffic Control Administration
NAVAIDs	Navigational Aids
NCDC	National Climatic Data Center
NEPA	National Environmental Policy Act of 1969
NextGen	Next Generation Air Transportation System
NHPA	National Historic Preservation Act of 1966
NIRS	Noise integrated Routing System
NM	Nautical Miles
NMFS	National Marine Fisheries Service
NO_2	Nitrogen Dioxide
NPS	National Park Service
NRHP	National Register of Historic Places
O_3	Ozone
OKK	Kokomo VOR
ORD	Chicago O'Hare International Airport
PARTNER	Partnership for Air Transportation Noise & Emissions Reduction
Pb	Lead
PBN	Performance Based Navigation
PM	Particulate Matter
PM_{10}	Particulate matter with a diameter of less than 10 micrometers
$PM_{2.5}$	Particulate matter with a diameter of less than 2.5 micrometers
PTC	Presumed to Conform
RNAV	Area Navigation
RNP	Required Navigation Performance
SEL	Sound Exposure Level
SF_6	Sulfur Hexafluoride
SHPO	State Historic Preservation Officer
SIAP	Standard Instrument Approach Procedure
SID	Standard Instrument Departure
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
SOP	Standard Operating Procedure
SPI	Spinner VOR

SPL	Sound Pressure Level
STAR	RNAV Standard Terminal Arrival
TAF	Terminal Area Forecast
TARGETS	Terminal Area Route Generation, Evaluation, Traffic and Simulation
THPO	Tribal Historic Preservation Officer
TRACON	Terminal Radar Approach Control
USC	Unites States Code
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VFR	Visual Flight Rules
VMC	Visual Meteorological Conditions
VOR	VHF Omni-directional Range
YDNL	Yearly Day-Night Average Sound Level
ZAU	Chicago Air Route Traffic Control Center

Table A-2 Glossary of Terms

A-Weighted Sound Level	A quantity, in decibels, read from a standard sound-level meter with A-weighting circuitry. The A-weighting scale discriminates against the lower frequencies below 1000 hertz according to a relationship approximating the auditory sensitivity of the human ear. The A-weighted sound level is approximately related to the relative “noisiness” or “annoyance” of many common sounds.
Acoustics	The science of sound, including the generation, transmission, and effects of sound waves, both audible and inaudible.
Air Carrier	An entity holding a Certificate of Public Convenience and Necessity issued by the Department of Transportation (DOT) to conduct scheduled air services over specified routes and a limited amount of non-scheduled operations.
Air Pollutant	Any substance in air that could, in high enough concentration, harm man, other animals, vegetation, or material. Pollutants may include almost any natural or artificial composition of airborne matter capable of being airborne. They may be in gases, particulates, or in combinations thereof. Generally, they fall into two main groups: (1) those emitted directly from identifiable sources and (2) those produced in the air by interaction between two or more primary pollutants, or by reaction with normal atmospheric constituents, with or without photo-activation.
Air Route Traffic Control Center (ARTCC, Center)	An FAA facility established to provide air traffic control service to aircraft operating on an Instrument Flight Rules (IFR) flight plan within controlled airspace and principally during the en-route phase of flight. When equipment capabilities and controller workload permit, certain advisory/assistance services may be provided to Visual Flight Rules (VFR).
Air Traffic Control (ATC)	A service operated by appropriate authority to promote the safe, orderly, and expeditious flow of air traffic.
Airport Traffic Control Tower (ATCT)	A facility that uses air/ground communications, visual signaling, and other devices to provide ATC services to aircraft operating in the vicinity of an airport. Authorizes aircraft to land or take-off at the airport controlled by the tower regardless of flight plan or weather conditions.
Airspace	Navigable area used by aircraft for purposes of flight.
Airway	An area of Class E airspace established in the form of a corridor, the centerline of which is defined by radio navigational aids. The network of airways serving aircraft operations up to but not including 18,000 feet MSL are referred to as “Victor” airways. The network of airways serving aircraft operations at or above 18,000 feet MSL are referred to as a “Jet Route”.
Altitude	Height above a reference point, usually expressed in feet. Reference points are typically sea level, the ground, or airfield elevation in which case MSL, AGL or AFE further describes the altitude, respectively.
Ambient Noise Level	The level of noise that is all-encompassing within a given environment for which a single source cannot be determined. It is usually a composite of sounds from many and varied sources near to and far from the receiver.
Area Navigation (RNAV)	A method of air navigation that permits aircraft to operate on any desired course within a network of station-referenced navigation aids (NAVAIDs), rather than navigating directly to and from the NAVAIDs.
Arithmetic Averaged Sound Pressure Level	The arithmetic sum of a series of sound pressure levels divided by the number of levels included in the sum.
Arrival Stream	A flow of aircraft that are following similar arrival procedures. This can conserve flight distance, reduce congestion, and allow instrument flight plans into airports with limited NAVAIDs.
Attainment Area	An area in which the Federal or state standards for ambient air quality are being achieved.
Automated Radar Terminal System (ARTS)	Computer-aided radar display subsystems capable of associating alphanumeric data, such as aircraft identification, altitude, and airspeed-with aircraft radar returns.

Based Aircraft	Active aircraft that are stationed at an airport on a permanent basis.
Block	Census blocks are small areas bounded on all sides by visible features such as streets, roads, streams, and railroad tracks, and by invisible boundaries such as city, town, township, and county limits; property lines; and short, imaginary extensions of streets and roads. Blocks are numbered uniquely within each census tract or block numbering area (BNA). A three-digit number identifies a block, sometimes with a single alphabetical suffix. The U.S. Bureau of Census designates census blocks.
Census Block	A U.S. Census block group is one of several geographical units by which the U.S. Census Bureau organizes data and is the smallest such unit available for this analysis throughout the study area.
Centroid	A point representing the geographic center of a US Bureau of Census' census block.
Climb	The act or instance of increasing altitude.
Conformity	A determination that a project conforms with a State Implementation Plan (SIP) whose purpose is to eliminate or reduce the severity and number of violations of the National Ambient Air Quality Standards; and does not impede the scheduled attainment of such standards.
Constructive Use	When the proximity impacts (e.g., noise) of a proposed project adjacent to, or near, a Section 4(f) property result in substantial impairment of the property
Controlled Airspace	Airspace of defined dimensions within which air traffic control service is provided to IFR flights and to VFR flights in accordance with the airspace classification.
Corner Posts	The relative geographical locations with respect to TRACON airspace that allow referencing various arrival procedures based on the direction from which they enter the Airport general area.
Criteria Pollutants	The 1970 amendments to the Clean Air Act required EPA to set National Ambient Air Quality Standards for certain pollutants known to be hazardous to human health. EPA has identified and set standards to protect human health and welfare for six pollutants: ozone, carbon monoxide, total suspended particulates, sulfur dioxide, lead, and nitrogen oxide. The term, "criteria pollutants" derives from the requirement that EPA must describe the characteristics and potential health and welfare effects of these pollutants. It is on the basis of these criteria that standards are set or revised.
Day-Night Average Sound Level (DNL)	A measure of the annual average noise environment over a 24-hour day. It is the 24-hour, logarithmic- (or energy-) average, A-weighted sound pressure level with a 10-decibel penalty applied to the nighttime event levels that occur between 10 p.m. and 7 a.m.
De minimis Levels	De minimis is defined as lacking significance or importance, or so minor as to be disregarded. De minimis levels are minimum air pollutant levels and vary according to the type of pollutant and severity of the non-attainment area. Unless state minimums are lower than Federal, these levels are consistent for all conformity determinations. The calculation of total project emissions is made and compared to these de minimis cutoffs. If the emissions for a pollutant are above de minimis, the project requires a conformity determination. All emissions from the project must be analyzed and found to conform, not only those above the de minimis levels.
Decibel (dB)	Commonly used to define the level produced by a sound source. The decibel scale is logarithmic (e.g., when the scale goes up by ten, the perceived level is twice as loud)
Departure	The act of an aircraft taking off from an airport.
Departure Procedure (DP)	A preplanned IFR ATC departure procedure printed for pilot use in graphic and/or textual form. DPs provide transition from the terminal to the appropriate en route structure.
Descent	The process of decreasing altitude.
Downwind	In the direction in which the wind blows, with the wind behind.
Emissions	Pollution discharged into the atmosphere from stationary sources such as smokestacks, surface areas of commercial or industrial facilities, residential chimneys, and from mobile sources such as motor vehicles, locomotives, or aircraft exhausts.
En Route Airspace	A general term to describe the airspace controlled by an ARTCC.
Energy-Averaged Sound Pressure Level	The logarithmic sum of the sound power of a series of sound pressure levels divided by the number of levels included in the sum.
Enplanement	The total number of revenue passengers boarding aircraft, including originating, stopover, and transfer passengers, in scheduled and non-scheduled services.
Environmental Assessment (EA)	An EA is a concise document used to describe the environmental impacts of a proposed Federal action.
Environmental Noise	Unwanted sound from various outdoor sources that produce noise (e.g., aircraft, cars, trucks, buses, railways, industrial plants, construction activities)
Equipage	Navigation and aircraft surveillance equipment installed on aircraft
Equivalent Sound Level (Leq)	The level of a constant sound, which, in the given situation and time period, has the same average sound energy, as does a time-varying sound. Specifically, equivalent sound level is the energy-averaged sound pressure level of the individual A-weighted sound pressure levels occurring during the time interval.

Federal Aviation Administration (FAA)	The Federal Aviation Administration (FAA) is the agency of the United States government with primary responsibility for civil aviation. Among its major functions are the regulation of civil aviation to promote safety, fulfill the requirements of national defense and development, and operate a common system of air traffic control and navigation for both civil and military aircraft.
Fix	A geographical position determined by reference to one or more radio NAVAIDS, celestial plotting, or by some other means such as satellite navigation.
Flight Data Information	Specific information used by ATC for an individual flight, including information such as aircraft identification, destination, type, route, and altitude.
Flight Management Systems (FMS)	An FMS is an integrated suite of sensors, receivers, and computers, coupled with a navigation database. These systems generally provide performance and RNAV guidance to displays and automatic flight control systems.
Flight Track	The route used by an aircraft in flight.
Flow	The direction in which aircraft take-off and land at a particular airport. Aircraft generally take-off and land into the wind. However, other factors (e.g., nearby airports, construction) can also affect flow
Flyways	Migration routes for avian species
Frequency (acoustic)	The number of oscillations per second completed by a vibrating object.
General Aviation (GA)	That portion of civil aviation which encompasses all facets of aviation except air carriers holding a certificate of public convenience and necessity from the Civil Aeronautics Board and large aircraft commercial operators.
Global Positioning System (GPS)	A satellite-based radio positioning and navigation system operated by the U.S. Department of Defense. The system provides highly accurate position and velocity information, and precise time, on a continuous global basis to an unlimited number of properly equipped users.
Hand-Off	An action taken to transfer the radar identification of an aircraft from one controller to another. When the aircraft enters the receiving controller's airspace, radio communications with the aircraft are transferred.
Heading	A compass bearing indicating the direction of travel.
Hertz (Hz)	The unit used to designate frequency; specifically, the number of cycles per second.
Household	A household includes all the persons who occupy a housing unit. The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share living arrangements.
Housing Unit	A housing unit is a house, apartment, a mobile home or trailer, a group of rooms or a single room occupied as separate living quarters or, if vacant, intended for occupancy as separate living quarters.
Hydrocarbons (HC)	Chemical compounds that consist entirely of carbon and hydrogen.
Instrument Departure Procedure	A preplanned instrument flight rule (IFR) departure procedure published for pilot use, in graphic or textual format, that provides obstruction clearance from the terminal area to the appropriate en route structure. There are two types of DP, Obstacle Departure Procedure (ODP), printed either textually or graphically, and, Standard Instrument Departure (SID), which is always printed graphically
Instrument Flight Rules (IFR)	Rules governing the procedures for conducting instrument flight in aircraft. Also a term used by pilots and controllers to indicate type of flight plan.
Instrument Landing System	A precision instrument approach system that normally consists of the following electronic components and visual aids: a) Localizer (provides course guidance to the runway); b) Glideslope (provides vertical guidance for aircraft during approach and landing); c) Outer Marker (a marker beacon at or near the glideslope intercept altitude of an ILS approach); d) Middle Marker (a marker beacon that defines a point along the glideslope of an ILS normally located at or near the point of decision height); and e) Approach Lights (an airport lighting facility that provides visual guidance to landing aircraft by radiating light beams in a directional pattern by which the pilot aligns the aircraft with the extended centerline of the runway on his/her final approach for landing).
Instrument Meteorological Conditions (IMC)	Weather conditions expressed in terms of visibility, distance from clouds, and cloud ceilings during which all aircraft are required to operate using Instrument Flight Rules (IFR).
Integrated Noise Model (INM)	A computer program developed, updated and maintained by the Federal Aviation Administration to evaluate aircraft noise impacts in the vicinity of airports.
In-Trail Spacing	The distance between two aircraft on an identical route; one aircraft is following another.
Invasive Species	Invasive species are organisms (usually transported by humans) that successfully establish themselves in, and then overcome, otherwise intact, pre-existing native ecosystems.
Knots	Speed measured in nautical miles per hour.
Level-off	The process by which an aircraft that is initially changing altitude maintains a constant altitude. This can be done once the aircraft reaches its cruise altitude in the en route environment, or as a series of steps taken as the aircraft transition to/from the en route environment to guarantee adequate separation from other aircraft.

Loudness	The attribute of an auditory sensation in terms of which sounds may be ordered on a scale extending from soft to loud. Loudness depends primarily upon the sound pressure of the source, but it also depends upon the frequency and waveform of the source.
Low-Income	A person whose median household income is at or below the Department of Health and Human Services poverty guidelines
Mean Sea Level (MSL)	The height of the surface of the sea for all stages of the tide, used as a reference for elevations or altitude of aircraft flight. Also called sea level datum.
National Airspace System (NAS)	The common network of air navigation facilities, equipment and services, airports or landing areas; aeronautical charts, information and services; rules, regulations and procedures, technical information, and manpower and material.
National Ambient Air Quality Standards (NAAQS)	Standards for criteria pollutants established by United States Environmental Protection Agency that apply to outdoor air.
Natural Areas	Undeveloped areas of land such as parks, wildlife refuges/management areas, and nature preserves.
Nautical Mile (NM)	A measure of distance equal to 1 minute of arc on the earth's surface (approx. 6,076 ft.).
Navigation Aids (NAVAIDs)	Any visual or electronic device airborne or on the surface that provides point to point guidance information or position data to aircraft in-flight.
Next Generation Air Transportation System	A program shifting aircraft procedures from fixed. Ground-based radio navigation transmitting facilities and radar to satellite, or GPS, navigation and onboard surveillance
Noise	Any sound that is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise annoying.
Noise Exposure	The cumulative acoustic stimulation reaching the ear of a person over a specified period of time (e.g., a work shift, a day, a working life, or a lifetime).
Noise Integrated Routing System (NIRS)	A computer program developed, updated, and maintained by the FAA to evaluate aircraft noise impact for air traffic actions involving multiple airports over broad geographic areas.
Non-Attainment Area	Areas with levels that exceed one or more of the NAAQS for the criteria pollutants designated in the Clean Air Act.
Non-Directional Beacon (NDB)	A radio beacon transmitting non-directional signals whereby the pilot of an aircraft equipped with direction finding equipment can determine his bearing to or from the radio beacon and "home" on or track to or from the station. When the radio beacon is installed in conjunction with the Instrument Land System (ILS) marker, it is normally called a Compass Locator.
Operation	Landing or take-off of an aircraft.
Over-flights	Aircraft whose flights originate or terminate outside the controlling facility's area that transit the airspace without landing.
Performance-Based Navigation (PBN)	Specifies that aircraft Required Navigation Performance (RNP) and Area Navigation (RNAV) systems performance requirements be defined in terms of accuracy, integrity, availability, continuity and functionality required for the proposed operations in the context of a particular airspace, when supported by the appropriate navigation infrastructure.
Piston Aircraft	Propeller-driven aircraft powered by an internal combustion engine.
Power Settings	Amount of engine power used by the pilot.
Quadrant	A quarter part of a circle, centered on a NAVAID oriented clockwise from magnetic north.
Radar (primary)	A device which, by measuring the time interval between transmission and reception of radio pulses, and correlating the angular orientation of the radiated antenna beam, or beams in azimuth and/or elevation, provides information on range, azimuth, and /or elevation of objects in the path of the transmitted pulses. Also known as "Primary Radar".
Radar (secondary)	A radar system in which the object to be detected is fitted with cooperative equipment in the form of a radio receiver/transmitter (transponder). Radar pulses transmitted from the searching transmitter/receiver (interrogator) site are received in the cooperative equipment and used to trigger a distinctive transmission from the transponder. This reply transmission, rather than a reflected signal, is then received back at the interrogator site for processing and display at an ATC facility. Also known as a "Radar Beacon".
Radial	A magnetic bearing extending from a VOR/VORTAC/TACAN navigation facility.
Required Navigation Performance (RNP)	A type of performance-based navigation (PBN) that allows an aircraft to fly a specific path between two 3-dimensionally defined points in space. RNP differs from Area Navigation (RNAV) systems in that there is a requirement for on-board performance monitoring and alerting specification.
RNAV (VOR/DME)	A SIAP that employs Area Navigation using a combination of VHF Omni-directional Range (VOR) and Distance Measuring Equipment (DME) ground stations for navigational course guidance.
Satellite Navigation	See Global Positioning System (GPS).
Section 4(f)	A resource that may be protected under special provisions of the U.S. Department of Transportation Act, 49 USC 303(c).
Sector	A defined volume of airspace, including both lateral and vertical limits, in which a single air traffic controller is responsible for the safe movement of air traffic. A TRACON's or ARTCC's airspace is comprised of multiple sectors.
Separation	Spacing between aircraft. This spacing may be vertical, lateral, longitudinal, or visual.

Sequencing	Procedure in which air traffic is merged into an orderly flow.
Sound Exposure Level (SEL)	A time-integrated metric (i.e., continuously summed over a time period) that quantifies the total energy in the A-weighted sound level measured during a transient noise event. The time period for this measurement is generally taken to be that between the moments when the A-weighted sound level is 10 dB below the maximum.
Sound Pressure Level	A measure, in decibels, of the magnitude of the sound. Specifically, the sound pressure level of a sound that is 10 times the logarithm to the base 10 of the ratio of the squared pressure of this sound to the squared reference pressure. The reference pressure is usually taken to be 20 micropascals. See also Energy-Averaged Sound Pressure Level.
Source (acoustic)	The object that generates the sound.
Standard Instrument Approach Procedure (SIAP)	A series of predetermined maneuvers for the orderly transfer of an aircraft under instrument flight conditions from the beginning of the initial approach to a land or to a point from which a landing may be made visually. It is prescribed and approved of a specific airport by a competent authority
Standard Terminal Arrival (STAR)	A preplanned instrument flight rule (IFR) air traffic control arrival procedure published for pilot use in graphic and/or textual form. STAR's provide transition from the en route structure to an outer fix or an instrument approach fix/arrival waypoint in the terminal area.
Statute Mile (SM)	A measure of distance equal to 5,280 feet.
Sulfur Dioxide (SO2)	Sulfur dioxide typically results from combustion processes, refining of petroleum, and other industrial processes.
Tactical Air Navigation (TACAN)	An ultra-high frequency electronic air navigation aid that provides equipped aircraft a continuous indication of bearing and distance to the station.
Tactical Separation	The separation of aircraft by air traffic control instruction via radio voice communication
Terminal Area	A general term used to describe airspace in which approach control services for airport traffic control service is provided.
Terminal Radar Approach Control (TRACON)	An FAA ATC facility that uses radar and two-way radio communication to provide separation of air traffic within a specified geographic area in the vicinity of one or more large airports.
Time Above (TA or TALA)	The TA noise metric provides the duration in minutes for which aircraft-related noise exceeded a specified A-weighted sound level. If not stated otherwise, TA pertains to a 24-hour day. (e.g., A TA65 [or TALA65] of 17 minutes means that 65 dB was exceeded for a total of 17 minutes of the course of a 24-hour day.)
Topography	The configuration of a surface including its relief and the position of its natural and man-made features.
T-route	A route that corresponds to the RNAV IFR Terminal Transition Route (RITTR) program, and begins and ends at current fixes or NAVAIDs on Victor Airways in terminal airspace.
Turboprop Aircraft	An aircraft whose main propulsive force is provided by a propeller driven by a gas turbine. Additional propulsive force may be provided by gas discharged from the turbine exhaust.
Vector	Heading instructions issued by ATC to provide navigational guidance by radar.
Vector Airway	An airspace area established in the form of a corridor, the centerline of which is defined by radio navigational aids.
Very High Frequency Omni-directional Radio Range Station (VOR)	A ground-based electronic navigation aid transmitting very high frequency navigation signals, 360° in azimuth, oriented from magnetic North. Distance Measuring Equipment (DME) may be installed. Used as a basis for navigation in the National Airspace System.
Very High Frequency Omni-directional Range with Tactical Air Navigation (VORTAC)	A navigation aid providing VOR azimuth, TACAN azimuth, and TACAN distance measuring equipment (DME) at one site. The most common form of radio navigation currently in use.
Visual Flight Rules (VFR)	Rules that govern the procedures for conducting flight under visual conditions. The term 'VFR' is also used in the United States to indicate weather conditions that are equal to or greater than minimum VFR requirements. In addition, it is used by pilots and controllers to indicate type of flight plan.
Visual Meteorological Conditions (VMC)	Weather conditions expressed in terms of visibility, distance from cloud, and ceiling, equal to or better than specified minima.

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Appendix B REFERENCES

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Appendix C LIST OF PREPARERS

As required by FAA Order 1050.1E, this section identifies the names and qualifications of the principal persons contributing information to this EA. The FAA employed the efforts of an interdisciplinary team of scientists, technicians, and experts in various fields to accomplish this study, as required by Section 1502.6 of Council on Environmental Quality (CEQ) regulations. Specialists involved in this EA included FAA and support contractor staff in fields such as air traffic control, airspace planning, noise assessment and abatement, DOT Section 4(f) resources, avian and bat species, and other disciplines. While an interdisciplinary approach has been used to develop the EA, all decisions made with regard to the content and scope of the EA are those of the FAA.

Harris Miller Miller & Hanson Inc.

Name: Vinayak Khera
Job Title: Vice President
Education: M.S., Environmental Engineering; B.S., Aircraft Engineering (minor in Aviation Business Administration); B.A., Economics
Years of Experience: 13
Areas of Expertise Relating to the Project: Specializes in system and state-wide planning studies, airport and airspace design studies and environmental planning for airports. Has worked with federal, state, and local governments, as well as community groups, for more than 13 years to find balanced solutions to issues involving the effects of new capacity-enhancing technologies and policies on the environment. He also has managed several airspace environmental projects. Presently, is principal-in-charge of all of HMMH's OAPM environmental projects.
Project Responsibilities: Project Manager

Name: Diana Wasiuk, PMP
Job Title: Chief Operations Officer
Education: M.B.A., Aviation; B.A., Aviation Business Administration
Years of Experience: 13
Areas of Expertise Relating to the Project: Expert in airfield and airspace operations of both complex commercial airports as well as smaller GA airports. Has served as Project Manager and subject matter expert for several regional airspace redesigns, airport capacity enhancement projects, master plans, NEPA environmental studies and NextGen implementation initiatives. Serves as subject matter expert to industry research groups and conference panels.
Project Responsibilities: Deputy Project Manager, Document Review and Quality Control

Name: Kurt Hellauer
Job Title: Principal Consultant
Education: B.A., Government
Years of Experience: 25
Areas of Expertise Relating to the Project: National Environmental Policy Act (NEPA) program management, environmental impact analysis, and land-use planning. Background in aircraft operations modeling, airspace analysis, airport operations, and land use planning. Certified FAA Commercial Pilot.

Project Responsibilities: Alternatives, Affected Environment, DOT Section 4(f) Properties, Historic & Cultural Resources.

Name: Rhea Hanrahran
Job Title: Consultant
Education: B.S., Physics
Years of Experience: 3
Areas of Expertise Relating to the Project:
Has participated in Part 150 Studies, Sound Insulation Programs, and supported several noise measurement projects. Has experience in Flight Track Analysis, Environmental Impact Studies, and other studies related to State and local requirements.
Project Responsibilities: NIRS Technical Lead

Name: Jesse Lambert
Job Title: Senior Consultant
Education: M.A., International Commerce and Policy; B.A., Political Science
Years of Experience: 5
Areas of Expertise Relating to the Project: Significant experience with research, analysis, and writing for policy initiatives and legal review. Has worked with multiple Federal government-led projects, managing document editing and coordination responsibilities. Supported the FAA Joint Planning and Development Office related to long-term aviation planning for NextGen. Familiar with NextGen aviation concepts and environmental policy.
Project Responsibilities: Editing, Technical Writing, and Document Management

Name: Kirk Harris
Job Title: Consultant
Education: M.B.A., Entrepreneurship; B.S., Aviation Management
Years of Experience: 5
Areas of Expertise Relating to the Project: Airline dispatcher and operations specialist. FAA Commercial Pilot Certificate. Program Management Support to the FAA/Joint Planning and Development office, including leading industry experts of the Aircraft Working Group/Equipage Standing Committee and the Global Harmonization Working Group.
Project Responsibilities: Project Research and Document Development

Name: Chris Waite
Job Title: Consultant
Education: B.A., Physics
Years of Experience: 2
Areas of Expertise Relating to the Project: Part 161 studies, Flight Track Analysis, Environmental Impact Studies, and other studies related to State and local requirements. Sound Insulation Programs & GIS Measurement Technician. Experienced user of the Federal Aviation Administration's airport noise models, the Integrated Noise Model
Project Responsibilities: Noise Impact Analysis – Technical Lead

Name: Michael Hamilton
Job Title: Senior Geographic Information Specialist
Education: B.S., Geographic Information Systems & Cartography; A.S., Survey and Highway Engineering Technology
Years of Experience: 28
Areas of Expertise Relating to the Project: Use of graphics applications (GIS and CAD) for noise contour creation, overlay, manipulation, environmental noise impacts, Census data analysis including environmental justice and population impacts, noise sensitive mapping, land use mapping and analysis, noise barrier and noise mitigation mapping.
Project Responsibilities: Geographic Information Spatial Analysis and Graphics

Name: Phil DeVita
Job Title: Director, Air Quality
Education: M.S., Environmental Studies; B.S., Meteorology
Years of Experience: 20
Areas of Expertise Relating to the Project: Expert in air quality permitting and modeling, wind turbine and solar evaluation, air emissions characterization, and meteorological monitoring.
Project Responsibilities: Air Quality, Natural Resources, and Climate Change Analysis

Name: Stephen Barrett
Job Title: Director, Clean Energy
Education: M.A., Environmental Science and Policy; B.A., International Relations
Years of Experience: 15
Areas of Expertise Relating to the Project: environmental and regulatory consulting and project management. Active in renewable energy and sustainable development initiatives, included in the siting design and LEED analysis, and the permitting of energy, infrastructure, and real estate projects.
Project Responsibilities: Wildlife-related Analysis

Name: Laura Taylor
Job Title: Administrative Assistant
Years of Experience: 30
Areas of Expertise Relating to the Project: Over 30 years of professional support experience including high level project management support, government liaison, the organization of public events and annual meetings, including logistics, event recording, working with event sponsors and vendors, scheduling, record keeping, and public interface.
Project Responsibilities: Administrative Officer

Mosaic ATM

Name: Michael Graham
Job Title: Principal Analyst
Education: B.S., Computer Science
Years of Experience: 26
Areas of Expertize Relating to the Project: Leads multiple environmental studies for both the FAA and NASA performing model development, flight track analysis, including several national and regional impact studies that included noise, emissions and fuel burn. Specifically managed and supported development of the FAA NIRS tool as well as AEDT and the application of these tools for many FAA Airspace Redesign Projects.

URS Corporation

Name: Paul Behrens
Job Title: Manager, Airport Planning and Environmental Group
Education: M.S., Biology; B.S., Marine Science
Years of Experience: 35
Areas of Expertise Relating to Project: Has participated in Environmental Impact Studies, Part 150 Studies, DOT Section 4(f) Studies, and other environmental planning and assessment programs airports and a broad range of federal facilities and programs.

Name: Peter M. Green, AICP
Job Title: Senior Airport Environmental Planner
Education: M.P.A., Public Administration/Coastal Zone Studies; B.S., Environmental Resource Planning & Management
Years of Experience: 25
Areas of Expertize Relating to the Project: Has prepared numerous Environmental Assessments, environmental impact studies, and permit applications for a wide variety of airport development projects throughout the US. Has extensive experience preparing airport planning studies, Airport Master Plans, and Airport Layout Plans.

Appendix D AIR TRAFFIC PROCEDURES

U.S. Department
of Transportation
Federal Aviation Administration

May 20, 2013

To whom it may concern:

Minor changes to the Targets Distribution packages have been made since the printing of the Draft EA. FAA does not expect these minor revisions to change the track of the aircraft using the proposed procedures.

Sincerely,

Thomas L. Lattimer
Manager
Airspace Redesign Program

Aviation Planning at the Leading Edge

To: AARON J. FRAME

From: Jeffrey A. Jackson

Cc: Amy Malick, Ted J. Woosley

Date: January 23, 2013, January 24, 2013 (revised)

Re: Midway Future Eastbound Departure Changes

Based on comments from the FAA including today's new departure track information, future 22L arrival procedures will impact eastbound departures for runways 13L, 13C, 13R, 22L, 22R, 31L, 31C and 31R. This will only occur while aircraft are arriving runway 22L. When 22L arrivals are not occurring, eastbound departures will continue to operate as they do today.

When 22L arrivals are occurring, departures for runways 22L, 22R, 31L, 31C and 31R will make a left turn to an initial departure heading of 140 degrees until approximately four nautical miles south of the 22L arrival traffic. Once south of the 22L arrival traffic, aircraft will turn to an east heading. When 22L arrivals are occurring, departures for runways 13L, 13C and 13R will continue straight or turn slightly right to an initial departure heading of 140 degrees until approximately four nautical miles south of the 22L arrival traffic. Once south of the 22L arrival traffic, aircraft will turn to an east heading.

Based on operating configurations today, future operation levels and future runway use, departures for the modeled Future Conditions (2013 and 2018 With Project) need to be reassigned to new INM tracks. Departures requiring reassignment by runway are highlighted in yellow in **Table 1, Eastbound Departures When Arriving 22L.** New INM departure tracks are needed for runways 13L, 13C, 13R, 22L, 22R, 31L, 31C and 31R. Departures assigned to the new INM tracks will be divided evenly amongst all new tracks for each runway. New INM tracks are depicted in **Exhibit 1, New Eastbound Departure Tracks**. When 22L arrivals are not occurring, the eastbound departures will continue to utilize the tracks from Existing Conditions (2012).

memo

Landrum & Brown
8755 West Higgins Road, Suite 850
Chicago, IL 60631
773.628.2900 | 773.628.2901 fax
www.landrum-brown.com

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Table 1
Eastbound Departures When Arriving 22L

RWY	Departures					
	East Traffic[1]	Utilization When Arriving 22L[2]	2013		2018	
			RWY Utilization[3]	Operations[4]	RWY Utilization[3]	Operations[4]
13L	38%	2%	0.1%	0.0	0.1%	0.0
13C	38%	5%	4.9%	0.3	6.9%	0.5
13R	38%	1%	0.1%	0.0	0.0%	0.0
22L	34%	39%	22.5%	10.8	22.5%	12.1
22R	34%	52%	2.9%	1.9	2.9%	2.1
31L	36%	1%	2.1%	0.0	2.0%	0.0
31C	36%	5%	40.2%	2.6	38.3%	2.8
31R	36%	2%	0.8%	0.0	0.7%	0.0

1: Percent of departures for runway specified with an eastbound heading. Based on Existing Conditions (2012) Noise Contour.
2: Percent of departures for runway specified departing while aircraft are arriving on runway 22L. Based on 2011 Yearly Operations.
3: Total departure percentage for runway specified.
4: Annual Average Day (AAD) operations for runway specified that needs to be assigned to new eastbound tracks.

HMMH Note (May 24, 2013): Source data for table is from FAA Memorandum, "Chicago Midway Environmental Assessment - Future Runway Use," August 3, 2012.

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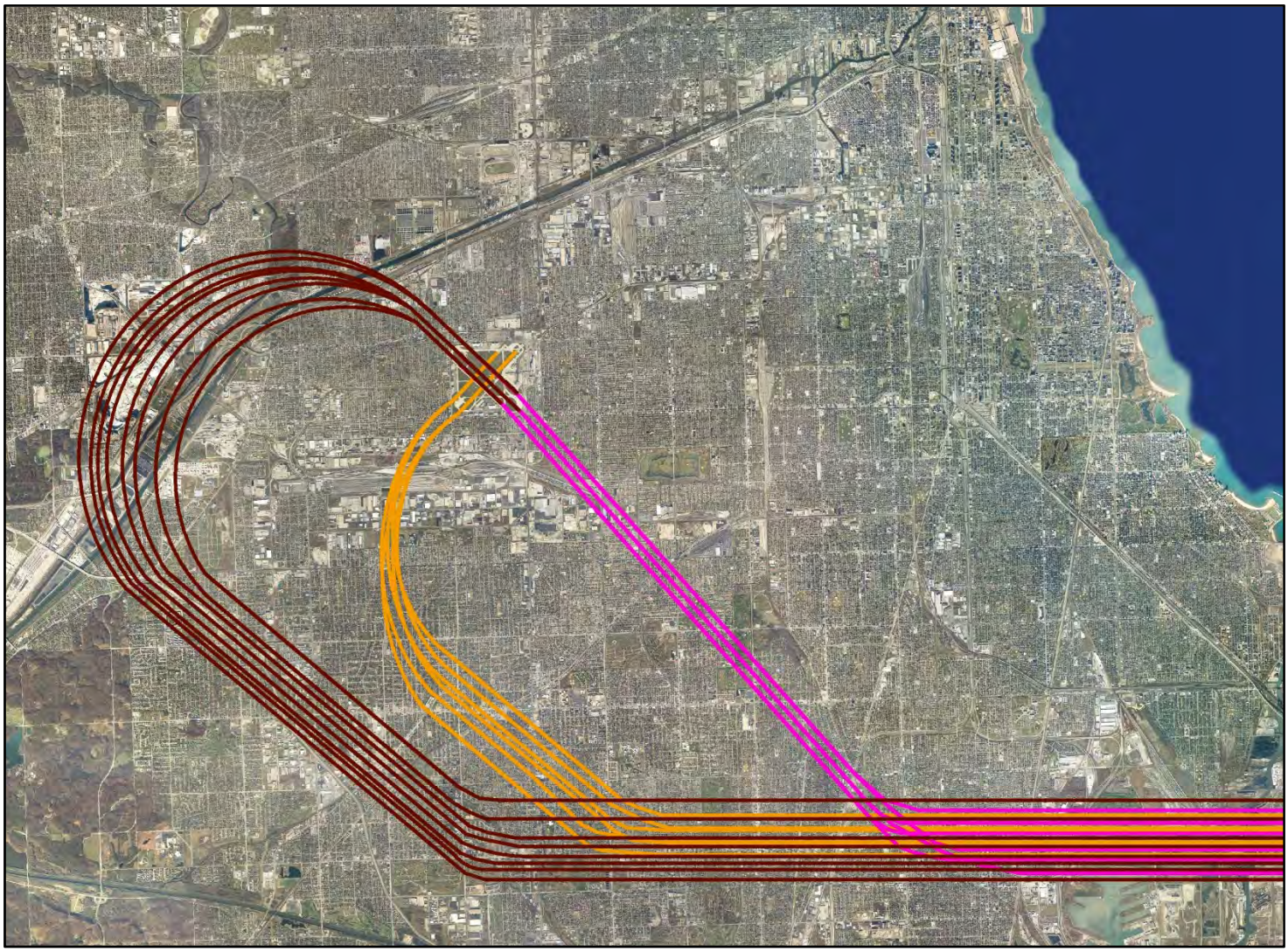
Exhibit 1
New Eastbound Departure Tracks



Runway 31L, 31C & 31R INM departure tracks

Runway 22L & 22R INM departure tracks

Runway 13L, 13C & 13R INM departure tracks

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ENDEE RNAV

Point Of Contact

ATC Facility Name - Chicago ARTCC

POC's Name - Thomas Rucker

Telephone Number - 630-906-8718

FAX Number -

Email Address - thomas.rucker@faa.gov

TARGETS Distribution Package

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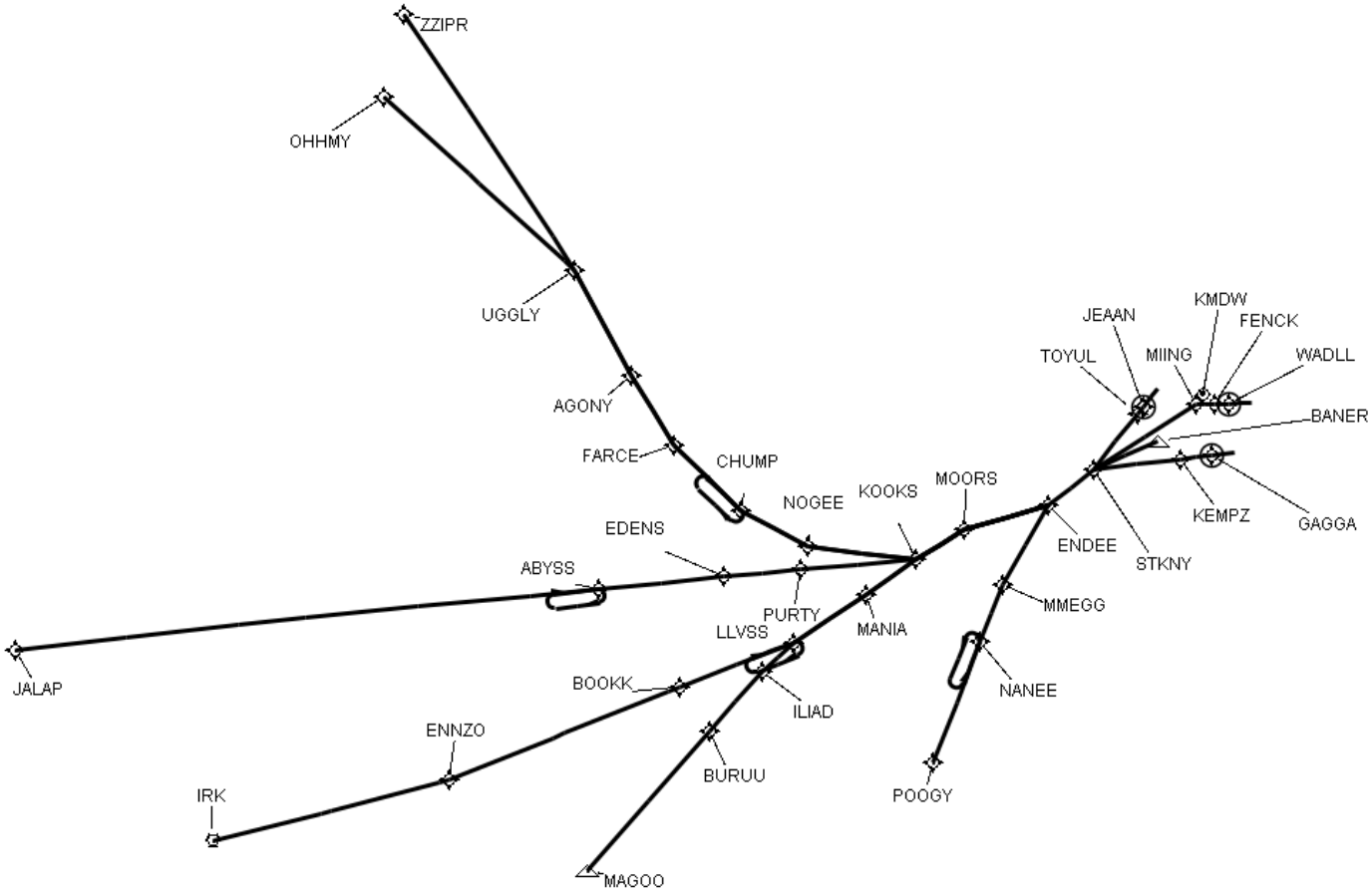

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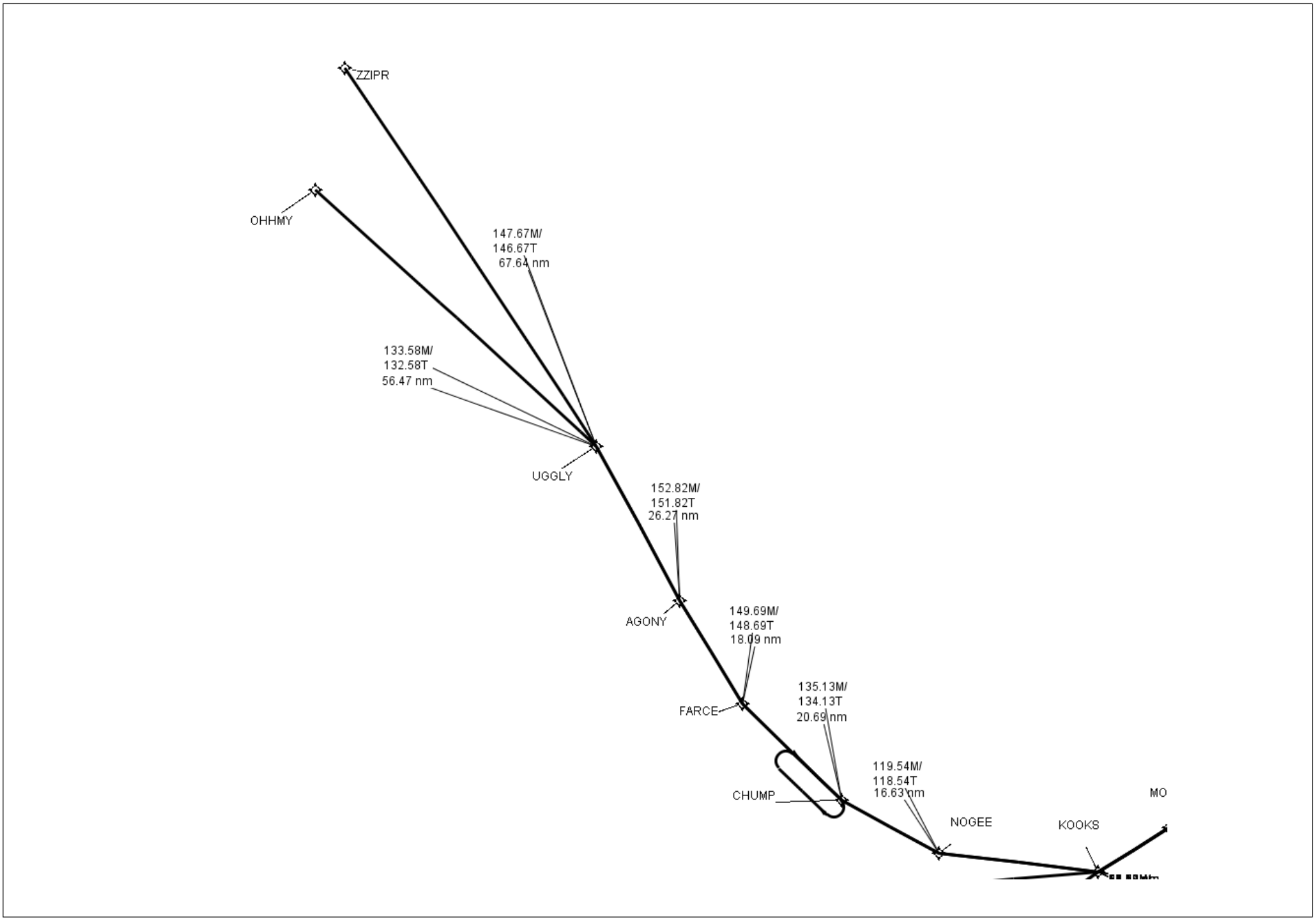

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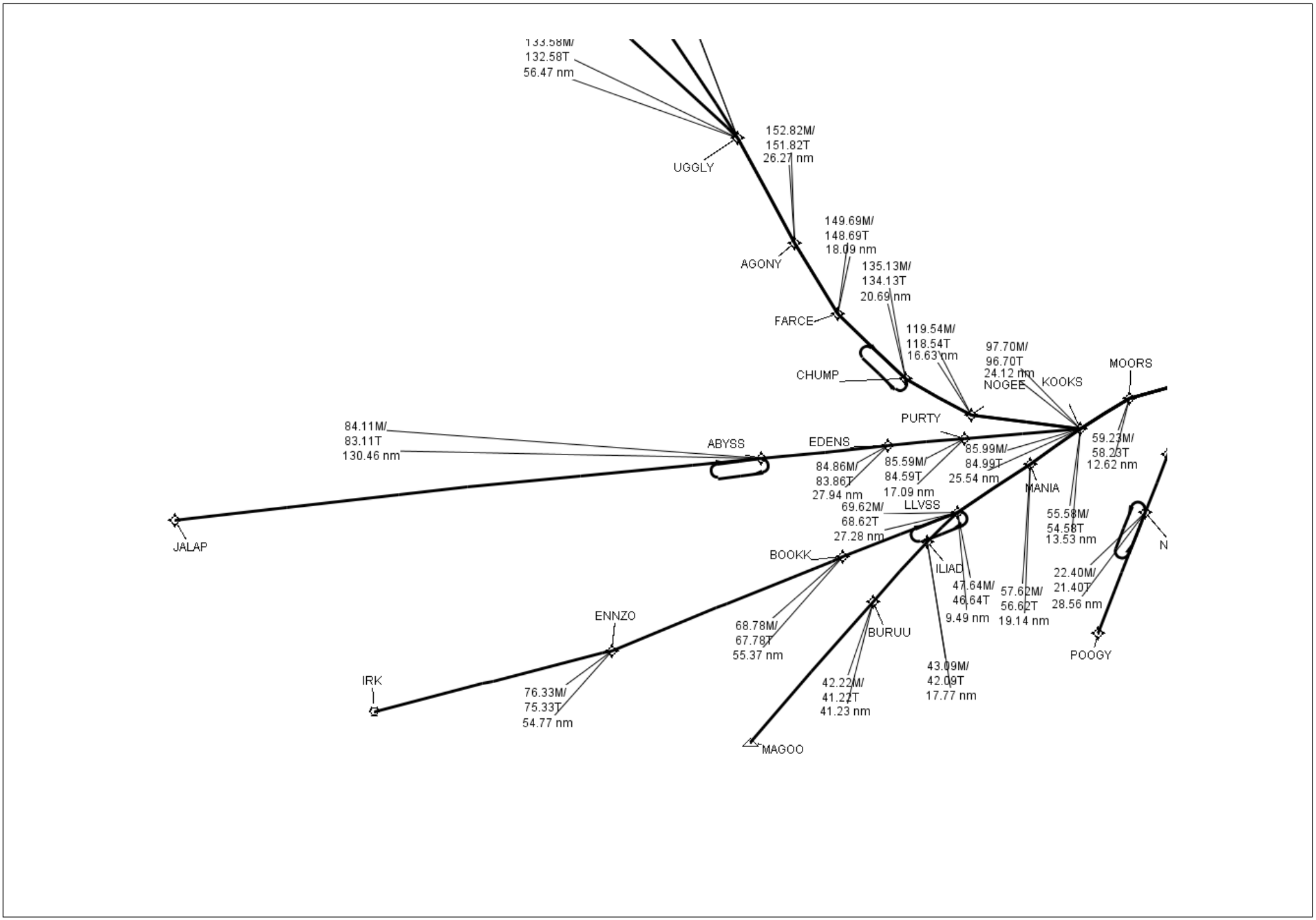

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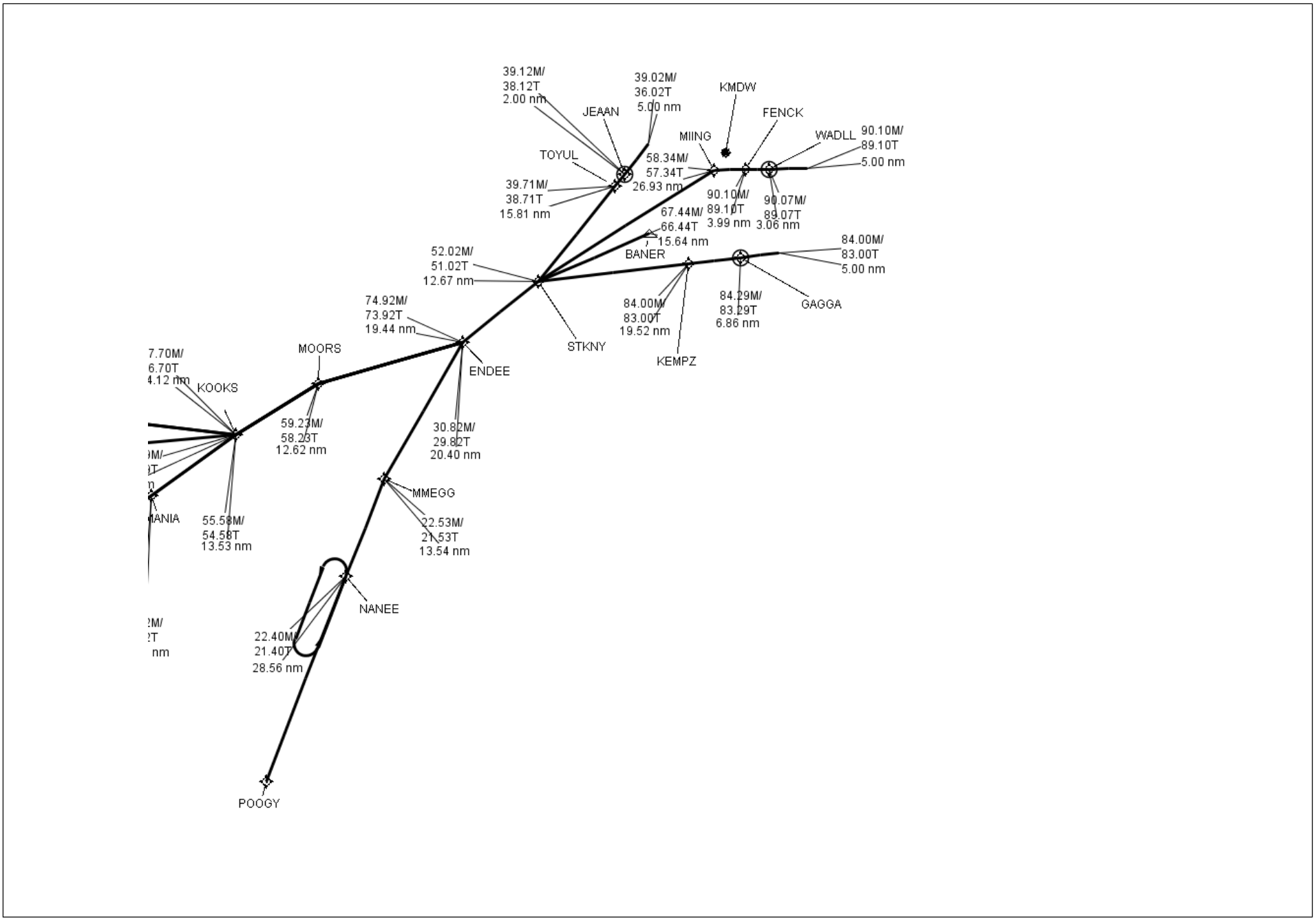

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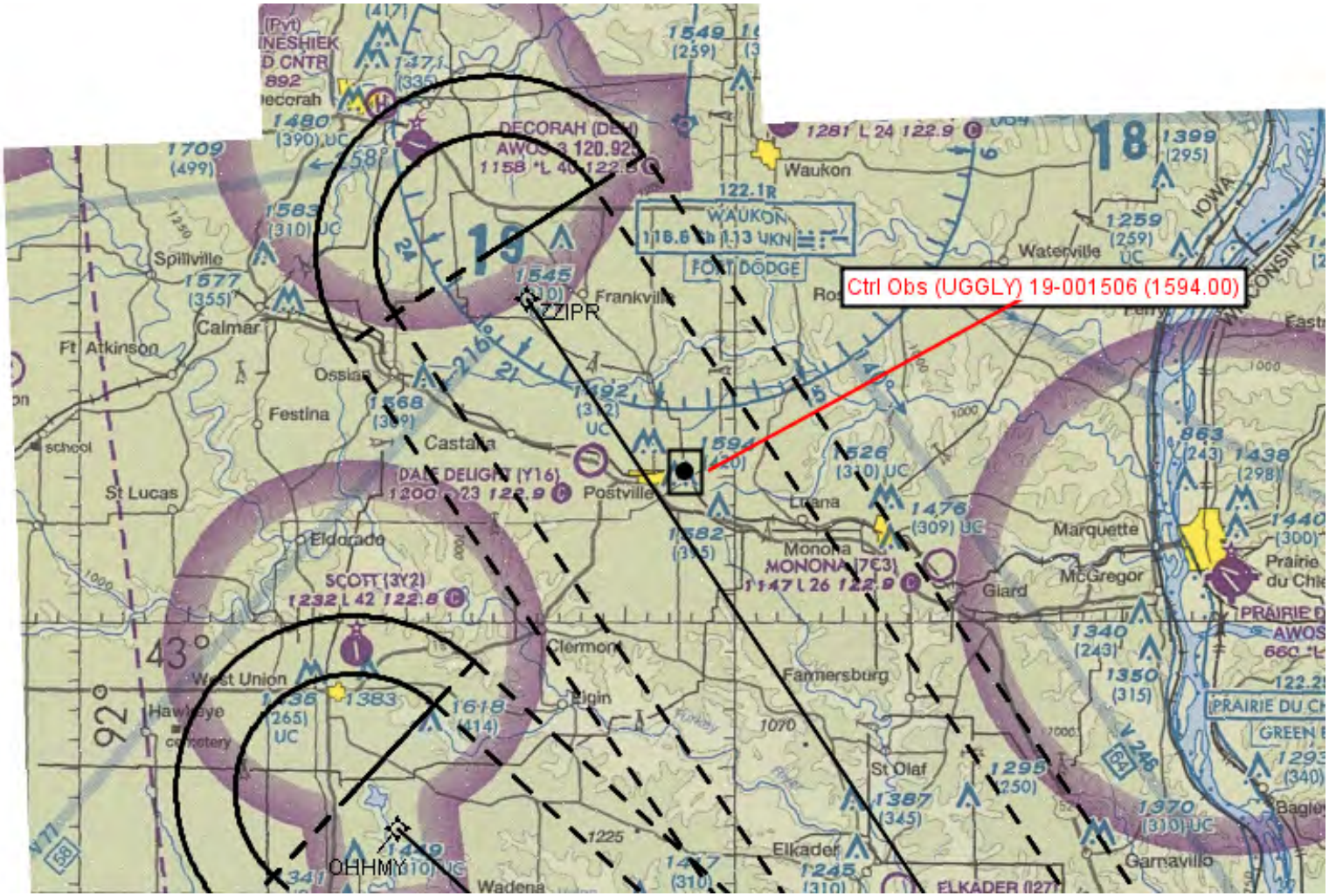

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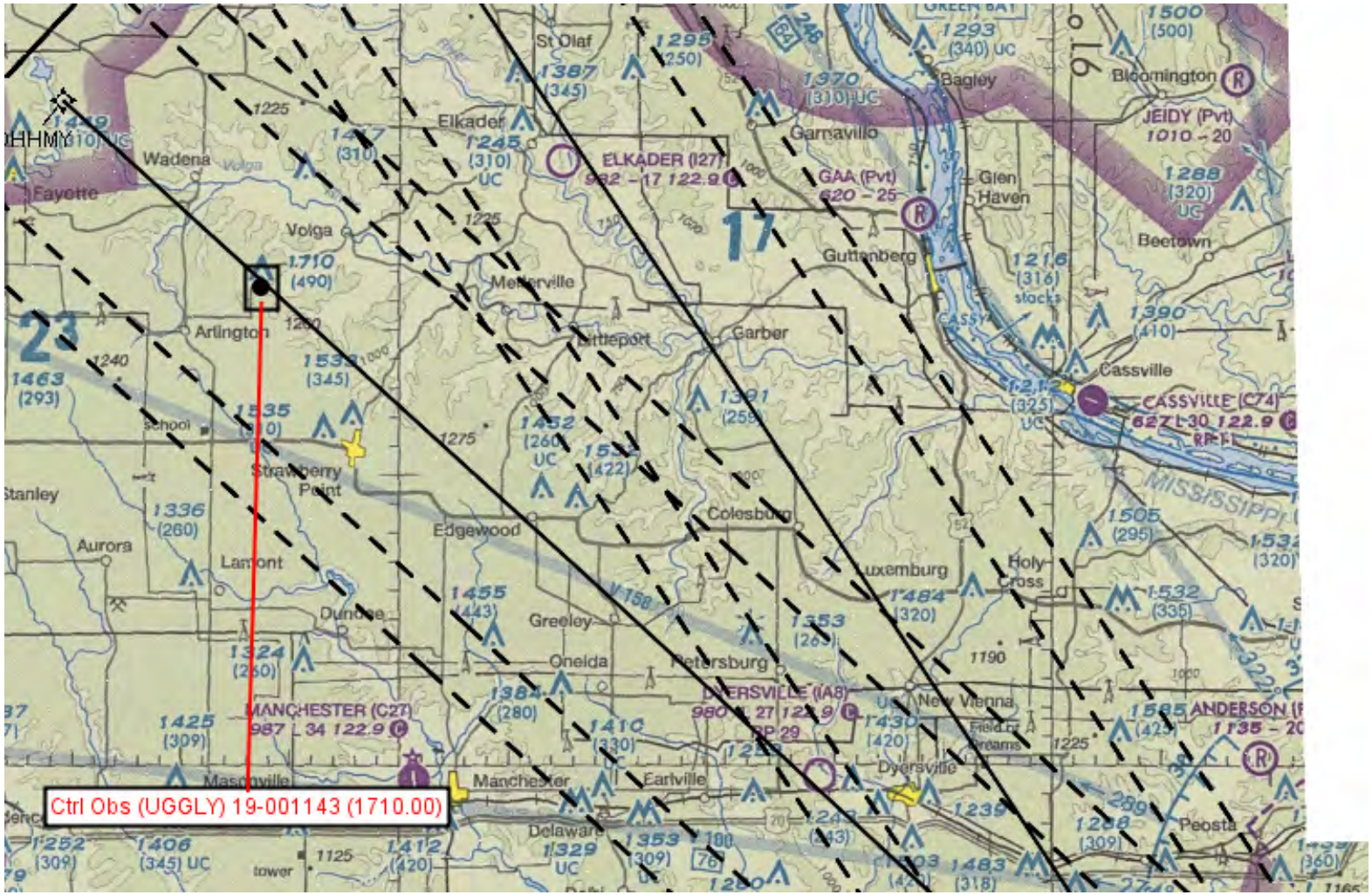

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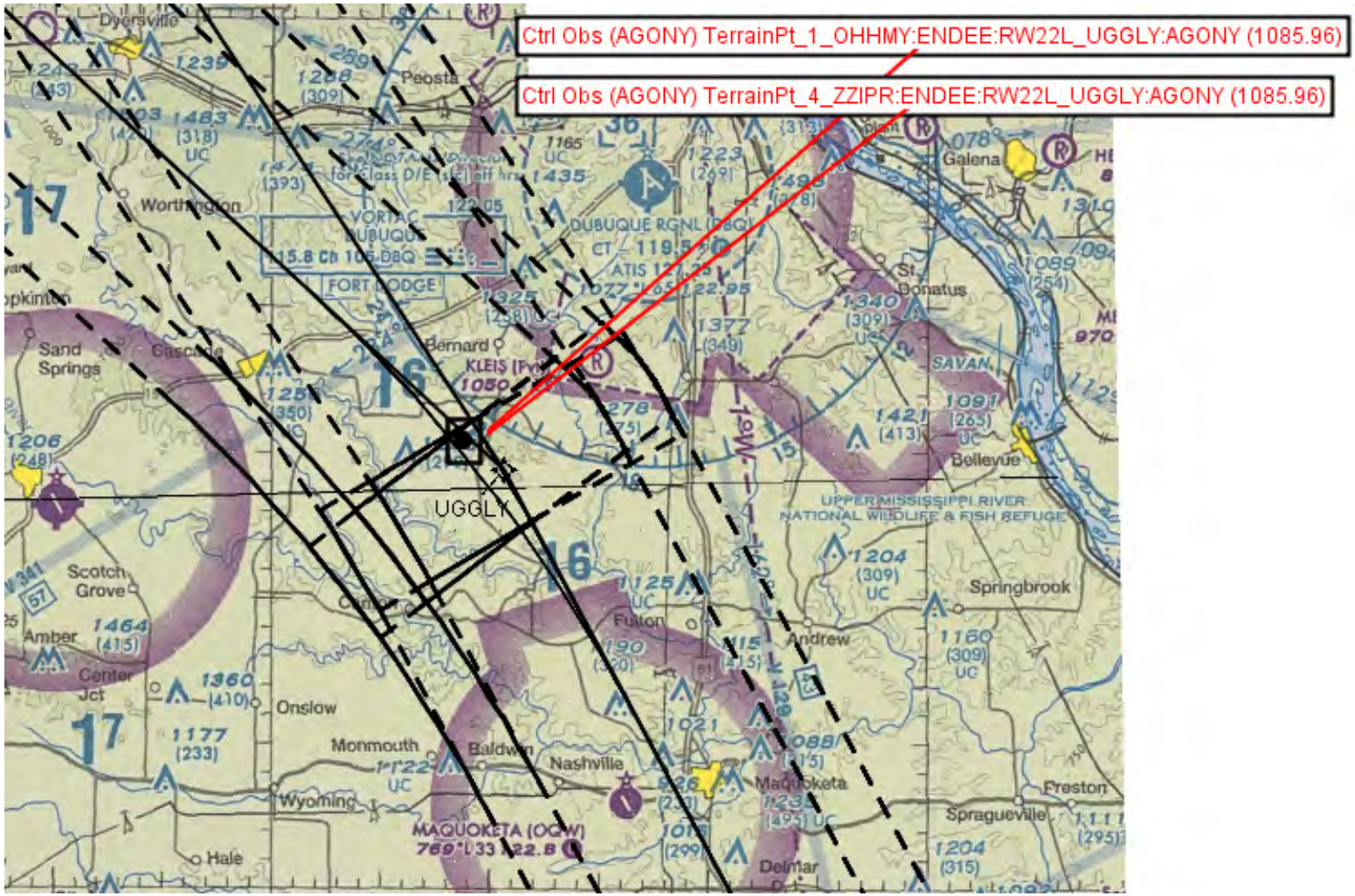

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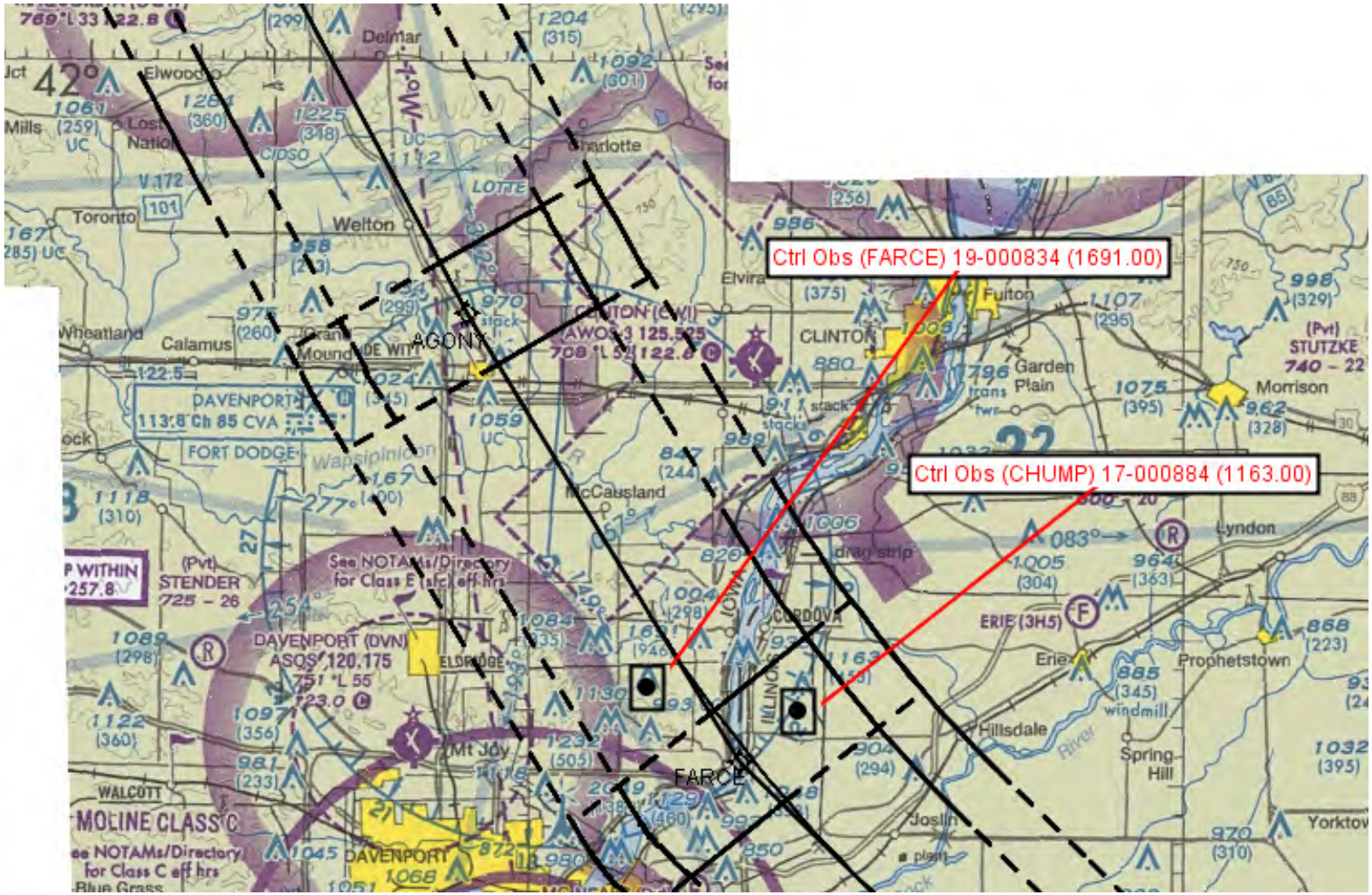

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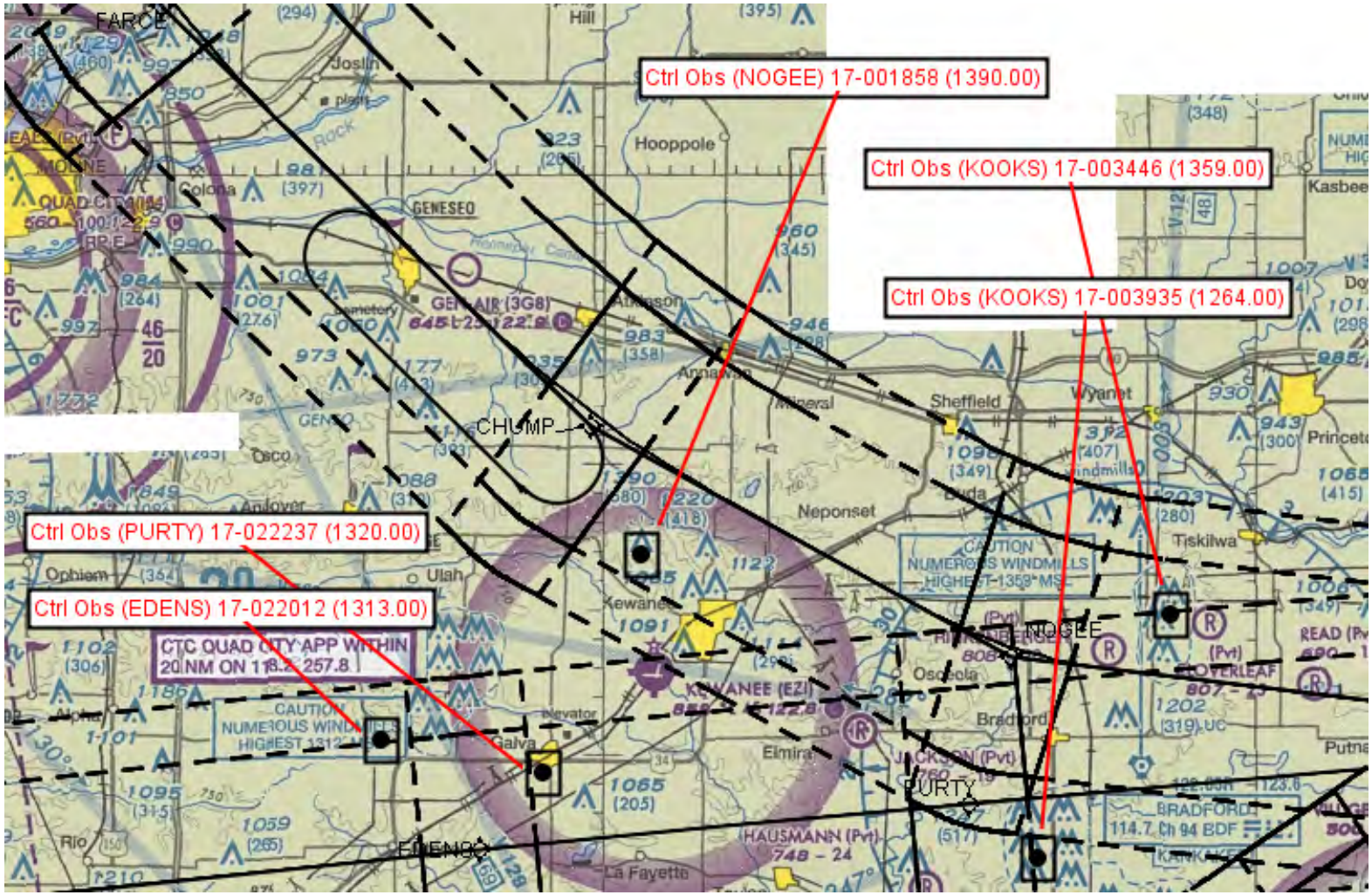

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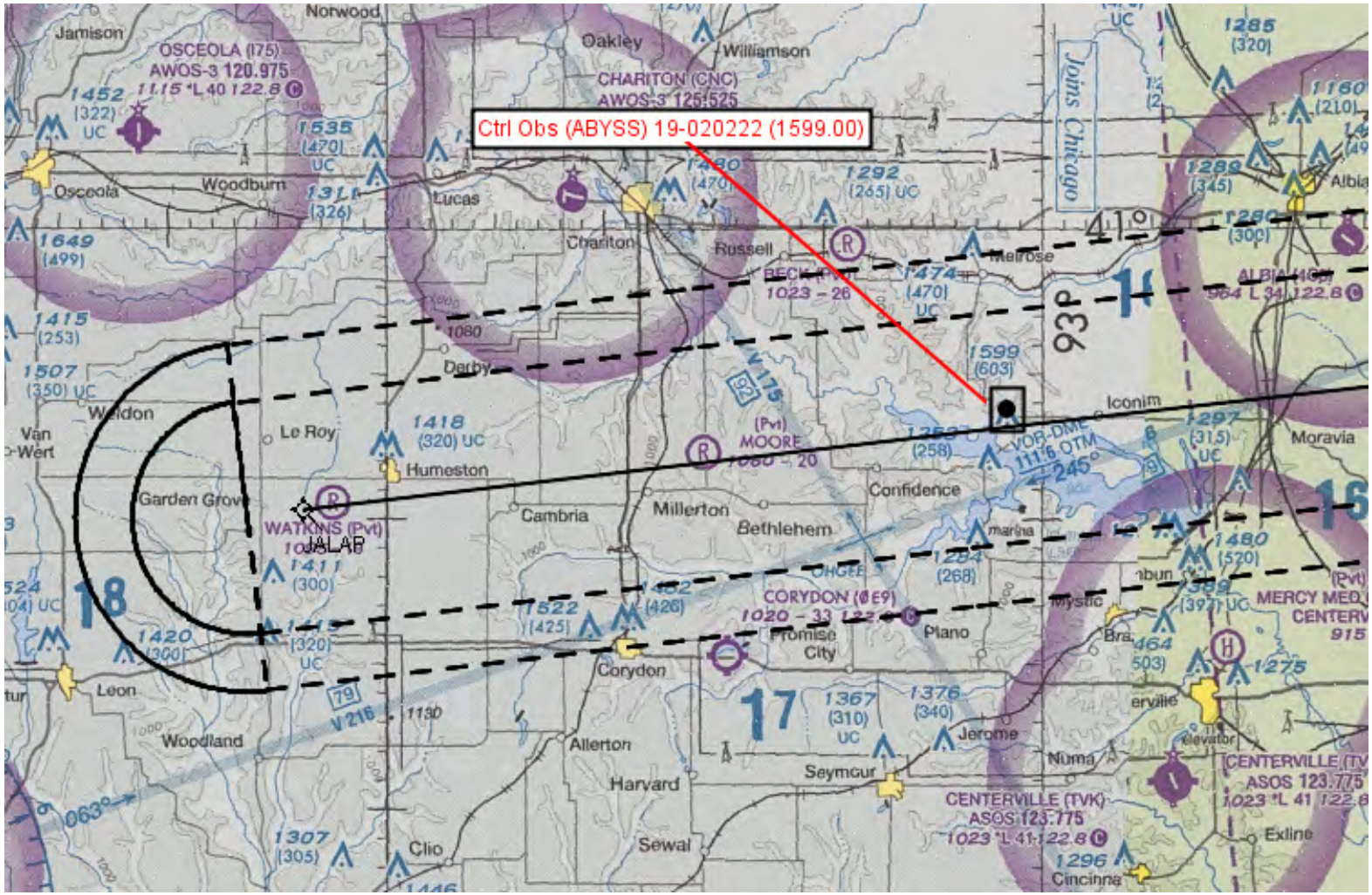

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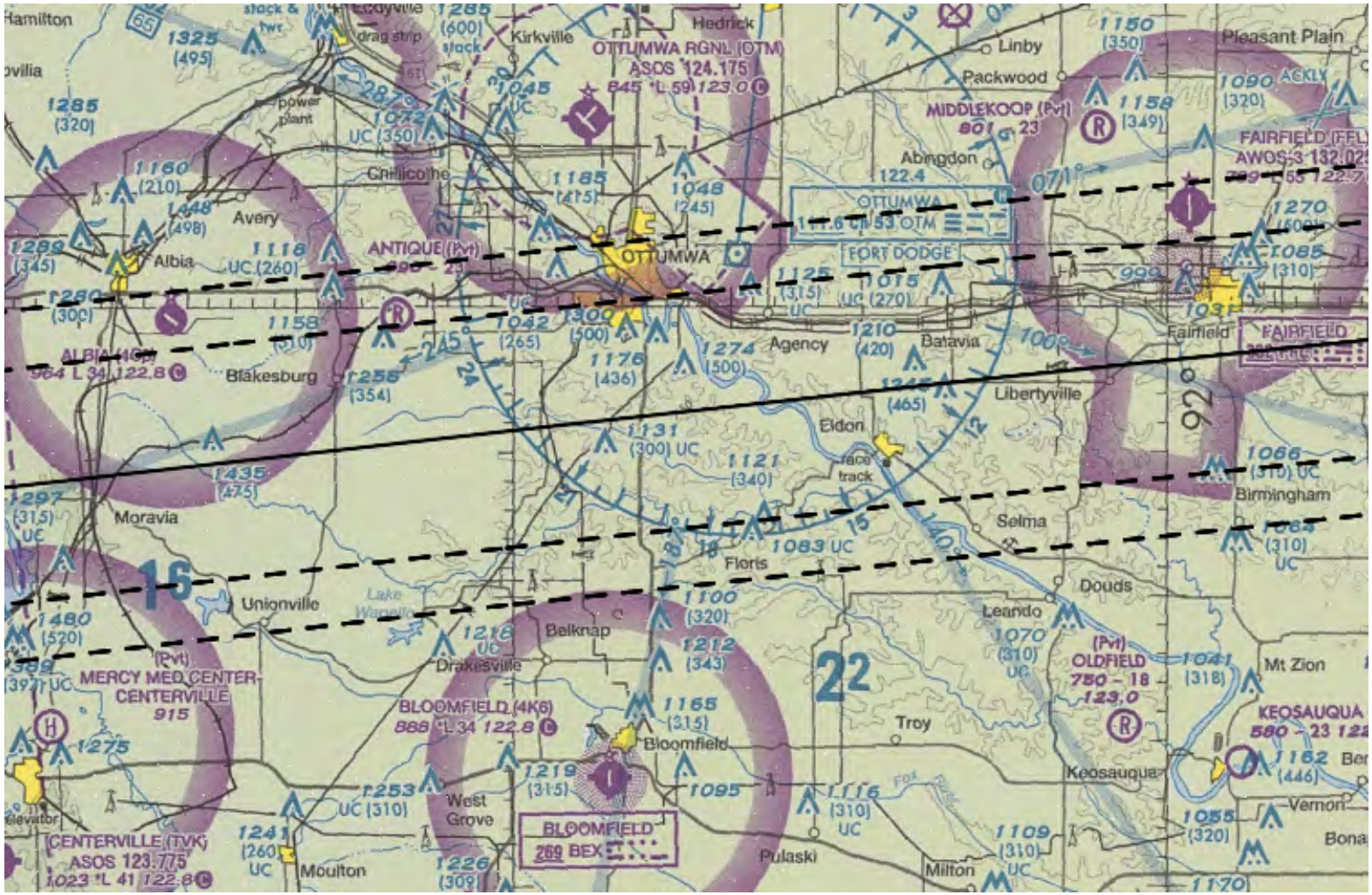

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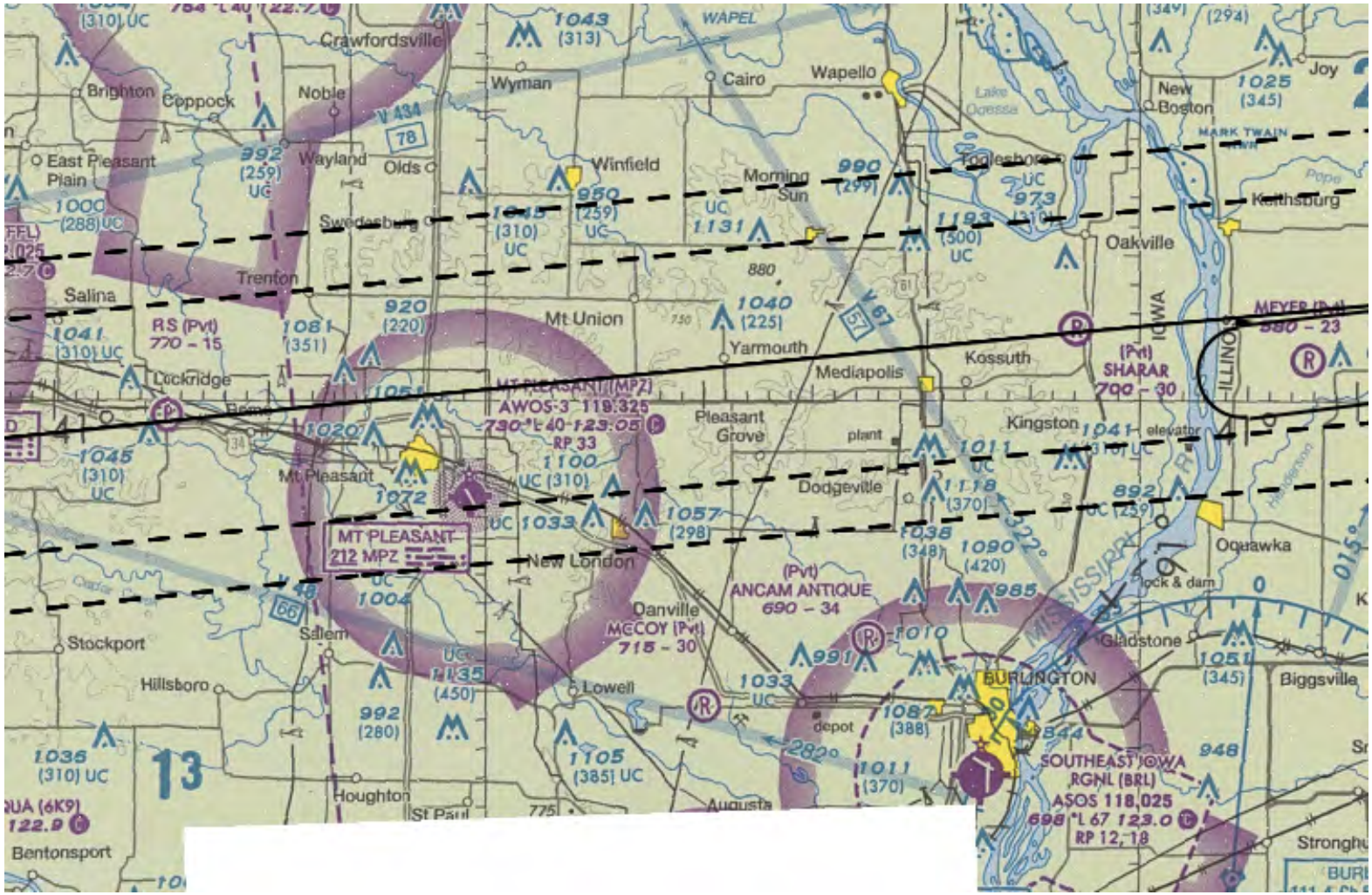

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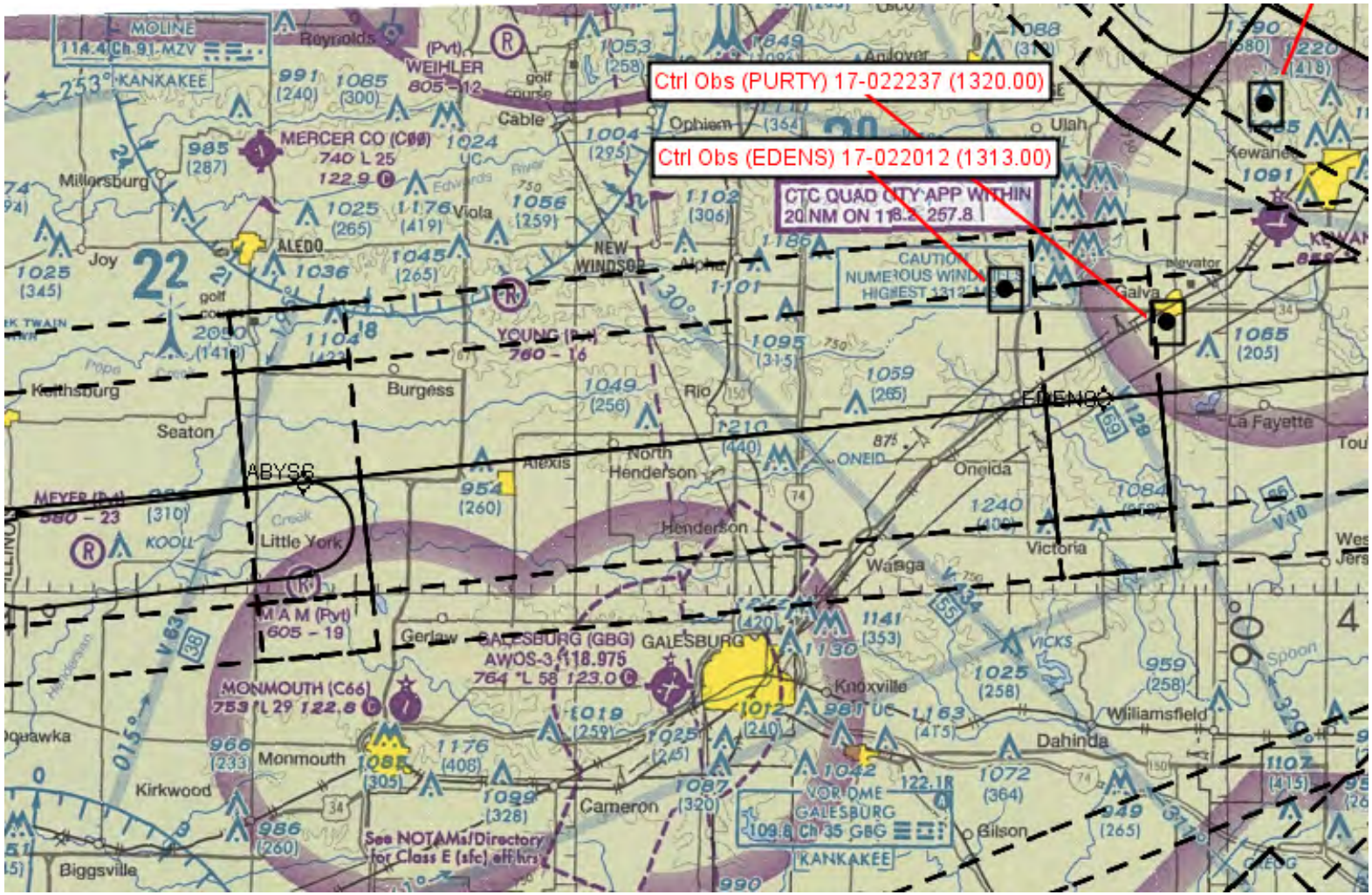

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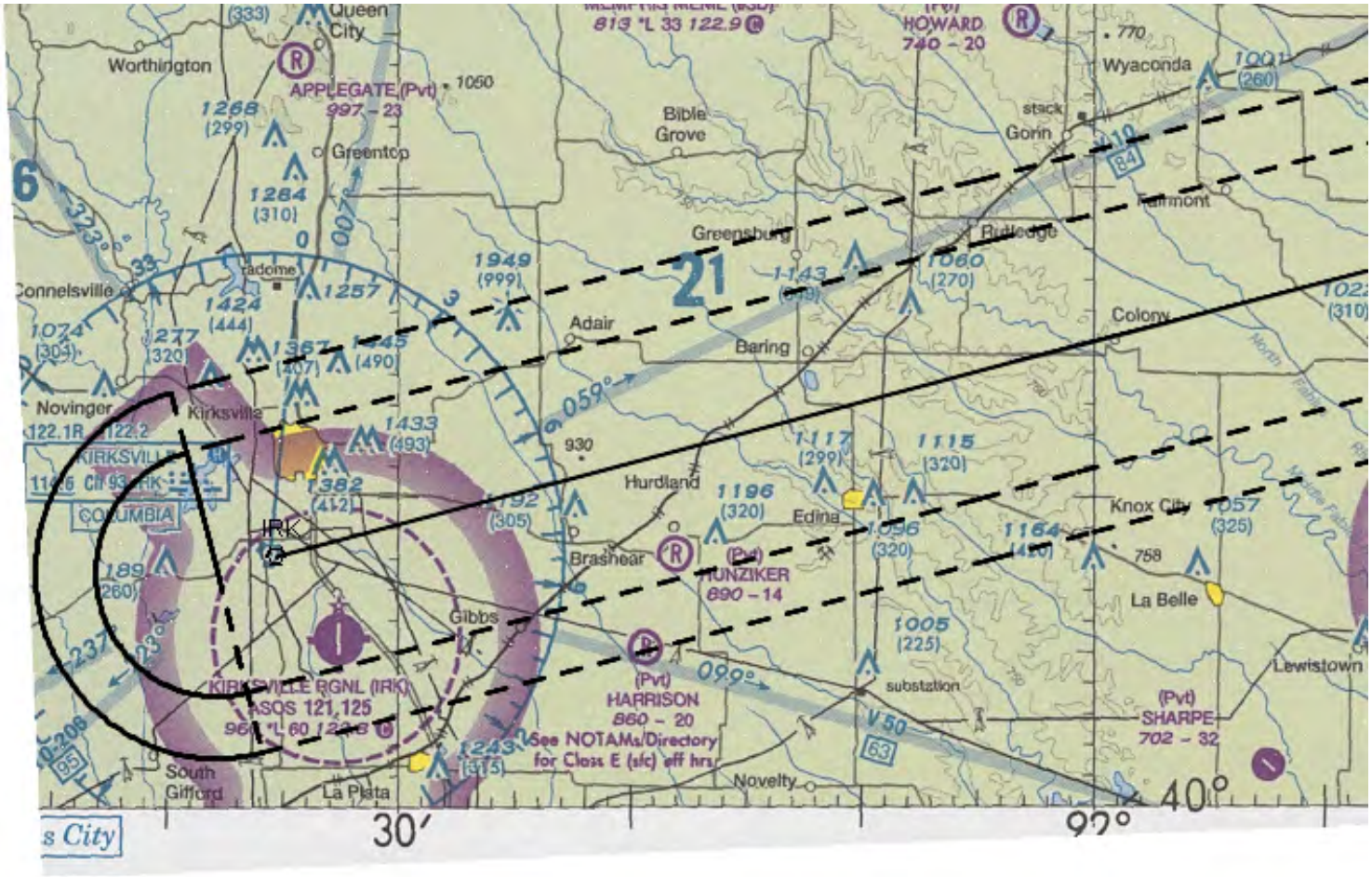

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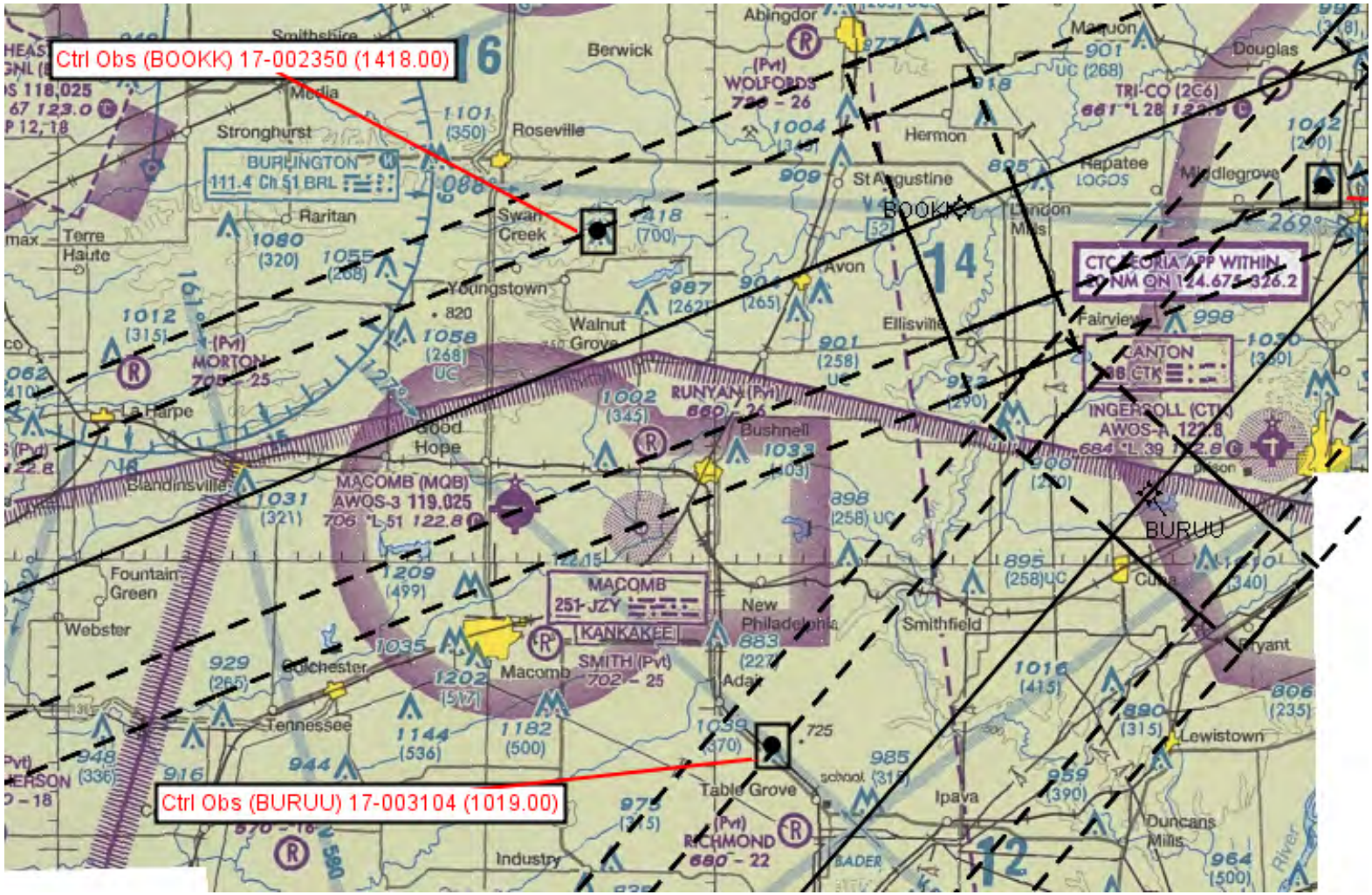
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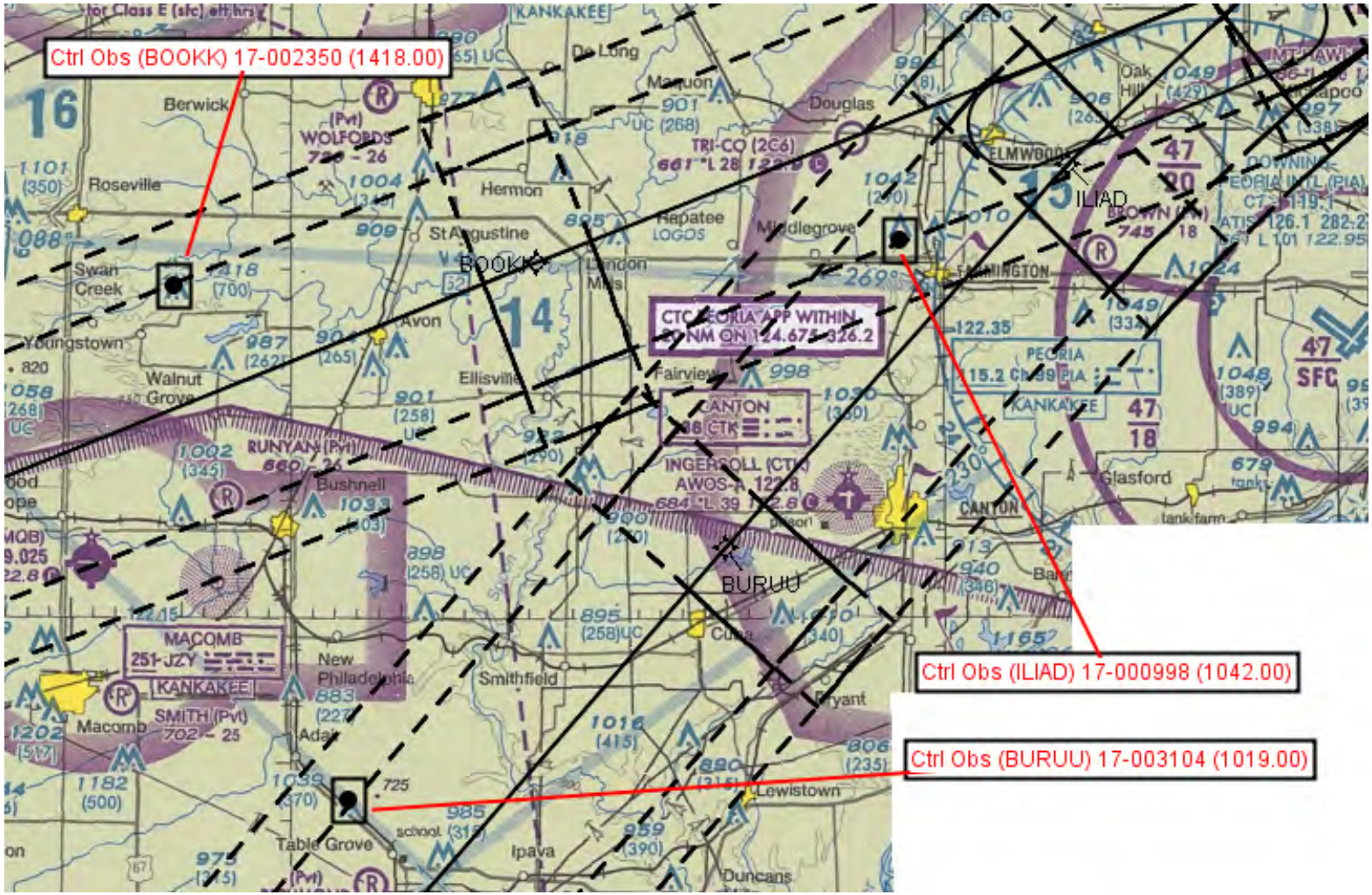
New Philadelphia
Adair
Smithfield
Bryant
Lewistown
Table Grove
Ipava
Duncans Mills
Industry
RICHMOND
680 - 22
SMITH (Pvt)
702 - 25
WOLFORDS
CANTON
INGERSOLL (CTK)

ENDEE RNAV

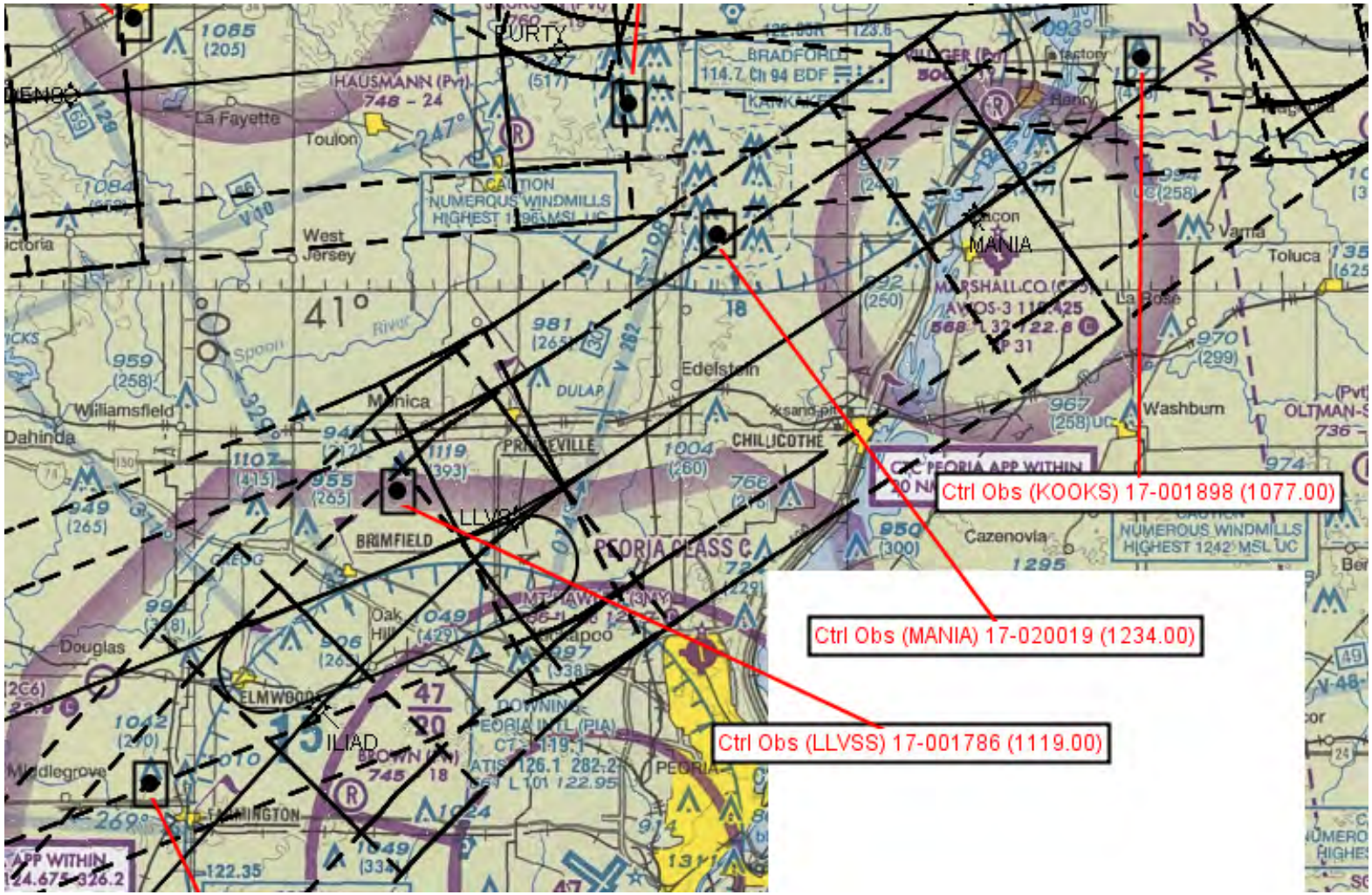
ENDEE RNAV

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway



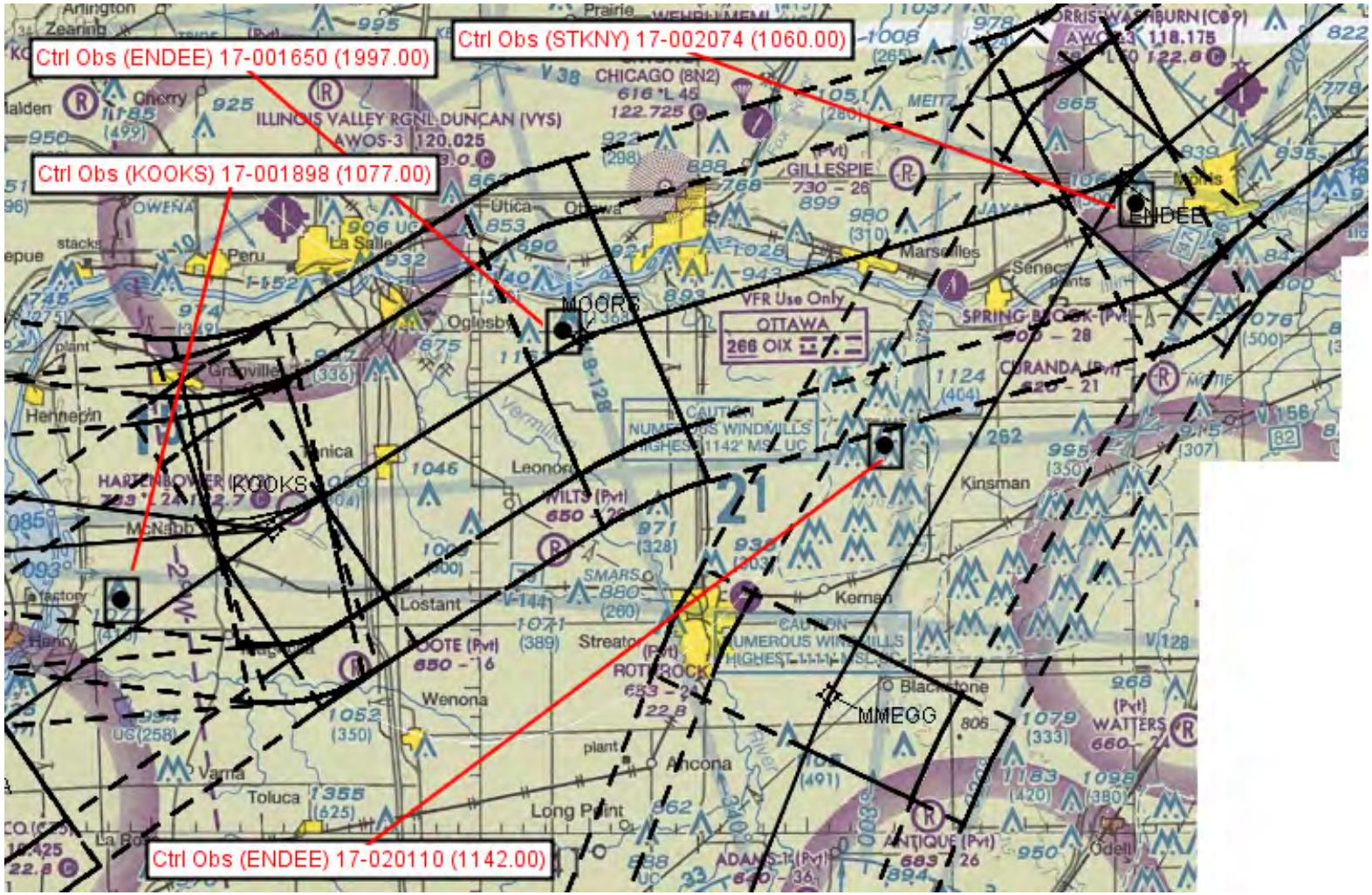
ENDEE RNAV

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway



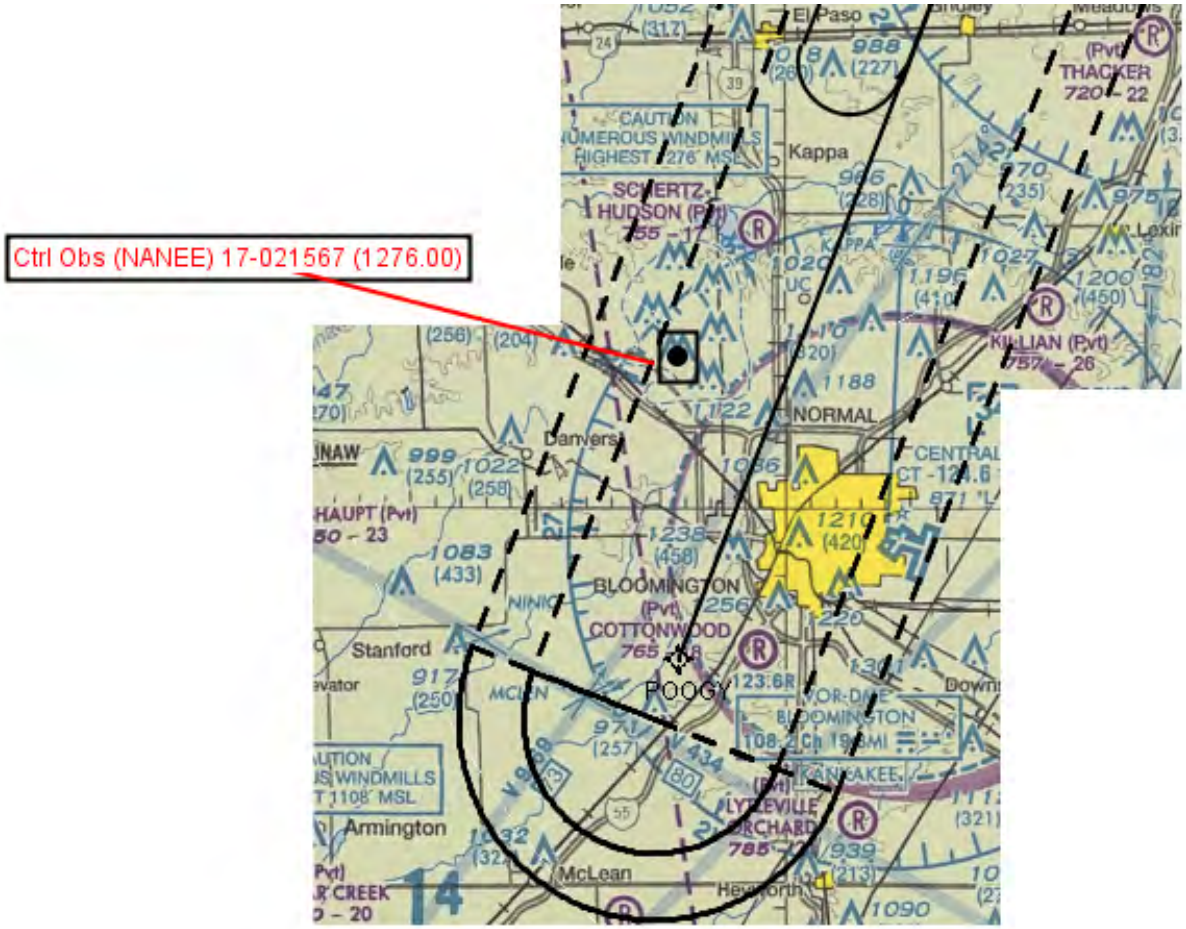
ENDEE RNAV

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway



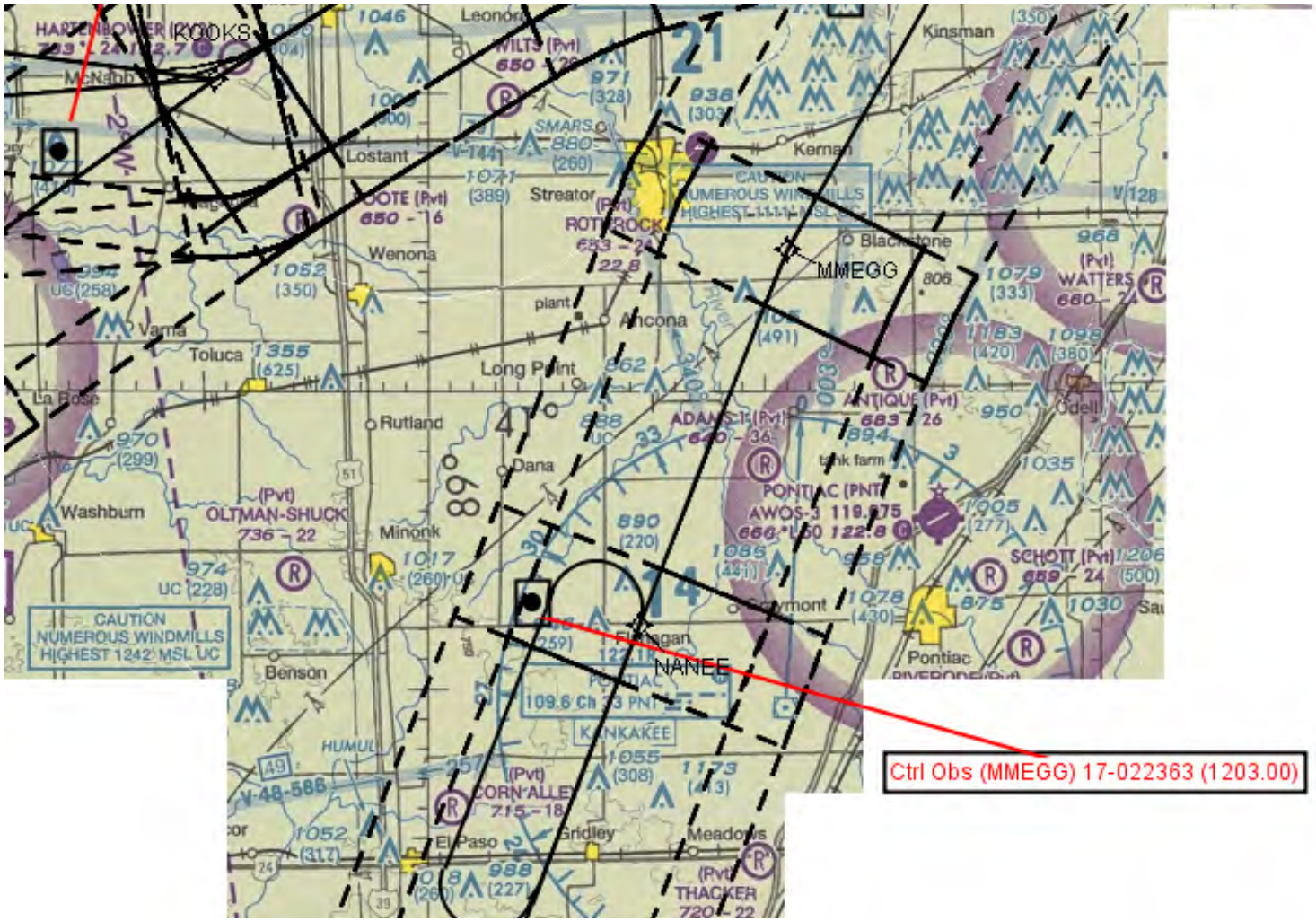
ENDEE RNAV

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway

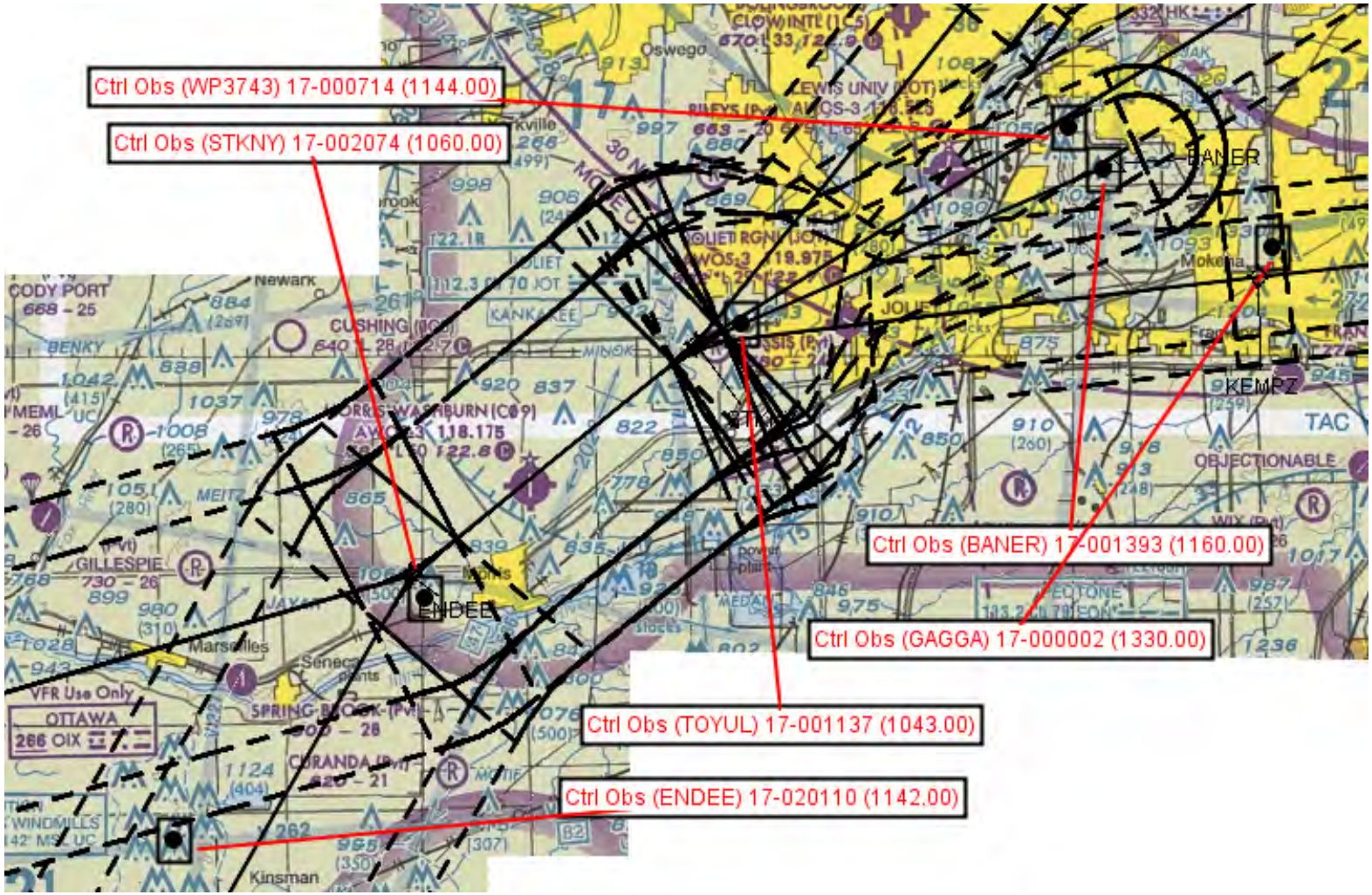


ENDEE RNAV

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway


KOOKS
MMEGG
NANEE
Ctrl Obs (MMEGG) 17-022363 (1203.00)
Kinsman
Kernan
Streator
Wenona
Ancona
Toluca
Long Point
Rutland
Dana
Minonk
Washburn
Benson
Pontiac
Odell
Gridley
Meadows
Lostant
Leonore
CAUTION
NUMEROUS WINDMILLS
HIGHEST 1242' MSL UC

ENDEE RNAV



ENDEE RNAV

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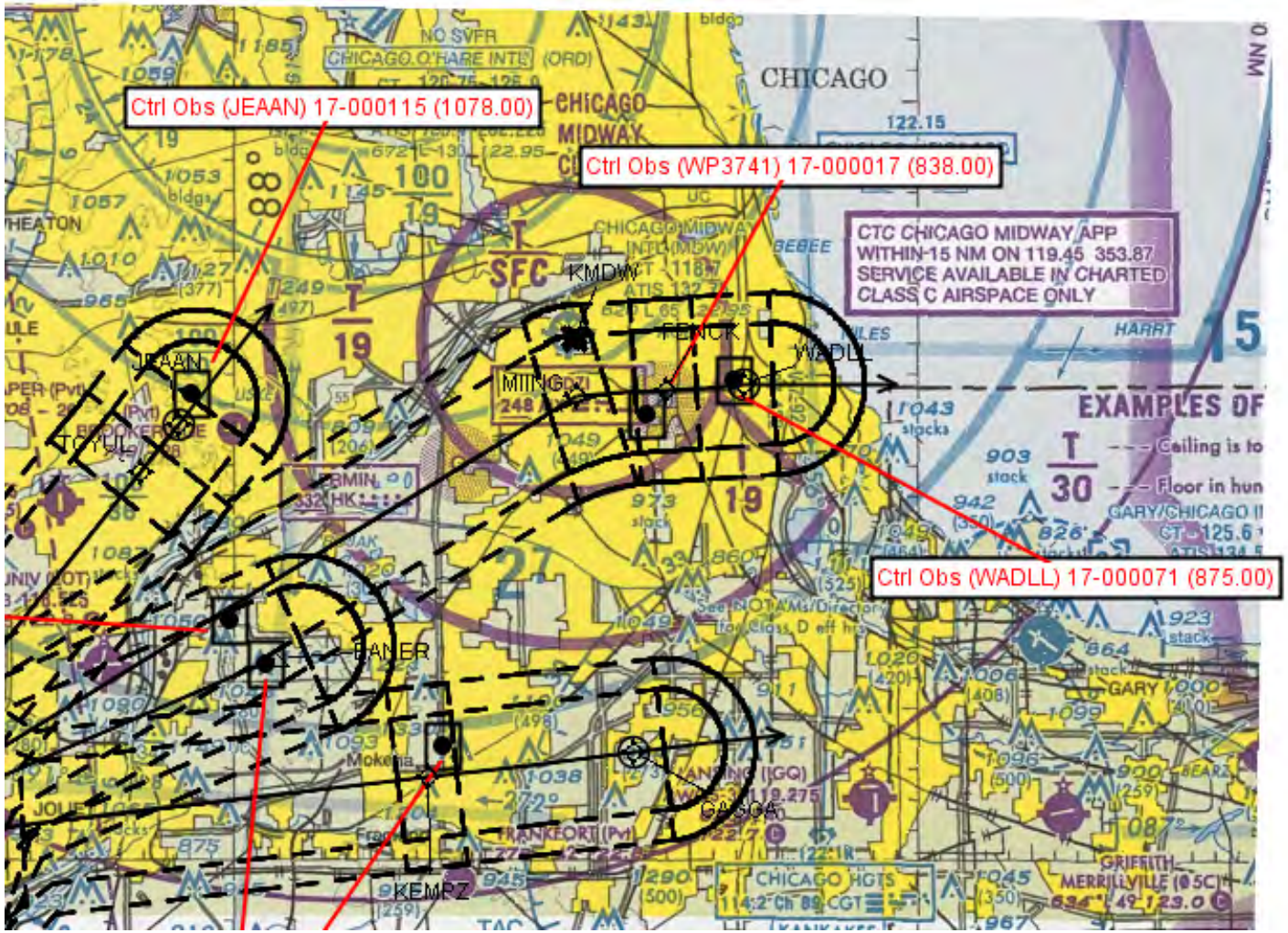
Chicago Midway



ENDEE RNAV

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway

En Route Transition Data - IRK

DB	Waypoint	Distance	Leg	FO/FB	Latitude	Longitude	TC	MC	Altitude	Speed	MEA	Arc Center Lat (D° M' S.ss")	Arc Center Lon (D° M' S.ss")	Arc Radius (NM)
AVNIS	IRK VORTAC		IF		N40 08 06.06	W092 35 30.17								
	ENNZO WP	54.77	TF	FB	N40 21 38.20	W091 26 11.00	75.33	76.33			4000			
	BOOKK WP	55.37	TF	FB	N40 42 15.65	W090 18 47.00	67.78	68.78	+24000 -26000		4000			
	LLVSS WP	27.28	TF	FB	N40 52 08.00	W089 45 18.00	68.62	69.62	-21000		3300			
	LLVSS WP	10.00	HM		N40 52 08.00	W089 45 18.00	68.62	69.62	-21000					
	MANIA WP	19.14	TF	FB	N41 02 38.18	W089 24 10.91	56.62	57.62	-18000		3300			
	KOOKS WP	13.53	TF	FB	N41 10 28.00	W089 09 35.00	54.58	55.58	-16000		3000			
	MOORS WP	12.62	TF	FB	N41 17 06.00	W088 55 21.00	58.23	59.23	-10000		3000			
	ENDEE WP	19.44	TF	FB	N41 22 26.60	W088 30 32.30	73.92	74.92	+6000 -7000		3000			

En Route Transition Data - JALAP

DB	Waypoint	Distance	Leg	FO/FB	Latitude	Longitude	TC	MC	Altitude	Speed	MEA	Arc Center Lat (D° M' S.ss")	Arc Center Lon (D° M' S.ss")	Arc Radius (NM)
	JALAP WP		IF		N40 50 18.00	W093 33 48.00								
	ABYSS WP	130.46	TF	FB	N41 03 51.01	W090 42 32.62	83.11	84.11	+24000 -26000		4000			
	ABYSS WP	10.00	HM		N41 03 51.01	W090 42 32.62	83.11	84.11	+24000 -26000					
	EDENS WP	27.94	TF	FB	N41 06 44.66	W090 05 47.43	83.86	84.86	-21000		4000			
	PURTY WP	17.09	TF	FB	N41 08 19.16	W089 43 16.22	84.59	85.59	-18000		3300			
	KOOKS WP	25.54	TF	FB	N41 10 28.00	W089 09 35.00	84.99	85.99	-16000		3300			
	MOORS WP	12.62	TF	FB	N41 17 06.00	W088 55 21.00	58.23	59.23	-10000		3000			
	ENDEE WP	19.44	TF	FB	N41 22 26.60	W088 30 32.30	73.92	74.92	+6000 -7000		3000			

En Route Transition Data - MAGOO

DB	Waypoint	Distance	Leg	FO/FB	Latitude	Longitude	TC	MC	Altitude	Speed	MEA	Arc Center Lat (D° M' S.ss")	Arc Center Lon (D° M' S.ss")	Arc Radius (NM)
AVNIS	MAGOO WP		IF		N40 01 29.73	W090 45 42.60								
	BURUU WP	41.23	TF	FB	N40 32 26.41	W090 10 04.41	41.22	42.22	+24000 -26000		4000			
	ILIAD WP	17.77	TF	FB	N40 45 37.00	W089 54 24.00	42.09	43.09			4000			
	LLVSS WP	9.49	TF	FB	N40 52 08.00	W089 45 18.00	46.64	47.64	-21000		3000			
	MANIA WP	19.14	TF	FB	N41 02 38.18	W089 24 10.91	56.62	57.62	-18000		3000			
	KOOKS WP	13.53	TF	FB	N41 10 28.00	W089 09 35.00	54.58	55.58	-16000		3000			
	MOORS WP	12.62	TF	FB	N41 17 06.00	W088 55 21.00	58.23	59.23	-10000		3000			
	ENDEE WP	19.44	TF	FB	N41 22 26.60	W088 30 32.30	73.92	74.92	+6000 -7000		3000			

En Route Transition Data - OHHMY

DB	Waypoint	Distance	Leg	FO/FB	Latitude	Longitude	TC	MC	Altitude	Speed	MEA	Arc Center Lat (D° M' S.ss")	Arc Center Lon (D° M' S.ss")	Arc Radius (NM)
	OHHMY WP		IF		N42 52 53.00	W091 45 30.00								
	UGGLY WP	56.47	TF	FB	N42 14 26.00	W090 49 31.00	132.58	133.58			4000			
	AGONY WP	26.27	TF	FB	N41 51 15.00	W090 32 55.00	151.82	152.82	-28000		4000			
	FARCE WP	18.09	TF	FB	N41 35 46.50	W090 20 23.15	148.69	149.69	+24000 -26000		3000			
	CHUMP WP	20.69	TF	FB	N41 21 20.00	W090 00 40.00	134.13	135.13	-21000		3000			
	NOGEE WP	16.63	TF	FB	N41 13 21.43	W089 41 18.54	118.54	119.54	-18000		3000			
	KOOKS WP	24.12	TF	FB	N41 10 28.00	W089 09 35.00	96.70	97.70	-16000		3000			
	MOORS WP	12.62	TF	FB	N41 17 06.00	W088 55 21.00	58.23	59.23	-10000		3000			
	ENDEE WP	19.44	TF	FB	N41 22 26.60	W088 30 32.30	73.92	74.92	+6000 -7000		3000			

En Route Transition Data - POOGY

DB	Waypoint	Distance	Leg	FO/FB	Latitude	Longitude	TC	MC	Altitude	Speed	MEA	Arc Center Lat (D° M' S.ss")	Arc Center Lon (D° M' S.ss")	Arc Radius (NM)
	POOGY WP		IF		N40 25 33.07	W089 04 19.04			-24000					
	NANEE WP	28.56	TF	FB	N40 52 08.67	W088 50 35.11	21.40	22.40	-15000		3000			
	NANEE WP	10.00	HM		N40 52 08.67	W088 50 35.11	21.40	22.40	-15000					
	MMEGG WP	13.54	TF	FB	N41 04 44.60	W088 44 00.96	21.53	22.53	-10000		3000			
	ENDEE WP	20.40	TF	FB	N41 22 26.60	W088 30 32.30	29.82	30.82	+6000 -7000		3000			

En Route Transition Data - ZZIPR

DB	Waypoint	Distance	Leg	FO/FB	Latitude	Longitude	TC	MC	Altitude	Speed	MEA	Arc Center Lat (D° M' S.ss")	Arc Center Lon (D° M' S.ss")	Arc Radius (NM)
AVNIS	ZZIPR WP		IF		N43 11 09.00	W091 39 33.00								
	UGGLY WP	67.64	TF	FB	N42 14 26.00	W090 49 31.00	146.67	147.67			4000			
	AGONY WP	26.27	TF	FB	N41 51 15.00	W090 32 55.00	151.82	152.82	-28000		4000			
	FARCE WP	18.09	TF	FB	N41 35 46.50	W090 20 23.15	148.69	149.69	+24000 -26000		3000			
	CHUMP WP	20.69	TF	FB	N41 21 20.00	W090 00 40.00	134.13	135.13	-21000		3000			
	CHUMP WP	10.00	HM		N41 21 20.00	W090 00 40.00	134.13	135.13	-21000					
	NOGEE WP	16.63	TF	FB	N41 13 21.43	W089 41 18.54	118.54	119.54	-18000		3000			
	KOOKS WP	24.12	TF	FB	N41 10 28.00	W089 09 35.00	96.70	97.70	-16000		3000			
	MOORS WP	12.62	TF	FB	N41 17 06.00	W088 55 21.00	58.23	59.23	-10000		3000			
	ENDEE WP	19.44	TF	FB	N41 22 26.60	W088 30 32.30	73.92	74.92	+6000 -7000		3000			

Common Route Data - ENDEE

DB	Waypoint	Distance	Leg	FO/FB	Latitude	Longitude	TC	MC	Altitude	Speed	MEA	Arc Center Lat (D° M' S.ss")	Arc Center Lon (D° M' S.ss")	Arc Radius (NM)
	ENDEE WP		IF		N41 22 26.60	W088 30 32.30			+6000 -7000					
	STKNY WP	12.67	TF	FB	N41 30 24.41	W088 17 25.60	51.02	52.02	6000		2400			

Runway Transition Data - RW04R

DB	Waypoint	Distance	Leg	FO/FB	Latitude	Longitude	TC	MC	Altitude	Speed	MEA	Arc Center Lat (D° M' S.ss")	Arc Center Lon (D° M' S.ss")	Arc Radius (NM)
	STKNY WP		IF		N41 30 24.41	W088 17 25.60			6000					
	BANER_ WP	15.63	TF	FB	N41 36 38.18	W087 58 19.39	66.43	67.43			2300			

Runway Transition Data - RW13C

DB	Waypoint	Distance	Leg	FO/FB	Latitude	Longitude	TC	MC	Altitude	Speed	MEA	Arc Center Lat (D° M' S.ss")	Arc Center Lon (D° M' S.ss")	Arc Radius (NM)
	STKNY WP		IF		N41 30 24.41	W088 17 25.60			6000					
AVNIS	TOYUL WP	15.81	TF	FB	N41 42 44.18	W088 04 13.55	38.71	39.71			2300			
	JEAAN WP	2.00	TF	FO	N41 44 18.61	W088 02 34.59	38.12	39.12			2300			
	JEAAN WP	5.00	FM		N41 44 18.61	W088 02 34.59	39.02	39.02						

Runway Transition Data - RW22L

DB	Waypoint	Distance	Leg	FO/FB	Latitude	Longitude	TC	MC	Altitude	Speed	MEA	Arc Center Lat (D° M' S.ss")	Arc Center Lon (D° M' S.ss")	Arc Radius (NM)
	STKNY WP		IF		N41 30 24.41	W088 17 25.60			6000					
	MIING WP	28.48	TF	FB	N41 45 16.41	W087 45 02.08	58.37	59.37			2200			
	FENCK WP	2.92	TF	FB	N41 45 27.22	W087 41 08.60	86.44	87.44			2100			
	WADLL WP	2.54	TF	FO	N41 45 36.80	W087 37 45.03	86.39	87.39			2100			
	WADLL WP	5.00	FM		N41 45 36.80	W087 37 45.03	91.00	91.00						

Runway Transition Data - RW31C

DB	Waypoint	Distance	Leg	FO/FB	Latitude	Longitude	TC	MC	Altitude	Speed	MEA	Arc Center Lat (D° M' S.ss")	Arc Center Lon (D° M' S.ss")	Arc Radius (NM)
	STKNY WP		IF		N41 30 24.41	W088 17 25.60			6000					
	KEMPZ WP	19.52	TF	FB	N41 32 44.27	W087 51 37.14	83.00	84.00			2400			
	GAGGA WP	6.86	TF	FO	N41 33 32.00	W087 42 33.00	83.29	84.29			2400			
	GAGGA WP	5.00	FM		N41 33 32.00	W087 42 33.00	86.00	84.00						

Waypoint Data

DB	Waypoint	Arc Center	Lat-Long (DMS.S)	Latitude (Deg)	Longitude (Deg)	Latitude (D°, M.mm')	Longitude (D°, M.mm')	Latitude (D° M' S.ss")	Longitude (D° M' S.ss")
	ABYSS WP		410351.01N-0904232.62W	N 41.0641704	W 90.7090599	N41 03.850	W90 42.544	N41 03 51.01	W090 42 32.62
	AGONY WP		415115.00N-0903255.00W	N 41.8541667	W 90.5486111	N41 51.250	W90 32.917	N41 51 15.00	W090 32 55.00
	BANER_ WP		413638.18N-0875819.39W	N 41.6106056	W 87.9720528	N41 36.636	W87 58.323	N41 36 38.18	W087 58 19.39
	BOOKK WP		404215.65N-0901847.00W	N 40.7043463	W 90.3130567	N40 42.261	W90 18.783	N40 42 15.65	W090 18 47.00
	BURUU WP		403226.41N-0901004.41W	N 40.5406694	W 90.1678917	N40 32.440	W90 10.073	N40 32 26.41	W090 10 04.41
	CHUMP WP		412120.00N-0900040.00W	N 41.3555556	W 90.0111111	N41 21.333	W90 00.667	N41 21 20.00	W090 00 40.00
	EDENS WP		410644.66N-0900547.43W	N 41.1124047	W 90.0965094	N41 06.744	W90 05.791	N41 06 44.66	W090 05 47.43
	ENDEE WP		412226.60N-0883032.30W	N 41.3740557	W 88.5089727	N41 22.443	W88 30.538	N41 22 26.60	W088 30 32.30
	ENNZO WP		402138.20N-0912611.00W	N 40.3606125	W 91.4363889	N40 21.637	W91 26.183	N40 21 38.20	W091 26 11.00
	FARCE WP		413546.50N-0902023.15W	N 41.5962500	W 90.3397639	N41 35.775	W90 20.386	N41 35 46.50	W090 20 23.15
	FENCK WP		414527.22N-0874108.60W	N 41.7575617	W 87.6857235	N41 45.454	W87 41.143	N41 45 27.22	W087 41 08.60
	GAGGA WP		413332.00N-0874233.00W	N 41.5588889	W 87.7091667	N41 33.533	W87 42.550	N41 33 32.00	W087 42 33.00
	ILIAD WP		404537.00N-0895424.00W	N 40.7602778	W 89.9066667	N40 45.617	W89 54.400	N40 45 37.00	W089 54 24.00
AVNIS	IRK VORTAC		400806.06N-0923530.17W	N 40.1350167	W 92.5917139	N40 08.101	W92 35.503	N40 08 06.06	W092 35 30.17
	JALAP WP		405018.00N-0933348.00W	N 40.8383333	W 93.5633333	N40 50.300	W93 33.800	N40 50 18.00	W093 33 48.00
	JEAAN WP		414418.61N-0880234.59W	N 41.7385037	W 88.0429422	N41 44.310	W88 02.577	N41 44 18.61	W088 02 34.59
	KEMPZ WP		413244.27N-0875137.14W	N 41.5456297	W 87.8603168	N41 32.738	W87 51.619	N41 32 44.27	W087 51 37.14
	KOOKS WP		411028.00N-0890935.00W	N 41.1744444	W 89.1597222	N41 10.467	W89 09.583	N41 10 28.00	W089 09 35.00
	LLVSS WP		405208.00N-0894518.00W	N 40.8688889	W 89.7550000	N40 52.133	W89 45.300	N40 52 08.00	W089 45 18.00
AVNIS	MAGOO WP		400129.73N-0904542.60W	N 40.0249250	W 90.7618333	N40 01.495	W90 45.710	N40 01 29.73	W090 45 42.60
	MANIA WP		410238.18N-0892410.91W	N 41.0439389	W 89.4030306	N41 02.636	W89 24.182	N41 02 38.18	W089 24 10.91
	MIING WP		414516.41N-0874502.08W	N 41.7545582	W 87.7505774	N41 45.273	W87 45.035	N41 45 16.41	W087 45 02.08
	MMEGG WP		410444.60N-0884400.96W	N 41.0790553	W 88.7335991	N41 04.743	W88 44.016	N41 04 44.60	W088 44 00.96
	MOORS WP		411706.00N-0885521.00W	N 41.2850000	W 88.9225000	N41 17.100	W88 55.350	N41 17 06.00	W088 55 21.00
	NANEE WP		405208.67N-0885035.11W	N 40.8690750	W 88.8430861	N40 52.145	W88 50.585	N40 52 08.67	W088 50 35.11
	NOGEE WP		411321.43N-0894118.54W	N 41.2226194	W 89.6884833	N41 13.357	W89 41.309	N41 13 21.43	W089 41 18.54
	OHHMY WP		425253.00N-0914530.00W	N 42.8813889	W 91.7583333	N42 52.883	W91 45.500	N42 52 53.00	W091 45 30.00
	POOGY WP		402533.07N-0890419.04W	N 40.4258528	W 89.0719556	N40 25.551	W89 04.317	N40 25 33.07	W089 04 19.04
	PURTY WP		410819.16N-0894316.22W	N 41.1386556	W 89.7211722	N41 08.319	W89 43.270	N41 08 19.16	W089 43 16.22
	STKNY WP		413024.41N-0881725.60W	N 41.5067800	W 88.2904455	N41 30.407	W88 17.427	N41 30 24.41	W088 17 25.60
AVNIS	TOYUL WP		414244.18N-0880413.55W	N 41.7122722	W 88.0704306	N41 42.736	W88 04.226	N41 42 44.18	W088 04 13.55
	UGGLY WP		421426.00N-0904931.00W	N 42.2405556	W 90.8252778	N42 14.433	W90 49.517	N42 14 26.00	W090 49 31.00
	WADLL WP		414536.80N-0873745.03W	N 41.7602220	W 87.6291748	N41 45.613	W87 37.750	N41 45 36.80	W087 37 45.03
AVNIS	ZZIPR WP		431109.00N-0913933.00W	N 43.1858333	W 91.6591667	N43 11.150	W91 39.550	N43 11 09.00	W091 39 33.00

RS Results ENDEE RNAV 04

ENDEE RNAV

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2

Last Evaluation: 06-Dec-2012 07:31:02
Reference Software Version: 1.2.0

Route Evaluation for POOGY:ENDEE:RW22L

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	POOGY		-24000.0				0.0	0.0
TF	NANEE	FLY_BY	-15000.0			0.02	28.56	1.0
TF	MMEGG	FLY_BY	-10000.0			8.22	13.54	1.0
TF	ENDEE	FLY_BY	+6000.0	-7000.0		21.05	20.4	1.74
TF	STKNY	FLY_BY	6000.0			7.2	12.67	1.74
TF	WP3743	FLY_BY				27.72	28.48	1.53
TF	WP3741	FLY_BY				0.1	2.92	1.53
TF	WADLL	FLY_OVER					2.54	1.0
FM							0.0	0.0

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	POOGY				0.0	0.0							0.0	0.0				
TF	NANEE	FLY_BY	0.0		20524.08	300.0	0.0	88.0	427.0	491.0	0.0		13384.7	300.0	0.0	74.0	379.0	453.0
TF	MMEGG	FLY_BY	0.0		13384.7	300.0	0.0	74.0	379.0	453.0	1.95	27.16	10000.0	250.0	4.11	67.0	299.0	366.0
TF	ENDEE	FLY_BY	1.95	27.16	10000.0	250.0	4.11	67.0	299.0	366.0	1.74	9.39	7000.0	250.0	10.53	61.0	285.0	346.0
TF	STKNY	FLY_BY	1.74	9.39	7000.0	250.0	10.53	61.0	285.0	346.0	1.68	26.77	6000.0	250.0	3.6	59.0	281.0	340.0
TF	WP3743	FLY_BY	1.68	26.77	6000.0	250.0	3.6	59.0	281.0	340.0	1.53	6.2	3465.55	250.0	13.86	54.0	270.0	324.0
TF	WP3741	FLY_BY	1.53	6.2	3465.55	250.0	13.86	54.0	270.0	324.0	0.07	84.95	2736.07	250.0	1.0	52.0	267.0	319.0
TF	WADLL	FLY_OVER	0.07	84.95	2736.07	250.0	1.0	52.0	267.0	319.0	0.0		2100.0	250.0	0.0	30.0	265.0	295.0
FM			0.0		2100.0	250.0	0.0	30.0	265.0	295.0			0.0	0.0				

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	NANEE	17-021567	AVNIS	2C	N40°34' 13"	W089°04' 20"	1276.0	false	P	1000.0	2276	2276.0	05-Dec-2012 05:20:24
2	MMEGG	17-022363	AVNIS	5D	N40°52' 30"	W088°55' 24"	1203.0	false	P	1000.0	2203	2203.0	05-Dec-2012 05:20:26
3	ENDEE	17-020110	AVNIS	5D	N41°12' 55"	W088°41' 24"	1142.0	false	P	1000.0	2142	2142.0	05-Dec-2012 05:20:35
4	STKNY	17-002074	AVNIS	4D	N41°21' 17"	W088°29' 55"	1060.0	false	P	1000.0	2060	2060.0	05-Dec-2012 05:23:06
5	WP3743	17-000714	AVNIS	2C	N41°37' 29"	W088°00' 15"	1144.0	false	P	1000.0	2144	2144.0	05-Dec-2012 05:20:22
6	WP3741	17-000017	AVNIS	4D	N41°44' 15"	W087°42' 01"	838.0	false	P	1000.0	1838	1838.0	05-Dec-2012 05:20:22
7	WADLL	17-000071	AVNIS	2D	N41°45' 23"	W087°38' 06"	875.0	false	P	1000.0	1875	1875.0	05-Dec-2012 05:20:22

Route Criteria Failures

No failures.

Route Evaluation for POOGY:ENDEE:RW04R

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	POOGY		-24000.0				0.0	0.0
TF	NANEE	FLY_BY	-15000.0			0.02	28.56	1.0
TF	MMEGG	FLY_BY	-10000.0			8.22	13.54	1.0
TF	ENDEE	FLY_BY	+6000.0	-7000.0		21.05	20.4	1.74
TF	STKNY	FLY_BY	6000.0			15.27	12.67	3.43
TF	BANER	FLY_BY					15.64	1.69

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	POOGY				0.0	0.0							0.0	0.0				
TF	NANEE	FLY_BY	0.0		20524.08	300.0	0.0	88.0	427.0	491.0	0.0		13384.7	300.0	0.0	74.0	379.0	453.0
TF	MMEGG	FLY_BY	0.0		13384.7	300.0	0.0	74.0	379.0	453.0	1.95	27.16	10000.0	250.0	4.11	67.0	299.0	366.0
TF	ENDEE	FLY_BY	1.95	27.16	10000.0	250.0	4.11	67.0	299.0	366.0	1.74	9.39	7000.0	250.0	10.53	61.0	285.0	346.0
TF	STKNY	FLY_BY	1.74	9.39	7000.0	250.0	10.53	61.0	285.0	346.0	1.69	12.57	6000.0	250.0	7.64	59.0	281.0	340.0
TF	BANER	FLY_BY	1.69	12.57	6000.0	250.0	7.64	59.0	281.0	340.0	0.0		2300.0	250.0	0.0	30.0	265.0	295.0

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	NANEE	17-021567	AVNIS	2C	N40°34' 13"	W089°04' 20"	1276.0	false	P	1000.0	2276	2276.0	05-Dec-2012 05:20:24
2	MMEGG	17-022363	AVNIS	5D	N40°52' 30"	W088°55' 24"	1203.0	false	P	1000.0	2203	2203.0	05-Dec-2012 05:20:26
3	ENDEE	17-020110	AVNIS	5D	N41°12' 55"	W088°41' 24"	1142.0	false	P	1000.0	2142	2142.0	05-Dec-2012 05:20:35
4	STKNY	17-002074	AVNIS	4D	N41°21' 17"	W088°29' 55"	1060.0	false	P	1000.0	2060	2060.0	05-Dec-2012 05:23:06
5	BANER	17-001393	AVNIS	2C	N41°36' 03"	W087°58' 44"	1160.0	false	P	1000.0	2160	2160.0	05-Dec-2012 05:20:22

Route Criteria Failures

RSO153: The route beginning at POOGY and ending at BANER has a Fly-By Fix as the last fix of the route, but does not terminates at an approach procedure.

Route Evaluation for POOGY:ENDEE:RW31C

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	POOGY		-24000.0				0.0	0.0
TF	NANEE	FLY_BY	-15000.0			0.02	28.56	1.0
TF	MMEGG	FLY_BY	-10000.0			8.22	13.54	1.0
TF	ENDEE	FLY_BY	+6000.0	-7000.0		21.05	20.4	1.74
TF	STKNY	FLY_BY	6000.0			31.84	12.67	3.43
TF	KEMPZ	FLY_BY				0.0	19.52	1.69
TF	GAGGA	FLY_OVER					6.86	1.0
FM							0.0	0.0

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	POOGY				0.0	0.0							0.0	0.0				
TF	NANEE	FLY_BY	0.0		20524.08	300.0	0.0	88.0	427.0	491.0	0.0		13384.7	300.0	0.0	74.0	379.0	453.0
TF	MMEGG	FLY_BY	0.0		13384.7	300.0	0.0	74.0	379.0	453.0	1.95	27.16	10000.0	250.0	4.11	67.0	299.0	366.0
TF	ENDEE	FLY_BY	1.95	27.16	10000.0	250.0	4.11	67.0	299.0	366.0	1.74	9.39	7000.0	250.0	10.53	61.0	285.0	346.0
TF	STKNY	FLY_BY	1.74	9.39	7000.0	250.0	10.53	61.0	285.0	346.0	1.69	5.91	6000.0	250.0	15.92	59.0	281.0	340.0
TF	KEMPZ	FLY_BY	1.69	5.91	6000.0	250.0	15.92	59.0	281.0	340.0	0.0		4113.82	250.0	0.0	55.0	273.0	328.0
TF	GAGGA	FLY_OVER	0.0		4113.82	250.0	0.0	55.0	273.0	328.0	0.0		2400.0	250.0	0.0	30.0	266.0	296.0
FM			0.0		2400.0	250.0	0.0	30.0	266.0	296.0			0.0	0.0				

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	NANEE	17-021567	AVNIS	2C	N40°34' 13"	W089°04' 20"	1276.0	false	P	1000.0	2276	2276.0	05-Dec-2012 05:20:24
2	MMEGG	17-022363	AVNIS	5D	N40°52' 30"	W088°55' 24"	1203.0	false	P	1000.0	2203	2203.0	05-Dec-2012 05:20:26
3	ENDEE	17-020110	AVNIS	5D	N41°12' 55"	W088°41' 24"	1142.0	false	P	1000.0	2142	2142.0	05-Dec-2012 05:20:35
4	STKNY	17-002074	AVNIS	4D	N41°21' 17"	W088°29' 55"	1060.0	false	P	1000.0	2060	2060.0	05-Dec-2012 05:23:06
5	KEMPZ	17-000002	AVNIS	2D	N41°33' 20"	W087°50' 55"	1330.0	false	P	1000.0	2330	2330.0	05-Dec-2012 05:20:22
6	GAGGA	17-000002	AVNIS	2D	N41°33' 20"	W087°50' 55"	1330.0	false	P	1000.0	2330	2330.0	05-Dec-2012 05:20:22

Route Criteria Failures

No failures.

Route Evaluation for POOGY:ENDEE:RW13C

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	POOGY		-24000.0				0.0	0.0
TF	NANEE	FLY_BY	-15000.0			0.02	28.56	1.0
TF	MMEGG	FLY_BY	-10000.0			8.22	13.54	1.0
TF	ENDEE	FLY_BY	+6000.0	-7000.0		21.05	20.4	1.74
TF	STKNY	FLY_BY	6000.0			12.45	12.67	3.43
TF	TOYUL	FLY_BY				0.73	15.81	1.68
TF	JEAAN	FLY_OVER					2.0	1.0
FM							0.0	0.0

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	POOGY				0.0	0.0							0.0	0.0				
TF	NANEE	FLY_BY	0.0		20524.08	300.0	0.0	88.0	427.0	491.0	0.0		13384.7	300.0	0.0	74.0	379.0	453.0
TF	MMEGG	FLY_BY	0.0		13384.7	300.0	0.0	74.0	379.0	453.0	1.95	27.16	10000.0	250.0	4.11	67.0	299.0	366.0
TF	ENDEE	FLY_BY	1.95	27.16	10000.0	250.0	4.11	67.0	299.0	366.0	1.74	9.39	7000.0	250.0	10.53	61.0	285.0	346.0
TF	STKNY	FLY_BY	1.74	9.39	7000.0	250.0	10.53	61.0	285.0	346.0	1.68	15.44	6000.0	250.0	6.23	59.0	281.0	340.0
TF	TOYUL	FLY_BY	1.68	15.44	6000.0	250.0	6.23	59.0	281.0	340.0	0.55	85.49	2800.0	250.0	1.0	53.0	267.0	320.0
TF	JEAAN	FLY_OVER	0.55	85.49	2800.0	250.0	1.0	53.0	267.0	320.0	0.0		2300.0	250.0	0.0	30.0	265.0	295.0
FM			0.0		2300.0	250.0	0.0	30.0	265.0	295.0			0.0	0.0				

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	NANEE	17-021567	AVNIS	2C	N40°34' 13"	W089°04' 20"	1276.0	false	P	1000.0	2276	2276.0	05-Dec-2012 05:20:24
2	MMEGG	17-022363	AVNIS	5D	N40°52' 30"	W088°55' 24"	1203.0	false	P	1000.0	2203	2203.0	05-Dec-2012 05:20:26
3	ENDEE	17-020110	AVNIS	5D	N41°12' 55"	W088°41' 24"	1142.0	false	P	1000.0	2142	2142.0	05-Dec-2012 05:20:35
4	STKNY	17-002074	AVNIS	4D	N41°21' 17"	W088°29' 55"	1060.0	false	P	1000.0	2060	2060.0	05-Dec-2012 05:23:06
5	TOYUL	17-001137	AVNIS	5D	N41°30' 45"	W088°15' 18"	1043.0	false	P	1000.0	2043	2043.0	05-Dec-2012 05:20:38
6	JEAAN	17-000115	AVNIS	2C	N41°44' 58"	W088°01' 57"	1078.0	false	P	1000.0	2078	2078.0	05-Dec-2012 05:20:38

Route Criteria Failures

No failures.

Route Evaluation for MAGOO:ENDEE:RW22L

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	MAGOO						0.0	0.0
TF	BURUU	FLY_BY	+24000.0	-26000.0		0.49	41.23	1.0
TF	ILIAD	FLY_BY				4.38	17.77	1.0
TF	LLVSS	FLY_BY	-21000.0			9.88	9.49	1.0
TF	MANIA	FLY_BY	-18000.0			2.27	19.14	1.0
TF	KOOKS	FLY_BY	-16000.0			3.5	13.53	1.0
TF	MOORS	FLY_BY	-10000.0			15.53	12.62	1.95
TF	ENDEE	FLY_BY	+6000.0	-7000.0		23.17	19.44	3.7
TF	STKNY	FLY_BY	6000.0			7.2	12.67	1.74
TF	WP3743	FLY_BY				27.72	28.48	1.53
TF	WP3741	FLY_BY				0.1	2.92	1.53
TF	WADLL	FLY_OVER					2.54	1.0
FM							0.0	0.0

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	MAGOO				0.0	0.0							0.0	0.0				
TF	BURUU	FLY_BY	0.0		36307.7	300.0	0.0	119.0	572.0	570.0	0.21	49.47	26000.0	300.0	5.0	98.0	470.0	545.0
TF	ILIAD	FLY_BY	0.21	49.47	26000.0	300.0	5.0	98.0	470.0	545.0	1.72	44.86	23373.73	300.0	5.0	93.0	449.0	519.0
TF	LLVSS	FLY_BY	1.72	44.86	23373.73	300.0	5.0	93.0	449.0	519.0	3.54	40.98	21000.0	300.0	5.0	89.0	431.0	496.0
TF	MANIA	FLY_BY	3.54	40.98	21000.0	300.0	5.0	89.0	431.0	496.0	3.34	168.56	16537.3	300.0	1.14	80.0	399.0	479.0
TF	KOOKS	FLY_BY	3.34	168.56	16537.3	300.0	1.14	80.0	399.0	479.0	2.95	96.66	13155.21	300.0	1.75	73.0	377.0	450.0
TF	MOORS	FLY_BY	2.95	96.66	13155.21	300.0	1.75	73.0	377.0	450.0	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0
TF	ENDEE	FLY_BY	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0
TF	STKNY	FLY_BY	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0	1.68	26.77	6000.0	250.0	3.6	59.0	281.0	340.0
TF	WP3743	FLY_BY	1.68	26.77	6000.0	250.0	3.6	59.0	281.0	340.0	1.53	6.2	3465.55	250.0	13.86	54.0	270.0	324.0
TF	WP3741	FLY_BY	1.53	6.2	3465.55	250.0	13.86	54.0	270.0	324.0	0.07	84.95	2736.07	250.0	1.0	52.0	267.0	319.0
TF	WADLL	FLY_OVER	0.07	84.95	2736.07	250.0	1.0	52.0	267.0	319.0	0.0		2100.0	250.0	0.0	30.0	265.0	295.0
FM			0.0		2100.0	250.0	0.0	30.0	265.0	295.0			0.0	0.0				

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	BURUU	17-003104	AVNIS	2C	N40°23' 18"	W090°27' 26"	1019.0	false	P	1000.0	2019	2019.0	05-Dec-2012 06:10:17
2	ILIAD	17-000998	AVNIS	5D	N40°42' 36"	W090°02' 03"	1042.0	false	P	1000.0	2042	2042.0	05-Dec-2012 06:04:57
3	LLVSS	17-001786	AVNIS	5D	N40°52' 43"	W089°50' 41"	1119.0	false	P	1000.0	2119	2119.0	05-Dec-2012 06:04:19
4	MANIA	17-020019	AVNIS	9I	N41°01' 31"	W089°35' 59"	1234.0	false	P	1000.0	3234	2234.0	05-Dec-2012 05:22:05
5	KOOKS	17-001898	AVNIS	5D	N41°07' 38"	W089°16' 31"	1077.0	false	P	1000.0	2077	2077.0	05-Dec-2012 05:22:56
6	MOORS	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
7	ENDEE	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
8	STKNY	17-002074	AVNIS	4D	N41°21' 17"	W088°29' 55"	1060.0	false	P	1000.0	2060	2060.0	05-Dec-2012 05:23:06
9	WP3743	17-000714	AVNIS	2C	N41°37' 29"	W088°00' 15"	1144.0	false	P	1000.0	2144	2144.0	05-Dec-2012 05:20:22
10	WP3741	17-000017	AVNIS	4D	N41°44' 15"	W087°42' 01"	838.0	false	P	1000.0	1838	1838.0	05-Dec-2012 05:20:22
11	WADLL	17-000071	AVNIS	2D	N41°45' 23"	W087°38' 06"	875.0	false	P	1000.0	1875	1875.0	05-Dec-2012 05:20:22

Route Criteria Failures

No failures.

Route Evaluation for MAGOO:ENDEE:RW04R

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	MAGOO						0.0	0.0
TF	BURUU	FLY_BY	+24000.0	-26000.0		0.49	41.23	1.0
TF	ILIAD	FLY_BY				4.38	17.77	1.0
TF	LLVSS	FLY_BY	-21000.0			9.88	9.49	1.0
TF	MANIA	FLY_BY	-18000.0			2.27	19.14	1.0
TF	KOOKS	FLY_BY	-16000.0			3.5	13.53	1.0
TF	MOORS	FLY_BY	-10000.0			15.53	12.62	1.95
TF	ENDEE	FLY_BY	+6000.0	-7000.0		23.17	19.44	3.7
TF	STKNY	FLY_BY	6000.0			15.27	12.67	3.43
TF	BANER	FLY_BY					15.64	1.69

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	MAGOO				0.0	0.0							0.0	0.0				
TF	BURUU	FLY_BY	0.0		36307.7	300.0	0.0	119.0	572.0	570.0	0.21	49.47	26000.0	300.0	5.0	98.0	470.0	545.0
TF	ILIAD	FLY_BY	0.21	49.47	26000.0	300.0	5.0	98.0	470.0	545.0	1.72	44.86	23373.73	300.0	5.0	93.0	449.0	519.0
TF	LLVSS	FLY_BY	1.72	44.86	23373.73	300.0	5.0	93.0	449.0	519.0	3.54	40.98	21000.0	300.0	5.0	89.0	431.0	496.0
TF	MANIA	FLY_BY	3.54	40.98	21000.0	300.0	5.0	89.0	431.0	496.0	3.34	168.56	16537.3	300.0	1.14	80.0	399.0	479.0
TF	KOOKS	FLY_BY	3.34	168.56	16537.3	300.0	1.14	80.0	399.0	479.0	2.95	96.66	13155.21	300.0	1.75	73.0	377.0	450.0
TF	MOORS	FLY_BY	2.95	96.66	13155.21	300.0	1.75	73.0	377.0	450.0	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0
TF	ENDEE	FLY_BY	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0
TF	STKNY	FLY_BY	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0	1.69	12.57	6000.0	250.0	7.64	59.0	281.0	340.0
TF	BANER	FLY_BY	1.69	12.57	6000.0	250.0	7.64	59.0	281.0	340.0	0.0		2300.0	250.0	0.0	30.0	265.0	295.0

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	BURUU	17-003104	AVNIS	2C	N40°23' 18"	W090°27' 26"	1019.0	false	P	1000.0	2019	2019.0	05-Dec-2012 06:10:17
2	ILIAD	17-000998	AVNIS	5D	N40°42' 36"	W090°02' 03"	1042.0	false	P	1000.0	2042	2042.0	05-Dec-2012 06:04:57
3	LLVSS	17-001786	AVNIS	5D	N40°52' 43"	W089°50' 41"	1119.0	false	P	1000.0	2119	2119.0	05-Dec-2012 06:04:19
4	MANIA	17-020019	AVNIS	9I	N41°01' 31"	W089°35' 59"	1234.0	false	P	1000.0	3234	2234.0	05-Dec-2012 05:22:05
5	KOOKS	17-001898	AVNIS	5D	N41°07' 38"	W089°16' 31"	1077.0	false	P	1000.0	2077	2077.0	05-Dec-2012 05:22:56
6	MOORS	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
7	ENDEE	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
8	STKNY	17-002074	AVNIS	4D	N41°21' 17"	W088°29' 55"	1060.0	false	P	1000.0	2060	2060.0	05-Dec-2012 05:23:06
9	BANER	17-001393	AVNIS	2C	N41°36' 03"	W087°58' 44"	1160.0	false	P	1000.0	2160	2160.0	05-Dec-2012 05:20:22

ENDEE RNAV

Route Criteria Failures

RSO153: The route beginning at MAGOO and ending at BANER has a Fly-By Fix as the last fix of the route, but does not terminates at an approach procedure.

Route Evaluation for MAGOO:ENDEE:RW31C

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	MAGOO						0.0	0.0
TF	BURUU	FLY_BY	+24000.0	-26000.0		0.49	41.23	1.0
TF	ILIAD	FLY_BY				4.38	17.77	1.0
TF	LLVSS	FLY_BY	-21000.0			9.88	9.49	1.0
TF	MANIA	FLY_BY	-18000.0			2.27	19.14	1.0
TF	KOOKS	FLY_BY	-16000.0			3.5	13.53	1.0
TF	MOORS	FLY_BY	-10000.0			15.53	12.62	1.95
TF	ENDEE	FLY_BY	+6000.0	-7000.0		23.17	19.44	3.7
TF	STKNY	FLY_BY	6000.0			31.84	12.67	3.43
TF	KEMPZ	FLY_BY				0.0	19.52	1.69
TF	GAGGA	FLY_OVER					6.86	1.0
FM							0.0	0.0

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	MAGOO				0.0	0.0							0.0	0.0				
TF	BURUU	FLY_BY	0.0		36307.7	300.0	0.0	119.0	572.0	570.0	0.21	49.47	26000.0	300.0	5.0	98.0	470.0	545.0
TF	ILIAD	FLY_BY	0.21	49.47	26000.0	300.0	5.0	98.0	470.0	545.0	1.72	44.86	23373.73	300.0	5.0	93.0	449.0	519.0
TF	LLVSS	FLY_BY	1.72	44.86	23373.73	300.0	5.0	93.0	449.0	519.0	3.54	40.98	21000.0	300.0	5.0	89.0	431.0	496.0
TF	MANIA	FLY_BY	3.54	40.98	21000.0	300.0	5.0	89.0	431.0	496.0	3.34	168.56	16537.3	300.0	1.14	80.0	399.0	479.0
TF	KOOKS	FLY_BY	3.34	168.56	16537.3	300.0	1.14	80.0	399.0	479.0	2.95	96.66	13155.21	300.0	1.75	73.0	377.0	450.0
TF	MOORS	FLY_BY	2.95	96.66	13155.21	300.0	1.75	73.0	377.0	450.0	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0
TF	ENDEE	FLY_BY	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0
TF	STKNY	FLY_BY	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0	1.69	5.91	6000.0	250.0	15.92	59.0	281.0	340.0
TF	KEMPZ	FLY_BY	1.69	5.91	6000.0	250.0	15.92	59.0	281.0	340.0	0.0		4113.82	250.0	0.0	55.0	273.0	328.0
TF	GAGGA	FLY_OVER	0.0		4113.82	250.0	0.0	55.0	273.0	328.0	0.0		2400.0	250.0	0.0	30.0	266.0	296.0
FM			0.0		2400.0	250.0	0.0	30.0	266.0	296.0			0.0	0.0				

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	BURUU	17-003104	AVNIS	2C	N40°23' 18"	W090°27' 26"	1019.0	false	P	1000.0	2019	2019.0	05-Dec-2012 06:10:17
2	ILIAD	17-000998	AVNIS	5D	N40°42' 36"	W090°02' 03"	1042.0	false	P	1000.0	2042	2042.0	05-Dec-2012 06:04:57
3	LLVSS	17-001786	AVNIS	5D	N40°52' 43"	W089°50' 41"	1119.0	false	P	1000.0	2119	2119.0	05-Dec-2012 06:04:19
4	MANIA	17-020019	AVNIS	9I	N41°01' 31"	W089°35' 59"	1234.0	false	P	1000.0	3234	2234.0	05-Dec-2012 05:22:05
5	KOOKS	17-001898	AVNIS	5D	N41°07' 38"	W089°16' 31"	1077.0	false	P	1000.0	2077	2077.0	05-Dec-2012 05:22:56
6	MOORS	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
7	ENDEE	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
8	STKNY	17-002074	AVNIS	4D	N41°21' 17"	W088°29' 55"	1060.0	false	P	1000.0	2060	2060.0	05-Dec-2012 05:23:06
9	KEMPZ	17-000002	AVNIS	2D	N41°33' 20"	W087°50' 55"	1330.0	false	P	1000.0	2330	2330.0	05-Dec-2012 05:20:22
10	GAGGA	17-000002	AVNIS	2D	N41°33' 20"	W087°50' 55"	1330.0	false	P	1000.0	2330	2330.0	05-Dec-2012 05:20:22

Route Criteria Failures

No failures.

Route Evaluation for MAGOO:ENDEE:RW13C

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	MAGOO						0.0	0.0
TF	BURUU	FLY_BY	+24000.0	-26000.0		0.49	41.23	1.0
TF	ILIAD	FLY_BY				4.38	17.77	1.0
TF	LLVSS	FLY_BY	-21000.0			9.88	9.49	1.0
TF	MANIA	FLY_BY	-18000.0			2.27	19.14	1.0
TF	KOOKS	FLY_BY	-16000.0			3.5	13.53	1.0
TF	MOORS	FLY_BY	-10000.0			15.53	12.62	1.95
TF	ENDEE	FLY_BY	+6000.0	-7000.0		23.17	19.44	3.7
TF	STKNY	FLY_BY	6000.0			12.45	12.67	3.43
TF	TOYUL	FLY_BY				0.73	15.81	1.68
TF	JEAAN	FLY_OVER					2.0	1.0
FM							0.0	0.0

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	MAGOO				0.0	0.0							0.0	0.0				
TF	BURUU	FLY_BY	0.0		36307.7	300.0	0.0	119.0	572.0	570.0	0.21	49.47	26000.0	300.0	5.0	98.0	470.0	545.0
TF	ILIAD	FLY_BY	0.21	49.47	26000.0	300.0	5.0	98.0	470.0	545.0	1.72	44.86	23373.73	300.0	5.0	93.0	449.0	519.0
TF	LLVSS	FLY_BY	1.72	44.86	23373.73	300.0	5.0	93.0	449.0	519.0	3.54	40.98	21000.0	300.0	5.0	89.0	431.0	496.0
TF	MANIA	FLY_BY	3.54	40.98	21000.0	300.0	5.0	89.0	431.0	496.0	3.34	168.56	16537.3	300.0	1.14	80.0	399.0	479.0
TF	KOOKS	FLY_BY	3.34	168.56	16537.3	300.0	1.14	80.0	399.0	479.0	2.95	96.66	13155.21	300.0	1.75	73.0	377.0	450.0
TF	MOORS	FLY_BY	2.95	96.66	13155.21	300.0	1.75	73.0	377.0	450.0	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0
TF	ENDEE	FLY_BY	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0
TF	STKNY	FLY_BY	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0	1.68	15.44	6000.0	250.0	6.23	59.0	281.0	340.0
TF	TOYUL	FLY_BY	1.68	15.44	6000.0	250.0	6.23	59.0	281.0	340.0	0.55	85.49	2800.0	250.0	1.0	53.0	267.0	320.0
TF	JEAAN	FLY_OVER	0.55	85.49	2800.0	250.0	1.0	53.0	267.0	320.0	0.0		2300.0	250.0	0.0	30.0	265.0	295.0
FM			0.0		2300.0	250.0	0.0	30.0	265.0	295.0			0.0	0.0				

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	BURUU	17-003104	AVNIS	2C	N40°23' 18"	W090°27' 26"	1019.0	false	P	1000.0	2019	2019.0	05-Dec-2012 06:10:17
2	ILIAD	17-000998	AVNIS	5D	N40°42' 36"	W090°02' 03"	1042.0	false	P	1000.0	2042	2042.0	05-Dec-2012 06:04:57
3	LLVSS	17-001786	AVNIS	5D	N40°52' 43"	W089°50' 41"	1119.0	false	P	1000.0	2119	2119.0	05-Dec-2012 06:04:19
4	MANIA	17-020019	AVNIS	9I	N41°01' 31"	W089°35' 59"	1234.0	false	P	1000.0	3234	2234.0	05-Dec-2012 05:22:05
5	KOOKS	17-001898	AVNIS	5D	N41°07' 38"	W089°16' 31"	1077.0	false	P	1000.0	2077	2077.0	05-Dec-2012 05:22:56
6	MOORS	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
7	ENDEE	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
8	STKNY	17-002074	AVNIS	4D	N41°21' 17"	W088°29' 55"	1060.0	false	P	1000.0	2060	2060.0	05-Dec-2012 05:23:06
9	TOYUL	17-001137	AVNIS	5D	N41°30' 45"	W088°15' 18"	1043.0	false	P	1000.0	2043	2043.0	05-Dec-2012 05:20:38
10	JEAAN	17-000115	AVNIS	2C	N41°44' 58"	W088°01' 57"	1078.0	false	P	1000.0	2078	2078.0	05-Dec-2012 05:20:38

Route Criteria Failures

No failures.

Route Evaluation for OHHMY:ENDEE:RW22L

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	OHHMY						0.0	0.0
TF	UGGLY	FLY_BY				18.61	56.47	8.87
TF	AGONY	FLY_BY	-28000.0			3.32	26.27	8.87
TF	FARCE	FLY_BY	+24000.0	-26000.0		14.7	18.09	6.38
TF	CHUMP	FLY_BY	-21000.0			15.81	20.69	12.07
TF	NOGEE	FLY_BY	-18000.0			22.05	16.63	9.22
TF	KOOKS	FLY_BY	-16000.0			38.82	24.12	6.48
TF	MOORS	FLY_BY	-10000.0			15.53	12.62	4.9
TF	ENDEE	FLY_BY	+6000.0	-7000.0		23.17	19.44	3.7
TF	STKNY	FLY_BY	6000.0			7.2	12.67	1.74
TF	WP3743	FLY_BY				27.72	28.48	1.53
TF	WP3741	FLY_BY				0.1	2.92	1.53
TF	WADLL	FLY_OVER					2.54	1.0
FM							0.0	0.0

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	OHHMY				0.0	0.0							0.0	0.0				
TF	UGGLY	FLY_BY	0.0		41000.0	300.0	0.0	128.0	629.0	570.0	8.87	54.11	34566.88	300.0	5.0	115.0	552.0	570.0
TF	AGONY	FLY_BY	8.87	54.11	34566.88	300.0	5.0	115.0	552.0	570.0	1.54	53.17	28000.0	300.0	5.0	102.0	488.0	565.0
TF	FARCE	FLY_BY	1.54	53.17	28000.0	300.0	5.0	102.0	488.0	565.0	6.38	49.47	26000.0	300.0	5.0	98.0	470.0	545.0
TF	CHUMP	FLY_BY	6.38	49.47	26000.0	300.0	5.0	98.0	470.0	545.0	5.69	40.98	21000.0	300.0	5.0	89.0	431.0	496.0
TF	NOGEE	FLY_BY	5.69	40.98	21000.0	300.0	5.0	89.0	431.0	496.0	3.53	18.1	18000.0	300.0	11.02	83.0	409.0	492.0
TF	KOOKS	FLY_BY	3.53	18.1	18000.0	300.0	11.02	83.0	409.0	492.0	2.95	8.37	13155.21	300.0	19.41	73.0	377.0	450.0
TF	MOORS	FLY_BY	2.95	8.37	13155.21	300.0	19.41	73.0	377.0	450.0	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0
TF	ENDEE	FLY_BY	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0
TF	STKNY	FLY_BY	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0	1.68	26.77	6000.0	250.0	3.6	59.0	281.0	340.0
TF	WP3743	FLY_BY	1.68	26.77	6000.0	250.0	3.6	59.0	281.0	340.0	1.53	6.2	3465.55	250.0	13.86	54.0	270.0	324.0
TF	WP3741	FLY_BY	1.53	6.2	3465.55	250.0	13.86	54.0	270.0	324.0	0.07	84.95	2736.07	250.0	1.0	52.0	267.0	319.0
TF	WADLL	FLY_OVER	0.07	84.95	2736.07	250.0	1.0	52.0	267.0	319.0	0.0		2100.0	250.0	0.0	30.0	265.0	295.0
FM			0.0		2100.0	250.0	0.0	30.0	265.0	295.0			0.0	0.0				

ENDEE RNAV

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	UGGLY	19-001143	AVNIS	5E	N42°46' 05"	W091°36' 25"	1710.0	false	P	1000.0	2710	2710.0	05-Dec-2012 05:20:32
2	AGONY	TerrainPt_1_OHHMY:ENDEE:RW22L_UGGLY:AGONY		4E	N42°15' 03"	W090°51' 21"	1085.96	false	P	1000.0	2286	2285.96	06-Dec-2012 08:11:58
3	FARCE	19-000834	AVNIS	5D	N41°37' 58"	W090°24' 38"	1691.0	false	P	1000.0	2691	2691.0	05-Dec-2012 05:21:41
4	CHUMP	17-000884	AVNIS	5D	N41°37' 10"	W090°17' 41"	1163.0	false	P	1000.0	2163	2163.0	05-Dec-2012 05:21:41
5	NOGEE	17-001858	AVNIS	5D	N41°16' 29"	W089°58' 18"	1390.0	false	P	1000.0	2390	2390.0	05-Dec-2012 05:22:03
6	KOOKS	17-003446	AVNIS	5D	N41°14' 27"	W089°34' 02"	1359.0	false	P	1000.0	2359	2359.0	05-Dec-2012 05:22:03
7	MOORS	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
8	ENDEE	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
9	STKNY	17-002074	AVNIS	4D	N41°21' 17"	W088°29' 55"	1060.0	false	P	1000.0	2060	2060.0	05-Dec-2012 05:23:06
10	WP3743	17-000714	AVNIS	2C	N41°37' 29"	W088°00' 15"	1144.0	false	P	1000.0	2144	2144.0	05-Dec-2012 05:20:22
11	WP3741	17-000017	AVNIS	4D	N41°44' 15"	W087°42' 01"	838.0	false	P	1000.0	1838	1838.0	05-Dec-2012 05:20:22
12	WADLL	17-000071	AVNIS	2D	N41°45' 23"	W087°38' 06"	875.0	false	P	1000.0	1875	1875.0	05-Dec-2012 05:20:22

Route Criteria Failures

No failures.

Route Evaluation for OHHMY:ENDEE:RW04R

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	OHHMY						0.0	0.0
TF	UGGLY	FLY_BY				18.61	56.47	8.87
TF	AGONY	FLY_BY	-28000.0			3.32	26.27	8.87
TF	FARCE	FLY_BY	+24000.0	-26000.0		14.7	18.09	6.38
TF	CHUMP	FLY_BY	-21000.0			15.81	20.69	12.07
TF	NOGEE	FLY_BY	-18000.0			22.05	16.63	9.22
TF	KOOKS	FLY_BY	-16000.0			38.82	24.12	6.48
TF	MOORS	FLY_BY	-10000.0			15.53	12.62	4.9
TF	ENDEE	FLY_BY	+6000.0	-7000.0		23.17	19.44	3.7
TF	STKNY	FLY_BY	6000.0			15.27	12.67	3.43
TF	BANER	FLY_BY					15.64	1.69

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	OHHMY				0.0	0.0							0.0	0.0				
TF	UGGLY	FLY_BY	0.0		41000.0	300.0	0.0	128.0	629.0	570.0	8.87	54.11	34566.88	300.0	5.0	115.0	552.0	570.0
TF	AGONY	FLY_BY	8.87	54.11	34566.88	300.0	5.0	115.0	552.0	570.0	1.54	53.17	28000.0	300.0	5.0	102.0	488.0	565.0
TF	FARCE	FLY_BY	1.54	53.17	28000.0	300.0	5.0	102.0	488.0	565.0	6.38	49.47	26000.0	300.0	5.0	98.0	470.0	545.0
TF	CHUMP	FLY_BY	6.38	49.47	26000.0	300.0	5.0	98.0	470.0	545.0	5.69	40.98	21000.0	300.0	5.0	89.0	431.0	496.0
TF	NOGEE	FLY_BY	5.69	40.98	21000.0	300.0	5.0	89.0	431.0	496.0	3.53	18.1	18000.0	300.0	11.02	83.0	409.0	492.0
TF	KOOKS	FLY_BY	3.53	18.1	18000.0	300.0	11.02	83.0	409.0	492.0	2.95	8.37	13155.21	300.0	19.41	73.0	377.0	450.0
TF	MOORS	FLY_BY	2.95	8.37	13155.21	300.0	19.41	73.0	377.0	450.0	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0
TF	ENDEE	FLY_BY	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0
TF	STKNY	FLY_BY	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0	1.69	12.57	6000.0	250.0	7.64	59.0	281.0	340.0
TF	BANER	FLY_BY	1.69	12.57	6000.0	250.0	7.64	59.0	281.0	340.0	0.0		2300.0	250.0	0.0	30.0	265.0	295.0

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	UGGLY	19-001143	AVNIS	5E	N42°46' 05"	W091°36' 25"	1710.0	false	P	1000.0	2710	2710.0	05-Dec-2012 05:20:32
2	AGONY	TerrainPt_1_OHHMY:ENDEE:RW22L_UGGLY:AGONY		4E	N42°15' 03"	W090°51' 21"	1085.96	false	P	1000.0	2286	2285.96	06-Dec-2012 08:11:58
3	FARCE	19-000834	AVNIS	5D	N41°37' 58"	W090°24' 38"	1691.0	false	P	1000.0	2691	2691.0	05-Dec-2012 05:21:41
4	CHUMP	17-000884	AVNIS	5D	N41°37' 10"	W090°17' 41"	1163.0	false	P	1000.0	2163	2163.0	05-Dec-2012 05:21:41
5	NOGEE	17-001858	AVNIS	5D	N41°16' 29"	W089°58' 18"	1390.0	false	P	1000.0	2390	2390.0	05-Dec-2012 05:22:03
6	KOOKS	17-003446	AVNIS	5D	N41°14' 27"	W089°34' 02"	1359.0	false	P	1000.0	2359	2359.0	05-Dec-2012 05:22:03
7	MOORS	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
8	ENDEE	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
9	STKNY	17-002074	AVNIS	4D	N41°21' 17"	W088°29' 55"	1060.0	false	P	1000.0	2060	2060.0	05-Dec-2012 05:23:06
10	BANER	17-001393	AVNIS	2C	N41°36' 03"	W087°58' 44"	1160.0	false	P	1000.0	2160	2160.0	05-Dec-2012 05:20:22

Route Criteria Failures

RSO153: The route beginning at OHHMY and ending at BANER has a Fly-By Fix as the last fix of the route, but does not terminates at an approach procedure.

Route Evaluation for OHHMY:ENDEE:RW31C

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	OHHMY						0.0	0.0
TF	UGGLY	FLY_BY				18.61	56.47	8.87
TF	AGONY	FLY_BY	-28000.0			3.32	26.27	8.87
TF	FARCE	FLY_BY	+24000.0	-26000.0		14.7	18.09	6.38
TF	CHUMP	FLY_BY	-21000.0			15.81	20.69	12.07
TF	NOGEE	FLY_BY	-18000.0			22.05	16.63	9.22
TF	KOOKS	FLY_BY	-16000.0			38.82	24.12	6.48
TF	MOORS	FLY_BY	-10000.0			15.53	12.62	4.9
TF	ENDEE	FLY_BY	+6000.0	-7000.0		23.17	19.44	3.7
TF	STKNY	FLY_BY	6000.0			31.84	12.67	3.43
TF	KEMPZ	FLY_BY				0.0	19.52	1.69
TF	GAGGA	FLY_OVER					6.86	1.0
FM							0.0	0.0

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	OHHMY				0.0	0.0							0.0	0.0				
TF	UGGLY	FLY_BY	0.0		41000.0	300.0	0.0	128.0	629.0	570.0	8.87	54.11	34566.88	300.0	5.0	115.0	552.0	570.0
TF	AGONY	FLY_BY	8.87	54.11	34566.88	300.0	5.0	115.0	552.0	570.0	1.54	53.17	28000.0	300.0	5.0	102.0	488.0	565.0
TF	FARCE	FLY_BY	1.54	53.17	28000.0	300.0	5.0	102.0	488.0	565.0	6.38	49.47	26000.0	300.0	5.0	98.0	470.0	545.0
TF	CHUMP	FLY_BY	6.38	49.47	26000.0	300.0	5.0	98.0	470.0	545.0	5.69	40.98	21000.0	300.0	5.0	89.0	431.0	496.0
TF	NOGEE	FLY_BY	5.69	40.98	21000.0	300.0	5.0	89.0	431.0	496.0	3.53	18.1	18000.0	300.0	11.02	83.0	409.0	492.0
TF	KOOKS	FLY_BY	3.53	18.1	18000.0	300.0	11.02	83.0	409.0	492.0	2.95	8.37	13155.21	300.0	19.41	73.0	377.0	450.0
TF	MOORS	FLY_BY	2.95	8.37	13155.21	300.0	19.41	73.0	377.0	450.0	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0
TF	ENDEE	FLY_BY	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0
TF	STKNY	FLY_BY	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0	1.69	5.91	6000.0	250.0	15.92	59.0	281.0	340.0
TF	KEMPZ	FLY_BY	1.69	5.91	6000.0	250.0	15.92	59.0	281.0	340.0	0.0		4113.82	250.0	0.0	55.0	273.0	328.0
TF	GAGGA	FLY_OVER	0.0		4113.82	250.0	0.0	55.0	273.0	328.0	0.0		2400.0	250.0	0.0	30.0	266.0	296.0
FM			0.0		2400.0	250.0	0.0	30.0	266.0	296.0			0.0	0.0				

ENDEE RNAV

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	UGGLY	19-001143	AVNIS	5E	N42°46' 05"	W091°36' 25"	1710.0	false	P	1000.0	2710	2710.0	05-Dec-2012 05:20:32
2	AGONY	TerrainPt_1_OHHMY:ENDEE:RW22L_UGGLY:AGONY		4E	N42°15' 03"	W090°51' 21"	1085.96	false	P	1000.0	2286	2285.96	06-Dec-2012 08:11:58
3	FARCE	19-000834	AVNIS	5D	N41°37' 58"	W090°24' 38"	1691.0	false	P	1000.0	2691	2691.0	05-Dec-2012 05:21:41
4	CHUMP	17-000884	AVNIS	5D	N41°37' 10"	W090°17' 41"	1163.0	false	P	1000.0	2163	2163.0	05-Dec-2012 05:21:41
5	NOGEE	17-001858	AVNIS	5D	N41°16' 29"	W089°58' 18"	1390.0	false	P	1000.0	2390	2390.0	05-Dec-2012 05:22:03
6	KOOKS	17-003446	AVNIS	5D	N41°14' 27"	W089°34' 02"	1359.0	false	P	1000.0	2359	2359.0	05-Dec-2012 05:22:03
7	MOORS	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
8	ENDEE	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
9	STKNY	17-002074	AVNIS	4D	N41°21' 17"	W088°29' 55"	1060.0	false	P	1000.0	2060	2060.0	05-Dec-2012 05:23:06
10	KEMPZ	17-000002	AVNIS	2D	N41°33' 20"	W087°50' 55"	1330.0	false	P	1000.0	2330	2330.0	05-Dec-2012 05:20:22
11	GAGGA	17-000002	AVNIS	2D	N41°33' 20"	W087°50' 55"	1330.0	false	P	1000.0	2330	2330.0	05-Dec-2012 05:20:22

Route Criteria Failures

No failures.

Route Evaluation for OHHMY:ENDEE:RW13C

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	OHHMY						0.0	0.0
TF	UGGLY	FLY_BY				18.61	56.47	8.87
TF	AGONY	FLY_BY	-28000.0			3.32	26.27	8.87
TF	FARCE	FLY_BY	+24000.0	-26000.0		14.7	18.09	6.38
TF	CHUMP	FLY_BY	-21000.0			15.81	20.69	12.07
TF	NOGEE	FLY_BY	-18000.0			22.05	16.63	9.22
TF	KOOKS	FLY_BY	-16000.0			38.82	24.12	6.48
TF	MOORS	FLY_BY	-10000.0			15.53	12.62	4.9
TF	ENDEE	FLY_BY	+6000.0	-7000.0		23.17	19.44	3.7
TF	STKNY	FLY_BY	6000.0			12.45	12.67	3.43
TF	TOYUL	FLY_BY				0.73	15.81	1.68
TF	JEAAN	FLY_OVER					2.0	1.0
FM							0.0	0.0

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	OHHMY				0.0	0.0							0.0	0.0				
TF	UGGLY	FLY_BY	0.0		41000.0	300.0	0.0	128.0	629.0	570.0	8.87	54.11	34566.88	300.0	5.0	115.0	552.0	570.0
TF	AGONY	FLY_BY	8.87	54.11	34566.88	300.0	5.0	115.0	552.0	570.0	1.54	53.17	28000.0	300.0	5.0	102.0	488.0	565.0
TF	FARCE	FLY_BY	1.54	53.17	28000.0	300.0	5.0	102.0	488.0	565.0	6.38	49.47	26000.0	300.0	5.0	98.0	470.0	545.0
TF	CHUMP	FLY_BY	6.38	49.47	26000.0	300.0	5.0	98.0	470.0	545.0	5.69	40.98	21000.0	300.0	5.0	89.0	431.0	496.0
TF	NOGEE	FLY_BY	5.69	40.98	21000.0	300.0	5.0	89.0	431.0	496.0	3.53	18.1	18000.0	300.0	11.02	83.0	409.0	492.0
TF	KOOKS	FLY_BY	3.53	18.1	18000.0	300.0	11.02	83.0	409.0	492.0	2.95	8.37	13155.21	300.0	19.41	73.0	377.0	450.0
TF	MOORS	FLY_BY	2.95	8.37	13155.21	300.0	19.41	73.0	377.0	450.0	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0
TF	ENDEE	FLY_BY	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0
TF	STKNY	FLY_BY	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0	1.68	15.44	6000.0	250.0	6.23	59.0	281.0	340.0
TF	TOYUL	FLY_BY	1.68	15.44	6000.0	250.0	6.23	59.0	281.0	340.0	0.55	85.49	2800.0	250.0	1.0	53.0	267.0	320.0
TF	JEAAN	FLY_OVER	0.55	85.49	2800.0	250.0	1.0	53.0	267.0	320.0	0.0		2300.0	250.0	0.0	30.0	265.0	295.0
FM			0.0		2300.0	250.0	0.0	30.0	265.0	295.0			0.0	0.0				

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	UGGLY	19-001143	AVNIS	5E	N42°46' 05"	W091°36' 25"	1710.0	false	P	1000.0	2710	2710.0	05-Dec-2012 05:20:32
2	AGONY	TerrainPt_1_OHHMY:ENDEE:RW22L_UGGLY:AGONY		4E	N42°15' 03"	W090°51' 21"	1085.96	false	P	1000.0	2286	2285.96	06-Dec-2012 08:11:58
3	FARCE	19-000834	AVNIS	5D	N41°37' 58"	W090°24' 38"	1691.0	false	P	1000.0	2691	2691.0	05-Dec-2012 05:21:41
4	CHUMP	17-000884	AVNIS	5D	N41°37' 10"	W090°17' 41"	1163.0	false	P	1000.0	2163	2163.0	05-Dec-2012 05:21:41
5	NOGEE	17-001858	AVNIS	5D	N41°16' 29"	W089°58' 18"	1390.0	false	P	1000.0	2390	2390.0	05-Dec-2012 05:22:03
6	KOOKS	17-003446	AVNIS	5D	N41°14' 27"	W089°34' 02"	1359.0	false	P	1000.0	2359	2359.0	05-Dec-2012 05:22:03
7	MOORS	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
8	ENDEE	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
9	STKNY	17-002074	AVNIS	4D	N41°21' 17"	W088°29' 55"	1060.0	false	P	1000.0	2060	2060.0	05-Dec-2012 05:23:06
10	TOYUL	17-001137	AVNIS	5D	N41°30' 45"	W088°15' 18"	1043.0	false	P	1000.0	2043	2043.0	05-Dec-2012 05:20:38
11	JEAAN	17-000115	AVNIS	2C	N41°44' 58"	W088°01' 57"	1078.0	false	P	1000.0	2078	2078.0	05-Dec-2012 05:20:38

Route Criteria Failures

No failures.

Route Evaluation for IRK:ENDEE:RW22L

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	IRK						0.0	0.0
TF	ENNZO	FLY_BY				8.29	54.77	1.0
TF	BOOKK	FLY_BY	+24000.0	-26000.0		0.1	55.37	1.0
TF	LLVSS	FLY_BY	-21000.0			12.36	27.28	4.44
TF	MANIA	FLY_BY	-18000.0			2.27	19.14	4.44
TF	KOOKS	FLY_BY	-16000.0			3.5	13.53	1.0
TF	MOORS	FLY_BY	-10000.0			15.53	12.62	1.95
TF	ENDEE	FLY_BY	+6000.0	-7000.0		23.17	19.44	3.7
TF	STKNY	FLY_BY	6000.0			7.2	12.67	1.74
TF	WP3743	FLY_BY				27.72	28.48	1.53
TF	WP3741	FLY_BY				0.1	2.92	1.53
TF	WADLL	FLY_OVER					2.54	1.0
FM							0.0	0.0

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	IRK				0.0	0.0							0.0	0.0				
TF	ENNZO	FLY_BY	0.0		41000.0	300.0	0.0	128.0	629.0	570.0	3.92	54.11	39842.34	300.0	5.0	126.0	614.0	570.0
TF	BOOKK	FLY_BY	3.92	54.11	39842.34	300.0	5.0	126.0	614.0	570.0	0.04	49.47	26000.0	300.0	5.0	98.0	470.0	545.0
TF	LLVSS	FLY_BY	0.04	49.47	26000.0	300.0	5.0	98.0	470.0	545.0	4.44	40.98	21000.0	300.0	5.0	89.0	431.0	496.0
TF	MANIA	FLY_BY	4.44	40.98	21000.0	300.0	5.0	89.0	431.0	496.0	3.34	168.56	16537.3	300.0	1.14	80.0	399.0	479.0
TF	KOOKS	FLY_BY	3.34	168.56	16537.3	300.0	1.14	80.0	399.0	479.0	2.95	96.66	13155.21	300.0	1.75	73.0	377.0	450.0
TF	MOORS	FLY_BY	2.95	96.66	13155.21	300.0	1.75	73.0	377.0	450.0	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0
TF	ENDEE	FLY_BY	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0
TF	STKNY	FLY_BY	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0	1.68	26.77	6000.0	250.0	3.6	59.0	281.0	340.0
TF	WP3743	FLY_BY	1.68	26.77	6000.0	250.0	3.6	59.0	281.0	340.0	1.53	6.2	3465.55	250.0	13.86	54.0	270.0	324.0
TF	WP3741	FLY_BY	1.53	6.2	3465.55	250.0	13.86	54.0	270.0	324.0	0.07	84.95	2736.07	250.0	1.0	52.0	267.0	319.0
TF	WADLL	FLY_OVER	0.07	84.95	2736.07	250.0	1.0	52.0	267.0	319.0	0.0		2100.0	250.0	0.0	30.0	265.0	295.0
FM			0.0		2100.0	250.0	0.0	30.0	265.0	295.0			0.0	0.0				

ENDEE RNAV

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	ENNZO	29-002080	AVNIS	2C	N40°24' 01"	W091°35' 09"	1443.0	false	P	1000.0	2443	2443.0	05-Dec-2012 06:04:51
2	BOOKK	17-002350	AVNIS	2C	N40°41' 03"	W090°35' 29"	1418.0	false	P	1000.0	2418	2418.0	05-Dec-2012 06:08:48
3	LLVSS	17-001786	AVNIS	5D	N40°52' 43"	W089°50' 41"	1119.0	false	P	1000.0	2119	2119.0	05-Dec-2012 06:04:19
4	MANIA	17-020019	AVNIS	9I	N41°01' 31"	W089°35' 59"	1234.0	false	P	1000.0	3234	2234.0	05-Dec-2012 05:22:05
5	KOOKS	17-001898	AVNIS	5D	N41°07' 38"	W089°16' 31"	1077.0	false	P	1000.0	2077	2077.0	05-Dec-2012 05:22:56
6	MOORS	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
7	ENDEE	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
8	STKNY	17-002074	AVNIS	4D	N41°21' 17"	W088°29' 55"	1060.0	false	P	1000.0	2060	2060.0	05-Dec-2012 05:23:06
9	WP3743	17-000714	AVNIS	2C	N41°37' 29"	W088°00' 15"	1144.0	false	P	1000.0	2144	2144.0	05-Dec-2012 05:20:22
10	WP3741	17-000017	AVNIS	4D	N41°44' 15"	W087°42' 01"	838.0	false	P	1000.0	1838	1838.0	05-Dec-2012 05:20:22
11	WADLL	17-000071	AVNIS	2D	N41°45' 23"	W087°38' 06"	875.0	false	P	1000.0	1875	1875.0	05-Dec-2012 05:20:22

Route Criteria Failures

No failures.

Route Evaluation for IRK:ENDEE:RW04R

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	IRK						0.0	0.0
TF	ENNZO	FLY_BY				8.29	54.77	1.0
TF	BOOKK	FLY_BY	+24000.0	-26000.0		0.1	55.37	1.0
TF	LLVSS	FLY_BY	-21000.0			12.36	27.28	4.44
TF	MANIA	FLY_BY	-18000.0			2.27	19.14	4.44
TF	KOOKS	FLY_BY	-16000.0			3.5	13.53	1.0
TF	MOORS	FLY_BY	-10000.0			15.53	12.62	1.95
TF	ENDEE	FLY_BY	+6000.0	-7000.0		23.17	19.44	3.7
TF	STKNY	FLY_BY	6000.0			15.27	12.67	3.43
TF	BANER	FLY_BY					15.64	1.69

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	IRK				0.0	0.0							0.0	0.0				
TF	ENNZO	FLY_BY	0.0		41000.0	300.0	0.0	128.0	629.0	570.0	3.92	54.11	39842.34	300.0	5.0	126.0	614.0	570.0
TF	BOOKK	FLY_BY	3.92	54.11	39842.34	300.0	5.0	126.0	614.0	570.0	0.04	49.47	26000.0	300.0	5.0	98.0	470.0	545.0
TF	LLVSS	FLY_BY	0.04	49.47	26000.0	300.0	5.0	98.0	470.0	545.0	4.44	40.98	21000.0	300.0	5.0	89.0	431.0	496.0
TF	MANIA	FLY_BY	4.44	40.98	21000.0	300.0	5.0	89.0	431.0	496.0	3.34	168.56	16537.3	300.0	1.14	80.0	399.0	479.0
TF	KOOKS	FLY_BY	3.34	168.56	16537.3	300.0	1.14	80.0	399.0	479.0	2.95	96.66	13155.21	300.0	1.75	73.0	377.0	450.0
TF	MOORS	FLY_BY	2.95	96.66	13155.21	300.0	1.75	73.0	377.0	450.0	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0
TF	ENDEE	FLY_BY	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0
TF	STKNY	FLY_BY	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0	1.69	12.57	6000.0	250.0	7.64	59.0	281.0	340.0
TF	BANER	FLY_BY	1.69	12.57	6000.0	250.0	7.64	59.0	281.0	340.0	0.0		2300.0	250.0	0.0	30.0	265.0	295.0

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	ENNZO	29-002080	AVNIS	2C	N40°24' 01"	W091°35' 09"	1443.0	false	P	1000.0	2443	2443.0	05-Dec-2012 06:04:51
2	BOOKK	17-002350	AVNIS	2C	N40°41' 03"	W090°35' 29"	1418.0	false	P	1000.0	2418	2418.0	05-Dec-2012 06:08:48
3	LLVSS	17-001786	AVNIS	5D	N40°52' 43"	W089°50' 41"	1119.0	false	P	1000.0	2119	2119.0	05-Dec-2012 06:04:19
4	MANIA	17-020019	AVNIS	9I	N41°01' 31"	W089°35' 59"	1234.0	false	P	1000.0	3234	2234.0	05-Dec-2012 05:22:05
5	KOOKS	17-001898	AVNIS	5D	N41°07' 38"	W089°16' 31"	1077.0	false	P	1000.0	2077	2077.0	05-Dec-2012 05:22:56
6	MOORS	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
7	ENDEE	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
8	STKNY	17-002074	AVNIS	4D	N41°21' 17"	W088°29' 55"	1060.0	false	P	1000.0	2060	2060.0	05-Dec-2012 05:23:06
9	BANER	17-001393	AVNIS	2C	N41°36' 03"	W087°58' 44"	1160.0	false	P	1000.0	2160	2160.0	05-Dec-2012 05:20:22

Route Criteria Failures

RSO153: The route beginning at IRK and ending at BANER has a Fly-By Fix as the last fix of the route, but does not terminates at an approach procedure.

Route Evaluation for IRK:ENDEE:RW31C

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	IRK						0.0	0.0
TF	ENNZO	FLY_BY				8.29	54.77	1.0
TF	BOOKK	FLY_BY	+24000.0	-26000.0		0.1	55.37	1.0
TF	LLVSS	FLY_BY	-21000.0			12.36	27.28	4.44
TF	MANIA	FLY_BY	-18000.0			2.27	19.14	4.44
TF	KOOKS	FLY_BY	-16000.0			3.5	13.53	1.0
TF	MOORS	FLY_BY	-10000.0			15.53	12.62	1.95
TF	ENDEE	FLY_BY	+6000.0	-7000.0		23.17	19.44	3.7
TF	STKNY	FLY_BY	6000.0			31.84	12.67	3.43
TF	KEMPZ	FLY_BY				0.0	19.52	1.69
TF	GAGGA	FLY_OVER					6.86	1.0
FM							0.0	0.0

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	IRK				0.0	0.0							0.0	0.0				
TF	ENNZO	FLY_BY	0.0		41000.0	300.0	0.0	128.0	629.0	570.0	3.92	54.11	39842.34	300.0	5.0	126.0	614.0	570.0
TF	BOOKK	FLY_BY	3.92	54.11	39842.34	300.0	5.0	126.0	614.0	570.0	0.04	49.47	26000.0	300.0	5.0	98.0	470.0	545.0
TF	LLVSS	FLY_BY	0.04	49.47	26000.0	300.0	5.0	98.0	470.0	545.0	4.44	40.98	21000.0	300.0	5.0	89.0	431.0	496.0
TF	MANIA	FLY_BY	4.44	40.98	21000.0	300.0	5.0	89.0	431.0	496.0	3.34	168.56	16537.3	300.0	1.14	80.0	399.0	479.0
TF	KOOKS	FLY_BY	3.34	168.56	16537.3	300.0	1.14	80.0	399.0	479.0	2.95	96.66	13155.21	300.0	1.75	73.0	377.0	450.0
TF	MOORS	FLY_BY	2.95	96.66	13155.21	300.0	1.75	73.0	377.0	450.0	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0
TF	ENDEE	FLY_BY	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0
TF	STKNY	FLY_BY	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0	1.69	5.91	6000.0	250.0	15.92	59.0	281.0	340.0
TF	KEMPZ	FLY_BY	1.69	5.91	6000.0	250.0	15.92	59.0	281.0	340.0	0.0		4113.82	250.0	0.0	55.0	273.0	328.0
TF	GAGGA	FLY_OVER	0.0		4113.82	250.0	0.0	55.0	273.0	328.0	0.0		2400.0	250.0	0.0	30.0	266.0	296.0
FM			0.0		2400.0	250.0	0.0	30.0	266.0	296.0			0.0	0.0				

ENDEE RNAV

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	ENNZO	29-002080	AVNIS	2C	N40°24' 01"	W091°35' 09"	1443.0	false	P	1000.0	2443	2443.0	05-Dec-2012 06:04:51
2	BOOKK	17-002350	AVNIS	2C	N40°41' 03"	W090°35' 29"	1418.0	false	P	1000.0	2418	2418.0	05-Dec-2012 06:08:48
3	LLVSS	17-001786	AVNIS	5D	N40°52' 43"	W089°50' 41"	1119.0	false	P	1000.0	2119	2119.0	05-Dec-2012 06:04:19
4	MANIA	17-020019	AVNIS	9I	N41°01' 31"	W089°35' 59"	1234.0	false	P	1000.0	3234	2234.0	05-Dec-2012 05:22:05
5	KOOKS	17-001898	AVNIS	5D	N41°07' 38"	W089°16' 31"	1077.0	false	P	1000.0	2077	2077.0	05-Dec-2012 05:22:56
6	MOORS	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
7	ENDEE	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
8	STKNY	17-002074	AVNIS	4D	N41°21' 17"	W088°29' 55"	1060.0	false	P	1000.0	2060	2060.0	05-Dec-2012 05:23:06
9	KEMPZ	17-000002	AVNIS	2D	N41°33' 20"	W087°50' 55"	1330.0	false	P	1000.0	2330	2330.0	05-Dec-2012 05:20:22
10	GAGGA	17-000002	AVNIS	2D	N41°33' 20"	W087°50' 55"	1330.0	false	P	1000.0	2330	2330.0	05-Dec-2012 05:20:22

Route Criteria Failures

No failures.

Route Evaluation for IRK:ENDEE:RW13C

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	IRK						0.0	0.0
TF	ENNZO	FLY_BY				8.29	54.77	1.0
TF	BOOKK	FLY_BY	+24000.0	-26000.0		0.1	55.37	1.0
TF	LLVSS	FLY_BY	-21000.0			12.36	27.28	4.44
TF	MANIA	FLY_BY	-18000.0			2.27	19.14	4.44
TF	KOOKS	FLY_BY	-16000.0			3.5	13.53	1.0
TF	MOORS	FLY_BY	-10000.0			15.53	12.62	1.95
TF	ENDEE	FLY_BY	+6000.0	-7000.0		23.17	19.44	3.7
TF	STKNY	FLY_BY	6000.0			12.45	12.67	3.43
TF	TOYUL	FLY_BY				0.73	15.81	1.68
TF	JEAAN	FLY_OVER					2.0	1.0
FM							0.0	0.0

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	IRK				0.0	0.0							0.0	0.0				
TF	ENNZO	FLY_BY	0.0		41000.0	300.0	0.0	128.0	629.0	570.0	3.92	54.11	39842.34	300.0	5.0	126.0	614.0	570.0
TF	BOOKK	FLY_BY	3.92	54.11	39842.34	300.0	5.0	126.0	614.0	570.0	0.04	49.47	26000.0	300.0	5.0	98.0	470.0	545.0
TF	LLVSS	FLY_BY	0.04	49.47	26000.0	300.0	5.0	98.0	470.0	545.0	4.44	40.98	21000.0	300.0	5.0	89.0	431.0	496.0
TF	MANIA	FLY_BY	4.44	40.98	21000.0	300.0	5.0	89.0	431.0	496.0	3.34	168.56	16537.3	300.0	1.14	80.0	399.0	479.0
TF	KOOKS	FLY_BY	3.34	168.56	16537.3	300.0	1.14	80.0	399.0	479.0	2.95	96.66	13155.21	300.0	1.75	73.0	377.0	450.0
TF	MOORS	FLY_BY	2.95	96.66	13155.21	300.0	1.75	73.0	377.0	450.0	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0
TF	ENDEE	FLY_BY	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0
TF	STKNY	FLY_BY	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0	1.68	15.44	6000.0	250.0	6.23	59.0	281.0	340.0
TF	TOYUL	FLY_BY	1.68	15.44	6000.0	250.0	6.23	59.0	281.0	340.0	0.55	85.49	2800.0	250.0	1.0	53.0	267.0	320.0
TF	JEAAN	FLY_OVER	0.55	85.49	2800.0	250.0	1.0	53.0	267.0	320.0	0.0		2300.0	250.0	0.0	30.0	265.0	295.0
FM			0.0		2300.0	250.0	0.0	30.0	265.0	295.0			0.0	0.0				

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	ENNZO	29-002080	AVNIS	2C	N40°24' 01"	W091°35' 09"	1443.0	false	P	1000.0	2443	2443.0	05-Dec-2012 06:04:51
2	BOOKK	17-002350	AVNIS	2C	N40°41' 03"	W090°35' 29"	1418.0	false	P	1000.0	2418	2418.0	05-Dec-2012 06:08:48
3	LLVSS	17-001786	AVNIS	5D	N40°52' 43"	W089°50' 41"	1119.0	false	P	1000.0	2119	2119.0	05-Dec-2012 06:04:19
4	MANIA	17-020019	AVNIS	9I	N41°01' 31"	W089°35' 59"	1234.0	false	P	1000.0	3234	2234.0	05-Dec-2012 05:22:05
5	KOOKS	17-001898	AVNIS	5D	N41°07' 38"	W089°16' 31"	1077.0	false	P	1000.0	2077	2077.0	05-Dec-2012 05:22:56
6	MOORS	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
7	ENDEE	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
8	STKNY	17-002074	AVNIS	4D	N41°21' 17"	W088°29' 55"	1060.0	false	P	1000.0	2060	2060.0	05-Dec-2012 05:23:06
9	TOYUL	17-001137	AVNIS	5D	N41°30' 45"	W088°15' 18"	1043.0	false	P	1000.0	2043	2043.0	05-Dec-2012 05:20:38
10	JEAAN	17-000115	AVNIS	2C	N41°44' 58"	W088°01' 57"	1078.0	false	P	1000.0	2078	2078.0	05-Dec-2012 05:20:38

Route Criteria Failures

No failures.

Route Evaluation for ZZIPR:ENDEE:RW22L

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	ZZIPR						0.0	0.0
TF	UGGLY	FLY_BY				4.58	67.64	1.0
TF	AGONY	FLY_BY	-28000.0			3.32	26.27	1.0
TF	FARCE	FLY_BY	+24000.0	-26000.0		14.7	18.09	6.38
TF	CHUMP	FLY_BY	-21000.0			15.81	20.69	12.07
TF	NOGEE	FLY_BY	-18000.0			22.05	16.63	9.22
TF	KOOKS	FLY_BY	-16000.0			38.82	24.12	6.48
TF	MOORS	FLY_BY	-10000.0			15.53	12.62	4.9
TF	ENDEE	FLY_BY	+6000.0	-7000.0		23.17	19.44	3.7
TF	STKNY	FLY_BY	6000.0			7.2	12.67	1.74
TF	WP3743	FLY_BY				27.72	28.48	1.53
TF	WP3741	FLY_BY				0.1	2.92	1.53
TF	WADLL	FLY_OVER					2.54	1.0
FM							0.0	0.0

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	ZZIPR				0.0	0.0							0.0	0.0				
TF	UGGLY	FLY_BY	0.0		41000.0	300.0	0.0	128.0	629.0	570.0	2.16	54.11	34566.88	300.0	5.0	115.0	552.0	570.0
TF	AGONY	FLY_BY	2.16	54.11	34566.88	300.0	5.0	115.0	552.0	570.0	1.54	53.17	28000.0	300.0	5.0	102.0	488.0	565.0
TF	FARCE	FLY_BY	1.54	53.17	28000.0	300.0	5.0	102.0	488.0	565.0	6.38	49.47	26000.0	300.0	5.0	98.0	470.0	545.0
TF	CHUMP	FLY_BY	6.38	49.47	26000.0	300.0	5.0	98.0	470.0	545.0	5.69	40.98	21000.0	300.0	5.0	89.0	431.0	496.0
TF	NOGEE	FLY_BY	5.69	40.98	21000.0	300.0	5.0	89.0	431.0	496.0	3.53	18.1	18000.0	300.0	11.02	83.0	409.0	492.0
TF	KOOKS	FLY_BY	3.53	18.1	18000.0	300.0	11.02	83.0	409.0	492.0	2.95	8.37	13155.21	300.0	19.41	73.0	377.0	450.0
TF	MOORS	FLY_BY	2.95	8.37	13155.21	300.0	19.41	73.0	377.0	450.0	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0
TF	ENDEE	FLY_BY	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0
TF	STKNY	FLY_BY	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0	1.68	26.77	6000.0	250.0	3.6	59.0	281.0	340.0
TF	WP3743	FLY_BY	1.68	26.77	6000.0	250.0	3.6	59.0	281.0	340.0	1.53	6.2	3465.55	250.0	13.86	54.0	270.0	324.0
TF	WP3741	FLY_BY	1.53	6.2	3465.55	250.0	13.86	54.0	270.0	324.0	0.07	84.95	2736.07	250.0	1.0	52.0	267.0	319.0
TF	WADLL	FLY_OVER	0.07	84.95	2736.07	250.0	1.0	52.0	267.0	319.0	0.0		2100.0	250.0	0.0	30.0	265.0	295.0
FM			0.0		2100.0	250.0	0.0	30.0	265.0	295.0			0.0	0.0				

ENDEE RNAV

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	UGGLY	19-001506	AVNIS	4D	N43°04' 50"	W091°32' 15"	1594.0	false	P	1000.0	2594	2594.0	05-Dec-2012 05:23:25
2	AGONY	TerrainPt_4_ZZIPR:ENDEE:RW22L _UGGLY:AGONY		4E	N42°15' 03"	W090°51' 21"	1085.96	false	P	1000.0	2286	2285.96	06-Dec-2012 08:15:36
3	FARCE	19-000834	AVNIS	5D	N41°37' 58"	W090°24' 38"	1691.0	false	P	1000.0	2691	2691.0	05-Dec-2012 05:21:41
4	CHUMP	17-000884	AVNIS	5D	N41°37' 10"	W090°17' 41"	1163.0	false	P	1000.0	2163	2163.0	05-Dec-2012 05:21:41
5	NOGEE	17-001858	AVNIS	5D	N41°16' 29"	W089°58' 18"	1390.0	false	P	1000.0	2390	2390.0	05-Dec-2012 05:22:03
6	KOOKS	17-003446	AVNIS	5D	N41°14' 27"	W089°34' 02"	1359.0	false	P	1000.0	2359	2359.0	05-Dec-2012 05:22:03
7	MOORS	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
8	ENDEE	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
9	STKNY	17-002074	AVNIS	4D	N41°21' 17"	W088°29' 55"	1060.0	false	P	1000.0	2060	2060.0	05-Dec-2012 05:23:06
10	WP3743	17-000714	AVNIS	2C	N41°37' 29"	W088°00' 15"	1144.0	false	P	1000.0	2144	2144.0	05-Dec-2012 05:20:22
11	WP3741	17-000017	AVNIS	4D	N41°44' 15"	W087°42' 01"	838.0	false	P	1000.0	1838	1838.0	05-Dec-2012 05:20:22
12	WADLL	17-000071	AVNIS	2D	N41°45' 23"	W087°38' 06"	875.0	false	P	1000.0	1875	1875.0	05-Dec-2012 05:20:22

Route Criteria Failures

No failures.

Route Evaluation for ZZIPR:ENDEE:RW04R

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	ZZIPR						0.0	0.0
TF	UGGLY	FLY_BY				4.58	67.64	1.0
TF	AGONY	FLY_BY	-28000.0			3.32	26.27	1.0
TF	FARCE	FLY_BY	+24000.0	-26000.0		14.7	18.09	6.38
TF	CHUMP	FLY_BY	-21000.0			15.81	20.69	12.07
TF	NOGEE	FLY_BY	-18000.0			22.05	16.63	9.22
TF	KOOKS	FLY_BY	-16000.0			38.82	24.12	6.48
TF	MOORS	FLY_BY	-10000.0			15.53	12.62	4.9
TF	ENDEE	FLY_BY	+6000.0	-7000.0		23.17	19.44	3.7
TF	STKNY	FLY_BY	6000.0			15.27	12.67	3.43
TF	BANER	FLY_BY					15.64	1.69

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	ZZIPR				0.0	0.0							0.0	0.0				
TF	UGGLY	FLY_BY	0.0		41000.0	300.0	0.0	128.0	629.0	570.0	2.16	54.11	34566.88	300.0	5.0	115.0	552.0	570.0
TF	AGONY	FLY_BY	2.16	54.11	34566.88	300.0	5.0	115.0	552.0	570.0	1.54	53.17	28000.0	300.0	5.0	102.0	488.0	565.0
TF	FARCE	FLY_BY	1.54	53.17	28000.0	300.0	5.0	102.0	488.0	565.0	6.38	49.47	26000.0	300.0	5.0	98.0	470.0	545.0
TF	CHUMP	FLY_BY	6.38	49.47	26000.0	300.0	5.0	98.0	470.0	545.0	5.69	40.98	21000.0	300.0	5.0	89.0	431.0	496.0
TF	NOGEE	FLY_BY	5.69	40.98	21000.0	300.0	5.0	89.0	431.0	496.0	3.53	18.1	18000.0	300.0	11.02	83.0	409.0	492.0
TF	KOOKS	FLY_BY	3.53	18.1	18000.0	300.0	11.02	83.0	409.0	492.0	2.95	8.37	13155.21	300.0	19.41	73.0	377.0	450.0
TF	MOORS	FLY_BY	2.95	8.37	13155.21	300.0	19.41	73.0	377.0	450.0	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0
TF	ENDEE	FLY_BY	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0
TF	STKNY	FLY_BY	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0	1.69	12.57	6000.0	250.0	7.64	59.0	281.0	340.0
TF	BANER	FLY_BY	1.69	12.57	6000.0	250.0	7.64	59.0	281.0	340.0	0.0		2300.0	250.0	0.0	30.0	265.0	295.0

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	UGGLY	19-001506	AVNIS	4D	N43°04' 50"	W091°32' 15"	1594.0	false	P	1000.0	2594	2594.0	05-Dec-2012 05:23:25
2	AGONY	TerrainPt_4_ZZIPR:ENDEE:RW22L_UGGLY:AGONY		4E	N42°15' 03"	W090°51' 21"	1085.96	false	P	1000.0	2286	2285.96	06-Dec-2012 08:15:36
3	FARCE	19-000834	AVNIS	5D	N41°37' 58"	W090°24' 38"	1691.0	false	P	1000.0	2691	2691.0	05-Dec-2012 05:21:41
4	CHUMP	17-000884	AVNIS	5D	N41°37' 10"	W090°17' 41"	1163.0	false	P	1000.0	2163	2163.0	05-Dec-2012 05:21:41
5	NOGEE	17-001858	AVNIS	5D	N41°16' 29"	W089°58' 18"	1390.0	false	P	1000.0	2390	2390.0	05-Dec-2012 05:22:03
6	KOOKS	17-003446	AVNIS	5D	N41°14' 27"	W089°34' 02"	1359.0	false	P	1000.0	2359	2359.0	05-Dec-2012 05:22:03
7	MOORS	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
8	ENDEE	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
9	STKNY	17-002074	AVNIS	4D	N41°21' 17"	W088°29' 55"	1060.0	false	P	1000.0	2060	2060.0	05-Dec-2012 05:23:06
10	BANER	17-001393	AVNIS	2C	N41°36' 03"	W087°58' 44"	1160.0	false	P	1000.0	2160	2160.0	05-Dec-2012 05:20:22

Route Criteria Failures

RSO153: The route beginning at ZZIPR and ending at BANER has a Fly-By Fix as the last fix of the route, but does not terminates at an approach procedure.

Route Evaluation for ZZIPR:ENDEE:RW31C

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	ZZIPR						0.0	0.0
TF	UGGLY	FLY_BY				4.58	67.64	1.0
TF	AGONY	FLY_BY	-28000.0			3.32	26.27	1.0
TF	FARCE	FLY_BY	+24000.0	-26000.0		14.7	18.09	6.38
TF	CHUMP	FLY_BY	-21000.0			15.81	20.69	12.07
TF	NOGEE	FLY_BY	-18000.0			22.05	16.63	9.22
TF	KOOKS	FLY_BY	-16000.0			38.82	24.12	6.48
TF	MOORS	FLY_BY	-10000.0			15.53	12.62	4.9
TF	ENDEE	FLY_BY	+6000.0	-7000.0		23.17	19.44	3.7
TF	STKNY	FLY_BY	6000.0			31.84	12.67	3.43
TF	KEMPZ	FLY_BY				0.0	19.52	1.69
TF	GAGGA	FLY_OVER					6.86	1.0
FM							0.0	0.0

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	ZZIPR				0.0	0.0							0.0	0.0				
TF	UGGLY	FLY_BY	0.0		41000.0	300.0	0.0	128.0	629.0	570.0	2.16	54.11	34566.88	300.0	5.0	115.0	552.0	570.0
TF	AGONY	FLY_BY	2.16	54.11	34566.88	300.0	5.0	115.0	552.0	570.0	1.54	53.17	28000.0	300.0	5.0	102.0	488.0	565.0
TF	FARCE	FLY_BY	1.54	53.17	28000.0	300.0	5.0	102.0	488.0	565.0	6.38	49.47	26000.0	300.0	5.0	98.0	470.0	545.0
TF	CHUMP	FLY_BY	6.38	49.47	26000.0	300.0	5.0	98.0	470.0	545.0	5.69	40.98	21000.0	300.0	5.0	89.0	431.0	496.0
TF	NOGEE	FLY_BY	5.69	40.98	21000.0	300.0	5.0	89.0	431.0	496.0	3.53	18.1	18000.0	300.0	11.02	83.0	409.0	492.0
TF	KOOKS	FLY_BY	3.53	18.1	18000.0	300.0	11.02	83.0	409.0	492.0	2.95	8.37	13155.21	300.0	19.41	73.0	377.0	450.0
TF	MOORS	FLY_BY	2.95	8.37	13155.21	300.0	19.41	73.0	377.0	450.0	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0
TF	ENDEE	FLY_BY	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0
TF	STKNY	FLY_BY	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0	1.69	5.91	6000.0	250.0	15.92	59.0	281.0	340.0
TF	KEMPZ	FLY_BY	1.69	5.91	6000.0	250.0	15.92	59.0	281.0	340.0	0.0		4113.82	250.0	0.0	55.0	273.0	328.0
TF	GAGGA	FLY_OVER	0.0		4113.82	250.0	0.0	55.0	273.0	328.0	0.0		2400.0	250.0	0.0	30.0	266.0	296.0
FM			0.0		2400.0	250.0	0.0	30.0	266.0	296.0			0.0	0.0				

ENDEE RNAV

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	UGGLY	19-001506	AVNIS	4D	N43°04' 50"	W091°32' 15"	1594.0	false	P	1000.0	2594	2594.0	05-Dec-2012 05:23:25
2	AGONY	TerrainPt_4_ZZIPR:ENDEE:RW22L _UGGLY:AGONY		4E	N42°15' 03"	W090°51' 21"	1085.96	false	P	1000.0	2286	2285.96	06-Dec-2012 08:15:36
3	FARCE	19-000834	AVNIS	5D	N41°37' 58"	W090°24' 38"	1691.0	false	P	1000.0	2691	2691.0	05-Dec-2012 05:21:41
4	CHUMP	17-000884	AVNIS	5D	N41°37' 10"	W090°17' 41"	1163.0	false	P	1000.0	2163	2163.0	05-Dec-2012 05:21:41
5	NOGEE	17-001858	AVNIS	5D	N41°16' 29"	W089°58' 18"	1390.0	false	P	1000.0	2390	2390.0	05-Dec-2012 05:22:03
6	KOOKS	17-003446	AVNIS	5D	N41°14' 27"	W089°34' 02"	1359.0	false	P	1000.0	2359	2359.0	05-Dec-2012 05:22:03
7	MOORS	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
8	ENDEE	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
9	STKNY	17-002074	AVNIS	4D	N41°21' 17"	W088°29' 55"	1060.0	false	P	1000.0	2060	2060.0	05-Dec-2012 05:23:06
10	KEMPZ	17-000002	AVNIS	2D	N41°33' 20"	W087°50' 55"	1330.0	false	P	1000.0	2330	2330.0	05-Dec-2012 05:20:22
11	GAGGA	17-000002	AVNIS	2D	N41°33' 20"	W087°50' 55"	1330.0	false	P	1000.0	2330	2330.0	05-Dec-2012 05:20:22

Route Criteria Failures

No failures.

Route Evaluation for ZZIPR:ENDEE:RW13C

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	ZZIPR						0.0	0.0
TF	UGGLY	FLY_BY				4.58	67.64	1.0
TF	AGONY	FLY_BY	-28000.0			3.32	26.27	1.0
TF	FARCE	FLY_BY	+24000.0	-26000.0		14.7	18.09	6.38
TF	CHUMP	FLY_BY	-21000.0			15.81	20.69	12.07
TF	NOGEE	FLY_BY	-18000.0			22.05	16.63	9.22
TF	KOOKS	FLY_BY	-16000.0			38.82	24.12	6.48
TF	MOORS	FLY_BY	-10000.0			15.53	12.62	4.9
TF	ENDEE	FLY_BY	+6000.0	-7000.0		23.17	19.44	3.7
TF	STKNY	FLY_BY	6000.0			12.45	12.67	3.43
TF	TOYUL	FLY_BY				0.73	15.81	1.68
TF	JEAAN	FLY_OVER					2.0	1.0
FM							0.0	0.0

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	ZZIPR				0.0	0.0							0.0	0.0				
TF	UGGLY	FLY_BY	0.0		41000.0	300.0	0.0	128.0	629.0	570.0	2.16	54.11	34566.88	300.0	5.0	115.0	552.0	570.0
TF	AGONY	FLY_BY	2.16	54.11	34566.88	300.0	5.0	115.0	552.0	570.0	1.54	53.17	28000.0	300.0	5.0	102.0	488.0	565.0
TF	FARCE	FLY_BY	1.54	53.17	28000.0	300.0	5.0	102.0	488.0	565.0	6.38	49.47	26000.0	300.0	5.0	98.0	470.0	545.0
TF	CHUMP	FLY_BY	6.38	49.47	26000.0	300.0	5.0	98.0	470.0	545.0	5.69	40.98	21000.0	300.0	5.0	89.0	431.0	496.0
TF	NOGEE	FLY_BY	5.69	40.98	21000.0	300.0	5.0	89.0	431.0	496.0	3.53	18.1	18000.0	300.0	11.02	83.0	409.0	492.0
TF	KOOKS	FLY_BY	3.53	18.1	18000.0	300.0	11.02	83.0	409.0	492.0	2.95	8.37	13155.21	300.0	19.41	73.0	377.0	450.0
TF	MOORS	FLY_BY	2.95	8.37	13155.21	300.0	19.41	73.0	377.0	450.0	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0
TF	ENDEE	FLY_BY	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0
TF	STKNY	FLY_BY	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0	1.68	15.44	6000.0	250.0	6.23	59.0	281.0	340.0
TF	TOYUL	FLY_BY	1.68	15.44	6000.0	250.0	6.23	59.0	281.0	340.0	0.55	85.49	2800.0	250.0	1.0	53.0	267.0	320.0
TF	JEAAN	FLY_OVER	0.55	85.49	2800.0	250.0	1.0	53.0	267.0	320.0	0.0		2300.0	250.0	0.0	30.0	265.0	295.0
FM			0.0		2300.0	250.0	0.0	30.0	265.0	295.0			0.0	0.0				

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	UGGLY	19-001506	AVNIS	4D	N43°04' 50"	W091°32' 15"	1594.0	false	P	1000.0	2594	2594.0	05-Dec-2012 05:23:25
2	AGONY	TerrainPt_4_ZZIPR:ENDEE:RW22L_UGGLY:AGONY		4E	N42°15' 03"	W090°51' 21"	1085.96	false	P	1000.0	2286	2285.96	06-Dec-2012 08:15:36
3	FARCE	19-000834	AVNIS	5D	N41°37' 58"	W090°24' 38"	1691.0	false	P	1000.0	2691	2691.0	05-Dec-2012 05:21:41
4	CHUMP	17-000884	AVNIS	5D	N41°37' 10"	W090°17' 41"	1163.0	false	P	1000.0	2163	2163.0	05-Dec-2012 05:21:41
5	NOGEE	17-001858	AVNIS	5D	N41°16' 29"	W089°58' 18"	1390.0	false	P	1000.0	2390	2390.0	05-Dec-2012 05:22:03
6	KOOKS	17-003446	AVNIS	5D	N41°14' 27"	W089°34' 02"	1359.0	false	P	1000.0	2359	2359.0	05-Dec-2012 05:22:03
7	MOORS	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
8	ENDEE	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
9	STKNY	17-002074	AVNIS	4D	N41°21' 17"	W088°29' 55"	1060.0	false	P	1000.0	2060	2060.0	05-Dec-2012 05:23:06
10	TOYUL	17-001137	AVNIS	5D	N41°30' 45"	W088°15' 18"	1043.0	false	P	1000.0	2043	2043.0	05-Dec-2012 05:20:38
11	JEAAN	17-000115	AVNIS	2C	N41°44' 58"	W088°01' 57"	1078.0	false	P	1000.0	2078	2078.0	05-Dec-2012 05:20:38

Route Criteria Failures

No failures.

Route Evaluation for JALAP:ENDEE:RW22L

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	JALAP						0.0	0.0
TF	ABYSS	FLY_BY	+24000.0	-26000.0		1.12	130.46	1.0
TF	EDENS	FLY_BY	-21000.0			0.33	27.94	1.0
TF	PURTY	FLY_BY	-18000.0			0.16	17.09	1.0
TF	KOOKS	FLY_BY	-16000.0			27.13	25.54	2.95
TF	MOORS	FLY_BY	-10000.0			15.53	12.62	4.9
TF	ENDEE	FLY_BY	+6000.0	-7000.0		23.17	19.44	3.7
TF	STKNY	FLY_BY	6000.0			7.2	12.67	1.74
TF	WP3743	FLY_BY				27.72	28.48	1.53
TF	WP3741	FLY_BY				0.1	2.92	1.53
TF	WADLL	FLY_OVER					2.54	1.0
FM							0.0	0.0

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	JALAP				0.0	0.0							0.0	0.0				
TF	ABYSS	FLY_BY	0.0		41000.0	300.0	0.0	128.0	629.0	570.0	0.48	49.47	26000.0	300.0	5.0	98.0	470.0	545.0
TF	EDENS	FLY_BY	0.48	49.47	26000.0	300.0	5.0	98.0	470.0	545.0	0.12	40.98	21000.0	300.0	5.0	89.0	431.0	496.0
TF	PURTY	FLY_BY	0.12	40.98	21000.0	300.0	5.0	89.0	431.0	496.0	0.27	202.08	18000.0	300.0	1.0	83.0	409.0	492.0
TF	KOOKS	FLY_BY	0.27	202.08	18000.0	300.0	1.0	83.0	409.0	492.0	2.95	12.23	13155.21	300.0	13.56	73.0	377.0	450.0
TF	MOORS	FLY_BY	2.95	12.23	13155.21	300.0	13.56	73.0	377.0	450.0	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0
TF	ENDEE	FLY_BY	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0
TF	STKNY	FLY_BY	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0	1.68	26.77	6000.0	250.0	3.6	59.0	281.0	340.0
TF	WP3743	FLY_BY	1.68	26.77	6000.0	250.0	3.6	59.0	281.0	340.0	1.53	6.2	3465.55	250.0	13.86	54.0	270.0	324.0
TF	WP3741	FLY_BY	1.53	6.2	3465.55	250.0	13.86	54.0	270.0	324.0	0.07	84.95	2736.07	250.0	1.0	52.0	267.0	319.0
TF	WADLL	FLY_OVER	0.07	84.95	2736.07	250.0	1.0	52.0	267.0	319.0	0.0		2100.0	250.0	0.0	30.0	265.0	295.0
FM			0.0		2100.0	250.0	0.0	30.0	265.0	295.0			0.0	0.0				

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	ABYSS	19-020222	AVNIS	5D	N40°53' 23"	W093°01' 30"	1599.0	false	P	1000.0	2599	2599.0	05-Dec-2012 06:08:08
2	EDENS	17-022012	AVNIS	5D	N41°10' 09"	W090°10' 19"	1313.0	false	P	1000.0	2313	2313.0	05-Dec-2012 05:22:16
3	PURTY	17-022237	AVNIS	5D	N41°09' 01"	W090°02' 51"	1320.0	false	P	1000.0	2320	2320.0	05-Dec-2012 05:22:16
4	KOOKS	17-003935	AVNIS	9I	N41°06' 04"	W089°40' 06"	1264.0	false	P	1000.0	3264	2264.0	05-Dec-2012 05:22:03
5	MOORS	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
6	ENDEE	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
7	STKNY	17-002074	AVNIS	4D	N41°21' 17"	W088°29' 55"	1060.0	false	P	1000.0	2060	2060.0	05-Dec-2012 05:23:06
8	WP3743	17-000714	AVNIS	2C	N41°37' 29"	W088°00' 15"	1144.0	false	P	1000.0	2144	2144.0	05-Dec-2012 05:20:22
9	WP3741	17-000017	AVNIS	4D	N41°44' 15"	W087°42' 01"	838.0	false	P	1000.0	1838	1838.0	05-Dec-2012 05:20:22
10	WADLL	17-000071	AVNIS	2D	N41°45' 23"	W087°38' 06"	875.0	false	P	1000.0	1875	1875.0	05-Dec-2012 05:20:22

Route Criteria Failures

No failures.

Route Evaluation for JALAP:ENDEE:RW04R

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	JALAP						0.0	0.0
TF	ABYSS	FLY_BY	+24000.0	-26000.0		1.12	130.46	1.0
TF	EDENS	FLY_BY	-21000.0			0.33	27.94	1.0
TF	PURTY	FLY_BY	-18000.0			0.16	17.09	1.0
TF	KOOKS	FLY_BY	-16000.0			27.13	25.54	2.95
TF	MOORS	FLY_BY	-10000.0			15.53	12.62	4.9
TF	ENDEE	FLY_BY	+6000.0	-7000.0		23.17	19.44	3.7
TF	STKNY	FLY_BY	6000.0			15.27	12.67	3.43
TF	BANER	FLY_BY					15.64	1.69

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	JALAP				0.0	0.0							0.0	0.0				
TF	ABYSS	FLY_BY	0.0		41000.0	300.0	0.0	128.0	629.0	570.0	0.48	49.47	26000.0	300.0	5.0	98.0	470.0	545.0
TF	EDENS	FLY_BY	0.48	49.47	26000.0	300.0	5.0	98.0	470.0	545.0	0.12	40.98	21000.0	300.0	5.0	89.0	431.0	496.0
TF	PURTY	FLY_BY	0.12	40.98	21000.0	300.0	5.0	89.0	431.0	496.0	0.27	202.08	18000.0	300.0	1.0	83.0	409.0	492.0
TF	KOOKS	FLY_BY	0.27	202.08	18000.0	300.0	1.0	83.0	409.0	492.0	2.95	12.23	13155.21	300.0	13.56	73.0	377.0	450.0
TF	MOORS	FLY_BY	2.95	12.23	13155.21	300.0	13.56	73.0	377.0	450.0	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0
TF	ENDEE	FLY_BY	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0
TF	STKNY	FLY_BY	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0	1.69	12.57	6000.0	250.0	7.64	59.0	281.0	340.0
TF	BANER	FLY_BY	1.69	12.57	6000.0	250.0	7.64	59.0	281.0	340.0	0.0		2300.0	250.0	0.0	30.0	265.0	295.0

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	ABYSS	19-020222	AVNIS	5D	N40°53' 23"	W093°01' 30"	1599.0	false	P	1000.0	2599	2599.0	05-Dec-2012 06:08:08
2	EDENS	17-022012	AVNIS	5D	N41°10' 09"	W090°10' 19"	1313.0	false	P	1000.0	2313	2313.0	05-Dec-2012 05:22:16
3	PURTY	17-022237	AVNIS	5D	N41°09' 01"	W090°02' 51"	1320.0	false	P	1000.0	2320	2320.0	05-Dec-2012 05:22:16
4	KOOKS	17-003935	AVNIS	9I	N41°06' 04"	W089°40' 06"	1264.0	false	P	1000.0	3264	2264.0	05-Dec-2012 05:22:03
5	MOORS	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
6	ENDEE	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
7	STKNY	17-002074	AVNIS	4D	N41°21' 17"	W088°29' 55"	1060.0	false	P	1000.0	2060	2060.0	05-Dec-2012 05:23:06
8	BANER	17-001393	AVNIS	2C	N41°36' 03"	W087°58' 44"	1160.0	false	P	1000.0	2160	2160.0	05-Dec-2012 05:20:22

Route Criteria Failures

RSO153: The route beginning at JALAP and ending at BANER has a Fly-By Fix as the last fix of the route, but does not terminates at an approach procedure.

Route Evaluation for JALAP:ENDEE:RW31C

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	JALAP						0.0	0.0
TF	ABYSS	FLY_BY	+24000.0	-26000.0		1.12	130.46	1.0
TF	EDENS	FLY_BY	-21000.0			0.33	27.94	1.0
TF	PURTY	FLY_BY	-18000.0			0.16	17.09	1.0
TF	KOOKS	FLY_BY	-16000.0			27.13	25.54	2.95
TF	MOORS	FLY_BY	-10000.0			15.53	12.62	4.9
TF	ENDEE	FLY_BY	+6000.0	-7000.0		23.17	19.44	3.7
TF	STKNY	FLY_BY	6000.0			31.84	12.67	3.43
TF	KEMPZ	FLY_BY				0.0	19.52	1.69
TF	GAGGA	FLY_OVER					6.86	1.0
FM							0.0	0.0

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	JALAP				0.0	0.0							0.0	0.0				
TF	ABYSS	FLY_BY	0.0		41000.0	300.0	0.0	128.0	629.0	570.0	0.48	49.47	26000.0	300.0	5.0	98.0	470.0	545.0
TF	EDENS	FLY_BY	0.48	49.47	26000.0	300.0	5.0	98.0	470.0	545.0	0.12	40.98	21000.0	300.0	5.0	89.0	431.0	496.0
TF	PURTY	FLY_BY	0.12	40.98	21000.0	300.0	5.0	89.0	431.0	496.0	0.27	202.08	18000.0	300.0	1.0	83.0	409.0	492.0
TF	KOOKS	FLY_BY	0.27	202.08	18000.0	300.0	1.0	83.0	409.0	492.0	2.95	12.23	13155.21	300.0	13.56	73.0	377.0	450.0
TF	MOORS	FLY_BY	2.95	12.23	13155.21	300.0	13.56	73.0	377.0	450.0	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0
TF	ENDEE	FLY_BY	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0
TF	STKNY	FLY_BY	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0	1.69	5.91	6000.0	250.0	15.92	59.0	281.0	340.0
TF	KEMPZ	FLY_BY	1.69	5.91	6000.0	250.0	15.92	59.0	281.0	340.0	0.0		4113.82	250.0	0.0	55.0	273.0	328.0
TF	GAGGA	FLY_OVER	0.0		4113.82	250.0	0.0	55.0	273.0	328.0	0.0		2400.0	250.0	0.0	30.0	266.0	296.0
FM			0.0		2400.0	250.0	0.0	30.0	266.0	296.0			0.0	0.0				

ENDEE RNAV

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	ABYSS	19-020222	AVNIS	5D	N40°53' 23"	W093°01' 30"	1599.0	false	P	1000.0	2599	2599.0	05-Dec-2012 06:08:08
2	EDENS	17-022012	AVNIS	5D	N41°10' 09"	W090°10' 19"	1313.0	false	P	1000.0	2313	2313.0	05-Dec-2012 05:22:16
3	PURTY	17-022237	AVNIS	5D	N41°09' 01"	W090°02' 51"	1320.0	false	P	1000.0	2320	2320.0	05-Dec-2012 05:22:16
4	KOOKS	17-003935	AVNIS	9I	N41°06' 04"	W089°40' 06"	1264.0	false	P	1000.0	3264	2264.0	05-Dec-2012 05:22:03
5	MOORS	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
6	ENDEE	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
7	STKNY	17-002074	AVNIS	4D	N41°21' 17"	W088°29' 55"	1060.0	false	P	1000.0	2060	2060.0	05-Dec-2012 05:23:06
8	KEMPZ	17-000002	AVNIS	2D	N41°33' 20"	W087°50' 55"	1330.0	false	P	1000.0	2330	2330.0	05-Dec-2012 05:20:22
9	GAGGA	17-000002	AVNIS	2D	N41°33' 20"	W087°50' 55"	1330.0	false	P	1000.0	2330	2330.0	05-Dec-2012 05:20:22

Route Criteria Failures

No failures.

Route Evaluation for JALAP:ENDEE:RW13C

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	JALAP						0.0	0.0
TF	ABYSS	FLY_BY	+24000.0	-26000.0		1.12	130.46	1.0
TF	EDENS	FLY_BY	-21000.0			0.33	27.94	1.0
TF	PURTY	FLY_BY	-18000.0			0.16	17.09	1.0
TF	KOOKS	FLY_BY	-16000.0			27.13	25.54	2.95
TF	MOORS	FLY_BY	-10000.0			15.53	12.62	4.9
TF	ENDEE	FLY_BY	+6000.0	-7000.0		23.17	19.44	3.7
TF	STKNY	FLY_BY	6000.0			12.45	12.67	3.43
TF	TOYUL	FLY_BY				0.73	15.81	1.68
TF	JEAAN	FLY_OVER					2.0	1.0
FM							0.0	0.0

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	JALAP				0.0	0.0							0.0	0.0				
TF	ABYSS	FLY_BY	0.0		41000.0	300.0	0.0	128.0	629.0	570.0	0.48	49.47	26000.0	300.0	5.0	98.0	470.0	545.0
TF	EDENS	FLY_BY	0.48	49.47	26000.0	300.0	5.0	98.0	470.0	545.0	0.12	40.98	21000.0	300.0	5.0	89.0	431.0	496.0
TF	PURTY	FLY_BY	0.12	40.98	21000.0	300.0	5.0	89.0	431.0	496.0	0.27	202.08	18000.0	300.0	1.0	83.0	409.0	492.0
TF	KOOKS	FLY_BY	0.27	202.08	18000.0	300.0	1.0	83.0	409.0	492.0	2.95	12.23	13155.21	300.0	13.56	73.0	377.0	450.0
TF	MOORS	FLY_BY	2.95	12.23	13155.21	300.0	13.56	73.0	377.0	450.0	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0
TF	ENDEE	FLY_BY	1.95	14.32	10000.0	250.0	7.76	67.0	299.0	366.0	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0
TF	STKNY	FLY_BY	1.74	8.51	7000.0	250.0	11.59	61.0	285.0	346.0	1.68	15.44	6000.0	250.0	6.23	59.0	281.0	340.0
TF	TOYUL	FLY_BY	1.68	15.44	6000.0	250.0	6.23	59.0	281.0	340.0	0.55	85.49	2800.0	250.0	1.0	53.0	267.0	320.0
TF	JEAAN	FLY_OVER	0.55	85.49	2800.0	250.0	1.0	53.0	267.0	320.0	0.0		2300.0	250.0	0.0	30.0	265.0	295.0
FM			0.0		2300.0	250.0	0.0	30.0	265.0	295.0			0.0	0.0				

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	ABYSS	19-020222	AVNIS	5D	N40°53' 23"	W093°01' 30"	1599.0	false	P	1000.0	2599	2599.0	05-Dec-2012 06:08:08
2	EDENS	17-022012	AVNIS	5D	N41°10' 09"	W090°10' 19"	1313.0	false	P	1000.0	2313	2313.0	05-Dec-2012 05:22:16
3	PURTY	17-022237	AVNIS	5D	N41°09' 01"	W090°02' 51"	1320.0	false	P	1000.0	2320	2320.0	05-Dec-2012 05:22:16
4	KOOKS	17-003935	AVNIS	9I	N41°06' 04"	W089°40' 06"	1264.0	false	P	1000.0	3264	2264.0	05-Dec-2012 05:22:03
5	MOORS	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
6	ENDEE	17-001650	AVNIS	5D	N41°16' 55"	W088°56' 11"	1997.0	false	P	1000.0	2997	2997.0	05-Dec-2012 05:22:52
7	STKNY	17-002074	AVNIS	4D	N41°21' 17"	W088°29' 55"	1060.0	false	P	1000.0	2060	2060.0	05-Dec-2012 05:23:06
8	TOYUL	17-001137	AVNIS	5D	N41°30' 45"	W088°15' 18"	1043.0	false	P	1000.0	2043	2043.0	05-Dec-2012 05:20:38
9	JEAAN	17-000115	AVNIS	2C	N41°44' 58"	W088°01' 57"	1078.0	false	P	1000.0	2078	2078.0	05-Dec-2012 05:20:38

Route Criteria Failures

No failures.

Terrain Information

Terrain Extractor Name	Extractor Location	Extractor Type	Resolution
faa dted	C:\Users\tsmith\TARGETS501\data\FAA Dted\FAA DTED	org.mitre.caasd.terrain.DTEDExtractor	3.0

Procedure Criteria Failures

RSO148: In the RNAV STAR Procedure, the leg from TOYUL to JEAAN's MEA (2300) is greater than the MEA (2100) previous leg (as flown).
RSO147: In the RNAV STAR Procedure, the leg from LLVSS to MANIA's MOCA (3234) is greater than the MEA (3000) assigned to that leg.
RSO148: In the RNAV STAR Procedure, the leg from LLVSS to MANIA's MEA (3300) is greater than the MEA (3000) previous leg (as flown).
RSO148: In the RNAV STAR Procedure, the leg from PURTY to KOOKS's MEA (3300) is greater than the MEA (3000) previous leg (as flown).

ENDEE RNAV

Evaluation Failures

No failures.

Database Effective Dates

Database	Date
UddfObstacle	06/01/2007
NFDC	11/15/2012
IFP_OFFLINE	N/A
AVNIS	12/18/2012
NACO	12/13/2012
DOF	11/15/2012

Notes:

MOVE BANER WP TO 41 36 38.18N 87 58 19.39W

ENDEE RNAV

FISSK RNAV

Point Of Contact

ATC Facility Name - Chicago ARTCC

POC's Name - Thomas Rucker

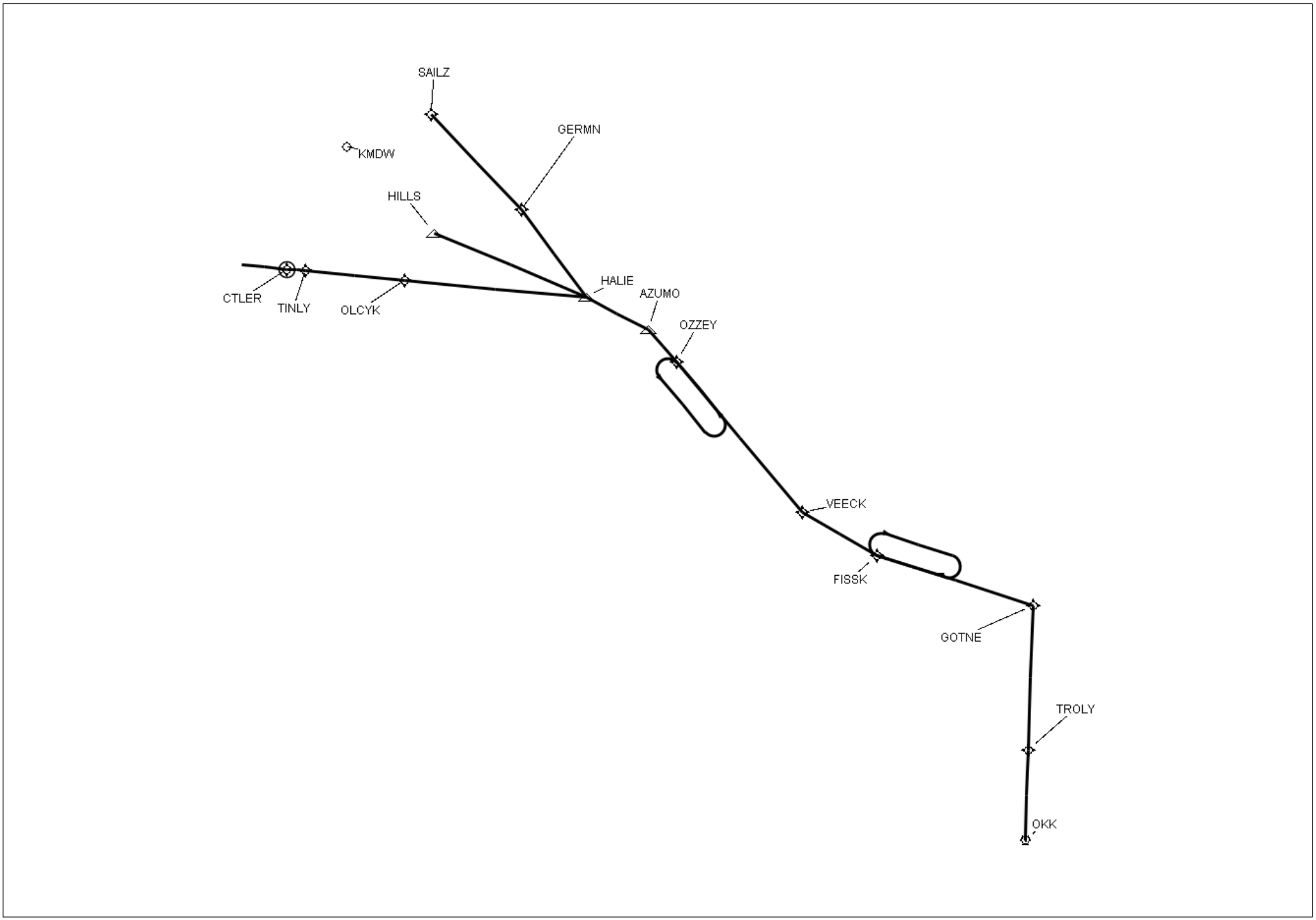
Telephone Number - 630-906-8718

FAX Number -

Email Address - thomas.rucker@faa.gov

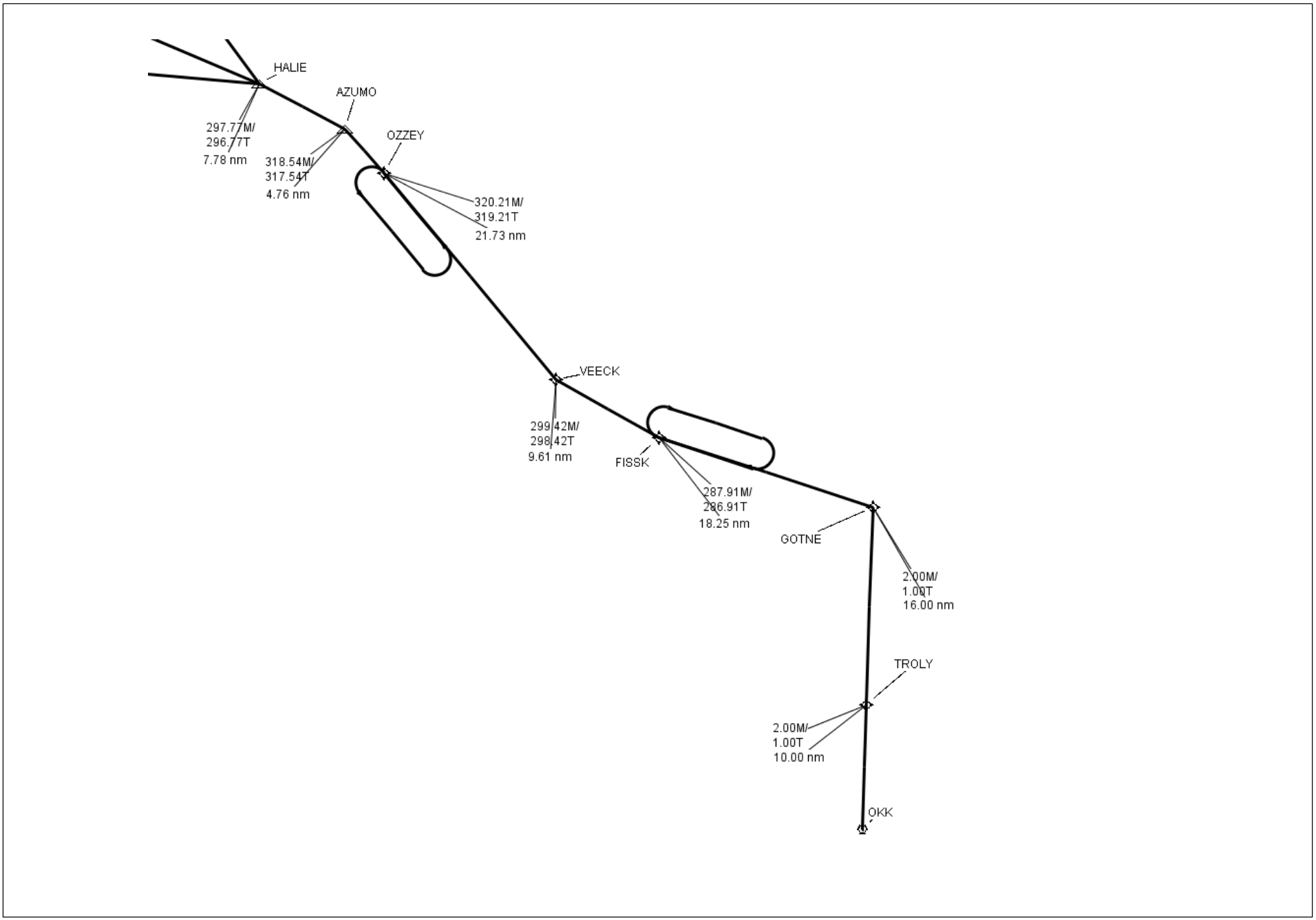
TARGETS Distribution Package

Version:TARGETS 5.0.1 (November 7, 2012)
Date: Tue Dec 18 13:18:04 CST 2012



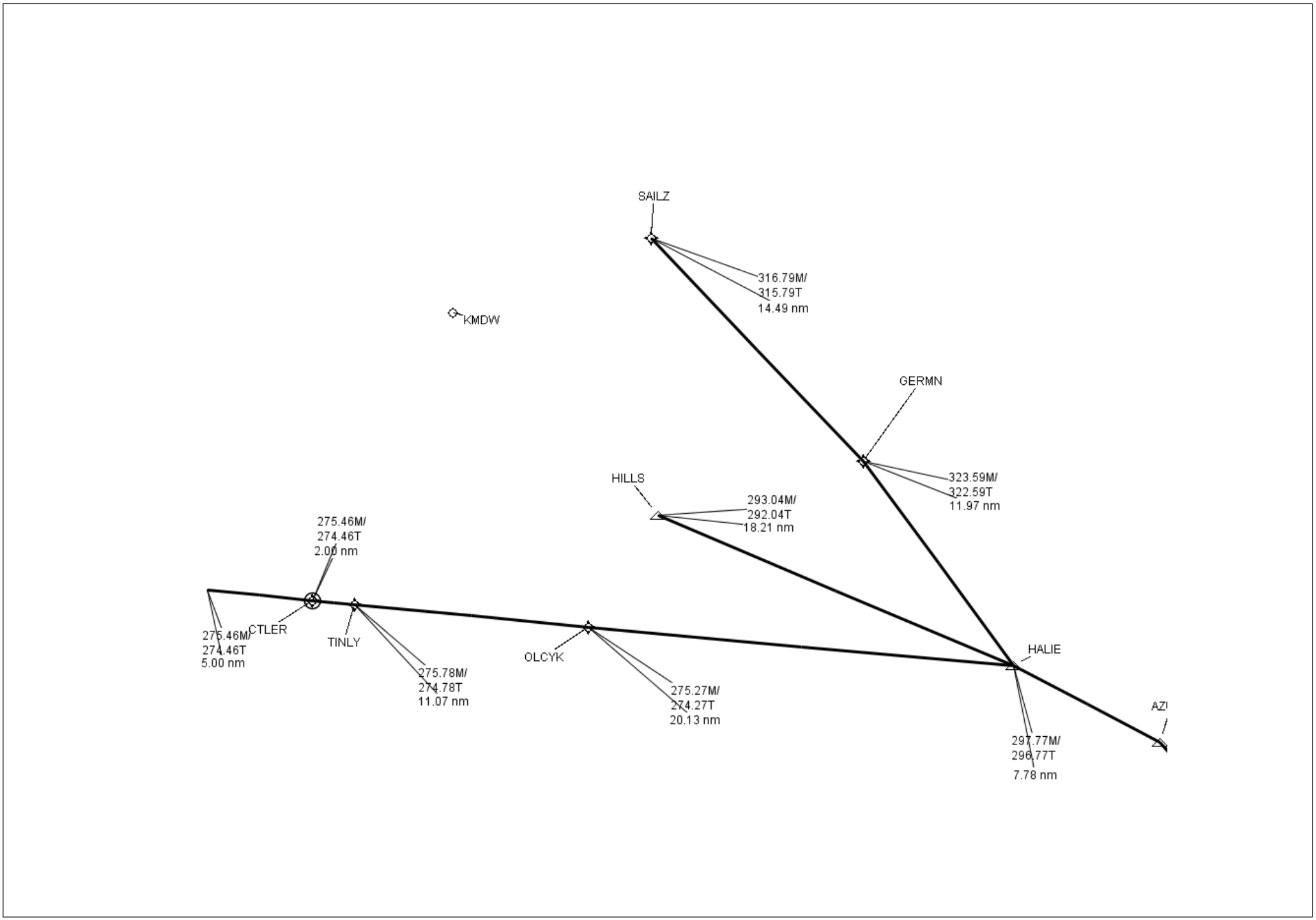
FISSK RNAV

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway



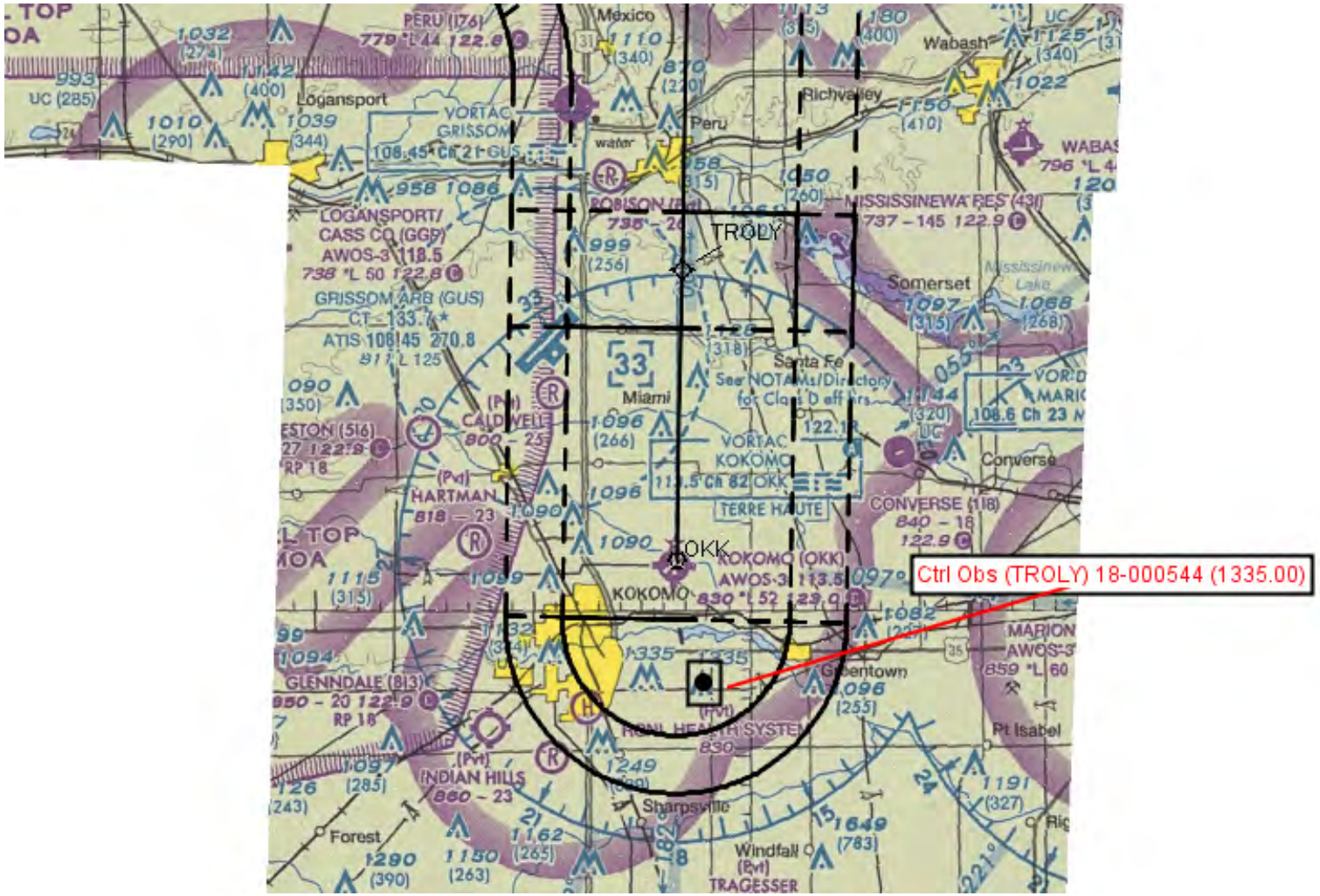
FISSK RNAV

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway



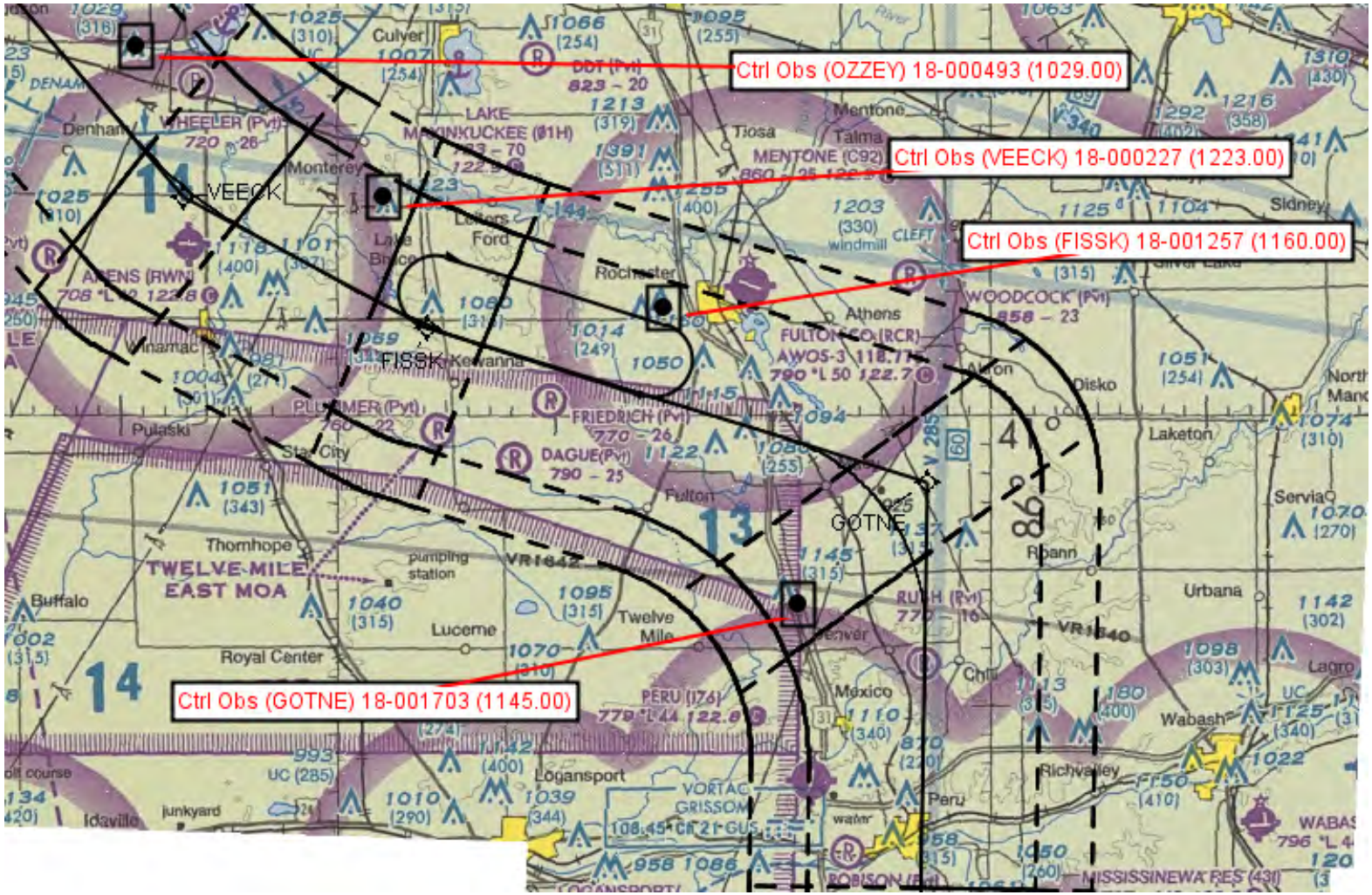
FISSK RNAV

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway



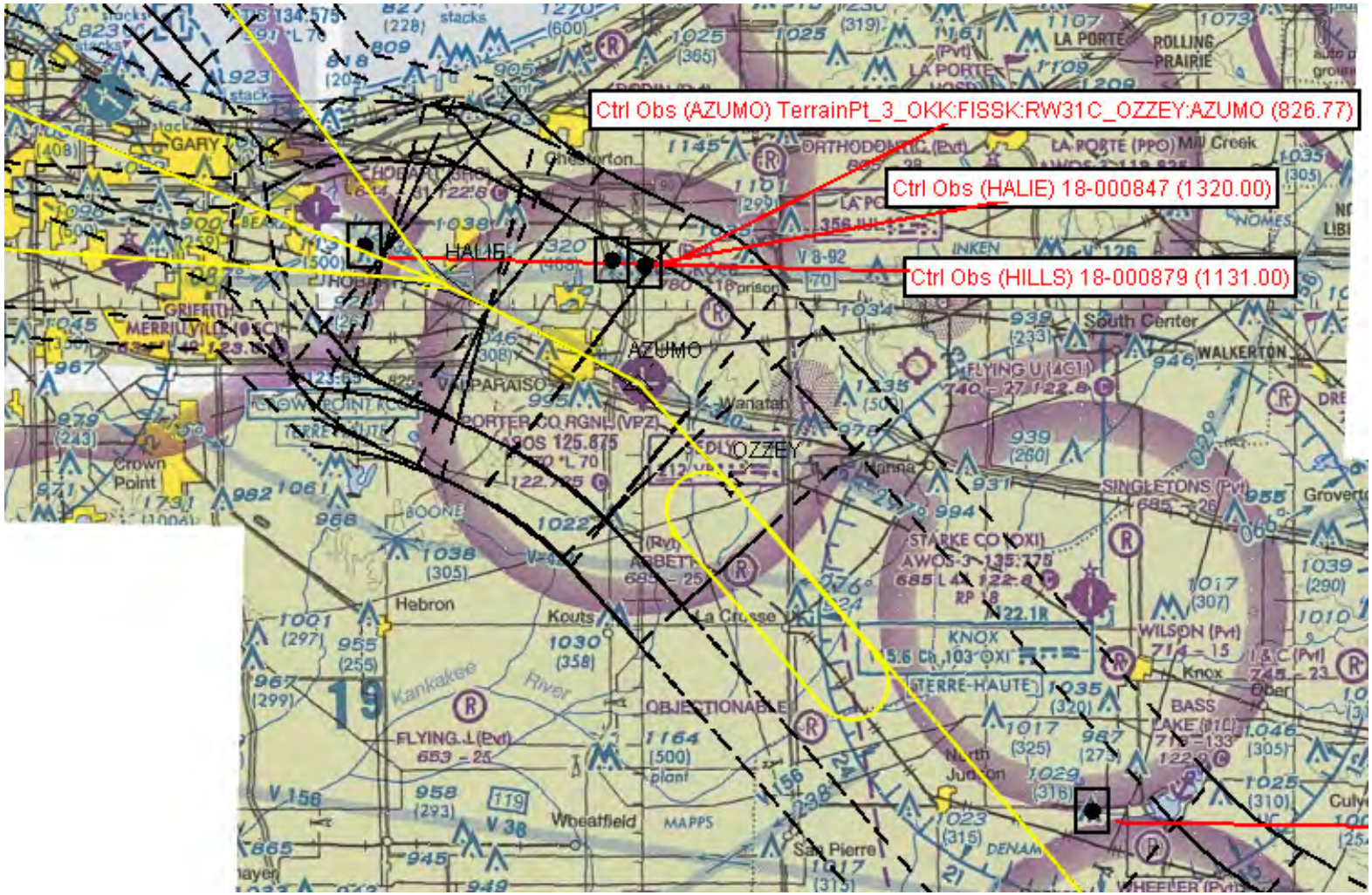
FISSK RNAV

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway



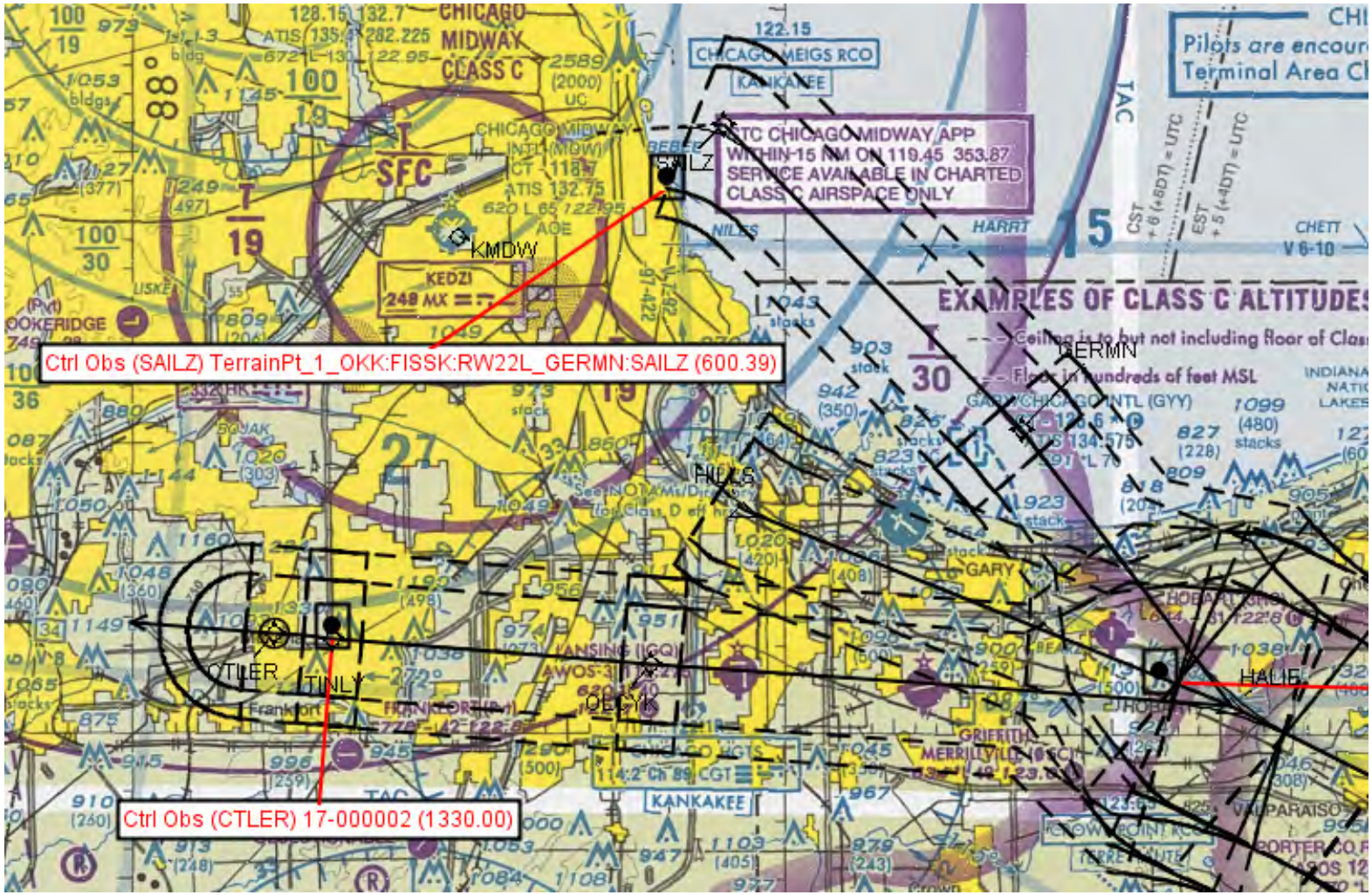
FISSK RNAV

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway



FISSK RNAV

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway



FISSK RNAV

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway

En Route Transition Data - OKK

DB	Waypoint	Distance	Leg	FO/FB	Latitude	Longitude	TC	MC	Altitude	Speed	MEA	Arc Center Lat (D° M' S.ss")	Arc Center Lon (D° M' S.ss")	Arc Radius (NM)
AVNIS	OKK VORTAC		IF		N40 31 40.00	W086 03 28.81								
AVNIS	TROLY WP	10.00	TF	FB	N40 41 40.35	W086 03 15.09	1.00	2.00			3400			
AVNIS	GOTNE WP	16.00	TF	FB	N40 57 40.58	W086 02 52.95	1.00	2.00			3400			
AVNIS	FISSK WP	18.25	TF	FB	N41 02 57.00	W086 25 58.00	286.91	287.91			3400			
AVNIS	FISSK WP	8.00	HM		N41 02 57.00	W086 25 58.00	286.91	287.91						

Common Route Data - FISSK

DB	Waypoint	Distance	Leg	FO/FB	Latitude	Longitude	TC	MC	Altitude	Speed	MEA	Arc Center Lat (D° M' S.ss")	Arc Center Lon (D° M' S.ss")	Arc Radius (NM)
AVNIS	FISSK WP		IF		N41 02 57.00	W086 25 58.00								
AVNIS	VEECK WP	9.61	TF	FB	N41 07 31.00	W086 37 09.00	298.42	299.42			3400			
AVNIS	OZZEY WP	21.73	TF	FB	N41 23 57.00	W086 56 00.60	319.21	320.21			3400			
AVNIS	OZZEY WP	8.00	HM		N41 23 57.00	W086 56 00.60	319.21	320.21						
AVNIS	AZUMO WP	4.76	TF	FB	N41 27 27.94	W087 00 17.27	317.54	318.54			3400			
AVNIS	HALIE WP	7.78	TF	FB	N41 30 57.85	W087 09 31.95	296.77	297.77			3400			

Runway Transition Data - RW04R13C

DB	Waypoint	Distance	Leg	FO/FB	Latitude	Longitude	TC	MC	Altitude	Speed	MEA	Arc Center Lat (D° M' S.ss")	Arc Center Lon (D° M' S.ss")	Arc Radius (NM)
AVNIS	HALIE WP		IF		N41 30 57.85	W087 09 31.95								
	OLCYK WP	20.13	TF	FB	N41 32 24.69	W087 36 16.06	274.27	275.27			2400			
	TINLY WP	11.07	TF	FB	N41 33 19.08	W087 50 57.56	274.78	275.78			2400			
	CTLER WP	2.00	TF	FO	N41 33 28.39	W087 53 36.92	274.46	275.46			2400			
	CTLER WP	5.00	FM		N41 33 28.39	W087 53 36.92	277.46	275.46						

Runway Transition Data - RW22L

DB	Waypoint	Distance	Leg	FO/FB	Latitude	Longitude	TC	MC	Altitude	Speed	MEA	Arc Center Lat (D° M' S.ss")	Arc Center Lon (D° M' S.ss")	Arc Radius (NM)
AVNIS	HALIE WP		IF		N41 30 57.85	W087 09 31.95								
	GERMN WP	11.97	TF	FB	N41 40 28.19	W087 19 14.25	322.59	323.59			3400			
	SAILZ WP	14.72	TF	FB	N41 51 00.49	W087 32 58.19	315.78	316.78			3400			

Runway Transition Data - RW31C

DB	Waypoint	Distance	Leg	FO/FB	Latitude	Longitude	TC	MC	Altitude	Speed	MEA	Arc Center Lat (D° M' S.ss")	Arc Center Lon (D° M' S.ss")	Arc Radius (NM)
AVNIS	HALIE WP		IF		N41 30 57.85	W087 09 31.95								
	HILLS_ WP	17.76	TF	FB	N41 37 25.40	W087 31 34.18	291.44	292.44			2200			

FISSK RNAV

Waypoint Data

DB	Waypoint	Arc Center	Lat-Long (DMS.S)	Latitude (Deg)	Longitude (Deg)	Latitude (D°, M.mm')	Longitude (D°, M.mm')	Latitude (D° M' S.ss")	Longitude (D° M' S.ss")
AVNIS	AZUMO WP		412727.94N-0870017.27W	N 41.4577611	W 87.0047972	N41 27.466	W87 00.288	N41 27 27.94	W087 00 17.27
	CTLER WP		413328.39N-0875336.92W	N 41.5578871	W 87.8935884	N41 33.473	W87 53.615	N41 33 28.39	W087 53 36.92
AVNIS	FISSK WP		410257.00N-0862558.00W	N 41.0491667	W 86.4327778	N41 02.950	W86 25.967	N41 02 57.00	W086 25 58.00
	GERMN WP		414028.19N-0871914.25W	N 41.6744972	W 87.3206250	N41 40.470	W87 19.238	N41 40 28.19	W087 19 14.25
AVNIS	GOTNE WP		405740.58N-0860252.95W	N 40.9612722	W 86.0480417	N40 57.676	W86 02.882	N40 57 40.58	W086 02 52.95
AVNIS	HALIE WP		413057.85N-0870931.95W	N 41.5160694	W 87.1588750	N41 30.964	W87 09.533	N41 30 57.85	W087 09 31.95
	HILLS_ WP		413725.40N-0873134.18W	N 41.6237222	W 87.5261611	N41 37.423	W87 31.570	N41 37 25.40	W087 31 34.18
AVNIS	OKK VORTAC		403140.00N-0860328.81W	N 40.5277778	W 86.0580028	N40 31.667	W86 03.480	N40 31 40.00	W086 03 28.81
	OLCYK WP		413224.69N-0873616.06W	N 41.5401917	W 87.6044611	N41 32.411	W87 36.268	N41 32 24.69	W087 36 16.06
AVNIS	OZZEY WP		412357.00N-0865600.60W	N 41.3991667	W 86.9335000	N41 23.950	W86 56.010	N41 23 57.00	W086 56 00.60
	SAILZ WP		415100.49N-0873258.19W	N 41.8501361	W 87.5494972	N41 51.008	W87 32.970	N41 51 00.49	W087 32 58.19
	TINLY WP		413319.08N-0875057.56W	N 41.5553000	W 87.8493222	N41 33.318	W87 50.959	N41 33 19.08	W087 50 57.56
AVNIS	TROLY WP		404140.35N-0860315.09W	N 40.6945417	W 86.0541917	N40 41.672	W86 03.252	N40 41 40.35	W086 03 15.09
AVNIS	VEECK WP		410731.00N-0863709.00W	N 41.1252778	W 86.6191667	N41 07.517	W86 37.150	N41 07 31.00	W086 37 09.00

RS Results FISSK RNAV 02

Last Evaluation: 07-Dec-2012 12:01:36
Reference Software Version: 1.2.0

Route Evaluation for OKK:FISSK:RW31C

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	OKK						0.0	0.0
TF	TROLY	FLY_BY				0.0	10.0	1.0
TF	GOTNE	FLY_BY				74.1	16.0	5.23
TF	FISSK	FLY_BY	11000.0			11.76	18.25	7.98
TF	VEECK	FLY_BY				20.92	9.61	5.49
TF	OZZEY	FLY_BY				1.46	21.73	2.74
TF	AZUMO	FLY_BY				20.73	4.76	1.86
TF	HALIE	FLY_BY				4.63	7.78	1.86
TF	HILLS	FLY_BY				21.87	18.21	1.27

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	OKK				0.0	0.0							0.0	0.0				
TF	TROLY	FLY_BY	0.0		22062.84	300.0	0.0	91.0	439.0	506.0	0.0		19562.66	300.0	0.0	86.0	420.0	481.0
TF	GOTNE	FLY_BY	0.0		19562.66	300.0	0.0	86.0	420.0	481.0	5.23	6.93	15563.59	300.0	25.0	78.0	393.0	471.0
TF	FISSK	FLY_BY	5.23	6.93	15563.59	300.0	25.0	78.0	393.0	471.0	2.75	26.65	11000.0	300.0	5.88	69.0	365.0	434.0
TF	VEECK	FLY_BY	2.75	26.65	11000.0	300.0	5.88	69.0	365.0	434.0	2.74	14.87	11000.0	300.0	10.46	69.0	365.0	434.0
TF	OZZEY	FLY_BY	2.74	14.87	11000.0	300.0	10.46	69.0	365.0	434.0	1.42	111.22	9887.46	250.0	1.0	67.0	298.0	365.0
TF	AZUMO	FLY_BY	1.42	111.22	9887.46	250.0	1.0	67.0	298.0	365.0	1.86	10.16	8696.29	250.0	10.36	64.0	293.0	357.0
TF	HALIE	FLY_BY	1.86	10.16	8696.29	250.0	10.36	64.0	293.0	357.0	1.72	42.69	6751.74	250.0	2.31	60.0	284.0	344.0
TF	HILLS	FLY_BY	1.72	42.69	6751.74	250.0	2.31	60.0	284.0	344.0	1.27	6.56	2200.0	250.0	10.94	30.0	265.0	295.0

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	TROLY	18-000544	AVNIS	5D	N40°27' 04"	W086°02' 12"	1335.0	false	P	1000.0	2335	2335.0	07-Dec-2012 12:03:22
2	GOTNE	18-001703	AVNIS	5D	N40°53' 06"	W086°08' 51"	1145.0	false	P	1000.0	2145	2145.0	07-Dec-2012 12:02:11
3	FISSK	18-001257	AVNIS	3C	N41°03' 17"	W086°15' 03"	1160.0	false	P	1000.0	2160	2160.0	07-Dec-2012 12:02:11
4	VEECK	18-000227	AVNIS	5D	N41°07' 08"	W086°27' 55"	1223.0	false	P	1000.0	2223	2223.0	07-Dec-2012 12:02:11
5	OZZEY	18-000493	AVNIS	5D	N41°12' 17"	W086°39' 21"	1029.0	false	P	1000.0	2029	2029.0	07-Dec-2012 12:02:12
6	AZUMO	TerrainPt_3_OKK:FISSK:RW31C_OZZEY:AZUMO		4E	N41°31' 06"	W086°59' 57"	826.77	false	P	1000.0	2027	2026.77	07-Dec-2012 12:05:47
7	HALIE	18-000847	AVNIS	2C	N41°31' 17"	W087°01' 26"	1320.0	false	P	1000.0	2320	2320.0	N/A
8	HILLS	18-000879	AVNIS	3C	N41°31' 49"	W087°12' 52"	1131.0	false	P	1000.0	2131	2131.0	N/A

Route Criteria Failures

No failures.

Route Evaluation for OKK:FISSK:RW22L

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	OKK						0.0	0.0
TF	TROLY	FLY_BY				0.0	10.0	1.0
TF	GOTNE	FLY_BY				74.1	16.0	5.23
TF	FISSK	FLY_BY	11000.0			11.76	18.25	7.98
TF	VEECK	FLY_BY				20.92	9.61	5.49
TF	OZZEY	FLY_BY				1.46	21.73	2.74
TF	AZUMO	FLY_BY				20.73	4.76	2.75
TF	HALIE	FLY_BY				25.92	7.78	5.39
TF	GERMN	FLY_BY				6.69	11.97	2.64
TF	SAILZ	FLY_BY				49.16	14.71	1.53

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	OKK				0.0	0.0							0.0	0.0				
TF	TROLY	FLY_BY	0.0		22062.84	300.0	0.0	91.0	439.0	506.0	0.0		19562.66	300.0	0.0	86.0	420.0	481.0
TF	GOTNE	FLY_BY	0.0		19562.66	300.0	0.0	86.0	420.0	481.0	5.23	6.93	15563.59	300.0	25.0	78.0	393.0	471.0
TF	FISSK	FLY_BY	5.23	6.93	15563.59	300.0	25.0	78.0	393.0	471.0	2.75	26.65	11000.0	300.0	5.88	69.0	365.0	434.0
TF	VEECK	FLY_BY	2.75	26.65	11000.0	300.0	5.88	69.0	365.0	434.0	2.74	14.87	11000.0	300.0	10.46	69.0	365.0	434.0
TF	OZZEY	FLY_BY	2.74	14.87	11000.0	300.0	10.46	69.0	365.0	434.0	2.01	157.24	11000.0	300.0	1.0	69.0	365.0	434.0
TF	AZUMO	FLY_BY	2.01	157.24	11000.0	300.0	1.0	69.0	365.0	434.0	2.75	15.01	11000.0	300.0	10.36	69.0	365.0	434.0
TF	HALIE	FLY_BY	2.75	15.01	11000.0	300.0	10.36	69.0	365.0	434.0	2.64	11.49	10071.03	300.0	12.96	67.0	359.0	426.0
TF	GERMN	FLY_BY	2.64	11.49	10071.03	300.0	12.96	67.0	359.0	426.0	1.75	30.04	7078.42	250.0	3.34	61.0	286.0	347.0
TF	SAILZ	FLY_BY	1.75	30.04	7078.42	250.0	3.34	61.0	286.0	347.0	1.53	3.34	3400.0	250.0	24.58	54.0	270.0	324.0

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	TROLY	18-000544	AVNIS	5D	N40°27' 04"	W086°02' 12"	1335.0	false	P	1000.0	2335	2335.0	07-Dec-2012 12:03:22
2	GOTNE	18-001703	AVNIS	5D	N40°53' 06"	W086°08' 51"	1145.0	false	P	1000.0	2145	2145.0	07-Dec-2012 12:02:11
3	FISSK	18-001257	AVNIS	3C	N41°03' 17"	W086°15' 03"	1160.0	false	P	1000.0	2160	2160.0	07-Dec-2012 12:02:11
4	VEECK	18-000227	AVNIS	5D	N41°07' 08"	W086°27' 55"	1223.0	false	P	1000.0	2223	2223.0	07-Dec-2012 12:02:11
5	OZZEY	18-000493	AVNIS	5D	N41°12' 17"	W086°39' 21"	1029.0	false	P	1000.0	2029	2029.0	07-Dec-2012 12:02:12
6	AZUMO	TerrainPt_3_OKK:FISSK:RW31C_OZZEY:AZUMO		4E	N41°31' 06"	W086°59' 57"	826.77	false	P	1000.0	2027	2026.77	07-Dec-2012 12:05:47
7	HALIE	18-000847	AVNIS	2C	N41°31' 17"	W087°01' 26"	1320.0	false	P	1000.0	2320	2320.0	N/A
8	GERMN	18-000879	AVNIS	3C	N41°31' 49"	W087°12' 52"	1131.0	false	P	1000.0	2131	2131.0	N/A
9	SAILZ	TerrainPt_1_OKK:FISSK:RW22L_GERMN:SAILZ		4E	N41°48' 51"	W087°35' 30"	600.39	false	P	1000.0	1800	1800.39	07-Dec-2012 12:05:56

Route Criteria Failures

No failures.

Route Evaluation for OKK:FISSK:RW04R13C

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	OKK						0.0	0.0
TF	TROLY	FLY_BY				0.0	10.0	1.0
TF	GOTNE	FLY_BY				74.1	16.0	5.23
TF	FISSK	FLY_BY	11000.0			11.76	18.25	7.98
TF	VEECK	FLY_BY				20.92	9.61	5.49
TF	OZZEY	FLY_BY				1.46	21.73	2.74
TF	AZUMO	FLY_BY				20.73	4.76	2.75
TF	HALIE	FLY_BY				22.4	7.78	5.45
TF	OLCYK	FLY_BY				0.8	20.13	2.71
TF	TINLY	FLY_BY				0.15	11.07	1.0
TF	CTLER	FLY_OVER					2.0	1.0
FM							0.0	0.0

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	OKK				0.0	0.0							0.0	0.0				
TF	TROLY	FLY_BY	0.0		22062.84	300.0	0.0	91.0	439.0	506.0	0.0		19562.66	300.0	0.0	86.0	420.0	481.0
TF	GOTNE	FLY_BY	0.0		19562.66	300.0	0.0	86.0	420.0	481.0	5.23	6.93	15563.59	300.0	25.0	78.0	393.0	471.0
TF	FISSK	FLY_BY	5.23	6.93	15563.59	300.0	25.0	78.0	393.0	471.0	2.75	26.65	11000.0	300.0	5.88	69.0	365.0	434.0
TF	VEECK	FLY_BY	2.75	26.65	11000.0	300.0	5.88	69.0	365.0	434.0	2.74	14.87	11000.0	300.0	10.46	69.0	365.0	434.0
TF	OZZEY	FLY_BY	2.74	14.87	11000.0	300.0	10.46	69.0	365.0	434.0	2.01	157.24	11000.0	300.0	1.0	69.0	365.0	434.0
TF	AZUMO	FLY_BY	2.01	157.24	11000.0	300.0	1.0	69.0	365.0	434.0	2.75	15.01	11000.0	300.0	10.36	69.0	365.0	434.0
TF	HALIE	FLY_BY	2.75	15.01	11000.0	300.0	10.36	69.0	365.0	434.0	2.71	13.67	10700.17	300.0	11.2	68.0	363.0	431.0
TF	OLCYK	FLY_BY	2.71	13.67	10700.17	300.0	11.2	68.0	363.0	431.0	0.67	94.81	5667.11	250.0	1.0	58.0	279.0	337.0
TF	TINLY	FLY_BY	0.67	94.81	5667.11	250.0	1.0	58.0	279.0	337.0	0.11	86.02	2900.0	250.0	1.0	53.0	268.0	321.0
TF	CTLER	FLY_OVER	0.11	86.02	2900.0	250.0	1.0	53.0	268.0	321.0	0.0		2400.0	250.0	0.0	30.0	266.0	296.0
FM			0.0		2400.0	250.0	0.0	30.0	266.0	296.0			0.0	0.0				

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	TROLY	18-000544	AVNIS	5D	N40°27' 04"	W086°02' 12"	1335.0	false	P	1000.0	2335	2335.0	07-Dec-2012 12:03:22
2	GOTNE	18-001703	AVNIS	5D	N40°53' 06"	W086°08' 51"	1145.0	false	P	1000.0	2145	2145.0	07-Dec-2012 12:02:11
3	FISSK	18-001257	AVNIS	3C	N41°03' 17"	W086°15' 03"	1160.0	false	P	1000.0	2160	2160.0	07-Dec-2012 12:02:11
4	VEECK	18-000227	AVNIS	5D	N41°07' 08"	W086°27' 55"	1223.0	false	P	1000.0	2223	2223.0	07-Dec-2012 12:02:11
5	OZZEY	18-000493	AVNIS	5D	N41°12' 17"	W086°39' 21"	1029.0	false	P	1000.0	2029	2029.0	07-Dec-2012 12:02:12
6	AZUMO	TerrainPt_3_OKK:FISSK:RW31C_OZZEY:AZUMO		4E	N41°31' 06"	W086°59' 57"	826.77	false	P	1000.0	2027	2026.77	07-Dec-2012 12:05:47
7	HALIE	18-000847	AVNIS	2C	N41°31' 17"	W087°01' 26"	1320.0	false	P	1000.0	2320	2320.0	N/A
8	OLCYK	18-000879	AVNIS	3C	N41°31' 49"	W087°12' 52"	1131.0	false	P	1000.0	2131	2131.0	N/A
9	TINLY	17-000002	AVNIS	2D	N41°33' 20"	W087°50' 55"	1330.0	false	P	1000.0	2330	2330.0	N/A
10	CTLER	17-000002	AVNIS	2D	N41°33' 20"	W087°50' 55"	1330.0	false	P	1000.0	2330	2330.0	N/A

Route Criteria Failures

No failures.

Terrain Information

Terrain Extractor Name	Extractor Location	Extractor Type	Resolution
faa dted	C:\Users\tsmith\TARGETS501\data\FAA Dted\FAA DTED	org.mitre.caasd.terrain.DTEDExtractor	3.0

Procedure Criteria Failures

RSO148: In the RNAV STAR Procedure, the leg from GERMN to SAILZ's MEA (3400) is greater than the MEA (3000) previous leg (as flown).

FISSK RNAV

Evaluation Failures

No failures.

Database Effective Dates

Database	Date
UddfObstacle	06/01/2007
NFDC	11/15/2012
IFP_OFFLINE	N/A
AVNIS	12/18/2012
NACO	12/13/2012
DOF	11/15/2012

Notes:

DO NOT CODE ALTITUDE RESTRICTION AT FISSK. ALTITUDE IS "EXPECT TO CROSS".
MOVE HILLS WP TO 41 37 25.40N 87 31 34.18W

FISSK RNAV

PANGG RNAV

Point Of Contact

ATC Facility Name - Chicago ARTCC

POC's Name - Thomas Rucker

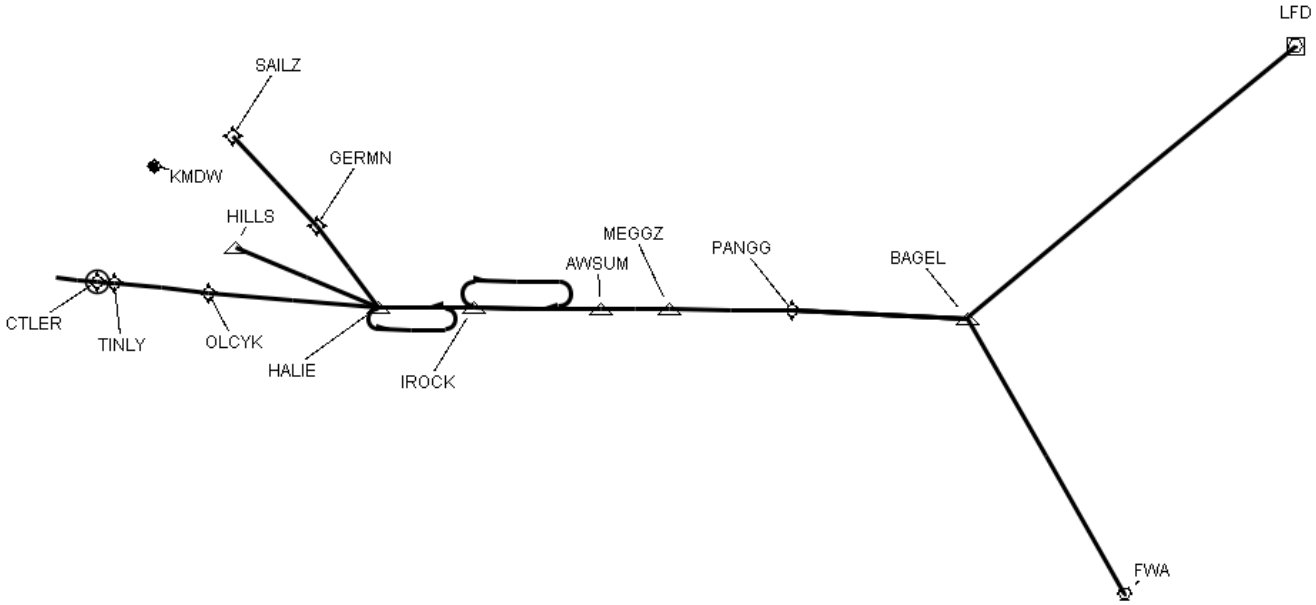
Telephone Number - 630-906-8718

FAX Number -

Email Address - thomas.rucker@faa.gov

TARGETS Distribution Package

Version:TARGETS 5.0.1 (November 7, 2012)
Date: Tue Dec 18 13:29:22 CST 2012



PANGG RNAV

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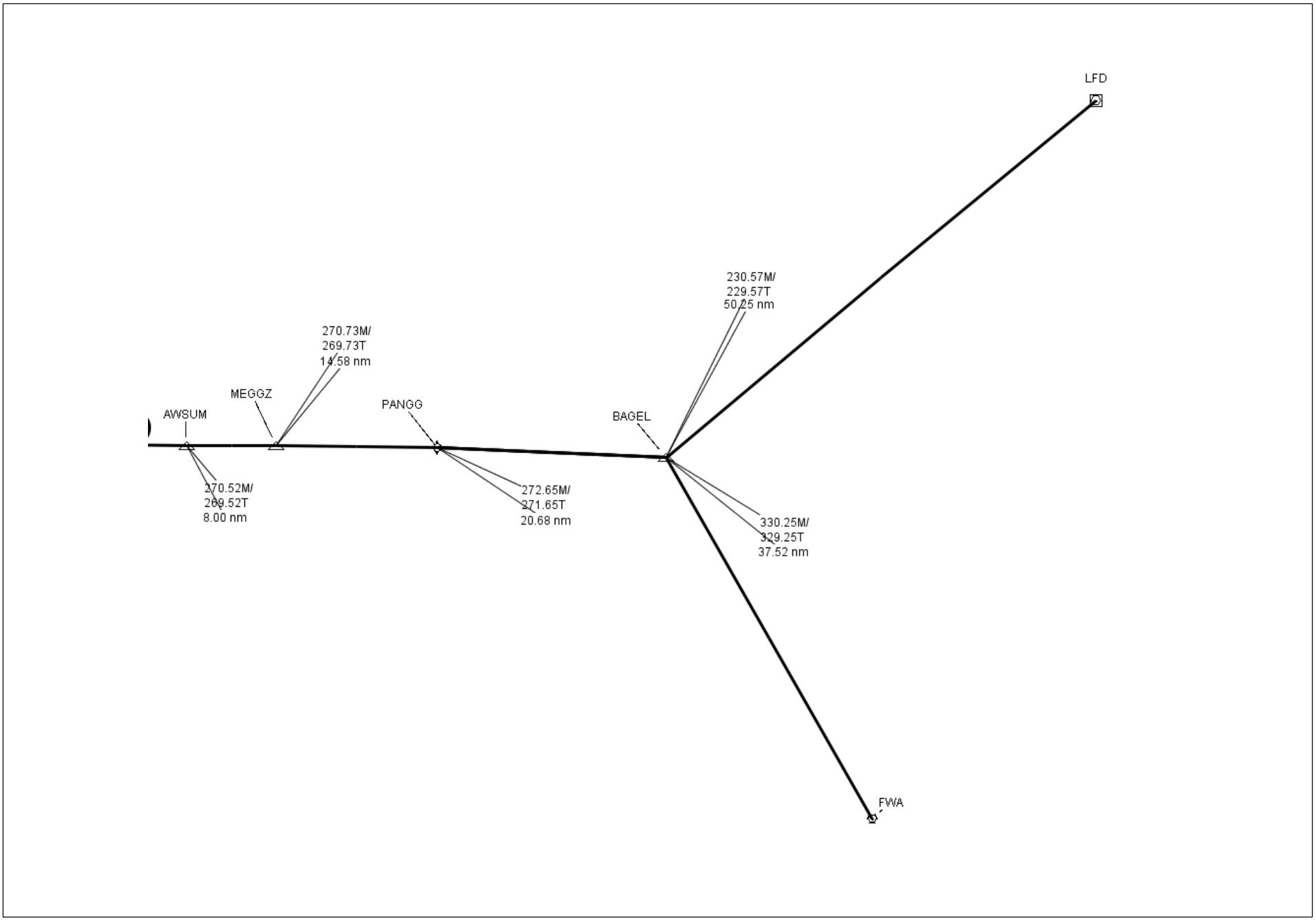
Chicago Midway



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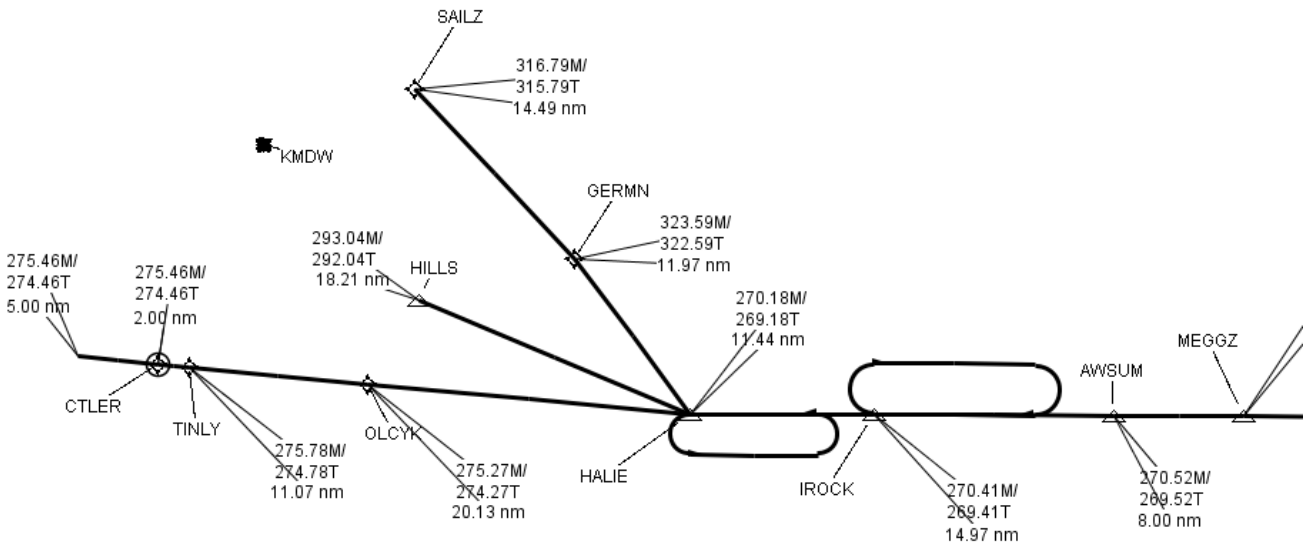
Chicago Midway



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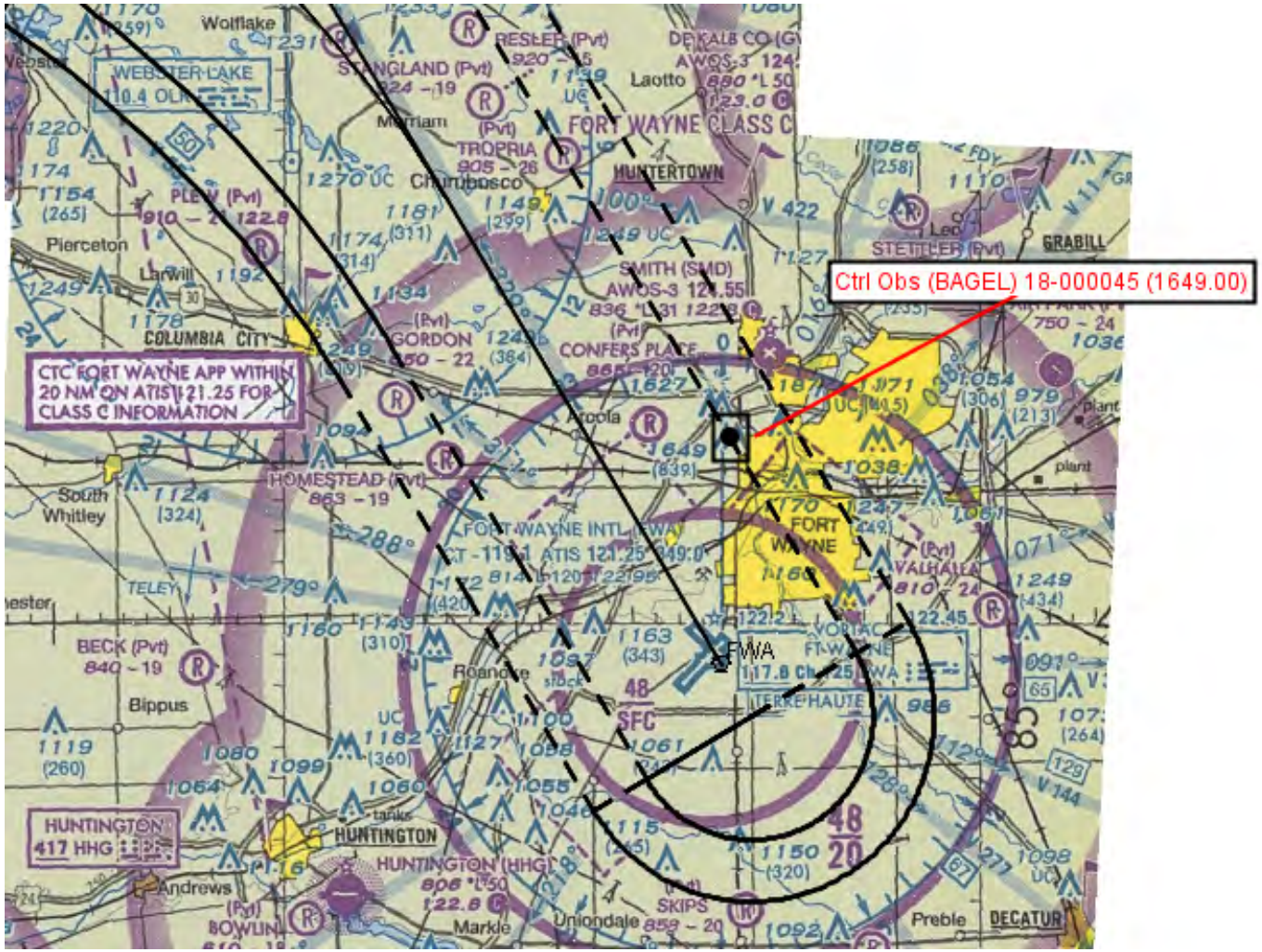
Chicago Midway

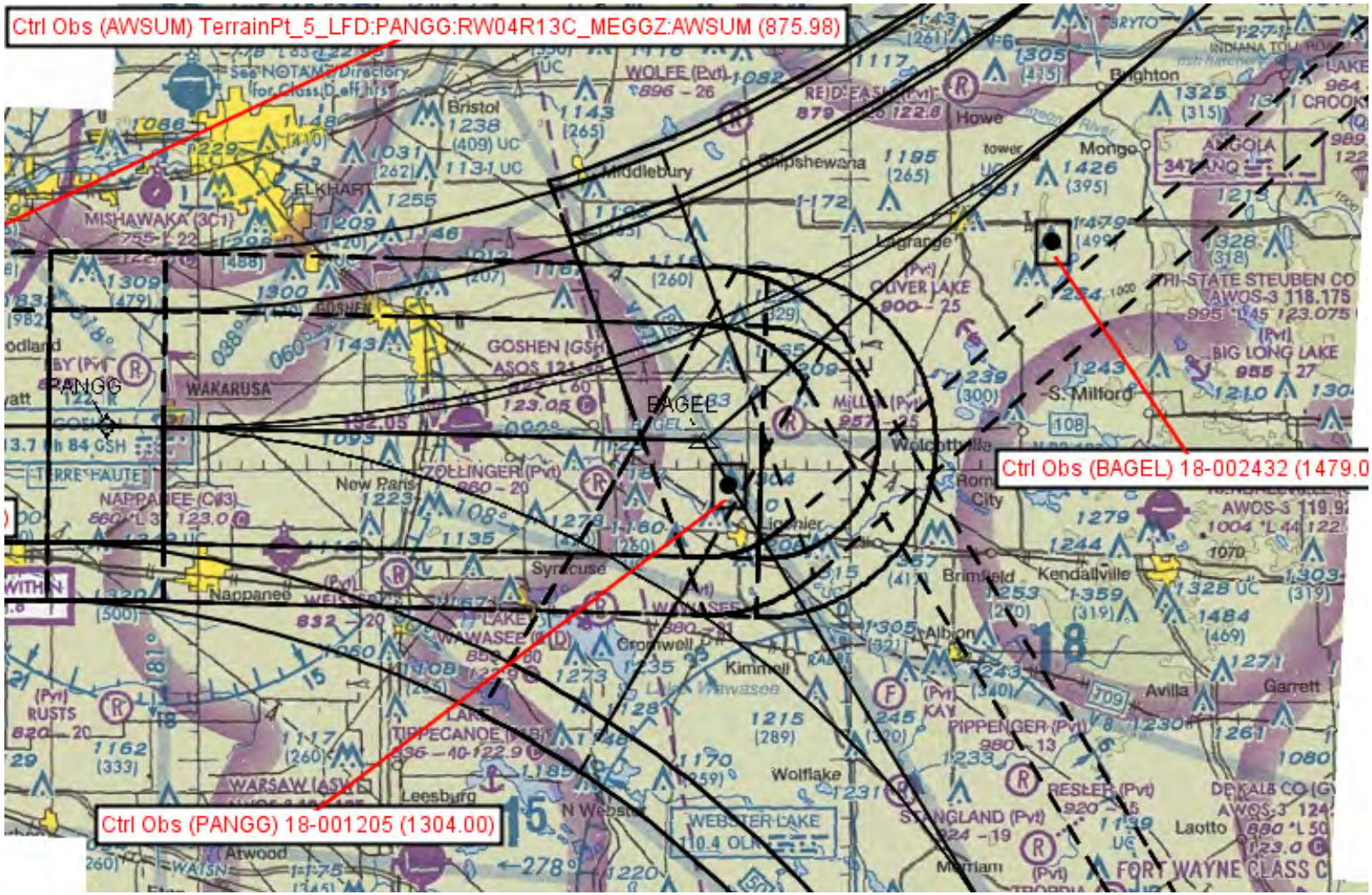
PANGG RNAV

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway



PANGG RNAV

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway



PANGG RNAV

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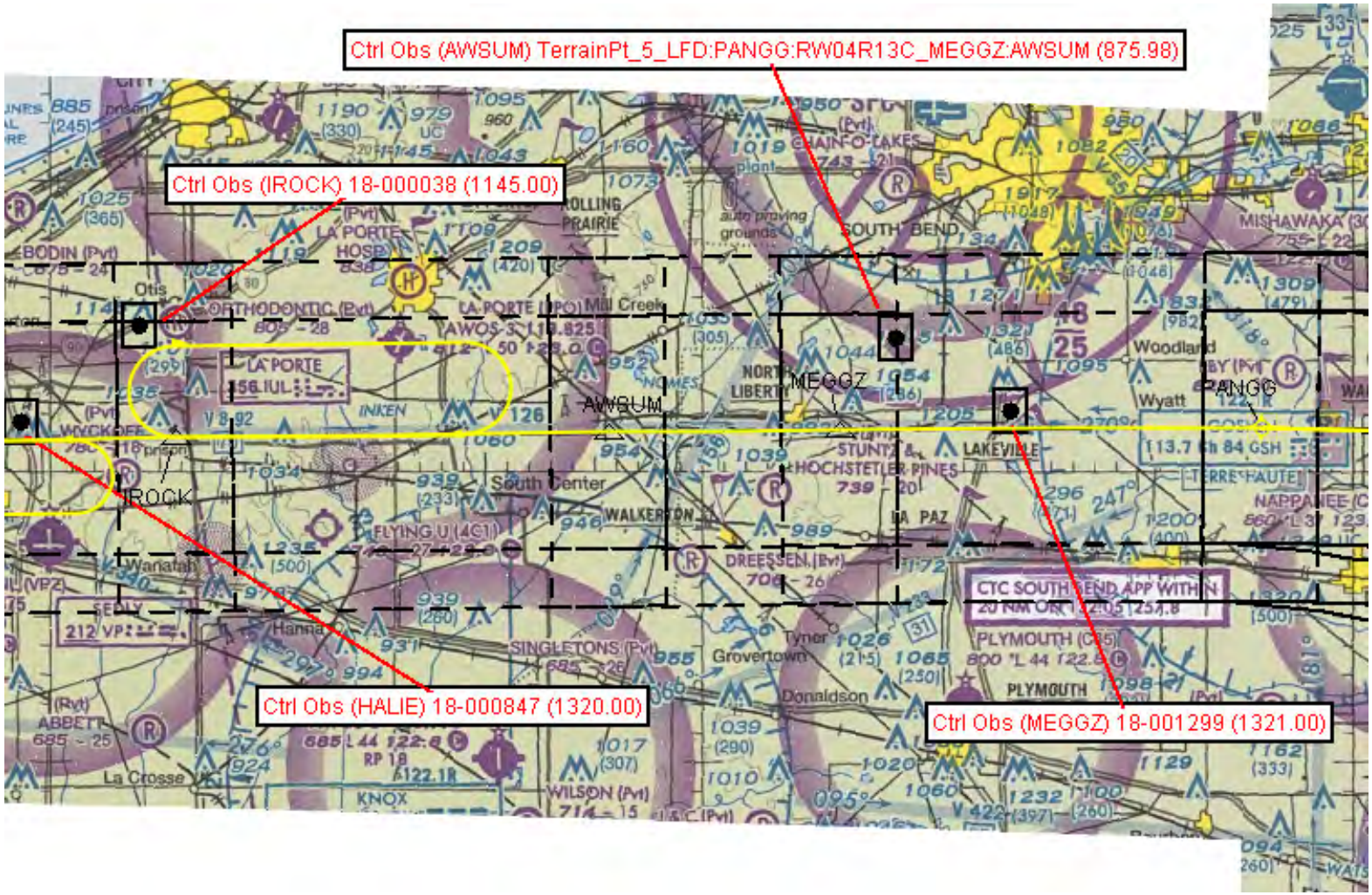
Chicago Midway



PANGG RNAV

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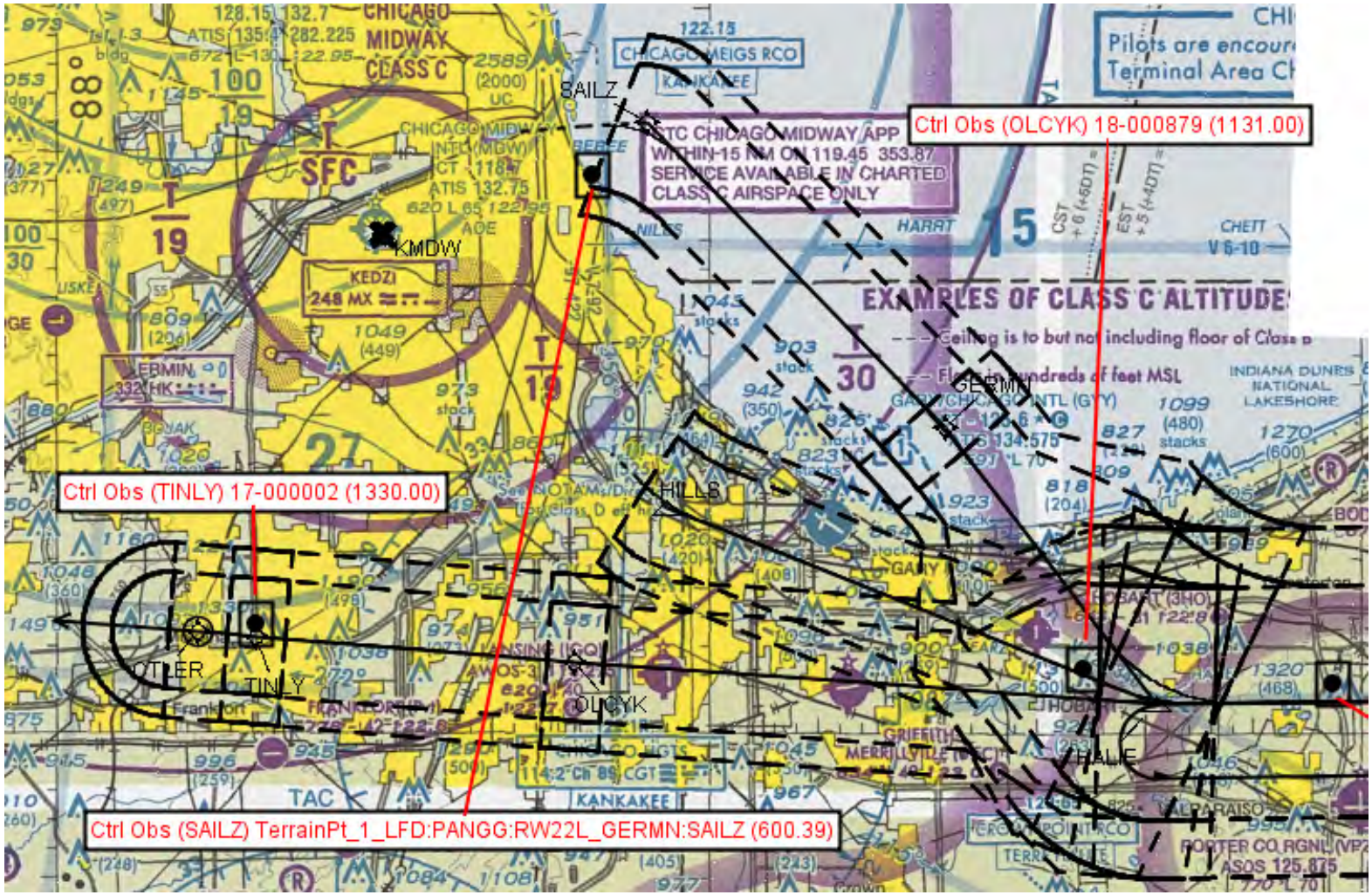
Chicago Midway



PANGG RNAV

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway

En Route Transition Data - BAGEL

DB	Waypoint	Distance	Leg	FO/FB	Latitude	Longitude	TC	MC	Altitude	Speed	MEA	Arc Center Lat (D° M' S.ss")	Arc Center Lon (D° M' S.ss")	Arc Radius (NM)
AVNIS	BAGEL WP		IF		N41 30 57.51	W085 36 49.28								
	PANGG WP	20.68	TF	FB	N41 31 30.03	W086 04 20.39	271.65	272.65			3400			

En Route Transition Data - FWA

DB	Waypoint	Distance	Leg	FO/FB	Latitude	Longitude	TC	MC	Altitude	Speed	MEA	Arc Center Lat (D° M' S.ss")	Arc Center Lon (D° M' S.ss")	Arc Radius (NM)
AVNIS	FWA VORTAC		IF		N40 58 44.63	W085 11 17.01								
AVNIS	BAGEL WP	37.52	TF	FB	N41 30 57.51	W085 36 49.28	329.25	330.25			3400			
	PANGG WP	20.68	TF	FB	N41 31 30.03	W086 04 20.39	271.65	272.65			3400			

En Route Transition Data - LFD

DB	Waypoint	Distance	Leg	FO/FB	Latitude	Longitude	TC	MC	Altitude	Speed	MEA	Arc Center Lat (D° M' S.ss")	Arc Center Lon (D° M' S.ss")	Arc Radius (NM)
AVNIS	LFD VOR/DME		IF		N42 03 44.96	W084 45 54.48								
AVNIS	BAGEL WP	50.25	TF	FB	N41 30 57.51	W085 36 49.28	229.57	230.57			3400			
	PANGG WP	20.68	TF	FB	N41 31 30.03	W086 04 20.39	271.65	272.65			3400			

Common Route Data - PANGG

DB	Waypoint	Distance	Leg	FO/FB	Latitude	Longitude	TC	MC	Altitude	Speed	MEA	Arc Center Lat (D° M' S.ss")	Arc Center Lon (D° M' S.ss")	Arc Radius (NM)
	PANGG WP		IF		N41 31 30.03	W086 04 20.39								
AVNIS	MEGGZ WP	14.58	TF	FB	N41 31 24.28	W086 23 44.65	269.73	270.73			3400			
AVNIS	AWSUM WP	8.00	TF	FB	N41 31 19.74	W086 34 23.35	269.52	270.52			3400			
AVNIS	IROCK WP	14.97	TF	FB	N41 31 08.73	W086 54 18.71	269.41	270.41			3400			
AVNIS	IROCK WP	10.00	HM		N41 31 08.73	W086 54 18.71	269.41	270.41						
AVNIS	HALIE WP	11.44	TF	FB	N41 30 57.85	W087 09 31.95	269.18	270.18			3400			

Runway Transition Data - RW04R13C

DB	Waypoint	Distance	Leg	FO/FB	Latitude	Longitude	TC	MC	Altitude	Speed	MEA	Arc Center Lat (D° M' S.ss")	Arc Center Lon (D° M' S.ss")	Arc Radius (NM)
AVNIS	HALIE WP		IF		N41 30 57.85	W087 09 31.95								
AVNIS	HALIE WP	8.00	HM		N41 30 57.85	W087 09 31.95	269.18	270.18						
	OLCYK WP	20.13	TF	FB	N41 32 24.69	W087 36 16.06	274.27	275.27			2400			
	TINLY WP	11.07	TF	FB	N41 33 19.08	W087 50 57.56	274.78	275.78			2400			
	CTLER WP	2.00	TF	FO	N41 33 28.39	W087 53 36.92	274.46	275.46			2400			
	CTLER WP	5.00	FM		N41 33 28.39	W087 53 36.92	277.46	275.46						

PANGG RNAV

Runway Transition Data - RW22L

DB	Waypoint	Distance	Leg	FO/FB	Latitude	Longitude	TC	MC	Altitude	Speed	MEA	Arc Center Lat (D° M' S.ss")	Arc Center Lon (D° M' S.ss")	Arc Radius (NM)
AVNIS	HALIE WP		IF		N41 30 57.85	W087 09 31.95								
	GERMN WP	11.97	TF	FB	N41 40 28.19	W087 19 14.25	322.59	323.59			3400			
	SAILZ WP	14.72	TF	FB	N41 51 00.49	W087 32 58.19	315.78	316.78			3400			

Runway Transition Data - RW31C

DB	Waypoint	Distance	Leg	FO/FB	Latitude	Longitude	TC	MC	Altitude	Speed	MEA	Arc Center Lat (D° M' S.ss")	Arc Center Lon (D° M' S.ss")	Arc Radius (NM)
AVNIS	HALIE WP		IF		N41 30 57.85	W087 09 31.95								
	HILLS_ WP	17.76	TF	FB	N41 37 25.40	W087 31 34.18	291.44	292.44			2200			

Waypoint Data

DB	Waypoint	Arc Center	Lat-Long (DMS.S)	Latitude (Deg)	Longitude (Deg)	Latitude (D°, M.mm')	Longitude (D°, M.mm')	Latitude (D° M' S.ss")	Longitude (D° M' S.ss")
AVNIS	AWSUM WP		413119.74N-0863423.35W	N 41.5221500	W 86.5731528	N41 31.329	W86 34.389	N41 31 19.74	W086 34 23.35
AVNIS	BAGEL WP		413057.51N-0853649.28W	N 41.5159750	W 85.6136889	N41 30.958	W85 36.821	N41 30 57.51	W085 36 49.28
	CTLER WP		413328.39N-0875336.92W	N 41.5578871	W 87.8935884	N41 33.473	W87 53.615	N41 33 28.39	W087 53 36.92
AVNIS	FWA VORTAC		405844.63N-0851117.01W	N 40.9790639	W 85.1880583	N40 58.744	W85 11.283	N40 58 44.63	W085 11 17.01
	GERMN WP		414028.19N-0871914.25W	N 41.6744972	W 87.3206250	N41 40.470	W87 19.238	N41 40 28.19	W087 19 14.25
AVNIS	HALIE WP		413057.85N-0870931.95W	N 41.5160694	W 87.1588750	N41 30.964	W87 09.533	N41 30 57.85	W087 09 31.95
	HILLS_ WP		413725.40N-0873134.18W	N 41.6237222	W 87.5261611	N41 37.423	W87 31.570	N41 37 25.40	W087 31 34.18
AVNIS	IROCK WP		413108.73N-0865418.71W	N 41.5190917	W 86.9051972	N41 31.146	W86 54.312	N41 31 08.73	W086 54 18.71
AVNIS	LFD VOR/DME		420344.96N-0844554.48W	N 42.0624889	W 84.7651333	N42 03.749	W84 45.908	N42 03 44.96	W084 45 54.48
AVNIS	MEGGZ WP		413124.28N-0862344.65W	N 41.5234111	W 86.3957361	N41 31.405	W86 23.744	N41 31 24.28	W086 23 44.65
	OLCYK WP		413224.69N-0873616.06W	N 41.5401917	W 87.6044611	N41 32.411	W87 36.268	N41 32 24.69	W087 36 16.06
	PANGG WP		413130.03N-0860420.39W	N 41.5250072	W 86.0723313	N41 31.500	W86 04.340	N41 31 30.03	W086 04 20.39
	SAILZ WP		415100.49N-0873258.19W	N 41.8501361	W 87.5494972	N41 51.008	W87 32.970	N41 51 00.49	W087 32 58.19
	TINLY WP		413319.08N-0875057.56W	N 41.5553000	W 87.8493222	N41 33.318	W87 50.959	N41 33 19.08	W087 50 57.56

RS Results PANGG RNAV 05

Last Evaluation: 08-Dec-2012 08:42:10
Reference Software Version: 1.2.0

Route Evaluation for LFD:PANGG:RW04R13C

PANGG RNAV

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	LFD						0.0	0.0
TF	BAGEL	FLY_BY				42.65	50.25	20.0
TF	PANGG	FLY_BY				1.62	20.68	20.0
TF	MEGGZ	FLY_BY				0.0	14.58	1.0
TF	AWSUM	FLY_BY				0.01	8.0	1.0
TF	IROCK	FLY_BY				0.01	14.97	1.0
TF	HALIE	FLY_BY				5.26	11.44	1.0
TF	OLCYK	FLY_BY				0.8	20.13	1.0
TF	TINLY	FLY_BY				0.15	11.07	1.0
TF	CTLER	FLY_OVER					2.0	1.0
FM							0.0	0.0

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	LFD				0.0	0.0							0.0	0.0				
TF	BAGEL	FLY_BY	0.0		40674.71	300.0	0.0	128.0	624.0	570.0	20.0	51.23	28113.01	300.0	5.0	103.0	489.0	566.0
TF	PANGG	FLY_BY	20.0	51.23	28113.01	300.0	5.0	103.0	489.0	566.0	0.62	44.18	22943.48	300.0	5.0	92.0	445.0	515.0
TF	MEGGZ	FLY_BY	0.62	44.18	22943.48	300.0	5.0	92.0	445.0	515.0	0.0		19299.64	300.0	0.0	85.0	418.0	500.0
TF	AWSUM	FLY_BY	0.0		19299.64	300.0	0.0	85.0	418.0	500.0	0.0		17300.57	300.0	0.0	81.0	404.0	485.0
TF	IROCK	FLY_BY	0.0		17300.57	300.0	0.0	81.0	404.0	485.0	0.0		13558.98	300.0	0.0	74.0	380.0	454.0
TF	HALIE	FLY_BY	0.0		13558.98	300.0	0.0	74.0	380.0	454.0	2.71	58.92	10700.17	300.0	2.63	68.0	363.0	431.0
TF	OLCYK	FLY_BY	2.71	58.92	10700.17	300.0	2.63	68.0	363.0	431.0	0.67	94.81	5667.11	250.0	1.0	58.0	279.0	337.0
TF	TINLY	FLY_BY	0.67	94.81	5667.11	250.0	1.0	58.0	279.0	337.0	0.11	86.02	2900.0	250.0	1.0	53.0	268.0	321.0
TF	CTLER	FLY_OVER	0.11	86.02	2900.0	250.0	1.0	53.0	268.0	321.0	0.0		2400.0	250.0	0.0	30.0	266.0	296.0
FM			0.0		2400.0	250.0	0.0	30.0	266.0	296.0			0.0	0.0				

PANGG RNAV

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	BAGEL	18-002432	AVNIS	5D	N41°37' 24"	W085°20' 49"	1479.0	false	P	1000.0	2479	2479.0	N/A
3	MEGGZ	18-001299	AVNIS	5D	N41°31' 41"	W086°15' 53"	1321.0	false	P	1000.0	2321	2321.0	N/A
4	AWSUM	TerrainPt_5_LFD:PANGG:RW04R13C_MEGGZ:AWSUM		4E	N41°34' 12"	W086°21' 09"	875.98	false	P	1000.0	2076	2075.98	08-Dec-2012 08:54:28
5	IROCK	18-000038	AVNIS	4D	N41°34' 35"	W086°55' 57"	1145.0	false	P	1000.0	2145	2145.0	N/A
6	HALIE	18-000847	AVNIS	2C	N41°31' 17"	W087°01' 26"	1320.0	false	P	1000.0	2320	2320.0	N/A
7	OLCYK	18-000879	AVNIS	3C	N41°31' 49"	W087°12' 52"	1131.0	false	P	1000.0	2131	2131.0	N/A
8	TINLY	17-000002	AVNIS	2D	N41°33' 20"	W087°50' 55"	1330.0	false	P	1000.0	2330	2330.0	N/A
9	CTLER	17-000002	AVNIS	2D	N41°33' 20"	W087°50' 55"	1330.0	false	P	1000.0	2330	2330.0	N/A

Route Criteria Failures

RSO150: The leg from BAGEL to PANGG is 20.67813696923732 NM where the Minimum Leg Length for OEA Construction is 22.3461680308865 NM.

Route Evaluation for LFD:PANGG:RW31C

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	LFD						0.0	0.0
TF	BAGEL	FLY_BY				42.65	50.25	18.06
TF	PANGG	FLY_BY				1.62	20.68	18.06
TF	MEGGZ	FLY_BY				0.0	14.58	1.0
TF	AWSUM	FLY_BY				0.01	8.0	1.0
TF	IROCK	FLY_BY				0.01	14.97	1.0
TF	HALIE	FLY_BY				23.03	11.44	1.72
TF	HILLS	FLY_BY				21.87	18.21	2.99

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	LFD				0.0	0.0							0.0	0.0				
TF	BAGEL	FLY_BY	0.0		36726.28	300.0	0.0	120.0	576.0	570.0	18.06	46.26	24164.58	300.0	5.0	95.0	455.0	527.0
TF	PANGG	FLY_BY	18.06	46.26	24164.58	300.0	5.0	95.0	455.0	527.0	2.95	208.71	18995.05	300.0	1.0	85.0	416.0	500.0
TF	MEGGZ	FLY_BY	2.95	208.71	18995.05	300.0	1.0	85.0	416.0	500.0	0.0		15351.21	300.0	0.0	77.0	391.0	468.0
TF	AWSUM	FLY_BY	0.0		15351.21	300.0	0.0	77.0	391.0	468.0	0.0		13352.14	300.0	0.0	73.0	379.0	452.0
TF	IROCK	FLY_BY	0.0		13352.14	300.0	0.0	73.0	379.0	452.0	0.0		9610.55	250.0	0.0	66.0	297.0	363.0
TF	HALIE	FLY_BY	0.0		9610.55	250.0	0.0	66.0	297.0	363.0	1.72	8.46	6751.74	250.0	11.51	60.0	284.0	344.0
TF	HILLS	FLY_BY	1.72	8.46	6751.74	250.0	11.51	60.0	284.0	344.0	1.27	6.56	2200.0	250.0	10.94	30.0	265.0	295.0

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	BAGEL	18-002432	AVNIS	5D	N41°37' 24"	W085°20' 49"	1479.0	false	P	1000.0	2479	2479.0	N/A
3	MEGGZ	18-001299	AVNIS	5D	N41°31' 41"	W086°15' 53"	1321.0	false	P	1000.0	2321	2321.0	N/A
4	AWSUM	TerrainPt_5_LFD:PANGG:RW04R13C_MEGGZ:AWSUM		4E	N41°34' 12"	W086°21' 09"	875.98	false	P	1000.0	2076	2075.98	08-Dec-2012 08:54:28
5	IROCK	18-000038	AVNIS	4D	N41°34' 35"	W086°55' 57"	1145.0	false	P	1000.0	2145	2145.0	N/A
6	HALIE	18-000847	AVNIS	2C	N41°31' 17"	W087°01' 26"	1320.0	false	P	1000.0	2320	2320.0	N/A
7	HILLS	18-000879	AVNIS	3C	N41°31' 49"	W087°12' 52"	1131.0	false	P	1000.0	2131	2131.0	N/A

Route Criteria Failures

No failures.

Route Evaluation for LFD:PANGG:RW22L

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	LFD						0.0	0.0
TF	BAGEL	FLY_BY				42.65	50.25	20.0
TF	PANGG	FLY_BY				1.62	20.68	20.0
TF	MEGGZ	FLY_BY				0.0	14.58	1.0
TF	AWSUM	FLY_BY				0.01	8.0	1.0
TF	IROCK	FLY_BY				0.01	14.97	1.0
TF	HALIE	FLY_BY				53.58	11.44	2.86
TF	GERMN	FLY_BY				6.69	11.97	2.86
TF	SAILZ	FLY_BY				49.16	14.71	1.53

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	LFD				0.0	0.0							0.0	0.0				
TF	BAGEL	FLY_BY	0.0		40045.56	300.0	0.0	126.0	616.0	570.0	20.0	51.23	27483.87	300.0	5.0	101.0	483.0	560.0
TF	PANGG	FLY_BY	20.0	51.23	27483.87	300.0	5.0	101.0	483.0	560.0	0.61	43.15	22314.33	300.0	5.0	91.0	441.0	509.0
TF	MEGGZ	FLY_BY	0.61	43.15	22314.33	300.0	5.0	91.0	441.0	509.0	0.0		18670.49	300.0	0.0	84.0	414.0	498.0
TF	AWSUM	FLY_BY	0.0		18670.49	300.0	0.0	84.0	414.0	498.0	0.0		16671.43	300.0	0.0	80.0	400.0	480.0
TF	IROCK	FLY_BY	0.0		16671.43	300.0	0.0	80.0	400.0	480.0	0.0		12929.84	300.0	0.0	73.0	376.0	449.0
TF	HALIE	FLY_BY	0.0		12929.84	300.0	0.0	73.0	376.0	449.0	2.86	5.67	10071.03	300.0	25.0	67.0	359.0	426.0
TF	GERMN	FLY_BY	2.86	5.67	10071.03	300.0	25.0	67.0	359.0	426.0	1.75	30.04	7078.42	250.0	3.34	61.0	286.0	347.0
TF	SAILZ	FLY_BY	1.75	30.04	7078.42	250.0	3.34	61.0	286.0	347.0	1.53	3.34	3400.0	250.0	24.58	54.0	270.0	324.0

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	BAGEL	18-002432	AVNIS	5D	N41°37' 24"	W085°20' 49"	1479.0	false	P	1000.0	2479	2479.0	N/A
3	MEGGZ	18-001299	AVNIS	5D	N41°31' 41"	W086°15' 53"	1321.0	false	P	1000.0	2321	2321.0	N/A
4	AWSUM	TerrainPt_5_LFD:PANGG:RW04R13C_MEGGZ:AWSUM		4E	N41°34' 12"	W086°21' 09"	875.98	false	P	1000.0	2076	2075.98	08-Dec-2012 08:54:28
5	IROCK	18-000038	AVNIS	4D	N41°34' 35"	W086°55' 57"	1145.0	false	P	1000.0	2145	2145.0	N/A
6	HALIE	18-000847	AVNIS	2C	N41°31' 17"	W087°01' 26"	1320.0	false	P	1000.0	2320	2320.0	N/A
7	GERMN	18-000879	AVNIS	3C	N41°31' 49"	W087°12' 52"	1131.0	false	P	1000.0	2131	2131.0	N/A
8	SAILZ	TerrainPt_1_LFD:PANGG:RW22L_GERMN:SAILZ		4E	N41°48' 51"	W087°35' 30"	600.39	false	P	1000.0	1800	1800.39	08-Dec-2012 08:55:34

Route Criteria Failures

RSO150: The leg from BAGEL to PANGG is 20.67813696923732 NM where the Minimum Leg Length for OEA Construction is 22.3461680308865 NM.

Route Evaluation for FWA:PANGG:RW04R13C

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	FWA						0.0	0.0
TF	BAGEL	FLY_BY				57.31	37.52	20.0
TF	PANGG	FLY_BY				1.62	20.68	20.0
TF	MEGGZ	FLY_BY				0.0	14.58	1.0
TF	AWSUM	FLY_BY				0.01	8.0	1.0
TF	IROCK	FLY_BY				0.01	14.97	1.0
TF	HALIE	FLY_BY				5.26	11.44	1.0
TF	OLCYK	FLY_BY				0.8	20.13	1.0
TF	TINLY	FLY_BY				0.15	11.07	1.0
TF	CTLER	FLY_OVER					2.0	1.0
FM							0.0	0.0

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	FWA				0.0	0.0							0.0	0.0				
TF	BAGEL	FLY_BY	0.0		37492.9	300.0	0.0	121.0	585.0	570.0	20.0	36.6	28113.01	300.0	7.0	103.0	489.0	566.0
TF	PANGG	FLY_BY	20.0	36.6	28113.01	300.0	7.0	103.0	489.0	566.0	0.62	44.18	22943.48	300.0	5.0	92.0	445.0	515.0
TF	MEGGZ	FLY_BY	0.62	44.18	22943.48	300.0	5.0	92.0	445.0	515.0	0.0		19299.64	300.0	0.0	85.0	418.0	500.0
TF	AWSUM	FLY_BY	0.0		19299.64	300.0	0.0	85.0	418.0	500.0	0.0		17300.57	300.0	0.0	81.0	404.0	485.0
TF	IROCK	FLY_BY	0.0		17300.57	300.0	0.0	81.0	404.0	485.0	0.0		13558.98	300.0	0.0	74.0	380.0	454.0
TF	HALIE	FLY_BY	0.0		13558.98	300.0	0.0	74.0	380.0	454.0	2.71	58.92	10700.17	300.0	2.63	68.0	363.0	431.0
TF	OLCYK	FLY_BY	2.71	58.92	10700.17	300.0	2.63	68.0	363.0	431.0	0.67	94.81	5667.11	250.0	1.0	58.0	279.0	337.0
TF	TINLY	FLY_BY	0.67	94.81	5667.11	250.0	1.0	58.0	279.0	337.0	0.11	86.02	2900.0	250.0	1.0	53.0	268.0	321.0
TF	CTLER	FLY_OVER	0.11	86.02	2900.0	250.0	1.0	53.0	268.0	321.0	0.0		2400.0	250.0	0.0	30.0	266.0	296.0
FM			0.0		2400.0	250.0	0.0	30.0	266.0	296.0			0.0	0.0				

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	BAGEL	18-000045	AVNIS	4D	N41°05' 39"	W085°10' 49"	1649.0	false	P	1000.0	2649	2649.0	N/A
3	MEGGZ	18-001299	AVNIS	5D	N41°31' 41"	W086°15' 53"	1321.0	false	P	1000.0	2321	2321.0	N/A
4	AWSUM	TerrainPt_5_LFD:PANGG:RW04R13C_MEGGZ:AWSUM		4E	N41°34' 12"	W086°21' 09"	875.98	false	P	1000.0	2076	2075.98	08-Dec-2012 08:54:28
5	IROCK	18-000038	AVNIS	4D	N41°34' 35"	W086°55' 57"	1145.0	false	P	1000.0	2145	2145.0	N/A
6	HALIE	18-000847	AVNIS	2C	N41°31' 17"	W087°01' 26"	1320.0	false	P	1000.0	2320	2320.0	N/A
7	OLCYK	18-000879	AVNIS	3C	N41°31' 49"	W087°12' 52"	1131.0	false	P	1000.0	2131	2131.0	N/A
8	TINLY	17-000002	AVNIS	2D	N41°33' 20"	W087°50' 55"	1330.0	false	P	1000.0	2330	2330.0	N/A
9	CTLER	17-000002	AVNIS	2D	N41°33' 20"	W087°50' 55"	1330.0	false	P	1000.0	2330	2330.0	N/A

Route Criteria Failures

RSO150: The leg from BAGEL to PANGG is 20.67813696923732 NM where the Minimum Leg Length for OEA Construction is 21.60792921510082 NM.

Route Evaluation for FWA:PANGG:RW31C

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	FWA						0.0	0.0
TF	BAGEL	FLY_BY				57.31	37.52	20.0
TF	PANGG	FLY_BY				1.62	20.68	20.0
TF	MEGGZ	FLY_BY				0.0	14.58	1.0
TF	AWSUM	FLY_BY				0.01	8.0	1.0
TF	IROCK	FLY_BY				0.01	14.97	1.0
TF	HALIE	FLY_BY				23.03	11.44	1.72
TF	HILLS	FLY_BY				21.87	18.21	2.99

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	FWA				0.0	0.0							0.0	0.0				
TF	BAGEL	FLY_BY	0.0		33544.47	300.0	0.0	113.0	542.0	570.0	20.0	36.6	24164.58	300.0	6.0	95.0	455.0	527.0
TF	PANGG	FLY_BY	20.0	36.6	24164.58	300.0	6.0	95.0	455.0	527.0	2.95	208.71	18995.05	300.0	1.0	85.0	416.0	500.0
TF	MEGGZ	FLY_BY	2.95	208.71	18995.05	300.0	1.0	85.0	416.0	500.0	0.0		15351.21	300.0	0.0	77.0	391.0	468.0
TF	AWSUM	FLY_BY	0.0		15351.21	300.0	0.0	77.0	391.0	468.0	0.0		13352.14	300.0	0.0	73.0	379.0	452.0
TF	IROCK	FLY_BY	0.0		13352.14	300.0	0.0	73.0	379.0	452.0	0.0		9610.55	250.0	0.0	66.0	297.0	363.0
TF	HALIE	FLY_BY	0.0		9610.55	250.0	0.0	66.0	297.0	363.0	1.72	8.46	6751.74	250.0	11.51	60.0	284.0	344.0
TF	HILLS	FLY_BY	1.72	8.46	6751.74	250.0	11.51	60.0	284.0	344.0	1.27	6.56	2200.0	250.0	10.94	30.0	265.0	295.0

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	BAGEL	18-000045	AVNIS	4D	N41°05' 39"	W085°10' 49"	1649.0	false	P	1000.0	2649	2649.0	N/A
3	MEGGZ	18-001299	AVNIS	5D	N41°31' 41"	W086°15' 53"	1321.0	false	P	1000.0	2321	2321.0	N/A
4	AWSUM	TerrainPt_5_LFD:PANGG:RW04R13C_MEGGZ:AWSUM		4E	N41°34' 12"	W086°21' 09"	875.98	false	P	1000.0	2076	2075.98	08-Dec-2012 08:54:28
5	IROCK	18-000038	AVNIS	4D	N41°34' 35"	W086°55' 57"	1145.0	false	P	1000.0	2145	2145.0	N/A
6	HALIE	18-000847	AVNIS	2C	N41°31' 17"	W087°01' 26"	1320.0	false	P	1000.0	2320	2320.0	N/A
7	HILLS	18-000879	AVNIS	3C	N41°31' 49"	W087°12' 52"	1131.0	false	P	1000.0	2131	2131.0	N/A

Route Criteria Failures

No failures.

Route Evaluation for FWA:PANGG:RW22L

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	FWA						0.0	0.0
TF	BAGEL	FLY_BY				57.31	37.52	20.0
TF	PANGG	FLY_BY				1.62	20.68	20.0
TF	MEGGZ	FLY_BY				0.0	14.58	1.0
TF	AWSUM	FLY_BY				0.01	8.0	1.0
TF	IROCK	FLY_BY				0.01	14.97	1.0
TF	HALIE	FLY_BY				53.58	11.44	2.86
TF	GERMN	FLY_BY				6.69	11.97	2.86
TF	SAILZ	FLY_BY				49.16	14.71	1.53

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	FWA				0.0	0.0							0.0	0.0				
TF	BAGEL	FLY_BY	0.0		36863.76	300.0	0.0	120.0	578.0	570.0	20.0	36.6	27483.87	300.0	7.0	101.0	483.0	560.0
TF	PANGG	FLY_BY	20.0	36.6	27483.87	300.0	7.0	101.0	483.0	560.0	0.61	43.15	22314.33	300.0	5.0	91.0	441.0	509.0
TF	MEGGZ	FLY_BY	0.61	43.15	22314.33	300.0	5.0	91.0	441.0	509.0	0.0		18670.49	300.0	0.0	84.0	414.0	498.0
TF	AWSUM	FLY_BY	0.0		18670.49	300.0	0.0	84.0	414.0	498.0	0.0		16671.43	300.0	0.0	80.0	400.0	480.0
TF	IROCK	FLY_BY	0.0		16671.43	300.0	0.0	80.0	400.0	480.0	0.0		12929.84	300.0	0.0	73.0	376.0	449.0
TF	HALIE	FLY_BY	0.0		12929.84	300.0	0.0	73.0	376.0	449.0	2.86	5.67	10071.03	300.0	25.0	67.0	359.0	426.0
TF	GERMN	FLY_BY	2.86	5.67	10071.03	300.0	25.0	67.0	359.0	426.0	1.75	30.04	7078.42	250.0	3.34	61.0	286.0	347.0
TF	SAILZ	FLY_BY	1.75	30.04	7078.42	250.0	3.34	61.0	286.0	347.0	1.53	3.34	3400.0	250.0	24.58	54.0	270.0	324.0

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	BAGEL	18-000045	AVNIS	4D	N41°05' 39"	W085°10' 49"	1649.0	false	P	1000.0	2649	2649.0	N/A
3	MEGGZ	18-001299	AVNIS	5D	N41°31' 41"	W086°15' 53"	1321.0	false	P	1000.0	2321	2321.0	N/A
4	AWSUM	TerrainPt_5_LFD:PANGG:RW04R13C_MEGGZ:AWSUM		4E	N41°34' 12"	W086°21' 09"	875.98	false	P	1000.0	2076	2075.98	08-Dec-2012 08:54:28
5	IROCK	18-000038	AVNIS	4D	N41°34' 35"	W086°55' 57"	1145.0	false	P	1000.0	2145	2145.0	N/A
6	HALIE	18-000847	AVNIS	2C	N41°31' 17"	W087°01' 26"	1320.0	false	P	1000.0	2320	2320.0	N/A
7	GERMN	18-000879	AVNIS	3C	N41°31' 49"	W087°12' 52"	1131.0	false	P	1000.0	2131	2131.0	N/A
8	SAILZ	TerrainPt_1_LFD:PANGG:RW22L_GERMN:SAILZ		4E	N41°48' 51"	W087°35' 30"	600.39	false	P	1000.0	1800	1800.39	08-Dec-2012 08:55:34

Route Criteria Failures

RSO150: The leg from BAGEL to PANGG is 20.67813696923732 NM where the Minimum Leg Length for OEA Construction is 21.635769379409968 NM.

Route Evaluation for BAGEL:PANGG:RW04R13C

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	BAGEL						0.0	0.0
TF	PANGG	FLY_BY				1.62	20.68	1.0
TF	MEGGZ	FLY_BY				0.0	14.58	1.0
TF	AWSUM	FLY_BY				0.01	8.0	1.0
TF	IROCK	FLY_BY				0.01	14.97	1.0
TF	HALIE	FLY_BY				5.26	11.44	1.0
TF	OLCYK	FLY_BY				0.8	20.13	1.0
TF	TINLY	FLY_BY				0.15	11.07	1.0
TF	CTLER	FLY_OVER					2.0	1.0
FM							0.0	0.0

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	BAGEL				0.0	0.0							0.0	0.0				
TF	PANGG	FLY_BY	0.0		28113.01	300.0	0.0	103.0	489.0	566.0	0.62	44.18	22943.48	300.0	5.0	92.0	445.0	515.0
TF	MEGGZ	FLY_BY	0.62	44.18	22943.48	300.0	5.0	92.0	445.0	515.0	0.0		19299.64	300.0	0.0	85.0	418.0	500.0
TF	AWSUM	FLY_BY	0.0		19299.64	300.0	0.0	85.0	418.0	500.0	0.0		17300.57	300.0	0.0	81.0	404.0	485.0
TF	IROCK	FLY_BY	0.0		17300.57	300.0	0.0	81.0	404.0	485.0	0.0		13558.98	300.0	0.0	74.0	380.0	454.0
TF	HALIE	FLY_BY	0.0		13558.98	300.0	0.0	74.0	380.0	454.0	2.71	58.92	10700.17	300.0	2.63	68.0	363.0	431.0
TF	OLCYK	FLY_BY	2.71	58.92	10700.17	300.0	2.63	68.0	363.0	431.0	0.67	94.81	5667.11	250.0	1.0	58.0	279.0	337.0
TF	TINLY	FLY_BY	0.67	94.81	5667.11	250.0	1.0	58.0	279.0	337.0	0.11	86.02	2900.0	250.0	1.0	53.0	268.0	321.0
TF	CTLER	FLY_OVER	0.11	86.02	2900.0	250.0	1.0	53.0	268.0	321.0	0.0		2400.0	250.0	0.0	30.0	266.0	296.0
FM			0.0		2400.0	250.0	0.0	30.0	266.0	296.0			0.0	0.0				

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	PANGG	18-001205	AVNIS	5D	N41°29' 03"	W085°35' 43"	1304.0	false	P	1000.0	2304	2304.0	N/A
2	MEGGZ	18-001299	AVNIS	5D	N41°31' 41"	W086°15' 53"	1321.0	false	P	1000.0	2321	2321.0	N/A
3	AWSUM	TerrainPt_5_LFD:PANGG:RW04R13C_MEGGZ:AWSUM		4E	N41°34' 12"	W086°21' 09"	875.98	false	P	1000.0	2076	2075.98	08-Dec-2012 08:54:28
4	IROCK	18-000038	AVNIS	4D	N41°34' 35"	W086°55' 57"	1145.0	false	P	1000.0	2145	2145.0	N/A
5	HALIE	18-000847	AVNIS	2C	N41°31' 17"	W087°01' 26"	1320.0	false	P	1000.0	2320	2320.0	N/A
6	OLCYK	18-000879	AVNIS	3C	N41°31' 49"	W087°12' 52"	1131.0	false	P	1000.0	2131	2131.0	N/A
7	TINLY	17-000002	AVNIS	2D	N41°33' 20"	W087°50' 55"	1330.0	false	P	1000.0	2330	2330.0	N/A
8	CTLER	17-000002	AVNIS	2D	N41°33' 20"	W087°50' 55"	1330.0	false	P	1000.0	2330	2330.0	N/A

Route Criteria Failures

No failures.

Route Evaluation for BAGEL:PANGG:RW31C

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	BAGEL						0.0	0.0
TF	PANGG	FLY_BY				1.62	20.68	1.0
TF	MEGGZ	FLY_BY				0.0	14.58	1.0
TF	AWSUM	FLY_BY				0.01	8.0	1.0
TF	IROCK	FLY_BY				0.01	14.97	1.0
TF	HALIE	FLY_BY				23.03	11.44	1.72
TF	HILLS	FLY_BY				21.87	18.21	2.99

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	BAGEL				0.0	0.0							0.0	0.0				
TF	PANGG	FLY_BY	0.0		24164.58	300.0	0.0	95.0	455.0	527.0	2.95	208.71	18995.05	300.0	1.0	85.0	416.0	500.0
TF	MEGGZ	FLY_BY	2.95	208.71	18995.05	300.0	1.0	85.0	416.0	500.0	0.0		15351.21	300.0	0.0	77.0	391.0	468.0
TF	AWSUM	FLY_BY	0.0		15351.21	300.0	0.0	77.0	391.0	468.0	0.0		13352.14	300.0	0.0	73.0	379.0	452.0
TF	IROCK	FLY_BY	0.0		13352.14	300.0	0.0	73.0	379.0	452.0	0.0		9610.55	250.0	0.0	66.0	297.0	363.0
TF	HALIE	FLY_BY	0.0		9610.55	250.0	0.0	66.0	297.0	363.0	1.72	8.46	6751.74	250.0	11.51	60.0	284.0	344.0
TF	HILLS	FLY_BY	1.72	8.46	6751.74	250.0	11.51	60.0	284.0	344.0	1.27	6.56	2200.0	250.0	10.94	30.0	265.0	295.0

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	PANGG	18-001205	AVNIS	5D	N41°29' 03"	W085°35' 43"	1304.0	false	P	1000.0	2304	2304.0	N/A
2	MEGGZ	18-001299	AVNIS	5D	N41°31' 41"	W086°15' 53"	1321.0	false	P	1000.0	2321	2321.0	N/A
3	AWSUM	TerrainPt_5_LFD:PANGG:RW04R13C_MEGGZ:AWSUM		4E	N41°34' 12"	W086°21' 09"	875.98	false	P	1000.0	2076	2075.98	08-Dec-2012 08:54:28
4	IROCK	18-000038	AVNIS	4D	N41°34' 35"	W086°55' 57"	1145.0	false	P	1000.0	2145	2145.0	N/A
5	HALIE	18-000847	AVNIS	2C	N41°31' 17"	W087°01' 26"	1320.0	false	P	1000.0	2320	2320.0	N/A
6	HILLS	18-000879	AVNIS	3C	N41°31' 49"	W087°12' 52"	1131.0	false	P	1000.0	2131	2131.0	N/A

Route Criteria Failures

No failures.

Route Evaluation for BAGEL:PANGG:RW22L

Flight Evaluation Results 1

Leg Tp	Wpt	Turn Tp	Alt Restr	Alt Restr 2	Spd Restr	Turn Ang	Leg Length	Min Seg Length
IF	BAGEL						0.0	0.0
TF	PANGG	FLY_BY				1.62	20.68	1.0
TF	MEGGZ	FLY_BY				0.0	14.58	1.0
TF	AWSUM	FLY_BY				0.01	8.0	1.0
TF	IROCK	FLY_BY				0.01	14.97	1.0
TF	HALIE	FLY_BY				53.58	11.44	2.86
TF	GERMN	FLY_BY				6.69	11.97	2.86
TF	SAILZ	FLY_BY				49.16	14.71	1.53

Flight Evaluation Results 2

Leg Tp	Wpt	Turn Tp	DTA1	DTA1 Turn Rad	DTA1 Turn Alt	DTA1 Turn Spd	DTA1 Bank Ang	DTA1 Tailwind	DTA1 True Airspd	DTA1 vGround	DTA2	DTA2 Turn Rad	DTA2 Turn Alt	DTA2 Turn Spd	DTA2 Bank Ang	DTA2 Tailwind	DTA2 True Airspd	DTA2 vGround
IF	BAGEL				0.0	0.0							0.0	0.0				
TF	PANGG	FLY_BY	0.0		27483.87	300.0	0.0	101.0	483.0	560.0	0.61	43.15	22314.33	300.0	5.0	91.0	441.0	509.0
TF	MEGGZ	FLY_BY	0.61	43.15	22314.33	300.0	5.0	91.0	441.0	509.0	0.0		18670.49	300.0	0.0	84.0	414.0	498.0
TF	AWSUM	FLY_BY	0.0		18670.49	300.0	0.0	84.0	414.0	498.0	0.0		16671.43	300.0	0.0	80.0	400.0	480.0
TF	IROCK	FLY_BY	0.0		16671.43	300.0	0.0	80.0	400.0	480.0	0.0		12929.84	300.0	0.0	73.0	376.0	449.0
TF	HALIE	FLY_BY	0.0		12929.84	300.0	0.0	73.0	376.0	449.0	2.86	5.67	10071.03	300.0	25.0	67.0	359.0	426.0
TF	GERMN	FLY_BY	2.86	5.67	10071.03	300.0	25.0	67.0	359.0	426.0	1.75	30.04	7078.42	250.0	3.34	61.0	286.0	347.0
TF	SAILZ	FLY_BY	1.75	30.04	7078.42	250.0	3.34	61.0	286.0	347.0	1.53	3.34	3400.0	250.0	24.58	54.0	270.0	324.0

Obstacle Evaluation Results

Leg #	To	Name	Source	AC	Lat	Long	MSL	Mnts Area	Pri/Sec Area	ROC	MOCA	Min OEA Alt	Date
1	PANGG	18-001205	AVNIS	5D	N41°29' 03"	W085°35' 43"	1304.0	false	P	1000.0	2304	2304.0	N/A
2	MEGGZ	18-001299	AVNIS	5D	N41°31' 41"	W086°15' 53"	1321.0	false	P	1000.0	2321	2321.0	N/A
3	AWSUM	TerrainPt_5_LFD:PANGG:RW04R13C_MEGGZ:AWSUM		4E	N41°34' 12"	W086°21' 09"	875.98	false	P	1000.0	2076	2075.98	08-Dec-2012 08:54:28
4	IROCK	18-000038	AVNIS	4D	N41°34' 35"	W086°55' 57"	1145.0	false	P	1000.0	2145	2145.0	N/A
5	HALIE	18-000847	AVNIS	2C	N41°31' 17"	W087°01' 26"	1320.0	false	P	1000.0	2320	2320.0	N/A
6	GERMN	18-000879	AVNIS	3C	N41°31' 49"	W087°12' 52"	1131.0	false	P	1000.0	2131	2131.0	N/A
7	SAILZ	TerrainPt_1_LFD:PANGG:RW22L_GERMN:SAILZ		4E	N41°48' 51"	W087°35' 30"	600.39	false	P	1000.0	1800	1800.39	08-Dec-2012 08:55:34

Route Criteria Failures

No failures.

Terrain Information

Terrain Extractor Name	Extractor Location	Extractor Type	Resolution
faa dted	C:\Users\tsmith\TARGETS501\data\FAA Dted\FAA DTED	org.mitre.caasd.terrain.DTEDExtractor	3.0

Procedure Criteria Failures

No failures.

Evaluation Failures

OEA for leg BAGEL:PANGG was not created.
Leg from BAGEL to PANGG in route LFD:PANGG:RW04R13C cannot be evaluated for obstacles -- the OEA was not constructed correctly.
Leg from BAGEL to PANGG in route LFD:PANGG:RW22L cannot be evaluated for obstacles -- the OEA was not constructed correctly.
Leg from BAGEL to PANGG in route FWA:PANGG:RW04R13C cannot be evaluated for obstacles -- the OEA was not constructed correctly.
Leg from BAGEL to PANGG in route FWA:PANGG:RW22L cannot be evaluated for obstacles -- the OEA was not constructed correctly.

Database Effective Dates

Database	Date
UddfObstacle	06/01/2007
NFDC	11/15/2012
IFP_OFFLINE	N/A
AVNIS	12/18/2012
NACO	12/13/2012
DOF	11/15/2012

Notes:

MOVE HILLS WP TO 41 37 25.40N 87 31 34.18W

PANGG RNAV

RNAV (RNP) Rwy 04R-EAST

Point Of Contact

ATC Facility Name - CSA

POC's Name - Harold Warncke

Telephone Number - 817 321-7608

FAX Number - 817 321-7646

Email Address - harold.ctr.warncke@faa.gov

TARGETS Distribution Package

Leg Table 1

Segment	Leg Type	Start	End	Turn Type	Glide Path End Alt	Min Obs./ ATC End Alt	Max End Alt	Turn Radius Comp Alt	Descent Grad	Climb Grad	End Spd	Turn Radius Comp Spd	RNP	Turn Dir
Intermediate	IF	*OLCYK*	*OLCYK*	FB	5778			5777.88	0.0			250.0	1.0	
Intermediate	TF	*OLCYK*	*SAVRD*	FB	3608	4000.00	4000	4000.00				250.0	1.0	LEFT
Intermediate	TF	*SAVRD*	*HILND*	FB	2658	2700.00		2700.00	342.1		210.0	210.0	1.0	RIGHT
Intermediate	RF	*HILND*	*YIPEE-N*	FB	1700			2700.00				210.0	1.0	RIGHT
Final	TF	*YIPEE-N*	KMDW:RW04R:AER	FB	669			668.80				165.0	0.3	

Leg Table 2

Segment	Leg Type	Start	End	Turn Type	Leg Length (NMI)	Leg Length (FT)	Start Course Magnetic	End Course Magnetic	Course Change	RF/Flyby Leg Radius	RF/Flyby Turn Bank Angle	Tailwind	RF Leg Arc Center
Intermediate	IF	*OLCYK*	*OLCYK*	FB	0.00	0.00000							
Intermediate	TF	*OLCYK*	*SAVRD*	FB	8.68	52734.93954	314.59	314.50	0.11		1.00	54.92	
Intermediate	TF	*SAVRD*	*HILND*	FB	3.80	23089.23885	314.49	314.45					
Intermediate	RF	*HILND*	*YIPEE-N*	FB	3.83	23286.50176	314.44	44.45	90.00	2.4400	24.56	52.35	04R-RTCP
Final	TF	*YIPEE-N*	KMDW:RW04R:AER	FB	3.24	19673.13855	44.45	44.48					

Waypoint Data

DB	Waypoint	Latitude (Deg)	Longitude (Deg)	Latitude (Deg, Decimal Min)	Longitude (Deg, Decimal Min)	Latitude (D° M' S.ss")	Longitude (D° M' S.ss")
	04R-RTCP WP	N 41.7130194	W 87.7681750	N41 42.781	W87 46.090	N41 42 46.87	W087 46 05.43
	HILND WP	N 41.6834861	W 87.8055139	N41 41.009	W87 48.331	N41 41 00.55	W087 48 19.85
	OLCYK WP	N 41.5401917	W 87.6044611	N41 32.411	W87 36.268	N41 32 24.69	W087 36 16.06
	SAVRD WP	N 41.6398969	W 87.7441872	N41 38.394	W87 44.651	N41 38 23.63	W087 44 39.07
	YIPEE-N WP	N 41.7410081	W 87.8076145	N41 44.460	W87 48.457	N41 44 27.63	W087 48 27.41

PFAF

	LAT	LON
LTP/FTP	N41 46 48.69	W087 45 28.84
Runway True Bearing	43.47	
FAF Altitude	1700.00	
LTP/FTP Elevation	619.00	
TCH	49.80	
Glidepath Angle	3.00	
GPI	950.24	
FAF Distance From LTP/FTP	19675.35 Feet	
	3.24 NM	
	LAT	LON
PFAF	N41 44 27.63	W087 48 27.41

Vertical Error Budget

RNP Value	0.30
LTP MSL Elevation	619.00
Distance (ft) LTP to PFAF	19675.35
MSL PFAF Altitude	1700.00
Glidepath Angle	3.00
TCH	49.80
Delta ISA (dISA)	-35.76
Semispan	131.00

Max Glidepath Angle	3.50
PFAF Elevation	1700.00
LTP Elevation	619.0
ACT	-22.00

Min Glidepath Angle	2.75	
NA Below	-22.00 (C)	-7.60 (F)
NA Above	46.59 (C)	115.86 (F)

Dist (ft) LTP to OCS ORIGIN	4087.77
OCS Slope (run:rise)	22.35:1
VEB ROC @ PFAF	377.64

Error Components	(Enter Bank Angle, WPR, FTE, and ATIS values below)		@ 250 ft	@ PFAF
ISAD	(dh x dISA)/288 + dISA - 0.5 x .00198 x [dh+h])		-35.56	-154.28
BG	25.00	semispan x sin (Bank Angle)	25.00	25.00
ANPE	1.225 x rnp x tan(a)		117.03	117.03
VAE	D x (tan(a) - tan(a - .01)) D=250/tan(a)		0.83	3.61
WPR	60.00	WPR x tan(a)	3.14	3.14
FTE	75.00		75.00	75.00
ASE	-8.8 x 10^-8 x (h + D x tan(a))^2 + 6.5 x 10^-3 x (h + D x tan(a)) + 50		55.58	60.80
ATIS	20.00		20.00	20.00

Database Effective Dates

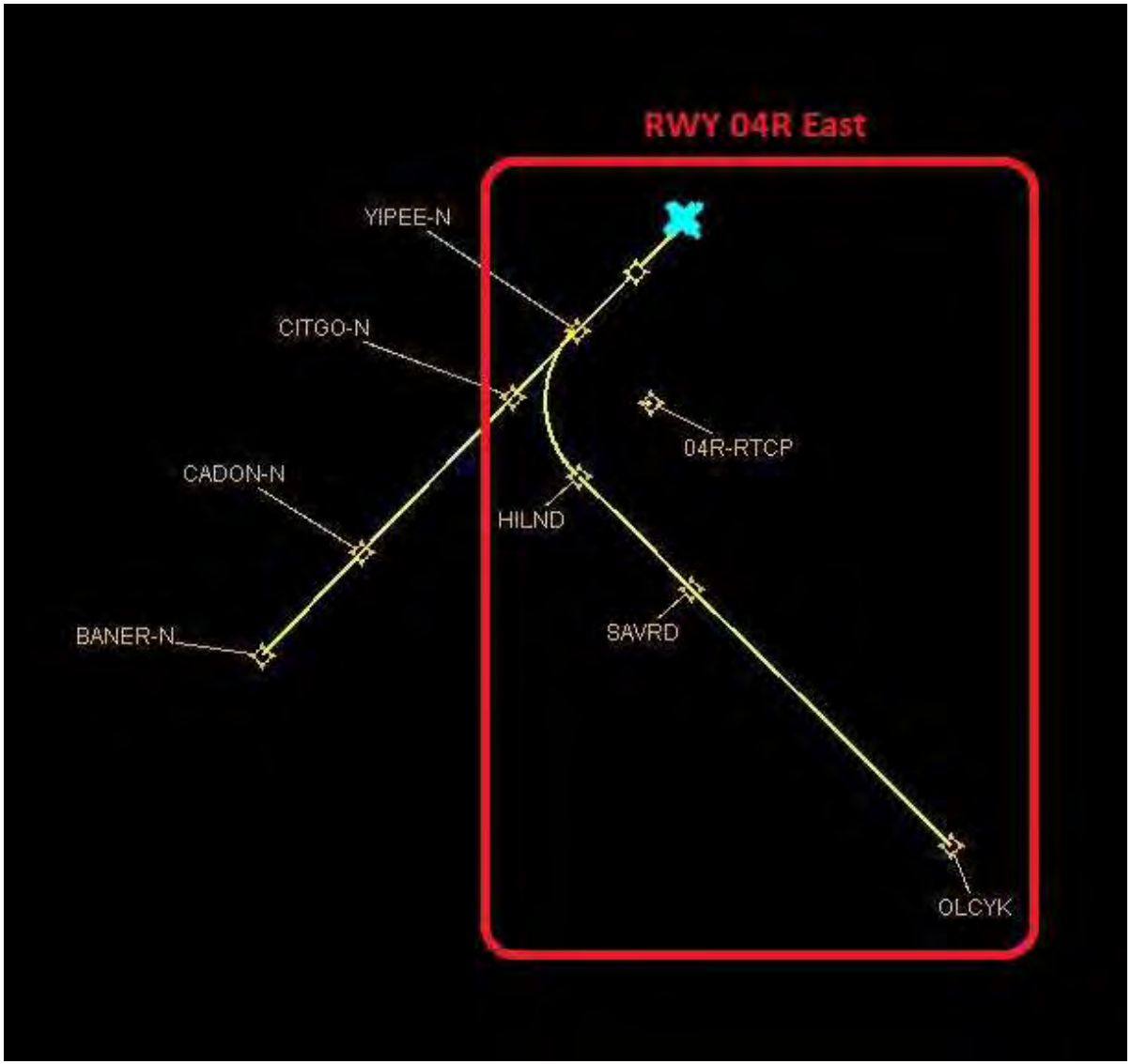
Database	Date
UddfObstacle	06/01/2007
NFDC	01/10/2013
IFP_OFFLINE	N/A
AVNIS	02/01/2013
NACO	01/10/2013
DOF	01/10/2013

Notes:

RNAV (RNP) Rwy 04R-EAST

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway

RWY 04R EAST RNAV



RNAV (RNP) Rwy 04R-WEST

Point Of Contact

ATC Facility Name - CSA

POC's Name - Harold Warncke

Telephone Number - 817 321-7608

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TARGETS Distribution Package

Leg Table 1

Segment	Leg Type	Start	End	Turn Type	Glide Path End Alt	Min Obs./ ATC End Alt	Max End Alt	Turn Radius Comp Alt	Descent Grad	Climb Grad	End Spd	Turn Radius Comp Spd	RNP	Turn Dir
Intermediate	IF	*BANER-N*	*BANER-N*	FB	4390	5000.00	5000	5000.00	0.0			250.0	1.0	
Intermediate	TF	*BANER-N*	*CADON-N*	FB	3540	4000.00		4000.00	294.1			250.0	1.0	RIGHT
Intermediate	TF	*CADON-N*	*CITGO-N*	FB	2249	2400.00		2400.00	309.8			250.0	1.0	RIGHT
Intermediate	TF	*CITGO-N*	*YIPEE-N*	FB	1700			1699.88				165.0	1.0	RIGHT
Final	TF	*YIPEE-N*	KMDW:RW04R:AER	FB	669			668.80				165.0	0.3	

Leg Table 2

Segment	Leg Type	Start	End	Turn Type	Leg Length (NMI)	Leg Length (FT)	Start Course Magnetic	End Course Magnetic	Course Change	RF/Flyby Leg Radius	RF/Flyby Turn Bank Angle	Tailwind	RF Leg Arc Center
Intermediate	IF	*BANER-N*	*BANER-N*	FB	0.00	0.00000							
Intermediate	TF	*BANER-N*	*CADON-N*	FB	3.40	20658.51596	44.34	44.37	0.03		1.00	54.92	
Intermediate	TF	*CADON-N*	*CITGO-N*	FB	5.16	31377.31702	44.37	44.42	0.06		1.00	30.00	
Intermediate	TF	*CITGO-N*	*YIPEE-N*	FB	2.20	13355.92175	44.43	44.45	0.02		1.00	30.00	
Final	TF	*YIPEE-N*	KMDW:RW04R:AER	FB	3.24	19673.13855	44.45	44.48					

Waypoint Data

DB	Waypoint	Latitude (Deg)	Longitude (Deg)	Latitude (Deg, Decimal Min)	Longitude (Deg, Decimal Min)	Latitude (D° M' S.ss")	Longitude (D° M' S.ss")
	BANER-N WP	N 41.6106056	W 87.9720528	N41 36.636	W87 58.323	N41 36 38.18	W087 58 19.39
	CADON-N WP	N 41.6518278	W 87.9201750	N41 39.110	W87 55.211	N41 39 06.58	W087 55 12.63
	CITGO-N WP	N 41.7143944	W 87.8412556	N41 42.864	W87 50.475	N41 42 51.82	W087 50 28.52
	YIPEE-N WP	N 41.7410081	W 87.8076145	N41 44.460	W87 48.457	N41 44 27.63	W087 48 27.41

PFAF

	LAT	LON
LTP/FTP	N41 46 48.69	W087 45 28.84
Runway True Bearing	43.47	
FAF Altitude	1699.88	
LTP/FTP Elevation	619.00	
TCH	49.80	
Glidepath Angle	3.00	
GPI	950.24	
FAF Distance From LTP/FTP	19673.14 Feet	
	3.24 NM	
	LAT	LON
PFAF	N41 44 27.63	W087 48 27.41

Vertical Error Budget

RNP Value	0.30
LTP MSL Elevation	619.00
Distance (ft) LTP to PFAF	19673.14
MSL PFAF Altitude	1699.88
Glidepath Angle	3.00
TCH	49.80
Delta ISA (dISA)	-35.76
Semispan	131.00

Max Glidepath Angle	3.50
PFAF Elevation	1699.88
LTP Elevation	619.0
ACT	-22.00

Min Glidepath Angle	2.75	
NA Below	-22.00 (C)	-7.60 (F)
NA Above	46.59 (C)	115.86 (F)

Dist (ft) LTP to OCS ORIGIN	4087.77
OCS Slope (run:rise)	22.35:1
VEB ROC @ PFAF	377.63

Error Components	(Enter Bank Angle, WPR, FTE, and ATIS values below)		@ 250 ft	@ PFAF
ISAD	(dh x dISA)/288 + dISA - 0.5 x .00198 x [dh+h])		-35.56	-154.27
BG	25.00	semispan x sin (Bank Angle)	25.00	25.00
ANPE	1.225 x rnp x tan(a)		117.03	117.03
VAE	D x (tan(a) - tan(a - .01)) D=250/tan(a)		0.83	3.61
WPR	60.00	WPR x tan(a)	3.14	3.14
FTE	75.00		75.00	75.00
ASE	-8.8 x 10^-8 x (h + D x tan(a))^2 + 6.5 x 10^-3 x (h + D x tan(a)) + 50		55.58	60.79
ATIS	20.00		20.00	20.00

Database Effective Dates

Database	Date
UddfObstacle	06/01/2007
NFDC	01/10/2013
IFP_OFFLINE	N/A
AVNIS	02/01/2013
NACO	01/10/2013
DOF	01/10/2013

RNAV (RNP) Rwy 04R-WEST

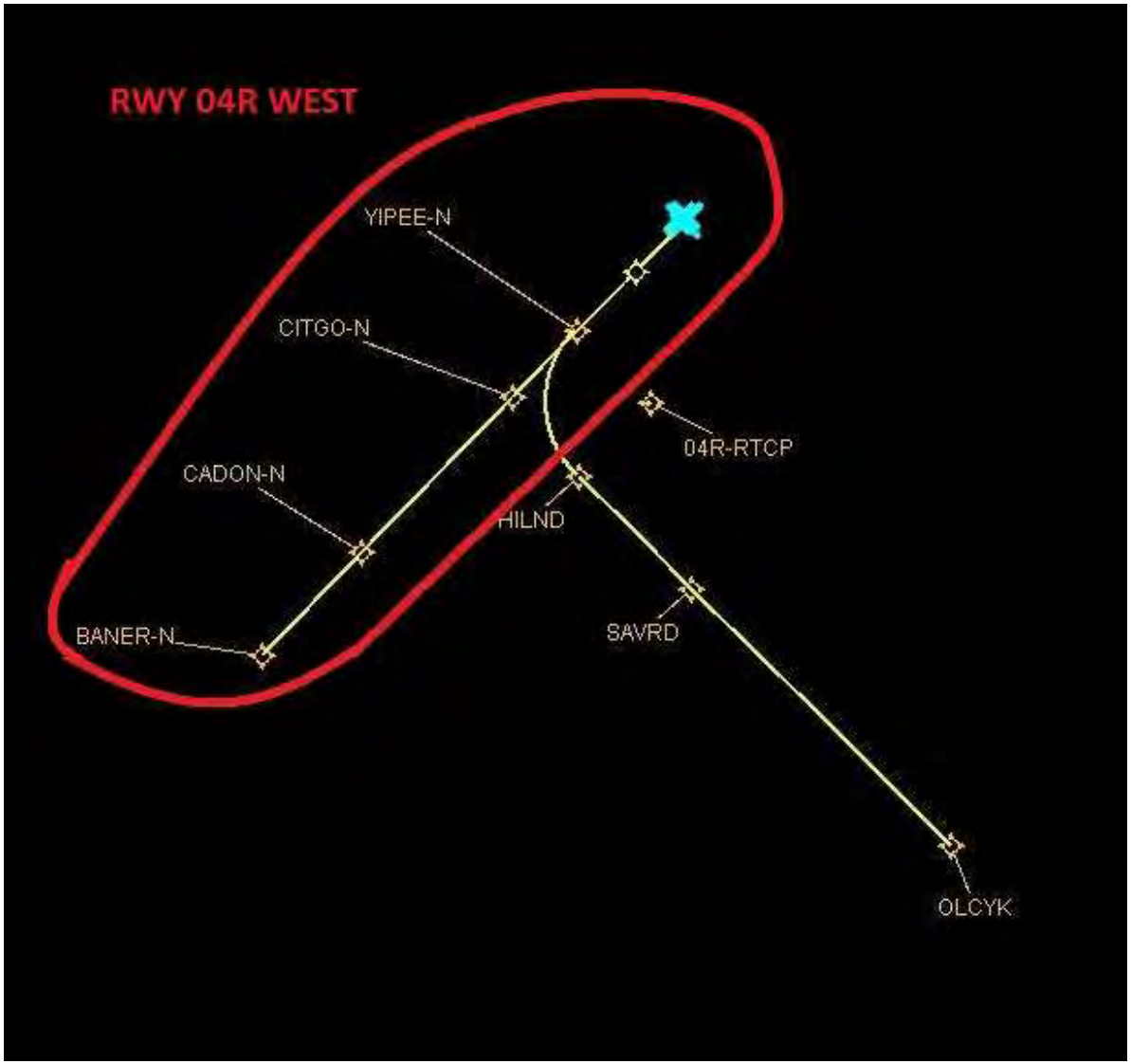
Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway

Notes:

RNAV (RNP) Rwy 04R-WEST

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway

RWY 04R WEST RNAV



RNAV (RNP) Rwy 13C-SOUTH

Point Of Contact

ATC Facility Name - CSC

POC's Name - Harold Warncke

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TARGETS Distribution Package

Leg Table 1

Segment	Leg Type	Start	End	Turn Type	Glide Path End Alt	Min Obs./ ATC End Alt	Max End Alt	Turn Radius Comp Alt	Descent Grad	Climb Grad	End Spd	Turn Radius Comp Spd	RNP	Turn Dir
Intermediate	IF	*PLOPP*	*PLOPP*	FB	4478	4000.00	4000	4000.00	0.0		210.0	210.0	1.0	
Intermediate	TF	*PLOPP*	*YUCAN*	FB	3610	3000.00	3000	3000.00	288.1			250.0	1.0	RIGHT
Intermediate	RF	*YUCAN*	*JUPIR-N*	FB	2545	2000.00	2000	3000.00	234.7			210.0	1.0	RIGHT
Intermediate	RF	*JUPIR-N*	*NIDEE-N*	FB	2000			2000.00				210.0	1.0	RIGHT
Final	RF	*NIDEE-N*	DULTE [AVNIS]	FB	1610			2000.00				165.0	0.3	RIGHT
Final	TF	DULTE [AVNIS]	KMDW:RW13C:AER	FB	654			654.20				165.0	0.3	

Leg Table 2

Segment	Leg Type	Start	End	Turn Type	Leg Length (NMI)	Leg Length (FT)	Start Course Magnetic	End Course Magnetic	Course Change	RF/Flyby Leg Radius	RF/Flyby Turn Bank Angle	Tailwind	RF Leg Arc Center
Intermediate	IF	*PLOPP*	*PLOPP*	FB	0.00	0.00000							
Intermediate	TF	*PLOPP*	*YUCAN*	FB	3.47	21093.19895	314.50	314.47					
Intermediate	RF	*YUCAN*	*JUPIR-N*	FB	4.26	25889.31553	314.47	54.53	100.06	2.4399	24.81	52.94	WP33
Intermediate	RF	*JUPIR-N*	*NIDEE-N*	FB	2.18	13236.95108	54.53	105.71	51.19	2.4400	20.76	30.00	WP33
Final	RF	*NIDEE-N*	DULTE [AVNIS]	FB	1.23	7449.04180	105.71	134.52	28.80	2.4399	14.01	30.00	WP33
Final	TF	DULTE [AVNIS]	KMDW:RW13C:AER	FB	3.00	18228.72075	134.52	134.55					

Waypoint Data

DB	Waypoint	Latitude (Deg)	Longitude (Deg)	Latitude (Deg, Decimal Min)	Longitude (Deg, Decimal Min)	Latitude (D° M' S.ss")	Longitude (D° M' S.ss")
AVNIS	DULTE	N 41.8251528	W 87.8083111	N41 49.509	W87 48.499	N41 49 30.55	W087 48 29.92
	JUPIR-N WP	N 41.8283639	W 87.8780667	N41 49.702	W87 52.684	N41 49 42.11	W087 52 41.04
	NIDEE-N WP	N 41.8349945	W 87.8319391	N41 50.100	W87 49.916	N41 50 05.98	W087 49 54.98
	PLOPP WP	N 41.7262879	W 87.8270663	N41 43.577	W87 49.624	N41 43 34.64	W087 49 37.44
	WP33 WP	N 41.7956436	W 87.8457465	N41 47.739	W87 50.745	N41 47 44.32	W087 50 44.69
	YUCAN WP	N 41.7661222	W 87.8831472	N41 45.967	W87 52.989	N41 45 58.04	W087 52 59.33

PFAF

	LAT	LON
LTP/FTP	N41 47 26.51	W087 45 35.42
Runway True Bearing	133.55	
FAF Altitude	2000.00	
LTP/FTP Elevation	608.20	
TCH	46.00	
Glidepath Angle	3.00	
GPI	877.73	
FAF Distance From LTP/FTP	25677.76 Feet	
	4.23 NM	
	LAT	LON
PFAF	N41 50 05.98	W087 49 54.98

RNAV (RNP) Rwy 13C-SOUTH

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2

Vertical Error Budget

RNP Value	0.30
LTP MSL Elevation	608.20
Distance (ft) LTP to PFAF	25677.76
MSL PFAF Altitude	2000.00
Glidepath Angle	3.00
TCH	46.00
Delta ISA (dISA)	-35.76
Semispan	131.00

Max Glidepath Angle	3.50
PFAF Elevation	2000.00
LTP Elevation	608.2
ACT	-22.00

Min Glidepath Angle	2.75	
NA Below	-21.98 (C)	-7.56 (F)
NA Above	47.20 (C)	116.95 (F)

Dist (ft) LTP to OCS ORIGIN	4159.56
OCS Slope (run:rise)	22.35:1
VEB ROC @ PFAF	418.02

Error Components	(Enter Bank Angle, WPR, FTE, and ATIS values below)		@ 250 ft	@ PFAF
ISAD	(dh x dISA)/288 + dISA - 0.5 x .00198 x [dh+h])		-35.56	-198.88
BG	40.48	semispan x sin (Bank Angle)	40.48	40.48
ANPE	1.225 x rnp x tan(a)		117.03	117.03
VAE	D x (tan(a) - tan(a - .01)) D=250/tan(a)		0.83	4.65
WPR	60.00	WPR x tan(a)	3.14	3.14
FTE	75.00		75.00	75.00
ASE	-8.8 x 10^-8 x (h + D x tan(a))^2 + 6.5 x 10^-3 x (h + D x tan(a)) + 50		55.51	62.65
ATIS	20.00		20.00	20.00

Database Effective Dates

Database	Date
UddfObstacle	06/01/2007
NFDC	01/10/2013
IFP_OFFLINE	N/A
AVNIS	02/01/2013
NACO	01/10/2013
DOF	01/10/2013

RNAV (RNP) Rwy 13C-SOUTH

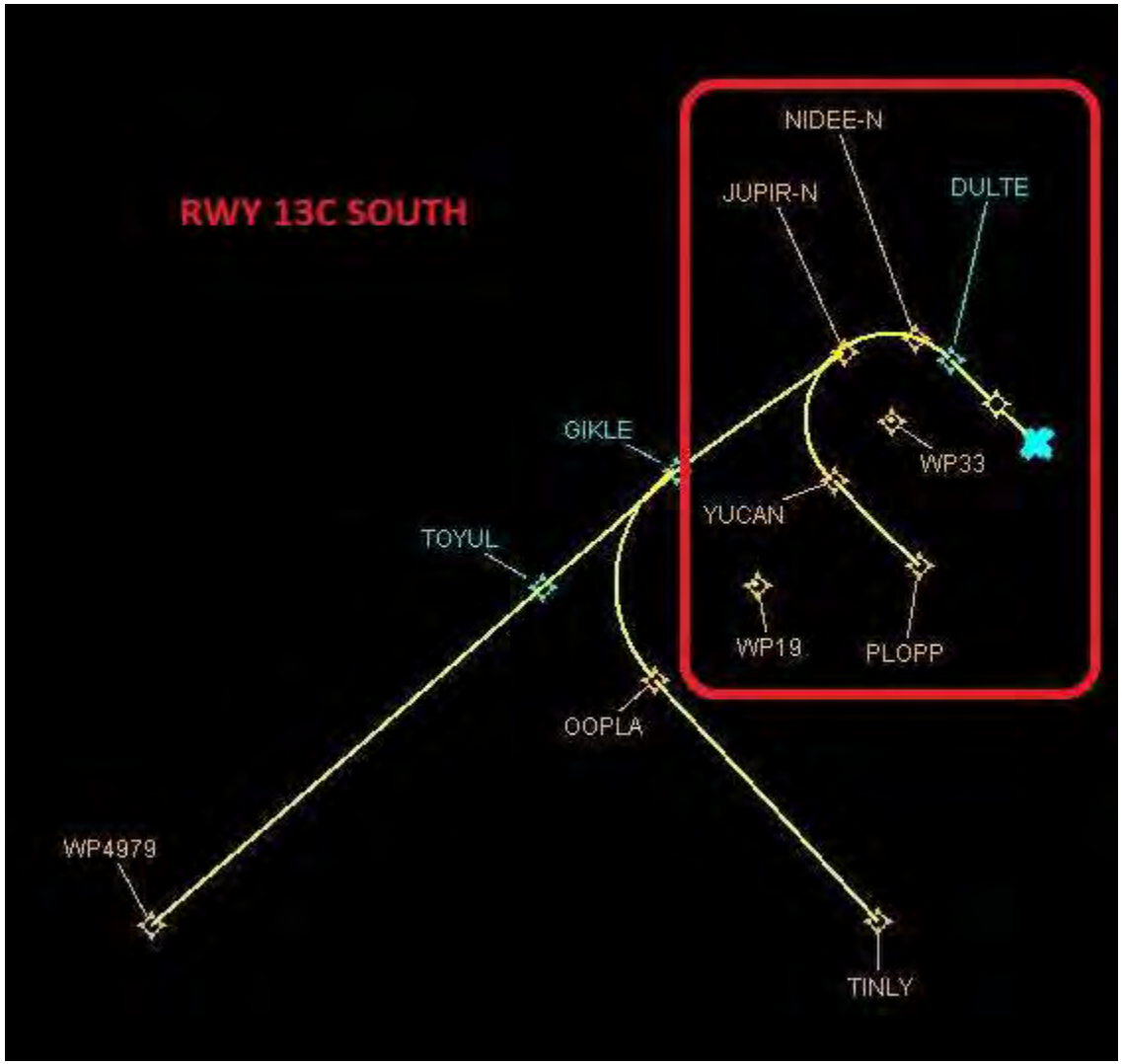
Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway

Notes:

RNAV (RNP) Rwy 13C-SOUTH

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway

RWY 13C SOUTH RNAV



RNAV (RNP) Rwy 13C-SW

Point Of Contact

ATC Facility Name - CSC

POC's Name - Harold Warncke

Telephone Number - 817 321-7608

FAX Number - 817 321-7646

Email Address - harold.ctr.warncke@faa.gov

TARGETS Distribution Package

Leg Table 1

Segment	Leg Type	Start	End	Turn Type	Glide Path End Alt	Min Obs./ ATC End Alt	Max End Alt	Turn Radius Comp Alt	Descent Grad	Climb Grad	End Spd	Turn Radius Comp Spd	RNP	Turn Dir
Intermediate	IF	*TINLY*	*TINLY*	FB	8111			8110.56	0.0			250.0	1.0	
Intermediate	TF	*TINLY*	*OOPLA*	FB	5741	4000.00	4000	4000.00				250.0	1.0	RIGHT
Intermediate	RF	*OOPLA*	GIKLE [AVNIS]	FB	4032	2500.00	2500	4000.00	219.4			250.0	1.0	RIGHT
Intermediate	TF	GIKLE [AVNIS]	*JUPIR-N*	FB	2545	2000.00	2000	2000.00	84.0		210.0	210.0	1.0	RIGHT
Intermediate	RF	*JUPIR-N*	*NIDEE-N*	FB	2000			2000.00				210.0	1.0	RIGHT
Final	RF	*NIDEE-N*	DULTE [AVNIS]	FB	1610			2000.00				165.0	0.3	RIGHT
Final	TF	DULTE [AVNIS]	KMDW:RW13C:AER	FB	654			654.20				165.0	0.3	

Leg Table 2

Segment	Leg Type	Start	End	Turn Type	Leg Length (NMI)	Leg Length (FT)	Start Course Magnetic	End Course Magnetic	Course Change	RF/Flyby Leg Radius	RF/Flyby Turn Bank Angle	Tailwind	RF Leg Arc Center
Intermediate	IF	*TINLY*	*TINLY*	FB	0.00	0.00000							
Intermediate	TF	*TINLY*	*OOPLA*	FB	9.48	57582.84250	317.03	316.94					
Intermediate	RF	*OOPLA*	GIKLE [AVNIS]	FB	6.84	41543.46386	316.94	54.46	97.52	4.0173	21.22	54.92	WP19
Intermediate	TF	GIKLE [AVNIS]	*JUPIR-N*	FB	5.95	36150.55425	54.46	54.53					
Intermediate	RF	*JUPIR-N*	*NIDEE-N*	FB	2.18	13236.95108	54.53	105.71	51.19	2.4399	20.76	30.00	WP33
Final	RF	*NIDEE-N*	DULTE [AVNIS]	FB	1.23	7449.04180	105.71	134.52	28.80	2.4399	14.01	30.00	WP33
Final	TF	DULTE [AVNIS]	KMDW:RW13C:AER	FB	3.00	18228.72075	134.52	134.55					

Waypoint Data

DB	Waypoint	Latitude (Deg)	Longitude (Deg)	Latitude (Deg, Decimal Min)	Longitude (Deg, Decimal Min)	Latitude (D° M' S.ss")	Longitude (D° M' S.ss")
AVNIS	DULTE	N 41.8251528	W 87.8083111	N41 49.509	W87 48.499	N41 49 30.55	W087 48 29.92
AVNIS	GIKLE	N 41.7693417	W 87.9846278	N41 46.161	W87 59.078	N41 46 09.63	W087 59 04.66
	JUPIR-N WP	N 41.8283639	W 87.8780667	N41 49.702	W87 52.684	N41 49 42.11	W087 52 41.04
	NIDEE-N WP	N 41.8349945	W 87.8319391	N41 50.100	W87 49.916	N41 50 05.98	W087 49 54.98
	OOPLA WP	N 41.6689444	W 87.9956361	N41 40.137	W87 59.738	N41 40 08.20	W087 59 44.29
	TINLY WP	N 41.5553000	W 87.8493222	N41 33.318	W87 50.959	N41 33 19.08	W087 50 57.56
	WP19 WP	N 41.7155139	W 87.9313944	N41 42.931	W87 55.884	N41 42 55.85	W087 55 53.02
	WP33 WP	N 41.7956436	W 87.8457465	N41 47.739	W87 50.745	N41 47 44.32	W087 50 44.69

PFAF

	LAT	LON
LTP/FTP	N41 47 26.51	W087 45 35.42
Runway True Bearing	133.55	
FAF Altitude	2000.00	
LTP/FTP Elevation	608.20	
TCH	46.00	
Glidepath Angle	3.00	
GPI	877.73	
FAF Distance From LTP/FTP	25677.76 Feet	
	4.23 NM	
	LAT	LON
PFAF	N41 50 05.98	W087 49 54.98

Vertical Error Budget

RNP Value	0.30
LTP MSL Elevation	608.20
Distance (ft) LTP to PFAF	25677.76
MSL PFAF Altitude	2000.00
Glidepath Angle	3.00
TCH	46.00
Delta ISA (dISA)	-35.76
Semispan	131.00

Max Glidepath Angle	3.50
PFAF Elevation	2000.00
LTP Elevation	608.2
ACT	-22.00

Min Glidepath Angle	2.75	
NA Below	-21.98 (C)	-7.56 (F)
NA Above	47.20 (C)	116.95 (F)

Dist (ft) LTP to OCS ORIGIN	4159.56
OCS Slope (run:rise)	22.35:1
VEB ROC @ PFAF	418.02

Error Components	(Enter Bank Angle, WPR, FTE, and ATIS values below)		@ 250 ft	@ PFAF
ISAD	(dh x dISA)/288 + dISA - 0.5 x .00198 x [dh+h])		-35.56	-198.88
BG	40.48	semispan x sin (Bank Angle)	40.48	40.48
ANPE	1.225 x rnp x tan(a)		117.03	117.03
VAE	D x (tan(a) - tan(a - .01)) D=250/tan(a)		0.83	4.65
WPR	60.00	WPR x tan(a)	3.14	3.14
FTE	75.00		75.00	75.00
ASE	-8.8 x 10^-8 x (h + D x tan(a))^2 + 6.5 x 10^-3 x (h + D x tan(a)) + 50		55.51	62.65
ATIS	20.00		20.00	20.00

Database Effective Dates

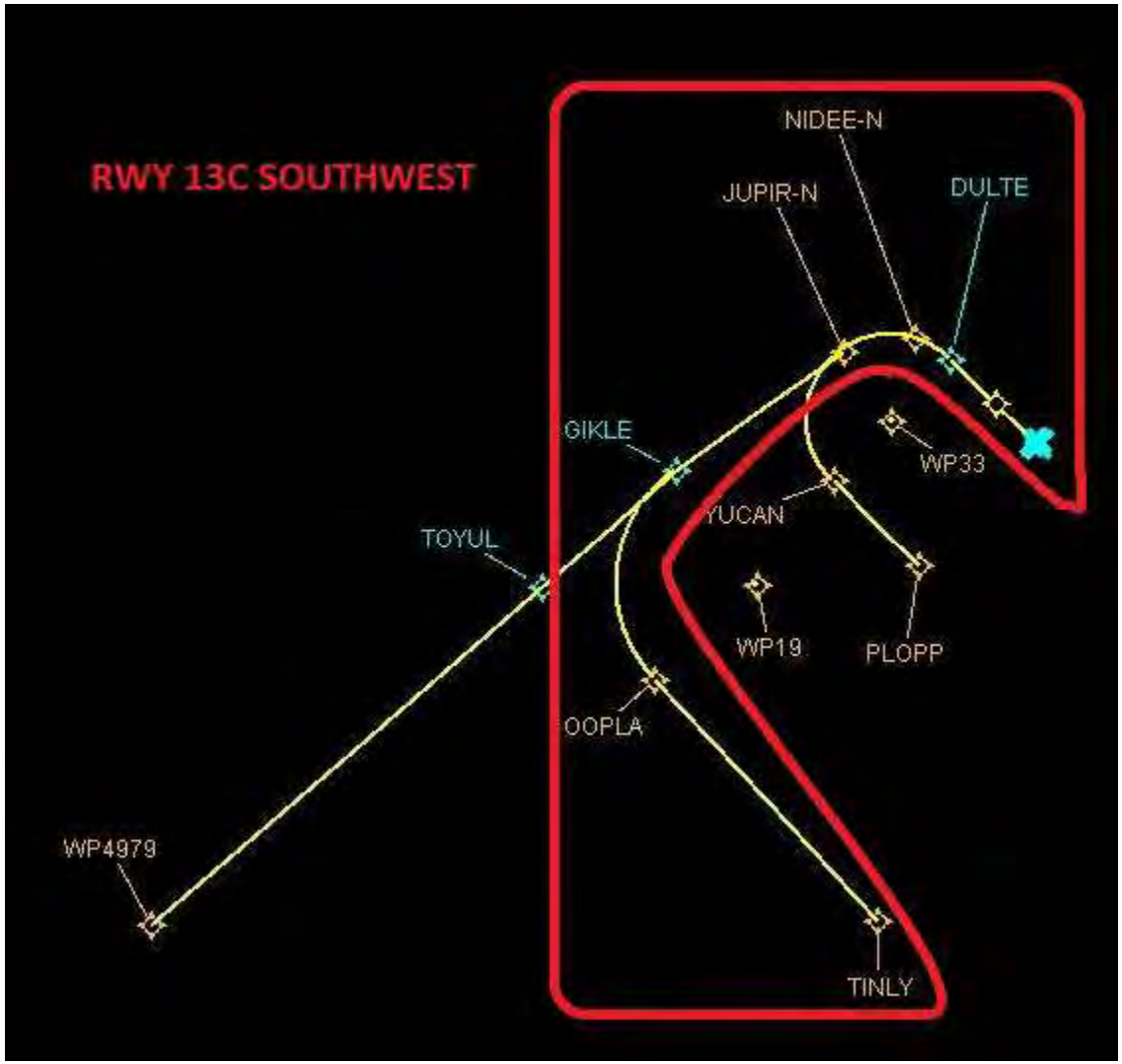
Database	Date
UddfObstacle	06/01/2007
NFDC	01/10/2013
IFP_OFFLINE	N/A
AVNIS	02/01/2013
NACO	01/10/2013
DOF	01/10/2013

Notes:

RNAV (RNP) Rwy 13C-SW

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway

RWY 13C SOUTHWEST RNAV



RNAV (RNP) Rwy 13C-WEST

Point Of Contact

ATC Facility Name - CSC

POC's Name - Harold Warncke

Telephone Number - 817 321-7608

FAX Number - 817 321-7646

Email Address - harold.ctr.warncke@faa.gov

TARGETS Distribution Package

Leg Table 1

Segment	Leg Type	Start	End	Turn Type	Glide Path End Alt	Min Obs./ ATC End Alt	Max End Alt	Turn Radius Comp Alt	Descent Grad	Climb Grad	End Spd	Turn Radius Comp Spd	RNP	Turn Dir
Initial from WPt WP4979	IF	*WP4979*	*WP4979*	FB	9056	4000.00	4000	4000.00	0.0			250.0	1.0	
Initial from WPt WP4979	TF	*WP4979*	TOYUL [AVNIS]	FB	5321	2500.00		5320.62	100.4			250.0	1.0	RIGHT
Intermediate from WPt TOYUL	TF	TOYUL [AVNIS]	GIKLE [AVNIS]	FB	4032	2500.00	2500	2500.00	0.0			250.0	1.0	RIGHT
Intermediate from WPt TOYUL	TF	GIKLE [AVNIS]	*JUPIR-N*	FB	2545	2000.00	2000	2000.00	84.0		210.0	210.0	1.0	RIGHT
Intermediate from WPt TOYUL	RF	*JUPIR-N*	*NIDEE-N*	FB	2000			2000.00				210.0	1.0	RIGHT
Final	RF	*NIDEE-N*	DULTE [AVNIS]	FB	1610			2000.00				165.0	0.3	RIGHT
Final	TF	DULTE [AVNIS]	KMDW:RW13C:AER	FB	654			654.20				165.0	0.3	

Leg Table 2

Segment	Leg Type	Start	End	Turn Type	Leg Length (NMI)	Leg Length (FT)	Start Course Magnetic	End Course Magnetic	Course Change	RF/Flyby Leg Radius	RF/Flyby Turn Bank Angle	Tailwind	RF Leg Arc Center
Initial from WPt WP4979	IF	*WP4979*	*WP4979*	FB	0.00	0.00000							
Initial from WPt WP4979	TF	*WP4979*	TOYUL [AVNIS]	FB	14.94	90777.16535	49.20	49.37	0.16		1.00	57.53	
Intermediate from WPt TOYUL	TF	TOYUL [AVNIS]	GIKLE [AVNIS]	FB	5.15	31318.39997	49.36	49.42	5.09		2.55	30.00	
Intermediate from WPt TOYUL	TF	GIKLE [AVNIS]	*JUPIR-N*	FB	5.95	36150.55425	54.46	54.53					
Intermediate from WPt TOYUL	RF	*JUPIR-N*	*NIDEE-N*	FB	2.18	13236.95108	54.53	105.71	51.19	2.4400	20.76	30.00	WP33
Final	RF	*NIDEE-N*	DULTE [AVNIS]	FB	1.23	7449.04180	105.71	134.52	28.80	2.4399	14.01	30.00	WP33
Final	TF	DULTE [AVNIS]	KMDW:RW13C:AER	FB	3.00	18228.72075	134.52	134.55					

Waypoint Data

DB	Waypoint	Latitude (Deg)	Longitude (Deg)	Latitude (Deg, Decimal Min)	Longitude (Deg, Decimal Min)	Latitude (D° M' S.ss")	Longitude (D° M' S.ss")
AVNIS	DULTE	N 41.8251528	W 87.8083111	N41 49.509	W87 48.499	N41 49 30.55	W087 48 29.92
AVNIS	GIKLE	N 41.7693417	W 87.9846278	N41 46.161	W87 59.078	N41 46 09.63	W087 59 04.66
	JUPIR-N WP	N 41.8283639	W 87.8780667	N41 49.702	W87 52.684	N41 49 42.11	W087 52 41.04
	NIDEE-N WP	N 41.8349945	W 87.8319391	N41 50.100	W87 49.916	N41 50 05.98	W087 49 54.98
AVNIS	TOYUL	N 41.7122722	W 88.0704306	N41 42.736	W88 4.226	N41 42 44.18	W088 04 13.55
	WP33 WP	N 41.7956436	W 87.8457465	N41 47.739	W87 50.745	N41 47 44.32	W087 50 44.69
	WP4979 WP	N 41.5465002	W 88.3182867	N41 32.790	W88 19.097	N41 32 47.40	W088 19 05.83

PFAF

	LAT	LON
LTP/FTP	N41 47 26.51	W087 45 35.42
Runway True Bearing	133.55	
FAF Altitude	2000.00	
LTP/FTP Elevation	608.20	
TCH	46.00	
Glidepath Angle	3.00	
GPI	877.73	
FAF Distance From LTP/FTP	25677.76 Feet	
	4.23 NM	
	LAT	LON
PFAF	N41 50 05.98	W087 49 54.98

Vertical Error Budget

RNP Value	0.30
LTP MSL Elevation	608.20
Distance (ft) LTP to PFAF	25677.76
MSL PFAF Altitude	2000.00
Glidepath Angle	3.00
TCH	46.00
Delta ISA (dISA)	-35.76
Semispan	131.00

Max Glidepath Angle	3.50
PFAF Elevation	2000.00
LTP Elevation	608.2
ACT	-22.00

Min Glidepath Angle	2.75	
NA Below	-21.98 (C)	-7.56 (F)
NA Above	47.20 (C)	116.95 (F)

Dist (ft) LTP to OCS ORIGIN	4159.56
OCS Slope (run:rise)	22.35:1
VEB ROC @ PFAF	418.02

Error Components	(Enter Bank Angle, WPR, FTE, and ATIS values below)		@ 250 ft	@ PFAF
ISAD	(dh x dISA)/288 + dISA - 0.5 x .00198 x [dh+h])		-35.56	-198.88
BG	40.48	semispan x sin (Bank Angle)	40.48	40.48
ANPE	1.225 x rnp x tan(a)		117.03	117.03
VAE	D x (tan(a) - tan(a - .01)) D=250/tan(a)		0.83	4.65
WPR	60.00	WPR x tan(a)	3.14	3.14
FTE	75.00		75.00	75.00
ASE	-8.8 x 10^-8 x (h + D x tan(a))^2 + 6.5 x 10^-3 x (h + D x tan(a)) + 50		55.51	62.65
ATIS	20.00		20.00	20.00

Database Effective Dates

Database	Date
UddfObstacle	06/01/2007
NFDC	01/10/2013
IFP_OFFLINE	N/A
AVNIS	02/01/2013
NACO	01/10/2013
DOF	01/10/2013

RNAV (RNP) Rwy 13C-WEST

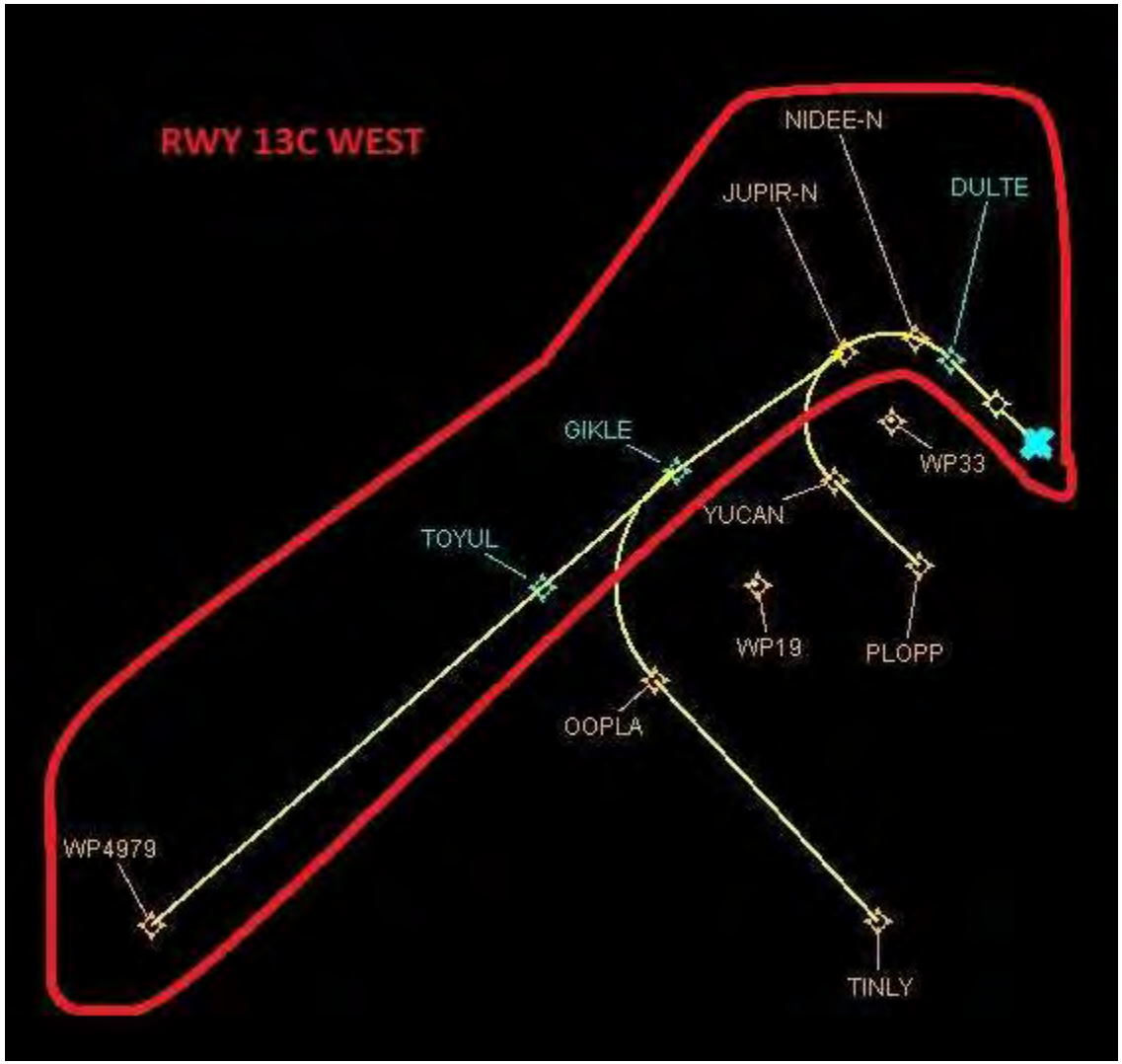
Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway

Notes:

RNAV (RNP) Rwy 13C-WEST

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway

RWY 13C WEST RNAV



RNAV (RNP) Rwy 22L-15-EAST

Point Of Contact

ATC Facility Name -

POC's Name -

Telephone Number -

FAX Number -

Email Address -

TARGETS Distribution Package

Leg Table 1

Segment	Leg Type	Start	End	Turn Type	Glide Path End Alt	Min Obs./ ATC End Alt	Max End Alt	Turn Radius Comp Alt	Descent Grad	Climb Grad	End Spd	Turn Radius Comp Spd	RNP	Turn Dir
Initial from WPt WP5385	IF	*STERE*	*STERE*	FB	5826			5826.11	0.0			250.0	1.0	
Initial from WPt WP5385	TF	*STERE*	*TACTT*	FB	4576	3000.00		4576.11				250.0	1.0	LEFT
Initial from WPt WP5385	TF	*TACTT*	*SAILZ-N2*	FB	3326	3000.00		3326.12	0.0			250.0	1.0	LEFT
Intermediate from WPt SAILZ-N2	TF	*SAILZ-N2*	*GPS-PFAF-2400*	FB	2230	2400.00		2400.00	136.8		210.0	210.0	1.0	LEFT
Intermediate from WPt SAILZ-N2	TF	*GPS-PFAF-2400*	*WP3299*	FB	1815	1900.00		1900.00	301.2			250.0	0.3	LEFT
Intermediate from WPt SAILZ-N2	RF	*WP3299*	*RNP-PFAF-1500*	FB	1500			1900.00				210.0	0.3	LEFT
Final	TF	*RNP-PFAF-1500*	KMDW:RW22L:AER	FB	656			656.00				165.0	0.3	

Leg Table 2

Segment	Leg Type	Start	End	Turn Type	Leg Length (NMI)	Leg Length (FT)	Start Course Magnetic	End Course Magnetic	Course Change	RF/Flyby Leg Radius	RF/Flyby Turn Bank Angle	Tailwind	RF Leg Arc Center
Initial from WPt WP5385	IF	*STERE*	*STERE*	FB	0.00	0.00000							
Initial from WPt WP5385	TF	*STERE*	*TACTT*	FB	5.00	30380.42170	271.05	270.97	0.07		1.00	56.06	
Initial from WPt WP5385	TF	*TACTT*	*SAILZ-N2*	FB	5.00	30380.45720	270.97	270.90	3.49		1.75	53.59	
Intermediate from WPt SAILZ-N2	TF	*SAILZ-N2*	*GPS-PFAF-2400*	FB	4.38	26640.84795	267.48	267.42	19.65	5.40	9.82	30.00	
Intermediate from WPt SAILZ-N2	TF	*GPS-PFAF-2400*	*WP3299*	FB	1.66	10086.66285	247.83	247.81					
Intermediate from WPt SAILZ-N2	RF	*WP3299*	*RNP-PFAF-1500*	FB	1.26	7655.27627	247.81	224.50	23.31	3.0998	16.57	30.00	WP3300
Final	TF	*RNP-PFAF-1500*	KMDW:RW22L:AER	FB	2.65	16103.05229	224.50	224.48					

Waypoint Data

DB	Waypoint	Latitude (Deg)	Longitude (Deg)	Latitude (Deg, Decimal Min)	Longitude (Deg, Decimal Min)	Latitude (D° M' S.ss")	Longitude (D° M' S.ss")
	GPS-PFAF-2400 WP	N 41.8456083	W 87.6470861	N41 50.737	W87 38.825	N41 50 44.19	W087 38 49.51
	RNP-PFAF-1500 WP	N 41.8227933	W 87.7040066	N41 49.368	W87 42.240	N41 49 22.06	W087 42 14.42
	SAILZ-N2 WP	N 41.8501361	W 87.5494972	N41 51.008	W87 32.970	N41 51 00.49	W087 32 58.19
	STERE WP	N 41.8502111	W 87.3264861	N41 51.013	W87 19.589	N41 51 00.76	W087 19 35.35
	TACTT WP	N 41.8502278	W 87.4379917	N41 51.014	W87 26.280	N41 51 00.82	W087 26 16.77
	WP3299 WP	N 41.8347139	W 87.6811139	N41 50.083	W87 40.867	N41 50 04.97	W087 40 52.01
	WP3300 WP	N 41.7871994	W 87.6539178	N41 47.232	W87 39.235	N41 47 13.92	W087 39 14.10

PFAF

	LAT	LON
LTP/FTP	N41 47 26.64	W087 44 40.76
Runway True Bearing	223.48	
FAF Altitude	1500.00	
LTP/FTP Elevation	606.00	
TCH	50.00	
Glidepath Angle	3.00	
GPI	954.06	
FAF Distance From LTP/FTP	16103.65 Feet	
	2.65 NM	
	LAT	LON
PFAF	N41 49 22.06	W087 42 14.42

Vertical Error Budget

RNP Value	0.30
LTP MSL Elevation	606.00
Distance (ft) LTP to PFAF	16103.65
MSL PFAF Altitude	1500.00
Glidepath Angle	3.00
TCH	50.00
Delta ISA (dISA)	-35.76
Semispan	131.00

Max Glidepath Angle	3.50
PFAF Elevation	1500.00
LTP Elevation	606.0
ACT	-22.00

Min Glidepath Angle	2.75	
NA Below	-21.97 (C)	-7.55 (F)
NA Above	46.08 (C)	114.94 (F)

Dist (ft) LTP to OCS ORIGIN	4082.96
OCS Slope (run:rise)	22.34:1
VEB ROC @ PFAF	352.53

Error Components	(Enter Bank Angle, WPR, FTE, and ATIS values below)		@ 250 ft	@ PFAF
ISAD	(dh x dISA)/288 + dISA - 0.5 x .00198 x [dh+h])		-35.56	-127.49
BG	25.00	semispan x sin (Bank Angle)	25.00	25.00
ANPE	1.225 x rnp x tan(a)		117.03	117.03
VAE	D x (tan(a) - tan(a - .01)) D=250/tan(a)		0.83	2.99
WPR	60.00	WPR x tan(a)	3.14	3.14
FTE	75.00		75.00	75.00
ASE	-8.8 x 10^-8 x (h + D x tan(a))^2 + 6.5 x 10^-3 x (h + D x tan(a)) + 50		55.50	59.55
ATIS	20.00		20.00	20.00

Database Effective Dates

Database	Date
UddfObstacle	06/01/2007
NFDC	01/10/2013
IFP_OFFLINE	N/A
AVNIS	02/01/2013
NACO	01/10/2013
DOF	01/10/2013

RNAV (RNP) Rwy 22L-15-EAST

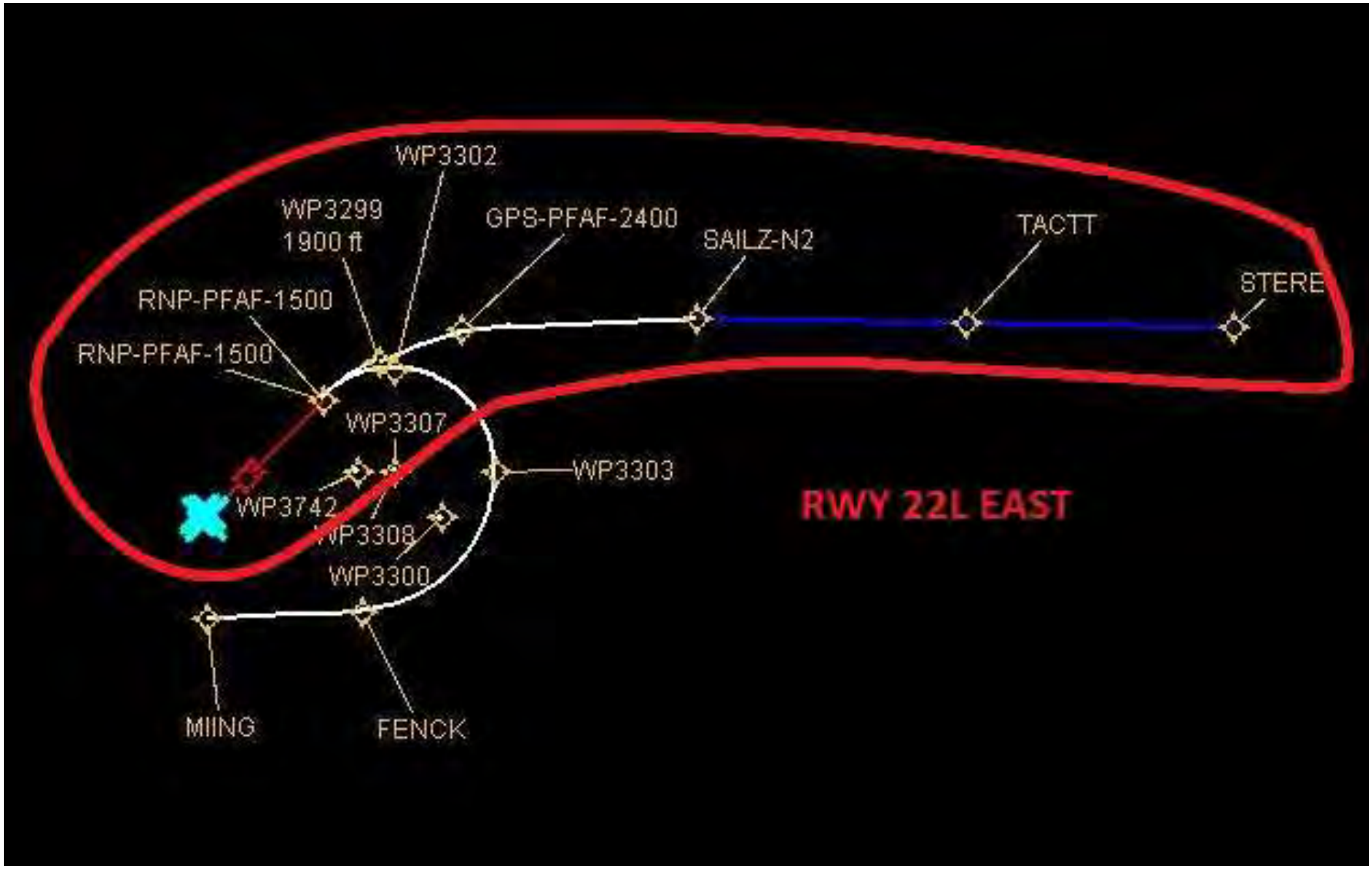
Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2

Notes:

RNAV (RNP) Rwy 22L-15-EAST

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway

RWY 22L EAST RNAV



RNAV (RNP) Rwy 22L-GM

Point Of Contact

ATC Facility Name -

POC's Name -

Telephone Number -

FAX Number -

Email Address -

TARGETS Distribution Package

Leg Table 1

Segment	Leg Type	Start	End	Turn Type	Glide Path End Alt	Min Obs./ ATC End Alt	Max End Alt	Turn Radius Comp Alt	Descent Grad	Climb Grad	End Spd	Turn Radius Comp Spd	RNP	Turn Dir
Intermediate from WPt WP3743	IF	*MIING*	*MIING*	FB	4340	4000.00	4000	4000.00	0.0		210.0	210.0	1.0	
Intermediate from WPt WP3743	TF	*MIING*	*FENCK*	FB	3611	4000.00		4000.00	0.0			250.0	1.0	LEFT
Intermediate from WPt WP3743	RF	*FENCK*	*WP3303*	FB	2615	2900.00		4000.00	276.3		180.0	210.0	1.0	LEFT
Intermediate from WPt WP3743	RF	*WP3303*	*WP3302*	FB	1871	1900.00		2900.00	336.0			180.0	1.0	LEFT
Intermediate from WPt WP3743	RF	*WP3302*	*RNP-PFAF-1500*	FB	1500			1900.00				180.0	1.0	LEFT
Final	TF	*RNP-PFAF-1500*	KMDW:RW22L:AER	FB	656			656.00				165.0	0.3	

Leg Table 2

Segment	Leg Type	Start	End	Turn Type	Leg Length (NMI)	Leg Length (FT)	Start Course Magnetic	End Course Magnetic	Course Change	RF/Flyby Leg Radius	RF/Flyby Turn Bank Angle	Tailwind	RF Leg Arc Center
Intermediate from WPt WP3743	IF	*MIING*	*MIING*	FB	0.00	0.00000							
Intermediate from WPt WP3743	TF	*MIING*	*FENCK*	FB	2.92	17729.59623	87.44	87.48					
Intermediate from WPt WP3743	RF	*FENCK*	*WP3303*	FB	3.98	24191.23355	87.48	359.78	87.70	2.6000	24.27	54.92	WP3742
Intermediate from WPt WP3743	RF	*WP3303*	*WP3302*	FB	2.98	18084.40289	359.78	269.53	90.25	1.8902	24.60	50.90	WP3308
Intermediate from WPt WP3743	RF	*WP3302*	*RNP-PFAF-1500*	FB	1.48	9019.89461	269.53	224.50	45.03	1.8898	20.45	30.00	WP3307
Final	TF	*RNP-PFAF-1500*	KMDW:RW22L:AER	FB	2.65	16103.05229	224.50	224.48					

Waypoint Data

DB	Waypoint	Latitude (Deg)	Longitude (Deg)	Latitude (Deg, Decimal Min)	Longitude (Deg, Decimal Min)	Latitude (D° M' S.ss")	Longitude (D° M' S.ss")
	FENCK WP	N 41.7575617	W 87.6857235	N41 45.454	W87 41.143	N41 45 27.22	W087 41 08.60
	MIING WP	N 41.7545582	W 87.7505774	N41 45.273	W87 45.035	N41 45 16.41	W087 45 02.08
	RNP-PFAF-1500 WP	N 41.8227933	W 87.7040066	N41 49.368	W87 42.240	N41 49 22.06	W087 42 14.42
	WP3302 WP	N 41.8325972	W 87.6745417	N41 49.956	W87 40.473	N41 49 57.35	W087 40 28.35
	WP3303 WP	N 41.8017694	W 87.6313528	N41 48.106	W87 37.881	N41 48 06.37	W087 37 52.87
	WP3307 WP	N 41.8010971	W 87.6734648	N41 48.066	W87 40.408	N41 48 03.95	W087 40 24.47
	WP3308 WP	N 41.8010917	W 87.6734646	N41 48.066	W87 40.408	N41 48 03.93	W087 40 24.47
	WP3742 WP	N 41.8008332	W 87.6892783	N41 48.050	W87 41.357	N41 48 03.00	W087 41 21.40

PFAF

	LAT	LON
LTP/FTP	N41 47 26.64	W087 44 40.76
Runway True Bearing	223.48	
FAF Altitude	1499.97	
LTP/FTP Elevation	606.00	
TCH	50.00	
Glidepath Angle	3.00	
GPI	954.06	
FAF Distance From LTP/FTP	16103.05 Feet	
	2.65 NM	
	LAT	LON
PFAF	N41 49 22.06	W087 42 14.42

Vertical Error Budget

RNP Value	0.30
LTP MSL Elevation	606.00
Distance (ft) LTP to PFAF	16103.05
MSL PFAF Altitude	1499.97
Glidepath Angle	3.00
TCH	50.00
Delta ISA (dISA)	-35.76
Semispan	131.00

Max Glidepath Angle	3.50	
PFAF Elevation	1499.97	
LTP Elevation	606.0	
ACT	-22.00	
Min Glidepath Angle	2.75	
NA Below	-21.97 (C)	-7.55 (F)
NA Above	46.08 (C)	114.94 (F)

Dist (ft) LTP to OCS ORIGIN	4082.96
OCS Slope (run:rise)	22.34:1
VEB ROC @ PFAF	352.52

Error Components	(Enter Bank Angle, WPR, FTE, and ATIS values below)		@ 250 ft	@ PFAF
ISAD	(dh x dISA)/288 + dISA - 0.5 x .00198 x [dh+h])		-35.56	-127.49
BG	25.00	semispan x sin (Bank Angle)	25.00	25.00
ANPE	1.225 x rnp x tan(a)		117.03	117.03
VAE	D x (tan(a) - tan(a - .01)) D=250/tan(a)		0.83	2.99
WPR	60.00	WPR x tan(a)	3.14	3.14
FTE	75.00		75.00	75.00
ASE	-8.8 x 10^-8 x (h + D x tan(a))^2 + 6.5 x 10^-3 x (h + D x tan(a)) + 50		55.50	59.55
ATIS	20.00		20.00	20.00

Database Effective Dates

Database	Date
UddfObstacle	06/01/2007
NFDC	01/10/2013
IFP_OFFLINE	N/A
AVNIS	02/01/2013
NACO	01/10/2013
DOF	01/10/2013

RNAV (RNP) Rwy 22L-GM

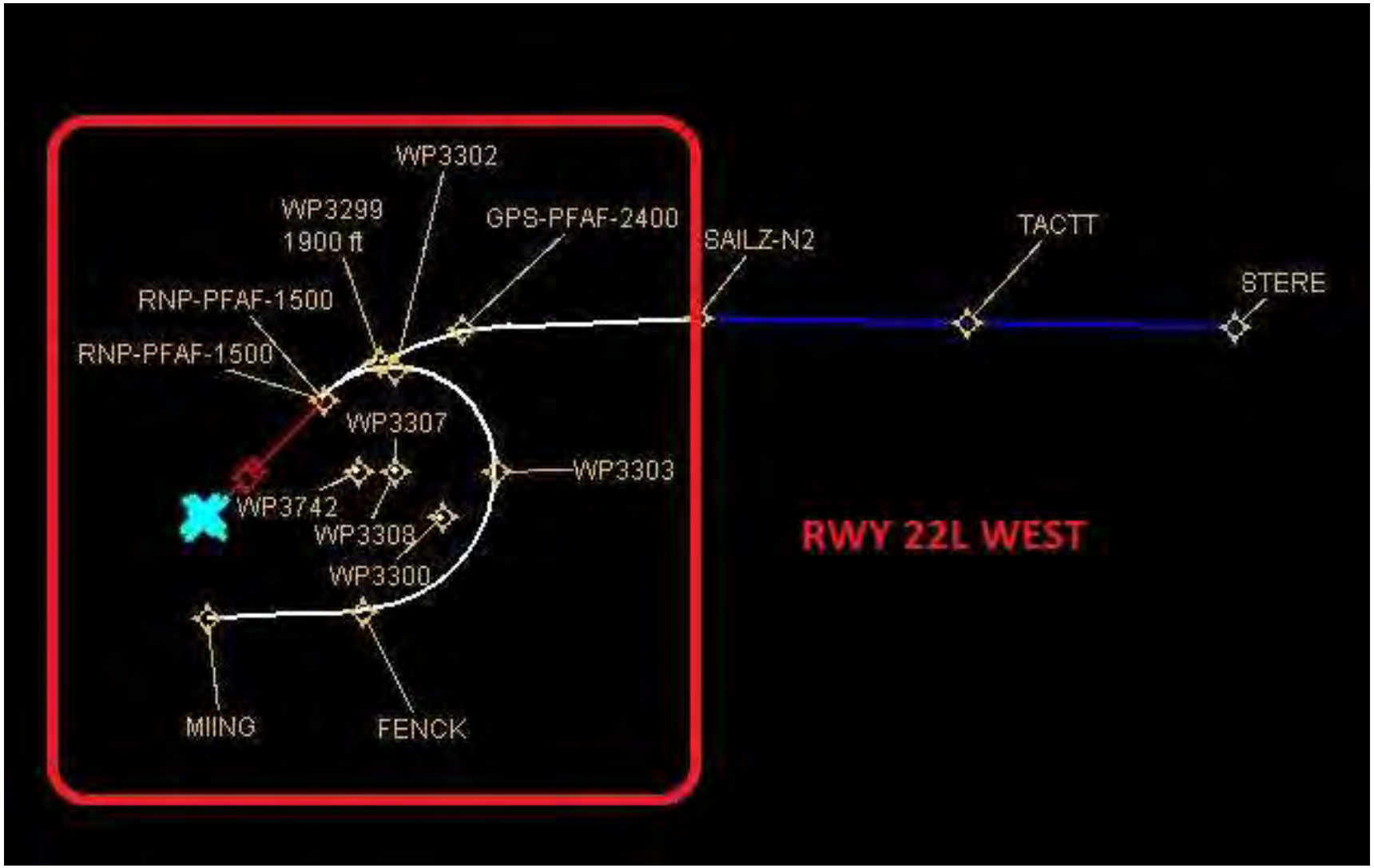
Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway

Notes:

RNAV (RNP) Rwy 22L-GM

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway

RWY 22L WEST RNAV



RNAV (GPS) Rwy 22L with Offset Final

Point Of Contact

ATC Facility Name - Tetra Tech AMT

POC's Name - Winston G. Robinson Jr.

Telephone Number - 817-321-7610

FAX Number - 817-321-7467

Email Address - winston.ctr.robinson@faa.gov

TARGETS Distribution Package

Leg Table 1

Segment	Leg Type	Start	End	Turn Type	Glide Path End Alt	Min Obs./ ATC End Alt	Max End Alt	Turn Radius Comp Alt	Descent Grad	Climb Grad	End Spd	Turn Radius Comp Spd	RNP	Turn Dir
Intermediate	IF	*INTERMEDIATE FIX*	*INTERMEDIATE FIX*	FB	3155	3000.00		3154.93	0.0		210.0	210.0	1.0	
Intermediate	TF	*INTERMEDIATE FIX*	*IF STEP DOWN*	FB	2237	2400.00		2400.00	163.5			210.0	1.0	LEFT
Intermediate	TF	*IF STEP DOWN*	*PFAF7*	FB	1600			1599.94				165.0	0.3	LEFT
Final	TF	*PFAF7*	KMDW:RW22L:AER	FB	656			656.00				165.0	0.3	

Leg Table 2

Segment	Leg Type	Start	End	Turn Type	Leg Length (NMI)	Leg Length (FT)	Start Course Magnetic	End Course Magnetic	Course Change	RF/Flyby Leg Radius	RF/Flyby Turn Bank Angle	Tailwind	RF Leg Arc Center
Intermediate	IF	*INTERMEDIATE FIX*	*INTERMEDIATE FIX*	FB	0.00	0.00000							
Intermediate	TF	*INTERMEDIATE FIX*	*IF STEP DOWN*	FB	3.67	22299.32595	259.57	259.52	0.05		1.00	30.00	
Intermediate	TF	*IF STEP DOWN*	*PFAF7*	FB	2.55	15493.92817	259.52	259.48	30.01	2.25	15.01	30.00	
Final	TF	*PFAF7*	KMDW:RW22L:AER	FB	2.61	15887.37734	229.51	229.48					

Waypoint Data

DB	Waypoint	Latitude (Deg)	Longitude (Deg)	Latitude (Deg, Decimal Min)	Longitude (Deg, Decimal Min)	Latitude (D° M' S.ss")	Longitude (D° M' S.ss")
	IF STEP DOWN WP	N 41.8281056	W 87.6453167	N41 49.686	W87 38.719	N41 49 41.18	W087 38 43.14
	INTERMEDIATE FIX WP	N 41.8402611	W 87.5651222	N41 50.416	W87 33.907	N41 50 24.94	W087 33 54.44
	PFAF7 WP	N 41.8196278	W 87.7010194	N41 49.178	W87 42.061	N41 49 10.66	W087 42 03.67

PFAF

	LAT	LON
LTP/FTP	N41 47 26.64	W087 44 40.76
Runway True Bearing	223.48	
FAF Altitude	1599.94	
LTP/FTP Elevation	606.00	
TCH	50.00	
Glidepath Angle	3.40	
GPI	841.60	
FAF Distance From LTP/FTP	15887.38 Feet	
	2.61 NM	
	LAT	LON
PFAF	N41 49 10.66	W087 42 03.67

Vertical Error Budget

RNP Value	0.30
LTP MSL Elevation	606.00
Distance (ft) LTP to PFAF	15887.38
MSL PFAF Altitude	1599.94
Glidepath Angle	3.40
TCH	50.00
Delta ISA (dISA)	0.00
Semispan	131.00

Max Glidepath Angle	3.50
PFAF Elevation	1599.94
LTP Elevation	606.0
ACT	0.00

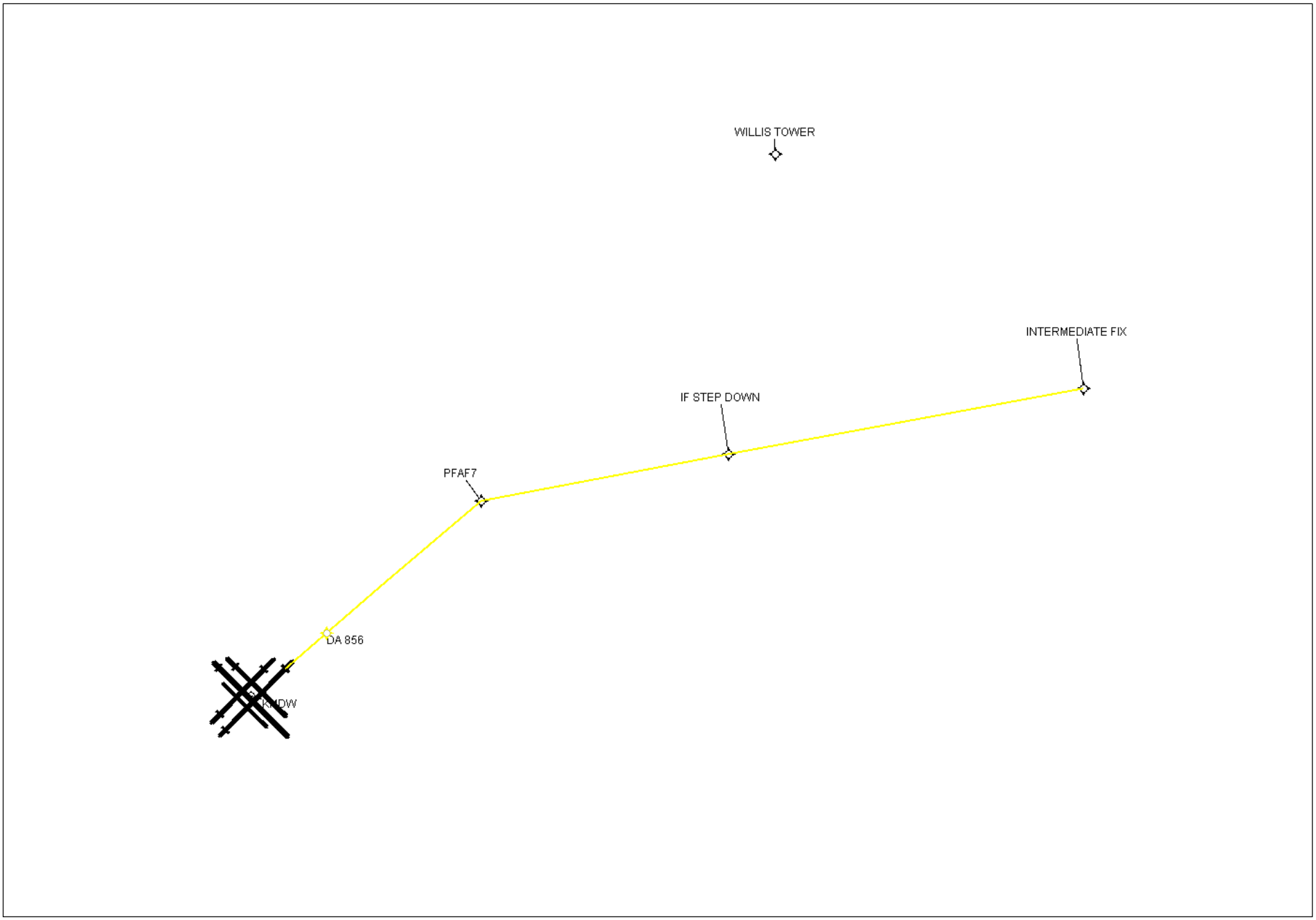
Min Glidepath Angle	3.53	
NA Below	13.79 (C)	56.82 (F)
NA Above	11.92 (C)	53.46 (F)

Dist (ft) LTP to OCS ORIGIN	3247.22
OCS Slope (run:rise)	16.88:1
VEB ROC @ PFAF	241.39

Error Components	(Enter Bank Angle, WPR, FTE, and ATIS values below)		@ 250 ft	@ PFAF
ISAD	(dh x dISA)/288 + dISA - 0.5 x .00198 x [dh+h])		0.00	0.00
BG	25.00	semispan x sin (Bank Angle)	25.00	25.00
ANPE	1.225 x rnp x tan(a)		132.66	132.66
VAE	D x (tan(a) - tan(a - .01)) D=250/tan(a)		0.74	2.93
WPR	60.00	WPR x tan(a)	3.56	3.56
FTE	75.00		75.00	75.00
ASE	-8.8 x 10^-8 x (h + D x tan(a))^2 + 6.5 x 10^-3 x (h + D x tan(a)) + 50		55.50	60.17
ATIS	20.00		20.00	20.00

RNAV (GPS) Rwy 22L with Offset Final

Created : Tue Oct 09 15:07:45 CDT 2012 in TARGETS vTARGETS 4.8 (April 5, 2012), AVNIS effective date UNKNOWN



RNAV (GPS) Rwy 22L with Offset Final

Created : Tue Oct 09 15:07:45 CDT 2012 in TARGETS vTARGETS 4.8 (April 5, 2012), AVNIS effective date UNKNOWN

Notes:

RNAV (GPS) Rwy 22L with Offset Final

Created : Tue Oct 09 15:07:45 CDT 2012 in TARGETS vTARGETS 4.8 (April 5, 2012), AVNIS effective date UNKNOWN

RNAV (RNP) Rwy 31C-SOUTH-N1

Point Of Contact

ATC Facility Name -

POC's Name -

Telephone Number -

FAX Number -

Email Address -

TARGETS Distribution Package

Leg Table 1

Segment	Leg Type	Start	End	Turn Type	Glide Path End Alt	Min Obs./ ATC End Alt	Max End Alt	Turn Radius Comp Alt	Descent Grad	Climb Grad	End Spd	Turn Radius Comp Spd	RNP	Turn Dir
Intermediate from WPt HILLS-ILS	IF	*HILLS-N1*	*HILLS-N1*	FB	4290	5000.00	5000	5000.00	0.0			250.0	1.0	
Intermediate from WPt HILLS-ILS	TF	*HILLS-N1*	*GLEAM-N1*	FB	3505	4000.00		4000.00	318.5			250.0	1.0	LEFT
Intermediate from WPt HILLS-ILS	TF	*GLEAM-N1*	*RUNTS-N1*	FB	2328	2500.00		2500.00	318.5			250.0	1.0	LEFT
Intermediate from WPt HILLS-ILS	TF	*RUNTS-N1*	*HOBEL-N1*	FB	1700			1700.03				165.0	1.0	LEFT
Final	TF	*HOBEL-N1*	KMDW:RW31C:AER	FB	660			659.80				165.0	0.3	

Leg Table 2

Segment	Leg Type	Start	End	Turn Type	Leg Length (NMI)	Leg Length (FT)	Start Course Magnetic	End Course Magnetic	Course Change	RF/Flyby Leg Radius	RF/Flyby Turn Bank Angle	Tailwind	RF Leg Arc Center
Intermediate from WPt HILLS-ILS	IF	*HILLS-N1*	*HILLS-N1*	FB	0.00	0.00000							
Intermediate from WPt HILLS-ILS	TF	*HILLS-N1*	*GLEAM-N1*	FB	3.14	19077.03605	314.72	314.68	0.03		1.00	54.92	
Intermediate from WPt HILLS-ILS	TF	*GLEAM-N1*	*RUNTS-N1*	FB	4.71	28617.98878	314.68	314.63	0.05		1.00	30.00	
Intermediate from WPt HILLS-ILS	TF	*RUNTS-N1*	*HOBEL-N1*	FB	2.51	15262.62480	314.63	314.61	0.03		1.00	30.00	
Final	TF	*HOBEL-N1*	KMDW:RW31C:AER	FB	3.27	19847.67498	314.61	314.57					

Waypoint Data

DB	Waypoint	Latitude (Deg)	Longitude (Deg)	Latitude (Deg, Decimal Min)	Longitude (Deg, Decimal Min)	Latitude (D° M' S.ss")	Longitude (D° M' S.ss")
	GLEAM-N1 WP	N 41.6598917	W 87.5766194	N41 39.594	W87 34.597	N41 39 35.61	W087 34 35.83
	HILLS-N1 WP	N 41.6237222	W 87.5261611	N41 37.423	W87 31.570	N41 37 25.40	W087 31 34.18
	HOBEL-N1 WP	N 41.7430028	W 87.6928972	N41 44.580	W87 41.574	N41 44 34.81	W087 41 34.43
	RUNTS-N1 WP	N 41.7141083	W 87.6524194	N41 42.847	W87 39.145	N41 42 50.79	W087 39 08.71

PFAF

	LAT	LON
LTP/FTP	N41 46 50.00	W087 44 44.12
Runway True Bearing	313.57	
FAF Altitude	1700.03	
LTP/FTP Elevation	611.90	
TCH	47.90	
Glidepath Angle	3.00	
GPI	913.99	
FAF Distance From LTP/FTP	19847.67 Feet	
	3.27 NM	
	LAT	LON
PFAF	N41 44 34.81	W087 41 34.43

Vertical Error Budget

RNP Value	0.30
LTP MSL Elevation	611.90
Distance (ft) LTP to PFAF	19847.67
MSL PFAF Altitude	1700.03
Glidepath Angle	3.00
TCH	47.90
Delta ISA (dISA)	0.00
Semispan	131.00

Max Glidepath Angle	3.50	
PFAF Elevation	1700.03	
LTP Elevation	611.9	
ACT	0.00	
Min Glidepath Angle	3.11	
NA Below	13.78 (C)	56.80 (F)
NA Above	46.62 (C)	115.92 (F)

Dist (ft) LTP to OCS ORIGIN	3404.40
OCS Slope (run:rise)	19.14:1
VEB ROC @ PFAF	222.71

Error Components	(Enter Bank Angle, WPR, FTE, and ATIS values below)		@ 250 ft	@ PFAF
ISAD	(dh x dISA)/288 + dISA - 0.5 x .00198 x [dh+h])		0.00	0.00
BG	25.00	semispan x sin (Bank Angle)	25.00	25.00
ANPE	1.225 x rnp x tan(a)		117.03	117.03
VAE	D x (tan(a) - tan(a - .01)) D=250/tan(a)		0.83	3.63
WPR	60.00	WPR x tan(a)	3.14	3.14
FTE	75.00		75.00	75.00
ASE	-8.8 x 10^-8 x (h + D x tan(a))^2 + 6.5 x 10^-3 x (h + D x tan(a)) + 50		55.54	60.80
ATIS	20.00		20.00	20.00

Database Effective Dates

Database	Date
UddfObstacle	06/01/2007
NFDC	01/10/2013
IFP_OFFLINE	N/A
AVNIS	02/01/2013
NACO	01/10/2013
DOF	01/10/2013

RNAV (RNP) Rwy 31C-SOUTH-N1

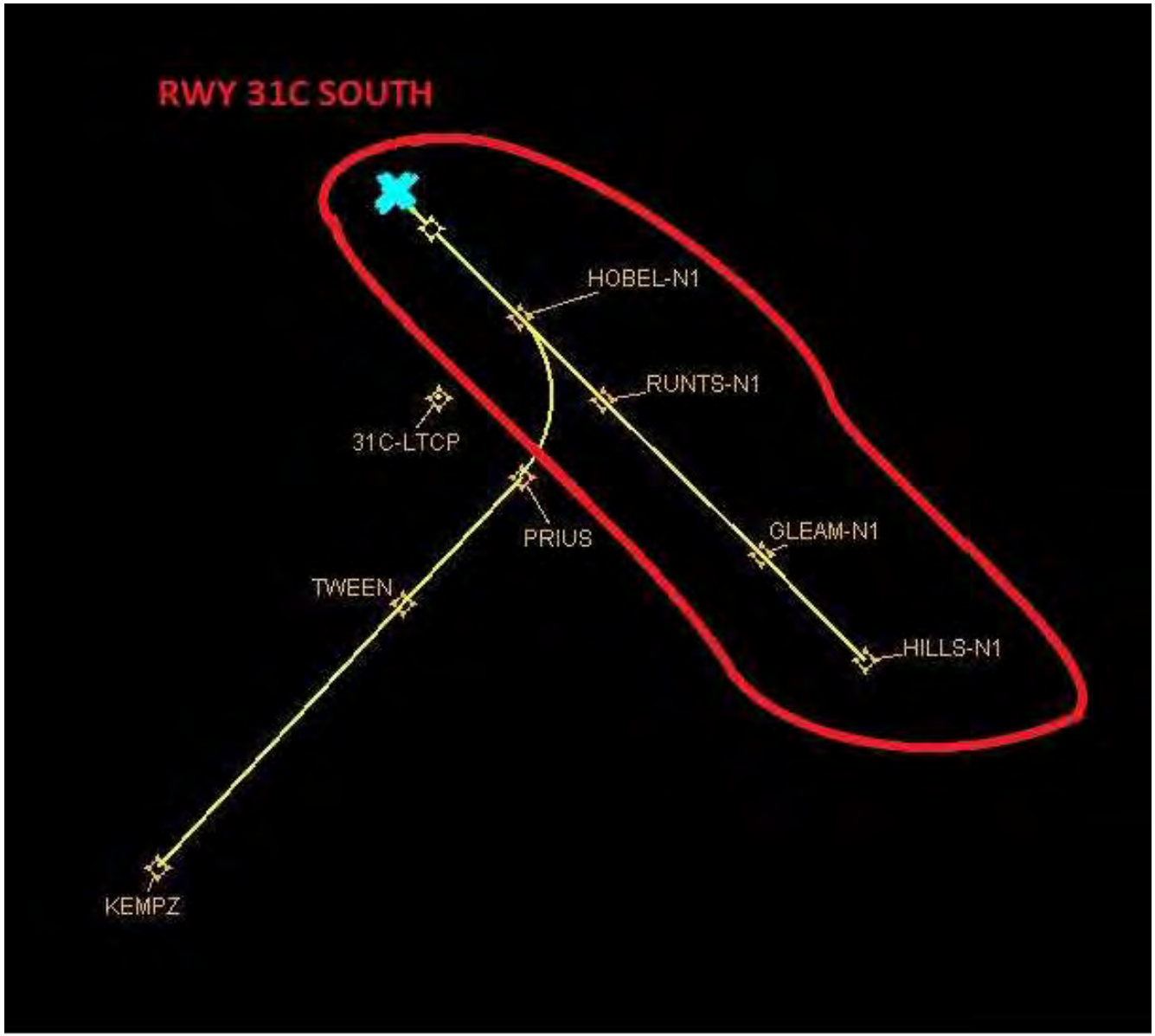
Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway

Notes:

RNAV (RNP) Rwy 31C-SOUTH-N1

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway

RWY 31C SOUTH RNAV



RNAV (RNP) Rwy 31C-WEST-N1

Point Of Contact

ATC Facility Name -

POC's Name -

Telephone Number -

FAX Number -

Email Address -

TARGETS Distribution Package

Leg Table 1

Segment	Leg Type	Start	End	Turn Type	Glide Path End Alt	Min Obs./ ATC End Alt	Max End Alt	Turn Radius Comp Alt	Descent Grad	Climb Grad	End Spd	Turn Radius Comp Spd	RNP	Turn Dir
Intermediate from WPt KEMPZ	IF	*KEMPZ*	*KEMPZ*	FB	5491	5000.00	5000	5000.00	0.0		210.0	210.0	1.0	
Intermediate from WPt KEMPZ	TF	*KEMPZ*	*TWEEN*	FB	3569	4000.00		4000.00	130.1			250.0	1.0	RIGHT
Intermediate from WPt KEMPZ	TF	*TWEEN*	*PRIUS*	FB	2645	2900.00		2900.00	297.6			210.0	1.0	LEFT
Intermediate from WPt KEMPZ	RF	*PRIUS*	*HOBEL-N1*	FB	1700			2900.00				210.0	1.0	LEFT
Final	TF	*HOBEL-N1*	KMDW:RW31C:AER	FB	660			659.80				165.0	0.3	

Leg Table 2

Segment	Leg Type	Start	End	Turn Type	Leg Length (NMI)	Leg Length (FT)	Start Course Magnetic	End Course Magnetic	Course Change	RF/Flyby Leg Radius	RF/Flyby Turn Bank Angle	Tailwind	RF Leg Arc Center
Intermediate from WPt KEMPZ	IF	*KEMPZ*	*KEMPZ*	FB	0.00	0.00000							
Intermediate from WPt KEMPZ	TF	*KEMPZ*	*TWEEN*	FB	7.69	46720.78472	43.19	43.27	0.10		1.00	54.92	
Intermediate from WPt KEMPZ	TF	*TWEEN*	*PRIUS*	FB	3.70	22461.42965	43.29	43.33					
Intermediate from WPt KEMPZ	RF	*PRIUS*	*HOBEL-N1*	FB	3.78	22954.86911	43.33	314.61	88.72	2.4400	24.73	52.74	31C-LTCP
Final	TF	*HOBEL-N1*	KMDW:RW31C:AER	FB	3.27	19847.67498	314.61	314.57					

Waypoint Data

DB	Waypoint	Latitude (Deg)	Longitude (Deg)	Latitude (Deg, Decimal Min)	Longitude (Deg, Decimal Min)	Latitude (D° M' S.ss")	Longitude (D° M' S.ss")
	31C-LTCP WP	N 41.7135472	W 87.7303417	N41 42.813	W87 43.820	N41 42 48.77	W087 43 49.23
	HOBEL-N1 WP	N 41.7430028	W 87.6928972	N41 44.580	W87 41.574	N41 44 34.81	W087 41 34.43
	KEMPZ WP	N 41.5456297	W 87.8603168	N41 32.738	W87 51.619	N41 32 44.27	W087 51 37.14
	PRIUS WP	N 41.6861583	W 87.6901972	N41 41.170	W87 41.412	N41 41 10.17	W087 41 24.71
	TWEEN WP	N 41.6405722	W 87.7455278	N41 38.434	W87 44.732	N41 38 26.06	W087 44 43.90

PFAF

	LAT	LON
LTP/FTP	N41 46 50.00	W087 44 44.12
Runway True Bearing	313.57	
FAF Altitude	1700.03	
LTP/FTP Elevation	611.90	
TCH	47.90	
Glidepath Angle	3.00	
GPI	913.99	
FAF Distance From LTP/FTP	19847.67 Feet	
	3.27 NM	
	LAT	LON
PFAF	N41 44 34.81	W087 41 34.43

Vertical Error Budget

RNP Value	0.30
LTP MSL Elevation	611.90
Distance (ft) LTP to PFAF	19847.67
MSL PFAF Altitude	1700.03
Glidepath Angle	3.00
TCH	47.90
Delta ISA (dISA)	0.00
Semispan	131.00

Max Glidepath Angle	3.50	
PFAF Elevation	1700.03	
LTP Elevation	611.9	
ACT	0.00	
Min Glidepath Angle	3.11	
NA Below	13.78 (C)	56.80 (F)
NA Above	46.62 (C)	115.92 (F)

Dist (ft) LTP to OCS ORIGIN	3404.40
OCS Slope (run:rise)	19.14:1
VEB ROC @ PFAF	222.71

Error Components	(Enter Bank Angle, WPR, FTE, and ATIS values below)		@ 250 ft	@ PFAF
ISAD	(dh x dISA)/288 + dISA - 0.5 x .00198 x [dh+h])		0.00	0.00
BG	25.00	semispan x sin (Bank Angle)	25.00	25.00
ANPE	1.225 x rnp x tan(a)		117.03	117.03
VAE	D x (tan(a) - tan(a - .01)) D=250/tan(a)		0.83	3.63
WPR	60.00	WPR x tan(a)	3.14	3.14
FTE	75.00		75.00	75.00
ASE	-8.8 x 10^-8 x (h + D x tan(a))^2 + 6.5 x 10^-3 x (h + D x tan(a)) + 50		55.54	60.80
ATIS	20.00		20.00	20.00

Database Effective Dates

Database	Date
UddfObstacle	06/01/2007
NFDC	01/10/2013
IFP_OFFLINE	N/A
AVNIS	02/01/2013
NACO	01/10/2013
DOF	01/10/2013

RNAV (RNP) Rwy 31C-WEST-N1

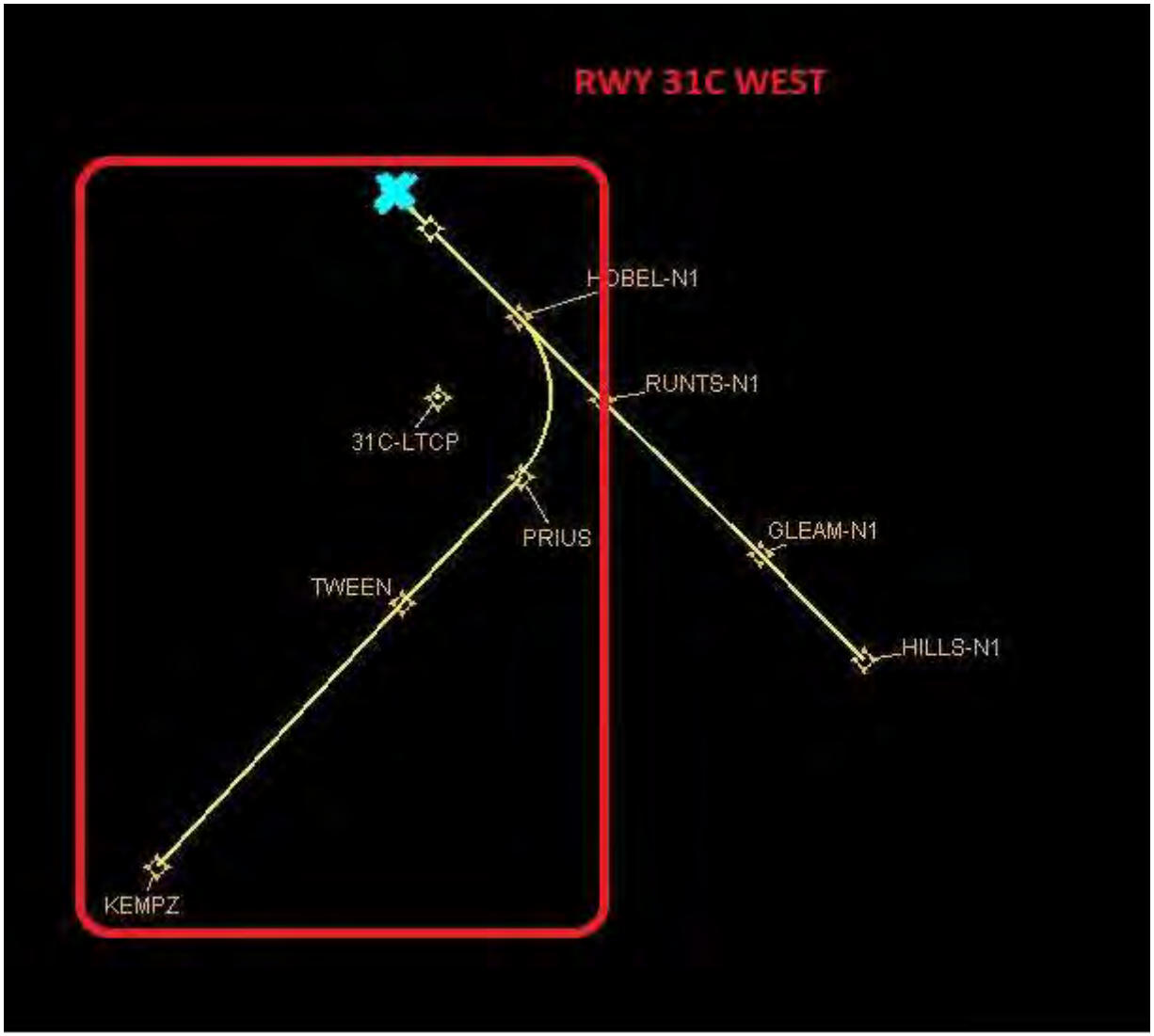
Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2

Notes:

RNAV (RNP) Rwy 31C-WEST-N1

Generated by: TARGETS: 5.0.1; WGS84: 1.1.6; Common RS: 1.2.0; RNAV STAR RS: 1.2.0 RNP AR RS: 1.1.2
Chicago Midway

RWY 31C WEST RNAV



Appendix E AIRCRAFT NOISE ANALYSIS

E.1 BASICS OF NOISE

This appendix introduces the acoustic metrics that are the relevant elements comprising the *Day-Night Average Sound Level (DNL)* noise metric, which collectively provide a basis for evaluating and understanding a broad range of noise settings.

Analysis of potential effects to the noise setting from aviation activities is conducted as directed in FAA Order 1050.1E, Appendix A, Section 14. Specifically, the FAA uses DNL to measure cumulative noise exposure from aviation activities that occur over the course of an Average Annual Day (AAD),[1] during a given year of interest. The DNL metric is built upon other fundamental concepts and metrics, which all help to analyze airport and airspace noise environments. The following sections provide essential reference material related to these technical concepts and metrics, including an introduction to fundamental acoustics and noise terminology (Section E.1.1), the effects of noise on human activity (Section E.1.2), community annoyance (Section E.1.3), and a discussion of currently accepted noise/land use compatibility guidelines (Section E.1.4).

E.1.1 Introduction to Acoustics and Noise Terminology

Noise is a complex physical quantity. Comprehension of noise exposure and the DNL metric used in environmental studies requires comprehension of the basic elements that are used to quantitatively analyze sound or noise. This chapter introduces the following acoustic metrics, all related to DNL:

- Decibel (dB)
- A-Weighted Decibel
- Maximum Sound Level (L_{max})
- Sound Exposure Level (SEL)
- Equivalent Sound Level (L_{eq})
- Day-Night Average Sound Level (DNL)

E.1.1.1 The Decibel (dB)

All sounds come from a sound source (e.g., a musical instrument, a voice speaking, or an airplane that passes overhead). It takes energy to produce sound. The sound energy produced by any sound source is transmitted through the air in sound waves – tiny, quick oscillations of pressure just above and just below atmospheric pressure. These oscillations, or sound pressures, impinge on the ear, creating the sound we hear.

Our ears are sensitive to a wide range of sound pressures but our ears are incapable of detecting small differences among these pressures. Therefore, the concept of sound pressure

[1] *Average Annual Day (AAD)* is a noise modeling metric used to normalize day-to-day variations in aviation operations over a one year period, calculated as the total number of annual operations divided by 365 (i.e., the number of days in a year).

level (SPL) is employed to better match how humans hear this sound energy, compressing the total range of sound pressures to a more meaningful range. SPL is a measurement of the sound pressure from a given noise source, compared to a standard reference value (typically the quietest sound that a young person with good hearing can detect).

SPL is measured and expressed in terms of *decibels* (dB). SPL is a logarithm of the squared ratio of two pressures, the numerator being the pressure of the sound source of interest, and the denominator being the *reference pressure* (i.e., the quietest sound we can hear). After logarithmic conversion of sound pressure to SPL, the quietest sounds we can hear (i.e., reference pressure) have SPLs of approximately zero (0) decibels, while the loudest sounds we hear without pain have SPLs of about 120 dB. Most sounds in our daily environment have SPLs from 30 to 100 dB.

Decibels are logarithmic quantities and do not compound like common numerical values. For example, if two sound sources each produce 100 dB and are operating concurrently, they would produce only 103 dB, not 200 dB as we might expect. Four equal sources at 100 dB operating simultaneously would result in a total sound pressure level of 106 dB. In fact, as the number of equal sources doubles, SPL rises only three (3) decibels.

If one source is much louder than another is, the two sources together will produce the same SPL (and sound to our ears) as if the louder source were operating alone. For example, a 100 dB source plus an 80 dB source produces 100 dB when operating together. The louder source "masks" the quieter one, but if the quieter source gets louder, it will have an increasing effect on the total SPL.

People hear SPL changes according to the following rules of thumb: 1) generally, a change of 1 dB or less in a given SPL is not readily perceptible, except in a laboratory setting; 2) a 5-dB change in a sound level is considered to be generally noticeable in a community setting; and 3) it takes approximately a 10-dB increase or decrease to be heard as a doubling or halving of a sound's loudness, respectively.

E.1.1.2 A-Weighted Decibel

Frequency (i.e., pitch), another important characteristic of sound, is the rate of repetition of the sound pressure oscillations as they reach our ears, expressed in units known as Hertz (Hz). The human ear does not respond equally to identical noise levels at different frequencies. The normal frequency range of hearing for most people extends from a low of approximately 20 Hz to a high of 10,000 to 20,000 Hz. However, people are most sensitive to sounds in the voice range, between approximately 500 Hz to 2,000 Hz. Therefore, to correlate the amplitude of a sound with its level as perceived by people, the sound energy spectrum is adjusted, or "weighted."

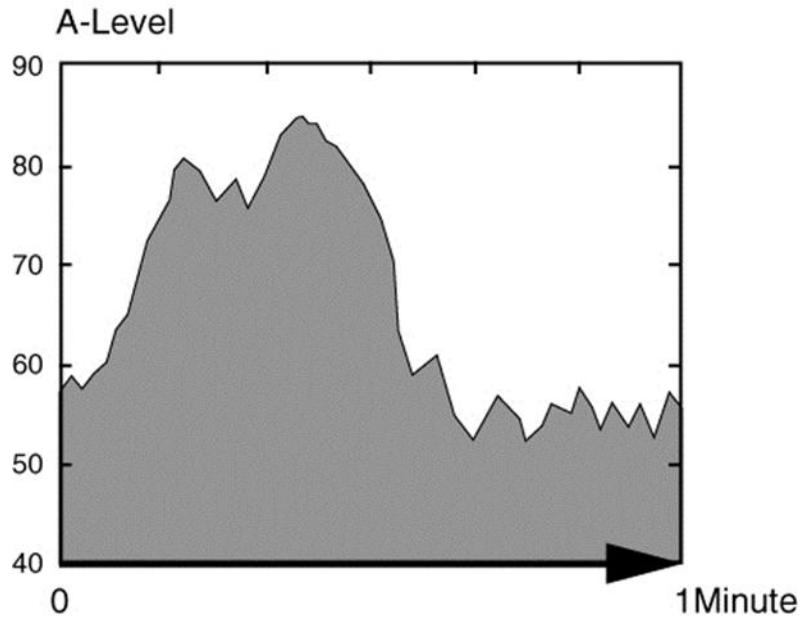
The weighting system most commonly used to correlate with human response to environmental noise is "A-weighting" (i.e., the "A-filter") and the resultant noise level is called the A-weighted sound level. A-weighting significantly de-emphasizes those parts of the frequency spectrum from a noise source that occurs both at lower frequencies (below 500 Hz) and at very high frequencies (above 10,000 Hz) that people do not hear well. The filter has very little effect, or is nearly "flat," in the middle range of frequencies, between 500 and 10,000 Hz. In addition to representing human hearing sensitivity, A-weighted sound levels have been found to correlate better than other weighting networks with human perception of "noisiness." Due to its

correlation with human hearing, the A-weighted level has been adopted as the basic measure of environmental noise by the EPA, and by nearly every other Federal and state agency concerned with community noise.

E.1.1.3 Maximum A-Weighted Noise Level (L_{max})

A-weighted sound levels vary with time. For example, as an aircraft approaches, the sound level increases, then falls and blends into the background as the aircraft recedes into the distance (though even the background varies as birds chirp or the wind blows or a vehicle passes by). This variation in sound level over time often makes it convenient to describe a particular noise "event" by its maximum sound level, abbreviated as L_{max}. Figure E.1-1 illustrates this concept showing an L_{max} of approximately 85 dB.

Figure E.1-1 Variations in the A-Weighted Sound Level Over Time



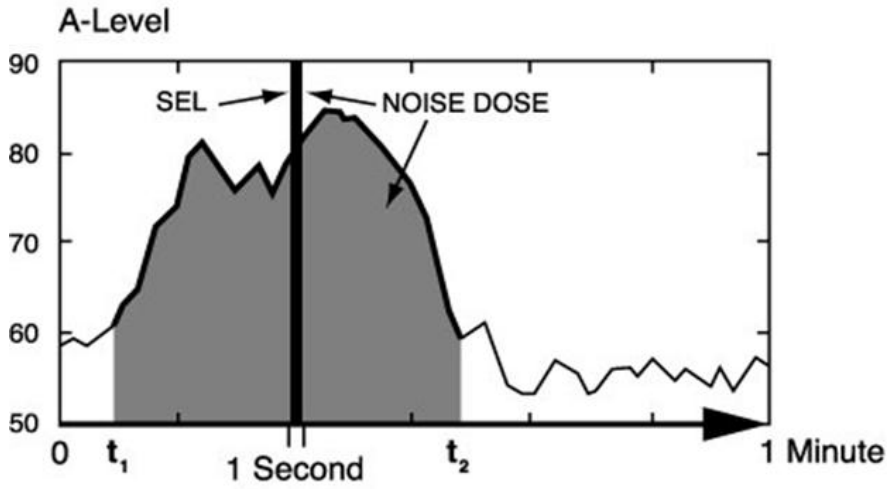
The maximum level describes only one dimension of an event but provides no information about cumulative noise exposure. In fact, two events with identical maxima may produce very different total exposures. One may be of very short duration, while the other may continue for an extended period and be perceived as much more annoying. To account for this deficiency, the *Sound Exposure Level* metric is used.

E.1.1.4 Sound Exposure Level (SEL)

Sound Exposure Level (SEL), the most frequently used measure of noise exposure for an individual aircraft noise event, measures the total noise energy produced during an event, from the time when the A-weighted sound level first exceeds a threshold (normally just above the background or ambient noise) to the time that it again drops below the threshold. To allow comparison of noise events with very different durations, SEL “normalizes” the duration in every case to one second. SEL is expressed as the steady noise level with just a one-second duration, which includes the same amount of noise energy as the actual longer duration, time-varying noise. In other words, SEL “squeezes” the entire noise event into one second. Figure E.1-2 depicts this transformation, with the shaded area representing the energy included in an

SEL measurement for the noise event, where the threshold is set to approximately 60 dB. The darkly shaded vertical bar, which is 90 dB high and just one second long (wide), contains exactly the same sound energy as the full event.

Figure E.1-2 Sound Exposure Level



Because the SEL is normalized to one second, its value will always be larger than the L_{max} for an event longer than one second will. In this case, the SEL is 90 dB and the L_{max} is approximately 85 dB. For most aircraft overflights, the SEL is normally approximately 7 to 12 dB higher than L_{max}. Because SEL considers duration, longer exposure to relatively slow, quieter aircraft, such as propeller models, can yield the same or higher SEL values than a shorter duration exposure to faster, louder aircraft, such as corporate jets.

Aircraft noise models use SEL as the basis for computing exposure from multiple events, as in computing DNL.

E.1.1.5 Day-Night Average Sound Level (DNL)

FAA requires that airports use a more complex measurement of noise exposure than either a single, peak event metric like L_{max} or single event total noise energy metric like SEL. Neither of these metrics would adequately characterize cumulative noise exposure during an AAD, thus requiring development of the DNL noise metric. Based on the following considerations, the EPA has identified DNL as the most appropriate means[2] of evaluating airport noise:

1. The measure should be applicable to the evaluation of pervasive long-term noise in various defined areas, under various conditions, over long periods.

2. The measure should correlate well with known effects of the noise environment, and on individuals and the public.

3. The measure should be simple, practical, and accurate. In principal, it should be useful for planning as well as for enforcement or monitoring purposes.

[2] EPA, "Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety," Report No. 550/9-74-004, March 1974.

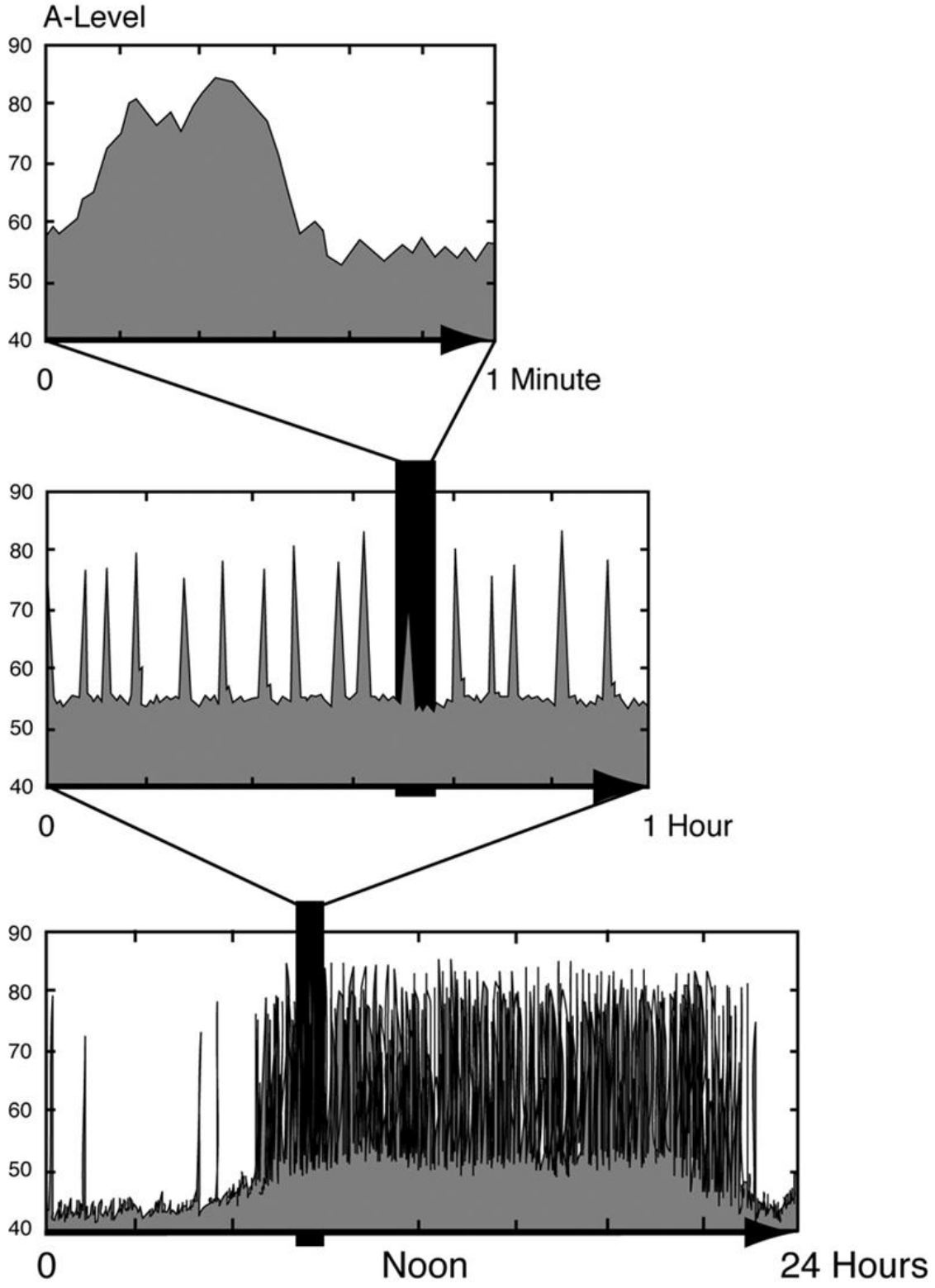
4. The required measurement equipment, with standard characteristics, should be commercially available.
5. The measure should be closely related to existing methods currently in use.
6. The single measure of noise at a given location should be predictable, within an acceptable tolerance, from knowledge of the physical events producing the noise.
7. The measure should lend itself to small, simple monitors, which can be left unattended in public areas for long periods.

The FAA and most other Federal agencies have formally adopted DNL when evaluating effects (primarily community annoyance) from aircraft operations in or near an airport.

The DNL metric represents noise as it occurs over a 24-hour period, with one important exception: DNL treats noise occurring at night differently from daytime noise. In determining DNL, the metric assumes that the A-weighted levels occurring at night (defined as 10 p.m. to 7 a.m.) are 10 dB louder than they actually are. This 10 dB increase is applied to account for the fact that there is a greater sensitivity to nighttime noise, and the fact that events at night are often perceived to be more intrusive because nighttime ambient noise is less than daytime ambient noise.

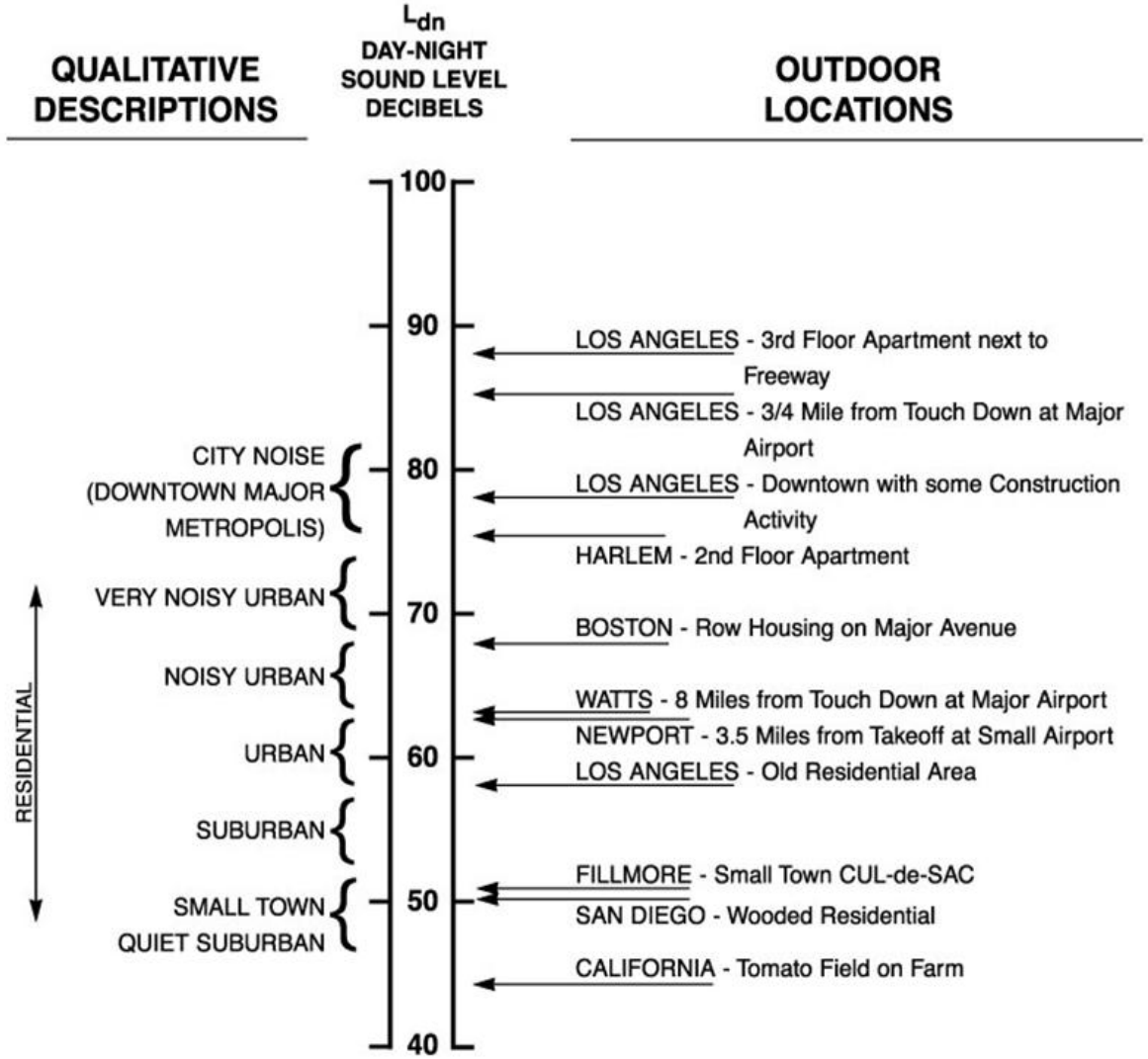
The manner by which these metrics build upon each other is illustrated in Figure E.1-3. A single event, peak (L_{max} or instantaneous) sound pressure level is transformed into a noise exposure metric (SEL) that accounts for and allows comparison of the magnitude and duration of the event by describing it in terms of energy over a constant duration (1 second). Figure E.1-1 illustrates changes to A-weighted sound level occurring during a single aircraft overflight event, repeated in the top frame of Figure E.1-3. The shaded area reflects the noise dose that a listener receives during the one-minute period of the sample. The center frame of Figure E.1-3 includes this one-minute sample within a full hour. The shaded area represents the noise during that hour with sixteen (16) discrete noise events, each producing a SEL. Similarly, the bottom frame includes the one-hour interval within a full 24 hours. Here, the shaded area represents the listener's noise dose over a complete day. Note that several overflights occur when the background noise drops some 10 dB, to approximately 45 dB

Figure E.1-3 Daily Noise Dose



While DNL can be measured or estimated, measurements are practical only for obtaining DNL values for relatively limited numbers of points, and, in the absence of a permanently installed monitoring system, only for relatively short time periods. Most airport and airspace noise studies are based on computer-generated DNL estimates, determined by accounting for all of the SEL values from individual events that comprise the total noise dose at a given location. Computed DNL values are often depicted in terms of equal-exposure noise contours (much as topographic maps have contours delineating points of equal elevation), or by color-coded grid points representing population centroids, specific noise sensitive sites (e.g., schools or places of worship), or non-specific but uniform coverage of a large study area. Figure E.1-4 depicts typical DNL values for a variety of noise environments.

Figure E.1-4 Examples of Day-Night Average Sound Levels, DNL[3]



[3] EPA, "Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety," p. 14, March 1974.

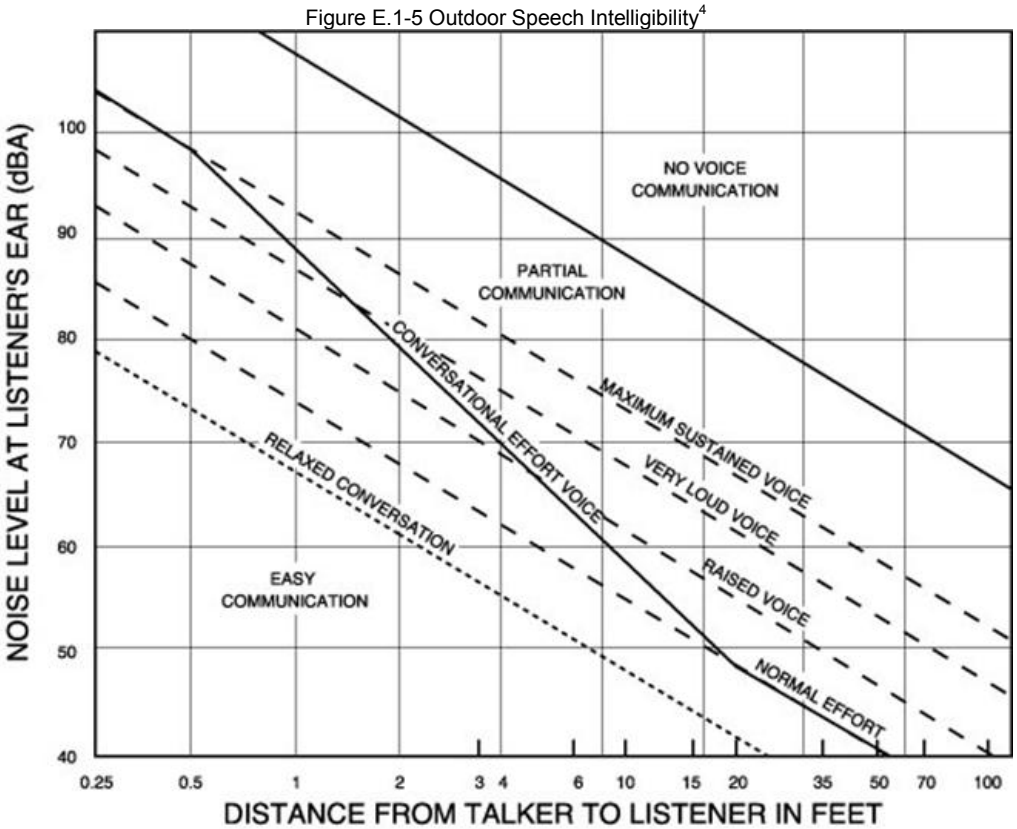
E.1.2 The Effects of Aircraft Noise on People

To residents around airports, aircraft noise can be an annoyance and a nuisance. It can interfere with conversation and listening to television, disrupt classroom activities in schools, and disrupt sleep. Relating these effects to specific noise metrics helps in the understanding of how and why people react to their environment.

E.1.2.1 Speech Interference

A primary effect of aircraft noise is its tendency to drown out or "mask" speech, making it difficult to carry on a normal conversation. The sound level of speech decreases as the distance between a talker and listener increases. As the background sound level increases, it becomes harder to hear speech. Figure E.1-5 presents typical distances between talker and listener for satisfactory outdoor conversations, in the presence of different steady A-weighted background noise levels for raised, normal, and relaxed voice effort. As the background level increases, the talker must raise his/her voice, or the individuals must move closer for improved intelligibility.

Figure E.1-5 Outdoor Speech Intelligibility[4]



As indicated in the figure, "satisfactory conversation" does not always require hearing every word; 95 percent intelligibility is acceptable for many conversations. Listeners can infer a few unheard words when they occur in a familiar context. However, in relaxed conversation, we have higher expectations of hearing speech and generally require closer to 100 percent intelligibility. Any combination of talker-listener distances and background noise that falls below

[4] EPA, "Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety," p. D-5, March 1974.

the bottom line in Figure E.1-5 (thus assuring 100% intelligibility) represents an ideal environment for outdoor speech communication and is considered necessary for acceptable indoor conversation as well.

One implication of the relationships in Figure E.1-5 is that for typical communication distances of 3 to 4 ft. (1 to 1.5 m), acceptable outdoor conversations can be carried on in a normal voice as long as the background noise outdoors is less than about 65 dB. If the noise exceeds this level, as might occur when an aircraft passes overhead, intelligibility would be lost unless vocal effort were increased or communication distance were decreased.

Indoors, typical distances, voice levels, and intelligibility expectations generally require a background level less than 45 dB. With windows partly open, housing generally provides approximately 10 to 15 dB of interior-to-exterior noise level reduction. Thus, if the outdoor sound level is 60 dB or less, there a reasonable chance that the resulting indoor sound level will afford acceptable conversation. With windows closed, 24 dB of attenuation is typical.

E.1.2.2 Sleep Interference

Research on sleep disruption from noise has led to widely varying observations. In part, this is because (1) sleep can be disturbed without awakening; (2) the deeper the sleep the more noise it takes to cause arousal; and (3) the tendency to awaken increases with age, and other factors. Figure E.1-6 shows a recent summary of findings on the topic.

Figure E.1-6 Sleep Interference[5]

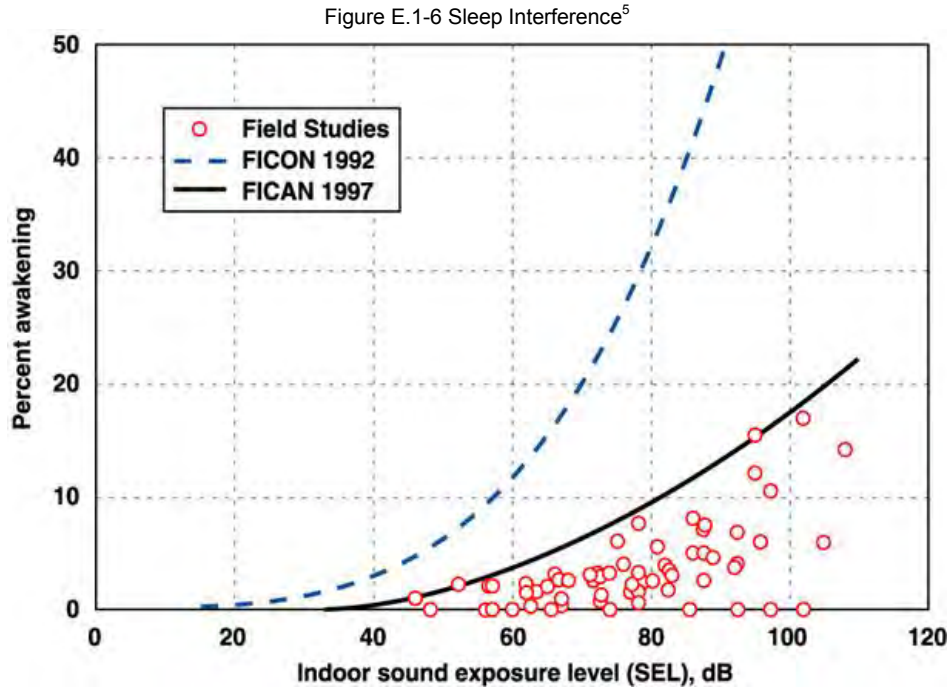


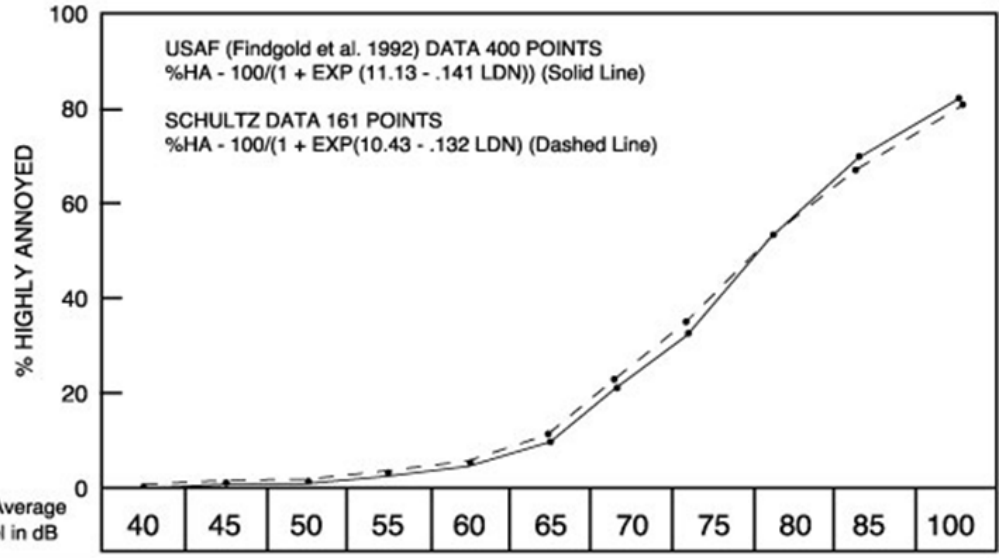
Figure E.1-6 uses indoor SEL as the measure of noise exposure as recent research supports the use of this metric in assessing sleep disruption. An indoor SEL of 80 dB results in a maximum of 10% awakening.

[5] Federal Interagency Committee on Aviation Noise (FICAN), "Effects of Aviation Noise on Awakenings from Sleep," p. 6, June 1997.

E.1.3 Community Annoyance

Numerous psychoacoustic surveys provide substantial evidence that individual reactions to noise vary widely for a given noise exposure level. However, research has confirmed that a community's aggregate response is generally predictable and relates reasonably well to measures of cumulative noise exposure such as DNL. Figure E.1-7 shows the widely recognized relationship between environmental noise and the percentage of people "highly annoyed," with annoyance being the key indicator of community response usually cited in this body of research.

Figure E.1-7 Percentage of People "Highly Annoyed"[6]



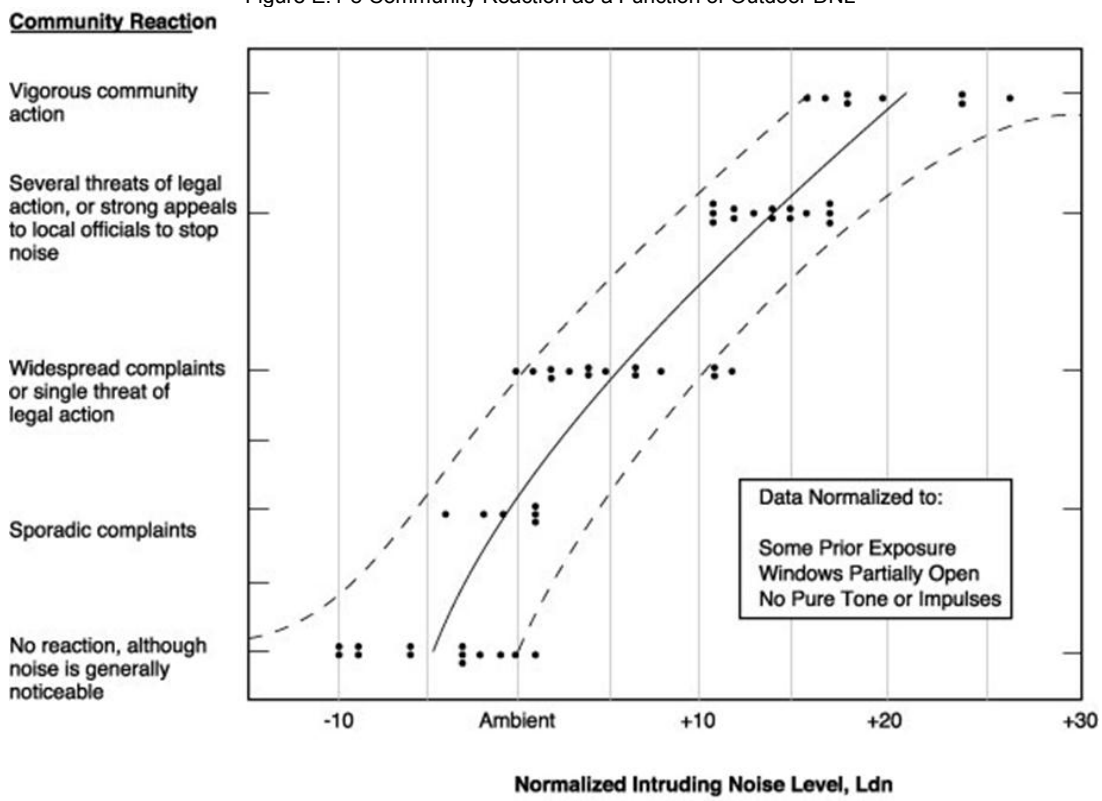
Day - Night Average Sound Level in dB		40	45	50	55	60	65	70	75	80	85	100
Calculated %HA Points	USAF	0.41	0.831	1.66	3.31	6.48	12.29	22.1	36.47	53.74	70.16	82.64
	SCHULTZ	0.576	1.11	2.12	4.03	7.52	13.59	23.32	37.05	53.25	68.78	81

Based on data from 18 surveys conducted worldwide, the curve indicates that at levels as low as DNL 55 dB, something on the order of 3 to 4 percent of people would be "highly annoyed," whereas this percentage of persons annoyed increases more rapidly as exposure increases above DNL 65 dB.

Separate work by the EPA has shown that overall community reaction to a noise environment is also dependent on DNL, as depicted in Figure E.1-8. Levels have been normalized to the same set of exposure conditions to permit valid comparisons between ambient noise environments. Data summarized in that figure suggest that little reaction would be expected for intrusive noise levels 5 dB below ambient, while widespread complaints can be expected as intruding noise exceeds background levels by about five decibels. Vigorous action is likely when the background is exceeded by 20 dB.

[6] FICAN, "Federal Agency Review of Selected Airport Noise Analysis Issues," pp. 3-6, August 1992; applied using data provided by USAF Armstrong Laboratory.

Figure E.1-8 Community Reaction as a Function of Outdoor DNL[7]



E.1.4 Noise/Land Use Compatibility Guidelines

The FAA, other Federal agencies, and several states have developed guidelines for identifying land use compatibility – for more noise-sensitive land use, noise exposure should be lower in order to achieve compatibility. Thus, DNL serves two principal purposes for aviation noise analysis:

- Provides a basis for comparing existing and future noise conditions
- Provides a quantitative basis for identifying potential noise impacts

Both of these functions require the application of objective criteria for evaluating noise impacts. *Code of Federal Regulations*, Title 14, Part 150 provides the FAA's recommended guidelines for determining noise/land use compatibility. According to these FAA guidelines, all identified land uses – even those that are more noise sensitive – normally are compatible with aircraft noise at DNL levels below 65 dB. The significance of this level is formally supported in standards adopted by the U. S. Department of Housing and Urban Development (HUD). *Code of Federal Regulations*, Title 24, Part 51 indicates that areas exposed to DNL levels less than or equal to 65 dB are acceptable for HUD funding. Areas exposed to noise levels between DNL 65 dB and 75 dB are "normally unacceptable," and require special abatement measures and review. Those at DNL 75 dB and above are "unacceptable" except under very limited circumstances.

[7] EPA, Office of Noise Abatement and Control, "Community Noise," p. 63, December 1971, prepared by Wyle Laboratories.

E.2 INTEGRATED NOISE MODEL (INM) TECHNICAL REPORT

The same noise metric and noise model was used to compute all noise exposure contours and other evaluations prepared for this Part 150 Study Update for Chicago Midway International Airport (MDW).

E.2.1 Noise Metric

The FAA has stipulated that noise exposure maps (NEMs) prepared for Part 150 studies will be based on the annual DNL. This noise metric was developed under the auspices of the USEPA and embodies extensive information regarding the physical description of transportation noise as related to human annoyance in residential areas. DNL is defined as the average A-weighted sound level during a 24-hour period with a 10 dB penalty applied to noise events that occur at night (10:00 p.m. to 6:59 a.m.). Noise exposure contours are lines connecting points of equal noise level; for this Part 150 study, these levels are 65 DNL, 70 DNL, and 75 DNL.

E.2.2 Noise Model

The noise levels were computed during this study using Version 7.0c of the Integrated Noise Model (INM). The INM was developed under the guidance of the FAA and is the only model generally approved by the FAA for use in Part 150 studies. The noise pattern calculated by the INM for an airport is a function of several factors, including; the number of aircraft operations during the period evaluated, the types of aircraft flown, the time of day when they are flown, the way they are flown, how frequently each runway is used for landing and takeoff, and the routes of flight used to and from the runways. Substantial variations in any one of these factors, when extended over a long period of time, may cause marked changes to the noise pattern.

E.2.3 Comparability of Conditions

Noise evaluations for the Existing (2012) condition of this Part 150 Study are based on actual operating levels at MDW during the 2011 calendar year. Data representative of an average-annual day of operations were developed from the CDA's Airport Noise Management System (ANMS). This data included the number of arrival and departure operations by individual types of aircraft during daytime and nighttime periods, the distribution of aircraft activities among the runway ends, and the distribution of aircraft along the flight paths leading to or from each runway. The current year NEM is labeled 2012 and is based on data collection and analysis which began in 2011.

The total annual operations on which the Existing Conditions (2012) NEM is based is 257,800. The FAA's January 2012 Terminal Area Forecast (TAF) projects 260,157 annual operations for the calendar year 2012, which is a difference of less than one percent from the actual calendar year 2011 data. In addition, no notable changes in aircraft fleet mix occurred between 2011 and 2012. Therefore, the data on which the 2012 NEM is based is reflective of actual conditions in 2012.

Per 14 CFR Part 150 requirements, the future noise contour on the official NEMs are to be dated at least five years after the date of submission. Since the FAA developed future flight procedure assumptions for the year 2018, the future noise contour for the MDW Part 150 is 2018 (six years after the date of submission).

The Future (2018) noise exposure contour is based upon the 2012 noise contour, the FAA's 2012 Terminal Area Forecast (TAF), new flight procedures proposed by the FAA, the utilization of the new flight procedures developed by the FAA, future runway use changes developed by the FAA and fleet mix assumptions developed by the FAA. The TAF was based upon information regarding aviation industry trends and specific airline activity at MDW that was available at the time. The 2012 TAF was the most current FAA forecast that was available at the time noise modeling began. Table E.2-2 shows the 2012 TAF.

E.2.4 Noise Modeling Input Data

Several types of operational information are required to produce noise exposure patterns for an airport. These include estimates of the numbers of actual operations by specific aircraft types at different periods of the day, flight path locations, runway and flight path utilization, and aircraft operating characteristics.

E.2.4.1 Number of Operations

The total annual operations on which the Existing Conditions (2012) NEM is based is 257,800. Table E.2-1 shows the number of aircraft by category estimated to operate at MDW during the Existing (2012) and Future (2018) years.

The total number of operations for the Future Conditions (2018) was derived from the FAA Terminal Area Forecast (TAF) of 298,650. Table E.2-1 also presents the average daily numbers of aircraft operations (calculated by dividing the annual total by 365 days) for the categories of aircraft operating at MDW.

Table E.2-1 Midway Airport Summary of Modeled Annual Operations

Aircraft Category	Annual		Average Day		Percent	
	2012	2018	2012	2018	2012	2018
Passenger	197,672	231,903	542	635	76.7%	77.7%
GA	57,828	64,447	158	177	22.4%	21.6%
Military	2,300	2,300	6	6	0.9%	0.8%
Total	257,800	298,650	706	818	100%	100%
Source: CDA, "2013 Part 150 Study Update," Appendix D, Table D-1.						

Table E.2-2 Midway Airport Summary of Modeled Annual Operations

APO TERMINAL AREA FORECAST DETAIL REPORT
Forecast Issued January 2012
REGION:AGL **STATE:**IL **LOCID:**MDW
CITY:CHICAGO **AIRPORT:**CHICAGO MIDWAY INTL

AIRCRAFT OPERATIONS									
	Itinerant Operations					Local Operations			
Fiscal Year	Air Carrier	Air Taxi & Commuter	GA	Military	Total	Civil	Military	Total	Total Ops
2012	187,531	26,491	43,790	2,295	260,107	24	26	50	260,157
2013	192,654	26,451	43,834	2,291	265,230	24	26	50	265,280
2014	199,319	26,854	43,878	2,287	272,338	24	26	50	272,388
2015	205,563	27,548	43,922	2,287	279,320	24	26	50	279,370
2016	212,046	28,287	43,966	2,283	286,582	24	26	50	286,632
2017	217,464	28,765	44,010	2,279	292,518	24	26	50	292,568
2018	223,020	29,251	44,054	2,275	298,600	24	26	50	298,650
Source: FAA TAF, January 2012									

E.2.4.2 Day-Night Distribution

The time of day that operations (i.e. both arrivals and departures) occur is also a key component of the INM input. It is important to the computation of the cumulative average noise level because a penalty of ten decibels is assigned to each operation that occurs at night (between the hours of 10:00 p.m. and 6:59 a.m.). The distribution between daytime and nighttime was developed for each individual aircraft type and operation type based on the radar data from the Airport Noise Management System. On an average day in 2011, approximately 9% of aviation traffic operating at MDW occurred during the nighttime hours (10:00 p.m. to 6:59 a.m.). The Day-Night splits developed from the data sample were used for the Existing (2012) as well as the Future (2018) noise exposure contours. Table E.2-3 presents a summary of the Day-Night percentages used for noise modeling for each operational category at MDW.

Table E.2-3 Midway Airport Summary of Day-Night Operational Distributions

Aircraft Category	Arrivals		Departures	
	Day	Night	Day	Night
Passenger	90%	10%	92%	8%
GA	90%	10%	92%	8%
Military	100%	0%	100%	0%

Note: Day = 7:00 a.m. to 9:59 p.m., Night = 10:00 p.m. to 6:59 a.m.
Source: CDA, "2013 Part 150 Study Update"

E.2.4.3 Aircraft Fleet Mix

The distribution of the operations (i.e. both arrivals and departures) among the many types of aircraft available within the INM database is another important component of the INM input data. The distribution among types for this analysis was based on actual radar data from the CDA's Airport Noise Management System (ANMS). The ANMS data provided actual aircraft types operating at Midway. The average daily operations by aircraft type for MDW is presented in Table E.2-4. The table presents the average daily operations by aircraft type for day and night, the INM type, and by fleet mix percentage. The majority of the fleet mix at the airport is expected to essentially remain unchanged over the five-year period through 2018.

E.2.4.4 Runway Utilization

The usage of the runways at the airport is another principal element in the definition of the noise exposure pattern. Generally, the primary factor determining runway use at an airport is the weather and prevailing wind conditions at the time of a flight.

The INM uses runway utilization to distribute aircraft onto the correct runway end by type of operation (arrival or departure). This distribution for Existing Conditions (2012) was developed based on radar data from the Airport Noise Management System. The distribution for Future Conditions (2018) was provided by the FAA and based on future levels of activity, aircraft fleet mix, and usage of new arrival procedures. Tables D-5 and D-6, Runway Use - *Existing (2012) & Future (2018), respectively,* illustrate a summary of the overall runway use modeled.

Table E.2-4 Midway Airport Average Day Operations by Aircraft Type

Aircraft Type	INM Type	Existing (2012)				Future (2018)			
		Day	Night	Total	Percent of Fleet	Day	Night	Total	Percent of Fleet
Jets									
Boeing 717	717200	16.89	2.65	19.54	2.79%	19.5	2.78	22.29	2.72%
Boeing 737-500	737500	15.03	2.5	17.53	2.50%	17.22	2.87	20.09	2.46%
Boeing 737-700	737700	312.18	33.69	345.87	49.41%	456.93	44.63	501.57	61.30%
Boeing 737-800	737800	0.3	0.1	0.4	0.06%	0.44	0.14	0.58	0.07%
Boeing 727-200 (FedEx-Hushkit)	727EM2	0.05	0.01	0.06	0.01%	0.07	0.03	0.1	0.01%
Boeing 737-300	7373B2	79.05	8.06	87.11	12.44%	4.83	0.45	5.28	0.64%
Boeing 757-200	757PW	0.03	0.01	0.04	0.01%	0.04	0.01	0.05	0.01%
Boeing 757-200	757RR	0.03	0.01	0.04	0.01%	0.04	0.01	0.05	0.01%
Airbus A319	A319-131	16.51	3.41	19.93	2.85%	19.5	3.46	22.95	2.81%
Airbus A320	A320-211	2.12	0.53	2.65	0.38%	2.48	0.65	3.13	0.38%
Canadair Regional Jet 700	CL601	10.69	0.52	11.2	1.60%	11.64	0.58	12.22	1.49%
Canadair Regional Jet	CLREGJ	10.85	0.38	11.23	1.60%	16.15	0.44	16.59	2.03%
Cessna 550	CNA55B	2.65	0.3	2.95	0.42%	3.1	0.32	3.42	0.42%
Cessna 650	CNA650	3.54	0.18	3.71	0.53%	4.5	0.28	4.78	0.58%
Cessna 750	CNA750	5.85	0.29	6.14	0.88%	7.87	0.43	8.31	1.02%
Canadair CRJ701	CRJ701	0.06	0	0.06	0.01%	0.08	0	0.08	0.01%
Canadair CRJ900	CRJ900	0.67	0	0.67	0.10%	0.69	0	0.69	0.08%
Dornier 328-300	D328J	1.34	0.02	1.36	0.19%	1.77	0.03	1.8	0.22%
McDonnell Douglas DC-9	DC93LW	0.08	0	0.08	0.01%	0.09	0	0.09	0.01%
McDonnell Douglas DC-9	DC95HW	0.03	0.01	0.04	0.00%	0.03	0.01	0.03	0.00%
Embraer 145	EMB145	0.92	0	0.92	0.13%	1.04	0	1.04	0.13%
Embraer 170	EMB170	13.38	1.25	14.62	2.09%	15.23	1.23	16.47	2.01%
Dassault Falcon 20	FAL20	3.43	0.86	4.29	0.61%	4.54	0.98	5.52	0.68%
Gulfstream GIIB	GIIB	5.69	0.25	5.94	0.85%	6.38	0.27	6.65	0.81%
Gulfstream IV	GIV	7.88	1.86	9.74	1.39%	9.11	1.9	11.01	1.35%
Gulfstream GV	GV	1.44	0.16	1.6	0.23%	1.68	0.16	1.85	0.23%
Lear 25	LEAR25	0.14	0.02	0.16	0.02%	0.17	0.02	0.19	0.02%
Lear 35	LEAR35	11.59	0.88	12.47	1.78%	12.51	0.91	13.42	1.64%
McDonnell Douglas MD81	MD81	0.01	0	0.01	0.00%	0.01	0	0.01	0.00%
McDonnell Douglas MD83	MD83	0.1	0	0.1	0.01%	0.13	0	0.13	0.02%
MU3001	MU3001	4.84	2.48	7.32	1.05%	5.56	2.51	8.07	0.99%
Sabreliner 80	SABR80	0.28	0.02	0.3	0.04%	0.33	0.02	0.35	0.04%
Subtotal		**527.65**	**60.45**	**588.08**	**84.00%**	**623.66**	**65.12**	**688.81**	**84.19%**
Props									
Beechcraft 1900	BEC190	2.71	0.27	2.98	0.43%	3.04	0.34	3.38	0.41%
Twin Engine Piston Prop	BEC58P	15.22	2.76	17.98	2.57%	20.05	3.64	23.69	2.90%
Beechcraft F90 Super King Air	BEC9F	1.98	0.33	2.31	0.33%	2.92	0.42	3.35	0.41%
Cessna 172	CNA172	4.88	0.06	4.94	0.71%	5.9	0.08	5.97	0.73%
Light Twin Engine Turboprop	CNA441	0.21	0.03	0.24	0.03%	0.3	0.04	0.34	0.04%
DASH 8	DHC8	18.27	1.03	19.31	2.76%	21.23	1.12	22.35	2.73%
Single Engine Piston Prop (Fixed Pitch)	GASEPF	25.66	2.95	28.61	4.09%	27.79	3.13	30.92	3.78%
Single Engine Piston Prop (Variable Pitch)	GASEPV	33.76	1.36	35.12	5.02%	37.37	1.49	38.87	4.75%
SAAB 340	SF340	0.31	0.13	0.44	0.06%	0.39	0.16	0.56	0.07%
Subtotal		**103.00**	**8.92**	**111.93**	**16.00%**	**118.99**	**10.42**	**129.43**	**15.82%**
Military									
Sikorsky S-70	S70	6.3	0	6.3	0.01%	6.3	0	6.3	0.01%
Grand Total		**630.65**	**69.37**	**700.01**	**100%**	**742.65**	**75.54**	**818.24**	**100%**

Note: Day = 7:00 a.m. to 9:59 a.m., Night = 10:00 a.m. to 6:59 a.m.
Source: CDA, "2013 Part 150 Study Update," Appendix D, Table D-4.

Table E.2-5 Midway Airport Runway Use – Existing Conditions (2012)

Runway	Arrivals			Departures		
	Daytime	Nighttime	Total	Daytime	Nighttime	Total
04L	3.4%	0.8%	3.1%	4.7%	1.2%	4.4%
04R	36.3%	60.6%	39.0%	21.5%	29.2%	22.2%
13C	3.2%	0.6%	2.9%	3.2%	0.4%	3.0%
13L	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
13R	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
22L	19.9%	14.6%	19.3%	22.6%	21.6%	22.5%
22R	2.8%	0.7%	2.6%	3.1%	1.1%	2.9%
31C	30.6%	20.2%	29.5%	41.9%	43.8%	42.1%
31L	2.4%	0.3%	2.1%	2.2%	2.3%	2.2%
31R	1.2%	2.2%	1.3%	0.8%	0.4%	0.8%
Note: Totals may not add to 100 due to rounding						

Table E.2-6 Midway Airport Runway Use – Future Conditions (2018)

Runway	Arrivals			Departures		
	Daytime	Nighttime	Total	Daytime	Nighttime	Total
04L	2.7%	0.7%	2.5%	4.7%	1.2%	4.4%
04R	29.2%	54.0%	31.6%	21.4%	30.6%	22.2%
13C	13.7%	3.7%	12.7%	7.5%	1.0%	6.9%
13L	0.2%	0.0%	0.2%	0.1%	0.0%	0.1%
13R	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%
22L	22.5%	17.4%	22.0%	22.6%	22.5%	22.5%
22R	3.2%	0.9%	3.0%	3.0%	1.1%	2.9%
31C	25.5%	20.9%	25.0%	38.1%	41.1%	38.3%
31L	2.0%	0.3%	1.8%	2.0%	2.1%	2.0%
31R	1.0%	2.0%	1.1%	0.7%	0.3%	0.7%
Note: Totals may not add to 100 due to rounding						

E.2.4.5 Flight Track Locations and Use

To determine projected noise levels on the ground, it is necessary to determine not only how many aircraft are present, but also the route along which they fly. Therefore, flight route information is a key element of the INM input data. In order to ensure that the INM modeling accurately reflects local conditions in the Chicago area it is necessary to develop noise modeling tracks from a sample of detailed radar data. A twelve-month sample of radar flight track data was acquired and analyzed for traffic into and out of MDW. The sample included the months of January through December of 2011. This sampling provides 365 days of data, including some 125,000+ arrival tracks and 125,000+ departure tracks, and is distributed throughout the year to cover any seasonal differences in weather or flight conditions. This detailed information allowed for the development of an exhaustive and rigorous database of flight tracks for the noise modeling effort.

Noise modeling tracks were developed for Existing Conditions (2012) by a detailed analysis of 2011 radar data. The data was separated first by operation type (i.e., arrival, departure) and then by aircraft type and runway. Primary flight corridors were identified then used to develop bundles of radar tracks based on runway, aircraft category (i.e., jet, prop), and route similarity. Once the radar track bundles were complete, the development of noise modeling input tracks in the INM was initiated.

Development of primary, or backbone, flight tracks for each radar track bundle was created along with simultaneous computation of sub-tracks that are located adjacent to the backbone track. These sub-tracks account for the dispersion of actual flights along the primary flight corridor based on the distribution of radar tracks within each bundle. Once the number of sub-tracks is determined, the distributional factors in combination with the statistical lateral distribution of the radar tracks at many locations along the flight corridor are used to determine the appropriate spacing between the sub-tracks at each location. The number of sub-tracks and the distributional factors associated with each model track are chosen by the user based on the number of radar tracks in the bundle and their general spread throughout the route.

The development of noise model flight tracks resulted in the creation of 245 backbone departure tracks representing the primary flight corridors and geometry from all of the runways at MDW. These backbone tracks also included 956 sub-tracks to account for the typical flight dispersion along the corridors. Consequently, 1,201 unique departure flight tracks were input into the INM to represent the flight paths from MDW. Similarly, the analysis of the arrival radar tracks resulted in the development of 212 backbone arrival tracks for the runways at MDW. These backbones were supplemented with 604 sub-tracks to account for the dispersion of arrival flights in the primary corridors for each runway. Thus, more than 816 arrival tracks were input into the INM for the MDW noise contour modeling.

In some cases, it may seem the INM tracks are more extensive than that of a typical day of actual flight tracks, but the INM tracks are based on the entire calendar year of 2011 and incorporate the long-term variations in dispersion that are not always evident in a single day of radar data. Also, it should be noted that the INM tracks may represent a fraction of a flight where traffic is relatively sparse or multiple flights where traffic is denser.

During the course of the preparation of this study, the FAA was in the process of developing new flight procedures for MDW. These procedures consisted of new Area Navigation (RNAV) and Required Navigational Performance (RNP) approaches into runways 04R, 13C, 22L and 31C. As part of this effort, future runway use, fleet mix and use of the new and conventional procedures were also developed by the FAA. Future runway use is shown in Table E.2-6 and utilization of the new procedures is detailed in Table E.2-7.

RNAV and RNP procedures are generally either departure or arrival procedures that are defined based on two or three dimensional points rather than ground-based navigational aids. This allows for flexibility in route design as well as leveraging newer technology such a satellite-based navigation. The RNP procedures add an extra dimension of precision using an onboard performance monitoring and alerting capability. A defining characteristic of RNP operations is the ability of the aircraft navigation system to monitor the navigation performance it achieves and inform the crew if the requirement is not met during an operation. This onboard monitoring and alerting capability enhances the pilot's situational awareness and can enable reduced obstacle clearance or closer route spacing without intervention by air traffic control. The practical effect of RNP procedures is that routes are generally flown more precisely with significantly less dispersion along flight tracks depending on the degree of precision specified by the RNP procedure.

In addition to new advanced arrival procedures, the new future 22L arrival procedures will impact eastbound departures for runways 13L, 13C, 13R, 22L, 22R, 31L, 31C and 31R. This will only occur while aircraft are arriving runway 22L. When 22L arrivals are not occurring, eastbound departures will continue to operate as they do today.

When 22L arrivals are occurring, departures for runways 22L, 22R, 31L, 31C and 31R will make a left turn to an initial departure heading of 140 degrees until approximately four nautical miles south of the 22L arrival traffic. Once south of the 22L arrival traffic, aircraft will turn to an east heading. When 22L arrivals are occurring, departures for runways 13L, 13C and 13R will continue straight or turn slightly right to an initial departure heading of 140 degrees until approximately four nautical miles south of the 22L arrival traffic. Once south of the 22L arrival traffic, aircraft will turn to an east heading. New INM departure tracks were created to reflect this change.

Table E.2-7 New Flight Procedures Utilization

Arrivals								
RWY	Type	Category	Direction	Group	2012		2018	
					%	Ops[1]	%	Ops[2]
04R	RNP	New	East	SWA	0.0%	0.0	25.5%	33.0
				GA	0.0%	0.0	2.0%	2.6
	RNP	New	West	SWA	0.0%	0.0	20.4%	26.4
				GA	0.0%	0.0	2.0%	2.6
	Conventional[3]	Existing	Multiple	All	100.0%	135.2	50.1%	64.8
	TOTAL				**100.0%**	**135.2**	**100.0%**	**129.4**
13C	RNP	New	South	SWA	0.0%	0.0	1.9%	1.0
				GA	0.0%	0.0	1.5%	0.8
	RNP	New	Southwest	SWA	0.0%	0.0	22.5%	11.7
				GA	0.0%	0.0	1.5%	0.8
	RNP	New	West	SWA	0.0%	0.0	20.3%	10.6
				GA	0.0%	0.0	1.5%	0.8
	Conventional[3]	Existing	Multiple	All	100.0%	10.1	50.7%	26.4
	TOTAL				**100.0%**	**10.1**	**100.0%**	**52.1**
22L	GPS	New	East	SWA	0.0%	0.0	36.0%	32.4
				Other	0.0%	0.0	7.0%	6.3
	RNP	New	East	SWA	0.0%	0.0	25.5%	22.9
				GA	0.0%	0.0	1.4%	1.3
	RNP	New	West	SWA	0.0%	0.0	8.2%	7.4
				GA	0.0%	0.0	1.4%	1.3
	Conventional[3]	Existing	Multiple	All	100.0%	67.1	20.4%	18.3
	TOTAL				**100.0%**	**67.1**	**100.0%**	**89.9**
31C	RNP	New	South	SWA	0.0%	0.0	25.5%	26.1
				GA	0.0%	0.0	2.0%	2.0
	RNP	New	West	SWA	0.0%	0.0	20.4%	20.9
				GA	0.0%	0.0	2.0%	2.0
	Conventional[3]	Existing	Multiple	All	100.0%	103.2	50.1%	51.3
	TOTAL				**100.0%**	**103.2**	**100.0%**	**102.3**

Notes:
1. Based on an Annual Average Day (AAD) of the Existing Conditions (2012).
2. Based on an Annual Average Day (AAD) of the Total Annual Operations of 298,650, FAA's Terminal Area Forecast (TAF), January 2012, FAA runway utilization forecast, July 2012 and procedure utilization in above table.
3. Consists of existing flights paths with the exception of the existing 13C RNP.

- Year 2018 percentages for SWA are based on a 2% increase from Year 2013.
- SWA Fleet: B737-700 & B737-800 are 100% RNP & GPS; B737-300 are 5% RNP & GPS and B737-500 are 50% RNP & GPS equipped.
- SWA will reduce the B737-300 to 1% of their operations at MDW in 2018; B737-700 and B737-800 will increase proportionally.
- Other Fleet: CLREGJ, CRJ701, CRJ900, EMB145, EMB170, CL601, CNA441, CNA500, CNA55B, CNA650, CNA750, GIV, GV, LEAR35, MU3001.
- GA represents the following aircraft: CNA441, CNA500, CNA55B, CNA650, CNA750, GIV, GV and LEAR35.
- Operations for runways 04L, 13L, 13R, 22R, 31L and 31R are not shown.
- New STAR Procedures (ENDEE, FISSK, GARFIELD and GOSHEN) are not shown.

Tables E.2-8 and E.2-9 provide the arrival and departure flight track utilization percentages modeled for the Existing (2012) conditions and Future (2018) conditions.

Table E.2-8 Midway Airport Arrival Flight Track Utilization by Aircraft Category – Existing (2012) and Future (2018) Conditions

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
04L	JAND11	0.002%	0.000%	0.000%	0.000%	0.002%	0.000%	0.000%	0.000%
	JAND22	0.207%	1.968%	0.000%	0.061%	0.118%	1.648%	0.000%	0.052%
	JAND26	0.006%	0.006%	0.000%	0.000%	0.005%	0.005%	0.000%	0.000%
	JAND27	0.001%	0.001%	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%
	JAND33	0.198%	0.006%	0.000%	0.000%	0.156%	0.005%	0.000%	0.000%
	JANN26	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	PAND11	0.000%	0.191%	0.000%	0.000%	0.000%	0.158%	0.000%	0.000%
	PAND18	0.000%	0.005%	0.000%	0.000%	0.000%	0.005%	0.000%	0.000%
	PAND22	0.000%	0.199%	0.000%	0.000%	0.000%	0.156%	0.000%	0.000%
	PAND23	0.000%	0.007%	0.000%	0.000%	0.000%	0.005%	0.000%	0.000%
	PAND26	0.000%	0.006%	0.000%	0.000%	0.000%	0.005%	0.000%	0.000%
	PAND27	0.000%	0.005%	0.000%	0.000%	0.000%	0.004%	0.000%	0.000%
	PAND28	0.000%	0.005%	0.000%	0.000%	0.000%	0.004%	0.000%	0.000%
	PAND33	0.000%	0.218%	0.000%	0.000%	0.000%	0.100%	0.000%	0.000%
	PAND34	0.000%	0.023%	0.000%	0.000%	0.000%	0.019%	0.000%	0.000%
	PAND35	0.000%	0.006%	0.000%	0.000%	0.000%	0.005%	0.000%	0.000%
	PANN11	0.000%	0.000%	0.000%	0.007%	0.000%	0.000%	0.000%	0.005%
	PANN22	0.000%	0.000%	0.000%	0.013%	0.000%	0.000%	0.000%	0.010%
	PANN26	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%
	PANN33	0.000%	0.000%	0.000%	0.002%	0.000%	0.000%	0.000%	0.002%
	PANN34	0.000%	0.000%	0.000%	0.002%	0.000%	0.000%	0.000%	0.002%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
04R	JAOD11	0.005%	0.001%	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%
	JAOD16	0.001%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	JAOD22	14.490%	0.008%	0.000%	0.000%	5.481%	0.007%	0.000%	0.000%
	JAOD28	0.072%	0.025%	0.000%	0.000%	0.048%	0.021%	0.000%	0.000%
	JAOD29	0.029%	0.008%	0.000%	0.000%	0.019%	0.007%	0.000%	0.000%
	JAOD33	15.255%	0.004%	0.000%	0.000%	5.597%	0.003%	0.000%	0.000%
	JAOD35	0.047%	0.028%	0.000%	0.000%	0.024%	0.024%	0.000%	0.000%
	JAODRE	0.000%	0.000%	0.000%	0.000%	7.252%	0.002%	1.438%	0.000%
	JAODRW	0.000%	0.000%	0.000%	0.000%	5.907%	0.002%	1.171%	0.000%
	JAON11	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	JAON22	0.000%	0.000%	1.699%	0.000%	0.000%	0.000%	0.579%	0.000%
	JAON28	0.000%	0.000%	0.005%	0.001%	0.000%	0.000%	0.003%	0.001%
	JAON29	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%	0.000%
	JAON33	0.000%	0.000%	4.645%	0.000%	0.000%	0.000%	1.831%	0.000%
	JAON35	0.000%	0.000%	0.004%	0.001%	0.000%	0.000%	0.004%	0.001%
	PAOD11	0.000%	0.381%	0.000%	0.000%	0.000%	0.319%	0.000%	0.000%
	PAOD22	0.029%	0.568%	0.000%	0.000%	0.023%	0.462%	0.000%	0.000%
	PAOD24	0.000%	0.531%	0.000%	0.043%	0.000%	0.439%	0.000%	0.035%
	PAOD25	0.000%	0.074%	0.000%	0.000%	0.000%	0.063%	0.000%	0.000%
	PAOD26	0.000%	0.003%	0.000%	0.000%	0.000%	0.003%	0.000%	0.000%
	PAOD33	0.000%	0.818%	0.000%	0.049%	0.000%	0.675%	0.000%	0.041%
	PAON11	0.000%	0.000%	0.000%	0.007%	0.000%	0.000%	0.000%	0.006%
	PAON17	0.000%	0.000%	0.000%	0.003%	0.000%	0.000%	0.000%	0.003%
	PAON18	0.000%	0.000%	0.000%	0.003%	0.000%	0.000%	0.000%	0.002%
	PAON22	0.000%	0.000%	0.000%	0.006%	0.000%	0.000%	0.000%	0.005%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
04R		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
	PAON24	0.000%	0.000%	0.000%	0.009%	0.000%	0.000%	0.000%	0.007%
	PAON25	0.000%	0.000%	0.000%	0.017%	0.000%	0.000%	0.000%	0.014%
	PAON26	0.000%	0.000%	0.000%	0.002%	0.000%	0.000%	0.000%	0.002%
	PAON33	0.000%	0.000%	0.000%	0.099%	0.000%	0.000%	0.000%	0.081%
	PAON34	0.000%	0.000%	0.000%	0.003%	0.000%	0.000%	0.000%	0.003%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
13C	JAQD16	0.004%	0.000%	0.000%	0.000%	0.014%	0.000%	0.000%	0.000%
	JAQD24	0.027%	0.010%	0.000%	0.000%	0.096%	0.043%	0.000%	0.000%
	JAQD25	0.012%	0.010%	0.000%	0.000%	0.059%	0.043%	0.000%	0.000%
	JAQD27	0.096%	0.038%	0.000%	0.000%	0.330%	0.170%	0.000%	0.000%
	JAQD28	0.069%	0.047%	0.000%	0.000%	0.325%	0.213%	0.000%	0.000%
	JAQD32	0.561%	0.003%	0.028%	0.000%	1.989%	0.013%	0.070%	0.000%
	JAQD36	0.004%	0.001%	0.000%	0.000%	0.017%	0.005%	0.000%	0.000%
	JAQD39	0.413%	0.000%	0.008%	0.000%	0.000%	0.000%	0.000%	0.000%
	JAQD41	1.431%	0.003%	0.000%	0.000%	2.231%	0.015%	0.000%	0.000%
	JAQDRS	0.000%	0.000%	0.000%	0.000%	0.430%	0.003%	0.013%	0.000%
	JAQDRSW	0.000%	0.000%	0.000%	0.000%	2.954%	0.003%	0.087%	0.000%
	JAQDRW	0.000%	0.000%	0.000%	0.000%	2.707%	0.003%	0.079%	0.000%
	JAQN24	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.006%	0.000%
	JAQN27	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.005%	0.000%
	JAQN28	0.000%	0.000%	0.001%	0.004%	0.000%	0.000%	0.005%	0.019%
	JAQN36	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.003%	0.001%
	JAQN41	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.001%	0.000%
	PAQD12	0.000%	0.002%	0.000%	0.000%	0.000%	0.007%	0.000%	0.000%
	PAQD14	0.000%	0.001%	0.000%	0.000%	0.000%	0.006%	0.000%	0.000%
	PAQD25	0.000%	0.001%	0.000%	0.000%	0.000%	0.003%	0.000%	0.000%
	PAQD26	0.000%	0.029%	0.000%	0.000%	0.000%	0.135%	0.000%	0.000%
	PAQD27	0.000%	0.005%	0.000%	0.000%	0.000%	0.022%	0.000%	0.000%
	PAQD31	0.000%	0.107%	0.000%	0.000%	0.000%	0.504%	0.000%	0.000%
	PAQD33	0.000%	0.008%	0.000%	0.000%	0.000%	0.035%	0.000%	0.000%
	PAQN12	0.000%	0.000%	0.000%	0.006%	0.000%	0.000%	0.000%	0.028%
	PAQN18	0.000%	0.000%	0.000%	0.006%	0.000%	0.000%	0.000%	0.026%
	PAQN25	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.002%
	PAQN26	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.002%
	PAQN31	0.000%	0.000%	0.000%	0.002%	0.000%	0.000%	0.000%	0.008%
	PAQN33	0.000%	0.000%	0.000%	0.002%	0.000%	0.000%	0.000%	0.011%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
13L	JAPD23	0.001%	0.001%	0.000%	0.000%	0.004%	0.004%	0.000%	0.000%
	PAPD11	0.000%	0.014%	0.000%	0.000%	0.000%	0.044%	0.000%	0.000%
	PAPD22	0.000%	0.014%	0.000%	0.000%	0.000%	0.055%	0.000%	0.000%
	PAPD33	0.000%	0.016%	0.000%	0.000%	0.000%	0.050%	0.000%	0.000%
	PAPN11	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.002%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
13R	PARD23	0.000%	0.005%	0.000%	0.000%	0.000%	0.036%	0.000%	0.000%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
13R		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
	PARD24	0.000%	0.001%	0.000%	0.000%	0.000%	0.005%	0.000%	0.000%
	PARD31	0.000%	0.005%	0.000%	0.000%	0.000%	0.031%	0.000%	0.000%
	PARD32	0.000%	0.006%	0.000%	0.000%	0.000%	0.038%	0.000%	0.000%
	PARN11	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.001%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
22L	JASD11	0.001%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	JASD12	0.002%	0.001%	0.000%	0.000%	0.001%	0.001%	0.000%	0.000%
	JASD26	9.291%	0.017%	0.000%	0.032%	1.717%	0.020%	0.000%	0.039%
	JASD27	0.003%	0.002%	0.000%	0.000%	0.001%	0.002%	0.000%	0.000%
	JASD33	0.007%	0.003%	0.000%	0.000%	0.006%	0.004%	0.000%	0.000%
	JASD34	7.173%	0.009%	0.003%	0.000%	0.957%	0.011%	0.000%	0.000%
	JASD35	0.002%	0.001%	0.000%	0.000%	0.001%	0.001%	0.000%	0.000%
	JASD35A	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	JASD35B	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%
	JASD35C	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%
	JASD35D	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%
	JASDGE	0.000%	0.000%	0.000%	0.000%	8.733%	0.001%	0.723%	0.000%
	JASDRE	0.000%	0.000%	0.000%	0.000%	5.483%	0.001%	0.454%	0.000%
	JASDRW	0.000%	0.000%	0.000%	0.000%	1.969%	0.001%	0.163%	0.000%
	JASN11	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	JASN12	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	JASN26	0.000%	0.000%	0.597%	0.000%	0.000%	0.000%	0.103%	0.000%
	JASN27	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	JASN33	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.002%	0.000%
	JASN34	0.000%	0.000%	0.793%	0.000%	0.000%	0.000%	0.014%	0.000%
	JASN35	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	JASN35E	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	JASN35F	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	PASD110	0.000%	0.003%	0.000%	0.000%	0.000%	0.004%	0.000%	0.000%
	PASD17	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%
	PASD18	0.000%	0.002%	0.000%	0.000%	0.000%	0.003%	0.000%	0.000%
	PASD21	0.000%	0.461%	0.000%	0.000%	0.000%	0.505%	0.000%	0.000%
	PASD22	0.000%	0.007%	0.000%	0.000%	0.000%	0.008%	0.000%	0.000%
	PASD23	0.000%	0.544%	0.000%	0.040%	0.000%	0.633%	0.000%	0.049%
	PASD34	0.000%	0.002%	0.000%	0.000%	0.000%	0.003%	0.000%	0.000%
	PASD35	0.000%	0.195%	0.000%	0.000%	0.000%	0.221%	0.000%	0.000%
	PASD36	0.000%	0.016%	0.000%	0.000%	0.000%	0.019%	0.000%	0.000%
	PASD37	0.000%	0.003%	0.000%	0.000%	0.000%	0.004%	0.000%	0.000%
	PASN111	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.002%
	PASN113	0.000%	0.000%	0.000%	0.004%	0.000%	0.000%	0.000%	0.005%
	PASN17	0.000%	0.000%	0.000%	0.011%	0.000%	0.000%	0.000%	0.012%
	PASN18	0.000%	0.000%	0.000%	0.005%	0.000%	0.000%	0.000%	0.006%
	PASN21	0.000%	0.000%	0.000%	0.068%	0.000%	0.000%	0.000%	0.076%
	PASN22	0.000%	0.000%	0.000%	0.002%	0.000%	0.000%	0.000%	0.002%
	PASN23	0.000%	0.000%	0.000%	0.002%	0.000%	0.000%	0.000%	0.003%
	PASN312	0.000%	0.000%	0.000%	0.011%	0.000%	0.000%	0.000%	0.014%
	PASN35	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	PASN36	0.000%	0.000%	0.000%	0.007%	0.000%	0.000%	0.000%	0.008%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
22L		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
	PASN37	0.000%	0.000%	0.000%	0.004%	0.000%	0.000%	0.000%	0.005%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
22R	JATD13	0.001%	0.000%	0.000%	0.000%	0.002%	0.000%	0.000%	0.000%
	JATD19	0.001%	0.000%	0.000%	0.000%	0.002%	0.000%	0.000%	0.000%
	JATD21	0.526%	0.011%	0.000%	0.000%	0.561%	0.012%	0.000%	0.000%
	JATD36	0.003%	0.004%	0.000%	0.000%	0.003%	0.005%	0.000%	0.000%
	JATD37	0.001%	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%
	JATN21	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	JATN37	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	PATD11	0.000%	0.010%	0.000%	0.000%	0.000%	0.012%	0.000%	0.000%
	PATD12	0.000%	0.035%	0.000%	0.000%	0.000%	0.037%	0.000%	0.000%
	PATD13	0.000%	0.040%	0.000%	0.000%	0.000%	0.042%	0.000%	0.000%
	PATD26	0.000%	0.172%	0.000%	0.000%	0.000%	0.181%	0.000%	0.000%
	PATD27	0.000%	0.007%	0.000%	0.000%	0.000%	0.008%	0.000%	0.000%
	PATD28	0.000%	0.022%	0.000%	0.000%	0.000%	0.024%	0.000%	0.000%
	PATD29	0.000%	0.027%	0.000%	0.000%	0.000%	0.029%	0.000%	0.000%
	PATD31	0.000%	0.809%	0.000%	0.000%	0.000%	0.932%	0.000%	0.000%
	PATD34	0.000%	0.018%	0.000%	0.000%	0.000%	0.118%	0.000%	0.000%
	PATD35	0.000%	0.070%	0.000%	0.000%	0.000%	0.078%	0.000%	0.000%
	PATD36	0.000%	0.682%	0.000%	0.039%	0.000%	0.777%	0.000%	0.045%
	PATD37	0.000%	0.003%	0.000%	0.000%	0.000%	0.004%	0.000%	0.000%
	PATD43	0.000%	0.046%	0.000%	0.000%	0.000%	0.048%	0.000%	0.000%
	PATN11	0.000%	0.000%	0.000%	0.004%	0.000%	0.000%	0.000%	0.005%
	PATN12	0.000%	0.000%	0.000%	0.005%	0.000%	0.000%	0.000%	0.006%
	PATN13	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%
	PATN26	0.000%	0.000%	0.000%	0.020%	0.000%	0.000%	0.000%	0.021%
	PATN28	0.000%	0.000%	0.000%	0.006%	0.000%	0.000%	0.000%	0.006%
	PATN31	0.000%	0.000%	0.000%	0.006%	0.000%	0.000%	0.000%	0.007%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
31C	JAVD212	0.002%	0.000%	0.000%	0.000%	0.002%	0.000%	0.000%	0.000%
	JAVD213	2.072%	0.668%	0.000%	0.000%	1.555%	0.587%	0.000%	0.000%
	JAVD23	3.002%	0.001%	0.303%	0.000%	0.688%	0.001%	0.261%	0.000%
	JAVD27	0.110%	0.060%	0.000%	0.000%	0.077%	0.053%	0.000%	0.000%
	JAVD310	17.727%	0.003%	0.002%	0.000%	5.694%	0.003%	0.000%	0.000%
	JAVD311	0.546%	0.452%	0.000%	0.000%	0.303%	0.300%	0.000%	0.000%
	JAVD314	0.317%	0.134%	0.000%	0.000%	0.176%	0.118%	0.000%	0.000%
	JAVD34	0.215%	0.084%	0.000%	0.000%	0.174%	0.074%	0.000%	0.000%
	JAVDRS	0.000%	0.000%	0.000%	0.000%	6.324%	0.002%	0.556%	0.001%
	JAVDRW	0.000%	0.000%	0.000%	0.000%	5.151%	0.002%	0.453%	0.001%
	JAVN212	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	JAVN213	0.000%	0.000%	0.105%	0.005%	0.000%	0.000%	0.086%	0.005%
	JAVN23	0.000%	0.000%	0.592%	0.000%	0.000%	0.000%	0.119%	0.000%
	JAVN27	0.000%	0.000%	0.007%	0.003%	0.000%	0.000%	0.006%	0.002%
	JAVN310	0.000%	0.000%	0.785%	0.000%	0.000%	0.000%	0.187%	0.000%
	JAVN311	0.000%	0.000%	0.025%	0.005%	0.000%	0.000%	0.024%	0.005%
	JAVN314	0.000%	0.000%	0.015%	0.002%	0.000%	0.000%	0.014%	0.002%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
31C		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
	JAVN34	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	PAVD13	0.000%	0.016%	0.000%	0.016%	0.000%	0.014%	0.000%	0.013%
	PAVD17	0.000%	0.019%	0.000%	0.000%	0.000%	0.016%	0.000%	0.000%
	PAVD21	0.000%	1.244%	0.000%	0.015%	0.000%	1.145%	0.000%	0.013%
	PAVD26	0.000%	0.029%	0.000%	0.000%	0.000%	0.026%	0.000%	0.000%
	PAVD32	0.000%	0.045%	0.000%	0.000%	0.000%	0.039%	0.000%	0.000%
	PAVD38	0.000%	0.505%	0.000%	0.118%	0.000%	0.438%	0.000%	0.105%
	PAVD39	0.000%	0.047%	0.000%	0.000%	0.000%	0.042%	0.000%	0.000%
	PAVN13	0.000%	0.000%	0.000%	0.008%	0.000%	0.000%	0.000%	0.007%
	PAVN17	0.000%	0.000%	0.000%	0.136%	0.000%	0.000%	0.000%	0.114%
	PAVN26	0.000%	0.000%	0.000%	0.013%	0.000%	0.000%	0.000%	0.012%
	PAVN32	0.000%	0.000%	0.000%	0.004%	0.000%	0.000%	0.000%	0.003%
	PAVN38	0.000%	0.000%	0.000%	0.022%	0.000%	0.000%	0.000%	0.019%
	PAVN39	0.000%	0.000%	0.000%	0.021%	0.000%	0.000%	0.000%	0.018%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
31L	PAUD13	0.000%	0.012%	0.000%	0.000%	0.000%	0.010%	0.000%	0.000%
	PAUD14	0.000%	0.031%	0.000%	0.000%	0.000%	0.027%	0.000%	0.000%
	PAUD21	0.000%	1.532%	0.000%	0.000%	0.000%	1.278%	0.000%	0.000%
	PAUD22	0.000%	0.410%	0.000%	0.017%	0.000%	0.359%	0.000%	0.015%
	PAUD35	0.000%	0.135%	0.000%	0.000%	0.000%	0.119%	0.000%	0.000%
	PAUN13	0.000%	0.000%	0.000%	0.005%	0.000%	0.000%	0.000%	0.004%
	PAUN21	0.000%	0.000%	0.000%	0.008%	0.000%	0.000%	0.000%	0.007%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
31R	JAWD15	0.017%	0.017%	0.000%	0.000%	0.017%	0.015%	0.000%	0.000%
	JAWD16	0.001%	0.001%	0.000%	0.000%	0.001%	0.001%	0.000%	0.000%
	JAWD21	0.264%	0.063%	0.133%	0.052%	0.218%	0.059%	0.108%	0.045%
	JAWD32	0.000%	0.002%	0.000%	0.000%	0.000%	0.002%	0.000%	0.000%
	JAWD33	0.006%	0.003%	0.000%	0.000%	0.005%	0.003%	0.000%	0.000%
	JAWD34	0.004%	0.007%	0.000%	0.000%	0.004%	0.006%	0.000%	0.000%
	PAWD13	0.000%	0.024%	0.000%	0.000%	0.000%	0.020%	0.000%	0.000%
	PAWD14	0.000%	0.084%	0.000%	0.000%	0.000%	0.069%	0.000%	0.000%
	PAWD21	0.000%	0.396%	0.000%	0.000%	0.000%	0.328%	0.000%	0.000%
	PAWD35	0.000%	0.192%	0.000%	0.000%	0.000%	0.159%	0.000%	0.000%
	PAWN13	0.000%	0.000%	0.000%	0.005%	0.000%	0.000%	0.000%	0.004%
	PAWN21	0.000%	0.000%	0.000%	0.043%	0.000%	0.000%	0.000%	0.035%
	PAWN35	0.000%	0.000%	0.000%	0.004%	0.000%	0.000%	0.000%	0.003%

Table E.2-9 Midway Airport Departure Flight Track Utilization by Aircraft Category – Existing (2012) and Future (2018) Conditions

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
04L	JDND54	0.003%	0.003%	0.000%	0.000%	0.027%	0.004%	0.000%	0.000%
	JDND57	0.000%	0.003%	0.000%	0.000%	0.000%	0.004%	0.000%	0.000%
	JDND65	0.448%	0.004%	0.000%	0.000%	0.483%	0.004%	0.000%	0.000%
	JDND68	0.007%	0.011%	0.000%	0.000%	0.007%	0.012%	0.000%	0.000%
	JDND71	0.000%	0.003%	0.000%	0.000%	0.000%	0.003%	0.000%	0.000%
	JDND72	0.410%	0.003%	0.000%	0.000%	0.398%	0.004%	0.000%	0.000%
	JDND83	0.001%	0.005%	0.000%	0.000%	0.001%	0.005%	0.000%	0.000%
	JDND86	0.004%	0.003%	0.000%	0.000%	0.004%	0.004%	0.000%	0.000%
	JDNN65	0.000%	0.000%	0.002%	0.000%	0.000%	0.000%	0.002%	0.000%
	JDNN72	0.000%	0.000%	0.007%	0.000%	0.000%	0.000%	0.007%	0.000%
	JDNS68	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	PDND52	0.000%	0.132%	0.000%	0.000%	0.000%	0.135%	0.000%	0.000%
	PDND56	0.000%	0.019%	0.000%	0.000%	0.000%	0.020%	0.000%	0.000%
	PDND63	0.000%	1.069%	0.000%	0.000%	0.000%	1.038%	0.000%	0.000%
	PDND64	0.000%	0.008%	0.000%	0.000%	0.000%	0.008%	0.000%	0.000%
	PDND75	0.000%	0.007%	0.000%	0.000%	0.000%	0.007%	0.000%	0.000%
	PDND76	0.000%	1.981%	0.000%	0.000%	0.000%	1.911%	0.000%	0.000%
	PDND81	0.000%	0.167%	0.000%	0.000%	0.000%	0.171%	0.000%	0.000%
	PDNN52	0.000%	0.000%	0.000%	0.006%	0.000%	0.000%	0.000%	0.006%
	PDNN56	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%
	PDNN63	0.000%	0.000%	0.000%	0.029%	0.000%	0.000%	0.000%	0.030%
	PDNN75	0.000%	0.000%	0.000%	0.020%	0.000%	0.000%	0.000%	0.019%
	PDNN76	0.000%	0.000%	0.000%	0.003%	0.000%	0.000%	0.000%	0.003%
	PDNN81	0.000%	0.000%	0.000%	0.041%	0.000%	0.000%	0.000%	0.039%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
04R	JDOD51	0.143%	0.001%	0.000%	0.000%	0.150%	0.001%	0.000%	0.000%
	JDOD55	1.469%	0.000%	0.000%	0.000%	1.410%	0.000%	0.000%	0.000%
	JDOD62	1.263%	0.133%	0.000%	0.000%	1.252%	0.141%	0.000%	0.000%
	JDOD69	0.679%	0.083%	0.000%	0.000%	0.720%	0.088%	0.000%	0.000%
	JDOD710	0.114%	0.020%	0.000%	0.000%	0.121%	0.021%	0.000%	0.000%
	JDOD711	0.070%	0.005%	0.000%	0.000%	0.075%	0.005%	0.000%	0.000%
	JDOD73	8.457%	0.004%	0.000%	0.000%	8.027%	0.004%	0.000%	0.000%
	JDOD84	3.806%	0.012%	0.000%	0.000%	4.209%	0.013%	0.000%	0.000%
	JDOD85	0.040%	0.018%	0.000%	0.000%	0.040%	0.020%	0.000%	0.000%
	JDOD86	0.480%	0.000%	0.000%	0.000%	0.504%	0.000%	0.000%	0.000%
	JDON51	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%	0.000%
	JDON55	0.000%	0.000%	0.400%	0.000%	0.000%	0.000%	0.414%	0.000%
	JDON62	0.000%	1.847%	0.575%	0.149%	0.000%	1.772%	0.595%	0.141%
	JDON69	0.000%	0.000%	0.005%	0.000%	0.000%	0.000%	0.006%	0.000%
	JDON710	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%	0.000%
	JDON711	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%	0.000%
	JDON73	0.000%	0.000%	0.742%	0.000%	0.000%	0.000%	0.768%	0.000%
	JDON85	0.000%	0.000%	0.000%	0.037%	0.000%	0.000%	0.000%	0.040%
	JDON86	0.000%	0.000%	0.186%	0.000%	0.000%	0.000%	0.193%	0.000%
	JDOS51	0.000%	0.000%	0.005%	0.000%	0.000%	0.000%	0.005%	0.000%
	JDOS55	0.000%	0.000%	0.005%	0.000%	0.000%	0.000%	0.005%	0.000%
	JDOS62	0.000%	0.000%	0.024%	0.000%	0.000%	0.000%	0.025%	0.000%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
04R		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
	JDOS69	0.000%	0.000%	0.025%	0.001%	0.000%	0.000%	0.026%	0.001%
	JDOS710	0.000%	0.000%	0.004%	0.001%	0.000%	0.000%	0.004%	0.001%
	JDOS711	0.000%	0.000%	0.003%	0.001%	0.000%	0.000%	0.004%	0.001%
	JDOS84	0.000%	0.000%	0.181%	0.037%	0.000%	0.000%	0.181%	0.040%
	PDOD51	0.000%	0.151%	0.000%	0.029%	0.000%	0.157%	0.000%	0.029%
	PDOD62	0.000%	0.572%	0.000%	0.047%	0.000%	0.570%	0.000%	0.045%
	PDOD73	0.000%	0.071%	0.000%	0.000%	0.000%	0.074%	0.000%	0.000%
	PDOD84	0.000%	0.122%	0.000%	0.000%	0.000%	0.128%	0.000%	0.000%
	PDON51	0.000%	0.000%	0.000%	0.050%	0.000%	0.000%	0.000%	0.053%
	PDON62	0.000%	0.000%	0.000%	0.019%	0.000%	0.000%	0.000%	0.020%
	PDON66	0.000%	0.000%	0.000%	0.015%	0.000%	0.000%	0.000%	0.016%
	PDON73	0.000%	0.000%	0.000%	0.053%	0.000%	0.000%	0.000%	0.056%
	PDON75	0.000%	0.000%	0.000%	0.003%	0.000%	0.000%	0.000%	0.003%
	PDON84	0.000%	0.000%	0.000%	0.011%	0.000%	0.000%	0.000%	0.012%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
	JDQD54	0.005%	0.000%	0.000%	0.000%	0.012%	0.000%	0.000%	0.000%
	JDQD65	0.896%	0.003%	0.003%	0.000%	1.368%	0.007%	0.007%	0.000%
	JDQD651	0.008%	0.002%	0.000%	0.000%	0.020%	0.005%	0.000%	0.000%
	JDQD710	0.000%	0.011%	0.000%	0.000%	0.000%	0.026%	0.000%	0.000%
	JDQD711	0.177%	0.053%	0.000%	0.000%	0.435%	0.131%	0.000%	0.000%
	JDQD712	0.217%	0.043%	0.000%	0.000%	0.523%	0.104%	0.000%	0.000%
	JDQD83	0.744%	0.001%	0.000%	0.000%	2.118%	0.003%	0.000%	0.000%
	JDQD87	0.005%	0.003%	0.000%	0.000%	0.011%	0.007%	0.000%	0.000%
	JDQD87B	0.000%	0.003%	0.000%	0.000%	0.000%	0.007%	0.000%	0.000%
	JDQD88	0.007%	0.003%	0.000%	0.000%	0.017%	0.007%	0.000%	0.000%
	JDQD881	0.592%	0.000%	0.000%	0.000%	1.493%	0.000%	0.001%	0.000%
	JDQD891	0.005%	0.000%	0.000%	0.000%	0.011%	0.000%	0.000%	0.000%
	JDQDVE1	0.000%	0.000%	0.000%	0.000%	0.061%	0.000%	0.000%	0.000%
13C	JDQDVE2	0.000%	0.000%	0.000%	0.000%	0.061%	0.000%	0.000%	0.000%
	JDQN65	0.000%	0.000%	0.002%	0.000%	0.000%	0.000%	0.004%	0.000%
	JDQN87	0.000%	0.000%	0.002%	0.000%	0.000%	0.000%	0.004%	0.000%
	JDQN881	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.002%
	JDQS651	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.002%
	JDQS710	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.002%	0.000%
	PDQD32	0.000%	0.001%	0.000%	0.000%	0.000%	0.004%	0.000%	0.000%
	PDQD61	0.000%	0.063%	0.000%	0.000%	0.000%	0.147%	0.000%	0.000%
	PDQD65	0.000%	0.015%	0.000%	0.000%	0.000%	0.038%	0.000%	0.000%
	PDQD72	0.000%	0.058%	0.000%	0.000%	0.000%	0.143%	0.000%	0.000%
	PDQD81	0.000%	0.019%	0.000%	0.000%	0.000%	0.046%	0.000%	0.000%
	PDQN61	0.000%	0.000%	0.000%	0.006%	0.000%	0.000%	0.000%	0.016%
	PDQN65	0.000%	0.000%	0.000%	0.003%	0.000%	0.000%	0.000%	0.008%
	PDQN72	0.000%	0.000%	0.000%	0.013%	0.000%	0.000%	0.000%	0.031%
	PDQN81	0.000%	0.000%	0.000%	0.007%	0.000%	0.000%	0.000%	0.017%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
13L	PDPD61	0.000%	0.007%	0.000%	0.000%	0.000%	0.025%	0.000%	0.000%
	PDPD65	0.000%	0.009%	0.000%	0.000%	0.000%	0.031%	0.000%	0.000%
	PDPD72	0.000%	0.010%	0.000%	0.000%	0.000%	0.036%	0.000%	0.000%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
13L		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
	PDPD81	0.000%	0.002%	0.000%	0.000%	0.000%	0.008%	0.000%	0.000%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
13R	PDRD63	0.000%	0.003%	0.000%	0.000%	0.000%	0.003%	0.000%	0.000%
	PDRD72	0.000%	0.011%	0.000%	0.000%	0.000%	0.011%	0.000%	0.000%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
22L	JDSD55	0.423%	0.000%	0.000%	0.000%	0.182%	0.000%	0.000%	0.000%
	JDSD55B	0.019%	0.001%	0.000%	0.000%	0.019%	0.002%	0.000%	0.000%
	JDSD55C	0.013%	0.000%	0.000%	0.000%	0.013%	0.000%	0.000%	0.000%
	JDSD55D	0.006%	0.001%	0.000%	0.000%	0.006%	0.002%	0.000%	0.000%
	JDSD58	0.404%	0.000%	0.000%	0.000%	0.179%	0.000%	0.000%	0.000%
	JDSD63	0.407%	0.001%	0.000%	0.000%	0.183%	0.001%	0.000%	0.000%
	JDSD64	3.421%	0.006%	0.000%	0.000%	1.124%	0.006%	0.000%	0.000%
	JDSD67	0.024%	0.008%	0.000%	0.000%	0.025%	0.008%	0.000%	0.000%
	JDSD71	0.060%	0.003%	0.000%	0.000%	0.054%	0.003%	0.000%	0.000%
	JDSD71B	6.387%	0.004%	0.000%	0.000%	6.531%	0.004%	0.000%	0.000%
	JDSD71C	3.396%	0.003%	0.000%	0.000%	3.469%	0.003%	0.000%	0.000%
	JDSD82	5.574%	0.006%	0.000%	0.000%	5.701%	0.007%	0.000%	0.000%
	JDSD82B	0.012%	0.005%	0.000%	0.000%	0.013%	0.005%	0.000%	0.000%
	JDSD82F	0.001%	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%
	JDSDVE1	0.000%	0.000%	0.000%	0.000%	0.907%	0.000%	0.078%	0.000%
	JDSDVE2	0.000%	0.000%	0.000%	0.000%	0.907%	0.000%	0.078%	0.000%
	JDSDVE3	0.000%	0.000%	0.000%	0.000%	0.907%	0.000%	0.078%	0.000%
	JDSN58	0.000%	0.000%	0.139%	0.000%	0.000%	0.000%	0.070%	0.000%
	JDSN64	0.000%	0.000%	0.312%	0.000%	0.000%	0.000%	0.156%	0.000%
	JDSN67	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%	0.000%
	JDSN71	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	JDSN71B	0.000%	0.000%	0.966%	0.000%	0.000%	0.000%	0.988%	0.000%
	JDSN71C	0.000%	0.000%	0.007%	0.000%	0.000%	0.000%	0.007%	0.000%
	JDSN82	0.000%	0.000%	0.310%	0.000%	0.000%	0.000%	0.317%	0.000%
	JDSN82E	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	JDSS63	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	JDSS64	0.000%	0.000%	0.010%	0.000%	0.000%	0.000%	0.010%	0.000%
	JDSS67	0.000%	0.000%	0.008%	0.000%	0.000%	0.000%	0.008%	0.000%
	JDSS71	0.000%	0.000%	0.002%	0.000%	0.000%	0.000%	0.003%	0.000%
	JDSS71B	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%	0.000%
	JDSS71C	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	JDSS82B	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%	0.000%
	PDSD53	0.000%	0.002%	0.000%	0.000%	0.000%	0.002%	0.000%	0.000%
	PDSD54	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	PDSD55	0.000%	0.016%	0.000%	0.000%	0.000%	0.017%	0.000%	0.000%
	PDSD66	0.000%	0.096%	0.000%	0.000%	0.000%	0.095%	0.000%	0.000%
	PDSD67	0.000%	0.003%	0.000%	0.000%	0.000%	0.003%	0.000%	0.000%
	PDSD68	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%
	PDSD710	0.000%	0.012%	0.000%	0.000%	0.000%	0.013%	0.000%	0.000%
	PDSD711	0.000%	0.006%	0.000%	0.000%	0.000%	0.006%	0.000%	0.000%
	PDSD79	0.000%	0.118%	0.000%	0.000%	0.000%	0.068%	0.000%	0.000%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
22L		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
	PDSD81	0.000%	0.096%	0.000%	0.000%	0.000%	0.095%	0.000%	0.000%
	PDSD82	0.000%	0.009%	0.000%	0.000%	0.000%	0.009%	0.000%	0.000%
	PDSN53	0.000%	0.000%	0.000%	0.003%	0.000%	0.000%	0.000%	0.003%
	PDSN54	0.000%	0.000%	0.000%	0.011%	0.000%	0.000%	0.000%	0.012%
	PDSN55	0.000%	0.000%	0.000%	0.005%	0.000%	0.000%	0.000%	0.006%
	PDSN66	0.000%	0.000%	0.000%	0.069%	0.000%	0.000%	0.000%	0.068%
	PDSN67	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%
	PDSN68	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	PDSN710	0.000%	0.000%	0.000%	0.026%	0.000%	0.000%	0.000%	0.028%
	PDSN79	0.000%	0.000%	0.000%	0.058%	0.000%	0.000%	0.000%	0.058%
	PDSN81	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	PDSN82	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
	JDTD54	0.000%	0.002%	0.000%	0.000%	0.000%	0.002%	0.000%	0.000%
	JDTD55	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%
	JDTD62	0.012%	0.003%	0.000%	0.000%	0.012%	0.003%	0.000%	0.000%
	JDTD66	0.008%	0.001%	0.000%	0.000%	0.008%	0.001%	0.000%	0.000%
	JDTD71	0.449%	0.005%	0.026%	0.000%	0.432%	0.005%	0.024%	0.000%
	JDTD71B	0.001%	0.001%	0.000%	0.000%	0.001%	0.001%	0.000%	0.000%
	JDTD83	0.000%	0.004%	0.000%	0.000%	0.000%	0.004%	0.000%	0.000%
	JDTD88	0.001%	0.002%	0.000%	0.000%	0.001%	0.002%	0.000%	0.000%
	JDTDVE1	0.000%	0.000%	0.000%	0.000%	0.000%	0.065%	0.000%	0.000%
	JDTDVE2	0.000%	0.000%	0.000%	0.000%	0.000%	0.065%	0.000%	0.000%
	JDTDVE3	0.000%	0.000%	0.000%	0.000%	0.000%	0.065%	0.000%	0.000%
	JDTN54	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%	0.000%
	JDTN62	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%	0.000%
22R	JDTN67	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%	0.000%
	PDTD51	0.000%	0.012%	0.000%	0.000%	0.000%	0.013%	0.000%	0.000%
	PDTD52	0.000%	0.096%	0.000%	0.000%	0.000%	0.036%	0.000%	0.000%
	PDTD63	0.000%	0.197%	0.000%	0.000%	0.000%	0.065%	0.000%	0.000%
	PDTD74	0.000%	0.015%	0.000%	0.000%	0.000%	0.015%	0.000%	0.000%
	PDTD75	0.000%	1.443%	0.000%	0.000%	0.000%	1.440%	0.000%	0.000%
	PDTD78	0.000%	0.023%	0.000%	0.000%	0.000%	0.024%	0.000%	0.000%
	PDTD86	0.000%	0.502%	0.000%	0.039%	0.000%	0.494%	0.000%	0.038%
	PDTD87	0.000%	0.017%	0.000%	0.000%	0.000%	0.017%	0.000%	0.000%
	PDTN52	0.000%	0.000%	0.000%	0.009%	0.000%	0.000%	0.000%	0.010%
	PDTN63	0.000%	0.000%	0.000%	0.004%	0.000%	0.000%	0.000%	0.004%
	PDTN74	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	PDTN75	0.000%	0.000%	0.000%	0.010%	0.000%	0.000%	0.000%	0.010%
	PDTN78	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	PDTN86	0.000%	0.000%	0.000%	0.004%	0.000%	0.000%	0.000%	0.005%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
	JDVD511	0.046%	0.003%	0.000%	0.000%	0.043%	0.003%	0.000%	0.000%
31C	JDVD514	0.052%	0.006%	0.000%	0.000%	0.048%	0.006%	0.000%	0.000%
	JDVD528	0.021%	0.001%	0.000%	0.000%	0.019%	0.001%	0.000%	0.000%
	JDVD531	0.135%	0.032%	0.000%	0.000%	0.124%	0.029%	0.000%	0.000%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
31C		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
	JDVD532	11.762%	0.043%	0.000%	0.000%	9.052%	0.042%	0.000%	0.000%
	JDVD55	0.315%	0.000%	0.009%	0.000%	0.287%	0.000%	0.008%	0.000%
	JDVD717	0.015%	0.004%	0.000%	0.000%	0.014%	0.004%	0.000%	0.000%
	JDVD718	0.039%	0.013%	0.000%	0.000%	0.037%	0.013%	0.000%	0.000%
	JDVD718B	0.001%	0.001%	0.000%	0.000%	0.001%	0.001%	0.000%	0.000%
	JDVD718C	0.003%	0.000%	0.000%	0.000%	0.003%	0.000%	0.000%	0.000%
	JDVD719	0.145%	0.017%	0.000%	0.000%	0.140%	0.016%	0.000%	0.000%
	JDVD719B	0.005%	0.001%	0.000%	0.000%	0.005%	0.001%	0.000%	0.000%
	JDVD719C	0.010%	0.004%	0.000%	0.000%	0.011%	0.004%	0.000%	0.000%
	JDVD720	7.324%	0.010%	0.000%	0.000%	6.321%	0.010%	0.000%	0.000%
	JDVD81	0.466%	0.007%	0.000%	0.000%	0.418%	0.007%	0.000%	0.000%
	JDVD823	0.023%	0.010%	0.000%	0.000%	0.021%	0.009%	0.000%	0.000%
	JDVD824	0.123%	0.035%	0.000%	0.000%	0.112%	0.034%	0.000%	0.000%
	JDVD824B	0.010%	0.003%	0.000%	0.000%	0.009%	0.003%	0.000%	0.000%
	JDVD824C	15.327%	0.004%	0.000%	0.000%	15.262%	0.004%	0.000%	0.000%
	JDVD825	0.009%	0.009%	0.000%	0.000%	0.009%	0.009%	0.000%	0.000%
	JDVDVE1	0.000%	0.000%	0.000%	0.000%	0.165%	0.001%	0.006%	0.000%
	JDVDVE2	0.000%	0.000%	0.000%	0.000%	0.165%	0.001%	0.006%	0.000%
	JDVDVE3	0.000%	0.000%	0.000%	0.000%	0.165%	0.001%	0.006%	0.000%
	JDVDVE4	0.000%	0.000%	0.000%	0.000%	0.165%	0.001%	0.006%	0.000%
	JDVN514	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	JDVN528	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%	0.000%
	JDVN531	0.000%	0.000%	0.001%	0.008%	0.000%	0.000%	0.001%	0.007%
	JDVN532	0.000%	0.000%	0.581%	0.000%	0.000%	0.000%	0.365%	0.000%
	JDVN720	0.000%	0.000%	0.446%	0.000%	0.000%	0.000%	0.261%	0.000%
	JDVN81	0.000%	0.000%	0.030%	0.000%	0.000%	0.000%	0.027%	0.000%
	JDVS511	0.000%	0.000%	0.007%	0.000%	0.000%	0.000%	0.007%	0.000%
	JDVS528	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%	0.000%
	JDVS531	0.000%	0.000%	0.005%	0.000%	0.000%	0.000%	0.005%	0.000%
	JDVS532	0.000%	0.000%	0.032%	0.001%	0.000%	0.000%	0.030%	0.001%
	JDVS55	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	JDVS717	0.000%	0.000%	0.007%	0.000%	0.000%	0.000%	0.007%	0.000%
	JDVS719	0.000%	0.000%	0.006%	0.001%	0.000%	0.000%	0.006%	0.001%
	JDVS720	0.000%	0.000%	0.006%	0.000%	0.000%	0.000%	0.006%	0.000%
	JDVS81	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%	0.000%
	JDVS824	0.000%	0.000%	0.049%	0.000%	0.000%	0.000%	0.045%	0.000%
	PDVD54	0.000%	0.444%	0.000%	0.020%	0.000%	0.404%	0.000%	0.018%
	PDVD63	0.000%	0.429%	0.000%	0.043%	0.000%	0.390%	0.000%	0.037%
	PDVD71	0.000%	0.821%	0.000%	0.057%	0.000%	0.741%	0.000%	0.050%
	PDVD75	0.000%	0.298%	0.000%	0.000%	0.000%	0.284%	0.000%	0.000%
	PDVD83	0.000%	0.117%	0.000%	0.022%	0.000%	0.110%	0.000%	0.019%
	PDVN54	0.000%	0.000%	0.000%	0.075%	0.000%	0.000%	0.000%	0.072%
	PDVN63	0.000%	0.000%	2.367%	0.025%	0.000%	0.000%	2.482%	0.024%
	PDVN71	0.000%	0.000%	0.000%	0.074%	0.000%	0.000%	0.000%	0.072%
	PDVN75	0.000%	0.000%	0.000%	0.013%	0.000%	0.000%	0.000%	0.012%
	PDVN83	0.000%	0.000%	0.000%	0.023%	0.000%	0.000%	0.000%	0.022%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
31L	PDUD52	0.000%	0.356%	0.000%	0.019%	0.000%	0.322%	0.000%	0.017%
	PDUD63	0.000%	0.062%	0.000%	0.000%	0.000%	0.060%	0.000%	0.000%
	PDUD71	0.000%	1.394%	0.000%	0.039%	0.000%	1.252%	0.000%	0.035%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
	PDUD75	0.000%	0.137%	0.000%	0.000%	0.000%	0.132%	0.000%	0.000%
	PDUD83	0.000%	0.049%	0.000%	0.000%	0.000%	0.048%	0.000%	0.000%
	PDUN52	0.000%	0.000%	0.000%	0.009%	0.000%	0.000%	0.000%	0.009%
	PDUN63	0.000%	0.000%	0.000%	0.004%	0.000%	0.000%	0.000%	0.004%
	PDUN71	0.000%	0.000%	0.000%	0.114%	0.000%	0.000%	0.000%	0.103%
	PDUN75	0.000%	0.000%	0.000%	0.017%	0.000%	0.000%	0.000%	0.017%
	PDUN83	0.000%	0.000%	0.000%	0.003%	0.000%	0.000%	0.000%	0.003%

Runway	Flight Track	2012				2018			
		Daytime		Nighttime		Daytime		Nighttime	
		Jet	Prop	Jet	Prop	Jet	Prop	Jet	Prop
31R	PDWD51	0.000%	0.060%	0.000%	0.000%	0.000%	0.053%	0.000%	0.000%
	PDWD63	0.000%	0.337%	0.000%	0.000%	0.000%	0.299%	0.000%	0.000%
	PDWD72	0.000%	0.081%	0.000%	0.000%	0.000%	0.072%	0.000%	0.000%
	PDWD75	0.000%	0.222%	0.000%	0.000%	0.000%	0.196%	0.000%	0.000%
	PDWD83	0.000%	0.059%	0.000%	0.000%	0.000%	0.052%	0.000%	0.000%
	PDWN51	0.000%	0.000%	0.000%	0.011%	0.000%	0.000%	0.000%	0.009%
	PDWN63	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.001%
	PDWN72	0.000%	0.000%	0.000%	0.002%	0.000%	0.000%	0.000%	0.001%
	PDWN75	0.000%	0.000%	0.000%	0.004%	0.000%	0.000%	0.000%	0.003%
	PDWN83	0.000%	0.000%	0.000%	0.014%	0.000%	0.000%	0.000%	0.013%

Note: Daytime = 7:00 a.m. to 9:59 a.m., Nighttime = 10:00 a.m. to 6:59 a.m.
Source: CDA, "2013 Part 150 Study Update"

Based on operating configurations in 2012, future operation levels and future runway use, departure track utilization for the modeled Future Conditions (2018) reflects the eastbound departures changes. Table E.2-10 lists the AAD operations that were reassigned to the new departure INM tracks. All remaining eastbound departures will continue to utilize the tracks from Existing Conditions (2012).

Table E.2-10 Midway Airport Eastbound Departures Reassigned to New INM Tracks – Future Conditions (2018)

Runway	2018 Departures (AAD)
13L	0.0
13C	0.5
13R	0.0
22L	12.1
22R	2.1
31L	0.0
31C	2.8
31R	0.0

E.2.4.6 Aircraft Weight and Trip Length

Aircraft weight during departure is a factor in the dispersion of noise because it impacts the rate at which an aircraft is able to climb. Generally, the heavier the aircraft, the slower the rate of climb and the distribution of noise along its route of flight tends to be larger. Where specific aircraft weights are unknown, the INM uses the distance flown to the first stop as a surrogate for the weight, by assuming that the weight has a direct relationship with the fuel load necessary to reach the first destination. The INM groups trip lengths into nine stage length categories, and assigns various aircraft weights associated with up to all nine categories, shown in Table E.2-11.

Table E.2-11 INM Stage Length Categories

Category	Stage Length
1	0-500 nautical miles
2	500-1000 nautical miles
3	1000-1500 nautical miles
4	1500-2500 nautical miles
5	2500-3500 nautical miles
6	3500-4500 nautical miles
7	4500-5500 nautical miles
8	5500-6500 nautical miles
9	6500+ nautical miles

The trip lengths flown from MDW for the Existing (2012) and Future (2018) conditions are based on the destination field provided in the radar data from the ANMS and on the scheduled operations. Due to the lengths of the Midway runways and the nature of operations and aircraft operating at Midway, the majority of the trip lengths are less than 1,000 nautical miles, and represents the major proportion of the operations that are assumed to fall within each of the trip length categories used for both Existing (2012) and Future (2018) operation levels. Table E.2-10 indicates the proportion of the operations that fell within each of the seven trip length categories for both the Existing (2012) and the Future (2018) operation levels.

Table E.2-12 Midway Airport Departure Trip Length Distribution – Existing (2012) and Future (2018) Conditions

Stage Length	Passenger	General Aviation
1	80%	100%
2	20%	0%
3	0%	0%
4	0%	0%
5	0%	0%
6	0%	0%
7	0%	0%
Source: CDA, "2013 Part 150 Study Update"		

E.2.4.7 Terrain Elevation Data

Terrain elevation data was used in the noise modeling process in order to adjust observer-to-aircraft distances when computing noise levels. The terrain data describes the elevation of the ground surrounding the airport and on airport property. The terrain elevation data used in INM was obtained from the United States Geological Survey (USGS) at 1/3 arc second resolution in a National Elevation Dataset (NED) Gridfloat format. GridFloat is a non-proprietary binary data format.

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MEMORANDUM

To:	Nan L. Terry Environmental & Airspace Specialist FAA, ATO Central Service Center Operations Support Group AJV-C23
From:	Vinnie Khera Contractor Project Manager (Chicago Midway International Airport Air Traffic Procedural Changes - Environmental Assessment)
Date:	February 16, 2013
Subject:	Methodology for the Analysis of Change of Exposure at Noise Sensitive Areas in Vicinity of Chicago Midway International Airport (MDW).
Reference:	**Chicago Midway International Airport Air Traffic Procedural Changes – Environmental Assessment** Contract No. DTFAWA-10-A-00209, Order No. 002 HMMH Job No.304050.002

Harris Miller Miller & Hanson Inc. (HMMH) is preparing an Environmental Assessment (EA) for Air Traffic Procedural Changes at Chicago Midway International Airport (MDW). This memorandum describes how HMMH utilized Integrated Noise Model (INM) case files furnished by the Federal Aviation Administration (FAA) to analyze change of exposure levels to aircraft noise that would change at noise sensitive areas (i.e., population, residences, schools, parks, and historic sites).

Concurrent with the development of the EA, the City of Chicago, Department of Aviation (CDA) is preparing an update to its Part 150 Study (*2013 Part 150 Study Update*). The 2012 baseline noise setting described in that document and shown on Exhibit NEM-1 forms the baseline noise setting for the EA in Chapter 4 – *Affected Environment*. The *2013 Part 150 Study Update* analyzed two scenarios in addition: a Future Conditions (2018) and a Future Conditions (2018 Alternative – A). The former scenario is identical to the Proposed Action (2018) in the EA and the latter is identical to the No Action (2018).

The *2013 Part 150 Study Update* report and associated noise modeling were developed by Landrum & Brown (L&B) and used INM to model the area in the immediate vicinity of MDW. The methodology described below was employed for areas within the DNL 65 dB (and higher) noise exposure contours, referred to herein and in the Environmental Assessment, as the "airport environs." Areas outside the DNL 65 dB noise exposure contour were developed by HMMH using the Noise Integrated Routing System (NIRS) aircraft noise model and are not included in this methodology.

For the EA, noise impacts on population, housing, and noise sensitive sites were accomplished using the following data:

- U.S. Census Bureau 2010 block centroid points for potential impacts to population;
- MDW Residential Data points from the Draft Part 150 study developed by Landrum & Brown;
- MDW noise sensitive data points from the Draft Part 150 study developed by Landrum & Brown;

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Chicago Midway International Airport Air Traffic Procedural Changes – Environmental Assessment

Page 2

- MDW Part 150 noise contours for 2013 developed by Landrum & Brown; and
- INM inputs developed by Landrum & Brown.

Analysis of the data was accomplished using GIS, INM, and Microsoft Access database software to determine points to be analyzed in detail. INM case files representing five scenarios were prepared by Landrum and Brown:

- A baseline 2012 scenario;
- A 2013 Future Conditions (With Project) representing the 2013 Proposed Action in the EA;
- A 2013 Future Conditions (Without Project) representing the 2013 No Action in the EA;
- A 2018 Future Conditions (With Project) representing the 2018 Proposed Action in the EA;
- A 2018 Future Conditions (Without Project) representing the 2013 No Action in the EA;

These case files were run in INM to calculate noise, with the DNL metric, at uniform grid points, population census block points, and noise sensitive locations from the data sources described above. The results are reported in summarized form in Chapter 5 of the EA.

Methodology for the Analysis of Potential Impacts to Population, Housing, and Noise Sensitive Sites for the MDW Air Traffic Procedural Changes Environmental Assessment (EA) Using the 2013 DNL Noise Contours Developed in the MDW Part 150 Noise Study

Prepared by URS Corporation

February 15, 2013

This memorandum describes how URS Corporation utilized noise exposure contours derived from the Midway International Airport (MDW) Part 150 Noise Compatibility Study for the analysis of aircraft noise level changes on population, housing, noise sensitive sites, and compatible land use. The 2013 noise exposure contours[1] were developed by Landrum & Brown, the firm that prepared the Draft MDW Part 150 Study, using the FAA's Integrated Noise Model (INM). The methodology described below was employed for areas within the DNL 65 dBA (and higher) noise exposure contours, referred to herein and in the Environmental Assessment, as the "airport environs." Areas outside the DNL 65 dBA noise exposure contour were developed by HMMH using the NIRS noise model and are not included in this methodology.

For the EA, noise impacts on population, housing, and noise sensitive sites were accomplished using the following data:

- U.S. Census Bureau 2010 block centroid points for potential impacts to population;
- MDW Residential Data points from the Draft Part 150 study developed by Landrum & Brown;
- MDW noise sensitive data points from the Draft Part 150 study developed by Landrum & Brown;
- MDW Part 150 noise contours for 2013 developed by Landrum & Brown; and
- INM inputs developed by Landrum & Brown.

Analysis of the data was accomplished using GIS, INM, and Microsoft Access database software. The following procedure was used to generate results for 2013 noise impacts:

- The Draft MDW Part 150 noise contours for 2013 were used by URS in the GIS environment (ESRI ArcGIS) to identify and select all data points that were located within the 2013 No-Action and Proposed Action DNL +65 dBA noise exposure contours;
- Using INM, the selected data points were modeled by HMMH for the purpose of calculating noise exposure levels at each selected point for the 2013 No-Action and Proposed Action scenarios; and
- The results data from the INM modeling were imported into Microsoft Access where the data was sorted, queried, and summarized to provide values for impacts on population, housing, and noise sensitive sites. This information was used to develop EA Tables 5.4.3-1 and 5.4.3-2.

As described above, the impact analyses were based on discrete point data developed in conjunction with the EA and the Part 150 studies. Using the GIS, data points were selected for inclusion in the INM modeling if they fell on or within the 2013 noise exposure contours. All population, housing, and noise sensitive site points that were found to have a noise exposure level equal to or greater than DNL 65 dBA

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[1] Because similar analyses were performed by Landrum & Brown for the 2018 study year as part of the MDW Part 150 study, those results were used in the EA for reporting the potential impacts for the 2018 study year.

were sorted into three categories base on DNL noise exposure range of: DNL +75, 70 to 75, and 65 to 70 dBA. Population estimates for noise exposure were derived by evaluating projected noise levels (with and without project) at each of the selected population centroids and calculating the number of people associated with each population centroid using US Census block data. The number of housing units within each noise exposure range was determined by evaluating projected noise levels (with and without project) at each of the selected housing data points from the MDW Residential Data file. This data file included basic information on residential structure type and whether the structures had received noise mitigation treatment or its present status within the MDW noise mitigation program, if eligible. Noise sensitive sites, such as schools, churches, libraries, hospitals, and day care centers, were identified with their own discrete data points. These data points were analyzed using the same methodology as described for the population and housing points.

The data and calculations, at each stage of the analysis process, were subjected to various quality control measures. These measures included cross checks and consistency checks of the data and calculations between the GIS, Access database, and INM. Also, where practical, visual checks of the data were performed using up to date aerial photography contained in the GIS.

E.3 NOISE INTEGRATED ROUTING SYSTEM (NIRS) TECHNICAL REPORT

E.3.1 Noise Modeling Methodology and Data Inputs

FAA Order 1015.1E specifies that one of three noise models, FAA's Integrated Noise Model (INM), its Heliport Noise Model (HNM), or its Noise Integrated Routing System (NIRS), should be used for an Environmental Assessment.[8] NIRS is typically used for flight track changes over large areas and at altitudes over 3,000 ft. AGL. For the MDW EA analysis, NIRS provided an advantage compared to INM outside the MDW Environ. Therefore, NIRS Version 7.0b.2 was selected for evaluations beyond the immediate airport vicinity.[9]

Additionally, FAA Order 1050.1E specifies that analysis for the EA should be done with the yearly Day-Night Average Sound Level (DNL) noise metric. In accordance with FAA Order 1050.1E, this analysis considers the noise exposure for the following nine (9) scenarios:

- Existing Conditions (2012)
- First year of proposed implementation (2013) – No Action
- Five years after proposed implementation (2018) – No Action
- First year of proposed implementation (2013) – Proposed Action
- Five years after proposed implementation (2018) – Proposed Action

The 2013 Proposed Action noise results were compared to the 2013 No Action Alternative to determine any changes in noise levels that would meet or exceed the FAA criteria for significance or reportable occurrences.[10] Likewise, the 2018 Proposed Action noise results were compared to the 2018 No Action Alternative and evaluated against these criteria.

NIRS requires inputs from several data source types, including the following:

- Routes and events for each scenario
- Airport and runway locations
- Annualization weights for each traffic component of each scenario
- Additional population locations for calculation of DNL
- Additional grids for calculation of DNL
- Additional Noise Sensitive sites for calculation of DNL
- Geographic areas

[8] FAA order 1050.1E Change 1, Appendix A, Section 14.2b. Other methodology and computer models can be used with prior written approval from the FAA Office of Environment and Energy (AEE).
[9] FAA released NIRS Version 7.0b.2 on March 2, 2012 . This was the most current version of NIRS at the time of the noise analysis.
[10] FAA Order 1050.1E, Chg. 1, Appendix A, Section 14.3, sec. 14.4, and 14.5e.

- Terrain files

Data for the MDW EA came from various sources and were used for many of the input categories discussed above. Several of the primary sources of data are listed below, while additional sources are later discussed as appropriate:

- CDA "2013 Part 150 Noise Study Update" for MDW – This included an INM study representing existing conditions (2012) and future conditions (2013 and 2018), with associated flight tracks, noise location modeling grid points, terrain data, and a high-level operations summary.
- Radar Data – HMMH obtained data for eighty-five (85) 24-hour periods from January 1, 2011 to November 19, 2011
- Interviews – HMMH had discussions with personnel at the airport, particularly flight tower operators regarding activity and traffic flow at the airport.

HMMH's assumptions and data collection processes for each of these items are discussed below.

E.3.2 Study Area

To determine the bounds of the study for this EA, the FAA considered the geographic areas where new or revised aircraft procedures under the Proposed Action would differ from the No Action Alternative. The FAA evaluated the existing flight tracks in the MDW region as a basis for determining the areas in which the Proposed Action changes are likely to occur. As an initial step, the FAA collected radar data for arrival and departure operations from MDW during 2010-2011, focusing specifically on aircraft traffic within the ZAU ARTCC and the C90 TRACON. The National Offload Program (NOP) was used to gather representative radar data specific to the region for eighty-five (85) 24-hour periods from January 1, 2011 to November 19, 2011, providing an accurate representation of overall annual conditions.

E.3.2.1 Methodology to Determine the Study Area

The study area is a three-dimensional block of airspace designed to capture aircraft operations to and from MDW that operate below 10,000 ft. AGL. The top elevation of the study area is defined by an altitude of 10,000 ft. AGL, and the lateral dimension is defined by the point at which departing aircraft penetrate the 10,000 ft. AGL altitude, based on analysis of historical radar data. Applying these criteria, the study area captures the maximum range of flight tracks where 95 percent of aircraft pass through the 10,000 ft. AGL ceiling.

The FAA analyzed the collected radar data for airport jet aircraft approaching and departing from MDW and operating under IFR. A review of radar data showed that approximately 95 percent of MDW jet aircraft operations below 10,000 ft. AGL occur within approximately 55 NM of MDW. However, given the presence of O'Hare airport to the north, and the fact that aircraft operating to or from MDW generally do not depart or arrive from the north side of MDW, the study area polygon was adjusted accordingly.

To facilitate analysis of aircraft overflight operations that may potentially affect national parks and wildlife refuges administered the Department of Interior (DOI), an examination of the same radar data was undertaken for IFR operations occurring below 18,000 ft. AGL. This analysis

determined that slightly expanding the geographic extent of the study area identified for aircraft operations at 10,000 ft. AGL would capture the same properties. Therefore, the study area was extended slightly westward.

E.3.2.2 Setting and Location

The study area encompasses 10,402 sq. mi., 32 counties in part or whole, and portions of three states, with the following dimensions: 145.4 NM east to west along the south boundary, 78.3 NM east to west along the north boundary, and 60.1 NM north to south. Four airports were important for analysis of the MDW study area due to their contribution to the overall noise environment: Aurora Municipal Airport (ARR), DuPage Airport (DPA), Gary Chicago International Airport (GYY), and O'Hare International Airport (ORD), which impacts the noise environment around MDW along with other overflight activity. Please refer to Figure 10 in Section 4.2 for a graphical depiction of the study area. Table E.3-1 lists the counties in the study area.

Table E.3-1 Study Area Counties

Illinois				
Bureau	Cook	DeKalb	DuPage	Ford
Ford	**Grundy**	Iroquois	Kane	**Kankakee**
Kendall	LaSalle	Lee	Livingston	Marshall
Peoria	Putnam	**Will**	Woodford	
Indiana				
Cass	Fulton	Jasper	**Lake**	**LaPorte**
Marshall	Newton	**Porter**	**Pulaski**	St. Joseph
Starke	White			
Michigan				
Berrien				
Note: Bold font indicates counties that are fully within the study area; all others are partially within the study area boundary. Sources: Environmental Systems Research Institute, Inc.				

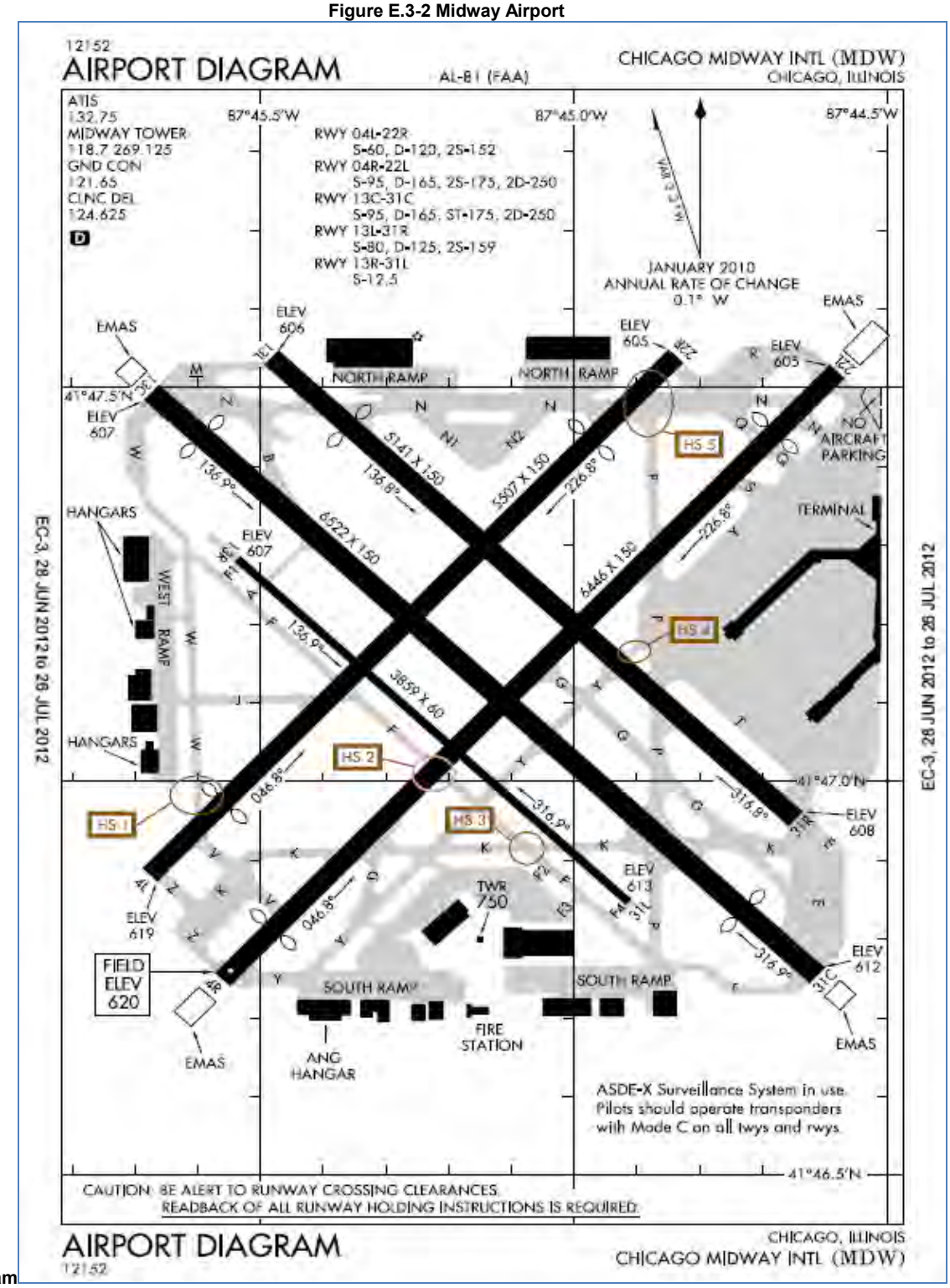
E.3.3 Airport Layout

The layout of an airfield is an important modeling input. Accurate runway information places modeled flights in the correct locations. Elevation data allow NIRS to calculate runway gradients, which influence modeled take-off roll and landing distance. Runway information for MDW, including runway end locations, elevations, width, and length, as well as the location and elevation of the airport reference point, were obtained from the FAA confirmed with the CDA "2013 Part 150 Noise Study Update." Table E.3-2 presents runway information for MDW and Figure E.3-1 shows the FAA airport Diagram for MDW.

Table E.3-2 Midway Airport Runway Information

Runway End	Latitude (decimal degrees)	Longitude (decimal degrees)	Elevation (ft. MSL)	Width (ft.)	Length (ft.)
04L	41.781366	-87.761192	618.2	150	5509
04R	41.779161	-87.759319	619.5	150	6445
13C	41.791574	-87.761069	607.4	150	6522
13L	41.792319	-87.757939	606.3	150	5142
13R	41.788069	-87.758805	607.4	60	3859
22R	41.792339	-87.747297	605.5	150	5509
22L	41.791997	-87.743059	605.6	150	6445
31C	41.779241	-87.743741	612.0	150	6522
31R	41.782594	-87.744275	608.6	150	5142
31L	41.780771	-87.748552	613.3	60	3859
Notes: Latitude/Longitude coordinates referenced to North American Datum 1983 (NAD 83)					

Figure E.3-2 Midway Airport



Diagram

E.3.4 Aircraft Operations

NIRS requires users to assign a specific aircraft type to each operation from its standard database. Operations data for each of the three study years (2012, 2013, and 2018) derived from the CDA "2013 Part 150 Noise Study Update" and the FAA Terminal Area Forecast (TAF) database. Table E.3-3 presents the annual aircraft operations for three operations categories: (1) Jets, (2) Turbo-Prop aircraft, and (3) Propeller aircraft. Operations remain the same for the No Action and Proposed Action forecast years.

Table E.3-3 Summary of Operations

Airport	Operations Category	2012	2013	2018
MDW	Jet	211,787	223,007	251,577
	Turbo-Prop	8,647	9,440	10,787
	Prop	30,639	32,820	36,270
	Total	251,072	265,267	298,634
ARR	Jet	2,436	2,453	2,544
	Turbo-Prop	640	645	669
	Prop	1,544	1,555	1,613
	Total	4,620	4,653	4,825
DPA	Jet	8,104	8,116	8,180
	Turbo-Prop	2,173	2,176	2,193
	Prop	2,735	2,740	2,761
	Total	13,012	13,032	13,134
GYY	Jet	3,257	3,257	3,282
	Turbo-Prop	816	816	822
	Prop	648	648	653
	Total	4,721	4,721	4,758
ORD[1]	Jet	231,243	233,723	163,568
	Turbo-Prop	120	122	2,751
	Prop	142	143	3,458
	Total	231,504	233,987	169,777
Overflights	Jet	2,671	2,671	2,671
	Turbo-Prop	90	90	90
	Prop	1,378	1,378	1,378
	Total	4,140	4,140	4,140

Note:
1. ORD operations for this table only include operations overflying MDW study area below 10,000 ft., not all operations at ORD.

Source: CDA, "2013 Part 150 Noise Study Update"; FAA TAF

E.3.4.1 Aircraft Noise Performance

Specific noise and performance data must be entered into NIRS for each aircraft type operating at the airport. Noise data is included in the form of sound exposure level (SEL) at a range of distances from a particular aircraft with engines at a specific thrust level. Performance data includes thrust, speed, and altitude profiles for takeoff and landing operations. The NIRS database contains standard noise and performance data for over one hundred different fixed wing aircraft types, most of which are civilian aircraft. NIRS automatically accesses the noise and performance data for takeoff and landing operations by those aircraft.

This study included many different aircraft types. While many aircraft could be modeled by direct assignments from the standard NIRS database, several were not listed as procedure steps in the NIRS database. For those aircraft types not in the NIRS standard database, FAA-approved substitutions were used to model the aircraft with a similar type that was in the database, listed in NIRS User's Guide Version 7.0b.2 Appendix E.

The day-night split of aircraft operations is important with the DNL metric. Nighttime operations, defined as an operation between 10 PM and 7 AM, are weighted 10 dB (i.e., as if the event occurred ten times).

For analysis of those parts of the study area beyond the immediate environs of MDW, this EA involved a detailed analysis of IFR aircraft for existing conditions (2012) using NIRS. Although the noise environment around MDW comes almost entirely from jet aircraft operations, the DNL calculations reflect noise from many types of jet and propeller aircraft operations on IFR flight plans, which the Proposed Action could affect. Most aircraft around MDW operate IFR to obtain ATC separation services in these busy areas. Aircraft operating under VFR are not included in the NIRS analysis as they would be unaffected by the Proposed Action. VFR aircraft operating outside certain categories of controlled airspace are not required to be in contact with ATC. Since these aircraft operate at the discretion of the pilot on the "see and be seen" principle and are not required to file flight plans, the FAA has very limited information for these operations. There is no known source for comprehensive route, altitude, aircraft type, and frequency information for VFR operations for the entire study area. Even if complete information were available for VFR operations, the Proposed Action evaluated in the EA would not require a change to the route or altitude of these operations. Therefore, if modeling were possible, both the Proposed Action and No Action Alternative would show the same flight route and altitude.

Table E.3-4 provides daily operations for the existing conditions (2012). Tables E.3-5 and E.3-6 present the operations for the 2013 and 2018 No Action Alternative and Proposed Action, respectively.

Table E.3-4 Existing Conditions (2012) Operations

Aircraft Type	Arrival		Departure		Total
	Day	Night	Day	Night	
1900D	1.3	0.1	1.4	0.1	3.0
717200	8.3	1.5	8.6	1.2	19.5
727EM2	0.0	0.0	0.0	0.0	0.1
7373B2	38.7	4.9	40.4	3.2	87.1
737500	7.2	1.6	7.8	0.9	17.5
737700	154.0	19.0	158.2	14.7	345.9
737700/737800	0.1	0.1	0.2	0.0	0.4
757PW	0.0	0.0	0.0	0.0	0.0
757RR	0.0	0.0	0.0	0.0	0.0
A319-131	7.6	2.4	8.9	1.0	19.9
A320-211	1.1	0.2	1.0	0.3	2.7
BEC58P	8.1	0.9	7.1	1.9	18.0
CIT3	1.8	0.1	1.7	0.1	3.7
CL600	0.7	0.0	0.7	0.0	1.4
CL601	10.7	0.5	10.9	0.3	22.4
CNA172	2.4	0.0	2.4	0.0	4.9
CNA441	1.1	0.2	1.1	0.2	2.6
CNA55B	1.3	0.2	1.4	0.1	3.0
CNA750	3.1	0.0	2.8	0.3	6.1
CRJ9-ER	0.4	0.0	0.4	0.0	0.7
DC93LW	0.0	0.0	0.0	0.0	0.1
DC95HW	0.0	0.0	0.0	0.0	0.0
DHC8	9.1	0.5	9.1	0.5	19.3
EMB145	0.5	0.0	0.5	0.0	0.9
GASEPF	12.9	1.4	12.7	1.6	28.6
GASEPV	16.8	0.7	16.9	0.6	35.1
GIIB	2.9	0.1	2.8	0.2	5.9
GIV	3.9	1.0	4.0	0.9	9.7
GV	7.2	0.9	7.6	0.5	16.2
LEAR25	0.2	0.0	0.2	0.0	0.5
LEAR35	7.8	0.5	7.2	1.2	16.8
MD9025/MD81	0.0	0.0	0.0	0.0	0.0
MD9025/MD83	0.1	0.0	0.1	0.0	0.1
MU3001	2.3	1.3	2.5	1.2	7.3
SF340	0.2	0.1	0.2	0.1	0.4
Total	**311.9**	**38.1**	**318.7**	**31.3**	**700.0**

Note: Totals and subtotals may not match exactly due to rounding

Table E.3-5 Forecast Operations – Proposed Action and No Action (2013)

NIRS Type	Arrival		Departure		Total
	Day	Night	Day	Night	
1900D	1.4	0.1	1.4	0.1	3.1
717200	8.6	1.5	8.9	1.2	20.3
727EM2	0.0	0.0	0.0	0.0	0.1
7373B2	40.3	4.9	41.9	3.3	90.4
737500	7.4	1.6	8.0	1.0	18.0
737700	160.9	19.1	164.7	15.3	360.0
737700/737800	0.2	0.1	0.2	0.0	0.4
757PW	0.0	0.0	0.0	0.0	0.0
757RR	0.0	0.0	0.0	0.0	0.0
A319-131	7.9	2.4	9.3	1.1	20.7
A320-211	1.2	0.2	1.0	0.4	2.8
BEC58P	8.4	0.9	7.4	1.9	18.7
CIT3	1.9	0.1	1.8	0.1	3.9
CL600	0.7	0.0	0.7	0.0	1.4
CL601	10.9	0.5	11.1	0.4	22.9
CNA172	2.5	0.0	2.5	0.0	5.1
CNA441	1.2	0.2	1.2	0.2	2.7
CNA55B	1.3	0.2	1.4	0.1	3.1
CNA750	3.2	0.0	2.9	0.3	6.5
CRJ9-ER	0.4	0.0	0.4	0.0	0.8
DC93LW	0.0	0.0	0.0	0.0	0.1
DC95HW	0.0	0.0	0.0	0.0	0.0
DHC8	9.5	0.5	9.5	0.6	20.0
EMB145	0.5	0.0	0.5	0.0	1.0
GASEPF	13.4	1.4	13.2	1.6	29.7
GASEPV	17.5	0.8	17.6	0.6	36.5
GIIB	2.9	0.1	2.8	0.2	6.0
GIV	4.0	1.0	4.2	0.9	10.1
GV	7.5	0.9	7.8	0.6	16.6
LEAR25	0.2	0.0	0.2	0.0	0.5
LEAR35	8.1	0.5	7.4	1.2	17.2
MD9025/MD81	0.0	0.0	0.0	0.0	0.0
MD9025/MD83	0.1	0.0	0.1	0.0	0.1
MU3001	2.5	1.3	2.6	1.2	7.6
SF340	0.2	0.1	0.2	0.1	0.5
Total	**324.8**	**38.6**	**330.9**	**32.5**	**726.8**

Note: Totals and subtotals may not match exactly due to rounding

Table E.3-6 Forecast Operations – Proposed Action and No Action (2018)

NIRS Type	Arrival		Departure		Total
	Day	Night	Day	Night	
1900D	1.5	0.2	1.6	0.1	3.4
717200	9.6	1.5	9.8	1.3	22.3
727EM2	0.0	0.0	0.0	0.0	0.1
7373B2	45.8	4.9	47.1	3.6	101.4
737500	8.2	1.9	9.0	1.1	20.1
737700	184.4	19.0	186.4	17.0	406.8
737700/737800	0.2	0.1	0.2	0.1	0.5
757PW	0.0	0.0	0.0	0.0	0.0
757RR	0.0	0.0	0.0	0.0	0.0
A319-131	8.9	2.6	10.4	1.2	23.1
A320-211	1.3	0.2	1.2	0.4	3.2
BEC58P	10.4	1.1	9.1	2.3	23.0
CIT3	2.2	0.1	2.1	0.1	4.6
CL600	0.8	0.0	0.8	0.0	1.7
CL601	13.2	0.6	13.4	0.4	27.6
CNA172	2.9	0.0	2.9	0.0	5.8
CNA441	1.6	0.2	1.5	0.3	3.5
CNA55B	1.5	0.2	1.6	0.1	3.4
CNA750	3.9	0.0	3.5	0.3	7.7
CRJ9-ER	0.4	0.0	0.4	0.0	0.7
DC93LW	0.0	0.0	0.0	0.0	0.1
DC95HW	0.0	0.0	0.0	0.0	0.0
DHC8	10.8	0.5	10.7	0.6	22.6
EMB145	0.5	0.0	0.5	0.0	1.0
GASEPF	14.1	1.6	14.0	1.7	31.4
GASEPV	18.8	0.8	18.9	0.7	39.2
GIIB	3.3	0.1	3.2	0.2	6.8
GIV	4.6	1.0	4.6	1.0	11.2
GV	8.3	0.8	8.6	0.6	18.4
LEAR25	0.2	0.0	0.3	0.0	0.5
LEAR35	8.9	0.6	8.1	1.4	18.9
MD9025/MD81	0.0	0.0	0.0	0.0	0.0
MD9025/MD83	0.1	0.0	0.1	0.0	0.1
MU3001	2.8	1.3	2.8	1.3	8.2
SF340	0.2	0.1	0.2	0.1	0.6
Total	**369.5**	**39.7**	**373.1**	**36.0**	**818.2**
Note: Totals and subtotals may not match exactly due to rounding					

E.3.5 Runway Utilization

Runway use describes the percent of each of the runways used over an annual period, which is affected by many factors including weather, runway length requirements, instrumentation available on each runway, and, if applicable, traffic flow at nearby airports. HMMH identified runway use information presented in CDA, "2013 Part 150 Noise Study Update." Table E.3-7 provides runway use data for the existing conditions (2012) and the No Action Alternative in 2013 and 2018. Table E.3-8 provides data for the Proposed Action in 2013 and 2018.

Table E.3-7 Runway Utilization – Existing Conditions (2013) and No Action (2013 and 2018)

	Runway	Base Year 2012	First Year 2013	Future Year 2018
Arrivals	04L	3.1%	3.0%	2.5%
	04R	39.0%	37.1%	31.6%
	13C	2.9%	4.9%	12.7%
	13L	<0.1%	0.1%	0.2%
	13R	<0.1%	<0.1%	0.1%
	22L	19.3%	19.3%	17.6%
	22R	2.6%	2.6%	2.3%
	31C	29.5%	29.5%	29.5%
	31L	2.1%	2.1%	2.1%
	31R	1.3%	1.3%	1.3%
	Total	**100%**	**100%**	**100%**
Departures	04L	4.4%	4.4%	4.4%
	04R	22.2%	22.2%	22.2%
	13C	3.0%	3.0%	4.9%
	13L	<0.1%	<0.1%	<0.1%
	13R	<0.1%	<0.1%	<0.1%
	22L	22.5%	22.5%	22.5%
	22R	2.9%	2.9%	2.9%
	31C	42.1%	42.1%	40.2%
	31L	2.2%	2.2%	2.1%
	31R	0.8%	0.8%	0.8%
	Total	**100%**	**100%**	**100%**

Table E.3-8 Runway Utilization – Proposed Action (2013 and 2018)

	Runway	First Year 2013	Future Year 2018
Arrivals	04L	3.0%	2.5%
	04R	37.1%	31.6%
	13C	4.9%	12.7%
	13L	0.1%	0.2%
	13R	<0.1%	0.1%
	22L	23.7%	22.0%
	22R	3.2%	3.0%
	31C	25.0%	25.0%
	31L	1.8%	1.8%
	31R	1.1%	1.1%
	Total	**100%**	**100%**
Departures	04L	4.4%	4.4%
	04R	22.2%	22.2%
	13C	4.9%	6.9%
	13L	<0.1%	0.1%
	13R	<0.1%	<0.1%
	22L	22.5%	22.5%
	22R	2.9%	2.9%
	31C	40.2%	38.3%
	31L	2.1%	2.0%
	31R	0.8%	0.7%
	Total	**100%**	**100%**

E.3.6 Flight Tracks

Flight tracks represent the route and altitude profile of an aircraft's flight path. Track use information for the MDW was derived from the CDA "2013 Part 150 Noise Study Update." The flight tracks used for INM in the Part 150 were extended to the boundaries of the MDW EA study area for use in NIRS by following the current STAR points for the No Action scenarios and the new STAR points for the Proposed Action scenarios. Using the 85 day, 24 hour radar sample, each track was scaled to the percent use of each procedure branch. Please refer to Figures 7, 8, and 9 in Section 3.3.2 for the flight tracks developed for comparisons of the air traffic procedure changes under the Proposed Action and the No Action Alternative. Tables E.3-9 and E.3.10 (attached) provide full detail regarding the track associations between INM and NIRS.

E.3.7 Meteorological Conditions

NIRS has several settings that affect aircraft performance profiles and sound propagation based on meteorological data. Meteorological settings include average annual temperature, barometric pressure, and relative humidity at the airport. Weather data for the MDW EA was acquired from CDA, "2013 Part 150 Noise Study Update." Average annual conditions for MDW include a temperature of 51.8°F, sea level pressure of 29.99 inch of mercury (inHg), and relative humidity of 67.9 percent.

E.3.8 Modeling Locations

While the previous sections have discussed parameters that affect the noise source considered in this study (i.e. aircraft operations), NIRS also requires input regarding various modeling locations, or noise receivers, for which aircraft noise exposure levels were computed. These locations primarily represent noise sensitive land use areas or other locations of interest. Several different types of locations were identified in the MDW EA study area, represented by 143,345 unique model points (available upon request). All model points were adjusted for elevation, as derived from United States Geographic Survey (USGS) terrain data. Terrain files imported into NIRS for noise computations must be in the USGS 1:250,000 scale DEM format (i.e., 1^0 square with 3 by 3 arc-second data spacing).

Table E.3-9 INM – NIRS Flight Track Associations – ARRIVALS

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
04L	JAND11	JD11N1	100%	--	100%	--	100%	--	100%	--	100%	--
	JAND22	JD22E1	61%	44%	61%	44%	61%	44%	61%	44%	61%	44%
		JD22SE1	39%	56%	39%	56%	39%	56%	39%	56%	39%	56%
	JAND26	JD26E1	61%	--	61%	--	61%	--	61%	--	61%	--
		JD26SE1	39%	--	39%	--	39%	--	39%	--	39%	--
	JAND27	JD27E1	61%	--	61%	--	61%	--	61%	--	61%	--
		JD27SE1	39%	--	39%	--	39%	--	39%	--	39%	--
	JAND33	JD33SW1	15%	--	15%	--	12%	--	15%	--	13%	--
		JD33SW2	37%	--	37%	--	30%	--	37%	--	33%	--
		JD33SW3	22%	--	22%	--	18%	--	22%	--	20%	--
		JD33SW4	12%	--	12%	--	9%	--	12%	--	11%	--
		JD33SW5	15%	--	15%	--	12%	--	15%	--	14%	--

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
04L		JY33SW1	0%	--	0%	--	3%	--	0%	--	1%	--
		JY33SW2	0%	--	0%	--	7%	--	0%	--	4%	--
		JY33SW3	0%	--	0%	--	4%	--	0%	--	2%	--
		JY33SW4	0%	--	0%	--	2%	--	0%	--	1%	--
		JY33SW5	0%	--	0%	--	3%	--	0%	--	1%	--
	JANN26	JN26E1	--	44%	--	44%	--	44%	--	44%	--	44%
		JN26SE1	--	56%	--	56%	--	56%	--	56%	--	56%
	PAND11	PD11N1	100%	--	100%	--	100%	--	100%	--	100%	--
	PAND18	PD18N1	0%	--	0%	--	0%	--	0%	--	0%	--
		PAND18	100%	--	100%	--	100%	--	100%	--	100%	--
	PAND22	PD22E1	85%	--	85%	--	85%	--	85%	--	85%	--
		PD22SE1	15%	--	15%	--	15%	--	15%	--	15%	--
	PAND23	PD23S1	100%	--	100%	--	100%	--	100%	--	100%	--
	PAND26	PD26E1	85%	--	85%	--	85%	--	85%	--	85%	--
		PD26SE1	15%	--	15%	--	15%	--	15%	--	15%	--
	PAND27	PD27E1	0%	--	0%	--	0%	--	0%	--	0%	--
		PD27SE1	0%	--	0%	--	0%	--	0%	--	0%	--
		PAND27	100%	--	100%	--	100%	--	100%	--	100%	--
	PAND28	PD28E1	0%	--	0%	--	0%	--	0%	--	0%	--
		PD28SE1	0%	--	0%	--	0%	--	0%	--	0%	--
		PAND28	100%	--	100%	--	100%	--	100%	--	100%	--
	PAND33	PD33SW1	11%	--	11%	--	10%	--	11%	--	10%	--
		PD33SW2	9%	--	9%	--	8%	--	9%	--	9%	--
		PD33SW3	8%	--	8%	--	7%	--	8%	--	7%	--
		PD33SW4	5%	--	5%	--	5%	--	5%	--	5%	--
		PD33SW5	67%	--	67%	--	61%	--	67%	--	61%	--
		PY33SW1	0%	--	0%	--	1%	--	0%	--	1%	--
		PY33SW2	0%	--	0%	--	1%	--	0%	--	1%	--
		PY33SW3	0%	--	0%	--	1%	--	0%	--	1%	--
		PY33SW4	0%	--	0%	--	0%	--	0%	--	0%	--
		PY33SW5	0%	--	0%	--	6%	--	0%	--	6%	--
	PAND34	PD34SW1	0%	--	0%	--	0%	--	0%	--	0%	--
		PD34SW2	0%	--	0%	--	0%	--	0%	--	0%	--
		PD34SW3	0%	--	0%	--	0%	--	0%	--	0%	--
		PD34SW4	0%	--	0%	--	0%	--	0%	--	0%	--
		PD34SW5	0%	--	0%	--	0%	--	0%	--	0%	--
		PAND34	100%	--	100%	--	100%	--	100%	--	100%	--
	PAND35	PD35S1	100%	--	100%	--	100%	--	100%	--	100%	--
	PANN11	PN11N1	--	100%	--	100%	--	100%	--	100%	--	100%
	PANN22	PN22SW1	--	100%	--	100%	--	97%	--	100%	--	98%
		PN22SW2	--	0%	--	0%	--	0%	--	0%	--	0%
		PN22SW3	--	0%	--	0%	--	0%	--	0%	--	0%
		PN22SW4	--	0%	--	0%	--	0%	--	0%	--	0%

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
04L		PN22SW5	--	0%	--	0%	--	0%	--	0%	--	0%
		PT22SW1	--	0%	--	0%	--	3%	--	0%	--	2%
	PANN26	PN26E1	--	100%	--	100%	--	100%	--	100%	--	100%
		PN26SE1	--	0%	--	0%	--	0%	--	0%	--	0%
	PANN33	PN33SW1	--	100%	--	100%	--	80%	--	100%	--	90%
		PN33SW2	--	0%	--	0%	--	0%	--	0%	--	0%
		PN33SW3	--	0%	--	0%	--	0%	--	0%	--	0%
		PN33SW4	--	0%	--	0%	--	0%	--	0%	--	0%
		PN33SW5	--	0%	--	0%	--	0%	--	0%	--	0%
		PT33SW1	--	0%	--	0%	--	20%	--	0%	--	10%
	PANN34	PN34SW1	--	0%	--	0%	--	0%	--	0%	--	0%
		PN34SW2	--	0%	--	0%	--	0%	--	0%	--	0%
		PN34SW3	--	0%	--	0%	--	0%	--	0%	--	0%
		PN34SW4	--	0%	--	0%	--	0%	--	0%	--	0%
		PN34SW5	--	0%	--	0%	--	0%	--	0%	--	0%
		PANN34	--	100%	--	100%	--	100%	--	100%	--	100%
04R	JAOD11	JD11N1	100%	--	100%	--	100%	--	100%	--	100%	--
	JAOD16	JD16N1	100%	--	100%	--	100%	--	100%	--	100%	--
	JAOD22	JD22E1	61%	--	61%	--	61%	--	61%	--	61%	--
		JD22SE1	39%	--	39%	--	39%	--	39%	--	39%	--
	JAOD28	JD28E1	61%	--	61%	--	61%	--	61%	--	61%	--
		JD28SE1	39%	--	39%	--	39%	--	39%	--	39%	--
	JAOD29	JD29E1	61%	--	61%	--	61%	--	61%	--	61%	--
		JD29SE1	39%	--	39%	--	39%	--	39%	--	39%	--
	JAOD33	JD33SW1	15%	--	15%	--	14%	--	15%	--	15%	--
		JD33SW2	37%	--	37%	--	36%	--	37%	--	37%	--
		JD33SW3	22%	--	22%	--	21%	--	22%	--	22%	--
		JD33SW4	12%	--	12%	--	12%	--	12%	--	12%	--
		JD33SW5	15%	--	15%	--	15%	--	15%	--	15%	--
		JY33SW1	0%	--	0%	--	0%	--	0%	--	0%	--
		JY33SW2	0%	--	0%	--	1%	--	0%	--	0%	--
		JY33SW3	0%	--	0%	--	0%	--	0%	--	0%	--
		JY33SW4	0%	--	0%	--	0%	--	0%	--	0%	--
		JY33SW5	0%	--	0%	--	0%	--	0%	--	0%	--
	JAOD35	JD35SW1	15%	--	15%	--	13%	--	15%	--	14%	--
		JD35SW2	37%	--	37%	--	31%	--	37%	--	34%	--
		JD35SW3	22%	--	22%	--	19%	--	22%	--	20%	--
		JD35SW4	12%	--	12%	--	10%	--	12%	--	11%	--
		JD35SW5	15%	--	15%	--	13%	--	15%	--	14%	--
		JY35SW1	0%	--	0%	--	2%	--	0%	--	1%	--
		JY35SW2	0%	--	0%	--	5%	--	0%	--	3%	--
		JY35SW3	0%	--	0%	--	3%	--	0%	--	1%	--
		JY35SW4	0%	--	0%	--	2%	--	0%	--	1%	--

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
		JY35SW5	0%	--	0%	--	2%	--	0%	--	1%	--
	JAODRE	JDREE1	--	--	--	--	61%	44%	--	--	61%	44%
		JDRESE1	--	--	--	--	39%	56%	--	--	39%	56%
	JAODRW	JDRWSW1	--	--	--	--	15%	13%	--	--	15%	13%
		JDRWSW2	--	--	--	--	37%	62%	--	--	37%	62%
		JDRWSW3	--	--	--	--	22%	14%	--	--	22%	14%
		JDRWSW4	--	--	--	--	12%	7%	--	--	12%	7%
		JDRWSW5	--	--	--	--	15%	5%	--	--	15%	5%
	JAON11	JN11N1	--	100%	--	100%	--	100%	--	100%	--	100%
	JAON22	JN22E1	--	44%	--	44%	--	44%	--	44%	--	44%
		JN22SE1	--	56%	--	56%	--	56%	--	56%	--	56%
	JAON28	JN28E1	--	44%	--	44%	--	44%	--	44%	--	44%
		JN28SE1	--	56%	--	56%	--	56%	--	56%	--	56%
	JAON29	JN29E1	--	44%	--	44%	--	44%	--	44%	--	44%
		JN29SE1	--	56%	--	56%	--	56%	--	56%	--	56%
	JAON33	JN33SW1	--	13%	--	13%	--	12%	--	13%	--	12%
		JN33SW2	--	62%	--	62%	--	60%	--	62%	--	61%
		JN33SW3	--	14%	--	14%	--	14%	--	14%	--	14%
		JN33SW4	--	7%	--	7%	--	6%	--	7%	--	7%
		JN33SW5	--	5%	--	5%	--	5%	--	5%	--	5%
		JT33SW1	--	0%	--	0%	--	0%	--	0%	--	0%
		JT33SW2	--	0%	--	0%	--	1%	--	0%	--	0%
		JT33SW3	--	0%	--	0%	--	0%	--	0%	--	0%
		JT33SW4	--	0%	--	0%	--	0%	--	0%	--	0%
		JT33SW5	--	0%	--	0%	--	0%	--	0%	--	0%
	JAON35	JN35SW1	--	13%	--	13%	--	12%	--	13%	--	12%
		JN35SW2	--	62%	--	62%	--	60%	--	62%	--	61%
		JN35SW3	--	14%	--	14%	--	14%	--	14%	--	14%
		JN35SW4	--	7%	--	7%	--	6%	--	7%	--	7%
		JN35SW5	--	5%	--	5%	--	5%	--	5%	--	5%
		JT35SW1	--	0%	--	0%	--	0%	--	0%	--	0%
		JT35SW2	--	0%	--	0%	--	2%	--	0%	--	1%
		JT35SW3	--	0%	--	0%	--	0%	--	0%	--	0%
		JT35SW4	--	0%	--	0%	--	0%	--	0%	--	0%
		JT35SW5	--	0%	--	0%	--	0%	--	0%	--	0%
	PAOD11	PD11N1	100%	--	100%	--	100%	--	100%	--	100%	--
	PAOD22	PD22E1	0%	--	0%	--	0%	--	0%	--	0%	--
		PD22SE1	0%	--	0%	--	0%	--	0%	--	0%	--
		PAOD22	100%	--	100%	--	100%	--	100%	--	100%	--
	PAOD24	PD24S1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	PAOD25	PD25E1	85%	--	85%	--	85%	--	85%	--	85%	--
		PD25SE1	15%	--	15%	--	15%	--	15%	--	15%	--
	PAOD26	PD26E1	0%	--	0%	--	0%	--	0%	--	0%	--

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
		PD26SE1	0%	--	0%	--	0%	--	0%	--	0%	--
		PAOD26	100%	--	100%	--	100%	--	100%	--	100%	--
	PAOD33	PD33SW1	11%	100%	11%	100%	9%	80%	11%	100%	10%	90%
		PD33SW2	9%	0%	9%	0%	8%	0%	9%	0%	9%	0%
		PD33SW3	8%	0%	8%	0%	7%	0%	8%	0%	7%	0%
		PD33SW4	5%	0%	5%	0%	5%	0%	5%	0%	5%	0%
		PD33SW5	67%	0%	67%	0%	57%	0%	67%	0%	62%	0%
		PY33SW1	0%	0%	0%	0%	2%	20%	0%	0%	1%	10%
		PY33SW2	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%
		PY33SW3	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%
		PY33SW4	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
		PY33SW5	0%	0%	0%	0%	9%	0%	0%	0%	5%	0%
	PAON11	PN11N1	--	100%	--	100%	--	100%	--	100%	--	100%
	PAON17	PN17N1	--	100%	--	100%	--	100%	--	100%	--	100%
	PAON18	PN18N1	--	0%	--	0%	--	0%	--	0%	--	0%
		PAON18	--	100%	--	100%	--	100%	--	100%	--	100%
	PAON22	PN22E1	--	0%	--	0%	--	0%	--	0%	--	0%
		PN22SE1	--	0%	--	0%	--	0%	--	0%	--	0%
		PAON22	--	100%	--	100%	--	100%	--	100%	--	100%
	PAON24	PN24SW1	--	0%	--	0%	--	0%	--	0%	--	0%
		PN24SW2	--	0%	--	0%	--	0%	--	0%	--	0%
		PN24SW3	--	0%	--	0%	--	0%	--	0%	--	0%
		PN24SW4	--	0%	--	0%	--	0%	--	0%	--	0%
		PN24SW5	--	0%	--	0%	--	0%	--	0%	--	0%
		PAON24	--	100%	--	100%	--	100%	--	100%	--	100%
	PAON25	PN25E1	--	100%	--	100%	--	100%	--	100%	--	100%
		PN25SE1	--	0%	--	0%	--	0%	--	0%	--	0%
	PAON26	PN26E1	--	100%	--	100%	--	100%	--	100%	--	100%
		PN26SE1	--	0%	--	0%	--	0%	--	0%	--	0%
	PAON33	PN33SW1	--	100%	--	100%	--	82%	--	100%	--	91%
		PN33SW2	--	0%	--	0%	--	0%	--	0%	--	0%
		PN33SW3	--	0%	--	0%	--	0%	--	0%	--	0%
		PN33SW4	--	0%	--	0%	--	0%	--	0%	--	0%
		PN33SW5	--	0%	--	0%	--	0%	--	0%	--	0%
		PT33SW1	--	0%	--	0%	--	18%	--	0%	--	9%
	PAON34	PN34SW1	--	0%	--	0%	--	0%	--	0%	--	0%
		PN34SW2	--	0%	--	0%	--	0%	--	0%	--	0%
		PN34SW3	--	0%	--	0%	--	0%	--	0%	--	0%
		PN34SW4	--	0%	--	0%	--	0%	--	0%	--	0%
		PN34SW5	--	0%	--	0%	--	0%	--	0%	--	0%
		PAON34	--	100%	--	100%	--	100%	--	100%	--	100%
13C	JAQD16	JD16SW1	15%	--	15%	--	12%	--	15%	--	13%	--
		JD16SW2	37%	--	37%	--	30%	--	37%	--	33%	--

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
		JD16SW3	22%	--	22%	--	18%	--	22%	--	20%	--
		JD16SW4	12%	--	12%	--	9%	--	12%	--	11%	--
		JD16SW5	15%	--	15%	--	12%	--	15%	--	14%	--
		JY16SW1	0%	--	0%	--	3%	--	0%	--	1%	--
		JY16SW2	0%	--	0%	--	7%	--	0%	--	4%	--
		JY16SW3	0%	--	0%	--	4%	--	0%	--	2%	--
		JY16SW4	0%	--	0%	--	2%	--	0%	--	1%	--
		JY16SW5	0%	--	0%	--	3%	--	0%	--	1%	--
	JAQD24	JD24E1	60%	--	60%	--	60%	--	60%	--	60%	--
		JD24SE1	40%	--	40%	--	40%	--	40%	--	40%	--
	JAQD25	JD25E1	60%	--	60%	--	60%	--	60%	--	60%	--
		JD25SE1	40%	--	40%	--	40%	--	40%	--	40%	--
	JAQD27	JD27E1X	60%	--	60%	--	60%	--	60%	--	60%	--
		JD27SE1X	40%	--	40%	--	40%	--	40%	--	40%	--
	JAQD28	JD28E1	60%	--	60%	--	60%	--	60%	--	60%	--
		JD28SE1	40%	--	40%	--	40%	--	40%	--	40%	--
	JAQD32	JD32SW1	15%	13%	15%	13%	14%	13%	15%	13%	15%	13%
		JD32SW2	37%	62%	37%	62%	36%	62%	37%	62%	37%	62%
		JD32SW3	22%	14%	22%	14%	21%	14%	22%	14%	22%	14%
		JD32SW4	12%	7%	12%	7%	11%	7%	12%	7%	12%	7%
		JD32SW5	15%	5%	15%	5%	15%	5%	15%	5%	15%	5%
		JY32SW1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
		JY32SW2	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
		JY32SW3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
		JY32SW4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
		JY32SW5	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	JAQD36	JD36SW1	15%	--	15%	--	12%	--	15%	--	13%	--
		JD36SW2	37%	--	37%	--	31%	--	37%	--	34%	--
		JD36SW3	22%	--	22%	--	18%	--	22%	--	20%	--
		JD36SW4	12%	--	12%	--	10%	--	12%	--	11%	--
		JD36SW5	15%	--	15%	--	12%	--	15%	--	14%	--
		JY36SW1	0%	--	0%	--	3%	--	0%	--	1%	--
		JY36SW2	0%	--	0%	--	6%	--	0%	--	3%	--
		JY36SW3	0%	--	0%	--	4%	--	0%	--	2%	--
		JY36SW4	0%	--	0%	--	2%	--	0%	--	1%	--
		JY36SW5	0%	--	0%	--	3%	--	0%	--	1%	--
	JAQD39	JD39SW1	15%	13%	15%	13%	--	--	15%	13%	--	--
		JD39SW2	37%	62%	37%	62%	--	--	37%	62%	--	--
		JD39SW4	12%	7%	12%	7%	--	--	12%	7%	--	--
		JD39SW5	15%	5%	15%	5%	--	--	15%	5%	--	--
	JAQD41	JD41SW1X	15%	--	15%	--	14%	--	15%	--	15%	--
		JD41SW2X	37%	--	37%	--	36%	--	37%	--	37%	--
		JD41SW3X	22%	--	22%	--	21%	--	22%	--	22%	--

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
		JD41SW4X	12%	--	12%	--	12%	--	12%	--	12%	--
		JD41SW5X	15%	--	15%	--	15%	--	15%	--	15%	--
		JY41SW1X	0%	--	0%	--	0%	--	0%	--	0%	--
		JY41SW2X	0%	--	0%	--	1%	--	0%	--	0%	--
		JY41SW3X	0%	--	0%	--	0%	--	0%	--	0%	--
		JY41SW4X	0%	--	0%	--	0%	--	0%	--	0%	--
		JY41SW5X	0%	--	0%	--	0%	--	0%	--	0%	--
	JAQDRS	JDRSE1	--	--	--	--	60%	47%	--	--	60%	47%
		JDRSSE1	--	--	--	--	40%	53%	--	--	40%	53%
	JAQDRSW	JDRSWE1	--	--	--	--	60%	47%	--	--	60%	47%
		JDRSWSE1	--	--	--	--	40%	53%	--	--	40%	53%
	JAQDRW	JDRWSW1	--	--	--	--	15%	13%	--	--	15%	13%
		JDRWSW2	--	--	--	--	37%	62%	--	--	37%	62%
		JDRWSW3	--	--	--	--	22%	14%	--	--	22%	14%
		JDRWSW4	--	--	--	--	12%	7%	--	--	12%	7%
		JDRWSW5	--	--	--	--	15%	5%	--	--	15%	5%
	JAQN24	JN24E1	--	47%	--	47%	--	47%	--	47%	--	47%
		JN24SE1	--	53%	--	53%	--	53%	--	53%	--	53%
	JAQN27	JN27E1	--	47%	--	47%	--	47%	--	47%	--	47%
		JN27SE1	--	53%	--	53%	--	53%	--	53%	--	53%
	JAQN28	JN28E1	--	47%	--	47%	--	47%	--	47%	--	47%
		JN28SE1	--	53%	--	53%	--	53%	--	53%	--	53%
	JAQN36	JN36SW1	--	13%	--	13%	--	11%	--	13%	--	12%
		JN36SW2	--	62%	--	62%	--	53%	--	62%	--	57%
		JN36SW3	--	14%	--	14%	--	12%	--	14%	--	13%
		JN36SW4	--	7%	--	7%	--	6%	--	7%	--	6%
		JN36SW5	--	5%	--	5%	--	5%	--	5%	--	5%
		JT36SW1	--	0%	--	0%	--	2%	--	0%	--	1%
		JT36SW2	--	0%	--	0%	--	9%	--	0%	--	4%
		JT36SW3	--	0%	--	0%	--	2%	--	0%	--	1%
		JT36SW4	--	0%	--	0%	--	1%	--	0%	--	0%
		JT36SW5	--	0%	--	0%	--	1%	--	0%	--	0%
	JAQN41	JN41SW1	--	13%	--	13%	--	13%	--	13%	--	13%
		JN41SW2	--	62%	--	62%	--	62%	--	62%	--	62%
		JN41SW3	--	14%	--	14%	--	14%	--	14%	--	14%
		JN41SW4	--	6%	--	7%	--	7%	--	7%	--	7%
		JN41SW5	--	5%	--	5%	--	5%	--	5%	--	5%
	PAQD12	PD12N1	100%	--	100%	--	100%	--	100%	--	100%	--
	PAQD14	PD14N1	100%	--	100%	--	100%	--	100%	--	100%	--
	PAQD25	PD25E1	75%	--	75%	--	75%	--	75%	--	75%	--
		PD25SE1	25%	--	25%	--	25%	--	25%	--	25%	--
	PAQD26	PD26E1	75%	--	75%	--	75%	--	75%	--	75%	--
		PD26SE1	25%	--	25%	--	25%	--	25%	--	25%	--

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
	PAQD27	PD27S1	100%	--	100%	--	100%	--	100%	--	100%	--
	PAQD31	PD31SW1	11%	--	11%	--	10%	--	11%	--	11%	--
		PD31SW2	9%	--	9%	--	9%	--	9%	--	9%	--
		PD31SW3	8%	--	8%	--	8%	--	8%	--	8%	--
		PD31SW4	5%	--	5%	--	5%	--	5%	--	5%	--
		PD31SW5	67%	--	67%	--	65%	--	67%	--	66%	--
		PY31SW1	0%	--	0%	--	0%	--	0%	--	0%	--
		PY31SW2	0%	--	0%	--	0%	--	0%	--	0%	--
		PY31SW3	0%	--	0%	--	0%	--	0%	--	0%	--
		PY31SW4	0%	--	0%	--	0%	--	0%	--	0%	--
		PY31SW5	0%	--	0%	--	2%	--	0%	--	1%	--
	PAQD33	PD33SW1	11%	--	11%	--	9%	--	11%	--	10%	--
		PD33SW2	9%	--	9%	--	8%	--	9%	--	8%	--
		PD33SW3	8%	--	8%	--	6%	--	8%	--	7%	--
		PD33SW4	5%	--	5%	--	4%	--	5%	--	5%	--
		PD33SW5	67%	--	67%	--	54%	--	67%	--	60%	--
		PY33SW1	0%	--	0%	--	2%	--	0%	--	1%	--
		PY33SW2	0%	--	0%	--	2%	--	0%	--	1%	--
		PY33SW3	0%	--	0%	--	2%	--	0%	--	1%	--
		PY33SW4	0%	--	0%	--	1%	--	0%	--	1%	--
		PY33SW5	0%	--	0%	--	13%	--	0%	--	6%	--
	PAQN12	PN12N1	--	100%	--	100%	--	100%	--	100%	--	100%
	PAQN18	PN18N1	--	0%	--	0%	--	0%	--	0%	--	0%
		PAQN18	--	100%	--	100%	--	100%	--	100%	--	100%
	PAQN25	PN25E1	--	0%	--	0%	--	0%	--	0%	--	0%
		PN25SE1	--	0%	--	0%	--	0%	--	0%	--	0%
		PAQN25	--	100%	--	100%	--	100%	--	100%	--	100%
	PAQN26	PN26E1	--	50%	--	50%	--	50%	--	50%	--	50%
		PN26SE1	--	50%	--	50%	--	50%	--	50%	--	50%
	PAQN31	PN31E1	--	50%	--	50%	--	50%	--	50%	--	50%
		PN31SE1	--	50%	--	50%	--	50%	--	50%	--	50%
	PAQN33	PN33SW1	--	100%	--	100%	--	81%	--	100%	--	91%
		PN33SW2	--	0%	--	0%	--	0%	--	0%	--	0%
		PN33SW3	--	0%	--	0%	--	0%	--	0%	--	0%
		PN33SW4	--	0%	--	0%	--	0%	--	0%	--	0%
		PN33SW5	--	0%	--	0%	--	0%	--	0%	--	0%
		PT33SW1	--	0%	--	0%	--	19%	--	0%	--	9%
13L	JAPD23	JD23E1	60%	--	60%	--	60%	--	60%	--	60%	--
		JD23SE1	40%	--	40%	--	40%	--	40%	--	40%	--
	PAPD11	PD11SW1	11%	--	11%	--	11%	--	11%	--	11%	--
		PD11SW2	9%	--	9%	--	9%	--	9%	--	9%	--
		PD11SW3	8%	--	8%	--	8%	--	8%	--	8%	--
		PD11SW4	5%	--	5%	--	5%	--	5%	--	5%	--

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
		PD11SW5	67%	--	67%	--	67%	--	67%	--	67%	--
	PAPD22	PD22E1	75%	--	75%	--	75%	--	75%	--	75%	--
		PD22SE1	25%	--	25%	--	25%	--	25%	--	25%	--
	PAPD33	PD33SW1	11%	--	11%	--	11%	--	11%	--	11%	--
		PD33SW2	9%	--	9%	--	9%	--	9%	--	9%	--
		PD33SW3	8%	--	8%	--	8%	--	8%	--	8%	--
		PD33SW4	5%	--	5%	--	5%	--	5%	--	5%	--
		PD33SW5	67%	--	67%	--	67%	--	67%	--	67%	--
	PAPN11	PN11N1	--	100%	--	100%	--	100%	--	100%	--	100%
13R	PARD23	PD23E1	75%	--	75%	--	75%	--	75%	--	75%	--
		PD23SE1	25%	--	25%	--	25%	--	25%	--	25%	--
	PARD24	PD24E1	0%	--	0%	--	0%	--	0%	--	0%	--
		PD24SE1	0%	--	0%	--	0%	--	0%	--	0%	--
		PARD24	100%	--	100%	--	100%	--	100%	--	100%	--
	PARD31	PD31SW1	11%	--	11%	--	9%	--	11%	--	10%	--
		PD31SW2	9%	--	9%	--	7%	--	9%	--	8%	--
		PD31SW3	8%	--	8%	--	6%	--	8%	--	7%	--
		PD31SW4	5%	--	5%	--	4%	--	5%	--	5%	--
		PD31SW5	67%	--	67%	--	53%	--	67%	--	60%	--
		PY31SW1	0%	--	0%	--	2%	--	0%	--	1%	--
		PY31SW2	0%	--	0%	--	2%	--	0%	--	1%	--
		PY31SW3	0%	--	0%	--	2%	--	0%	--	1%	--
		PY31SW4	0%	--	0%	--	1%	--	0%	--	1%	--
		PY31SW5	0%	--	0%	--	13%	--	0%	--	7%	--
	PARD32	PD32SW1	11%	--	11%	--	9%	--	11%	--	10%	--
		PD32SW2	9%	--	9%	--	7%	--	9%	--	8%	--
		PD32SW3	8%	--	8%	--	6%	--	8%	--	7%	--
		PD32SW4	5%	--	5%	--	4%	--	5%	--	5%	--
		PD32SW5	67%	--	67%	--	53%	--	67%	--	60%	--
		PY32SW1	0%	--	0%	--	2%	--	0%	--	1%	--
		PY32SW2	0%	--	0%	--	2%	--	0%	--	1%	--
		PY32SW3	0%	--	0%	--	2%	--	0%	--	1%	--
		PY32SW4	0%	--	0%	--	1%	--	0%	--	1%	--
		PY32SW5	0%	--	0%	--	13%	--	0%	--	7%	--
	PARN11	PN11NW1	--	100%	--	100%	--	100%	--	100%	--	100%
22L	JASD11	JD11N1	100%	--	100%	--	100%	--	100%	--	100%	--
	JASD12	JD12N1	100%	--	100%	--	100%	--	100%	--	100%	--
	JASD26	JD26E1	62%	53%	62%	53%	62%	53%	62%	53%	62%	53%
		JD26SE1	38%	47%	38%	47%	38%	47%	38%	47%	38%	47%
	JASD27	JD27E1	62%	--	62%	--	62%	--	62%	--	62%	--
		JD27SE1	38%	--	38%	--	38%	--	38%	--	38%	--
	JASD33	JD33SW1	15%	--	15%	--	13%	--	15%	--	14%	--
		JD33SW2	35%	--	35%	--	29%	--	35%	--	32%	--

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
22L		JD33SW3	23%	--	23%	--	20%	--	23%	--	22%	--
		JD33SW4	12%	--	12%	--	10%	--	12%	--	11%	--
		JD33SW5	15%	--	15%	--	13%	--	15%	--	14%	--
		JY33SW1	0%	--	0%	--	2%	--	0%	--	1%	--
		JY33SW2	0%	--	0%	--	5%	--	0%	--	3%	--
		JY33SW3	0%	--	0%	--	4%	--	0%	--	2%	--
		JY33SW4	0%	--	0%	--	2%	--	0%	--	1%	--
		JY33SW5	0%	--	0%	--	2%	--	0%	--	1%	--
	JASD34	JD34SW1	15%	10%	15%	10%	15%	8%	15%	10%	15%	9%
		JD34SW2	35%	56%	35%	56%	34%	45%	35%	56%	34%	50%
		JD34SW3	23%	18%	23%	18%	23%	14%	23%	18%	23%	16%
		JD34SW4	12%	7%	12%	7%	11%	5%	12%	7%	11%	6%
		JD34SW5	15%	10%	15%	10%	15%	8%	15%	10%	15%	9%
		JY34SW1	0%	0%	0%	0%	0%	2%	0%	0%	0%	1%
		JY34SW2	0%	0%	0%	0%	0%	11%	0%	0%	0%	6%
		JY34SW3	0%	0%	0%	0%	0%	4%	0%	0%	0%	2%
		JY34SW4	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%
		JY34SW5	0%	0%	0%	0%	0%	2%	0%	0%	0%	1%
	JASD35	JD35SW1	0%	--	0%	--	0%	--	0%	--	0%	--
		JD35SW2	0%	--	0%	--	0%	--	0%	--	0%	--
		JD35SW3	0%	--	0%	--	0%	--	0%	--	0%	--
		JD35SW4	0%	--	0%	--	0%	--	0%	--	0%	--
		JD35SW5	0%	--	0%	--	0%	--	0%	--	0%	--
		JASD35	100%	--	100%	--	100%	--	100%	--	100%	--
	JASD35A	JD35ASW1	15%	--	15%	--	15%	--	15%	--	15%	--
		JD35ASW2	35%	--	35%	--	35%	--	35%	--	35%	--
		JD35ASW3	23%	--	23%	--	23%	--	23%	--	23%	--
		JD35ASW4	11%	--	12%	--	12%	--	12%	--	11%	--
		JD35ASW5	15%	--	15%	--	15%	--	15%	--	15%	--
	JASD35B	JD35BSW1	15%	--	15%	--	12%	--	15%	--	14%	--
		JD35BSW2	35%	--	35%	--	28%	--	35%	--	31%	--
		JD35BSW3	23%	--	23%	--	19%	--	23%	--	21%	--
		JD35BSW4	12%	--	12%	--	9%	--	12%	--	10%	--
		JD35BSW5	15%	--	15%	--	12%	--	15%	--	14%	--
		JY35BSW1	0%	--	0%	--	3%	--	0%	--	2%	--
		JY35BSW2	0%	--	0%	--	7%	--	0%	--	3%	--
		JY35BSW3	0%	--	0%	--	5%	--	0%	--	2%	--
		JY35BSW4	0%	--	0%	--	2%	--	0%	--	1%	--
		JY35BSW5	0%	--	0%	--	3%	--	0%	--	2%	--
	JASD35C	JD35CSW1	15%	--	15%	--	12%	--	15%	--	14%	--
		JD35CSW2	35%	--	35%	--	28%	--	35%	--	31%	--
		JD35CSW3	23%	--	23%	--	19%	--	23%	--	21%	--
		JD35CSW4	12%	--	12%	--	9%	--	12%	--	10%	--

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
22L		JD35CSW5	15%	--	15%	--	12%	--	15%	--	14%	--
		JY35CSW1	0%	--	0%	--	3%	--	0%	--	1%	--
		JY35CSW2	0%	--	0%	--	7%	--	0%	--	3%	--
		JY35CSW3	0%	--	0%	--	5%	--	0%	--	2%	--
		JY35CSW4	0%	--	0%	--	2%	--	0%	--	1%	--
		JY35CSW5	0%	--	0%	--	3%	--	0%	--	2%	--
	JASD35D	JD35DSW1	15%	--	15%	--	12%	--	15%	--	14%	--
		JD35DSW2	35%	--	35%	--	28%	--	35%	--	31%	--
		JD35DSW3	23%	--	23%	--	19%	--	23%	--	21%	--
		JD35DSW4	12%	--	12%	--	9%	--	12%	--	10%	--
		JD35DSW5	15%	--	15%	--	12%	--	15%	--	14%	--
		JY35DSW1	0%	--	0%	--	3%	--	0%	--	1%	--
		JY35DSW2	0%	--	0%	--	7%	--	0%	--	3%	--
		JY35DSW3	0%	--	0%	--	5%	--	0%	--	2%	--
		JY35DSW4	0%	--	0%	--	2%	--	0%	--	1%	--
		JY35DSW5	0%	--	0%	--	3%	--	0%	--	2%	--
	JASDGE	JDGELE1	--	--	--	--	62%	53%	--	--	62%	53%
		JDGELSE1	--	--	--	--	38%	47%	--	--	38%	47%
	JASDRE	JDRELE1	--	--	--	--	62%	53%	--	--	62%	53%
		JDRELSE1	--	--	--	--	38%	47%	--	--	38%	47%
	JASDRW	JDRWSW1	--	--	--	--	15%	13%	--	--	15%	13%
		JDRWSW2	--	--	--	--	37%	62%	--	--	37%	62%
		JDRWSW3	--	--	--	--	22%	14%	--	--	22%	14%
		JDRWSW4	--	--	--	--	12%	7%	--	--	12%	7%
		JDRWSW5	--	--	--	--	15%	5%	--	--	15%	5%
	JASN11	JN11N1	--	100%	--	100%	--	100%	--	100%	--	100%
	JASN12	JN12N1	--	100%	--	100%	--	100%	--	100%	--	100%
	JASN26	JN26E1	--	53%	--	53%	--	53%	--	53%	--	53%
		JN26SE1	--	47%	--	47%	--	47%	--	47%	--	47%
	JASN27	JN27E1	--	54%	--	53%	--	53%	--	53%	--	54%
		JN27SE1	--	46%	--	47%	--	47%	--	47%	--	46%
	JASN33	JN33SW1	--	10%	--	10%	--	10%	--	10%	--	10%
		JN33SW2	--	56%	--	56%	--	56%	--	56%	--	56%
		JN33SW3	--	18%	--	18%	--	18%	--	18%	--	18%
		JN33SW4	--	7%	--	7%	--	7%	--	7%	--	7%
		JN33SW5	--	10%	--	10%	--	10%	--	10%	--	10%
		JT33SW1	--	0%	--	0%	--	0%	--	0%	--	0%
		JT33SW2	--	0%	--	0%	--	0%	--	0%	--	0%
		JT33SW3	--	0%	--	0%	--	0%	--	0%	--	0%
		JT33SW4	--	0%	--	0%	--	0%	--	0%	--	0%
		JT33SW5	--	0%	--	0%	--	0%	--	0%	--	0%
	JASN34	JN34SW1	--	10%	--	10%	--	10%	--	10%	--	10%
		JN34SW2	--	56%	--	56%	--	56%	--	56%	--	56%

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
22L		JN34SW3	--	18%	--	18%	--	18%	--	18%	--	17%
		JN34SW4	--	7%	--	7%	--	7%	--	7%	--	7%
		JN34SW5	--	10%	--	10%	--	10%	--	10%	--	10%
		JT34SW1	--	0%	--	0%	--	0%	--	0%	--	0%
		JT34SW2	--	0%	--	0%	--	0%	--	0%	--	0%
		JT34SW3	--	0%	--	0%	--	0%	--	0%	--	0%
		JT34SW4	--	0%	--	0%	--	0%	--	0%	--	0%
		JT34SW5	--	0%	--	0%	--	0%	--	0%	--	0%
	JASN35	JN35SW1	--	10%	--	10%	--	8%	--	10%	--	9%
		JN35SW2	--	56%	--	56%	--	45%	--	56%	--	50%
		JN35SW3	--	18%	--	18%	--	14%	--	18%	--	16%
		JN35SW4	--	7%	--	7%	--	5%	--	7%	--	6%
		JN35SW5	--	10%	--	10%	--	8%	--	10%	--	9%
		JT35SW1	--	0%	--	0%	--	2%	--	0%	--	1%
		JT35SW2	--	0%	--	0%	--	11%	--	0%	--	6%
		JT35SW3	--	0%	--	0%	--	3%	--	0%	--	2%
		JT35SW4	--	0%	--	0%	--	1%	--	0%	--	1%
		JT35SW5	--	0%	--	0%	--	2%	--	0%	--	1%
	JASN35E	JN35ESW1	--	10%	--	10%	--	10%	--	10%	--	10%
		JN35ESW2	--	56%	--	56%	--	55%	--	56%	--	56%
		JN35ESW3	--	17%	--	18%	--	17%	--	17%	--	17%
		JN35ESW4	--	7%	--	7%	--	7%	--	7%	--	7%
		JN35ESW5	--	10%	--	10%	--	10%	--	10%	--	10%
		JT35ESW1	--	0%	--	0%	--	0%	--	0%	--	0%
		JT35ESW2	--	0%	--	0%	--	1%	--	0%	--	1%
		JT35ESW3	--	0%	--	0%	--	0%	--	0%	--	0%
		JT35ESW4	--	0%	--	0%	--	0%	--	0%	--	0%
		JT35ESW5	--	0%	--	0%	--	0%	--	0%	--	0%
	JASN35F	JN35FSW1	--	10%	--	10%	--	10%	--	10%	--	10%
		JN35FSW2	--	56%	--	56%	--	56%	--	56%	--	56%
		JN35FSW3	--	18%	--	18%	--	18%	--	18%	--	18%
		JN35FSW4	--	7%	--	7%	--	7%	--	7%	--	7%
		JN35FSW5	--	10%	--	10%	--	10%	--	10%	--	10%
	PASD110	PD110N1	100%	--	100%	--	100%	--	100%	--	100%	--
	PASD17	PD17N1	100%	--	100%	--	100%	--	100%	--	100%	--
	PASD18	PD18N1	100%	--	100%	--	100%	--	100%	--	100%	--
	PASD21	PD21E1	80%	--	80%	--	80%	--	80%	--	80%	--
		PD21SE1	20%	--	20%	--	20%	--	20%	--	20%	--
	PASD22	PD22E1	80%	--	80%	--	80%	--	80%	--	80%	--
		PD22SE1	20%	--	20%	--	20%	--	20%	--	20%	--
	PASD23	PD23E1	80%	100%	80%	100%	80%	100%	80%	100%	80%	100%
		PD23SE1	20%	0%	20%	0%	20%	0%	20%	0%	20%	0%
	PASD34	PD34S1	100%	--	100%	--	100%	--	100%	--	100%	--

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
22L	PASD35	PD35SW1	4%	--	4%	--	4%	--	4%	--	4%	--
		PD35SW2	12%	--	12%	--	10%	--	12%	--	11%	--
		PD35SW3	7%	--	7%	--	6%	--	7%	--	6%	--
		PD35SW4	9%	--	9%	--	8%	--	9%	--	8%	--
		PD35SW5	68%	--	68%	--	58%	--	68%	--	63%	--
		PY35SW1	0%	--	0%	--	1%	--	0%	--	0%	--
		PY35SW2	0%	--	0%	--	2%	--	0%	--	1%	--
		PY35SW3	0%	--	0%	--	1%	--	0%	--	1%	--
		PY35SW4	0%	--	0%	--	1%	--	0%	--	1%	--
		PY35SW5	0%	--	0%	--	10%	--	0%	--	5%	--
	PASD36	PD36SW1	4%	--	4%	--	4%	--	4%	--	4%	--
		PD36SW2	12%	--	12%	--	10%	--	12%	--	11%	--
		PD36SW3	7%	--	7%	--	5%	--	7%	--	6%	--
		PD36SW4	9%	--	9%	--	7%	--	9%	--	8%	--
		PD36SW5	68%	--	68%	--	55%	--	68%	--	62%	--
		PY36SW1	0%	--	0%	--	1%	--	0%	--	0%	--
		PY36SW2	0%	--	0%	--	2%	--	0%	--	1%	--
		PY36SW3	0%	--	0%	--	1%	--	0%	--	1%	--
		PY36SW4	0%	--	0%	--	2%	--	0%	--	1%	--
		PY36SW5	0%	--	0%	--	13%	--	0%	--	7%	--
	PASD37	PD37S1	100%	--	100%	--	100%	--	100%	--	100%	--
	PASN111	PN111SW1	--	80%	--	80%	--	64%	--	80%	--	72%
		PN111SW2	--	0%	--	0%	--	0%	--	0%	--	0%
		PN111SW3	--	0%	--	0%	--	0%	--	0%	--	0%
		PN111SW4	--	0%	--	0%	--	0%	--	0%	--	0%
		PN111SW5	--	20%	--	20%	--	16%	--	20%	--	18%
		PT111SW1	--	0%	--	0%	--	16%	--	0%	--	8%
		PT111SW5	--	0%	--	0%	--	4%	--	0%	--	2%
	PASN113	PN113N1	--	100%	--	100%	--	100%	--	100%	--	100%
	PASN17	PN17N1	--	0%	--	0%	--	0%	--	0%	--	0%
		PASN17	--	100%	--	100%	--	100%	--	100%	--	100%
	PASN18	PN18N1	--	100%	--	100%	--	100%	--	100%	--	100%
	PASN21	PN21E1	--	100%	--	100%	--	100%	--	100%	--	100%
		PN21SE1	--	0%	--	0%	--	0%	--	0%	--	0%
	PASN22	PN22E1	--	100%	--	100%	--	100%	--	100%	--	100%
		PN22SE1	--	0%	--	0%	--	0%	--	0%	--	0%
	PASN23	PN23E1	--	100%	--	100%	--	100%	--	100%	--	100%
		PN23SE1	--	0%	--	0%	--	0%	--	0%	--	0%
	PASN312	PN312SW1	--	80%	--	80%	--	64%	--	80%	--	72%
		PN312SW2	--	0%	--	0%	--	0%	--	0%	--	0%
		PN312SW3	--	0%	--	0%	--	0%	--	0%	--	0%
		PN312SW4	--	0%	--	0%	--	0%	--	0%	--	0%
		PN312SW5	--	20%	--	20%	--	16%	--	20%	--	18%

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
		PT312SW1	--	0%	--	0%	--	16%	--	0%	--	8%
		PT312SW5	--	0%	--	0%	--	4%	--	0%	--	2%
	PASN35	PN35SW1	--	80%	--	80%	--	64%	--	80%	--	72%
		PN35SW2	--	0%	--	0%	--	0%	--	0%	--	0%
		PN35SW3	--	0%	--	0%	--	0%	--	0%	--	0%
		PN35SW4	--	0%	--	0%	--	0%	--	0%	--	0%
		PN35SW5	--	20%	--	20%	--	16%	--	20%	--	18%
		PT35SW1	--	0%	--	0%	--	16%	--	0%	--	8%
		PT35SW5	--	0%	--	0%	--	4%	--	0%	--	2%
	PASN36	PN36S1	--	100%	--	100%	--	100%	--	100%	--	100%
	PASN37	PN37S1	--	100%	--	100%	--	100%	--	100%	--	100%
22R	JATD13	JD13N1	100%	--	100%	--	100%	--	100%	--	100%	--
	JATD19	JD19N1	100%	--	100%	--	100%	--	100%	--	100%	--
	JATD21	JD21E1	62%	--	62%	--	62%	--	62%	--	62%	--
		JD21SE1	38%	--	38%	--	38%	--	38%	--	38%	--
	JATD36	JD36SW1	15%	--	15%	--	12%	--	15%	--	14%	--
		JD36SW2	35%	--	35%	--	28%	--	35%	--	31%	--
		JD36SW3	23%	--	23%	--	19%	--	23%	--	21%	--
		JD36SW4	12%	--	12%	--	9%	--	12%	--	10%	--
		JD36SW5	15%	--	15%	--	12%	--	15%	--	14%	--
		JY36SW1	0%	--	0%	--	3%	--	0%	--	2%	--
		JY36SW2	0%	--	0%	--	7%	--	0%	--	3%	--
		JY36SW3	0%	--	0%	--	5%	--	0%	--	2%	--
		JY36SW4	0%	--	0%	--	2%	--	0%	--	1%	--
		JY36SW5	0%	--	0%	--	3%	--	0%	--	2%	--
	JATD37	JD37SW1	15%	--	15%	--	12%	--	15%	--	14%	--
		JD37SW2	35%	--	35%	--	28%	--	35%	--	31%	--
		JD37SW3	23%	--	23%	--	19%	--	23%	--	21%	--
		JD37SW4	12%	--	12%	--	9%	--	12%	--	10%	--
		JD37SW5	15%	--	15%	--	12%	--	15%	--	14%	--
		JY37SW1	0%	--	0%	--	3%	--	0%	--	2%	--
		JY37SW2	0%	--	0%	--	7%	--	0%	--	3%	--
		JY37SW3	0%	--	0%	--	5%	--	0%	--	2%	--
		JY37SW4	0%	--	0%	--	2%	--	0%	--	1%	--
		JY37SW5	0%	--	0%	--	3%	--	0%	--	2%	--
	JATN21	JN21E1	--	53%	--	54%	--	53%	--	53%	--	53%
		JN21SE1	--	47%	--	46%	--	47%	--	47%	--	47%
	JATN37	JN37SW1	--	10%	--	10%	--	8%	--	10%	--	9%
		JN37SW2	--	56%	--	56%	--	45%	--	56%	--	51%
		JN37SW3	--	18%	--	18%	--	14%	--	17%	--	16%
		JN37SW4	--	6%	--	7%	--	6%	--	7%	--	6%
		JN37SW5	--	10%	--	10%	--	8%	--	9%	--	9%
		JT37SW1	--	0%	--	0%	--	2%	--	0%	--	1%

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
22R		JT37SW2	--	0%	--	0%	--	11%	--	0%	--	6%
		JT37SW3	--	0%	--	0%	--	4%	--	0%	--	2%
		JT37SW4	--	0%	--	0%	--	1%	--	0%	--	1%
		JT37SW5	--	0%	--	0%	--	2%	--	0%	--	1%
	PATD11	PD11N1	100%	--	100%	--	100%	--	100%	--	100%	--
	PATD12	PD12N1	100%	--	100%	--	100%	--	100%	--	100%	--
	PATD13	PD13N1	100%	--	100%	--	100%	--	100%	--	100%	--
	PATD26	PD26E1	80%	--	80%	--	80%	--	80%	--	80%	--
		PD26SE1	20%	--	20%	--	20%	--	20%	--	20%	--
	PATD27	PD27E1	80%	--	80%	--	80%	--	80%	--	80%	--
		PD27SE1	20%	--	20%	--	20%	--	20%	--	20%	--
	PATD28	PD28E1	0%	--	0%	--	0%	--	0%	--	0%	--
		PD28SE1	0%	--	0%	--	0%	--	0%	--	0%	--
		PATD28	100%	--	100%	--	100%	--	100%	--	100%	--
	PATD29	PD29E1	80%	--	80%	--	80%	--	80%	--	80%	--
		PD29SE1	20%	--	20%	--	20%	--	20%	--	20%	--
	PATD31	PD31SW1	4%	--	4%	--	4%	--	4%	--	4%	--
		PD31SW2	12%	--	12%	--	10%	--	12%	--	11%	--
		PD31SW3	7%	--	7%	--	5%	--	7%	--	6%	--
		PD31SW4	9%	--	9%	--	7%	--	9%	--	8%	--
		PD31SW5	68%	--	68%	--	55%	--	68%	--	61%	--
		PY31SW1	0%	--	0%	--	1%	--	0%	--	0%	--
		PY31SW2	0%	--	0%	--	2%	--	0%	--	1%	--
		PY31SW3	0%	--	0%	--	1%	--	0%	--	1%	--
		PY31SW4	0%	--	0%	--	2%	--	0%	--	1%	--
		PY31SW5	0%	--	0%	--	13%	--	0%	--	7%	--
	PATD34	PD34SW1	0%	--	0%	--	0%	--	0%	--	0%	--
		PD34SW2	0%	--	0%	--	0%	--	0%	--	0%	--
		PD34SW3	0%	--	0%	--	0%	--	0%	--	0%	--
		PD34SW4	0%	--	0%	--	0%	--	0%	--	0%	--
		PD34SW5	0%	--	0%	--	0%	--	0%	--	0%	--
		PATD34	100%	--	100%	--	100%	--	100%	--	100%	--
	PATD35	PD35SW1	4%	--	4%	--	4%	--	4%	--	4%	--
		PD35SW2	12%	--	12%	--	11%	--	12%	--	11%	--
		PD35SW3	7%	--	7%	--	6%	--	7%	--	6%	--
		PD35SW4	9%	--	9%	--	8%	--	9%	--	8%	--
		PD35SW5	68%	--	68%	--	61%	--	68%	--	64%	--
		PY35SW1	0%	--	0%	--	0%	--	0%	--	0%	--
		PY35SW2	0%	--	0%	--	1%	--	0%	--	1%	--
		PY35SW3	0%	--	0%	--	1%	--	0%	--	0%	--
		PY35SW4	0%	--	0%	--	1%	--	0%	--	1%	--
		PY35SW5	0%	--	0%	--	7%	--	0%	--	4%	--
	PATD36	PD36S1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
22R	PATD37	PD37S1	100%	--	100%	--	100%	--	100%	--	100%	--
	PATD43	PD43SW1	4%	--	4%	--	4%	--	4%	--	4%	--
		PD43SW2	12%	--	12%	--	12%	--	12%	--	12%	--
		PD43SW3	7%	--	7%	--	7%	--	7%	--	7%	--
		PD43SW4	9%	--	9%	--	9%	--	9%	--	9%	--
		PD43SW5	68%	--	68%	--	67%	--	68%	--	68%	--
		PY43SW1	0%	--	0%	--	0%	--	0%	--	0%	--
		PY43SW2	0%	--	0%	--	0%	--	0%	--	0%	--
		PY43SW3	0%	--	0%	--	0%	--	0%	--	0%	--
		PY43SW4	0%	--	0%	--	0%	--	0%	--	0%	--
		PY43SW5	0%	--	0%	--	1%	--	0%	--	1%	--
	PATN11	PN11N1	--	100%	--	100%	--	100%	--	100%	--	100%
	PATN12	PN12N1	--	100%	--	100%	--	100%	--	100%	--	100%
	PATN13	PN13N1	--	100%	--	100%	--	100%	--	100%	--	100%
	PATN26	PN26E1	--	100%	--	100%	--	100%	--	100%	--	100%
		PN26SE1	--	0%	--	0%	--	0%	--	0%	--	0%
	PATN28	PN28E1	--	0%	--	0%	--	0%	--	0%	--	0%
		PN28SE1	--	0%	--	0%	--	0%	--	0%	--	0%
		PATN28	--	100%	--	100%	--	100%	--	100%	--	100%
	PATN31	PN31SW1	--	80%	--	80%	--	70%	--	80%	--	75%
		PN31SW2	--	0%	--	0%	--	0%	--	0%	--	0%
		PN31SW3	--	0%	--	0%	--	0%	--	0%	--	0%
		PN31SW4	--	0%	--	0%	--	0%	--	0%	--	0%
		PN31SW5	--	20%	--	20%	--	17%	--	20%	--	19%
		PT31SW1	--	0%	--	0%	--	10%	--	0%	--	5%
		PT31SW5	--	0%	--	0%	--	3%	--	0%	--	1%
31C	JAVD212	JD212E1	62%	--	62%	--	62%	--	62%	--	62%	--
		JD212SE1	38%	--	38%	--	38%	--	38%	--	38%	--
	JAVD213	JD213E1	62%	--	62%	--	62%	--	62%	--	62%	--
		JD213SE1	38%	--	38%	--	38%	--	38%	--	38%	--
	JAVD23	JD23N1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	JAVD27	JD27E1	62%	--	62%	--	62%	--	62%	--	62%	--
	JAVD27	JD27SE1	38%	--	38%	--	38%	--	38%	--	38%	--
	JAVD310	JD310SW1	15%	10%	15%	10%	15%	8%	15%	10%	15%	9%
		JD310SW2	35%	56%	35%	56%	35%	45%	35%	56%	35%	50%
		JD310SW3	23%	18%	23%	18%	23%	14%	23%	18%	23%	16%
		JD310SW4	12%	7%	12%	7%	12%	5%	12%	7%	12%	6%
		JD310SW5	15%	10%	15%	10%	15%	8%	15%	10%	15%	9%
		JY310SW1	0%	0%	0%	0%	0%	2%	0%	0%	0%	1%
		JY310SW2	0%	0%	0%	0%	0%	11%	0%	0%	0%	6%
		JY310SW3	0%	0%	0%	0%	0%	4%	0%	0%	0%	2%
		JY310SW4	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%
		JY310SW5	0%	0%	0%	0%	0%	2%	0%	0%	0%	1%

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
31C	JAVD311	JD311SW1	15%	--	15%	--	13%	--	15%	--	14%	--
		JD311SW2	35%	--	35%	--	29%	--	35%	--	32%	--
		JD311SW3	23%	--	23%	--	20%	--	23%	--	22%	--
		JD311SW4	12%	--	12%	--	10%	--	12%	--	11%	--
		JD311SW5	15%	--	15%	--	13%	--	15%	--	14%	--
		JY311SW1	0%	--	0%	--	2%	--	0%	--	1%	--
		JY311SW2	0%	--	0%	--	5%	--	0%	--	2%	--
		JY311SW3	0%	--	0%	--	4%	--	0%	--	2%	--
		JY311SW4	0%	--	0%	--	2%	--	0%	--	1%	--
		JY311SW5	0%	--	0%	--	2%	--	0%	--	1%	--
	JAVD314	JD314SW1	15%	--	15%	--	12%	--	15%	--	14%	--
		JD314SW2	35%	--	35%	--	29%	--	35%	--	32%	--
		JD314SW3	23%	--	23%	--	19%	--	23%	--	21%	--
		JD314SW4	12%	--	12%	--	10%	--	12%	--	11%	--
		JD314SW5	15%	--	15%	--	13%	--	15%	--	14%	--
		JY314SW1	0%	--	0%	--	3%	--	0%	--	1%	--
		JY314SW2	0%	--	0%	--	6%	--	0%	--	3%	--
		JY314SW3	0%	--	0%	--	4%	--	0%	--	2%	--
		JY314SW4	0%	--	0%	--	2%	--	0%	--	1%	--
		JY314SW5	0%	--	0%	--	3%	--	0%	--	1%	--
	JAVD34	JD34SW1	15%	--	15%	--	13%	--	15%	--	14%	--
		JD34SW2	35%	--	35%	--	29%	--	35%	--	32%	--
		JD34SW3	23%	--	23%	--	19%	--	23%	--	21%	--
		JD34SW4	12%	--	12%	--	10%	--	12%	--	11%	--
		JD34SW5	15%	--	15%	--	13%	--	15%	--	14%	--
		JY34SW1	0%	--	0%	--	2%	--	0%	--	1%	--
		JY34SW2	0%	--	0%	--	6%	--	0%	--	3%	--
		JY34SW3	0%	--	0%	--	4%	--	0%	--	2%	--
		JY34SW4	0%	--	0%	--	2%	--	0%	--	1%	--
		JY34SW5	0%	--	0%	--	3%	--	0%	--	1%	--
	JAVDRS	JDRSE1	--	--	--	--	62%	46%	--	--	62%	46%
		JDRSSE1	--	--	--	--	38%	54%	--	--	38%	54%
	JAVDRW	JDRWSW1	--	--	--	--	15%	10%	--	--	15%	10%
		JDRWSW2	--	--	--	--	35%	56%	--	--	35%	56%
		JDRWSW3	--	--	--	--	23%	18%	--	--	23%	18%
		JDRWSW4	--	--	--	--	12%	7%	--	--	12%	7%
		JDRWSW5	--	--	--	--	15%	10%	--	--	15%	10%
	JAVN212	JN212E1	--	46%	--	47%	--	45%	--	46%	--	43%
		JN212SE1	--	54%	--	53%	--	55%	--	54%	--	57%
	JAVN213	JN213E1	--	46%	--	46%	--	46%	--	46%	--	46%
		JN213SE1	--	54%	--	54%	--	54%	--	54%	--	54%
	JAVN23	JN23N1	--	100%	--	100%	--	100%	--	100%	--	100%
	JAVN27	JN27E1	--	46%	--	46%	--	46%	--	46%	--	46%

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
31C		JN27SE1	--	54%	--	54%	--	54%	--	54%	--	54%
	JAVN310	JN310SW1	--	10%	--	10%	--	10%	--	10%	--	10%
		JN310SW2	--	56%	--	56%	--	53%	--	56%	--	55%
		JN310SW3	--	18%	--	18%	--	17%	--	18%	--	17%
		JN310SW4	--	7%	--	7%	--	6%	--	7%	--	7%
		JN310SW5	--	10%	--	10%	--	9%	--	10%	--	10%
		JT310SW1	--	0%	--	0%	--	1%	--	0%	--	0%
		JT310SW2	--	0%	--	0%	--	3%	--	0%	--	1%
		JT310SW3	--	0%	--	0%	--	1%	--	0%	--	0%
		JT310SW4	--	0%	--	0%	--	0%	--	0%	--	0%
		JT310SW5	--	0%	--	0%	--	1%	--	0%	--	0%
	JAVN311	JN311SW1	--	10%	--	10%	--	10%	--	10%	--	10%
		JN311SW2	--	56%	--	56%	--	54%	--	56%	--	55%
		JN311SW3	--	18%	--	18%	--	17%	--	18%	--	17%
		JN311SW4	--	7%	--	7%	--	6%	--	7%	--	7%
		JN311SW5	--	10%	--	10%	--	9%	--	10%	--	9%
		JT311SW1	--	0%	--	0%	--	0%	--	0%	--	0%
		JT311SW2	--	0%	--	0%	--	2%	--	0%	--	1%
		JT311SW3	--	0%	--	0%	--	1%	--	0%	--	0%
		JT311SW4	--	0%	--	0%	--	0%	--	0%	--	0%
		JT311SW5	--	0%	--	0%	--	0%	--	0%	--	0%
	JAVN314	JN314SW1	--	10%	--	10%	--	9%	--	10%	--	9%
		JN314SW2	--	56%	--	56%	--	49%	--	56%	--	53%
		JN314SW3	--	18%	--	18%	--	15%	--	18%	--	17%
		JN314SW4	--	7%	--	7%	--	6%	--	7%	--	6%
		JN314SW5	--	10%	--	10%	--	9%	--	10%	--	9%
		JT314SW1	--	0%	--	0%	--	1%	--	0%	--	1%
		JT314SW2	--	0%	--	0%	--	7%	--	0%	--	3%
		JT314SW3	--	0%	--	0%	--	2%	--	0%	--	1%
		JT314SW4	--	0%	--	0%	--	1%	--	0%	--	0%
		JT314SW5	--	0%	--	0%	--	1%	--	0%	--	1%
	JAVN34	JN34E1	--	46%	--	46%	--	46%	--	46%	--	46%
		JN34SE1	--	54%	--	54%	--	54%	--	54%	--	54%
	PAVD13	PD13N1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	PAVD17	PD17N1	100%	--	100%	--	100%	--	100%	--	100%	--
	PAVD21	PD21E1	84%	86%	84%	86%	84%	86%	84%	86%	84%	86%
		PD21SE1	16%	14%	16%	14%	16%	14%	16%	14%	16%	14%
	PAVD26	PD26SW1	4%	--	4%	--	4%	--	4%	--	4%	--
		PD26SW2	12%	--	12%	--	10%	--	12%	--	11%	--
		PD26SW3	7%	--	7%	--	5%	--	7%	--	6%	--
		PD26SW4	9%	--	9%	--	7%	--	9%	--	8%	--
		PD26SW5	68%	--	68%	--	55%	--	68%	--	61%	--
		PY26SW1	0%	--	0%	--	1%	--	0%	--	0%	--

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
31C		PY26SW2	0%	--	0%	--	2%	--	0%	--	1%	--
		PY26SW3	0%	--	0%	--	1%	--	0%	--	1%	--
		PY26SW4	0%	--	0%	--	2%	--	0%	--	1%	--
		PY26SW5	0%	--	0%	--	13%	--	0%	--	7%	--
	PAVD32	PD32S1	100%	--	100%	--	100%	--	100%	--	100%	--
	PAVD38	PD38SW1	4%	80%	4%	80%	4%	64%	4%	80%	4%	72%
		PD38SW2	12%	0%	12%	0%	10%	0%	12%	0%	11%	0%
		PD38SW3	7%	0%	7%	0%	5%	0%	7%	0%	6%	0%
		PD38SW4	9%	0%	9%	0%	7%	0%	9%	0%	8%	0%
		PD38SW5	68%	20%	68%	20%	55%	16%	68%	20%	62%	18%
		PY38SW1	0%	0%	0%	0%	1%	16%	0%	0%	0%	8%
		PY38SW2	0%	0%	0%	0%	2%	0%	0%	0%	1%	0%
		PY38SW3	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%
		PY38SW4	0%	0%	0%	0%	2%	0%	0%	0%	1%	0%
		PY38SW5	0%	0%	0%	0%	13%	4%	0%	0%	7%	2%
	PAVD39	PD39SW1	4%	--	4%	--	4%	--	4%	--	4%	--
		PD39SW2	12%	--	12%	--	10%	--	12%	--	11%	--
		PD39SW3	7%	--	7%	--	5%	--	7%	--	6%	--
		PD39SW4	9%	--	9%	--	7%	--	9%	--	8%	--
		PD39SW5	68%	--	68%	--	55%	--	68%	--	62%	--
		PY39SW1	0%	--	0%	--	1%	--	0%	--	0%	--
		PY39SW2	0%	--	0%	--	2%	--	0%	--	1%	--
		PY39SW3	0%	--	0%	--	1%	--	0%	--	1%	--
		PY39SW4	0%	--	0%	--	2%	--	0%	--	1%	--
		PY39SW5	0%	--	0%	--	13%	--	0%	--	7%	--
	PAVN13	PN13N1	--	100%	--	100%	--	100%	--	100%	--	100%
	PAVN17	PN17E1	--	86%	--	86%	--	86%	--	86%	--	86%
		PN17SE1	--	14%	--	14%	--	14%	--	14%	--	14%
	PAVN26	PN26SW1	--	0%	--	0%	--	0%	--	0%	--	0%
		PN26SW2	--	0%	--	0%	--	0%	--	0%	--	0%
		PN26SW3	--	0%	--	0%	--	0%	--	0%	--	0%
		PN26SW4	--	0%	--	0%	--	0%	--	0%	--	0%
		PN26SW5	--	0%	--	0%	--	0%	--	0%	--	0%
		PAVN26	--	100%	--	100%	--	100%	--	100%	--	100%
	PAVN32	PN32S1	--	100%	--	100%	--	100%	--	100%	--	100%
	PAVN38	PN38SW1	--	80%	--	80%	--	67%	--	80%	--	73%
		PN38SW2	--	0%	--	0%	--	0%	--	0%	--	0%
		PN38SW3	--	0%	--	0%	--	0%	--	0%	--	0%
		PN38SW4	--	0%	--	0%	--	0%	--	0%	--	0%
		PN38SW5	--	20%	--	20%	--	17%	--	20%	--	18%
		PT38SW1	--	0%	--	0%	--	13%	--	0%	--	7%
		PT38SW5	--	0%	--	0%	--	3%	--	0%	--	2%
	PAVN39	PN39E1	--	86%	--	86%	--	86%	--	86%	--	86%

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
31C		PN39SE1	--	14%	--	14%	--	14%	--	14%	--	14%
31L	PAUD13	PD13N1	100%	--	100%	--	100%	--	100%	--	100%	--
	PAUD14	PD14N1	100%	--	100%	--	100%	--	100%	--	100%	--
	PAUD21	PD21E1	84%	--	84%	--	84%	--	84%	--	84%	--
		PD21SE1	16%	--	16%	--	16%	--	16%	--	16%	--
	PAUD22	PD22S1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	PAUD35	PD35SW1	4%	--	4%	--	4%	--	4%	--	4%	--
		PD35SW2	12%	--	12%	--	10%	--	12%	--	11%	--
		PD35SW3	7%	--	7%	--	5%	--	7%	--	6%	--
		PD35SW4	9%	--	9%	--	7%	--	9%	--	8%	--
		PD35SW5	68%	--	68%	--	55%	--	68%	--	61%	--
		PY35SW1	0%	--	0%	--	1%	--	0%	--	0%	--
		PY35SW2	0%	--	0%	--	2%	--	0%	--	1%	--
		PY35SW3	0%	--	0%	--	1%	--	0%	--	1%	--
		PY35SW4	0%	--	0%	--	2%	--	0%	--	1%	--
		PY35SW5	0%	--	0%	--	13%	--	0%	--	7%	--
	PAUN13	PN13N1	--	100%	--	100%	--	100%	--	100%	--	100%
	PAUN21	PN21E1	--	86%	--	86%	--	86%	--	86%	--	86%
		PN21SE1	--	14%	--	14%	--	14%	--	14%	--	14%
31R	JAWD15	JD15E1	62%	--	62%	--	62%	--	62%	--	62%	--
		JD15SE1	38%	--	38%	--	38%	--	38%	--	38%	--
	JAWD16	JD16N1	100%	--	100%	--	100%	--	100%	--	100%	--
	JAWD21	JD21E1	62%	46%	62%	46%	62%	46%	62%	46%	62%	46%
		JD21SE1	38%	54%	38%	54%	38%	54%	38%	54%	38%	54%
	JAWD32	JD32SW1	15%	--	15%	--	12%	--	15%	--	14%	--
		JD32SW2	35%	--	35%	--	28%	--	35%	--	31%	--
		JD32SW3	23%	--	23%	--	19%	--	23%	--	21%	--
		JD32SW4	12%	--	12%	--	9%	--	12%	--	10%	--
		JD32SW5	15%	--	15%	--	12%	--	15%	--	14%	--
		JY32SW1	0%	--	0%	--	3%	--	0%	--	2%	--
		JY32SW2	0%	--	0%	--	7%	--	0%	--	3%	--
		JY32SW3	0%	--	0%	--	5%	--	0%	--	2%	--
		JY32SW4	0%	--	0%	--	2%	--	0%	--	1%	--
		JY32SW5	0%	--	0%	--	3%	--	0%	--	2%	--
	JAWD33	JD33SW1	15%	--	15%	--	12%	--	15%	--	14%	--
		JD33SW2	35%	--	35%	--	28%	--	35%	--	31%	--
		JD33SW3	23%	--	23%	--	19%	--	23%	--	21%	--
		JD33SW4	12%	--	12%	--	9%	--	12%	--	10%	--
		JD33SW5	15%	--	15%	--	12%	--	15%	--	14%	--
		JY33SW1	0%	--	0%	--	3%	--	0%	--	2%	--
		JY33SW2	0%	--	0%	--	7%	--	0%	--	3%	--
		JY33SW3	0%	--	0%	--	5%	--	0%	--	2%	--
		JY33SW4	0%	--	0%	--	2%	--	0%	--	1%	--

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
		JY33SW5	0%	--	0%	--	3%	--	0%	--	2%	--
	JAWD34	JD34SW1	15%	--	15%	--	12%	--	15%	--	14%	--
		JD34SW2	35%	--	35%	--	28%	--	35%	--	31%	--
		JD34SW3	23%	--	23%	--	19%	--	23%	--	21%	--
		JD34SW4	12%	--	12%	--	9%	--	12%	--	10%	--
		JD34SW5	15%	--	15%	--	12%	--	15%	--	14%	--
		JY34SW1	0%	--	0%	--	3%	--	0%	--	2%	--
		JY34SW2	0%	--	0%	--	7%	--	0%	--	3%	--
		JY34SW3	0%	--	0%	--	5%	--	0%	--	2%	--
		JY34SW4	0%	--	0%	--	2%	--	0%	--	1%	--
		JY34SW5	0%	--	0%	--	3%	--	0%	--	2%	--
	PAWD13	PD13N1	100%	--	100%	--	100%	--	100%	--	100%	--
	PAWD14	PD14N1	100%	--	100%	--	100%	--	100%	--	100%	--
	PAWD21	PD21E1	84%	--	84%	--	84%	86%	84%	--	84%	86%
		PD21SE1	16%	--	16%	--	16%	14%	16%	--	16%	14%
	PAWD35	PD35SW1	4%	--	4%	--	4%	--	4%	--	4%	--
		PD35SW2	12%	--	12%	--	12%	--	12%	--	12%	--
		PD35SW3	7%	--	7%	--	7%	--	7%	--	7%	--
		PD35SW4	9%	--	9%	--	9%	--	9%	--	9%	--
		PD35SW5	68%	--	68%	--	66%	--	68%	--	67%	--
		PY35SW1	0%	--	0%	--	0%	--	0%	--	0%	--
		PY35SW2	0%	--	0%	--	0%	--	0%	--	0%	--
		PY35SW3	0%	--	0%	--	0%	--	0%	--	0%	--
		PY35SW4	0%	--	0%	--	0%	--	0%	--	0%	--
		PY35SW5	0%	--	0%	--	2%	--	0%	--	1%	--
	PAWN13	PN13N1	--	100%	--	100%	--	100%	--	100%	--	100%
	PAWN21	PN21E1	--	86%	--	86%	--	86%	--	86%	--	86%
		PN21SE1	--	14%	--	14%	--	14%	--	14%	--	14%
	PAWN35	PN35SW1	--	80%	--	80%	--	80%	--	80%	--	80%
		PN35SW2	--	0%	--	0%	--	0%	--	0%	--	0%
		PN35SW3	--	0%	--	0%	--	0%	--	0%	--	0%
		PN35SW4	--	0%	--	0%	--	0%	--	0%	--	0%
		PN35SW5	--	20%	--	20%	--	20%	--	20%	--	20%

Table E.3-10 INM – NIRS Flight Track Associations - DEPARTURES

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
04L	JDND54	JD54N1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDND57	JD57N1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDND65	JD65E1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDND68	JD68E1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDND71	JD71S1	5%	--	5%	--	5%	--	5%	--	5%	--
		JD71S2	22%	--	22%	--	22%	--	22%	--	22%	--
		JD71S3	31%	--	31%	--	31%	--	31%	--	31%	--
		JD71S4	26%	--	26%	--	26%	--	26%	--	26%	--
		JD71S5	15%	--	15%	--	15%	--	15%	--	15%	--
	JDND72	JD72S1	5%	--	5%	--	5%	--	5%	--	5%	--
		JD72S2	22%	--	22%	--	22%	--	22%	--	22%	--
		JD72S3	31%	--	31%	--	31%	--	31%	--	31%	--
		JD72S4	26%	--	26%	--	26%	--	26%	--	26%	--
		JD72S5	15%	--	15%	--	15%	--	15%	--	15%	--
	JDND83	JD83W1	20%	--	20%	--	20%	--	20%	--	20%	--
		JD83W2	42%	--	42%	--	42%	--	42%	--	42%	--
		JD83W3	37%	--	37%	--	37%	--	37%	--	37%	--
	JDND86	JD86W1	20%	--	20%	--	20%	--	20%	--	20%	--
		JD86W2	42%	--	42%	--	42%	--	42%	--	42%	--
		JD86W3	37%	--	37%	--	37%	--	37%	--	37%	--
	JDNN65	JN65E1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDNN72	JN72S1	--	3%	--	3%	--	3%	--	3%	--	3%
		JN72S2	--	23%	--	23%	--	23%	--	23%	--	23%
		JN72S3	--	39%	--	39%	--	39%	--	39%	--	39%
		JN72S4	--	29%	--	29%	--	29%	--	29%	--	29%
		JN72S5	--	7%	--	7%	--	7%	--	7%	--	7%
	JDNS68	JS68E1	--	100%	--	100%	--	100%	--	100%	--	100%
	PDND52	PD52N1	100%	--	100%	--	100%	--	100%	--	100%	--
	PDND56	PD56N1	0%	--	0%	--	0%	--	0%	--	0%	--
		PDND56	100%	--	100%	--	100%	--	100%	--	100%	--
	PDND63	PD63E1	100%	--	100%	--	100%	--	100%	--	100%	--
	PDND64	PD64E1	0%	--	0%	--	0%	--	0%	--	0%	--
		PDND64	100%	--	100%	--	100%	--	100%	--	100%	--
	PDND75	PD75S1	25%	--	25%	--	25%	--	25%	--	25%	--
		PD75S2	25%	--	25%	--	25%	--	25%	--	25%	--
		PD75S3	13%	--	13%	--	13%	--	13%	--	13%	--
		PD75S4	31%	--	31%	--	31%	--	31%	--	31%	--
		PD75S5	6%	--	6%	--	6%	--	6%	--	6%	--
	PDND76	PD76S1	25%	--	25%	--	25%	--	25%	--	25%	--
		PD76S2	25%	--	25%	--	25%	--	25%	--	25%	--
		PD76S3	13%	--	13%	--	13%	--	13%	--	13%	--
		PD76S4	31%	--	31%	--	31%	--	31%	--	31%	--

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
		PD76S5	6%	--	6%	--	6%	--	6%	--	6%	--
	PDND81	PD81W1	24%	--	24%	--	24%	--	24%	--	24%	--
		PD81W2	49%	--	49%	--	49%	--	49%	--	49%	--
		PD81W3	27%	--	27%	--	27%	--	27%	--	27%	--
	PDNN52	PN52N1	--	100%	--	100%	--	100%	--	100%	--	100%
	PDNN56	PN56N1	--	0%	--	0%	--	0%	--	0%	--	0%
		PDNN56	--	100%	--	100%	--	100%	--	100%	--	100%
	PDNN63	PN63E1	--	100%	--	100%	--	100%	--	100%	--	100%
	PDNN75	PN75N1	--	0%	--	0%	--	0%	--	0%	--	0%
		PDNN75	--	100%	--	100%	--	100%	--	100%	--	100%
	PDNN76	PN76S1	--	3%	--	3%	--	3%	--	3%	--	3%
		PN76S2	--	13%	--	13%	--	13%	--	13%	--	13%
		PN76S3	--	27%	--	27%	--	27%	--	27%	--	27%
		PN76S4	--	27%	--	27%	--	27%	--	27%	--	27%
		PN76S5	--	30%	--	30%	--	30%	--	30%	--	30%
	PDNN81	PN81W1	--	50%	--	50%	--	50%	--	50%	--	50%
		PN81W2	--	50%	--	50%	--	50%	--	50%	--	50%
		PN81W3	--	0%	--	0%	--	0%	--	0%	--	0%
04R	JDOD51	JD51N1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDOD55	JD55N1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDOD62	JD62E1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDOD69	JD69E1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDOD710	JD710S1	5%	--	5%	--	5%	--	5%	--	5%	--
		JD710S2	22%	--	22%	--	22%	--	22%	--	22%	--
		JD710S3	31%	--	31%	--	31%	--	31%	--	31%	--
		JD710S4	26%	--	26%	--	26%	--	26%	--	26%	--
		JD710S5	15%	--	15%	--	15%	--	15%	--	15%	--
	JDOD711	JD711S1	5%	--	5%	--	5%	--	5%	--	5%	--
		JD711S2	22%	--	22%	--	22%	--	22%	--	22%	--
		JD711S3	31%	--	31%	--	31%	--	31%	--	31%	--
		JD711S4	26%	--	26%	--	26%	--	26%	--	26%	--
		JD711S5	15%	--	15%	--	15%	--	15%	--	15%	--
	JDOD73	JD73S1	5%	--	5%	--	5%	--	5%	--	5%	--
		JD73S2	22%	--	22%	--	22%	--	22%	--	22%	--
		JD73S3	31%	--	31%	--	31%	--	31%	--	31%	--
		JD73S4	26%	--	26%	--	26%	--	26%	--	26%	--
		JD73S5	15%	--	15%	--	15%	--	15%	--	15%	--
	JDOD84	JD84W1	20%	--	20%	--	20%	--	20%	--	20%	--
		JD84W2	42%	--	42%	--	42%	--	42%	--	42%	--
		JD84W3	37%	--	37%	--	37%	--	37%	--	37%	--
	JDOD85	JD85W1	20%	--	20%	--	20%	--	20%	--	20%	--
		JD85W2	42%	--	42%	--	42%	--	42%	--	42%	--
		JD85W3	37%	--	37%	--	37%	--	37%	--	37%	--

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
04R	JDOD86	JD86NW1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDON51	JN51N1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDON55	JN55N1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDON62	JN62E1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	JDON69	JN69E1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDON710	JN710S1	--	3%	--	3%	--	3%	--	3%	--	3%
		JN710S2	--	23%	--	23%	--	23%	--	23%	--	23%
		JN710S3	--	39%	--	39%	--	39%	--	39%	--	39%
		JN710S4	--	29%	--	29%	--	29%	--	29%	--	29%
		JN710S5	--	7%	--	7%	--	7%	--	7%	--	7%
	JDON711	JN711S1	--	3%	--	3%	--	3%	--	3%	--	3%
		JN711S2	--	23%	--	23%	--	23%	--	23%	--	23%
		JN711S3	--	39%	--	39%	--	39%	--	39%	--	39%
		JN711S4	--	29%	--	29%	--	29%	--	29%	--	29%
		JN711S5	--	7%	--	7%	--	7%	--	7%	--	7%
	JDON73	JN73S1	--	3%	--	3%	--	3%	--	3%	--	3%
		JN73S2	--	23%	--	23%	--	23%	--	23%	--	23%
		JN73S3	--	39%	--	39%	--	39%	--	39%	--	39%
		JN73S4	--	29%	--	29%	--	29%	--	29%	--	29%
		JN73S5	--	7%	--	7%	--	7%	--	7%	--	7%
	JDON85	JN85W1	--	7%	--	7%	--	7%	--	7%	--	7%
		JN85W2	--	55%	--	55%	--	55%	--	55%	--	55%
		JN85W3	--	38%	--	38%	--	38%	--	38%	--	38%
	JDON86	JN86NW1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDOS51	JS51N1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDOS55	JS55N1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDOS62	JS62E1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDOS69	JS69E1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDOS710	JS710S1	--	3%	--	3%	--	3%	--	3%	--	3%
		JS710S2	--	23%	--	23%	--	23%	--	23%	--	23%
		JS710S3	--	39%	--	39%	--	39%	--	39%	--	39%
		JS710S4	--	29%	--	29%	--	29%	--	29%	--	29%
		JS710S5	--	7%	--	7%	--	7%	--	7%	--	7%
	JDOS711	JS711S1	--	3%	--	3%	--	3%	--	3%	--	3%
		JS711S2	--	23%	--	23%	--	23%	--	23%	--	23%
		JS711S3	--	39%	--	39%	--	39%	--	39%	--	39%
		JS711S4	--	29%	--	29%	--	29%	--	29%	--	29%
		JS711S5	--	7%	--	7%	--	7%	--	7%	--	7%
	JDOS84	JS84W1	--	7%	--	7%	--	7%	--	7%	--	7%
		JS84W2	--	55%	--	55%	--	55%	--	55%	--	55%
		JS84W3	--	38%	--	38%	--	38%	--	38%	--	38%
	PDOD51	PD51N1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	PDOD62	PD62E1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
04R	PDOD73	PD73S1	25%	--	25%	--	25%	--	25%	--	25%	--
		PD73S2	25%	--	25%	--	25%	--	25%	--	25%	--
		PD73S3	13%	--	13%	--	13%	--	13%	--	13%	--
		PD73S4	31%	--	31%	--	31%	--	31%	--	31%	--
		PD73S5	6%	--	6%	--	6%	--	6%	--	6%	--
	PDOD84	PD84W1	24%	--	24%	--	24%	--	24%	--	24%	--
		PD84W2	49%	--	49%	--	49%	--	49%	--	49%	--
		PD84W3	27%	--	27%	--	27%	--	27%	--	27%	--
	PDON51	PN51N1	--	100%	--	100%	--	100%	--	100%	--	100%
	PDON62	PN62E1	--	100%	--	100%	--	100%	--	100%	--	100%
	PDON66	PN66E1	--	0%	--	0%	--	0%	--	0%	--	0%
	PDON73	PN73S1	--	3%	--	3%	--	3%	--	3%	--	3%
		PN73S2	--	13%	--	13%	--	13%	--	13%	--	13%
		PN73S3	--	27%	--	27%	--	27%	--	27%	--	27%
		PN73S4	--	27%	--	27%	--	27%	--	27%	--	27%
		PN73S5	--	30%	--	30%	--	30%	--	30%	--	30%
	PDON75	PN75S1	--	3%	--	3%	--	3%	--	3%	--	3%
		PN75S2	--	13%	--	13%	--	13%	--	13%	--	13%
		PN75S3	--	27%	--	27%	--	27%	--	27%	--	27%
		PN75S4	--	27%	--	27%	--	27%	--	27%	--	27%
		PN75S5	--	30%	--	30%	--	30%	--	30%	--	30%
	PDON84	PN84W1	--	50%	--	50%	--	50%	--	50%	--	50%
		PN84W2	--	50%	--	50%	--	50%	--	50%	--	50%
		PN84W3	--	0%	--	0%	--	0%	--	0%	--	0%
	PDON66	PDON66	--	100%	--	100%	--	100%	--	100%	--	100%
13C	JDQD54	JD54N1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDQD65	JD65E1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	JDQD651	JD651E1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDQD710	JD710S1	5%	--	5%	--	5%	--	5%	--	5%	--
		JD710S2	22%	--	22%	--	22%	--	22%	--	22%	--
		JD710S3	31%	--	31%	--	31%	--	31%	--	31%	--
		JD710S4	26%	--	26%	--	26%	--	26%	--	26%	--
		JD710S5	15%	--	15%	--	15%	--	15%	--	15%	--
	JDQD711	JD711S1	5%	--	5%	--	5%	--	5%	--	5%	--
		JD711S2	22%	--	22%	--	22%	--	22%	--	22%	--
		JD711S3	31%	--	31%	--	31%	--	31%	--	31%	--
		JD711S4	26%	--	26%	--	26%	--	26%	--	26%	--
		JD711S5	15%	--	15%	--	15%	--	15%	--	15%	--
	JDQD712	JD712S1	5%	--	5%	--	5%	--	5%	--	5%	--
		JD712S2	22%	--	22%	--	22%	--	22%	--	22%	--
		JD712S3	31%	--	31%	--	31%	--	31%	--	31%	--
		JD712S4	26%	--	26%	--	26%	--	26%	--	26%	--
		JD712S5	15%	--	15%	--	15%	--	15%	--	15%	--

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
13C	JDQD83	JD83W1	20%	--	20%	--	20%	--	20%	--	20%	--
		JD83W2	42%	--	42%	--	42%	--	42%	--	42%	--
		JD83W3	37%	--	37%	--	37%	--	37%	--	37%	--
	JDQD87	JD87W1	20%	--	20%	--	20%	--	20%	--	20%	--
		JD87W2	42%	--	42%	--	42%	--	42%	--	42%	--
		JD87W3	37%	--	37%	--	37%	--	37%	--	37%	--
	JDQD87B	JD87BW1	20%	--	20%	--	20%	--	20%	--	20%	--
		JD87BW2	42%	--	42%	--	42%	--	42%	--	42%	--
		JD87BW3	37%	--	37%	--	37%	--	37%	--	37%	--
	JDQD88	JD88W1	20%	--	20%	--	20%	--	20%	--	20%	--
		JD88W2	42%	--	42%	--	42%	--	42%	--	42%	--
		JD88W3	37%	--	37%	--	37%	--	37%	--	37%	--
	JDQD881	JD881W1	20%	7%	20%	7%	20%	7%	20%	7%	20%	7%
		JD881W2	42%	55%	42%	55%	42%	55%	42%	55%	42%	55%
		JD881W3	37%	38%	37%	38%	37%	38%	37%	38%	37%	38%
	JDQD891	JD891W1	20%	--	20%	--	20%	--	20%	--	20%	--
		JD891W2	42%	--	42%	--	42%	--	42%	--	42%	--
		JD891W3	37%	--	37%	--	37%	--	37%	--	37%	--
	JDQDVE1	JDVE1	--	--	--	--	100%	100%	--	--	100%	--
	JDQDVE2	JDVE2	--	--	--	--	100%	100%	--	--	100%	--
	JDQN65	JN65E1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDQN87	JN87W1	--	7%	--	7%	--	7%	--	7%	--	7%
		JN87W2	--	55%	--	55%	--	55%	--	55%	--	55%
		JN87W3	--	38%	--	38%	--	38%	--	38%	--	38%
	JDQN881	JN881W1	--	7%	--	7%	--	7%	--	7%	--	7%
		JN881W2	--	55%	--	55%	--	55%	--	55%	--	55%
		JN881W3	--	38%	--	38%	--	38%	--	38%	--	38%
	JDQS651	JS651E1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDQS710	JS710S1	--	3%	--	3%	--	3%	--	3%	--	3%
		JS710S2	--	23%	--	23%	--	23%	--	23%	--	23%
		JS710S3	--	39%	--	39%	--	39%	--	39%	--	39%
		JS710S4	--	29%	--	29%	--	29%	--	29%	--	29%
		JS710S5	--	7%	--	7%	--	7%	--	7%	--	7%
	PDQD32	PD32W1	24%	--	24%	--	24%	--	24%	--	24%	--
		PD32W2	49%	--	49%	--	49%	--	49%	--	49%	--
		PD32W3	27%	--	27%	--	27%	--	27%	--	27%	--
	PDQD61	PD61N1	100%	--	100%	--	100%	--	100%	--	100%	--
	PDQD65	PD65E1	100%	--	100%	--	100%	--	100%	--	100%	--
	PDQD72	PD72S1	25%	--	25%	--	25%	--	25%	--	25%	--
		PD72S2	25%	--	25%	--	25%	--	25%	--	25%	--
		PD72S3	13%	--	13%	--	13%	--	13%	--	13%	--
		PD72S4	31%	--	31%	--	31%	--	31%	--	31%	--
		PD72S5	6%	--	6%	--	6%	--	6%	--	6%	--

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
13C	PDQD81	PD81W1	24%	--	24%	--	24%	--	24%	--	24%	--
		PD81W2	49%	--	49%	--	49%	--	49%	--	49%	--
		PD81W3	27%	--	27%	--	27%	--	27%	--	27%	--
	PDQN61	PN61N1	--	100%	--	100%	--	100%	--	100%	--	100%
	PDQN65	PN65E1	--	100%	--	100%	--	100%	--	100%	--	100%
	PDQN72	PN72S1	--	3%	--	3%	--	3%	--	3%	--	3%
		PN72S2	--	13%	--	13%	--	13%	--	13%	--	13%
		PN72S3	--	27%	--	27%	--	27%	--	27%	--	27%
		PN72S4	--	27%	--	27%	--	27%	--	27%	--	27%
		PN72S5	--	30%	--	30%	--	30%	--	30%	--	30%
	PDQN81	PN81W1	--	50%	--	50%	--	50%	--	50%	--	50%
		PN81W2	--	50%	--	50%	--	50%	--	50%	--	50%
		PN81W3	--	0%	--	0%	--	0%	--	0%	--	0%
13L	PDPD61	PD61N1	100%	--	100%	--	100%	--	100%	--	100%	--
	PDPD65	PD65E1	100%	--	100%	--	100%	--	100%	--	100%	--
	PDPD72	PD72S1	0%	--	0%	--	0%	--	0%	--	0%	--
		PD72S2	0%	--	0%	--	0%	--	0%	--	0%	--
		PD72S3	0%	--	0%	--	0%	--	0%	--	0%	--
		PD72S4	0%	--	0%	--	0%	--	0%	--	0%	--
		PD72S5	0%	--	0%	--	0%	--	0%	--	0%	--
		PDPD72	100%	--	100%	--	100%	--	100%	--	100%	--
	PDPD81	PD81S1	0%	--	0%	--	0%	--	0%	--	0%	--
		PD81S2	0%	--	0%	--	0%	--	0%	--	0%	--
		PD81S3	0%	--	0%	--	0%	--	0%	--	0%	--
		PD81S4	0%	--	0%	--	0%	--	0%	--	0%	--
		PD81S5	0%	--	0%	--	0%	--	0%	--	0%	--
		PDPD81	100%	--	100%	--	100%	--	100%	--	100%	--
13R	PDRD63	PD63E1	100%	--	100%	--	100%	--	100%	--	100%	--
	PDRD72	PD72S1	0%	--	0%	--	0%	--	0%	--	0%	--
		PD72S2	0%	--	0%	--	0%	--	0%	--	0%	--
		PD72S3	0%	--	0%	--	0%	--	0%	--	0%	--
		PD72S4	0%	--	0%	--	0%	--	0%	--	0%	--
		PD72S5	0%	--	0%	--	0%	--	0%	--	0%	--
		PDRD72	100%	--	100%	--	100%	--	100%	--	100%	--
22L	JDSD55	JD55N1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDSD55B	JD55BN1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDSD55C	JD55CNW1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDSD55D	JD55DW1	20%	--	20%	--	20%	--	20%	--	20%	--
		JD55DW2	42%	--	42%	--	42%	--	42%	--	42%	--
		JD55DW3	37%	--	37%	--	37%	--	37%	--	37%	--
	JDSD58	JD58N1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDSD63	JD63E1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDSD64	JD64E1	100%	--	100%	--	100%	--	100%	--	100%	--

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
22L	JDSD67	JD67E1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDSD71	JD71S1	5%	--	5%	--	5%	--	5%	--	5%	--
		JD71S2	23%	--	23%	--	23%	--	23%	--	23%	--
		JD71S3	33%	--	33%	--	33%	--	33%	--	33%	--
		JD71S4	25%	--	25%	--	25%	--	25%	--	25%	--
		JD71S5	14%	--	14%	--	14%	--	14%	--	14%	--
	JDSD71B	JD71BS1	5%	--	5%	--	5%	--	5%	--	5%	--
		JD71BS2	23%	--	23%	--	23%	--	23%	--	23%	--
		JD71BS3	33%	--	33%	--	33%	--	33%	--	33%	--
		JD71BS4	25%	--	25%	--	25%	--	25%	--	25%	--
		JD71BS5	14%	--	14%	--	14%	--	14%	--	14%	--
	JDSD71C	JD71CS1	5%	--	5%	--	5%	--	5%	--	5%	--
		JD71CS2	23%	--	23%	--	23%	--	23%	--	23%	--
		JD71CS3	33%	--	33%	--	33%	--	33%	--	33%	--
		JD71CS4	25%	--	25%	--	25%	--	25%	--	25%	--
		JD71CS5	14%	--	14%	--	14%	--	14%	--	14%	--
	JDSD82	JD82W1	20%	--	20%	--	20%	--	20%	--	20%	--
		JD82W2	42%	--	42%	--	42%	--	42%	--	42%	--
		JD82W3	37%	--	37%	--	37%	--	37%	--	37%	--
	JDSD82B	JD82BW1	20%	--	20%	--	20%	--	20%	--	20%	--
		JD82BW2	42%	--	42%	--	42%	--	42%	--	42%	--
		JD82BW3	37%	--	37%	--	37%	--	37%	--	37%	--
	JDSD82F	JD82FNW1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDSDVE1	JDVE1	--	--	--	--	100%	100%	--	--	100%	100%
	JDSDVE2	JDVE2	--	--	--	--	100%	--	--	--	100%	100%
	JDSDVE3	JDVE3	--	--	--	--	100%	--	--	--	100%	100%
	JDSN58	JN58N1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDSN64	JN64E1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDSN67	JN67E1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDSN71	JN71S1	--	3%	--	3%	--	3%	--	3%	--	3%
		JN71S2	--	24%	--	24%	--	24%	--	24%	--	24%
		JN71S3	--	41%	--	41%	--	41%	--	41%	--	41%
		JN71S4	--	25%	--	25%	--	25%	--	25%	--	25%
		JN71S5	--	6%	--	6%	--	6%	--	6%	--	6%
	JDSN71B	JN71BS1	--	3%	--	3%	--	3%	--	3%	--	3%
		JN71BS2	--	24%	--	24%	--	24%	--	24%	--	24%
		JN71BS3	--	41%	--	41%	--	41%	--	41%	--	41%
		JN71BS4	--	25%	--	25%	--	25%	--	25%	--	25%
		JN71BS5	--	6%	--	6%	--	6%	--	6%	--	6%
	JDSN71C	JN71CS1	--	3%	--	3%	--	3%	--	3%	--	3%
		JN71CS2	--	24%	--	24%	--	24%	--	24%	--	24%
		JN71CS3	--	41%	--	41%	--	41%	--	41%	--	41%
		JN71CS4	--	25%	--	25%	--	25%	--	25%	--	25%

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
22L		JN71CS5	--	6%	--	6%	--	6%	--	6%	--	6%
	JDSN82	JN82W1	--	7%	--	7%	--	7%	--	7%	--	7%
		JN82W2	--	55%	--	55%	--	55%	--	55%	--	55%
		JN82W3	--	38%	--	38%	--	38%	--	38%	--	38%
	JDSN82E	JN82EW1	--	7%	--	7%	--	7%	--	7%	--	7%
		JN82EW2	--	55%	--	55%	--	55%	--	55%	--	55%
		JN82EW3	--	38%	--	38%	--	38%	--	38%	--	38%
	JDSS63	JS63E1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDSS64	JS64E1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDSS67	JS67E1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDSS71	JS71S1	--	3%	--	3%	--	3%	--	3%	--	3%
		JS71S2	--	24%	--	24%	--	24%	--	24%	--	24%
		JS71S3	--	41%	--	41%	--	41%	--	41%	--	41%
		JS71S4	--	25%	--	25%	--	25%	--	25%	--	25%
		JS71S5	--	6%	--	6%	--	6%	--	6%	--	6%
	JDSS71B	JS71BS1	--	3%	--	3%	--	3%	--	3%	--	3%
		JS71BS2	--	24%	--	24%	--	24%	--	24%	--	24%
		JS71BS3	--	41%	--	41%	--	41%	--	41%	--	41%
		JS71BS4	--	25%	--	25%	--	25%	--	25%	--	25%
		JS71BS5	--	6%	--	6%	--	6%	--	6%	--	6%
	JDSS71C	JS71CS1	--	3%	--	3%	--	3%	--	3%	--	3%
		JS71CS2	--	24%	--	24%	--	24%	--	24%	--	24%
		JS71CS3	--	41%	--	41%	--	41%	--	41%	--	41%
		JS71CS4	--	25%	--	25%	--	25%	--	25%	--	25%
		JS71CS5	--	6%	--	6%	--	6%	--	6%	--	6%
	JDSS82B	JS82BW1	--	7%	--	7%	--	7%	--	7%	--	7%
		JS82BW2	--	55%	--	55%	--	55%	--	55%	--	55%
		JS82BW3	--	38%	--	38%	--	38%	--	38%	--	38%
	PDSD53	PD53NW1	100%	--	100%	--	100%	--	100%	--	100%	--
	PDSD54	PD54N1	100%	--	100%	--	100%	--	100%	--	100%	--
	PDSD55	PD55N1	100%	--	100%	--	100%	--	100%	--	100%	--
	PDSD66	PD66E1	100%	--	100%	--	100%	--	100%	--	100%	--
	PDSD67	PD67E1	100%	--	100%	--	100%	--	100%	--	100%	--
	PDSD68	PD68E1	100%	--	100%	--	100%	--	100%	--	100%	--
	PDSD710	PD710S1	29%	--	29%	--	29%	--	29%	--	29%	--
		PD710S2	31%	--	31%	--	31%	--	31%	--	31%	--
		PD710S3	10%	--	10%	--	10%	--	10%	--	10%	--
		PD710S4	26%	--	26%	--	26%	--	26%	--	26%	--
		PD710S5	5%	--	5%	--	5%	--	5%	--	5%	--
	PDSD711	PD711S1	29%	--	29%	--	29%	--	29%	--	29%	--
		PD711S2	31%	--	31%	--	31%	--	31%	--	31%	--
		PD711S3	10%	--	10%	--	10%	--	10%	--	10%	--
		PD711S4	26%	--	26%	--	26%	--	26%	--	26%	--

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
22L		PD711S5	5%	--	5%	--	5%	--	5%	--	5%	--
	PDSD79	PD79S1	29%	--	29%	--	29%	--	29%	--	29%	--
		PD79S2	31%	--	31%	--	31%	--	31%	--	31%	--
		PD79S3	10%	--	10%	--	10%	--	10%	--	10%	--
		PD79S4	26%	--	26%	--	26%	--	26%	--	26%	--
		PD79S5	5%	--	5%	--	5%	--	5%	--	5%	--
	PDSD81	PD81W1	24%	--	24%	--	24%	--	24%	--	24%	--
		PD81W2	49%	--	49%	--	49%	--	49%	--	49%	--
		PD81W3	27%	--	27%	--	27%	--	27%	--	27%	--
	PDSD82	PD82W1	24%	--	24%	--	24%	--	24%	--	24%	--
		PD82W2	49%	--	49%	--	49%	--	49%	--	49%	--
		PD82W3	27%	--	27%	--	27%	--	27%	--	27%	--
	PDSN53	PN53NW1	--	100%	--	100%	--	100%	--	100%	--	100%
	PDSN54	PN54S1	--	100%	--	100%	--	100%	--	100%	--	100%
	PDSN55	PN55S1	--	100%	--	100%	--	100%	--	100%	--	100%
	PDSN66	PN66E1	--	100%	--	100%	--	100%	--	100%	--	100%
	PDSN67	PN67E1	--	100%	--	100%	--	100%	--	100%	--	100%
	PDSN68	PN68E1	--	100%	--	100%	--	100%	--	100%	--	100%
	PDSN710	PN710S1	--	0%	--	0%	--	0%	--	0%	--	0%
		PN710S2	--	20%	--	20%	--	20%	--	20%	--	20%
		PN710S3	--	27%	--	27%	--	27%	--	27%	--	27%
		PN710S4	--	27%	--	27%	--	27%	--	27%	--	27%
		PN710S5	--	27%	--	27%	--	27%	--	27%	--	27%
	PDSN79	PN79S1	--	0%	--	0%	--	0%	--	0%	--	0%
		PN79S2	--	20%	--	20%	--	20%	--	20%	--	20%
		PN79S3	--	27%	--	27%	--	27%	--	27%	--	27%
		PN79S4	--	27%	--	27%	--	27%	--	27%	--	27%
		PN79S5	--	27%	--	27%	--	27%	--	27%	--	27%
	PDSN81	PN81W1	--	50%	--	50%	--	50%	--	50%	--	50%
		PN81W2	--	50%	--	50%	--	50%	--	50%	--	50%
		PN81W3	--	0%	--	0%	--	0%	--	0%	--	0%
	PDSN82	PN82W1	--	50%	--	50%	--	50%	--	50%	--	50%
		PN82W2	--	50%	--	50%	--	50%	--	50%	--	50%
		PN82W3	--	0%	--	0%	--	0%	--	0%	--	0%
22R	JDTD54	JD54N1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDTD55	JD55NW1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDTD62	JD62E1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDTD66	JD66E1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDTD71	JD71S1	5%	3%	5%	3%	5%	3%	5%	3%	5%	3%
		JD71S2	23%	24%	23%	24%	23%	24%	23%	24%	23%	24%
		JD71S3	33%	41%	33%	41%	33%	41%	33%	41%	33%	41%
		JD71S4	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
		JD71S5	14%	6%	14%	6%	14%	6%	14%	6%	14%	6%

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
22R	JDTD71B	JD71BS1	5%	--	5%	--	5%	--	5%	--	5%	--
		JD71BS2	23%	--	23%	--	23%	--	23%	--	23%	--
		JD71BS3	33%	--	33%	--	33%	--	33%	--	33%	--
		JD71BS4	25%	--	25%	--	25%	--	25%	--	25%	--
		JD71BS5	14%	--	14%	--	14%	--	14%	--	14%	--
	JDTD83	JD83W1	20%	--	20%	--	20%	--	20%	--	20%	--
		JD83W2	42%	--	42%	--	42%	--	42%	--	42%	--
		JD83W3	37%	--	37%	--	37%	--	37%	--	37%	--
	JDTD88	JD88W1	20%	--	20%	--	20%	--	20%	--	20%	--
		JD88W2	42%	--	42%	--	42%	--	42%	--	42%	--
		JD88W3	37%	--	37%	--	37%	--	37%	--	37%	--
	JDTDVE1	JDVE1	--	--	--	--	100%	--	--	--	100%	--
	JDTDVE2	JDVE2	--	--	--	--	100%	--	--	--	100%	--
	JDTDVE3	JDVE3	--	--	--	--	100%	--	--	--	100%	--
	JDTN54	JN54N1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDTN62	JN62E1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDTN67	JN67E1	--	100%	--	100%	--	100%	--	100%	--	100%
	PDTD51	PD51NW1	100%	--	100%	--	100%	--	100%	--	100%	--
	PDTD52	PD52N1	100%	--	100%	--	100%	--	100%	--	100%	--
	PDTD63	PD63E1	100%	--	100%	--	100%	--	100%	--	100%	--
	PDTD74	PD74S5	100%	--	100%	--	100%	--	100%	--	100%	--
	PDTD75	PD75S1	29%	--	29%	--	29%	--	29%	--	29%	--
		PD75S2	31%	--	31%	--	31%	--	31%	--	31%	--
		PD75S3	10%	--	10%	--	10%	--	10%	--	10%	--
		PD75S4	26%	--	26%	--	26%	--	26%	--	26%	--
		PD75S5	5%	--	5%	--	5%	--	5%	--	5%	--
	PDTD78	PD78S1	100%	--	100%	--	100%	--	100%	--	100%	--
	PDTD86	PD86W1	24%	50%	24%	50%	24%	50%	24%	50%	24%	50%
		PD86W2	49%	50%	49%	50%	49%	50%	49%	50%	49%	50%
		PD86W3	27%	0%	27%	0%	27%	0%	27%	0%	27%	0%
	PDTD87	PD87S1	100%	--	100%	--	100%	--	100%	--	100%	--
	PDTN52	PN52E1	--	100%	--	100%	--	100%	--	100%	--	100%
	PDTN63	PN63E1	--	100%	--	100%	--	100%	--	100%	--	100%
	PDTN74	PN74S5	--	100%	--	100%	--	100%	--	100%	--	100%
	PDTN75	PN75S1	--	0%	--	0%	--	0%	--	0%	--	0%
		PN75S2	--	20%	--	20%	--	20%	--	20%	--	20%
		PN75S3	--	27%	--	27%	--	27%	--	27%	--	27%
		PN75S4	--	27%	--	27%	--	27%	--	27%	--	27%
		PN75S5	--	27%	--	27%	--	27%	--	27%	--	27%
	PDTN78	PN78S1	--	0%	--	0%	--	0%	--	0%	--	0%
		PN78S2	--	20%	--	20%	--	20%	--	20%	--	20%
		PN78S3	--	27%	--	27%	--	27%	--	27%	--	27%
		PN78S4	--	27%	--	27%	--	27%	--	27%	--	27%

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
		PN78S5	--	27%	--	27%	--	27%	--	27%	--	27%
	PDTN86	PN86W1	--	50%	--	50%	--	50%	--	50%	--	50%
		PN86W2	--	50%	--	50%	--	50%	--	50%	--	50%
		PN86W3	--	0%	--	0%	--	0%	--	0%	--	0%
31C	JDVD511	JD511N1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDVD514	JD514N1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDVD528	JD528E1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDVD531	JD531E1	100%	--	100%	--	100%	--	100%	--	100%	--
	JDVD532	JD532E1X	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	JDVD55	JD55S1	5%	3%	5%	3%	5%	3%	5%	3%	5%	3%
		JD55S2	23%	24%	23%	24%	23%	24%	23%	24%	23%	24%
		JD55S3	33%	41%	33%	41%	33%	41%	33%	41%	33%	41%
		JD55S4	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
		JD55S5	14%	6%	14%	6%	14%	6%	14%	6%	14%	6%
	JDVD717	JD717S1X	5%	--	5%	--	5%	--	5%	--	5%	--
		JD717S2X	23%	--	23%	--	23%	--	23%	--	23%	--
		JD717S3X	33%	--	33%	--	33%	--	33%	--	33%	--
		JD717S4X	25%	--	25%	--	25%	--	25%	--	25%	--
		JD717S5X	14%	--	14%	--	14%	--	14%	--	14%	--
	JDVD718	JD718S1	5%	--	5%	--	5%	--	5%	--	5%	--
		JD718S2	23%	--	23%	--	23%	--	23%	--	23%	--
		JD718S3	33%	--	33%	--	33%	--	33%	--	33%	--
		JD718S4	25%	--	25%	--	25%	--	25%	--	25%	--
		JD718S5	14%	--	14%	--	14%	--	14%	--	14%	--
	JDVD718B	JD718BS1	5%	--	5%	--	5%	--	5%	--	5%	--
		JD718BS2	23%	--	23%	--	23%	--	23%	--	23%	--
		JD718BS3	33%	--	33%	--	33%	--	33%	--	33%	--
		JD718BS4	25%	--	25%	--	25%	--	25%	--	25%	--
		JD718BS5	14%	--	14%	--	14%	--	14%	--	14%	--
	JDVD718C	JD718CS1	5%	--	5%	--	5%	--	5%	--	5%	--
		JD718CS2	23%	--	23%	--	23%	--	23%	--	23%	--
		JD718CS3	33%	--	33%	--	33%	--	33%	--	33%	--
		JD718CS4	25%	--	25%	--	25%	--	25%	--	25%	--
		JD718CS5	14%	--	14%	--	14%	--	14%	--	14%	--
	JDVD719	JD719S1	5%	--	5%	--	5%	--	5%	--	5%	--
		JD719S2	23%	--	23%	--	23%	--	23%	--	23%	--
		JD719S3	33%	--	33%	--	33%	--	33%	--	33%	--
		JD719S4	25%	--	25%	--	25%	--	25%	--	25%	--
		JD719S5	14%	--	14%	--	14%	--	14%	--	14%	--
	JDVD719B	JD719BS1	5%	--	5%	--	5%	--	5%	--	5%	--
		JD719BS2	23%	--	23%	--	23%	--	23%	--	23%	--
		JD719BS3	33%	--	33%	--	33%	--	33%	--	33%	--
		JD719BS4	25%	--	25%	--	25%	--	25%	--	25%	--

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
31C		JD719BS5	14%	--	14%	--	14%	--	14%	--	14%	--
	JDVD719C	JD719CS1	5%	--	5%	--	5%	--	5%	--	5%	--
		JD719CS2	23%	--	23%	--	23%	--	23%	--	23%	--
		JD719CS3	33%	--	33%	--	33%	--	33%	--	33%	--
		JD719CS4	25%	--	25%	--	25%	--	25%	--	25%	--
		JD719CS5	14%	--	14%	--	14%	--	14%	--	14%	--
	JDVD720	JD720S1	5%	--	5%	--	5%	--	5%	--	5%	--
		JD720S2	23%	--	23%	--	23%	--	23%	--	23%	--
		JD720S3	33%	--	33%	--	33%	--	33%	--	33%	--
		JD720S4	25%	--	25%	--	25%	--	25%	--	25%	--
		JD720S5	14%	--	14%	--	14%	--	14%	--	14%	--
	JDVD81	JD81NW1X	100%	--	100%	--	100%	--	100%	--	100%	--
	JDVD823	JD823W1X	20%	--	20%	--	20%	--	20%	--	20%	--
		JD823W2X	42%	--	42%	--	42%	--	42%	--	42%	--
		JD823W3X	37%	--	37%	--	37%	--	37%	--	37%	--
	JDVD824	JD824W1	20%	--	20%	--	20%	--	20%	--	20%	--
		JD824W2	42%	--	42%	--	42%	--	42%	--	42%	--
		JD824W3	37%	--	37%	--	37%	--	37%	--	37%	--
	JDVD824B	JD824BW1	20%	--	20%	--	20%	--	20%	--	20%	--
		JD824BW2	42%	--	42%	--	42%	--	42%	--	42%	--
		JD824BW3	37%	--	37%	--	37%	--	37%	--	37%	--
	JDVD824C	JD824CW1	20%	--	20%	--	20%	--	20%	--	20%	--
		JD824CW2	42%	--	42%	--	42%	--	42%	--	42%	--
		JD824CW3	37%	--	37%	--	37%	--	37%	--	37%	--
	JDVD825	JD825W1	20%	--	20%	--	20%	--	20%	--	20%	--
		JD825W2	42%	--	42%	--	42%	--	42%	--	42%	--
		JD825W3	37%	--	37%	--	37%	--	37%	--	37%	--
	JDVDVE1	JDVE1	--	--	--	--	100%	100%	--	--	100%	100%
	JDVDVE2	JDVE2	--	--	--	--	100%	100%	--	--	100%	100%
	JDVDVE3	JDVE3	--	--	--	--	100%	100%	--	--	100%	100%
	JDVDVE4	JDVE4	--	--	--	--	100%	100%	--	--	100%	100%
	JDVN514	JN514N1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDVN528	JN528E1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDVN531	JN531E1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDVN532	JN532E1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDVN720	JN720S1	--	3%	--	3%	--	3%	--	3%	--	3%
		JN720S2	--	24%	--	24%	--	24%	--	24%	--	24%
		JN720S3	--	41%	--	41%	--	41%	--	41%	--	41%
		JN720S4	--	25%	--	25%	--	25%	--	25%	--	25%
		JN720S5	--	6%	--	6%	--	6%	--	6%	--	6%
	JDVN81	JN81NW1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDVS511	JS511N1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDVS528	JS528E1	--	100%	--	100%	--	100%	--	100%	--	100%

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
31C	JDVS531	JS531E1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDVS532	JS532E1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDVS55	JS55S1	--	3%	--	3%	--	3%	--	3%	--	3%
		JS55S2	--	24%	--	24%	--	24%	--	24%	--	24%
		JS55S3	--	41%	--	41%	--	41%	--	41%	--	41%
		JS55S4	--	25%	--	25%	--	25%	--	25%	--	25%
		JS55S5	--	6%	--	6%	--	6%	--	6%	--	6%
	JDVS717	JS717S1	--	3%	--	3%	--	3%	--	3%	--	3%
		JS717S2	--	24%	--	24%	--	24%	--	24%	--	24%
		JS717S3	--	41%	--	41%	--	41%	--	41%	--	41%
		JS717S4	--	25%	--	25%	--	25%	--	25%	--	25%
		JS717S5	--	6%	--	6%	--	6%	--	6%	--	6%
	JDVS719	JS719S1	--	3%	--	3%	--	3%	--	3%	--	3%
		JS719S2	--	24%	--	24%	--	24%	--	24%	--	24%
		JS719S3	--	41%	--	41%	--	41%	--	41%	--	41%
		JS719S4	--	25%	--	25%	--	25%	--	25%	--	25%
		JS719S5	--	6%	--	6%	--	6%	--	6%	--	6%
	JDVS720	JS720S1	--	3%	--	3%	--	3%	--	3%	--	3%
		JS720S2	--	24%	--	24%	--	24%	--	24%	--	24%
		JS720S3	--	41%	--	41%	--	41%	--	41%	--	41%
		JS720S4	--	25%	--	25%	--	25%	--	25%	--	25%
		JS720S5	--	6%	--	6%	--	6%	--	6%	--	6%
	JDVS81	JS81NW1	--	100%	--	100%	--	100%	--	100%	--	100%
	JDVS824	JS824W1	--	7%	--	7%	--	7%	--	7%	--	7%
		JS824W2	--	55%	--	55%	--	55%	--	55%	--	55%
		JS824W3	--	38%	--	38%	--	38%	--	38%	--	38%
	PDVD54	PD54N1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	PDVD63	PD63E1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	PDVD71	PD71S1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
		PD71S2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
		PD71S3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
		PD71S4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
		PD71S5	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
		PDVD71	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	PDVD75	PD75W1	24%	--	24%	--	24%	--	24%	--	24%	--
		PD75W2	49%	--	49%	--	49%	--	49%	--	49%	--
		PD75W3	27%	--	27%	--	27%	--	27%	--	27%	--
	PDVD83	PD83NW1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	PDVN54	PN54N1	--	100%	--	100%	--	100%	--	100%	--	100%
	PDVN63	PN63E1	--	100%	--	100%	--	100%	--	100%	--	100%
	PDVN71	PN71S1	--	0%	--	0%	--	0%	--	0%	--	0%
		PN71S2	--	20%	--	20%	--	20%	--	20%	--	20%
		PN71S3	--	27%	--	27%	--	27%	--	27%	--	27%

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
31C		PN71S4	--	27%	--	27%	--	27%	--	27%	--	27%
		PN71S5	--	27%	--	27%	--	27%	--	27%	--	27%
	PDVN75	PN75W1	--	50%	--	50%	--	50%	--	50%	--	50%
		PN75W2	--	50%	--	50%	--	50%	--	50%	--	50%
		PN75W3	--	0%	--	0%	--	0%	--	0%	--	0%
	PDVN83	PN83NW1	--	100%	--	100%	--	100%	--	100%	--	100%
31L	PDUD52	PD52E1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	PDUD63	PD63E1X	100%	--	100%	--	100%	--	100%	--	100%	--
	PDUD71	PD71S1	29%	0%	29%	0%	29%	0%	29%	0%	29%	0%
		PD71S2	31%	20%	31%	20%	31%	20%	31%	20%	31%	20%
		PD71S3	10%	27%	10%	27%	10%	27%	10%	27%	10%	27%
		PD71S4	26%	27%	26%	27%	26%	27%	26%	27%	26%	27%
		PD71S5	5%	27%	5%	27%	5%	27%	5%	27%	5%	27%
	PDUD75	PD75W1	24%	--	24%	--	24%	--	24%	--	24%	--
		PD75W2	49%	--	49%	--	49%	--	49%	--	49%	--
		PD75W3	27%	--	27%	--	27%	--	27%	--	27%	--
	PDUD83	PD83NW1	100%	--	100%	--	100%	--	100%	--	100%	--
	PDUN52	PN52N1	--	100%	--	100%	--	100%	--	100%	--	100%
	PDUN63	PN63E1	--	100%	--	100%	--	100%	--	100%	--	100%
	PDUN71	PN71S1	--	0%	--	0%	--	0%	--	0%	--	0%
		PN71S2	--	20%	--	20%	--	20%	--	20%	--	20%
		PN71S3	--	27%	--	27%	--	27%	--	27%	--	27%
		PN71S4	--	27%	--	27%	--	27%	--	27%	--	27%
		PN71S5	--	27%	--	27%	--	27%	--	27%	--	27%
	PDUN75	PN75W1	--	50%	--	50%	--	50%	--	50%	--	50%
		PN75W2	--	50%	--	50%	--	50%	--	50%	--	50%
		PN75W3	--	0%	--	0%	--	0%	--	0%	--	0%
	PDUN83	PN83NW1	--	100%	--	100%	--	100%	--	100%	--	100%
31R	PDWD51	PD51N1	100%	--	100%	--	100%	--	100%	--	100%	--
	PDWD63	PD63E1	100%	--	100%	--	100%	--	100%	--	100%	--
	PDWD72	PD72S1	29%	--	29%	--	29%	--	29%	--	29%	--
		PD72S2	31%	--	31%	--	31%	--	31%	--	31%	--
		PD72S3	10%	--	10%	--	10%	--	10%	--	10%	--
		PD72S4	26%	--	26%	--	26%	--	26%	--	26%	--
		PD72S5	5%	--	5%	--	5%	--	5%	--	5%	--
	PDWD75	PD75W1	24%	--	24%	--	24%	--	24%	--	24%	--
		PD75W2	49%	--	49%	--	49%	--	49%	--	49%	--
		PD75W3	27%	--	27%	--	27%	--	27%	--	27%	--
	PDWD83	PD83NW1	100%	--	100%	--	100%	--	100%	--	100%	--
	PDWN51	PN51N1	--	100%	--	100%	--	100%	--	100%	--	100%
	PDWN63	PN63E1	--	100%	--	100%	--	100%	--	100%	--	100%
	PDWN72	PN72S1	--	0%	--	0%	--	0%	--	0%	--	0%
		PN72S2	--	20%	--	20%	--	20%	--	20%	--	20%

Runway	Flight Track		2012 Base Year		2013 No Action		2013 Proposed Action		2018 No Action		2018 Proposed Action	
	INM track	NIRS track	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
31R		PN72S3	--	27%	--	27%	--	27%	--	27%	--	27%
		PN72S4	--	27%	--	27%	--	27%	--	27%	--	27%
		PN72S5	--	27%	--	27%	--	27%	--	27%	--	27%
	PDWN75	PN75W1	--	50%	--	50%	--	50%	--	50%	--	50%
		PN75W2	--	50%	--	50%	--	50%	--	50%	--	50%
		PN75W3	--	0%	--	0%	--	0%	--	0%	--	0%
	PDWN83	PN83NW1	--	100%	--	100%	--	100%	--	100%	--	100%

U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of Environment and Energy

800 Independence Ave., S.W.
Washington, D.C. 20591

Date: April 13, 2012

Nan L. Terry
Environmental Specialist
FAA ATO Central Service Center
Operations Support Group, South Team, AJV-C2

Dear Nan,

The Office of Environment and Energy (AEE) has received the memo dated March 2, 2012, referencing HMMH Project number 304050.002 requesting configuration parameters in the Noise Integrated Routing System (NIRS) that will allow implementation of custom profiles below 3000 ft. The request is related to the development of the noise section of the Chicago Midway (MDW) Proposed RNAV/RNP Procedures Environmental Assessment (EA) using NIRS version 7.0b2.

Current FAA policy for applying NIRS requires the use of standard profiles below 3,000 ft. Above Field Elevation (AFE); however, after reviewing flight profiles for Midway Airport, HMMH determined that there are many procedures occurring below this flight level that do not conform to the standard profile below 3,000 ft. AFE. In addition, elements of the proposed action will also include procedures with altitudes below 3000 ft. AFE.

AEE has reviewed the request and approves the use of custom profiles below 3000 ft. AFE in order to perform a sensitivity to determine whether custom profiles are warranted. To implement custom profiles below 3000 ft., the NIRS control code – 4 should be used.

Please understand that this approval is limited to this particular EA for MDW. Any additional projects or non-standard modeling at MDW or any other site will require separate approval.

Sincerely,

Rebecca Cointin, Acting Manager
AEE/Noise Division

cc: Donna Warren, FAA/AJV-11

U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of Environment and Energy

800 Independence Ave., S.W.
Washington, D.C. 20591

July 24, 2012

Nan L. Terry
Environmental Specialist
FAA ATO Central Service Center
Operations Support Group, South Team, AJV-C2

Dear Nan,

The Office of Environment and Energy (AEE) has reviewed the proposed non-standard Noise Integrated Routing System (NIRS) aircraft substitutions for the Chicago Midway (MDW) Environmental Assessment (EA).

Harris Miller Miller & Hanson Inc. (HMMH) is assisting FAA in conducting the Environmental Assessment (EA) and is trying to model certain aircraft types that are not included in the NIRS database. HMMH has proposed substitutions for five aircraft types that currently do not have a direct NIRS equivalent in the aircraft database. The proposed substitutions and the corresponding AEE recommendations are summarized in the table below.

Aircraft	HMMH Proposed Substitution	AEE Recommendation*
SABR80	LEAR25	FAL20
D328J	CL600	Concur
MD83	MD9025	Concur
MD81	MD9025	Concur
737-800	737700	Concur

*These substitutions apply only to Arrival operations with the exception of the SABR80 and D328J substitutions for which it applies to both Arrival and Departure Operations.

AEE concurs with all but one of the proposed substitutions. The aircraft type FAL20 should be used as a substitute for the SABR80. The FAL20 has noise levels closer to the SABR80 than the LEAR25.

Please understand that this approval is limited to this particular EA for MDW. Any additional projects or non-standard input at MDW or any other site will require separate approval.

Sincerely,

Rebecca Cointin, Acting Manager
AEE/Noise Division

Appendix F INVENTORY OF POTENTIAL DEPARTMENT OF TRANSPORTATION ACT, SECTION 4(f) RESOURCES AND NOISE EXPOSURE

Table F-1 INM Model Inside DNL 65 dB Contour

Category	Type	ID	Resource Name	Latitude	Longitude	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	468	Park 468	41.790953	-87.737389	66.6	66.7	0.10	67.1	67.4	0.30
4F	Local	1942826	Park Number 528	41.7772222	-87.7361111	60.8	61.3	0.50	62.0	62.3	0.30
4F	Local	1708446	Minuteman Park	41.7866991	-87.7633879	63.1	63.1	0.00	63.6	63.8	0.20
4F	Local	372719	West Lawn Park	41.7730884	-87.7286641	58.1	58.7	0.60	59.4	59.8	0.40
4F	Local	371088	Strohacker Park	41.7939216	-87.7325537	65.3	65.5	0.20	65.8	66.1	0.30
4F	Local	363734	Lawler Park	41.776977	-87.7514428	64.7	64.6	-0.10	65.1	65.1	0.00
4F	Local	355482	Archer Park	41.804477	-87.7350541	62.2	62.1	-0.10	62.7	62.8	0.10
4F	Historic	0INM	5046 S Kolin Ave	41.8009003	-87.7322186	68.0	67.5	-0.50	68.3	67.8	-0.50
4F	Historic	1INM	6248-58 S Central Av	41.7783715	-87.7620475	74.0	73.9	-0.10	74.3	74.2	-0.10
4F	Historic	2INM	5600-08 W 63rd St	41.7782	-87.7620416	74.3	74.3	0.00	74.6	74.5	-0.10
4F	Historic	3INM	Illinois National Guard Armory	41.7785224	-87.7566716	73.6	73.7	0.10	74.1	74.3	0.20

Notes:
1. Some Section 4(f) resources do not fall entirely within the DNL 64 dB noise exposure contour or adjoin the contour. For the purpose of this evaluation, these resources were evaluated using the INM model even though the grid point (centroid) for the resouce may have been located outside of the contour.
2. Points identified for Historic Site 1 and Site 2 represent the same property.

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	365838	Mount Greenwood Park	41.690033	-87.713106	44.7	44.7	47.4	2.70	45.4	47.7	2.30
4F	Local	368377	Rehm Park	41.870865	-87.788113	48	48.1	48.1	0.00	48.9	48.8	-0.10
4F	Local	366616	O'Hallaren Park	41.741978	-87.669216	52.2	52.3	49.8	-2.50	52.6	49.1	-3.50
4F	Local	366603	Nowell Park	41.503086	-88.079224	43.2	43.3	42	-1.30	43.8	42.6	-1.20
4F	Local	366185	Navy Pier Park	41.891977	-87.613107	42.9	43	42.9	-0.10	43.7	43.6	-0.10
4F	Local	366139	Myer Park	41.387813	-89.352033	28.8	28.9	27.2	-1.70	29.4	28	-1.40
4F	Local	366124	Murray Park	41.760311	-87.667828	51.5	51.6	50.8	-0.80	52	50.9	-1.10
4F	Local	366741	Oakdale Park	41.720311	-87.648382	52.2	52.3	50.2	-2.10	52.6	49.8	-2.80
4F	Local	365968	Mount Vernon Park	41.700311	-87.647826	51.6	51.7	49.8	-1.90	52.1	49.6	-2.50
4F	Local	366765	Oakland Park	41.825589	-87.603661	50.1	50.3	50	-0.30	50.7	50.5	-0.20
4F	Local	365741	Morton Park	41.847532	-87.748389	49.3	49.4	48.8	-0.60	50	49.3	-0.70
4F	Local	365689	Morgan Field Park	41.681700	-87.647548	47.4	47.6	46.4	-1.20	47.9	46.3	-1.60
4F	Local	365676	Moran Park	41.789755	-87.653939	53	53.1	52.7	-0.40	53.6	53	-0.60
4F	Local	365493	Mills Park	41.885031	-87.800891	49.6	49.7	49.7	0.00	50.4	50.4	0.00
4F	Local	365343	Micek Park	41.797533	-87.677829	56.9	57	56.3	-0.70	57.4	56.7	-0.70
4F	Local	365336	Meyering Park	41.764478	-87.615882	46.7	46.9	47	0.10	47.5	47.4	-0.10
4F	Local	365323	Messenger Woods County Forest Preserve	41.575865	-87.952555	45.4	45.5	44.6	-0.90	46	44.9	-1.10
4F	Local	366032	Mraz Park	41.848365	-87.794501	48.8	48.9	48.6	-0.30	49.6	49.4	-0.20
4F	Local	367528	Pigeon Hill Park	41.771973	-88.300349	42.3	42.4	42.4	0.00	43	43.2	0.20
4F	Local	363532	LaFollette Park	41.904754	-87.753390	46.5	46.5	46.5	0.00	47.3	47.2	-0.10
4F	Local	368224	Rainey Park	41.750588	-87.728663	48.3	48.5	49	0.50	49.4	50	0.60
4F	Local	368223	Rainbow Park	41.756701	-87.550879	42.3	42.5	42.7	0.20	43.1	43	-0.10
4F	Local	368207	Raceway Park	41.656978	-87.659214	46	46.1	44.8	-1.30	46.5	44.7	-1.80
4F	Local	368148	Pulaski Park	41.906143	-87.663387	43	43.1	43	-0.10	43.8	43.7	-0.10
4F	Local	367816	Plowmens Park	41.764751	-88.559244	41.8	41.9	41.9	0.00	42.3	42.6	0.30
4F	Local	366709	Oak Meadows Park	41.712255	-87.747552	45.3	45.4	48.8	3.40	46.1	49.3	3.20
4F	Local	367543	Pilcher Park	41.535586	-88.013667	44.5	44.6	44.8	0.20	45.2	45.3	0.10
4F	Local	365170	McKinley Park	41.824199	-87.679497	53.9	54	56	2.00	54.4	56.6	2.20
4F	Local	367483	Phillips Park	41.736696	-88.292292	41.7	41.7	41.8	0.10	42.3	42.6	0.30
4F	Local	367375	Peck Park	41.321422	-88.840632	31.8	32	31.1	-0.90	32.3	31.1	-1.20
4F	Local	367298	Pasteur Park	41.788921	-87.731720	59.8	59.9	59.9	0.00	60.5	60.6	0.10
4F	Local	367185	Palmer Park	41.690312	-87.615602	50.9	51.1	49.4	-1.70	51.4	49.2	-2.20
4F	Local	366844	Rollins Park	41.757251	-88.291737	42.1	42.2	42.2	0.00	42.7	43	0.30
4F	Local	366832	Ogden Park	41.775033	-87.656439	52.2	52.4	52.2	-0.20	53	52.3	-0.70
4F	Local	366782	Oakley Park	41.803644	-87.682552	57.5	57.6	56.8	-0.80	58	57.1	-0.90
4F	Local	367595	Pioneer Park	41.126976	-87.848097	40.8	40.9	40.9	0.00	41.6	41.5	-0.10
4F	Local	363804	Legion Park	41.600864	-88.048114	46	46.1	45.8	-0.30	46.5	46.7	0.20
4F	Local	364127	Lions Field	41.583367	-87.668935	46.8	46.9	45.7	-1.20	47.3	45.8	-1.50
4F	Local	364126	Lion Field	41.666978	-87.619491	48.4	48.5	45.4	-3.10	48.9	45	-3.90
4F	Local	364101	Lindblom Park	41.784200	-87.675329	55.1	55.3	54.5	-0.80	55.8	54.7	-1.10
4F	Local	364007	Lincoln Park	41.755307	-88.335627	41.1	41.3	41.3	0.00	41.9	42.2	0.30
4F	Local	363991	Balmoral Park Racetrack	41.413923	-87.626430	40.8	40.9	40.9	0.00	41.6	41.5	-0.10
4F	Local	363959	Lily Gardens Park	41.763089	-87.639494	50.5	50.6	50.7	0.10	51.2	51	-0.20

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	365314	Merrill Park	41.719757	-87.571712	40.9	41	42.6	1.60	41.6	43.1	1.50
4F	Local	363805	Lehigh Memorial Park	41.296423	-89.039803	29.6	29.7	28.8	-0.90	30.1	28.7	-1.40
4F	Local	364579	Lowe Park	41.798922	-87.641161	53.2	53.4	53.4	0.00	53.8	53.8	0.00
4F	Local	363740	Lawndale Park	41.835310	-87.730610	52.8	52.9	52.4	-0.50	53.4	52.7	-0.70
4F	Local	363734	Lawler Park	41.776977	-87.751442	63.5	63.7	63.6	-0.10	64.2	64.2	0.00
4F	Local	363663	Lan-Oak Park	41.570313	-87.554764	43.3	43.4	46.7	3.30	43.3	46.3	3.00
4F	Local	363607	Lake Shore Park	41.897255	-87.618663	42.7	42.8	42.7	-0.10	43.5	43.3	-0.20
4F	Local	363604	Lake Park	41.321702	-89.311199	30.3	30.5	27.3	-3.20	30.8	27.8	-3.00
4F	Local	363568	Laidlaw Park	41.813919	-87.907838	49.2	49.4	49.6	0.20	50.2	50.9	0.70
4F	Local	373149	Wilson Playground	41.831977	-87.654218	50.7	50.9	52.1	1.20	51.3	52.6	1.30
4F	Local	363854	Lexington Park	41.616423	-87.648935	47.3	47.4	46.8	-0.60	47.8	46.5	-1.30
4F	Local	364901	Marquette Park	41.767533	-87.701440	52.3	52.4	51.4	-1.00	53.2	51.6	-1.60
4F	Local	368497	Ridge Acres Park	41.805586	-87.889781	49.5	49.6	49.7	0.10	50.3	50.5	0.20
4F	Local	365169	McKiernan Park	41.698366	-87.702828	44.2	44.4	47.1	2.70	45	47.9	2.90
4F	Local	365145	McGuane Park	41.840588	-87.647552	48.5	48.6	51.8	3.20	49.1	52.7	3.60
4F	Local	365063	McCarty Park	41.755584	-88.308959	41.7	41.8	41.8	0.00	42.3	42.7	0.40
4F	Local	365044	Maywood Park	41.886975	-87.837004	52.2	52.2	52.2	0.00	53	53	0.00
4F	Local	365028	May Street Park	41.768918	-88.328405	41.6	41.8	41.8	0.00	42.4	42.7	0.30
4F	Local	365002	Matthiessen State Park	41.295590	-89.025359	29.7	29.8	28.7	-1.10	30.2	28.5	-1.70
4F	Local	364481	Longcommon Park	41.834198	-87.815891	49.6	49.9	50.2	0.30	51.1	52.2	1.10
4F	Local	364922	Marshall County State Conservation Areas	40.990869	-89.430645	23.9	24	23.2	-0.80	24.4	22.5	-1.90
4F	Local	364482	Longfellow Park	41.877253	-87.783391	47.9	47.9	47.8	-0.10	48.7	48.6	-0.10
4F	Local	364848	Maplewood Park	41.911143	-87.690888	45.2	45.4	45.3	-0.10	46.1	46	-0.10
4F	Local	364777	Manor Park	41.832532	-87.769500	53.7	53.8	53.3	-0.50	54.4	53.8	-0.60
4F	Local	364768	Mann Park	41.657257	-87.550599	42.1	42.2	41.7	-0.50	42.6	41.2	-1.40
4F	Local	364704	Madison Park	41.803367	-87.593938	51.4	51.5	51.4	-0.10	52	51.8	-0.20
4F	Local	364694	Madden Park	41.826422	-87.615328	50.5	50.7	50.4	-0.30	51.1	50.9	-0.20
4F	Local	364613	Luella Park	41.713368	-87.567268	40.4	40.5	42.4	1.90	41	42.8	1.80
4F	Local	365313	Merrick Park	41.888087	-87.761724	47.2	47.2	47.2	0.00	48	47.9	-0.10
4F	Local	364930	Marshfield Park	41.735311	-87.664772	52.6	52.7	50.1	-2.60	53	49.4	-3.60
4F	Local	371481	Thatcher Woods Glen	41.892809	-87.829782	52.1	52.2	52.2	0.00	53	53	0.00
4F	Local	368245	Randall Park	41.781695	-88.351739	41.4	41.5	41.5	0.00	42.1	42.4	0.30
4F	Local	372126	Vernon Park	41.871699	-87.658942	43.5	43.5	43.4	-0.10	44.2	44	-0.20
4F	Local	372072	Van Horne Woods Forest Preserve	41.508088	-87.881440	44.9	45	45	0.00	45.6	45.5	-0.10
4F	Local	371943	Union Park	41.883921	-87.664776	43.2	43.3	43.1	-0.20	44	43.7	-0.30
4F	Local	371770	Tuley Park	41.730312	-87.611436	46.9	47	47.4	0.40	47.6	47.8	0.20
4F	Local	371578	Tilton Park	41.885587	-87.735056	45.7	45.7	45.5	-0.20	46.5	46.3	-0.20
4F	Local	372187	Vittum Park	41.803088	-87.748665	59.8	60	59.9	-0.10	60.4	60.7	0.30
4F	Local	371549	Thornton Park	41.348644	-88.863966	30.8	30.9	29.6	-1.30	31.3	29.8	-1.50
4F	Local	372232	Waiola Park	41.803920	-87.877281	50.1	50.2	50.2	0.00	50.9	51	0.10
4F	Local	371424	Taylor Park	41.902809	-87.785336	48.1	48.2	48.1	-0.10	49	48.9	-0.10
4F	Local	371280	Sunset Park	41.325035	-89.141473	31	31.1	30.6	-0.50	31.7	31.1	-0.60
4F	Local	371263	Sunnywood Park	41.854753	-87.848670	50.8	50.9	50.9	0.00	51.7	51.7	0.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	371236	Sunken Gardens	41.870310	-87.708943	45	45.1	44.8	-0.30	45.8	45.4	-0.40
4F	Local	371212	Summit Park	41.786698	-87.813111	57.4	57.5	57	-0.50	58.1	57.5	-0.60
4F	Local	371049	Stony Island Park	41.735312	-87.574491	41.3	41.5	42.3	0.80	42.1	42.8	0.70
4F	Local	370976	Stevenson Playground	41.887809	-87.778113	47.8	47.9	47.8	-0.10	48.7	48.6	-0.10
4F	Local	371560	Throop Park	41.804477	-87.657829	54.7	54.9	54.5	-0.40	55.3	54.9	-0.40
4F	Local	372659	West Chatham Park	41.745034	-87.631993	49	49.2	49.3	0.10	49.7	49.6	-0.10
4F	NRHP	10000038	Baker, George, House	41.852621	-88.055537	43.9	44	44	0.00	44.7	44.7	0.00
4F	Local	372980	Wicker Park	41.907532	-87.676999	43.7	43.8	43.7	-0.10	44.5	44.4	-0.10
4F	Local	372885	White City Park	41.329202	-89.291476	30.3	30.4	27.2	-3.20	30.8	27.8	-3.00
4F	Local	372864	Whistler Preserve	41.655312	-87.636713	47.3	47.5	44.6	-2.90	47.8	44.1	-3.70
4F	Local	372848	Wheeler Park	41.895305	-88.306186	42.6	42.6	42.6	0.00	42.9	43	0.10
4F	Local	372756	West Pullman Park	41.669478	-87.631436	48.5	48.6	45.9	-2.70	48.9	45.1	-3.80
4F	Local	372137	Veterans Park	41.718368	-87.555601	39	39.1	41.4	2.30	39.7	41.9	2.20
4F	Local	372719	West Lawn Park	41.773088	-87.728664	57.8	58	58.6	0.60	59.2	59.7	0.50
4F	Local	370900	Stanton Park	41.906143	-87.645053	42.4	42.6	42.5	-0.10	43.2	43.1	-0.10
4F	Local	372607	Wentworth Park	41.788365	-87.780610	59.3	59.4	59.2	-0.20	59.9	59.8	-0.10
4F	Local	372481	Washington Square	41.899199	-87.630608	42.6	42.7	42.6	-0.10	43.4	43.3	-0.10
4F	Local	372424	Washington Park	41.332534	-89.123972	31.1	31.2	30.6	-0.60	31.8	31.1	-0.70
4F	Local	372421	Washington Park	41.794756	-87.611438	51.3	51.5	51.4	-0.10	51.9	51.9	0.00
4F	Local	372420	Washington Park	41.349200	-88.842021	31.6	31.7	29.9	-1.80	32	30.1	-1.90
4F	Local	372389	Warren Park	41.857532	-87.766167	47.5	47.6	47.2	-0.40	48.3	47.9	-0.40
4F	Local	372284	Wallace Park	41.726700	-87.638659	48.7	48.9	48	-0.90	49.3	48.1	-1.20
4F	Local	372734	West Park	41.509753	-88.107836	44.8	44.9	42.7	-2.20	45.3	43.2	-2.10
4F	Local	368785	Roosevelt Park	41.868364	-87.804502	49.4	49.4	49.4	0.00	50.2	50.1	-0.10
4F	Local	370015	Scottsdale Park	41.741699	-87.735608	46.8	47	47.7	0.70	48	48.7	0.70
4F	Local	369984	Schultz Park	41.559202	-87.534208	42.9	42.9	46	3.10	42.8	45.7	2.90
4F	Local	369976	Schroeder Park	41.856420	-87.848948	50.9	51	51	0.00	51.8	51.8	0.00
4F	Local	369323	Saint Joseph Park	41.551141	-88.101170	46.4	46.5	44.5	-2.00	46.8	44.8	-2.00
4F	Local	368983	Sain Park	41.879754	-87.687832	43.9	44	43.7	-0.30	44.7	44.4	-0.30
4F	Local	368955	Sacramento Square	41.891143	-87.701999	44.6	44.7	44.5	-0.20	45.4	45.2	-0.20
4F	Local	370974	Stevens Playground	41.766140	-88.325071	41.7	41.8	41.8	0.00	42.3	42.7	0.40
4F	Local	368874	Rowan Park	41.685590	-87.537822	39.4	39.6	39.9	0.30	40.2	40.1	-0.10
4F	Local	370073	Seneca Park	41.896977	-87.622830	42.7	42.8	42.7	-0.10	43.4	43.4	0.00
4F	Local	368725	Rockwell Park	41.878921	-87.686721	43.8	43.9	43.7	-0.20	44.6	44.3	-0.30
4F	Local	368706	Rock Springs Park	41.805308	-87.905893	49.2	49.3	49.5	0.20	50.1	50.5	0.40
4F	Local	368643	Robinson Park	41.827254	-87.804223	51.2	51.5	51.6	0.10	52.6	53.5	0.90
4F	Local	368577	Riverdale Park	41.645590	-87.626157	46.3	46.4	43.6	-2.80	46.7	43.2	-3.50
4F	Local	368567	Rivals Park	41.551975	-88.089503	46.9	46.9	44.4	-2.50	47.2	44.6	-2.60
4F	Local	368514	Ridgeland Park	41.887531	-87.786724	48.2	48.3	48.3	0.00	49.1	49	-0.10
4F	Local	368504	Ridge Park	41.717811	-87.668105	52.9	53.1	51.5	-1.60	53.5	51.5	-2.00
4F	Local	368931	Russell Park	41.743923	-87.548379	40.2	40.4	41.1	0.70	40.9	41.6	0.70
4F	Local	370242	Sherwood Park	41.790589	-87.634772	51.6	51.8	51.9	0.10	52.3	52.4	0.10
4F	Local	363437	Kiwanis Field	41.667256	-87.622824	48.7	48.8	45.7	-3.10	49.2	45	-4.20

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	370697	South Shore Park	41.758090	-87.577825	42.8	42.9	43	0.10	43.5	43.4	-0.10
4F	Local	370548	Snow Park	41.120032	-87.850319	40.8	40.9	40.9	0.00	41.5	41.5	0.00
4F	Local	370505	Smith Park	41.892254	-87.690332	44	44	43.8	-0.20	44.8	44.6	-0.20
4F	Local	370504	Smith Memorial Park	41.505034	-87.655877	43.3	43.5	43.5	0.00	44.1	44.1	0.00
4F	Local	370437	Skinner Park	41.879754	-87.660886	43.2	43.3	43.1	-0.20	43.9	43.7	-0.20
4F	Local	370390	Simons Park	41.911421	-87.715334	45.9	45.9	45.8	-0.10	46.7	46.5	-0.20
4F	Local	370018	Scoville Park	41.889475	-87.795058	48.9	49	49	0.00	49.8	49.8	0.00
4F	Local	370246	Shewbridge Field	41.758644	-87.650327	51.4	51.5	51.3	-0.20	52.1	51.4	-0.70
4F	Local	370053	Seiter Park	41.501701	-87.618654	43	43.1	43.1	0.00	43.8	43.7	-0.10
4F	Local	370229	Sherman Park	41.796144	-87.657273	54.3	54.4	53.9	-0.50	54.9	54.4	-0.50
4F	Local	370218	Sheridan Park	41.870866	-87.654497	43.5	43.6	43.5	-0.10	44.2	44.1	-0.10
4F	Local	370188	Shedd Park	41.850032	-87.716443	48.2	48.3	47.8	-0.50	48.8	48.2	-0.60
4F	Local	370177	Shawmut Park	41.818364	-87.865336	50	50.1	50.1	0.00	50.8	51	0.20
4F	Local	370110	Shabbona County Park	41.538364	-88.847856	29	29.1	27.3	-1.80	29.6	28.1	-1.50
4F	Local	370099	Seward Park	41.902254	-87.638108	42.5	42.6	42.5	-0.10	43.3	43.2	-0.10
4F	Local	370921	Starved Rock State Park	41.313089	-88.967580	30.1	30.2	28.7	-1.50	30.5	28.7	-1.80
4F	Local	370380	Silver Springs State Park	41.627529	-88.522574	32.8	32.8	32.8	0.00	33.5	33.5	0.00
4F	Local	357264	Calumet Park	41.628367	-87.640602	47.3	47.4	44.8	-2.60	47.7	44.1	-3.60
4F	Local	359179	Dolton Park	41.628645	-87.604212	45.9	46	42.6	-3.40	46.3	42.1	-4.20
4F	Local	357664	Centennial Park	41.658367	-87.664214	46.1	46.2	45	-1.20	46.6	45	-1.60
4F	Local	357663	Centennial Park	41.336423	-89.126472	31.3	31.4	30.7	-0.70	31.9	31.2	-0.70
4F	Local	357555	Carver Park	41.652812	-87.598101	47.1	47.3	43.9	-3.40	47.7	43.1	-4.60
4F	Local	357408	Campbell Park	41.872810	-87.681720	43.9	43.9	43.6	-0.30	44.6	44.3	-0.30
4F	Local	357319	Cameron National Wildlife Refuge	41.067536	-89.408978	26.6	26.7	25	-1.70	27.1	24.4	-2.70
4F	Local	357853	Chapin Park	41.362254	-88.425345	35.3	35.4	34.1	-1.30	35.7	34.2	-1.50
4F	Local	357265	Calumet Park	41.718368	-87.529211	40.6	40.7	41.2	0.50	41.3	41.8	0.50
4F	Local	357940	Chicago Stadium (historical)	41.881699	-87.672831	43.3	43.4	43.2	-0.20	44.1	43.9	-0.20
4F	Local	357130	Burnham Park	41.823922	-87.590327	49.8	50	49.8	-0.20	50.4	50.2	-0.20
4F	Local	357129	Burnham Park	41.641979	-87.546710	43.5	43.6	44	0.40	43.9	43.9	0.00
4F	Local	357061	Bulger Park	41.904753	-87.853672	54.5	54.5	54.5	0.00	55.3	55.3	0.00
4F	Local	357056	Buffalo Rock State Park	41.326978	-88.909800	30.7	30.8	29.1	-1.70	31.1	29.1	-2.00
4F	Local	357020	Buckingham Fountain	41.875588	-87.618940	43.5	43.6	43.6	0.00	44.2	44.1	-0.10
4F	Local	356643	Boyce Playground	41.818089	-87.642551	53	53.1	53.3	0.20	53.6	53.6	0.00
4F	Local	356596	Bosley Park	41.839477	-87.653941	48.9	48.9	53	4.10	49.4	53.9	4.50
4F	Local	357267	Calumet Park	41.606702	-87.535320	42.1	42.1	41.1	-1.00	42.2	40.5	-1.70
4F	Local	358482	Cornell Square Park	41.801977	-87.670885	55.9	56.1	55.5	-0.60	56.4	56	-0.40
4F	Local	363544	LaVasseur Park	41.132532	-87.879765	40.8	41	41	0.00	41.6	41.6	0.00
4F	Local	358992	Dellwood Park	41.573364	-88.063114	47	47.1	45.3	-1.80	47.4	45.7	-1.70
4F	Local	358920	Dean Playground	41.906976	-87.670887	43.3	43.5	43.3	-0.20	44.2	44	-0.20
4F	Local	358875	Dawes Park	41.746144	-87.673939	52.3	52.5	50.2	-2.30	52.8	49.4	-3.40
4F	Local	358873	Davis Square Park	41.813088	-87.667551	55	55.2	54.7	-0.50	55.6	55	-0.60
4F	Local	358846	Dauphin Playlot	41.735312	-87.602547	45.9	46.1	46.5	0.40	46.6	46.8	0.20
4F	Local	357805	Cermak Park	41.818365	-87.811168	52	52.2	51.9	-0.30	53.2	53.2	0.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	358655	Crescent Park	41.697256	-87.677549	45.1	45.2	49.2	4.00	45.7	49.9	4.20
4F	Local	356421	Blackstone Park	41.542810	-89.112862	31.8	31.9	31.8	-0.10	32.5	32.8	0.30
4F	Local	358359	Copley Park	41.765862	-88.296737	42.2	42.3	42.3	0.00	42.8	43.1	0.30
4F	Local	358311	Commercial Club Park	41.896699	-87.673665	43.5	43.5	43.4	-0.10	44.2	44.1	-0.10
4F	Local	358304	Columbus Park	41.872809	-87.769223	47	47.1	46.9	-0.20	47.8	47.7	-0.10
4F	Local	358200	Cobb Park	41.106421	-87.857541	40.7	40.8	40.8	0.00	41.5	41.5	0.00
4F	Local	358051	Clark Park	41.876143	-87.740611	45.6	45.8	45.5	-0.30	46.5	46.2	-0.30
4F	Local	358009	Cid Field	41.800032	-87.785333	60.2	60.5	60.1	-0.40	61.2	60.6	-0.60
4F	Local	357945	Chicago Zoological Park	41.832531	-87.837280	49.8	49.9	50.5	0.60	50.9	52.3	1.40
4F	Local	358774	Cummings Square	41.889475	-87.806170	50.3	50.4	50.4	0.00	51.2	51.2	0.00
4F	NRHP	99001669	Nike Missile Site C47	41.528152	-87.172324	40.4	40.5	42.5	2.00	40.5	42.6	2.10
4F	Local	355482	Archer Park	41.804477	-87.735054	62.3	62.5	62.4	-0.10	62.9	63.1	0.20
4F	Local	355357	Altgeld Park	41.874199	-87.691998	44.4	44.5	44.2	-0.30	45.2	44.8	-0.40
4F	Local	355317	Allen Park	41.340866	-88.844799	32	32	29.8	-2.20	32.3	29.9	-2.40
4F	Local	355240	Adams Park	41.757256	-87.598936	44.4	44.6	44.8	0.20	45.2	45.2	0.00
4F	Local	355230	Ada Park	41.688645	-87.654492	47.3	47.5	47	-0.50	47.8	47	-0.80
4F	Local	355209	Abbott Park	41.720867	-87.621714	47.5	47.6	47.7	0.10	48.1	48	-0.10
4F	Local	356547	Bohn Park	41.692533	-87.670604	45.3	45.4	47.5	2.10	46	47.9	1.90
4F	NRHP	99001708	Morris Wide Water Canal Boat Site	41.366433	-88.403494	33.6	33.6	32.8	-0.80	34	33	-1.00
4F	Local	355588	Athletic Field	41.850310	-87.747833	48.5	48.6	48	-0.60	49.2	48.6	-0.60
4F	NRHP	99001378	One LaSalle Street Building	41.882080	-87.632187	43.2	43.3	43.1	-0.20	43.9	43.8	-0.10
4F	NRHP	99001157	State Street Commercial Historic District	41.618715	-87.516615	42.9	43	43.8	0.80	43.1	43.6	0.50
4F	NRHP	99001151	Mallon Building	40.985338	-86.881499	25.9	25.9	25.9	0.00	26.5	26.4	-0.10
4F	NRHP	99001112	First Unitarian Church of Hobart	41.530100	-87.253432	40.8	40.8	43.3	2.50	40.8	43.4	2.60
4F	NRHP	99001107	Whitaker, William, Landscape and House	41.410091	-87.363996	30	30.1	30.1	0.00	30.7	30.5	-0.20
4F	NRHP	99001102	Chesterton Commercial Historic District	41.612166	-87.052204	28.5	28.7	28.8	0.10	29.1	28.7	-0.40
4F	NRHP	99001072	Raymond M. Hilliard Center Historic District	41.854092	-87.616309	45.5	45.6	47.9	2.30	46.1	48.8	2.70
4F	NRHP	99001710	St. Matthew Evangelical Lutheran School	41.853713	-87.678650	46.2	46.3	46.2	-0.10	46.9	46.8	-0.10
4F	Local	355971	Beckman Park	41.104199	-87.846707	40.7	40.8	40.8	0.00	41.4	41.4	0.00
4F	Local	359196	Donovan Playground	41.827811	-87.648385	51.5	51.6	52.2	0.60	52.1	52.6	0.50
4F	Local	356349	Bird Park	41.121699	-87.878375	40.8	40.8	40.9	0.10	41.5	41.5	0.00
4F	Local	356263	Bickerdike Square Park	41.892254	-87.664220	43.2	43.3	43.1	-0.20	44	43.8	-0.20
4F	Local	356253	Beverly Park	41.708089	-87.683661	45.3	45.4	48.4	3.00	46	49	3.00
4F	Local	356250	Beverly Lawn Park	41.712255	-87.731162	44.5	44.6	47.1	2.50	45.3	48.3	3.00
4F	Local	356127	Bessemer Park	41.732812	-87.556990	39.6	39.7	41	1.30	40.2	41.5	1.30
4F	Local	356125	Berwyn Park	41.837531	-87.799501	49.8	49.9	49.5	-0.40	50.6	50.4	-0.20
4F	Local	355509	Armour Square Park	41.833922	-87.633940	49.7	49.9	50.1	0.20	50.4	50.7	0.30
4F	Local	356001	Beilfuss Park	41.912254	-87.723112	46.5	46.6	46.5	-0.10	47.4	47.3	-0.10
4F	Local	355563	Ashland Park	41.619756	-87.655324	47.1	47.1	46.6	-0.50	47.5	46.2	-1.30
4F	Local	355884	Beach Park	41.842806	-88.310629	42.6	42.7	42.7	0.00	43.1	43.3	0.20
4F	Local	355796	Barnard Park	41.703089	-87.670049	46.7	46.8	48.5	1.70	47.3	49.1	1.80
4F	Local	355646	Avalon Park	41.741701	-87.594769	44.5	44.6	45	0.40	45.2	45.4	0.20
4F	Local	355632	Austin Park	41.887531	-87.770890	47.5	47.6	47.5	-0.10	48.3	48.3	0.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	355620	Augusta Park	41.898365	-87.738112	46.4	46.4	46.3	-0.10	47.2	47.1	-0.10
4F	Local	355611	Auburn Park	41.753089	-87.634771	49.7	49.9	50	0.10	50.4	50.3	-0.10
4F	Local	356536	Bogan Park	41.746144	-87.720329	47.9	48	48	0.00	48.7	48.8	0.10
4F	Local	356073	Bensley Park	41.718090	-87.563379	39.7	39.9	41.9	2.00	40.4	42.4	2.00
4F	Local	361914	Helgesen Park	41.133921	-87.883932	40.8	40.9	40.9	0.00	41.5	41.5	0.00
4F	Local	359029	Des Plaines State Conservation Area	41.393364	-88.210061	39.5	39.6	39.6	0.00	40.4	40.3	-0.10
4F	Local	362529	Hudson Playground	41.899754	-87.638942	42.6	42.7	42.6	-0.10	43.4	43.2	-0.20
4F	Local	362511	Hoyne Park	41.831699	-87.678108	51.8	51.9	55.8	3.90	52.3	56.6	4.30
4F	Local	362415	Horan Park	41.876143	-87.704499	45	45.1	44.8	-0.30	45.8	45.4	-0.40
4F	Local	362215	Hodgkins Park	41.772254	-87.855335	53.1	53.2	53.2	0.00	53.7	53.9	0.20
4F	Local	362211	Hodes Park	41.761978	-87.585325	43.5	43.7	43.8	0.10	44.3	44.2	-0.10
4F	Local	362635	Illini State Park	41.321700	-88.715907	29.3	29.4	36.8	7.40	29.7	37	7.30
4F	Local	361976	Hermitage Park	41.787255	-87.667829	54.2	54.4	53.8	-0.60	54.9	54.2	-0.70
4F	Local	362699	Independence Square	41.862532	-87.719499	45.8	45.9	45.4	-0.50	46.5	46	-0.50
4F	Local	361907	Hegeler Park	41.341701	-89.094527	31.1	31.2	30.7	-0.50	31.8	31.2	-0.60
4F	Local	361826	Hawthorne Park	41.839754	-87.755055	51.8	51.9	51.4	-0.50	52.4	51.8	-0.60
4F	Local	361740	Harrison Park	41.856699	-87.672275	45.5	45.6	45.5	-0.10	46.2	46.1	-0.10
4F	Local	361648	Hardin Square	41.846977	-87.634496	46.9	47.1	51.2	4.10	47.6	52.2	4.60
4F	Local	361574	Hamilton Park	41.760867	-87.637827	50.2	50.4	50.5	0.10	50.9	50.8	-0.10
4F	Local	361504	Hale Park	41.778365	-87.778943	58.6	58.7	58.2	-0.50	59.2	58.8	-0.40
4F	Local	361308	Greenfields Park	41.905864	-87.802281	49.2	49.3	49.3	0.00	50.1	50.1	0.00
4F	Local	362103	Highland Park	41.534197	-88.031723	44.3	44.5	44.5	0.00	45	44.9	-0.10
4F	Local	363182	Kankakee River State Park	41.209476	-88.030606	39	39	39	0.00	39.6	39.6	0.00
4F	Local	363418	Kirby Park	41.322813	-89.209252	31	31	29.7	-1.30	31.6	30.3	-1.30
4F	Local	363334	Kiehl Park	41.733918	-88.323682	40.9	41.1	41.1	0.00	41.6	41.9	0.30
4F	Local	363319	Keystone Park	41.887531	-87.821726	51.5	51.6	51.6	0.00	52.4	52.4	0.00
4F	Local	363284	Kensington Park	41.679478	-87.615046	50.2	50.3	48.1	-2.20	50.7	47.8	-2.90
4F	Local	363278	Kennedy Park	41.686978	-87.683105	44.7	44.8	48.3	3.50	45.4	48.8	3.40
4F	Local	363249	Kelly Park	41.818366	-87.692830	56.7	56.9	58.4	1.50	57.2	58.8	1.60
4F	Local	362557	Humboldt Park	41.906143	-87.702000	45.5	45.6	45.5	-0.10	46.4	46.3	-0.10
4F	Local	363215	Kedvale Park	41.906698	-87.730334	46.7	46.7	46.6	-0.10	47.5	47.4	-0.10
4F	Local	361222	Graver Park	41.707811	-87.660604	51	51.2	49.5	-1.70	51.5	49.4	-2.10
4F	Local	363001	Jobbers Park	41.112254	-87.870875	40.7	40.8	40.8	0.00	41.5	41.5	0.00
4F	Local	362917	Janura Park	41.838920	-87.790057	49.9	50.1	49.6	-0.50	50.8	50.3	-0.50
4F	Local	362879	Jackson Park	41.780867	-87.580881	47.4	47.6	47.5	-0.10	48.1	48	-0.10
4F	Local	362857	Ivanhoe Park	41.634478	-87.628657	47.3	47.4	44	-3.40	47.6	43.3	-4.30
4F	Local	362849	Island Park	41.305587	-88.148391	38.3	38.3	38.3	0.00	39	39	0.00
4F	Local	362848	Island Park	41.163089	-87.655037	38.7	38.9	38.9	0.00	39.5	39.5	0.00
4F	Local	362803	Iroquois County State Conservation Area	40.988088	-87.569476	37.6	37.6	37.6	0.00	38.3	38.3	0.00
4F	Local	363244	Kells Park	41.895032	-87.707000	45.2	45.2	45.1	-0.10	46	45.8	-0.20
4F	Local	359701	Ehlert Park	41.811976	-87.847558	50.5	50.5	50.6	0.10	51.3	51.4	0.10
4F	Local	360445	Foster Park	41.741700	-87.659772	50	50.2	48.3	-1.90	50.5	47.9	-2.60
4F	Local	360439	Fosco Playground	41.864477	-87.657553	44.1	44.2	44.2	0.00	44.8	44.8	0.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	360259	Finneran Park	41.591702	-87.533098	43.1	43.1	40.9	-2.20	43.1	40.2	-2.90
4F	Local	360219	Fernwood Park	41.703645	-87.639214	53.2	53.3	51.5	-1.80	53.6	51.4	-2.20
4F	Local	360172	Farnsworth Park	41.752529	-88.280903	42.2	42.3	42.3	0.00	42.9	43.1	0.20
4F	Local	360001	Evergreen Park	41.716977	-87.706439	44.8	44.8	45.8	1.00	45.5	46.6	1.10
4F	Local	361305	Greene Park	41.769473	-88.333127	41.6	41.8	41.8	0.00	42.3	42.6	0.30
4F	Local	359781	Ellis Park	41.827811	-87.610328	50.1	50.2	50	-0.20	50.7	50.5	-0.20
4F	Local	360676	Fuller Park	41.811144	-87.634495	53.4	53.5	53.6	0.10	53.9	54	0.10
4F	Local	359641	Eckhart Park	41.896977	-87.661165	43.1	43.2	43	-0.20	43.8	43.7	-0.10
4F	Local	359640	Eckersall Stadium	41.745868	-87.564768	41	41.2	41.5	0.30	41.7	41.9	0.20
4F	Local	359589	East View Park	41.803364	-87.860336	50.5	50.6	50.7	0.10	51.4	51.5	0.10
4F	Local	359430	Dvorak Park	41.854199	-87.653385	45.6	45.7	47.1	1.40	46.3	47.9	1.60
4F	Local	359410	Durkin Park	41.739199	-87.727552	46	46.1	46.6	0.50	46.9	47.4	0.50
4F	Local	359321	Dryden Park	41.881972	-88.322019	42.4	42.5	42.5	0.00	42.8	42.8	0.00
4F	Local	359224	Douglas Park	41.860865	-87.698665	45.4	45.6	45.1	-0.50	46.2	45.7	-0.50
4F	Local	359954	Euclid Park	41.716700	-87.637548	50.6	50.7	49.2	-1.50	51.1	49	-2.10
4F	Local	360808	Gately Stadium Park	41.708367	-87.603380	45.7	45.8	46	0.20	46.3	46.3	0.00
4F	Local	373199	Winterhoff Park	41.567813	-87.537819	43.2	43.3	45.9	2.60	43.2	45.6	2.40
4F	Local	361172	Grant Park	41.879477	-87.618940	43.4	43.4	43.4	0.00	44.1	44	-0.10
4F	Local	361132	Grand Crossing Park	41.755867	-87.600881	44.8	44.9	45.1	0.20	45.5	45.5	0.00
4F	Local	361091	Goudy Square Park	41.905588	-87.626719	42.3	42.4	42.4	0.00	43.1	43	-0.10
4F	Local	361058	Goose Lake Prairie State Park	41.364753	-88.308397	32.7	32.8	32.7	-0.10	33.5	33.3	-0.20
4F	Local	361036	Goold Park	41.363642	-88.430623	35.7	35.7	34.4	-1.30	36	34.6	-1.40
4F	Local	361022	Good Templar Park	41.893916	-88.296741	43.6	43.6	43.6	0.00	43.9	43.9	0.00
4F	Local	360511	Fox Park	41.876420	-87.793391	48.6	48.6	48.6	0.00	49.4	49.4	0.00
4F	Local	360814	Gebhard Woods State Park	41.356976	-88.435345	35.5	35.6	34	-1.60	35.8	34.3	-1.50
4F	Local	360551	Franklin Park	41.861421	-87.732555	46.1	46.2	45.7	-0.50	46.9	46.3	-0.60
4F	Local	360787	Garnsey Park	41.548086	-88.100337	46.7	46.8	44.5	-2.30	47.1	44.7	-2.40
4F	Local	360784	Garfield Square	41.890032	-87.715333	46	46.1	45.9	-0.20	46.7	46.6	-0.10
4F	Local	360771	Garfield Park	41.881699	-87.717000	45.6	45.6	45.4	-0.20	46.3	46.1	-0.20
4F	Local	360770	Garfield Park	41.774473	-88.292848	42.5	42.6	42.6	0.00	43.2	43.4	0.20
4F	Local	360727	Galewood Park	41.912253	-87.768947	47.3	47.3	47.3	0.00	48.1	48.1	0.00
4F	Local	360711	Gage Park	41.793088	-87.683940	57	57.2	56.6	-0.60	57.7	57	-0.70
4F	Local	361288	Greenbaum Park	41.912532	-87.733390	46.3	46.3	46.3	0.00	47.1	47	-0.10
4F	Local	360876	Gilbert Park	41.814197	-87.888392	49.4	49.5	49.7	0.20	50.3	50.8	0.50
4F	Local	378575	Brandt Park	41.730032	-87.749497	46.1	46.3	48	1.70	47.1	49.4	2.30
4F	Local	378652	Bremen Heights Park	41.625867	-87.728660	48.1	48.2	49.3	1.10	48.7	49.3	0.60
4F	Local	378592	Mini Park	41.726144	-87.706717	45.8	45.9	46.2	0.30	46.6	46.9	0.30
4F	Local	378591	Southeast Park	41.712255	-87.694772	44.9	45	46.3	1.30	45.7	47	1.30
4F	Local	378590	Hurley Park	41.711978	-87.669216	49.8	50	49.7	-0.30	50.3	50	-0.30
4F	Local	378579	Norris Field	41.730866	-87.691995	51.2	51.4	50.4	-1.00	51.9	50.9	-1.00
4F	Local	378578	Harr Park	41.739755	-87.749497	47.3	47.5	48.6	1.10	48.4	49.8	1.40
4F	Local	378594	Evergreen Aqua Park	41.730033	-87.699217	48	48.1	47.8	-0.30	48.7	48.3	-0.40
4F	Local	378576	Lee Park	41.735311	-87.714218	46.4	46.5	46.6	0.10	47.2	47.2	0.00

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4F	Local	378604	Robichaux Park	41.726978	-87.633659	48.1	48.3	48	-0.30	48.7	48.2	-0.50
4F	Local	378574	Patterson Park	41.733644	-87.721440	45.3	45.5	45.9	0.40	46.2	46.6	0.40
4F	Local	378573	Anderson Park	41.728088	-87.729496	44.9	45	45.9	0.90	45.7	46.9	1.20
4F	Local	378572	Dillon Park	41.709199	-87.744774	45.1	45.2	48.6	3.40	45.9	49.1	3.20
4F	Local	378571	Northwest Park	41.726977	-87.713940	45.4	45.5	46	0.50	46.2	46.7	0.50
4F	Local	378565	Goreham Park	41.626420	-87.920611	48	48.1	46.9	-1.20	48.4	47.3	-1.10
4F	Local	378557	Devon Park	41.724753	-87.923947	47	47.1	47.1	0.00	47.8	47.8	0.00
4F	Local	378556	Stevens Park	41.733920	-87.926169	48.1	48.2	48.2	0.00	48.9	49	0.10
4F	Local	378577	Lewandowski Park	41.732532	-87.743108	46	46.1	47.3	1.20	47	48.6	1.60
4F	Local	378629	Sears Park	41.666700	-87.707827	45.7	45.8	47.3	1.50	46.4	47.7	1.30
4F	Local	378468	Roesner Park	41.598923	-87.685325	47.9	48	46.7	-1.30	48.4	46.9	-1.50
4F	Local	378646	Block Park	41.706145	-87.631714	51.8	51.9	50.4	-1.50	52.3	50.3	-2.00
4F	Local	378645	Cooper Park	41.680311	-87.654214	46.5	46.6	46.1	-0.50	47	46.1	-0.90
4F	Local	378644	Lamb Park	41.696145	-87.656437	48.6	48.7	47.9	-0.80	49.1	47.9	-1.20
4F	Local	378633	Troublemakers Park	41.668922	-87.669215	45.3	45.4	45.4	0.00	45.9	45.6	-0.30
4F	Local	378632	Almond Park	41.684200	-87.675882	44.8	45	46.9	1.90	45.5	47.3	1.80
4F	Local	378593	Cosme Park	41.727533	-87.667549	55.6	55.7	53.7	-2.00	56.2	53.8	-2.40
4F	Local	378630	Commissioners Park	41.665589	-87.701716	45.6	45.7	46.7	1.00	46.2	47.1	0.90
4F	Local	378541	Flossmoor Park	41.543645	-87.676990	44.9	45	44.9	-0.10	45.5	45.7	0.20
4F	Local	378628	Munroe Park	41.701700	-87.685605	44.7	44.8	48.4	3.60	45.4	49.1	3.70
4F	Local	378627	Hart Park	41.668922	-87.678937	45.2	45.3	45.6	0.30	45.8	45.9	0.10
4F	Local	378619	Laramie Park	41.674200	-87.749495	47.8	47.8	47.6	-0.20	48.2	47.7	-0.50
4F	Local	378618	Lawn Manor Park	41.696422	-87.728106	44.8	44.9	47.8	2.90	45.5	48.2	2.70
4F	Local	378617	Wolfe Wildlife Refuge	41.693922	-87.748107	46.3	46.4	48	1.60	46.9	47.9	1.00
4F	Local	378606	Fernwood Parkway Park	41.711978	-87.632826	50.6	50.8	49.3	-1.50	51.1	49.2	-1.90
4F	Local	378605	Smith Park	41.713645	-87.631437	49.9	50.1	48.8	-1.30	50.5	48.7	-1.80
4F	Local	378631	Blackwelder Park	41.683922	-87.670604	45	45.1	46.5	1.40	45.6	46.8	1.20
4F	Local	378483	Tierra Grande Park	41.547534	-87.722269	44.7	44.8	44.6	-0.20	45.4	45.5	0.10
4F	Local	378502	Dresser Park	41.610589	-87.686714	47.7	47.8	48.7	0.90	48.1	48.6	0.50
4F	Local	378500	Lone Pine Park	41.611145	-87.696714	47.8	47.9	48.1	0.20	48.3	48	-0.30
4F	Local	378496	Orchard Park	41.559201	-87.658379	45.3	45.4	44.4	-1.00	45.8	44.9	-0.90
4F	Local	378493	Cherrywood Park	41.571423	-87.685324	47	47	45.6	-1.40	47.5	46	-1.50
4F	Local	378492	Taft Park	41.596423	-87.632545	46.3	46.4	48.1	1.70	46.7	48	1.30
4F	Local	378490	McNeil Park	41.605311	-87.700048	48.1	48.2	47.2	-1.00	48.5	47.2	-1.30
4F	Local	378553	Pinewood Park	41.742531	-87.963393	48.1	48.2	48.2	0.00	48.9	49	0.10
4F	Local	378484	Cedar Park	41.566423	-87.660323	45.8	45.9	44.7	-1.20	46.3	45.1	-1.20
4F	Local	378509	Well Park	41.558923	-87.686713	46.3	46.4	45.1	-1.30	46.8	45.7	-1.10
4F	Local	378481	Riverside Park	41.618645	-87.627268	46.9	47	44.5	-2.50	47.3	44.2	-3.10
4F	Local	378479	Governors Trail Park	41.500590	-87.715879	42.6	42.7	42.7	0.00	43.4	43.3	-0.10
4F	Local	378476	Indiana Park	41.502256	-87.688656	42.2	42.4	42.4	0.00	43	43	0.00
4F	Local	378475	New Holmes Park	41.598090	-87.639490	46.3	46.4	48.2	1.80	46.7	48.1	1.40
4F	Local	378474	Southwest Park	41.598090	-87.658379	46.9	46.9	47.4	0.50	47.3	47.3	0.00
4F	Local	378472	Tatje Park	41.597812	-87.632545	46.3	46.4	48.2	1.80	46.7	48	1.30

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	373012	Wilder Park	41.763362	-88.314238	41.8	42	42	0.00	42.5	42.8	0.30
4F	Local	378486	Cypress Park	41.538090	-87.715880	43.8	43.9	43.9	0.00	44.5	44.6	0.10
4F	Local	378523	Irons Oak Park	41.528923	-87.677545	43.8	43.9	43.9	0.00	44.5	44.5	0.00
4F	Local	378653	Walker Park	41.639755	-87.748661	47.8	47.9	51.2	3.30	48.4	51.3	2.90
4F	Local	378540	George Arquilla Park	41.550590	-87.627266	44	44.1	43.2	-0.90	44.5	43.8	-0.70
4F	Local	378538	Leavitt Avenue Park	41.544201	-87.682268	44.8	44.9	44.9	0.00	45.4	45.6	0.20
4F	Local	378536	Illinois Park	41.503368	-87.679211	42.5	42.6	42.6	0.00	43.3	43.2	-0.10
4F	Local	378535	Wolf Park	41.550867	-87.725047	45.3	45.4	44.8	-0.60	45.9	45.7	-0.20
4F	Local	378531	Tolentine Park	41.514478	-87.709490	42.7	42.8	42.8	0.00	43.4	43.4	0.00
4F	Local	378530	Highland Park	41.531145	-87.685879	43.8	43.8	43.8	0.00	44.4	44.5	0.10
4F	Local	378503	Holmes Park	41.602256	-87.639490	46.6	46.7	48.5	1.80	47	48.3	1.30
4F	Local	378524	Pheasant Trails Park	41.532256	-87.660045	44.2	44.3	44.3	0.00	44.9	45	0.10
4F	Local	378506	Oakwood Park	41.512256	-87.724213	43.1	43.3	43.3	0.00	43.9	43.9	0.00
4F	Local	378522	Memorial Park	41.503367	-87.706990	42.3	42.4	42.4	0.00	43.1	43	-0.10
4F	Local	378520	Community Park	41.573367	-87.722270	47.1	47.2	45.6	-1.60	47.6	46	-1.60
4F	Local	378518	Donnelly Park	41.613923	-87.689770	47.7	47.8	49.3	1.50	48.2	49.2	1.00
4F	Local	378516	Harmon Park	41.620034	-87.643379	47.1	47.2	45.5	-1.70	47.6	45.2	-2.40
4F	Local	378512	Martin Luther King Park	41.596423	-87.651713	46.4	46.5	47.4	0.90	46.9	47.2	0.30
4F	Local	378511	Notre Dame Park	41.512256	-87.738658	43.9	44	44	0.00	44.7	44.6	-0.10
4F	Local	378549	Timberlake Park	41.728920	-87.949225	47	47	47.1	0.10	47.7	47.8	0.10
4F	Local	378526	Estates Park	41.557256	-87.640322	44.4	44.5	43.6	-0.90	44.9	44.1	-0.80
4F	Local	388516	Jasper-Pulaski Fish and Wildlife Area	41.163372	-86.932798	26.2	26.3	26.2	-0.10	26.9	26.7	-0.20
4F	Local	378647	White Park	41.673367	-87.648936	46.4	46.5	45.5	-1.00	46.9	45.4	-1.50
4F	Local	389114	Lakefront Park	41.694757	-87.509210	39.1	39.3	40.6	1.30	39.9	41.1	1.20
4F	Local	389032	Krueger Memorial Park	41.720317	-86.872529	40.9	41	41	0.00	41.5	41.5	0.00
4F	Local	388919	Kirchoff Park	41.471983	-87.043918	34.5	34.6	36.2	1.60	34.8	36.5	1.70
4F	Local	388731	Kaukakee State Fish and Wildlife Area	41.287540	-86.779185	31.3	31.4	32.1	0.70	31.4	31.9	0.50
4F	Local	388730	Kankakee River State Park	41.165867	-87.513645	38.3	38.5	38.5	0.00	39.1	39.1	0.00
4F	Local	389899	Lost Park	41.599202	-87.455596	42.9	42.9	44.3	1.40	43.1	44.5	1.40
4F	Local	388536	Jefferson Park	41.597536	-87.343649	36.7	36.8	37.7	0.90	37	38.1	1.10
4F	Local	390188	Mark Town Park	41.660313	-87.470042	35.2	35.4	41.1	5.70	35.8	42.1	6.30
4F	Local	388464	Jackson Park	41.604758	-87.345594	37.1	37.2	38.1	0.90	37.5	38.4	0.90
4F	Local	388405	Irving Park	41.628091	-87.499208	43.1	43.2	42.5	-0.70	43.4	41.9	-1.50
4F	Local	388361	Indiana Dunes State Park	41.663093	-87.036977	32.7	32.8	33	0.20	33.3	33.1	-0.20
4F	Local	388299	Indi-Illi Park	41.590590	-87.523931	43.3	43.3	41	-2.30	43.2	40.3	-2.90
4F	Local	387630	Hermit Park	41.638090	-87.522542	42.8	42.9	42	-0.90	43.2	41.3	-1.90
4F	Local	387484	Hawthorne Park	41.620038	-87.069199	28.9	29	29.1	0.10	29.4	29.1	-0.30
4F	Local	387369	Harrison Park	41.607813	-87.518931	42.2	42.3	42	-0.30	42.4	41.6	-0.80
4F	Local	388560	Jeorse Park	41.651980	-87.435874	42.8	42.9	45.1	2.20	43	45.7	2.70
4F	Local	393195	Pullman Field	41.714483	-86.910863	40.2	40.3	40.3	0.00	40.8	40.8	0.00
4F	Local	397048	Washington Park	41.588925	-87.333926	38.3	38.3	39	0.70	38.5	39.2	0.70
4F	Local	397046	Washington Park	41.635313	-87.450318	44.5	44.5	45.6	1.10	44.6	46	1.40
4F	Local	396353	Tolleston Park	41.586980	-87.370594	41.8	41.9	42.7	0.80	41.9	42.8	0.90

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	396341	Tod Park	41.641980	-87.481430	39.5	39.6	40.4	0.80	39.9	40.6	0.70
4F	Local	394560	Sandy Acres Park	41.281430	-86.621402	27.4	27.4	27.1	-0.30	27.7	27.1	-0.60
4F	Local	393831	Roosevelt Park	41.578369	-87.345593	42.3	42.4	43	0.60	42.4	43.1	0.70
4F	Local	389131	Lakeview Park	41.530870	-87.264757	40.9	41	43.5	2.50	40.9	43.6	2.70
4F	Local	393577	Riley Park	41.628091	-87.458930	44.6	44.7	45.3	0.60	44.7	45.5	0.80
4F	Local	386696	Glenrose Park	41.483650	-87.042807	35.7	35.8	36.3	0.50	36	36.4	0.40
4F	Local	393058	Pottawattamie Park	41.720873	-86.866695	40.9	41.1	41.1	0.00	41.5	41.6	0.10
4F	Local	392767	Pittman Square Park	41.526980	-87.331981	41.6	41.6	43.6	2.00	41.6	43.5	1.90
4F	Local	392655	Phrommer Park	41.590869	-87.441706	42.1	42.1	43.7	1.60	42.3	43.9	1.60
4F	Local	392626	Pettit Park	41.548924	-87.449761	42.6	42.7	45	2.30	42.6	44.7	2.10
4F	Local	392245	Orchard Park	41.552535	-87.490040	43.1	43.1	45.3	2.20	43	44.9	1.90
4F	Local	390337	Doctor Martin Luther King Park	41.605035	-87.504208	42.8	42.9	42.9	0.00	43	42.5	-0.50
4F	Local	390210	Marquette Park	41.619203	-87.260314	33.9	34	34.2	0.20	34.6	34.7	0.10
4F	Local	393657	Riverside Park	41.570313	-87.501152	41.9	41.9	42.8	0.90	41.9	42.3	0.40
4F	Local	378696	Will County Forest Preserve	41.355587	-87.943105	41.5	41.5	41.5	0.00	42.2	42.1	-0.10
4F	Local	382777	Block Field	41.632813	-87.451430	44.8	44.8	45.7	0.90	44.8	46	1.20
4F	Local	382267	Beaver Lake Prairie Chicken Refuge	41.078923	-87.420864	36.8	36.8	36.8	0.00	37.5	37.5	0.00
4F	Local	382245	Beason Park	41.104485	-86.564731	32.5	32.5	32.3	-0.20	32.6	31.5	-1.10
4F	Local	381725	Ames Field	41.701428	-86.896696	38.5	38.6	38.6	0.00	39.1	39	-0.10
4F	Local	379999	Sandwich Memorial Park	41.639752	-88.626187	31.8	31.9	31.9	0.00	32.5	32.6	0.10
4F	Local	379997	Klatt Field	41.666140	-88.525075	34	34.2	34.1	-0.10	34.6	34.8	0.20
4F	Local	387303	Harding Park	41.597257	-87.453651	42.5	42.6	44.2	1.60	42.8	44.3	1.50
4F	Local	378728	Rigden Park	41.349477	-88.849799	31.3	31.4	29.8	-1.60	31.7	30	-1.70
4F	Local	383549	Callahan Park	41.645313	-87.442263	42.9	43	44.8	1.80	43	45.4	2.40
4F	Local	378670	Franson Park	41.632256	-87.629490	47.6	47.7	44.2	-3.50	47.9	43.5	-4.40
4F	Local	378669	Prairie Park	41.637812	-87.632546	46.8	47	44	-3.00	47.3	43.3	-4.00
4F	Local	378668	Briggs-Ellis Park	41.628923	-87.651713	47.3	47.4	45.3	-2.10	47.7	44.7	-3.00
4F	Local	378663	Memorial Park	41.634200	-87.681437	47.2	47.3	46.5	-0.80	47.7	46.3	-1.40
4F	Local	378662	Memorial Park	41.631422	-87.700326	48	48.1	49	0.90	48.4	48.9	0.50
4F	Local	378655	Lindsey Park	41.642256	-87.713938	47.3	47.4	47.9	0.50	47.8	47.9	0.10
4F	Local	378654	Caesar Park	41.635033	-87.730605	48.2	48.4	50.8	2.40	48.8	50.9	2.10
4F	Local	379996	Knights Park	41.655585	-88.612576	33.3	33.4	33.4	0.00	34	34.2	0.20
4F	Local	384229	Cleveland Park	41.710317	-86.883362	39.7	39.8	39.8	0.00	40.3	40.3	0.00
4F	Local	378467	Markham Park	41.594478	-87.705048	48	48.1	46.6	-1.50	48.6	46.9	-1.70
4F	Local	386675	Gleason Park	41.560869	-87.344759	41.1	41.1	43.2	2.10	41.2	43.4	2.20
4F	Local	386648	Gill Field	41.708650	-86.894474	39.4	39.6	39.6	0.00	40	40	0.00
4F	Local	386525	Gardena Playground	41.698650	-86.881973	38.1	38.3	38.3	0.00	38.7	38.7	0.00
4F	Local	386257	Forsyth Park	41.683924	-87.515043	38.9	39	39.3	0.30	39.6	39.6	0.00
4F	Local	386239	Forest Park	41.479761	-87.070308	35.8	35.9	37.7	1.80	36	37.9	1.90
4F	Local	385845	Evergreen Park	41.288924	-87.405590	33	33.1	33.1	0.00	33.8	33.7	-0.10
4F	Local	383153	Brook Side Park	40.937815	-87.163356	29.8	29.9	29.9	0.00	30.5	30.5	0.00
4F	Local	385598	Edison Park	41.590868	-87.512819	43.4	43.4	41.2	-2.20	43.4	40.4	-3.00
4F	Local	383365	Buffington Park	41.600036	-87.333649	36.3	36.4	37.4	1.00	36.7	37.7	1.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	384109	Circle Park	41.548646	-87.485873	42.9	42.8	44.8	2.00	42.8	44.5	1.70
4F	Local	383888	Centennial Park	41.352544	-86.309172	29.3	29.3	29.3	0.00	29.8	29.8	0.00
4F	Local	383740	Carolina Park	41.589203	-87.328093	37.7	37.8	38.5	0.70	37.9	38.7	0.80
4F	Local	383637	Camp Paxton	41.000318	-86.623620	30.6	30.6	29.7	-0.90	30.8	29.2	-1.60
4F	Local	383614	Camp Farr	41.579761	-87.001975	29.1	29.2	29.4	0.20	29.7	29.5	-0.20
4F	Local	383590	Camp Area Number Five	41.296146	-87.516980	39	39.1	39.1	0.00	39.7	39.6	-0.10
4F	Local	387276	Hanson Park	41.718095	-86.888640	40.6	40.8	40.8	0.00	41.2	41.3	0.10
4F	Local	385670	Ellendale Park	41.540869	-87.449206	42.4	42.3	43.9	1.60	42.3	43.7	1.40
4F	Local	374170	Thorn Creek Forest Preserve	41.458923	-87.687544	41.3	41.4	41.4	0.00	42	41.9	-0.10
4F	Local	374214	Wayne Lehnert Forest Preserve	41.358366	-87.838935	42.9	43.1	43.1	0.00	43.7	43.7	0.00
4F	Local	374184	Craig Park	41.441145	-87.678654	40.8	40.9	40.9	0.00	41.5	41.5	0.00
4F	Local	374182	Jones Park	41.476701	-87.710323	42.3	42.4	42.4	0.00	43.1	43	-0.10
4F	Local	374181	Pierce Park	41.477534	-87.726990	43.4	43.4	43.4	0.00	44.1	44.1	0.00
4F	Local	374180	Keokuk Park	41.478090	-87.700878	41.8	42	42	0.00	42.6	42.6	0.00
4F	Local	374176	Klawitter Park	41.479756	-87.737268	43.8	43.9	43.9	0.00	44.6	44.5	-0.10
4F	Local	374186	Central Park	41.487812	-87.685878	41.8	41.9	41.9	0.00	42.5	42.5	0.00
4F	Local	374171	Veterans Memorial Park	41.486979	-87.681989	41.8	42	42	0.00	42.6	42.5	-0.10
4F	Local	374187	Krotiak Park	41.490868	-87.681989	42	42.1	42.1	0.00	42.7	42.6	-0.10
4F	Local	374169	Riegel Farm Park	41.430034	-87.675043	40.6	40.7	40.7	0.00	41.3	41.3	0.00
4F	Local	374167	Petrarca Park	41.495590	-87.629765	43.3	43.4	43.3	-0.10	44	44	0.00
4F	Local	374166	Jirtle Park	41.492257	-87.631710	43.2	43.3	43.3	0.00	44	44	0.00
4F	Local	374142	Balmoral Park Race Track	41.411145	-87.625874	40.8	40.8	40.8	0.00	41.5	41.5	0.00
4F	Local	374131	Brookside Park	41.499477	-87.866161	45.2	45.3	45.3	0.00	45.9	45.9	0.00
4F	Local	374127	Main Park	41.495866	-87.859494	45.2	45.3	45.3	0.00	45.9	45.9	0.00
4F	Local	374105	Chicago Portage National Historic Site	41.805587	-87.807001	54.2	54.6	54	-0.60	55.9	55	-0.90
4F	Local	374172	Pine Lake Park	41.443645	-87.704766	42.2	42.3	42.3	0.00	43	42.9	-0.10
4F	Local	374195	Hecht Park	41.472812	-87.645321	42.3	42.5	42.5	0.00	43.2	43.1	-0.10
4F	Local	378469	Woodbrough Park	41.554756	-87.641711	44.6	44.7	43.7	-1.00	45.1	44.3	-0.80
4F	Local	374207	Thies Park	41.253643	-87.847266	42.1	42.2	42.2	0.00	42.9	42.9	0.00
4F	Local	374203	Legion Park	41.252810	-87.833654	41.8	41.9	41.9	0.00	42.5	42.5	0.00
4F	Local	374202	Hendrickson Park	41.251143	-87.826987	41.5	41.6	41.6	0.00	42.3	42.3	0.00
4F	Local	374199	Logan Park	41.499201	-87.684767	42.2	42.3	42.3	0.00	43	42.9	-0.10
4F	Local	374198	Eastgate Park	41.492812	-87.666711	42.5	42.6	42.6	0.00	43.2	43.2	0.00
4F	Local	374185	Winnebago Parks	41.491145	-87.693934	41.9	42	42	0.00	42.6	42.6	0.00
4F	Local	374196	Jackson Park	41.487812	-87.635321	43.1	43.2	43.2	0.00	43.9	43.9	0.00
4F	Local	373963	The Commons	41.887251	-88.005899	48.3	48.3	48.4	0.10	49.1	49.1	0.00
4F	Local	374194	Euclid Park	41.495590	-87.646155	43.2	43.3	43.3	0.00	44	43.9	-0.10
4F	Local	374193	Veterans Memorial Park	41.466701	-87.629209	42.6	42.7	42.7	0.00	43.4	43.4	0.00
4F	Local	374192	Algonquin Park	41.494479	-87.672266	42.4	42.5	42.5	0.00	43.1	43.1	0.00
4F	Local	374191	Murphy Park	41.481145	-87.670044	41.9	42	42	0.00	42.7	42.6	-0.10
4F	Local	374190	Onarga Park	41.473090	-87.681988	41.5	41.5	41.5	0.00	42.2	42.1	-0.10
4F	Local	374189	Somonauk Park	41.474478	-87.698656	41.8	41.9	41.9	0.00	42.5	42.4	-0.10
4F	Local	374188	Marquette Park	41.475867	-87.690878	41.6	41.7	41.7	0.00	42.3	42.2	-0.10

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	374197	Cedar Park	41.483645	-87.673377	41.9	42	42	0.00	42.6	42.6	0.00
4F	Local	373586	Centennial Park	41.770585	-88.157566	43.9	44.1	44.1	0.00	44.6	44.9	0.30
4F	Local	373733	Kelly Park	41.853918	-88.110068	41.9	42	42	0.00	42.7	42.7	0.00
4F	Local	373711	Hummer Park	41.800030	-87.993951	47.1	47.2	47.2	0.00	47.9	48	0.10
4F	Local	373665	Fullersberg Park	41.829197	-87.933117	49.8	49.8	49.8	0.00	50.6	50.6	0.00
4F	Local	373651	Fisher Park	41.792808	-88.011729	46.9	47	47	0.00	47.7	47.8	0.10
4F	Local	373623	Eastview Terrace Park	41.875307	-88.016176	47.4	47.4	47.4	0.00	48.2	48.2	0.00
4F	Local	373621	East End Park	41.903363	-87.922841	54.8	54.8	54.8	0.00	55.6	55.6	0.00
4F	Local	374009	Wilder Park	41.895863	-87.943397	52	52	52	0.00	52.8	52.8	0.00
4F	Local	373588	Central Park	41.774196	-88.146455	44.1	44.2	44.2	0.00	44.7	45.1	0.40
4F	Local	373799	Morton Arboretum	41.818085	-88.059232	44.6	44.7	44.7	0.00	45.4	45.5	0.10
4F	Local	373577	Burnside Park	41.808364	-87.935894	49.4	49.5	49.6	0.10	50.3	50.5	0.20
4F	Local	373576	Burlington Park County Forest Preserve	41.777529	-88.164511	44.1	44.3	44.3	0.00	44.8	45.1	0.30
4F	Local	373542	Adams Park	41.866973	-88.103957	42.3	42.4	42.4	0.00	43	43	0.00
4F	Local	373541	Academy Park	41.875306	-88.098123	41.7	41.8	41.8	0.00	42.5	42.5	0.00
4F	Local	373277	Woodhull Park	41.761701	-87.584214	43.5	43.6	43.7	0.10	44.2	44.2	0.00
4F	Local	373255	Wolfe Park	41.698090	-87.542822	39.5	39.6	40.7	1.10	40.1	41.1	1.00
4F	Local	373213	Wm W Powers Conservation Area	41.666979	-87.532543	39	39.2	39	-0.20	39.7	39.1	-0.60
4F	Local	373611	DuPage County Fairgrounds	41.867251	-88.133958	41.3	41.3	41.4	0.10	41.9	42	0.10
4F	Local	373865	Randall Park	41.790586	-88.003396	47.1	47.3	47.3	0.00	47.9	48.1	0.20
4F	Local	375387	Plum Creek Forest Preserve	41.479202	-87.533373	37.5	37.6	37.6	0.00	38.3	38.2	-0.10
4F	Local	373962	Terrace View Park	41.895585	-88.020899	45.8	45.9	45.9	0.00	46.6	46.6	0.00
4F	Local	373958	Sunset Park	41.863085	-88.073122	43.4	43.4	43.4	0.00	44.1	44.1	0.00
4F	Local	373957	Sunset Knoll Park	41.867807	-88.029788	46.1	46.1	46.1	0.00	46.8	46.8	0.00
4F	Local	373953	Stacy Park	41.890029	-88.068678	43.1	43.2	43.2	0.00	43.9	43.9	0.00
4F	Local	373943	South Side Park	41.863362	-88.057011	44	44.1	44.1	0.00	44.8	44.8	0.00
4F	Local	373942	Central Park	41.860029	-88.107290	42.3	42.3	42.3	0.00	42.9	43	0.10
4F	Local	373734	Kendall Park	41.780307	-88.148955	44.1	44.3	44.3	0.00	44.8	45.1	0.30
4F	Local	373866	Rathje Park	41.859473	-88.117846	41.7	41.8	41.8	0.00	42.4	42.4	0.00
4F	Local	373789	McDowell Grove County Forest Preserve	41.794751	-88.183401	44.2	44.3	44.4	0.10	44.8	45.1	0.30
4F	Local	373861	Prince Park	41.797530	-88.015341	46.7	46.8	46.8	0.00	47.4	47.6	0.20
4F	Local	373855	Pioneer Park	41.769473	-88.650357	40.7	40.9	40.9	0.00	41.3	41.7	0.40
4F	Local	373854	Pioneer Park County Forest Preserve	41.753085	-88.133398	43.7	43.8	43.8	0.00	44.3	44.6	0.30
4F	Local	373822	North Terrace Park	41.894474	-87.994510	50	50	50	0.00	50.8	50.8	0.00
4F	Local	373821	North Side Park	41.879195	-88.111457	40.3	40.4	40.4	0.00	41.1	41.1	0.00
4F	Local	373806	William Freidrich Memorial Park	41.764196	-88.153399	43.8	43.9	43.9	0.00	44.5	44.7	0.20
4F	Local	373997	West DuPage County Forest Preserve	41.872806	-88.182570	40.1	40.1	40.2	0.10	40.7	40.7	0.00
4F	Local	373920	Salt Creek Park	41.900029	-87.960898	54.5	54.5	54.5	0.00	55.3	55.3	0.00
4F	Local	376193	Baker Park	41.343923	-89.108694	31.4	31.5	30.8	-0.70	32.1	31.3	-0.80
4F	Local	374209	Peotone Community Park	41.327810	-87.798099	40.5	40.6	40.6	0.00	41.2	41.1	-0.10
4F	Local	377435	Lincoln-Douglas Park	41.358922	-88.832021	31.2	31.3	29.9	-1.40	31.6	30.1	-1.50
4F	Local	377433	East Side Park	41.347255	-88.832298	32.1	32.2	30	-2.20	32.4	30.1	-2.30
4F	Local	377432	Varland Park	41.325311	-88.835076	32.1	32.2	30.8	-1.40	32.5	30.8	-1.70

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	377431	Kiwanis Park	41.335033	-88.838965	32.2	32.3	30	-2.30	32.6	30	-2.60
4F	Local	376831	Joliet Municipal Stadium	41.520308	-88.152560	45.2	45.2	42.6	-2.60	45.5	42.9	-2.60
4F	Local	377439	Fox River State Park (historical)	41.361699	-88.803409	32.2	32.3	30.3	-2.00	32.6	30.5	-2.10
4F	Local	376194	Cerri Memorial Park	41.264202	-89.121750	29.2	29.4	29	-0.40	29.7	28.5	-1.20
4F	Local	378345	Hayes Park	41.740589	-87.696717	56.6	56.7	55.4	-1.30	57.2	56	-1.20
4F	Local	376192	Carey Memorial Park	41.341423	-89.012858	29.4	29.5	29.1	-0.40	30	29.5	-0.50
4F	Local	375923	Trumbull Park	41.706423	-87.564212	40.8	41	42.2	1.20	41.5	42.7	1.20
4F	Local	375569	Potts Park	41.582535	-87.547264	42.4	42.4	42.4	0.00	42.4	42	-0.40
4F	Local	375568	Bock Park	41.573924	-87.542542	42.9	42.9	44.8	1.90	42.9	44.3	1.40
4F	Local	375567	Oakwood Park	41.548646	-87.545319	41	41	42	1.00	41.1	42.1	1.00
4F	Local	375566	Liberty Memorial Park	41.512257	-87.540874	38	38.1	39	0.90	38.5	39	0.50
4F	Local	375565	Lions Park	41.577535	-87.531431	42	42.1	42.2	0.10	42.1	41.8	-0.30
4F	Local	376195	McKinley Park	41.334756	-89.110361	31	31.1	30.6	-0.50	31.7	31.1	-0.60
4F	Local	378458	Maynegaite Park	41.533367	-87.687546	43.9	43.9	44	0.10	44.5	44.7	0.20
4F	Local	378466	Cooper Park	41.615867	-87.669769	47.6	47.7	49.2	1.50	48	49	1.00
4F	Local	378465	Country Aire Park	41.615867	-87.706437	47.7	47.8	48.5	0.70	48.3	48.6	0.30
4F	Local	378464	Lincoln Park	41.602256	-87.661713	47.4	47.5	48.4	0.90	47.9	48.3	0.40
4F	Local	378463	Radio Station Park	41.603645	-87.677825	47.8	47.9	47.5	-0.40	48.3	47.6	-0.70
4F	Local	378462	Independence Park	41.571145	-87.710325	47	47.1	45.5	-1.60	47.5	45.9	-1.60
4F	Local	378461	Atkin Park	41.565867	-87.722270	47	47.1	45.3	-1.80	47.5	45.8	-1.70
4F	Local	377436	Walsh Park	41.361700	-88.832576	30.9	31	29.8	-1.20	31.3	30	-1.30
4F	Local	378459	Bicentennial Park	41.521423	-87.699212	42.9	43	43	0.00	43.7	43.6	-0.10
4F	Local	375562	Hollandale Park	41.598090	-87.611989	45.8	45.9	46.7	0.80	46.2	46.4	0.20
4F	Local	378457	North End Park	41.534201	-87.646433	44.1	44.2	44.3	0.10	44.8	45	0.20
4F	Local	378433	Golden Meadows Park	41.898363	-87.920618	54.4	54.5	54.5	0.00	55.3	55.3	0.00
4F	Local	378432	Eisenhower Park	41.898919	-87.899506	54.5	54.5	54.5	0.00	55.3	55.3	0.00
4F	Local	378408	Santa Fe Speedway	41.724198	-87.904502	47.2	47.3	47.3	0.00	48	48.1	0.10
4F	Local	378395	Prospect Gardens Park	41.694200	-87.668382	45.7	45.8	47.4	1.60	46.3	47.9	1.60
4F	Local	378380	King Park	41.507257	-87.627265	43.3	43.4	43.4	0.00	44	44	0.00
4F	Local	378350	Brainerd Park	41.727811	-87.654216	51.7	51.8	49.3	-2.50	52.1	48.8	-3.30
4F	Local	378460	Oak Hill Park	41.579756	-87.680324	47.3	47.4	45.9	-1.50	47.8	46.1	-1.70
4F	Local	375509	Eckersall Stadium	41.747257	-87.564490	41.1	41.3	41.5	0.20	41.9	41.9	0.00
4F	Local	375524	Pullman Park	41.691423	-87.608658	49.4	49.6	48	-1.60	49.9	47.8	-2.10
4F	Local	375523	Dougherty Park	41.725868	-87.560046	39.5	39.6	41.3	1.70	40.2	41.9	1.70
4F	Local	375522	Park Number 289	41.738367	-87.606714	46.5	46.7	46.9	0.20	47.2	47.3	0.10
4F	Local	375521	Nat King Cole Park	41.739478	-87.614492	47.5	47.5	47.8	0.30	48.1	48.2	0.10
4F	Local	375520	Needles Park	41.638090	-87.588934	44.9	45	42	-3.00	45.3	41.7	-3.60
4F	Local	375519	Blackstone Park	41.628923	-87.570600	42.7	42.8	40.9	-1.90	43.1	40.6	-2.50
4F	Local	375564	Kiwanis Park	41.563090	-87.565876	42.9	42.9	45	2.10	42.9	44.8	1.90
4F	Local	375517	Eckersall Park	41.744201	-87.563935	40.9	41	41.4	0.40	41.6	41.8	0.20
4F	Local	375527	Riverview Park	41.606423	-87.594489	44.5	44.5	42.8	-1.70	44.8	42.5	-2.30
4F	Local	375435	Touhy Park	41.878921	-87.679498	43.5	43.6	43.3	-0.30	44.3	44	-0.30
4F	Local	375429	Northerly Island Park	41.860311	-87.609773	44.7	44.9	45.6	0.70	45.4	46.4	1.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	375406	Winderwere Park	41.498920	-87.960887	43	43.1	42.8	-0.30	43.7	43.4	-0.30
4F	Local	375405	Stonebridge Park	41.487531	-87.984776	42.6	42.8	42.6	-0.20	43.4	43.2	-0.20
4F	Local	375404	Tri-Star Park	41.495865	-87.961164	42.9	42.9	42.8	-0.10	43.6	43.4	-0.20
4F	Local	375389	Goodenow Grove Forest Preserve	41.404201	-87.605040	41.4	41.4	41.4	0.00	42.1	42.1	0.00
4F	Local	375388	Plum Grove Forest Preserve	41.396423	-87.620318	40.5	40.6	40.6	0.00	41.3	41.3	0.00
4F	Local	375518	Cottage Park	41.638368	-87.554210	43.3	43.4	43.8	0.40	43.7	43.6	-0.10
4F	Local	375534	Paurlberg Park	41.581424	-87.569765	43.2	43.1	45.9	2.80	43.2	45.5	2.30
4F	NRHP	99000632	Tomek, F.F., House	41.832184	-87.817158	50	50.3	51.1	0.80	51.8	53.6	1.80
4F	Local	375561	Cook County Forest Preserve	41.561979	-87.588376	42.9	42.9	43	0.10	43.1	43	-0.10
4F	Local	375560	Lake View Park	41.533924	-87.539763	41	41	40	-1.00	41	40.6	-0.40
4F	Local	375540	Rainbow Park	41.517257	-87.560319	39.4	39.5	40.3	0.80	39.9	40.4	0.50
4F	Local	375539	Thornwood Park	41.582812	-87.609211	43.4	43.5	46.6	3.10	43.7	46.4	2.70
4F	Local	375538	Dahlenburg Park	41.588090	-87.608100	44.2	44.3	47.4	3.10	44.4	47.3	2.90
4F	Local	375537	Thorndale Park	41.582257	-87.599211	43.2	43.3	46.9	3.60	43.4	46.7	3.30
4F	Local	375525	Veterans Memorial Park	41.605034	-87.604767	45.2	45.3	43.9	-1.40	45.6	43.6	-2.00
4F	Local	375535	Vollbrecht Park	41.581701	-87.579765	43.2	43.2	46.8	3.60	43.3	46.4	3.10
4F	Local	375526	Van Oostenbrugge Park	41.609479	-87.604489	45.4	45.5	43.4	-2.10	45.8	43	-2.80
4F	Local	375533	Pioneer Park	41.596146	-87.587544	43.3	43.3	43.4	0.10	43.5	43	-0.50
4F	Local	375532	Little Calumet Park	41.608923	-87.586155	44.2	44.3	42.2	-2.10	44.4	41.7	-2.70
4F	Local	375531	Pacesetter Park	41.606701	-87.587544	43.9	43.9	42.2	-1.70	44.2	41.8	-2.40
4F	Local	375530	Veterans Park	41.587257	-87.536986	42.5	42.5	41	-1.50	42.5	40.5	-2.00
4F	Local	375529	Willowbrook Park	41.594757	-87.610600	45.5	45.5	47.3	1.80	45.7	47	1.30
4F	Local	375528	Arrowhead Park	41.587257	-87.594488	43.7	43.8	47	3.20	43.9	46.7	2.80
4F	Local	375563	Tomahawk Park	41.615867	-87.617823	45.8	45.9	43.7	-2.20	46.2	43.3	-2.90
4F	Local	375536	Thorn Creek Park	41.582534	-87.596433	43.3	43.2	47.1	3.90	43.4	46.9	3.50
4F	NRHP	73000018	St. Joseph Indian Normal School	40.921429	-87.151085	29.7	29.8	29.8	0.00	30.4	30.4	0.00
4F	NRHP	75000653	Studebaker Building	41.876176	-87.624777	43.5	43.5	43.5	0.00	44.2	44.1	-0.10
4F	NRHP	74000023	Michigan City Lighthouse	41.722740	-86.905775	41.2	41.3	41.3	0.00	41.8	41.8	0.00
4F	NRHP	73000710	Washington Park Historic District	41.349312	-88.841635	31.6	31.7	29.9	-1.80	32	30.1	-1.90
4F	NRHP	73000700	Gale, Walter, House	41.893989	-87.801915	49.7	49.8	49.8	0.00	50.6	50.5	-0.10
4F	NRHP	73000699	Frank Lloyd Wright-Prairie School of Architecture Historic District	41.893633	-87.792230	48.7	48.7	48.7	0.00	49.5	49.5	0.00
4F	NRHP	73000697	Marquette Building	41.880023	-87.629636	43.3	43.4	43.2	-0.20	44	43.9	-0.10
4F	NRHP	74000751	Hitchcock, Charles, Hall	41.791189	-87.600841	50.1	50.3	50.3	0.00	50.8	50.8	0.00
4F	NRHP	73000073	Lake County Courthouse	41.417381	-87.365952	30	30.1	30.1	0.00	30.7	30.6	-0.10
4F	NRHP	74000752	Jewelers' Building	41.881421	-87.625889	43.2	43.4	43.3	-0.10	44	43.9	-0.10
4F	NRHP	72001566	USS SILVERSIDES (SS 236) National Historic Landmark	41.890857	-87.608165	43	43	42.9	-0.10	43.7	43.6	-0.10
4F	NRHP	72001565	Jackson Park Historic Landscape District and Midway Plaisance	41.780078	-87.577224	47.2	47.3	47.3	0.00	47.9	47.8	-0.10
4F	NRHP	72000596	Union Meat Market	41.799201	-86.611697	42.7	42.8	42.9	0.10	43.3	43.6	0.30
4F	NRHP	72000467	Will County Historical Society Headquarters	41.589191	-88.054791	46.5	46.6	46.1	-0.50	47	46.7	-0.30
4F	NRHP	72000462	Hossack, John, House	41.340085	-88.841315	32	32.1	29.8	-2.30	32.4	29.9	-2.50
4F	NRHP	72000456	Wright, Frank Lloyd, House and Studio	41.894182	-87.800109	49.5	49.6	49.6	0.00	50.3	50.3	0.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	NRHP	72000455	Thomas, Frank, House	41.891134	-87.796732	49.1	49.2	49.2	0.00	50	50	0.00
4F	NRHP	73000696	Kehilath Anshe Ma'ariv Synagogue	41.834470	-87.622275	49.3	49.4	49.6	0.20	49.8	50.1	0.30
4F	NRHP	75000027	Barker, John H., Mansion	41.714992	-86.902420	40.3	40.4	40.4	0.00	40.9	40.9	0.00
4F	NRHP	69000055	Riverside Landscape Architecture District	41.827637	-87.820761	50.1	50.4	50.8	0.40	51.5	52.8	1.30
4F	NRHP	75000650	Reid Murdoch Building	41.888118	-87.631644	43	43.1	43	-0.10	43.7	43.6	-0.10
4F	NRHP	75000649	Page Brothers Building	41.885528	-87.627520	43.1	43.2	43.1	-0.10	43.9	43.7	-0.20
4F	NRHP	75000648	Fourth Presbyterian Church of Chicago	41.898694	-87.624636	42.6	42.7	42.7	0.00	43.4	43.3	-0.10
4F	NRHP	75000647	Field Museum of Natural History	41.866310	-87.617090	44.1	44.2	44.4	0.20	44.8	45.1	0.30
4F	NRHP	75000646	De Priest, Oscar Stanton, House	41.811723	-87.618009	52.4	52.6	52.5	-0.10	53	52.9	-0.10
4F	NRHP	74000749	Delaware Building	41.884799	-87.629201	43.1	43.2	43.1	-0.10	43.9	43.8	-0.10
4F	NRHP	75000644	Chicago Avenue Water Tower and Pumping Station	41.897157	-87.624042	42.7	42.8	42.7	-0.10	43.4	43.3	-0.10
4F	NRHP	72000450	Heller, Isadore H., House	41.801560	-87.593102	51.3	51.4	51.3	-0.10	51.9	51.7	-0.20
4F	NRHP	75000026	Wood, John, Old Mill	41.476391	-87.221723	37	37	35.8	-1.20	37.1	34.7	-2.40
4F	NRHP	75000025	Marktown Historic District	41.658664	-87.467871	35.4	35.5	41.2	5.70	35.9	42.2	6.30
4F	NRHP	74002195	Stacy's Tavern	41.889604	-88.064151	43.1	43.1	43.1	0.00	43.9	43.9	0.00
4F	NRHP	74000757	Wells-Barnett, Ida B., House	41.829749	-87.617556	50.1	50.1	50	-0.10	50.6	50.5	-0.10
4F	NRHP	74000756	Tree Studio Building and Annexes	41.892822	-87.627833	42.9	43	42.9	-0.10	43.6	43.5	-0.10
4F	NRHP	74000755	Shedd Park Fieldhouse	41.850237	-87.717041	48.2	48.3	47.7	-0.60	48.8	48.2	-0.60
4F	NRHP	74000754	Second Presbyterian Church	41.855858	-87.624507	45.3	45.4	47.1	1.70	46	47.9	1.90
4F	NRHP	75000645	Chicago Savings Bank Building	41.881830	-87.628448	43.2	43.3	43.2	-0.10	44	43.8	-0.20
4F	NRHP	70000239	Gale, Mrs. Thomas H., House	41.891851	-87.798513	49.4	49.4	49.3	-0.10	50.2	50.1	-0.10
4F	NRHP	7000208	Young, Martin, House	41.608283	-87.054037	28.4	28.6	28.7	0.10	29	28.6	-0.40
4F	NRHP	7000115	Kankakee County Courthouse	41.119277	-87.860433	40.8	40.9	41	0.10	41.6	41.6	0.00
4F	NRHP	7000064	Continental and Commercial National Bank	41.879305	-87.632413	43.2	43.4	43.3	-0.10	44	43.8	-0.20
4F	NRHP	7000062	Silhan, Mr. Robert, House	41.824407	-87.781573	54.5	54.7	54.2	-0.50	55.2	54.7	-0.50
4F	NRHP	70000243	Coonley, Avery, House	41.820582	-87.828678	50.4	50.5	50.4	-0.10	51.3	51.3	0.00
4F	NRHP	70000242	Winslow, William H., House And Stable	41.888573	-87.828847	51.8	51.9	51.9	0.00	52.7	52.7	0.00
4F	NRHP	72000452	Prairie Avenue District	41.857386	-87.621859	45.1	45.2	46.5	1.30	45.7	47.3	1.60
4F	NRHP	70000240	Unity Temple	41.888440	-87.796783	49.2	49.2	49.2	0.00	50	50	0.00
4F	NRHP	7000457	Steuben Club, The	41.884558	-87.633682	43.1	43.2	43.1	-0.10	43.8	43.7	-0.10
4F	NRHP	70000238	Rookery Building	41.879108	-87.632158	43.2	43.3	43.2	-0.10	44	43.8	-0.20
4F	NRHP	70000237	Reliance Building	41.882821	-87.628458	43.2	43.3	43.2	-0.10	43.9	43.8	-0.10
4F	NRHP	70000236	Monadnock Block	41.878042	-87.629496	43.3	43.4	43.3	-0.10	44.1	43.9	-0.20
4F	NRHP	70000235	McClurg Building	41.878870	-87.626250	43.3	43.4	43.3	-0.10	44.1	43.9	-0.20
4F	NRHP	70000233	Glessner, John J., House	41.857642	-87.621102	45	45.1	46.3	1.20	45.7	47.2	1.50
4F	NRHP	70000231	Carson, Pirie, Scott and Company	41.881745	-87.627604	43.2	43.3	43.2	-0.10	44	43.9	-0.10
4F	NRHP	99000975	Wheeler--Kohn House	41.855129	-87.619512	45.4	45.5	47.4	1.90	46	48.3	2.30
4F	NRHP	70000241	Drummond, William E., House	41.889666	-87.827174	51.8	51.9	51.9	0.00	52.7	52.7	0.00
4F	NRHP	7000898	Hatch, William H., House	41.886668	-87.818215	51.3	51.4	51.3	-0.10	52.2	52.1	-0.10
4F	NRHP	75000655	Williams, Dr. Daniel Hale, House	41.818763	-87.615307	51.5	51.7	51.5	-0.20	52.2	52	-0.20
4F	NRHP	72000449	Chicago Public Library, Central Building	41.883921	-87.625058	43.2	43.3	43.2	-0.10	43.9	43.8	-0.10
4F	NRHP	71000291	Kimball, William W., House	41.856837	-87.620131	45.1	45.2	46.7	1.50	45.8	47.5	1.70
4F	NRHP	71000290	Clarke, Henry B., House	41.857141	-87.622061	45.1	45.2	46.5	1.30	45.7	47.3	1.60

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	NRHP	7001475	Hunter--Hattenburg House	41.109023	-87.859621	40.8	40.8	40.9	0.10	41.5	41.5	0.00
4F	NRHP	7001474	International Tailoring Company Building	41.877769	-87.649306	43.2	43.3	43.2	-0.10	44	43.8	-0.20
4F	NRHP	7001282	Pulaski County Courthouse	41.050931	-86.603765	30.7	30.7	29.8	-0.90	30.8	29	-1.80
4F	NRHP	7000210	Crown Point Courthouse Square Historic District (Boundary Increase II)	41.417367	-87.407665	31	31.1	31.1	0.00	31.8	31.6	-0.20
4F	NRHP	7001238	Lumber Exchange Building and Tower Addition	41.881775	-87.632063	43.2	43.3	43.2	-0.10	43.9	43.8	-0.10
4F	NRHP	7000211	North Liberty Park	41.538090	-86.429872	34.9	34.9	33.9	-1.00	34.9	33.3	-1.60
4F	NRHP	7000855	Palmer Park	41.690835	-87.615562	50.9	51.1	49.4	-1.70	51.4	49.2	-2.20
4F	NRHP	7000853	Vial, Robert, House	41.754876	-87.895828	51.4	51.5	51.6	0.10	52.1	52.2	0.10
4F	NRHP	7000565	Van Buren Terrace Historic District	41.604799	-87.346370	37.3	37.3	38.2	0.90	37.6	38.5	0.90
4F	NRHP	7000563	Wolf, George John, House	41.584220	-87.523813	42.4	42.4	40.9	-1.50	42.4	40.4	-2.00
4F	NRHP	7000477	Coonley, Avery, School	41.788717	-88.019718	46.7	46.9	46.9	0.00	47.6	47.8	0.20
4F	NRHP	7000458	Rees, Harriet F., House	41.853879	-87.620765	45.6	45.7	48	2.30	46.2	48.9	2.70
4F	NRHP	72000451	Old Stone Gate of Chicago Union Stockyards	41.818581	-87.648417	53.1	53.2	53.2	0.00	53.6	53.6	0.00
4F	NRHP	7001281	Wolf, Josephus, House	41.536324	-87.144725	39	39.1	40.5	1.40	39.2	40.8	1.60
4F	NRHP	78001129	Sears, Roebuck and Company Complex	41.869409	-87.711834	45.1	45.2	44.8	-0.40	45.9	45.5	-0.40
4F	NRHP	75000652	South Shore Country Club	41.769846	-87.562874	44.9	45.1	45	-0.10	45.7	45.4	-0.30
4F	NRHP	78001139	Hofmann Tower	41.820711	-87.821949	50.8	50.9	50.7	-0.20	51.8	51.8	0.00
4F	NRHP	78001138	Lyons Township Hall	41.813787	-87.869296	50	50.1	50.2	0.10	50.9	51	0.10
4F	NRHP	78001134	West Jackson Boulevard District	41.877659	-87.665466	43.2	43.3	43.1	-0.20	44	43.8	-0.20
4F	NRHP	78001133	Swift House	41.812955	-87.623438	52.6	52.8	52.7	-0.10	53.2	53.1	-0.10
4F	NRHP	78001132	St. Thomas Church and Convent	41.795540	-87.595465	50.7	50.9	50.8	-0.10	51.3	51.3	0.00
4F	NRHP	78001154	Chicago, Burlington, & Quincy Roundhouse and Locomotive Shop	41.760885	-88.308538	41.8	41.9	41.9	0.00	42.5	42.8	0.30
4F	NRHP	78001130	South Loop Printing House District	41.874008	-87.630962	43.5	43.6	43.5	-0.10	44.2	44.1	-0.10
4F	NRHP	78001155	Copley, Col. Ira C., Mansion	41.759093	-88.324224	41.5	41.7	41.7	0.00	42.2	42.5	0.30
4F	NRHP	78001128	Schoenhofen Brewery Historic District	41.858648	-87.639558	44.9	45	45.9	0.90	45.6	46.6	1.00
4F	NRHP	78001127	Orchestra Hall	41.878698	-87.624802	43.4	43.4	43.4	0.00	44.1	44	-0.10
4F	NRHP	78001126	Old Chicago Historical Society Building	41.893621	-87.630011	42.9	42.9	42.8	-0.10	43.6	43.5	-0.10
4F	NRHP	78001125	Montgomery Ward Company Complex	41.897238	-87.643669	42.7	42.8	42.7	-0.10	43.5	43.4	-0.10
4F	NRHP	78001124	Michigan-Wacker Historic District	41.888542	-87.624814	43	43.1	43	-0.10	43.8	43.7	-0.10
4F	NRHP	78001123	Marshall Field Company Store	41.883730	-87.627021	43.2	43.3	43.2	-0.10	43.9	43.8	-0.10
4F	NRHP	78001122	Jewish People's Institute	41.863052	-87.713088	45.6	45.7	45.2	-0.50	46.3	45.8	-0.50
4F	NRHP	78001131	South Shore Beach Apartments	41.763927	-87.559442	43.7	43.9	43.8	-0.10	44.4	44.2	-0.20
4F	NRHP	79000021	Gary Land Company Building	41.604207	-87.333407	36.5	36.5	37.5	1.00	36.9	37.9	1.00
4F	NRHP	79000836	Blanchard Hall	41.868645	-88.099590	42.4	42.5	42.5	0.00	43.1	43.2	0.10
4F	NRHP	79000834	La Grange Village Historic District	41.810374	-87.872838	50	50.1	50.2	0.10	50.9	51	0.10
4F	NRHP	79000827	Quinn Chapel of the A.M.E. Church	41.848794	-87.625112	46.5	46.6	50.3	3.70	47.1	51.3	4.20
4F	NRHP	79000826	Notre Dame de Chicago	41.873452	-87.660903	43.4	43.5	43.3	-0.20	44.1	43.9	-0.20
4F	NRHP	79000825	Municipal Pier	41.891468	-87.599757	42.9	43	42.9	-0.10	43.6	43.5	-0.10
4F	NRHP	79000824	Hyde Park-Kenwood Historic District	41.798196	-87.597440	51.2	51.3	51.2	-0.10	51.8	51.7	-0.10
4F	NRHP	78001144	First Church of Lombard	41.883081	-88.018725	46.5	46.6	46.6	0.00	47.4	47.4	0.00
4F	NRHP	79000822	Balaban and Katz Chicago Theatre	41.885530	-87.627279	43.1	43.2	43.1	-0.10	43.8	43.7	-0.10

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4F	NRHP	77001516	Naperville Historic District	41.775478	-88.151983	44.1	44.2	44.2	0.00	44.8	45	0.20
4F	NRHP	78003401	New Masonic Building and Oriental Theater	41.884444	-87.628233	43.2	43.2	43.1	-0.10	43.9	43.8	-0.10
4F	NRHP	78003181	Chicago Board of Trade Building	40.977221	-87.623534	38.2	38.3	38.2	-0.10	38.9	38.9	0.00
4F	NRHP	78003108	Trinity Episcopal Church	41.865734	-88.111951	42	42.1	42.1	0.00	42.7	42.7	0.00
4F	NRHP	78003107	Du Page County Courthouse	41.864009	-88.103969	42.5	42.6	42.6	0.00	43.2	43.2	0.00
4F	NRHP	78001200	Union Station	41.524403	-88.079829	44.4	44.5	43.3	-1.20	44.9	43.7	-1.20
4F	NRHP	78001199	Rubens Rialto Square Theater	41.526009	-88.081414	44.6	44.7	43.4	-1.30	45.2	43.8	-1.40
4F	NRHP	78001158	Hickox, Warren, House	41.112342	-87.861391	40.8	40.8	40.9	0.10	41.5	41.5	0.00
4F	NRHP	79000823	Chapin and Gore Building	41.879325	-87.625411	43.3	43.4	43.3	-0.10	44.1	44	-0.10
4F	NRHP	76000686	Abbott, Robert S., House	41.810022	-87.616187	52.4	52.6	52.5	-0.10	53	52.9	-0.10
4F	NRHP	76000696	Lillie, Frank R., House	41.789474	-87.592882	49.6	49.7	49.7	0.00	50.3	50.1	-0.20
4F	NRHP	76000695	Leiter II Building	41.876432	-87.627431	43.4	43.5	43.4	-0.10	44.1	44	-0.10
4F	NRHP	76000694	Lakeside Press Building	41.872554	-87.628357	43.6	43.7	43.7	0.00	44.3	44.3	0.00
4F	NRHP	76000691	Fisher Building	41.877054	-87.628944	43.4	43.5	43.4	-0.10	44.1	44	-0.10
4F	NRHP	76000690	Du Sable, Jean Baptiste Point, Homesite	41.889694	-87.623463	43	43.1	43	-0.10	43.8	43.6	-0.20
4F	NRHP	76000689	Douglas Tomb State Memorial	41.831680	-87.608507	49.4	49.5	49.4	-0.10	50	50	0.00
4F	NRHP	78000038	Miller Town Hall	41.600610	-87.261389	36.6	36.6	37	0.40	37.2	37.6	0.40
4F	NRHP	76000687	Compton, Arthur H., House	41.792023	-87.596335	50.2	50.3	50.3	0.00	50.8	50.7	-0.10
4F	NRHP	76000700	Nickerson, Samuel, House	41.893999	-87.626820	42.8	42.9	42.9	0.00	43.6	43.5	-0.10
4F	NRHP	76000027	Pinehurst Hall	41.650743	-86.759846	34.1	34.3	34.3	0.00	34.8	34.7	-0.10
4F	NRHP	76000017	Porter County Jail and Sheriff's House	41.466592	-87.059425	35.2	35.3	37.8	2.50	35.4	38.1	2.70
4F	NRHP	76000016	Heritage Hall	41.462046	-87.054272	35.1	35.1	37.9	2.80	35.3	38.1	2.80
4F	NRHP	75002077	Graue Mill	41.820884	-87.929115	49.7	49.8	49.8	0.00	50.5	50.6	0.10
4F	NRHP	75002076	Pine Craig	41.769579	-88.153718	44	44.1	44.1	0.00	44.6	44.9	0.30
4F	NRHP	75000676	Lockport Historic District	41.589341	-88.057013	46.4	46.5	46	-0.50	46.8	46.6	-0.20
4F	NRHP	75000656	Lemont Central Grade School	41.672598	-87.997253	44.8	44.9	44.2	-0.70	45.3	45.6	0.30
4F	NRHP	76000688	Dearborn Station	41.872194	-87.628354	43.6	43.7	43.7	0.00	44.4	44.3	-0.10
4F	NRHP	76002146	Williams, Silas, House	41.124788	-88.825631	26.7	26.8	20.6	-6.20	27.3	20.6	-6.70
4F	NRHP	69000054	Pullman Historic District	41.697172	-87.609505	48.5	48.6	47.3	-1.30	49	47.3	-1.70
4F	NRHP	77000483	River Forest Historic District	41.891857	-87.819355	51.7	51.7	51.7	0.00	52.5	52.5	0.00
4F	NRHP	77000482	Cluever, Richard, House	41.893087	-87.833607	52.3	52.3	52.3	0.00	53.1	53.1	0.00
4F	NRHP	77000481	St. Patrick's Roman Catholic Church	41.879129	-87.644511	43.2	43.3	43.2	-0.10	43.9	43.8	-0.10
4F	NRHP	77000480	St. Ignatius College	41.867470	-87.651684	43.9	44	43.9	-0.10	44.5	44.5	0.00
4F	NRHP	77000479	Roloson, Robert, Houses	41.835683	-87.617879	48.9	49.1	49.3	0.20	49.5	50	0.50
4F	NRHP	77000477	Kent, Sydney, House	41.840692	-87.624250	48.1	48.2	50	1.80	48.7	50.8	2.10
4F	NRHP	76000697	Manhattan Building	41.884935	-87.628961	43.1	43.2	43.1	-0.10	43.9	43.8	-0.10
4F	NRHP	76002162	Hauptgebaude	41.895778	-87.945392	51.9	51.9	51.9	0.00	52.7	52.7	0.00
4F	NRHP	76000699	Millikan, Robert A., House	41.792743	-87.596462	50.3	50.4	50.4	0.00	51	50.8	-0.20
4F	NRHP	76000712	Batavia Institute	41.844613	-88.316352	42.3	42.3	42.4	0.10	42.8	43	0.20
4F	NRHP	76000711	Tanner, William A., House	41.763530	-88.318300	41.8	41.9	41.9	0.00	42.4	42.7	0.30
4F	NRHP	76000710	Fox River House	41.758988	-88.317726	41.6	41.8	41.8	0.00	42.4	42.6	0.20
4F	NRHP	76000705	South Dearborn Street--Printing House Row Historic District	41.878499	-87.628174	43.3	43.4	43.3	-0.10	44.1	43.9	-0.20

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4F	NRHP	76000703	Ridge Historic District	41.710155	-87.670223	48.7	48.8	49.5	0.70	49.3	49.9	0.60
4F	NRHP	76000702	Pontiac Building	41.874803	-87.628861	43.5	43.6	43.5	-0.10	44.2	44.1	-0.10
4F	NRHP	78000037	Halsted, Melvin A., House	41.293417	-87.423301	33.7	33.9	33.8	-0.10	34.5	34.4	-0.10
4F	NRHP	77000474	First Congregational Church of Austin	41.888727	-87.767978	47.5	47.5	47.4	-0.10	48.3	48.2	-0.10
4F	NRHP	2000201	Vurpillat's Opera House	41.051203	-86.604121	30.7	30.7	29.8	-0.90	30.8	29	-1.80
4F	NRHP	3001204	Riverbank Laboratories	41.871606	-88.313967	44.3	44.4	44.4	0.00	44.6	44.6	0.00
4F	NRHP	2001387	Motor Row Historic District	41.852808	-87.623971	45.7	45.9	48.5	2.60	46.4	49.5	3.10
4F	NRHP	2001386	Automatic Electric Company Building	41.878383	-87.652241	43.2	43.3	43.2	-0.10	43.9	43.8	-0.10
4F	NRHP	2001351	Scoville Place	41.889713	-87.795111	49	49	49	0.00	49.8	49.8	0.00
4F	NRHP	2001349	Maxwell--Briscoe Automobile Company Showroom	41.860168	-87.623597	44.7	44.8	45.5	0.70	45.4	46.3	0.90
4F	NRHP	2001347	Fuller Park	41.812914	-87.634262	53.2	53.3	53.5	0.20	53.7	53.9	0.20
4F	NRHP	216	Service, Jeremiah H., House	41.706044	-86.504466	39.3	39.5	39.4	-0.10	39.9	40	0.10
4F	NRHP	2000844	Henderson, Frank B., House	41.894223	-87.938449	52	52.1	52.1	0.00	52.9	52.9	0.00
4F	NRHP	258	Heurtley, Arthur, House	41.893100	-87.800216	49.5	49.6	49.6	0.00	50.4	50.4	0.00
4F	NRHP	2000100	Gunderson Historic District	41.876278	-87.785556	47.9	48	48	0.00	48.8	48.7	-0.10
4F	NRHP	1629	Heminger Travel Lodge	41.343598	-86.299600	29.4	29.5	29.4	-0.10	30	29.9	-0.10
4F	NRHP	1540	Monon Park Dancing Pavillion	41.368661	-87.439572	33.4	33.6	33.6	0.00	34.3	34.2	-0.10
4F	NRHP	153	Somerset Hotel	41.867702	-87.626141	44	44.1	44.1	0.00	44.7	44.8	0.10
4F	NRHP	1338nrhp	Roche, Martin--John Tait House	41.829469	-87.617698	50.1	50.2	50.1	-0.10	50.7	50.5	-0.20
4F	NRHP	1330	Peabody, Francis Stuyvesant, House	41.799630	-87.928928	49.4	49.5	49.8	0.30	50.4	51	0.60
4F	NRHP	1139	Marshall County Infirmary	41.328170	-86.262482	29.5	29.6	29.5	-0.10	30	30	0.00
4F	NRHP	2001168	Wynant, Wilbur, House	41.600100	-87.351385	37.5	37.5	38.4	0.90	37.7	38.7	1.00
4F	NRHP	3000786	Washington Square Historic District	41.898798	-87.630303	42.6	42.7	42.6	-0.10	43.4	43.3	-0.10
4F	NRHP	70000230	Auditorium Building, Roosevelt University	41.875593	-87.648754	43.3	43.4	43.3	-0.10	44.1	43.9	-0.20
4F	NRHP	3001040	Columbus Park	41.874512	-87.769627	47	47.1	47	-0.10	47.8	47.7	-0.10
4F	NRHP	3000985	Griffith Grand Trunk Depot	41.521116	-87.427661	40.7	40.7	39.9	-0.80	40.7	39.7	-1.00
4F	NRHP	3000917	Flat Iron Building	41.504423	-87.634734	43.4	43.5	43.5	0.00	44.1	44.1	0.00
4F	NRHP	3000916	Pentecost, John L., House	41.893798	-87.941951	51.7	51.8	51.8	0.00	52.6	52.6	0.00
4F	NRHP	3000789	Armour Square	41.833658	-87.633961	49.8	50	50.2	0.20	50.4	50.7	0.30
4F	NRHP	2001760	Scutt, Hiram B., Mansion	41.526843	-88.088488	45.1	45.2	43.4	-1.80	45.6	43.9	-1.70
4F	NRHP	3000787	Davis Square	41.813067	-87.667516	55	55.2	54.7	-0.50	55.6	55	-0.60
4F	NRHP	11000383	Maack, Albert, House	41.408913	-87.366382	30.1	30.1	30.1	0.00	30.8	30.6	-0.20
4F	NRHP	3000784	Palmolive Building	41.899869	-87.623924	42.6	42.7	42.6	-0.10	43.3	43.2	-0.10
4F	NRHP	3000783	Reid House	41.855179	-87.620151	45.4	45.5	47.4	1.90	46	48.3	2.30
4F	NRHP	3000546	Pulaski County Bridge No.31	41.059142	-86.829360	25.1	25.1	25	-0.10	25.6	25.3	-0.30
4F	NRHP	3000544	Scott--Lucas House	40.940985	-87.455250	37.1	37.2	37.2	0.00	37.8	37.8	0.00
4F	NRHP	3000538	Produce Terminal Cold Storage Company Building	41.861607	-87.657901	44.5	44.6	44.6	0.00	45.2	45.3	0.10
4F	NRHP	3000355	Butler School	41.834777	-87.946202	48.7	48.8	48.8	0.00	49.6	49.6	0.00
4F	NRHP	3000144	Lowell Commercial Historic District	41.291644	-87.422955	33.7	33.9	33.9	0.00	34.5	34.4	-0.10
4F	NRHP	3000788	Calumet Park	41.716779	-87.528197	40.4	40.5	41.2	0.70	41.1	41.8	0.70
4F	NRHP	10000724	K-Town Historic District	41.854625	-87.729716	47.2	47.4	46.8	-0.60	47.9	47.3	-0.60
4F	NRHP	10001079	Morgan--Skinner--Boyd Homestead	41.485038	-87.333272	37.9	37.9	36.6	-1.30	38	36.2	-1.80
4F	NRHP	10001078	Ibach House	41.557424	-87.480377	42.8	42.7	45.1	2.40	42.6	44.7	2.10

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	NRHP	10001077	Allman, Walter, House	41.417932	-87.362604	30	30	30	0.00	30.6	30.4	-0.20
4F	NRHP	10001074	Valparaiso Downtown Commercial Historic District (Boundary Increase)	41.468031	-87.063738	35.4	35.4	38.1	2.70	35.6	38.3	2.70
4F	NRHP	1000085	Immanuel Evangelical Church	41.799332	-87.932354	49.4	49.5	49.7	0.20	50.3	51	0.70
4F	NRHP	1000082	Olympia Fields Country Club	41.515933	-87.685145	43	43	43	0.00	43.7	43.6	-0.10
4F	NRHP	11000657	Polk Street Concrete Cottage Historic District	41.599564	-87.350062	37.3	37.3	38.2	0.90	37.5	38.4	0.90
4F	NRHP	10000777	Forest--Moraine Residential Historic District	41.300701	-87.520709	39.2	39.3	39.3	0.00	40	39.9	-0.10
4F	NRHP	1000594	Chicago Telephone Company Kedzie Exchange	41.880313	-87.710870	45.3	45.4	45.2	-0.20	46.1	45.9	-0.20
4F	NRHP	10000376	Northern States Life Insurance Company	41.607560	-87.521602	42.1	42.2	41.8	-0.40	42.3	41.3	-1.00
4F	NRHP	10000375	Nichols, Charles E., House	41.289796	-87.428174	34	34.1	34.1	0.00	34.8	34.7	-0.10
4F	NRHP	10000374	Haste-Crumpacker House	41.470286	-87.057992	35.1	35.1	37.4	2.30	35.3	37.7	2.40
4F	NRHP	10000312	St. Charles Hospital	41.758283	-88.308449	41.8	41.9	41.9	0.00	42.4	42.8	0.40
4F	NRHP	10000309	Union Park Hotel	41.884031	-87.666171	43.2	43.3	43.1	-0.20	44	43.8	-0.20
4F	NRHP	10000175	Jackson Shore Apartments	41.797351	-87.581339	50.4	50.5	50.3	-0.20	51	50.8	-0.20
4F	NRHP	10000124	Forest-Ivanhoe Residential Historic District	41.582807	-87.523682	42.2	42.2	40.9	-1.30	42.2	40.5	-1.70
4F	NRHP	10000778	Forest--Southview Residential Historic District	41.595752	-87.523367	43.3	43.3	41	-2.30	43.3	40.3	-3.00
4F	NRHP	1001343	First Congregational Church of Michigan City	41.715893	-86.903381	40.4	40.5	40.5	0.00	41	41	0.00
4F	NRHP	3001463	Robinwood	41.897007	-87.937285	52.5	52.6	52.6	0.00	53.4	53.4	0.00
4F	NRHP	11000243	Sutherland Hotel	41.811810	-87.603406	51.7	51.8	51.6	-0.20	52.3	52.1	-0.20
4F	NRHP	11000220	Solomon Enclave	41.699533	-86.962055	38.1	38.3	38.3	0.00	38.7	38.6	-0.10
4F	NRHP	11000125	Southmoor Apartment Hotel	41.607196	-87.522319	42.1	42.2	41.7	-0.50	42.2	41.2	-1.00
4F	NRHP	11000124	Sigler, Eli, House	41.317533	-87.200153	26.5	26.5	26.5	0.00	27.1	27	-0.10
4F	NRHP	11000120	Brannon, James, House	41.295067	-87.415429	33.4	33.4	33.4	0.00	34.1	34	-0.10
4F	NRHP	11000118	Hohman Avenue Commercial Historic District	41.619248	-87.522177	42.7	42.8	43.6	0.80	42.9	43.5	0.60
4F	NRHP	10001082	Chief Menominee Memorial Site	41.295497	-86.361983	27.4	27.4	27.4	0.00	27.8	27.8	0.00
4F	NRHP	1001349	Barker House	41.688042	-86.882754	36.7	36.9	36.9	0.00	37.3	37.2	-0.10
4F	NRHP	10001201	Cermak, Anton, House	41.850338	-87.716729	48.1	48.2	47.7	-0.50	48.8	48.1	-0.70
4F	NRHP	1001340	Garrettson--Baine--Bartholomew House	41.697240	-86.894275	37.9	38.1	38	-0.10	38.5	38.4	-0.10
4F	NRHP	1001311	Ambler's Texaco Gas Station	41.094123	-88.440729	32.2	32.3	32.2	-0.10	33	32.8	-0.20
4F	NRHP	1000868	United States Post Office--Chicago	41.876099	-87.638756	43.3	43.4	43.3	-0.10	44.1	43.9	-0.20
4F	NRHP	1000865	Berwyn Municipal Building	41.843084	-87.791280	49.3	49.4	49	-0.40	50.1	49.8	-0.30
4F	NRHP	1000649	Chicago Varnish Company Building	41.889031	-87.629363	43	43.1	43	-0.10	43.7	43.6	-0.10
4F	NRHP	1000619	Clark, Wellington A., House	41.415760	-87.365942	30.1	30.1	30.1	0.00	30.7	30.5	-0.20
4F	NRHP	11000386	Bloch, Conrad and Catherine, House	41.473616	-87.064582	35.4	35.5	37.6	2.10	35.6	37.9	2.30
4F	NRHP	1001538	Crane Company Building	41.870683	-87.624603	43.7	43.9	43.8	-0.10	44.4	44.5	0.10
4F	NRHP	6000376	Lou Mitchell's Restaurant	41.877209	-87.641599	43.3	43.4	43.3	-0.10	44	43.9	-0.10
4F	NRHP	3001200	Steward, Lewis, House	41.664959	-88.529741	33.9	34	34	0.00	34.5	34.7	0.20
4F	NRHP	6000678	Grand Crossing Park	41.756865	-87.600460	44.7	44.8	45	0.20	45.4	45.4	0.00
4F	NRHP	6000673	First Congregational Church of Western Springs	41.814841	-87.903106	49.2	49.3	49.6	0.30	50.1	50.8	0.70
4F	NRHP	6000449	Downtown Momence Historic District	41.156661	-87.662801	38.8	38.9	38.9	0.00	39.6	39.6	0.00
4F	NRHP	6000448	McGovney--Yunker Farmstead	41.526646	-87.881412	45.6	45.8	45.4	-0.40	46.4	46	-0.40
4F	NRHP	6000446	Union Park Congregational Church and Carpenter Chapel	41.885042	-87.667435	43.2	43.3	43.2	-0.10	44	43.8	-0.20
4F	NRHP	6001016	Goldblatt Bros. Department Store	41.808441	-87.665386	55.4	55.6	54.9	-0.70	55.9	55.3	-0.60

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	NRHP	6000381	Alternate Route 66, Wilmington to Joilet	41.404412	-88.107664	39.6	39.7	39.7	0.00	40.3	40.3	0.00
4F	NRHP	6001017	Cook County Hospital Administration Building	41.875841	-87.672835	43.4	43.5	43.2	-0.30	44.1	43.8	-0.30
4F	NRHP	6000375	Dell Rhea's Chicken Basket	41.747465	-87.939540	49.3	49.5	49.5	0.00	50	50.2	0.20
4F	NRHP	6000011	Downtown Hinsdale Historic District	41.805144	-87.853253	50.7	50.8	50.8	0.00	51.5	51.6	0.10
4F	NRHP	6000010	Joilet YMCA	41.530574	-88.083552	45.3	45.3	43.4	-1.90	45.8	43.9	-1.90
4F	NRHP	6000008	Hanson, Anton, E., House	41.758767	-87.582674	43.1	43.2	43.3	0.10	43.8	43.7	-0.10
4F	NRHP	5001609	Pilsen Historic District	41.853951	-87.670460	45.9	46	46.2	0.20	46.6	46.9	0.30
4F	NRHP	5001603	Morris Downtown Commercial Historic District	41.375592	-88.484037	38.8	38.8	39	0.20	38.9	39.2	0.30
4F	NRHP	5001464	Crown Point Courthouse Square Historic District (Boundary Adjustment)	41.417086	-87.365471	30	30.1	30.1	0.00	30.7	30.6	-0.10
4F	NRHP	6000445	Durham--Perry Farmstead	41.149361	-87.876248	41	41.1	41.1	0.00	41.8	41.8	0.00
4F	NRHP	66000315	Hull House	41.871460	-87.646904	43.5	43.7	43.6	-0.10	44.3	44.2	-0.10
4F	NRHP	678	Porter Town Hall	41.616289	-87.072288	28.7	28.8	29	0.20	29.2	28.9	-0.30
4F	NRHP	675	Michigan City Post Office	41.717962	-86.900733	40.6	40.8	40.8	0.00	41.2	41.3	0.10
4F	NRHP	671	Forest Place Historic District	41.220481	-86.416875	27.1	27.2	27.2	0.00	27.5	27.5	0.00
4F	NRHP	67000005	Room 405, George Herbert Jones Laboratory, The University of Chicago	41.790377	-87.601074	50	50.2	50.1	-0.10	50.7	50.6	-0.10
4F	NRHP	66000332	Illinois and Michigan Canal	41.569857	-88.069864	46.8	46.9	45.1	-1.80	47.2	45.4	-1.80
4F	NRHP	66000325	Starved Rock	41.320484	-88.990705	29.6	29.7	28.9	-0.80	30.1	29	-1.10
4F	NRHP	6001015	Austin Town Hall Park Historic District	41.880640	-87.765169	47	47	46.9	-0.10	47.8	47.7	-0.10
4F	NRHP	66000316	Robie, Frederick C., House	41.789755	-87.595893	49.7	49.9	49.8	-0.10	50.4	50.3	-0.10
4F	NRHP	5001252	Pacesetter Gardens Historic District	41.646824	-87.637285	47.2	47.3	44.4	-2.90	47.7	44	-3.70
4F	NRHP	66000314	First Self-Sustaining Nuclear Reaction, Site of	41.792448	-87.601094	50.5	50.6	50.5	-0.10	51.1	51	-0.10
4F	NRHP	66000108	Chicago Portage National Historic Site	41.810751	-87.807820	53.3	53.8	53.2	-0.60	55.1	54.4	-0.70
4F	NRHP	66000005	Bailley, Joseph, Homestead	41.624939	-87.093090	29	29.1	29.3	0.20	29.6	29.2	-0.40
4F	NRHP	6001295	Dune Acres Clubhouse	41.653029	-87.086141	31.3	31.4	31.6	0.20	31.9	31.7	-0.20
4F	NRHP	6001293	McCallum, William, House	41.468036	-87.054158	34.9	35	37.3	2.30	35.2	37.6	2.40
4F	NRHP	6001291	Jacoby Church and Cemetery	41.309403	-86.261977	29.3	29.3	29.3	0.00	29.8	29.7	-0.10
4F	NRHP	6001023	Hotel Kaskaskia Buildings (Boundary Increase)	41.329515	-89.095893	30.5	30.6	30.3	-0.30	31.1	30.7	-0.40
4F	NRHP	66000317	Taft, Lorado, Midway Studios	41.785590	-87.603556	49	49.1	49.1	0.00	49.7	49.6	-0.10
4F	NRHP	4000419	Small--Towle House	41.310849	-88.141869	38.5	38.5	38.5	0.00	39.2	39.1	-0.10
4F	NRHP	4001299	Bassett, Orland P., House	41.798769	-87.921718	49.4	49.5	49.7	0.20	50.3	50.8	0.50
4F	NRHP	4001298	Oak Park Conservatory	41.871664	-87.789850	48.2	48.3	48.2	-0.10	49.1	49	-0.10
4F	NRHP	4001102	Bailey, Louis J., Branch Library--Gary International Institute	41.587610	-87.341239	40.8	40.9	41.3	0.40	40.9	41.4	0.50
4F	NRHP	4000871	Washington Park	41.795979	-87.611273	51.5	51.7	51.6	-0.10	52.2	52.1	-0.10
4F	NRHP	4000870	South Water Market	41.872649	-87.654821	43.4	43.5	43.4	-0.10	44.1	44	-0.10
4F	NRHP	4000867	Farnsworth House	41.637413	-88.535344	32	32.1	32	-0.10	32.6	32.6	0.00
4F	NRHP	5001370	Ouilmette North Historic District	41.484293	-87.699472	41.9	42	42	0.00	42.6	42.5	-0.10
4F	NRHP	4000421	Emery, Jr., William H., House	41.894223	-87.938449	52	52.1	52.1	0.00	52.9	52.9	0.00
4F	NRHP	4001306	Chicago and North Western Railway Power House	41.888393	-87.648522	43	43	42.9	-0.10	43.7	43.6	-0.10
4F	NRHP	4000208	Bartlett Real Estate Office	41.673418	-86.986817	34.5	34.7	34.7	0.00	35.1	34.9	-0.20
4F	NRHP	4000167	Lockport Lock, Dam and Power House Historic District	41.569574	-88.077968	46.3	46.3	45.4	-0.90	46.7	45.7	-1.00

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4F	NRHP	4000166	Starved Rock Lock and Dam Historic District	41.323337	-88.986156	29.5	29.6	28.9	-0.70	30	29	-1.00
4F	NRHP	4000165	Marseilles Lock and Dam Historic District	41.326155	-88.731975	30.3	30.4	35.9	5.50	30.7	36.1	5.40
4F	NRHP	4000164	Dresden Island Lock and Dam Historic District	41.398354	-88.281639	33.8	33.9	33.6	-0.30	34.5	34.1	-0.40
4F	NRHP	4000163	Brandon Road Lock and Dam Historic District	41.506357	-88.098341	44.1	44.1	42.4	-1.70	44.6	43	-1.60
4F	NRHP	4000076	South Park Manor Historic District	41.757063	-87.619095	47.7	47.9	48	0.10	48.5	48.4	-0.10
4F	NRHP	4000866	Ninth Street Seven Arch Stone Bridge	41.593323	-88.064757	45.9	45.9	45.9	0.00	46.4	46.7	0.30
4F	NRHP	5000114	Humphrey, John, House	41.630071	-87.859580	48.4	48.4	47.7	-0.70	48.8	48.1	-0.70
4F	NRHP	79000842	Chicago, Burlington, and Quincy Railroad Depot	41.851480	-88.310470	43	43.1	43.1	0.00	43.5	43.6	0.10
4F	NRHP	5001014	Indiana Harbor Public Library	41.647499	-87.448913	40.1	40.1	43.4	3.30	40.3	44.2	3.90
4F	NRHP	5001013	Kingsbury--Doak Farmhouse	41.339060	-87.286153	28	28.1	28.1	0.00	28.7	28.5	-0.20
4F	NRHP	5000875	Cornell Square	41.802283	-87.671100	55.9	56.1	55.6	-0.50	56.5	56	-0.50
4F	NRHP	5000873	Central Park Theater	41.866510	-87.707343	45.1	45.2	44.8	-0.40	45.9	45.4	-0.50
4F	NRHP	5000872	Grand Theater	41.867391	-88.108232	42	42.1	42.1	0.00	42.7	42.7	0.00
4F	NRHP	5000871	Illinois Institute of Technology Academic Campus	41.835023	-87.628266	49.4	49.5	49.8	0.30	49.9	50.4	0.50
4F	NRHP	4001300	Hotel Arthur	41.759237	-88.313232	41.7	41.8	41.9	0.10	42.4	42.7	0.30
4F	NRHP	5000608	Lake County Sanatorium Nurses Home	41.451252	-87.365424	30.2	30.3	30.1	-0.20	30.7	30.3	-0.40
4F	NRHP	4001301	University Apartments	41.797176	-87.590943	50.8	50.9	50.8	-0.10	51.4	51.2	-0.20
4F	NRHP	5000109	Chicago Club	41.876960	-87.624701	43.4	43.5	43.4	-0.10	44.1	44	-0.10
4F	NRHP	5000108	Garden Homes Historic District	41.736495	-87.621614	47.9	48	48.3	0.30	48.6	48.6	0.00
4F	NRHP	5000107	Narragansett, The	41.804612	-87.584703	51	51.1	50.9	-0.20	51.6	51.4	-0.20
4F	NRHP	477	Holy Name Cathedral	41.896155	-87.627866	42.7	42.8	42.7	-0.10	43.5	43.4	-0.10
4F	NRHP	476	Childs, Robert A. and Mary, House	41.798919	-87.927714	49.4	49.6	49.8	0.20	50.3	50.9	0.60
4F	NRHP	409	Illinois Central Railroad Depot	41.110328	-87.865771	40.8	40.8	40.8	0.00	41.5	41.5	0.00
4F	NRHP	5001253	Downtown Peotone Historic District	41.334214	-87.791412	40.3	40.4	40.4	0.00	41	40.9	-0.10
4F	NRHP	5000845	Purple, George E., House	41.809965	-87.883860	49.7	49.8	49.8	0.00	50.5	50.7	0.20
4F	NRHP	9000428	Jackson-Monroe Terraces Historic District	41.603256	-87.344190	36.8	36.8	37.8	1.00	37.1	38.1	1.00
4F	NRHP	92000488	Frangenheim, William, House	41.891395	-87.837201	52.4	52.5	52.5	0.00	53.3	53.3	0.00
4F	NRHP	9001134	Chesterton Residential Historic District	41.608697	-87.054169	28.5	28.6	28.7	0.10	29	28.7	-0.30
4F	NRHP	9000759	Pinhook Methodist Church and Cemetery	41.563623	-86.857552	30.4	30.5	30.7	0.20	30.8	30.8	0.00
4F	NRHP	9000758	Morningside Historic District	41.535203	-87.338841	42.1	42.1	44.1	2.00	42.1	44	1.90
4F	NRHP	9000521	Lakeside Inn	41.843208	-86.678789	40.3	40.5	40.4	-0.10	41	41	0.00
4F	NRHP	9000459	East Village Historic District	41.899549	-87.674037	43.5	43.5	43.4	-0.10	44.3	44.1	-0.20
4F	NRHP	91000114	Coca Cola Company Building	41.864910	-87.626234	44.2	44.3	44.5	0.20	44.9	45.2	0.30
4F	NRHP	9000429	Monroe Terrace Historic District	41.605257	-87.343733	37	37.1	38	0.90	37.3	38.4	1.10
4F	NRHP	91000566	Washington Square	41.899607	-87.630612	42.6	42.7	42.6	-0.10	43.3	43.2	-0.10
4F	NRHP	9000427	American Sheet and Tin Mill Apartment Building	41.603631	-87.345404	36.9	37	37.9	0.90	37.3	38.3	1.00
4F	NRHP	9000374	Bradley, B. Harley, House and Stable	41.112101	-87.857576	40.8	40.9	40.9	0.00	41.5	41.5	0.00
4F	NRHP	90001794	Smith, Everel S., House	41.543128	-86.897761	33.5	33.6	34	0.40	33.8	34.1	0.30
4F	NRHP	90001725	Oak Lawn School	41.718961	-87.752003	45.7	45.8	48.7	2.90	46.5	49.7	3.20
4F	NRHP	90001724	Reorganized Church of Jesus Christ of Latter Day Saints	41.659184	-88.535958	33.3	33.4	33.4	0.00	33.9	34.1	0.20
4F	NRHP	90001723	Ransom Water Tower	41.156634	-88.649176	31.3	31.4	27.1	-4.30	31.7	27.3	-4.40
4F	NRHP	9000166	IBM Building	41.890716	-87.627656	42.9	43	43	0.00	43.7	43.6	-0.10
4F	NRHP	9000430	Polk Street Terraces Historic District	41.603105	-87.349637	37.4	37.5	38.4	0.90	37.7	38.7	1.00

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4F	NRHP	91001166	Lakeville High School	41.531068	-86.273610	34.3	34.3	33.5	-0.80	34.4	32.9	-1.50
4F	NRHP	79000840	Old Second National Bank	41.757899	-88.318426	41.6	41.8	41.8	0.00	42.3	42.6	0.30
4F	NRHP	92000486	Knuessl Building	41.345546	-88.843382	31.7	31.8	29.9	-1.90	32.2	30	-2.20
4F	NRHP	92000189	Tepicon Hall	41.149356	-86.593880	31.5	31.5	31.3	-0.20	31.5	30.6	-0.90
4F	NRHP	92000048	Gibbs, William and Caroline, House	41.892210	-87.836609	52.5	52.5	52.5	0.00	53.3	53.3	0.00
4F	NRHP	92000047	Lynch, Timothy J., House	41.891387	-87.838286	52.5	52.6	52.6	0.00	53.3	53.3	0.00
4F	NRHP	92000046	Robinson House	41.893016	-87.837222	52.5	52.6	52.6	0.00	53.4	53.4	0.00
4F	NRHP	91000088	Joliet Steel Works	41.541047	-88.075131	46	46.1	43.9	-2.20	46.5	44.3	-2.20
4F	NRHP	91001688	Flanders House	41.612443	-88.202878	37.5	37.5	33.9	-3.60	37.7	34.3	-3.40
4F	NRHP	9000028	Hegeler I, Julius W., House	41.335079	-89.087109	30.6	30.7	30.4	-0.30	31.3	30.8	-0.50
4F	NRHP	91001082	Miller, Allan, House	41.765760	-87.571248	44	44.2	44.1	-0.10	44.8	44.6	-0.20
4F	NRHP	91001000	Fletcher, Ruffin Drew, House	41.126374	-88.827820	27	27.1	20.7	-6.40	27.4	20.6	-6.80
4F	NRHP	91000793	Washington Park	41.726087	-86.900745	41.5	41.7	41.7	0.00	42.1	42.2	0.10
4F	NRHP	91000687	Upper Bluff Historic District	41.529191	-88.096439	45.8	45.9	43.6	-2.30	46.3	44	-2.30
4F	NRHP	91000573	Turner Town Hall	41.883715	-88.204345	40.1	40.1	40.1	0.00	40.6	40.7	0.10
4F	NRHP	91000570	Kenwood Evangelical Church	41.811369	-87.599947	51.6	51.7	51.5	-0.20	52.2	52	-0.20
4F	NRHP	91000567	Columbus Park	41.874512	-87.769627	47	47.1	47	-0.10	47.8	47.7	-0.10
4F	NRHP	92000045	Nichols, Harry H., House	41.885624	-87.838090	52.2	52.2	52.2	0.00	53	53	0.00
4F	NRHP	87000069	Hoosier Theater Building	41.679640	-87.496354	35.8	36	39.7	3.70	36.6	40.5	3.90
4F	NRHP	87002540	Tri-Taylor Historic District (Boundary Increase)	41.871101	-87.683883	44.1	44.2	43.9	-0.30	44.8	44.5	-0.30
4F	NRHP	87002510	Marshall Field and Company Store	41.889287	-87.804508	50.1	50.1	50.1	0.00	50.9	50.9	0.00
4F	NRHP	87002499	Vogt, Karl, Building	41.574808	-87.784632	48.1	48.1	46.8	-1.30	48.5	47.1	-1.40
4F	NRHP	87002055	Spring Valley House--Sulfur Springs Hotel	41.323209	-88.963188	29.8	29.9	28.8	-1.10	30.3	28.9	-1.40
4F	NRHP	87002047	Dupage Theatre and Dupage Shoppes	41.885971	-88.017927	46.5	46.6	46.6	0.00	47.4	47.4	0.00
4F	NRHP	87001113	Building at 257 East Delaware	41.899263	-87.619457	42.6	42.7	42.6	-0.10	43.4	43.3	-0.10
4F	NRHP	90000745	Sherman Park	41.796719	-87.655177	54.1	54.2	53.8	-0.40	54.7	54.2	-0.50
4F	NRHP	87000819	Adler Planetarium	41.866185	-87.606726	44.1	44.3	44.5	0.20	44.9	45.2	0.30
4F	NRHP	88002233	Fairbanks, Morse and Company Building	41.870225	-87.626045	43.7	43.9	43.9	0.00	44.5	44.5	0.00
4F	NRHP	86003720	Sears, Albert H., House	41.665383	-88.530340	33.9	34	34	0.00	34.6	34.8	0.20
4F	NRHP	86003170	Starke County Courthouse	41.298807	-86.622579	27.2	27.2	27.1	-0.10	27.7	27.4	-0.30
4F	NRHP	86003169	Legler, Henry E., Regional Branch of the Chicago Public Library	41.879368	-87.725202	45.3	45.4	45.2	-0.20	46.2	45.9	-0.30
4F	NRHP	86001488	Riverview Historic District	41.110212	-87.858409	40.8	40.8	40.9	0.10	41.5	41.5	0.00
4F	NRHP	86001487	Stolp Island Historic District	41.757644	-88.315521	41.6	41.8	41.8	0.00	42.3	42.6	0.30
4F	NRHP	86001484	West Side Historic District	41.753019	-88.325278	41.3	41.5	41.5	0.00	42.1	42.4	0.30
4F	NRHP	86001480	Villa Avenue Train Station	41.894938	-87.970453	53.7	53.8	53.8	0.00	54.6	54.6	0.00
4F	NRHP	87000820	Shedd, John G., Aquarium	41.867678	-87.613970	44	44.2	44.3	0.10	44.7	44.9	0.20
4F	NRHP	89001113	Bohlander, Jacob, House	41.890757	-87.838278	52.5	52.5	52.5	0.00	53.3	53.3	0.00
4F	NRHP	92000489	Grow, Caroline, House	41.892904	-87.840234	52.7	52.8	52.8	0.00	53.6	53.6	0.00
4F	NRHP	9000025	Spiegel Office Building	41.831350	-87.652039	50.8	51	51.9	0.90	51.4	52.4	1.00
4F	NRHP	9000024	Inland Steel Building	41.880748	-87.628679	43.2	43.4	43.3	-0.10	44	43.9	-0.10
4F	NRHP	90000101	Joliet, Louis, Hotel	41.526832	-88.080110	44.6	44.7	43.4	-1.30	45.2	43.8	-1.40
4F	NRHP	89002025	Rothschild, A. M., & Company Store	41.877433	-87.625633	43.4	43.5	43.4	-0.10	44.1	44	-0.10

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	NRHP	89001731	Whitney, William, House	41.801286	-87.924558	49.4	49.6	49.8	0.20	50.4	51	0.60
4F	NRHP	89001729	West Jackson Historic District (Boundary Increase)	41.878639	-87.667224	43.2	43.4	43.2	-0.20	44	43.8	-0.20
4F	NRHP	88000069	Michigan City East Pierhead Light Tower and Elevated Walk	41.728166	-86.909831	41.8	41.9	41.9	0.00	42.4	42.5	0.10
4F	NRHP	89001202	YMCA Hotel	41.867370	-87.620956	44	44.1	44.2	0.10	44.7	44.8	0.10
4F	NRHP	88002229	Hotel Kaskaskia	41.329515	-89.095893	30.5	30.6	30.3	-0.30	31.1	30.7	-0.40
4F	NRHP	89001111	Geneva Country Day School	41.883161	-88.320278	42.6	42.6	42.6	0.00	43	43	0.00
4F	NRHP	89000411	Beverly Shores South Shore Railroad Station	41.673417	-86.985856	34.6	34.7	34.7	0.00	35.2	34.9	-0.30
4F	NRHP	89000343	Marseilles Hydro Plant	41.326927	-88.715291	29.7	29.8	36.5	6.70	30.2	36.7	6.50
4F	NRHP	88003311	Hotel St. Benedict Flats	41.897063	-87.626428	42.7	42.8	42.7	-0.10	43.5	43.4	-0.10
4F	NRHP	88003039	Lake County Sheriff's House and Jail	41.415783	-87.364219	30.1	30.1	30.1	0.00	30.7	30.5	-0.20
4F	NRHP	88002235	Twin Tower Sanctuary	41.628560	-87.862957	48.5	48.6	47.7	-0.90	49	48.1	-0.90
4F	NRHP	90000327	Valparaiso Downtown Commercial District	41.467520	-87.060025	35.3	35.3	37.8	2.50	35.4	38.1	2.70
4F	NRHP	89001231	U-505 (IX C U-Boat)	41.866498	-87.615766	44.1	44.2	44.4	0.20	44.8	45	0.20
4F	NRHP	96000856	LaSalle Street Auto Row Historic District	41.755163	-88.313522	41.6	41.7	41.7	0.00	42.3	42.6	0.30
4F	NRHP	92000487	Akin, Mrs. Henry F., House	41.879470	-87.842107	52.2	52.2	52.2	0.00	53	53	0.00
4F	NRHP	97001333	Armour's Warehouse	41.324444	-88.610987	33.8	33.9	35.3	1.40	34.2	35.4	1.20
4F	NRHP	97001272	Mazon Creek Fossil Beds	41.327205	-88.363864	31.1	31.2	30.1	-1.10	31.8	30.6	-1.20
4F	NRHP	97000435	Silversmith Building	41.881211	-87.626393	43.2	43.4	43.3	-0.10	44	43.9	-0.10
4F	NRHP	97000381	Thorne, George R., House	41.632681	-87.750758	47.7	47.8	49.4	1.60	48.3	49.6	1.30
4F	NRHP	97000343	Haymarket Martyrs' Monument	41.842797	-87.819341	49.2	49.2	49.2	0.00	50	50.2	0.20
4F	NRHP	98000063	Belmonte Flats	41.816838	-87.604693	51.3	51.5	51.3	-0.20	51.9	51.6	-0.30
4F	NRHP	96001006	Horner, Imre and Maria, House	41.692512	-86.979604	37.2	37.3	37.3	0.00	37.8	37.6	-0.20
4F	NRHP	98000067	Church of the Epiphany	41.878734	-87.666381	43.2	43.3	43.1	-0.20	44	43.7	-0.30
4F	NRHP	96000515	7th District Police Station	41.864593	-87.650691	44.2	44.2	44.3	0.10	44.9	45	0.10
4F	NRHP	96000514	St. Mary's Church	40.952233	-87.652634	38.2	38.3	38.3	0.00	38.9	38.9	0.00
4F	NRHP	96000512	Streator Public Library	41.119512	-88.834537	26.6	26.7	20.6	-6.10	27.1	20.6	-6.50
4F	NRHP	96000283	Ross, John, Farm	41.370489	-87.289280	27.8	27.9	27.9	0.00	28.4	28.2	-0.20
4F	NRHP	96000093	Quigley Preparatory Seminary	41.897877	-87.625833	42.6	42.8	42.7	-0.10	43.4	43.3	-0.10
4F	NRHP	96000080	Boyce Building	41.891009	-87.629985	42.9	43	42.9	-0.10	43.7	43.6	-0.10
4F	NRHP	951	American State Bank	41.850184	-87.793536	48.7	48.8	48.5	-0.30	49.5	49.3	-0.20
4F	NRHP	96001281	Promontory Apartments	41.794264	-87.580770	49.9	50.1	50	-0.10	50.6	50.4	-0.20
4F	NRHP	98001103	New York Central Railroad Passenger Depot	41.611345	-87.054400	28.5	28.7	28.8	0.10	29.1	28.7	-0.40
4F	Local	397655	Willow Slough State Game Preserve	41.007533	-87.503920	37.3	37.4	37.4	0.00	38.1	38.1	0.00
4F	NRHP	99000587	Holy Cross Church	41.850217	-88.302735	43	43.1	43.1	0.00	43.5	43.6	0.10
4F	NRHP	99000163	Building at 900 West Lake Street	41.885853	-87.650063	43	43.1	43	-0.10	43.8	43.6	-0.20
4F	NRHP	98001524	Plymouth Downtown Historic District	41.340910	-86.309489	29.4	29.5	29.4	-0.10	30	29.9	-0.10
4F	NRHP	98001354	Kendall County Courthouse	41.640419	-88.448102	36.2	36.3	36.2	-0.10	36.9	36.9	0.00
4F	NRHP	98001353	Fisher--Nash--Griggs House	41.342189	-88.810898	32.8	32.8	30.3	-2.50	33.2	30.3	-2.90
4F	NRHP	97001338	Standard Oil Gasoline Station	41.002007	-88.528904	30.9	31.1	30.6	-0.50	31.7	31.1	-0.60
4F	NRHP	98001132	Trustees System Service Building	41.886035	-87.633672	43	43.1	43	-0.10	43.8	43.7	-0.10
4F	NRHP	95000989	Hegeler--Carus Mansion	41.335889	-89.087135	30.7	30.8	30.4	-0.40	31.3	30.9	-0.40
4F	NRHP	98001101	Brown, George, Mansion	41.605847	-87.061836	28.5	28.6	28.7	0.10	29	28.7	-0.30

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	NRHP	98001054	East Shore Historic District	41.202845	-86.390971	27.1	27.2	27.2	0.00	27.5	27.4	-0.10
4F	NRHP	98000982	White and Company's Goose Lake Stoneware Manufactury	41.347176	-88.322051	32.2	32.3	32.1	-0.20	33	32.7	-0.30
4F	NRHP	98000976	White and Company's Goose Lake Tile Works	41.345518	-88.317356	32.5	32.5	32.4	-0.10	33.2	33	-0.20
4F	NRHP	98000303	Stallbohm Barn--Kaske House	41.559060	-87.500093	43.2	43.1	45.5	2.40	43.1	45.1	2.00
4F	NRHP	98000298	Dell Plain, Morse, House and Garden	41.584332	-87.477506	43.8	43.8	41.8	-2.00	43.8	41.1	-2.70
4F	NRHP	98000178	Yale, The	41.774496	-87.631548	48.8	49	49.2	0.20	49.6	49.6	0.00
4F	NRHP	98001351	Loop Retail Historic District	41.881118	-87.627067	43.2	43.4	43.3	-0.10	44	43.9	-0.10
4F	NRHP	92001075	Grant Park	41.875185	-87.618188	43.5	43.6	43.6	0.00	44.2	44.2	0.00
4F	NRHP	93000836	Peabody, Francis Stuyvesant, Estate	41.828865	-87.958578	47.6	47.7	47.7	0.00	48.5	48.5	0.00
4F	NRHP	93000464	Ridgeway, Marion, Polygonal Barn	41.590171	-86.702599	30.4	30.4	30.5	0.10	30.9	30.7	-0.20
4F	NRHP	93000324	O'Conor, Andrew J., III, House	41.348742	-88.829368	32.1	32.2	30	-2.20	32.4	30.2	-2.20
4F	NRHP	92001850	Gridley, Mrs., A. W., House	41.859999	-88.313777	45.4	45.4	45.4	0.00	45.6	45.7	0.10
4F	NRHP	92001841	Groesbeck, Abraham, House	41.883095	-87.659918	43.1	43.2	43	-0.20	43.9	43.7	-0.20
4F	NRHP	92001653	New Carlisle Historic District	41.706231	-86.510318	39.4	39.5	39.4	-0.10	40	40	0.00
4F	NRHP	95001530	Culver Commercial Historic District	41.216732	-86.423588	27.1	27.1	27.1	0.00	27.5	27.4	-0.10
4F	NRHP	92001165	Coambs, Norris and Harriet, Lustron House	41.608372	-87.055357	28.4	28.6	28.7	0.10	29	28.7	-0.30
4F	NRHP	93001239	Plano Hotel	41.662382	-88.539277	33.5	33.7	33.7	0.00	34.2	34.4	0.20
4F	NRHP	92000496	Thompkins, Jennie S., House	41.891016	-87.839727	52.6	52.6	52.6	0.00	53.4	53.4	0.00
4F	NRHP	92000495	Sullivan, Joseph P. O., House	41.887123	-87.842449	52.7	52.7	52.7	0.00	53.5	53.5	0.00
4F	NRHP	92000494	Soffel, Albert, House	41.892276	-87.839865	52.7	52.7	52.7	0.00	53.5	53.5	0.00
4F	NRHP	92000493	Millward, Caroline, House	41.891918	-87.839619	52.6	52.7	52.7	0.00	53.5	53.5	0.00
4F	NRHP	92000492	Maywood Fire Department Building	41.888222	-87.840052	52.5	52.5	52.5	0.00	53.3	53.3	0.00
4F	NRHP	92000491	Masonic Temple Building	41.885794	-87.839538	52.4	52.4	52.4	0.00	53.2	53.1	-0.10
4F	NRHP	92000490	Larson, Mads C., House	41.884658	-87.834702	51.9	51.9	51.9	0.00	52.7	52.7	0.00
4F	NRHP	92001539	Point School	41.222740	-87.631507	38.3	38.3	38.3	0.00	38.9	38.9	0.00
4F	NRHP	94001353	Gary Public Schools Memorial Auditorium	41.598074	-87.336255	36.3	36.4	37.4	1.00	36.7	37.7	1.00
4F	NRHP	86001199	Poinsetta Apartments	41.794067	-87.584258	50.1	50.2	50.1	-0.10	50.7	50.5	-0.20
4F	NRHP	95000987	Kankakee State Hospital Historic District	41.102866	-87.861362	40.7	40.8	40.8	0.00	41.5	41.5	0.00
4F	NRHP	95000702	Emerson, Ralph Waldo, School	41.599089	-87.327620	36.2	36.3	37.3	1.00	36.7	37.7	1.00
4F	NRHP	95000487	Hamilton Park	41.761648	-87.637208	50.2	50.3	50.4	0.10	50.9	50.7	-0.20
4F	NRHP	95000486	Trumbull Park	41.706301	-87.564590	40.9	41	42.3	1.30	41.5	42.8	1.30
4F	NRHP	942	Buckingham Building	41.876805	-87.625024	43.4	43.5	43.4	-0.10	44.1	44.1	0.00
4F	NRHP	94001601	Strawn, Jeremiah, House	41.346965	-88.833501	32	32.1	29.9	-2.20	32.4	30.1	-2.30
4F	NRHP	93000837	Garfield Park	41.886289	-87.716059	45.8	45.8	45.7	-0.10	46.6	46.4	-0.20
4F	NRHP	94001354	Gary Bathing Beach Aquatorium	41.619852	-87.256749	33.5	33.5	33.8	0.30	34.2	34.3	0.10
4F	NRHP	93001238	Chicago, Burlington & Quincy Railroad Depot	41.662218	-88.538072	33.6	33.7	33.7	0.00	34.2	34.4	0.20
4F	NRHP	94001352	Gary City Center Historic District	41.600215	-87.337022	36.2	36.3	37.3	1.00	36.6	37.7	1.10
4F	NRHP	94000980	Coleman Hardware Company Building	41.356839	-88.429241	35.1	35.2	33.7	-1.50	35.6	33.9	-1.70
4F	NRHP	94000978	Heck, John, House	41.585223	-88.058169	46.6	46.7	46.1	-0.60	47	46.6	-0.40
4F	NRHP	94000233	Rensselaer Carnegie Library	40.937911	-87.153261	29.7	29.8	29.8	0.00	30.4	30.4	0.00
4F	NRHP	94000021	Eagle Hotel	41.307929	-88.147445	38.3	38.3	38.3	0.00	39	39	0.00
4F	NRHP	93001413	Starke County Bridge No. 39	41.300252	-86.623645	27.2	27.3	27.1	-0.20	27.7	27.4	-0.30

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	NRHP	95001239	Chicago, Rock Island and Pacific Railroad Depot	41.328840	-88.705973	29.6	29.7	36.8	7.10	30	37	7.00
4F	NRHP	94001600	Yorkville School	41.647715	-88.448025	35.9	36	36	0.00	36.7	36.7	0.00
4F	NRHP	82000029	Weller House	41.607385	-86.951186	28.8	29	29	0.00	29.4	29	-0.40
4F	NRHP	86001472	Beverly Shores--Century of Progress Architectural District	41.684317	-87.001835	35.8	36	36	0.00	36.4	36.3	-0.10
4F	NRHP	82000398	Dwight Chicago and Alton Railroad Depot	41.086077	-88.428588	33.2	33.3	33.3	0.00	33.9	33.8	-0.10
4F	NRHP	82000393	Schulze Baking Company Plant	41.795475	-87.624713	52.1	52.3	52.4	0.10	52.8	52.9	0.10
4F	NRHP	82000392	St. Luke's Hospital Complex	41.863215	-87.623145	44.4	44.5	44.8	0.30	45.1	45.5	0.40
4F	NRHP	82000391	Hotel Windermere East	41.793171	-87.583287	49.9	50	49.9	-0.10	50.5	50.4	-0.10
4F	NRHP	82000390	Fort Dearborn Hotel	41.876682	-87.631049	43.4	43.5	43.4	-0.10	44.1	44	-0.10
4F	NRHP	82002524	Dunham, Arthur J., House	41.834916	-87.800212	50.1	50.3	49.9	-0.40	51	50.8	-0.20
4F	NRHP	82000042	Independence Methodist Church	41.066913	-86.949555	25.1	25.2	25.1	-0.10	25.7	25.6	-0.10
4F	NRHP	82002525	Young, Joshua P., House	41.652517	-87.674968	46.8	46.9	45.4	-1.50	47.3	45.3	-2.00
4F	NRHP	82000028	Immanuel Lutheran Church	41.471186	-87.060508	35.2	35.3	37.5	2.20	35.4	37.8	2.40
4F	NRHP	82000022	Woodbank	41.190273	-86.393353	27.1	27.1	27.1	0.00	27.4	27.3	-0.10
4F	NRHP	81000675	Adams Memorial Library	41.875063	-88.106569	41	41.1	41.1	0.00	41.8	41.8	0.00
4F	NRHP	81000223	U.S. Post Office	41.527462	-88.080240	44.7	44.8	43.4	-1.40	45.2	43.8	-1.40
4F	NRHP	81000219	Western Springs Water Tower	41.809851	-87.900905	49.2	49.3	49.5	0.20	50.1	50.7	0.60
4F	NRHP	81000218	Rosenwald Apartment Building	41.810251	-87.623894	52.8	53	52.9	-0.10	53.4	53.3	-0.10
4F	NRHP	81000019	Lassen Hotel	41.368356	-87.425102	32.3	32.4	32.4	0.00	33.1	32.9	-0.20
4F	NRHP	82000047	Hobart Carnegie Library	41.532149	-87.263749	40.9	40.9	43.4	2.50	40.8	43.5	2.70
4F	NRHP	82002545	Masonic Temple	41.753280	-88.312798	41.5	41.7	41.7	0.00	42.2	42.6	0.40
4F	NRHP	82004912	Grossdale Station	41.823083	-87.842691	49.9	50	50	0.00	50.8	51	0.20
4F	NRHP	82002605	Peotone Mill	41.332323	-87.797962	40.5	40.6	40.6	0.00	41.2	41.2	0.00
4F	NRHP	82002604	Joliet Township High School	41.525714	-88.074458	44.2	44.3	43.3	-1.00	44.8	43.8	-1.00
4F	NRHP	82002603	Christ Episcopal Church	41.525982	-88.084291	44.8	44.9	43.4	-1.50	45.3	43.9	-1.40
4F	NRHP	82002551	Swannell, Charles E., House	41.110096	-87.860647	40.8	40.8	40.9	0.10	41.5	41.5	0.00
4F	NRHP	82002549	North Geneva Historic District	41.889638	-88.308346	43.4	43.4	43.4	0.00	43.7	43.8	0.10
4F	NRHP	82000401	George, Ron, Round Barn	41.667310	-88.130506	37.1	37.2	37.2	0.00	37.7	37.9	0.20
4F	NRHP	82002546	First Methodist Church of Batavia	41.848379	-88.313900	42.6	42.7	42.7	0.00	43	43.2	0.20
4F	NRHP	8001211	Rumsey, J. Claude, House	41.295604	-87.416507	33.4	33.5	33.5	0.00	34.2	34.1	-0.10
4F	NRHP	82002544	Hotel Aurora	41.758298	-88.315066	41.6	41.8	41.8	0.00	42.4	42.6	0.20
4F	NRHP	82002543	Graham Building	41.757389	-88.315769	41.6	41.8	41.8	0.00	42.3	42.6	0.30
4F	NRHP	82002532	Masonic Temple Building	41.888094	-87.794850	48.9	49	49	0.00	49.8	49.7	-0.10
4F	NRHP	82002531	Warner, Seth, House	41.891899	-87.765002	47.5	47.6	47.5	-0.10	48.4	48.3	-0.10
4F	NRHP	82002530	Railway Exchange Building	41.878339	-87.624557	43.4	43.5	43.4	-0.10	44.1	44	-0.10
4F	NRHP	82002528	Griffiths, John W., Mansion	41.825563	-87.623802	51	51.1	51	-0.10	51.5	51.4	-0.10
4F	NRHP	82002527	Bloom Township High School	41.514524	-87.643725	43.6	43.7	43.7	0.00	44.3	44.3	0.00
4F	NRHP	82002547	Stearns-Wadsworth House	41.844568	-88.407412	41.3	41.4	41.4	0.00	41.9	42.1	0.20
4F	NRHP	79003159	Sandwich City Hall	41.644879	-88.620031	32.2	32.3	32.3	0.00	32.9	33.1	0.20
4F	NRHP	80001370	Keystone Building	41.757389	-88.315769	41.6	41.8	41.8	0.00	42.3	42.6	0.30
4F	NRHP	80001369	Aurora Elks Lodge No. 705	41.756382	-88.317192	41.6	41.7	41.7	0.00	42.3	42.5	0.20
4F	NRHP	80001351	Story-Camp Rowhouses	41.879999	-87.665792	43.2	43.3	43.1	-0.20	44	43.7	-0.30
4F	NRHP	80001347	Ludington Building	41.868962	-87.626394	43.9	44	44	0.00	44.6	44.6	0.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	NRHP	80001343	Building at 14--16 Pearson Street	41.897505	-87.627879	42.6	42.8	42.7	-0.10	43.4	43.3	-0.10
4F	NRHP	80001342	AVR 661	41.661888	-87.575131	45.6	45.8	45.1	-0.70	46	44.9	-1.10
4F	NRHP	81000002	Plymouth Fire Station	41.341501	-86.310380	29.4	29.5	29.4	-0.10	30	29.9	-0.10
4F	NRHP	80000030	Rose, David Garland, House	41.466200	-87.051474	34.9	34.9	37.3	2.40	35.1	37.6	2.50
4F	NRHP	80001377	Smith, Ephraim, House	41.771532	-88.428672	43.1	43.3	43.3	0.00	43.7	43.9	0.20
4F	NRHP	79000876	Milne, Robert, House	41.589540	-88.049122	46.9	47	46.2	-0.80	47.3	46.7	-0.60
4F	NRHP	79000875	Henry, Jacob H., House	41.522995	-88.076330	44	44.2	43.2	-1.00	44.6	43.7	-0.90
4F	NRHP	79000849	Milk, Lemuel, Carriage House	41.121259	-87.861508	40.9	40.9	41	0.10	41.6	41.6	0.00
4F	NRHP	79000846	Gray-Watkins Mill	41.728473	-88.436373	40.1	40.2	40.2	0.00	40.7	41	0.30
4F	NRHP	79000845	Central Geneva Historic District	41.885450	-88.308357	43.4	43.5	43.5	0.00	43.8	43.8	0.00
4F	NRHP	79000843	Dutch Mill	41.871532	-88.305458	45.4	45.4	45.4	0.00	45.6	45.6	0.00
4F	NRHP	99000973	Four Nineteen Building	41.744705	-87.602210	45.7	45.8	46	0.20	46.4	46.4	0.00
4F	NRHP	80000044	Whiting Memorial Community House	41.678108	-87.496522	35.8	36	39.6	3.60	36.5	40.3	3.80
4F	NRHP	8000398	Elizabeth Place	41.881737	-88.310908	43.1	43.1	43.1	0.00	43.4	43.4	0.00
4F	NRHP	83000139	Marshall County Court House	41.343758	-86.311193	29.4	29.5	29.5	0.00	29.9	29.9	0.00
4F	NRHP	8001168	South Shore Bungalow Historic District	41.756663	-87.571167	42.4	42.6	42.6	0.00	43.2	43	-0.20
4F	NRHP	8001165	Chicago Federal Center	41.879186	-87.629398	43.3	43.4	43.3	-0.10	44	43.9	-0.10
4F	NRHP	8001097	Otis Elevator Company Factory Building	41.863306	-87.663208	44.3	44.3	44.3	0.00	44.9	44.9	0.00
4F	NRHP	8001096	Frank Lloyd Wright-Prairie School of Architecture Historic District (Boundary Increase)	41.893962	-87.792825	48.8	48.8	48.7	-0.10	49.6	49.5	-0.10
4F	NRHP	8001095	Lindemann and Hoverson Company Showroom and Warehouse	41.883177	-87.691859	44.1	44.1	43.9	-0.20	44.8	44.5	-0.30
4F	NRHP	8000568	Skinner, DeForest, House	41.470465	-87.060746	35.2	35.3	37.6	2.30	35.4	37.9	2.50
4F	NRHP	80001371	Paramount Theatre	41.757036	-88.315160	41.6	41.8	41.8	0.00	42.3	42.6	0.30
4F	NRHP	80004525	Ardmore Avenue Train Station	41.883601	-87.979683	52.5	52.5	52.5	0.00	53.3	53.3	0.00
4F	NRHP	80001373	White, Louise, School	41.850742	-88.304071	43.1	43.1	43.1	0.00	43.4	43.6	0.20
4F	NRHP	8000326	Schiller, Alfred A.,House	41.886612	-88.060461	43	43.1	43.1	0.00	43.9	43.9	0.00
4F	NRHP	80001421	Plainfield Halfway House	41.611527	-88.204302	37.5	37.6	33.8	-3.80	37.8	34.3	-3.50
4F	NRHP	80001420	Stone Manor	41.573042	-87.936104	46.2	46.3	45.3	-1.00	46.8	45.5	-1.30
4F	NRHP	80001419	Joliet Municipal Airport	41.523244	-88.179409	43.4	43.4	42.8	-0.60	43.8	43	-0.80
4F	NRHP	80001418	Joliet East Side Historic District	41.518968	-88.074454	43.7	43.8	43	-0.80	44.3	43.5	-0.80
4F	NRHP	80001383	Oughton, John R., House	41.085806	-88.428641	33.2	33.3	33.3	0.00	33.9	33.8	-0.10
4F	NRHP	81000001	East Laporte Street Footbridge	41.340293	-86.304297	29.4	29.5	29.5	0.00	29.9	29.9	0.00
4F	NRHP	80004526	Gregg, William L., House	41.792851	-87.975167	47.7	47.8	47.9	0.10	48.5	48.8	0.30
4F	NRHP	85000979	von KleinSmid Mansion	41.645170	-88.624961	32.3	32.5	32.5	0.00	33	33.2	0.20
4F	NRHP	85002840	Gage Group--Ascher, Keith, and Gage Buildings	41.881243	-87.637000	43.2	43.2	43.1	-0.10	43.9	43.8	-0.10
4F	NRHP	85002702	Starved Rock Lodge and Cabins	41.318715	-88.993005	29.6	29.7	28.9	-0.80	30.1	29	-1.10
4F	NRHP	85002430	Studebaker Clubhouse and Tree Sign	41.668828	-86.490383	36.1	36.1	36.1	0.00	36.6	36.5	-0.10
4F	NRHP	85001912	Municipal Courts Building	41.880140	-87.624575	43.3	43.4	43.3	-0.10	44.1	43.9	-0.20
4F	NRHP	85001909	LaSalle City Building	41.329537	-89.094699	30.5	30.6	30.3	-0.30	31.1	30.7	-0.40
4F	NRHP	85001741	Austin Historic District	41.886768	-87.770015	47.5	47.5	47.4	-0.10	48.3	48.2	-0.10
4F	NRHP	84001170	Fitzpatrick House	41.600688	-88.070902	45.6	45.6	45.9	0.30	46.1	46.7	0.60
4F	NRHP	85001009	Ford Airport Hanger	41.542449	-87.538342	40.7	40.8	40.7	-0.10	40.8	41.2	0.40

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	NRHP	86001005	Blackstone Hotel	41.873475	-87.624630	43.6	43.7	43.6	-0.10	44.3	44.3	0.00
4F	NRHP	85000978	Wilson, Judge Isaac, House	41.850146	-88.301047	43.1	43.2	43.2	0.00	43.6	43.7	0.10
4F	NRHP	85000966	Guyon Hotel	41.882063	-87.726317	45.5	45.6	45.4	-0.20	46.3	46.1	-0.20
4F	NRHP	85000361	Healy Chapel	41.759286	-88.323145	41.5	41.7	41.7	0.00	42.2	42.6	0.40
4F	NRHP	85000265	Dawson Brothers Plant	41.891903	-87.647352	42.9	43	42.9	-0.10	43.6	43.5	-0.10
4F	NRHP	84001233	Thompson, Dr. George W., House	41.053642	-86.606189	30.6	30.7	29.8	-0.90	30.8	29	-1.80
4F	NRHP	84001231	Porter County Memorial Hall	41.466683	-87.059066	35.2	35.3	37.8	2.50	35.4	38.1	2.70
4F	NRHP	83000039	Downtown LaPorte Historic District	41.610907	-86.721419	31.1	31.3	31.3	0.00	31.7	31.5	-0.20
4F	NRHP	85001274	Foley, Jennie, Building	41.873474	-87.657047	43.4	43.4	43.3	-0.10	44.1	43.9	-0.20
4F	NRHP	86001091	Overton Hygienic Building	41.828071	-87.626235	50.6	50.8	50.7	-0.10	51.2	51.1	-0.10
4F	NRHP	79000841	Campana Factory	41.865121	-88.316316	45.6	45.7	45.7	0.00	45.8	45.9	0.10
4F	NRHP	86001198	Mayfair Apartments	41.795328	-87.584270	50.3	50.4	50.2	-0.20	50.9	50.7	-0.20
4F	NRHP	86001197	East Park Towers	41.799740	-87.584430	50.8	50.9	50.7	-0.20	51.4	51.1	-0.30
4F	NRHP	86001195	Hotel Del Prado	41.799562	-87.583947	50.7	50.8	50.7	-0.10	51.3	51.1	-0.20
4F	NRHP	86001194	Flamingo-On-The-Lake Apartments	41.794625	-87.580773	50	50.1	50	-0.10	50.7	50.5	-0.20
4F	NRHP	86001193	Chicago Beach Hotel	41.802339	-87.586982	51	51.2	51	-0.20	51.6	51.5	-0.10
4F	NRHP	86001096	Eighth Regiment Armory	41.830721	-87.619396	49.9	50	50	0.00	50.5	50.4	-0.10
4F	NRHP	85002842	Smith, J. P., Shoe Company Plant	41.894855	-87.650938	42.8	43	42.8	-0.20	43.7	43.5	-0.20
4F	NRHP	86001092	Unity Hall	41.837729	-87.622475	48.6	48.7	49.5	0.80	49.2	50.2	1.00
4F	NRHP	86000117	Warren Featherbone Company Office Building	41.801296	-86.610625	42.7	42.8	42.9	0.10	43.3	43.5	0.20
4F	NRHP	86001090	Chicago Bee Building	41.828071	-87.626235	50.6	50.8	50.7	-0.10	51.2	51.1	-0.10
4F	NRHP	86001089	Victory Sculpture	41.831091	-87.617473	49.8	49.9	49.9	0.00	50.4	50.3	-0.10
4F	NRHP	86001041b	Hyde Park-Kenwood Historic District (Boundary Increase II)	41.765543	-87.576780	44	44.1	44.2	0.10	44.8	44.5	-0.30
4F	NRHP	86001041a	Hyde Park-Kenwood Historic District (Boundary Increase II)	41.764746	-87.575931	43.8	44	44	0.00	44.6	44.4	-0.20
4F	NRHP	86001031	Lemont Methodist Episcopal Church	41.673023	-88.000143	44.5	44.6	44	-0.60	45.1	45.6	0.50
4F	NRHP	86001007	Jeffery--Cyril Historic District	41.764832	-87.576738	43.8	44	44	0.00	44.6	44.4	-0.20
4F	NRHP	84001130	GAR Memorial Building	41.756669	-88.315754	41.6	41.8	41.8	0.00	42.3	42.6	0.30
4F	NRHP	86001095	Wabash Avenue YMCA	41.825738	-87.624767	51	51.1	51	-0.10	51.6	51.4	-0.20
4F	NRHP	83000320	United Methodist Church of Batavia	41.850476	-88.311654	42.9	42.9	43	0.10	43.3	43.4	0.10
4F	NRHP	84000289	Lake-Side Terrace Apartments	41.762137	-87.557020	43.4	43.5	43.5	0.00	44.1	43.9	-0.20
4F	NRHP	84000281	Cook County Criminal Court Building	41.890197	-87.630218	42.9	43	43	0.00	43.7	43.6	-0.10
4F	NRHP	84000204	Glen Ellyn Main Street Historic District	41.880420	-88.066770	42.9	42.9	42.9	0.00	43.7	43.7	0.00
4F	NRHP	84000138	Midwest Athletic Club	41.881014	-87.721243	45.5	45.6	45.4	-0.20	46.3	46.1	-0.20
4F	NRHP	83003570	SS CLIPPER	41.891042	-87.607082	42.9	43	42.9	-0.10	43.7	43.6	-0.10
4F	NRHP	83003564	Ridgeland-Oak Park Historic District	41.885273	-87.788475	48.4	48.4	48.3	-0.10	49.1	49.1	0.00
4F	NRHP	84001229	Gilson, Clinton D., Barn	41.339567	-87.166516	29.8	29.9	29.9	0.00	30.5	30.5	0.00
4F	NRHP	83000325	Pioneer Gothic Church	41.094499	-88.428592	32.9	33	32.9	-0.10	33.7	33.6	-0.10
4F	NRHP	84000492	Morrison, Francis H., House	41.606509	-86.716565	30.9	31	31	0.00	31.5	31.3	-0.20
4F	NRHP	83000319	Stolp Woolen Mill Store	41.757020	-88.316483	41.6	41.8	41.8	0.00	42.3	42.6	0.30
4F	NRHP	83000315	Tri-Taylor Historic District	41.870330	-87.683345	44.1	44.2	43.9	-0.30	44.9	44.5	-0.40
4F	NRHP	83000314	Singer Building	41.879941	-87.628068	43.3	43.4	43.3	-0.10	44	43.9	-0.10

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	NRHP	83000312	Morton, J. Sterling, High School East Auditorium	41.846450	-87.773132	49.2	49.3	48.8	-0.50	49.9	49.5	-0.40
4F	NRHP	83000311	King, Patrick J., House	41.882901	-87.707524	45.2	45.3	45	-0.30	46	45.8	-0.20
4F	NRHP	83000308	Calumet Plant, R. R. Donnelly & Sons Company	41.853696	-87.618052	45.6	45.7	48.1	2.40	46.2	49	2.80
4F	NRHP	86001201	Shoreland Hotel	41.795793	-87.581265	50.2	50.4	50.2	-0.20	50.8	50.7	-0.10
4F	NRHP	83003563	Oliver Building	41.885158	-87.629325	43.1	43.2	43.1	-0.10	43.9	43.8	-0.10
4F	NRHP	84001052	Soldier Field	41.862576	-87.616391	44.5	44.6	45	0.40	45.1	45.7	0.60
4F	NRHP	84001128	Fabyan Villa	41.871276	-88.312080	44.7	44.7	44.7	0.00	44.9	44.9	0.00
4F	NRHP	84001126	Aurora College Complex	41.754854	-88.347953	41.1	41.2	41.2	0.00	41.7	42.1	0.40
4F	NRHP	84001076	West Fifth Avenue Apartments Historic District	41.601817	-87.358222	38.9	39	39.6	0.60	39.2	39.9	0.70
4F	NRHP	84001072	State Bank of Hammond Building	41.614371	-87.509174	42.9	43	43.8	0.80	43.2	43.7	0.50
4F	NRHP	84001070	Pennsylvania Railroad Station	41.534258	-87.246975	40.6	40.6	43	2.40	40.6	43.1	2.50
4F	NRHP	84001069	Nisbet Homestead Farm	41.670736	-88.863208	37.1	37.3	37.3	0.00	37.9	38.3	0.40
4F	NRHP	84001068	Meyer, Joseph Ernest, House	41.490483	-87.496581	34.7	34.7	34.8	0.10	35.2	35.1	-0.10
4F	NRHP	84000293	Peoples Gas Building	41.879779	-87.624812	43.3	43.4	43.3	-0.10	44.1	43.9	-0.20
4F	NRHP	84001063	Orr, William, House	41.609976	-86.778119	32.3	32.4	32.5	0.10	33.1	32.9	-0.20
4F	NRHP	84000340	Standard Oil Gasoline Station	41.608180	-88.205679	38.1	38.1	33.8	-4.30	38.3	34.4	-3.90
4F	NRHP	84001047	St. James Catholic Church and Cemetery	41.698631	-87.932638	45.6	45.7	45.2	-0.50	46.3	45.9	-0.40
4F	NRHP	84000996	Hyde Park-Kenwood Historic District (Boundary Increase)	41.806029	-87.604953	52	52.1	51.9	-0.20	52.6	52.4	-0.20
4F	NRHP	84000988	Conway Building	41.882805	-87.631350	43.2	43.2	43.1	-0.10	43.9	43.8	-0.10
4F	NRHP	84000986	Chicago Harbor Lighthouse	41.889372	-87.590673	42.9	43	42.9	-0.10	43.6	43.5	-0.10
4F	NRHP	84000520	Loring, Dr. David J., Residence and Clinic	41.468934	-87.060745	35.2	35.3	37.8	2.50	35.5	38	2.50
4F	NRHP	84000503	Buckley Homestead	41.281457	-87.378563	31.7	31.7	31.7	0.00	32.4	32.3	-0.10
4F	NRHP	83000126	Jasper County Courthouse	40.935843	-87.150762	29.7	29.8	29.8	0.00	30.4	30.4	0.00
4F	NRHP	84001065	Knights of Columbus Building	41.601751	-87.341554	36.4	36.5	37.5	1.00	36.8	37.9	1.10
4F	Local	1710173	Roswell B Mason Playground	41.860032	-87.725055	46.2	46.3	45.8	-0.50	46.9	46.4	-0.50
4F	Local	1714030	Veterans of Foreign Wars Little League Park	41.562534	-87.644767	44.7	44.7	43.9	-0.80	45.1	44.3	-0.80
4F	Local	1710243	Hoard Park	41.763645	-87.598659	44.6	44.8	44.9	0.10	45.4	45.3	-0.10
4F	Local	1710225	Herald Square	41.886977	-87.626996	43.1	43.2	43.1	-0.10	43.8	43.7	-0.10
4F	Local	1710215	Haydon Track	41.794200	-87.605049	50.9	51	51	0.00	51.6	51.5	-0.10
4F	Local	1710214	Hawthorne Park	41.754478	-87.654216	50.9	51	50.5	-0.50	51.5	50.5	-1.00
4F	Local	1710202	Harding Park	41.902532	-87.724778	47	47	46.9	-0.10	47.8	47.7	-0.10
4F	Local	1713586	Sedgwick Park	41.803087	-87.861169	50.5	50.6	50.7	0.10	51.4	51.5	0.10
4F	Local	1710195	Hainesworth Park	41.840864	-87.865892	50.2	50.4	50.4	0.00	51.3	51.4	0.10
4F	Local	1713600	Senka Park	41.790588	-87.711719	57.4	57.6	57.6	0.00	58.1	58.3	0.20
4F	Local	1710171	Rosenblum Park	41.758090	-87.577825	42.8	42.9	43	0.10	43.5	43.4	-0.10
4F	Local	1710157	Roosevelt Park	41.868088	-87.630052	43.9	44	44.1	0.10	44.6	44.6	0.00
4F	Local	1710139	Robin Hood Park	41.835586	-87.869226	50.1	50.2	50.5	0.30	51.2	51.9	0.70
4F	Local	1710106	Ridgewood Park	41.787253	-87.901448	49.9	50	50	0.00	50.7	50.8	0.10
4F	Local	1710103	Ridgeland Park	41.753921	-87.779220	58.5	58.6	59.4	0.80	59	59.9	0.90
4F	Local	1710095	Richard D Irwin Park	41.560867	-87.661990	45.5	45.6	44.5	-1.10	46	45.1	-0.90
4F	Local	1710094	Rice Park	41.754199	-87.763664	52.4	52.5	53.5	1.00	53	54.3	1.30
4F	Local	1710198	Hanover Park	41.794754	-87.808667	56.3	56.5	55.9	-0.60	57.4	56.5	-0.90
4F	Local	1713764	Stone and Monroe Park	41.828364	-87.878670	49.8	49.9	50.3	0.40	50.8	51.8	1.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	1708492	Morrell Park	41.806421	-87.704219	59.4	59.6	58.9	-0.70	59.9	59.2	-0.70
4F	Local	1713907	Treetop Park	41.610310	-87.860331	49	49.1	47.6	-1.50	49.5	47.9	-1.60
4F	Local	1713889	Tower Park	41.582812	-87.706992	47.8	47.9	46.3	-1.60	48.2	46.5	-1.70
4F	Local	1713888	Tower Park	41.555868	-87.647267	44.9	44.9	43.9	-1.00	45.3	44.5	-0.80
4F	Local	1713827	Taylor Lauridsen Park	41.818366	-87.642829	52.9	53.1	53.3	0.20	53.5	53.6	0.10
4F	Local	1713825	Tarkington Park	41.764755	-87.706996	51.8	52	51.5	-0.50	52.8	52.3	-0.50
4F	Local	1710296	Hope Park	41.791700	-87.640883	51.9	52.1	52	-0.10	52.6	52.6	0.00
4F	Local	1713796	Superior Park	41.894754	-87.679499	43.6	43.7	43.5	-0.20	44.4	44.3	-0.10
4F	Local	1709950	Playlot 291	41.796700	-87.600326	51.1	51.3	51.2	-0.10	51.8	51.6	-0.20
4F	Local	1713748	Stars and Stripes Park	41.799198	-87.797556	57.3	57.6	57	-0.60	58.5	57.4	-1.10
4F	Local	1713741	Spruce Park	41.798645	-87.590048	50.9	51	50.9	-0.10	51.5	51.4	-0.10
4F	Local	1713739	Springdale Park	41.794475	-87.897003	49.5	49.6	49.7	0.10	50.3	50.5	0.20
4F	Local	1713738	Spring Rock Park	41.805864	-87.907837	49.2	49.3	49.5	0.20	50.1	50.6	0.50
4F	Local	1713685	Soehrman Park	41.762253	-87.887835	52.1	52.2	52.3	0.10	52.8	52.9	0.10
4F	Local	1713678	Smith Park	41.813920	-87.824501	51.5	51.7	51.5	-0.20	52.6	52.4	-0.20
4F	Local	1713676	Smirz Park	41.830309	-87.780889	52.9	53	52.4	-0.60	53.6	53	-0.60
4F	Local	1713806	Sycamore Playlot	41.801700	-87.599493	51.6	51.7	51.6	-0.10	52.2	52	-0.20
4F	Local	1708709	Narragansett Park	41.753921	-87.781443	59.8	59.9	60.4	0.50	60.2	60.8	0.60
4F	Local	1709688	Lake Shore Playground	41.897255	-87.618108	42.7	42.8	42.7	-0.10	43.5	43.4	-0.10
4F	Local	1709686	Kiwanis Park	41.824198	-87.840058	49.9	50	50	0.00	50.8	50.9	0.10
4F	Local	1708811	Northerly Island Park	41.865311	-87.608940	44.2	44.3	44.6	0.30	44.9	45.3	0.40
4F	Local	1708808	Northeast Park	41.839475	-87.856448	50.3	50.5	50.7	0.20	51.5	52	0.50
4F	Local	1708806	North Warren Park	41.862254	-87.770890	47.3	47.4	47.1	-0.30	48.1	47.9	-0.20
4F	Local	1708789	North End Park	41.838920	-87.850059	50.2	50.4	50.7	0.30	51.5	52.3	0.80
4F	Local	1710017	Promontory Point Park	41.796145	-87.576715	50.1	50.2	50	-0.20	50.7	50.5	-0.20
4F	Local	1708768	Nichols Park	41.796700	-87.593937	50.9	51	50.9	-0.10	51.5	51.3	-0.20
4F	Local	1709738	Ohio Park	41.891698	-87.744501	46.3	46.4	46.3	-0.10	47.2	47	-0.20
4F	Local	1708682	Loveland Park	41.698643	-87.828387	52.3	52.4	53	0.60	52.8	53.3	0.50
4F	Local	1708662	Logan Monument	41.870588	-87.623385	43.8	43.9	43.9	0.00	44.5	44.5	0.00
4F	Local	1708649	Lions Park	41.560868	-87.643100	44.5	44.6	43.8	-0.80	44.9	44.2	-0.70
4F	Local	1708645	Linden Park	41.901698	-87.725889	47	47	46.9	-0.10	47.8	47.7	-0.10
4F	Local	1708630	Lincoln Monument	41.912254	-87.630886	42.1	42.1	42	-0.10	42.8	42.7	-0.10
4F	Local	1708612	Levin Park	41.888365	-87.762001	47.2	47.3	47.2	-0.10	48	47.9	-0.10
4F	Local	1688415	Burlington Square Park	41.778918	-88.145622	44.2	44.3	44.3	0.00	44.8	45.1	0.30
4F	Local	1708780	Normandy Park	41.798365	-87.788944	59.7	59.9	59.6	-0.30	60.5	59.9	-0.60
4F	Local	1709874	Park 413	41.885309	-87.768668	47.4	47.4	47.3	-0.10	48.2	48.1	-0.10
4F	Local	1714031	Veterans Park	41.843920	-87.811446	49.1	49.2	49	-0.20	50	49.9	-0.10
4F	Local	1709940	Piotrowski Park	41.834754	-87.730610	52.9	53.1	52.6	-0.50	53.5	52.9	-0.60
4F	Local	1709939	Pioneer Park	41.859753	-87.861726	50.9	51	51	0.00	51.8	51.8	0.00
4F	Local	1709936	Pinewood Park	41.553923	-87.690324	46	46	45.1	-0.90	46.4	45.8	-0.60
4F	Local	1709906	Perennial Garden	41.786978	-87.585881	48.9	49	48.9	-0.10	49.5	49.4	-0.10
4F	Local	1709880	Park 484	41.770032	-87.739775	56.7	56.8	57.2	0.40	57.9	58.4	0.50
4F	Local	1709879	Park 479	41.865310	-87.628940	44.2	44.2	44.4	0.20	44.8	45.1	0.30

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	1709690	Lincoln Memorial	41.876977	-87.621718	43.4	43.6	43.5	-0.10	44.2	44.1	-0.10
4F	Local	1709875	Park 414	41.902809	-87.733945	46.5	46.6	46.5	-0.10	47.3	47.2	-0.10
4F	Local	1709737	Ohio and Harding Park	41.891976	-87.724500	46.4	46.5	46.3	-0.20	47.2	47.1	-0.10
4F	Local	1709872	Park 399	41.907254	-87.688944	44.8	44.9	44.8	-0.10	45.6	45.5	-0.10
4F	Local	1709871	Park 315	41.899754	-87.639220	42.6	42.7	42.6	-0.10	43.4	43.2	-0.20
4F	Local	1709842	Palace Park	41.832810	-87.666719	50.9	51	54.9	3.90	51.5	55.6	4.10
4F	Local	1709834	Owens Park	41.751699	-87.749219	49.5	49.6	50.3	0.70	50.4	51.1	0.70
4F	Local	1709791	Orr Park	41.894476	-87.727834	46.5	46.6	46.5	-0.10	47.3	47.2	-0.10
4F	Local	1709752	Olive Park	41.893088	-87.613107	42.9	43	42.9	-0.10	43.6	43.5	-0.10
4F	Local	1710002	Pritzger Park	41.877533	-87.628107	43.3	43.5	43.4	-0.10	44.1	44	-0.10
4F	Local	1709878	Park 456	41.900310	-87.661998	43.1	43.2	43	-0.20	43.9	43.7	-0.20
4F	Local	1820777	Herrick Park	41.880584	-88.127847	39.7	39.7	39.8	0.10	40.4	40.5	0.10
4F	Local	1714027	Valley Forge Park	41.784198	-87.797833	58.9	59	58.4	-0.60	59.5	58.8	-0.70
4F	Local	1820802	Wexford Park	41.851140	-88.133679	40.8	40.9	40.9	0.00	41.5	41.6	0.10
4F	Local	1820801	Westhaven Park	41.854195	-88.130068	40.9	41	41	0.00	41.6	41.7	0.10
4F	Local	1820796	Triangle Park	41.867807	-88.090067	43	43.1	43.1	0.00	43.8	43.8	0.00
4F	Local	1820794	Sunnyside Park	41.853362	-88.089789	42.4	42.4	42.4	0.00	43.1	43.2	0.10
4F	Local	1820782	Madison Park	41.851695	-88.131179	40.9	40.9	41	0.10	41.6	41.7	0.10
4F	Local	1822787	Brantwood Park	41.551702	-87.479206	43.1	43.1	45.3	2.20	42.9	44.9	2.00
4F	Local	1820780	Hurley Gardens	41.853362	-88.134235	40.8	40.8	40.9	0.10	41.5	41.6	0.10
4F	Local	1823059	Black Willow Marsh County Forest Preserve	41.900862	-88.087568	42.1	42.1	42.1	0.00	42.9	42.9	0.00
4F	Local	1820759	Coventry Park	41.884195	-88.127013	39.6	39.6	39.7	0.10	40.3	40.4	0.10
4F	Local	1820747	Arrowhead Park	41.845307	-88.132012	41.3	41.4	41.4	0.00	42	42.1	0.10
4F	Local	1820746	Appleby Park	41.822807	-88.086177	43.4	43.5	43.5	0.00	44.2	44.3	0.10
4F	Local	1820744	Adams Park	41.866695	-88.106179	42.2	42.3	42.3	0.00	42.9	42.9	0.00
4F	Local	1820509	Market Square	41.328923	-89.113694	30.8	30.9	30.5	-0.40	31.5	30.9	-0.60
4F	Local	1817699	Romeoville Prairie County Forest Preserve	41.659753	-88.037560	44	44	42.5	-1.50	44.6	43.3	-1.30
4F	Local	1817698	Wood Ridge County Forest Preserve	41.689475	-88.018393	43.2	43.3	43.6	0.30	44.2	45.2	1.00
4F	Local	1820781	Lincoln Park	41.852251	-88.093956	42.2	42.3	42.3	0.00	43	43	0.00
4F	Local	1848347	Maramech Woods Nature Preserve	41.640863	-88.542019	32	32.1	32	-0.10	32.6	32.7	0.10
4F	Local	1848406	Starved Rock Nature Preserve	41.318090	-89.038692	29.4	29.5	29.2	-0.30	29.9	29.3	-0.60
4F	Local	1848405	Pecumsaugan Creek - Blackball Mines Nature Preserve	41.341700	-89.041748	30	30.1	29.7	-0.40	30.7	30.2	-0.50
4F	Local	1848404	Mitchells Grove Nature Preserve	41.377811	-89.084805	31.4	31.5	29.9	-1.60	32.1	30.6	-1.50
4F	Local	1848403	Matthiessen Dells Nature Preserve	41.293368	-89.025081	29.8	29.9	28.7	-1.20	30.2	28.4	-1.80
4F	Local	1848402	Margery C Carlson Nature Preserve	41.257813	-89.029803	28.5	28.6	30.6	2.00	28.9	30.1	1.20
4F	Local	1848401	Lower Fox River - Blakes Landing Nature Preserve	41.457925	-88.743267	31.5	31.6	29.3	-2.30	32.1	29.9	-2.20
4F	Local	1820999	Pierson Park	41.113088	-87.842819	40.7	40.8	40.8	0.00	41.4	41.4	0.00
4F	Local	1848348	Millhurst Fen Nature Preserve	41.621141	-88.560352	31.4	31.5	31.4	-0.10	32.1	32	-0.10
4F	Local	1817691	Fox Hollow County Forest Preserve	41.746388	-88.013611	46.5	46.6	47.1	0.50	47.2	48.6	1.40
4F	Local	1848346	Goose Lake Prairie Nature Preserve	41.367531	-88.297286	33.3	33.4	33.3	-0.10	34.1	33.9	-0.20
4F	Local	1847272	Sunbury Railroad Prairie Nature Preserve	41.084754	-88.614231	29.1	29.3	27.1	-2.20	29.7	27.3	-2.40
4F	Local	1847270	Hooper Branch Savanna Nature Preserve	41.001699	-87.553365	37.3	37.4	37.4	0.00	38	38	0.00
4F	Local	1840039	Prairie Path Woodland Swamp County Forest Preserve	41.789473	-88.270070	43.3	43.4	43.4	0.00	43.9	44.1	0.20

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	1840026	Braeburn Marsh County Forest Preserve	41.861139	-88.335352	43.5	43.5	43.6	0.10	43.8	43.9	0.10
4F	Local	1840025	Dick Young County Forest Preserve	41.836139	-88.372297	41.6	41.7	41.7	0.00	42.1	42.4	0.30
4F	Local	1823810	Mill Creek County Forest Preserve	41.875861	-88.366742	40.6	40.7	40.7	0.00	41.1	41.2	0.10
4F	Local	1848400	Yorkville Prairie Nature Preserve	41.671696	-88.389793	37.9	38	38	0.00	38.6	38.6	0.00
4F	Local	1714173	Willow Wood Park	41.579478	-87.711714	47.6	47.7	46.1	-1.60	48.1	46.4	-1.70
4F	Local	1740755	Forest Park	41.873087	-87.812003	50.1	50.1	50.1	0.00	50.9	50.9	0.00
4F	Local	1740745	Finn Park	41.781142	-87.875336	51.8	51.9	52	0.10	52.6	52.7	0.10
4F	Local	1716685	Snell Baseball Field	41.753640	-88.351461	41	41.1	41.1	0.00	41.7	42	0.30
4F	Local	1714310	Langhorst Field	41.897530	-87.947842	52.2	52.2	52.2	0.00	53	53	0.00
4F	Local	1714299	Founders Common	41.899196	-87.945341	52.4	52.5	52.5	0.00	53.2	53.2	0.00
4F	Local	1714289	College Mall	41.896418	-87.947286	52	52	52	0.00	52.8	52.8	0.00
4F	Local	1817695	Oldfield Oaks County Forest Preserve	41.727253	-88.006172	45.3	45.5	45.6	0.10	46.3	46.7	0.40
4F	Local	1714176	Willowview Park	41.555034	-87.659490	45.5	45.5	44.5	-1.00	45.9	45.1	-0.80
4F	Local	1741083	Lilacia Park	41.885307	-88.020344	46.3	46.3	46.3	0.00	47.1	47.1	0.00
4F	Local	1714171	Willow Park	41.796422	-87.603660	51.2	51.4	51.3	-0.10	51.9	51.8	-0.10
4F	Local	1714136	Western Park	41.898088	-87.686721	44	44.1	43.9	-0.20	44.8	44.6	-0.20
4F	Local	1714125	West Morton Park	41.845032	-87.763389	49.8	50	49.4	-0.60	50.5	50	-0.50
4F	Local	1714081	Washtenaw Park	41.845866	-87.692275	48.4	48.5	48.4	-0.10	49	48.9	-0.10
4F	Local	1714058	Walker Park	41.752253	-87.894224	51.2	51.3	51.3	0.00	51.9	52	0.10
4F	Local	1714055	Wagner Park	41.801977	-87.648939	53.8	54	53.8	-0.20	54.4	54.3	-0.10
4F	Local	1714052	Volunteer Park	41.710587	-87.837555	54.5	54.5	54.5	0.00	54.9	54.7	-0.20
4F	Local	1714200	Wolf Park	41.576423	-87.702547	47.4	47.5	46	-1.50	47.9	46.3	-1.60
4F	Local	1817551	Middle Rock Run County Forest Preserve	41.510030	-88.174505	44.8	44.8	41.5	-3.30	45.1	41.7	-3.40
4F	Local	1708446	Minuteman Park	41.786699	-87.763387	63.2	63.3	63.3	0.00	63.9	64	0.10
4F	Local	1817690	Barbers Corners County Forest Preserve	41.714197	-88.084785	41.4	41.5	41.5	0.00	42.1	42.3	0.20
4F	Local	1817689	DuPage River Park	41.709752	-88.122842	40	40.1	40.1	0.00	40.6	40.8	0.20
4F	Local	1817627	Hoopers Hollow Park	41.762530	-88.028395	46.6	46.7	46.8	0.10	47.3	47.6	0.30
4F	Local	1817626	Blacksmith Park	41.826974	-88.077844	43.6	43.7	43.7	0.00	44.3	44.5	0.20
4F	Local	1817625	Candlewood Park	41.788363	-88.093398	44.9	45	45	0.00	45.6	45.9	0.30
4F	Local	1817624	Green Valley County Forest Preserve	41.754197	-88.069508	44.7	44.8	44.9	0.10	45.5	45.7	0.20
4F	Local	1740761	Gladstone Park	41.866697	-87.878949	51.3	51.4	51.4	0.00	52.2	52.2	0.00
4F	Local	1817559	Lake Renwick County Forest Preserve	41.605030	-88.180897	39.7	39.7	36	-3.70	39.9	37.3	-2.60
4F	Local	1740790	Peirce Park	41.807531	-87.913671	49.4	49.4	49.7	0.30	50.3	50.9	0.60
4F	Local	1817504	Foxhill Greens Park	41.786418	-88.195901	44.1	44.2	44.2	0.00	44.7	45	0.30
4F	Local	1817502	Spring Creek County Forest Preserve	41.592254	-87.920888	46.2	46.3	45.5	-0.80	46.9	46	-0.90
4F	Local	1817501	Morris Park	41.590309	-87.991723	46.3	46.4	45	-1.40	47	45.4	-1.60
4F	Local	1817500	Lower Spring Creek County Forest Preserve	41.558364	-87.985333	45.7	45.8	44.7	-1.10	46.3	45	-1.30
4F	Local	1817499	Potawatomi Woods County Forest Preserve	41.525031	-87.995888	44.5	44.6	44.2	-0.40	45.2	44.8	-0.40
4F	Local	1741161	Cerran Park	41.871697	-87.878672	51.7	51.7	51.7	0.00	52.5	52.5	0.00
4F	Local	1817694	Falcon Ridge Park	41.731975	-88.038117	44.6	44.7	44.9	0.20	45.4	46	0.60
4F	Local	1817560	Goodenow Grove County Forest Preserve	41.395867	-87.626985	40.3	40.3	40.3	0.00	41	40.9	-0.10
4F	Local	1698063	Donnelley State Fish and Wildlife Area	41.290314	-89.332588	30.7	30.8	28.6	-2.20	31.2	29.1	-2.10
4F	Local	1703162	Anderson Baseball Diamond	41.794478	-87.603660	50.9	51	51	0.00	51.6	51.5	-0.10

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	1699681	Oak Valley Park	41.493920	-88.074779	42.4	42.5	41.5	-1.00	43.1	42.1	-1.00
4F	Local	1699676	Lockport Historic District	41.589475	-88.057003	46.4	46.5	46	-0.50	46.8	46.6	-0.20
4F	Local	1699675	Joliet East Side Historic District	41.520586	-88.076447	43.9	43.9	43.1	-0.80	44.5	43.6	-0.90
4F	Local	1699674	Upper Bluff Historic District	41.530030	-88.095892	45.9	46	43.6	-2.40	46.3	44	-2.30
4F	Local	1698066	Lake Senachwine Conservation Area	41.199480	-89.360644	28.8	29	28.8	-0.20	29.4	28.6	-0.80
4F	Local	1699723	Shabbona Park	41.468923	-87.689489	41.5	41.6	41.6	0.00	42.2	42.1	-0.10
4F	Local	1698064	Fox Run State Conservation Area	41.308646	-89.221752	31	31.1	29.9	-1.20	31.6	30.5	-1.10
4F	Local	1699728	Raccoon Grove Forest Preserve	41.393089	-87.755877	41.7	41.7	41.7	0.00	42.4	42.3	-0.10
4F	Local	1693900	Westwood Park	41.743918	-88.346738	40.8	40.9	40.9	0.00	41.5	41.8	0.30
4F	Local	1693873	South River Street Park	41.743918	-88.328960	41.1	41.2	41.2	0.00	41.8	42.1	0.30
4F	Local	1693870	Simmons Park	41.780584	-88.286737	42.9	43	43	0.00	43.5	43.8	0.30
4F	Local	1693860	Schneider Park	41.815306	-88.314795	42.2	42.3	42.3	0.00	42.8	43.1	0.30
4F	Local	1693825	Quarry Park	41.842528	-88.310351	42.7	42.7	42.7	0.00	43.1	43.3	0.20
4F	Local	1693823	Prairie Park	41.902250	-88.323131	41	41.1	41.1	0.00	41.4	41.5	0.10
4F	Local	1693817	Oakhurst County Forest Preserve	41.750862	-88.270903	42.3	42.4	42.4	0.00	42.9	43.2	0.30
4F	Local	1698065	George S Park Memorial Woods Nature Preserve	41.121424	-89.296754	28.3	28.4	27.5	-0.90	28.6	26.8	-1.80
4F	Local	1699790	Belmont Park	41.536975	-88.031445	44.5	44.6	44.5	-0.10	45.2	45	-0.20
4F	Local	1708604	Legge Memorial Park	41.783364	-87.913948	49.9	50.1	50.1	0.00	50.7	50.9	0.20
4F	Local	1703113	Alfred D Kohn Playground	41.704756	-87.623936	50.3	50.4	49	-1.40	50.8	48.9	-1.90
4F	Local	1703091	Adams Park	41.862810	-87.663108	44.3	44.4	44.3	-0.10	45	45	0.00
4F	Local	1700126	Miller-Anderson Woods State Nature Preserve	41.237536	-89.405646	30.5	30.7	29.6	-1.10	31.1	29.7	-1.40
4F	Local	1700117	Lake Depue State Fish and Wildlife Area	41.310313	-89.328699	30.4	30.5	27.5	-3.00	30.9	28.1	-2.80
4F	Local	1699798	Mokena Park	41.523088	-87.885329	45.4	45.4	45.1	-0.30	46.1	45.7	-0.40
4F	Local	1699704	Bicentennial Park	41.526419	-88.087558	45.1	45.1	43.4	-1.70	45.5	43.9	-1.60
4F	Local	1699793	Kiwanis Park	41.522533	-87.819216	44.6	44.7	44.6	-0.10	45.3	45.1	-0.20
4F	Local	1693811	Memorial Field	41.855028	-88.318129	44.1	44.2	44.2	0.00	44.5	44.6	0.10
4F	Local	1699765	Isle a la Cache County Forest Preserve	41.646697	-88.068672	43.3	43.5	41.4	-2.10	44.1	42.1	-2.00
4F	Local	1699753	Four Seasons Park	41.610863	-88.165341	40.1	40.1	36.7	-3.40	40.4	38	-2.40
4F	Local	1699746	Hickory Creek County Forest Preserve	41.514199	-87.895329	44.7	44.8	44.6	-0.20	45.4	45.1	-0.30
4F	Local	1699745	Tanglewood Park	41.512532	-87.866995	45.3	45.4	45.3	-0.10	46	45.9	-0.10
4F	Local	1699735	Breidert Green Park	41.498644	-87.849772	45.1	45.3	45.2	-0.10	45.9	45.8	-0.10
4F	Local	1699731	Hunters Woods County Forest Preserve	41.501144	-87.802271	43.5	43.6	43.6	0.00	44.2	44.1	-0.10
4F	Local	1699729	Sauk Trail Forest Preserve	41.485311	-87.800048	43	43.1	43.1	0.00	43.7	43.7	0.00
4F	Local	1699794	Tinley Gardens Tot Lot	41.555866	-87.845607	46.9	47	47.8	0.80	47.5	48.6	1.10
4F	Local	1688631	North Park	41.294198	-88.286174	36.2	36.3	36.3	0.00	37	37	0.00
4F	Local	1693574	Merriner Park	41.118644	-88.840629	26.6	26.8	20.5	-6.30	27.2	20.5	-6.70
4F	Local	1693573	Mendota Swimming Pool	41.555865	-89.123974	32.8	33	33	0.00	33.6	33.9	0.30
4F	Local	1693569	Mattheissen Park	41.338367	-89.089249	30.9	31	30.6	-0.40	31.5	31	-0.50
4F	Local	1693568	Mary Hegeler Carus Park	41.331701	-89.084805	30.4	30.5	30.2	-0.30	31	30.6	-0.40
4F	Local	1693556	LaSalle Lake State Fish and Wildlife Area	41.254200	-88.630627	34	34.1	25.1	-9.00	34.3	24.8	-9.50
4F	Local	1693497	Apple Orchard Park	41.543365	-89.124251	32	32.1	32.1	0.00	32.7	33	0.30
4F	Local	1693816	O'Donnell Park	41.786973	-88.274793	43.2	43.4	43.4	0.00	43.9	44.1	0.20
4F	Local	1688642	Short Pioneer Cemetery Prairie Nature Preserve	41.332253	-88.287841	34.8	34.8	34.8	0.00	35.5	35.4	-0.10

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	1693584	Mendota Lake Park	41.558365	-89.131196	33.1	33.2	33.2	0.00	33.8	34.3	0.50
4F	Local	1688623	Mazonia State Fish and Wildlife Area	41.197532	-88.270893	38.4	38.6	38.6	0.00	39.2	39.2	0.00
4F	Local	1688469	Wil-O-Way Commons Park	41.776140	-88.168678	44.1	44.2	44.2	0.00	44.7	45	0.30
4F	Local	1688467	West Greens Park	41.774474	-88.160622	44	44.2	44.2	0.00	44.7	45	0.30
4F	Local	1688462	Veterans Park	41.759196	-88.140621	43.9	43.9	43.9	0.00	44.5	44.8	0.30
4F	Local	1688458	Summer Lakes Park	41.828084	-88.209792	43.5	43.6	43.6	0.00	44	44.1	0.10
4F	Local	1688436	Lincoln Park	41.760029	-88.144788	43.8	43.9	43.9	0.00	44.5	44.7	0.20
4F	Local	397049	Washington Park	41.725872	-86.900030	41.5	41.7	41.7	0.00	42.1	42.2	0.10
4F	Local	1693495	Ancient Oaks Day Use Area	41.326422	-88.740630	30.6	30.7	35.4	4.70	31	35.7	4.70
4F	Local	1693768	Goodwin Park	41.804751	-88.343684	41.6	41.7	41.7	0.00	42.3	42.6	0.30
4F	Local	1703173	Apollo Park	41.545034	-87.641711	44.7	44.7	44.2	-0.50	45.1	44.9	-0.20
4F	Local	1693809	McCullough Park	41.769473	-88.312015	42	42.1	42.1	0.00	42.7	43	0.30
4F	Local	1693808	McCleery Park	41.769195	-88.340072	41.5	41.7	41.7	0.00	42.2	42.6	0.40
4F	Local	1693800	Krug Park	41.732251	-88.324515	40.8	41	41	0.00	41.6	41.8	0.20
4F	Local	1693796	Kane County Fairgrounds	41.903916	-88.342853	40.1	40.2	40.2	0.00	40.6	40.6	0.00
4F	Local	1693793	Jefferson Park	41.766140	-88.347572	41.4	41.4	41.5	0.10	42	42.4	0.40
4F	Local	1693788	Illinois Avenue Park	41.773918	-88.308404	42.2	42.3	42.3	0.00	42.8	43.2	0.40
4F	Local	1693579	Norwegian Settlers State Memorial	41.463364	-88.666740	29.6	29.8	27	-2.80	30.2	27.4	-2.80
4F	Local	1693771	Hall Park	41.775029	-88.363684	41.2	41.4	41.4	0.00	41.9	42.3	0.40
4F	Local	1693580	Oakland Park	41.110866	-88.829240	25.8	25.9	20.5	-5.40	26.3	20.6	-5.70
4F	Local	1693759	Foxcroft Park	41.784473	-88.362573	41.3	41.5	41.5	0.00	42	42.4	0.40
4F	Local	1693689	Berman Park	41.736696	-88.331182	40.9	41	41	0.00	41.6	41.8	0.20
4F	Local	1693637	Washington Park Historic District	41.349477	-88.842021	31.6	31.7	29.9	-1.80	32	30	-2.00
4F	Local	1693626	Southside Athletic Park	41.111422	-88.818684	25.6	25.7	20.6	-5.10	26.2	20.7	-5.50
4F	Local	1693610	Saint Marys Park	41.347812	-89.093694	31.4	31.5	30.8	-0.70	32	31.3	-0.70
4F	Local	1693596	Pulaski Park	41.333645	-89.091194	30.6	30.7	30.4	-0.30	31.3	30.8	-0.50
4F	Local	1693813	North Aurora Island Park	41.805306	-88.323128	41.9	42	42	0.00	42.6	42.9	0.30
4F	Local	1693787	Illinois Avenue Island Park	41.769473	-88.308960	42.1	42.2	42.2	0.00	42.7	43	0.30
4F	Local	1707081	Gladys Park	41.876143	-87.708944	45.1	45.2	44.9	-0.30	45.9	45.6	-0.30
4F	Local	1703138	Altman Park	41.681421	-87.806720	50.1	50.2	52	1.80	50.7	52.2	1.50
4F	Local	1708153	Jefferson Park	41.859199	-87.642274	44.9	45	45.7	0.70	45.5	46.4	0.90
4F	Local	1708139	Jacques Marquette Monument	41.845032	-87.699220	49	49.1	48.8	-0.30	49.6	49.2	-0.40
4F	Local	1708131	Jackman Field	41.788923	-87.591993	49.5	49.6	49.5	-0.10	50.1	50	-0.10
4F	Local	1707972	Indian Trail Park	41.554201	-87.655323	45.3	45.3	44.3	-1.00	45.8	45	-0.80
4F	Local	1707967	Independence Square Fountain	41.862532	-87.719777	45.8	45.9	45.4	-0.50	46.5	46	-0.50
4F	Local	1708177	Jessie 'Ma' Houston Playlot Park	41.803645	-87.605327	52	52.1	52	-0.10	52.6	52.4	-0.20
4F	Local	1707151	Grand Park	41.901421	-87.715056	46.4	46.5	46.4	-0.10	47.2	47.1	-0.10
4F	Local	1708225	Kenwood Park	41.805034	-87.592826	51.4	51.5	51.4	-0.10	52	51.8	-0.20
4F	Local	1707077	Giribaldi Park	41.872254	-87.665331	43.5	43.5	43.3	-0.20	44.2	43.9	-0.30
4F	Local	1707064	George Washington Memorial	41.802256	-87.616438	52.5	52.7	52.6	-0.10	53.1	53	-0.10
4F	Local	1706995	Hollydale Park	41.567534	-87.681991	46.7	46.7	45.3	-1.40	47.2	45.7	-1.50
4F	Local	1706985	Hillcrest Park	41.569201	-87.680602	46.8	46.8	45.3	-1.50	47.3	45.8	-1.50
4F	Local	1706981	Heritage Park	41.635032	-87.843664	47.8	47.9	47.7	-0.20	48.5	48.1	-0.40

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4F	Local	1706980	Heritage Park	41.545590	-87.651434	45	45	44.6	-0.40	45.4	45.3	-0.10
4F	Local	1704321	Fulton Park	41.885587	-87.741445	45.9	46	45.8	-0.20	46.7	46.5	-0.20
4F	Local	1707965	Independence Park	41.560034	-87.665879	45.7	45.8	44.6	-1.20	46.2	45.2	-1.00
4F	Local	1708319	Markham Boys League Baseball Fields	41.592811	-87.710603	48.1	48.2	46.5	-1.70	48.6	46.8	-1.80
4F	Local	1708443	Millette Memorial Park	41.739476	-87.802832	60.3	60.3	60.4	0.10	60.4	60.7	0.30
4F	Local	1708393	Memorial Park	41.696977	-87.774774	48.3	48.4	48.7	0.30	48.8	48.8	0.00
4F	Local	1708392	Memorial Park	41.761145	-87.629493	49.1	49.3	49.4	0.10	49.9	49.7	-0.20
4F	Local	1708391	Memorial Park	41.876975	-87.875894	52	52	52	0.00	52.8	52.8	0.00
4F	Local	1708390	Memorial Park	41.618646	-87.531154	42.2	42.3	42.8	0.50	42.5	42.6	0.10
4F	Local	1708389	Memorial Park	41.824475	-87.870059	49.9	49.9	50.2	0.30	50.8	51.3	0.50
4F	Local	1708156	Jeffrey - Cyril Historic District	41.765312	-87.576991	43.9	44.1	44.1	0.00	44.7	44.5	-0.20
4F	Local	1708336	Mason Park	41.883921	-87.728667	45.6	45.6	45.5	-0.10	46.4	46.2	-0.20
4F	Local	1704256	Flippinger Park	41.874475	-87.863116	51.8	51.9	51.9	0.00	52.6	52.6	0.00
4F	Local	1708310	Mariano Park	41.901977	-87.628386	42.5	42.6	42.5	-0.10	43.2	43.2	0.00
4F	Local	1708303	Maple Park	41.868087	-87.803947	49.3	49.4	49.3	-0.10	50.2	50.1	-0.10
4F	Local	1708286	Madlin Park	41.825864	-87.854225	49.9	50	50.1	0.10	50.8	51.1	0.30
4F	Local	1708275	Kruger Park	41.726698	-87.838944	55.6	55.7	54.4	-1.30	56	54.7	-1.30
4F	Local	1708257	Kolar Park	41.825587	-87.774222	55.5	55.6	55.2	-0.40	56.1	55.6	-0.50
4F	Local	1708247	Kinzie Parkway Park	41.888087	-87.755890	46.9	47	46.9	-0.10	47.8	47.6	-0.20
4F	Local	1708228	Keystone Park	41.911420	-87.727279	46.7	46.7	46.6	-0.10	47.5	47.4	-0.10
4F	Local	1708350	Mayfair Park	41.840031	-87.893393	49.7	49.8	49.8	0.00	50.6	50.6	0.00
4F	Local	1703536	Dearborn Park	41.870866	-87.629218	43.7	43.8	43.8	0.00	44.4	44.4	0.00
4F	Local	1703744	Barrie Park	41.869754	-87.778668	47.5	47.6	47.5	-0.10	48.3	48.2	-0.10
4F	Local	1703707	Euclid Square Park	41.866142	-87.792280	48.3	48.4	48.3	-0.10	49.1	49.1	0.00
4F	Local	1703596	Durse Park	41.898366	-87.639775	42.7	42.7	42.6	-0.10	43.4	43.3	-0.10
4F	Local	1703595	Dunbar Park	41.840311	-87.620884	48.1	48.2	49.7	1.50	48.6	50.6	2.00
4F	Local	1703591	Drexel Square	41.801700	-87.605049	51.9	52	51.9	-0.10	52.5	52.3	-0.20
4F	Local	1703582	Dooley Park	41.753922	-87.708662	61.3	61.4	60.9	-0.50	62	61.6	-0.40
4F	Local	1704303	Freedom Park	41.824198	-87.786723	53.6	53.7	53.2	-0.50	54.3	53.8	-0.50
4F	Local	1703549	Denning Park	41.801420	-87.887559	49.7	49.8	49.9	0.10	50.5	50.7	0.20
4F	Local	1703818	Blackhawk Park	41.772531	-87.892836	51.7	51.8	51.8	0.00	52.4	52.5	0.10
4F	Local	1703533	De George Park	41.911143	-87.749501	45.8	45.8	45.7	-0.10	46.6	46.5	-0.10
4F	Local	1703432	Chinatown Square	41.854199	-87.633385	45.5	45.7	47.8	2.10	46.2	48.7	2.50
4F	Local	1703344	Butterfield Park	41.540034	-87.643933	44.4	44.4	44.3	-0.10	44.9	45.1	0.20
4F	Local	1703246	Austin Town Hall Park	41.888365	-87.765890	47.4	47.4	47.4	0.00	48.2	48.1	-0.10
4F	Local	1703212	Aspen Park	41.700587	-87.834221	52.5	52.6	52.7	0.10	53	52.9	-0.10
4F	Local	1703198	Arrigo Park	41.871699	-87.660053	43.5	43.5	43.4	-0.10	44.2	44	-0.20
4F	Local	1703189	Arcadia Park	41.515034	-87.701990	42.7	42.7	42.7	0.00	43.4	43.3	-0.10
4F	Local	1703578	Dolphin Lake Park	41.559201	-87.681990	46.3	46.3	45	-1.30	46.8	45.6	-1.20
4F	Local	1704088	Cityfront Plaza	41.890310	-87.621719	43	43.1	43	-0.10	43.8	43.6	-0.20
4F	Local	1866510	Bourbonnais Geological Area Nature Preserve	41.146976	-87.890876	40.8	40.9	40.9	0.00	41.5	41.5	0.00
4F	Local	1704210	Fieldcrest Park	41.595589	-87.728937	48.3	48.4	46.6	-1.80	48.8	46.9	-1.90
4F	Local	1704203	Fedor Memorial Park	41.759754	-87.815888	55.2	55.4	55.3	-0.10	56.1	55.8	-0.30

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4F	Local	1704137	Cornell Park	41.796145	-87.585048	50.4	50.5	50.4	-0.10	51	50.9	-0.10
4F	Local	1704116	Commons Park	41.846142	-87.819224	49.1	49.2	49.1	-0.10	50	50	0.00
4F	Local	1704115	Columbus Park	41.833643	-87.761444	53.8	54	53.5	-0.50	54.5	53.9	-0.60
4F	Local	1704107	Clyde Park	41.840587	-87.776723	50.4	50.5	49.9	-0.60	51.1	50.6	-0.50
4F	Local	1703746	Bataan Park	41.899197	-87.845893	53.4	53.5	53.5	0.00	54.3	54.3	0.00
4F	Local	1704091	Claremont Park	41.873365	-87.685609	44	44.2	43.8	-0.40	44.8	44.5	-0.30
4F	Local	1703816	Bixler Park	41.791700	-87.592826	50	50.1	50.1	0.00	50.6	50.6	0.00
4F	Local	1703934	Charles Earle Playground	41.782255	-87.667551	53.8	54	53.4	-0.60	54.4	53.7	-0.70
4F	Local	1703912	Carroll Park	41.868087	-87.797002	48.7	48.8	48.8	0.00	49.6	49.5	-0.10
4F	Local	1703884	Butternut Playlot	41.798922	-87.596715	51.2	51.4	51.2	-0.20	51.8	51.7	-0.10
4F	Local	1703882	Butler Field	41.879477	-87.618663	43.4	43.4	43.4	0.00	44.1	44	-0.10
4F	Local	1703860	Brookfield Zoo	41.833364	-87.836169	49.7	50	50.6	0.60	51.1	52.7	1.60
4F	Local	1703858	Brook Park	41.799475	-87.910615	49.2	49.3	49.4	0.10	50.1	50.4	0.30
4F	Local	1704280	Fowney Park	41.628368	-87.573655	43.2	43.4	41.2	-2.20	43.7	40.8	-2.90
4F	Local	1704100	Clemente Park	41.903921	-87.684777	44.2	44.3	44.1	-0.20	45	44.9	-0.10
4F	Local	1961549	Newman Park	41.031111	-89.440833	24.3	24.4	24.4	0.00	24.8	23.8	-1.00
4F	Local	1981587	Braidwood City Park	41.269166	-88.219722	38.8	38.8	38.9	0.10	39.6	39.5	-0.10
4F	Local	1981487	Crescent Park	41.730000	-88.256111	41.7	41.8	41.8	0.00	42.3	42.6	0.30
4F	Local	1981486	Columbia Commons	41.743888	-88.121666	43.2	43.3	43.3	0.00	43.8	44.1	0.30
4F	Local	1981485	Boundary Hill Park	41.743611	-88.058611	44.6	44.7	44.8	0.10	45.3	45.6	0.30
4F	Local	1980020	Union Base-Ball Grounds (historical)	41.883611	-87.624166	43.2	43.3	43.2	-0.10	44	43.8	-0.20
4F	Local	1980019	Twenty-third Street Grounds (historical)	41.850555	-87.628333	46.2	46.3	49.7	3.40	46.8	50.8	4.00
4F	Local	1981489	Darien Chestnut Forest Preserve	41.746666	-88.010277	46.6	46.7	47.3	0.60	47.4	48.8	1.40
4F	Local	1961550	Johnsons Park	41.017777	-89.407777	24.4	24.5	23.9	-0.60	24.8	23.3	-1.50
4F	Local	1981490	Janes Avenue Park	41.740833	-88.038055	45.2	45.4	45.5	0.10	46	46.4	0.40
4F	Local	1942826	Park Number 528	41.777222	-87.736111	60.4	60.6	61.1	0.50	61.8	62.1	0.30
4F	Local	1941788	Prairie Garden	41.775833	-88.097222	44.8	44.9	44.9	0.00	45.5	45.8	0.30
4F	Local	1892956	Nelson Lake Marsh Nature Preserve	41.836139	-88.375630	41.6	41.7	41.7	0.00	42.1	42.4	0.30
4F	Local	1892953	Johnson's Mound Nature Preserve	41.864472	-88.428688	39.4	39.6	39.6	0.00	40	40.3	0.30
4F	Local	1892948	Bliss Woods Nature Preserve	41.782251	-88.433964	42.2	42.4	42.4	0.00	42.9	43.1	0.20
4F	Local	1892947	Almon Underwood Prairie Nature Preserve	41.831139	-88.491189	40.4	40.6	40.6	0.00	41.1	41.3	0.20
4F	Local	1891946	Millenium Park	41.882810	-87.622830	43.2	43.3	43.2	-0.10	44	43.9	-0.10
4F	Local	1971157	Van Buren Terrace Historic District	41.604722	-87.346111	37.2	37.3	38.2	0.90	37.5	38.5	1.00
4F	Local	1981499	Pierce Park	41.730555	-88.311111	41	41.2	41.2	0.00	41.7	42	0.30
4F	Local	1865423	Mount Palatine Cemetery Prairie Nature Preserve	41.195313	-89.172862	26.1	26.2	30.2	4.00	26.6	29.7	3.10
4F	Local	1981509	Stonegate Park	41.686388	-88.348611	38.6	38.7	38.7	0.00	39.3	39.4	0.10
4F	Local	1981508	Northampton Park	41.694722	-88.340833	39	39.1	39.1	0.00	39.8	39.9	0.10
4F	Local	1981507	Jaycee Park	41.708611	-88.318611	40	40.1	40.1	0.00	40.7	40.9	0.20
4F	Local	1981506	Heritage Park	41.682222	-88.348611	38.3	38.4	38.4	0.00	39	39.1	0.10
4F	Local	1981505	Briarcliff Woods Park	41.719722	-88.337777	40.4	40.5	40.5	0.00	41	41.3	0.30
4F	Local	1981488	Cumberland Park	41.734722	-88.256944	42	42.2	42.2	0.00	42.6	42.9	0.30
4F	Local	1981500	Victor Dunn Memorial Park	41.739722	-88.300000	41.5	41.6	41.6	0.00	42.1	42.4	0.30
4F	Local	1891592	Wolf Road Prairie Nature Preserve	41.837530	-87.901727	49.6	49.7	49.7	0.00	50.5	50.5	0.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	1981498	Phillips Park Zoo	41.736944	-88.294722	41.5	41.7	41.7	0.00	42.3	42.5	0.20
4F	Local	1981497	Montgomery Park	41.730555	-88.338333	40.6	40.8	40.7	-0.10	41.3	41.6	0.30
4F	Local	1981496	Copley Island Park	41.747777	-88.335833	41	41.2	41.2	0.00	41.7	42	0.30
4F	Local	1981494	University Heights Park	41.736388	-88.105277	42.9	43	43	0.00	43.6	43.8	0.20
4F	Local	1981493	Oakridge Parkway	41.727777	-88.122500	41.9	42	42	0.00	42.5	42.7	0.20
4F	Local	1981492	Meadow Glens Park	41.746111	-88.108333	43.4	43.6	43.6	0.00	44.1	44.4	0.30
4F	Local	1981491	Janes Avenue Soccer Field	41.738333	-88.039444	45	45.2	45.3	0.10	45.8	46.2	0.40
4F	Local	1981504	Augusta Lake Park	41.705000	-88.356944	39.5	39.7	39.7	0.00	40.2	40.4	0.20
4F	Local	1890712	Foxwood Park	41.481980	-87.397537	33.1	33.1	32.4	-0.70	33.4	32.4	-1.00
4F	Local	1891101	State Street Commercial Historic District	41.618646	-87.516709	42.9	42.9	43.7	0.80	43.1	43.6	0.50
4F	Local	1891100	Marktown Historic District	41.659202	-87.467541	35.3	35.4	41.3	5.90	35.8	42.3	6.50
4F	Local	1891098	Lowell Commercial Historic District	41.291702	-87.420590	33.6	33.7	33.7	0.00	34.4	34.3	-0.10
4F	Local	1891096	Gary City Center Historic District	41.600036	-87.337538	36.2	36.3	37.3	1.00	36.6	37.7	1.10
4F	Local	1890729	Prairie West Park	41.449202	-87.480593	34	34.1	34.1	0.00	34.8	34.6	-0.20
4F	Local	1890717	Homestead Acres Park Number 2	41.432813	-87.482538	34.8	34.9	34.9	0.00	35.6	35.5	-0.10
4F	Local	1891594	Churchill Prairie Nature Preserve	41.891418	-88.048678	43.7	43.7	43.7	0.00	44.4	44.4	0.00
4F	Local	1890713	Rohrman Park	41.474202	-87.424482	32.1	32.1	32	-0.10	32.7	32.3	-0.40
4F	Local	1891547	Cap Sauers Holdings Nature Preserve	41.679476	-87.894222	51.2	51.2	50.3	-0.90	51.5	50.9	-0.60
4F	Local	1890711	Deep River Outdoor Recreation Center	41.562814	-87.296425	39.8	39.8	41.2	1.40	39.9	41.4	1.50
4F	Local	1890710	Columbus Park	41.564758	-87.279758	38.4	38.4	39.5	1.10	38.6	39.8	1.20
4F	Local	1890709	Beidron Park	41.488091	-87.441705	33.9	33.9	33.7	-0.20	34.3	33.8	-0.50
4F	Local	1890708	Terrace Park	41.534202	-87.478650	40.7	40.7	40.7	0.00	40.7	41	0.30
4F	Local	1890707	Orchard Park	41.553646	-87.440872	43.1	43	44.9	1.90	43.1	44.5	1.40
4F	Local	1890706	Markley Park	41.541146	-87.449761	42.4	42.3	44	1.70	42.3	43.8	1.50
4F	Local	1890705	Lakeside Park	41.534758	-87.454761	41.6	41.6	42	0.40	41.5	42	0.50
4F	Local	1890716	Homestead Acres Park Number 1	41.437813	-87.476982	34.1	34.2	34.2	0.00	34.9	34.8	-0.10
4F	Local	1891554	Palos Fen Nature Preserve	41.698087	-87.841443	52.6	52.7	52.3	-0.40	53.1	52.4	-0.70
4F	Local	1981591	Water Tower Park	41.343611	-87.631944	39.1	39.2	39.2	0.00	39.8	39.8	0.00
4F	Local	1891588	Santa Fe Prairie Nature Preserve	41.760031	-87.857834	52.6	52.7	52.8	0.10	53.3	53.4	0.10
4F	Local	1891587	Salt Creek Woods Nature Preserve	41.830864	-87.895893	49.4	49.6	49.5	-0.10	50.4	50.4	0.00
4F	Local	1891585	Old Plank Road Prairie Nature Preserve	41.498923	-87.743380	44.1	44.1	44.1	0.00	44.8	44.7	-0.10
4F	Local	1891559	Thornton - Lansing Road Nature Preserve	41.562257	-87.592821	43	43	42.9	-0.10	43.2	43	-0.20
4F	Local	1891558	Sundrop Prairie Nature Preserve	41.620311	-87.702826	47.8	47.9	49.9	2.00	48.4	49.9	1.50
4F	Local	1891557	Sand Ridge Nature Preserve	41.613368	-87.554210	41.9	41.9	40.8	-1.10	42.1	40.3	-1.80
4F	Local	1891102	West Fifth Avenue Apartments Historic District	41.601980	-87.358649	39.1	39.1	39.7	0.60	39.3	39.9	0.60
4F	Local	1891555	Paw Paw Woods Nature Preserve	41.720587	-87.888945	47.3	47.5	47.3	-0.20	48.1	48	-0.10
4F	Local	1891104	People's Park	41.622257	-87.514486	43.1	43.2	43.8	0.60	43.3	43.6	0.30
4F	Local	1891553	Paintbrush Prairie Nature Preserve	41.609478	-87.704492	48	48.1	47.6	-0.50	48.5	47.5	-1.00
4F	Local	1891552	Jurgensen Woods Nature Preserve	41.554479	-87.586987	42.2	42.2	42	-0.20	42.5	42.2	-0.30
4F	Local	1891551	Gensburg - Markham Prairie Nature Preserve	41.606978	-87.687825	47.8	47.9	47.7	-0.20	48.2	47.6	-0.60
4F	Local	1891550	Dropseed Prairie Nature Preserve	41.606423	-87.701437	48	48.1	47.3	-0.80	48.5	47.3	-1.20
4F	Local	1891549	Cranberry Slough Nature Preserve	41.710309	-87.857833	53.5	53.5	52.6	-0.90	53.8	53	-0.80
4F	Local	1891548	Chicago Ridge Prairie Nature Preserve	41.700588	-87.765885	47.3	47.4	48.5	1.10	48	48.5	0.50

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4F	Local	1891593	Belmont Prairie Nature Preserve	41.799196	-88.048120	45.1	45.1	45.2	0.10	45.8	46	0.20
4F	Local	1891556	Sagawau Canyon Nature Preserve	41.688087	-87.925335	47.8	47.8	46.3	-1.50	48.2	47	-1.20
4F	IN	1338in	Galena (Springfield Fen) Wetland Conservation Area	41.691890	-86.716905	37.6	37.7	37.7	0.00	38.2	38.1	-0.10
4F	Local	1981510	Susan John Park	41.711944	-88.338055	40.1	40.2	40.2	0.00	40.8	41	0.20
4F	IN	767	Swamp Rose Nature Preserve (Original)	41.557169	-86.335006	32.4	32.5	31.9	-0.60	32.7	31.7	-1.00
4F	IN	723	Hog Lake Public Access Site	41.708095	-86.629851	39.3	39.5	39.4	-0.10	39.9	40	0.10
4F	IN	661	Bruce Lake Public Access Site	41.078183	-86.471138	29.9	29.9	29.7	-0.20	30	29	-1.00
4F	IN	525	Pleasant Lake Public Access Site	41.518660	-86.278064	34.7	34.8	33.8	-1.00	34.9	33.1	-1.80
4F	IN	348	Howat 80 Wildlife Management Area	41.016092	-86.841422	24.8	24.8	24.8	0.00	25.3	25.1	-0.20
4F	IN	816	Dunes Prairie Nature Preserve	41.654458	-87.065265	31.7	31.8	31.9	0.10	32.2	32	-0.20
4F	IN	1341	Carlson Gamebird Habitat Area	40.931748	-87.471699	37.1	37.2	37.1	-0.10	37.8	37.8	0.00
4F	IN	847	Tippecanoe River Public Access Site	40.964617	-86.677880	25.9	25.9	25.7	-0.20	26.2	25.8	-0.40
4F	IN	1272	Clarence Triplett Gamebird Habitat Area	40.915510	-87.504337	37.1	37.2	37.2	0.00	37.8	37.8	0.00
4F	IN	1253	Dick Blythe Wetland Conservation Area	41.410455	-86.693696	28.5	28.5	28.5	0.00	29.2	29	-0.20
4F	IN	1233	Beaver Dam Wetland Conservation Area	41.433264	-87.405692	31.1	31.2	31.1	-0.10	31.8	31.7	-0.10
4F	IN	1213	Ecker Wetland Conservation Area	41.402815	-86.456873	29.1	29.1	29.1	0.00	29.7	29.5	-0.20
4F	IN	1209	Bass Lake Public Access Site	41.212149	-86.612147	27.5	27.6	27.5	-0.10	27.7	27.2	-0.50
4F	IN	1196	Blue Heron (Lillovitch) Rookery Nongame Area	41.500938	-86.356900	34.5	34.6	33.5	-1.10	34.6	32.8	-1.80
4F	IN	1192	Badal Wildlife Habitat Trust Area	41.169572	-87.390430	33.8	33.9	33.9	0.00	34.6	34.5	-0.10
4F	IN	301	Fletcher Lake Public Access Site	40.910500	-86.333858	29.8	29.8	29.4	-0.40	29.9	28.9	-1.00
4F	IN	949	Mill Pond Lake Public Access Site	41.299763	-86.399864	27.5	27.6	27.6	0.00	28.1	28	-0.10
4F	IN	990	Langeluttig Marsh Wetland Conservation Area	41.621206	-87.032375	29	29.1	29.2	0.10	29.5	29.2	-0.30
4F	IN	987	Robert Peo Public Access Site (Trail Creek)	41.721602	-86.876137	41	41.2	41.2	0.00	41.6	41.7	0.10
4F	IN	972	Jasper-Pulaski Fish And Wildlife Area	41.247003	-86.908734	30.2	30.2	28.9	-1.30	30.4	28.4	-2.00
4F	IN	970	Lake Maxinkuckee Wetland Conservation Area	41.182588	-86.387856	27.1	27.1	27.1	0.00	27.3	27.3	0.00
4F	IN	969	Lake Maxinkuckee Public Access Site	41.196538	-86.416339	27	27	27.1	0.10	27.4	27.3	-0.10
4F	IN	968	Lake Maxinkuckee Fish Hatchery	41.228029	-86.451027	27	27	27.1	0.10	27.4	27.4	0.00
4F	IN	775	Salt Creek Fish And Wildlife Area	41.531873	-87.126951	39.2	39.2	40.8	1.60	39.4	41	1.60
4F	IN	960	Prudential Gamebird Habitat Area	41.041392	-87.406246	36.6	36.7	36.7	0.00	37.4	37.4	0.00
4F	IN	1058	Long Lake Public Access Site	41.524608	-87.051425	38.6	38.7	40	1.30	38.8	40.2	1.40
4F	IN	948	Michigan City Fish & Wildlife Headquarters	41.721335	-86.905741	41	41.2	41.2	0.00	41.6	41.7	0.10
4F	IN	881	Trail Creek Public Fishing Area	41.679496	-86.851238	35.9	36	36	0.00	36.5	36.3	-0.20
4F	IN	880	Trail Creek Fen (Dnr)	41.686661	-86.844164	36.8	36.9	36.9	0.00	37.4	37.3	-0.10
4F	IN	879	Trail Creek (2) Public Access Site	41.718187	-86.894230	40.6	40.8	40.8	0.00	41.2	41.3	0.10
4F	IN	871	Tippecanoe River Nature Preserve	41.123257	-86.573875	32.2	32.2	32	-0.20	32.2	31.3	-0.90
4F	IN	86	Thomas Sporre Wildlife Refuge	41.372741	-87.299348	27.7	27.8	27.8	0.00	28.4	28.2	-0.20
4F	IN	854	Koontz Lake Dam Property	41.411789	-86.488109	29.1	29.2	29.1	-0.10	29.7	29.5	-0.20
4F	IN	962	Pulaski Mill Public Access Site	40.977072	-86.656227	27	27	26.6	-0.40	27.2	26.4	-0.80
4F	Local	1981599	City Park	41.636111	-88.087222	43.1	43.1	40.7	-2.40	43.7	41.6	-2.10
4F	Local	1989468	New Buffalo Welcome Center Historical Marker	41.764722	-86.741111	43.3	43.5	43.6	0.10	43.9	44.2	0.30
4F	Local	1989462	The Dewey Cannon Historical Marker	41.800277	-86.609722	42.7	42.8	42.9	0.10	43.3	43.5	0.20
4F	Local	1982799	Spring Lake Park	41.755000	-88.226666	43.2	43.3	43.3	0.00	43.8	44	0.20
4F	Local	1982798	Andover Park	41.726666	-88.236388	41.4	41.6	41.5	-0.10	42	42.3	0.30

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4F	Local	1982797	Ridge Park	41.730000	-88.248611	41.7	41.9	41.9	0.00	42.4	42.6	0.20
4F	Local	1981603	Walnut Ridge Park	41.720833	-88.110555	41.4	41.5	41.5	0.00	42.1	42.2	0.10
4F	IN	1186	Doak Fish And Wildlife Area	41.372839	-87.253449	28.9	28.9	28.9	0.00	29.5	29.4	-0.10
4F	Local	1981600	Murphy Park	41.644166	-88.081388	42.8	42.9	40.8	-2.10	43.6	41.8	-1.80
4F	Local	1991532	Chikaming Township Park	41.837500	-86.651111	41	41.1	41.1	0.00	41.6	41.6	0.00
4F	Local	1981598	Village Park	41.640555	-88.107500	41	41.1	39.3	-1.80	41.7	40.5	-1.20
4F	Local	1981597	Arlington Park	41.650000	-88.088888	41.2	41.3	40.3	-1.00	42.1	41.5	-0.60
4F	Local	1981596	Meadowalk Park	41.665277	-88.078055	40.7	40.8	40.7	-0.10	41.7	41.9	0.20
4F	Local	1981595	Sippel Memorial Field	41.344444	-87.626111	39.2	39.3	39.3	0.00	39.9	39.8	-0.10
4F	Local	1981594	Depot Park	41.343611	-87.630555	39.1	39.2	39.2	0.00	39.8	39.8	0.00
4F	Local	1981593	Womens Welfare Park	41.345000	-87.630555	39.2	39.2	39.2	0.00	39.8	39.8	0.00
4F	Local	1981592	Lions Park	41.346666	-87.632222	39.2	39.2	39.2	0.00	39.9	39.8	-0.10
4F	Local	1981602	Yangas Park	41.637500	-87.913611	47.8	47.9	47.1	-0.80	48.3	47.5	-0.80
4F	IL	16	Gebhard Woods State Park	41.357333	-88.435129	35.5	35.6	34	-1.60	35.9	34.3	-1.60
4F	Local	1890702	Fletcher Park	41.543369	-87.463095	42.6	42.5	44.2	1.70	42.5	43.9	1.40
4F	IN	1049	Koontz Lake Wetland Conservation Area	41.420550	-86.472956	28.9	28.9	28.8	-0.10	29.4	29.1	-0.30
4F	IN	1048	Koontz Lake Public Access Site	41.408230	-86.465365	29	29.1	29	-0.10	29.6	29.4	-0.20
4F	IN	1000	Kankakee River Swampland	41.240691	-87.217649	27.8	27.8	27.8	0.00	28.4	28.3	-0.10
4F	IL	94	Fox River	41.356052	-88.808316	32.4	32.5	30.3	-2.20	32.9	30.4	-2.50
4F	IL	85	Milks Grove State Fish and Wildlife Area	40.928132	-88.039978	37.4	37.5	37.5	0.00	38.2	38.2	0.00
4F	IL	83	Old Plank Road State Trail	41.498979	-87.661167	43	43.1	43.1	0.00	43.7	43.7	0.00
4F	Local	1989469	Lakeside Inn Historical Marker	41.842777	-86.679166	40.3	40.5	40.4	-0.10	41	41	0.00
4F	IL	41	William G. Stratton State Park	41.355232	-88.418722	34	34.1	32.5	-1.60	34.5	32.7	-1.80
4F	Local	1990803	Watkins Memorial Park	41.795833	-86.618611	42.8	42.9	43	0.10	43.4	43.7	0.30
4F	IL	104	Wolf Road Prairie	41.836963	-87.904080	49.6	49.6	49.6	0.00	50.5	50.5	0.00
4F	IL	93	Burnham Greenway	41.664849	-87.539906	39.7	39.9	39.5	-0.40	40.3	39.4	-0.90
4F	IL	49	Clifton State Habitat Area	40.940917	-87.897566	39.4	39.5	39.5	0.00	40.1	40.2	0.10
4F	IL	37	Sandy Ford State Natural Area	41.196974	-88.896707	30.5	30.6	25.9	-4.70	30.8	25.2	-5.60
4F	IL	30	Mitchell's Grove State Natural Area	41.377583	-89.085631	31.4	31.5	29.9	-1.60	32.1	30.6	-1.50
4F	Local	1991567	New Buffalo Public Beach	41.801111	-86.748333	42.9	43.1	43.2	0.10	43.5	43.8	0.30
4F	IN	1173	Cedar Lake Public Access Site	41.384362	-87.430788	32.4	32.4	32.4	0.00	33.1	33	-0.10
4F	IL	46	Channahon State Park	41.424125	-88.227868	37.1	37.1	36.7	-0.40	37.8	37.3	-0.50
4F	Local	1886184	Stevenson Park	41.882530	-87.871449	52.4	52.4	52.4	0.00	53.2	53.2	0.00
4F	Local	1890704	Kennedy Park	41.572258	-87.451428	43.8	43.8	42.6	-1.20	43.8	42.1	-1.70
4F	Local	1886359	Apollo Park	41.665311	-87.727828	47.5	47.6	47.7	0.10	48	47.9	-0.10
4F	Local	1886358	Anderson Little League Field	41.679200	-87.722828	45.6	45.6	46.9	1.30	46.2	47.1	0.90
4F	Local	1886277	Central Park	41.658645	-87.677826	45.8	45.9	45.3	-0.60	46.3	45.4	-0.90
4F	Local	1886194	Whitman Park	41.567257	-87.573098	43.1	43.1	45.6	2.50	43.1	45.4	2.30
4F	Local	1886190	Vergne Way Park	41.613089	-87.742271	47.8	47.9	47.2	-0.70	48.4	47.4	-1.00
4F	Local	1886361	Barnes Park	41.678644	-87.729495	45.8	45.9	46.9	1.00	46.4	47	0.60
4F	Local	1886185	Stone Hollow Park	41.566701	-87.688935	46.7	46.8	45.3	-1.50	47.2	45.8	-1.40
4F	Local	1886362	Ketelaar Tot Lot	41.667533	-87.716439	46.2	46.2	47.5	1.30	46.7	48	1.30
4F	Local	1886183	Spirit Trail Park	41.510034	-87.698934	42.4	42.6	42.6	0.00	43.2	43.1	-0.10

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	1886181	Rotary Park	41.545868	-87.533097	40.9	40.8	41.8	1.00	40.9	42	1.10
4F	Local	1886178	Pinehurst Park	41.535034	-87.656156	44.3	44.4	44.4	0.00	44.9	45.2	0.30
4F	Local	1886177	Penney Park	41.680588	-87.784774	49.7	49.8	50.2	0.40	50.2	50.2	0.00
4F	Local	1886175	Papoose Park	41.586423	-87.611433	44	44	47.2	3.20	44.3	47.1	2.80
4F	Local	1886174	Oakley Playlot	41.561424	-87.552820	42.8	42.9	45.7	2.80	42.8	45.4	2.60
4F	Local	1886170	North End Park	41.536701	-87.646711	44.2	44.2	44.3	0.10	44.8	45.1	0.30
4F	Local	1886187	Swanson Park	41.512256	-87.668933	43.3	43.4	43.4	0.00	44	44	0.00
4F	Local	1886905	Darien Community Park	41.757808	-87.956449	49.5	49.6	49.6	0.00	50.3	50.3	0.00
4F	Local	1887009	Oakwood Park	41.817530	-87.964228	47.3	47.4	47.5	0.10	48.2	48.3	0.10
4F	Local	1887008	Mary Egan Park	41.795030	-87.975617	47.6	47.7	47.7	0.00	48.4	48.6	0.20
4F	Local	1887007	Lebeck Park	41.793086	-87.978395	47.6	47.7	47.7	0.00	48.4	48.6	0.20
4F	Local	1887006	Kiwanis Park	41.798363	-87.984229	47.3	47.4	47.4	0.00	48.1	48.3	0.20
4F	Local	1887005	Bellerive Park	41.771975	-87.980061	48.5	48.6	49	0.40	49.2	50.3	1.10
4F	Local	1886929	Westfield Estates Park	41.885028	-88.148681	39.6	39.6	39.6	0.00	40.3	40.3	0.00
4F	Local	1886360	Aquatic Park	41.674477	-87.730606	46.1	46.2	46.8	0.60	46.8	47.1	0.30
4F	Local	1886907	Darien Sportsplex	41.753642	-87.955615	49.3	49.4	49.4	0.00	50.1	50.2	0.10
4F	Local	1886040	Jaycee Park	41.545590	-87.539486	40.8	40.8	41.4	0.60	40.8	41.7	0.90
4F	Local	1886904	Chartwell Park	41.882251	-88.152014	39.5	39.6	39.6	0.00	40.2	40.3	0.10
4F	Local	1886664	Wildwood Park	41.493090	-87.690878	41.9	42	42	0.00	42.6	42.6	0.00
4F	Local	1886367	Wilkins Park	41.658089	-87.731717	47.7	47.7	48.3	0.60	48.2	48.5	0.30
4F	Local	1886366	Ronnetree Park	41.660033	-87.728383	47.9	47.9	48.2	0.30	48.3	48.4	0.10
4F	Local	1886365	Progress Park	41.671700	-87.716439	45.7	45.8	47.4	1.60	46.3	47.7	1.40
4F	Local	1886364	Prairie View Park	41.672811	-87.727828	46.1	46.2	46.9	0.70	46.8	47.1	0.30
4F	Local	1886363	Lacrosse Tot Lot	41.661144	-87.740606	47.9	47.9	48.1	0.20	48.3	48.2	-0.10
4F	Local	1886922	Ty Warner Park	41.814752	-87.970895	47.1	47.1	47.1	0.00	47.9	48	0.10
4F	Local	1876890	Long Grove Forest Preserve	41.848917	-88.563691	38.9	39.1	39.1	0.00	39.6	39.8	0.20
4F	Local	1877462	Bristol Park	41.572533	-87.803939	48	48.1	47.1	-1.00	48.5	47.4	-1.10
4F	Local	1877401	Oak Park Swimming Pool	41.887809	-87.785613	48.2	48.2	48.2	0.00	49	49	0.00
4F	Local	1876956	Prairie Kame Forest Preserve	41.801695	-88.483410	41.2	41.2	41.3	0.10	41.8	42.1	0.30
4F	Local	1876952	Hannaford Woods Forest Preserve	41.794473	-88.443686	41.8	41.9	41.9	0.00	42.4	42.7	0.30
4F	Local	1876948	Elfstrom Stadium	41.880028	-88.282851	49.2	49.2	49.2	0.00	49.3	49.3	0.00
4F	Local	1876946	Culver Forest Preserve	41.771140	-88.389240	41	41.2	41.2	0.00	41.8	42.1	0.30
4F	Local	1886048	Marycrest Park	41.555867	-87.736992	46.3	46.4	45.3	-1.10	46.8	46	-0.80
4F	Local	1876944	Blackberry Farms Historic Site	41.765307	-88.390351	41.4	41.5	41.5	0.00	42	42.3	0.30
4F	Local	1877465	Memorial School Park	41.565589	-87.780605	47.6	47.7	46.6	-1.10	48.1	47	-1.10
4F	Local	1876793	Hazletine Park	41.910861	-88.310075	41.4	41.4	41.4	0.00	41.7	41.7	0.00
4F	Local	1876790	Burgess Field	41.896416	-88.320908	41.7	41.8	41.8	0.00	42.1	42.1	0.00
4F	Local	1866517	Momence Wetlands Nature Preserve	41.163645	-87.554201	38	38.1	38.1	0.00	38.8	38.7	-0.10
4F	Local	1866513	Kankakee River Nature Preserve	41.188365	-87.965047	39	39.1	39.1	0.00	39.8	39.7	-0.10
4F	Local	1866512	Iroquois Woods Nature Preserve	41.045032	-87.847817	40.3	40.5	40.5	0.00	41.1	41.1	0.00
4F	Local	1866511	Gooseberry Island Nature Preserve	41.064754	-87.817539	40.1	40.3	40.3	0.00	40.9	40.8	-0.10
4F	Local	1688413	Atten Park	41.841418	-88.143679	41.4	41.5	41.5	0.00	42.1	42.2	0.10
4F	Local	1876945	Blackberry Maples Forest Preserve	41.839472	-88.456188	40.6	40.7	40.7	0.00	41.2	41.4	0.20

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	1880958	Ferrell Field	41.710033	-87.715606	44.3	44.4	46.4	2.00	45.1	47.5	2.40
4F	Local	1887109	Cameno Real Park	41.613643	-87.857831	48.7	48.8	47.5	-1.30	49.2	47.8	-1.40
4F	Local	1886039	Illinois Park	41.503368	-87.679489	42.5	42.6	42.6	0.00	43.3	43.2	-0.10
4F	Local	1886036	Harriet Park	41.601700	-87.738382	48.1	48.2	46.7	-1.50	48.7	46.8	-1.90
4F	Local	1886034	Fireman's Park	41.535590	-87.638933	43.9	44	44.1	0.10	44.6	44.8	0.20
4F	Local	1885996	Don Burns Park	41.584756	-87.739771	48.2	48.3	46.5	-1.80	48.7	46.8	-1.90
4F	Local	1885994	Commissioners Park	41.537256	-87.649489	44.3	44.3	44.4	0.10	44.9	45.1	0.20
4F	Local	1885993	Columbus Manor Park	41.714477	-87.768108	47.1	47.2	49.7	2.50	47.9	49.8	1.90
4F	Local	1877463	Centennial Park	41.586700	-87.804217	48.7	48.8	47.9	-0.90	49.2	48.3	-0.90
4F	Local	1880961	Mary's Circle	41.708089	-87.714217	44.3	44.4	46.5	2.10	45.1	47.6	2.50
4F	Local	1877464	Kiwanis Park	41.571699	-87.827273	48	48.1	47.9	-0.20	48.5	48.4	-0.10
4F	Local	1878039	Guthrie Park	41.826698	-87.820335	50.2	50.4	50.7	0.30	51.5	52.5	1.00
4F	Local	1878038	Blythe Park	41.836142	-87.808668	49.6	49.7	49.5	-0.20	50.5	50.7	0.20
4F	Local	1878035	Parkholme	41.856143	-87.752556	47.4	47.5	47	-0.50	48.2	47.7	-0.50
4F	Local	1878034	Drexel Park	41.826976	-87.760333	56.2	56.4	56	-0.40	56.9	56.4	-0.50
4F	Local	1877467	Volunteer Park	41.572255	-87.815884	48	48.1	47.6	-0.50	48.5	48	-0.50
4F	Local	1877466	Ron Centanni Park	41.576699	-87.822829	48.6	48.7	48.1	-0.60	49.1	48.5	-0.60
4F	Local	1886044	Landeen Park	41.513923	-87.649211	43.6	43.7	43.7	0.00	44.4	44.3	-0.10
4F	Local	1880965	O'Malley Quadrangle	41.707533	-87.713106	44.3	44.4	46.5	2.10	45.1	47.6	2.50
4F	Local	1887896	Indian Trail Park	41.510589	-87.803382	43.8	43.9	43.8	-0.10	44.5	44.4	-0.10
4F	Local	1888240	Mound Street Park	41.461706	-87.051140	34.9	35	37.7	2.70	35.2	38	2.80
4F	Local	1887903	Crete Park	41.447256	-87.632542	41.8	41.8	41.8	0.00	42.5	42.5	0.00
4F	Local	1887902	Firemens Park	41.421145	-87.738655	43.3	43.4	43.4	0.00	44.1	44.1	0.00
4F	Local	1887901	West Shore Park	41.516697	-88.204229	42.7	42.8	43	0.20	43.2	43.2	0.00
4F	Local	1887900	Village Green Park	41.606974	-88.205620	38.3	38.3	33.9	-4.40	38.5	34.5	-4.00
4F	Local	1887899	Shorewood Park	41.509752	-88.201451	43.4	43.5	42	-1.50	43.8	42.2	-1.60
4F	Local	1887809	Sand Ridge Savanna Nature Preserve	41.255587	-88.165057	37.9	38	38	0.00	38.6	38.6	0.00
4F	Local	1887897	Ottawa Park	41.606974	-88.197008	38.9	38.9	34.4	-4.50	39.1	35.1	-4.00
4F	Local	1888336	Tower Park	41.477817	-87.058363	35.3	35.3	36.9	1.60	35.5	37.2	1.70
4F	Local	1887895	Country West Park	41.526419	-88.213396	42.5	42.6	44.9	2.30	43	45.2	2.20
4F	Local	1887894	Ca Crest Park	41.529197	-88.208118	42.7	42.8	45	2.20	43.1	45.4	2.30
4F	Local	1887893	Theodore Marsh County Forest Preserve	41.554197	-88.143394	43.7	43.8	45.8	2.00	44.3	46.1	1.80
4F	Local	1887882	Haines Wayside Park	41.516976	-87.968665	44.2	44.2	43.4	-0.80	44.8	43.9	-0.90
4F	Local	1887881	Corcoran Park	41.518642	-87.974499	44.3	44.4	43.5	-0.90	44.9	44	-0.90
4F	Local	1887811	Wilmington Shrub Prairie Nature Preserve	41.276698	-88.166169	37.9	38	38	0.00	38.6	38.6	0.00
4F	Local	1887044	Bill Young Park	41.612254	-87.867831	49.2	49.2	47.6	-1.60	49.6	47.9	-1.70
4F	Local	1887898	Renwick Community Park Complex	41.595863	-88.213675	39	39.1	34.2	-4.90	39.2	34.8	-4.40
4F	Local	1889541	Good Shepherd Episcopal Church	41.631424	-87.483097	41.9	42	41.8	-0.20	42.2	41.7	-0.50
4F	Local	1866493	Myer Woods Nature Preserve	41.351424	-89.345922	29.4	29.5	26.2	-3.30	29.8	26.9	-2.90
4F	Local	1890701	Onehundredthirtyseventh Avenue Park	41.368646	-87.423091	32.1	32.2	32.3	0.10	32.9	32.8	-0.10
4F	Local	1889858	Glen Park Optimist Club Ball Park	41.548092	-87.323648	40.9	40.9	43.4	2.50	41	43.5	2.50
4F	Local	1889856	Norton Park	41.588925	-87.349482	43.2	43.2	43.5	0.30	43.2	43.5	0.30
4F	Local	1889854	Gateway Park	41.604480	-87.337538	36.5	36.6	37.5	0.90	36.9	37.9	1.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	1889707	Glendale Park	41.602257	-87.523653	42.5	42.5	41.2	-1.30	42.5	40.5	-2.00
4F	Local	1889706	Conkey Park	41.601979	-87.509486	42.8	42.8	42	-0.80	42.9	41.5	-1.40
4F	Local	1888334	Foundation Meadows	41.495872	-87.063919	37.8	37.8	38.3	0.50	38	38.4	0.40
4F	Local	1889701	Turner Park	41.620868	-87.511709	43.1	43.2	43.8	0.60	43.4	43.7	0.30
4F	Local	1888335	Ogden Gardens	41.478928	-87.066419	35.6	35.6	37.4	1.80	35.8	37.6	1.80
4F	Local	1889538	Indiana Harbor Catholic Elementary School	41.641702	-87.443930	43.2	43.2	44.9	1.70	43.3	45.5	2.20
4F	Local	1889536	Nunez Park	41.646980	-87.446985	40.9	41	43.8	2.80	41.1	44.5	3.40
4F	Local	1889534	City Hall Park	41.631980	-87.479208	41.7	41.8	42	0.20	42	42	0.00
4F	Local	1888968	Pioneer Park	41.883919	-87.944508	50.5	50.6	50.6	0.00	51.4	51.4	0.00
4F	Local	1888338	Westside Park	41.464761	-87.084474	35.8	35.8	38.8	3.00	35.9	39	3.10
4F	Local	1888337	Two Hundred East Park	41.482539	-87.030585	35.5	35.5	35.9	0.40	35.7	35.9	0.20
4F	Local	1887808	Romeoville Prairie Nature Preserve	41.647252	-88.070061	43.2	43.3	41.3	-2.00	44	42.1	-1.90
4F	Local	1889702	G R Clark Athletic Field	41.672813	-87.506432	36.4	36.5	38.3	1.80	37.1	38.7	1.60
4F	Local	1887755	Central Park	41.721699	-87.736718	44.8	44.9	46.6	1.70	45.7	48.1	2.40
4F	Local	1887771	Hickory Glen Park	41.540868	-87.588098	42.7	42.7	42.1	-0.60	42.9	42.6	-0.30
4F	Local	1887770	Heritage Park	41.620589	-87.751439	47.9	48.1	47.6	-0.50	48.6	47.9	-0.70
4F	Local	1887769	Helen Park	41.606421	-87.839219	48.7	48.8	47.5	-1.30	49.2	47.8	-1.40
4F	Local	1887768	Harnew Park	41.726143	-87.771997	48.1	48.2	51.1	2.90	48.9	51.5	2.60
4F	Local	1887767	Gaddis Park	41.725033	-87.729774	44.7	44.8	45.9	1.10	45.5	47.1	1.60
4F	Local	1887766	Fitzgerald Park	41.739476	-87.785054	53.9	54	55	1.00	54.4	55.4	1.00
4F	Local	1887810	Vermont Cemetery Prairie Nature Preserve	41.697529	-88.234234	38.1	38.2	38.2	0.00	38.7	38.8	0.10
4F	Local	1887764	Colonial Park	41.639199	-87.848664	47.9	48	47.8	-0.20	48.6	48.3	-0.30
4F	Local	1887776	Park Hill Park	41.604199	-87.842552	48.9	49	47.7	-1.30	49.4	48	-1.40
4F	Local	1887115	Worthbrook Park	41.730032	-87.777831	49.6	49.7	52.1	2.40	50.3	52.4	2.10
4F	Local	1887114	Saint Boniface Park	41.594755	-87.783383	49	49.1	47.8	-1.30	49.4	48	-1.40
4F	Local	1887113	Pulte Park	41.622254	-87.839775	48.6	48.6	47.7	-0.90	49.1	48.1	-1.00
4F	Local	1887112	Orland Tract Forest Preserve	41.575588	-87.861996	48.5	48.6	47.4	-1.20	49.1	48	-1.10
4F	Local	1887111	Friendly Oaks Park	41.596700	-87.751438	48.4	48.5	46.8	-1.70	48.9	47	-1.90
4F	Local	1887110	Dogwood Park	41.617810	-87.836163	48.8	48.9	47.6	-1.30	49.3	48	-1.30
4F	Local	1890703	Jaycee Park	41.530869	-87.454761	41.1	41.1	40.9	-0.20	41	41	0.00
4F	Local	1887765	Erfert Park	41.555035	-87.541708	42	42	44.5	2.50	42	44.3	2.30
4F	Local	1887798	Gottschlag Park	41.528642	-88.061446	44	44.1	43.6	-0.50	44.6	44	-0.60
4F	Local	1887807	O'Hara Woods Nature Preserve	41.644474	-88.105339	40.5	40.6	39.3	-1.30	41.3	40.5	-0.80
4F	Local	1887806	Messenger Woods Nature Preserve	41.582253	-87.965333	45	45.1	44.3	-0.80	45.7	44.6	-1.10
4F	Local	1887805	Long Run Seep Nature Preserve	41.623641	-88.048948	45.3	45.3	44.8	-0.50	45.6	45.5	-0.10
4F	Local	1887804	Lockport Prairie Nature Preserve	41.582530	-88.077837	45.8	45.9	46	0.10	46.3	46.6	0.30
4F	Local	1887803	Lake Renwick Heron Rookery Nature Preserve	41.600863	-88.189786	39.4	39.4	35.4	-4.00	39.7	36.6	-3.10
4F	Local	1887802	Hitts Siding Prairie Nature Preserve	41.300031	-88.172280	38.1	38.2	38.3	0.10	38.9	38.9	0.00
4F	Local	1887801	Hickory Creek Barrens Nature Preserve	41.516976	-87.914775	44.5	44.7	44.3	-0.40	45.3	44.8	-0.50
4F	Local	1887773	Liberty Park	41.612255	-87.834497	48.6	48.7	47.4	-1.30	49.2	47.8	-1.40
4F	Local	1887799	Braidwood Dunes and Savanna Nature Preserve	41.254476	-88.197837	37.9	38	38	0.00	38.7	38.6	-0.10
4F	Local	1887774	Lions Park	41.738920	-87.869501	50	50.1	50.1	0.00	50.7	50.8	0.10
4F	Local	1887797	Desmond Field	41.535586	-88.063391	44.8	44.9	43.7	-1.20	45.4	44.1	-1.30

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	1887796	Crest Hill Community Park	41.558086	-88.108671	45.2	45.2	45.2	0.00	45.6	45.4	-0.20
4F	Local	1887795	College View Park	41.614752	-88.087560	43.5	43.6	42.3	-1.30	44.2	43	-1.20
4F	Local	1887780	Discovery Park	41.575587	-87.898664	47.1	47.3	46.2	-1.10	47.7	46.5	-1.20
4F	Local	1887778	Wierzba Park	41.748921	-87.803666	61.1	61.1	61.1	0.00	61.2	61.3	0.10
4F	Local	1887777	Village Square Park	41.612532	-87.841719	48.7	48.8	47.5	-1.30	49.2	47.9	-1.30
4F	Local	1887108	Centennial Park	41.721977	-87.786164	50.2	50.2	51.3	1.10	50.8	51.6	0.80
4F	Local	1887800	Grant Creek Prairie Nature Preserve	41.366142	-88.189504	40.7	40.7	40.7	0.00	41.4	41.4	0.00
4F	Local	1622098	Brook Crossings Park	41.712252	-88.167843	40.3	40.4	40.4	0.00	40.8	41	0.20
4F	Local	1622196	Lambs Woods County Forest Preserve	41.570864	-88.029780	46.4	46.5	44.3	-2.20	46.9	44.6	-2.30
4F	Local	1622123	Erickson Park	41.698919	-88.078395	40.6	40.7	40.9	0.20	41.3	41.9	0.60
4F	Local	1622122	Erickson Park	41.412809	-88.114502	39.7	39.7	39.7	0.00	40.4	40.3	-0.10
4F	Local	1622117	Culver Park	41.622253	-87.951445	46.3	46.4	47.3	0.90	47	47.8	0.80
4F	Local	1622112	College Park	41.506419	-88.164783	45.1	45.2	41.2	-4.00	45.4	41.5	-3.90
4F	Local	1622108	Channahon Parkway State Park	41.424197	-88.227562	37.1	37.2	36.7	-0.50	37.9	37.4	-0.50
4F	Local	1622126	Farmington Park	41.723641	-88.115897	41.5	41.7	41.7	0.00	42.2	42.4	0.20
4F	Local	1622105	Central Park	41.438086	-88.216728	38	38.1	37	-1.10	38.7	37.6	-1.10
4F	Local	1622129	Forest Park	41.551975	-88.051447	46.2	46.3	44.3	-2.00	46.7	44.5	-2.20
4F	Local	1622097	Bonnie Brae Park	41.599753	-88.041447	46.4	46.4	45.8	-0.60	46.9	46.6	-0.30
4F	Local	1622095	Bluff Park	41.435030	-88.201450	38.9	38.9	38.5	-0.40	39.6	39.2	-0.40
4F	Local	1622094	Blackhawk Pond Park	41.702808	-88.091729	40.1	40.2	40.3	0.10	40.8	41.1	0.30
4F	Local	1622093	Birdheaven Park	41.530864	-88.007278	44.4	44.6	44.7	0.10	45.2	45.2	0.00
4F	Local	1622088	Atchley Park	41.635863	-88.097006	42.5	42.7	40.1	-2.60	43.2	41.3	-1.90
4F	Local	1622085	A F Hill Park	41.554753	-88.065058	46.8	46.9	44.2	-2.70	47.3	44.4	-2.90
4F	Local	1611808	Prairie Park	41.633366	-87.822830	47.7	47.8	47.5	-0.30	48.4	48	-0.40
4F	Local	1622106	Central Park	41.693919	-88.060617	41.4	41.5	41.8	0.30	42.3	42.9	0.60
4F	Local	1622161	Indian Boundary South Park	41.526978	-87.803105	44.4	44.5	44.4	-0.10	45.1	44.9	-0.20
4F	Local	1605217	Rotary Park	41.911139	-88.297019	41.9	41.9	41.9	0.00	42.3	42.3	0.00
4F	Local	1622193	Knoch Knolls Commons Park	41.714752	-88.142565	40.5	40.6	40.6	0.00	41	41.2	0.20
4F	Local	1622192	Kingston Park	41.524200	-87.807827	44.3	44.4	44.3	-0.10	45	44.8	-0.20
4F	Local	1622191	Keepataw County Forest Preserve	41.676697	-88.035060	42.7	42.8	42.5	-0.30	43.7	43.3	-0.40
4F	Local	1622183	Jaycee Park	41.646141	-88.098117	41	41	39.8	-1.20	41.7	41	-0.70
4F	Local	1622182	Jaycee Park	41.690863	-88.089784	39.6	39.7	39.9	0.20	40.3	40.8	0.50
4F	Local	1622125	Farmington Commons Park	41.716419	-88.116175	40.7	40.9	40.9	0.00	41.4	41.6	0.20
4F	Local	1622176	Inwood Park	41.519475	-88.163116	44.5	44.6	42.4	-2.20	44.9	42.7	-2.20
4F	Local	1606870	Grundy County Fairground	41.409753	-88.420901	38.6	38.7	38.8	0.10	38.9	39	0.10
4F	Local	1622160	Indian Boundary North Park	41.531422	-87.802827	44.6	44.7	44.5	-0.20	45.3	45.1	-0.20
4F	Local	1622155	Hunter Prairie Park	41.514200	-87.795604	43.8	44	43.9	-0.10	44.6	44.5	-0.10
4F	Local	1622152	Hoffman Park	41.521422	-87.808382	44.2	44.3	44.2	-0.10	44.9	44.8	-0.10
4F	Local	1622150	Hidden Lakes Park	41.711974	-88.090063	41	41.1	41.1	0.00	41.7	41.9	0.20
4F	Local	1622145	Hammel Woods County Forest Preserve	41.531141	-88.193118	42.9	43	44.6	1.60	43.4	44.8	1.40
4F	Local	1622144	Haley Park	41.548365	-87.924220	45.3	45.4	45.8	0.40	45.9	46.3	0.40
4F	Local	1622130	Forsythe Woods County Forest Preserve	41.304198	-88.125334	39.3	39.3	39.4	0.10	40	40	0.00
4F	Local	1622178	Ivanhoe Park	41.709474	-88.062562	42	42	42.2	0.20	42.7	43.3	0.60

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	1605229	Aurora West County Forest Preserve	41.784473	-88.394518	41.2	41.3	41.3	0.00	41.8	42.2	0.40
4F	Local	1605262	Waa Kee Sha Park	41.630863	-88.348958	33.5	33.6	33.4	-0.20	34.1	34	-0.10
4F	Local	1605258	Violet Patch Park	41.700862	-88.349237	39.4	39.5	39.5	0.00	40.1	40.2	0.10
4F	Local	1605257	Civic Center Park	41.703085	-88.345904	39.6	39.7	39.7	0.00	40.2	40.4	0.20
4F	Local	1605253	Winrock Park	41.715029	-88.324237	40.3	40.5	40.5	0.00	41	41.2	0.20
4F	Local	1605250	Lebanon Park	41.736973	-88.318681	41.1	41.2	41.2	0.00	41.8	42	0.20
4F	Local	1605248	Porter Park	41.729196	-88.335904	40.6	40.8	40.8	0.00	41.3	41.6	0.30
4F	Local	1607514	William Stratton State Access Area	41.355309	-88.417845	33.9	34	32.4	-1.60	34.3	32.5	-1.80
4F	Local	1605234	Bliss Woods County Forest Preserve	41.785306	-88.440908	42.9	43	43	0.00	43.4	43.7	0.30
4F	Local	1605265	Jericho Lake Park	41.738085	-88.386739	40.5	40.7	40.7	0.00	41.1	41.4	0.30
4F	Local	1605227	Pioneer Park	41.764473	-88.389240	41.4	41.5	41.5	0.00	42	42.3	0.30
4F	Local	1605225	Island Park	41.884194	-88.302018	43.9	43.9	44	0.10	44.2	44.2	0.00
4F	Local	1605224	Old Mill Park	41.887528	-88.301463	44.3	44.3	44.3	0.00	44.5	44.5	0.00
4F	Local	1605222	Bennett Park	41.891416	-88.300074	44	44	44	0.00	44.2	44.3	0.10
4F	Local	1605221	Elm Park	41.896972	-88.295630	42.7	42.7	42.7	0.00	43	43.1	0.10
4F	Local	1605220	Riverside Park	41.897528	-88.300630	42.3	42.4	42.4	0.00	42.6	42.7	0.10
4F	Local	1688420	Cress Creek Park	41.792251	-88.161734	44.2	44.3	44.3	0.00	44.9	45.1	0.20
4F	Local	1605247	Pine Knoll Park	41.742807	-88.360072	40.6	40.8	40.8	0.00	41.3	41.6	0.30
4F	Local	1605607	Glaeser Park	41.489478	-87.726712	43.2	43.3	43.3	0.00	44	43.9	-0.10
4F	Local	1622197	Lamers Park	41.606698	-87.919777	47.5	47.5	46.2	-1.30	47.9	47	-0.90
4F	Local	1606629	John Moore Park	41.480030	-88.481181	38.2	38.3	30.6	-7.70	38.6	30.9	-7.70
4F	Local	1606219	Coleman Park	41.177257	-89.212863	26.1	26.3	29.8	3.50	26.6	29.3	2.70
4F	Local	1606168	Katchewan Park	41.091977	-88.826184	25.5	25.6	20.5	-5.10	26	20.6	-5.40
4F	Local	1606162	City Park	41.123366	-88.832852	26.8	27	20.6	-6.40	27.3	20.6	-6.70
4F	Local	1606159	Bodznick Park	41.119755	-88.818129	26.1	26.2	20.6	-5.60	26.6	20.6	-6.00
4F	Local	1606158	Central Park	41.122811	-88.818684	26.3	26.4	20.7	-5.70	26.9	20.7	-6.20
4F	Local	1605263	Harris County Forest Preserve	41.615307	-88.457016	35.7	35.8	35.7	-0.10	36.6	36.5	-0.10
4F	Local	1605833	Miller Memorial Park	40.998087	-88.519780	31.2	31.3	31.1	-0.20	32	31.7	-0.30
4F	Local	1605264	Baker County Forest Preserve	41.515585	-88.312566	41.5	41.7	40.6	-1.10	42	41.1	-0.90
4F	Local	1605405	Nelson Lake County Forest Preserve	41.837806	-88.368963	41.7	41.8	41.8	0.00	42.2	42.5	0.30
4F	Local	1605385	Campton Hills Park	41.910583	-88.369799	38.5	38.5	38.5	0.00	39	39.1	0.10
4F	Local	1605330	Snyder Grove Park	41.521421	-89.088972	30.1	30.2	30	-0.20	30.8	30.9	0.10
4F	Local	1605304	Foli Park	41.654752	-88.528963	32.9	33.1	33.1	0.00	33.6	33.7	0.10
4F	Local	1605272	Lyon County Forest Preserve	41.640863	-88.414238	36.5	36.6	36.5	-0.10	37.3	37.3	0.00
4F	Local	1605271	Saw Wee Kee Park	41.663918	-88.402016	37.6	37.8	37.7	-0.10	38.4	38.4	0.00
4F	Local	1606874	Heidecke State Fish and Wildlife Area	41.366698	-88.335898	31.6	31.7	31	-0.70	32.3	31.4	-0.90
4F	Local	1606148	Spring Lake Park	41.133922	-88.864519	28.8	28.9	20.8	-8.10	29.2	20.5	-8.70
4F	Local	1622692	Hirsch Park	41.569200	-87.778938	47.9	48	46.7	-1.30	48.3	47	-1.30
4F	Local	1622194	Knoch Knolls Park	41.711419	-88.138953	40.1	40.2	40.2	0.00	40.7	40.9	0.20
4F	Local	1622723	Martin Park	41.728365	-87.814221	57	57.1	58.4	1.30	57.4	58.6	1.20
4F	Local	1622716	Lancaster Woods Park	41.583922	-87.771161	48.5	48.6	46.9	-1.70	49	47.3	-1.70
4F	Local	1622715	Lagoon Park	41.601144	-87.754216	48.1	48.2	46.8	-1.40	48.6	46.9	-1.70
4F	Local	1622713	Krasowski Park	41.701976	-87.813387	52.9	53	54	1.00	53.4	54	0.60

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	1622709	Kelly Park	41.588088	-87.843107	48.7	48.7	47.5	-1.20	49.1	47.8	-1.30
4F	Local	1622726	McCarthy Park	41.584199	-87.811440	48.6	48.7	48	-0.70	49.1	48.3	-0.80
4F	Local	1622694	Homerding Park	41.680032	-87.789497	49.9	49.9	50.9	1.00	50.3	50.9	0.60
4F	Local	1622730	Meidell Park	41.524479	-87.659211	43.9	44	44	0.00	44.6	44.6	0.00
4F	Local	1622685	Grove Park	41.583366	-87.811995	48.6	48.7	47.9	-0.80	49.1	48.3	-0.80
4F	Local	1622680	Richard M Gory Park	41.593088	-87.825607	48.8	48.8	47.7	-1.10	49.2	48	-1.20
4F	Local	1622679	Golden Gate Park	41.658367	-87.610879	47.6	47.7	44.4	-3.30	48.2	44.2	-4.00
4F	Local	1622677	German Park	41.594477	-87.810051	48.9	49	48.3	-0.70	49.3	48.5	-0.80
4F	Local	1622676	Freedom Park	41.702810	-87.774219	48.1	48.2	48.9	0.70	48.7	49	0.30
4F	Local	1622674	Founders Park	41.742810	-87.815332	58.3	58.4	58	-0.40	58.6	58.3	-0.30
4F	Local	1622672	Filson Park	41.591977	-87.799217	49	49.1	48.3	-0.80	49.5	48.6	-0.90
4F	Local	1622708	Jesk Park	41.609200	-87.776439	48.1	48.2	47.9	-0.30	48.7	48.3	-0.40
4F	Local	1622746	Newcastle Park	41.744476	-87.791165	58.5	58.5	58.7	0.20	58.9	59	0.10
4F	Local	1622766	Rauhoff Park	41.569200	-87.788383	47.8	47.9	46.7	-1.20	48.3	47.1	-1.20
4F	Local	1622763	Pottawattomie Park	41.568366	-87.840051	47.6	47.7	47.8	0.10	48.2	48.3	0.10
4F	Local	1622761	Petkiewitz Park	41.729476	-87.833111	56.9	56.9	55.6	-1.30	57.1	56	-1.10
4F	Local	1622760	Peaks Park	41.696699	-87.787275	49.1	49.2	49.5	0.30	49.8	49.8	0.00
4F	Local	1622758	Parkview Park	41.648365	-87.831720	48.1	48.2	48.1	-0.10	48.8	48.7	-0.10
4F	Local	1622757	Park Number 439	41.680311	-87.649214	47	47.2	46.3	-0.90	47.5	46.1	-1.40
4F	Local	1622724	McArthur Park	41.740032	-87.771720	50	50.1	52.6	2.50	50.7	53.5	2.80
4F	Local	1622752	Osborne Park	41.703365	-87.829221	52.8	52.9	53.7	0.80	53.4	53.9	0.50
4F	Local	1622662	Convent Park	41.620866	-87.762272	48	48.1	47.9	-0.20	48.6	48.3	-0.30
4F	Local	1622745	Navajo Park	41.667255	-87.786719	48.3	48.4	51	2.60	49	51.1	2.10
4F	Local	1622740	Moore Park	41.693643	-87.794219	49.8	49.9	50.3	0.40	50.4	50.5	0.10
4F	Local	1622739	Michael Park	41.700032	-87.810331	52.5	52.6	53.2	0.60	53	53.3	0.30
4F	Local	1622737	Merchants Park	41.556423	-87.670601	45.9	45.9	44.8	-1.10	46.3	45.4	-0.90
4F	Local	1622735	Memorial Park	41.579755	-87.781994	48.2	48.3	46.9	-1.40	48.7	47.2	-1.50
4F	Local	1622734	Memorial Park	41.672810	-87.808108	49.5	49.6	50.2	0.60	50.1	50.4	0.30
4F	Local	1622733	Memorial Park	41.708088	-87.767830	47	47.1	49	1.90	47.7	49.1	1.40
4F	Local	1622753	Palmer Park	41.666977	-87.799497	49.2	49.3	49.9	0.60	49.8	50.1	0.30
4F	Local	1622244	Rotary Park	41.698641	-88.049783	42	42.1	42.3	0.20	42.9	43.5	0.60
4F	Local	1622287	Winston Woods Park	41.721697	-88.061729	42.9	43	43.1	0.10	43.6	43.9	0.30
4F	Local	1622286	Willowview Park	41.532254	-87.895608	45.8	45.9	45.5	-0.40	46.5	46.1	-0.40
4F	Local	1622281	Weigand Riverfront Park	41.722252	-88.132842	41.2	41.4	41.4	0.00	41.8	42.1	0.30
4F	Local	1622278	Veteran Woods County Forest Preserve	41.669197	-88.059783	41.6	41.8	41.4	-0.40	42.8	42.4	-0.40
4F	Local	1622270	Sunset Park	41.633363	-88.099228	42.6	42.7	40.1	-2.60	43.3	41.2	-2.10
4F	Local	1622266	Sugar Creek County Forest Preserve	41.485586	-88.047278	42.5	42.6	42.3	-0.30	43.3	42.9	-0.40
4F	Local	1622668	El Morro Park	41.609200	-87.766717	48	48.1	47.4	-0.70	48.6	47.7	-0.90
4F	Local	1622246	Runyon County Forest Preserve	41.601142	-88.048114	46	46	45.8	-0.20	46.5	46.7	0.20
4F	Local	1622292	Zalor County Forest Preserve	41.495309	-88.025055	43.4	43.5	43.1	-0.40	44.2	43.7	-0.50
4F	Local	1622243	Rock Run County Forest Preserve	41.539752	-88.170617	43.3	43.4	45	1.60	43.9	45.3	1.40
4F	Local	1622229	Pathways Pond Park	41.703641	-88.086729	40.4	40.5	40.6	0.10	41.2	41.4	0.20
4F	Local	1622218	McKinley Woods County Forest Preserve	41.390031	-88.234784	37.4	37.5	37.4	-0.10	38.2	38.1	-0.10

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	1622216	Marquette Park	41.528364	-88.120337	46.3	46.3	43.3	-3.00	46.6	43.6	-3.00
4F	Local	1622211	Lower Spring Creek County Forest Preserve	41.546142	-88.039224	45.3	45.4	44.6	-0.80	45.9	45	-0.90
4F	Local	1622205	Lions Park	41.506698	-87.963109	43.4	43.4	43	-0.40	44.1	43.5	-0.60
4F	Local	1622203	Lincoln Meadows Park	41.505033	-87.856995	45.3	45.4	45.3	-0.10	46	45.9	-0.10
4F	Local	1622263	Springbrook Crossings Park	41.720585	-88.168121	41.3	41.4	41.4	0.00	41.9	42.1	0.20
4F	Local	1622642	Brown Park	41.669753	-88.004226	44.8	44.8	43.9	-0.90	45.3	45.2	-0.10
4F	Local	1605215	Langum Park	41.907250	-88.303408	41.4	41.5	41.5	0.00	41.8	41.8	0.00
4F	Local	1622660	Commissioners Park	41.590588	-87.817829	48.7	48.8	48	-0.80	49.2	48.3	-0.90
4F	Local	1622659	Commissioners Park	41.744476	-87.807554	61.6	61.6	61.7	0.10	61.6	61.9	0.30
4F	Local	1622658	Commissioners Park	41.696977	-87.764774	47.5	47.5	48.3	0.80	48.1	48.3	0.20
4F	Local	1622652	Central Park	41.607255	-87.753938	47.9	48	46.9	-1.10	48.5	47.2	-1.30
4F	Local	1622651	Centennial Park	41.653364	-88.010892	45.5	45.5	44	-1.50	45.9	44.8	-1.10
4F	Local	1622647	Cachey Park	41.609199	-87.822829	48.4	48.5	47.3	-1.20	48.9	47.6	-1.30
4F	Local	1622288	Wipfler Park	41.705586	-88.045895	42.4	42.5	42.8	0.30	43.3	44.1	0.80
4F	Local	1622643	Brown Park	41.621421	-87.869776	48.2	48.2	47.3	-0.90	48.7	47.7	-1.00
4F	Local	1622289	Woodlawn Park	41.510311	-87.798382	43.7	43.9	43.8	-0.10	44.4	44.3	-0.10
4F	Local	1622641	Brentwood Park	41.641699	-87.837553	47.9	48	47.9	-0.10	48.6	48.4	-0.20
4F	Local	1622639	Bettenhausen Park	41.592255	-87.805329	49	49.1	48.3	-0.80	49.4	48.6	-0.80
4F	Local	1622638	Beacon Hill Park	41.498368	-87.673100	42.5	42.6	42.6	0.00	43.3	43.2	-0.10
4F	Local	1622636	Bannes Park	41.590310	-87.819218	48.7	48.8	47.9	-0.90	49.1	48.2	-0.90
4F	Local	1622635	Austin View Park	41.667810	-87.767551	48.1	48.2	49.5	1.30	48.7	49.6	0.90
4F	Local	1622631	Alleymong Park	41.520034	-87.765603	44.6	44.7	44.7	0.00	45.3	45.2	-0.10
4F	Local	1622664	Corrine Deinert Park	41.576144	-87.828107	48.7	48.7	48.1	-0.60	49.1	48.5	-0.60
4F	Local	1622644	Buedingen Park	41.587810	-87.827829	48.6	48.7	47.6	-1.10	49.1	47.9	-1.20
4F	Local	401570	Hidden Lake Park	41.501981	-87.329203	40.4	40.3	39.4	-0.90	40.4	38.8	-1.60
4F	Local	401680	Haven Hollow Park	41.534204	-87.132254	39	39	40.5	1.50	39.2	40.8	1.60
4F	Local	401586	Thomds Centennial Park	41.611149	-87.052532	28.5	28.7	28.8	0.10	29.1	28.7	-0.40
4F	Local	401585	Coffee Creek Park	41.610038	-87.049198	28.5	28.6	28.8	0.20	29	28.7	-0.30
4F	Local	401584	Moraine Nature Preserve	41.540595	-87.017530	35.5	35.5	36.1	0.60	35.7	36.3	0.60
4F	Local	401583	Bicentennial Park	41.505594	-87.063086	38.9	39	39.8	0.80	39.1	39.8	0.70
4F	Local	401573	Four Winds Park	41.576147	-87.252258	37	37	37.7	0.70	37.5	38.2	0.70
4F	Local	401588	Indian Springs Park	41.618649	-87.080033	28.7	28.9	29.1	0.20	29.3	29	-0.30
4F	Local	401571	Johnson Park	41.563647	-87.289758	39.2	39.2	40.4	1.20	39.3	40.6	1.30
4F	Local	401589	Dogwood Park	41.595038	-87.079754	28.9	29	29.2	0.20	29.5	29.3	-0.20
4F	Local	401569	Robinson Park	41.524481	-87.307258	41.6	41.5	43.6	2.10	41.5	43.6	2.10
4F	Local	401568	Glenwood Park	41.512258	-87.309758	41.1	41.1	41.8	0.70	41.1	41.7	0.60
4F	Local	401567	Brookview Park	41.508925	-87.301980	40.8	40.8	41.2	0.40	40.8	41	0.20
4F	Local	401566	Hillman Park	41.542536	-87.288369	40.8	40.8	43.1	2.30	40.8	43.2	2.40
4F	Local	401542	Spencer Park	41.200314	-87.194473	27.1	27.2	27.2	0.00	27.8	27.6	-0.20
4F	Local	401541	Freedom Park	41.189759	-87.201140	27.3	27.4	27.4	0.00	27.9	27.8	-0.10
4F	Local	401501	Central Park	41.532258	-87.428649	41.8	41.7	42.4	0.70	41.8	42.4	0.60
4F	Local	401572	Twin Oaks Park	41.561425	-87.260869	38.4	38.4	39.4	1.00	38.6	39.7	1.10
4F	Local	401671	Pennsy Park	41.534759	-87.247535	40.5	40.6	42.9	2.30	40.6	43.1	2.50

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	1605219	Cambridge Park	41.901694	-88.284519	42.7	42.7	42.7	0.00	43.1	43.1	0.00
4F	Local	401678	Countryside Park	41.554759	-87.210312	38	38	39	1.00	38.3	39.4	1.10
4F	Local	401677	Miller Park	41.581425	-87.242535	37	37	37.6	0.60	37.6	38.2	0.60
4F	Local	401676	Mock Park	41.574481	-87.230591	36.9	37	37.6	0.60	37.5	38.2	0.70
4F	Local	401675	McAfee Park	41.546426	-87.228090	39.6	39.6	41.3	1.70	39.8	41.6	1.80
4F	Local	401674	Imagination Glen Park	41.588648	-87.140033	30.7	30.8	31	0.20	31.3	31.3	0.00
4F	Local	401587	Chesterton Park	41.607260	-87.058921	28.5	28.6	28.7	0.10	29	28.7	-0.30
4F	Local	401672	Woodland Park	41.591426	-87.185590	32.4	32.5	32.8	0.30	33.1	33.2	0.10
4F	Local	401498	Northwood Park	41.565869	-87.469484	42.4	42.4	42.9	0.50	42.4	42.4	0.00
4F	Local	401670	Perry Park	41.558370	-87.201979	37.3	37.4	38.3	0.90	37.8	38.7	0.90
4F	Local	401669	Olson Memorial Park	41.567537	-87.176145	35.6	35.7	36.2	0.50	36.2	36.7	0.50
4F	Local	401668	West Beach Recreation Area	41.621703	-87.208369	29.9	29.9	30.3	0.40	30.5	30.5	0.00
4F	Local	401610	Northgate Community Park	41.519202	-87.511151	39	39	39.5	0.50	39.1	39.3	0.20
4F	Local	401609	Bieker Woods Park	41.559479	-87.501985	43.2	43.1	45.5	2.40	43.1	45.1	2.00
4F	Local	401606	Shelby Community Park	41.195591	-87.345309	32.1	32.2	32.2	0.00	32.8	32.7	-0.10
4F	Local	401590	Lakewood Park	41.609204	-87.112255	28.5	28.7	28.9	0.20	29.1	28.9	-0.20
4F	Local	401673	Wolfe Park	41.566426	-87.218924	37	37.1	37.8	0.70	37.5	38.3	0.80
4F	Local	398442	Indiana Dunes National Lakeshore	41.641704	-87.041699	30.4	30.6	30.7	0.10	31	30.8	-0.20
4F	Local	401479	Dowling Park	41.575869	-87.454206	43.6	43.6	42.3	-1.30	43.7	41.8	-1.90
4F	Local	401475	Riverview Park	41.568092	-87.238368	37.2	37.3	38	0.70	37.7	38.5	0.80
4F	Local	401471	Edward Valve Park	41.635591	-87.486986	41.3	41.4	41.2	-0.20	41.6	41.1	-0.50
4F	Local	401465	Sunnyside Park	41.639202	-87.436152	46.9	46.9	47.7	0.80	47	48	1.00
4F	Local	401431	Motts Park	41.704484	-86.834472	39	39.2	39.1	-0.10	39.6	39.6	0.00
4F	Local	401379	Pheasant Hills Park	41.489479	-87.518928	36.1	36.1	36.2	0.10	36.7	36.6	-0.10
4F	Local	401500	Franklin Fields Park	41.527535	-87.427538	41.4	41.4	41.2	-0.20	41.3	41.1	-0.20
4F	Local	398481	Menominee State Wetlands	41.325043	-86.358340	28.5	28.5	28.5	0.00	29	28.9	-0.10
4F	Local	401482	Main Square Park	41.554758	-87.453928	42.7	42.7	44.9	2.20	42.7	44.5	1.80
4F	Local	398385	Whiting Park	41.682535	-87.486987	35.8	35.9	41.3	5.40	36.5	42.2	5.70
4F	Local	398307	Hoosier Prairie State Nature Preserve	41.520869	-87.454205	39.9	39.8	39.2	-0.60	39.8	39.1	-0.70
4F	Local	397978	Zilla Park	41.706983	-86.891418	39.2	39.4	39.4	0.00	39.8	39.8	0.00
4F	Local	397900	Wythougan Park	41.301708	-86.623069	27.2	27.2	27.1	-0.10	27.7	27.4	-0.30
4F	Local	397795	Wolf Lake Park	41.677813	-87.516154	38.1	38.2	38.7	0.50	38.8	39	0.20
4F	Local	397707	Winamac State Fish and Wildlife Area	41.116429	-86.617510	31.3	31.3	31.1	-0.20	31.3	30.5	-0.80
4F	IN	994	Lawrence Lake Public Access Site	41.297817	-86.339683	27.5	27.6	27.6	0.00	28	27.9	-0.10
4F	Local	399199	Jasper-Pulaski Nursery	41.158372	-86.901408	27	27.1	26.9	-0.20	27.7	27.4	-0.30
4F	Local	401489	Oak Ridge Prairie County Park	41.510036	-87.384759	41.1	41	40	-1.00	41	39.3	-1.70
4F	Local	401681	Hickory Park	41.561981	-87.213090	37.2	37.3	38.1	0.80	37.7	38.5	0.80
4F	Local	401497	Meadows Park	41.534480	-87.475317	40.9	40.8	40.9	0.10	40.8	41.1	0.30
4F	Local	401496	Bluebird Park	41.535591	-87.470039	41.2	41.2	41.5	0.30	41.1	41.6	0.50
4F	Local	401495	Stewart Park	41.543091	-87.488095	41.9	41.8	43.2	1.40	41.8	43	1.20
4F	Local	401494	Beech Park	41.565035	-87.491707	42.1	42	43.9	1.90	42	43.4	1.40
4F	Local	401493	Brunswick Park	41.596980	-87.397539	44.6	44.6	45.5	0.90	44.6	45.7	1.10
4F	Local	401492	Gibson Woods Park	41.600313	-87.443651	42.6	42.7	43.9	1.20	42.9	43.9	1.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	401480	Homestead Park	41.567535	-87.454484	43.5	43.5	42.9	-0.60	43.6	42.2	-1.40
4F	Local	401490	Memorial Park	41.604757	-87.495874	43.1	43.1	43.6	0.50	43.3	43.4	0.10
4F	Local	401481	Sheppard Park	41.536424	-87.440316	42	42	43.1	1.10	42	42.9	0.90
4F	Local	401488	Plum Creek Park	41.514480	-87.478650	38.7	38.6	39.1	0.50	38.7	38.6	-0.10
4F	Local	401487	Hessville Park	41.581980	-87.459484	43.2	43.2	42	-1.20	43.3	41.7	-1.60
4F	Local	401486	Columbia Park	41.616146	-87.497541	43.5	43.6	44.2	0.60	43.8	44	0.20
4F	Local	401485	Cheever Park	41.531147	-87.420871	41.8	41.8	42.5	0.70	41.7	42.4	0.70
4F	Local	401484	Twin Creek Park	41.536702	-87.492262	40.7	40.6	40.9	0.30	40.7	41.2	0.50
4F	Local	401483	Little Turtle Park	41.559202	-87.448373	43.2	43.2	44.3	1.10	43.2	43.8	0.60
4F	Local	401499	Optimist Park	41.572813	-87.463929	43.6	43.6	42.2	-1.40	43.6	41.4	-2.20
4F	Local	401491	Jefferson Park	41.587535	-87.486985	43.8	43.8	41.8	-2.00	43.8	41	-2.80
4F	Local	404402	Jesse-Pilfer Park	41.472539	-87.069752	35.6	35.7	38.1	2.40	35.8	38.4	2.60
4F	Local	401679	Harbor Oaks Park	41.600314	-87.218646	33.6	33.6	33.9	0.30	34.2	34.4	0.20
4F	Local	1592449	Engstrom Park	41.846695	-88.328963	42.4	42.5	42.5	0.00	42.9	43	0.10
4F	Local	1592448	Walnut Park	41.843361	-88.317573	42.2	42.3	42.3	0.00	42.7	42.9	0.20
4F	Local	1592447	Vanburen Park	41.846972	-88.303406	43	43.1	43.1	0.00	43.5	43.6	0.10
4F	Local	1592446	Washington Park	41.854472	-88.305629	43.7	43.8	43.8	0.00	44.1	44.2	0.10
4F	Local	1592445	Prairie Lathem Park	41.858639	-88.299518	45	45	45	0.00	45.2	45.3	0.10
4F	Local	1592451	Glenwood County Forest Preserve	41.833639	-88.309240	42.7	42.8	42.8	0.00	43.3	43.5	0.20
4F	Local	1592436	Exposition Park (historical)	41.798640	-88.335906	41.6	41.8	41.8	0.00	42.4	42.7	0.30
4F	Local	1592452	Les Arends County Forest Preserve	41.828639	-88.325351	42.1	42.2	42.2	0.00	42.7	43	0.30
4F	Local	404397	Will Park	41.464483	-87.058363	35.2	35.2	38	2.80	35.4	38.2	2.80
4F	Local	404385	Rodgers-Lakewood Park	41.516150	-87.062530	39.3	39.3	40.6	1.30	39.4	40.8	1.40
4F	Local	404384	Kosciuzko Park	41.620868	-87.482541	44.1	44.2	43.9	-0.30	44.4	43.6	-0.80
4F	Local	404378	Pulaski Park	41.645591	-87.519209	41.6	41.7	40.5	-1.20	42.1	39.9	-2.20
4F	Local	404203	Potato Creek State Park	41.552546	-86.348064	32.8	32.9	32.3	-0.60	33	31.9	-1.10
4F	Local	404017	Camp Wakinda	41.595325	-86.285007	32	32.2	32	-0.20	32.6	32.2	-0.40
4F	Local	404016	Camp Millhouse	41.602824	-86.364177	31.8	31.9	31.8	-0.10	32.3	32	-0.30
4F	Local	1592444	Highlands Park	41.865306	-88.302018	47.5	47.5	47.5	0.00	47.7	47.7	0.00
4F	Local	1592476	Washington Park	41.756418	-88.366739	40.9	41.1	41.1	0.00	41.6	41.9	0.30
4F	Local	1605214	Mount Saint Mary Park	41.907250	-88.309242	41.3	41.4	41.4	0.00	41.7	41.7	0.00
4F	Local	1605211	Moody Park	41.907250	-88.315075	41.2	41.2	41.3	0.10	41.5	41.6	0.10
4F	Local	1605210	Kehoe Park	41.906416	-88.324520	40.5	40.5	40.6	0.10	40.9	40.9	0.00
4F	Local	1605208	Fairview Park	41.907250	-88.337298	39.9	40	40	0.00	40.4	40.5	0.10
4F	Local	1592706	Sunset Park	41.878639	-88.324241	42.2	42.3	42.3	0.00	42.6	42.7	0.10
4F	Local	1592705	Gunnar Anderson County Forest Preserve	41.879194	-88.308685	43.2	43.3	43.3	0.00	43.5	43.6	0.10
4F	Local	1592450	Big Woods Park	41.836695	-88.290628	43.8	43.8	43.8	0.00	44.2	44.3	0.10
4F	Local	1592479	Pavilion Park	41.762806	-88.445630	43.1	43.2	43.2	0.00	43.6	43.8	0.20
4F	Local	401947	Memorial Park	41.624487	-86.725023	31.8	31.9	31.9	0.00	32.4	32.2	-0.20
4F	Local	1592474	Rob Roy Park	41.771695	-88.353961	41.3	41.5	41.5	0.00	42	42.4	0.40
4F	Local	1592472	View Street Park	41.765862	-88.325349	41.7	41.8	41.8	0.00	42.3	42.7	0.40
4F	Local	1592470	North River Street Park	41.761696	-88.313682	41.8	41.9	41.9	0.00	42.5	42.8	0.30
4F	Local	1592464	Jaycee Park	41.778362	-88.327294	41.9	42.1	42.1	0.00	42.6	42.9	0.30

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4F	Local	1592459	Gregory Park	41.781973	-88.312571	42.3	42.4	42.4	0.00	42.9	43.2	0.30
4F	Local	1592456	Highland Park	41.808362	-88.341184	41.7	41.8	41.9	0.10	42.4	42.7	0.30
4F	Local	1592453	Red Oak Park	41.825028	-88.317573	42.2	42.3	42.3	0.00	42.9	43.1	0.20
4F	Local	1592480	Strubler Park	41.763362	-88.439241	43.2	43.4	43.4	0.00	43.7	43.9	0.20
4F	Local	401698	Stephen Park	41.481424	-87.463094	33.4	33.5	33.5	0.00	34	33.8	-0.20
4F	Local	401725	Berkley Park	41.487817	-87.058363	36.5	36.6	37.2	0.60	36.7	37.2	0.50
4F	Local	401724	Fairground Park	41.479761	-87.051974	35.3	35.3	36.5	1.20	35.5	36.6	1.10
4F	Local	401713	Porter County Fairgrounds and Expo Center	41.436428	-87.020861	34.4	34.5	37.2	2.70	34.5	37.3	2.80
4F	Local	401711	Leroy Community Park	41.357536	-87.271977	28.4	28.5	28.5	0.00	29	28.8	-0.20
4F	Local	401710	Buckley Homestead County Park	41.284202	-87.376422	31.5	31.5	31.5	0.00	32.2	32.1	-0.10
4F	Local	401706	Liberty Park	41.293091	-87.424757	33.8	33.9	33.9	0.00	34.6	34.5	-0.10
4F	Local	404003	Bendix Woods Park	41.670045	-86.489738	36.1	36.3	36.2	-0.10	36.7	36.6	-0.10
4F	Local	401699	Elmridge Park	41.484479	-87.486427	34	34	34.1	0.10	34.6	34.4	-0.20
4F	Local	401753	Tahoe Park	41.490869	-87.347258	38.6	38.7	37.3	-1.40	38.7	36.7	-2.00
4F	Local	401694	Peter G Redar Park	41.489758	-87.445038	34	34.1	33.9	-0.20	34.4	34	-0.40
4F	Local	401693	Timber Lane Park	41.454757	-87.477260	33.6	33.6	33.7	0.10	34.3	34.2	-0.10
4F	Local	401692	James E Larimer Park	41.448924	-87.485038	34.4	34.5	34.5	0.00	35.1	34.9	-0.20
4F	Local	401691	Civic Memorial Park	41.448368	-87.466704	33	33.1	33.1	0.00	33.7	33.6	-0.10
4F	Local	401690	Lancer Park	41.455313	-87.445037	32	32.1	32.1	0.00	32.7	32.5	-0.20
4F	Local	401686	Lemon Lake County Park	41.383369	-87.404202	30.7	30.9	30.9	0.00	31.5	31.4	-0.10
4F	Local	401682	Bicentennial Park	41.571425	-87.248647	37.1	37.1	37.9	0.80	37.5	38.3	0.80
4F	Local	401704	Reservation Park	41.295313	-87.435035	34.3	34.3	34.3	0.00	35	34.9	-0.10
4F	Local	401783	Wells Street Park	41.409480	-87.359480	29.9	29.9	29.9	0.00	30.5	30.3	-0.20
4F	Local	1622793	Stahlak Park	41.689199	-87.780608	48.5	48.6	48.8	0.20	49.2	49.1	-0.10
4F	Local	401936	Kingsbury State Fish and Game Area	41.515599	-86.590572	35.3	35.4	34.8	-0.60	35.5	34.5	-1.00
4F	Local	401935	Kingsbury State Fish and Wildlife Area	41.498099	-86.570015	34.2	34.3	33.6	-0.70	34.4	33.2	-1.20
4F	Local	401910	Clark Field	41.595598	-86.717244	30.7	30.8	30.8	0.00	31.3	31.1	-0.20
4F	Local	401908	Camp To-Pe-Ne-Bee	41.612262	-86.873360	29.5	29.6	29.6	0.00	30.1	29.7	-0.40
4F	Local	401901	Allesee Park	41.604209	-86.688632	30.4	30.5	30.5	0.00	31	30.7	-0.30
4F	Local	401813	Burns Ditch Rest Park (historical)	41.591703	-87.216702	34.7	34.8	35.1	0.30	35.4	35.7	0.30
4F	Local	401729	Louis Alyea Memorial Park	41.317259	-87.201420	26.5	26.5	26.5	0.00	27.1	27	-0.10
4F	Local	401784	Saverman Woods Park	41.409758	-87.346979	29.2	29.2	29.2	0.00	29.8	29.6	-0.20
4F	Local	401750	Forest Hill Park	41.478925	-87.326980	36.7	36.7	35.6	-1.10	36.9	35.3	-1.60
4F	Local	401769	Collins Park	41.445036	-87.352813	30	30.1	30	-0.10	30.6	30.3	-0.30
4F	Local	401768	Thomas Street Park	41.425314	-87.355313	29.6	29.7	29.6	-0.10	30.3	30	-0.30
4F	Local	401767	Jerry Ross Park	41.418369	-87.367535	30.1	30.1	30.1	0.00	30.8	30.6	-0.20
4F	Local	401765	Deep River County Park	41.493092	-87.248923	38.1	38.1	37.9	-0.20	38	37.4	-0.60
4F	Local	401756	Rosenbaum Park	41.485591	-87.374759	35.4	35.4	34.2	-1.20	35.5	33.9	-1.60
4F	Local	401755	Independence Park	41.487536	-87.374759	36	36	34.8	-1.20	36.1	34.4	-1.70
4F	Local	401972	Soldiers Memorial Park	41.615320	-86.750579	32.3	32.4	32.4	0.00	32.9	32.8	-0.10
4F	Local	401787	Kaiser Park	41.393647	-87.363091	30	30	30	0.00	30.6	30.5	-0.10
4F	Local	1655977	Pluckett Park	41.896974	-87.961175	53.8	53.8	53.8	0.00	54.6	54.6	0.00
4F	Local	1656036	Stough Park	41.799753	-87.944227	49.1	49.1	49.3	0.20	49.9	50.4	0.50

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	1655988	Queensbury Greens Park	41.783918	-88.190068	44.2	44.3	44.3	0.00	44.8	45.1	0.30
4F	Local	1655987	Prospect Park	41.801419	-87.959783	48.2	48.2	48.3	0.10	49	49.2	0.20
4F	Local	1655985	Presidents Park	41.852807	-88.084233	42.5	42.6	42.6	0.00	43.3	43.3	0.00
4F	Local	1655983	Prairie Trail Park	41.890028	-88.150625	39.5	39.6	39.6	0.00	40.2	40.2	0.00
4F	Local	1655982	Prairie Trail Park	41.780586	-87.954783	49.4	49.5	49.7	0.20	50.2	50.8	0.60
4F	Local	1655990	Reed-Keppler Park	41.894472	-88.210627	39.5	39.5	39.6	0.10	40	40.1	0.10
4F	Local	1655979	Prairie Park	41.767529	-88.124788	44.3	44.4	44.4	0.00	45	45.3	0.30
4F	Local	1655994	Ridge Park	41.829751	-88.115067	42.6	42.8	42.8	0.00	43.4	43.5	0.10
4F	Local	1655973	Pioneer Park	41.873084	-88.212571	41.3	41.3	41.3	0.00	41.7	41.8	0.10
4F	Local	1655971	Pembroke Park	41.774474	-88.121732	44.5	44.6	44.6	0.00	45.2	45.4	0.20
4F	Local	1655970	Pembroke Commons Park	41.756141	-88.120898	43.9	44	44	0.00	44.6	44.9	0.30
4F	Local	1655968	Patriots Park	41.786141	-88.000340	47.4	47.5	47.5	0.00	48.1	48.3	0.20
4F	Local	1655966	Panfish Park	41.856973	-88.058677	43.8	43.8	43.8	0.00	44.5	44.6	0.10
4F	Local	1655964	Orchard Park	41.836696	-88.129234	42.4	42.4	42.4	0.00	43	43.2	0.20
4F	Local	1655963	Orchard Brook Park	41.823085	-88.012008	46.9	47	47	0.00	47.7	47.8	0.10
4F	Local	1655980	Prairie Path Park	41.857251	-88.115623	41.7	41.8	41.8	0.00	42.4	42.5	0.10
4F	Local	1656020	Seager Park	41.786140	-88.129233	44.3	44.4	44.4	0.00	45	45.3	0.30
4F	Local	1622786	Schussler Park	41.626143	-87.836719	48.1	48.2	47.5	-0.70	48.7	48	-0.70
4F	Local	1656031	Spring Hill Park	41.784752	-88.122288	44.4	44.5	44.5	0.00	45.1	45.4	0.30
4F	Local	1656030	Spring Park	41.770586	-88.003673	47.6	47.7	47.8	0.10	48.3	48.7	0.40
4F	Local	1656029	Springhill Park	41.781418	-88.126455	44.4	44.5	44.5	0.00	45.1	45.3	0.20
4F	Local	1656025	Sportsmans Park	41.762529	-88.160344	43.7	43.8	43.8	0.00	44.3	44.6	0.30
4F	Local	1656023	Sixtythird Street Park	41.773085	-88.057563	45.5	45.6	45.7	0.10	46.2	46.5	0.30
4F	Local	1655989	Redfield Commons Park	41.795862	-88.192291	44.1	44.2	44.2	0.00	44.7	44.9	0.20
4F	Local	1656021	Sentinel Park	41.807530	-87.984784	47.1	47.2	47.2	0.00	47.9	48	0.10
4F	Local	1655959	Old Pond Park	41.880862	-88.155903	39.4	39.5	39.5	0.00	40.2	40.2	0.00
4F	Local	1656019	Scotts Grove Park	41.824751	-88.079510	43.6	43.7	43.7	0.00	44.3	44.5	0.20
4F	Local	1656018	Scottdale Park	41.826696	-88.080066	43.5	43.6	43.6	0.00	44.3	44.4	0.10
4F	Local	1656004	Sadlebrook Park	41.822252	-87.981451	46.7	46.8	46.8	0.00	47.5	47.6	0.10
4F	Local	1655999	Rotary Park	41.766697	-87.975338	48.8	48.9	49.1	0.20	49.6	50.2	0.60
4F	Local	1655997	Robbins Park	41.794475	-87.935338	49.4	49.5	49.7	0.20	50.3	50.9	0.60
4F	Local	1655996	Riverwalk Park	41.770029	-88.155622	43.9	44.1	44.1	0.00	44.6	44.9	0.30
4F	Local	1655995	River Road Park	41.784752	-88.077842	45	45.1	45.1	0.00	45.7	45.9	0.20
4F	Local	1656022	Seven Gables Park	41.840307	-88.107011	42.2	42.3	42.3	0.00	42.9	43	0.10
4F	Local	1655892	Lake Harriet Park	41.757808	-88.050618	45.5	45.7	45.7	0.00	46.3	46.5	0.20
4F	Local	1655917	Mar-Duke Farm Park	41.764197	-88.011173	47.3	47.4	47.5	0.10	48	48.5	0.50
4F	Local	1655915	Manville-Oaks Park	41.858362	-88.208126	42.9	43	43	0.00	43.3	43.4	0.10
4F	Local	1655909	Madison Meadow Park	41.871696	-88.002009	50.4	50.5	50.5	0.00	51.2	51.2	0.00
4F	Local	1655908	Lyman Woods County Forest Preserve	41.826419	-88.007008	47	47.1	47.1	0.00	47.8	47.9	0.10
4F	Local	1655907	Lufkin Park	41.870307	-87.979508	49.9	50	50	0.00	50.7	50.7	0.00
4F	Local	1655900	Lions Park	41.797808	-87.947838	48.9	49	49.2	0.20	49.7	50.3	0.60
4F	Local	1655961	Olesen Farm Park	41.765863	-88.119787	44.3	44.4	44.4	0.00	45	45.3	0.30
4F	Local	1655896	Lee and Grant Park	41.805863	-88.026452	45.9	46	46	0.00	46.7	46.8	0.10

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	1655921	Meadows Center Park	41.780030	-88.058397	45.4	45.5	45.6	0.10	46.2	46.3	0.10
4F	Local	1655891	Lake Carleton Park	41.759197	-88.046729	45.7	45.9	45.9	0.00	46.4	46.7	0.30
4F	Local	1655890	Lagoon Park	41.903640	-88.006455	47	47.1	47.1	0.00	47.9	47.9	0.00
4F	Local	1655889	Knolls Park	41.878362	-88.139514	39.8	39.8	39.8	0.00	40.5	40.5	0.00
4F	Local	1655888	Knolls Park	41.854196	-87.995897	48.7	48.8	48.8	0.00	49.6	49.6	0.00
4F	Local	1655887	Knoch Park	41.763918	-88.156733	43.8	43.9	43.9	0.00	44.4	44.7	0.30
4F	Local	1655886	Kingston Park	41.783641	-88.065620	45.2	45.4	45.4	0.00	45.9	46.1	0.20
4F	Local	1655884	Kings Park	41.770863	-88.134510	44.1	44.3	44.3	0.00	44.9	45.1	0.20
4F	Local	1655897	Lincoln Marsh County Forest Preserve	41.872251	-88.123124	40.6	40.7	40.7	0.00	41.4	41.4	0.00
4F	Local	1655937	New Albany Park	41.770030	-88.107843	44.5	44.7	44.7	0.00	45.2	45.5	0.30
4F	Local	1656037	Summer Hill Park	41.772808	-88.062564	45.3	45.5	45.5	0.00	46	46.3	0.30
4F	Local	1655958	Old Grove Park	41.863363	-87.999231	50.3	50.4	50.4	0.00	51.1	51.1	0.00
4F	Local	1655957	O'Brien Park	41.760863	-88.015339	47	47.2	47.3	0.10	47.8	48.2	0.40
4F	Local	1655955	Oak Hill South Park	41.785863	-88.099787	44.8	45	45	0.00	45.5	45.8	0.30
4F	Local	1655954	Oak Hill Park	41.788085	-88.099787	44.8	44.9	44.9	0.00	45.5	45.7	0.20
4F	Local	1655952	Oak Grove County Forest Preserve	41.756142	-87.920058	50.7	50.8	50.8	0.00	51.4	51.5	0.10
4F	Local	1655946	Northside Park	41.828085	-88.017286	46.8	46.8	46.9	0.10	47.6	47.7	0.10
4F	Local	1655918	Marjorie Davis Park	41.908918	-87.948397	55.6	55.6	55.6	0.00	56.4	56.4	0.00
4F	Local	1655940	Newton Park	41.863085	-88.057011	44	44.1	44.1	0.00	44.8	44.8	0.00
4F	Local	1655919	McCollum Park	41.763363	-88.005617	47.4	47.6	47.8	0.20	48.2	48.9	0.70
4F	Local	1655932	Muddy Waters Park	41.773086	-87.985894	48.2	48.3	48.7	0.40	48.9	49.9	1.00
4F	Local	1655928	Milness Famey Memorial Park	41.778086	-88.003117	47.5	47.6	47.7	0.10	48.3	48.6	0.30
4F	Local	1655927	Mertz Memorial Park	41.776697	-87.969227	48.9	49	49.3	0.30	49.7	50.6	0.90
4F	Local	1655926	Merlin Park	41.790586	-87.943671	49.3	49.4	49.6	0.20	50.2	50.9	0.70
4F	Local	1655925	Memorial Park	41.756419	-88.042285	45.8	46	46	0.00	46.5	46.8	0.30
4F	Local	1655924	Memorial Park	41.867529	-88.109235	42	42	42	0.00	42.6	42.6	0.00
4F	Local	1655960	Old Tavern Road Park	41.804196	-88.107844	43.9	44	44	0.00	44.7	44.9	0.20
4F	Local	1655942	Nike Park	41.799473	-88.151456	44.1	44.2	44.2	0.00	44.7	44.9	0.20
4F	Local	1685595	Holly Park	41.758919	-87.988672	48	48.1	48.4	0.30	48.8	49.6	0.80
4F	Local	1656033	W W Stevens Park	41.869751	-88.117568	41.3	41.3	41.3	0.00	41.9	42	0.10
4F	Local	1685628	Pennywood Park	41.790585	-88.097010	44.8	44.9	44.9	0.00	45.5	45.7	0.20
4F	Local	1685621	Methodist Park	41.786974	-88.058675	45.3	45.4	45.4	0.00	46	46.2	0.20
4F	Local	1685620	Memorial Park	41.787808	-88.026730	46.5	46.6	46.6	0.00	47.2	47.4	0.20
4F	Local	1685619	Memorial Park	41.878362	-88.059511	43.2	43.3	43.3	0.00	44	44	0.00
4F	Local	1685612	Loy Park	41.796141	-88.034508	45.8	45.9	45.9	0.00	46.6	46.8	0.20
4F	Local	1685661	Surrey Ridge Park	41.770863	-88.103676	44.6	44.8	44.8	0.00	45.3	45.6	0.30
4F	Local	1685602	Lake Ellyn Park	41.882807	-88.060623	43	43.1	43.1	0.00	43.8	43.9	0.10
4F	Local	1685662	Surrey Ridge Sports Complex	41.771974	-88.108676	44.6	44.7	44.8	0.10	45.3	45.6	0.30
4F	Local	1685548	Eighty-Third Street Park	41.736419	-88.051729	44.4	44.6	44.6	0.00	45.2	45.4	0.20
4F	Local	1685531	Chathum Park	41.835307	-88.111734	42.5	42.5	42.6	0.10	43.2	43.3	0.10
4F	Local	1685526	Breckenridge Park	41.763919	-88.102565	44.4	44.5	44.5	0.00	45.1	45.3	0.20
4F	Local	1685525	Birchwood Park	41.757253	-87.983949	48.2	48.3	48.4	0.10	49	49.4	0.40
4F	Local	1685523	Barkridge Park	41.789474	-88.095898	44.8	45	45	0.00	45.6	45.8	0.20

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	1685522	Asa Douglas Harmon Wild Flower Preserve	41.877807	-88.057844	43.3	43.4	43.4	0.00	44.1	44.1	0.00
4F	Local	1685518	Ackerman Park	41.892529	-88.053956	43.4	43.5	43.5	0.00	44.2	44.2	0.00
4F	Local	1685606	Lions Park	41.804474	-87.970339	47.5	47.6	47.6	0.00	48.3	48.5	0.20
4F	Local	1686319	Yorkville City Park	41.646696	-88.446739	36	36.1	36.1	0.00	36.8	36.8	0.00
4F	Local	1688258	Strasma Park	41.083921	-87.813095	40.1	40.2	40.2	0.00	40.8	40.8	0.00
4F	Local	1688256	Small Memorial Park	41.112810	-87.878653	40.7	40.8	40.8	0.00	41.5	41.4	-0.10
4F	Local	1688235	Riverview Historic District	41.112532	-87.858375	40.8	40.8	40.9	0.10	41.5	41.5	0.00
4F	Local	1688233	River Road Park	41.093643	-87.850318	40.6	40.7	40.8	0.10	41.3	41.3	0.00
4F	Local	1688228	Old Fair Park	41.132254	-87.858097	40.9	41	41	0.00	41.6	41.6	0.00
4F	Local	1688213	Limestone Park	41.139476	-87.990046	38.5	38.6	38.6	0.00	39.2	39.2	0.00
4F	Local	1685659	Sun Valley Park	41.761141	-88.100064	44.3	44.4	44.4	0.00	45	45.3	0.30
4F	Local	1688187	Gettysburg Park	41.169476	-87.881710	41.2	41.2	41.2	0.00	41.9	41.9	0.00
4F	Local	1657062	Washington Park	41.798919	-88.005063	46.9	47	47	0.00	47.7	47.9	0.20
4F	Local	1686296	Maramach Forest Preserve	41.644474	-88.543686	32.1	32.2	32.2	0.00	32.8	32.9	0.10
4F	Local	1686287	Houses Grove Forest Preserve	41.513919	-88.309788	41.4	41.5	41.6	0.10	41.8	41.9	0.10
4F	Local	1686242	Sparland State Conservation Area	41.058369	-89.425090	26	26.1	24.7	-1.40	26.4	24.1	-2.30
4F	Local	1686228	Aichison Waterfowl Refuge	40.936147	-89.436756	24.3	24.4	20.9	-3.50	24.6	20.3	-4.30
4F	Local	1685673	Whittaker Park	41.748087	-87.919780	50.1	50.2	50.2	0.00	50.8	50.9	0.10
4F	Local	1685666	Timber Park	41.772530	-88.093676	44.8	44.9	44.9	0.00	45.4	45.7	0.30
4F	Local	1685664	Tate Woods Park	41.804752	-88.090899	44.2	44.4	44.4	0.00	45	45.2	0.20
4F	Local	1688212	Lills Park	41.148643	-87.844208	40.9	41	41	0.00	41.7	41.7	0.00
4F	Local	1656058	Valley Forge Park	41.766141	-88.107287	44.5	44.5	44.5	0.00	45.1	45.4	0.30
4F	Local	1656078	West Chicago Prairie County Forest Preserve	41.888917	-88.223683	41.7	41.8	41.8	0.00	42.1	42.2	0.10
4F	Local	1656074	Fritz Werley Park	41.807252	-87.974229	47.2	47.3	47.4	0.10	48.1	48.2	0.10
4F	Local	1656072	Waterford Park	41.768086	-87.930892	50.5	50.6	50.6	0.00	51.2	51.3	0.10
4F	Local	1656069	Washington Park	41.886974	-87.929785	52.5	52.5	52.5	0.00	53.3	53.3	0.00
4F	Local	1656067	Wallingford Park	41.813363	-88.003952	47.1	47.1	47.2	0.10	47.9	48	0.10
4F	Local	1656066	Vista Pond Park	41.893640	-88.001732	48.7	48.7	48.7	0.00	49.5	49.5	0.00
4F	Local	1685436	Saunnak Forest Preserve	41.636974	-88.654243	31.8	31.9	31.9	0.00	32.5	32.7	0.20
4F	Local	1656060	Veterans Memorial Park	41.792530	-87.972283	47.8	48	48	0.00	48.6	49	0.40
4F	Local	1656095	Williams Love Park	41.769752	-87.985339	48.3	48.4	48.8	0.40	49.1	50.1	1.00
4F	Local	1656057	Twin Lakes Park	41.781697	-87.981728	48.1	48.2	48.3	0.10	48.8	49.4	0.60
4F	Local	1656050	Triangle Park	41.771419	-88.060897	45.4	45.5	45.5	0.00	46.1	46.4	0.30
4F	Local	1656048	Timber Ridge Park	41.892250	-88.146737	39.3	39.4	39.4	0.00	40	40.1	0.10
4F	Local	1656047	Timber Ridge County Forest Preserve	41.889750	-88.165348	39.5	39.5	39.5	0.00	40	40.1	0.10
4F	Local	1656045	Tanglewood Park	41.765585	-88.097287	44.5	44.7	44.7	0.00	45.2	45.4	0.20
4F	Local	1656042	Surrey Park	41.863362	-88.033399	45.8	45.9	45.9	0.00	46.6	46.6	0.00
4F	Local	1656039	Sunnydale Park	41.763919	-88.033396	46.4	46.5	46.6	0.10	47.1	47.4	0.30
4F	Local	1656063	Village Green Park	41.853362	-88.078955	42.8	42.8	42.8	0.00	43.5	43.6	0.10
4F	Local	1656107	York Commons Park	41.880585	-87.937285	50.9	50.9	50.9	0.00	51.7	51.7	0.00
4F	Local	1655869	Huntington Estates Park	41.759752	-88.114231	44.1	44.2	44.2	0.00	44.8	45.1	0.30
4F	Local	1656761	Rocky Ledge Park	41.753090	-87.545046	41.7	41.8	42.2	0.40	42.4	42.7	0.30
4F	Local	1656751	Woodland Park	41.832533	-87.609494	49.2	49.4	49.4	0.00	49.9	49.9	0.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	1656740	White City Amusement Park	41.780867	-87.617827	48.3	48.5	48.6	0.10	49.1	49.1	0.00
4F	Local	1656684	Stevenson Park	41.887809	-87.777835	47.8	47.9	47.8	-0.10	48.6	48.5	-0.10
4F	Local	1656682	Stagg Field (historical)	41.792534	-87.599493	50.4	50.6	50.5	-0.10	51.1	50.9	-0.20
4F	Local	1656306	Butterfield Park	41.873641	-87.926173	52.3	52.3	52.3	0.00	53.1	53.1	0.00
4F	Local	1656088	Wheaton Driving Park (historical)	41.885029	-88.098957	40.9	40.9	40.9	0.00	41.6	41.6	0.00
4F	Local	1656108	York-High Ridge County Forest Preserve	41.864752	-87.987842	49.8	49.8	49.8	0.00	50.5	50.6	0.10
4F	Local	1656093	Whitlock Park	41.814197	-87.993396	47.1	47.1	47.1	0.00	47.9	47.9	0.00
4F	Local	1656105	Woodridge County Forest Preserve	41.768085	-88.084786	44.8	44.9	44.9	0.00	45.5	45.7	0.20
4F	Local	1656101	Winfield Mounds County Forest Preserve	41.884750	-88.163681	39.3	39.4	39.5	0.10	40	40.1	0.10
4F	Local	1656099	Wil-O-Way Park	41.770307	-88.179789	43.9	44	44	0.00	44.5	44.8	0.30
4F	Local	1656098	Willowbrook Park	41.867529	-87.984508	49.9	49.9	50	0.10	50.7	50.7	0.00
4F	Local	1656097	Willowbrook County Forest Preserve	41.843085	-88.060343	43.8	43.9	43.9	0.00	44.7	44.7	0.00
4F	Local	1656096	Willowbrook Community Park	41.751697	-87.951448	49.3	49.5	49.4	-0.10	50	50.2	0.20
4F	Local	1679857	Prairie Avenue Historic District	41.856422	-87.620884	45.2	45.3	46.9	1.60	45.9	47.7	1.80
4F	Local	1656109	York Woods County Forest Preserve	41.859752	-87.934506	50.5	50.6	50.6	0.00	51.4	51.4	0.00
4F	Local	1633339	Hunter Woods Park	41.729474	-88.110342	42.2	42.4	42.3	-0.10	42.9	43.1	0.20
4F	Local	1655883	Kensington Park	41.842529	-88.037009	46.1	46.3	46.3	0.00	47	47	0.00
4F	Local	1633356	South Grove Park	41.733641	-88.020617	45.4	45.5	46.1	0.60	46.2	47.7	1.50
4F	Local	1633352	Rutgers Park	41.722252	-88.024783	44.3	44.4	45	0.60	45.2	46.7	1.50
4F	Local	1633350	Ranchview Park	41.740585	-88.096453	43.4	43.5	43.5	0.00	44	44.3	0.30
4F	Local	1633347	Mending Wall Park	41.732530	-88.052006	44.1	44.3	44.3	0.00	44.9	45.2	0.30
4F	Local	1633344	Lindenwood Park	41.743919	-87.969504	48.1	48.2	48.2	0.00	48.9	48.9	0.00
4F	Local	1633361	Waubonsie Lake Park	41.747807	-88.247846	42.7	42.8	42.8	0.00	43.3	43.6	0.30
4F	Local	1633340	Ide Grove Park	41.742808	-88.018395	46.1	46.2	46.7	0.50	46.9	48.1	1.20
4F	Local	1633362	Westglen Park	41.741974	-88.152010	42.9	43.1	43.1	0.00	43.5	43.8	0.30
4F	Local	1633337	Grabtree Park	41.745030	-88.054785	44.8	45	45	0.00	45.5	45.8	0.30
4F	Local	1633335	Goodrich Woods County Forest Preserve	41.749752	-88.120620	43.6	43.7	43.7	0.00	44.2	44.5	0.30
4F	Local	1633333	Gartner Park	41.748918	-88.154232	43.2	43.4	43.3	-0.10	43.9	44.1	0.20
4F	Local	1633332	Fender County Forest Preserve	41.730863	-88.128676	42.1	42.2	42.2	0.00	42.8	42.9	0.10
4F	Local	1633330	Echo Point Park	41.738641	-88.045895	44.9	44.9	45	0.10	45.5	45.9	0.40
4F	Local	1633329	Eagle Park	41.742252	-88.112842	43.1	43.3	43.3	0.00	43.8	44.1	0.30
4F	Local	1633328	Dragon Lake County Forest Preserve	41.737252	-88.173955	42.5	42.6	42.6	0.00	43.1	43.3	0.20
4F	Local	1633342	Lemont Woods County Forest Preserve	41.688919	-88.025060	43	43.1	43.1	0.00	44.1	44.4	0.30
4F	Local	1649145	Park 416	41.883365	-87.752556	46.5	46.6	46.5	-0.10	47.4	47.2	-0.20
4F	Local	1655719	Arboretum Woods Park	41.811418	-88.081454	44.1	44.2	44.2	0.00	44.9	45.1	0.20
4F	Local	1655717	Arbor View Park	41.805307	-88.063676	44.7	44.8	44.8	0.00	45.4	45.6	0.20
4F	Local	1655714	Albright Park	41.822807	-88.077566	43.7	43.8	43.8	0.00	44.5	44.6	0.10
4F	Local	1655712	Abbeywood Park	41.771696	-88.097842	44.7	44.8	44.8	0.00	45.4	45.7	0.30
4F	Local	1649197	San Souci Amusement Park (historical)	41.785034	-87.607271	48.9	49	49	0.00	49.7	49.6	-0.10
4F	Local	1649170	Ridgeland Commons Park	41.887809	-87.786447	48.2	48.3	48.3	0.00	49.1	49	-0.10
4F	Local	1633359	Spring Field Park	41.730307	-88.142565	42.1	42.2	42.2	0.00	42.7	42.9	0.20
4F	Local	1649146	Park 430	41.892809	-87.754501	47	47.1	47	-0.10	47.8	47.7	-0.10
4F	Local	1633321	Arbor Way Park	41.731141	-88.134509	42.1	42.2	42.2	0.00	42.8	43	0.20

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	1633498	Heght Park	41.540866	-87.843662	46.6	46.7	46.2	-0.50	47.3	46.9	-0.40
4F	Local	1633415	Rigden Park	41.349477	-88.849521	31.3	31.4	29.8	-1.60	31.7	30	-1.70
4F	Local	1633405	Marseilles State Fish and Wildlife Area	41.288367	-88.680072	31.1	31.3	31	-0.30	31.6	30.8	-0.80
4F	Local	1633385	Glen Park	41.531419	-88.702019	34.5	34.5	32.6	-1.90	35	33.3	-1.70
4F	Local	1633365	Zarn Park	41.740586	-88.027839	45.6	45.8	46	0.20	46.4	47.1	0.70
4F	Local	1633364	Winding Creek Park	41.740585	-88.138954	42.9	43	43	0.00	43.5	43.8	0.30
4F	Local	1633363	Wheatland Park	41.739751	-88.241735	42.4	42.5	42.5	0.00	43	43.3	0.30
4F	Local	1649158	Pietrowski Playground Park	41.719757	-87.538100	39.8	39.9	41.1	1.20	40.5	41.6	1.10
4F	Local	1622805	Veterans Park	41.600033	-87.806718	48.5	48.6	48.1	-0.50	49	48.3	-0.70
4F	Local	1622899	Babe Ruth Park	41.876419	-87.863116	52	52	52	0.00	52.8	52.8	0.00
4F	Local	1622896	Austin Gardens Park	41.890031	-87.801169	49.7	49.7	49.7	0.00	50.5	50.5	0.00
4F	Local	1622883	Anderson Park	41.901420	-87.778669	47.9	48	48	0.00	48.8	48.7	-0.10
4F	Local	1622812	Worthwoods Park	41.692254	-87.802831	51.2	51.3	51.9	0.60	51.7	51.9	0.20
4F	Local	1622810	Woodgate Park	41.524200	-87.753381	44.6	44.7	44.7	0.00	45.4	45.3	-0.10
4F	Local	1622809	Westgate Park	41.659477	-87.783385	48.5	48.6	50.2	1.60	49	50.3	1.30
4F	Local	1633325	Clearwood Park	41.742251	-88.235624	42.5	42.7	42.7	0.00	43.1	43.4	0.30
4F	Local	1622806	Vogt Woods Park	41.580033	-87.776438	48.1	48.2	46.8	-1.40	48.7	47.2	-1.50
4F	Local	1622980	Davis Park	41.901976	-87.762002	47.3	47.4	47.4	0.00	48.2	48.1	-0.10
4F	Local	1622804	Veterans Park	41.610588	-87.804773	48.4	48.5	47.4	-1.10	48.9	47.8	-1.10
4F	Local	1622802	Tower Park	41.613366	-87.765050	48.1	48.2	47.6	-0.60	48.6	48	-0.60
4F	Local	1622800	Timberline Park	41.668364	-88.013393	44.4	44.4	43.4	-1.00	45	44.4	-0.60
4F	Local	1622798	Sunny Pine Park	41.642532	-87.833108	47.9	48	47.9	-0.10	48.6	48.4	-0.20
4F	Local	1622797	Sundale Park	41.624199	-87.798107	48	48.1	47.3	-0.80	48.7	47.7	-1.00
4F	Local	1622794	Stevenson Park	41.738365	-87.771720	49.7	49.8	52.3	2.50	50.4	53.3	2.90
4F	Local	397547	Wicker Park	41.561424	-87.475318	42.3	42.2	44.2	2.00	42.2	43.7	1.50
4F	Local	1622808	Wedgwood Park	41.626977	-87.819774	47.9	48	47.4	-0.60	48.5	47.8	-0.70
4F	Local	1623133	Robert W Stephenson Memorial Swimming Pool	41.100310	-88.429504	32.7	32.8	32.7	-0.10	33.4	33.3	-0.10
4F	Local	1655724	Bainbridge Greens Park	41.789751	-88.191179	44.1	44.3	44.3	0.00	44.8	45	0.20
4F	Local	1623260	Moore Park	41.878087	-87.752556	46.3	46.4	46.2	-0.20	47.1	46.9	-0.20
4F	Local	1623251	Memorial Park	41.881420	-87.845893	52.6	52.6	52.6	0.00	53.4	53.4	0.00
4F	Local	1623232	Lindberg Park	41.906142	-87.802281	49.2	49.3	49.3	0.00	50.1	50.1	0.00
4F	Local	1623225	Lake Meadows Park	41.837255	-87.611439	48.5	48.6	49.1	0.50	49.1	49.8	0.70
4F	Local	1623218	Kiddieland Park	41.910031	-87.837560	53.2	53.2	53.2	0.00	54	54	0.00
4F	Local	1623214	Kennedy Park	41.882253	-87.861449	52.6	52.7	52.7	0.00	53.5	53.5	0.00
4F	Local	1622906	Beaubien Forest Preserve	41.650034	-87.588101	46	46.1	43.3	-2.80	46.5	43	-3.50
4F	Local	1623152	South Park	40.987532	-88.731178	26.4	26.5	27.7	1.20	27	28.1	1.10
4F	Local	1622966	Constitution Park	41.904475	-87.817837	51.7	51.8	51.8	0.00	52.6	52.6	0.00
4F	Local	1623132	Renfrew Park	41.098643	-88.428671	32.7	32.9	32.8	-0.10	33.5	33.5	0.00
4F	Local	1623117	North Park	40.992254	-88.732011	26.4	26.5	27.7	1.20	26.9	28	1.10
4F	Local	1623089	Florence W Garrett Park	41.086976	-88.433392	32.8	33	32.9	-0.10	33.6	33.6	0.00
4F	Local	1623033	Groveland Park	41.833644	-87.610328	49.1	49.2	49.3	0.10	49.7	49.8	0.10
4F	Local	1623010	Field Park	41.902531	-87.799503	49.1	49.2	49.2	0.00	50	49.9	-0.10
4F	Local	1622990	Douglas Monument Park	41.831422	-87.608383	49.4	49.6	49.5	-0.10	50	50	0.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	1633323	Campus Green Park	41.743919	-88.107286	43.3	43.5	43.5	0.00	44	44.3	0.30
4F	Local	1623189	Hubbard Park	41.888643	-87.750334	46.6	46.6	46.5	-0.10	47.4	47.3	-0.10
4F	Local	1655816	Fullersburg County Forest Preserve	41.829197	-87.935339	49.6	49.7	49.7	0.00	50.4	50.5	0.10
4F	Local	1655834	Glen Oak Park	41.872529	-88.045899	44.3	44.3	44.3	0.00	45.1	45.1	0.00
4F	Local	1655833	Glen Oak County Forest Preserve	41.866140	-88.045899	44.6	44.7	44.7	0.00	45.4	45.4	0.00
4F	Local	1655827	Glen Ellyn Manor Park	41.861973	-88.073400	43.3	43.4	43.4	0.00	44.1	44.1	0.00
4F	Local	1655822	Gilbert Park	41.794752	-88.023396	46.4	46.5	46.5	0.00	47.2	47.3	0.10
4F	Local	1655821	Gerald R Weeks Memorial Park	41.891417	-88.118125	39.9	39.9	39.9	0.00	40.6	40.6	0.00
4F	Local	1655820	Gastaldo Park	41.758919	-88.058952	45.3	45.4	45.4	0.00	46	46.2	0.20
4F	Local	1655796	Easton Park	41.884750	-88.189515	39.6	39.6	39.6	0.00	40.2	40.2	0.00
4F	Local	1655818	Garden Plots Park	41.759752	-88.160344	43.5	43.7	43.7	0.00	44.2	44.5	0.30
4F	Local	1655844	Green Trails Park	41.766419	-88.091731	44.6	44.8	44.8	0.00	45.3	45.6	0.30
4F	Local	1655813	Forest View Park	41.789473	-88.185624	44.2	44.4	44.4	0.00	44.9	45.1	0.20
4F	Local	1655812	Four Seasons Park	41.851696	-88.020620	48.4	48.4	48.4	0.00	49.2	49.2	0.00
4F	Local	1655810	Founders Park	41.872806	-88.147014	40.3	40.3	40.4	0.10	40.9	41	0.10
4F	Local	1655808	Fiftyninth and Main Park	41.778363	-88.010062	47.4	47.5	47.5	0.00	48.1	48.3	0.20
4F	Local	1655800	Elmhurst Salt Creek County Forest Preserve	41.891974	-87.963397	52.7	52.7	52.7	0.00	53.5	53.5	0.00
4F	Local	1655799	Eldridge Park	41.866696	-87.951452	49.2	49.2	49.2	0.00	50	50	0.00
4F	Local	1655721	Arrowhead Park	41.798640	-88.137011	44	44.2	44.2	0.00	44.7	45	0.30
4F	Local	1655819	Gartner Park	41.750307	-88.152843	43.3	43.4	43.4	0.00	44	44.2	0.20
4F	Local	1655858	Hobson Pool Park	41.765030	-88.058952	45.4	45.6	45.5	-0.10	46.1	46.4	0.30
4F	Local	1622788	Sergeant Means Park	41.512256	-87.678100	43	43.1	43.1	0.00	43.8	43.7	-0.10
4F	Local	1655868	Hull Park	41.826418	-88.086455	43.2	43.3	43.4	0.10	44	44.1	0.10
4F	Local	1655867	Hosek Park	41.790864	-87.959505	48.6	48.7	48.9	0.20	49.4	50	0.60
4F	Local	1655864	Hoopers Hollow Park	41.802252	-88.029508	45.9	45.9	46	0.10	46.6	46.8	0.20
4F	Local	1655863	Hoffman Park	41.834752	-88.044232	45.5	45.6	45.6	0.00	46.3	46.4	0.10
4F	Local	1655862	Hoffman Park	41.871140	-88.084512	43	43.1	43.1	0.00	43.8	43.8	0.00
4F	Local	1655861	Hobson Woods River Access	41.758085	-88.135899	43.9	44	44	0.00	44.5	44.8	0.30
4F	Local	1655840	Graft Park	41.868640	-88.129791	41.1	41.1	41.2	0.10	41.7	41.8	0.10
4F	Local	1655859	Hobson West Park	41.751974	-88.165344	43.2	43.3	43.3	0.00	43.8	44.1	0.30
4F	Local	1655843	Green Meadows Park	41.768364	-87.982005	48.5	48.6	49	0.40	49.2	50.2	1.00
4F	Local	1655857	Hitchcock Woods County Forest Preserve	41.793363	-88.095065	44.7	44.9	44.9	0.00	45.4	45.7	0.30
4F	Local	1655852	Hidden Lake County Forest Preserve	41.826974	-88.042287	45.3	45.4	45.4	0.00	46.1	46.2	0.10
4F	Local	1655850	Heritage Farms N Ponds Park	41.774196	-88.087564	44.9	45	45	0.00	45.6	45.8	0.20
4F	Local	1655849	Heritage Farm Ponds Park	41.770030	-88.087842	44.8	44.9	44.9	0.00	45.5	45.7	0.20
4F	Local	1655848	Hawthorne Hill Park	41.754474	-88.055618	45.2	45.4	45.4	0.00	46	46.2	0.20
4F	Local	1655845	Hampshire Park	41.768085	-88.105620	44.5	44.6	44.6	0.00	45.2	45.4	0.20
4F	Local	1655795	East Greens Park	41.772252	-88.135344	44.1	44.3	44.3	0.00	44.9	45.1	0.20
4F	Local	1655860	Hobson Woods Park	41.756696	-88.132565	43.9	44	44	0.00	44.5	44.8	0.30
4F	Local	1655744	Briar Knoll Park	41.846140	-88.099789	42	42.1	42.2	0.10	42.8	42.9	0.10
4F	Local	1655760	Carroll Park	41.778919	-88.016729	47.1	47.2	47.2	0.00	47.8	48	0.20
4F	Local	1655759	Carriage Hill Park	41.765585	-88.088120	44.6	44.8	44.8	0.00	45.3	45.6	0.30
4F	Local	1655756	Cantighy Park	41.855306	-88.157847	40.9	41	41	0.00	41.5	41.6	0.10

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
4F	Local	1655753	Buttonwood Park	41.757529	-88.171455	43.4	43.5	43.5	0.00	44	44.3	0.30
4F	Local	1655750	Burns Field Park	41.808364	-87.935894	49.4	49.5	49.6	0.10	50.3	50.5	0.20
4F	Local	1655749	Brush Hill Park	41.777807	-88.183123	44.1	44.3	44.3	0.00	44.7	45	0.30
4F	Local	1655797	Eggerman Woods County Forest Preserve	41.758363	-88.099509	44.2	44.3	44.3	0.00	44.9	45.2	0.30
4F	Local	1655745	Briar Patch Park	41.842529	-88.086455	42.5	42.6	42.6	0.00	43.3	43.4	0.10
4F	Local	1655767	Churchill Woods County Forest Preserve	41.887529	-88.044511	43.9	43.9	43.9	0.00	44.7	44.7	0.00
4F	Local	1655739	Blackwell County Forest Preserve	41.835584	-88.175902	42.5	42.6	42.6	0.00	43	43.2	0.20
4F	Local	1655737	Blackhawk Park	41.816974	-87.967562	47.2	47.2	47.3	0.10	48	48.1	0.10
4F	Local	1655736	Blackhawk Park	41.795863	-87.967839	47.9	48	48.1	0.10	48.7	49	0.30
4F	Local	1655735	Big Woods County Forest Preserve	41.815306	-88.239515	44.3	44.4	44.4	0.00	44.7	44.9	0.20
4F	Local	1655730	Belleau Woods County Forest Preserve	41.854195	-88.143957	40.7	40.7	40.8	0.10	41.3	41.4	0.10
4F	Local	1655728	Beau Bien Park	41.801418	-88.104510	44.1	44.2	44.3	0.10	44.8	45.1	0.30
4F	Local	1655870	Huntington Estates Parkway	41.761418	-88.114509	44.2	44.3	44.3	0.00	44.8	45.1	0.30
4F	Local	1655746	Brighton Park	41.836140	-88.123123	42.4	42.5	42.6	0.10	43.1	43.3	0.20
4F	Local	1655775	Connelly Park	41.802807	-88.071454	44.7	44.8	44.8	0.00	45.4	45.7	0.30
4F	Local	1655794	Eastern Park	41.793364	-87.947560	49	49.2	49.4	0.20	49.9	50.6	0.70
4F	Local	1655789	Dunham Place Park	41.758363	-88.019784	46.8	46.9	47.1	0.20	47.5	47.9	0.40
4F	Local	1655784	Dorset Park	41.829751	-88.124234	42.7	42.8	42.8	0.00	43.4	43.5	0.10
4F	Local	1655783	Doerhoefer Park	41.811696	-88.016730	46.4	46.5	46.5	0.00	47.2	47.3	0.10
4F	Local	1655781	Deer Creek Park	41.784197	-87.992562	47.6	47.7	47.8	0.10	48.3	48.6	0.30
4F	Local	1655780	Danada County Forest Preserve	41.824473	-88.117845	42.8	42.9	42.9	0.00	43.5	43.7	0.20
4F	Local	1655778	Creekside Park	41.773920	-87.932004	50.2	50.4	50.3	-0.10	51	51.1	0.10
4F	Local	1655761	Central Park	41.838363	-87.954229	48	48.1	48.1	0.00	48.8	48.8	0.00
4F	Local	1655776	Co-Op Park	41.856140	-88.066733	43.3	43.4	43.4	0.00	44.1	44.1	0.00
4F	Local	1655764	Cerny Park	41.811140	-88.176457	43.4	43.5	43.5	0.00	44	44.3	0.30
4F	Local	1655774	Concord Square Park	41.764474	-88.024229	46.8	46.9	47	0.10	47.5	47.8	0.30
4F	Local	1655773	Community Park	41.790307	-88.081454	45	45	45.1	0.10	45.7	45.9	0.20
4F	Local	1655772	Community Park	41.891140	-88.095346	41.2	41.3	41.3	0.00	42	42	0.00
4F	Local	1655771	College Road Park	41.751696	-88.091731	44.1	44.2	44.2	0.00	44.8	45	0.20
4F	Local	1655769	Coach House Park	41.768363	-88.110343	44.5	44.6	44.6	0.00	45.2	45.5	0.30
4F	Local	1655768	Clydesdale Park	41.829474	-88.080066	43.4	43.5	43.5	0.00	44.1	44.3	0.20
4F	Local	1655722	Aspen Park	41.761696	-88.104231	44.3	44.4	44.4	0.00	45	45.2	0.20
4F	Local	1655777	Cosley Park	41.877806	-88.120346	40.1	40.1	40.2	0.10	40.8	40.9	0.10
Grid		108_81	Illinois and Michigan Canal State Trail	41.377669	-88.490640	38.9	39	40.2	1.20	39.1	40.4	1.30
Grid		109_77	Illinois and Michigan Canal State Trail	41.344263	-88.479164	34.8	34.9	33.6	-1.30	35.2	33.7	-1.50
Grid		109_76	Illinois and Michigan Canal State Trail	41.335894	-88.479070	34.5	34.6	33.4	-1.20	34.8	33.6	-1.20
Grid		109_75	Illinois and Michigan Canal State Trail	41.327525	-88.478976	34.5	34.6	33.2	-1.40	34.9	33.5	-1.40
Grid		109_74	Illinois and Michigan Canal State Trail	41.319155	-88.478883	34.7	34.7	32.6	-2.10	35.1	32.9	-2.20
Grid		109_73	Illinois and Michigan Canal State Trail	41.310786	-88.478789	34.8	34.9	31.9	-3.00	35.1	32.2	-2.90
Grid		109_72	Illinois and Michigan Canal State Trail	41.302417	-88.478695	34.6	34.7	31.1	-3.60	35	31.3	-3.70
Grid		108_74	Illinois and Michigan Canal State Trail	41.319084	-88.489973	34	34.1	32.7	-1.40	34.4	33	-1.40
Grid		109_70	Illinois and Michigan Canal State Trail	41.285678	-88.478508	33.7	33.8	29.6	-4.20	34.1	29.7	-4.40
Grid		109_80	Illinois and Michigan Canal State Trail	41.369371	-88.479446	37.9	38	37	-1.00	38.1	37.1	-1.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		108_80	Illinois and Michigan Canal State Trail	41.369300	-88.490545	38.6	38.7	38.1	-0.60	38.8	38.3	-0.50
Grid		108_79	Illinois and Michigan Canal State Trail	41.360930	-88.490449	37.8	37.9	36.1	-1.80	38	36.2	-1.80
Grid		108_78	Illinois and Michigan Canal State Trail	41.352561	-88.490354	36.7	36.8	34.3	-2.50	37	34.3	-2.70
Grid		108_77	Illinois and Michigan Canal State Trail	41.344192	-88.490259	35.5	35.5	33.2	-2.30	35.8	33.3	-2.50
Grid		108_76	Illinois and Michigan Canal State Trail	41.335822	-88.490163	34.5	34.6	32.9	-1.70	34.8	33	-1.80
Grid		105_78	Illinois and Michigan Canal State Trail	41.352340	-88.523641	38.5	38.6	36.6	-2.00	38.7	36.7	-2.00
Grid		109_71	Illinois and Michigan Canal State Trail	41.294047	-88.478601	34.2	34.3	30.4	-3.90	34.6	30.5	-4.10
Grid		110_75	Illinois and Michigan Canal State Trail	41.327595	-88.467885	35	35.1	32.8	-2.30	35.4	33	-2.40
Grid		111_71	Illinois and Michigan Canal State Trail	41.294188	-88.456430	32.5	32.6	28.4	-4.20	32.9	28.5	-4.40
Grid		111_70	Illinois and Michigan Canal State Trail	41.285818	-88.456339	31.7	31.8	28	-3.80	32.2	28.1	-4.10
Grid		110_81	Illinois and Michigan Canal State Trail	41.377811	-88.468440	38.1	38.2	37.5	-0.70	38.3	37.6	-0.70
Grid		110_80	Illinois and Michigan Canal State Trail	41.369442	-88.468347	37.1	37.2	35.8	-1.40	37.4	35.9	-1.50
Grid		110_79	Illinois and Michigan Canal State Trail	41.361073	-88.468255	36.1	36.1	34.6	-1.50	36.4	34.7	-1.70
Grid		110_78	Illinois and Michigan Canal State Trail	41.352703	-88.468162	35.2	35.3	34.2	-1.10	35.6	34.3	-1.30
Grid		109_78	Illinois and Michigan Canal State Trail	41.352633	-88.479258	35.7	35.8	34.1	-1.70	36	34.1	-1.90
Grid		110_76	Illinois and Michigan Canal State Trail	41.335965	-88.467977	34.9	35	33.7	-1.30	35.3	34	-1.30
Grid		109_79	Illinois and Michigan Canal State Trail	41.361002	-88.479352	36.9	37	35.2	-1.80	37.2	35.3	-1.90
Grid		110_74	Illinois and Michigan Canal State Trail	41.319226	-88.467793	34.9	35	31.8	-3.20	35.3	32	-3.30
Grid		110_73	Illinois and Michigan Canal State Trail	41.310857	-88.467700	34.7	34.7	30.9	-3.80	35	31	-4.00
Grid		110_72	Illinois and Michigan Canal State Trail	41.302487	-88.467608	34.1	34.3	30	-4.30	34.5	30.2	-4.30
Grid		110_71	Illinois and Michigan Canal State Trail	41.294118	-88.467516	33.5	33.6	29.2	-4.40	33.9	29.3	-4.60
Grid		110_70	Illinois and Michigan Canal State Trail	41.285749	-88.467423	32.8	32.9	28.5	-4.40	33.2	28.7	-4.50
Grid		109_81	Illinois and Michigan Canal State Trail	41.377741	-88.479540	38.7	38.8	38.9	0.10	38.9	39.1	0.20
Grid		108_73	Illinois and Michigan Canal State Trail	41.310714	-88.489878	34.2	34.3	32.5	-1.80	34.6	32.8	-1.80
Grid		110_77	Illinois and Michigan Canal State Trail	41.344334	-88.468070	35	35.1	34	-1.10	35.3	34.2	-1.10
Grid		106_72	Illinois and Michigan Canal State Trail	41.302198	-88.511957	33.1	33.2	31.8	-1.40	33.4	32.1	-1.30
Grid		106_80	Illinois and Michigan Canal State Trail	41.369153	-88.512742	38.5	38.5	39.8	1.30	38.6	40	1.40
Grid		106_79	Illinois and Michigan Canal State Trail	41.360784	-88.512644	38.6	38.7	37.9	-0.80	38.8	38.1	-0.70
Grid		106_78	Illinois and Michigan Canal State Trail	41.352414	-88.512545	38.3	38.4	35.7	-2.70	38.5	35.8	-2.70
Grid		106_77	Illinois and Michigan Canal State Trail	41.344045	-88.512447	37.5	37.5	33.6	-3.90	37.7	33.6	-4.10
Grid		106_76	Illinois and Michigan Canal State Trail	41.335676	-88.512349	36.4	36.5	32.2	-4.30	36.6	32.1	-4.50
Grid		106_75	Illinois and Michigan Canal State Trail	41.327306	-88.512251	35.1	35.2	31.5	-3.70	35.3	31.5	-3.80
Grid		108_75	Illinois and Michigan Canal State Trail	41.327453	-88.490068	34.1	34.1	32.8	-1.30	34.4	33.1	-1.30
Grid		106_73	Illinois and Michigan Canal State Trail	41.310568	-88.512055	33.2	33.3	31.6	-1.70	33.6	31.9	-1.70
Grid		106_112	Silver Springs State Fish and Wildlife Area	41.636972	-88.515899	32.7	32.7	32.7	0.00	33.3	33.4	0.10
Grid		106_71	Illinois and Michigan Canal State Trail	41.293829	-88.511859	33.3	33.4	31.9	-1.50	33.6	32.3	-1.30
Grid		106_70	Illinois and Michigan Canal State Trail	41.285460	-88.511761	33.6	33.7	31.8	-1.90	33.9	32.1	-1.80
Grid		105_111	Silver Springs State Fish and Wildlife Area	41.628528	-88.526943	32.5	32.5	32.5	0.00	33.2	33.1	-0.10
Grid		105_110	Silver Springs State Fish and Wildlife Area	41.620158	-88.526842	33.1	33.2	33.1	-0.10	33.8	33.8	0.00
Grid		105_80	Illinois and Michigan Canal State Trail	41.369078	-88.523840	37.7	37.8	40.1	2.30	37.9	40.4	2.50
Grid		116_81	Illinois and Michigan Canal State Trail	41.378212	-88.401838	34.6	34.7	34.3	-0.40	35	34.5	-0.50
Grid		106_74	Illinois and Michigan Canal State Trail	41.318937	-88.512153	34	34.1	31.4	-2.70	34.3	31.6	-2.70
Grid		107_76	Illinois and Michigan Canal State Trail	41.335750	-88.501256	35.3	35.3	32.4	-2.90	35.6	32.4	-3.20

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		108_72	Illinois and Michigan Canal State Trail	41.302345	-88.489782	34.5	34.6	32	-2.60	34.8	32.3	-2.50
Grid		108_71	Illinois and Michigan Canal State Trail	41.293976	-88.489687	34.4	34.5	31.3	-3.20	34.8	31.6	-3.20
Grid		108_70	Illinois and Michigan Canal State Trail	41.285606	-88.489592	34.2	34.3	30.7	-3.60	34.6	30.9	-3.70
Grid		107_81	Illinois and Michigan Canal State Trail	41.377596	-88.501740	38.6	38.7	40.8	2.10	38.8	41.1	2.30
Grid		107_80	Illinois and Michigan Canal State Trail	41.369227	-88.501643	38.8	38.8	39	0.20	38.9	39.3	0.40
Grid		107_79	Illinois and Michigan Canal State Trail	41.360858	-88.501546	38.5	38.5	37	-1.50	38.6	37.2	-1.40
Grid		106_110	Silver Springs State Fish and Wildlife Area	41.620233	-88.515701	33.9	34	33.9	-0.10	34.6	34.6	0.00
Grid		107_77	Illinois and Michigan Canal State Trail	41.344119	-88.501353	36.6	36.7	33.3	-3.40	36.8	33.2	-3.60
Grid		106_111	Silver Springs State Fish and Wildlife Area	41.628603	-88.515800	33.1	33.2	33.1	-0.10	33.8	33.8	0.00
Grid		107_75	Illinois and Michigan Canal State Trail	41.327380	-88.501159	34.2	34.3	32.2	-2.10	34.5	32.3	-2.20
Grid		107_74	Illinois and Michigan Canal State Trail	41.319011	-88.501063	33.6	33.7	32.2	-1.50	34	32.5	-1.50
Grid		107_73	Illinois and Michigan Canal State Trail	41.310642	-88.500966	33.5	33.6	32.3	-1.30	33.9	32.6	-1.30
Grid		107_72	Illinois and Michigan Canal State Trail	41.302272	-88.500870	33.8	33.9	32.2	-1.70	34.1	32.5	-1.60
Grid		107_71	Illinois and Michigan Canal State Trail	41.293903	-88.500773	34.1	34.1	32	-2.10	34.4	32.3	-2.10
Grid		107_70	Illinois and Michigan Canal State Trail	41.285534	-88.500676	34.1	34.2	31.5	-2.70	34.5	31.8	-2.70
Grid		111_74	Illinois and Michigan Canal State Trail	41.319296	-88.456702	34.5	34.6	30.8	-3.80	34.9	30.9	-4.00
Grid		107_78	Illinois and Michigan Canal State Trail	41.352488	-88.501450	37.7	37.7	34.9	-2.80	37.9	35	-2.90
Grid		114_80	Illinois and Michigan Canal State Trail	41.369714	-88.423952	35.7	35.8	34.7	-1.10	36.1	34.9	-1.20
Grid		115_75	Illinois and Michigan Canal State Trail	41.327932	-88.412426	31.5	31.6	28.8	-2.80	32	29	-3.00
Grid		115_74	Illinois and Michigan Canal State Trail	41.319563	-88.412341	31.4	31.5	28.5	-3.00	31.9	28.7	-3.20
Grid		115_73	Illinois and Michigan Canal State Trail	41.311193	-88.412256	31.4	31.5	28.4	-3.10	31.9	28.7	-3.20
Grid		115_72	Illinois and Michigan Canal State Trail	41.302824	-88.412171	31.4	31.5	28.4	-3.10	32	28.7	-3.30
Grid		115_71	Illinois and Michigan Canal State Trail	41.294455	-88.412086	31.4	31.5	28.5	-3.00	31.9	28.9	-3.00
Grid		115_70	Illinois and Michigan Canal State Trail	41.286085	-88.412000	31.3	31.4	28.6	-2.80	31.8	29	-2.80
Grid		111_72	Illinois and Michigan Canal State Trail	41.302557	-88.456520	33.2	33.3	29	-4.30	33.6	29.1	-4.50
Grid		114_81	Illinois and Michigan Canal State Trail	41.378083	-88.424039	36.2	36.3	35	-1.30	36.6	35.1	-1.50
Grid		115_78	Illinois and Michigan Canal State Trail	41.353040	-88.412682	33.1	33.2	31.6	-1.60	33.6	31.7	-1.90
Grid		114_79	Illinois and Michigan Canal State Trail	41.361344	-88.423865	35.1	35.2	33.8	-1.40	35.5	34.1	-1.40
Grid		114_78	Illinois and Michigan Canal State Trail	41.352975	-88.423778	34.3	34.4	32.6	-1.80	34.7	32.8	-1.90
Grid		114_77	Illinois and Michigan Canal State Trail	41.344606	-88.423692	33.5	33.6	31.3	-2.30	34	31.4	-2.60
Grid		114_76	Illinois and Michigan Canal State Trail	41.336236	-88.423605	32.7	32.8	30.1	-2.70	33.2	30.2	-3.00
Grid		114_75	Illinois and Michigan Canal State Trail	41.327867	-88.423518	32	32.1	29.2	-2.90	32.5	29.2	-3.30
Grid		114_74	Illinois and Michigan Canal State Trail	41.319498	-88.423431	31.6	31.7	28.5	-3.20	32	28.7	-3.30
Grid		114_82	Illinois and Michigan Canal State Trail	41.386452	-88.424125	36.7	36.8	35.3	-1.50	37.1	35.4	-1.70
Grid		116_72	Illinois and Michigan Canal State Trail	41.302888	-88.401083	31.4	31.5	28.8	-2.70	31.9	29.2	-2.70
Grid		93_79	Illinois and Michigan Canal State Trail	41.359725	-88.656904	31.3	31.5	35.2	3.70	31.7	35.4	3.70
Grid		116_79	Illinois and Michigan Canal State Trail	41.361474	-88.401670	32.8	32.9	31.8	-1.10	33.2	31.9	-1.30
Grid		116_78	Illinois and Michigan Canal State Trail	41.353104	-88.401586	32.1	32.2	30.7	-1.50	32.6	30.7	-1.90
Grid		116_77	Illinois and Michigan Canal State Trail	41.344735	-88.401502	31.7	31.8	29.7	-2.10	32.2	29.8	-2.40
Grid		116_76	Illinois and Michigan Canal State Trail	41.336366	-88.401418	31.6	31.7	29.1	-2.60	32.1	29.2	-2.90
Grid		116_75	Illinois and Michigan Canal State Trail	41.327996	-88.401335	31.5	31.6	28.7	-2.90	32.1	29	-3.10
Grid		115_76	Illinois and Michigan Canal State Trail	41.336301	-88.412512	31.8	31.9	29.4	-2.50	32.3	29.5	-2.80
Grid		116_73	Illinois and Michigan Canal State Trail	41.311258	-88.401167	31.5	31.6	28.7	-2.90	32.1	29.1	-3.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		115_77	Illinois and Michigan Canal State Trail	41.344671	-88.412597	32.3	32.4	30.4	-2.00	32.8	30.4	-2.40
Grid		116_71	Illinois and Michigan Canal State Trail	41.294519	-88.401000	31.2	31.3	28.9	-2.40	31.8	29.4	-2.40
Grid		116_70	Illinois and Michigan Canal State Trail	41.286150	-88.400916	31	31.1	29.1	-2.00	31.6	29.6	-2.00
Grid		115_82	Illinois and Michigan Canal State Trail	41.386518	-88.413023	36.4	36.5	35.2	-1.30	36.7	35.3	-1.40
Grid		115_81	Illinois and Michigan Canal State Trail	41.378148	-88.412938	35.7	35.8	34.9	-0.90	36	35.1	-0.90
Grid		115_80	Illinois and Michigan Canal State Trail	41.369779	-88.412853	34.9	35	34.1	-0.90	35.3	34.3	-1.00
Grid		115_79	Illinois and Michigan Canal State Trail	41.361410	-88.412767	34	34.1	33	-1.10	34.4	33.1	-1.30
Grid		114_71	Illinois and Michigan Canal State Trail	41.294390	-88.423172	31.2	31.3	28.1	-3.20	31.7	28.5	-3.20
Grid		116_74	Illinois and Michigan Canal State Trail	41.319627	-88.401251	31.6	31.6	28.7	-2.90	32.1	29	-3.10
Grid		111_81	Illinois and Michigan Canal State Trail	41.377881	-88.457339	37.4	37.4	36.3	-1.10	37.6	36.4	-1.20
Grid		114_73	Illinois and Michigan Canal State Trail	41.311128	-88.423345	31.4	31.4	28.2	-3.20	31.8	28.5	-3.30
Grid		112_76	Illinois and Michigan Canal State Trail	41.336103	-88.445791	34.8	34.9	32.1	-2.80	35.2	32.3	-2.90
Grid		112_75	Illinois and Michigan Canal State Trail	41.327733	-88.445702	34.2	34.3	30.9	-3.40	34.6	31	-3.60
Grid		112_74	Illinois and Michigan Canal State Trail	41.319364	-88.445612	33.6	33.7	29.8	-3.90	34	29.9	-4.10
Grid		112_73	Illinois and Michigan Canal State Trail	41.310995	-88.445523	32.9	32.9	28.9	-4.00	33.3	29	-4.30
Grid		112_72	Illinois and Michigan Canal State Trail	41.302625	-88.445433	32	32.1	28.3	-3.80	32.6	28.5	-4.10
Grid		112_78	Illinois and Michigan Canal State Trail	41.352841	-88.445970	35.5	35.6	34.2	-1.40	35.9	34.4	-1.50
Grid		112_70	Illinois and Michigan Canal State Trail	41.285887	-88.445254	31.1	31.2	27.8	-3.40	31.6	28	-3.60
Grid		112_79	Illinois and Michigan Canal State Trail	41.361211	-88.446060	35.8	35.9	34.5	-1.40	36.1	34.7	-1.40
Grid		111_80	Illinois and Michigan Canal State Trail	41.369512	-88.457248	36.4	36.5	35	-1.50	36.7	35.1	-1.60
Grid		111_79	Illinois and Michigan Canal State Trail	41.361142	-88.457157	35.7	35.8	34.5	-1.30	36	34.6	-1.40
Grid		111_78	Illinois and Michigan Canal State Trail	41.352773	-88.457066	35.4	35.5	34.3	-1.20	35.7	34.5	-1.20
Grid		111_77	Illinois and Michigan Canal State Trail	41.344404	-88.456975	35.3	35.3	34.1	-1.20	35.7	34.3	-1.40
Grid		111_76	Illinois and Michigan Canal State Trail	41.336034	-88.456884	35.2	35.3	33.2	-2.10	35.5	33.4	-2.10
Grid		111_75	Illinois and Michigan Canal State Trail	41.327665	-88.456793	34.9	35	31.9	-3.10	35.3	32.1	-3.20
Grid		105_77	Illinois and Michigan Canal State Trail	41.343970	-88.523542	38.1	38.1	34.2	-3.90	38.2	34.2	-4.00
Grid		112_71	Illinois and Michigan Canal State Trail	41.294256	-88.445344	31.5	31.5	27.9	-3.60	31.9	28.2	-3.70
Grid		113_75	Illinois and Michigan Canal State Trail	41.327801	-88.434610	33.2	33.3	29.9	-3.40	33.6	30	-3.60
Grid		111_73	Illinois and Michigan Canal State Trail	41.310926	-88.456611	33.9	34	29.8	-4.20	34.3	29.9	-4.40
Grid		114_70	Illinois and Michigan Canal State Trail	41.286020	-88.423085	31.2	31.4	28.2	-3.20	31.8	28.5	-3.30
Grid		113_81	Illinois and Michigan Canal State Trail	41.378017	-88.435139	36.4	36.5	35	-1.50	36.8	35.1	-1.70
Grid		113_80	Illinois and Michigan Canal State Trail	41.369647	-88.435051	36	36.1	34.8	-1.30	36.3	34.9	-1.40
Grid		113_79	Illinois and Michigan Canal State Trail	41.361278	-88.434962	35.6	35.7	34.4	-1.30	36.1	34.6	-1.50
Grid		113_78	Illinois and Michigan Canal State Trail	41.352909	-88.434874	35.2	35.3	33.6	-1.70	35.6	33.8	-1.80
Grid		112_77	Illinois and Michigan Canal State Trail	41.344472	-88.445881	35.3	35.3	33.4	-1.90	35.6	33.6	-2.00
Grid		113_76	Illinois and Michigan Canal State Trail	41.336170	-88.434698	33.9	34	31.1	-2.90	34.3	31.2	-3.10
Grid		114_72	Illinois and Michigan Canal State Trail	41.302759	-88.423258	31.3	31.3	28.1	-3.20	31.8	28.4	-3.40
Grid		113_74	Illinois and Michigan Canal State Trail	41.319431	-88.434522	32.4	32.5	29	-3.50	32.8	29.1	-3.70
Grid		113_73	Illinois and Michigan Canal State Trail	41.311062	-88.434434	31.7	31.8	28.4	-3.40	32.2	28.5	-3.70
Grid		113_72	Illinois and Michigan Canal State Trail	41.302693	-88.434346	31.4	31.4	28.1	-3.30	31.8	28.3	-3.50
Grid		113_71	Illinois and Michigan Canal State Trail	41.294323	-88.434258	31.1	31.2	27.9	-3.30	31.7	28.2	-3.50
Grid		113_70	Illinois and Michigan Canal State Trail	41.285954	-88.434170	31.1	31.1	27.9	-3.20	31.6	28.2	-3.40
Grid		112_81	Illinois and Michigan Canal State Trail	41.377949	-88.446239	36.8	36.8	35.4	-1.40	37.1	35.4	-1.70

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		112_80	Illinois and Michigan Canal State Trail	41.369580	-88.446149	36.1	36.1	34.8	-1.30	36.4	34.9	-1.50
Grid		113_77	Illinois and Michigan Canal State Trail	41.344539	-88.434786	34.6	34.7	32.4	-2.30	35	32.5	-2.50
Grid		96_79	Illinois and Michigan Canal State Trail	41.359985	-88.623614	30.1	30.3	37.4	7.10	30.6	37.7	7.10
Grid		97_76	Illinois and Michigan Canal State Trail	41.334962	-88.612183	32.1	32.2	37.6	5.40	32.6	37.8	5.20
Grid		97_75	Illinois and Michigan Canal State Trail	41.326593	-88.612072	33.4	33.5	36	2.50	33.8	36	2.20
Grid		97_74	Illinois and Michigan Canal State Trail	41.318223	-88.611961	34.6	34.7	33.7	-1.00	34.9	33.7	-1.20
Grid		97_73	Illinois and Michigan Canal State Trail	41.309854	-88.611851	35.6	35.7	31.6	-4.10	36	31.4	-4.60
Grid		97_72	Illinois and Michigan Canal State Trail	41.301485	-88.611740	36.4	36.4	29.8	-6.60	36.6	29.5	-7.10
Grid		97_71	Illinois and Michigan Canal State Trail	41.293115	-88.611629	36.5	36.6	28.3	-8.30	36.9	27.9	-9.00
Grid		96_72	Illinois and Michigan Canal State Trail	41.301400	-88.622826	35.6	35.7	30.4	-5.30	36	30.1	-5.90
Grid		96_80	Illinois and Michigan Canal State Trail	41.368355	-88.623726	31.1	31.2	35.9	4.70	31.5	36.1	4.60
Grid		97_79	Illinois and Michigan Canal State Trail	41.360070	-88.612517	30.1	30.3	38	7.70	30.7	38.3	7.60
Grid		96_78	Illinois and Michigan Canal State Trail	41.351616	-88.623501	29.8	29.9	38.3	8.40	30.3	38.6	8.30
Grid		96_77	Illinois and Michigan Canal State Trail	41.343247	-88.623389	30	30.1	38.5	8.40	30.5	38.8	8.30
Grid		96_76	Illinois and Michigan Canal State Trail	41.334877	-88.623276	30.8	30.9	37.9	7.00	31.3	38.1	6.80
Grid		96_75	Illinois and Michigan Canal State Trail	41.326508	-88.623164	32.1	32.2	36.5	4.30	32.5	36.7	4.20
Grid		96_74	Illinois and Michigan Canal State Trail	41.318139	-88.623051	33.4	33.5	34.5	1.00	33.7	34.5	0.80
Grid		105_79	Illinois and Michigan Canal State Trail	41.360709	-88.523741	38.4	38.4	38.6	0.20	38.5	38.9	0.40
Grid		97_70	Illinois and Michigan Canal State Trail	41.284746	-88.611518	36.3	36.3	27.2	-9.10	36.5	26.7	-9.80
Grid		98_75	Illinois and Michigan Canal State Trail	41.326676	-88.600981	34.7	34.8	35.2	0.40	35	35.2	0.20
Grid		99_72	Illinois and Michigan Canal State Trail	41.301651	-88.589566	36.7	36.8	28.7	-8.10	37	28.3	-8.70
Grid		99_71	Illinois and Michigan Canal State Trail	41.293282	-88.589458	36.2	36.2	27.6	-8.60	36.4	27.1	-9.30
Grid		99_70	Illinois and Michigan Canal State Trail	41.284912	-88.589350	35.3	35.4	26.8	-8.60	35.6	26.4	-9.20
Grid		98_80	Illinois and Michigan Canal State Trail	41.368523	-88.601530	30.6	30.8	37.4	6.60	31.1	37.7	6.60
Grid		98_79	Illinois and Michigan Canal State Trail	41.360154	-88.601420	30.6	30.7	38.6	7.90	31.1	38.9	7.80
Grid		98_78	Illinois and Michigan Canal State Trail	41.351784	-88.601310	31.2	31.3	39	7.70	31.6	39.3	7.70
Grid		97_77	Illinois and Michigan Canal State Trail	41.343331	-88.612295	31	31.1	38.6	7.50	31.4	38.8	7.40
Grid		98_76	Illinois and Michigan Canal State Trail	41.335046	-88.601091	33.5	33.5	37.2	3.70	33.8	37.3	3.50
Grid		97_78	Illinois and Michigan Canal State Trail	41.351701	-88.612406	30.3	30.4	38.7	8.30	30.7	39	8.30
Grid		98_74	Illinois and Michigan Canal State Trail	41.318307	-88.600872	35.7	35.8	33	-2.80	36	32.9	-3.10
Grid		98_73	Illinois and Michigan Canal State Trail	41.309938	-88.600762	36.5	36.6	30.9	-5.70	36.7	30.6	-6.10
Grid		98_72	Illinois and Michigan Canal State Trail	41.301568	-88.600653	36.7	36.8	29.2	-7.60	37	28.8	-8.20
Grid		98_71	Illinois and Michigan Canal State Trail	41.293199	-88.600543	36.5	36.6	27.8	-8.80	36.8	27.4	-9.40
Grid		98_70	Illinois and Michigan Canal State Trail	41.284830	-88.600434	35.9	35.9	26.9	-9.00	36.1	26.5	-9.60
Grid		97_80	Illinois and Michigan Canal State Trail	41.368439	-88.612628	30.7	30.9	36.6	5.70	31.2	36.9	5.70
Grid		96_71	Illinois and Michigan Canal State Trail	41.293031	-88.622714	36.3	36.3	28.8	-7.50	36.6	28.5	-8.10
Grid		98_77	Illinois and Michigan Canal State Trail	41.343415	-88.601201	32.2	32.4	38.5	6.10	32.7	38.7	6.00
Grid		94_72	Illinois and Michigan Canal State Trail	41.301227	-88.645000	33.3	33.3	31.8	-1.50	33.7	31.5	-2.20
Grid		94_80	Illinois and Michigan Canal State Trail	41.368182	-88.645923	32	32.2	34.3	2.10	32.4	34.5	2.10
Grid		94_79	Illinois and Michigan Canal State Trail	41.359813	-88.645807	30.8	30.9	36	5.10	31.2	36.3	5.10
Grid		94_78	Illinois and Michigan Canal State Trail	41.351443	-88.645692	29.7	29.9	37.3	7.40	30.3	37.7	7.40
Grid		94_77	Illinois and Michigan Canal State Trail	41.343074	-88.645576	29.2	29.3	38	8.70	29.6	38.3	8.70
Grid		94_76	Illinois and Michigan Canal State Trail	41.334705	-88.645461	29.1	29.2	38	8.80	29.7	38.2	8.50

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		94_75	Illinois and Michigan Canal State Trail	41.326335	-88.645346	29.6	29.8	37.2	7.40	30.1	37.3	7.20
Grid		96_73	Illinois and Michigan Canal State Trail	41.309769	-88.622939	34.5	34.6	32.4	-2.20	34.9	32.2	-2.70
Grid		94_73	Illinois and Michigan Canal State Trail	41.309597	-88.645115	31.9	32	33.8	1.80	32.4	33.7	1.30
Grid		95_67	LaSalle Lake State Fish and Wildlife Area	41.259467	-88.633345	34.9	35	25.4	-9.60	35.2	25.1	-10.10
Grid		94_71	Illinois and Michigan Canal State Trail	41.292858	-88.644885	34.6	34.7	30	-4.70	34.9	29.6	-5.30
Grid		94_70	Illinois and Michigan Canal State Trail	41.284489	-88.644770	35.7	35.7	28.4	-7.30	36	27.9	-8.10
Grid		94_67	LaSalle Lake State Fish and Wildlife Area	41.259381	-88.644424	35.6	35.6	25.6	-10.00	35.8	25.2	-10.60
Grid		94_66	LaSalle Lake State Fish and Wildlife Area	41.251011	-88.644309	34.5	34.6	25.1	-9.50	34.8	24.8	-10.00
Grid		94_65	LaSalle Lake State Fish and Wildlife Area	41.242642	-88.644194	33.2	33.3	24.7	-8.60	33.6	24.4	-9.20
Grid		21_29	Marshall State Fish and Wildlife Area	40.932068	-89.444779	24.2	24.3	20.9	-3.40	24.6	20.2	-4.40
Grid		94_74	Illinois and Michigan Canal State Trail	41.317966	-88.645230	30.7	30.7	35.7	5.00	31.2	35.8	4.60
Grid		95_76	Illinois and Michigan Canal State Trail	41.334792	-88.634368	29.8	29.9	38	8.10	30.3	38.2	7.90
Grid		96_70	Illinois and Michigan Canal State Trail	41.284661	-88.622602	36.5	36.6	27.5	-9.10	36.8	27.2	-9.60
Grid		96_67	LaSalle Lake State Fish and Wildlife Area	41.259553	-88.622265	34.1	34.2	25.3	-8.90	34.5	25	-9.50
Grid		96_66	LaSalle Lake State Fish and Wildlife Area	41.251184	-88.622153	32.8	32.9	25	-7.90	33.2	24.7	-8.50
Grid		96_65	LaSalle Lake State Fish and Wildlife Area	41.242815	-88.622041	31.6	31.7	24.8	-6.90	32	24.7	-7.30
Grid		95_80	Illinois and Michigan Canal State Trail	41.368269	-88.634824	31.5	31.7	35	3.30	31.9	35.3	3.40
Grid		95_79	Illinois and Michigan Canal State Trail	41.359900	-88.634710	30.4	30.5	36.7	6.20	30.8	37	6.20
Grid		95_65	LaSalle Lake State Fish and Wildlife Area	41.242729	-88.633117	32.3	32.4	24.7	-7.70	32.7	24.5	-8.20
Grid		95_77	Illinois and Michigan Canal State Trail	41.343161	-88.634482	29.4	29.5	38.3	8.80	30	38.6	8.60
Grid		95_66	LaSalle Lake State Fish and Wildlife Area	41.251098	-88.633231	33.7	33.8	24.9	-8.90	34	24.7	-9.30
Grid		95_75	Illinois and Michigan Canal State Trail	41.326422	-88.634255	30.7	30.9	36.9	6.00	31.2	37.1	5.90
Grid		95_74	Illinois and Michigan Canal State Trail	41.318053	-88.634141	32	32.1	35.2	3.10	32.5	35.2	2.70
Grid		95_73	Illinois and Michigan Canal State Trail	41.309684	-88.634027	33.3	33.4	33.1	-0.30	33.7	32.9	-0.80
Grid		95_72	Illinois and Michigan Canal State Trail	41.301314	-88.633913	34.5	34.6	31.1	-3.50	34.8	30.8	-4.00
Grid		95_71	Illinois and Michigan Canal State Trail	41.292945	-88.633799	35.6	35.7	29.4	-6.30	35.9	29	-6.90
Grid		95_70	Illinois and Michigan Canal State Trail	41.284575	-88.633686	36.3	36.3	28	-8.30	36.5	27.5	-9.00
Grid		99_75	Illinois and Michigan Canal State Trail	41.326759	-88.589890	35.8	35.9	34.4	-1.50	36.1	34.4	-1.70
Grid		95_78	Illinois and Michigan Canal State Trail	41.351530	-88.634596	29.6	29.7	37.9	8.20	30.1	38.1	8.00
Grid		103_73	Illinois and Michigan Canal State Trail	41.310340	-88.545320	35.5	35.6	29.2	-6.40	35.8	29.1	-6.70
Grid		104_70	Illinois and Michigan Canal State Trail	41.285309	-88.533929	32.3	32.4	30.7	-1.70	32.7	31	-1.70
Grid		103_80	Illinois and Michigan Canal State Trail	41.368925	-88.546038	35.4	35.5	39.9	4.40	35.8	40.2	4.40
Grid		103_79	Illinois and Michigan Canal State Trail	41.360556	-88.545935	36.5	36.6	39.4	2.80	36.8	39.7	2.90
Grid		103_78	Illinois and Michigan Canal State Trail	41.352186	-88.545833	37.4	37.5	38	0.50	37.6	38.2	0.60
Grid		103_77	Illinois and Michigan Canal State Trail	41.343817	-88.545730	38	38	35.9	-2.10	38.1	35.9	-2.20
Grid		103_76	Illinois and Michigan Canal State Trail	41.335448	-88.545628	38	38.1	33.5	-4.60	38.2	33.4	-4.80
Grid		99_73	Illinois and Michigan Canal State Trail	41.310020	-88.589674	37	37	30.3	-6.70	37.2	29.9	-7.30
Grid		103_74	Illinois and Michigan Canal State Trail	41.318709	-88.545423	36.7	36.8	30	-6.80	36.9	29.8	-7.10
Grid		104_73	Illinois and Michigan Canal State Trail	41.310417	-88.534232	34.6	34.7	29.7	-5.00	34.9	29.7	-5.20
Grid		103_72	Illinois and Michigan Canal State Trail	41.301970	-88.545218	34.3	34.4	28.9	-5.50	34.7	28.9	-5.80
Grid		103_71	Illinois and Michigan Canal State Trail	41.293601	-88.545116	33.2	33.3	29.1	-4.20	33.7	29.2	-4.50
Grid		103_70	Illinois and Michigan Canal State Trail	41.285232	-88.545013	32.4	32.5	29.5	-3.00	32.9	29.7	-3.20
Grid		102_80	Illinois and Michigan Canal State Trail	41.368847	-88.557136	34.1	34.2	39.6	5.40	34.5	39.9	5.40

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		102_79	Illinois and Michigan Canal State Trail	41.360477	-88.557032	35.1	35.2	39.5	4.30	35.5	39.8	4.30
Grid		102_78	Illinois and Michigan Canal State Trail	41.352108	-88.556928	36.3	36.3	38.4	2.10	36.5	38.7	2.20
Grid		103_75	Illinois and Michigan Canal State Trail	41.327078	-88.545525	37.4	37.5	31.5	-6.00	37.7	31.3	-6.40
Grid		104_80	Illinois and Michigan Canal State Trail	41.369002	-88.534939	36.7	36.8	40.1	3.30	36.9	40.4	3.50
Grid		105_76	Illinois and Michigan Canal State Trail	41.335601	-88.523442	37.2	37.3	32.3	-5.00	37.5	32.2	-5.30
Grid		105_75	Illinois and Michigan Canal State Trail	41.327231	-88.523342	36.1	36.2	31.1	-5.10	36.3	31	-5.30
Grid		105_74	Illinois and Michigan Canal State Trail	41.318862	-88.523243	34.9	34.9	30.6	-4.30	35.1	30.6	-4.50
Grid		105_73	Illinois and Michigan Canal State Trail	41.310493	-88.523143	33.7	33.8	30.7	-3.10	34	30.8	-3.20
Grid		105_72	Illinois and Michigan Canal State Trail	41.302123	-88.523044	32.9	33	31	-2.00	33.2	31.2	-2.00
Grid		105_71	Illinois and Michigan Canal State Trail	41.293754	-88.522944	32.6	32.7	31.3	-1.40	33	31.6	-1.40
Grid		104_71	Illinois and Michigan Canal State Trail	41.293678	-88.534030	32.7	32.8	30.2	-2.60	33.1	30.5	-2.60
Grid		104_111	Silver Springs State Fish and Wildlife Area	41.628452	-88.538086	31.9	32.1	32	-0.10	32.6	32.6	0.00
Grid		104_72	Illinois and Michigan Canal State Trail	41.302047	-88.534131	33.5	33.6	29.9	-3.70	33.9	30	-3.90
Grid		104_79	Illinois and Michigan Canal State Trail	41.360633	-88.534838	37.6	37.7	39.1	1.40	37.8	39.4	1.60
Grid		104_78	Illinois and Michigan Canal State Trail	41.352263	-88.534737	38.2	38.3	37.3	-1.00	38.4	37.4	-1.00
Grid		104_77	Illinois and Michigan Canal State Trail	41.343894	-88.534636	38.3	38.3	35	-3.30	38.4	35	-3.40
Grid		104_76	Illinois and Michigan Canal State Trail	41.335525	-88.534535	37.8	37.8	32.8	-5.00	38	32.7	-5.30
Grid		104_75	Illinois and Michigan Canal State Trail	41.327155	-88.534434	36.9	37	31.1	-5.90	37.1	31	-6.10
Grid		104_74	Illinois and Michigan Canal State Trail	41.318786	-88.534333	35.8	35.9	30.1	-5.80	36.1	30	-6.10
Grid		102_75	Illinois and Michigan Canal State Trail	41.327000	-88.556617	37.6	37.7	32.1	-5.60	37.8	31.8	-6.00
Grid		105_70	Illinois and Michigan Canal State Trail	41.285385	-88.522845	32.7	32.8	31.5	-1.30	33.1	31.8	-1.30
Grid		100_71	Illinois and Michigan Canal State Trail	41.293363	-88.578372	35.6	35.6	27.4	-8.20	35.9	27.1	-8.80
Grid		102_77	Illinois and Michigan Canal State Trail	41.343739	-88.556824	37.1	37.2	36.6	-0.60	37.3	36.7	-0.60
Grid		100_78	Illinois and Michigan Canal State Trail	41.351948	-88.579119	33.6	33.7	39	5.30	34	39.3	5.30
Grid		100_77	Illinois and Michigan Canal State Trail	41.343579	-88.579013	34.8	34.9	37.8	2.90	35.1	38	2.90
Grid		100_76	Illinois and Michigan Canal State Trail	41.335210	-88.578906	35.9	36	35.9	-0.10	36.2	36	-0.20
Grid		100_75	Illinois and Michigan Canal State Trail	41.326840	-88.578799	36.8	36.8	33.6	-3.20	37	33.5	-3.50
Grid		100_74	Illinois and Michigan Canal State Trail	41.318471	-88.578692	37.2	37.3	31.5	-5.80	37.4	31.2	-6.20
Grid		100_80	Illinois and Michigan Canal State Trail	41.368687	-88.579333	31.7	31.8	38.7	6.90	32.1	39	6.90
Grid		100_72	Illinois and Michigan Canal State Trail	41.301732	-88.578479	36.5	36.5	28.4	-8.10	36.7	28	-8.70
Grid		101_70	Illinois and Michigan Canal State Trail	41.285074	-88.567182	33.8	33.9	27.4	-6.50	34.1	27.3	-6.80
Grid		100_70	Illinois and Michigan Canal State Trail	41.284994	-88.578266	34.4	34.5	26.9	-7.60	34.8	26.7	-8.10
Grid		99_80	Illinois and Michigan Canal State Trail	41.368606	-88.590431	31	31.1	38	6.90	31.4	38.3	6.90
Grid		99_79	Illinois and Michigan Canal State Trail	41.360236	-88.590323	31.4	31.5	39	7.50	31.9	39.3	7.40
Grid		99_78	Illinois and Michigan Canal State Trail	41.351867	-88.590215	32.3	32.4	39	6.60	32.8	39.4	6.60
Grid		99_77	Illinois and Michigan Canal State Trail	41.343498	-88.590107	33.5	33.6	38.3	4.70	33.9	38.5	4.60
Grid		99_76	Illinois and Michigan Canal State Trail	41.335128	-88.589998	34.8	34.8	36.6	1.80	35.1	36.7	1.60
Grid		116_82	Illinois and Michigan Canal State Trail	41.386582	-88.401922	35.6	35.7	35.1	-0.60	35.9	35.3	-0.60
Grid		100_73	Illinois and Michigan Canal State Trail	41.310102	-88.578586	37	37	29.7	-7.30	37.2	29.3	-7.90
Grid		101_78	Illinois and Michigan Canal State Trail	41.352029	-88.568024	34.9	35	38.8	3.80	35.3	39.1	3.80
Grid		99_74	Illinois and Michigan Canal State Trail	41.318390	-88.589782	36.6	36.7	32.2	-4.50	36.8	32	-4.80
Grid		102_74	Illinois and Michigan Canal State Trail	41.318631	-88.556513	37	37.1	30.3	-6.80	37.3	30	-7.30
Grid		102_73	Illinois and Michigan Canal State Trail	41.310261	-88.556409	36.4	36.4	29	-7.40	36.6	28.8	-7.80

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		102_72	Illinois and Michigan Canal State Trail	41.301892	-88.556305	35.2	35.3	28.4	-6.90	35.5	28.2	-7.30
Grid		102_71	Illinois and Michigan Canal State Trail	41.293523	-88.556201	34	34.1	28.2	-5.90	34.4	28.1	-6.30
Grid		102_70	Illinois and Michigan Canal State Trail	41.285153	-88.556098	33	33.1	28.3	-4.80	33.4	28.4	-5.00
Grid		100_79	Illinois and Michigan Canal State Trail	41.360318	-88.579226	32.5	32.6	39.3	6.70	32.9	39.7	6.80
Grid		101_79	Illinois and Michigan Canal State Trail	41.360398	-88.568129	33.8	33.9	39.5	5.60	34.2	39.8	5.60
Grid		102_76	Illinois and Michigan Canal State Trail	41.335369	-88.556720	37.7	37.8	34.3	-3.50	37.9	34.2	-3.70
Grid		101_77	Illinois and Michigan Canal State Trail	41.343659	-88.567918	36.1	36.1	37.3	1.20	36.3	37.4	1.10
Grid		101_76	Illinois and Michigan Canal State Trail	41.335290	-88.567813	37	37	35.1	-1.90	37.1	35.1	-2.00
Grid		101_75	Illinois and Michigan Canal State Trail	41.326921	-88.567708	37.5	37.5	32.8	-4.70	37.6	32.7	-4.90
Grid		101_74	Illinois and Michigan Canal State Trail	41.318552	-88.567603	37.3	37.3	30.8	-6.50	37.5	30.5	-7.00
Grid		101_73	Illinois and Michigan Canal State Trail	41.310182	-88.567497	36.8	36.9	29.3	-7.60	37	28.9	-8.10
Grid		101_72	Illinois and Michigan Canal State Trail	41.301813	-88.567392	36	36	28.2	-7.80	36.2	27.9	-8.30
Grid		101_71	Illinois and Michigan Canal State Trail	41.293443	-88.567287	34.8	34.9	27.6	-7.30	35.1	27.4	-7.70
Grid		101_80	Illinois and Michigan Canal State Trail	41.368767	-88.568235	32.8	32.9	39.2	6.30	33.2	39.6	6.40
Grid		127_73	Illinois and Michigan Canal State Trail	41.311891	-88.279187	36.2	36.3	36.3	0.00	37	36.9	-0.10
Grid		127_81	Illinois and Michigan Canal State Trail	41.378846	-88.279731	34.2	34.2	34.1	-0.10	34.9	34.7	-0.20
Grid		127_80	Illinois and Michigan Canal State Trail	41.370476	-88.279663	34.4	34.5	34.4	-0.10	35.1	35	-0.10
Grid		127_79	Illinois and Michigan Canal State Trail	41.362107	-88.279595	34.5	34.6	34.6	0.00	35.4	35.3	-0.10
Grid		127_78	Illinois and Michigan Canal State Trail	41.353738	-88.279527	34.8	34.8	34.8	0.00	35.6	35.5	-0.10
Grid		127_77	Illinois and Michigan Canal State Trail	41.345368	-88.279459	35	35.1	35.1	0.00	35.9	35.8	-0.10
Grid		127_76	Illinois and Michigan Canal State Trail	41.336999	-88.279391	35.3	35.5	35.4	-0.10	36.1	36	-0.10
Grid		126_87	Illinois and Michigan Canal State Trail	41.429009	-88.291250	34.7	34.8	33.2	-1.60	35.3	33.4	-1.90
Grid		127_74	Illinois and Michigan Canal State Trail	41.320260	-88.279255	35.9	36	36	0.00	36.8	36.7	-0.10
Grid		127_84	Illinois and Michigan Canal State Trail	41.403954	-88.279936	33.8	33.9	33.5	-0.40	34.6	34.1	-0.50
Grid		127_72	Illinois and Michigan Canal State Trail	41.303522	-88.279119	36.5	36.6	36.6	0.00	37.3	37.2	-0.10
Grid		127_71	Illinois and Michigan Canal State Trail	41.295152	-88.279051	36.7	36.8	36.8	0.00	37.6	37.5	-0.10
Grid		127_60	Mazonia-Braidwood State Fish and Wildlife Area	41.203089	-88.278304	38.5	38.5	38.5	0.00	39.2	39.2	0.00
Grid		126_90	Illinois and Michigan Canal State Trail	41.454117	-88.291459	38.9	39	36.5	-2.50	39.2	36.7	-2.50
Grid		126_89	Illinois and Michigan Canal State Trail	41.445748	-88.291389	37.1	37.2	35.1	-2.10	37.5	35.3	-2.20
Grid		125_72	Illinois and Michigan Canal State Trail	41.303416	-88.301294	34.6	34.7	34.6	-0.10	35.4	35.3	-0.10
Grid		127_75	Illinois and Michigan Canal State Trail	41.328630	-88.279323	35.6	35.7	35.7	0.00	36.4	36.3	-0.10
Grid		128_59	Mazonia-Braidwood State Fish and Wildlife Area	41.194771	-88.267167	38.4	38.5	38.5	0.00	39.2	39.1	-0.10
Grid		128_78	Illinois and Michigan Canal State Trail	41.353789	-88.268430	35.7	35.8	35.8	0.00	36.5	36.5	0.00
Grid		128_77	Illinois and Michigan Canal State Trail	41.345419	-88.268364	36	36.1	36.1	0.00	36.8	36.8	0.00
Grid		128_76	Illinois and Michigan Canal State Trail	41.337050	-88.268297	36.4	36.4	36.4	0.00	37.1	37.1	0.00
Grid		128_75	Illinois and Michigan Canal State Trail	41.328681	-88.268231	36.7	36.7	36.7	0.00	37.4	37.4	0.00
Grid		128_74	Illinois and Michigan Canal State Trail	41.320311	-88.268164	37	37	37	0.00	37.7	37.7	0.00
Grid		128_73	Illinois and Michigan Canal State Trail	41.311942	-88.268097	37.2	37.3	37.3	0.00	38	38	0.00
Grid		127_82	Illinois and Michigan Canal State Trail	41.387215	-88.279799	34	34.1	33.9	-0.20	34.8	34.5	-0.30
Grid		128_71	Illinois and Michigan Canal State Trail	41.295203	-88.267964	37.7	37.7	37.7	0.00	38.4	38.4	0.00
Grid		127_83	Illinois and Michigan Canal State Trail	41.395584	-88.279868	33.9	34	33.8	-0.20	34.7	34.4	-0.30
Grid		127_90	Illinois and Michigan Canal State Trail	41.454170	-88.280345	39.1	39.1	35.7	-3.40	39.4	36	-3.40
Grid		127_89	Illinois and Michigan Canal State Trail	41.445800	-88.280277	37.3	37.3	34.5	-2.80	37.7	34.7	-3.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		127_88	Illinois and Michigan Canal State Trail	41.437431	-88.280209	35.9	36	33.7	-2.30	36.5	33.9	-2.60
Grid		127_87	Illinois and Michigan Canal State Trail	41.429062	-88.280140	35.2	35.3	33.3	-2.00	35.8	33.7	-2.10
Grid		127_86	Illinois and Michigan Canal State Trail	41.420692	-88.280072	34.6	34.6	33.2	-1.40	35.2	33.7	-1.50
Grid		127_85	Illinois and Michigan Canal State Trail	41.412323	-88.280004	34.1	34.1	33.3	-0.80	34.7	33.9	-0.80
Grid		126_86	Illinois and Michigan Canal State Trail	41.420640	-88.291180	34.3	34.3	32.8	-1.50	34.9	33.1	-1.80
Grid		128_72	Illinois and Michigan Canal State Trail	41.303573	-88.268031	37.5	37.5	37.5	0.00	38.2	38.2	0.00
Grid		125_79	Goose Lake Prairie State Natural Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.362002	-88.301791	33.1	33.2	33.1	-0.10	33.9	33.7	-0.20
Grid		125_87	Illinois and Michigan Canal State Trail	41.428956	-88.302359	34.4	34.5	33.5	-1.00	34.9	33.7	-1.20
Grid		125_86	Illinois and Michigan Canal State Trail	41.420587	-88.302288	34	34.1	32.7	-1.40	34.6	33	-1.60
Grid		125_85	Illinois and Michigan Canal State Trail	41.412218	-88.302217	33.6	33.6	32.3	-1.30	34.2	32.7	-1.50
Grid		125_84	Illinois and Michigan Canal State Trail	41.403848	-88.302146	33.1	33.2	32.3	-0.90	33.8	32.7	-1.10
Grid		125_83	Illinois and Michigan Canal State Trail	41.395479	-88.302075	32.9	32.9	32.4	-0.50	33.6	32.9	-0.70
Grid		125_82	Illinois and Michigan Canal State Trail	41.387110	-88.302004	32.8	32.9	32.6	-0.30	33.6	33.2	-0.40
Grid		126_88	Illinois and Michigan Canal State Trail	41.437379	-88.291319	35.5	35.6	34	-1.60	35.9	34.1	-1.80
Grid		125_80	Goose Lake Prairie State Natural Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.370371	-88.301862	33.1	33.1	33	-0.10	33.8	33.6	-0.20
Grid		125_90	Illinois and Michigan Canal State Trail	41.454064	-88.302573	38.9	39	37.1	-1.90	39.1	37.2	-1.90
Grid		125_78	Goose Lake Prairie State Natural Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.353632	-88.301720	33.3	33.3	33.2	-0.10	34	33.9	-0.10
Grid		125_77	Illinois and Michigan Canal State Trail	41.345263	-88.301649	33.4	33.5	33.4	-0.10	34.2	34.1	-0.10
Grid		125_76	Illinois and Michigan Canal State Trail	41.336894	-88.301578	33.6	33.6	33.6	0.00	34.3	34.2	-0.10
Grid		125_75	Illinois and Michigan Canal State Trail	41.328524	-88.301507	33.8	33.8	33.8	0.00	34.6	34.4	-0.20
Grid		125_74	Illinois and Michigan Canal State Trail	41.320155	-88.301436	34	34.1	34.1	0.00	34.9	34.7	-0.20
Grid		116_80	Illinois and Michigan Canal State Trail	41.369843	-88.401754	33.7	33.8	33.2	-0.60	34.1	33.3	-0.80
Grid		125_81	Goose Lake Prairie State Natural Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.378740	-88.301933	32.9	33	32.8	-0.20	33.7	33.4	-0.30
Grid		126_77	Illinois and Michigan Canal State Trail	41.345316	-88.290554	34.2	34.3	34.2	-0.10	35	34.9	-0.10
Grid		126_85	Illinois and Michigan Canal State Trail	41.412271	-88.291110	33.7	33.8	32.7	-1.10	34.4	33.2	-1.20
Grid		126_84	Illinois and Michigan Canal State Trail	41.403901	-88.291041	33.4	33.4	32.9	-0.50	34.1	33.4	-0.70
Grid		126_83	Illinois and Michigan Canal State Trail	41.395532	-88.290971	33.3	33.4	33.1	-0.30	34.1	33.6	-0.50
Grid		126_82	Illinois and Michigan Canal State Trail	41.387163	-88.290902	33.4	33.5	33.3	-0.20	34.2	33.9	-0.30
Grid		126_81	Goose Lake Prairie State Natural Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.378793	-88.290832	33.5	33.6	33.4	-0.20	34.3	34.1	-0.20
Grid		126_80	Goose Lake Prairie State Natural Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.370424	-88.290762	33.7	33.7	33.6	-0.10	34.4	34.3	-0.10
Grid		125_88	Illinois and Michigan Canal State Trail	41.437326	-88.302430	35.5	35.5	34.7	-0.80	35.9	34.9	-1.00
Grid		126_78	Illinois and Michigan Canal State Trail	41.353685	-88.290623	34	34.1	34	-0.10	34.8	34.7	-0.10
Grid		125_89	Illinois and Michigan Canal State Trail	41.445695	-88.302501	37.3	37.3	36	-1.30	37.6	36.2	-1.40
Grid		126_76	Illinois and Michigan Canal State Trail	41.336947	-88.290484	34.4	34.5	34.5	0.00	35.2	35.1	-0.10
Grid		126_75	Illinois and Michigan Canal State Trail	41.328577	-88.290415	34.7	34.7	34.7	0.00	35.4	35.3	-0.10
Grid		126_74	Illinois and Michigan Canal State Trail	41.320208	-88.290345	35	35	35	0.00	35.7	35.7	0.00
Grid		126_73	Illinois and Michigan Canal State Trail	41.311839	-88.290276	35.3	35.3	35.3	0.00	36	36	0.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		126_72	Illinois and Michigan Canal State Trail	41.303469	-88.290206	35.6	35.6	35.6	0.00	36.3	36.3	0.00
Grid		126_71	Illinois and Michigan Canal State Trail	41.295100	-88.290137	35.9	35.9	35.9	0.00	36.6	36.6	0.00
Grid		128_81	Illinois and Michigan Canal State Trail	41.378897	-88.268630	34.9	35	34.9	-0.10	35.7	35.6	-0.10
Grid		126_79	Goose Lake Prairie State Natural Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.362055	-88.290693	33.8	33.9	33.8	-0.10	34.6	34.4	-0.20
Grid		130_87	Illinois and Michigan Canal State Trail	41.429212	-88.246812	36.5	36.6	35.2	-1.40	37.2	35.8	-1.40
Grid		131_62	Mazonia-Braidwood State Fish and Wildlife Area	41.220026	-88.234145	38.2	38.3	38.3	0.00	39	39	0.00
Grid		131_61	Mazonia-Braidwood State Fish and Wildlife Area	41.211657	-88.234083	38.1	38.2	38.2	0.00	38.9	38.8	-0.10
Grid		131_60	Mazonia-Braidwood State Fish and Wildlife Area	41.203287	-88.234021	38	38	38	0.00	38.7	38.6	-0.10
Grid		131_59	Mazonia-Braidwood State Fish and Wildlife Area	41.194918	-88.233959	37.9	37.9	37.9	0.00	38.6	38.5	-0.10
Grid		130_91	Illinois and Michigan Canal State Trail	41.462689	-88.247068	40.4	40.5	35.8	-4.70	40.8	36.1	-4.70
Grid		130_90	Illinois and Michigan Canal State Trail	41.454320	-88.247004	38.9	39	35.2	-3.80	39.3	35.6	-3.70
Grid		128_79	Illinois and Michigan Canal State Trail	41.362158	-88.268497	35.4	35.5	35.5	0.00	36.2	36.2	0.00
Grid		130_88	Illinois and Michigan Canal State Trail	41.437581	-88.246876	37.3	37.4	35	-2.40	37.8	35.5	-2.30
Grid		131_77	Illinois and Michigan Canal State Trail	41.345566	-88.235079	39	39.1	39.1	0.00	39.9	39.8	-0.10
Grid		130_86	Illinois and Michigan Canal State Trail	41.420842	-88.246748	36	36.1	35.4	-0.70	36.7	36	-0.70
Grid		130_85	Illinois and Michigan Canal State Trail	41.412473	-88.246684	35.9	35.9	35.6	-0.30	36.6	36.2	-0.40
Grid		130_84	Illinois and Michigan Canal State Trail	41.404103	-88.246621	36	36	35.8	-0.20	36.7	36.5	-0.20
Grid		130_83	Illinois and Michigan Canal State Trail	41.395734	-88.246557	36.1	36.2	36.2	0.00	37	36.8	-0.20
Grid		130_82	Illinois and Michigan Canal State Trail	41.387365	-88.246493	36.5	36.5	36.5	0.00	37.2	37.1	-0.10
Grid		130_81	Illinois and Michigan Canal State Trail	41.378995	-88.246429	36.8	36.9	36.8	-0.10	37.6	37.5	-0.10
Grid		130_89	Illinois and Michigan Canal State Trail	41.445950	-88.246940	38	38	35	-3.00	38.5	35.5	-3.00
Grid		131_84	Illinois and Michigan Canal State Trail	41.404151	-88.235515	36.9	36.9	36.8	-0.10	37.6	37.5	-0.10
Grid		131_92	Illinois and Michigan Canal State Trail	41.471106	-88.236016	41.6	41.7	36.8	-4.90	42	37	-5.00
Grid		131_91	Illinois and Michigan Canal State Trail	41.462737	-88.235953	40.2	40.3	35.9	-4.40	40.6	36.2	-4.40
Grid		131_90	Illinois and Michigan Canal State Trail	41.454367	-88.235890	39	39	35.5	-3.50	39.4	36	-3.40
Grid		131_89	Illinois and Michigan Canal State Trail	41.445998	-88.235828	38.2	38.3	35.6	-2.70	38.8	36.1	-2.70
Grid		131_88	Illinois and Michigan Canal State Trail	41.437629	-88.235765	37.5	37.5	35.7	-1.80	38.1	36.2	-1.90
Grid		131_87	Illinois and Michigan Canal State Trail	41.429259	-88.235703	36.8	36.9	35.9	-1.00	37.5	36.5	-1.00
Grid		131_75	Illinois and Michigan Canal State Trail	41.328827	-88.234954	39.4	39.5	39.5	0.00	40.3	40.3	0.00
Grid		131_85	Illinois and Michigan Canal State Trail	41.412521	-88.235578	36.7	36.8	36.6	-0.20	37.5	37.2	-0.30
Grid		131_76	Illinois and Michigan Canal State Trail	41.337197	-88.235016	39.3	39.3	39.3	0.00	40.1	40.1	0.00
Grid		131_83	Illinois and Michigan Canal State Trail	41.395782	-88.235453	37.2	37.2	37.2	0.00	37.9	37.8	-0.10
Grid		131_82	Illinois and Michigan Canal State Trail, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.387413	-88.235391	37.4	37.5	37.5	0.00	38.3	38.2	-0.10
Grid		131_81	Illinois and Michigan Canal State Trail	41.379043	-88.235328	37.8	37.8	37.8	0.00	38.6	38.5	-0.10
Grid		131_80	Illinois and Michigan Canal State Trail	41.370674	-88.235266	38.2	38.2	38.2	0.00	38.9	38.9	0.00
Grid		131_79	Illinois and Michigan Canal State Trail	41.362305	-88.235203	38.5	38.6	38.6	0.00	39.2	39.2	0.00
Grid		131_78	Illinois and Michigan Canal State Trail	41.353935	-88.235141	38.7	38.8	38.8	0.00	39.6	39.6	0.00
Grid		130_78	Illinois and Michigan Canal State Trail	41.353887	-88.246237	37.8	37.8	37.8	0.00	38.5	38.5	0.00
Grid		131_86	Illinois and Michigan Canal State Trail	41.420890	-88.235640	36.6	36.7	36.2	-0.50	37.3	36.8	-0.50
Grid		128_88	Illinois and Michigan Canal State Trail	41.437482	-88.269098	36.6	36.7	33.9	-2.80	37.2	34.3	-2.90
Grid		130_80	Illinois and Michigan Canal State Trail	41.370626	-88.246365	37.1	37.2	37.1	-0.10	37.9	37.8	-0.10

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		129_76	Illinois and Michigan Canal State Trail	41.337100	-88.257204	37.3	37.4	37.4	0.00	38.2	38.1	-0.10
Grid		129_75	Illinois and Michigan Canal State Trail	41.328731	-88.257138	37.6	37.7	37.7	0.00	38.5	38.4	-0.10
Grid		129_74	Illinois and Michigan Canal State Trail	41.320361	-88.257073	37.9	37.9	37.9	0.00	38.7	38.6	-0.10
Grid		129_73	Illinois and Michigan Canal State Trail	41.311992	-88.257008	38.1	38.2	38.2	0.00	39	38.9	-0.10
Grid		129_59	Mazonia-Braidwood State Fish and Wildlife Area	41.194821	-88.256098	38.3	38.3	38.3	0.00	39	39	0.00
Grid		129_78	Illinois and Michigan Canal State Trail	41.353839	-88.257334	36.7	36.8	36.8	0.00	37.5	37.4	-0.10
Grid		128_89	Illinois and Michigan Canal State Trail	41.445851	-88.269165	37.5	37.6	34.4	-3.20	38	34.7	-3.30
Grid		129_79	Illinois and Michigan Canal State Trail	41.362208	-88.257399	36.4	36.5	36.5	0.00	37.2	37.1	-0.10
Grid		128_87	Illinois and Michigan Canal State Trail	41.429113	-88.269031	35.9	36	33.8	-2.20	36.4	34.2	-2.20
Grid		128_86	Illinois and Michigan Canal State Trail	41.420743	-88.268964	35	35.1	33.8	-1.30	35.6	34.4	-1.20
Grid		128_85	Illinois and Michigan Canal State Trail	41.412374	-88.268897	34.5	34.6	34	-0.60	35.3	34.6	-0.70
Grid		128_84	Illinois and Michigan Canal State Trail	41.404005	-88.268831	34.4	34.5	34.3	-0.20	35.2	34.9	-0.30
Grid		128_83	Illinois and Michigan Canal State Trail	41.395635	-88.268764	34.5	34.6	34.4	-0.20	35.3	35	-0.30
Grid		128_82	Illinois and Michigan Canal State Trail	41.387266	-88.268697	34.7	34.8	34.7	-0.10	35.5	35.3	-0.20
Grid		125_71	Illinois and Michigan Canal State Trail	41.295047	-88.301224	34.9	34.9	34.9	0.00	35.7	35.6	-0.10
Grid		128_90	Illinois and Michigan Canal State Trail	41.454221	-88.269232	39.1	39.2	35.3	-3.90	39.5	35.5	-4.00
Grid		129_87	Illinois and Michigan Canal State Trail	41.429163	-88.257922	36.3	36.3	34.5	-1.80	36.9	35	-1.90
Grid		128_80	Illinois and Michigan Canal State Trail	41.370527	-88.268564	35.1	35.2	35.2	0.00	36	35.9	-0.10
Grid		130_77	Illinois and Michigan Canal State Trail	41.345518	-88.246174	38.1	38.1	38.1	0.00	38.8	38.8	0.00
Grid		130_76	Illinois and Michigan Canal State Trail	41.337149	-88.246110	38.4	38.4	38.4	0.00	39.1	39.1	0.00
Grid		130_75	Illinois and Michigan Canal State Trail	41.328779	-88.246046	38.6	38.7	38.7	0.00	39.4	39.4	0.00
Grid		130_74	Illinois and Michigan Canal State Trail	41.320410	-88.245982	38.9	38.9	38.9	0.00	39.6	39.6	0.00
Grid		129_90	Illinois and Michigan Canal State Trail	41.454271	-88.258118	39	39.1	35	-4.10	39.4	35.3	-4.10
Grid		129_77	Illinois and Michigan Canal State Trail	41.345469	-88.257269	37	37.1	37.1	0.00	37.9	37.8	-0.10
Grid		129_88	Illinois and Michigan Canal State Trail	41.437532	-88.257987	37.1	37.2	34.4	-2.80	37.6	34.9	-2.70
Grid		130_79	Illinois and Michigan Canal State Trail	41.362257	-88.246301	37.4	37.5	37.5	0.00	38.3	38.2	-0.10
Grid		129_86	Illinois and Michigan Canal State Trail	41.420793	-88.257856	35.5	35.6	34.6	-1.00	36.2	35.2	-1.00
Grid		129_85	Illinois and Michigan Canal State Trail	41.412424	-88.257791	35.1	35.2	34.8	-0.40	35.9	35.4	-0.50
Grid		129_84	Illinois and Michigan Canal State Trail	41.404055	-88.257726	35.1	35.2	35	-0.20	35.8	35.6	-0.20
Grid		129_83	Illinois and Michigan Canal State Trail	41.395685	-88.257660	35.3	35.3	35.2	-0.10	36	35.8	-0.20
Grid		129_82	Illinois and Michigan Canal State Trail	41.387316	-88.257595	35.5	35.6	35.5	-0.10	36.3	36.1	-0.20
Grid		129_81	Illinois and Michigan Canal State Trail	41.378947	-88.257530	35.8	35.8	35.8	0.00	36.6	36.4	-0.20
Grid		129_80	Illinois and Michigan Canal State Trail	41.370577	-88.257464	36.1	36.2	36.2	0.00	36.8	36.7	-0.10
Grid		129_89	Illinois and Michigan Canal State Trail	41.445901	-88.258052	37.8	37.8	34.6	-3.20	38.2	35	-3.20
Grid		119_79	Illinois and Michigan Canal State Trail	41.361659	-88.368377	32.1	32.2	30	-2.20	32.6	30.2	-2.40
Grid		120_71	Illinois and Michigan Canal State Trail	41.294764	-88.356655	31.3	31.4	31.2	-0.20	32.1	31.8	-0.30
Grid		120_70	Illinois and Michigan Canal State Trail	41.286395	-88.356577	31.5	31.6	31.4	-0.20	32.3	32	-0.30
Grid		119_85	Illinois and Michigan Canal State Trail	41.411875	-88.368855	35.3	35.4	35.9	0.50	35.7	36	0.30
Grid		119_84	Illinois and Michigan Canal State Trail	41.403506	-88.368775	34.1	34.2	35.1	0.90	34.5	35.4	0.90
Grid		119_83	Illinois and Michigan Canal State Trail	41.395137	-88.368696	33.2	33.3	34	0.70	33.7	34.2	0.50
Grid		119_82	Illinois and Michigan Canal State Trail	41.386767	-88.368616	32.7	32.8	32.7	-0.10	33.1	32.8	-0.30
Grid		119_72	Illinois and Michigan Canal State Trail	41.303074	-88.367821	30.9	30.9	30.3	-0.60	31.6	30.9	-0.70
Grid		119_80	Illinois and Michigan Canal State Trail	41.370029	-88.368457	32.2	32.3	30.6	-1.70	32.7	30.8	-1.90

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		120_74	Illinois and Michigan Canal State Trail	41.319872	-88.356889	31.1	31.2	30.6	-0.60	31.8	31.2	-0.60
Grid		119_78	Illinois and Michigan Canal State Trail	41.353290	-88.368298	31.9	32	29.7	-2.30	32.5	30.1	-2.40
Grid		119_77	Illinois and Michigan Canal State Trail	41.344921	-88.368218	31.6	31.7	29.7	-2.00	32.2	30	-2.20
Grid		119_76	Illinois and Michigan Canal State Trail	41.336551	-88.368138	31.4	31.5	29.7	-1.80	32	30.1	-1.90
Grid		119_75	Illinois and Michigan Canal State Trail	41.328182	-88.368059	31.2	31.2	29.8	-1.40	31.8	30.3	-1.50
Grid		119_74	Illinois and Michigan Canal State Trail	41.319813	-88.367979	31	31.1	30	-1.10	31.7	30.5	-1.20
Grid		125_73	Illinois and Michigan Canal State Trail	41.311786	-88.301365	34.3	34.4	34.3	-0.10	35.1	35	-0.10
Grid		119_81	Illinois and Michigan Canal State Trail	41.378398	-88.368536	32.4	32.5	31.6	-0.90	32.8	31.6	-1.20
Grid		120_81	Illinois and Michigan Canal State Trail	41.378458	-88.357436	32.3	32.4	30.9	-1.50	32.9	31.1	-1.80
Grid		121_73	Illinois and Michigan Canal State Trail	41.311562	-88.345722	31.5	31.6	31.4	-0.20	32.3	32	-0.30
Grid		121_72	Illinois and Michigan Canal State Trail	41.303192	-88.345645	31.7	31.7	31.6	-0.10	32.4	32.2	-0.20
Grid		121_71	Illinois and Michigan Canal State Trail	41.294823	-88.345569	31.9	31.9	31.8	-0.10	32.6	32.4	-0.20
Grid		120_86	Illinois and Michigan Canal State Trail	41.420304	-88.357827	35.6	35.7	36.2	0.50	36	36.3	0.30
Grid		120_85	Illinois and Michigan Canal State Trail	41.411935	-88.357749	34.2	34.2	35.4	1.20	34.5	35.6	1.10
Grid		120_84	Illinois and Michigan Canal State Trail	41.403566	-88.357670	33.2	33.3	34.3	1.00	33.7	34.5	0.80
Grid		120_72	Illinois and Michigan Canal State Trail	41.303134	-88.356733	31.2	31.3	31	-0.30	32	31.6	-0.40
Grid		120_82	Illinois and Michigan Canal State Trail	41.386827	-88.357514	32.5	32.6	31.8	-0.80	33	32	-1.00
Grid		120_73	Illinois and Michigan Canal State Trail	41.311503	-88.356811	31.1	31.2	30.8	-0.40	31.9	31.4	-0.50
Grid		120_80	Illinois and Michigan Canal State Trail	41.370088	-88.357358	32.2	32.2	30.3	-1.90	32.7	30.6	-2.10
Grid		120_79	Illinois and Michigan Canal State Trail	41.361719	-88.357279	31.9	32	30.1	-1.90	32.4	30.4	-2.00
Grid		120_78	Illinois and Michigan Canal State Trail	41.353350	-88.357201	31.6	31.7	30.1	-1.60	32.2	30.5	-1.70
Grid		120_77	Illinois and Michigan Canal State Trail	41.344980	-88.357123	31.4	31.4	30.1	-1.30	32	30.6	-1.40
Grid		120_76	Illinois and Michigan Canal State Trail	41.336611	-88.357045	31.2	31.2	30.2	-1.00	31.9	30.7	-1.20
Grid		120_75	Illinois and Michigan Canal State Trail	41.328242	-88.356967	31.1	31.2	30.4	-0.80	31.8	31	-0.80
Grid		119_71	Illinois and Michigan Canal State Trail	41.294705	-88.367741	30.9	31	30.6	-0.40	31.7	31.2	-0.50
Grid		120_83	Illinois and Michigan Canal State Trail	41.395196	-88.357592	32.8	32.9	33	0.10	33.3	33.1	-0.20
Grid		117_75	Illinois and Michigan Canal State Trail	41.328059	-88.390243	31.7	31.7	29	-2.70	32.2	29.3	-2.90
Grid		117_83	Illinois and Michigan Canal State Trail	41.395014	-88.390902	35.4	35.5	35.3	-0.20	35.8	35.5	-0.30
Grid		117_82	Illinois and Michigan Canal State Trail	41.386645	-88.390820	34.4	34.5	34.6	0.10	34.8	34.8	0.00
Grid		117_81	Illinois and Michigan Canal State Trail	41.378275	-88.390737	33.4	33.5	33.4	-0.10	33.9	33.6	-0.30
Grid		117_80	Illinois and Michigan Canal State Trail	41.369906	-88.390655	32.7	32.8	32.1	-0.70	33.1	32.2	-0.90
Grid		117_79	Illinois and Michigan Canal State Trail	41.361537	-88.390572	32.1	32.2	31	-1.20	32.6	31.1	-1.50
Grid		117_78	Illinois and Michigan Canal State Trail	41.353167	-88.390490	31.9	32	29.9	-2.10	32.4	30.1	-2.30
Grid		119_73	Illinois and Michigan Canal State Trail	41.311443	-88.367900	30.9	31	30.2	-0.80	31.6	30.7	-0.90
Grid		117_76	Illinois and Michigan Canal State Trail	41.336429	-88.390325	31.7	31.8	29	-2.80	32.2	29.3	-2.90
Grid		118_71	Illinois and Michigan Canal State Trail	41.294644	-88.378827	30.8	30.8	30	-0.80	31.4	30.5	-0.90
Grid		117_74	Illinois and Michigan Canal State Trail	41.319690	-88.390160	31.5	31.6	29	-2.60	32.1	29.4	-2.70
Grid		117_73	Illinois and Michigan Canal State Trail	41.311321	-88.390078	31.4	31.4	29.1	-2.30	31.9	29.5	-2.40
Grid		117_72	Illinois and Michigan Canal State Trail	41.302951	-88.389996	31.1	31.2	29.3	-1.90	31.7	29.7	-2.00
Grid		117_71	Illinois and Michigan Canal State Trail	41.294582	-88.389913	30.9	31	29.5	-1.50	31.5	29.9	-1.60
Grid		117_70	Illinois and Michigan Canal State Trail	41.286213	-88.389831	30.8	30.8	29.6	-1.20	31.4	30.2	-1.20
Grid		116_83	Illinois and Michigan Canal State Trail	41.394951	-88.402006	36.4	36.5	35.4	-1.10	36.7	35.6	-1.10
Grid		117_77	Illinois and Michigan Canal State Trail	41.344798	-88.390407	31.8	31.9	29.4	-2.50	32.2	29.5	-2.70

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		118_78	Illinois and Michigan Canal State Trail	41.353229	-88.379394	32	32.1	29.7	-2.40	32.5	29.9	-2.60
Grid		119_70	Illinois and Michigan Canal State Trail	41.286335	-88.367662	31	31.1	30.8	-0.30	31.8	31.4	-0.40
Grid		118_85	Illinois and Michigan Canal State Trail	41.411815	-88.379961	36.5	36.6	36	-0.60	36.9	36.1	-0.80
Grid		118_84	Illinois and Michigan Canal State Trail	41.403445	-88.379880	35.3	35.4	35.6	0.20	35.7	35.8	0.10
Grid		118_83	Illinois and Michigan Canal State Trail	41.395076	-88.379799	34.2	34.3	34.8	0.50	34.6	35.1	0.50
Grid		118_82	Illinois and Michigan Canal State Trail	41.386707	-88.379718	33.3	33.3	33.8	0.50	33.7	33.9	0.20
Grid		118_81	Illinois and Michigan Canal State Trail	41.378337	-88.379637	32.6	32.6	32.4	-0.20	33.1	32.5	-0.60
Grid		117_84	Illinois and Michigan Canal State Trail	41.403383	-88.390985	36.4	36.5	35.7	-0.80	36.8	35.8	-1.00
Grid		118_79	Illinois and Michigan Canal State Trail	41.361599	-88.379475	32	32.1	30.3	-1.80	32.6	30.4	-2.20
Grid		118_70	Illinois and Michigan Canal State Trail	41.286274	-88.378746	30.7	30.8	30.2	-0.60	31.5	30.8	-0.70
Grid		118_77	Illinois and Michigan Canal State Trail	41.344860	-88.379313	31.9	31.9	29.4	-2.50	32.4	29.7	-2.70
Grid		118_76	Illinois and Michigan Canal State Trail	41.336491	-88.379232	31.7	31.7	29.3	-2.40	32.2	29.6	-2.60
Grid		118_75	Illinois and Michigan Canal State Trail	41.328121	-88.379151	31.5	31.6	29.4	-2.20	32.1	29.7	-2.40
Grid		118_74	Illinois and Michigan Canal State Trail	41.319752	-88.379070	31.2	31.4	29.5	-1.90	31.9	29.9	-2.00
Grid		118_73	Illinois and Michigan Canal State Trail	41.311382	-88.378989	31	31.1	29.6	-1.50	31.7	30.1	-1.60
Grid		118_72	Illinois and Michigan Canal State Trail	41.303013	-88.378908	30.9	31	29.8	-1.20	31.5	30.3	-1.20
Grid		121_76	Illinois and Michigan Canal State Trail	41.336670	-88.345952	31.3	31.3	30.9	-0.40	32	31.4	-0.60
Grid		118_80	Illinois and Michigan Canal State Trail	41.369968	-88.379556	32.2	32.3	31.2	-1.10	32.7	31.4	-1.30
Grid		123_83	Illinois and Michigan Canal State Trail	41.395369	-88.324282	32.6	32.7	31.5	-1.20	33.3	31.9	-1.40
Grid		124_72	Illinois and Michigan Canal State Trail	41.303362	-88.312382	33.8	33.8	33.8	0.00	34.5	34.4	-0.10
Grid		124_71	Illinois and Michigan Canal State Trail	41.294993	-88.312310	34	34.1	34.1	0.00	34.8	34.7	-0.10
Grid		123_89	Illinois and Michigan Canal State Trail	41.445585	-88.324726	38.3	38.3	37.1	-1.20	38.6	37.2	-1.40
Grid		123_88	Illinois and Michigan Canal State Trail	41.437216	-88.324652	36.6	36.7	36.3	-0.40	36.9	36.5	-0.40
Grid		123_87	Illinois and Michigan Canal State Trail	41.428847	-88.324578	34.7	34.8	35.3	0.50	35.1	35.5	0.40
Grid		123_86	Illinois and Michigan Canal State Trail	41.420477	-88.324504	33.6	33.7	34	0.30	34.1	34.1	0.00
Grid		121_74	Illinois and Michigan Canal State Trail	41.319931	-88.345798	31.4	31.5	31.3	-0.20	32.2	31.8	-0.40
Grid		123_84	Illinois and Michigan Canal State Trail	41.403738	-88.324356	33.1	33.2	31.9	-1.30	33.6	32.2	-1.40
Grid		124_75	Illinois and Michigan Canal State Trail	41.328470	-88.312599	33	33.1	33	-0.10	33.8	33.6	-0.20
Grid		123_82	Illinois and Michigan Canal State Trail	41.387000	-88.324208	32.2	32.3	31.4	-0.90	32.9	31.8	-1.10
Grid		123_81	Heidecke Lake State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.378630	-88.324134	32	32.1	31.5	-0.60	32.7	31.9	-0.80
Grid		123_80	Heidecke Lake State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.370261	-88.324060	32	32	31.6	-0.40	32.6	32.1	-0.50
Grid		123_79	Goose Lake Prairie State Natural Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.361892	-88.323986	32	32	31.7	-0.30	32.7	32.3	-0.40
Grid		123_78	Goose Lake Prairie State Natural Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.353522	-88.323912	32.1	32.1	31.9	-0.20	32.8	32.4	-0.40
Grid		123_77	Illinois and Michigan Canal State Trail	41.345153	-88.323839	32.2	32.2	32	-0.20	32.9	32.6	-0.30
Grid		123_85	Illinois and Michigan Canal State Trail	41.412108	-88.324430	33.4	33.4	32.8	-0.60	33.9	33	-0.90
Grid		124_82	Illinois and Michigan Canal State Trail	41.387055	-88.313106	32.4	32.5	32	-0.50	33.1	32.4	-0.70
Grid		124_90	Illinois and Michigan Canal State Trail	41.454010	-88.313686	39.1	39.2	37.4	-1.80	39.4	37.5	-1.90
Grid		124_89	Illinois and Michigan Canal State Trail	41.445641	-88.313614	37.7	37.8	36.7	-1.10	38.1	36.8	-1.30
Grid		124_88	Illinois and Michigan Canal State Trail	41.437271	-88.313541	35.9	36	35.7	-0.30	36.3	35.8	-0.50

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		124_87	Illinois and Michigan Canal State Trail	41.428902	-88.313468	34.4	34.5	34.3	-0.20	34.8	34.5	-0.30
Grid		124_86	Illinois and Michigan Canal State Trail	41.420533	-88.313396	33.7	33.8	33.2	-0.60	34.3	33.3	-1.00
Grid		124_85	Illinois and Michigan Canal State Trail	41.412163	-88.313323	33.5	33.6	32.3	-1.30	34.1	32.6	-1.50
Grid		124_73	Illinois and Michigan Canal State Trail	41.311731	-88.312454	33.5	33.6	33.5	-0.10	34.3	34.2	-0.10
Grid		124_83	Illinois and Michigan Canal State Trail	41.395425	-88.313178	32.6	32.7	31.8	-0.90	33.2	32.2	-1.00
Grid		124_74	Illinois and Michigan Canal State Trail	41.320101	-88.312527	33.2	33.3	33.2	-0.10	34	33.9	-0.10
Grid		124_81	Heidecke Lake State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.378686	-88.313033	32.4	32.4	32.1	-0.30	33.1	32.6	-0.50
Grid		124_80	Goose Lake Prairie State Natural Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.370317	-88.312961	32.5	32.5	32.3	-0.20	33.2	32.8	-0.40
Grid		124_79	Goose Lake Prairie State Natural Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.361947	-88.312888	32.5	32.6	32.4	-0.20	33.3	33	-0.30
Grid		124_78	Goose Lake Prairie State Natural Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.353578	-88.312816	32.6	32.7	32.6	-0.10	33.4	33.2	-0.20
Grid		124_77	Goose Lake Prairie State Natural Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.345209	-88.312744	32.8	32.8	32.7	-0.10	33.5	33.3	-0.20
Grid		124_76	Illinois and Michigan Canal State Trail	41.336839	-88.312671	32.8	33	32.9	-0.10	33.7	33.5	-0.20
Grid		123_74	Illinois and Michigan Canal State Trail	41.320045	-88.323617	32.6	32.6	32.5	-0.10	33.3	33.1	-0.20
Grid		124_84	Illinois and Michigan Canal State Trail	41.403794	-88.313251	33.1	33.2	31.9	-1.30	33.7	32.3	-1.40
Grid		121_83	Illinois and Michigan Canal State Trail	41.395255	-88.346489	32.7	32.8	32.2	-0.60	33.3	32.3	-1.00
Grid		123_76	Illinois and Michigan Canal State Trail	41.336784	-88.323765	32.2	32.3	32.2	-0.10	33	32.7	-0.30
Grid		122_73	Illinois and Michigan Canal State Trail	41.311619	-88.334633	32.1	32.1	32	-0.10	32.9	32.6	-0.30
Grid		122_72	Illinois and Michigan Canal State Trail	41.303250	-88.334558	32.2	32.3	32.2	-0.10	33.1	32.9	-0.20
Grid		122_71	Illinois and Michigan Canal State Trail	41.294881	-88.334482	32.4	32.5	32.5	0.00	33.3	33.1	-0.20
Grid		121_87	Illinois and Michigan Canal State Trail	41.428732	-88.346796	36.4	36.4	36.4	0.00	36.7	36.6	-0.10
Grid		121_86	Illinois and Michigan Canal State Trail	41.420363	-88.346719	34.6	34.7	35.8	1.10	35	36	1.00
Grid		122_75	Illinois and Michigan Canal State Trail	41.328358	-88.334783	31.8	31.9	31.7	-0.20	32.6	32.3	-0.30
Grid		121_84	Illinois and Michigan Canal State Trail	41.403624	-88.346566	33	33.1	33.4	0.30	33.5	33.5	0.00
Grid		122_76	Illinois and Michigan Canal State Trail	41.336727	-88.334858	31.7	31.8	31.6	-0.20	32.4	32	-0.40
Grid		121_82	Illinois and Michigan Canal State Trail	41.386886	-88.346412	32.5	32.6	31.3	-1.30	33	31.4	-1.60
Grid		121_81	Illinois and Michigan Canal State Trail	41.378516	-88.346335	32.2	32.3	30.7	-1.60	32.8	31	-1.80
Grid		121_80	Heidecke Lake State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.370147	-88.346259	31.9	31.9	30.5	-1.40	32.5	30.9	-1.60
Grid		121_79	Illinois and Michigan Canal State Trail	41.361778	-88.346182	31.6	31.6	30.5	-1.10	32.2	30.9	-1.30
Grid		121_78	Illinois and Michigan Canal State Trail	41.353408	-88.346105	31.4	31.4	30.5	-0.90	32.1	31	-1.10
Grid		121_77	Illinois and Michigan Canal State Trail	41.345039	-88.346028	31.3	31.4	30.7	-0.70	32	31.2	-0.80
Grid		93_78	Illinois and Michigan Canal State Trail	41.351355	-88.656787	30.2	30.3	36.8	6.50	30.6	37	6.40
Grid		121_85	Illinois and Michigan Canal State Trail	41.411994	-88.346642	33.4	33.5	34.6	1.10	33.9	34.8	0.90
Grid		122_84	Illinois and Michigan Canal State Trail	41.403682	-88.335461	33	33.1	32.5	-0.60	33.6	32.6	-1.00
Grid		121_75	Illinois and Michigan Canal State Trail	41.328300	-88.345875	31.3	31.4	31.1	-0.30	32.1	31.7	-0.40
Grid		123_73	Illinois and Michigan Canal State Trail	41.311676	-88.323544	32.8	32.8	32.7	-0.10	33.5	33.4	-0.10
Grid		123_72	Illinois and Michigan Canal State Trail	41.303306	-88.323470	33	33	33	0.00	33.7	33.6	-0.10
Grid		123_71	Illinois and Michigan Canal State Trail	41.294937	-88.323396	33.2	33.2	33.2	0.00	33.9	33.8	-0.10

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		122_88	Illinois and Michigan Canal State Trail	41.437159	-88.335762	37.4	37.5	36.8	-0.70	37.7	36.9	-0.80
Grid		122_87	Illinois and Michigan Canal State Trail	41.428790	-88.335687	35.4	35.5	36	0.50	35.8	36.2	0.40
Grid		122_74	Illinois and Michigan Canal State Trail	41.319989	-88.334708	31.9	32.1	31.9	-0.20	32.7	32.4	-0.30
Grid		122_85	Illinois and Michigan Canal State Trail	41.412051	-88.335536	33.2	33.3	33.7	0.40	33.7	33.8	0.10
Grid		123_75	Illinois and Michigan Canal State Trail	41.328414	-88.323691	32.4	32.4	32.3	-0.10	33.1	32.9	-0.20
Grid		122_83	Illinois and Michigan Canal State Trail	41.395313	-88.335385	32.7	32.8	31.6	-1.20	33.3	31.8	-1.50
Grid		122_82	Illinois and Michigan Canal State Trail	41.386943	-88.335310	32.3	32.4	31.1	-1.30	32.9	31.4	-1.50
Grid		122_81	Heidecke Lake State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.378574	-88.335235	32	32	30.9	-1.10	32.6	31.3	-1.30
Grid		122_80	Heidecke Lake State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.370205	-88.335159	31.8	31.8	31	-0.80	32.4	31.4	-1.00
Grid		122_79	Heidecke Lake State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.361835	-88.335084	31.6	31.7	31	-0.70	32.3	31.5	-0.80
Grid		122_78	Goose Lake Prairie State Natural Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.353466	-88.335009	31.5	31.6	31.2	-0.40	32.3	31.7	-0.60
Grid		122_77	Illinois and Michigan Canal State Trail	41.345097	-88.334933	31.6	31.7	31.3	-0.40	32.3	31.9	-0.40
Grid		122_86	Illinois and Michigan Canal State Trail	41.420421	-88.335611	33.9	34	35	1.00	34.3	35.1	0.80
Grid		60_73	Matthiessen State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.305996	-89.022081	29.7	29.8	28.9	-0.90	30.2	28.9	-1.30
Grid		61_70	Illinois and Michigan Canal State Trail	41.281011	-89.010507	29.6	29.7	29	-0.70	30.1	28.6	-1.50
Grid		60_80	Illinois and Michigan Canal State Trail	41.364581	-89.023229	31.2	31.3	30.6	-0.70	31.9	31.2	-0.70
Grid		60_79	Illinois and Michigan Canal State Trail	41.356212	-89.023065	30.5	30.6	30.1	-0.50	31.2	30.7	-0.50
Grid		60_78	Illinois and Michigan Canal State Trail	41.347842	-89.022901	29.9	30	29.6	-0.40	30.6	30.1	-0.50
Grid		60_77	Illinois and Michigan Canal State Trail	41.339473	-89.022737	29.5	29.6	29.2	-0.40	30.1	29.6	-0.50
Grid		60_76	Illinois and Michigan Canal State Trail	41.331104	-89.022573	29.3	29.4	29.1	-0.30	29.9	29.4	-0.50
Grid		59_77	Illinois and Michigan Canal State Trail	41.339348	-89.033829	29.7	29.8	29.5	-0.30	30.3	29.8	-0.50
Grid		60_74	Starved Rock State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.314365	-89.022245	29.5	29.6	29	-0.60	30	29.1	-0.90
Grid		61_73	Matthiessen State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.306119	-89.010994	29.8	29.9	28.8	-1.10	30.3	28.8	-1.50
Grid		60_72	Matthiessen State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.297626	-89.021917	29.8	29.9	28.7	-1.20	30.2	28.5	-1.70
Grid		60_71	Matthiessen State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.289257	-89.021753	29.7	29.8	28.7	-1.10	30.2	28.3	-1.90
Grid		60_70	Matthiessen State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.280888	-89.021589	29.6	29.7	28.9	-0.80	30.1	28.5	-1.60
Grid		59_80	Illinois and Michigan Canal State Trail	41.364456	-89.034325	31.4	31.5	30.7	-0.80	32.1	31.4	-0.70
Grid		59_79	Illinois and Michigan Canal State Trail	41.356087	-89.034160	30.8	30.9	30.3	-0.60	31.5	30.9	-0.60
Grid		56_77	Illinois and Michigan Canal State Trail	41.338967	-89.067104	30.4	30.5	30.1	-0.40	31.1	30.6	-0.50
Grid		60_75	Starved Rock State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.322734	-89.022409	29.4	29.5	29.1	-0.40	29.8	29.2	-0.60
Grid		61_80	Illinois and Michigan Canal State Trail	41.364705	-89.012133	31	31.1	30.4	-0.70	31.6	31	-0.60
Grid		62_77	Illinois and Michigan Canal State Trail	41.339719	-89.000553	29.2	29.3	28.9	-0.40	29.8	29.3	-0.50

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		62_76	Illinois and Michigan Canal State Trail	41.331350	-89.000391	29.2	29.3	28.9	-0.40	29.7	29.1	-0.60
Grid		62_75	Starved Rock State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.322981	-89.000230	29.4	29.5	28.9	-0.60	29.9	29.1	-0.80
Grid		62_74	Illinois and Michigan Canal State Trail	41.314612	-89.000069	29.7	29.8	28.9	-0.90	30.2	29	-1.20
Grid		62_73	Illinois and Michigan Canal State Trail	41.306242	-88.999908	29.9	30	28.7	-1.30	30.3	28.7	-1.60
Grid		62_72	Illinois and Michigan Canal State Trail	41.297873	-88.999747	30	30.1	28.6	-1.50	30.4	28.4	-2.00
Grid		61_71	Illinois and Michigan Canal State Trail	41.289381	-89.010670	29.8	29.9	28.7	-1.20	30.3	28.4	-1.90
Grid		62_70	Illinois and Michigan Canal State Trail	41.281134	-88.999425	29.7	29.8	29.3	-0.50	30.1	28.9	-1.20
Grid		61_72	Matthiessen State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.297750	-89.010832	29.9	30	28.6	-1.40	30.3	28.5	-1.80
Grid		61_79	Illinois and Michigan Canal State Trail	41.356335	-89.011970	30.3	30.3	29.8	-0.50	30.9	30.4	-0.50
Grid		61_78	Illinois and Michigan Canal State Trail	41.347966	-89.011807	29.7	29.7	29.4	-0.30	30.3	29.8	-0.50
Grid		61_77	Illinois and Michigan Canal State Trail	41.339597	-89.011645	29.3	29.4	29.1	-0.30	29.9	29.5	-0.40
Grid		61_76	Illinois and Michigan Canal State Trail	41.331227	-89.011482	29.3	29.3	29	-0.30	29.8	29.2	-0.60
Grid		61_75	Illinois and Michigan Canal State Trail	41.322858	-89.011320	29.3	29.4	29	-0.40	29.9	29.2	-0.70
Grid		61_74	Illinois and Michigan Canal State Trail	41.314489	-89.011157	29.6	29.7	29	-0.70	30.1	29.1	-1.00
Grid		59_76	Illinois and Michigan Canal State Trail	41.330979	-89.033663	29.4	29.5	29.2	-0.30	30	29.5	-0.50
Grid		62_71	Illinois and Michigan Canal State Trail	41.289503	-88.999586	29.9	30	28.7	-1.30	30.3	28.5	-1.80
Grid		57_73	Illinois and Michigan Canal State Trail	41.305618	-89.055339	29.5	29.6	29.2	-0.40	30	29.2	-0.80
Grid		58_70	Illinois and Michigan Canal State Trail	41.280637	-89.043753	29.5	29.7	28.8	-0.90	30	28.4	-1.60
Grid		57_80	Illinois and Michigan Canal State Trail	41.364203	-89.056518	31.7	31.8	30.9	-0.90	32.4	31.5	-0.90
Grid		57_79	Illinois and Michigan Canal State Trail	41.355834	-89.056349	31.3	31.4	30.7	-0.70	32	31.3	-0.70
Grid		57_78	Illinois and Michigan Canal State Trail	41.347464	-89.056181	30.7	30.8	30.3	-0.50	31.4	30.9	-0.50
Grid		57_77	Illinois and Michigan Canal State Trail	41.339095	-89.056013	30.2	30.3	29.9	-0.40	30.8	30.4	-0.40
Grid		57_76	Illinois and Michigan Canal State Trail	41.330726	-89.055844	29.7	29.8	29.6	-0.20	30.4	30	-0.40
Grid		59_78	Illinois and Michigan Canal State Trail	41.347717	-89.033994	30.2	30.3	29.9	-0.40	30.9	30.4	-0.50
Grid		57_74	Illinois and Michigan Canal State Trail	41.313987	-89.055508	29.5	29.5	29.3	-0.20	30	29.5	-0.50
Grid		58_73	Illinois and Michigan Canal State Trail	41.305745	-89.044253	29.6	29.6	29.1	-0.50	30	29.2	-0.80
Grid		57_72	Illinois and Michigan Canal State Trail	41.297248	-89.055171	29.5	29.6	29	-0.60	30.1	29	-1.10
Grid		57_71	Illinois and Michigan Canal State Trail	41.288879	-89.055003	29.6	29.7	28.9	-0.80	30.1	28.6	-1.50
Grid		57_70	Illinois and Michigan Canal State Trail	41.280509	-89.054835	29.5	29.6	28.8	-0.80	30	28.4	-1.60
Grid		56_80	Illinois and Michigan Canal State Trail	41.364075	-89.067614	31.7	31.9	30.9	-1.00	32.4	31.4	-1.00
Grid		56_79	Illinois and Michigan Canal State Trail	41.355705	-89.067444	31.5	31.6	30.8	-0.80	32.1	31.4	-0.70
Grid		69_72	Illinois and Michigan Canal State Trail	41.298702	-88.922151	30.5	30.6	30.2	-0.40	30.9	30.1	-0.80
Grid		57_75	Illinois and Michigan Canal State Trail	41.322356	-89.055676	29.5	29.6	29.4	-0.20	30.1	29.6	-0.50
Grid		58_80	Illinois and Michigan Canal State Trail	41.364330	-89.045422	31.6	31.7	30.8	-0.90	32.3	31.5	-0.80
Grid		59_75	Illinois and Michigan Canal State Trail	41.322609	-89.033498	29.4	29.4	29.1	-0.30	29.9	29.4	-0.50
Grid		59_74	Starved Rock State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.314240	-89.033332	29.5	29.5	29.1	-0.40	30	29.2	-0.80
Grid		59_73	Illinois and Michigan Canal State Trail	41.305871	-89.033167	29.6	29.7	29	-0.70	30.1	29	-1.10
Grid		59_72	Matthiessen State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.297501	-89.033002	29.7	29.8	28.8	-1.00	30.1	28.7	-1.40

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		59_71	Matthiessen State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.289132	-89.032836	29.6	29.7	28.7	-1.00	30.1	28.4	-1.70
Grid		59_70	Matthiessen State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.280763	-89.032671	29.5	29.7	28.8	-0.90	30	28.4	-1.60
Grid		58_71	Illinois and Michigan Canal State Trail	41.289006	-89.043920	29.6	29.7	28.8	-0.90	30.1	28.5	-1.60
Grid		59_68	Matthiessen State Park	41.264024	-89.032341	28.8	29	29.9	0.90	29.3	29.4	0.10
Grid		58_72	Illinois and Michigan Canal State Trail	41.297375	-89.044086	29.6	29.7	28.9	-0.80	30.1	28.7	-1.40
Grid		58_79	Illinois and Michigan Canal State Trail	41.355961	-89.045255	31.1	31.2	30.5	-0.70	31.7	31.1	-0.60
Grid		58_78	Illinois and Michigan Canal State Trail	41.347591	-89.045088	30.5	30.5	30.1	-0.40	31.1	30.6	-0.50
Grid		58_77	Illinois and Michigan Canal State Trail	41.339222	-89.044921	29.9	30	29.7	-0.30	30.5	30.1	-0.40
Grid		58_76	Illinois and Michigan Canal State Trail	41.330853	-89.044754	29.6	29.7	29.4	-0.30	30.2	29.7	-0.50
Grid		58_75	Illinois and Michigan Canal State Trail	41.322483	-89.044587	29.4	29.5	29.3	-0.20	30	29.5	-0.50
Grid		58_74	Starved Rock State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.314114	-89.044420	29.4	29.6	29.2	-0.40	30	29.4	-0.60
Grid		62_80	Illinois and Michigan Canal State Trail	41.364827	-89.001036	30.7	30.8	30.2	-0.60	31.3	30.8	-0.50
Grid		59_69	Matthiessen State Park	41.272393	-89.032506	29.3	29.4	29.3	-0.10	29.7	28.8	-0.90
Grid		66_78	Illinois and Michigan Canal State Trail	41.348569	-88.956339	29	29.1	28.6	-0.50	29.5	28.9	-0.60
Grid		67_75	Illinois and Michigan Canal State Trail	41.323578	-88.944783	30.1	30.3	28.8	-1.50	30.6	28.9	-1.70
Grid		67_74	Starved Rock State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.315209	-88.944629	30.3	30.4	28.7	-1.70	30.8	28.7	-2.10
Grid		67_73	Starved Rock State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.306840	-88.944476	30.4	30.5	28.9	-1.60	30.8	28.7	-2.10
Grid		67_72	Illinois and Michigan Canal State Trail	41.298470	-88.944322	30.3	30.4	29.4	-1.00	30.7	29.2	-1.50
Grid		67_71	Illinois and Michigan Canal State Trail	41.290101	-88.944168	30	30.2	30.2	0.00	30.5	30	-0.50
Grid		67_70	Illinois and Michigan Canal State Trail	41.281732	-88.944014	29.7	29.8	31.2	1.40	30.1	31	0.90
Grid		62_78	Illinois and Michigan Canal State Trail	41.348089	-89.000714	29.5	29.5	29.1	-0.40	30.1	29.6	-0.50
Grid		66_79	Illinois and Michigan Canal State Trail	41.356938	-88.956495	29	29.1	28.7	-0.40	29.6	29.1	-0.50
Grid		67_78	Illinois and Michigan Canal State Trail	41.348686	-88.945245	29	29.1	28.6	-0.50	29.6	28.8	-0.80
Grid		66_77	Illinois and Michigan Canal State Trail	41.340200	-88.956184	29.2	29.3	28.7	-0.60	29.7	29	-0.70
Grid		66_76	Illinois and Michigan Canal State Trail	41.331830	-88.956028	29.6	29.7	28.9	-0.80	30.1	29	-1.10
Grid		66_75	Illinois and Michigan Canal State Trail	41.323461	-88.955873	29.9	30	28.8	-1.20	30.4	28.9	-1.50
Grid		66_74	Illinois and Michigan Canal State Trail	41.315092	-88.955717	30.1	30.2	28.7	-1.50	30.6	28.7	-1.90
Grid		66_73	Starved Rock State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.306722	-88.955562	30.2	30.4	28.7	-1.70	30.7	28.6	-2.10
Grid		66_72	Illinois and Michigan Canal State Trail	41.298353	-88.955407	30.2	30.3	29.1	-1.20	30.6	28.9	-1.70
Grid		66_80	Illinois and Michigan Canal State Trail	41.365308	-88.956650	29.4	29.5	29.1	-0.40	30.1	29.6	-0.50
Grid		68_74	Starved Rock State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.315325	-88.933541	30.5	30.6	28.8	-1.80	30.9	28.8	-2.10
Grid		93_80	Illinois and Michigan Canal State Trail	41.368094	-88.657021	32.7	32.8	33.6	0.80	33	33.8	0.80
Grid		69_70	Illinois and Michigan Canal State Trail	41.281963	-88.921849	29.7	29.8	32.1	2.30	30.1	32.1	2.00
Grid		68_80	Illinois and Michigan Canal State Trail	41.365541	-88.934457	28.9	29	28.6	-0.40	29.5	29.1	-0.40
Grid		68_79	Illinois and Michigan Canal State Trail	41.357172	-88.934304	28.8	28.9	28.4	-0.50	29.4	28.8	-0.60
Grid		68_78	Illinois and Michigan Canal State Trail	41.348803	-88.934152	29.1	29.1	28.6	-0.50	29.6	28.9	-0.70

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		68_77	Illinois and Michigan Canal State Trail	41.340433	-88.933999	29.5	29.6	28.8	-0.80	30	29	-1.00
Grid		67_76	Illinois and Michigan Canal State Trail	41.331948	-88.944937	29.8	29.9	28.9	-1.00	30.3	29.1	-1.20
Grid		68_75	Illinois and Michigan Canal State Trail	41.323694	-88.933694	30.3	30.4	28.8	-1.60	30.7	28.9	-1.80
Grid		67_77	Illinois and Michigan Canal State Trail	41.340317	-88.945091	29.4	29.4	28.8	-0.60	29.9	29	-0.90
Grid		68_73	Starved Rock State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.306956	-88.933389	30.5	30.6	29.1	-1.50	30.9	29	-1.90
Grid		68_72	Illinois and Michigan Canal State Trail	41.298586	-88.933236	30.4	30.5	29.8	-0.70	30.8	29.6	-1.20
Grid		68_71	Illinois and Michigan Canal State Trail	41.290217	-88.933084	30.1	30.3	30.7	0.40	30.5	30.5	0.00
Grid		68_70	Illinois and Michigan Canal State Trail	41.281848	-88.932932	29.7	29.8	31.7	1.90	30	31.5	1.50
Grid		67_80	Illinois and Michigan Canal State Trail	41.365425	-88.945554	29.1	29.2	28.8	-0.40	29.7	29.3	-0.40
Grid		67_79	Illinois and Michigan Canal State Trail	41.357056	-88.945400	28.9	29	28.5	-0.50	29.4	28.9	-0.50
Grid		65_80	Illinois and Michigan Canal State Trail	41.365189	-88.967747	29.7	29.8	29.3	-0.50	30.3	29.9	-0.40
Grid		68_76	Illinois and Michigan Canal State Trail	41.332064	-88.933846	30	30.1	28.9	-1.20	30.5	29.1	-1.40
Grid		63_76	Illinois and Michigan Canal State Trail	41.331472	-88.989301	29.2	29.4	28.8	-0.60	29.8	29.1	-0.70
Grid		66_71	Illinois and Michigan Canal State Trail	41.289984	-88.955252	30	30.1	29.8	-0.30	30.4	29.6	-0.80
Grid		64_72	Illinois and Michigan Canal State Trail	41.298115	-88.977577	30.1	30.2	28.8	-1.40	30.5	28.5	-2.00
Grid		64_71	Illinois and Michigan Canal State Trail	41.289746	-88.977419	29.9	30.1	29.2	-0.90	30.4	28.9	-1.50
Grid		64_70	Illinois and Michigan Canal State Trail	41.281376	-88.977261	29.7	29.8	29.9	0.10	30.1	29.6	-0.50
Grid		63_80	Illinois and Michigan Canal State Trail	41.364949	-88.989940	30.4	30.4	29.9	-0.50	31	30.4	-0.60
Grid		63_79	Illinois and Michigan Canal State Trail	41.356580	-88.989780	29.7	29.7	29.3	-0.40	30.3	29.8	-0.50
Grid		64_74	Starved Rock State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.314854	-88.977893	29.9	30	28.8	-1.20	30.4	28.8	-1.60
Grid		63_77	Illinois and Michigan Canal State Trail	41.339841	-88.989460	29.2	29.2	28.8	-0.40	29.7	29.1	-0.60
Grid		64_75	Starved Rock State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.323223	-88.978052	29.6	29.7	28.8	-0.90	30.1	29	-1.10
Grid		63_75	Starved Rock State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.323102	-88.989141	29.5	29.6	28.9	-0.70	30	29	-1.00
Grid		63_74	Starved Rock State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.314733	-88.988981	29.8	29.9	28.8	-1.10	30.2	28.9	-1.30
Grid		63_73	Starved Rock State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.306364	-88.988822	30	30.1	28.7	-1.40	30.5	28.6	-1.90
Grid		63_72	Illinois and Michigan Canal State Trail	41.297994	-88.988662	30	30.2	28.7	-1.50	30.5	28.4	-2.10
Grid		63_71	Illinois and Michigan Canal State Trail	41.289625	-88.988503	30	30.1	28.9	-1.20	30.3	28.6	-1.70
Grid		63_70	Illinois and Michigan Canal State Trail	41.281256	-88.988343	29.6	29.8	29.6	-0.20	30.1	29.2	-0.90
Grid		56_76	Illinois and Michigan Canal State Trail	41.330597	-89.066934	30	30	29.8	-0.20	30.6	30.1	-0.50
Grid		63_78	Illinois and Michigan Canal State Trail	41.348211	-88.989620	29.3	29.4	29	-0.40	29.9	29.4	-0.50
Grid		65_72	Illinois and Michigan Canal State Trail	41.298235	-88.966492	30.2	30.3	28.9	-1.40	30.6	28.6	-2.00
Grid		62_79	Illinois and Michigan Canal State Trail	41.356458	-89.000875	30	30	29.6	-0.40	30.6	30.1	-0.50
Grid		65_79	Illinois and Michigan Canal State Trail	41.356820	-88.967590	29.2	29.3	28.8	-0.50	29.8	29.3	-0.50
Grid		65_78	Illinois and Michigan Canal State Trail	41.348451	-88.967433	29	29.1	28.7	-0.40	29.6	29	-0.60
Grid		65_77	Illinois and Michigan Canal State Trail	41.340081	-88.967276	29.2	29.2	28.7	-0.50	29.7	29	-0.70
Grid		65_76	Illinois and Michigan Canal State Trail	41.331712	-88.967119	29.4	29.5	28.8	-0.70	29.9	29	-0.90
Grid		65_75	Illinois and Michigan Canal State Trail	41.323343	-88.966962	29.8	29.9	28.8	-1.10	30.3	28.9	-1.40

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		64_73	Starved Rock State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.306484	-88.977735	30.1	30.2	28.7	-1.50	30.6	28.6	-2.00
Grid		65_73	Starved Rock State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.306604	-88.966649	30.2	30.3	28.6	-1.70	30.6	28.5	-2.10
Grid		66_70	Illinois and Michigan Canal State Trail	41.281614	-88.955096	29.6	29.7	30.7	1.00	30.1	30.5	0.40
Grid		65_71	Illinois and Michigan Canal State Trail	41.289865	-88.966335	30	30.1	29.5	-0.60	30.4	29.2	-1.20
Grid		65_70	Illinois and Michigan Canal State Trail	41.281496	-88.966179	29.7	29.8	30.3	0.50	30.1	30	-0.10
Grid		64_80	Illinois and Michigan Canal State Trail	41.365070	-88.978844	30	30.2	29.6	-0.60	30.7	30.2	-0.50
Grid		64_79	Illinois and Michigan Canal State Trail	41.356700	-88.978685	29.5	29.5	29.1	-0.40	30.1	29.6	-0.50
Grid		64_78	Illinois and Michigan Canal State Trail	41.348331	-88.978527	29.1	29.2	28.8	-0.40	29.7	29.2	-0.50
Grid		64_77	Illinois and Michigan Canal State Trail	41.339962	-88.978368	29.1	29.2	28.7	-0.50	29.7	29	-0.70
Grid		64_76	Illinois and Michigan Canal State Trail	41.331592	-88.978210	29.4	29.4	28.8	-0.60	29.8	29	-0.80
Grid		65_74	Illinois and Michigan Canal State Trail	41.314973	-88.966806	30.1	30.2	28.7	-1.50	30.5	28.7	-1.80
Grid		31_74	Lake DePue State Fish and Wildlife Area	41.310301	-89.343758	30.4	30.5	27.4	-3.10	30.9	27.9	-3.00
Grid		34_75	Lake DePue State Fish and Wildlife Area	41.319133	-89.310703	30.4	30.5	27.4	-3.10	30.9	27.9	-3.00
Grid		34_74	Lake DePue State Fish and Wildlife Area	41.310764	-89.310501	30.5	30.6	27.8	-2.80	31	28.4	-2.60
Grid		33_75	Lake DePue State Fish and Wildlife Area	41.318980	-89.321790	30.3	30.5	27.2	-3.30	30.8	27.8	-3.00
Grid		33_74	Lake DePue State Fish and Wildlife Area	41.310611	-89.321587	30.4	30.6	27.7	-2.90	30.9	28.2	-2.70
Grid		32_74	Lake DePue State Fish and Wildlife Area	41.310456	-89.332673	30.4	30.6	27.5	-3.10	30.9	28	-2.90
Grid		32_73	Lake DePue State Fish and Wildlife Area	41.302087	-89.332469	30.5	30.6	28	-2.60	31	28.5	-2.50
Grid		29_47	Chautauqua National Wildlife Refuge National Wildlife Refuge	41.084015	-89.360325	27.7	27.8	25.8	-2.00	28.1	25.2	-2.90
Grid		32_71	Donnelley State Fish and Wildlife Area	41.285348	-89.332061	30.8	30.9	28.8	-2.10	31.3	29.3	-2.00
Grid		48_71	Illinois and Michigan Canal State Trail	41.287686	-89.154749	30	30.1	29.6	-0.50	30.5	29.8	-0.70
Grid		31_73	Lake DePue State Fish and Wildlife Area	41.301932	-89.343553	30.5	30.6	27.8	-2.80	31	28.3	-2.70
Grid		31_72	Lake DePue State Fish and Wildlife Area	41.293562	-89.343348	30.5	30.7	28.2	-2.50	31	28.7	-2.30
Grid		30_73	Lake DePue State Fish and Wildlife Area	41.301775	-89.354637	30.4	30.5	27.7	-2.80	30.9	28.1	-2.80
Grid		30_72	Lake DePue State Fish and Wildlife Area	41.293406	-89.354430	30.5	30.6	28.1	-2.50	31	28.5	-2.50
Grid		30_49	Marshall State Fish and Wildlife Area	41.100911	-89.349689	28.2	28.3	26.3	-2.00	28.6	25.6	-3.00
Grid		56_78	Illinois and Michigan Canal State Trail	41.347336	-89.067274	31	31	30.5	-0.50	31.6	31.1	-0.50
Grid		32_72	Donnelley State Fish and Wildlife Area	41.293718	-89.332265	30.6	30.8	28.4	-2.40	31.1	28.9	-2.20
Grid		48_78	Illinois and Michigan Canal State Trail	41.346271	-89.156017	31.2	31.3	30	-1.30	31.8	30.5	-1.30
Grid		49_76	Illinois and Michigan Canal State Trail	41.329670	-89.144565	31.2	31.3	30.5	-0.80	31.8	31.1	-0.70
Grid		49_75	Illinois and Michigan Canal State Trail	41.321300	-89.144385	30.9	31	30.4	-0.60	31.6	30.9	-0.70
Grid		49_74	Illinois and Michigan Canal State Trail	41.312931	-89.144205	30.6	30.7	30.2	-0.50	31.2	30.6	-0.60
Grid		49_73	Illinois and Michigan Canal State Trail	41.304562	-89.144026	30.3	30.4	30	-0.40	30.9	30.3	-0.60
Grid		49_72	Illinois and Michigan Canal State Trail	41.296192	-89.143846	30	30.1	29.8	-0.30	30.6	30	-0.60
Grid		49_71	Illinois and Michigan Canal State Trail	41.287823	-89.143666	29.8	30	29.5	-0.50	30.4	29.6	-0.80
Grid		35_75	Lake DePue State Fish and Wildlife Area	41.319285	-89.299615	30.4	30.5	27.6	-2.90	30.9	28.1	-2.80
Grid		48_79	Illinois and Michigan Canal State Trail	41.354641	-89.156198	31	31	29.4	-1.60	31.6	30	-1.60
Grid		36_75	Lake DePue State Fish and Wildlife Area	41.319436	-89.288528	30.5	30.6	27.8	-2.80	31	28.4	-2.60
Grid		48_77	Illinois and Michigan Canal State Trail	41.337902	-89.155836	31.3	31.4	30.3	-1.10	32	30.9	-1.10
Grid		48_76	Illinois and Michigan Canal State Trail	41.329533	-89.155655	31.3	31.3	30.5	-0.80	31.9	31.1	-0.80

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Grid		48_75	Illinois and Michigan Canal State Trail	41.321163	-89.155473	31	31.1	30.5	-0.60	31.7	31	-0.70
Grid		48_74	Illinois and Michigan Canal State Trail	41.312794	-89.155292	30.7	30.8	30.2	-0.60	31.4	30.7	-0.70
Grid		48_73	Illinois and Michigan Canal State Trail	41.304425	-89.155111	30.5	30.5	30.1	-0.40	31.1	30.4	-0.70
Grid		48_72	Illinois and Michigan Canal State Trail	41.296055	-89.154930	30.2	30.3	29.9	-0.40	30.8	30.1	-0.70
Grid		28_47	Chautauqua National Wildlife Refuge National Wildlife Refuge	41.083856	-89.371372	27.7	27.8	25.7	-2.10	28.1	25	-3.10
Grid		48_80	Illinois and Michigan Canal State Trail	41.363010	-89.156380	30.8	30.8	28.8	-2.00	31.3	29.4	-1.90
Grid		22_31	Marshall State Fish and Wildlife Area	40.948973	-89.434190	24.3	24.5	21.4	-3.10	24.7	20.7	-4.00
Grid		23_38	Marshall State Fish and Wildlife Area	41.007723	-89.424669	23.9	24.1	23.7	-0.40	24.4	23.1	-1.30
Grid		23_37	Marshall State Fish and Wildlife Area	40.999354	-89.424454	24	24.1	23.4	-0.70	24.4	22.8	-1.60
Grid		23_32	Marshall State Fish and Wildlife Area	40.957507	-89.423381	24.5	24.6	21.6	-3.00	24.9	20.9	-4.00
Grid		22_38	Marshall State Fish and Wildlife Area	41.007558	-89.435703	23.7	23.8	23.8	0.00	24.2	23.2	-1.00
Grid		22_37	Marshall State Fish and Wildlife Area	40.999189	-89.435486	23.7	23.8	23.5	-0.30	24.1	22.9	-1.20
Grid		22_36	Marshall State Fish and Wildlife Area	40.990819	-89.435270	23.8	23.9	23.2	-0.70	24.2	22.6	-1.60
Grid		29_71	Hennepin Canal State Trail	41.284879	-89.365305	30.5	30.6	28.4	-2.20	31	28.7	-2.30
Grid		22_32	Marshall State Fish and Wildlife Area	40.957342	-89.434406	24.3	24.5	21.8	-2.70	24.7	21.1	-3.60
Grid		23_43	Marshall State Fish and Wildlife Area	41.049570	-89.425744	25.4	25.5	24.7	-0.80	25.8	24	-1.80
Grid		22_30	Marshall State Fish and Wildlife Area	40.940603	-89.433974	24.3	24.5	21.1	-3.40	24.7	20.4	-4.30
Grid		21_37	Marshall State Fish and Wildlife Area	40.999022	-89.446518	23.5	23.6	23.6	0.00	23.9	23	-0.90
Grid		21_33	Marshall State Fish and Wildlife Area	40.965545	-89.445648	23.9	24.1	22.3	-1.80	24.3	21.6	-2.70
Grid		21_32	Marshall State Fish and Wildlife Area	40.957176	-89.445431	24.1	24.2	21.9	-2.30	24.4	21.3	-3.10
Grid		21_31	Marshall State Fish and Wildlife Area	40.948806	-89.445213	24.1	24.2	21.6	-2.60	24.5	20.9	-3.60
Grid		21_30	Marshall State Fish and Wildlife Area	40.940437	-89.444996	24.1	24.3	21.2	-3.10	24.6	20.6	-4.00
Grid		22_35	Marshall State Fish and Wildlife Area	40.982450	-89.435054	23.9	24.1	22.9	-1.20	24.3	22.2	-2.10
Grid		25_44	Marshall State Fish and Wildlife Area	41.058266	-89.403875	26.1	26.3	24.9	-1.40	26.6	24.3	-2.30
Grid		28_46	Chautauqua National Wildlife Refuge National Wildlife Refuge	41.075487	-89.371164	27.3	27.4	25.5	-1.90	27.7	24.9	-2.80
Grid		27_46	Chautauqua National Wildlife Refuge National Wildlife Refuge	41.075327	-89.382209	27.2	27.4	25.4	-2.00	27.8	24.8	-3.00
Grid		26_46	Chautauqua National Wildlife Refuge National Wildlife Refuge	41.075167	-89.393254	27.2	27.3	25.3	-2.00	27.7	24.6	-3.10
Grid		25_67	Miller-Anderson Woods State Natural Area	41.250761	-89.408774	30.5	30.5	29.2	-1.30	31	29.4	-1.60
Grid		25_66	Miller-Anderson Woods State Natural Area	41.242391	-89.408560	30.5	30.6	29.5	-1.10	31.1	29.6	-1.50
Grid		25_65	Miller-Anderson Woods State Natural Area	41.234022	-89.408347	30.5	30.7	29.6	-1.10	31.2	29.8	-1.40
Grid		23_41	Marshall State Fish and Wildlife Area	41.032831	-89.425314	24.5	24.7	24.4	-0.30	25	23.8	-1.20
Grid		25_45	Chautauqua National Wildlife Refuge National Wildlife Refuge	41.066635	-89.404087	26.6	26.7	25	-1.70	27.1	24.4	-2.70
Grid		23_42	Marshall State Fish and Wildlife Area	41.041200	-89.425529	24.9	25	24.5	-0.50	25.4	24	-1.40
Grid		24_45	Chautauqua National Wildlife Refuge National Wildlife Refuge	41.066472	-89.415131	26.5	26.6	24.9	-1.70	27	24.3	-2.70
Grid		24_44	Marshall State Fish and Wildlife Area	41.058103	-89.414917	26	26.1	24.8	-1.30	26.5	24.2	-2.30
Grid		24_43	Marshall State Fish and Wildlife Area	41.049734	-89.414703	25.5	25.6	24.7	-0.90	26	24.1	-1.90
Grid		24_42	Marshall State Fish and Wildlife Area	41.041364	-89.414490	25.1	25.1	24.6	-0.50	25.5	24	-1.50

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		24_39	Marshall State Fish and Wildlife Area	41.016256	-89.413849	24.3	24.3	23.9	-0.40	24.7	23.3	-1.40
Grid		23_44	Marshall State Fish and Wildlife Area	41.057939	-89.425959	25.9	26	24.7	-1.30	26.4	24.1	-2.30
Grid		49_79	Illinois and Michigan Canal State Trail	41.354778	-89.145104	31.1	31.2	29.7	-1.50	31.7	30.3	-1.40
Grid		25_46	Chautauqua National Wildlife Refuge National Wildlife Refuge	41.075005	-89.404300	27.1	27.2	25.1	-2.10	27.5	24.5	-3.00
Grid		54_71	Illinois and Michigan Canal State Trail	41.288491	-89.088252	29.6	29.6	29.2	-0.40	30	29	-1.00
Grid		54_79	Illinois and Michigan Canal State Trail	41.355446	-89.089633	31.6	31.7	30.8	-0.90	32.3	31.4	-0.90
Grid		54_78	Illinois and Michigan Canal State Trail	41.347076	-89.089460	31.3	31.4	30.7	-0.70	31.9	31.3	-0.60
Grid		54_77	Illinois and Michigan Canal State Trail	41.338707	-89.089288	30.9	31	30.5	-0.50	31.6	31.1	-0.50
Grid		54_76	Illinois and Michigan Canal State Trail	41.330338	-89.089115	30.4	30.5	30.2	-0.30	31.1	30.6	-0.50
Grid		54_75	Illinois and Michigan Canal State Trail	41.321968	-89.088942	30	30.1	29.9	-0.20	30.6	30.2	-0.40
Grid		54_74	Illinois and Michigan Canal State Trail	41.313599	-89.088770	29.7	29.8	29.8	0.00	30.3	29.9	-0.40
Grid		49_77	Illinois and Michigan Canal State Trail	41.338039	-89.144745	31.4	31.5	30.5	-1.00	32	31	-1.00
Grid		54_72	Illinois and Michigan Canal State Trail	41.296860	-89.088425	29.5	29.6	29.5	-0.10	30.1	29.4	-0.70
Grid		54_82	Mitchell's Grove State Natural Area	41.380554	-89.090151	31.3	31.5	29.6	-1.90	31.9	30.3	-1.60
Grid		53_80	Illinois and Michigan Canal State Trail	41.363684	-89.100902	31.6	31.6	30.4	-1.20	32.2	31	-1.20
Grid		53_79	Illinois and Michigan Canal State Trail	41.355314	-89.100727	31.6	31.7	30.7	-1.00	32.2	31.3	-0.90
Grid		53_78	Illinois and Michigan Canal State Trail	41.346945	-89.100553	31.4	31.5	30.8	-0.70	32.1	31.3	-0.80
Grid		53_77	Illinois and Michigan Canal State Trail	41.338576	-89.100379	31.1	31.2	30.7	-0.50	31.7	31.2	-0.50
Grid		53_76	Illinois and Michigan Canal State Trail	41.330206	-89.100205	30.6	30.7	30.4	-0.30	31.2	30.8	-0.40
Grid		53_75	Illinois and Michigan Canal State Trail	41.321837	-89.100031	30.2	30.3	30.1	-0.20	30.8	30.4	-0.40
Grid		54_73	Illinois and Michigan Canal State Trail	41.305230	-89.088597	29.6	29.7	29.7	0.00	30.2	29.7	-0.50
Grid		55_77	Illinois and Michigan Canal State Trail	41.338837	-89.078196	30.6	30.7	30.3	-0.40	31.3	30.8	-0.50
Grid		56_75	Illinois and Michigan Canal State Trail	41.322228	-89.066765	29.7	29.7	29.6	-0.10	30.3	29.8	-0.50
Grid		56_74	Illinois and Michigan Canal State Trail	41.313859	-89.066595	29.5	29.6	29.4	-0.20	30.1	29.6	-0.50
Grid		56_73	Illinois and Michigan Canal State Trail	41.305489	-89.066425	29.5	29.6	29.3	-0.30	30	29.4	-0.60
Grid		56_72	Illinois and Michigan Canal State Trail	41.297120	-89.066256	29.5	29.6	29.2	-0.40	30.1	29.1	-1.00
Grid		56_71	Illinois and Michigan Canal State Trail	41.288751	-89.066086	29.5	29.7	29	-0.70	30	28.8	-1.20
Grid		55_80	Illinois and Michigan Canal State Trail	41.363945	-89.078710	31.7	31.8	30.7	-1.10	32.3	31.3	-1.00
Grid		54_80	Illinois and Michigan Canal State Trail	41.363815	-89.089806	31.6	31.7	30.5	-1.20	32.3	31.2	-1.10
Grid		55_78	Illinois and Michigan Canal State Trail	41.347207	-89.078367	31.2	31.3	30.6	-0.70	31.8	31.2	-0.60
Grid		54_81	Illinois and Michigan Canal State Trail	41.372184	-89.089979	31.5	31.6	30.1	-1.50	32.1	30.8	-1.30
Grid		55_76	Illinois and Michigan Canal State Trail	41.330468	-89.078025	30.2	30.3	30	-0.30	30.8	30.4	-0.40
Grid		55_75	Illinois and Michigan Canal State Trail	41.322099	-89.077853	29.8	29.9	29.7	-0.20	30.4	30	-0.40
Grid		55_74	Illinois and Michigan Canal State Trail	41.313729	-89.077682	29.6	29.7	29.6	-0.10	30.2	29.8	-0.40
Grid		55_73	Illinois and Michigan Canal State Trail	41.305360	-89.077511	29.5	29.6	29.5	-0.10	30.1	29.5	-0.60
Grid		55_72	Illinois and Michigan Canal State Trail	41.296991	-89.077340	29.5	29.6	29.3	-0.30	30.1	29.2	-0.90
Grid		55_71	Illinois and Michigan Canal State Trail	41.288621	-89.077169	29.6	29.7	29.1	-0.60	30	28.9	-1.10
Grid		53_72	Illinois and Michigan Canal State Trail	41.296729	-89.099509	29.6	29.7	29.6	-0.10	30.1	29.6	-0.50
Grid		55_79	Illinois and Michigan Canal State Trail	41.355576	-89.078538	31.5	31.6	30.7	-0.90	32.2	31.3	-0.90
Grid		50_76	Illinois and Michigan Canal State Trail	41.329805	-89.133475	31.2	31.2	30.6	-0.60	31.8	31.1	-0.70
Grid		53_74	Illinois and Michigan Canal State Trail	41.313468	-89.099857	29.9	30	29.9	-0.10	30.5	30.1	-0.40
Grid		51_73	Illinois and Michigan Canal State Trail	41.304832	-89.121854	30	30	29.9	-0.10	30.6	30.1	-0.50

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		51_72	Illinois and Michigan Canal State Trail	41.296463	-89.121678	29.7	29.8	29.7	-0.10	30.3	29.7	-0.60
Grid		51_71	Illinois and Michigan Canal State Trail	41.288093	-89.121501	29.6	29.7	29.4	-0.30	30.2	29.4	-0.80
Grid		50_80	Illinois and Michigan Canal State Trail	41.363283	-89.134189	31.1	31.2	29.5	-1.70	31.7	30.1	-1.60
Grid		50_79	Illinois and Michigan Canal State Trail	41.354913	-89.134010	31.3	31.4	30	-1.40	31.9	30.6	-1.30
Grid		51_75	Illinois and Michigan Canal State Trail	41.321571	-89.122208	30.6	30.7	30.3	-0.40	31.2	30.7	-0.50
Grid		50_77	Illinois and Michigan Canal State Trail	41.338175	-89.133653	31.3	31.4	30.6	-0.80	32	31.2	-0.80
Grid		51_76	Illinois and Michigan Canal State Trail	41.329940	-89.122385	31	31.1	30.6	-0.50	31.7	31.1	-0.60
Grid		50_75	Illinois and Michigan Canal State Trail	41.321436	-89.133297	30.7	30.8	30.4	-0.40	31.4	30.8	-0.60
Grid		50_74	Illinois and Michigan Canal State Trail	41.313067	-89.133118	30.4	30.5	30.1	-0.40	31.1	30.5	-0.60
Grid		50_73	Illinois and Michigan Canal State Trail	41.304697	-89.132940	30.1	30.2	29.9	-0.30	30.7	30.2	-0.50
Grid		50_72	Illinois and Michigan Canal State Trail	41.296328	-89.132762	29.9	29.9	29.7	-0.20	30.5	29.9	-0.60
Grid		50_71	Illinois and Michigan Canal State Trail	41.287959	-89.132584	29.7	29.8	29.5	-0.30	30.3	29.5	-0.80
Grid		49_80	Illinois and Michigan Canal State Trail	41.363147	-89.145284	30.9	31	29.1	-1.90	31.5	29.7	-1.80
Grid		69_73	Illinois and Michigan Canal State Trail	41.307071	-88.922302	30.6	30.7	29.4	-1.30	31	29.3	-1.70
Grid		50_78	Illinois and Michigan Canal State Trail	41.346544	-89.133832	31.4	31.5	30.4	-1.10	32	31	-1.00
Grid		52_74	Illinois and Michigan Canal State Trail	41.313335	-89.110944	30.1	30.1	30	-0.10	30.7	30.2	-0.50
Grid		49_78	Illinois and Michigan Canal State Trail	41.346408	-89.144924	31.3	31.4	30.2	-1.20	32	30.8	-1.20
Grid		53_71	Illinois and Michigan Canal State Trail	41.288360	-89.099335	29.5	29.6	29.3	-0.30	30	29.1	-0.90
Grid		52_80	Illinois and Michigan Canal State Trail	41.363551	-89.111997	31.4	31.5	30.2	-1.30	32.1	30.8	-1.30
Grid		52_79	Illinois and Michigan Canal State Trail	41.355182	-89.111822	31.5	31.6	30.5	-1.10	32.2	31.2	-1.00
Grid		52_78	Illinois and Michigan Canal State Trail	41.346812	-89.111646	31.5	31.6	30.7	-0.90	32.1	31.3	-0.80
Grid		52_77	Illinois and Michigan Canal State Trail	41.338443	-89.111470	31.2	31.3	30.7	-0.60	31.9	31.2	-0.70
Grid		51_74	Illinois and Michigan Canal State Trail	41.313202	-89.122031	30.3	30.3	30	-0.30	30.8	30.3	-0.50
Grid		52_75	Illinois and Michigan Canal State Trail	41.321704	-89.111120	30.4	30.5	30.2	-0.30	31	30.6	-0.40
Grid		53_73	Illinois and Michigan Canal State Trail	41.305098	-89.099683	29.7	29.8	29.7	-0.10	30.3	29.9	-0.40
Grid		52_73	Illinois and Michigan Canal State Trail	41.304966	-89.110769	29.8	29.9	29.9	0.00	30.4	30	-0.40
Grid		52_72	Illinois and Michigan Canal State Trail	41.296596	-89.110593	29.7	29.8	29.7	-0.10	30.2	29.7	-0.50
Grid		52_71	Illinois and Michigan Canal State Trail	41.288227	-89.110418	29.6	29.7	29.3	-0.40	30	29.2	-0.80
Grid		51_80	Illinois and Michigan Canal State Trail	41.363417	-89.123093	31.3	31.4	29.8	-1.60	31.9	30.4	-1.50
Grid		51_79	Illinois and Michigan Canal State Trail	41.355048	-89.122916	31.4	31.5	30.3	-1.20	32	30.9	-1.10
Grid		51_78	Illinois and Michigan Canal State Trail	41.346679	-89.122739	31.5	31.6	30.6	-1.00	32.1	31.2	-0.90
Grid		51_77	Illinois and Michigan Canal State Trail	41.338309	-89.122562	31.3	31.4	30.7	-0.70	32	31.3	-0.70
Grid		52_76	Illinois and Michigan Canal State Trail	41.330074	-89.111295	30.8	30.9	30.5	-0.40	31.5	30.9	-0.60
Grid		85_73	Illinois and Michigan Canal State Trail	41.308766	-88.744906	29.1	29.2	36.5	7.30	29.6	36.7	7.10
Grid		86_70	Illinois and Michigan Canal State Trail	41.283754	-88.733438	27.8	28	33.2	5.20	28.4	33.1	4.70
Grid		85_80	Illinois and Michigan Canal State Trail	41.367351	-88.745804	34.2	34.3	31.1	-3.20	34.6	31.3	-3.30
Grid		85_79	Illinois and Michigan Canal State Trail	41.358982	-88.745675	34	34.1	31.1	-3.00	34.4	31.2	-3.20
Grid		85_78	Illinois and Michigan Canal State Trail	41.350612	-88.745547	33.5	33.6	31.6	-2.00	33.9	31.7	-2.20
Grid		85_77	Illinois and Michigan Canal State Trail	41.342243	-88.745419	32.7	32.8	32.8	0.00	33.1	32.9	-0.20
Grid		85_76	Illinois and Michigan Canal State Trail	41.333874	-88.745290	31.7	31.8	34.1	2.30	32.1	34.3	2.20
Grid		84_77	Illinois and Michigan Canal State Trail	41.342145	-88.756512	32.9	33	32.1	-0.90	33.3	32.3	-1.00
Grid		85_74	Illinois and Michigan Canal State Trail	41.317135	-88.745034	29.9	30	36.2	6.20	30.3	36.4	6.10
Grid		86_73	Illinois and Michigan Canal State Trail	41.308862	-88.733818	28.7	28.9	36.5	7.60	29.2	36.8	7.60

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		85_72	Illinois and Michigan Canal State Trail	41.300396	-88.744778	28.4	28.6	36.1	7.50	28.9	36.3	7.40
Grid		85_71	Illinois and Michigan Canal State Trail	41.292027	-88.744650	28	28.2	35.2	7.00	28.5	35.3	6.80
Grid		85_70	Illinois and Michigan Canal State Trail	41.283658	-88.744522	27.8	27.9	33.7	5.80	28.3	33.7	5.40
Grid		84_80	Illinois and Michigan Canal State Trail	41.367253	-88.756901	33.8	34	30.9	-3.10	34.2	31.1	-3.10
Grid		84_79	Illinois and Michigan Canal State Trail	41.358884	-88.756772	33.9	34	30.9	-3.10	34.4	31	-3.40
Grid		81_77	Illinois and Michigan Canal State Trail	41.341845	-88.789792	33.1	33.2	30.8	-2.40	33.5	30.9	-2.60
Grid		85_75	Illini State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.325504	-88.745162	30.7	30.8	35.3	4.50	31.1	35.5	4.40
Grid		86_80	Illinois and Michigan Canal State Trail	41.367448	-88.734706	34.3	34.5	31.3	-3.20	34.7	31.4	-3.30
Grid		87_77	Illinois and Michigan Canal State Trail	41.342435	-88.723232	32	32.1	34.1	2.00	32.5	34.3	1.80
Grid		87_76	Illinois and Michigan Canal State Trail	41.334066	-88.723107	30.9	31	35.4	4.40	31.3	35.6	4.30
Grid		87_75	Illini State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.325697	-88.722981	29.9	30	36.3	6.30	30.3	36.5	6.20
Grid		87_74	Illinois and Michigan Canal State Trail	41.317327	-88.722856	29.1	29.2	36.6	7.40	29.5	36.9	7.40
Grid		87_73	Illinois and Michigan Canal State Trail	41.308958	-88.722731	28.5	28.6	36.5	7.90	28.9	36.8	7.90
Grid		87_72	Illinois and Michigan Canal State Trail	41.300589	-88.722605	27.9	28.1	35.8	7.70	28.5	35.9	7.40
Grid		86_71	Illinois and Michigan Canal State Trail	41.292124	-88.733565	27.8	28	34.9	6.90	28.4	34.9	6.50
Grid		87_70	Illinois and Michigan Canal State Trail	41.283850	-88.722355	28.1	28.3	32.6	4.30	28.6	32.5	3.90
Grid		86_72	Illinois and Michigan Canal State Trail	41.300493	-88.733692	28.2	28.4	36	7.60	28.7	36.3	7.60
Grid		86_79	Illinois and Michigan Canal State Trail	41.359078	-88.734579	34	34.1	31.4	-2.70	34.4	31.5	-2.90
Grid		86_78	Illinois and Michigan Canal State Trail	41.350709	-88.734452	33.3	33.5	32.1	-1.40	33.7	32.2	-1.50
Grid		86_77	Illinois and Michigan Canal State Trail	41.342340	-88.734325	32.3	32.5	33.4	0.90	32.7	33.5	0.80
Grid		86_76	Illinois and Michigan Canal State Trail	41.333970	-88.734199	31.3	31.5	34.7	3.20	31.7	35	3.30
Grid		86_75	Illinois and Michigan Canal State Trail	41.325601	-88.734072	30.3	30.4	35.8	5.40	30.7	36.1	5.40
Grid		86_74	Illinois and Michigan Canal State Trail	41.317232	-88.733945	29.4	29.6	36.5	6.90	29.9	36.7	6.80
Grid		84_76	Illinois and Michigan Canal State Trail	41.333776	-88.756383	32	32.1	33.5	1.40	32.5	33.6	1.10
Grid		87_71	Illinois and Michigan Canal State Trail	41.292219	-88.722480	27.8	28	34.4	6.40	28.4	34.5	6.10
Grid		82_72	Illinois and Michigan Canal State Trail	41.300100	-88.778036	29.3	29.4	35.9	6.50	29.7	36	6.30
Grid		82_80	Illinois and Michigan Canal State Trail	41.367054	-88.779097	33	33.1	30.6	-2.50	33.4	30.8	-2.60
Grid		82_79	Illinois and Michigan Canal State Trail	41.358685	-88.778964	33.4	33.5	30.6	-2.90	33.9	30.8	-3.10
Grid		82_78	Illinois and Michigan Canal State Trail	41.350316	-88.778831	33.5	33.6	30.6	-3.00	33.8	30.7	-3.10
Grid		82_77	Illinois and Michigan Canal State Trail	41.341946	-88.778699	33.1	33.2	31.2	-2.00	33.5	31.3	-2.20
Grid		82_76	Illinois and Michigan Canal State Trail	41.333577	-88.778566	32.5	32.6	32.3	-0.30	32.9	32.4	-0.50
Grid		82_75	Illinois and Michigan Canal State Trail	41.325208	-88.778434	31.7	31.8	33.6	1.80	32.1	33.8	1.70
Grid		84_78	Illinois and Michigan Canal State Trail	41.350515	-88.756642	33.6	33.7	31.3	-2.40	34	31.3	-2.70
Grid		82_73	Illinois and Michigan Canal State Trail	41.308469	-88.778169	30	30.1	35.6	5.50	30.5	35.8	5.30
Grid		83_71	Illinois and Michigan Canal State Trail	41.291830	-88.766819	28.5	28.6	35.6	7.00	28.9	35.7	6.80
Grid		82_71	Illinois and Michigan Canal State Trail	41.291730	-88.777904	28.7	28.8	35.7	6.90	29.2	35.8	6.60
Grid		82_70	Illinois and Michigan Canal State Trail	41.283361	-88.777772	28.2	28.4	34.8	6.40	28.7	34.9	6.20
Grid		81_81	Illinois and Michigan Canal State Trail	41.375323	-88.790328	31.4	31.5	29.9	-1.60	31.8	30.3	-1.50
Grid		81_80	Illinois and Michigan Canal State Trail	41.366953	-88.790194	32.5	32.6	30.4	-2.20	32.9	30.7	-2.20
Grid		81_79	Illinois and Michigan Canal State Trail	41.358584	-88.790060	33	33.1	30.5	-2.60	33.4	30.7	-2.70
Grid		69_71	Illinois and Michigan Canal State Trail	41.290332	-88.922000	30.2	30.3	31.2	0.90	30.6	31.1	0.50

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		82_74	Illinois and Michigan Canal State Trail	41.316838	-88.778301	30.9	31	34.8	3.80	31.3	35.1	3.80
Grid		83_78	Illinois and Michigan Canal State Trail	41.350416	-88.767737	33.5	33.6	30.9	-2.70	34	30.9	-3.10
Grid		84_75	Illini State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.325406	-88.756253	31.1	31.2	34.7	3.50	31.5	34.9	3.40
Grid		84_74	Illinois and Michigan Canal State Trail	41.317037	-88.756123	30.2	30.3	35.8	5.50	30.7	36.1	5.40
Grid		84_73	Illinois and Michigan Canal State Trail	41.308668	-88.755994	29.4	29.6	36.2	6.60	29.8	36.4	6.60
Grid		84_72	Illinois and Michigan Canal State Trail	41.300298	-88.755864	28.8	28.9	36.2	7.30	29.2	36.3	7.10
Grid		84_71	Illinois and Michigan Canal State Trail	41.291929	-88.755735	28.2	28.3	35.5	7.20	28.7	35.5	6.80
Grid		84_70	Illinois and Michigan Canal State Trail	41.283560	-88.755605	27.9	28	34.1	6.10	28.3	34.2	5.90
Grid		82_81	Illinois and Michigan Canal State Trail	41.375424	-88.779229	32	32.1	30.2	-1.90	32.5	30.5	-2.00
Grid		83_79	Illinois and Michigan Canal State Trail	41.358785	-88.767868	33.8	33.9	30.8	-3.10	34.1	30.9	-3.20
Grid		83_70	Illinois and Michigan Canal State Trail	41.283461	-88.766688	28	28.2	34.5	6.30	28.6	34.6	6.00
Grid		83_77	Illinois and Michigan Canal State Trail	41.342046	-88.767605	33	33.2	31.6	-1.60	33.4	31.7	-1.70
Grid		83_76	Illinois and Michigan Canal State Trail	41.333677	-88.767474	32.3	32.4	32.8	0.40	32.7	33	0.30
Grid		83_75	Illinois and Michigan Canal State Trail	41.325308	-88.767343	31.4	31.6	34.1	2.50	31.8	34.3	2.50
Grid		83_74	Illinois and Michigan Canal State Trail	41.316938	-88.767212	30.6	30.7	35.3	4.60	30.9	35.6	4.70
Grid		83_73	Illinois and Michigan Canal State Trail	41.308569	-88.767081	29.7	29.9	35.9	6.00	30.1	36.1	6.00
Grid		83_72	Illinois and Michigan Canal State Trail	41.300200	-88.766950	29	29.2	36	6.80	29.5	36.2	6.70
Grid		87_80	Illinois and Michigan Canal State Trail	41.367543	-88.723608	34.5	34.6	31.4	-3.20	34.8	31.5	-3.30
Grid		83_80	Illinois and Michigan Canal State Trail	41.367154	-88.767999	33.5	33.6	30.7	-2.90	33.9	31	-2.90
Grid		91_76	Illinois and Michigan Canal State Trail	41.334437	-88.678738	29.2	29.3	37.4	8.10	29.6	37.6	8.00
Grid		92_71	Marseilles State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.292681	-88.667055	32.1	32.2	31.2	-1.00	32.4	30.9	-1.50
Grid		92_70	Marseilles State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.284312	-88.666937	33.4	33.5	29.4	-4.10	33.8	29	-4.80
Grid		92_69	Marseilles State Fish and Wildlife Area	41.275942	-88.666819	34.7	34.8	27.9	-6.90	35	27.5	-7.50
Grid		92_68	Marseilles State Fish and Wildlife Area	41.267573	-88.666701	35.6	35.6	26.7	-8.90	35.8	26.2	-9.60
Grid		91_80	Illinois and Michigan Canal State Trail	41.367915	-88.679217	33.7	33.8	32.5	-1.30	34.1	32.7	-1.40
Grid		91_79	Illinois and Michigan Canal State Trail	41.359545	-88.679097	32.4	32.6	33.7	1.10	32.8	34	1.20
Grid		87_78	Illinois and Michigan Canal State Trail	41.350805	-88.723357	33.1	33.2	32.7	-0.50	33.5	32.8	-0.70
Grid		91_77	Illinois and Michigan Canal State Trail	41.342807	-88.678858	30.1	30.2	36.7	6.50	30.5	37	6.50
Grid		92_74	Illinois and Michigan Canal State Trail	41.317789	-88.667409	28.7	28.8	36.5	7.70	29.3	36.7	7.40
Grid		91_75	Illinois and Michigan Canal State Trail	41.326068	-88.678618	28.6	28.7	37.4	8.70	29.1	37.6	8.50
Grid		91_74	Illinois and Michigan Canal State Trail	41.317699	-88.678499	28.4	28.5	36.8	8.30	28.9	36.9	8.00
Grid		91_73	Illinois and Michigan Canal State Trail	41.309329	-88.678379	28.6	28.7	35.5	6.80	29.2	35.6	6.40
Grid		91_72	Marseilles State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.300960	-88.678260	29.5	29.6	33.7	4.10	29.9	33.7	3.80
Grid		91_71	Marseilles State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.292591	-88.678140	30.7	30.9	31.9	1.00	31.2	31.7	0.50
Grid		91_70	Marseilles State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.284221	-88.678021	32.2	32.3	30	-2.30	32.5	29.7	-2.80
Grid		91_78	Illinois and Michigan Canal State Trail	41.351176	-88.678977	31.2	31.3	35.3	4.00	31.6	35.5	3.90
Grid		93_67	LaSalle Lake State Fish and Wildlife Area	41.259293	-88.655504	35.8	35.9	25.7	-10.20	36.1	25.2	-10.90

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		93_77	Illinois and Michigan Canal State Trail	41.342986	-88.656670	29.3	29.4	37.7	8.30	29.8	37.9	8.10
Grid		93_76	Illinois and Michigan Canal State Trail	41.334617	-88.656553	28.8	28.9	37.9	9.00	29.4	38.1	8.70
Grid		93_75	Illinois and Michigan Canal State Trail	41.326247	-88.656436	28.9	29	37.4	8.40	29.4	37.6	8.20
Grid		93_74	Illinois and Michigan Canal State Trail	41.317878	-88.656320	29.5	29.6	36.2	6.60	30.1	36.4	6.30
Grid		93_73	Illinois and Michigan Canal State Trail	41.309509	-88.656203	30.6	30.7	34.4	3.70	31	34.5	3.50
Grid		93_72	Illinois and Michigan Canal State Trail	41.301139	-88.656086	31.9	32	32.5	0.50	32.3	32.3	0.00
Grid		92_72	Marseilles State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.301050	-88.667173	30.6	30.7	33.1	2.40	31.1	33.1	2.00
Grid		93_70	Illinois and Michigan Canal State Trail	41.284401	-88.655853	34.7	34.8	28.8	-6.00	35	28.4	-6.60
Grid		92_73	Illinois and Michigan Canal State Trail	41.309420	-88.667291	29.4	29.6	35	5.40	30	35	5.00
Grid		92_80	Illinois and Michigan Canal State Trail	41.368005	-88.668119	33.2	33.4	33	-0.40	33.6	33.2	-0.40
Grid		92_79	Illinois and Michigan Canal State Trail	41.359636	-88.668000	31.9	32	34.5	2.50	32.3	34.7	2.40
Grid		92_78	Illinois and Michigan Canal State Trail	41.351266	-88.667882	30.6	30.8	36.1	5.30	31	36.4	5.40
Grid		92_77	Illinois and Michigan Canal State Trail	41.342897	-88.667764	29.6	29.7	37.2	7.50	30.1	37.6	7.50
Grid		92_76	Illinois and Michigan Canal State Trail	41.334528	-88.667646	28.8	29	37.7	8.70	29.3	37.9	8.60
Grid		92_75	Illinois and Michigan Canal State Trail	41.326158	-88.667527	28.6	28.7	37.5	8.80	29.1	37.7	8.60
Grid		90_80	Illinois and Michigan Canal State Trail	41.367823	-88.690315	34.1	34.2	32.2	-2.00	34.4	32.2	-2.20
Grid		93_71	Illinois and Michigan Canal State Trail	41.292770	-88.655970	33.4	33.4	30.5	-2.90	33.7	30.2	-3.50
Grid		88_76	Illinois and Michigan Canal State Trail	41.334160	-88.712015	30.5	30.6	36	5.40	30.9	36.3	5.40
Grid		91_69	Marseilles State Fish and Wildlife Area	41.275852	-88.677901	33.5	33.6	28.4	-5.20	33.9	27.9	-6.00
Grid		89_72	Illinois and Michigan Canal State Trail	41.300776	-88.700433	28.1	28.2	35	6.80	28.6	35	6.40
Grid		89_71	Marseilles State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.292407	-88.700310	28.6	28.8	33.2	4.40	29.1	33.1	4.00
Grid		89_70	Illinois and Michigan Canal State Trail	41.284038	-88.700188	29.7	29.8	31.3	1.50	30.1	31	0.90
Grid		88_80	Illinois and Michigan Canal State Trail	41.367638	-88.712510	34.4	34.6	31.6	-3.00	34.8	31.7	-3.10
Grid		88_79	Illinois and Michigan Canal State Trail	41.359268	-88.712386	33.7	33.8	32.1	-1.70	34.1	32.1	-2.00
Grid		89_74	Illinois and Michigan Canal State Trail	41.317515	-88.700677	28.4	28.6	36.9	8.30	28.9	37.2	8.30
Grid		88_77	Illinois and Michigan Canal State Trail	41.342530	-88.712138	31.6	31.7	34.8	3.10	32	35	3.00
Grid		89_75	Illinois and Michigan Canal State Trail	41.325884	-88.700800	29.1	29.2	37	7.80	29.5	37.3	7.80
Grid		88_75	Illinois and Michigan Canal State Trail	41.325791	-88.711891	29.5	29.6	36.7	7.10	29.9	36.9	7.00
Grid		88_74	Illinois and Michigan Canal State Trail	41.317422	-88.711767	28.7	28.8	36.8	8.00	29.2	37.1	7.90
Grid		88_73	Illinois and Michigan Canal State Trail	41.309052	-88.711643	28.2	28.3	36.4	8.10	28.6	36.7	8.10
Grid		88_72	Illinois and Michigan Canal State Trail	41.300683	-88.711519	27.9	28	35.5	7.50	28.5	35.6	7.10
Grid		88_71	Illinois and Michigan Canal State Trail	41.292314	-88.711395	28.1	28.2	33.8	5.60	28.6	33.8	5.20
Grid		88_70	Illinois and Michigan Canal State Trail	41.283944	-88.711272	28.7	28.9	32	3.10	29.2	31.8	2.60
Grid		81_76	Illinois and Michigan Canal State Trail	41.333476	-88.789658	32.6	32.7	31.8	-0.90	33	31.9	-1.10
Grid		88_78	Illinois and Michigan Canal State Trail	41.350899	-88.712262	32.7	32.8	33.3	0.50	33.1	33.5	0.40
Grid		90_72	Marseilles State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.300869	-88.689346	28.6	28.7	34.5	5.80	29.1	34.5	5.40
Grid		87_79	Illinois and Michigan Canal State Trail	41.359174	-88.723483	33.9	34	31.7	-2.30	34.3	31.8	-2.50
Grid		90_79	Illinois and Michigan Canal State Trail	41.359454	-88.690193	33	33.1	33.1	0.00	33.4	33.3	-0.10
Grid		90_78	Illinois and Michigan Canal State Trail	41.351085	-88.690072	31.7	31.9	34.6	2.70	32.1	34.8	2.70
Grid		90_77	Illinois and Michigan Canal State Trail	41.342715	-88.689951	30.5	30.6	36	5.40	31	36.3	5.30

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		90_76	Illinois and Michigan Canal State Trail	41.334346	-88.689830	29.5	29.6	37	7.40	30	37.3	7.30
Grid		90_75	Illinois and Michigan Canal State Trail	41.325977	-88.689709	28.7	28.9	37.2	8.30	29.3	37.5	8.20
Grid		89_73	Illinois and Michigan Canal State Trail	41.309146	-88.700555	28	28.2	36.3	8.10	28.6	36.5	7.90
Grid		90_73	Illinois and Michigan Canal State Trail	41.309238	-88.689467	28.2	28.3	35.9	7.60	28.7	36.1	7.40
Grid		91_68	Marseilles State Fish and Wildlife Area	41.267483	-88.677782	34.8	34.9	27	-7.90	35.1	26.5	-8.60
Grid		90_71	Marseilles State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.292499	-88.689225	29.6	29.7	32.5	2.80	30	32.4	2.40
Grid		90_70	Marseilles State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.284130	-88.689104	30.9	31	30.7	-0.30	31.3	30.3	-1.00
Grid		89_80	Illinois and Michigan Canal State Trail	41.367731	-88.701413	34.3	34.4	31.8	-2.60	34.6	31.9	-2.70
Grid		89_79	Illinois and Michigan Canal State Trail	41.359362	-88.701290	33.4	33.6	32.6	-1.00	33.8	32.8	-1.00
Grid		89_78	Illinois and Michigan Canal State Trail	41.350993	-88.701167	32.2	32.4	33.9	1.50	32.6	34.2	1.60
Grid		89_77	Illinois and Michigan Canal State Trail	41.342623	-88.701045	31	31.2	35.5	4.30	31.4	35.7	4.30
Grid		89_76	Illinois and Michigan Canal State Trail	41.334254	-88.700922	30	30.1	36.6	6.50	30.4	36.9	6.50
Grid		90_74	Illinois and Michigan Canal State Trail	41.317608	-88.689588	28.3	28.4	36.9	8.50	28.8	37.1	8.30
Grid		73_70	Illinois and Michigan Canal State Trail	41.282413	-88.877519	29.5	29.6	33.8	4.20	29.9	33.9	4.00
Grid		73_78	Illinois and Michigan Canal State Trail	41.349367	-88.878681	30.3	30.4	29.3	-1.10	30.7	29.6	-1.10
Grid		73_77	Illinois and Michigan Canal State Trail	41.340998	-88.878536	30.9	31	29.4	-1.60	31.3	29.6	-1.70
Grid		73_76	Illinois and Michigan Canal State Trail	41.332629	-88.878390	31.3	31.4	29.4	-2.00	31.6	29.5	-2.10
Grid		73_75	Illinois and Michigan Canal State Trail	41.324259	-88.878245	31.3	31.4	29.6	-1.80	31.8	29.6	-2.20
Grid		73_74	Illinois and Michigan Canal State Trail	41.315890	-88.878100	31.3	31.4	30.2	-1.20	31.7	30.1	-1.60
Grid		73_73	Illinois and Michigan Canal State Trail	41.307521	-88.877954	31	31.1	31.1	0.00	31.4	31.1	-0.30
Grid		72_74	Illinois and Michigan Canal State Trail	41.315779	-88.889188	31.1	31.2	29.8	-1.40	31.5	29.7	-1.80
Grid		73_71	Illinois and Michigan Canal State Trail	41.290782	-88.877664	30	30.1	33.1	3.00	30.4	33.1	2.70
Grid		74_70	Illinois and Michigan Canal State Trail	41.282522	-88.866436	29.4	29.5	34.2	4.70	29.8	34.3	4.50
Grid		72_80	Illinois and Michigan Canal State Trail	41.365995	-88.890069	28.7	28.8	28.3	-0.50	29.2	28.7	-0.50
Grid		72_79	Illinois and Michigan Canal State Trail	41.357626	-88.889922	29.3	29.3	28.7	-0.60	29.7	29	-0.70
Grid		72_78	Illinois and Michigan Canal State Trail	41.349257	-88.889775	29.9	30.1	29.1	-1.00	30.4	29.4	-1.00
Grid		72_77	Illinois and Michigan Canal State Trail	41.340887	-88.889629	30.6	30.7	29.3	-1.40	31	29.5	-1.50
Grid		72_76	Illinois and Michigan Canal State Trail	41.332518	-88.889482	31	31	29.3	-1.70	31.4	29.4	-2.00
Grid		81_78	Illinois and Michigan Canal State Trail	41.350215	-88.789926	33.2	33.3	30.5	-2.80	33.6	30.5	-3.10
Grid		73_72	Illinois and Michigan Canal State Trail	41.299151	-88.877809	30.6	30.7	32.2	1.50	31	32.2	1.20
Grid		74_77	Illinois and Michigan Canal State Trail	41.341108	-88.867443	31.2	31.3	29.6	-1.70	31.6	29.7	-1.90
Grid		75_74	Illinois and Michigan Canal State Trail	41.316108	-88.855923	31.5	31.7	31	-0.70	31.9	31	-0.90
Grid		75_73	Illinois and Michigan Canal State Trail	41.307739	-88.855780	31	31.1	32	0.90	31.4	32.1	0.70
Grid		75_72	Illinois and Michigan Canal State Trail	41.299370	-88.855638	30.4	30.5	33.1	2.60	30.8	33.2	2.40
Grid		75_71	Illinois and Michigan Canal State Trail	41.291000	-88.855495	29.8	30	33.9	3.90	30.2	34	3.80
Grid		75_70	Illinois and Michigan Canal State Trail	41.282631	-88.855353	29.3	29.4	34.5	5.10	29.7	34.6	4.90
Grid		74_80	Illinois and Michigan Canal State Trail	41.366216	-88.867875	29.1	29.2	28.6	-0.60	29.6	28.9	-0.70
Grid		73_79	Illinois and Michigan Canal State Trail	41.357737	-88.878827	29.5	29.6	29	-0.60	30	29.2	-0.80
Grid		74_78	Illinois and Michigan Canal State Trail	41.349477	-88.867587	30.6	30.7	29.5	-1.20	31.1	29.7	-1.40
Grid		73_80	Illinois and Michigan Canal State Trail	41.366106	-88.878972	28.8	28.9	28.4	-0.50	29.3	28.8	-0.50
Grid		74_76	Illinois and Michigan Canal State Trail	41.332738	-88.867299	31.5	31.6	29.6	-2.00	31.9	29.6	-2.30

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		74_75	Illinois and Michigan Canal State Trail	41.324369	-88.867155	31.5	31.7	29.9	-1.80	31.9	29.8	-2.10
Grid		74_74	Illinois and Michigan Canal State Trail	41.316000	-88.867011	31.4	31.5	30.6	-0.90	31.8	30.5	-1.30
Grid		74_73	Illinois and Michigan Canal State Trail	41.307630	-88.866867	31	31.1	31.6	0.50	31.4	31.6	0.20
Grid		74_72	Illinois and Michigan Canal State Trail	41.299261	-88.866723	30.5	30.6	32.6	2.00	30.8	32.7	1.90
Grid		74_71	Illinois and Michigan Canal State Trail	41.290892	-88.866580	29.9	30.1	33.5	3.40	30.3	33.7	3.40
Grid		72_73	Illinois and Michigan Canal State Trail	41.307410	-88.889041	30.9	31	30.6	-0.40	31.4	30.6	-0.80
Grid		74_79	Illinois and Michigan Canal State Trail	41.357846	-88.867731	29.9	30	29.2	-0.80	30.4	29.5	-0.90
Grid		69_80	Illinois and Michigan Canal State Trail	41.365656	-88.923360	28.7	28.8	28.4	-0.40	29.3	28.8	-0.50
Grid		70_77	Illinois and Michigan Canal State Trail	41.340662	-88.911814	30	30.1	29.1	-1.00	30.4	29.3	-1.10
Grid		70_76	Illinois and Michigan Canal State Trail	41.332293	-88.911664	30.5	30.6	29.1	-1.50	30.9	29.2	-1.70
Grid		70_75	Illinois and Michigan Canal State Trail	41.323924	-88.911514	30.7	30.8	29.1	-1.70	31.2	29.1	-2.10
Grid		70_74	Illinois and Michigan Canal State Trail	41.315554	-88.911365	30.8	30.9	29.2	-1.70	31.2	29.1	-2.10
Grid		70_73	Illinois and Michigan Canal State Trail	41.307185	-88.911215	30.7	30.8	29.7	-1.10	31.1	29.6	-1.50
Grid		70_72	Illinois and Michigan Canal State Trail	41.298816	-88.911066	30.6	30.7	30.6	-0.10	31	30.6	-0.40
Grid		72_75	Illinois and Michigan Canal State Trail	41.324149	-88.889335	31.1	31.2	29.4	-1.80	31.5	29.3	-2.20
Grid		70_70	Illinois and Michigan Canal State Trail	41.282077	-88.910767	29.7	29.8	32.6	2.80	30.1	32.6	2.50
Grid		70_80	Illinois and Michigan Canal State Trail	41.365770	-88.912263	28.6	28.7	28.3	-0.40	29.2	28.7	-0.50
Grid		69_79	Illinois and Michigan Canal State Trail	41.357287	-88.923209	28.8	28.9	28.4	-0.50	29.3	28.7	-0.60
Grid		69_78	Illinois and Michigan Canal State Trail	41.348918	-88.923058	29.2	29.3	28.7	-0.60	29.7	29	-0.70
Grid		69_77	Illinois and Michigan Canal State Trail	41.340548	-88.922906	29.8	29.8	29	-0.80	30.2	29.2	-1.00
Grid		69_76	Illinois and Michigan Canal State Trail	41.332179	-88.922755	30.2	30.3	29	-1.30	30.7	29.2	-1.50
Grid		69_75	Buffalo Rock State Park, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.323810	-88.922604	30.5	30.6	28.9	-1.70	31	29	-2.00
Grid		69_74	Illinois and Michigan Canal State Trail	41.315440	-88.922453	30.6	30.8	29	-1.80	31	28.9	-2.10
Grid		70_71	Illinois and Michigan Canal State Trail	41.290446	-88.910916	30.2	30.3	31.6	1.30	30.6	31.6	1.00
Grid		71_75	Illinois and Michigan Canal State Trail	41.324037	-88.900425	30.9	31	29.2	-1.80	31.3	29.2	-2.10
Grid		72_72	Illinois and Michigan Canal State Trail	41.299041	-88.888895	30.6	30.7	31.7	1.00	31.1	31.6	0.50
Grid		72_71	Illinois and Michigan Canal State Trail	41.290671	-88.888748	30.1	30.2	32.6	2.40	30.6	32.7	2.10
Grid		72_70	Illinois and Michigan Canal State Trail	41.282302	-88.888601	29.6	29.7	33.5	3.80	30	33.5	3.50
Grid		71_80	Illinois and Michigan Canal State Trail	41.365883	-88.901166	28.6	28.7	28.3	-0.40	29.1	28.6	-0.50
Grid		71_79	Illinois and Michigan Canal State Trail	41.357514	-88.901018	29	29.1	28.6	-0.50	29.5	28.9	-0.60
Grid		71_78	Illinois and Michigan Canal State Trail	41.349145	-88.900870	29.7	29.8	29	-0.80	30.1	29.3	-0.80
Grid		70_78	Illinois and Michigan Canal State Trail	41.349032	-88.911964	29.4	29.5	28.8	-0.70	29.9	29.1	-0.80
Grid		71_76	Illinois and Michigan Canal State Trail	41.332406	-88.900573	30.7	30.8	29.2	-1.60	31.1	29.3	-1.80
Grid		70_79	Illinois and Michigan Canal State Trail	41.357401	-88.912113	28.8	28.9	28.4	-0.50	29.3	28.7	-0.60
Grid		71_74	Illinois and Michigan Canal State Trail	41.315667	-88.900276	30.9	31	29.4	-1.60	31.4	29.4	-2.00
Grid		71_73	Illinois and Michigan Canal State Trail	41.307298	-88.900128	30.9	31	30.1	-0.90	31.2	30.1	-1.10
Grid		71_72	Illinois and Michigan Canal State Trail	41.298929	-88.899980	30.6	30.7	31.1	0.40	31	31.1	0.10
Grid		71_71	Illinois and Michigan Canal State Trail	41.290559	-88.899832	30.2	30.3	32.2	1.90	30.6	32.2	1.60
Grid		71_70	Illinois and Michigan Canal State Trail	41.282190	-88.899684	29.7	29.7	33	3.30	30.1	33	2.90
Grid		71_60	Sandy Ford State Natural Area	41.198497	-88.898205	30.3	30.4	26.2	-4.20	30.6	25.5	-5.10
Grid		75_77	Illinois and Michigan Canal State Trail	41.341216	-88.856350	31.6	31.7	29.7	-2.00	32	29.8	-2.20
Grid		71_77	Illinois and Michigan Canal State Trail	41.340775	-88.900721	30.3	30.4	29.2	-1.20	30.7	29.4	-1.30

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		79_73	Illinois and Michigan Canal State Trail	41.308163	-88.811431	30.7	30.8	34.3	3.50	31	34.4	3.40
Grid		79_81	Illinois and Michigan Canal State Trail	41.375117	-88.812526	30.3	30.4	29.4	-1.00	30.7	29.6	-1.10
Grid		79_80	Illinois and Michigan Canal State Trail	41.366748	-88.812389	31.3	31.4	30	-1.40	31.7	30.2	-1.50
Grid		79_79	Illinois and Michigan Canal State Trail	41.358379	-88.812252	32.1	32.2	30.2	-2.00	32.5	30.4	-2.10
Grid		79_78	Illinois and Michigan Canal State Trail	41.350009	-88.812115	32.7	32.8	30.2	-2.60	33	30.3	-2.70
Grid		79_77	Illinois and Michigan Canal State Trail	41.341640	-88.811978	32.7	32.8	30.3	-2.50	33.1	30.3	-2.80
Grid		79_76	Illinois and Michigan Canal State Trail	41.333271	-88.811841	32.6	32.7	30.9	-1.80	32.9	30.9	-2.00
Grid		75_75	Illinois and Michigan Canal State Trail	41.324478	-88.856065	31.7	31.9	30.2	-1.70	32.2	30.1	-2.10
Grid		79_74	Illinois and Michigan Canal State Trail	41.316532	-88.811568	31.4	31.5	33.1	1.60	31.8	33.3	1.50
Grid		80_72	Illinois and Michigan Canal State Trail	41.299897	-88.800209	29.8	29.9	35.3	5.40	30.2	35.6	5.40
Grid		79_72	Illinois and Michigan Canal State Trail	41.299793	-88.811294	29.9	30	35	5.00	30.4	35.1	4.70
Grid		79_71	Illinois and Michigan Canal State Trail	41.291424	-88.811158	29.3	29.5	35.3	5.80	29.7	35.5	5.80
Grid		79_70	Illinois and Michigan Canal State Trail	41.283055	-88.811021	28.7	28.9	35.2	6.30	29.2	35.2	6.00
Grid		78_81	Illinois and Michigan Canal State Trail	41.375013	-88.823625	29.9	29.9	29.1	-0.80	30.3	29.4	-0.90
Grid		78_80	Illinois and Michigan Canal State Trail	41.366644	-88.823486	30.8	30.9	29.7	-1.20	31.3	30	-1.30
Grid		78_79	Illinois and Michigan Canal State Trail	41.358274	-88.823348	31.7	31.7	30.1	-1.60	32	30.3	-1.70
Grid		79_75	Illinois and Michigan Canal State Trail	41.324901	-88.811705	32.1	32.2	31.9	-0.30	32.5	32	-0.50
Grid		80_79	Illinois and Michigan Canal State Trail	41.358482	-88.801156	32.6	32.7	30.3	-2.40	33	30.5	-2.50
Grid		81_75	Illinois and Michigan Canal State Trail	41.325107	-88.789524	32	32	33	1.00	32.4	33.2	0.80
Grid		81_74	Illinois and Michigan Canal State Trail	41.316737	-88.789390	31.1	31.3	34.3	3.00	31.5	34.4	2.90
Grid		81_73	Illinois and Michigan Canal State Trail	41.308368	-88.789256	30.2	30.4	35.2	4.80	30.7	35.4	4.70
Grid		81_72	Illinois and Michigan Canal State Trail	41.299999	-88.789122	29.5	29.7	35.6	5.90	29.9	35.8	5.90
Grid		81_71	Illinois and Michigan Canal State Trail	41.291629	-88.788989	28.9	29	35.6	6.60	29.3	35.7	6.40
Grid		81_70	Illinois and Michigan Canal State Trail	41.283260	-88.788855	28.5	28.6	35	6.40	28.9	35.1	6.20
Grid		80_70	Illinois and Michigan Canal State Trail	41.283158	-88.799938	28.6	28.7	35.1	6.40	29.1	35.2	6.10
Grid		80_80	Illinois and Michigan Canal State Trail	41.366851	-88.801292	31.8	31.9	30.2	-1.70	32.2	30.5	-1.70
Grid		80_71	Illinois and Michigan Canal State Trail	41.291527	-88.800073	29.1	29.3	35.5	6.20	29.5	35.6	6.10
Grid		80_78	Illinois and Michigan Canal State Trail	41.350113	-88.801021	33	33.1	30.3	-2.80	33.4	30.4	-3.00
Grid		80_77	Illinois and Michigan Canal State Trail	41.341743	-88.800885	32.9	33.1	30.5	-2.60	33.3	30.5	-2.80
Grid		80_76	Illinois and Michigan Canal State Trail	41.333374	-88.800750	32.6	32.8	31.3	-1.50	33	31.4	-1.60
Grid		80_75	Illinois and Michigan Canal State Trail	41.325005	-88.800614	32.1	32.2	32.5	0.30	32.5	32.6	0.10
Grid		80_74	Illinois and Michigan Canal State Trail	41.316635	-88.800479	31.3	31.4	33.7	2.30	31.7	33.9	2.20
Grid		80_73	Illinois and Michigan Canal State Trail	41.308266	-88.800344	30.5	30.6	34.7	4.10	30.9	34.9	4.00
Grid		78_76	Illinois and Michigan Canal State Trail	41.333166	-88.822933	32.4	32.5	30.5	-2.00	32.9	30.5	-2.40
Grid		80_81	Illinois and Michigan Canal State Trail	41.375221	-88.801427	30.9	30.9	29.7	-1.20	31.2	30	-1.20
Grid		76_73	Illinois and Michigan Canal State Trail	41.307847	-88.844693	31	31	32.6	1.60	31.3	32.7	1.40
Grid		78_78	Illinois and Michigan Canal State Trail	41.349905	-88.823210	32.2	32.3	30.1	-2.20	32.6	30.2	-2.40
Grid		76_80	Illinois and Michigan Canal State Trail	41.366432	-88.845681	29.9	30	29.2	-0.80	30.3	29.4	-0.90
Grid		76_79	Illinois and Michigan Canal State Trail	41.358063	-88.845540	30.7	30.8	29.7	-1.10	31.2	30	-1.20
Grid		76_78	Illinois and Michigan Canal State Trail	41.349693	-88.845399	31.5	31.5	29.9	-1.60	31.9	30.1	-1.80
Grid		76_77	Illinois and Michigan Canal State Trail	41.341324	-88.845257	31.9	32	29.8	-2.20	32.3	29.9	-2.40
Grid		76_76	Illinois and Michigan Canal State Trail	41.332955	-88.845116	32	32.1	30	-2.10	32.5	29.9	-2.60
Grid		77_71	Illinois and Michigan Canal State Trail	41.291214	-88.833327	29.6	29.7	34.7	5.00	30	34.8	4.80

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		76_74	Illinois and Michigan Canal State Trail	41.316216	-88.844834	31.6	31.6	31.5	-0.10	32	31.5	-0.50
Grid		77_72	Illinois and Michigan Canal State Trail	41.299584	-88.833466	30.2	30.3	34.1	3.80	30.6	34.2	3.60
Grid		76_72	Illinois and Michigan Canal State Trail	41.299477	-88.844552	30.3	30.4	33.6	3.20	30.7	33.7	3.00
Grid		76_71	Illinois and Michigan Canal State Trail	41.291108	-88.844411	29.7	29.9	34.3	4.40	30.1	34.5	4.40
Grid		76_70	Illinois and Michigan Canal State Trail	41.282739	-88.844270	29.2	29.3	34.7	5.40	29.6	34.8	5.20
Grid		75_80	Illinois and Michigan Canal State Trail	41.366324	-88.856778	29.5	29.5	28.9	-0.60	29.9	29.2	-0.70
Grid		75_79	Illinois and Michigan Canal State Trail	41.357955	-88.856635	30.3	30.4	29.5	-0.90	30.7	29.7	-1.00
Grid		75_78	Illinois and Michigan Canal State Trail	41.349586	-88.856493	31.1	31.2	29.7	-1.50	31.4	29.9	-1.50
Grid		132_59	Mazonia-Braidwood State Fish and Wildlife Area	41.194965	-88.222890	37.7	37.8	37.7	-0.10	38.4	38.4	0.00
Grid		76_75	Illinois and Michigan Canal State Trail	41.324585	-88.844975	32	32.1	30.6	-1.50	32.4	30.5	-1.90
Grid		77_80	Illinois and Michigan Canal State Trail	41.366538	-88.834584	30.3	30.4	29.5	-0.90	30.7	29.7	-1.00
Grid		75_76	Illinois and Michigan Canal State Trail	41.332847	-88.856208	31.7	31.9	29.8	-2.10	32.2	29.8	-2.40
Grid		78_75	Illinois and Michigan Canal State Trail	41.324797	-88.822795	32.1	32.2	31.4	-0.80	32.5	31.4	-1.10
Grid		78_74	Illinois and Michigan Canal State Trail	41.316428	-88.822657	31.5	31.6	32.6	1.00	31.9	32.7	0.80
Grid		78_73	Illinois and Michigan Canal State Trail	41.308058	-88.822518	30.8	30.9	33.7	2.80	31.1	33.9	2.80
Grid		78_72	Illinois and Michigan Canal State Trail	41.299689	-88.822380	30.1	30.2	34.6	4.40	30.5	34.7	4.20
Grid		78_71	Illinois and Michigan Canal State Trail	41.291320	-88.822242	29.5	29.6	35	5.40	29.9	35.2	5.30
Grid		77_70	Illinois and Michigan Canal State Trail	41.282845	-88.833187	29	29.2	34.9	5.70	29.5	35.1	5.60
Grid		77_81	Illinois and Michigan Canal State Trail	41.374908	-88.834724	29.4	29.5	28.8	-0.70	29.8	29.1	-0.70
Grid		78_77	Illinois and Michigan Canal State Trail	41.341536	-88.823071	32.4	32.5	30.1	-2.40	32.8	30.1	-2.70
Grid		77_79	Illinois and Michigan Canal State Trail	41.358169	-88.834444	31.1	31.3	29.9	-1.40	31.5	30.1	-1.40
Grid		77_78	Illinois and Michigan Canal State Trail	41.349800	-88.834304	31.8	31.9	30	-1.90	32.2	30.1	-2.10
Grid		77_77	Illinois and Michigan Canal State Trail	41.341430	-88.834164	32.2	32.3	29.9	-2.40	32.6	30	-2.60
Grid		77_76	Illinois and Michigan Canal State Trail	41.333061	-88.834025	32.3	32.4	30.2	-2.20	32.7	30.2	-2.50
Grid		77_75	Illinois and Michigan Canal State Trail	41.324692	-88.833885	32.1	32.2	31	-1.20	32.5	31	-1.50
Grid		77_74	Illinois and Michigan Canal State Trail	41.316322	-88.833745	31.5	31.7	32	0.30	31.9	32.1	0.20
Grid		77_73	Illinois and Michigan Canal State Trail	41.307953	-88.833606	30.8	31	33.2	2.20	31.3	33.3	2.00
Grid		78_70	Illinois and Michigan Canal State Trail	41.282950	-88.822104	28.9	29	35.1	6.10	29.3	35.2	5.90
Grid		165_129	Illinois and Michigan Canal State Trail	41.781750	-87.858547	52.3	52.4	52.4	0.00	53	53.1	0.10
Grid		166_120	Illinois and Michigan Canal State Trail	41.706436	-87.847266	53.9	54	54.1	0.10	54.3	54.4	0.10
Grid		166_119	Illinois and Michigan Canal State Trail	41.698067	-87.847253	52.6	52.7	52.2	-0.50	53	52.4	-0.60
Grid		166_118	Illinois and Michigan Canal State Trail	41.689697	-87.847241	51	51	50.7	-0.30	51.5	51.1	-0.40
Grid		166_117	Illinois and Michigan Canal State Trail	41.681328	-87.847229	50.2	50.3	50	-0.30	50.8	50.4	-0.40
Grid		166_116	Illinois and Michigan Canal State Trail	41.672959	-87.847216	49.9	50	49.6	-0.40	50.5	50	-0.50
Grid		166_115	Illinois and Michigan Canal State Trail	41.664589	-87.847204	49.3	49.4	49	-0.40	49.9	49.4	-0.50
Grid		165_122	Illinois and Michigan Canal State Trail	41.723165	-87.858451	50.6	50.7	49.9	-0.80	51.1	50.5	-0.60
Grid		166_113	Illinois and Michigan Canal State Trail	41.647851	-87.847180	48.2	48.3	48.1	-0.20	48.9	48.6	-0.30
Grid		166_123	Illinois and Michigan Canal State Trail	41.731544	-87.847303	51.3	51.4	50.8	-0.60	51.9	51.4	-0.50
Grid		165_128	Illinois and Michigan Canal State Trail	41.773381	-87.858534	53	53.2	53.2	0.00	53.7	53.8	0.10
Grid		165_127	Illinois and Michigan Canal State Trail	41.765012	-87.858520	53	53.1	53.2	0.10	53.6	53.8	0.20
Grid		165_126	Illinois and Michigan Canal State Trail	41.756642	-87.858506	52.3	52.4	52.5	0.10	53	53.1	0.10
Grid		165_125	Illinois and Michigan Canal State Trail	41.748273	-87.858492	51.5	51.6	51.8	0.20	52.2	52.3	0.10
Grid		165_124	Illinois and Michigan Canal State Trail	41.739904	-87.858478	50.4	50.5	50.6	0.10	51.1	51.2	0.10

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		163_118	Illinois and Michigan Canal State Trail	41.689665	-87.880705	51.6	51.6	50.9	-0.70	51.9	51.5	-0.40
Grid		166_114	Illinois and Michigan Canal State Trail	41.656220	-87.847192	48.6	48.7	48.5	-0.20	49.3	49	-0.30
Grid		167_113	Illinois and Michigan Canal State Trail	41.647859	-87.836032	48.1	48.2	48.1	-0.10	48.8	48.6	-0.20
Grid		167_121	Illinois and Michigan Canal State Trail	41.714814	-87.836119	55.3	55.3	55.6	0.30	55.7	55.9	0.20
Grid		167_120	Illinois and Michigan Canal State Trail	41.706445	-87.836108	53.5	53.6	53.5	-0.10	54	53.8	-0.20
Grid		167_119	Illinois and Michigan Canal State Trail	41.698075	-87.836097	52.4	52.5	52.3	-0.20	52.9	52.5	-0.40
Grid		167_118	Illinois and Michigan Canal State Trail	41.689706	-87.836086	51.9	52	51.6	-0.40	52.4	51.7	-0.70
Grid		167_117	Illinois and Michigan Canal State Trail	41.681337	-87.836076	51.1	51.2	50.8	-0.40	51.6	50.9	-0.70
Grid		167_116	Illinois and Michigan Canal State Trail	41.672967	-87.836065	50.1	50.1	49.9	-0.20	50.6	50.2	-0.40
Grid		166_121	Illinois and Michigan Canal State Trail	41.714805	-87.847278	54.7	54.8	54.5	-0.30	55.1	54.8	-0.30
Grid		167_114	Illinois and Michigan Canal State Trail	41.656229	-87.836043	48.5	48.7	48.6	-0.10	49.2	49.1	-0.10
Grid		166_122	Illinois and Michigan Canal State Trail	41.723175	-87.847290	53.6	53.7	52.5	-1.20	54	52.9	-1.10
Grid		166_129	Illinois and Michigan Canal State Trail	41.781760	-87.847377	53	53.1	53.1	0.00	53.7	53.8	0.10
Grid		166_128	Illinois and Michigan Canal State Trail	41.773391	-87.847364	53.5	53.6	53.6	0.00	54.2	54.3	0.10
Grid		166_127	Illinois and Michigan Canal State Trail	41.765021	-87.847352	53	53.1	53.2	0.10	53.7	53.8	0.10
Grid		166_126	Illinois and Michigan Canal State Trail	41.756652	-87.847340	52.3	52.5	52.6	0.10	53	53.2	0.20
Grid		166_125	Illinois and Michigan Canal State Trail	41.748283	-87.847327	51.6	51.7	51.8	0.10	52.3	52.4	0.10
Grid		166_124	Illinois and Michigan Canal State Trail	41.739913	-87.847315	50.8	50.9	50.9	0.00	51.5	51.5	0.00
Grid		165_121	Illinois and Michigan Canal State Trail	41.714796	-87.858437	52.8	52.9	51.5	-1.40	53.1	52.1	-1.00
Grid		167_115	Illinois and Michigan Canal State Trail	41.664598	-87.836054	49.1	49.2	49.1	-0.10	49.8	49.6	-0.20
Grid		163_125	Illinois and Michigan Canal State Trail	41.748250	-87.880822	51.1	51.2	51.2	0.00	51.8	51.9	0.10
Grid		164_118	Illinois and Michigan Canal State Trail	41.689677	-87.869550	51.6	51.7	51.7	0.00	52.1	52.2	0.10
Grid		164_117	Illinois and Michigan Canal State Trail	41.681307	-87.869535	50.9	50.9	50.4	-0.50	51.4	50.8	-0.60
Grid		164_116	Illinois and Michigan Canal State Trail	41.672938	-87.869520	50	50.1	49.2	-0.90	50.5	49.7	-0.80
Grid		164_115	Illinois and Michigan Canal State Trail	41.664569	-87.869505	48.9	49	48.4	-0.60	49.5	48.9	-0.60
Grid		164_114	Illinois and Michigan Canal State Trail	41.656199	-87.869490	48.4	48.5	48	-0.50	49	48.5	-0.50
Grid		164_113	Illinois and Michigan Canal State Trail	41.647830	-87.869474	48.4	48.4	47.9	-0.50	48.9	48.3	-0.60
Grid		165_123	Illinois and Michigan Canal State Trail	41.731534	-87.858465	49.5	49.7	49.5	-0.20	50.3	50.2	-0.10
Grid		163_126	Illinois and Michigan Canal State Trail	41.756620	-87.880839	52.1	52.2	52.2	0.00	52.7	52.8	0.10
Grid		164_121	Illinois and Michigan Canal State Trail	41.714785	-87.869596	50.6	50.6	49.4	-1.20	51	50	-1.00
Grid		163_124	Illinois and Michigan Canal State Trail	41.739881	-87.880805	49.8	49.9	50	0.10	50.6	50.7	0.10
Grid		163_123	Illinois and Michigan Canal State Trail	41.731511	-87.880789	48.6	48.7	48.7	0.00	49.3	49.4	0.10
Grid		163_122	Illinois and Michigan Canal State Trail	41.723142	-87.880772	47.9	47.9	47.8	-0.10	48.6	48.5	-0.10
Grid		163_121	Illinois and Michigan Canal State Trail	41.714773	-87.880755	48.6	48.7	47.8	-0.90	49.2	48.5	-0.70
Grid		163_120	Illinois and Michigan Canal State Trail	41.706403	-87.880739	50.4	50.4	48.9	-1.50	50.7	49.5	-1.20
Grid		187_56	Momence Wetlands State Natural Area	41.170753	-87.614106	37.9	38	38	0.00	38.6	38.6	0.00
Grid		163_127	Illinois and Michigan Canal State Trail	41.764989	-87.880855	52.5	52.6	52.7	0.10	53.2	53.3	0.10
Grid		164_128	Illinois and Michigan Canal State Trail	41.773370	-87.869703	53	53.1	53.2	0.10	53.7	53.8	0.10
Grid		165_120	Illinois and Michigan Canal State Trail	41.706426	-87.858423	53.2	53.3	53	-0.30	53.6	53.5	-0.10
Grid		165_119	Illinois and Michigan Canal State Trail	41.698057	-87.858410	52.4	52.5	52.8	0.30	53	53.2	0.20
Grid		165_118	Illinois and Michigan Canal State Trail	41.689688	-87.858396	51.5	51.6	51.1	-0.50	51.9	51.5	-0.40
Grid		165_117	Illinois and Michigan Canal State Trail	41.681318	-87.858382	50	50.2	49.7	-0.50	50.7	50.2	-0.50
Grid		165_116	Illinois and Michigan Canal State Trail	41.672949	-87.858368	49.3	49.4	49.1	-0.30	49.9	49.5	-0.40

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		165_115	Illinois and Michigan Canal State Trail	41.664580	-87.858355	49.1	49.2	48.7	-0.50	49.7	49.2	-0.50
Grid		164_119	Illinois and Michigan Canal State Trail	41.698046	-87.869566	52.3	52.4	52	-0.40	52.7	52.5	-0.20
Grid		165_113	Illinois and Michigan Canal State Trail	41.647841	-87.858327	48.7	48.8	48.2	-0.60	49.3	48.7	-0.60
Grid		164_120	Illinois and Michigan Canal State Trail	41.706415	-87.869581	52.2	52.2	50.8	-1.40	52.5	51.3	-1.20
Grid		164_127	Illinois and Michigan Canal State Trail	41.765001	-87.869688	53	53.1	53.2	0.10	53.7	53.8	0.10
Grid		164_126	Illinois and Michigan Canal State Trail	41.756631	-87.869672	52.3	52.5	52.6	0.10	53	53.1	0.10
Grid		164_125	Illinois and Michigan Canal State Trail	41.748262	-87.869657	51.3	51.4	51.5	0.10	52	52.1	0.10
Grid		164_124	Illinois and Michigan Canal State Trail	41.739893	-87.869642	50.1	50.2	50.3	0.10	50.8	50.9	0.10
Grid		164_123	Illinois and Michigan Canal State Trail	41.731523	-87.869627	48.9	49	49	0.00	49.7	49.7	0.00
Grid		164_122	Illinois and Michigan Canal State Trail	41.723154	-87.869611	48.9	49	48.6	-0.40	49.5	49.2	-0.30
Grid		167_124	Illinois and Michigan Canal State Trail	41.739922	-87.836152	52.4	52.5	52.2	-0.30	53	52.8	-0.20
Grid		165_114	Illinois and Michigan Canal State Trail	41.656210	-87.858341	49.1	49.2	48.5	-0.70	49.6	49	-0.60
Grid		169_129	Illinois and Michigan Canal State Trail	41.781783	-87.813865	57.3	57.5	57	-0.50	58.1	57.6	-0.50
Grid		170_117	Illinois and Michigan Canal State Trail	41.681356	-87.802616	50.2	50.2	52.1	1.90	50.7	52.2	1.50
Grid		170_116	Illinois and Michigan Canal State Trail	41.672987	-87.802609	49.2	49.3	50.6	1.30	49.8	50.8	1.00
Grid		170_115	Illinois and Michigan Canal State Trail	41.664618	-87.802603	49.4	49.5	49.5	0.00	50	49.7	-0.30
Grid		170_114	Illinois and Michigan Canal State Trail	41.656248	-87.802596	48.5	48.6	48.7	0.10	49.1	48.9	-0.20
Grid		170_113	Illinois and Michigan Canal State Trail	41.647879	-87.802590	47.7	47.8	47.9	0.10	48.4	48.3	-0.10
Grid		169_132	Illinois and Michigan Canal State Trail	41.806891	-87.813889	53.3	53.7	53.2	-0.50	55	54.2	-0.80
Grid		167_122	Illinois and Michigan Canal State Trail	41.723183	-87.836130	56.9	57	56.2	-0.80	57.2	56.6	-0.60
Grid		169_130	Illinois and Michigan Canal State Trail	41.790152	-87.813873	56.4	56.7	56	-0.70	57.4	56.7	-0.70
Grid		170_120	Illinois and Michigan Canal State Trail	41.706464	-87.802635	51.5	51.5	51.9	0.40	52.1	52.2	0.10
Grid		169_128	Illinois and Michigan Canal State Trail	41.773414	-87.813857	55.9	56.1	55.6	-0.50	56.7	56	-0.70
Grid		169_127	Illinois and Michigan Canal State Trail	41.765044	-87.813849	55.4	55.5	55.3	-0.20	56.2	55.8	-0.40
Grid		169_126	Illinois and Michigan Canal State Trail	41.756675	-87.813841	55.4	55.6	55.6	0.00	56.3	56	-0.30
Grid		169_125	Illinois and Michigan Canal State Trail	41.748306	-87.813833	56.7	56.8	56.6	-0.20	57.2	56.9	-0.30
Grid		169_124	Illinois and Michigan Canal State Trail	41.739936	-87.813825	60.4	60.5	60.4	-0.10	60.5	60.7	0.20
Grid		169_123	Illinois and Michigan Canal State Trail	41.731567	-87.813817	58.4	58.4	59.8	1.40	58.6	59.9	1.30
Grid		169_131	Illinois and Michigan Canal State Trail	41.798522	-87.813881	54.5	54.8	54.1	-0.70	55.7	54.8	-0.90
Grid		170_127	Illinois and Michigan Canal State Trail	41.765050	-87.802681	56.9	57	56.7	-0.30	57.7	57.2	-0.50
Grid		132_57	Mazonia-Braidwood State Fish and Wildlife Area	41.178226	-88.222768	37.5	37.6	37.6	0.00	38.3	38.2	-0.10
Grid		181_91	Thorn Creek Woods	41.463742	-87.680174	41.2	41.3	41.3	0.00	42	41.9	-0.10
Grid		180_91	Thorn Creek Woods	41.463748	-87.691290	41.5	41.6	41.6	0.00	42.2	42.1	-0.10
Grid		170_133	Illinois and Michigan Canal State Trail	41.815266	-87.802720	53.1	53.4	53.1	-0.30	54.6	54.8	0.20
Grid		170_132	Illinois and Michigan Canal State Trail	41.806896	-87.802714	54.6	55	54.3	-0.70	56.4	55.4	-1.00
Grid		170_131	Illinois and Michigan Canal State Trail	41.798527	-87.802707	56.4	56.7	56.1	-0.60	57.7	56.6	-1.10
Grid		170_118	Illinois and Michigan Canal State Trail	41.689726	-87.802622	51.2	51.3	52.1	0.80	51.7	52.1	0.40
Grid		170_129	Illinois and Michigan Canal State Trail	41.781788	-87.802694	58.2	58.5	57.8	-0.70	59.1	58.2	-0.90
Grid		170_119	Illinois and Michigan Canal State Trail	41.698095	-87.802629	51.1	51.2	51.6	0.40	51.7	51.8	0.10
Grid		170_126	Illinois and Michigan Canal State Trail	41.756680	-87.802675	57.6	57.7	57.6	-0.10	58.2	58	-0.20
Grid		170_125	Illinois and Michigan Canal State Trail	41.748311	-87.802668	62.2	62.1	62.2	0.10	62.2	62.5	0.30
Grid		170_124	Illinois and Michigan Canal State Trail	41.739942	-87.802661	60.5	60.6	60.7	0.10	60.6	60.9	0.30
Grid		170_123	Illinois and Michigan Canal State Trail	41.731572	-87.802655	55.8	55.9	56.2	0.30	56.3	56.6	0.30

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		170_122	Illinois and Michigan Canal State Trail	41.723203	-87.802648	53.7	53.7	54.1	0.40	54.3	54.4	0.10
Grid		170_121	Illinois and Michigan Canal State Trail	41.714834	-87.802642	52.2	52.4	52.6	0.20	52.9	53	0.10
Grid		169_120	Illinois and Michigan Canal State Trail	41.706459	-87.813793	53.3	53.4	54.3	0.90	53.8	54.4	0.60
Grid		170_130	Illinois and Michigan Canal State Trail	41.790158	-87.802701	58.9	59	58.5	-0.50	59.7	59	-0.70
Grid		168_113	Illinois and Michigan Canal State Trail	41.647867	-87.824885	48	48.1	48.1	0.00	48.7	48.6	-0.10
Grid		169_122	Illinois and Michigan Canal State Trail	41.723198	-87.813809	55.5	55.6	56.4	0.80	55.9	56.6	0.70
Grid		168_120	Illinois and Michigan Canal State Trail	41.706452	-87.824951	53.3	53.4	55.1	1.70	53.9	55.2	1.30
Grid		168_119	Illinois and Michigan Canal State Trail	41.698083	-87.824941	52.2	52.3	53.5	1.20	52.7	53.8	1.10
Grid		168_118	Illinois and Michigan Canal State Trail	41.689714	-87.824932	51.3	51.4	52	0.60	51.8	52.2	0.40
Grid		168_117	Illinois and Michigan Canal State Trail	41.681344	-87.824922	50.8	50.9	50.9	0.00	51.3	51.1	-0.20
Grid		168_116	Illinois and Michigan Canal State Trail	41.672975	-87.824913	50.6	50.6	50.4	-0.20	51.1	50.5	-0.60
Grid		168_122	Illinois and Michigan Canal State Trail	41.723191	-87.824969	57.1	57.2	57.9	0.70	57.4	58.2	0.80
Grid		168_114	Illinois and Michigan Canal State Trail	41.656236	-87.824894	48.5	48.6	48.6	0.00	49.2	49	-0.20
Grid		168_123	Illinois and Michigan Canal State Trail	41.731560	-87.824979	58.6	58.7	58.1	-0.60	58.8	58.5	-0.30
Grid		167_130	Illinois and Michigan Canal State Trail	41.790138	-87.836217	52.6	52.8	52.7	-0.10	53.5	53.5	0.00
Grid		167_129	Illinois and Michigan Canal State Trail	41.781769	-87.836206	54.1	54.3	54.1	-0.20	54.9	54.8	-0.10
Grid		167_128	Illinois and Michigan Canal State Trail	41.773399	-87.836195	54.2	54.4	54.3	-0.10	55	55	0.00
Grid		167_127	Illinois and Michigan Canal State Trail	41.765030	-87.836184	53.5	53.6	53.6	0.00	54.2	54.2	0.00
Grid		167_126	Illinois and Michigan Canal State Trail	41.756661	-87.836173	53	53.2	53.2	0.00	53.8	53.8	0.00
Grid		167_125	Illinois and Michigan Canal State Trail	41.748291	-87.836163	52.4	52.5	52.6	0.10	53.2	53.1	-0.10
Grid		163_117	Illinois and Michigan Canal State Trail	41.681295	-87.880689	50.9	51	50.9	-0.10	51.4	51.4	0.00
Grid		168_115	Illinois and Michigan Canal State Trail	41.664606	-87.824903	49.4	49.5	49.4	-0.10	50	49.7	-0.30
Grid		168_131	Illinois and Michigan Canal State Trail	41.798515	-87.825054	52.9	53.2	52.8	-0.40	54.3	53.8	-0.50
Grid		167_123	Illinois and Michigan Canal State Trail	41.731553	-87.836141	55.1	55.2	53.9	-1.30	55.4	54.4	-1.00
Grid		169_119	Illinois and Michigan Canal State Trail	41.698090	-87.813785	52.4	52.5	54	1.50	52.9	54	1.10
Grid		169_118	Illinois and Michigan Canal State Trail	41.689720	-87.813777	51.1	51.2	53.2	2.00	51.7	53.4	1.70
Grid		169_117	Illinois and Michigan Canal State Trail	41.681351	-87.813769	50.1	50.3	51.4	1.10	50.8	51.7	0.90
Grid		169_116	Illinois and Michigan Canal State Trail	41.672982	-87.813761	50	50	50.2	0.20	50.5	50.4	-0.10
Grid		169_115	Illinois and Michigan Canal State Trail	41.664612	-87.813753	49.7	49.8	49.6	-0.20	50.2	49.7	-0.50
Grid		168_121	Illinois and Michigan Canal State Trail	41.714822	-87.824960	54.7	54.8	56.4	1.60	55.2	56.5	1.30
Grid		169_113	Illinois and Michigan Canal State Trail	41.647873	-87.813737	47.9	48	48	0.00	48.6	48.4	-0.20
Grid		169_121	Illinois and Michigan Canal State Trail	41.714828	-87.813801	54.1	54.1	54.8	0.70	54.6	55	0.40
Grid		168_130	Illinois and Michigan Canal State Trail	41.790146	-87.825045	54.3	54.6	54.1	-0.50	55.4	54.9	-0.50
Grid		168_129	Illinois and Michigan Canal State Trail	41.781776	-87.825035	55.7	56	55.6	-0.40	56.6	56.2	-0.40
Grid		168_128	Illinois and Michigan Canal State Trail	41.773407	-87.825026	55.2	55.3	55	-0.30	56	55.7	-0.30
Grid		168_127	Illinois and Michigan Canal State Trail	41.765038	-87.825017	54.2	54.4	54.3	-0.10	55.2	54.9	-0.30
Grid		168_126	Illinois and Michigan Canal State Trail	41.756668	-87.825007	54.1	54.3	54.3	0.00	55	54.8	-0.20
Grid		168_125	Illinois and Michigan Canal State Trail	41.748299	-87.824998	53.8	54	53.9	-0.10	54.6	54.4	-0.20
Grid		168_124	Illinois and Michigan Canal State Trail	41.739930	-87.824988	55.5	55.7	55.1	-0.60	56.1	55.5	-0.60
Grid		169_114	Illinois and Michigan Canal State Trail	41.656243	-87.813745	48.5	48.6	48.6	0.00	49.2	49	-0.20
Grid		156_114	Illinois and Michigan Canal State Trail	41.656073	-87.958681	47.3	47.3	46.4	-0.90	47.6	47.3	-0.30
Grid		156_122	Illinois and Michigan Canal State Trail	41.723028	-87.958895	46.2	46.2	46.2	0.00	46.9	47	0.10
Grid		156_121	Illinois and Michigan Canal State Trail	41.714659	-87.958868	45.4	45.5	45.5	0.00	46.2	46.2	0.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		156_120	Illinois and Michigan Canal State Trail	41.706289	-87.958841	44.9	45	44.9	-0.10	45.7	45.7	0.00
Grid		156_119	Illinois and Michigan Canal State Trail	41.697920	-87.958814	44.7	44.8	44.6	-0.20	45.5	45.3	-0.20
Grid		156_118	Illinois and Michigan Canal State Trail	41.689551	-87.958788	45	45	44.4	-0.60	45.6	45.2	-0.40
Grid		156_117	Illinois and Michigan Canal State Trail	41.681181	-87.958761	46.3	46.3	44.7	-1.60	46.7	45.5	-1.20
Grid		155_120	Illinois and Michigan Canal State Trail	41.706269	-87.969999	44.7	44.8	44.7	-0.10	45.5	45.5	0.00
Grid		156_115	Illinois and Michigan Canal State Trail	41.664443	-87.958707	46.8	46.8	45.9	-0.90	47.2	46.7	-0.50
Grid		157_56	Kankakee State Fish and Wildlife Area	41.170671	-87.946074	39.3	39.4	39.4	0.00	40	40	0.00
Grid		156_113	Illinois and Michigan Canal State Trail	41.647704	-87.958654	47.4	47.4	46.7	-0.70	47.8	47.8	0.00
Grid		156_58	Kankakee State Fish and Wildlife Area	41.187390	-87.957192	39.1	39.3	39.2	-0.10	39.9	39.9	0.00
Grid		156_57	Kankakee State Fish and Wildlife Area	41.179021	-87.957166	39.1	39.2	39.2	0.00	39.8	39.8	0.00
Grid		155_123	Illinois and Michigan Canal State Trail	41.731377	-87.970084	46.8	46.9	46.9	0.00	47.6	47.7	0.10
Grid		155_122	Illinois and Michigan Canal State Trail	41.723007	-87.970055	46	46	46	0.00	46.7	46.8	0.10
Grid		163_119	Illinois and Michigan Canal State Trail	41.698034	-87.880722	51.6	51.6	50.1	-1.50	51.8	50.6	-1.20
Grid		156_116	Illinois and Michigan Canal State Trail	41.672812	-87.958734	46.7	46.7	45.3	-1.40	47.1	46.1	-1.00
Grid		157_119	Illinois and Michigan Canal State Trail	41.697940	-87.947658	45	45	44.7	-0.30	45.7	45.4	-0.30
Grid		158_114	Illinois and Michigan Canal State Trail	41.656111	-87.936383	48.5	48.5	47.4	-1.10	48.8	48	-0.80
Grid		158_113	Illinois and Michigan Canal State Trail	41.647742	-87.936359	48.8	48.8	48	-0.80	49.2	48.6	-0.60
Grid		158_55	Kankakee State Fish and Wildlife Area	41.162320	-87.934985	39.6	39.7	39.7	0.00	40.3	40.3	0.00
Grid		157_124	Illinois and Michigan Canal State Trail	41.739786	-87.947785	48.3	48.4	48.4	0.00	49	49.1	0.10
Grid		157_123	Illinois and Michigan Canal State Trail	41.731417	-87.947760	47.3	47.4	47.4	0.00	48.1	48.1	0.00
Grid		157_122	Illinois and Michigan Canal State Trail	41.723048	-87.947735	46.3	46.4	46.4	0.00	47.1	47.2	0.10
Grid		156_123	Illinois and Michigan Canal State Trail	41.731397	-87.958922	47.1	47.1	47.1	0.00	47.8	47.9	0.10
Grid		157_120	Illinois and Michigan Canal State Trail	41.706309	-87.947684	45	45.1	45	-0.10	45.8	45.8	0.00
Grid		157_55	Kankakee State Fish and Wildlife Area	41.162302	-87.946049	39.2	39.4	39.4	0.00	40	39.9	-0.10
Grid		157_118	Illinois and Michigan Canal State Trail	41.689570	-87.947633	45.7	45.8	44.8	-1.00	46.3	45.5	-0.80
Grid		157_117	Illinois and Michigan Canal State Trail	41.681201	-87.947608	47	47	45.3	-1.70	47.3	46	-1.30
Grid		157_116	Illinois and Michigan Canal State Trail	41.672832	-87.947582	46.9	46.9	45.8	-1.10	47.3	46.6	-0.70
Grid		157_115	Illinois and Michigan Canal State Trail	41.664462	-87.947557	47.4	47.4	46.3	-1.10	47.7	47	-0.70
Grid		157_114	Illinois and Michigan Canal State Trail	41.656093	-87.947532	47.6	47.7	46.8	-0.90	48	47.5	-0.50
Grid		157_113	Illinois and Michigan Canal State Trail	41.647724	-87.947506	48.1	48.2	46.9	-1.30	48.5	47.7	-0.80
Grid		155_119	Illinois and Michigan Canal State Trail	41.697899	-87.969971	44.4	44.6	44.4	-0.20	45.3	45.2	-0.10
Grid		157_121	Illinois and Michigan Canal State Trail	41.714678	-87.947709	45.5	45.6	45.6	0.00	46.3	46.3	0.00
Grid		153_117	Illinois and Michigan Canal State Trail	41.681116	-87.992220	44	44.1	43.8	-0.30	44.8	44.8	0.00
Grid		154_61	Kankakee State Fish and Wildlife Area	41.212456	-87.979417	39.2	39.3	39.3	0.00	39.9	39.9	0.00
Grid		154_60	Kankakee State Fish and Wildlife Area	41.204087	-87.979387	39	39.2	39.2	0.00	39.8	39.8	0.00
Grid		154_59	Kankakee State Fish and Wildlife Area	41.195717	-87.979358	38.9	39.1	39.1	0.00	39.7	39.7	0.00
Grid		153_122	Illinois and Michigan Canal State Trail	41.722963	-87.992376	45.3	45.5	45.4	-0.10	46.4	46.2	-0.20
Grid		153_121	Illinois and Michigan Canal State Trail	41.714594	-87.992345	44.7	44.8	44.7	-0.10	45.6	45.6	0.00
Grid		153_120	Illinois and Michigan Canal State Trail	41.706224	-87.992314	44.2	44.3	44.2	-0.10	45.1	45.1	0.00
Grid		155_121	Illinois and Michigan Canal State Trail	41.714638	-87.970027	45.2	45.3	45.3	0.00	46	46	0.00
Grid		153_118	Illinois and Michigan Canal State Trail	41.689486	-87.992252	43.8	43.8	43.7	-0.10	44.5	44.6	0.10
Grid		154_115	Illinois and Michigan Canal State Trail	41.664400	-87.981008	46.3	46.3	45.2	-1.10	46.7	46.4	-0.30
Grid		153_116	Illinois and Michigan Canal State Trail	41.672747	-87.992189	45.2	45.2	44.2	-1.00	45.7	45.6	-0.10

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		153_115	Illinois and Michigan Canal State Trail	41.664378	-87.992158	46	46	44.7	-1.30	46.4	46.1	-0.30
Grid		153_114	Illinois and Michigan Canal State Trail	41.656008	-87.992127	45.9	45.9	45.1	-0.80	46.3	46.2	-0.10
Grid		153_113	Illinois and Michigan Canal State Trail	41.647639	-87.992096	46.5	46.5	45.8	-0.70	46.8	46.7	-0.10
Grid		153_61	Kankakee State Fish and Wildlife Area	41.212433	-87.990489	39.1	39.2	39.1	-0.10	39.8	39.7	-0.10
Grid		153_60	Kankakee State Fish and Wildlife Area	41.204064	-87.990459	39	39	39	0.00	39.7	39.6	-0.10
Grid		153_119	Illinois and Michigan Canal State Trail	41.697855	-87.992283	43.8	44	43.9	-0.10	44.7	44.8	0.10
Grid		154_122	Illinois and Michigan Canal State Trail	41.722986	-87.981216	45.7	45.7	45.7	0.00	46.5	46.5	0.00
Grid		155_118	Illinois and Michigan Canal State Trail	41.689530	-87.969942	44.5	44.6	44.3	-0.30	45.3	45	-0.30
Grid		155_117	Illinois and Michigan Canal State Trail	41.681161	-87.969914	45.5	45.5	44.4	-1.10	46.1	45.1	-1.00
Grid		155_116	Illinois and Michigan Canal State Trail	41.672791	-87.969886	46.5	46.5	44.9	-1.60	46.9	45.7	-1.20
Grid		155_115	Illinois and Michigan Canal State Trail	41.664422	-87.969858	46.4	46.4	45.5	-0.90	46.8	46.4	-0.40
Grid		155_114	Illinois and Michigan Canal State Trail	41.656053	-87.969829	46.9	46.9	46.3	-0.60	47.3	47.4	0.10
Grid		155_113	Illinois and Michigan Canal State Trail	41.647683	-87.969801	47.2	47.2	46.8	-0.40	47.5	48	0.50
Grid		154_113	Illinois and Michigan Canal State Trail	41.647662	-87.980948	47.1	47	46.5	-0.50	47.4	47.5	0.10
Grid		155_58	Kankakee State Fish and Wildlife Area	41.187370	-87.968261	39	39.1	39.1	0.00	39.7	39.7	0.00
Grid		154_114	Illinois and Michigan Canal State Trail	41.656031	-87.980978	46.4	46.4	46	-0.40	46.8	47.3	0.50
Grid		154_121	Illinois and Michigan Canal State Trail	41.714616	-87.981186	44.9	45	45	0.00	45.8	45.8	0.00
Grid		154_120	Illinois and Michigan Canal State Trail	41.706247	-87.981156	44.4	44.6	44.5	-0.10	45.2	45.2	0.00
Grid		154_119	Illinois and Michigan Canal State Trail	41.697878	-87.981127	44.2	44.2	44.2	0.00	45	44.9	-0.10
Grid		154_118	Illinois and Michigan Canal State Trail	41.689508	-87.981097	44.2	44.2	44	-0.20	44.9	44.8	-0.10
Grid		154_117	Illinois and Michigan Canal State Trail	41.681139	-87.981067	44.7	44.7	44	-0.70	45.3	44.9	-0.40
Grid		154_116	Illinois and Michigan Canal State Trail	41.672770	-87.981037	46	46	44.4	-1.60	46.4	45.4	-1.00
Grid		158_117	Illinois and Michigan Canal State Trail	41.681219	-87.936455	47.4	47.4	46	-1.40	47.8	46.7	-1.10
Grid		155_59	Kankakee State Fish and Wildlife Area	41.195739	-87.968288	39.1	39.2	39.1	-0.10	39.8	39.8	0.00
Grid		161_119	Illinois and Michigan Canal State Trail	41.698007	-87.903034	48.7	48.8	47.2	-1.60	49.1	48	-1.10
Grid		162_113	Illinois and Michigan Canal State Trail	41.647805	-87.891769	49	49	47.8	-1.20	49.3	48.1	-1.20
Grid		161_126	Illinois and Michigan Canal State Trail	41.756592	-87.903171	51.3	51.4	51.4	0.00	52	52	0.00
Grid		161_125	Illinois and Michigan Canal State Trail	41.748223	-87.903152	50.5	50.7	50.7	0.00	51.2	51.4	0.20
Grid		161_124	Illinois and Michigan Canal State Trail	41.739854	-87.903132	49.4	49.5	49.5	0.00	50.2	50.2	0.00
Grid		161_123	Illinois and Michigan Canal State Trail	41.731484	-87.903112	48.2	48.3	48.3	0.00	48.9	49	0.10
Grid		161_122	Illinois and Michigan Canal State Trail	41.723115	-87.903093	47.1	47.2	47.2	0.00	47.9	47.9	0.00
Grid		158_115	Illinois and Michigan Canal State Trail	41.664481	-87.936407	48.1	48.1	47	-1.10	48.4	47.7	-0.70
Grid		161_120	Illinois and Michigan Canal State Trail	41.706376	-87.903054	47.3	47.3	46.5	-0.80	47.8	47.3	-0.50
Grid		162_116	Illinois and Michigan Canal State Trail	41.672913	-87.891824	50.5	50.6	50.3	-0.30	51	50.8	-0.20
Grid		161_118	Illinois and Michigan Canal State Trail	41.689638	-87.903015	49.3	49.3	47.8	-1.50	49.7	48.5	-1.20
Grid		161_117	Illinois and Michigan Canal State Trail	41.681268	-87.902995	50.2	50.2	48.7	-1.50	50.5	49.3	-1.20
Grid		161_116	Illinois and Michigan Canal State Trail	41.672899	-87.902975	51	51	50	-1.00	51.3	50.5	-0.80
Grid		161_115	Illinois and Michigan Canal State Trail	41.664530	-87.902956	50.3	50.4	49.9	-0.50	50.8	50.4	-0.40
Grid		161_114	Illinois and Michigan Canal State Trail	41.656160	-87.902936	48.8	48.9	48.6	-0.30	49.3	49.1	-0.20
Grid		161_113	Illinois and Michigan Canal State Trail	41.647791	-87.902917	47.8	47.9	47.3	-0.60	48.4	47.8	-0.60
Grid		161_121	Illinois and Michigan Canal State Trail	41.714746	-87.903073	46.6	46.7	46.5	-0.20	47.4	47.3	-0.10
Grid		162_123	Illinois and Michigan Canal State Trail	41.731498	-87.891950	48.4	48.5	48.5	0.00	49.1	49.2	0.10
Grid		163_116	Illinois and Michigan Canal State Trail	41.672926	-87.880672	50.1	50.2	49.7	-0.50	50.6	50.2	-0.40

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		163_115	Illinois and Michigan Canal State Trail	41.664557	-87.880655	49.8	49.8	48.8	-1.00	50.2	49.2	-1.00
Grid		163_114	Illinois and Michigan Canal State Trail	41.656187	-87.880639	49.2	49.2	48.2	-1.00	49.6	48.6	-1.00
Grid		163_113	Illinois and Michigan Canal State Trail	41.647818	-87.880622	48.1	48.2	47.5	-0.70	48.7	47.9	-0.80
Grid		162_127	Illinois and Michigan Canal State Trail	41.764976	-87.892023	52	52.1	52.1	0.00	52.6	52.8	0.20
Grid		162_126	Illinois and Michigan Canal State Trail	41.756606	-87.892005	51.7	51.8	51.8	0.00	52.3	52.5	0.20
Grid		162_114	Illinois and Michigan Canal State Trail	41.656174	-87.891787	48.9	48.9	48	-0.90	49.3	48.4	-0.90
Grid		162_124	Illinois and Michigan Canal State Trail	41.739868	-87.891969	49.6	49.7	49.8	0.10	50.4	50.4	0.00
Grid		162_115	Illinois and Michigan Canal State Trail	41.664544	-87.891806	49.3	49.3	49	-0.30	49.8	49.5	-0.30
Grid		162_122	Illinois and Michigan Canal State Trail	41.723129	-87.891932	47.4	47.5	47.4	-0.10	48.1	48.1	0.00
Grid		162_121	Illinois and Michigan Canal State Trail	41.714760	-87.891914	47.3	47.4	47	-0.40	48	47.7	-0.30
Grid		162_120	Illinois and Michigan Canal State Trail	41.706390	-87.891896	48.7	48.8	47.5	-1.30	49.2	48.2	-1.00
Grid		162_119	Illinois and Michigan Canal State Trail	41.698021	-87.891878	49.9	50	48.3	-1.70	50.2	48.9	-1.30
Grid		162_118	Illinois and Michigan Canal State Trail	41.689652	-87.891860	50.9	50.9	49.3	-1.60	51.1	49.9	-1.20
Grid		162_117	Illinois and Michigan Canal State Trail	41.681282	-87.891842	51.3	51.3	50.5	-0.80	51.6	51	-0.60
Grid		160_124	Illinois and Michigan Canal State Trail	41.739838	-87.914295	49.2	49.4	49.3	-0.10	50	50.1	0.10
Grid		162_125	Illinois and Michigan Canal State Trail	41.748237	-87.891987	50.8	50.9	51	0.10	51.5	51.6	0.10
Grid		158_124	Illinois and Michigan Canal State Trail	41.739805	-87.936622	48.6	48.7	48.7	0.00	49.3	49.4	0.10
Grid		160_126	Illinois and Michigan Canal State Trail	41.756577	-87.914337	50.9	51	51	0.00	51.6	51.7	0.10
Grid		159_118	Illinois and Michigan Canal State Trail	41.689606	-87.925324	47.7	47.8	46.3	-1.50	48.1	47	-1.10
Grid		159_117	Illinois and Michigan Canal State Trail	41.681237	-87.925301	48	48	46.6	-1.40	48.3	47.3	-1.00
Grid		159_116	Illinois and Michigan Canal State Trail	41.672867	-87.925279	48.5	48.5	47.2	-1.30	48.8	47.9	-0.90
Grid		159_115	Illinois and Michigan Canal State Trail	41.664498	-87.925256	49	49	47.8	-1.20	49.3	48.4	-0.90
Grid		159_114	Illinois and Michigan Canal State Trail	41.656129	-87.925234	49.4	49.4	48.6	-0.80	49.8	49.2	-0.60
Grid		159_120	Illinois and Michigan Canal State Trail	41.706345	-87.925369	45.7	45.8	45.6	-0.20	46.5	46.4	-0.10
Grid		159_55	Kankakee State Fish and Wildlife Area	41.162338	-87.923921	39.9	40.1	40.1	0.00	40.7	40.7	0.00
Grid		159_121	Illinois and Michigan Canal State Trail	41.714714	-87.925391	46	46.1	46.1	0.00	46.8	46.7	-0.10
Grid		158_123	Illinois and Michigan Canal State Trail	41.731435	-87.936598	47.5	47.6	47.6	0.00	48.3	48.4	0.10
Grid		158_122	Illinois and Michigan Canal State Trail	41.723066	-87.936574	46.5	46.6	46.6	0.00	47.3	47.3	0.00
Grid		158_121	Illinois and Michigan Canal State Trail	41.714697	-87.936550	45.7	45.8	45.7	-0.10	46.5	46.5	0.00
Grid		158_120	Illinois and Michigan Canal State Trail	41.706327	-87.936526	45.3	45.4	45.3	-0.10	46.1	46	-0.10
Grid		158_119	Illinois and Michigan Canal State Trail	41.697958	-87.936502	45.5	45.5	45.1	-0.40	46.1	45.8	-0.30
Grid		158_118	Illinois and Michigan Canal State Trail	41.689589	-87.936478	46.7	46.8	45.4	-1.40	47.2	46.2	-1.00
Grid		188_34	Iroquois County State Wildlife Area	40.986613	-87.603463	38.1	38.2	38.2	0.00	38.8	38.8	0.00
Grid		159_113	Illinois and Michigan Canal State Trail	41.647759	-87.925212	49.2	49.3	48.9	-0.40	49.8	49.5	-0.30
Grid		160_116	Illinois and Michigan Canal State Trail	41.672884	-87.914127	49.6	49.6	48.2	-1.40	49.9	48.8	-1.10
Grid		158_116	Illinois and Michigan Canal State Trail	41.672850	-87.936431	47.7	47.7	46.4	-1.30	48	47.1	-0.90
Grid		160_123	Illinois and Michigan Canal State Trail	41.731469	-87.914274	48.1	48.2	48.2	0.00	48.9	48.9	0.00
Grid		160_122	Illinois and Michigan Canal State Trail	41.723100	-87.914253	47	47.1	47.1	0.00	47.8	47.8	0.00
Grid		160_121	Illinois and Michigan Canal State Trail	41.714730	-87.914232	46.3	46.4	46.3	-0.10	47.1	47	-0.10
Grid		160_120	Illinois and Michigan Canal State Trail	41.706361	-87.914211	46.3	46.4	46.1	-0.30	47.1	46.8	-0.30
Grid		160_119	Illinois and Michigan Canal State Trail	41.697992	-87.914190	47.6	47.7	46.5	-1.20	48.1	47.2	-0.90
Grid		159_119	Illinois and Michigan Canal State Trail	41.697975	-87.925346	46.4	46.4	45.7	-0.70	47	46.5	-0.50
Grid		160_117	Illinois and Michigan Canal State Trail	41.681253	-87.914148	48.9	49	47.5	-1.50	49.3	48.1	-1.20

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		160_125	Illinois and Michigan Canal State Trail	41.748208	-87.914316	50.3	50.4	50.4	0.00	50.9	51.1	0.20
Grid		160_115	Illinois and Michigan Canal State Trail	41.664514	-87.914106	50.2	50.2	49.2	-1.00	50.5	49.8	-0.70
Grid		160_114	Illinois and Michigan Canal State Trail	41.656145	-87.914085	50	50.1	49.5	-0.60	50.5	50	-0.50
Grid		160_113	Illinois and Michigan Canal State Trail	41.647776	-87.914064	49	49.1	48.6	-0.50	49.5	49	-0.50
Grid		159_125	Illinois and Michigan Canal State Trail	41.748192	-87.925481	49.9	50	50	0.00	50.6	50.7	0.10
Grid		159_124	Illinois and Michigan Canal State Trail	41.739822	-87.925459	48.9	49	49	0.00	49.7	49.7	0.00
Grid		159_123	Illinois and Michigan Canal State Trail	41.731453	-87.925436	47.8	47.9	47.9	0.00	48.6	48.7	0.10
Grid		159_122	Illinois and Michigan Canal State Trail	41.723084	-87.925414	46.8	46.9	46.9	0.00	47.5	47.6	0.10
Grid		160_118	Illinois and Michigan Canal State Trail	41.689622	-87.914169	48.4	48.4	46.9	-1.50	48.8	47.6	-1.20
Grid		261_72	Kankakee State Fish and Wildlife Area	41.300683	-86.793333	31	31	32	1.00	31.1	31.8	0.70
Grid		264_73	Kankakee State Fish and Wildlife Area	41.308766	-86.759946	27.6	27.6	28.4	0.80	27.8	28.3	0.50
Grid		264_72	Kankakee State Fish and Wildlife Area	41.300396	-86.760074	28.2	28.3	29.2	0.90	28.4	29	0.60
Grid		263_71	Kankakee State Fish and Wildlife Area	41.292124	-86.771287	30.2	30.2	31.1	0.90	30.3	30.9	0.60
Grid		262_72	Kankakee State Fish and Wildlife Area	41.300589	-86.782247	30.1	30.2	31.1	0.90	30.2	31	0.80
Grid		262_71	Kankakee State Fish and Wildlife Area	41.292219	-86.782372	31.1	31.1	32	0.90	31.2	31.8	0.60
Grid		262_70	Kankakee State Fish and Wildlife Area	41.283850	-86.782497	31.8	31.8	32.6	0.80	31.9	32.3	0.40
Grid		256_110	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.619174	-86.844311	30.3	30.4	30.5	0.10	30.9	30.6	-0.30
Grid		262_68	Kankakee State Fish and Wildlife Area	41.267111	-86.782748	32.2	32.2	32.8	0.60	32.2	32.4	0.20
Grid		266_73	Kankakee State Fish and Wildlife Area	41.308569	-86.737771	27.3	27.3	27.6	0.30	27.5	27.5	0.00
Grid		261_71	Kankakee State Fish and Wildlife Area	41.292314	-86.793457	31.7	31.8	32.7	0.90	31.8	32.4	0.60
Grid		261_70	Kankakee State Fish and Wildlife Area	41.283944	-86.793581	32.1	32.1	32.9	0.80	32.2	32.6	0.40
Grid		261_69	Kankakee State Fish and Wildlife Area	41.275575	-86.793704	32.2	32.2	32.9	0.70	32.2	32.6	0.40
Grid		261_68	Kankakee State Fish and Wildlife Area	41.267206	-86.793828	31.8	31.9	32.5	0.60	31.9	32.1	0.20
Grid		260_71	Kankakee State Fish and Wildlife Area	41.292407	-86.804542	32.1	32.2	33.1	0.90	32.2	32.8	0.60
Grid		246_54	Jasper-Pulaski State Fish and Wildlife Area	41.151322	-86.961472	24.9	25	25	0.00	25.6	25.4	-0.20
Grid		262_69	Kankakee State Fish and Wildlife Area	41.275481	-86.782622	32.2	32.2	32.9	0.70	32.2	32.6	0.40
Grid		271_99	Kingsbury State Fish and Wildlife Area	41.525661	-86.678730	35.5	35.5	35.4	-0.10	35.6	35.3	-0.30
Grid		275_49	Winamac State Fish and Wildlife Area	41.106766	-86.641427	30	30	29.7	-0.30	30.2	29.1	-1.10
Grid		274_136	Warren Woods State Park	41.835007	-86.640025	41.1	41.3	41.2	-0.10	41.7	41.8	0.10
Grid		273_136	Warren Woods State Park	41.835115	-86.651203	41.1	41.2	41.2	0.00	41.8	41.8	0.00
Grid		273_135	Warren Woods State Park	41.826746	-86.651346	41.6	41.8	41.8	0.00	42.2	42.4	0.20
Grid		273_96	Kingsbury State Fish and Wildlife Area	41.500341	-86.656906	34.8	34.9	34.6	-0.30	35.1	34.4	-0.70
Grid		273_95	Kingsbury State Fish and Wildlife Area	41.491972	-86.657048	34.1	34.1	33.8	-0.30	34.3	33.6	-0.70
Grid		265_73	Kankakee State Fish and Wildlife Area	41.308668	-86.748859	27.3	27.3	27.8	0.50	27.5	27.8	0.30
Grid		272_95	Kingsbury State Fish and Wildlife Area	41.492079	-86.668167	34.1	34.1	33.8	-0.30	34.4	33.7	-0.70
Grid		265_74	Kankakee State Fish and Wildlife Area	41.317037	-86.748729	27.4	27.4	27.7	0.30	27.7	27.6	-0.10
Grid		271_96	Kingsbury State Fish and Wildlife Area	41.500553	-86.679147	34.9	34.9	34.7	-0.20	35.1	34.6	-0.50
Grid		271_95	Kingsbury State Fish and Wildlife Area	41.492184	-86.679286	34.1	34.1	33.8	-0.30	34.3	33.7	-0.60
Grid		270_99	Kingsbury State Fish and Wildlife Area	41.525766	-86.689855	35.5	35.6	35.5	-0.10	35.8	35.5	-0.30
Grid		270_96	Kingsbury State Fish and Wildlife Area	41.500658	-86.690267	34.9	35	34.8	-0.20	35.2	34.7	-0.50
Grid		266_75	Kankakee State Fish and Wildlife Area	41.325308	-86.737509	28.1	28.1	27.9	-0.20	28.4	27.9	-0.50
Grid		266_74	Kankakee State Fish and Wildlife Area	41.316938	-86.737640	27.6	27.7	27.7	0.00	27.9	27.6	-0.30

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		252_54	Jasper-Pulaski State Fish and Wildlife Area	41.150837	-86.895105	26.8	26.9	26.7	-0.20	27.4	27.1	-0.30
Grid		272_96	Kingsbury State Fish and Wildlife Area	41.500448	-86.668027	34.9	34.9	34.6	-0.30	35.1	34.5	-0.60
Grid		247_52	Jasper-Pulaski State Fish and Wildlife Area	41.134505	-86.950617	24.6	24.7	24.7	0.00	25.3	25.1	-0.20
Grid		248_52	Jasper-Pulaski State Fish and Wildlife Area	41.134426	-86.939559	24.9	24.9	24.9	0.00	25.5	25.3	-0.20
Grid		247_120	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.703620	-86.943535	38.7	38.9	38.8	-0.10	39.3	39.2	-0.10
Grid		247_119	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.695251	-86.943641	37.5	37.7	37.6	-0.10	38.1	38	-0.10
Grid		247_57	Jasper-Pulaski State Fish and Wildlife Area	41.176352	-86.950101	26.4	26.5	26.4	-0.10	27.1	26.9	-0.20
Grid		247_56	Jasper-Pulaski State Fish and Wildlife Area	41.167983	-86.950204	26	26	26	0.00	26.6	26.4	-0.20
Grid		247_55	Jasper-Pulaski State Fish and Wildlife Area	41.159613	-86.950307	25.6	25.7	25.6	-0.10	26.2	26	-0.20
Grid		260_69	Kankakee State Fish and Wildlife Area	41.275668	-86.804787	31.9	31.9	32.6	0.70	31.8	32.2	0.40
Grid		247_53	Jasper-Pulaski State Fish and Wildlife Area	41.142875	-86.950514	24.9	25	24.9	-0.10	25.5	25.3	-0.20
Grid		248_55	Jasper-Pulaski State Fish and Wildlife Area	41.159534	-86.939245	25.9	25.9	25.9	0.00	26.5	26.3	-0.20
Grid		246_120	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.703699	-86.954692	38.7	38.9	38.8	-0.10	39.3	39.2	-0.10
Grid		246_119	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.695329	-86.954795	37.6	37.7	37.7	0.00	38.1	38	-0.10
Grid		246_118	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.686960	-86.954899	36.5	36.6	36.6	0.00	37	36.9	-0.10
Grid		246_111	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.628375	-86.955623	30.2	30.2	30.3	0.10	30.7	30.3	-0.40
Grid		246_56	Jasper-Pulaski State Fish and Wildlife Area	41.168061	-86.961268	25.7	25.7	25.6	-0.10	26.3	26.1	-0.20
Grid		187_55	Momence Wetlands State Natural Area	41.162383	-87.614124	37.9	38	38	0.00	38.6	38.6	0.00
Grid		247_54	Jasper-Pulaski State Fish and Wildlife Area	41.151244	-86.950411	25.2	25.3	25.2	-0.10	25.8	25.7	-0.10
Grid		249_56	Jasper-Pulaski State Fish and Wildlife Area	41.167823	-86.928076	26.7	26.7	26.6	-0.10	27.3	27.1	-0.20
Grid		251_56	Jasper-Pulaski State Fish and Wildlife Area	41.167659	-86.905948	27.4	27.5	27.3	-0.20	28.1	27.8	-0.30
Grid		251_54	Jasper-Pulaski State Fish and Wildlife Area	41.150920	-86.906166	26.4	26.4	26.3	-0.10	27	26.8	-0.20
Grid		251_53	Jasper-Pulaski State Fish and Wildlife Area	41.142551	-86.906275	26	26	25.9	-0.10	26.6	26.3	-0.30
Grid		250_56	Jasper-Pulaski State Fish and Wildlife Area	41.167741	-86.917012	27	27	26.9	-0.10	27.6	27.4	-0.20
Grid		250_55	Jasper-Pulaski State Fish and Wildlife Area	41.159372	-86.917119	26.5	26.6	26.5	-0.10	27.2	26.9	-0.30
Grid		250_54	Jasper-Pulaski State Fish and Wildlife Area	41.151003	-86.917227	26.1	26.2	26.1	-0.10	26.7	26.4	-0.30
Grid		248_53	Jasper-Pulaski State Fish and Wildlife Area	41.142795	-86.939454	25.2	25.2	25.2	0.00	25.8	25.6	-0.20
Grid		249_121	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.711830	-86.921115	39.8	40	39.9	-0.10	40.4	40.4	0.00
Grid		248_54	Jasper-Pulaski State Fish and Wildlife Area	41.151165	-86.939349	25.5	25.6	25.5	-0.10	26.1	25.9	-0.20
Grid		249_55	Jasper-Pulaski State Fish and Wildlife Area	41.159454	-86.928182	26.2	26.2	26.2	0.00	26.8	26.6	-0.20
Grid		249_54	Jasper-Pulaski State Fish and Wildlife Area	41.151084	-86.928288	25.8	25.8	25.8	0.00	26.4	26.2	-0.20
Grid		249_53	Jasper-Pulaski State Fish and Wildlife Area	41.142715	-86.928394	25.4	25.5	25.4	-0.10	26	25.8	-0.20
Grid		248_120	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.703541	-86.932379	38.7	38.8	38.8	0.00	39.3	39.2	-0.10
Grid		248_57	Jasper-Pulaski State Fish and Wildlife Area	41.176273	-86.939035	26.8	26.8	26.7	-0.10	27.4	27.2	-0.20
Grid		248_56	Jasper-Pulaski State Fish and Wildlife Area	41.167903	-86.939140	26.3	26.3	26.3	0.00	26.9	26.7	-0.20

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		275_52	Winamac State Fish and Wildlife Area	41.131874	-86.640998	31	31	30.8	-0.20	31.1	30.1	-1.00
Grid		250_53	Jasper-Pulaski State Fish and Wildlife Area	41.142633	-86.917334	25.7	25.7	25.7	0.00	26.3	26.1	-0.20
Grid		280_98	Kingsbury State Fish and Wildlife Area	41.516304	-86.578762	35.3	35.3	34.8	-0.50	35.4	34.4	-1.00
Grid		282_96	Kingsbury State Fish and Wildlife Area	41.499334	-86.556827	34.3	34.3	33.7	-0.60	34.5	33.2	-1.30
Grid		281_99	Kingsbury State Fish and Wildlife Area	41.524559	-86.567486	35.1	35.2	34.7	-0.50	35.3	34.3	-1.00
Grid		281_98	Kingsbury State Fish and Wildlife Area	41.516189	-86.567640	35.3	35.3	34.7	-0.60	35.4	34.3	-1.10
Grid		281_97	Kingsbury State Fish and Wildlife Area	41.507820	-86.567793	34.9	35	34.4	-0.60	35.1	34	-1.10
Grid		281_96	Kingsbury State Fish and Wildlife Area	41.499451	-86.567947	34.3	34.4	33.8	-0.60	34.5	33.3	-1.20
Grid		281_51	Tippecanoe River State Park	41.122830	-86.574808	32.3	32.3	32.1	-0.20	32.3	31.3	-1.00
Grid		275_50	Winamac State Fish and Wildlife Area	41.115136	-86.641284	30.1	30.1	30	-0.10	30.3	29.3	-1.00
Grid		280_99	Kingsbury State Fish and Wildlife Area	41.524674	-86.578610	35.1	35.2	34.7	-0.50	35.3	34.3	-1.00
Grid		283_97	Kingsbury State Fish and Wildlife Area	41.507586	-86.545551	35	35	34.3	-0.70	35.1	33.8	-1.30
Grid		280_97	Kingsbury State Fish and Wildlife Area	41.507935	-86.578914	35	35	34.4	-0.60	35.1	34.1	-1.00
Grid		280_96	Kingsbury State Fish and Wildlife Area	41.499566	-86.579066	34.4	34.4	33.8	-0.60	34.5	33.4	-1.10
Grid		280_95	Kingsbury State Fish and Wildlife Area	41.491196	-86.579218	33.6	33.6	33.1	-0.50	33.8	32.7	-1.10
Grid		280_53	Tippecanoe River State Park	41.139684	-86.585563	31.7	31.8	31.5	-0.30	31.8	30.8	-1.00
Grid		280_52	Tippecanoe River State Park	41.131315	-86.585713	32.2	32.3	32	-0.30	32.3	31.3	-1.00
Grid		280_51	Tippecanoe River State Park	41.122946	-86.585863	32.4	32.5	32.2	-0.30	32.5	31.5	-1.00
Grid		281_50	Tippecanoe River State Park	41.114461	-86.574959	32.5	32.5	32.3	-0.20	32.5	31.5	-1.00
Grid		299_103	Potato Creek State Park	41.555778	-86.366545	32.5	32.5	32	-0.50	32.7	31.7	-1.00
Grid		302_102	Potato Creek State Park	41.546998	-86.333343	33.4	33.5	32.8	-0.70	33.6	32.3	-1.30
Grid		302_101	Potato Creek State Park	41.538628	-86.333527	34.2	34.3	33.4	-0.90	34.4	32.9	-1.50
Grid		301_103	Potato Creek State Park	41.555505	-86.344288	32.6	32.6	32	-0.60	32.8	31.8	-1.00
Grid		301_102	Potato Creek State Park	41.547136	-86.344470	33.4	33.5	32.8	-0.70	33.6	32.3	-1.30
Grid		301_101	Potato Creek State Park	41.538766	-86.344653	34.3	34.3	33.5	-0.80	34.5	32.9	-1.60
Grid		300_103	Potato Creek State Park	41.555642	-86.355417	32.5	32.6	32.1	-0.50	32.8	31.7	-1.10
Grid		282_97	Kingsbury State Fish and Wildlife Area	41.507704	-86.556672	34.9	35	34.3	-0.70	35.1	33.9	-1.20
Grid		300_101	Potato Creek State Park	41.538903	-86.355779	34.3	34.3	33.5	-0.80	34.4	32.9	-1.50
Grid		282_98	Kingsbury State Fish and Wildlife Area	41.516073	-86.556517	35.3	35.3	34.7	-0.60	35.4	34.3	-1.10
Grid		299_102	Potato Creek State Park	41.547408	-86.366725	33.4	33.5	32.8	-0.70	33.6	32.3	-1.30
Grid		299_101	Potato Creek State Park	41.539039	-86.366904	34.3	34.4	33.5	-0.90	34.4	32.9	-1.50
Grid		298_103	Potato Creek State Park	41.555912	-86.377674	32.5	32.5	32	-0.50	32.7	31.7	-1.00
Grid		298_102	Potato Creek State Park	41.547543	-86.377852	33.4	33.5	32.7	-0.80	33.5	32.3	-1.20
Grid		298_101	Potato Creek State Park	41.539174	-86.378030	34.3	34.4	33.5	-0.90	34.4	33	-1.40
Grid		283_98	Kingsbury State Fish and Wildlife Area	41.515956	-86.545395	35.3	35.4	34.7	-0.70	35.5	34.2	-1.30
Grid		279_99	Kingsbury State Fish and Wildlife Area	41.524788	-86.589735	35.1	35.2	34.7	-0.50	35.3	34.4	-0.90
Grid		300_102	Potato Creek State Park	41.547273	-86.355598	33.4	33.5	32.8	-0.70	33.6	32.3	-1.30
Grid		276_52	Winamac State Fish and Wildlife Area	41.131765	-86.629941	31.5	31.6	31.3	-0.30	31.6	30.6	-1.00
Grid		280_50	Tippecanoe River State Park	41.114576	-86.586013	32.4	32.4	32.2	-0.20	32.4	31.4	-1.00
Grid		277_50	Winamac State Fish and Wildlife Area	41.114915	-86.619176	31.1	31.1	31	-0.10	31.1	30.3	-0.80
Grid		277_49	Winamac State Fish and Wildlife Area	41.106546	-86.619322	30.6	30.6	30.5	-0.10	30.7	29.9	-0.80
Grid		276_99	Kingsbury State Fish and Wildlife Area	41.525124	-86.623107	35.1	35.2	34.9	-0.30	35.3	34.6	-0.70
Grid		276_98	Kingsbury State Fish and Wildlife Area	41.516754	-86.623254	35.4	35.5	35.1	-0.40	35.6	34.8	-0.80

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		276_56	Winamac State Fish and Wildlife Area	41.165242	-86.629363	32.1	32.2	31.8	-0.40	32.2	31.1	-1.10
Grid		277_52	Winamac State Fish and Wildlife Area	41.131654	-86.618884	32	32.1	31.8	-0.30	32.1	31	-1.10
Grid		276_53	Winamac State Fish and Wildlife Area	41.140134	-86.629796	32	32	31.7	-0.30	32.1	31	-1.10
Grid		277_53	Winamac State Fish and Wildlife Area	41.140023	-86.618738	32.3	32.3	32	-0.30	32.4	31.3	-1.10
Grid		276_51	Winamac State Fish and Wildlife Area	41.123395	-86.630085	31	31	30.9	-0.10	31.1	30.2	-0.90
Grid		276_50	Winamac State Fish and Wildlife Area	41.115026	-86.630230	30.5	30.5	30.4	-0.10	30.6	29.8	-0.80
Grid		276_49	Winamac State Fish and Wildlife Area	41.106657	-86.630374	30.1	30.2	30	-0.20	30.3	29.5	-0.80
Grid		275_136	Warren Woods State Park	41.834899	-86.628847	41.1	41.3	41.2	-0.10	41.7	41.9	0.20
Grid		275_54	Winamac State Fish and Wildlife Area	41.148613	-86.640712	32	32	31.7	-0.30	32.1	30.9	-1.20
Grid		275_53	Winamac State Fish and Wildlife Area	41.140244	-86.640855	31.5	31.5	31.3	-0.20	31.6	30.5	-1.10
Grid		245_118	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.687037	-86.966052	36.5	36.6	36.6	0.00	37.1	36.9	-0.20
Grid		276_54	Winamac State Fish and Wildlife Area	41.148503	-86.629652	32.3	32.3	32	-0.30	32.3	31.2	-1.10
Grid		278_99	Kingsbury State Fish and Wildlife Area	41.524901	-86.600859	35.1	35.1	34.8	-0.30	35.3	34.5	-0.80
Grid		275_51	Winamac State Fish and Wildlife Area	41.123505	-86.641141	30.5	30.5	30.3	-0.20	30.6	29.7	-0.90
Grid		279_98	Kingsbury State Fish and Wildlife Area	41.516419	-86.589885	35.3	35.4	34.8	-0.60	35.5	34.5	-1.00
Grid		279_55	Tippecanoe River State Park	41.156537	-86.596324	30.9	31	30.9	-0.10	31	30.2	-0.80
Grid		279_54	Tippecanoe River State Park	41.148168	-86.596472	31.6	31.7	31.5	-0.20	31.7	30.8	-0.90
Grid		279_53	Tippecanoe River State Park	41.139798	-86.596621	32.2	32.2	31.9	-0.30	32.3	31.2	-1.10
Grid		279_52	Tippecanoe River State Park	41.131429	-86.596770	32.4	32.4	32.2	-0.20	32.5	31.4	-1.10
Grid		277_51	Winamac State Fish and Wildlife Area	41.123284	-86.619030	31.6	31.6	31.4	-0.20	31.6	30.7	-0.90
Grid		279_49	Tippecanoe River State Park	41.106321	-86.597216	31.7	31.7	31.6	-0.10	31.8	30.8	-1.00
Grid		280_49	Tippecanoe River State Park	41.106207	-86.586163	32.1	32.1	31.9	-0.20	32.2	31.2	-1.00
Grid		278_98	Kingsbury State Fish and Wildlife Area	41.516532	-86.601008	35.4	35.4	34.9	-0.50	35.5	34.6	-0.90
Grid		278_55	Winamac State Fish and Wildlife Area	41.156650	-86.607385	31.6	31.6	31.4	-0.20	31.7	30.7	-1.00
Grid		278_54	Winamac State Fish and Wildlife Area	41.148281	-86.607532	32.2	32.2	31.9	-0.30	32.2	31.1	-1.10
Grid		278_50	Winamac State Fish and Wildlife Area	41.114803	-86.608122	31.7	31.7	31.5	-0.20	31.7	30.8	-0.90
Grid		277_56	Winamac State Fish and Wildlife Area	41.165131	-86.618300	31.6	31.6	31.4	-0.20	31.7	30.7	-1.00
Grid		277_55	Winamac State Fish and Wildlife Area	41.156762	-86.618446	32.1	32.2	31.8	-0.40	32.2	31.1	-1.10
Grid		277_54	Winamac State Fish and Wildlife Area	41.148392	-86.618592	32.4	32.4	32	-0.40	32.4	31.3	-1.10
Grid		279_50	Tippecanoe River State Park	41.114690	-86.597068	32.1	32.1	31.9	-0.20	32.2	31.2	-1.00
Grid		198_32	Willow Slough State Fish and Wildlife Area	40.969673	-87.493187	37.2	37.3	37.3	0.00	37.9	37.9	0.00
Grid		198_40	Willow Slough State Fish and Wildlife Area	41.036628	-87.492920	37.6	37.7	37.7	0.00	38.3	38.3	0.00
Grid		198_39	Willow Slough State Fish and Wildlife Area	41.028259	-87.492954	37.5	37.6	37.6	0.00	38.3	38.2	-0.10
Grid		198_38	Willow Slough State Fish and Wildlife Area	41.019890	-87.492987	37.5	37.5	37.6	0.10	38.2	38.2	0.00
Grid		198_37	Willow Slough State Fish and Wildlife Area	41.011520	-87.493020	37.4	37.5	37.5	0.00	38.1	38.1	0.00
Grid		198_36	Willow Slough State Fish and Wildlife Area	41.003151	-87.493054	37.3	37.4	37.4	0.00	38.1	38.1	0.00
Grid		198_35	Willow Slough State Fish and Wildlife Area	40.994781	-87.493087	37.3	37.4	37.4	0.00	38	38	0.00
Grid		197_35	Willow Slough State Fish and Wildlife Area	40.994806	-87.504122	37.2	37.4	37.4	0.00	38	38	0.00
Grid		198_33	Willow Slough State Fish and Wildlife Area	40.978043	-87.493153	37.2	37.3	37.3	0.00	37.9	37.9	0.00
Grid		199_33	Willow Slough State Fish and Wildlife Area	40.978017	-87.482121	37.2	37.3	37.3	0.00	37.9	38	0.10
Grid		198_31	Willow Slough State Fish and Wildlife Area	40.961304	-87.493220	37.1	37.2	37.2	0.00	37.8	37.9	0.10
Grid		197_40	Willow Slough State Fish and Wildlife Area	41.036653	-87.503963	37.5	37.6	37.6	0.00	38.2	38.2	0.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		197_39	Willow Slough State Fish and Wildlife Area	41.028284	-87.503995	37.4	37.5	37.5	0.00	38.2	38.2	0.00
Grid		197_38	Willow Slough State Fish and Wildlife Area	41.019915	-87.504027	37.4	37.5	37.5	0.00	38.1	38.1	0.00
Grid		197_37	Willow Slough State Fish and Wildlife Area	41.011545	-87.504059	37.3	37.5	37.5	0.00	38.1	38.1	0.00
Grid		246_55	Jasper-Pulaski State Fish and Wildlife Area	41.159691	-86.961370	25.3	25.3	25.3	0.00	25.9	25.7	-0.20
Grid		198_34	Willow Slough State Fish and Wildlife Area	40.986412	-87.493120	37.2	37.3	37.3	0.00	38	38	0.00
Grid		200_32	Willow Slough State Fish and Wildlife Area	40.969620	-87.471124	37.2	37.3	37.3	0.00	38	38	0.00
Grid		212_108	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.605279	-87.334672	36.6	36.6	37.6	1.00	37	38	1.00
Grid		202_98	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.521939	-87.446468	40.2	40.1	39.4	-0.70	40.1	39.3	-0.80
Grid		201_98	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.521968	-87.457594	39.9	40	39.3	-0.70	39.9	39.2	-0.70
Grid		200_40	Willow Slough State Fish and Wildlife Area	41.036575	-87.470835	37.6	37.7	37.7	0.00	38.3	38.3	0.00
Grid		200_36	Willow Slough State Fish and Wildlife Area	41.003098	-87.470980	37.4	37.5	37.5	0.00	38.2	38.2	0.00
Grid		200_35	Willow Slough State Fish and Wildlife Area	40.994728	-87.471016	37.4	37.5	37.5	0.00	38.1	38.1	0.00
Grid		199_31	Willow Slough State Fish and Wildlife Area	40.961278	-87.482190	37.1	37.3	37.2	-0.10	37.9	37.9	0.00
Grid		200_33	Willow Slough State Fish and Wildlife Area	40.977990	-87.471088	37.2	37.4	37.3	-0.10	38	38	0.00
Grid		199_32	Willow Slough State Fish and Wildlife Area	40.969647	-87.482155	37.2	37.3	37.3	0.00	37.9	37.9	0.00
Grid		200_31	Willow Slough State Fish and Wildlife Area	40.961251	-87.471160	37.2	37.3	37.3	0.00	37.9	37.9	0.00
Grid		199_40	Willow Slough State Fish and Wildlife Area	41.036602	-87.481878	37.6	37.7	37.7	0.00	38.3	38.3	0.00
Grid		199_37	Willow Slough State Fish and Wildlife Area	41.011494	-87.481982	37.4	37.6	37.6	0.00	38.1	38.1	0.00
Grid		199_36	Willow Slough State Fish and Wildlife Area	41.003125	-87.482017	37.4	37.4	37.5	0.10	38.1	38.1	0.00
Grid		199_35	Willow Slough State Fish and Wildlife Area	40.994755	-87.482051	37.3	37.4	37.4	0.00	38	38.1	0.10
Grid		199_34	Willow Slough State Fish and Wildlife Area	40.986386	-87.482086	37.3	37.4	37.4	0.00	38	38	0.00
Grid		197_34	Willow Slough State Fish and Wildlife Area	40.986437	-87.504154	37.2	37.3	37.3	0.00	37.9	37.9	0.00
Grid		200_34	Willow Slough State Fish and Wildlife Area	40.986359	-87.471052	37.3	37.4	37.4	0.00	38	38.1	0.10
Grid		191_35	Iroquois County State Wildlife Area	40.994933	-87.570336	37.6	37.6	37.6	0.00	38.2	38.2	0.00
Grid		194_115	William W. Powers State Recreation Area	41.664422	-87.534995	39.3	39.4	39.2	-0.20	39.9	39.2	-0.70
Grid		194_114	William W. Powers State Recreation Area	41.656053	-87.535023	40.5	40.6	39.9	-0.70	40.9	39.6	-1.30
Grid		193_36	Iroquois County State Wildlife Area	41.003265	-87.548239	37.2	37.4	37.4	0.00	38	38	0.00
Grid		193_35	Iroquois County State Wildlife Area	40.994895	-87.548265	37.3	37.4	37.4	0.00	38	38	0.00
Grid		193_34	Iroquois County State Wildlife Area	40.986526	-87.548291	37.3	37.4	37.4	0.00	38	38	0.00
Grid		192_36	Iroquois County State Wildlife Area	41.003284	-87.559276	37.4	37.5	37.5	0.00	38.1	38.1	0.00
Grid		197_36	Willow Slough State Fish and Wildlife Area	41.003176	-87.504091	37.3	37.4	37.4	0.00	38	38	0.00
Grid		192_34	Iroquois County State Wildlife Area	40.986546	-87.559326	37.4	37.5	37.5	0.00	38.1	38.1	0.00
Grid		195_36	Willow Slough State Fish and Wildlife Area	41.003222	-87.526165	37.2	37.3	37.3	0.00	37.9	37.9	0.00
Grid		191_34	Iroquois County State Wildlife Area	40.986564	-87.570360	37.6	37.7	37.7	0.00	38.3	38.3	0.00
Grid		190_34	Iroquois County State Wildlife Area	40.986582	-87.581394	37.7	37.9	37.8	-0.10	38.5	38.5	0.00
Grid		190_33	Iroquois County State Wildlife Area	40.978212	-87.581416	37.8	37.9	37.8	-0.10	38.5	38.5	0.00
Grid		189_35	Iroquois County State Wildlife Area	40.994967	-87.592408	37.9	38	38	0.00	38.6	38.6	0.00
Grid		189_34	Iroquois County State Wildlife Area	40.986598	-87.592428	37.9	38	38	0.00	38.7	38.7	0.00
Grid		188_55	Momence Wetlands State Natural Area	41.162369	-87.603060	37.8	37.9	37.9	0.00	38.5	38.5	0.00
Grid		192_35	Iroquois County State Wildlife Area	40.994915	-87.559301	37.4	37.5	37.5	0.00	38.1	38.1	0.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		196_35	Willow Slough State Fish and Wildlife Area	40.994830	-87.515158	37.2	37.3	37.3	0.00	37.9	37.9	0.00
Grid		197_33	Willow Slough State Fish and Wildlife Area	40.978068	-87.504186	37.2	37.3	37.2	-0.10	37.9	37.9	0.00
Grid		197_32	Willow Slough State Fish and Wildlife Area	40.969698	-87.504218	37.1	37.3	37.2	-0.10	37.8	37.8	0.00
Grid		197_31	Willow Slough State Fish and Wildlife Area	40.961329	-87.504250	37.1	37.2	37.2	0.00	37.8	37.8	0.00
Grid		197_30	Willow Slough State Fish and Wildlife Area	40.952960	-87.504282	37.1	37.2	37.2	0.00	37.8	37.8	0.00
Grid		196_39	Willow Slough State Fish and Wildlife Area	41.028308	-87.515036	37.4	37.5	37.4	-0.10	38.1	38.1	0.00
Grid		196_38	Willow Slough State Fish and Wildlife Area	41.019938	-87.515067	37.3	37.5	37.4	-0.10	38.1	38.1	0.00
Grid		194_116	William W. Powers State Recreation Area	41.672791	-87.534966	39.8	39.9	39.4	-0.50	40.5	39.6	-0.90
Grid		196_36	Willow Slough State Fish and Wildlife Area	41.003200	-87.515128	37.3	37.3	37.3	0.00	38	38	0.00
Grid		195_35	Willow Slough State Fish and Wildlife Area	40.994853	-87.526194	37.2	37.3	37.3	0.00	38	37.9	-0.10
Grid		196_34	Willow Slough State Fish and Wildlife Area	40.986461	-87.515189	37.2	37.3	37.3	0.00	37.9	37.9	0.00
Grid		196_33	Willow Slough State Fish and Wildlife Area	40.978092	-87.515219	37.1	37.2	37.2	0.00	37.8	37.8	0.00
Grid		196_32	Willow Slough State Fish and Wildlife Area	40.969722	-87.515250	37.1	37.2	37.2	0.00	37.9	37.9	0.00
Grid		196_31	Willow Slough State Fish and Wildlife Area	40.961353	-87.515280	37.1	37.2	37.2	0.00	37.8	37.9	0.10
Grid		195_38	Willow Slough State Fish and Wildlife Area	41.019961	-87.526107	37.3	37.4	37.4	0.00	38	38	0.00
Grid		195_37	Willow Slough State Fish and Wildlife Area	41.011592	-87.526136	37.2	37.4	37.4	0.00	38	38	0.00
Grid		216_108	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.605108	-87.290113	37.1	37.2	37.6	0.40	37.7	38.2	0.50
Grid		196_37	Willow Slough State Fish and Wildlife Area	41.011569	-87.515097	37.3	37.4	37.4	0.00	38	38	0.00
Grid		239_113	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.645630	-87.033439	30.9	31	31.1	0.10	31.4	31.2	-0.20
Grid		241_114	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.653857	-87.011051	32	32.2	32.3	0.10	32.6	32.3	-0.30
Grid		240_116	Indiana State Park, Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.670668	-87.022009	33.8	33.9	34	0.10	34.4	34.2	-0.20
Grid		240_115	Indiana State Park, Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.662298	-87.022103	32.8	33	33.1	0.10	33.4	33.1	-0.30
Grid		240_114	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.653929	-87.022198	31.9	32.1	32.2	0.10	32.5	32.2	-0.30
Grid		240_113	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.645560	-87.022293	31	31.2	31.3	0.10	31.6	31.3	-0.30
Grid		239_116	Indiana State Park, Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.670738	-87.033159	33.7	33.8	33.9	0.10	34.3	34.1	-0.20
Grid		215_108	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.605152	-87.301253	37.2	37.3	37.8	0.50	37.8	38.4	0.60
Grid		239_114	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.654000	-87.033346	31.7	31.9	32	0.10	32.3	32.1	-0.20
Grid		241_117	Indiana State Park, Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.678965	-87.010762	35	35.2	35.2	0.00	35.6	35.4	-0.20
Grid		238_115	Indiana State Park, Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.662439	-87.044402	32.6	32.8	32.9	0.10	33.2	33	-0.20
Grid		238_114	Indiana State Park, Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.654069	-87.044494	31.7	31.9	32	0.10	32.3	32	-0.30

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		238_113	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.645700	-87.044586	30.9	31	31.2	0.20	31.5	31.1	-0.40
Grid		237_115	Indiana State Park, Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.662507	-87.055551	32.6	32.7	32.9	0.20	33.1	33	-0.10
Grid		237_114	Indiana State Park, Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.654138	-87.055642	31.7	31.8	32	0.20	32.2	32	-0.20
Grid		237_113	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.645768	-87.055732	30.9	30.9	31.1	0.20	31.4	31.1	-0.30
Grid		239_115	Indiana State Park, Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.662369	-87.033253	32.7	32.8	32.9	0.10	33.2	33	-0.20
Grid		244_111	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.628528	-86.977909	30	30.2	30.2	0.00	30.6	30.2	-0.40
Grid		245_111	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.628452	-86.966766	30.1	30.2	30.3	0.10	30.6	30.2	-0.40
Grid		245_56	Jasper-Pulaski State Fish and Wildlife Area	41.168138	-86.972332	25.4	25.4	25.4	0.00	26	25.8	-0.20
Grid		245_55	Jasper-Pulaski State Fish and Wildlife Area	41.159769	-86.972433	25	25	25	0.00	25.6	25.4	-0.20
Grid		245_54	Jasper-Pulaski State Fish and Wildlife Area	41.151399	-86.972533	24.7	24.7	24.7	0.00	25.3	25.1	-0.20
Grid		245_53	Jasper-Pulaski State Fish and Wildlife Area	41.143030	-86.972634	24.4	24.5	24.4	-0.10	25	24.9	-0.10
Grid		245_52	Jasper-Pulaski State Fish and Wildlife Area	41.134661	-86.972734	24.3	24.3	24.3	0.00	24.9	24.7	-0.20
Grid		241_115	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.662227	-87.010954	32.9	33.1	33.2	0.10	33.5	33.3	-0.20
Grid		244_116	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.670374	-86.977406	34.2	34.4	34.4	0.00	34.8	34.6	-0.20
Grid		241_116	Indiana State Park, Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.670596	-87.010858	34	34.1	34.2	0.10	34.5	34.4	-0.10
Grid		244_55	Jasper-Pulaski State Fish and Wildlife Area	41.159845	-86.983496	24.7	24.8	24.7	-0.10	25.3	25.1	-0.20
Grid		244_54	Jasper-Pulaski State Fish and Wildlife Area	41.151475	-86.983595	24.5	24.5	24.5	0.00	25	24.9	-0.10
Grid		243_117	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.678819	-86.988458	35.2	35.4	35.4	0.00	35.8	35.6	-0.20
Grid		242_117	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.678893	-86.999610	35.1	35.3	35.3	0.00	35.7	35.5	-0.20
Grid		242_116	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.670523	-86.999708	34.1	34.2	34.3	0.10	34.6	34.5	-0.10
Grid		242_115	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.662154	-86.999805	33.1	33.3	33.3	0.00	33.7	33.4	-0.30
Grid		235_113	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.645902	-87.078025	30.7	30.8	31	0.20	31.3	31	-0.30
Grid		244_117	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.678744	-86.977306	35.3	35.5	35.4	-0.10	35.9	35.7	-0.20
Grid		220_108	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.604919	-87.245554	35	35.1	35.4	0.30	35.8	35.9	0.10
Grid		236_114	Indiana State Park, Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.654205	-87.066789	31.6	31.8	31.9	0.10	32.2	32	-0.20

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		223_109	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.613135	-87.212065	30.9	31	31.3	0.30	31.6	31.6	0.00
Grid		223_108	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.604766	-87.212135	32.2	32.3	32.5	0.20	32.9	33	0.10
Grid		222_109	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.613187	-87.223206	31.7	31.8	32	0.20	32.4	32.4	0.00
Grid		222_108	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.604818	-87.223275	33.1	33.2	33.5	0.30	33.8	33.9	0.10
Grid		221_109	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.613238	-87.234347	32.6	32.7	32.9	0.20	33.3	33.4	0.10
Grid		224_109	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.613082	-87.200924	30.2	30.3	30.6	0.30	30.9	30.8	-0.10
Grid		221_107	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.596499	-87.234481	35.5	35.5	35.9	0.40	36.1	36.4	0.30
Grid		225_111	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.629766	-87.189637	29.2	29.3	29.7	0.40	29.8	29.7	-0.10
Grid		220_106	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.588180	-87.245685	36.8	36.9	37.4	0.50	37.5	38	0.50
Grid		219_108	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.604968	-87.256694	35.8	35.8	36.1	0.30	36.5	36.7	0.20
Grid		219_106	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.588229	-87.256822	37	37.1	37.7	0.60	37.7	38.3	0.60
Grid		218_108	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.605015	-87.267833	36.4	36.5	36.8	0.30	37.1	37.4	0.30
Grid		217_109	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.613432	-87.278912	36.2	36.3	36.5	0.20	36.9	37.1	0.20
Grid		217_108	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.605062	-87.278973	36.8	36.9	37.3	0.40	37.5	37.9	0.40
Grid		152_119	Illinois and Michigan Canal State Trail	41.697831	-88.003439	43.7	43.7	43.8	0.10	44.6	44.9	0.30
Grid		221_108	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.604869	-87.234414	34.1	34.1	34.4	0.30	34.8	34.9	0.10
Grid		233_113	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.646031	-87.100318	30.4	30.6	30.9	0.30	31	30.8	-0.20
Grid		216_98	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.521414	-87.290712	41.4	41.4	43.4	2.00	41.3	43.4	2.10
Grid		235_112	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.637533	-87.078112	30	30.1	30.3	0.20	30.6	30.3	-0.30
Grid		235_111	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.629163	-87.078200	29.4	29.4	29.6	0.20	29.9	29.6	-0.30
Grid		234_114	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.654336	-87.089085	31.4	31.5	31.8	0.30	32	31.8	-0.20
Grid		234_113	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.645967	-87.089171	30.6	30.8	30.9	0.10	31.2	30.9	-0.30

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		234_112	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.637598	-87.089257	29.9	30	30.2	0.20	30.4	30.2	-0.20
Grid		223_110	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.621504	-87.211995	30	30.1	30.4	0.30	30.7	30.6	-0.10
Grid		234_110	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.620859	-87.089429	28.8	28.9	29.1	0.20	29.4	29.1	-0.30
Grid		236_113	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.645836	-87.066878	30.8	31	31.1	0.10	31.4	31.1	-0.30
Grid		233_112	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.637662	-87.100402	29.7	29.9	30.1	0.20	30.3	30.1	-0.20
Grid		233_110	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.620923	-87.100572	28.8	28.9	29.1	0.20	29.3	29	-0.30
Grid		232_113	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.646094	-87.111464	30.4	30.4	30.7	0.30	30.9	30.7	-0.20
Grid		232_110	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.620986	-87.111714	28.7	28.8	29.1	0.30	29.3	28.9	-0.40
Grid		229_109	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.612799	-87.145219	28.8	28.8	29.1	0.30	29.3	29.1	-0.20
Grid		229_108	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.604430	-87.145298	29.1	29.3	29.5	0.20	29.8	29.6	-0.20
Grid		226_111	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.629711	-87.178493	29.1	29.2	29.6	0.40	29.7	29.6	-0.10
Grid		234_111	Indiana Dunes National Lakeshore National Park (National Lakeshore)	41.629228	-87.089343	29.2	29.4	29.6	0.20	29.8	29.5	-0.30
Grid		139_85	Midewin National Tallgrass Prairie National Forest	41.412864	-88.146724	40.6	40.7	40.7	0.00	41.3	41.3	0.00
Grid		139_98	Illinois and Michigan Canal State Trail	41.521665	-88.147388	45.4	45.5	42.7	-2.80	45.7	43	-2.70
Grid		139_97	Illinois and Michigan Canal State Trail	41.513296	-88.147337	45.6	45.7	42.2	-3.50	46	42.6	-3.40
Grid		139_96	Illinois and Michigan Canal State Trail	41.504927	-88.147286	45.2	45.3	41.6	-3.70	45.6	42.1	-3.50
Grid		139_95	Illinois and Michigan Canal State Trail	41.496557	-88.147235	44.5	44.6	41.4	-3.20	44.9	41.9	-3.00
Grid		139_94	Illinois and Michigan Canal State Trail	41.488188	-88.147184	43.6	43.7	41.2	-2.50	44.2	41.8	-2.40
Grid		139_93	Illinois and Michigan Canal State Trail	41.479819	-88.147133	42.8	42.9	41.1	-1.80	43.4	41.7	-1.70
Grid		139_78	Midewin National Tallgrass Prairie National Forest	41.354279	-88.146368	38.6	38.7	38.7	0.00	39.4	39.3	-0.10
Grid		139_86	Midewin National Tallgrass Prairie National Forest	41.421233	-88.146775	40.9	40.9	40.9	0.00	41.7	41.6	-0.10
Grid		139_101	Illinois and Michigan Canal State Trail	41.546773	-88.147542	44	44.1	45.3	1.20	44.6	45.5	0.90
Grid		139_84	Midewin National Tallgrass Prairie National Forest	41.404495	-88.146674	40.2	40.4	40.3	-0.10	41.1	41	-0.10
Grid		139_83	Midewin National Tallgrass Prairie National Forest	41.396125	-88.146623	39.9	40	40	0.00	40.7	40.7	0.00
Grid		139_82	Midewin National Tallgrass Prairie National Forest	41.387756	-88.146572	39.6	39.7	39.7	0.00	40.4	40.4	0.00
Grid		139_81	Midewin National Tallgrass Prairie National Forest	41.379387	-88.146521	39.4	39.4	39.4	0.00	40.1	40.1	0.00
Grid		139_80	Midewin National Tallgrass Prairie National Forest	41.371017	-88.146470	39.1	39.1	39.1	0.00	39.8	39.8	0.00
Grid		138_76	Des Plaines State Fish and Wildlife Area	41.337501	-88.157360	38.5	38.6	38.6	0.00	39.3	39.2	-0.10
Grid		139_87	Midewin National Tallgrass Prairie National Forest	41.429603	-88.146826	41.1	41.2	41.2	0.00	41.9	41.9	0.00
Grid		139_108	Illinois and Michigan Canal State Trail	41.605359	-88.147901	40.2	40.3	37.9	-2.40	40.8	38.9	-1.90
Grid		140_79	Midewin National Tallgrass Prairie National Forest	41.362686	-88.135321	38.7	38.8	38.8	0.00	39.5	39.4	-0.10

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		140_78	Midewin National Tallgrass Prairie National Forest	41.354317	-88.135271	38.6	38.7	38.7	0.00	39.4	39.3	-0.10
Grid		140_77	Midewin National Tallgrass Prairie National Forest	41.345947	-88.135222	38.6	38.6	38.7	0.10	39.3	39.3	0.00
Grid		140_76	Midewin National Tallgrass Prairie National Forest	41.337578	-88.135172	38.6	38.6	38.6	0.00	39.3	39.2	-0.10
Grid		139_112	Illinois and Michigan Canal State Trail	41.638836	-88.148106	37.2	37.3	36.5	-0.80	37.8	37.7	-0.10
Grid		139_111	Illinois and Michigan Canal State Trail	41.630467	-88.148055	38.7	38.7	36.9	-1.80	39.1	38.3	-0.80
Grid		139_99	Illinois and Michigan Canal State Trail	41.530035	-88.147440	44.9	45	43	-2.00	45.3	43.2	-2.10
Grid		139_109	Illinois and Michigan Canal State Trail	41.613728	-88.147952	40.6	40.6	37.4	-3.20	41	38.6	-2.40
Grid		139_100	Illinois and Michigan Canal State Trail	41.538404	-88.147491	44.5	44.6	43.9	-0.70	45	44.1	-0.90
Grid		139_107	Illinois and Michigan Canal State Trail	41.596989	-88.147849	40.8	41	38.8	-2.20	41.5	39.8	-1.70
Grid		139_106	Illinois and Michigan Canal State Trail	41.588620	-88.147798	42.3	42.3	40.2	-2.10	42.8	41.2	-1.60
Grid		139_105	Illinois and Michigan Canal State Trail	41.580251	-88.147747	43.4	43.5	42.2	-1.30	44	43.2	-0.80
Grid		139_104	Illinois and Michigan Canal State Trail	41.571881	-88.147696	44	44.1	44.1	0.00	44.5	44.9	0.40
Grid		139_103	Illinois and Michigan Canal State Trail	41.563512	-88.147644	43.8	43.9	45.2	1.30	44.3	45.9	1.60
Grid		139_102	Illinois and Michigan Canal State Trail	41.555143	-88.147593	43.5	43.6	45.8	2.20	44.1	46.2	2.10
Grid		139_77	Midewin National Tallgrass Prairie National Forest	41.345909	-88.146317	38.5	38.6	38.6	0.00	39.2	39.2	0.00
Grid		139_110	Illinois and Michigan Canal State Trail	41.622097	-88.148003	40.2	40.2	37.1	-3.10	40.6	38.5	-2.10
Grid		138_83	Midewin National Tallgrass Prairie National Forest	41.396086	-88.157726	40.5	40.5	40.5	0.00	41.2	41.2	0.00
Grid		138_95	Illinois and Michigan Canal State Trail	41.496518	-88.158356	44.5	44.6	41	-3.60	44.9	41.4	-3.50
Grid		138_94	Illinois and Michigan Canal State Trail	41.488149	-88.158304	43.6	43.7	40.8	-2.90	44.1	41.3	-2.80
Grid		138_93	Illinois and Michigan Canal State Trail	41.479780	-88.158251	42.7	42.8	40.6	-2.20	43.3	41.2	-2.10
Grid		138_92	Illinois and Michigan Canal State Trail	41.471410	-88.158198	42.1	42.2	40.7	-1.50	42.7	41.3	-1.40
Grid		138_87	Midewin National Tallgrass Prairie National Forest	41.429563	-88.157936	41.2	41.3	41.2	-0.10	42	41.9	-0.10
Grid		138_86	Midewin National Tallgrass Prairie National Forest	41.421194	-88.157884	41.1	41.2	41.1	-0.10	41.9	41.8	-0.10
Grid		139_79	Midewin National Tallgrass Prairie National Forest	41.362648	-88.146419	38.8	38.9	38.9	0.00	39.6	39.6	0.00
Grid		138_84	Midewin National Tallgrass Prairie National Forest	41.404455	-88.157779	40.7	40.8	40.7	-0.10	41.5	41.4	-0.10
Grid		138_98	Illinois and Michigan Canal State Trail	41.521626	-88.158514	44.7	44.7	42.6	-2.10	45	42.9	-2.10
Grid		138_82	Midewin National Tallgrass Prairie National Forest	41.387717	-88.157674	40.2	40.2	40.2	0.00	40.9	40.9	0.00
Grid		138_81	Midewin National Tallgrass Prairie National Forest	41.379347	-88.157622	39.8	39.9	39.9	0.00	40.6	40.6	0.00
Grid		138_80	Midewin National Tallgrass Prairie National Forest	41.370978	-88.157569	39.5	39.6	39.6	0.00	40.3	40.2	-0.10
Grid		138_79	Midewin National Tallgrass Prairie National Forest	41.362609	-88.157517	39.2	39.3	39.3	0.00	40	39.9	-0.10
Grid		138_78	Midewin National Tallgrass Prairie National Forest	41.354239	-88.157465	39	39	39	0.00	39.7	39.6	-0.10
Grid		152_121	Illinois and Michigan Canal State Trail	41.714570	-88.003504	44.4	44.6	44.5	-0.10	45.5	45.5	0.00
Grid		138_85	Midewin National Tallgrass Prairie National Forest	41.412825	-88.157831	41	41	41	0.00	41.7	41.7	0.00
Grid		138_105	Illinois and Michigan Canal State Trail	41.580212	-88.158882	42.7	42.8	40.8	-2.00	43.2	41.6	-1.60
Grid		139_76	Des Plaines State Fish and Wildlife Area	41.337540	-88.146266	38.4	38.5	38.5	0.00	39.2	39.1	-0.10
Grid		139_75	Des Plaines State Fish and Wildlife Area	41.329170	-88.146215	38.3	38.4	38.4	0.00	39.1	39	-0.10
Grid		138_111	Illinois and Michigan Canal State Trail	41.630428	-88.159199	37.7	37.8	36.2	-1.60	38.1	37.3	-0.80
Grid		138_110	Illinois and Michigan Canal State Trail	41.622058	-88.159146	39.3	39.4	36.6	-2.80	39.6	37.9	-1.70
Grid		138_109	Illinois and Michigan Canal State Trail	41.613689	-88.159093	40.2	40.3	36.9	-3.40	40.6	38.2	-2.40
Grid		138_108	Illinois and Michigan Canal State Trail	41.605320	-88.159040	39.9	40	37.2	-2.80	40.5	38.3	-2.20
Grid		138_96	Illinois and Michigan Canal State Trail	41.504888	-88.158409	45.1	45.2	41.2	-4.00	45.5	41.6	-3.90
Grid		138_106	Illinois and Michigan Canal State Trail	41.588581	-88.158935	41.4	41.5	39	-2.50	41.9	39.9	-2.00
Grid		138_97	Illinois and Michigan Canal State Trail	41.513257	-88.158461	45.2	45.3	41.9	-3.40	45.5	42.3	-3.20

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		138_104	Illinois and Michigan Canal State Trail	41.571842	-88.158830	43.5	43.6	43	-0.60	44.1	43.8	-0.30
Grid		138_103	Illinois and Michigan Canal State Trail	41.563473	-88.158777	43.7	43.8	44.6	0.80	44.2	45.4	1.20
Grid		138_102	Illinois and Michigan Canal State Trail	41.555104	-88.158724	43.4	43.4	45.6	2.20	43.9	46.1	2.20
Grid		138_101	Illinois and Michigan Canal State Trail	41.546734	-88.158672	43.4	43.6	45.6	2.00	44.1	45.9	1.80
Grid		138_100	Illinois and Michigan Canal State Trail	41.538365	-88.158619	43.9	44.1	44.3	0.20	44.5	44.5	0.00
Grid		138_99	Illinois and Michigan Canal State Trail	41.529996	-88.158566	44.1	44.3	43.1	-1.20	44.6	43.2	-1.40
Grid		140_82	Midewin National Tallgrass Prairie National Forest	41.387794	-88.135469	39.3	39.3	39.3	0.00	40	39.9	-0.10
Grid		138_107	Illinois and Michigan Canal State Trail	41.596950	-88.158988	40	40.2	37.9	-2.30	40.6	38.8	-1.80
Grid		141_98	Illinois and Michigan Canal State Trail	41.521740	-88.125137	45.9	46	43.1	-2.90	46.3	43.5	-2.80
Grid		141_106	Illinois and Michigan Canal State Trail	41.588695	-88.125524	43.8	43.9	43	-0.90	44.4	43.8	-0.60
Grid		141_105	Illinois and Michigan Canal State Trail	41.580326	-88.125476	44.6	44.7	44.6	-0.10	45.1	45.3	0.20
Grid		141_104	Illinois and Michigan Canal State Trail	41.571956	-88.125427	44.4	44.6	45.5	0.90	45	46.1	1.10
Grid		141_103	Illinois and Michigan Canal State Trail	41.563587	-88.125379	44.2	44.2	45.8	1.60	44.7	46.3	1.60
Grid		141_102	Illinois and Michigan Canal State Trail	41.555218	-88.125331	44.5	44.5	45.4	0.90	45	45.7	0.70
Grid		141_101	Illinois and Michigan Canal State Trail	41.546848	-88.125282	45.1	45.2	44.6	-0.60	45.6	44.8	-0.80
Grid		140_80	Midewin National Tallgrass Prairie National Forest	41.371055	-88.135370	38.9	39	39	0.00	39.6	39.5	-0.10
Grid		141_99	Illinois and Michigan Canal State Trail	41.530110	-88.125186	46.3	46.3	43.2	-3.10	46.6	43.5	-3.10
Grid		141_109	Illinois and Michigan Canal State Trail	41.613803	-88.125669	41.2	41.3	39.2	-2.10	41.9	40.3	-1.60
Grid		141_97	Illinois and Michigan Canal State Trail	41.513371	-88.125089	45.5	45.6	42.7	-2.90	45.9	43.2	-2.70
Grid		141_96	Illinois and Michigan Canal State Trail	41.505002	-88.125041	45.1	45.1	42.3	-2.80	45.5	42.8	-2.70
Grid		141_95	Illinois and Michigan Canal State Trail	41.496632	-88.124993	44.3	44.4	42.1	-2.30	44.9	42.7	-2.20
Grid		141_94	Illinois and Michigan Canal State Trail	41.488263	-88.124944	43.3	43.4	41.7	-1.70	43.9	42.4	-1.50
Grid		141_93	Illinois and Michigan Canal State Trail	41.479894	-88.124896	42.5	42.6	41.6	-1.00	43.3	42.2	-1.10
Grid		141_87	Midewin National Tallgrass Prairie National Forest	41.429678	-88.124607	40.4	40.5	40.4	-0.10	41.1	41.1	0.00
Grid		141_100	Illinois and Michigan Canal State Trail	41.538479	-88.125234	45.9	46	43.7	-2.30	46.3	43.9	-2.40
Grid		142_78	Midewin National Tallgrass Prairie National Forest	41.354389	-88.113078	39.4	39.5	39.4	-0.10	40.1	40.1	0.00
Grid		142_95	Illinois and Michigan Canal State Trail	41.496668	-88.113871	43.9	43.9	42	-1.90	44.4	42.6	-1.80
Grid		142_94	Illinois and Michigan Canal State Trail	41.488299	-88.113825	43	43	41.7	-1.30	43.6	42.3	-1.30
Grid		142_87	Midewin National Tallgrass Prairie National Forest	41.429713	-88.113497	40	40.1	40.1	0.00	40.8	40.7	-0.10
Grid		142_86	Midewin National Tallgrass Prairie National Forest	41.421344	-88.113451	39.8	39.9	39.9	0.00	40.6	40.5	-0.10
Grid		142_82	Midewin National Tallgrass Prairie National Forest	41.387867	-88.113264	39.3	39.4	39.4	0.00	40.1	40	-0.10
Grid		142_81	Midewin National Tallgrass Prairie National Forest	41.379497	-88.113217	39.3	39.3	39.3	0.00	40	39.9	-0.10
Grid		141_107	Illinois and Michigan Canal State Trail	41.597064	-88.125572	42.6	42.8	41.2	-1.60	43.3	42.1	-1.20
Grid		142_79	Midewin National Tallgrass Prairie National Forest	41.362759	-88.113124	39.3	39.3	39.3	0.00	40	39.9	-0.10
Grid		141_108	Illinois and Michigan Canal State Trail	41.605434	-88.125621	41.6	41.7	40	-1.70	42.4	41.1	-1.30
Grid		142_77	Midewin National Tallgrass Prairie National Forest	41.346020	-88.113031	39.5	39.5	39.5	0.00	40.2	40.1	-0.10
Grid		142_76	Midewin National Tallgrass Prairie National Forest	41.337651	-88.112984	39.6	39.7	39.7	0.00	40.4	40.3	-0.10
Grid		141_113	Illinois and Michigan Canal State Trail	41.647280	-88.125863	38.2	38.3	37.9	-0.40	38.9	39.2	0.30
Grid		141_112	Illinois and Michigan Canal State Trail	41.638911	-88.125814	39.4	39.5	38.1	-1.40	40.1	39.4	-0.70
Grid		141_111	Illinois and Michigan Canal State Trail	41.630542	-88.125766	40.9	41	38.3	-2.70	41.4	39.5	-1.90
Grid		141_110	Illinois and Michigan Canal State Trail	41.622172	-88.125718	41.5	41.6	38.7	-2.90	42	39.8	-2.20
Grid		141_82	Midewin National Tallgrass Prairie National Forest	41.387831	-88.124367	39.1	39.3	39.2	-0.10	39.9	39.9	0.00
Grid		142_80	Midewin National Tallgrass Prairie National Forest	41.371128	-88.113171	39.3	39.3	39.3	0.00	40	39.9	-0.10

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		140_94	Illinois and Michigan Canal State Trail	41.488226	-88.136064	43.5	43.7	41.5	-2.20	44.2	42.2	-2.00
Grid		141_86	Midewin National Tallgrass Prairie National Forest	41.421308	-88.124559	40.1	40.2	40.2	0.00	40.9	40.8	-0.10
Grid		140_101	Illinois and Michigan Canal State Trail	41.546811	-88.136412	44.5	44.6	44.9	0.30	45.1	45.1	0.00
Grid		140_100	Illinois and Michigan Canal State Trail	41.538442	-88.136362	45.1	45.2	43.7	-1.50	45.5	43.9	-1.60
Grid		140_99	Illinois and Michigan Canal State Trail	41.530073	-88.136313	45.6	45.7	43.1	-2.60	46	43.4	-2.60
Grid		140_98	Illinois and Michigan Canal State Trail	41.521703	-88.136263	45.9	46	42.9	-3.10	46.2	43.3	-2.90
Grid		140_97	Illinois and Michigan Canal State Trail	41.513334	-88.136213	45.6	45.6	42.5	-3.10	46	42.9	-3.10
Grid		140_103	Illinois and Michigan Canal State Trail	41.563550	-88.136512	43.9	44	45.7	1.70	44.5	46.2	1.70
Grid		140_95	Illinois and Michigan Canal State Trail	41.496595	-88.136114	44.5	44.6	41.8	-2.80	45	42.4	-2.60
Grid		140_104	Illinois and Michigan Canal State Trail	41.571919	-88.136561	44.3	44.4	44.9	0.50	44.8	45.6	0.80
Grid		140_93	Illinois and Michigan Canal State Trail	41.479857	-88.136014	42.7	42.8	41.4	-1.40	43.4	42.1	-1.30
Grid		140_87	Midewin National Tallgrass Prairie National Forest	41.429641	-88.135717	40.9	40.9	40.9	0.00	41.6	41.5	-0.10
Grid		140_86	Midewin National Tallgrass Prairie National Forest	41.421271	-88.135667	40.5	40.6	40.6	0.00	41.2	41.2	0.00
Grid		140_85	Midewin National Tallgrass Prairie National Forest	41.412902	-88.135618	40.2	40.3	40.3	0.00	40.9	40.8	-0.10
Grid		140_84	Midewin National Tallgrass Prairie National Forest	41.404533	-88.135568	39.8	39.9	39.9	0.00	40.6	40.6	0.00
Grid		140_83	Midewin National Tallgrass Prairie National Forest	41.396163	-88.135519	39.5	39.6	39.6	0.00	40.3	40.2	-0.10
Grid		138_75	Des Plaines State Fish and Wildlife Area	41.329131	-88.157308	38.4	38.5	38.5	0.00	39.2	39.1	-0.10
Grid		140_96	Illinois and Michigan Canal State Trail	41.504965	-88.136163	45.2	45.3	42	-3.30	45.6	42.6	-3.00
Grid		140_112	Illinois and Michigan Canal State Trail	41.638874	-88.136960	38.2	38.3	37.3	-1.00	38.8	38.7	-0.10
Grid		140_81	Midewin National Tallgrass Prairie National Forest	41.379425	-88.135420	39	39.1	39.1	0.00	39.8	39.7	-0.10
Grid		141_81	Midewin National Tallgrass Prairie National Forest	41.379462	-88.124319	39	39.1	39.1	0.00	39.8	39.7	-0.10
Grid		141_80	Midewin National Tallgrass Prairie National Forest	41.371092	-88.124271	38.9	39	39	0.00	39.7	39.6	-0.10
Grid		141_79	Midewin National Tallgrass Prairie National Forest	41.362723	-88.124222	38.9	38.9	38.9	0.00	39.6	39.5	-0.10
Grid		141_78	Midewin National Tallgrass Prairie National Forest	41.354354	-88.124174	38.8	39	39	0.00	39.6	39.6	0.00
Grid		141_77	Midewin National Tallgrass Prairie National Forest	41.345984	-88.124126	38.9	39	39	0.00	39.7	39.6	-0.10
Grid		140_102	Illinois and Michigan Canal State Trail	41.555181	-88.136462	43.9	44	45.7	1.70	44.5	46	1.50
Grid		140_113	Illinois and Michigan Canal State Trail	41.647243	-88.137010	37.2	37.3	37	-0.30	37.9	38.3	0.40
Grid		141_85	Midewin National Tallgrass Prairie National Forest	41.412939	-88.124511	39.9	39.9	39.9	0.00	40.6	40.5	-0.10
Grid		140_111	Illinois and Michigan Canal State Trail	41.630505	-88.136910	39.8	39.9	37.6	-2.30	40.3	38.9	-1.40
Grid		140_110	Illinois and Michigan Canal State Trail	41.622135	-88.136860	40.9	41	37.8	-3.20	41.4	39	-2.40
Grid		140_109	Illinois and Michigan Canal State Trail	41.613766	-88.136811	40.8	40.9	38.2	-2.70	41.4	39.3	-2.10
Grid		140_108	Illinois and Michigan Canal State Trail	41.605397	-88.136761	40.8	40.9	38.9	-2.00	41.5	40	-1.50
Grid		140_107	Illinois and Michigan Canal State Trail	41.597027	-88.136711	41.8	41.9	40	-1.90	42.5	41.1	-1.40
Grid		140_106	Illinois and Michigan Canal State Trail	41.588658	-88.136661	43.1	43.2	41.6	-1.60	43.6	42.6	-1.00
Grid		140_105	Illinois and Michigan Canal State Trail	41.580289	-88.136611	44.1	44.2	43.6	-0.60	44.6	44.4	-0.20
Grid		141_76	Midewin National Tallgrass Prairie National Forest	41.337615	-88.124078	39	39	39	0.00	39.7	39.6	-0.10
Grid		133_90	Illinois and Michigan Canal State Trail	41.454460	-88.213663	39.4	39.4	36.9	-2.50	39.9	37.4	-2.50
Grid		134_79	Des Plaines State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.362442	-88.201909	40.6	40.6	40.7	0.10	41.4	41.4	0.00
Grid		134_78	Des Plaines State Fish and Wildlife Area	41.354072	-88.201851	40.6	40.6	40.7	0.10	41.4	41.4	0.00
Grid		134_64	Mazonia-Braidwood State Fish and Wildlife Area	41.236901	-88.201040	37.7	37.9	37.8	-0.10	38.5	38.5	0.00
Grid		134_63	Mazonia-Braidwood State Fish and Wildlife Area	41.228532	-88.200982	37.7	37.8	37.8	0.00	38.4	38.4	0.00
Grid		134_62	Mazonia-Braidwood State Fish and Wildlife Area	41.220163	-88.200924	37.6	37.7	37.7	0.00	38.4	38.3	-0.10

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		133_93	Illinois and Michigan Canal State Trail	41.479568	-88.213842	42.6	42.7	38	-4.70	43	38.3	-4.70
Grid		133_83	Illinois and Michigan Canal State Trail	41.395874	-88.213245	39.2	39.3	39.3	0.00	40	39.9	-0.10
Grid		133_91	Illinois and Michigan Canal State Trail	41.462829	-88.213723	40.1	40.1	36.8	-3.30	40.5	37.3	-3.20
Grid		134_82	Des Plaines State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.387550	-88.202084	40.3	40.4	40.4	0.00	41	41	0.00
Grid		133_89	Illinois and Michigan Canal State Trail	41.446090	-88.213603	38.7	38.8	37.1	-1.70	39.3	37.6	-1.70
Grid		133_88	Illinois and Michigan Canal State Trail	41.437721	-88.213544	38.2	38.2	37.3	-0.90	38.8	37.9	-0.90
Grid		133_87	Illinois and Michigan Canal State Trail	41.429352	-88.213484	38	38.1	37.7	-0.40	38.7	38.3	-0.40
Grid		133_86	Des Plaines State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.420982	-88.213424	38.2	38.3	38.1	-0.20	39	38.8	-0.20
Grid		133_85	Illinois and Michigan Canal State Trail	41.412613	-88.213365	38.5	38.6	38.5	-0.10	39.3	39.2	-0.10
Grid		138_77	Midewin National Tallgrass Prairie National Forest	41.345870	-88.157412	38.7	38.8	38.8	0.00	39.4	39.4	0.00
Grid		133_92	Illinois and Michigan Canal State Trail	41.471198	-88.213782	41.3	41.4	37.2	-4.20	41.8	37.6	-4.20
Grid		134_89	Illinois and Michigan Canal State Trail	41.446135	-88.202491	39.1	39.2	38	-1.20	39.8	38.6	-1.20
Grid		135_82	Illinois and Michigan Canal State Trail	41.387593	-88.190981	40.8	40.8	40.8	0.00	41.5	41.5	0.00
Grid		135_81	Illinois and Michigan Canal State Trail	41.379224	-88.190925	40.8	40.8	40.8	0.00	41.6	41.5	-0.10
Grid		135_80	Des Plaines State Fish and Wildlife Area	41.370854	-88.190868	40.7	40.9	40.9	0.00	41.5	41.5	0.00
Grid		135_79	Des Plaines State Fish and Wildlife Area	41.362485	-88.190811	40.6	40.7	40.7	0.00	41.4	41.4	0.00
Grid		134_93	Illinois and Michigan Canal State Trail	41.479612	-88.202724	42.5	42.6	38.3	-4.30	42.9	38.6	-4.30
Grid		134_92	Illinois and Michigan Canal State Trail	41.471243	-88.202666	41.3	41.3	37.6	-3.70	41.7	38.1	-3.60
Grid		134_80	Des Plaines State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.370811	-88.201967	40.6	40.6	40.6	0.00	41.4	41.3	-0.10
Grid		134_90	Illinois and Michigan Canal State Trail	41.454504	-88.202549	39.6	39.7	37.7	-2.00	40.3	38.3	-2.00
Grid		134_81	Des Plaines State Fish and Wildlife Area, Midewin National Tallgrass Prairie National Forest, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.379180	-88.202025	40.5	40.5	40.5	0.00	41.3	41.2	-0.10
Grid		134_88	Illinois and Michigan Canal State Trail	41.437766	-88.202433	38.8	38.9	38.3	-0.60	39.5	39	-0.50
Grid		134_87	Illinois and Michigan Canal State Trail	41.429396	-88.202374	38.9	38.9	38.7	-0.20	39.6	39.3	-0.30
Grid		134_86	Des Plaines State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.421027	-88.202316	39.1	39.1	39	-0.10	39.9	39.7	-0.20
Grid		134_85	Illinois and Michigan Canal State Trail	41.412657	-88.202258	39.4	39.5	39.4	-0.10	40.2	40.1	-0.10
Grid		134_84	Illinois and Michigan Canal State Trail	41.404288	-88.202200	39.8	39.8	39.8	0.00	40.6	40.5	-0.10
Grid		134_83	Illinois and Michigan Canal State Trail	41.395919	-88.202142	40.1	40.1	40.1	0.00	40.8	40.8	0.00
Grid		133_82	Des Plaines State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.387505	-88.213186	39.5	39.6	39.5	-0.10	40.3	40.3	0.00
Grid		134_91	Illinois and Michigan Canal State Trail	41.462874	-88.202607	40.3	40.3	37.5	-2.80	40.8	38.1	-2.70
Grid		132_78	Illinois and Michigan Canal State Trail	41.353982	-88.224044	39.7	39.7	39.7	0.00	40.5	40.4	-0.10
Grid		132_86	Illinois and Michigan Canal State Trail	41.420937	-88.224532	37.4	37.4	37.1	-0.30	38.1	37.8	-0.30
Grid		132_85	Illinois and Michigan Canal State Trail	41.412567	-88.224471	37.6	37.6	37.5	-0.10	38.3	38.1	-0.20
Grid		132_84	Illinois and Michigan Canal State Trail	41.404198	-88.224410	37.9	37.9	37.9	0.00	38.6	38.5	-0.10
Grid		132_83	Des Plaines State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.395829	-88.224349	38.2	38.3	38.2	-0.10	39	38.9	-0.10

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		132_82	Des Plaines State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.387459	-88.224288	38.5	38.6	38.6	0.00	39.3	39.3	0.00
Grid		132_81	Des Plaines State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.379090	-88.224227	38.9	38.9	38.9	0.00	39.6	39.6	0.00
Grid		133_84	Illinois and Michigan Canal State Trail	41.404244	-88.213305	38.8	38.9	38.9	0.00	39.6	39.6	0.00
Grid		132_79	Des Plaines State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.362351	-88.224105	39.4	39.5	39.5	0.00	40.3	40.2	-0.10
Grid		132_89	Illinois and Michigan Canal State Trail	41.446045	-88.224716	38.5	38.6	36.2	-2.40	39.1	36.8	-2.30
Grid		132_77	Illinois and Michigan Canal State Trail	41.345613	-88.223983	39.9	39.9	39.9	0.00	40.7	40.6	-0.10
Grid		132_63	Mazonia-Braidwood State Fish and Wildlife Area	41.228442	-88.223132	38.1	38.2	38.1	-0.10	38.8	38.8	0.00
Grid		132_62	Mazonia-Braidwood State Fish and Wildlife Area	41.220073	-88.223072	38	38.1	38	-0.10	38.7	38.7	0.00
Grid		132_61	Mazonia-Braidwood State Fish and Wildlife Area	41.211703	-88.223011	37.8	37.9	37.9	0.00	38.6	38.6	0.00
Grid		132_60	Mazonia-Braidwood State Fish and Wildlife Area	41.203334	-88.222950	37.7	37.8	37.9	0.10	38.5	38.5	0.00
Grid		302_103	Potato Creek State Park	41.555367	-86.333160	32.6	32.6	32.1	-0.50	32.8	31.8	-1.00
Grid		132_80	Des Plaines State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.370721	-88.224166	39.1	39.3	39.2	-0.10	40	39.9	-0.10
Grid		133_59	Mazonia-Braidwood State Fish and Wildlife Area	41.195010	-88.211820	37.5	37.7	37.7	0.00	38.3	38.3	0.00
Grid		133_81	Des Plaines State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.379136	-88.213126	39.8	39.8	39.8	0.00	40.6	40.5	-0.10
Grid		133_80	Des Plaines State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.370766	-88.213067	40	40.1	40.1	0.00	40.9	40.8	-0.10
Grid		133_79	Des Plaines State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.362397	-88.213007	40.2	40.2	40.2	0.00	41	40.9	-0.10
Grid		133_78	Illinois and Michigan Canal State Trail	41.354028	-88.212948	40.3	40.4	40.4	0.00	41.1	41.1	0.00
Grid		133_64	Mazonia-Braidwood State Fish and Wildlife Area	41.236857	-88.212116	37.9	38	38	0.00	38.7	38.7	0.00
Grid		133_62	Mazonia-Braidwood State Fish and Wildlife Area	41.220118	-88.211998	37.8	37.8	37.8	0.00	38.5	38.5	0.00
Grid		132_87	Illinois and Michigan Canal State Trail	41.429306	-88.224593	37.3	37.4	36.7	-0.70	38	37.4	-0.60
Grid		133_60	Mazonia-Braidwood State Fish and Wildlife Area	41.203380	-88.211879	37.6	37.7	37.7	0.00	38.3	38.3	0.00
Grid		132_88	Illinois and Michigan Canal State Trail	41.437675	-88.224654	37.7	37.8	36.4	-1.40	38.3	37	-1.30
Grid		133_58	Mazonia-Braidwood State Fish and Wildlife Area	41.186641	-88.211761	37.5	37.6	37.6	0.00	38.2	38.2	0.00
Grid		133_57	Mazonia-Braidwood State Fish and Wildlife Area	41.178271	-88.211702	37.5	37.6	37.5	-0.10	38.2	38.2	0.00
Grid		132_93	Illinois and Michigan Canal State Trail	41.479522	-88.224960	42.7	42.8	37.9	-4.90	43	38.2	-4.80
Grid		132_92	Illinois and Michigan Canal State Trail	41.471153	-88.224899	41.5	41.6	36.9	-4.70	41.8	37.2	-4.60
Grid		132_91	Illinois and Michigan Canal State Trail	41.462783	-88.224838	40.1	40.1	36.3	-3.80	40.5	36.7	-3.80
Grid		132_90	Illinois and Michigan Canal State Trail	41.454414	-88.224777	39.1	39.1	36.1	-3.00	39.6	36.6	-3.00
Grid		135_85	Illinois and Michigan Canal State Trail	41.412701	-88.191151	40.3	40.3	40.3	0.00	41	41	0.00
Grid		133_61	Mazonia-Braidwood State Fish and Wildlife Area	41.211749	-88.211939	37.7	37.8	37.8	0.00	38.4	38.4	0.00
Grid		137_79	Midewin National Tallgrass Prairie National Forest	41.362569	-88.168615	39.7	39.8	39.8	0.00	40.5	40.5	0.00
Grid		137_87	Midewin National Tallgrass Prairie National Forest, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.429523	-88.169046	41	41	40.9	-0.10	41.7	41.6	-0.10
Grid		137_86	Midewin National Tallgrass Prairie National Forest	41.421154	-88.168992	41	41.1	41	-0.10	41.8	41.7	-0.10
Grid		137_85	Midewin National Tallgrass Prairie National Forest	41.412785	-88.168938	41.1	41.1	41.1	0.00	41.8	41.8	0.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		137_84	Midewin National Tallgrass Prairie National Forest	41.404415	-88.168884	41	41	41	0.00	41.7	41.7	0.00
Grid		137_83	Midewin National Tallgrass Prairie National Forest	41.396046	-88.168830	40.8	40.8	40.8	0.00	41.6	41.5	-0.10
Grid		137_82	Midewin National Tallgrass Prairie National Forest	41.387677	-88.168776	40.6	40.7	40.7	0.00	41.4	41.4	0.00
Grid		135_83	Illinois and Michigan Canal State Trail	41.395962	-88.191038	40.7	40.7	40.7	0.00	41.4	41.4	0.00
Grid		137_80	Midewin National Tallgrass Prairie National Forest	41.370938	-88.168669	40.1	40.1	40.1	0.00	40.9	40.8	-0.10
Grid		137_90	Illinois and Michigan Canal State Trail	41.454631	-88.169207	41.1	41.1	40.5	-0.60	41.8	41.1	-0.70
Grid		137_78	Midewin National Tallgrass Prairie National Forest	41.354199	-88.168561	39.4	39.5	39.5	0.00	40.2	40.1	-0.10
Grid		137_77	Midewin National Tallgrass Prairie National Forest	41.345830	-88.168508	39.1	39.2	39.2	0.00	39.9	39.8	-0.10
Grid		137_75	Des Plaines Game Propagation Center	41.329091	-88.168400	38.7	38.8	38.7	-0.10	39.4	39.4	0.00
Grid		136_103	Illinois and Michigan Canal State Trail	41.563391	-88.181042	42.8	42.9	42.4	-0.50	43.2	43.1	-0.10
Grid		136_99	Illinois and Michigan Canal State Trail	41.529914	-88.180820	43.2	43.4	43.7	0.30	43.7	43.9	0.20
Grid		136_98	Illinois and Michigan Canal State Trail	41.521545	-88.180765	43.4	43.4	42.7	-0.70	43.8	42.9	-0.90
Grid		137_81	Midewin National Tallgrass Prairie National Forest	41.379307	-88.168723	40.4	40.4	40.5	0.10	41.2	41.1	-0.10
Grid		137_97	Illinois and Michigan Canal State Trail	41.513217	-88.169585	44.8	44.8	41.9	-2.90	45.1	42.2	-2.90
Grid		137_105	Illinois and Michigan Canal State Trail	41.580171	-88.170018	41.9	42.1	39.4	-2.70	42.4	40.2	-2.20
Grid		137_104	Illinois and Michigan Canal State Trail	41.571802	-88.169964	42.8	43	41.5	-1.50	43.3	42.3	-1.00
Grid		137_103	Illinois and Michigan Canal State Trail	41.563433	-88.169910	43.3	43.5	43.7	0.20	43.8	44.4	0.60
Grid		137_102	Illinois and Michigan Canal State Trail	41.555063	-88.169856	43.3	43.4	45.2	1.80	43.8	45.8	2.00
Grid		137_101	Illinois and Michigan Canal State Trail	41.546694	-88.169801	43.1	43.2	45.8	2.60	43.7	46.1	2.40
Grid		137_100	Illinois and Michigan Canal State Trail	41.538325	-88.169747	43.4	43.5	44.7	1.20	43.9	44.9	1.00
Grid		137_88	Des Plaines State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.437893	-88.169100	40.9	41	40.8	-0.20	41.7	41.5	-0.20
Grid		137_98	Illinois and Michigan Canal State Trail	41.521586	-88.169639	43.9	44	42.6	-1.40	44.3	42.7	-1.60
Grid		137_89	Des Plaines State Fish and Wildlife Area, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.446262	-88.169154	40.9	41	40.7	-0.30	41.7	41.4	-0.30
Grid		137_96	Illinois and Michigan Canal State Trail	41.504847	-88.169531	45	45.1	40.9	-4.20	45.3	41.2	-4.10
Grid		137_95	Illinois and Michigan Canal State Trail	41.496478	-88.169477	44.5	44.6	40.6	-4.00	44.9	41	-3.90
Grid		137_94	Illinois and Michigan Canal State Trail	41.488109	-88.169423	43.6	43.6	40.3	-3.30	44	40.8	-3.20
Grid		137_93	Illinois and Michigan Canal State Trail	41.479739	-88.169369	42.6	42.7	40	-2.70	43.1	40.6	-2.50
Grid		137_92	Illinois and Michigan Canal State Trail	41.471370	-88.169315	41.9	42	40.2	-1.80	42.5	40.7	-1.80
Grid		137_91	Illinois and Michigan Canal State Trail	41.463001	-88.169261	41.4	41.5	40.3	-1.20	42.1	40.9	-1.20
Grid		136_95	Illinois and Michigan Canal State Trail	41.496437	-88.180598	44.5	44.6	40.1	-4.50	44.8	40.4	-4.40
Grid		137_99	Illinois and Michigan Canal State Trail	41.529955	-88.169693	43.6	43.7	43.3	-0.40	44.2	43.5	-0.70
Grid		135_92	Illinois and Michigan Canal State Trail	41.471286	-88.191549	41.3	41.4	38.3	-3.10	41.8	38.9	-2.90
Grid		136_97	Illinois and Michigan Canal State Trail	41.513175	-88.180709	44.2	44.2	42	-2.20	44.5	42.3	-2.20
Grid		136_76	Midewin National Tallgrass Prairie National Forest	41.337419	-88.179548	39.4	39.5	39.5	0.00	40.2	40.1	-0.10
Grid		136_75	Des Plaines Game Propagation Center	41.329050	-88.179492	39.1	39.2	39.2	0.00	39.9	39.8	-0.10
Grid		135_97	Illinois and Michigan Canal State Trail	41.513133	-88.191833	43.6	43.7	42.3	-1.40	44	42.5	-1.50
Grid		135_96	Illinois and Michigan Canal State Trail	41.504764	-88.191776	44.6	44.6	41	-3.60	44.9	41.1	-3.80
Grid		135_95	Illinois and Michigan Canal State Trail	41.496394	-88.191719	44.5	44.5	39.9	-4.60	44.8	40.1	-4.70
Grid		136_78	Midewin National Tallgrass Prairie National Forest	41.354158	-88.179658	40	40	40	0.00	40.8	40.7	-0.10
Grid		135_93	Illinois and Michigan Canal State Trail	41.479656	-88.191606	42.5	42.5	38.7	-3.80	42.9	39.1	-3.80
Grid		136_79	Midewin National Tallgrass Prairie National Forest	41.362527	-88.179713	40.3	40.3	40.4	0.10	41.1	41	-0.10

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		135_91	Illinois and Michigan Canal State Trail	41.462917	-88.191492	40.6	40.7	38.4	-2.30	41.1	38.9	-2.20
Grid		135_90	Illinois and Michigan Canal State Trail	41.454548	-88.191435	40	40.1	38.7	-1.40	40.7	39.2	-1.50
Grid		135_89	Illinois and Michigan Canal State Trail	41.446178	-88.191378	39.6	39.7	39	-0.70	40.4	39.6	-0.80
Grid		135_88	Illinois and Michigan Canal State Trail	41.437809	-88.191322	39.6	39.7	39.3	-0.40	40.4	40	-0.40
Grid		135_87	Illinois and Michigan Canal State Trail	41.429440	-88.191265	39.7	39.8	39.6	-0.20	40.5	40.3	-0.20
Grid		135_86	Illinois and Michigan Canal State Trail	41.421070	-88.191208	39.9	40.1	40	-0.10	40.8	40.7	-0.10
Grid		142_98	Illinois and Michigan Canal State Trail	41.521776	-88.114012	45.8	45.9	43.3	-2.60	46.2	43.8	-2.40
Grid		135_94	Illinois and Michigan Canal State Trail	41.488025	-88.191663	43.6	43.7	39.4	-4.30	44	39.7	-4.30
Grid		136_87	Illinois and Michigan Canal State Trail	41.429482	-88.180155	40.5	40.5	40.4	-0.10	41.2	41.1	-0.10
Grid		135_84	Illinois and Michigan Canal State Trail	41.404332	-88.191095	40.5	40.6	40.6	0.00	41.3	41.3	0.00
Grid		136_94	Illinois and Michigan Canal State Trail	41.488067	-88.180543	43.6	43.7	39.9	-3.80	44	40.3	-3.70
Grid		136_93	Illinois and Michigan Canal State Trail	41.479698	-88.180487	42.5	42.6	39.4	-3.20	43	39.9	-3.10
Grid		136_92	Illinois and Michigan Canal State Trail	41.471329	-88.180432	41.6	41.6	39.3	-2.30	42.1	39.9	-2.20
Grid		136_91	Illinois and Michigan Canal State Trail	41.462959	-88.180377	41	41.1	39.4	-1.70	41.6	40	-1.60
Grid		136_90	Illinois and Michigan Canal State Trail	41.454590	-88.180321	40.5	40.6	39.6	-1.00	41.2	40.3	-0.90
Grid		136_77	Midewin National Tallgrass Prairie National Forest	41.345789	-88.179603	39.7	39.7	39.7	0.00	40.4	40.4	0.00
Grid		136_88	Illinois and Michigan Canal State Trail	41.437851	-88.180211	40.3	40.4	40.2	-0.20	41.1	40.9	-0.20
Grid		136_96	Illinois and Michigan Canal State Trail	41.504806	-88.180654	44.8	44.9	40.8	-4.10	45.1	41	-4.10
Grid		136_86	Midewin National Tallgrass Prairie National Forest, Illinois and Michigan Canal National Park (National Heritage Corridor)	41.421113	-88.180100	40.6	40.7	40.7	0.00	41.5	41.4	-0.10
Grid		136_85	Illinois and Michigan Canal State Trail	41.412743	-88.180045	40.8	40.9	40.9	0.00	41.6	41.6	0.00
Grid		136_84	Illinois and Michigan Canal State Trail	41.404374	-88.179989	40.9	41	41	0.00	41.7	41.6	-0.10
Grid		136_83	Des Plaines State Fish and Wildlife Area	41.396005	-88.179934	40.9	41	41	0.00	41.7	41.6	-0.10
Grid		136_82	Des Plaines State Fish and Wildlife Area	41.387635	-88.179879	40.8	41	41	0.00	41.7	41.7	0.00
Grid		136_81	Midewin National Tallgrass Prairie National Forest	41.379266	-88.179824	40.8	40.8	40.8	0.00	41.5	41.5	0.00
Grid		136_80	Midewin National Tallgrass Prairie National Forest	41.370897	-88.179768	40.6	40.6	40.6	0.00	41.3	41.3	0.00
Grid		136_89	Illinois and Michigan Canal State Trail	41.446221	-88.180266	40.3	40.3	39.9	-0.40	41	40.5	-0.50
Grid		148_97	Illinois and Michigan Canal State Trail	41.513599	-88.047220	43.9	44	43	-1.00	44.5	43.6	-0.90
Grid		148_105	Illinois and Michigan Canal State Trail	41.580554	-88.047526	47.6	47.6	45.8	-1.80	47.9	46.1	-1.80
Grid		148_104	Illinois and Michigan Canal State Trail	41.572184	-88.047488	47.4	47.4	44.5	-2.90	47.8	44.8	-3.00
Grid		148_103	Illinois and Michigan Canal State Trail	41.563815	-88.047450	46.8	46.8	44.2	-2.60	47.2	44.4	-2.80
Grid		148_102	Illinois and Michigan Canal State Trail	41.555446	-88.047411	46.3	46.4	44.3	-2.10	46.8	44.4	-2.40
Grid		148_101	Illinois and Michigan Canal State Trail	41.547076	-88.047373	45.6	45.7	44.4	-1.30	46.2	44.8	-1.40
Grid		148_100	Illinois and Michigan Canal State Trail	41.538707	-88.047335	44.7	44.8	44.2	-0.60	45.3	44.6	-0.70
Grid		148_79	Midewin National Tallgrass Prairie National Forest	41.362951	-88.046535	42	42.1	42.1	0.00	42.8	42.7	-0.10
Grid		148_98	Illinois and Michigan Canal State Trail	41.521968	-88.047258	43.8	43.9	43.6	-0.30	44.5	44.1	-0.40
Grid		148_108	Illinois and Michigan Canal State Trail	41.605662	-88.047641	45.9	46	46.1	0.10	46.4	47	0.60
Grid		148_96	Illinois and Michigan Canal State Trail	41.505230	-88.047182	43.6	43.7	42.6	-1.10	44.3	43.2	-1.10
Grid		148_95	Illinois and Michigan Canal State Trail	41.496860	-88.047144	43	43.2	42.4	-0.80	43.8	43	-0.80
Grid		148_94	Illinois and Michigan Canal State Trail	41.488491	-88.047106	42.6	42.7	42.3	-0.40	43.4	42.9	-0.50
Grid		148_82	Midewin National Tallgrass Prairie National Forest	41.388059	-88.046649	42.2	42.3	42.3	0.00	43	42.9	-0.10
Grid		148_81	Midewin National Tallgrass Prairie National Forest	41.379690	-88.046611	42.1	42.2	42.2	0.00	42.9	42.9	0.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		142_96	Illinois and Michigan Canal State Trail	41.505037	-88.113918	44.7	44.8	42.5	-2.30	45.2	43	-2.20
Grid		148_99	Illinois and Michigan Canal State Trail	41.530338	-88.047297	44	44.1	43.9	-0.20	44.7	44.4	-0.30
Grid		148_115	Illinois and Michigan Canal State Trail	41.664247	-88.047909	42.6	42.7	41.9	-0.80	43.6	42.7	-0.90
Grid		149_81	Midewin National Tallgrass Prairie National Forest	41.379718	-88.035510	42.1	42.1	42.1	0.00	42.8	42.8	0.00
Grid		149_80	Midewin National Tallgrass Prairie National Forest	41.371349	-88.035473	41.9	42	42	0.00	42.7	42.6	-0.10
Grid		149_79	Midewin National Tallgrass Prairie National Forest	41.362979	-88.035436	41.8	41.9	41.9	0.00	42.5	42.5	0.00
Grid		149_78	Midewin National Tallgrass Prairie National Forest	41.354610	-88.035400	41.7	41.8	41.8	0.00	42.4	42.4	0.00
Grid		149_61	Kankakee State Fish and Wildlife Area	41.212331	-88.034780	39	39.1	39.1	0.00	39.8	39.7	-0.10
Grid		148_118	Illinois and Michigan Canal State Trail	41.689355	-88.048024	41.9	42.1	42.1	0.00	43	43.2	0.20
Grid		148_106	Illinois and Michigan Canal State Trail	41.588923	-88.047564	47.1	47.1	46.2	-0.90	47.5	46.7	-0.80
Grid		148_116	Illinois and Michigan Canal State Trail	41.672617	-88.047947	42.1	42.3	41.9	-0.40	43.3	42.7	-0.60
Grid		148_107	Illinois and Michigan Canal State Trail	41.597292	-88.047603	46.3	46.3	45.8	-0.50	46.8	46.6	-0.20
Grid		148_114	Illinois and Michigan Canal State Trail	41.655878	-88.047871	43.7	43.8	42.1	-1.70	44.4	42.8	-1.60
Grid		148_113	Illinois and Michigan Canal State Trail	41.647508	-88.047832	44.4	44.4	42.4	-2.00	45	43.2	-1.80
Grid		148_112	Illinois and Michigan Canal State Trail	41.639139	-88.047794	44.4	44.5	43	-1.50	45	43.8	-1.20
Grid		148_111	Illinois and Michigan Canal State Trail	41.630770	-88.047756	44.7	44.7	43.9	-0.80	45.2	44.5	-0.70
Grid		148_110	Illinois and Michigan Canal State Trail	41.622400	-88.047717	45.5	45.5	45	-0.50	45.9	45.8	-0.10
Grid		148_109	Illinois and Michigan Canal State Trail	41.614031	-88.047679	45.9	45.9	46.1	0.20	46.3	46.8	0.50
Grid		148_78	Midewin National Tallgrass Prairie National Forest	41.354582	-88.046497	41.9	41.9	41.9	0.00	42.6	42.6	0.00
Grid		148_117	Illinois and Michigan Canal State Trail	41.680986	-88.047986	41.9	42.1	41.9	-0.20	43.1	42.8	-0.30
Grid		147_96	Illinois and Michigan Canal State Trail	41.505200	-88.058305	43.3	43.4	42.3	-1.10	44	42.9	-1.10
Grid		147_104	Illinois and Michigan Canal State Trail	41.572155	-88.058622	47.3	47.3	45	-2.30	47.6	45.2	-2.40
Grid		147_103	Illinois and Michigan Canal State Trail	41.563786	-88.058582	47.1	47.2	44.3	-2.90	47.5	44.5	-3.00
Grid		147_102	Illinois and Michigan Canal State Trail	41.555416	-88.058543	46.7	46.8	44.2	-2.60	47.2	44.4	-2.80
Grid		147_101	Illinois and Michigan Canal State Trail	41.547047	-88.058503	46	46.1	44.3	-1.80	46.6	44.6	-2.00
Grid		147_100	Illinois and Michigan Canal State Trail	41.538678	-88.058463	45	45.1	43.9	-1.20	45.6	44.3	-1.30
Grid		147_99	Illinois and Michigan Canal State Trail	41.530308	-88.058424	44.1	44.1	43.6	-0.50	44.7	44.1	-0.60
Grid		148_80	Midewin National Tallgrass Prairie National Forest	41.371320	-88.046573	42.1	42.1	42.1	0.00	42.8	42.8	0.00
Grid		147_97	Illinois and Michigan Canal State Trail	41.513570	-88.058345	43.6	43.7	42.7	-1.00	44.2	43.3	-0.90
Grid		147_107	Illinois and Michigan Canal State Trail	41.597263	-88.058741	45.9	46	45.9	-0.10	46.4	46.7	0.30
Grid		147_95	Illinois and Michigan Canal State Trail	41.496831	-88.058265	42.8	42.8	41.9	-0.90	43.4	42.5	-0.90
Grid		147_94	Illinois and Michigan Canal State Trail	41.488462	-88.058226	42.2	42.4	41.8	-0.60	43	42.4	-0.60
Grid		147_82	Midewin National Tallgrass Prairie National Forest	41.388030	-88.057751	42	42.1	42.1	0.00	42.8	42.7	-0.10
Grid		147_81	Midewin National Tallgrass Prairie National Forest	41.379660	-88.057712	42	42.1	42.1	0.00	42.7	42.7	0.00
Grid		147_80	Midewin National Tallgrass Prairie National Forest	41.371291	-88.057672	42	42	42	0.00	42.7	42.7	0.00
Grid		147_79	Midewin National Tallgrass Prairie National Forest	41.362922	-88.057633	41.9	42	42	0.00	42.7	42.7	0.00
Grid		147_98	Illinois and Michigan Canal State Trail	41.521939	-88.058384	43.6	43.7	43.3	-0.40	44.3	43.8	-0.50
Grid		147_114	Illinois and Michigan Canal State Trail	41.655849	-88.059019	42.8	43	41.6	-1.40	43.7	42.4	-1.30
Grid		148_77	Midewin National Tallgrass Prairie National Forest	41.346212	-88.046459	41.7	41.9	41.9	0.00	42.5	42.5	0.00
Grid		148_76	Midewin National Tallgrass Prairie National Forest	41.337843	-88.046421	41.7	41.7	41.7	0.00	42.4	42.4	0.00
Grid		148_62	Kankakee State Fish and Wildlife Area	41.220672	-88.045890	39.3	39.4	39.4	0.00	40	40	0.00
Grid		148_27	Milks Grove State Fish and Wildlife Area	40.927745	-88.044572	37.4	37.5	37.5	0.00	38.2	38.2	0.00
Grid		147_118	Illinois and Michigan Canal State Trail	41.689326	-88.059179	41.4	41.5	41.7	0.20	42.4	42.9	0.50

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		147_117	Illinois and Michigan Canal State Trail	41.680957	-88.059139	41.4	41.5	41.5	0.00	42.5	42.7	0.20
Grid		147_105	Illinois and Michigan Canal State Trail	41.580524	-88.058662	46.9	47	46	-1.00	47.3	46.4	-0.90
Grid		147_115	Illinois and Michigan Canal State Trail	41.664218	-88.059059	41.9	42	41.4	-0.60	43	42.3	-0.70
Grid		147_106	Illinois and Michigan Canal State Trail	41.588894	-88.058701	46.4	46.4	46	-0.40	46.8	46.6	-0.20
Grid		147_113	Illinois and Michigan Canal State Trail	41.647479	-88.058980	43.9	44	41.8	-2.20	44.6	42.6	-2.00
Grid		147_112	Illinois and Michigan Canal State Trail	41.639110	-88.058940	44.1	44.2	42.3	-1.90	44.7	43	-1.70
Grid		147_111	Illinois and Michigan Canal State Trail	41.630741	-88.058900	44.1	44.1	42.9	-1.20	44.7	43.6	-1.10
Grid		147_110	Illinois and Michigan Canal State Trail	41.622371	-88.058860	44.7	44.7	44	-0.70	45.2	44.7	-0.50
Grid		147_109	Illinois and Michigan Canal State Trail	41.614002	-88.058821	45.4	45.4	45.3	-0.10	45.8	46.1	0.30
Grid		147_108	Illinois and Michigan Canal State Trail	41.605632	-88.058781	45.8	45.8	46	0.20	46.1	46.8	0.70
Grid		149_95	Illinois and Michigan Canal State Trail	41.496889	-88.036023	43.4	43.4	42.8	-0.60	44.1	43.4	-0.70
Grid		147_116	Illinois and Michigan Canal State Trail	41.672587	-88.059099	41.5	41.7	41.5	-0.20	42.6	42.4	-0.20
Grid		150_114	Illinois and Michigan Canal State Trail	41.655933	-88.025573	45.2	45.2	43.2	-2.00	45.6	44	-1.60
Grid		151_61	Kankakee State Fish and Wildlife Area	41.212384	-88.012635	38.9	39	39	0.00	39.6	39.6	0.00
Grid		151_60	Kankakee State Fish and Wildlife Area	41.204015	-88.012601	38.8	38.9	38.9	0.00	39.5	39.5	0.00
Grid		150_120	Illinois and Michigan Canal State Trail	41.706149	-88.025786	43.3	43.4	43.8	0.40	44.3	45.5	1.20
Grid		150_119	Illinois and Michigan Canal State Trail	41.697780	-88.025751	43	43.2	43.5	0.30	44.1	44.8	0.70
Grid		150_118	Illinois and Michigan Canal State Trail	41.689411	-88.025715	42.9	43.1	43.1	0.00	44.1	44.4	0.30
Grid		150_117	Illinois and Michigan Canal State Trail	41.681041	-88.025680	43	43.1	43	-0.10	44.1	44	-0.10
Grid		149_82	Midewin National Tallgrass Prairie National Forest	41.388087	-88.035546	42.2	42.2	42.2	0.00	42.9	42.9	0.00
Grid		150_115	Illinois and Michigan Canal State Trail	41.664303	-88.025609	44.2	44.2	42.9	-1.30	44.8	43.7	-1.10
Grid		151_113	Illinois and Michigan Canal State Trail	41.647590	-88.014391	45.3	45.3	44.2	-1.10	45.7	45	-0.70
Grid		150_113	Illinois and Michigan Canal State Trail	41.647564	-88.025538	45.1	45.1	43.6	-1.50	45.6	44.4	-1.20
Grid		150_104	Illinois and Michigan Canal State Trail	41.572240	-88.025219	46.3	46.3	44.3	-2.00	46.8	44.7	-2.10
Grid		150_103	Illinois and Michigan Canal State Trail	41.563871	-88.025184	45.7	45.8	44.4	-1.40	46.3	44.7	-1.60
Grid		150_102	Illinois and Michigan Canal State Trail	41.555501	-88.025148	45.7	45.8	44.6	-1.20	46.3	44.9	-1.40
Grid		150_101	Illinois and Michigan Canal State Trail	41.547132	-88.025113	45.3	45.4	44.9	-0.50	46	45.3	-0.70
Grid		150_100	Illinois and Michigan Canal State Trail	41.538762	-88.025078	44.7	44.8	44.7	-0.10	45.4	45.2	-0.20
Grid		150_116	Illinois and Michigan Canal State Trail	41.672672	-88.025644	43.3	43.4	42.9	-0.50	44.2	43.8	-0.40
Grid		151_120	Illinois and Michigan Canal State Trail	41.706175	-88.014629	43.6	43.8	44.2	0.40	44.8	45.8	1.00
Grid		132_58	Mazonia-Braidwood State Fish and Wildlife Area	41.186595	-88.222829	37.6	37.7	37.7	0.00	38.3	38.3	0.00
Grid		152_118	Illinois and Michigan Canal State Trail	41.689462	-88.003406	43.5	43.6	43.8	0.20	44.4	45	0.60
Grid		152_117	Illinois and Michigan Canal State Trail	41.681092	-88.003373	43.6	43.6	43.8	0.20	44.4	45.3	0.90
Grid		152_116	Illinois and Michigan Canal State Trail	41.672723	-88.003341	44.4	44.4	43.9	-0.50	45	45.4	0.40
Grid		152_115	Illinois and Michigan Canal State Trail	41.664354	-88.003308	45.5	45.5	43.9	-1.60	46	45.1	-0.90
Grid		152_114	Illinois and Michigan Canal State Trail	41.655984	-88.003276	45.7	45.7	44.3	-1.40	46	45.2	-0.80
Grid		151_81	Midewin National Tallgrass Prairie National Forest	41.379771	-88.013307	41.4	41.5	41.5	0.00	42.2	42.1	-0.10
Grid		152_60	Kankakee State Fish and Wildlife Area	41.204040	-88.001530	38.9	38.9	38.9	0.00	39.6	39.5	-0.10
Grid		151_82	Midewin National Tallgrass Prairie National Forest	41.388140	-88.013341	41.6	41.7	41.7	0.00	42.4	42.3	-0.10
Grid		151_119	Illinois and Michigan Canal State Trail	41.697806	-88.014595	43.4	43.6	44	0.40	44.5	45.7	1.20
Grid		151_118	Illinois and Michigan Canal State Trail	41.689437	-88.014561	43.3	43.4	43.9	0.50	44.3	45.5	1.20
Grid		151_117	Illinois and Michigan Canal State Trail	41.681067	-88.014527	43.3	43.4	43.5	0.10	44.2	44.9	0.70
Grid		151_116	Illinois and Michigan Canal State Trail	41.672698	-88.014493	43.8	43.9	43.4	-0.50	44.4	44.4	0.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		151_115	Illinois and Michigan Canal State Trail	41.664329	-88.014459	44.9	45	43.4	-1.60	45.5	44.3	-1.20
Grid		151_114	Illinois and Michigan Canal State Trail	41.655959	-88.014425	45.5	45.5	43.7	-1.80	45.9	44.5	-1.40
Grid		150_97	Illinois and Michigan Canal State Trail	41.513654	-88.024972	44.4	44.5	43.7	-0.80	45.1	44.3	-0.80
Grid		152_113	Illinois and Michigan Canal State Trail	41.647615	-88.003243	45.7	45.7	45	-0.70	46.1	45.8	-0.30
Grid		149_102	Illinois and Michigan Canal State Trail	41.555474	-88.036280	45.8	45.9	44.4	-1.50	46.4	44.7	-1.70
Grid		150_99	Illinois and Michigan Canal State Trail	41.530393	-88.025043	44.3	44.4	44.4	0.00	45	45	0.00
Grid		149_109	Illinois and Michigan Canal State Trail	41.614059	-88.036538	46.2	46.3	46.4	0.10	46.7	47.2	0.50
Grid		149_108	Illinois and Michigan Canal State Trail	41.605690	-88.036501	46.2	46.3	45.9	-0.40	46.7	46.8	0.10
Grid		149_107	Illinois and Michigan Canal State Trail	41.597321	-88.036464	47	47	46.1	-0.90	47.4	46.7	-0.70
Grid		149_106	Illinois and Michigan Canal State Trail	41.588951	-88.036427	47.8	47.8	46.2	-1.60	48.1	46.6	-1.50
Grid		149_105	Illinois and Michigan Canal State Trail	41.580582	-88.036390	47.7	47.8	45.3	-2.50	48.1	45.6	-2.50
Grid		149_111	Illinois and Michigan Canal State Trail	41.630798	-88.036611	45.4	45.4	44.7	-0.70	45.8	45.5	-0.30
Grid		149_103	Illinois and Michigan Canal State Trail	41.563843	-88.036317	46.2	46.3	44.2	-2.10	46.8	44.4	-2.40
Grid		149_112	Illinois and Michigan Canal State Trail	41.639167	-88.036648	44.8	44.8	43.7	-1.10	45.2	44.4	-0.80
Grid		149_101	Illinois and Michigan Canal State Trail	41.547105	-88.036243	45.3	45.4	44.6	-0.80	46	45	-1.00
Grid		149_100	Illinois and Michigan Canal State Trail	41.538735	-88.036206	44.6	44.7	44.4	-0.30	45.3	44.9	-0.40
Grid		149_99	Illinois and Michigan Canal State Trail	41.530366	-88.036170	44.1	44.2	44.2	0.00	44.8	44.7	-0.10
Grid		149_98	Illinois and Michigan Canal State Trail	41.521997	-88.036133	44.2	44.2	43.8	-0.40	44.8	44.4	-0.40
Grid		149_97	Illinois and Michigan Canal State Trail	41.513627	-88.036096	44.2	44.3	43.4	-0.90	44.8	44	-0.80
Grid		149_96	Illinois and Michigan Canal State Trail	41.505258	-88.036059	43.9	43.9	43	-0.90	44.5	43.6	-0.90
Grid		147_76	Midewin National Tallgrass Prairie National Forest	41.337814	-88.057515	41.7	41.8	41.8	0.00	42.5	42.5	0.00
Grid		149_104	Illinois and Michigan Canal State Trail	41.572213	-88.036354	46.9	46.9	44.3	-2.60	47.3	44.6	-2.70
Grid		150_61	Kankakee State Fish and Wildlife Area	41.212358	-88.023707	38.9	39	39	0.00	39.6	39.6	0.00
Grid		149_94	Illinois and Michigan Canal State Trail	41.488519	-88.035986	43	43.1	42.7	-0.40	43.7	43.4	-0.30
Grid		150_96	Illinois and Michigan Canal State Trail	41.505285	-88.024937	44	44.1	43.3	-0.80	44.8	43.9	-0.90
Grid		150_95	Illinois and Michigan Canal State Trail	41.496916	-88.024901	43.6	43.6	43.1	-0.50	44.3	43.7	-0.60
Grid		150_94	Illinois and Michigan Canal State Trail	41.488546	-88.024866	43.2	43.2	43	-0.20	43.9	43.6	-0.30
Grid		150_82	Midewin National Tallgrass Prairie National Forest	41.388114	-88.024443	41.9	42	42	0.00	42.7	42.6	-0.10
Grid		150_81	Midewin National Tallgrass Prairie National Forest	41.379745	-88.024408	41.8	41.8	41.8	0.00	42.5	42.5	0.00
Grid		149_110	Illinois and Michigan Canal State Trail	41.622429	-88.036575	46.1	46.1	46	-0.10	46.4	46.7	0.30
Grid		150_79	Midewin National Tallgrass Prairie National Forest	41.363006	-88.024338	41.5	41.5	41.5	0.00	42.2	42.2	0.00
Grid		150_98	Illinois and Michigan Canal State Trail	41.522024	-88.025007	44.4	44.5	44.1	-0.40	45.1	44.7	-0.40
Grid		149_119	Illinois and Michigan Canal State Trail	41.697753	-88.036907	42.5	42.7	42.7	0.00	43.6	43.9	0.30
Grid		149_118	Illinois and Michigan Canal State Trail	41.689383	-88.036870	42.4	42.6	42.4	-0.20	43.6	43.4	-0.20
Grid		149_117	Illinois and Michigan Canal State Trail	41.681014	-88.036833	42.5	42.7	42.4	-0.30	43.7	43.3	-0.40
Grid		149_116	Illinois and Michigan Canal State Trail	41.672645	-88.036796	42.7	42.8	42.4	-0.40	43.8	43.2	-0.60
Grid		149_115	Illinois and Michigan Canal State Trail	41.664275	-88.036759	43.4	43.5	42.5	-1.00	44.3	43.3	-1.00
Grid		149_114	Illinois and Michigan Canal State Trail	41.655906	-88.036722	44.5	44.6	42.8	-1.80	45.1	43.5	-1.60
Grid		149_113	Illinois and Michigan Canal State Trail	41.647537	-88.036685	44.9	44.9	43	-1.90	45.3	43.8	-1.50
Grid		150_80	Midewin National Tallgrass Prairie National Forest	41.371376	-88.024373	41.6	41.7	41.8	0.10	42.4	42.3	-0.10
Grid		143_112	Illinois and Michigan Canal State Trail	41.638982	-88.103523	41.7	41.7	39.6	-2.10	42.3	40.8	-1.50
Grid		144_80	Midewin National Tallgrass Prairie National Forest	41.371196	-88.090972	40.6	40.6	40.6	0.00	41.3	41.3	0.00
Grid		144_79	Midewin National Tallgrass Prairie National Forest	41.362827	-88.090928	40.6	40.7	40.7	0.00	41.4	41.4	0.00

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		144_78	Midewin National Tallgrass Prairie National Forest	41.354458	-88.090884	40.7	40.8	40.8	0.00	41.5	41.4	-0.10
Grid		144_77	Midewin National Tallgrass Prairie National Forest	41.346088	-88.090840	40.8	40.8	40.8	0.00	41.5	41.5	0.00
Grid		144_76	Midewin National Tallgrass Prairie National Forest	41.337719	-88.090797	40.9	40.9	40.9	0.00	41.6	41.6	0.00
Grid		143_115	Illinois and Michigan Canal State Trail	41.664090	-88.103660	39	39	39.2	0.20	39.8	40.4	0.60
Grid		144_110	Illinois and Michigan Canal State Trail	41.622277	-88.092289	42.8	42.9	41	-1.90	43.6	41.9	-1.70
Grid		143_113	Illinois and Michigan Canal State Trail	41.647351	-88.103569	40.2	40.3	39.4	-0.90	41.1	40.6	-0.50
Grid		144_94	Illinois and Michigan Canal State Trail	41.488367	-88.091585	42.2	42.3	41.3	-1.00	42.9	41.9	-1.00
Grid		143_111	Illinois and Michigan Canal State Trail	41.630612	-88.103477	42.5	42.6	39.9	-2.70	43.1	41.1	-2.00
Grid		143_110	Illinois and Michigan Canal State Trail	41.622243	-88.103432	42.3	42.4	40.3	-2.10	43.1	41.4	-1.70
Grid		143_109	Illinois and Michigan Canal State Trail	41.613874	-88.103386	42.5	42.7	41	-1.70	43.4	41.9	-1.50
Grid		143_108	Illinois and Michigan Canal State Trail	41.605504	-88.103341	43.3	43.4	42.1	-1.30	44	43	-1.00
Grid		143_107	Illinois and Michigan Canal State Trail	41.597135	-88.103295	44.4	44.4	43.8	-0.60	44.9	44.6	-0.30
Grid		143_106	Illinois and Michigan Canal State Trail	41.588766	-88.103250	45	45.1	45.2	0.10	45.6	46	0.40
Grid		143_114	Illinois and Michigan Canal State Trail	41.655720	-88.103614	39.4	39.5	39.2	-0.30	40.2	40.5	0.30
Grid		144_101	Illinois and Michigan Canal State Trail	41.546953	-88.091893	46.9	47	44.4	-2.60	47.3	44.6	-2.70
Grid		147_78	Midewin National Tallgrass Prairie National Forest	41.354552	-88.057594	41.9	42	42	0.00	42.6	42.6	0.00
Grid		144_108	Illinois and Michigan Canal State Trail	41.605538	-88.092201	44.2	44.3	43.4	-0.90	44.7	44.1	-0.60
Grid		144_107	Illinois and Michigan Canal State Trail	41.597169	-88.092157	45.1	45.1	45	-0.10	45.5	45.8	0.30
Grid		144_106	Illinois and Michigan Canal State Trail	41.588799	-88.092113	45.4	45.4	45.8	0.40	45.9	46.5	0.60
Grid		144_105	Illinois and Michigan Canal State Trail	41.580430	-88.092069	45.3	45.4	45.9	0.50	45.9	46.6	0.70
Grid		144_104	Illinois and Michigan Canal State Trail	41.572061	-88.092025	45.4	45.4	45.9	0.50	45.8	46.3	0.50
Grid		144_81	Midewin National Tallgrass Prairie National Forest	41.379566	-88.091015	40.5	40.6	40.6	0.00	41.3	41.2	-0.10
Grid		144_102	Illinois and Michigan Canal State Trail	41.555322	-88.091937	46.6	46.7	44.5	-2.20	47	44.8	-2.20
Grid		144_82	Midewin National Tallgrass Prairie National Forest	41.387935	-88.091059	40.4	40.4	40.4	0.00	41.1	41	-0.10
Grid		144_100	Illinois and Michigan Canal State Trail	41.538583	-88.091849	46.5	46.5	43.8	-2.70	46.9	44.1	-2.80
Grid		144_99	Illinois and Michigan Canal State Trail	41.530214	-88.091805	45.8	45.8	43.6	-2.20	46.2	43.9	-2.30
Grid		144_98	Illinois and Michigan Canal State Trail	41.521845	-88.091761	44.9	44.9	43.3	-1.60	45.4	43.8	-1.60
Grid		144_97	Illinois and Michigan Canal State Trail	41.513475	-88.091717	44.2	44.3	42.7	-1.60	44.7	43.3	-1.40
Grid		144_96	Illinois and Michigan Canal State Trail	41.505106	-88.091673	43.7	43.8	42.2	-1.60	44.3	42.8	-1.50
Grid		144_95	Illinois and Michigan Canal State Trail	41.496737	-88.091629	43	43.1	41.7	-1.40	43.7	42.4	-1.30
Grid		143_103	Illinois and Michigan Canal State Trail	41.563658	-88.103114	45.1	45.1	45.6	0.50	45.5	45.9	0.40
Grid		144_103	Illinois and Michigan Canal State Trail	41.563691	-88.091981	45.7	45.8	45.2	-0.60	46.1	45.5	-0.60
Grid		142_105	Illinois and Michigan Canal State Trail	41.580361	-88.114340	44.8	45	45.3	0.30	45.4	46	0.60
Grid		143_105	Illinois and Michigan Canal State Trail	41.580396	-88.103204	45.1	45.1	45.7	0.60	45.6	46.4	0.80
Grid		142_112	Illinois and Michigan Canal State Trail	41.638947	-88.114669	40.6	40.6	38.8	-1.80	41.2	40	-1.20
Grid		142_111	Illinois and Michigan Canal State Trail	41.630578	-88.114622	41.8	41.9	39.2	-2.70	42.4	40.4	-2.00
Grid		142_110	Illinois and Michigan Canal State Trail	41.622208	-88.114575	42	42	39.6	-2.40	42.6	40.8	-1.80
Grid		142_109	Illinois and Michigan Canal State Trail	41.613839	-88.114528	41.8	42	40.2	-1.80	42.7	41.3	-1.40
Grid		142_108	Illinois and Michigan Canal State Trail	41.605470	-88.114481	42.5	42.6	41	-1.60	43.2	41.9	-1.30
Grid		142_114	Illinois and Michigan Canal State Trail	41.655686	-88.114763	38.5	38.6	38.5	-0.10	39.2	39.8	0.60
Grid		142_106	Illinois and Michigan Canal State Trail	41.588731	-88.114387	44.6	44.7	44.2	-0.50	45.1	45	-0.10
Grid		143_76	Midewin National Tallgrass Prairie National Forest	41.337685	-88.101891	40.3	40.3	40.3	0.00	41	41	0.00
Grid		142_104	Illinois and Michigan Canal State Trail	41.571992	-88.114293	44.6	44.7	45.8	1.10	45.2	46.4	1.20

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		142_103	Illinois and Michigan Canal State Trail	41.563623	-88.114246	44.6	44.7	45.8	1.10	45.1	46.1	1.00
Grid		142_102	Illinois and Michigan Canal State Trail	41.555254	-88.114199	45.1	45.1	45.1	0.00	45.5	45.3	-0.20
Grid		142_101	Illinois and Michigan Canal State Trail	41.546884	-88.114152	45.9	46	44.6	-1.40	46.4	44.7	-1.70
Grid		142_100	Illinois and Michigan Canal State Trail	41.538515	-88.114106	46.6	46.7	43.9	-2.80	47	44.1	-2.90
Grid		142_99	Illinois and Michigan Canal State Trail	41.530145	-88.114059	46.3	46.4	43.5	-2.90	46.7	43.8	-2.90
Grid		152_120	Illinois and Michigan Canal State Trail	41.706200	-88.003471	44	44.1	44.1	0.00	45	45.1	0.10
Grid		142_107	Illinois and Michigan Canal State Trail	41.597100	-88.114434	43.5	43.6	42.5	-1.10	44.1	43.3	-0.80
Grid		143_95	Illinois and Michigan Canal State Trail	41.496703	-88.102750	43.3	43.5	41.9	-1.60	44	42.5	-1.50
Grid		144_111	Illinois and Michigan Canal State Trail	41.630646	-88.092333	42.9	43	40.6	-2.40	43.6	41.5	-2.10
Grid		143_102	Illinois and Michigan Canal State Trail	41.555288	-88.103068	45.8	45.9	44.8	-1.10	46.2	45	-1.20
Grid		143_101	Illinois and Michigan Canal State Trail	41.546919	-88.103023	46.7	46.7	44.4	-2.30	47.1	44.7	-2.40
Grid		143_100	Illinois and Michigan Canal State Trail	41.538550	-88.102977	46.7	46.8	43.9	-2.90	47.1	44.2	-2.90
Grid		143_99	Illinois and Michigan Canal State Trail	41.530180	-88.102932	46.2	46.2	43.6	-2.60	46.6	43.9	-2.70
Grid		143_98	Illinois and Michigan Canal State Trail	41.521811	-88.102886	45.5	45.6	43.4	-2.20	45.9	43.9	-2.00
Grid		142_113	Illinois and Michigan Canal State Trail	41.647316	-88.114716	39.2	39.3	38.6	-0.70	40	39.9	-0.10
Grid		143_96	Illinois and Michigan Canal State Trail	41.505072	-88.102796	44.1	44.2	42.4	-1.80	44.7	42.9	-1.80
Grid		143_104	Illinois and Michigan Canal State Trail	41.572027	-88.103159	45	45	46	1.00	45.4	46.5	1.10
Grid		143_94	Illinois and Michigan Canal State Trail	41.488334	-88.102705	42.5	42.6	41.5	-1.10	43.2	42.1	-1.10
Grid		143_82	Midewin National Tallgrass Prairie National Forest	41.387901	-88.102162	39.8	39.9	39.9	0.00	40.5	40.5	0.00
Grid		143_81	Midewin National Tallgrass Prairie National Forest	41.379532	-88.102116	39.8	39.9	39.9	0.00	40.6	40.5	-0.10
Grid		143_80	Midewin National Tallgrass Prairie National Forest	41.371163	-88.102071	39.8	40	39.9	-0.10	40.6	40.6	0.00
Grid		143_79	Midewin National Tallgrass Prairie National Forest	41.362793	-88.102026	39.9	40	40	0.00	40.7	40.6	-0.10
Grid		143_78	Midewin National Tallgrass Prairie National Forest	41.354424	-88.101981	40	40.1	40.1	0.00	40.8	40.7	-0.10
Grid		143_77	Midewin National Tallgrass Prairie National Forest	41.346055	-88.101936	40.1	40.2	40.3	0.10	40.9	40.9	0.00
Grid		143_97	Illinois and Michigan Canal State Trail	41.513442	-88.102841	44.9	44.9	42.9	-2.00	45.4	43.4	-2.00
Grid		146_82	Midewin National Tallgrass Prairie National Forest	41.387999	-88.068854	41.6	41.6	41.6	0.00	42.3	42.3	0.00
Grid		146_101	Illinois and Michigan Canal State Trail	41.547017	-88.069633	46.5	46.5	44.2	-2.30	46.9	44.4	-2.50
Grid		146_100	Illinois and Michigan Canal State Trail	41.538647	-88.069592	45.5	45.6	43.8	-1.80	46	44.2	-1.80
Grid		146_99	Illinois and Michigan Canal State Trail	41.530278	-88.069551	44.4	44.5	43.5	-1.00	45	43.9	-1.10
Grid		146_98	Illinois and Michigan Canal State Trail	41.521909	-88.069510	43.7	43.8	43.2	-0.60	44.4	43.7	-0.70
Grid		146_97	Illinois and Michigan Canal State Trail	41.513539	-88.069469	43.5	43.6	42.6	-1.00	44.2	43.2	-1.00
Grid		146_96	Illinois and Michigan Canal State Trail	41.505170	-88.069428	43.3	43.4	42.1	-1.30	43.9	42.7	-1.20
Grid		144_109	Illinois and Michigan Canal State Trail	41.613907	-88.092245	43.3	43.3	41.9	-1.40	44	42.7	-1.30
Grid		146_94	Illinois and Michigan Canal State Trail	41.488431	-88.069345	42	42.1	41.4	-0.70	42.7	42	-0.70
Grid		146_104	Illinois and Michigan Canal State Trail	41.572125	-88.069756	46.7	46.7	45.4	-1.30	47	45.7	-1.30
Grid		146_81	Midewin National Tallgrass Prairie National Forest	41.379630	-88.068813	41.6	41.7	41.7	0.00	42.4	42.4	0.00
Grid		146_80	Midewin National Tallgrass Prairie National Forest	41.371261	-88.068772	41.6	41.7	41.7	0.00	42.4	42.4	0.00
Grid		146_79	Midewin National Tallgrass Prairie National Forest	41.362891	-88.068731	41.7	41.8	41.8	0.00	42.4	42.4	0.00
Grid		146_78	Midewin National Tallgrass Prairie National Forest	41.354522	-88.068690	41.6	41.7	41.8	0.10	42.4	42.4	0.00
Grid		146_77	Midewin National Tallgrass Prairie National Forest	41.346153	-88.068650	41.6	41.8	41.7	-0.10	42.4	42.4	0.00
Grid		146_76	Midewin National Tallgrass Prairie National Forest	41.337783	-88.068609	41.6	41.7	41.7	0.00	42.3	42.3	0.00
Grid		146_95	Illinois and Michigan Canal State Trail	41.496801	-88.069386	42.6	42.7	41.6	-1.10	43.3	42.2	-1.10
Grid		146_111	Illinois and Michigan Canal State Trail	41.630710	-88.070044	43.6	43.7	42	-1.70	44.3	42.8	-1.50

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		142_97	Illinois and Michigan Canal State Trail	41.513407	-88.113965	45.3	45.3	42.8	-2.50	45.8	43.4	-2.40
Grid		147_63	Kankakee State Fish and Wildlife Area	41.229012	-88.057003	39.7	39.8	39.7	-0.10	40.4	40.4	0.00
Grid		146_117	Illinois and Michigan Canal State Trail	41.680926	-88.070292	40.7	40.9	41.1	0.20	41.7	42.2	0.50
Grid		146_116	Illinois and Michigan Canal State Trail	41.672557	-88.070251	40.9	41.1	41	-0.10	41.9	42.2	0.30
Grid		146_115	Illinois and Michigan Canal State Trail	41.664187	-88.070209	41.3	41.4	41	-0.40	42.3	42.1	-0.20
Grid		146_114	Illinois and Michigan Canal State Trail	41.655818	-88.070168	42	42.1	41.1	-1.00	43	42.1	-0.90
Grid		146_102	Illinois and Michigan Canal State Trail	41.555386	-88.069674	47	47	44.2	-2.80	47.3	44.4	-2.90
Grid		146_112	Illinois and Michigan Canal State Trail	41.639079	-88.070086	43.6	43.7	41.6	-2.10	44.3	42.3	-2.00
Grid		146_103	Illinois and Michigan Canal State Trail	41.563755	-88.069715	47	47.1	44.4	-2.70	47.4	44.7	-2.70
Grid		146_110	Illinois and Michigan Canal State Trail	41.622341	-88.070003	43.9	44	42.9	-1.10	44.6	43.6	-1.00
Grid		146_109	Illinois and Michigan Canal State Trail	41.613971	-88.069962	44.7	44.8	44.2	-0.60	45.2	45	-0.20
Grid		146_108	Illinois and Michigan Canal State Trail	41.605602	-88.069921	45.4	45.5	45.6	0.10	45.8	46.4	0.60
Grid		146_107	Illinois and Michigan Canal State Trail	41.597233	-88.069880	45.7	45.8	46	0.20	46.2	46.8	0.60
Grid		146_106	Illinois and Michigan Canal State Trail	41.588863	-88.069839	46	46	45.9	-0.10	46.4	46.6	0.20
Grid		146_105	Illinois and Michigan Canal State Trail	41.580494	-88.069797	46.2	46.3	46	-0.30	46.7	46.5	-0.20
Grid		145_115	Illinois and Michigan Canal State Trail	41.664156	-88.081360	40.6	40.7	40.5	-0.20	41.5	41.7	0.20
Grid		146_113	Illinois and Michigan Canal State Trail	41.647449	-88.070127	43.2	43.3	41.3	-2.00	44	42.1	-1.90
Grid		145_78	Midewin National Tallgrass Prairie National Forest	41.354490	-88.079787	41.3	41.4	41.4	0.00	42	42	0.00
Grid		146_63	Kankakee State Fish and Wildlife Area	41.228982	-88.068079	39.9	40	40	0.00	40.6	40.6	0.00
Grid		145_96	Illinois and Michigan Canal State Trail	41.505138	-88.080550	43.3	43.5	42.1	-1.40	44	42.7	-1.30
Grid		145_95	Illinois and Michigan Canal State Trail	41.496769	-88.080508	42.8	42.8	41.6	-1.20	43.4	42.2	-1.20
Grid		145_94	Illinois and Michigan Canal State Trail	41.488400	-88.080465	42	42.1	41.3	-0.80	42.7	41.9	-0.80
Grid		145_82	Midewin National Tallgrass Prairie National Forest	41.387968	-88.079957	41	41.1	41.1	0.00	41.7	41.7	0.00
Grid		145_81	Midewin National Tallgrass Prairie National Forest	41.379598	-88.079914	41.1	41.2	41.2	0.00	41.9	41.9	0.00
Grid		145_98	Illinois and Michigan Canal State Trail	41.521877	-88.080635	44.2	44.2	43.2	-1.00	44.8	43.7	-1.10
Grid		145_79	Midewin National Tallgrass Prairie National Forest	41.362860	-88.079830	41.3	41.3	41.3	0.00	42	42	0.00
Grid		145_99	Illinois and Michigan Canal State Trail	41.530246	-88.080678	45	45.1	43.5	-1.60	45.6	43.9	-1.70
Grid		145_77	Midewin National Tallgrass Prairie National Forest	41.346121	-88.079745	41.3	41.4	41.4	0.00	42.1	42	-0.10
Grid		145_76	Midewin National Tallgrass Prairie National Forest	41.337752	-88.079703	41.3	41.3	41.3	0.00	42	42	0.00
Grid		145_64	Kankakee State Fish and Wildlife Area	41.237320	-88.079196	40.2	40.3	40.2	-0.10	40.9	40.9	0.00
Grid		144_115	Illinois and Michigan Canal State Trail	41.664123	-88.092510	39.7	39.9	39.9	0.00	40.7	41.1	0.40
Grid		144_114	Illinois and Michigan Canal State Trail	41.655754	-88.092465	40.3	40.4	40	-0.40	41.2	41.2	0.00
Grid		144_113	Illinois and Michigan Canal State Trail	41.647385	-88.092421	41.3	41.4	40.2	-1.20	42.2	41.3	-0.90
Grid		144_112	Illinois and Michigan Canal State Trail	41.639015	-88.092377	42.6	42.7	40.4	-2.30	43.3	41.4	-1.90
Grid		145_80	Midewin National Tallgrass Prairie National Forest	41.371229	-88.079872	41.2	41.2	41.2	0.00	41.9	41.9	0.00
Grid		145_107	Illinois and Michigan Canal State Trail	41.597201	-88.081018	45.4	45.5	45.8	0.30	45.9	46.5	0.60
Grid		147_77	Midewin National Tallgrass Prairie National Forest	41.346183	-88.057554	41.8	41.9	41.9	0.00	42.6	42.5	-0.10
Grid		145_114	Illinois and Michigan Canal State Trail	41.655787	-88.081317	41.2	41.3	40.6	-0.70	42.2	41.8	-0.40
Grid		145_113	Illinois and Michigan Canal State Trail	41.647417	-88.081274	42.3	42.4	40.7	-1.70	43.2	41.8	-1.40
Grid		145_112	Illinois and Michigan Canal State Trail	41.639048	-88.081232	43.2	43.3	40.9	-2.40	44	41.8	-2.20
Grid		145_111	Illinois and Michigan Canal State Trail	41.630679	-88.081189	43.2	43.3	41.2	-2.10	43.9	42	-1.90
Grid		145_110	Illinois and Michigan Canal State Trail	41.622309	-88.081146	43.3	43.4	41.9	-1.50	44.1	42.6	-1.50
Grid		145_97	Illinois and Michigan Canal State Trail	41.513508	-88.080593	43.7	43.8	42.6	-1.20	44.3	43.2	-1.10

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No-Action	2013 Proposed Action	Change (2013)	2018 No-Action	2018 Proposed Action	Change (2018)
Grid		145_108	Illinois and Michigan Canal State Trail	41.605571	-88.081061	44.9	45	44.7	-0.30	45.4	45.4	0.00
Grid		145_116	Illinois and Michigan Canal State Trail	41.672525	-88.081402	40.2	40.3	40.4	0.10	41.1	41.6	0.50
Grid		145_106	Illinois and Michigan Canal State Trail	41.588832	-88.080976	45.6	45.7	45.9	0.20	46.2	46.7	0.50
Grid		145_105	Illinois and Michigan Canal State Trail	41.580463	-88.080933	45.7	45.8	46	0.20	46.2	46.6	0.40
Grid		145_104	Illinois and Michigan Canal State Trail	41.572093	-88.080891	45.9	45.9	45.7	-0.20	46.3	46.1	-0.20
Grid		145_103	Illinois and Michigan Canal State Trail	41.563724	-88.080848	46.5	46.5	44.8	-1.70	46.9	45	-1.90
Grid		145_102	Illinois and Michigan Canal State Trail	41.555355	-88.080805	46.8	46.9	44.3	-2.60	47.2	44.6	-2.60
Grid		145_101	Illinois and Michigan Canal State Trail	41.546985	-88.080763	46.7	46.8	44.2	-2.60	47.2	44.5	-2.70
Grid		145_100	Illinois and Michigan Canal State Trail	41.538616	-88.080720	46	46.1	43.8	-2.30	46.5	44.2	-2.30
Grid		145_109	Illinois and Michigan Canal State Trail	41.613940	-88.081104	44	44	43	-1.00	44.6	43.8	-0.80

Appendix G INVENTORY OF HISTORIC RESOURCES AND NOISE EXPOSURE

Table G-1 Inventory of Historic Resources and Noise Exposure Within the Area of Potential Effect

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No Action	2013 Proposed Action	Change (2013)	2018 No Action	2018 Proposed Action	Change (2018)
4F	NRHP	10000175	Jackson Shore Apartments	41.797351	-87.581339	50.4	50.5	50.3	-0.20	51.0	50.8	-0.20
4F	NRHP	10000724	K-Town Historic District	41.854625	-87.729716	47.2	47.4	46.8	-0.60	47.9	47.3	-0.60
4F	NRHP	1000085	Immanuel Evangelical Church	41.799332	-87.932354	49.4	49.5	49.7	0.20	50.3	51.0	0.70
4F	NRHP	10001201	Cermak, Anton, House	41.850338	-87.716729	48.1	48.2	47.7	-0.50	48.8	48.1	-0.70
4F	NRHP	1000594	Chicago Telephone Company Kedzie Exchange	41.880313	-87.71087	45.3	45.4	45.2	-0.20	46.1	45.9	-0.20
4F	NRHP	1000865	Berwyn Municipal Building	41.843084	-87.79128	49.3	49.4	49.0	-0.40	50.1	49.8	-0.30
4F	NRHP	11000243	Sutherland Hotel	41.81181	-87.603406	51.7	51.8	51.6	-0.20	52.3	52.1	-0.20
4F	NRHP	1330	Peabody, Francis Stuyvesant, House	41.79963	-87.928928	49.4	49.5	49.8	0.30	50.4	51.0	0.60
4F	NRHP	1338nrhp	Roche, Martin--John Tait House	41.829469	-87.617698	50.1	50.2	50.1	-0.10	50.7	50.5	-0.20
4F	NRHP	2000100	Gunderson Historic District	41.876278	-87.785556	47.9	48.0	48.0	0.00	48.8	48.7	-0.10
4F	NRHP	2000844	Henderson, Frank B., House	41.894223	-87.938449	52.0	52.1	52.1	0.00	52.9	52.9	0.00
4F	NRHP	2001347	Fuller Park	41.812914	-87.634262	53.2	53.3	53.5	0.20	53.7	53.9	0.20
4F	NRHP	2001349	Maxwell--Briscoe Automobile Company Showroom	41.860168	-87.623597	44.7	44.8	45.5	0.70	45.4	46.3	0.90
4F	NRHP	2001351	Scoville Place	41.889713	-87.795111	49.0	49.0	49.0	0.00	49.8	49.8	0.00
4F	NRHP	2001387	Motor Row Historic District	41.852808	-87.623971	45.7	45.9	48.5	2.60	46.4	49.5	3.10
4F	NRHP	2001760	Scutt, Hiram B., Mansion	41.526843	-88.088488	45.1	45.2	43.4	-1.80	45.6	43.9	-1.70
4F	NRHP	258	Heurtley, Arthur, House	41.8931	-87.800216	49.5	49.6	49.6	0.00	50.4	50.4	0.00
4F	NRHP	3000355	Butler School	41.834777	-87.946202	48.7	48.8	48.8	0.00	49.6	49.6	0.00
4F	NRHP	3000538	Produce Terminal Cold Storage Company Building	41.861607	-87.657901	44.5	44.6	44.6	0.00	45.2	45.3	0.10
4F	NRHP	3000783	Reid House	41.855179	-87.620151	45.4	45.5	47.4	1.90	46.0	48.3	2.30
4F	NRHP	3000787	Davis Square	41.813067	-87.667516	55.0	55.2	54.7	-0.50	55.6	55.0	-0.60
4F	NRHP	3000789	Armour Square	41.833658	-87.633961	49.8	50.0	50.2	0.20	50.4	50.7	0.30
4F	NRHP	3000916	Pentecost, John L., House	41.893798	-87.941951	51.7	51.8	51.8	0.00	52.6	52.6	0.00
4F	NRHP	3001040	Columbus Park	41.874512	-87.769627	47.0	47.1	47.0	-0.10	47.8	47.7	-0.10
4F	NRHP	3001463	Robinwood	41.897007	-87.937285	52.5	52.6	52.6	0.00	53.4	53.4	0.00
4F	NRHP	4000076	South Park Manor Historic District	41.757063	-87.619095	47.7	47.9	48.0	0.10	48.5	48.4	-0.10
4F	NRHP	4000167	Lockport Lock, Dam and Power House Historic District	41.569574	-88.077968	46.3	46.3	45.4	-0.90	46.7	45.7	-1.00
4F	NRHP	4000421	Emery, Jr., William H., House	41.894223	-87.938449	52.0	52.1	52.1	0.00	52.9	52.9	0.00
4F	NRHP	4000866	Ninth Street Seven Arch Stone Bridge	41.593323	-88.064757	45.9	45.9	45.9	0.00	46.4	46.7	0.30
4F	NRHP	4000871	Washington Park	41.795979	-87.611273	51.5	51.7	51.6	-0.10	52.2	52.1	-0.10
4F	NRHP	4001298	Oak Park Conservatory	41.871664	-87.78985	48.2	48.3	48.2	-0.10	49.1	49.0	-0.10
4F	NRHP	4001299	Bassett, Orland P., House	41.798769	-87.921718	49.4	49.5	49.7	0.20	50.3	50.8	0.50
4F	NRHP	4001301	University Apartments	41.797176	-87.590943	50.8	50.9	50.8	-0.10	51.4	51.2	-0.20
4F	NRHP	476	Childs, Robert A. and Mary, House	41.798919	-87.927714	49.4	49.6	49.8	0.20	50.3	50.9	0.60
4F	NRHP	5000107	Narragansett, The	41.804612	-87.584703	51.0	51.1	50.9	-0.20	51.6	51.4	-0.20
4F	NRHP	5000108	Garden Homes Historic District	41.736495	-87.621614	47.9	48.0	48.3	0.30	48.6	48.6	0.00
4F	NRHP	5000114	Humphrey, John, House	41.630071	-87.85958	48.4	48.4	47.7	-0.70	48.8	48.1	-0.70
4F	NRHP	5000845	Purple, George E., House	41.809965	-87.88386	49.7	49.8	49.8	0.00	50.5	50.7	0.20
4F	NRHP	5000871	Illinois Institute of Technology Academic Campus	41.835023	-87.628266	49.4	49.5	49.8	0.30	49.9	50.4	0.50
4F	NRHP	5000873	Central Park Theater	41.86651	-87.707343	45.1	45.2	44.8	-0.40	45.9	45.4	-0.50
4F	NRHP	5000875	Cornell Square	41.802283	-87.6711	55.9	56.1	55.6	-0.50	56.5	56.0	-0.50
4F	NRHP	5001252	Pacesetter Gardens Historic District	41.646824	-87.637285	47.2	47.3	44.4	-2.90	47.7	44.0	-3.70
4F	NRHP	5001609	Pilsen Historic District	41.853951	-87.67046	45.9	46.0	46.2	0.20	46.6	46.9	0.30
4F	NRHP	6000010	Joilet YMCA	41.530574	-88.083552	45.3	45.3	43.4	-1.90	45.8	43.9	-1.90

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Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No Action	2013 Proposed Action	Change (2013)	2018 No Action	2018 Proposed Action	Change (2018)
4F	NRHP	6000011	Downtown Hinsdale Historic District	41.805144	-87.853253	50.7	50.8	50.8	0.00	51.5	51.6	0.10
4F	NRHP	6000375	Dell Rhea's Chicken Basket	41.747465	-87.93954	49.3	49.5	49.5	0.00	50.0	50.2	0.20
4F	NRHP	6000448	McGovney--Yunker Farmstead	41.526646	-87.881412	45.6	45.8	45.4	-0.40	46.4	46.0	-0.40
4F	NRHP	6000673	First Congregational Church of Western Springs	41.814841	-87.903106	49.2	49.3	49.6	0.30	50.1	50.8	0.70
4F	NRHP	6000678	Grand Crossing Park	41.756865	-87.60046	44.7	44.8	45.0	0.20	45.4	45.4	0.00
4F	NRHP	6001015	Austin Town Hall Park Historic District	41.88064	-87.765169	47.0	47.0	46.9	-0.10	47.8	47.7	-0.10
4F	NRHP	6001016	Goldblatt Bros. Department Store	41.808441	-87.665386	55.4	55.6	54.9	-0.70	55.9	55.3	-0.60
4F	NRHP	66000108	Chicago Portage National Historic Site	41.810751	-87.80782	53.3	53.8	53.2	-0.60	55.1	54.4	-0.70
4F	NRHP	66000314	First Self-Sustaining Nuclear Reaction, Site of	41.792448	-87.601094	50.5	50.6	50.5	-0.10	51.1	51.0	-0.10
4F	NRHP	66000316	Robie, Frederick C., House	41.789755	-87.595893	49.7	49.9	49.8	-0.10	50.4	50.3	-0.10
4F	NRHP	66000317	Taft, Lorado, Midway Studios	41.78559	-87.603556	49.0	49.1	49.1	0.00	49.7	49.6	-0.10
4F	NRHP	66000332	Illinois and Michigan Canal	41.569857	-88.069864	46.8	46.9	45.1	-1.80	47.2	45.4	-1.80
4F	NRHP	67000005	Room 405, George Herbert Jones Laboratory, The University of Chicago	41.790377	-87.601074	50.0	50.2	50.1	-0.10	50.7	50.6	-0.10
4F	NRHP	69000054	Pullman Historic District	41.697172	-87.609505	48.5	48.6	47.3	-1.30	49.0	47.3	-1.70
4F	NRHP	69000055	Riverside Landscape Architecture District	41.827637	-87.820761	50.1	50.4	50.8	0.40	51.5	52.8	1.30
4F	NRHP	70000233	Glessner, John J., House	41.857642	-87.621102	45.0	45.1	46.3	1.20	45.7	47.2	1.50
4F	NRHP	70000239	Gale, Mrs. Thomas H., House	41.891851	-87.798513	49.4	49.4	49.3	-0.10	50.2	50.1	-0.10
4F	NRHP	70000240	Unity Temple	41.88844	-87.796783	49.2	49.2	49.2	0.00	50.0	50.0	0.00
4F	NRHP	70000241	Drummond, William E., House	41.889666	-87.827174	51.8	51.9	51.9	0.00	52.7	52.7	0.00
4F	NRHP	70000242	Winslow, William H., House And Stable	41.888573	-87.828847	51.8	51.9	51.9	0.00	52.7	52.7	0.00
4F	NRHP	70000243	Coonley, Avery, House	41.820582	-87.828678	50.4	50.5	50.4	-0.10	51.3	51.3	0.00
4F	NRHP	7000062	Silhan, Mr. Robert, House	41.824407	-87.781573	54.5	54.7	54.2	-0.50	55.2	54.7	-0.50
4F	NRHP	7000458	Rees, Harriet F., House	41.853879	-87.620765	45.6	45.7	48.0	2.30	46.2	48.9	2.70
4F	NRHP	7000477	Coonley, Avery, School	41.788717	-88.019718	46.7	46.9	46.9	0.00	47.6	47.8	0.20
4F	NRHP	7000853	Vial, Robert, House	41.754876	-87.895828	51.4	51.5	51.6	0.10	52.1	52.2	0.10
4F	NRHP	7000855	Palmer Park	41.690835	-87.615562	50.9	51.1	49.4	-1.70	51.4	49.2	-2.20
4F	NRHP	7000898	Hatch, William H., House	41.886668	-87.818215	51.3	51.4	51.3	-0.10	52.2	52.1	-0.10
4F	NRHP	71000290	Clarke, Henry B., House	41.857141	-87.622061	45.1	45.2	46.5	1.30	45.7	47.3	1.60
4F	NRHP	71000291	Kimball, William W., House	41.856837	-87.620131	45.1	45.2	46.7	1.50	45.8	47.5	1.70
4F	NRHP	72000450	Heller, Isadore H., House	41.80156	-87.593102	51.3	51.4	51.3	-0.10	51.9	51.7	-0.20
4F	NRHP	72000451	Old Stone Gate of Chicago Union Stockyards	41.818581	-87.648417	53.1	53.2	53.2	0.00	53.6	53.6	0.00
4F	NRHP	72000452	Prairie Avenue District	41.857386	-87.621859	45.1	45.2	46.5	1.30	45.7	47.3	1.60
4F	NRHP	72000455	Thomas, Frank, House	41.891134	-87.796732	49.1	49.2	49.2	0.00	50.0	50.0	0.00
4F	NRHP	72000456	Wright, Frank Lloyd, House and Studio	41.894182	-87.800109	49.5	49.6	49.6	0.00	50.3	50.3	0.00
4F	NRHP	72000467	Will County Historical Society Headquarters	41.589191	-88.054791	46.5	46.6	46.1	-0.50	47.0	46.7	-0.30
4F	NRHP	72001565	Jackson Park Historic Landscape District and Midway Plaisance	41.780078	-87.577224	47.2	47.3	47.3	0.00	47.9	47.8	-0.10
4F	NRHP	73000696	Kehilath Anshe Ma'ariv Synagogue	41.83447	-87.622275	49.3	49.4	49.6	0.20	49.8	50.1	0.30
4F	NRHP	73000699	Frank Lloyd Wright-Prairie School of Architecture Historic District	41.893633	-87.79223	48.7	48.7	48.7	0.00	49.5	49.5	0.00
4F	NRHP	73000700	Gale, Walter, House	41.893989	-87.801915	49.7	49.8	49.8	0.00	50.6	50.5	-0.10
4F	NRHP	74000751	Hitchcock, Charles, Hall	41.791189	-87.600841	50.1	50.3	50.3	0.00	50.8	50.8	0.00
4F	NRHP	74000754	Second Presbyterian Church	41.855858	-87.624507	45.3	45.4	47.1	1.70	46.0	47.9	1.90

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Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No Action	2013 Proposed Action	Change (2013)	2018 No Action	2018 Proposed Action	Change (2018)
4F	NRHP	74000755	Shedd Park Fieldhouse	41.850237	-87.717041	48.2	48.3	47.7	-0.60	48.8	48.2	-0.60
4F	NRHP	74000757	Wells-Barnett, Ida B., House	41.829749	-87.617556	50.1	50.1	50.0	-0.10	50.6	50.5	-0.10
4F	NRHP	75000646	De Priest, Oscar Stanton, House	41.811723	-87.618009	52.4	52.6	52.5	-0.10	53.0	52.9	-0.10
4F	NRHP	75000652	South Shore Country Club	41.769846	-87.562874	44.9	45.1	45.0	-0.10	45.7	45.4	-0.30
4F	NRHP	75000655	Williams, Dr. Daniel Hale, House	41.818763	-87.615307	51.5	51.7	51.5	-0.20	52.2	52.0	-0.20
4F	NRHP	75000656	Lemont Central Grade School	41.672598	-87.997253	44.8	44.9	44.2	-0.70	45.3	45.6	0.30
4F	NRHP	75000676	Lockport Historic District	41.589341	-88.057013	46.4	46.5	46.0	-0.50	46.8	46.6	-0.20
4F	NRHP	75002077	Graue Mill	41.820884	-87.929115	49.7	49.8	49.8	0.00	50.5	50.6	0.10
4F	NRHP	76000686	Abbott, Robert S., House	41.810022	-87.616187	52.4	52.6	52.5	-0.10	53.0	52.9	-0.10
4F	NRHP	76000687	Compton, Arthur H., House	41.792023	-87.596335	50.2	50.3	50.3	0.00	50.8	50.7	-0.10
4F	NRHP	76000689	Douglas Tomb State Memorial	41.83168	-87.608507	49.4	49.5	49.4	-0.10	50.0	50.0	0.00
4F	NRHP	76000696	Lillie, Frank R., House	41.789474	-87.592882	49.6	49.7	49.7	0.00	50.3	50.1	-0.20
4F	NRHP	76000699	Millikan, Robert A., House	41.792743	-87.596462	50.3	50.4	50.4	0.00	51.0	50.8	-0.20
4F	NRHP	76000703	Ridge Historic District	41.710155	-87.670223	48.7	48.8	49.5	0.70	49.3	49.9	0.60
4F	NRHP	76002162	Hauptgebaude	41.895778	-87.945392	51.9	51.9	51.9	0.00	52.7	52.7	0.00
4F	NRHP	77000474	First Congregational Church of Austin	41.888727	-87.767978	47.5	47.5	47.4	-0.10	48.3	48.2	-0.10
4F	NRHP	77000477	Kent, Sydney, House	41.840692	-87.62425	48.1	48.2	50.0	1.80	48.7	50.8	2.10
4F	NRHP	77000479	Roloson, Robert, Houses	41.835683	-87.617879	48.9	49.1	49.3	0.20	49.5	50.0	0.50
4F	NRHP	77000482	Cluever, Richard, House	41.893087	-87.833607	52.3	52.3	52.3	0.00	53.1	53.1	0.00
4F	NRHP	77000483	River Forest Historic District	41.891857	-87.819355	51.7	51.7	51.7	0.00	52.5	52.5	0.00
4F	NRHP	78001122	Jewish People's Institute	41.863052	-87.713088	45.6	45.7	45.2	-0.50	46.3	45.8	-0.50
4F	NRHP	78001128	Schoenhofen Brewery Historic District	41.858648	-87.639558	44.9	45.0	45.9	0.90	45.6	46.6	1.00
4F	NRHP	78001129	Sears, Roebuck and Company Complex	41.869409	-87.711834	45.1	45.2	44.8	-0.40	45.9	45.5	-0.40
4F	NRHP	78001132	St. Thomas Church and Convent	41.79554	-87.595465	50.7	50.9	50.8	-0.10	51.3	51.3	0.00
4F	NRHP	78001133	Swift House	41.812955	-87.623438	52.6	52.8	52.7	-0.10	53.2	53.1	-0.10
4F	NRHP	78001138	Lyons Township Hall	41.813787	-87.869296	50.0	50.1	50.2	0.10	50.9	51.0	0.10
4F	NRHP	78001139	Hofmann Tower	41.820711	-87.821949	50.8	50.9	50.7	-0.20	51.8	51.8	0.00
4F	NRHP	78001144	First Church of Lombard	41.883081	-88.018725	46.5	46.6	46.6	0.00	47.4	47.4	0.00
4F	NRHP	78001199	Rubens Rialto Square Theater	41.526009	-88.081414	44.6	44.7	43.4	-1.30	45.2	43.8	-1.40
4F	NRHP	79000824	Hyde Park-Kenwood Historic District	41.798196	-87.59744	51.2	51.3	51.2	-0.10	51.8	51.7	-0.10
4F	NRHP	79000827	Quinn Chapel of the A.M.E. Church	41.848794	-87.625112	46.5	46.6	50.3	3.70	47.1	51.3	4.20
4F	NRHP	79000834	La Grange Village Historic District	41.810374	-87.872838	50.0	50.1	50.2	0.10	50.9	51.0	0.10
4F	NRHP	79000841	Campana Factory	41.865121	-88.316316	45.6	45.7	45.7	0.00	45.8	45.9	0.10
4F	NRHP	79000843	Dutch Mill	41.871532	-88.305458	45.4	45.4	45.4	0.00	45.6	45.6	0.00
4F	NRHP	79000876	Milne, Robert, House	41.58954	-88.049122	46.9	47.0	46.2	-0.80	47.3	46.7	-0.60
4F	NRHP	80001342	AVR 661	41.661888	-87.575131	45.6	45.8	45.1	-0.70	46.0	44.9	-1.10
4F	NRHP	80001420	Stone Manor	41.573042	-87.936104	46.2	46.3	45.3	-1.00	46.8	45.5	-1.30
4F	NRHP	80004525	Ardmore Avenue Train Station	41.883601	-87.979683	52.5	52.5	52.5	0.00	53.3	53.3	0.00
4F	NRHP	80004526	Gregg, William L., House	41.792851	-87.975167	47.7	47.8	47.9	0.10	48.5	48.8	0.30
4F	NRHP	8001096	Frank Lloyd Wright-Prairie School of Architecture Historic District (Boundary Increase)	41.893962	-87.792825	48.8	48.8	48.7	-0.10	49.6	49.5	-0.10
4F	NRHP	81000218	Rosenwald Apartment Building	41.810251	-87.623894	52.8	53.0	52.9	-0.10	53.4	53.3	-0.10
4F	NRHP	81000219	Western Springs Water Tower	41.809851	-87.900905	49.2	49.3	49.5	0.20	50.1	50.7	0.60
4F	NRHP	81000223	U.S. Post Office	41.527462	-88.08024	44.7	44.8	43.4	-1.40	45.2	43.8	-1.40

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4F	NRHP	82000391	Hotel Windermere East	41.793171	-87.583287	49.9	50.0	49.9	-0.10	50.5	50.4	-0.10
4F	NRHP	82000392	St. Luke's Hospital Complex	41.863215	-87.623145	44.4	44.5	44.8	0.30	45.1	45.5	0.40
4F	NRHP	82000393	Schulze Baking Company Plant	41.795475	-87.624713	52.1	52.3	52.4	0.10	52.8	52.9	0.10
4F	NRHP	82002524	Dunham, Arthur J., House	41.834916	-87.800212	50.1	50.3	49.9	-0.40	51.0	50.8	-0.20
4F	NRHP	82002525	Young, Joshua P., House	41.652517	-87.674968	46.8	46.9	45.4	-1.50	47.3	45.3	-2.00
4F	NRHP	82002528	Griffiths, John W., Mansion	41.825563	-87.623802	51.0	51.1	51.0	-0.10	51.5	51.4	-0.10
4F	NRHP	82002531	Warner, Seth, House	41.891899	-87.765002	47.5	47.6	47.5	-0.10	48.4	48.3	-0.10
4F	NRHP	82002532	Masonic Temple Building	41.888094	-87.79485	48.9	49.0	49.0	0.00	49.8	49.7	-0.10
4F	NRHP	82002603	Christ Episcopal Church	41.525982	-88.084291	44.8	44.9	43.4	-1.50	45.3	43.9	-1.40
4F	NRHP	82004912	Grossdale Station	41.823083	-87.842691	49.9	50.0	50.0	0.00	50.8	51.0	0.20
4F	NRHP	83000308	Calumet Plant, R. R. Donnelly & Sons Company	41.853696	-87.618052	45.6	45.7	48.1	2.40	46.2	49.0	2.80
4F	NRHP	83000311	King, Patrick J., House	41.882901	-87.707524	45.2	45.3	45.0	-0.30	46.0	45.8	-0.20
4F	NRHP	83000312	Morton, J. Sterling, High School East Auditorium	41.84645	-87.773132	49.2	49.3	48.8	-0.50	49.9	49.5	-0.40
4F	NRHP	83003564	Ridgeland-Oak Park Historic District	41.885273	-87.788475	48.4	48.4	48.3	-0.10	49.1	49.1	0.00
4F	NRHP	84000138	Midwest Athletic Club	41.881014	-87.721243	45.5	45.6	45.4	-0.20	46.3	46.1	-0.20
4F	NRHP	84000996	Hyde Park-Kenwood Historic District (Boundary Increase)	41.806029	-87.604953	52.0	52.1	51.9	-0.20	52.6	52.4	-0.20
4F	NRHP	84001047	St. James Catholic Church and Cemetery	41.698631	-87.932638	45.6	45.7	45.2	-0.50	46.3	45.9	-0.40
4F	NRHP	84001052	Soldier Field	41.862576	-87.616391	44.5	44.6	45.0	0.40	45.1	45.7	0.60
4F	NRHP	84001170	Fitzpatrick House	41.600688	-88.070902	45.6	45.6	45.9	0.30	46.1	46.7	0.60
4F	NRHP	85000966	Guyon Hotel	41.882063	-87.726317	45.5	45.6	45.4	-0.20	46.3	46.1	-0.20
4F	NRHP	85001741	Austin Historic District	41.886768	-87.770015	47.5	47.5	47.4	-0.10	48.3	48.2	-0.10
4F	NRHP	86001031	Lemont Methodist Episcopal Church	41.673023	-88.000143	44.5	44.6	44.0	-0.60	45.1	45.6	0.50
4F	NRHP	86001089	Victory Sculpture	41.831091	-87.617473	49.8	49.9	49.9	0.00	50.4	50.3	-0.10
4F	NRHP	86001090	Chicago Bee Building	41.828071	-87.626235	50.6	50.8	50.7	-0.10	51.2	51.1	-0.10
4F	NRHP	86001091	Overton Hygienic Building	41.828071	-87.626235	50.6	50.8	50.7	-0.10	51.2	51.1	-0.10
4F	NRHP	86001092	Unity Hall	41.837729	-87.622475	48.6	48.7	49.5	0.80	49.2	50.2	1.00
4F	NRHP	86001095	Wabash Avenue YMCA	41.825738	-87.624767	51.0	51.1	51.0	-0.10	51.6	51.4	-0.20
4F	NRHP	86001096	Eighth Regiment Armory	41.830721	-87.619396	49.9	50.0	50.0	0.00	50.5	50.4	-0.10
4F	NRHP	86001193	Chicago Beach Hotel	41.802339	-87.586982	51.0	51.2	51.0	-0.20	51.6	51.5	-0.10
4F	NRHP	86001194	Flamingo-On-The-Lake Apartments	41.794625	-87.580773	50.0	50.1	50.0	-0.10	50.7	50.5	-0.20
4F	NRHP	86001195	Hotel Del Prado	41.799562	-87.583947	50.7	50.8	50.7	-0.10	51.3	51.1	-0.20
4F	NRHP	86001197	East Park Towers	41.79974	-87.58443	50.8	50.9	50.7	-0.20	51.4	51.1	-0.30
4F	NRHP	86001198	Mayfair Apartments	41.795328	-87.58427	50.3	50.4	50.2	-0.20	50.9	50.7	-0.20
4F	NRHP	86001199	Poinsetta Apartments	41.794067	-87.584258	50.1	50.2	50.1	-0.10	50.7	50.5	-0.20
4F	NRHP	86001201	Shoreland Hotel	41.795793	-87.581265	50.2	50.4	50.2	-0.20	50.8	50.7	-0.10
4F	NRHP	86001480	Villa Avenue Train Station	41.894938	-87.970453	53.7	53.8	53.8	0.00	54.6	54.6	0.00
4F	NRHP	86003169	Legler, Henry E., Regional Branch of the Chicago Public Library	41.879368	-87.725202	45.3	45.4	45.2	-0.20	46.2	45.9	-0.30
4F	NRHP	87002047	Dupage Theatre and Dupage Shoppes	41.885971	-88.017927	46.5	46.6	46.6	0.00	47.4	47.4	0.00
4F	NRHP	87002499	Vogt, Karl, Building	41.574808	-87.784632	48.1	48.1	46.8	-1.30	48.5	47.1	-1.40
4F	NRHP	87002510	Marshall Field and Company Store	41.889287	-87.804508	50.1	50.1	50.1	0.00	50.9	50.9	0.00
4F	NRHP	88002235	Twin Tower Sanctuary	41.62856	-87.862957	48.5	48.6	47.7	-0.90	49.0	48.1	-0.90
4F	NRHP	89001113	Bohlander, Jacob, House	41.890757	-87.838278	52.5	52.5	52.5	0.00	53.3	53.3	0.00

Table G-1 Inventory of Historic Resources and Noise Exposure Within the Area of Potential Effect

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No Action	2013 Proposed Action	Change (2013)	2018 No Action	2018 Proposed Action	Change (2018)
4F	NRHP	89001731	Whitney, William, House	41.801286	-87.924558	49.4	49.6	49.8	0.20	50.4	51.0	0.60
4F	NRHP	90000101	Joliet, Louis, Hotel	41.526832	-88.08011	44.6	44.7	43.4	-1.30	45.2	43.8	-1.40
4F	NRHP	9000025	Spiegel Office Building	41.83135	-87.652039	50.8	51.0	51.9	0.90	51.4	52.4	1.00
4F	NRHP	90000745	Sherman Park	41.796719	-87.655177	54.1	54.2	53.8	-0.40	54.7	54.2	-0.50
4F	NRHP	90001725	Oak Lawn School	41.718961	-87.752003	45.7	45.8	48.7	2.90	46.5	49.7	3.20
4F	NRHP	91000088	Joliet Steel Works	41.541047	-88.075131	46.0	46.1	43.9	-2.20	46.5	44.3	-2.20
4F	NRHP	91000567	Columbus Park	41.874512	-87.769627	47.0	47.1	47.0	-0.10	47.8	47.7	-0.10
4F	NRHP	91000570	Kenwood Evangelical Church	41.811369	-87.599947	51.6	51.7	51.5	-0.20	52.2	52.0	-0.20
4F	NRHP	91000687	Upper Bluff Historic District	41.529191	-88.096439	45.8	45.9	43.6	-2.30	46.3	44.0	-2.30
4F	NRHP	92000045	Nichols, Harry H., House	41.885624	-87.83809	52.2	52.2	52.2	0.00	53.0	53.0	0.00
4F	NRHP	92000046	Robinson House	41.893016	-87.837222	52.5	52.6	52.6	0.00	53.4	53.4	0.00
4F	NRHP	92000047	Lynch, Timothy J., House	41.891387	-87.838286	52.5	52.6	52.6	0.00	53.3	53.3	0.00
4F	NRHP	92000048	Gibbs, William and Caroline, House	41.89221	-87.836609	52.5	52.5	52.5	0.00	53.3	53.3	0.00
4F	NRHP	92000487	Akin, Mrs. Henry F., House	41.87947	-87.842107	52.2	52.2	52.2	0.00	53.0	53.0	0.00
4F	NRHP	92000488	Frangenheim, William, House	41.891395	-87.837201	52.4	52.5	52.5	0.00	53.3	53.3	0.00
4F	NRHP	92000489	Grow, Caroline, House	41.892904	-87.840234	52.7	52.8	52.8	0.00	53.6	53.6	0.00
4F	NRHP	92000490	Larson, Mads C., House	41.884658	-87.834702	51.9	51.9	51.9	0.00	52.7	52.7	0.00
4F	NRHP	92000491	Masonic Temple Building	41.885794	-87.839538	52.4	52.4	52.4	0.00	53.2	53.1	-0.10
4F	NRHP	92000492	Maywood Fire Department Building	41.888222	-87.840052	52.5	52.5	52.5	0.00	53.3	53.3	0.00
4F	NRHP	92000493	Millward, Caroline, House	41.891918	-87.839619	52.6	52.7	52.7	0.00	53.5	53.5	0.00
4F	NRHP	92000494	Soffel, Albert, House	41.892276	-87.839865	52.7	52.7	52.7	0.00	53.5	53.5	0.00
4F	NRHP	92000495	Sullivan, Joseph P. O., House	41.887123	-87.842449	52.7	52.7	52.7	0.00	53.5	53.5	0.00
4F	NRHP	92000496	Thompkins, Jennie S., House	41.891016	-87.839727	52.6	52.6	52.6	0.00	53.4	53.4	0.00
4F	NRHP	92001850	Gridley, Mrs., A. W., House	41.859999	-88.313777	45.4	45.4	45.4	0.00	45.6	45.7	0.10
4F	NRHP	93000836	Peabody, Francis Stuyvesant, Estate	41.828865	-87.958578	47.6	47.7	47.7	0.00	48.5	48.5	0.00
4F	NRHP	93000837	Garfield Park	41.886289	-87.716059	45.8	45.8	45.7	-0.10	46.6	46.4	-0.20
4F	NRHP	94000978	Heck, John, House	41.585223	-88.058169	46.6	46.7	46.1	-0.60	47.0	46.6	-0.40
4F	NRHP	95000487	Hamilton Park	41.761648	-87.637208	50.2	50.3	50.4	0.10	50.9	50.7	-0.20
4F	NRHP	951	American State Bank	41.850184	-87.793536	48.7	48.8	48.5	-0.30	49.5	49.3	-0.20
4F	NRHP	96001281	Promontory Apartments	41.794264	-87.58077	49.9	50.1	50.0	-0.10	50.6	50.4	-0.20
4F	NRHP	97000343	Haymarket Martyrs' Monument	41.842797	-87.819341	49.2	49.2	49.2	0.00	50.0	50.2	0.20
4F	NRHP	97000381	Thorne, George R., House	41.632681	-87.750758	47.7	47.8	49.4	1.60	48.3	49.6	1.30
4F	NRHP	98000063	Belmonte Flats	41.816838	-87.604693	51.3	51.5	51.3	-0.20	51.9	51.6	-0.30
4F	NRHP	98000178	Yale, The	41.774496	-87.631548	48.8	49.0	49.2	0.20	49.6	49.6	0.00
4F	NRHP	99000632	Tomek, F.F., House	41.832184	-87.817158	50.0	50.3	51.1	0.80	51.8	53.6	1.80
4F	NRHP	99000973	Four Nineteen Building	41.744705	-87.60221	45.7	45.8	46.0	0.20	46.4	46.4	0.00
4F	NRHP	99000975	Wheeler--Kohn House	41.855129	-87.619512	45.4	45.5	47.4	1.90	46.0	48.3	2.30
4F	NRHP	99001072	Raymond M. Hilliard Center Historic District	41.854092	-87.616309	45.5	45.6	47.9	2.30	46.1	48.8	2.70
4F	NRHP	99001710	St. Matthew Evangelical Lutheran School	41.853713	-87.67865	46.2	46.3	46.2	-0.10	46.9	46.8	-0.10
4F	Historic	0	5842 S Rockwell St	41.787012	-87.689094	55.8	56	55.7	-0.30	56.5	56.2	-0.30
4F	Historic	1	3736 S Campbell Ave	41.825311	-87.687813	54.2	54.3	57.1	2.80	54.7	57.8	3.10
4F	Historic	2	4438 S Homan Ave	41.812352	-87.709324	60.1	60.3	60.9	0.60	60.6	61.1	0.50
4F	Historic	3	6557-59 S Troy St	41.773692	-87.701381	53	53.2	52.6	-0.60	54	52.9	-1.10
4F	Historic	4	2428 W 34Th Pl	41.831376	-87.686339	52.3	52.5	55.5	3.00	52.9	56.4	3.50

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4F	Historic	5	2648 W Pershing Rd	41.823117	-87.691675	55.3	55.5	57.8	2.30	55.8	58.4	2.60
4F	Historic	6	The Cromwell Paper Co	41.805901	-87.699702	58.6	58.8	58.1	-0.70	59.2	58.5	-0.70
4F	Historic	7	6235 S Kedzie Ave	41.779787	-87.702802	53.6	53.8	53.4	-0.40	54.5	54.1	-0.40
4F	Historic	8	5239 S Trumbull Ave	41.797766	-87.709549	60.2	60.3	60.3	0.00	60.8	60.9	0.10
4F	Historic	9	5646 S Karlov Ave	41.790014	-87.725929	58.5	58.7	58.6	-0.10	59.2	59.3	0.10
4F	Historic	10	Marquette Park Substation	41.775593	-87.702771	53	53.2	52.8	-0.40	54	53.3	-0.70
4F	Historic	11	3145 W 63Rd St	41.778740	-87.702511	53.5	53.7	53.2	-0.50	54.4	53.9	-0.50
4F	Historic	12	2529-31 W 38Th St	41.824551	-87.688507	54.5	54.6	57.4	2.80	55	58	3.00
4F	Historic	13	4444 S Homan Ave	41.812188	-87.709316	60.3	60.4	60.9	0.50	60.7	61.2	0.50
4F	Historic	14	3541 W 58Th St	41.787731	-87.712389	55.6	55.8	55.8	0.00	56.4	56.6	0.20
4F	Historic	15	5554-56 S Sawyer Ave	41.791854	-87.705012	57.8	58	58	0.00	58.6	58.5	-0.10
4F	Historic	16	2523-25 W 38Th St	41.824563	-87.688347	54.5	54.6	57.4	2.80	55	58	3.00
4F	Historic	17	Gordon S Hubbard High School	41.780036	-87.719116	53.3	53.4	53.7	0.30	54.3	54.6	0.30
4F	Historic	18	Lawn Lodge	41.780113	-87.707828	52.9	53	53.1	0.10	53.8	53.9	0.10
4F	Historic	19	3522-28 Artesian Ave	41.829451	-87.686566	52.9	53	56	3.00	53.4	56.8	3.40
4F	Historic	20	4436 S Homan Ave	41.812435	-87.709328	60.1	60.3	60.8	0.50	60.5	61	0.50
4F	Historic	21	Michael M Byrne Public School	41.794924	-87.791224	60.2	60.4	60	-0.40	60.8	60.4	-0.40
4F	Historic	22	Commonwealth Edison Substation	41.828563	-87.722732	54.3	54.4	54	-0.40	54.8	54.4	-0.40
4F	Historic	23	3740 W 55Th St	41.793531	-87.717434	59.6	59.8	59.9	0.10	60.3	60.5	0.20
4F	Historic	24	3741 W 66Th Pl	41.772156	-87.716778	52.7	52.8	53.7	0.90	54.2	54.8	0.60
4F	Historic	25	3324 W 55Th St	41.793725	-87.707058	58.6	58.8	58.8	0.00	59.4	59.5	0.10
4F	Historic	26	3453 W 63Rd St	41.777752	-87.709998	52.3	52.5	52.9	0.40	53.5	53.7	0.20
4F	Historic	27	4430 S Homan Ave	41.812600	-87.709336	60	60.1	60.6	0.50	60.4	60.9	0.50
4F	Historic	28	6234-44 S Kedzie Ave	41.779640	-87.703462	53.5	53.6	53.3	-0.30	54.4	54	-0.40
4F	Historic	29	4442 S Homan Ave	41.812271	-87.709322	60.2	60.4	60.9	0.50	60.6	61.2	0.60
4F	Historic	30	2745 W 44Th St	41.813501	-87.693679	57.4	57.6	57	-0.60	57.9	57.2	-0.70
4F	Historic	31	Francis M Mckay Public School	41.767616	-87.691345	51.3	51.4	50.9	-0.50	52.1	51.1	-1.00
4F	Historic	32	3962-66 S Archer Ave	41.821687	-87.692261	56	56.1	58.3	2.20	56.5	58.9	2.40
4F	Historic	33	Washtenaw Ave Substation	41.807744	-87.692011	58.6	58.7	57.3	-1.40	59.1	57.3	-1.80
4F	Historic	34	4023 S Montgomery Ave	41.820232	-87.692562	56.5	56.6	58.6	2.00	56.9	59.1	2.20
4F	Historic	35	3135-39 W 59Th St	41.786003	-87.702336	55.7	55.9	55.6	-0.30	56.5	56.3	-0.20
4F	Historic	36	4448 S Homan Ave	41.812107	-87.709311	60.3	60.5	61	0.50	60.7	61.2	0.50
4F	Historic	37	Chicago Fire Dept Engine Co #88	41.784544	-87.710766	54.1	54.2	54.3	0.10	54.9	55.2	0.30
4F	Historic	38	3647 W 84Th Pl	41.739339	-87.713843	47.2	47.3	47.2	-0.10	47.9	47.8	-0.10
4F	Historic	39	3737 S Campbell Ave	41.825273	-87.687145	54.1	54.3	57.2	2.90	54.7	57.8	3.10
4F	Historic	40	4432 S Homan Ave	41.812517	-87.709332	60.1	60.2	60.7	0.50	60.4	61	0.60
4F	Historic	41	4173-75 S Archer Ave	41.817515	-87.698132	57	57.2	59.2	2.00	57.5	59.7	2.20
4F	Historic	42	Dupont-Whitehouse House	41.828598	-87.686502	53.2	53.3	56.1	2.80	53.7	56.9	3.20
4F	Historic	43	3401-05 W 53Rd St	41.795976	-87.708796	59.6	59.8	59.8	0.00	60.3	60.4	0.10
4F	Historic	44	4759 S Hamlin Ave	41.806168	-87.718399	62.2	62.4	63.5	1.10	62.7	63.8	1.10
4F	Historic	45	3000-04 W 42Nd St	41.817540	-87.699703	57.1	57.3	59.1	1.80	57.6	59.6	2.00
4F	Historic	46	5126 Homan Ave	41.799836	-87.708894	60.3	60.4	60.4	0.00	61	61	0.00
4F	Historic	47	6237-45 S Kedzie Ave	41.779618	-87.702798	53.6	53.8	53.4	-0.40	54.4	54	-0.40
4F	Historic	48	Westlawn State Bank	41.778959	-87.722007	53.8	53.9	54.3	0.40	54.8	55.2	0.40

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4F	Historic	49	Frank W Gunsaulus Public School	41.812743	-87.699846	58.9	59.1	58.7	-0.40	59.4	58.8	-0.60
4F	Historic	50	5501 S Richmond St	41.793427	-87.697268	58.4	58.6	58	-0.60	59	58.5	-0.50
4F	Historic	51	3357 W 59Th Pl	41.785082	-87.707972	54.5	54.7	54.7	0.00	55.4	55.5	0.10
4F	Historic	52	4450 S Homan Ave	41.812024	-87.709311	60.3	60.5	61.1	0.60	60.7	61.3	0.60
4F	Historic	53	2601-33 W Marquette Rd	41.771326	-87.689205	52.3	52.5	52.1	-0.40	53.1	52.4	-0.70
4F	Historic	54	Hope Evangelical Lutheran Church	41.777091	-87.691294	53.6	53.7	53.5	-0.20	54.4	53.9	-0.50
4F	Historic	55	4800 S St. Louis Ave	41.806009	-87.711827	60.6	60.8	60.7	-0.10	61.2	61.1	-0.10
4F	Historic	56	5237 S Trumbull Ave	41.797837	-87.709561	60.2	60.3	60.3	0.00	60.8	61	0.20
4F	Historic	57	3842 W 56Th Pl	41.790753	-87.719924	57.8	58	58	0.00	58.5	58.7	0.20
4F	Historic	58	6357 S Albany Ave	41.777380	-87.700393	53.7	53.9	53.2	-0.70	54.6	53.7	-0.90
4F	Historic	59	Dr Walter'S School For Crippled	41.801766	-87.686070	58	58.1	57.3	-0.80	58.5	57.6	-0.90
4F	Historic	60	4901 S Archer Ave	41.803943	-87.720246	62.2	62.4	63.9	1.50	62.8	64.5	1.70
4F	Historic	61	Fieldhouse Marquette Park	41.770748	-87.703968	52.3	52.5	52	-0.50	53.4	52.5	-0.90
4F	Historic	62	4236 S Archer Ave	41.816611	-87.700751	57.2	57.4	59.4	2.00	57.7	59.8	2.10
4F	Historic	63	3712 W 64Th Pl	41.776245	-87.716007	52.6	52.8	53.4	0.60	53.9	54.4	0.50
4F	Historic	64	5632 S Maplewood Ave	41.790967	-87.687854	56.6	56.8	56.5	-0.30	57.3	56.9	-0.40
4F	Historic	65	Ev Lutheran Friedens Kirch	41.815354	-87.694797	56.9	57	57.7	0.70	57.4	58.1	0.70
4F	Historic	66	4226 S Francisco Ave	41.816477	-87.697180	56.9	57.1	59	1.90	57.4	59.4	2.00
4F	Historic	67	4716 S Talman Ave	41.807747	-87.690803	58.6	58.7	57.2	-1.50	59	57.2	-1.80
4F	Historic	68	Ferdinand W Peck Public School	41.788092	-87.719723	56.1	56.2	56.2	0.00	56.8	56.9	0.10
4F	Historic	69	3125 W 38Th St	41.824260	-87.703018	55	55.1	57.7	2.60	55.5	58.7	3.20
4F	Historic	70	3920-30 S Archer Ave	41.822531	-87.691058	55.5	55.7	58	2.30	56	58.6	2.60
4F	Historic	71	Lourdes High School	41.791795	-87.724967	59.6	59.8	59.8	0.00	60.3	60.4	0.10
4F	Historic	72	3907 W 82Nd Pl	41.742914	-87.719664	47	47.1	47.1	0.00	47.8	47.9	0.10
4F	Historic	73	2908 W Pershing Rd	41.822932	-87.697521	55.5	55.7	57.3	1.60	56	58	2.00
4F	Historic	74	3942-58 W 63Rd St	41.778949	-87.722349	53.9	54	54.3	0.30	54.9	55.2	0.30
4F	Historic	75	3738 W 63Rd Pl	41.778016	-87.716938	52.8	52.9	53.4	0.50	54	54.4	0.40
4F	Historic	76	5548 S Nordica Ave	41.790598	-87.797923	59.6	59.8	59.4	-0.40	60.3	59.8	-0.50
4F	Historic	77	4428 S Homan Ave	41.812681	-87.709337	59.9	60	60.6	0.60	60.3	60.9	0.60
4F	Historic	78	3700-16 S Rockwell St	41.826170	-87.690593	54.2	54.3	56.6	2.30	54.6	57.3	2.70
4F	Historic	79	3442 W 62Nd St	41.779590	-87.709723	52.6	52.8	53	0.20	53.6	53.9	0.30
4F	Historic	80	5151 S Albany Ave	41.799370	-87.701041	59.6	59.8	59.4	-0.40	60.2	59.8	-0.40
4F	Historic	81	3721 W 83Rd Pl	41.741151	-87.715338	47.3	47.5	47.3	-0.20	48.1	48	-0.10
4F	Historic	82	Colony Theater	41.786573	-87.703714	55.8	55.9	55.8	-0.10	56.5	56.4	-0.10
4F	Historic	83	3412 W 84Th St	41.740809	-87.707597	49.7	49.9	49.3	-0.60	50.5	49.9	-0.60
4F	Historic	84	5514 Christianna Ave	41.792948	-87.707525	58.4	58.5	58.6	0.10	59.1	59.2	0.10
4F	Historic	85	4426-50 S Homan Ave	41.812765	-87.709348	59.9	60	60.5	0.50	60.3	60.8	0.50
4F	Historic	86	Engine Company 65, Truck 52	41.803741	-87.735355	62.8	62.9	62.8	-0.10	63.4	63.6	0.20
4F	Historic	87	Illinois Central Swing Bridge	41.828648	-87.714411	53.9	54.1	53.9	-0.20	54.5	54.3	-0.20
4F	Historic	88	Chicago Sanitary And Ship Canal District	41.823171	-87.731419	56.3	56.5	56.1	-0.40	56.9	56.5	-0.40
4F	Historic	89	Riverside Landscape Architecture District	41.826524	-87.805519	51.3	51.6	52.1	0.50	53	54.4	1.40
4F	Historic	90	Chicago Portage National Historic Site	41.811394	-87.807295	53.3	53.6	53	-0.60	55	54.3	-0.70
4F	Historic	0INM	5046 S Kolin Ave	41.8009003	-87.73221856	67.8	68.0	67.5	-0.50	68.3	67.8	-0.50
4F	Historic	1INM	6248-58 S Central Av	41.77837148	-87.76204753	73.9	74.0	73.9	-0.10	74.3	74.2	-0.10

Table G-1 Inventory of Historic Resources and Noise Exposure Within the Area of Potential Effect

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2103 No Action	2013 Proposed Action	Change (2013)	2018 No Action	2018 Proposed Action	Change (2018)
4F	Historic	2INM	5600-08 W 63rd St	41.77820002	-87.76204158	74.2	74.3	74.3	0.00	74.6	74.5	-0.10
4F	Historic	3INM	Illinois National Guard Armory	41.77852238	-87.75667162	73.5	73.6	73.7	0.10	74.1	74.3	0.20

Table G-2 Inventory of Historic Resources and Noise Exposure Within the Study Area

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2013 No Action	2013 Proposed Action	Year 2013 Change	2018 No Action	2018 Proposed Action	Year 2018 Change
4F	NRHP	70000235	McClurg Building	41.87887	-87.62625	43.3	43.4	43.3	-0.10	44.1	43.9	-0.20
4F	NRHP	70000243	Coonley, Avery, House	41.820582	-87.828678	50.4	50.5	50.4	-0.10	51.3	51.3	0.00
4F	NRHP	70000242	Winslow, William H., House And Stable	41.888573	-87.828847	51.8	51.9	51.9	0.00	52.7	52.7	0.00
4F	NRHP	70000241	Drummond, William E., House	41.889666	-87.827174	51.8	51.9	51.9	0.00	52.7	52.7	0.00
4F	NRHP	70000240	Unity Temple	41.88844	-87.796783	49.2	49.2	49.2	0.00	50.0	50.0	0.00
4F	NRHP	70000239	Gale, Mrs. Thomas H., House	41.891851	-87.798513	49.4	49.4	49.3	-0.10	50.2	50.1	-0.10
4F	NRHP	70000238	Rookery Building	41.879108	-87.632158	43.2	43.3	43.2	-0.10	44.0	43.8	-0.20
4F	NRHP	66000325	Starved Rock	41.320484	-88.990705	29.6	29.7	28.9	-0.80	30.1	29.0	-1.10
4F	NRHP	70000236	Monadnock Block	41.878042	-87.629496	43.3	43.4	43.3	-0.10	44.1	43.9	-0.20
4F	NRHP	72000449	Chicago Public Library, Central Building	41.883921	-87.625058	43.2	43.3	43.2	-0.10	43.9	43.8	-0.10
4F	NRHP	70000233	Glessner, John J., House	41.857642	-87.621102	45.0	45.1	46.3	1.20	45.7	47.2	1.50
4F	NRHP	70000231	Carson, Pirie, Scott and Company	41.881745	-87.627604	43.2	43.3	43.2	-0.10	44.0	43.9	-0.10
4F	NRHP	70000230	Auditorium Building, Roosevelt University	41.875593	-87.648754	43.3	43.4	43.3	-0.10	44.1	43.9	-0.20
4F	NRHP	69000055	Riverside Landscape Architecture District	41.827637	-87.820761	50.1	50.4	50.8	0.40	51.5	52.8	1.30
4F	NRHP	69000054	Pullman Historic District	41.697172	-87.609505	48.5	48.6	47.3	-1.30	49.0	47.3	-1.70
4F	NRHP	67000005	Room 405, George Herbert Jones Laboratory, The University of Chicago	41.790377	-87.601074	50.0	50.2	50.1	-0.10	50.7	50.6	-0.10
4F	NRHP	9000459	East Village Historic District	41.899549	-87.674037	43.5	43.5	43.4	-0.10	44.3	44.1	-0.20
4F	NRHP	70000237	Reliance Building	41.882821	-87.628458	43.2	43.3	43.2	-0.10	43.9	43.8	-0.10
4F	NRHP	72000467	Will County Historical Society Headquarters	41.589191	-88.054791	46.5	46.6	46.1	-0.50	47.0	46.7	-0.30
4F	NRHP	73000700	Gale, Walter, House	41.893989	-87.801915	49.7	49.8	49.8	0.00	50.6	50.5	-0.10
4F	NRHP	73000699	Frank Lloyd Wright-Prairie School of Architecture Historic District	41.893633	-87.79223	48.7	48.7	48.7	0.00	49.5	49.5	0.00
4F	NRHP	73000697	Marquette Building	41.880023	-87.629636	43.3	43.4	43.2	-0.20	44.0	43.9	-0.10
4F	NRHP	73000696	Kehilath Anshe Ma'ariv Synagogue	41.83447	-87.622275	49.3	49.4	49.6	0.20	49.8	50.1	0.30
4F	NRHP	73000073	Lake County Courthouse	41.417381	-87.365952	30.0	30.1	30.1	0.00	30.7	30.6	-0.10
4F	NRHP	73000018	St. Joseph Indian Normal School	40.921429	-87.151085	29.7	29.8	29.8	0.00	30.4	30.4	0.00
4F	NRHP	72001566	USS SILVERSIDES (SS 236) National Historic Landmark	41.890857	-87.608165	43.0	43.0	42.9	-0.10	43.7	43.6	-0.10
4F	NRHP	71000290	Clarke, Henry B., House	41.857141	-87.622061	45.1	45.2	46.5	1.30	45.7	47.3	1.60
4F	NRHP	72000596	Union Meat Market	41.799201	-86.611697	42.7	42.8	42.9	0.10	43.3	43.6	0.30
4F	NRHP	71000291	Kimball, William W., House	41.856837	-87.620131	45.1	45.2	46.7	1.50	45.8	47.5	1.70
4F	NRHP	72000462	Hossack, John, House	41.340085	-88.841315	32.0	32.1	29.8	-2.30	32.4	29.9	-2.50
4F	NRHP	72000456	Wright, Frank Lloyd, House and Studio	41.894182	-87.800109	49.5	49.6	49.6	0.00	50.3	50.3	0.00
4F	NRHP	72000455	Thomas, Frank, House	41.891134	-87.796732	49.1	49.2	49.2	0.00	50.0	50.0	0.00
4F	NRHP	72000452	Prairie Avenue District	41.857386	-87.621859	45.1	45.2	46.5	1.30	45.7	47.3	1.60
4F	NRHP	72000451	Old Stone Gate of Chicago Union Stockyards	41.818581	-87.648417	53.1	53.2	53.2	0.00	53.6	53.6	0.00
4F	NRHP	72000450	Heller, Isadore H., House	41.80156	-87.593102	51.3	51.4	51.3	-0.10	51.9	51.7	-0.20
4F	NRHP	66000317	Taft, Lorado, Midway Studios	41.78559	-87.603556	49.0	49.1	49.1	0.00	49.7	49.6	-0.10
4F	NRHP	72001565	Jackson Park Historic Landscape District and Midway Plaisance	41.780078	-87.577224	47.2	47.3	47.3	0.00	47.9	47.8	-0.10
4F	NRHP	10000309	Union Park Hotel	41.884031	-87.666171	43.2	43.3	43.1	-0.20	44.0	43.8	-0.20
4F	NRHP	10001074	Valparaiso Downtown Commercial Historic District (Boundary Increase)	41.468031	-87.063738	35.4	35.4	38.1	2.70	35.6	38.3	2.70
4F	NRHP	10000778	Forest--Southview Residential Historic District	41.595752	-87.523367	43.3	43.3	41.0	-2.30	43.3	40.3	-3.00
4F	NRHP	10000777	Forest--Moraine Residential Historic District	41.300701	-87.520709	39.2	39.3	39.3	0.00	40.0	39.9	-0.10
4F	NRHP	10000724	K-Town Historic District	41.854625	-87.729716	47.2	47.4	46.8	-0.60	47.9	47.3	-0.60
4F	NRHP	10000376	Northern States Life Insurance Company	41.60756	-87.521602	42.1	42.2	41.8	-0.40	42.3	41.3	-1.00

Table G-2 Inventory of Historic Resources and Noise Exposure Within the Study Area

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2013 No Action	2013 Proposed Action	Year 2013 Change	2018 No Action	2018 Proposed Action	Year 2018 Change
4F	NRHP	10000375	Nichols, Charles E., House	41.289796	-87.428174	34.0	34.1	34.1	0.00	34.8	34.7	-0.10
4F	NRHP	66000332	Illinois and Michigan Canal	41.569857	-88.069864	46.8	46.9	45.1	-1.80	47.2	45.4	-1.80
4F	NRHP	10000312	St. Charles Hospital	41.758283	-88.308449	41.8	41.9	41.9	0.00	42.4	42.8	0.40
4F	NRHP	10001079	Morgan--Skinner--Boyd Homestead	41.485038	-87.333272	37.9	37.9	36.6	-1.30	38.0	36.2	-1.80
4F	NRHP	10000175	Jackson Shore Apartments	41.797351	-87.581339	50.4	50.5	50.3	-0.20	51.0	50.8	-0.20
4F	NRHP	10000124	Forest-Ivanhoe Residential Historic District	41.582807	-87.523682	42.2	42.2	40.9	-1.30	42.2	40.5	-1.70
4F	NRHP	10000038	Baker, George, House	41.852621	-88.055537	43.9	44.0	44.0	0.00	44.7	44.7	0.00
4F	NRHP	9001134	Chesterton Residential Historic District	41.608697	-87.054169	28.5	28.6	28.7	0.10	29.0	28.7	-0.30
4F	NRHP	9000759	Pinhook Methodist Church and Cemetery	41.563623	-86.857552	30.4	30.5	30.7	0.20	30.8	30.8	0.00
4F	NRHP	9000758	Morningside Historic District	41.535203	-87.338841	42.1	42.1	44.1	2.00	42.1	44.0	1.90
4F	NRHP	78001144	First Church of Lombard	41.883081	-88.018725	46.5	46.6	46.6	0.00	47.4	47.4	0.00
4F	NRHP	10000374	Haste-Crumpacker House	41.470286	-87.057992	35.1	35.1	37.4	2.30	35.3	37.7	2.40
4F	NRHP	11000220	Solomon Enclave	41.699533	-86.962055	38.1	38.3	38.3	0.00	38.7	38.6	-0.10
4F	NRHP	66000316	Robie, Frederick C., House	41.789755	-87.595893	49.7	49.9	49.8	-0.10	50.4	50.3	-0.10
4F	NRHP	66000315	Hull House	41.87146	-87.646904	43.5	43.7	43.6	-0.10	44.3	44.2	-0.10
4F	NRHP	66000314	First Self-Sustaining Nuclear Reaction, Site of	41.792448	-87.601094	50.5	50.6	50.5	-0.10	51.1	51.0	-0.10
4F	NRHP	66000108	Chicago Portage National Historic Site	41.810751	-87.80782	53.3	53.8	53.2	-0.60	55.1	54.4	-0.70
4F	NRHP	66000005	Bailley, Joseph, Homestead	41.624939	-87.09309	29.0	29.1	29.3	0.20	29.6	29.2	-0.40
4F	NRHP	11000657	Polk Street Concrete Cottage Historic District	41.599564	-87.350062	37.3	37.3	38.2	0.90	37.5	38.4	0.90
4F	NRHP	11000386	Bloch, Conrad and Catherine, House	41.473616	-87.064582	35.4	35.5	37.6	2.10	35.6	37.9	2.30
4F	NRHP	10001077	Allman, Walter, House	41.417932	-87.362604	30.0	30.0	30.0	0.00	30.6	30.4	-0.20
4F	NRHP	11000243	Sutherland Hotel	41.81181	-87.603406	51.7	51.8	51.6	-0.20	52.3	52.1	-0.20
4F	NRHP	10001078	Ibach House	41.557424	-87.480377	42.8	42.7	45.1	2.40	42.6	44.7	2.10
4F	NRHP	11000125	Southmoor Apartment Hotel	41.607196	-87.522319	42.1	42.2	41.7	-0.50	42.2	41.2	-1.00
4F	NRHP	11000124	Sigler, Eli, House	41.317533	-87.200153	26.5	26.5	26.5	0.00	27.1	27.0	-0.10
4F	NRHP	11000120	Brannon, James, House	41.295067	-87.415429	33.4	33.4	33.4	0.00	34.1	34.0	-0.10
4F	NRHP	11000118	Hohman Avenue Commercial Historic District	41.619248	-87.522177	42.7	42.8	43.6	0.80	42.9	43.5	0.60
4F	NRHP	10001201	Cermak, Anton, House	41.850338	-87.716729	48.1	48.2	47.7	-0.50	48.8	48.1	-0.70
4F	NRHP	10001082	Chief Menominee Memorial Site	41.295497	-86.361983	27.4	27.4	27.4	0.00	27.8	27.8	0.00
4F	NRHP	74000749	Delaware Building	41.884799	-87.629201	43.1	43.2	43.1	-0.10	43.9	43.8	-0.10
4F	NRHP	11000383	Maack, Albert, House	41.408913	-87.366382	30.1	30.1	30.1	0.00	30.8	30.6	-0.20
4F	NRHP	76000712	Batavia Institute	41.844613	-88.316352	42.3	42.3	42.4	0.10	42.8	43.0	0.20
4F	NRHP	77000482	Cluever, Richard, House	41.893087	-87.833607	52.3	52.3	52.3	0.00	53.1	53.1	0.00
4F	NRHP	77000481	St. Patrick's Roman Catholic Church	41.879129	-87.644511	43.2	43.3	43.2	-0.10	43.9	43.8	-0.10
4F	NRHP	77000480	St. Ignatius College	41.86747	-87.651684	43.9	44.0	43.9	-0.10	44.5	44.5	0.00
4F	NRHP	77000479	Roloson, Robert, Houses	41.835683	-87.617879	48.9	49.1	49.3	0.20	49.5	50.0	0.50
4F	NRHP	77000477	Kent, Sydney, House	41.840692	-87.62425	48.1	48.2	50.0	1.80	48.7	50.8	2.10
4F	NRHP	77000474	First Congregational Church of Austin	41.888727	-87.767978	47.5	47.5	47.4	-0.10	48.3	48.2	-0.10
4F	NRHP	73000710	Washington Park Historic District	41.349312	-88.841635	31.6	31.7	29.9	-1.80	32.0	30.1	-1.90
4F	NRHP	76002146	Williams, Silas, House	41.124788	-88.825631	26.7	26.8	20.6	-6.20	27.3	20.6	-6.70
4F	NRHP	78000037	Halsted, Melvin A., House	41.293417	-87.423301	33.7	33.9	33.8	-0.10	34.5	34.4	-0.10
4F	NRHP	76000711	Tanner, William A., House	41.76353	-88.3183	41.8	41.9	41.9	0.00	42.4	42.7	0.30
4F	NRHP	76000710	Fox River House	41.758988	-88.317726	41.6	41.8	41.8	0.00	42.4	42.6	0.20
4F	NRHP	76000705	South Dearborn Street--Printing House Row Historic District	41.878499	-87.628174	43.3	43.4	43.3	-0.10	44.1	43.9	-0.20
4F	NRHP	76000703	Ridge Historic District	41.710155	-87.670223	48.7	48.8	49.5	0.70	49.3	49.9	0.60
4F	NRHP	76000702	Pontiac Building	41.874803	-87.628861	43.5	43.6	43.5	-0.10	44.2	44.1	-0.10
4F	NRHP	76000700	Nickerson, Samuel, House	41.893999	-87.62682	42.8	42.9	42.9	0.00	43.6	43.5	-0.10

Table G-2 Inventory of Historic Resources and Noise Exposure Within the Study Area

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2013 No Action	2013 Proposed Action	Year 2013 Change	2018 No Action	2018 Proposed Action	Year 2018 Change
4F	NRHP	76000699	Millikan, Robert A., House	41.792743	-87.596462	50.3	50.4	50.4	0.00	51.0	50.8	-0.20
4F	NRHP	76002162	Hauptgebaude	41.895778	-87.945392	51.9	51.9	51.9	0.00	52.7	52.7	0.00
4F	NRHP	78001127	Orchestra Hall	41.878698	-87.624802	43.4	43.4	43.4	0.00	44.1	44.0	-0.10
4F	NRHP	153	Somerset Hotel	41.867702	-87.626141	44.0	44.1	44.1	0.00	44.7	44.8	0.10
4F	NRHP	78001138	Lyons Township Hall	41.813787	-87.869296	50.0	50.1	50.2	0.10	50.9	51.0	0.10
4F	NRHP	78001134	West Jackson Boulevard District	41.877659	-87.665466	43.2	43.3	43.1	-0.20	44.0	43.8	-0.20
4F	NRHP	78001133	Swift House	41.812955	-87.623438	52.6	52.8	52.7	-0.10	53.2	53.1	-0.10
4F	NRHP	78001132	St. Thomas Church and Convent	41.79554	-87.595465	50.7	50.9	50.8	-0.10	51.3	51.3	0.00
4F	NRHP	78001131	South Shore Beach Apartments	41.763927	-87.559442	43.7	43.9	43.8	-0.10	44.4	44.2	-0.20
4F	NRHP	78001130	South Loop Printing House District	41.874008	-87.630962	43.5	43.6	43.5	-0.10	44.2	44.1	-0.10
4F	NRHP	77000483	River Forest Historic District	41.891857	-87.819355	51.7	51.7	51.7	0.00	52.5	52.5	0.00
4F	NRHP	78001128	Schoenhofen Brewery Historic District	41.858648	-87.639558	44.9	45.0	45.9	0.90	45.6	46.6	1.00
4F	NRHP	77001516	Naperville Historic District	41.775478	-88.151983	44.1	44.2	44.2	0.00	44.8	45.0	0.20
4F	NRHP	78001126	Old Chicago Historical Society Building	41.893621	-87.630011	42.9	42.9	42.8	-0.10	43.6	43.5	-0.10
4F	NRHP	78001125	Montgomery Ward Company Complex	41.897238	-87.643669	42.7	42.8	42.7	-0.10	43.5	43.4	-0.10
4F	NRHP	78001124	Michigan-Wacker Historic District	41.888542	-87.624814	43.0	43.1	43.0	-0.10	43.8	43.7	-0.10
4F	NRHP	78001123	Marshall Field Company Store	41.88373	-87.627021	43.2	43.3	43.2	-0.10	43.9	43.8	-0.10
4F	NRHP	78001122	Jewish People's Institute	41.863052	-87.713088	45.6	45.7	45.2	-0.50	46.3	45.8	-0.50
4F	NRHP	78000038	Miller Town Hall	41.60061	-87.261389	36.6	36.6	37.0	0.40	37.2	37.6	0.40
4F	NRHP	76000695	Leiter II Building	41.876432	-87.627431	43.4	43.5	43.4	-0.10	44.1	44.0	-0.10
4F	NRHP	78001129	Sears, Roebuck and Company Complex	41.869409	-87.711834	45.1	45.2	44.8	-0.40	45.9	45.5	-0.40
4F	NRHP	74002195	Stacy's Tavern	41.889604	-88.064151	43.1	43.1	43.1	0.00	43.9	43.9	0.00
4F	NRHP	76000697	Manhattan Building	41.884935	-87.628961	43.1	43.2	43.1	-0.10	43.9	43.8	-0.10
4F	NRHP	75000648	Fourth Presbyterian Church of Chicago	41.898694	-87.624636	42.6	42.7	42.7	0.00	43.4	43.3	-0.10
4F	NRHP	75000647	Field Museum of Natural History	41.86631	-87.61709	44.1	44.2	44.4	0.20	44.8	45.1	0.30
4F	NRHP	75000646	De Priest, Oscar Stanton, House	41.811723	-87.618009	52.4	52.6	52.5	-0.10	53.0	52.9	-0.10
4F	NRHP	75000645	Chicago Savings Bank Building	41.88183	-87.628448	43.2	43.3	43.2	-0.10	44.0	43.8	-0.20
4F	NRHP	75000644	Chicago Avenue Water Tower and Pumping Station	41.897157	-87.624042	42.7	42.8	42.7	-0.10	43.4	43.3	-0.10
4F	NRHP	75000027	Barker, John H., Mansion	41.714992	-86.90242	40.3	40.4	40.4	0.00	40.9	40.9	0.00
4F	NRHP	75000650	Reid Murdoch Building	41.888118	-87.631644	43.0	43.1	43.0	-0.10	43.7	43.6	-0.10
4F	NRHP	75000025	Marktown Historic District	41.658664	-87.467871	35.4	35.5	41.2	5.70	35.9	42.2	6.30
4F	NRHP	75000652	South Shore Country Club	41.769846	-87.562874	44.9	45.1	45.0	-0.10	45.7	45.4	-0.30
4F	NRHP	74000757	Wells-Barnett, Ida B., House	41.829749	-87.617556	50.1	50.1	50.0	-0.10	50.6	50.5	-0.10
4F	NRHP	74000756	Tree Studio Building and Annexes	41.892822	-87.627833	42.9	43.0	42.9	-0.10	43.6	43.5	-0.10
4F	NRHP	74000755	Shedd Park Fieldhouse	41.850237	-87.717041	48.2	48.3	47.7	-0.60	48.8	48.2	-0.60
4F	NRHP	74000754	Second Presbyterian Church	41.855858	-87.624507	45.3	45.4	47.1	1.70	46.0	47.9	1.90
4F	NRHP	74000752	Jewelers' Building	41.881421	-87.625889	43.2	43.4	43.3	-0.10	44.0	43.9	-0.10
4F	NRHP	74000751	Hitchcock, Charles, Hall	41.791189	-87.600841	50.1	50.3	50.3	0.00	50.8	50.8	0.00
4F	NRHP	9000430	Polk Street Terraces Historic District	41.603105	-87.349637	37.4	37.5	38.4	0.90	37.7	38.7	1.00
4F	NRHP	75000026	Wood, John, Old Mill	41.476391	-87.221723	37.0	37.0	35.8	-1.20	37.1	34.7	-2.40
4F	NRHP	76000017	Porter County Jail and Sheriff's House	41.466592	-87.059425	35.2	35.3	37.8	2.50	35.4	38.1	2.70
4F	NRHP	74000023	Michigan City Lighthouse	41.72274	-86.905775	41.2	41.3	41.3	0.00	41.8	41.8	0.00
4F	NRHP	76000694	Lakeside Press Building	41.872554	-87.628357	43.6	43.7	43.7	0.00	44.3	44.3	0.00
4F	NRHP	76000691	Fisher Building	41.877054	-87.628944	43.4	43.5	43.4	-0.10	44.1	44.0	-0.10
4F	NRHP	76000690	Du Sable, Jean Baptiste Point, Homesite	41.889694	-87.623463	43.0	43.1	43.0	-0.10	43.8	43.6	-0.20
4F	NRHP	76000689	Douglas Tomb State Memorial	41.83168	-87.608507	49.4	49.5	49.4	-0.10	50.0	50.0	0.00
4F	NRHP	76000688	Dearborn Station	41.872194	-87.628354	43.6	43.7	43.7	0.00	44.4	44.3	-0.10

Table G-2 Inventory of Historic Resources and Noise Exposure Within the Study Area

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2013 No Action	2013 Proposed Action	Year 2013 Change	2018 No Action	2018 Proposed Action	Year 2018 Change
4F	NRHP	76000687	Compton, Arthur H., House	41.792023	-87.596335	50.2	50.3	50.3	0.00	50.8	50.7	-0.10
4F	NRHP	75000649	Page Brothers Building	41.885528	-87.62752	43.1	43.2	43.1	-0.10	43.9	43.7	-0.20
4F	NRHP	76000027	Pinehurst Hall	41.650743	-86.759846	34.1	34.3	34.3	0.00	34.8	34.7	-0.10
4F	NRHP	76000696	Lillie, Frank R., House	41.789474	-87.592882	49.6	49.7	49.7	0.00	50.3	50.1	-0.20
4F	NRHP	76000016	Heritage Hall	41.462046	-87.054272	35.1	35.1	37.9	2.80	35.3	38.1	2.80
4F	NRHP	75002077	Graue Mill	41.820884	-87.929115	49.7	49.8	49.8	0.00	50.5	50.6	0.10
4F	NRHP	75002076	Pine Craig	41.769579	-88.153718	44.0	44.1	44.1	0.00	44.6	44.9	0.30
4F	NRHP	75000676	Lockport Historic District	41.589341	-88.057013	46.4	46.5	46.0	-0.50	46.8	46.6	-0.20
4F	NRHP	75000656	Lemont Central Grade School	41.672598	-87.997253	44.8	44.9	44.2	-0.70	45.3	45.6	0.30
4F	NRHP	75000655	Williams, Dr. Daniel Hale, House	41.818763	-87.615307	51.5	51.7	51.5	-0.20	52.2	52.0	-0.20
4F	NRHP	75000653	Studebaker Building	41.876176	-87.624777	43.5	43.5	43.5	0.00	44.2	44.1	-0.10
4F	NRHP	76000686	Abbott, Robert S., House	41.810022	-87.616187	52.4	52.6	52.5	-0.10	53.0	52.9	-0.10
4F	NRHP	3000786	Washington Square Historic District	41.898798	-87.630303	42.6	42.7	42.6	-0.10	43.4	43.3	-0.10
4F	NRHP	3001200	Steward, Lewis, House	41.664959	-88.529741	33.9	34.0	34.0	0.00	34.5	34.7	0.20
4F	NRHP	3001040	Columbus Park	41.874512	-87.769627	47.0	47.1	47.0	-0.10	47.8	47.7	-0.10
4F	NRHP	3000985	Griffith Grand Trunk Depot	41.521116	-87.427661	40.7	40.7	39.9	-0.80	40.7	39.7	-1.00
4F	NRHP	3000917	Flat Iron Building	41.504423	-87.634734	43.4	43.5	43.5	0.00	44.1	44.1	0.00
4F	NRHP	3000916	Pentecost, John L., House	41.893798	-87.941951	51.7	51.8	51.8	0.00	52.6	52.6	0.00
4F	NRHP	3000789	Armour Square	41.833658	-87.633961	49.8	50.0	50.2	0.20	50.4	50.7	0.30
4F	NRHP	2001760	Scutt, Hiram B., Mansion	41.526843	-88.088488	45.1	45.2	43.4	-1.80	45.6	43.9	-1.70
4F	NRHP	3000787	Davis Square	41.813067	-87.667516	55.0	55.2	54.7	-0.50	55.6	55.0	-0.60
4F	NRHP	4000076	South Park Manor Historic District	41.757063	-87.619095	47.7	47.9	48.0	0.10	48.5	48.4	-0.10
4F	NRHP	3000784	Palmolive Building	41.899869	-87.623924	42.6	42.7	42.6	-0.10	43.3	43.2	-0.10
4F	NRHP	3000783	Reid House	41.855179	-87.620151	45.4	45.5	47.4	1.90	46.0	48.3	2.30
4F	NRHP	3000546	Pulaski County Bridge No.31	41.059142	-86.82936	25.1	25.1	25.0	-0.10	25.6	25.3	-0.30
4F	NRHP	3000544	Scott--Lucas House	40.940985	-87.45525	37.1	37.2	37.2	0.00	37.8	37.8	0.00
4F	NRHP	3000538	Produce Terminal Cold Storage Company Building	41.861607	-87.657901	44.5	44.6	44.6	0.00	45.2	45.3	0.10
4F	NRHP	3000355	Butler School	41.834777	-87.946202	48.7	48.8	48.8	0.00	49.6	49.6	0.00
4F	NRHP	9000521	Lakeside Inn	41.843208	-86.678789	40.3	40.5	40.4	-0.10	41.0	41.0	0.00
4F	NRHP	3000788	Calumet Park	41.716779	-87.528197	40.4	40.5	41.2	0.70	41.1	41.8	0.70
4F	NRHP	4000419	Small--Towle House	41.310849	-88.141869	38.5	38.5	38.5	0.00	39.2	39.1	-0.10
4F	NRHP	4001300	Hotel Arthur	41.759237	-88.313232	41.7	41.8	41.9	0.10	42.4	42.7	0.30
4F	NRHP	4001299	Bassett, Orland P., House	41.798769	-87.921718	49.4	49.5	49.7	0.20	50.3	50.8	0.50
4F	NRHP	4001298	Oak Park Conservatory	41.871664	-87.78985	48.2	48.3	48.2	-0.10	49.1	49.0	-0.10
4F	NRHP	4001102	Bailey, Louis J., Branch Library--Gary International Institute	41.58761	-87.341239	40.8	40.9	41.3	0.40	40.9	41.4	0.50
4F	NRHP	4000871	Washington Park	41.795979	-87.611273	51.5	51.7	51.6	-0.10	52.2	52.1	-0.10
4F	NRHP	4000870	South Water Market	41.872649	-87.654821	43.4	43.5	43.4	-0.10	44.1	44.0	-0.10
4F	NRHP	4000867	Farnsworth House	41.637413	-88.535344	32.0	32.1	32.0	-0.10	32.6	32.6	0.00
4F	NRHP	3001204	Riverbank Laboratories	41.871606	-88.313967	44.3	44.4	44.4	0.00	44.6	44.6	0.00
4F	NRHP	4000421	Emery, Jr., William H., House	41.894223	-87.938449	52.0	52.1	52.1	0.00	52.9	52.9	0.00
4F	NRHP	3001463	Robinwood	41.897007	-87.937285	52.5	52.6	52.6	0.00	53.4	53.4	0.00
4F	NRHP	4000208	Bartlett Real Estate Office	41.673418	-86.986817	34.5	34.7	34.7	0.00	35.1	34.9	-0.20
4F	NRHP	4000167	Lockport Lock, Dam and Power House Historic District	41.569574	-88.077968	46.3	46.3	45.4	-0.90	46.7	45.7	-1.00
4F	NRHP	4000166	Starved Rock Lock and Dam Historic District	41.323337	-88.986156	29.5	29.6	28.9	-0.70	30.0	29.0	-1.00
4F	NRHP	4000165	Marseilles Lock and Dam Historic District	41.326155	-88.731975	30.3	30.4	35.9	5.50	30.7	36.1	5.40
4F	NRHP	4000164	Dresden Island Lock and Dam Historic District	41.398354	-88.281639	33.8	33.9	33.6	-0.30	34.5	34.1	-0.40
4F	NRHP	4000163	Brandon Road Lock and Dam Historic District	41.506357	-88.098341	44.1	44.1	42.4	-1.70	44.6	43.0	-1.60

Table G-2 Inventory of Historic Resources and Noise Exposure Within the Study Area

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4F	NRHP	2001387	Motor Row Historic District	41.852808	-87.623971	45.7	45.9	48.5	2.60	46.4	49.5	3.10
4F	NRHP	4000866	Ninth Street Seven Arch Stone Bridge	41.593323	-88.064757	45.9	45.9	45.9	0.00	46.4	46.7	0.30
4F	NRHP	678	Porter Town Hall	41.616289	-87.072288	28.7	28.8	29.0	0.20	29.2	28.9	-0.30
4F	NRHP	1000082	Olympia Fields Country Club	41.515933	-87.685145	43.0	43.0	43.0	0.00	43.7	43.6	-0.10
4F	NRHP	1629	Heminger Travel Lodge	41.343598	-86.2996	29.4	29.5	29.4	-0.10	30.0	29.9	-0.10
4F	NRHP	1540	Monon Park Dancing Pavillion	41.368661	-87.439572	33.4	33.6	33.6	0.00	34.3	34.2	-0.10
4F	NRHP	1338nrhp	Roche, Martin--John Tait House	41.829469	-87.617698	50.1	50.2	50.1	-0.10	50.7	50.5	-0.20
4F	NRHP	1330	Peabody, Francis Stuyvesant, House	41.79963	-87.928928	49.4	49.5	49.8	0.30	50.4	51.0	0.60
4F	NRHP	1139	Marshall County Infirmary	41.32817	-86.262482	29.5	29.6	29.5	-0.10	30.0	30.0	0.00
4F	NRHP	3000144	Lowell Commercial Historic District	41.291644	-87.422955	33.7	33.9	33.9	0.00	34.5	34.4	-0.10
4F	NRHP	942	Buckingham Building	41.876805	-87.625024	43.4	43.5	43.4	-0.10	44.1	44.1	0.00
4F	NRHP	1000619	Clark, Wellington A., House	41.41576	-87.365942	30.1	30.1	30.1	0.00	30.7	30.5	-0.20
4F	NRHP	675	Michigan City Post Office	41.717962	-86.900733	40.6	40.8	40.8	0.00	41.2	41.3	0.10
4F	NRHP	671	Forest Place Historic District	41.220481	-86.416875	27.1	27.2	27.2	0.00	27.5	27.5	0.00
4F	NRHP	477	Holy Name Cathedral	41.896155	-87.627866	42.7	42.8	42.7	-0.10	43.5	43.4	-0.10
4F	NRHP	476	Childs, Robert A. and Mary, House	41.798919	-87.927714	49.4	49.6	49.8	0.20	50.3	50.9	0.60
4F	NRHP	409	Illinois Central Railroad Depot	41.110328	-87.865771	40.8	40.8	40.8	0.00	41.5	41.5	0.00
4F	NRHP	258	Heurtley, Arthur, House	41.8931	-87.800216	49.5	49.6	49.6	0.00	50.4	50.4	0.00
4F	NRHP	216	Service, Jeremiah H., House	41.706044	-86.504466	39.3	39.5	39.4	-0.10	39.9	40.0	0.10
4F	NRHP	951	American State Bank	41.850184	-87.793536	48.7	48.8	48.5	-0.30	49.5	49.3	-0.20
4F	NRHP	1001349	Barker House	41.688042	-86.882754	36.7	36.9	36.9	0.00	37.3	37.2	-0.10
4F	NRHP	2001386	Automatic Electric Company Building	41.878383	-87.652241	43.2	43.3	43.2	-0.10	43.9	43.8	-0.10
4F	NRHP	2001351	Scoville Place	41.889713	-87.795111	49.0	49.0	49.0	0.00	49.8	49.8	0.00
4F	NRHP	2001349	Maxwell--Briscoe Automobile Company Showroom	41.860168	-87.623597	44.7	44.8	45.5	0.70	45.4	46.3	0.90
4F	NRHP	2001347	Fuller Park	41.812914	-87.634262	53.2	53.3	53.5	0.20	53.7	53.9	0.20
4F	NRHP	2001168	Wynant, Wilbur, House	41.6001	-87.351385	37.5	37.5	38.4	0.90	37.7	38.7	1.00
4F	NRHP	2000844	Henderson, Frank B., House	41.894223	-87.938449	52.0	52.1	52.1	0.00	52.9	52.9	0.00
4F	NRHP	2000201	Vurpillat's Opera House	41.051203	-86.604121	30.7	30.7	29.8	-0.90	30.8	29.0	-1.80
4F	NRHP	1000085	Immanuel Evangelical Church	41.799332	-87.932354	49.4	49.5	49.7	0.20	50.3	51.0	0.70
4F	NRHP	1001538	Crane Company Building	41.870683	-87.624603	43.7	43.9	43.8	-0.10	44.4	44.5	0.10
4F	NRHP	1000594	Chicago Telephone Company Kedzie Exchange	41.880313	-87.71087	45.3	45.4	45.2	-0.20	46.1	45.9	-0.20
4F	NRHP	1001343	First Congregational Church of Michigan City	41.715893	-86.903381	40.4	40.5	40.5	0.00	41.0	41.0	0.00
4F	NRHP	1001340	Garrettson--Baine--Bartholomew House	41.69724	-86.894275	37.9	38.1	38.0	-0.10	38.5	38.4	-0.10
4F	NRHP	1001311	Ambler's Texaco Gas Station	41.094123	-88.440729	32.2	32.3	32.2	-0.10	33.0	32.8	-0.20
4F	NRHP	1000868	United States Post Office--Chicago	41.876099	-87.638756	43.3	43.4	43.3	-0.10	44.1	43.9	-0.20
4F	NRHP	1000865	Berwyn Municipal Building	41.843084	-87.79128	49.3	49.4	49.0	-0.40	50.1	49.8	-0.30
4F	NRHP	1000649	Chicago Varnish Company Building	41.889031	-87.629363	43.0	43.1	43.0	-0.10	43.7	43.6	-0.10
4F	NRHP	5000107	Narragansett, The	41.804612	-87.584703	51.0	51.1	50.9	-0.20	51.6	51.4	-0.20
4F	NRHP	2000100	Gunderson Historic District	41.876278	-87.785556	47.9	48.0	48.0	0.00	48.8	48.7	-0.10
4F	NRHP	7000477	Coonley, Avery, School	41.788717	-88.019718	46.7	46.9	46.9	0.00	47.6	47.8	0.20
4F	NRHP	7001282	Pulaski County Courthouse	41.050931	-86.603765	30.7	30.7	29.8	-0.90	30.8	29.0	-1.80
4F	NRHP	7001281	Wolf, Josephus, House	41.536324	-87.144725	39.0	39.1	40.5	1.40	39.2	40.8	1.60
4F	NRHP	7001238	Lumber Exchange Building and Tower Addition	41.881775	-87.632063	43.2	43.3	43.2	-0.10	43.9	43.8	-0.10
4F	NRHP	7000898	Hatch, William H., House	41.886668	-87.818215	51.3	51.4	51.3	-0.10	52.2	52.1	-0.10
4F	NRHP	7000855	Palmer Park	41.690835	-87.615562	50.9	51.1	49.4	-1.70	51.4	49.2	-2.20
4F	NRHP	7000853	Vial, Robert, House	41.754876	-87.895828	51.4	51.5	51.6	0.10	52.1	52.2	0.10
4F	NRHP	4001301	University Apartments	41.797176	-87.590943	50.8	50.9	50.8	-0.10	51.4	51.2	-0.20

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4F	NRHP	7000563	Wolf, George John, House	41.58422	-87.523813	42.4	42.4	40.9	-1.50	42.4	40.4	-2.00
4F	NRHP	8000326	Schiller, Alfred A.,House	41.886612	-88.060461	43.0	43.1	43.1	0.00	43.9	43.9	0.00
4F	NRHP	7000458	Rees, Harriet F., House	41.853879	-87.620765	45.6	45.7	48.0	2.30	46.2	48.9	2.70
4F	NRHP	7000457	Steuben Club, The	41.884558	-87.633682	43.1	43.2	43.1	-0.10	43.8	43.7	-0.10
4F	NRHP	7000211	North Liberty Park	41.53809	-86.429872	34.9	34.9	33.9	-1.00	34.9	33.3	-1.60
4F	NRHP	7000210	Crown Point Courthouse Square Historic District (Boundary Increase II)	41.417367	-87.407665	31.0	31.1	31.1	0.00	31.8	31.6	-0.20
4F	NRHP	7000208	Young, Martin, House	41.608283	-87.054037	28.4	28.6	28.7	0.10	29.0	28.6	-0.40
4F	NRHP	7000115	Kankakee County Courthouse	41.119277	-87.860433	40.8	40.9	41.0	0.10	41.6	41.6	0.00
4F	NRHP	7000064	Continental and Commercial National Bank	41.879305	-87.632413	43.2	43.4	43.3	-0.10	44.0	43.8	-0.20
4F	NRHP	7000565	Van Buren Terrace Historic District	41.604799	-87.34637	37.3	37.3	38.2	0.90	37.6	38.5	0.90
4F	NRHP	8001168	South Shore Bungalow Historic District	41.756663	-87.571167	42.4	42.6	42.6	0.00	43.2	43.0	-0.20
4F	NRHP	9000429	Monroe Terrace Historic District	41.605257	-87.343733	37.0	37.1	38.0	0.90	37.3	38.4	1.10
4F	NRHP	9000428	Jackson-Monroe Terraces Historic District	41.603256	-87.34419	36.8	36.8	37.8	1.00	37.1	38.1	1.00
4F	NRHP	9000427	American Sheet and Tin Mill Apartment Building	41.603631	-87.345404	36.9	37.0	37.9	0.90	37.3	38.3	1.00
4F	NRHP	9000374	Bradley, B. Harley, House and Stable	41.112101	-87.857576	40.8	40.9	40.9	0.00	41.5	41.5	0.00
4F	NRHP	9000166	IBM Building	41.890716	-87.627656	42.9	43.0	43.0	0.00	43.7	43.6	-0.10
4F	NRHP	9000028	Hegeler I, Julius W., House	41.335079	-89.087109	30.6	30.7	30.4	-0.30	31.3	30.8	-0.50
4F	NRHP	9000025	Spiegel Office Building	41.83135	-87.652039	50.8	51.0	51.9	0.90	51.4	52.4	1.00
4F	NRHP	7001474	International Tailoring Company Building	41.877769	-87.649306	43.2	43.3	43.2	-0.10	44.0	43.8	-0.20
4F	NRHP	8001211	Rumsey, J. Claude, House	41.295604	-87.416507	33.4	33.5	33.5	0.00	34.2	34.1	-0.10
4F	NRHP	7001475	Hunter--Hattenburg House	41.109023	-87.859621	40.8	40.8	40.9	0.10	41.5	41.5	0.00
4F	NRHP	8001165	Chicago Federal Center	41.879186	-87.629398	43.3	43.4	43.3	-0.10	44.0	43.9	-0.10
4F	NRHP	8001097	Otis Elevator Company Factory Building	41.863306	-87.663208	44.3	44.3	44.3	0.00	44.9	44.9	0.00
4F	NRHP	8001096	Frank Lloyd Wright-Prairie School of Architecture Historic District (Boundary Increase)	41.893962	-87.792825	48.8	48.8	48.7	-0.10	49.6	49.5	-0.10
4F	NRHP	8001095	Lindemann and Hoverson Company Showroom and Warehouse	41.883177	-87.691859	44.1	44.1	43.9	-0.20	44.8	44.5	-0.30
4F	NRHP	8000568	Skinner, DeForest, House	41.470465	-87.060746	35.2	35.3	37.6	2.30	35.4	37.9	2.50
4F	NRHP	8000398	Elizabeth Place	41.881737	-88.310908	43.1	43.1	43.1	0.00	43.4	43.4	0.00
4F	NRHP	6001293	McCallum, William, House	41.468036	-87.054158	34.9	35.0	37.3	2.30	35.2	37.6	2.40
4F	NRHP	9000024	Inland Steel Building	41.880748	-87.628679	43.2	43.4	43.3	-0.10	44.0	43.9	-0.10
4F	NRHP	5000872	Grand Theater	41.867391	-88.108232	42.0	42.1	42.1	0.00	42.7	42.7	0.00
4F	NRHP	7000062	Silhan, Mr. Robert, House	41.824407	-87.781573	54.5	54.7	54.2	-0.50	55.2	54.7	-0.50
4F	NRHP	5001464	Crown Point Courthouse Square Historic District (Boundary Adjustment)	41.417086	-87.365471	30.0	30.1	30.1	0.00	30.7	30.6	-0.10
4F	NRHP	5001370	Ouilmette North Historic District	41.484293	-87.699472	41.9	42.0	42.0	0.00	42.6	42.5	-0.10
4F	NRHP	5001253	Downtown Peotone Historic District	41.334214	-87.791412	40.3	40.4	40.4	0.00	41.0	40.9	-0.10
4F	NRHP	5001252	Pacesetter Gardens Historic District	41.646824	-87.637285	47.2	47.3	44.4	-2.90	47.7	44.0	-3.70
4F	NRHP	5001014	Indiana Harbor Public Library	41.647499	-87.448913	40.1	40.1	43.4	3.30	40.3	44.2	3.90
4F	NRHP	5001013	Kingsbury--Doak Farmhouse	41.33906	-87.286153	28.0	28.1	28.1	0.00	28.7	28.5	-0.20
4F	NRHP	5001609	Pilsen Historic District	41.853951	-87.67046	45.9	46.0	46.2	0.20	46.6	46.9	0.30
4F	NRHP	5000873	Central Park Theater	41.86651	-87.707343	45.1	45.2	44.8	-0.40	45.9	45.4	-0.50
4F	NRHP	6000008	Hanson, Anton, E., House	41.758767	-87.582674	43.1	43.2	43.3	0.10	43.8	43.7	-0.10
4F	NRHP	5000871	Illinois Institute of Technology Academic Campus	41.835023	-87.628266	49.4	49.5	49.8	0.30	49.9	50.4	0.50
4F	NRHP	5000845	Purple, George E., House	41.809965	-87.88386	49.7	49.8	49.8	0.00	50.5	50.7	0.20
4F	NRHP	5000608	Lake County Sanatorium Nurses Home	41.451252	-87.365424	30.2	30.3	30.1	-0.20	30.7	30.3	-0.40

Table G-2 Inventory of Historic Resources and Noise Exposure Within the Study Area

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2013 No Action	2013 Proposed Action	Year 2013 Change	2018 No Action	2018 Proposed Action	Year 2018 Change
4F	NRHP	5000114	Humphrey, John, House	41.630071	-87.85958	48.4	48.4	47.7	-0.70	48.8	48.1	-0.70
4F	NRHP	5000109	Chicago Club	41.87696	-87.624701	43.4	43.5	43.4	-0.10	44.1	44.0	-0.10
4F	NRHP	5000108	Garden Homes Historic District	41.736495	-87.621614	47.9	48.0	48.3	0.30	48.6	48.6	0.00
4F	NRHP	78001154	Chicago, Burlington, & Quincy Roundhouse and Locomotive Shop	41.760885	-88.308538	41.8	41.9	41.9	0.00	42.5	42.8	0.30
4F	NRHP	5000875	Cornell Square	41.802283	-87.6711	55.9	56.1	55.6	-0.50	56.5	56.0	-0.50
4F	NRHP	6000448	McGovney--Yunker Farmstead	41.526646	-87.881412	45.6	45.8	45.4	-0.40	46.4	46.0	-0.40
4F	NRHP	4001306	Chicago and North Western Railway Power House	41.888393	-87.648522	43.0	43.0	42.9	-0.10	43.7	43.6	-0.10
4F	NRHP	6001291	Jacoby Church and Cemetery	41.309403	-86.261977	29.3	29.3	29.3	0.00	29.8	29.7	-0.10
4F	NRHP	6001023	Hotel Kaskaskia Buildings (Boundary Increase)	41.329515	-89.095893	30.5	30.6	30.3	-0.30	31.1	30.7	-0.40
4F	NRHP	6001017	Cook County Hospital Administration Building	41.875841	-87.672835	43.4	43.5	43.2	-0.30	44.1	43.8	-0.30
4F	NRHP	6001016	Goldblatt Bros. Department Store	41.808441	-87.665386	55.4	55.6	54.9	-0.70	55.9	55.3	-0.60
4F	NRHP	6001015	Austin Town Hall Park Historic District	41.88064	-87.765169	47.0	47.0	46.9	-0.10	47.8	47.7	-0.10
4F	NRHP	6000678	Grand Crossing Park	41.756865	-87.60046	44.7	44.8	45.0	0.20	45.4	45.4	0.00
4F	NRHP	5001603	Morris Downtown Commercial Historic District	41.375592	-88.484037	38.8	38.8	39.0	0.20	38.9	39.2	0.30
4F	NRHP	6000449	Downtown Momence Historic District	41.156661	-87.662801	38.8	38.9	38.9	0.00	39.6	39.6	0.00
4F	NRHP	6001295	Dune Acres Clubhouse	41.653029	-87.086141	31.3	31.4	31.6	0.20	31.9	31.7	-0.20
4F	NRHP	6000446	Union Park Congregational Church and Carpenter Chapel	41.885042	-87.667435	43.2	43.3	43.2	-0.10	44.0	43.8	-0.20
4F	NRHP	6000445	Durham--Perry Farmstead	41.149361	-87.876248	41.0	41.1	41.1	0.00	41.8	41.8	0.00
4F	NRHP	6000381	Alternate Route 66, Wilmington to Joilet	41.404412	-88.107664	39.6	39.7	39.7	0.00	40.3	40.3	0.00
4F	NRHP	6000376	Lou Mitchell's Restaurant	41.877209	-87.641599	43.3	43.4	43.3	-0.10	44.0	43.9	-0.10
4F	NRHP	6000375	Dell Rhea's Chicken Basket	41.747465	-87.93954	49.3	49.5	49.5	0.00	50.0	50.2	0.20
4F	NRHP	6000011	Downtown Hinsdale Historic District	41.805144	-87.853253	50.7	50.8	50.8	0.00	51.5	51.6	0.10
4F	NRHP	6000010	Joilet YMCA	41.530574	-88.083552	45.3	45.3	43.4	-1.90	45.8	43.9	-1.90
4F	NRHP	6000673	First Congregational Church of Western Springs	41.814841	-87.903106	49.2	49.3	49.6	0.30	50.1	50.8	0.70
4F	NRHP	90001725	Oak Lawn School	41.718961	-87.752003	45.7	45.8	48.7	2.90	46.5	49.7	3.20
4F	NRHP	91000687	Upper Bluff Historic District	41.529191	-88.096439	45.8	45.9	43.6	-2.30	46.3	44.0	-2.30
4F	NRHP	91000573	Turner Town Hall	41.883715	-88.204345	40.1	40.1	40.1	0.00	40.6	40.7	0.10
4F	NRHP	91000570	Kenwood Evangelical Church	41.811369	-87.599947	51.6	51.7	51.5	-0.20	52.2	52.0	-0.20
4F	NRHP	91000567	Columbus Park	41.874512	-87.769627	47.0	47.1	47.0	-0.10	47.8	47.7	-0.10
4F	NRHP	91000566	Washington Square	41.899607	-87.630612	42.6	42.7	42.6	-0.10	43.3	43.2	-0.10
4F	NRHP	91000114	Coca Cola Company Building	41.86491	-87.626234	44.2	44.3	44.5	0.20	44.9	45.2	0.30
4F	NRHP	89001729	West Jackson Historic District (Boundary Increase)	41.878639	-87.667224	43.2	43.4	43.2	-0.20	44.0	43.8	-0.20
4F	NRHP	90001794	Smith, Everel S., House	41.543128	-86.897761	33.5	33.6	34.0	0.40	33.8	34.1	0.30
4F	NRHP	91001082	Miller, Allan, House	41.76576	-87.571248	44.0	44.2	44.1	-0.10	44.8	44.6	-0.20
4F	NRHP	90001724	Reorganized Church of Jesus Christ of Latter Day Saints	41.659184	-88.535958	33.3	33.4	33.4	0.00	33.9	34.1	0.20
4F	NRHP	90001723	Ransom Water Tower	41.156634	-88.649176	31.3	31.4	27.1	-4.30	31.7	27.3	-4.40
4F	NRHP	90000745	Sherman Park	41.796719	-87.655177	54.1	54.2	53.8	-0.40	54.7	54.2	-0.50
4F	NRHP	90000327	Valparaiso Downtown Commercial District	41.46752	-87.060025	35.3	35.3	37.8	2.50	35.4	38.1	2.70
4F	NRHP	90000101	Joliet, Louis, Hotel	41.526832	-88.08011	44.6	44.7	43.4	-1.30	45.2	43.8	-1.40
4F	NRHP	89002025	Rothschild, A. M., & Company Store	41.877433	-87.625633	43.4	43.5	43.4	-0.10	44.1	44.0	-0.10
4F	NRHP	86001096	Eighth Regiment Armory	41.830721	-87.619396	49.9	50.0	50.0	0.00	50.5	50.4	-0.10
4F	NRHP	91000088	Joliet Steel Works	41.541047	-88.075131	46.0	46.1	43.9	-2.20	46.5	44.3	-2.20
4F	NRHP	92000189	Tepicon Hall	41.149356	-86.59388	31.5	31.5	31.3	-0.20	31.5	30.6	-0.90
4F	NRHP	92000494	Soffel, Albert, House	41.892276	-87.839865	52.7	52.7	52.7	0.00	53.5	53.5	0.00
4F	NRHP	92000493	Millward, Caroline, House	41.891918	-87.839619	52.6	52.7	52.7	0.00	53.5	53.5	0.00
4F	NRHP	92000492	Maywood Fire Department Building	41.888222	-87.840052	52.5	52.5	52.5	0.00	53.3	53.3	0.00

Table G-2 Inventory of Historic Resources and Noise Exposure Within the Study Area

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4F	NRHP	92000491	Masonic Temple Building	41.885794	-87.839538	52.4	52.4	52.4	0.00	53.2	53.1	-0.10
4F	NRHP	92000490	Larson, Mads C., House	41.884658	-87.834702	51.9	51.9	51.9	0.00	52.7	52.7	0.00
4F	NRHP	92000489	Grow, Caroline, House	41.892904	-87.840234	52.7	52.8	52.8	0.00	53.6	53.6	0.00
4F	NRHP	92000488	Frangenheim, William, House	41.891395	-87.837201	52.4	52.5	52.5	0.00	53.3	53.3	0.00
4F	NRHP	91000793	Washington Park	41.726087	-86.900745	41.5	41.7	41.7	0.00	42.1	42.2	0.10
4F	NRHP	92000486	Knuessl Building	41.345546	-88.843382	31.7	31.8	29.9	-1.90	32.2	30.0	-2.20
4F	NRHP	91001000	Fletcher, Ruffin Drew, House	41.126374	-88.82782	27.0	27.1	20.7	-6.40	27.4	20.6	-6.80
4F	NRHP	92000048	Gibbs, William and Caroline, House	41.89221	-87.836609	52.5	52.5	52.5	0.00	53.3	53.3	0.00
4F	NRHP	92000047	Lynch, Timothy J., House	41.891387	-87.838286	52.5	52.6	52.6	0.00	53.3	53.3	0.00
4F	NRHP	92000046	Robinson House	41.893016	-87.837222	52.5	52.6	52.6	0.00	53.4	53.4	0.00
4F	NRHP	92000045	Nichols, Harry H., House	41.885624	-87.83809	52.2	52.2	52.2	0.00	53.0	53.0	0.00
4F	NRHP	91001688	Flanders House	41.612443	-88.202878	37.5	37.5	33.9	-3.60	37.7	34.3	-3.40
4F	NRHP	91001166	Lakeville High School	41.531068	-86.27361	34.3	34.3	33.5	-0.80	34.4	32.9	-1.50
4F	NRHP	89001231	U-505 (IX C U-Boat)	41.866498	-87.615766	44.1	44.2	44.4	0.20	44.8	45.0	0.20
4F	NRHP	92000487	Akin, Mrs. Henry F., House	41.87947	-87.842107	52.2	52.2	52.2	0.00	53.0	53.0	0.00
4F	NRHP	86001472	Beverly Shores--Century of Progress Architectural District	41.684317	-87.001835	35.8	36.0	36.0	0.00	36.4	36.3	-0.10
4F	NRHP	87000069	Hoosier Theater Building	41.67964	-87.496354	35.8	36.0	39.7	3.70	36.6	40.5	3.90
4F	NRHP	86003720	Sears, Albert H., House	41.665383	-88.53034	33.9	34.0	34.0	0.00	34.6	34.8	0.20
4F	NRHP	86003170	Starke County Courthouse	41.298807	-86.622579	27.2	27.2	27.1	-0.10	27.7	27.4	-0.30
4F	NRHP	86003169	Legler, Henry E., Regional Branch of the Chicago Public Library	41.879368	-87.725202	45.3	45.4	45.2	-0.20	46.2	45.9	-0.30
4F	NRHP	86001488	Riverview Historic District	41.110212	-87.858409	40.8	40.8	40.9	0.10	41.5	41.5	0.00
4F	NRHP	86001487	Stolp Island Historic District	41.757644	-88.315521	41.6	41.8	41.8	0.00	42.3	42.6	0.30
4F	NRHP	89001731	Whitney, William, House	41.801286	-87.924558	49.4	49.6	49.8	0.20	50.4	51.0	0.60
4F	NRHP	86001480	Villa Avenue Train Station	41.894938	-87.970453	53.7	53.8	53.8	0.00	54.6	54.6	0.00
4F	NRHP	87001113	Building at 257 East Delaware	41.899263	-87.619457	42.6	42.7	42.6	-0.10	43.4	43.3	-0.10
4F	NRHP	86001201	Shoreland Hotel	41.795793	-87.581265	50.2	50.4	50.2	-0.20	50.8	50.7	-0.10
4F	NRHP	86001199	Poinsetta Apartments	41.794067	-87.584258	50.1	50.2	50.1	-0.10	50.7	50.5	-0.20
4F	NRHP	86001198	Mayfair Apartments	41.795328	-87.58427	50.3	50.4	50.2	-0.20	50.9	50.7	-0.20
4F	NRHP	86001197	East Park Towers	41.79974	-87.58443	50.8	50.9	50.7	-0.20	51.4	51.1	-0.30
4F	NRHP	86001195	Hotel Del Prado	41.799562	-87.583947	50.7	50.8	50.7	-0.10	51.3	51.1	-0.20
4F	NRHP	86001194	Flamingo-On-The-Lake Apartments	41.794625	-87.580773	50.0	50.1	50.0	-0.10	50.7	50.5	-0.20
4F	NRHP	78001139	Hofmann Tower	41.820711	-87.821949	50.8	50.9	50.7	-0.20	51.8	51.8	0.00
4F	NRHP	86001484	West Side Historic District	41.753019	-88.325278	41.3	41.5	41.5	0.00	42.1	42.4	0.30
4F	NRHP	88002229	Hotel Kaskaskia	41.329515	-89.095893	30.5	30.6	30.3	-0.30	31.1	30.7	-0.40
4F	NRHP	89001202	YMCA Hotel	41.86737	-87.620956	44.0	44.1	44.2	0.10	44.7	44.8	0.10
4F	NRHP	89001113	Bohlander, Jacob, House	41.890757	-87.838278	52.5	52.5	52.5	0.00	53.3	53.3	0.00
4F	NRHP	89001111	Geneva Country Day School	41.883161	-88.320278	42.6	42.6	42.6	0.00	43.0	43.0	0.00
4F	NRHP	89000411	Beverly Shores South Shore Railroad Station	41.673417	-86.985856	34.6	34.7	34.7	0.00	35.2	34.9	-0.30
4F	NRHP	89000343	Marseilles Hydro Plant	41.326927	-88.715291	29.7	29.8	36.5	6.70	30.2	36.7	6.50
4F	NRHP	88003311	Hotel St. Benedict Flats	41.897063	-87.626428	42.7	42.8	42.7	-0.10	43.5	43.4	-0.10
4F	NRHP	88003039	Lake County Sheriff's House and Jail	41.415783	-87.364219	30.1	30.1	30.1	0.00	30.7	30.5	-0.20
4F	NRHP	87000819	Adler Planetarium	41.866185	-87.606726	44.1	44.3	44.5	0.20	44.9	45.2	0.30
4F	NRHP	88002233	Fairbanks, Morse and Company Building	41.870225	-87.626045	43.7	43.9	43.9	0.00	44.5	44.5	0.00
4F	NRHP	87000820	Shedd, John G., Aquarium	41.867678	-87.61397	44.0	44.2	44.3	0.10	44.7	44.9	0.20
4F	NRHP	88000069	Michigan City East Pierhead Light Tower and Elevated Walk	41.728166	-86.909831	41.8	41.9	41.9	0.00	42.4	42.5	0.10
4F	NRHP	87002540	Tri-Taylor Historic District (Boundary Increase)	41.871101	-87.683883	44.1	44.2	43.9	-0.30	44.8	44.5	-0.30

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4F	NRHP	87002510	Marshall Field and Company Store	41.889287	-87.804508	50.1	50.1	50.1	0.00	50.9	50.9	0.00
4F	NRHP	87002499	Vogt, Karl, Building	41.574808	-87.784632	48.1	48.1	46.8	-1.30	48.5	47.1	-1.40
4F	NRHP	87002055	Spring Valley House--Sulfur Springs Hotel	41.323209	-88.963188	29.8	29.9	28.8	-1.10	30.3	28.9	-1.40
4F	NRHP	87002047	Dupage Theatre and Dupage Shoppes	41.885971	-88.017927	46.5	46.6	46.6	0.00	47.4	47.4	0.00
4F	NRHP	92001075	Grant Park	41.875185	-87.618188	43.5	43.6	43.6	0.00	44.2	44.2	0.00
4F	NRHP	88002235	Twin Tower Sanctuary	41.62856	-87.862957	48.5	48.6	47.7	-0.90	49.0	48.1	-0.90
4F	NRHP	98000067	Church of the Epiphany	41.878734	-87.666381	43.2	43.3	43.1	-0.20	44.0	43.7	-0.30
4F	NRHP	98001103	New York Central Railroad Passenger Depot	41.611345	-87.0544	28.5	28.7	28.8	0.10	29.1	28.7	-0.40
4F	NRHP	98001101	Brown, George, Mansion	41.605847	-87.061836	28.5	28.6	28.7	0.10	29.0	28.7	-0.30
4F	NRHP	98001054	East Shore Historic District	41.202845	-86.390971	27.1	27.2	27.2	0.00	27.5	27.4	-0.10
4F	NRHP	98000982	White and Company's Goose Lake Stoneware Manufactury	41.347176	-88.322051	32.2	32.3	32.1	-0.20	33.0	32.7	-0.30
4F	NRHP	98000976	White and Company's Goose Lake Tile Works	41.345518	-88.317356	32.5	32.5	32.4	-0.10	33.2	33.0	-0.20
4F	NRHP	98000303	Stallbohm Barn--Kaske House	41.55906	-87.500093	43.2	43.1	45.5	2.40	43.1	45.1	2.00
4F	NRHP	92000495	Sullivan, Joseph P. O., House	41.887123	-87.842449	52.7	52.7	52.7	0.00	53.5	53.5	0.00
4F	NRHP	98000178	Yale, The	41.774496	-87.631548	48.8	49.0	49.2	0.20	49.6	49.6	0.00
4F	NRHP	98001353	Fisher--Nash--Griggs House	41.342189	-88.810898	32.8	32.8	30.3	-2.50	33.2	30.3	-2.90
4F	NRHP	98000063	Belmonte Flats	41.816838	-87.604693	51.3	51.5	51.3	-0.20	51.9	51.6	-0.30
4F	NRHP	97001338	Standard Oil Gasoline Station	41.002007	-88.528904	30.9	31.1	30.6	-0.50	31.7	31.1	-0.60
4F	NRHP	97001333	Armour's Warehouse	41.324444	-88.610987	33.8	33.9	35.3	1.40	34.2	35.4	1.20
4F	NRHP	97001272	Mazon Creek Fossil Beds	41.327205	-88.363864	31.1	31.2	30.1	-1.10	31.8	30.6	-1.20
4F	NRHP	97000435	Silversmith Building	41.881211	-87.626393	43.2	43.4	43.3	-0.10	44.0	43.9	-0.10
4F	NRHP	97000381	Thorne, George R., House	41.632681	-87.750758	47.7	47.8	49.4	1.60	48.3	49.6	1.30
4F	NRHP	97000343	Haymarket Martyrs' Monument	41.842797	-87.819341	49.2	49.2	49.2	0.00	50.0	50.2	0.20
4F	NRHP	98000298	Dell Plain, Morse, House and Garden	41.584332	-87.477506	43.8	43.8	41.8	-2.00	43.8	41.1	-2.70
4F	NRHP	99000975	Wheeler--Kohn House	41.855129	-87.619512	45.4	45.5	47.4	1.90	46.0	48.3	2.30
4F	NRHP	99001708	Morris Wide Water Canal Boat Site	41.366433	-88.403494	33.6	33.6	32.8	-0.80	34.0	33.0	-1.00
4F	NRHP	99001669	Nike Missile Site C47	41.528152	-87.172324	40.4	40.5	42.5	2.00	40.5	42.6	2.10
4F	NRHP	99001378	One LaSalle Street Building	41.88208	-87.632187	43.2	43.3	43.1	-0.20	43.9	43.8	-0.10
4F	NRHP	99001157	State Street Commercial Historic District	41.618715	-87.516615	42.9	43.0	43.8	0.80	43.1	43.6	0.50
4F	NRHP	99001151	Mallon Building	40.985338	-86.881499	25.9	25.9	25.9	0.00	26.5	26.4	-0.10
4F	NRHP	99001112	First Unitarian Church of Hobart	41.5301	-87.253432	40.8	40.8	43.3	2.50	40.8	43.4	2.60
4F	NRHP	99001107	Whitaker, William, Landscape and House	41.410091	-87.363996	30.0	30.1	30.1	0.00	30.7	30.5	-0.20
4F	NRHP	98001132	Trustees System Service Building	41.886035	-87.633672	43.0	43.1	43.0	-0.10	43.8	43.7	-0.10
4F	NRHP	99001072	Raymond M. Hilliard Center Historic District	41.854092	-87.616309	45.5	45.6	47.9	2.30	46.1	48.8	2.70
4F	NRHP	98001351	Loop Retail Historic District	41.881118	-87.627067	43.2	43.4	43.3	-0.10	44.0	43.9	-0.10
4F	NRHP	99000973	Four Nineteen Building	41.744705	-87.60221	45.7	45.8	46.0	0.20	46.4	46.4	0.00
4F	NRHP	99000632	Tomek, F.F., House	41.832184	-87.817158	50.0	50.3	51.1	0.80	51.8	53.6	1.80
4F	NRHP	99000587	Holy Cross Church	41.850217	-88.302735	43.0	43.1	43.1	0.00	43.5	43.6	0.10
4F	NRHP	99000163	Building at 900 West Lake Street	41.885853	-87.650063	43.0	43.1	43.0	-0.10	43.8	43.6	-0.20
4F	NRHP	98001524	Plymouth Downtown Historic District	41.34091	-86.309489	29.4	29.5	29.4	-0.10	30.0	29.9	-0.10
4F	NRHP	98001354	Kendall County Courthouse	41.640419	-88.448102	36.2	36.3	36.2	-0.10	36.9	36.9	0.00
4F	NRHP	96000856	LaSalle Street Auto Row Historic District	41.755163	-88.313522	41.6	41.7	41.7	0.00	42.3	42.6	0.30
4F	NRHP	99001102	Chesterton Commercial Historic District	41.612166	-87.052204	28.5	28.7	28.8	0.10	29.1	28.7	-0.40
4F	NRHP	93000464	Ridgeway, Marion, Polygonal Barn	41.590171	-86.702599	30.4	30.4	30.5	0.10	30.9	30.7	-0.20
4F	NRHP	96001281	Promontory Apartments	41.794264	-87.58077	49.9	50.1	50.0	-0.10	50.6	50.4	-0.20
4F	NRHP	94000978	Heck, John, House	41.585223	-88.058169	46.6	46.7	46.1	-0.60	47.0	46.6	-0.40
4F	NRHP	94000233	Rensselaer Carnegie Library	40.937911	-87.153261	29.7	29.8	29.8	0.00	30.4	30.4	0.00

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Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2013 No Action	2013 Proposed Action	Year 2013 Change	2018 No Action	2018 Proposed Action	Year 2018 Change
4F	NRHP	94000021	Eagle Hotel	41.307929	-88.147445	38.3	38.3	38.3	0.00	39.0	39.0	0.00
4F	NRHP	93001413	Starke County Bridge No. 39	41.300252	-86.623645	27.2	27.3	27.1	-0.20	27.7	27.4	-0.30
4F	NRHP	93001239	Plano Hotel	41.662382	-88.539277	33.5	33.7	33.7	0.00	34.2	34.4	0.20
4F	NRHP	93001238	Chicago, Burlington & Quincy Railroad Depot	41.662218	-88.538072	33.6	33.7	33.7	0.00	34.2	34.4	0.20
4F	NRHP	94001352	Gary City Center Historic District	41.600215	-87.337022	36.2	36.3	37.3	1.00	36.6	37.7	1.10
4F	NRHP	93000836	Peabody, Francis Stuyvesant, Estate	41.828865	-87.958578	47.6	47.7	47.7	0.00	48.5	48.5	0.00
4F	NRHP	94001353	Gary Public Schools Memorial Auditorium	41.598074	-87.336255	36.3	36.4	37.4	1.00	36.7	37.7	1.00
4F	NRHP	93000324	O'Conor, Andrew J., III, House	41.348742	-88.829368	32.1	32.2	30.0	-2.20	32.4	30.2	-2.20
4F	NRHP	92001850	Gridley, Mrs., A. W., House	41.859999	-88.313777	45.4	45.4	45.4	0.00	45.6	45.7	0.10
4F	NRHP	92001841	Groesbeck, Abraham, House	41.883095	-87.659918	43.1	43.2	43.0	-0.20	43.9	43.7	-0.20
4F	NRHP	92001653	New Carlisle Historic District	41.706231	-86.510318	39.4	39.5	39.4	-0.10	40.0	40.0	0.00
4F	NRHP	92001539	Point School	41.22274	-87.631507	38.3	38.3	38.3	0.00	38.9	38.9	0.00
4F	NRHP	92001165	Coambs, Norris and Harriet, Lustron House	41.608372	-87.055357	28.4	28.6	28.7	0.10	29.0	28.7	-0.30
4F	NRHP	86001095	Wabash Avenue YMCA	41.825738	-87.624767	51.0	51.1	51.0	-0.10	51.6	51.4	-0.20
4F	NRHP	93000837	Garfield Park	41.886289	-87.716059	45.8	45.8	45.7	-0.10	46.6	46.4	-0.20
4F	NRHP	95000989	Hegeler--Carus Mansion	41.335889	-89.087135	30.7	30.8	30.4	-0.40	31.3	30.9	-0.40
4F	NRHP	92000496	Thompkins, Jennie S., House	41.891016	-87.839727	52.6	52.6	52.6	0.00	53.4	53.4	0.00
4F	NRHP	96000515	7th District Police Station	41.864593	-87.650691	44.2	44.2	44.3	0.10	44.9	45.0	0.10
4F	NRHP	96000514	St. Mary's Church	40.952233	-87.652634	38.2	38.3	38.3	0.00	38.9	38.9	0.00
4F	NRHP	96000512	Streator Public Library	41.119512	-88.834537	26.6	26.7	20.6	-6.10	27.1	20.6	-6.50
4F	NRHP	96000283	Ross, John, Farm	41.370489	-87.28928	27.8	27.9	27.9	0.00	28.4	28.2	-0.20
4F	NRHP	96000093	Quigley Preparatory Seminary	41.897877	-87.625833	42.6	42.8	42.7	-0.10	43.4	43.3	-0.10
4F	NRHP	96000080	Boyce Building	41.891009	-87.629985	42.9	43.0	42.9	-0.10	43.7	43.6	-0.10
4F	NRHP	94000980	Coleman Hardware Company Building	41.356839	-88.429241	35.1	35.2	33.7	-1.50	35.6	33.9	-1.70
4F	NRHP	95001239	Chicago, Rock Island and Pacific Railroad Depot	41.32884	-88.705973	29.6	29.7	36.8	7.10	30.0	37.0	7.00
4F	NRHP	96001006	Horner, Imre and Maria, House	41.692512	-86.979604	37.2	37.3	37.3	0.00	37.8	37.6	-0.20
4F	NRHP	95000987	Kankakee State Hospital Historic District	41.102866	-87.861362	40.7	40.8	40.8	0.00	41.5	41.5	0.00
4F	NRHP	95000702	Emerson, Ralph Waldo, School	41.599089	-87.32762	36.2	36.3	37.3	1.00	36.7	37.7	1.00
4F	NRHP	95000487	Hamilton Park	41.761648	-87.637208	50.2	50.3	50.4	0.10	50.9	50.7	-0.20
4F	NRHP	95000486	Trumbull Park	41.706301	-87.56459	40.9	41.0	42.3	1.30	41.5	42.8	1.30
4F	NRHP	94001601	Strawn, Jeremiah, House	41.346965	-88.833501	32.0	32.1	29.9	-2.20	32.4	30.1	-2.30
4F	NRHP	94001600	Yorkville School	41.647715	-88.448025	35.9	36.0	36.0	0.00	36.7	36.7	0.00
4F	NRHP	94001354	Gary Bathing Beach Aquatorium	41.619852	-87.256749	33.5	33.5	33.8	0.30	34.2	34.3	0.10
4F	NRHP	95001530	Culver Commercial Historic District	41.216732	-86.423588	27.1	27.1	27.1	0.00	27.5	27.4	-0.10
4F	NRHP	80004526	Gregg, William L., House	41.792851	-87.975167	47.7	47.8	47.9	0.10	48.5	48.8	0.30
4F	NRHP	82000022	Woodbank	41.190273	-86.393353	27.1	27.1	27.1	0.00	27.4	27.3	-0.10
4F	NRHP	81000675	Adams Memorial Library	41.875063	-88.106569	41.0	41.1	41.1	0.00	41.8	41.8	0.00
4F	NRHP	81000223	U.S. Post Office	41.527462	-88.08024	44.7	44.8	43.4	-1.40	45.2	43.8	-1.40
4F	NRHP	81000219	Western Springs Water Tower	41.809851	-87.900905	49.2	49.3	49.5	0.20	50.1	50.7	0.60
4F	NRHP	81000218	Rosenwald Apartment Building	41.810251	-87.623894	52.8	53.0	52.9	-0.10	53.4	53.3	-0.10
4F	NRHP	81000019	Lassen Hotel	41.368356	-87.425102	32.3	32.4	32.4	0.00	33.1	32.9	-0.20
4F	NRHP	80001373	White, Louise, School	41.850742	-88.304071	43.1	43.1	43.1	0.00	43.4	43.6	0.20
4F	NRHP	81000001	East Laporte Street Footbridge	41.340293	-86.304297	29.4	29.5	29.5	0.00	29.9	29.9	0.00
4F	NRHP	82000042	Independence Methodist Church	41.066913	-86.949555	25.1	25.2	25.1	-0.10	25.7	25.6	-0.10
4F	NRHP	80004525	Ardmore Avenue Train Station	41.883601	-87.979683	52.5	52.5	52.5	0.00	53.3	53.3	0.00
4F	NRHP	80001421	Plainfield Halfway House	41.611527	-88.204302	37.5	37.6	33.8	-3.80	37.8	34.3	-3.50
4F	NRHP	80001420	Stone Manor	41.573042	-87.936104	46.2	46.3	45.3	-1.00	46.8	45.5	-1.30

Table G-2 Inventory of Historic Resources and Noise Exposure Within the Study Area

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4F	NRHP	80001419	Joliet Municipal Airport	41.523244	-88.179409	43.4	43.4	42.8	-0.60	43.8	43.0	-0.80
4F	NRHP	80001418	Joliet East Side Historic District	41.518968	-88.074454	43.7	43.8	43.0	-0.80	44.3	43.5	-0.80
4F	NRHP	80001383	Oughton, John R., House	41.085806	-88.428641	33.2	33.3	33.3	0.00	33.9	33.8	-0.10
4F	NRHP	86001193	Chicago Beach Hotel	41.802339	-87.586982	51.0	51.2	51.0	-0.20	51.6	51.5	-0.10
4F	NRHP	81000002	Plymouth Fire Station	41.341501	-86.31038	29.4	29.5	29.4	-0.10	30.0	29.9	-0.10
4F	NRHP	82000401	George, Ron, Round Barn	41.66731	-88.130506	37.1	37.2	37.2	0.00	37.7	37.9	0.20
4F	NRHP	82002544	Hotel Aurora	41.758298	-88.315066	41.6	41.8	41.8	0.00	42.4	42.6	0.20
4F	NRHP	82002543	Graham Building	41.757389	-88.315769	41.6	41.8	41.8	0.00	42.3	42.6	0.30
4F	NRHP	82002532	Masonic Temple Building	41.888094	-87.79485	48.9	49.0	49.0	0.00	49.8	49.7	-0.10
4F	NRHP	82002531	Warner, Seth, House	41.891899	-87.765002	47.5	47.6	47.5	-0.10	48.4	48.3	-0.10
4F	NRHP	82002530	Railway Exchange Building	41.878339	-87.624557	43.4	43.5	43.4	-0.10	44.1	44.0	-0.10
4F	NRHP	82002528	Griffiths, John W., Mansion	41.825563	-87.623802	51.0	51.1	51.0	-0.10	51.5	51.4	-0.10
4F	NRHP	82002527	Bloom Township High School	41.514524	-87.643725	43.6	43.7	43.7	0.00	44.3	44.3	0.00
4F	NRHP	82000028	Immanuel Lutheran Church	41.471186	-87.060508	35.2	35.3	37.5	2.20	35.4	37.8	2.40
4F	NRHP	82002524	Dunham, Arthur J., House	41.834916	-87.800212	50.1	50.3	49.9	-0.40	51.0	50.8	-0.20
4F	NRHP	82000029	Weller House	41.607385	-86.951186	28.8	29.0	29.0	0.00	29.4	29.0	-0.40
4F	NRHP	82000398	Dwight Chicago and Alton Railroad Depot	41.086077	-88.428588	33.2	33.3	33.3	0.00	33.9	33.8	-0.10
4F	NRHP	82000393	Schulze Baking Company Plant	41.795475	-87.624713	52.1	52.3	52.4	0.10	52.8	52.9	0.10
4F	NRHP	82000392	St. Luke's Hospital Complex	41.863215	-87.623145	44.4	44.5	44.8	0.30	45.1	45.5	0.40
4F	NRHP	82000391	Hotel Windermere East	41.793171	-87.583287	49.9	50.0	49.9	-0.10	50.5	50.4	-0.10
4F	NRHP	82000390	Fort Dearborn Hotel	41.876682	-87.631049	43.4	43.5	43.4	-0.10	44.1	44.0	-0.10
4F	NRHP	82000047	Hobart Carnegie Library	41.532149	-87.263749	40.9	40.9	43.4	2.50	40.8	43.5	2.70
4F	NRHP	80001371	Paramount Theatre	41.757036	-88.31516	41.6	41.8	41.8	0.00	42.3	42.6	0.30
4F	NRHP	82002525	Young, Joshua P., House	41.652517	-87.674968	46.8	46.9	45.4	-1.50	47.3	45.3	-2.00
4F	NRHP	78003401	New Masonic Building and Oriental Theater	41.884444	-87.628233	43.2	43.2	43.1	-0.10	43.9	43.8	-0.10
4F	NRHP	79000834	La Grange Village Historic District	41.810374	-87.872838	50.0	50.1	50.2	0.10	50.9	51.0	0.10
4F	NRHP	79000827	Quinn Chapel of the A.M.E. Church	41.848794	-87.625112	46.5	46.6	50.3	3.70	47.1	51.3	4.20
4F	NRHP	79000826	Notre Dame de Chicago	41.873452	-87.660903	43.4	43.5	43.3	-0.20	44.1	43.9	-0.20
4F	NRHP	79000825	Municipal Pier	41.891468	-87.599757	42.9	43.0	42.9	-0.10	43.6	43.5	-0.10
4F	NRHP	79000824	Hyde Park-Kenwood Historic District	41.798196	-87.59744	51.2	51.3	51.2	-0.10	51.8	51.7	-0.10
4F	NRHP	79000823	Chapin and Gore Building	41.879325	-87.625411	43.3	43.4	43.3	-0.10	44.1	44.0	-0.10
4F	NRHP	80001377	Smith, Ephraim, House	41.771532	-88.428672	43.1	43.3	43.3	0.00	43.7	43.9	0.20
4F	NRHP	79000021	Gary Land Company Building	41.604207	-87.333407	36.5	36.5	37.5	1.00	36.9	37.9	1.00
4F	NRHP	79000841	Campana Factory	41.865121	-88.316316	45.6	45.7	45.7	0.00	45.8	45.9	0.10
4F	NRHP	78003181	Chicago Board of Trade Building	40.977221	-87.623534	38.2	38.3	38.2	-0.10	38.9	38.9	0.00
4F	NRHP	78003108	Trinity Episcopal Church	41.865734	-88.111951	42.0	42.1	42.1	0.00	42.7	42.7	0.00
4F	NRHP	78003107	Du Page County Courthouse	41.864009	-88.103969	42.5	42.6	42.6	0.00	43.2	43.2	0.00
4F	NRHP	78001200	Union Station	41.524403	-88.079829	44.4	44.5	43.3	-1.20	44.9	43.7	-1.20
4F	NRHP	78001199	Rubens Rialto Square Theater	41.526009	-88.081414	44.6	44.7	43.4	-1.30	45.2	43.8	-1.40
4F	NRHP	78001158	Hickox, Warren, House	41.112342	-87.861391	40.8	40.8	40.9	0.10	41.5	41.5	0.00
4F	NRHP	78001155	Copley, Col. Ira C., Mansion	41.759093	-88.324224	41.5	41.7	41.7	0.00	42.2	42.5	0.30
4F	NRHP	79000822	Balaban and Katz Chicago Theatre	41.88553	-87.627279	43.1	43.2	43.1	-0.10	43.8	43.7	-0.10
4F	NRHP	79000876	Milne, Robert, House	41.58954	-88.049122	46.9	47.0	46.2	-0.80	47.3	46.7	-0.60
4F	NRHP	80001370	Keystone Building	41.757389	-88.315769	41.6	41.8	41.8	0.00	42.3	42.6	0.30
4F	NRHP	80001369	Aurora Elks Lodge No. 705	41.756382	-88.317192	41.6	41.7	41.7	0.00	42.3	42.5	0.20
4F	NRHP	80001351	Story-Camp Rowhouses	41.879999	-87.665792	43.2	43.3	43.1	-0.20	44.0	43.7	-0.30
4F	NRHP	80001347	Ludington Building	41.868962	-87.626394	43.9	44.0	44.0	0.00	44.6	44.6	0.00

Table G-2 Inventory of Historic Resources and Noise Exposure Within the Study Area

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4F	NRHP	80001343	Building at 14--16 Pearson Street	41.897505	-87.627879	42.6	42.8	42.7	-0.10	43.4	43.3	-0.10
4F	NRHP	80001342	AVR 661	41.661888	-87.575131	45.6	45.8	45.1	-0.70	46.0	44.9	-1.10
4F	NRHP	80000044	Whiting Memorial Community House	41.678108	-87.496522	35.8	36.0	39.6	3.60	36.5	40.3	3.80
4F	NRHP	79000836	Blanchard Hall	41.868645	-88.09959	42.4	42.5	42.5	0.00	43.1	43.2	0.10
4F	NRHP	79003159	Sandwich City Hall	41.644879	-88.620031	32.2	32.3	32.3	0.00	32.9	33.1	0.20
4F	NRHP	79000840	Old Second National Bank	41.757899	-88.318426	41.6	41.8	41.8	0.00	42.3	42.6	0.30
4F	NRHP	79000875	Henry, Jacob H., House	41.522995	-88.07633	44.0	44.2	43.2	-1.00	44.6	43.7	-0.90
4F	NRHP	79000849	Milk, Lemuel, Carriage House	41.121259	-87.861508	40.9	40.9	41.0	0.10	41.6	41.6	0.00
4F	NRHP	79000846	Gray-Watkins Mill	41.728473	-88.436373	40.1	40.2	40.2	0.00	40.7	41.0	0.30
4F	NRHP	79000845	Central Geneva Historic District	41.88545	-88.308357	43.4	43.5	43.5	0.00	43.8	43.8	0.00
4F	NRHP	79000843	Dutch Mill	41.871532	-88.305458	45.4	45.4	45.4	0.00	45.6	45.6	0.00
4F	NRHP	79000842	Chicago, Burlington, and Quincy Railroad Depot	41.85148	-88.31047	43.0	43.1	43.1	0.00	43.5	43.6	0.10
4F	NRHP	82002547	Stearns-Wadsworth House	41.844568	-88.407412	41.3	41.4	41.4	0.00	41.9	42.1	0.20
4F	NRHP	80000030	Rose, David Garland, House	41.4662	-87.051474	34.9	34.9	37.3	2.40	35.1	37.6	2.50
4F	NRHP	84001170	Fitzpatrick House	41.600688	-88.070902	45.6	45.6	45.9	0.30	46.1	46.7	0.60
4F	NRHP	85000979	von KleinSmid Mansion	41.64517	-88.624961	32.3	32.5	32.5	0.00	33.0	33.2	0.20
4F	NRHP	85000978	Wilson, Judge Isaac, House	41.850146	-88.301047	43.1	43.2	43.2	0.00	43.6	43.7	0.10
4F	NRHP	85000966	Guyon Hotel	41.882063	-87.726317	45.5	45.6	45.4	-0.20	46.3	46.1	-0.20
4F	NRHP	85000361	Healy Chapel	41.759286	-88.323145	41.5	41.7	41.7	0.00	42.2	42.6	0.40
4F	NRHP	85000265	Dawson Brothers Plant	41.891903	-87.647352	42.9	43.0	42.9	-0.10	43.6	43.5	-0.10
4F	NRHP	84001233	Thompson, Dr. George W., House	41.053642	-86.606189	30.6	30.7	29.8	-0.90	30.8	29.0	-1.80
4F	NRHP	82002545	Masonic Temple	41.75328	-88.312798	41.5	41.7	41.7	0.00	42.2	42.6	0.40
4F	NRHP	84001229	Gilson, Clinton D., Barn	41.339567	-87.166516	29.8	29.9	29.9	0.00	30.5	30.5	0.00
4F	NRHP	85001741	Austin Historic District	41.886768	-87.770015	47.5	47.5	47.4	-0.10	48.3	48.2	-0.10
4F	NRHP	84001130	GAR Memorial Building	41.756669	-88.315754	41.6	41.8	41.8	0.00	42.3	42.6	0.30
4F	NRHP	84001128	Fabyan Villa	41.871276	-88.31208	44.7	44.7	44.7	0.00	44.9	44.9	0.00
4F	NRHP	84001126	Aurora College Complex	41.754854	-88.347953	41.1	41.2	41.2	0.00	41.7	42.1	0.40
4F	NRHP	84001076	West Fifth Avenue Apartments Historic District	41.601817	-87.358222	38.9	39.0	39.6	0.60	39.2	39.9	0.70
4F	NRHP	84001072	State Bank of Hammond Building	41.614371	-87.509174	42.9	43.0	43.8	0.80	43.2	43.7	0.50
4F	NRHP	84001070	Pennsylvania Railroad Station	41.534258	-87.246975	40.6	40.6	43.0	2.40	40.6	43.1	2.50
4F	NRHP	84001069	Nisbet Homestead Farm	41.670736	-88.863208	37.1	37.3	37.3	0.00	37.9	38.3	0.40
4F	NRHP	84001231	Porter County Memorial Hall	41.466683	-87.059066	35.2	35.3	37.8	2.50	35.4	38.1	2.70
4F	NRHP	86000117	Warren Featherbone Company Office Building	41.801296	-86.610625	42.7	42.8	42.9	0.10	43.3	43.5	0.20
4F	NRHP	86001092	Unity Hall	41.837729	-87.622475	48.6	48.7	49.5	0.80	49.2	50.2	1.00
4F	NRHP	86001091	Overton Hygienic Building	41.828071	-87.626235	50.6	50.8	50.7	-0.10	51.2	51.1	-0.10
4F	NRHP	86001090	Chicago Bee Building	41.828071	-87.626235	50.6	50.8	50.7	-0.10	51.2	51.1	-0.10
4F	NRHP	86001089	Victory Sculpture	41.831091	-87.617473	49.8	49.9	49.9	0.00	50.4	50.3	-0.10
4F	NRHP	86001041b	Hyde Park-Kenwood Historic District (Boundary Increase II)	41.765543	-87.57678	44.0	44.1	44.2	0.10	44.8	44.5	-0.30
4F	NRHP	86001041a	Hyde Park-Kenwood Historic District (Boundary Increase II)	41.764746	-87.575931	43.8	44.0	44.0	0.00	44.6	44.4	-0.20
4F	NRHP	86001031	Lemont Methodist Episcopal Church	41.673023	-88.000143	44.5	44.6	44.0	-0.60	45.1	45.6	0.50
4F	NRHP	85001009	Ford Airport Hanger	41.542449	-87.538342	40.7	40.8	40.7	-0.10	40.8	41.2	0.40
4F	NRHP	86001005	Blackstone Hotel	41.873475	-87.62463	43.6	43.7	43.6	-0.10	44.3	44.3	0.00
4F	NRHP	85001274	Foley, Jennie, Building	41.873474	-87.657047	43.4	43.4	43.3	-0.10	44.1	43.9	-0.20
4F	NRHP	85002842	Smith, J. P., Shoe Company Plant	41.894855	-87.650938	42.8	43.0	42.8	-0.20	43.7	43.5	-0.20
4F	NRHP	85002840	Gage Group--Ascher, Keith, and Gage Buildings	41.881243	-87.637	43.2	43.2	43.1	-0.10	43.9	43.8	-0.10
4F	NRHP	85002702	Starved Rock Lodge and Cabins	41.318715	-88.993005	29.6	29.7	28.9	-0.80	30.1	29.0	-1.10
4F	NRHP	85002430	Studebaker Clubhouse and Tree Sign	41.668828	-86.490383	36.1	36.1	36.1	0.00	36.6	36.5	-0.10

Table G-2 Inventory of Historic Resources and Noise Exposure Within the Study Area

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2013 No Action	2013 Proposed Action	Year 2013 Change	2018 No Action	2018 Proposed Action	Year 2018 Change
4F	NRHP	85001912	Municipal Courts Building	41.88014	-87.624575	43.3	43.4	43.3	-0.10	44.1	43.9	-0.20
4F	NRHP	85001909	LaSalle City Building	41.329537	-89.094699	30.5	30.6	30.3	-0.30	31.1	30.7	-0.40
4F	NRHP	84001063	Orr, William, House	41.609976	-86.778119	32.3	32.4	32.5	0.10	33.1	32.9	-0.20
4F	NRHP	86001007	Jeffery--Cyril Historic District	41.764832	-87.576738	43.8	44.0	44.0	0.00	44.6	44.4	-0.20
4F	NRHP	83000039	Downtown LaPorte Historic District	41.610907	-86.721419	31.1	31.3	31.3	0.00	31.7	31.5	-0.20
4F	NRHP	84001068	Meyer, Joseph Ernest, House	41.490483	-87.496581	34.7	34.7	34.8	0.10	35.2	35.1	-0.10
4F	NRHP	83000319	Stolp Woolen Mill Store	41.75702	-88.316483	41.6	41.8	41.8	0.00	42.3	42.6	0.30
4F	NRHP	83000315	Tri-Taylor Historic District	41.87033	-87.683345	44.1	44.2	43.9	-0.30	44.9	44.5	-0.40
4F	NRHP	83000314	Singer Building	41.879941	-87.628068	43.3	43.4	43.3	-0.10	44.0	43.9	-0.10
4F	NRHP	83000312	Morton, J. Sterling, High School East Auditorium	41.84645	-87.773132	49.2	49.3	48.8	-0.50	49.9	49.5	-0.40
4F	NRHP	83000311	King, Patrick J., House	41.882901	-87.707524	45.2	45.3	45.0	-0.30	46.0	45.8	-0.20
4F	NRHP	83000308	Calumet Plant, R. R. Donnelly & Sons Company	41.853696	-87.618052	45.6	45.7	48.1	2.40	46.2	49.0	2.80
4F	NRHP	83000325	Pioneer Gothic Church	41.094499	-88.428592	32.9	33.0	32.9	-0.10	33.7	33.6	-0.10
4F	NRHP	83000126	Jasper County Courthouse	40.935843	-87.150762	29.7	29.8	29.8	0.00	30.4	30.4	0.00
4F	NRHP	83003563	Oliver Building	41.885158	-87.629325	43.1	43.2	43.1	-0.10	43.9	43.8	-0.10
4F	NRHP	82004912	Grossdale Station	41.823083	-87.842691	49.9	50.0	50.0	0.00	50.8	51.0	0.20
4F	NRHP	82002605	Peotone Mill	41.332323	-87.797962	40.5	40.6	40.6	0.00	41.2	41.2	0.00
4F	NRHP	82002604	Joliet Township High School	41.525714	-88.074458	44.2	44.3	43.3	-1.00	44.8	43.8	-1.00
4F	NRHP	82002603	Christ Episcopal Church	41.525982	-88.084291	44.8	44.9	43.4	-1.50	45.3	43.9	-1.40
4F	NRHP	82002551	Swannell, Charles E., House	41.110096	-87.860647	40.8	40.8	40.9	0.10	41.5	41.5	0.00
4F	NRHP	82002549	North Geneva Historic District	41.889638	-88.308346	43.4	43.4	43.4	0.00	43.7	43.8	0.10
4F	NRHP	99001710	St. Matthew Evangelical Lutheran School	41.853713	-87.67865	46.2	46.3	46.2	-0.10	46.9	46.8	-0.10
4F	NRHP	83000139	Marshall County Court House	41.343758	-86.311193	29.4	29.5	29.5	0.00	29.9	29.9	0.00
4F	NRHP	84000340	Standard Oil Gasoline Station	41.60818	-88.205679	38.1	38.1	33.8	-4.30	38.3	34.4	-3.90
4F	NRHP	82002546	First Methodist Church of Batavia	41.848379	-88.3139	42.6	42.7	42.7	0.00	43.0	43.2	0.20
4F	NRHP	84001052	Soldier Field	41.862576	-87.616391	44.5	44.6	45.0	0.40	45.1	45.7	0.60
4F	NRHP	84001047	St. James Catholic Church and Cemetery	41.698631	-87.932638	45.6	45.7	45.2	-0.50	46.3	45.9	-0.40
4F	NRHP	84000996	Hyde Park-Kenwood Historic District (Boundary Increase)	41.806029	-87.604953	52.0	52.1	51.9	-0.20	52.6	52.4	-0.20
4F	NRHP	84000988	Conway Building	41.882805	-87.63135	43.2	43.2	43.1	-0.10	43.9	43.8	-0.10
4F	NRHP	84000986	Chicago Harbor Lighthouse	41.889372	-87.590673	42.9	43.0	42.9	-0.10	43.6	43.5	-0.10
4F	NRHP	84000520	Loring, Dr. David J., Residence and Clinic	41.468934	-87.060745	35.2	35.3	37.8	2.50	35.5	38.0	2.50
4F	NRHP	83000320	United Methodist Church of Batavia	41.850476	-88.311654	42.9	42.9	43.0	0.10	43.3	43.4	0.10
4F	NRHP	84000492	Morrison, Francis H., House	41.606509	-86.716565	30.9	31.0	31.0	0.00	31.5	31.3	-0.20
4F	NRHP	84001065	Knights of Columbus Building	41.601751	-87.341554	36.4	36.5	37.5	1.00	36.8	37.9	1.10
4F	NRHP	84000293	Peoples Gas Building	41.879779	-87.624812	43.3	43.4	43.3	-0.10	44.1	43.9	-0.20
4F	NRHP	84000289	Lake-Side Terrace Apartments	41.762137	-87.55702	43.4	43.5	43.5	0.00	44.1	43.9	-0.20
4F	NRHP	84000281	Cook County Criminal Court Building	41.890197	-87.630218	42.9	43.0	43.0	0.00	43.7	43.6	-0.10
4F	NRHP	84000204	Glen Ellyn Main Street Historic District	41.88042	-88.06677	42.9	42.9	42.9	0.00	43.7	43.7	0.00
4F	NRHP	84000138	Midwest Athletic Club	41.881014	-87.721243	45.5	45.6	45.4	-0.20	46.3	46.1	-0.20
4F	NRHP	83003570	SS CLIPPER	41.891042	-87.607082	42.9	43.0	42.9	-0.10	43.7	43.6	-0.10
4F	NRHP	83003564	Ridgeland-Oak Park Historic District	41.885273	-87.788475	48.4	48.4	48.3	-0.10	49.1	49.1	0.00
4F	NRHP	84000503	Buckley Homestead	41.281457	-87.378563	31.7	31.7	31.7	0.00	32.4	32.3	-0.10
4F	Historic	0	5842 S Rockwell St	41.787012	-87.689094	55.8	56	55.7	-0.30	56.5	56.2	-0.30
4F	Historic	1	3736 S Campbell Ave	41.825311	-87.687813	54.2	54.3	57.1	2.80	54.7	57.8	3.10
4F	Historic	2	4438 S Homan Ave	41.812352	-87.709324	60.1	60.3	60.9	0.60	60.6	61.1	0.50
4F	Historic	3	6557-59 S Troy St	41.773692	-87.701381	53	53.2	52.6	-0.60	54	52.9	-1.10
4F	Historic	4	2428 W 34Th Pl	41.831376	-87.686339	52.3	52.5	55.5	3.00	52.9	56.4	3.50

Table G-2 Inventory of Historic Resources and Noise Exposure Within the Study Area

Category	Type	ID	Resource Name	Latitude	Longitude	2012 Existing Conditions	2013 No Action	2013 Proposed Action	Year 2013 Change	2018 No Action	2018 Proposed Action	Year 2018 Change
4F	Historic	5	2648 W Pershing Rd	41.823117	-87.691675	55.3	55.5	57.8	2.30	55.8	58.4	2.60
4F	Historic	6	The Cromwell Paper Co	41.805901	-87.699702	58.6	58.8	58.1	-0.70	59.2	58.5	-0.70
4F	Historic	7	6235 S Kedzie Ave	41.779787	-87.702802	53.6	53.8	53.4	-0.40	54.5	54.1	-0.40
4F	Historic	8	5239 S Trumbull Ave	41.797766	-87.709549	60.2	60.3	60.3	0.00	60.8	60.9	0.10
4F	Historic	9	5646 S Karlov Ave	41.790014	-87.725929	58.5	58.7	58.6	-0.10	59.2	59.3	0.10
4F	Historic	10	Marquette Park Substation	41.775593	-87.702771	53	53.2	52.8	-0.40	54	53.3	-0.70
4F	Historic	11	3145 W 63Rd St	41.778740	-87.702511	53.5	53.7	53.2	-0.50	54.4	53.9	-0.50
4F	Historic	12	2529-31 W 38Th St	41.824551	-87.688507	54.5	54.6	57.4	2.80	55	58	3.00
4F	Historic	13	4444 S Homan Ave	41.812188	-87.709316	60.3	60.4	60.9	0.50	60.7	61.2	0.50
4F	Historic	14	3541 W 58Th St	41.787731	-87.712389	55.6	55.8	55.8	0.00	56.4	56.6	0.20
4F	Historic	15	5554-56 S Sawyer Ave	41.791854	-87.705012	57.8	58	58	0.00	58.6	58.5	-0.10
4F	Historic	16	2523-25 W 38Th St	41.824563	-87.688347	54.5	54.6	57.4	2.80	55	58	3.00
4F	Historic	17	Gordon S Hubbard High School	41.780036	-87.719116	53.3	53.4	53.7	0.30	54.3	54.6	0.30
4F	Historic	18	Lawn Lodge	41.780113	-87.707828	52.9	53	53.1	0.10	53.8	53.9	0.10
4F	Historic	19	3522-28 Artesian Ave	41.829451	-87.686566	52.9	53	56	3.00	53.4	56.8	3.40
4F	Historic	20	4436 S Homan Ave	41.812435	-87.709328	60.1	60.3	60.8	0.50	60.5	61	0.50
4F	Historic	21	Michael M Byrne Public School	41.794924	-87.791224	60.2	60.4	60	-0.40	60.8	60.4	-0.40
4F	Historic	22	Commonwealth Edison Substation	41.828563	-87.722732	54.3	54.4	54	-0.40	54.8	54.4	-0.40
4F	Historic	23	3740 W 55Th St	41.793531	-87.717434	59.6	59.8	59.9	0.10	60.3	60.5	0.20
4F	Historic	24	3741 W 66Th Pl	41.772156	-87.716778	52.7	52.8	53.7	0.90	54.2	54.8	0.60
4F	Historic	25	3324 W 55Th St	41.793725	-87.707058	58.6	58.8	58.8	0.00	59.4	59.5	0.10
4F	Historic	26	3453 W 63Rd St	41.777752	-87.709998	52.3	52.5	52.9	0.40	53.5	53.7	0.20
4F	Historic	27	4430 S Homan Ave	41.812600	-87.709336	60	60.1	60.6	0.50	60.4	60.9	0.50
4F	Historic	28	6234-44 S Kedzie Ave	41.779640	-87.703462	53.5	53.6	53.3	-0.30	54.4	54	-0.40
4F	Historic	29	4442 S Homan Ave	41.812271	-87.709322	60.2	60.4	60.9	0.50	60.6	61.2	0.60
4F	Historic	30	2745 W 44Th St	41.813501	-87.693679	57.4	57.6	57	-0.60	57.9	57.2	-0.70
4F	Historic	31	Francis M Mckay Public School	41.767616	-87.691345	51.3	51.4	50.9	-0.50	52.1	51.1	-1.00
4F	Historic	32	3962-66 S Archer Ave	41.821687	-87.692261	56	56.1	58.3	2.20	56.5	58.9	2.40
4F	Historic	33	Washtenaw Ave Substation	41.807744	-87.692011	58.6	58.7	57.3	-1.40	59.1	57.3	-1.80
4F	Historic	34	4023 S Montgomery Ave	41.820232	-87.692562	56.5	56.6	58.6	2.00	56.9	59.1	2.20
4F	Historic	35	3135-39 W 59Th St	41.786003	-87.702336	55.7	55.9	55.6	-0.30	56.5	56.3	-0.20
4F	Historic	36	4448 S Homan Ave	41.812107	-87.709311	60.3	60.5	61	0.50	60.7	61.2	0.50
4F	Historic	37	Chicago Fire Dept Engine Co #88	41.784544	-87.710766	54.1	54.2	54.3	0.10	54.9	55.2	0.30
4F	Historic	38	3647 W 84Th Pl	41.739339	-87.713843	47.2	47.3	47.2	-0.10	47.9	47.8	-0.10
4F	Historic	39	3737 S Campbell Ave	41.825273	-87.687145	54.1	54.3	57.2	2.90	54.7	57.8	3.10
4F	Historic	40	4432 S Homan Ave	41.812517	-87.709332	60.1	60.2	60.7	0.50	60.4	61	0.60
4F	Historic	41	4173-75 S Archer Ave	41.817515	-87.698132	57	57.2	59.2	2.00	57.5	59.7	2.20
4F	Historic	42	Dupont-Whitehouse House	41.828598	-87.686502	53.2	53.3	56.1	2.80	53.7	56.9	3.20
4F	Historic	43	3401-05 W 53Rd St	41.795976	-87.708796	59.6	59.8	59.8	0.00	60.3	60.4	0.10
4F	Historic	44	4759 S Hamlin Ave	41.806168	-87.718399	62.2	62.4	63.5	1.10	62.7	63.8	1.10
4F	Historic	45	3000-04 W 42Nd St	41.817540	-87.699703	57.1	57.3	59.1	1.80	57.6	59.6	2.00
4F	Historic	46	5126 Homan Ave	41.799836	-87.708894	60.3	60.4	60.4	0.00	61	61	0.00
4F	Historic	47	6237-45 S Kedzie Ave	41.779618	-87.702798	53.6	53.8	53.4	-0.40	54.4	54	-0.40
4F	Historic	48	Westlawn State Bank	41.778959	-87.722007	53.8	53.9	54.3	0.40	54.8	55.2	0.40
4F	Historic	49	Frank W Gunsaulus Public School	41.812743	-87.699846	58.9	59.1	58.7	-0.40	59.4	58.8	-0.60
4F	Historic	50	5501 S Richmond St	41.793427	-87.697268	58.4	58.6	58	-0.60	59	58.5	-0.50
4F	Historic	51	3357 W 59Th Pl	41.785082	-87.707972	54.5	54.7	54.7	0.00	55.4	55.5	0.10

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4F	Historic	52	4450 S Homan Ave	41.812024	-87.709311	60.3	60.5	61.1	0.60	60.7	61.3	0.60
4F	Historic	53	2601-33 W Marquette Rd	41.771326	-87.689205	52.3	52.5	52.1	-0.40	53.1	52.4	-0.70
4F	Historic	54	Hope Evangelical Lutheran Church	41.777091	-87.691294	53.6	53.7	53.5	-0.20	54.4	53.9	-0.50
4F	Historic	55	4800 S St. Louis Ave	41.806009	-87.711827	60.6	60.8	60.7	-0.10	61.2	61.1	-0.10
4F	Historic	56	5237 S Trumbull Ave	41.797837	-87.709561	60.2	60.3	60.3	0.00	60.8	61	0.20
4F	Historic	57	3842 W 56Th Pl	41.790753	-87.719924	57.8	58	58	0.00	58.5	58.7	0.20
4F	Historic	58	6357 S Albany Ave	41.777380	-87.700393	53.7	53.9	53.2	-0.70	54.6	53.7	-0.90
4F	Historic	59	Dr Walter'S School For Crippled	41.801766	-87.686070	58	58.1	57.3	-0.80	58.5	57.6	-0.90
4F	Historic	60	4901 S Archer Ave	41.803943	-87.720246	62.2	62.4	63.9	1.50	62.8	64.5	1.70
4F	Historic	61	Fieldhouse Marquette Park	41.770748	-87.703968	52.3	52.5	52	-0.50	53.4	52.5	-0.90
4F	Historic	62	4236 S Archer Ave	41.816611	-87.700751	57.2	57.4	59.4	2.00	57.7	59.8	2.10
4F	Historic	63	3712 W 64Th Pl	41.776245	-87.716007	52.6	52.8	53.4	0.60	53.9	54.4	0.50
4F	Historic	64	5632 S Maplewood Ave	41.790967	-87.687854	56.6	56.8	56.5	-0.30	57.3	56.9	-0.40
4F	Historic	65	Ev Lutheran Friedens Kirch	41.815354	-87.694797	56.9	57	57.7	0.70	57.4	58.1	0.70
4F	Historic	66	4226 S Francisco Ave	41.816477	-87.697180	56.9	57.1	59	1.90	57.4	59.4	2.00
4F	Historic	67	4716 S Talman Ave	41.807747	-87.690803	58.6	58.7	57.2	-1.50	59	57.2	-1.80
4F	Historic	68	Ferdinand W Peck Public School	41.788092	-87.719723	56.1	56.2	56.2	0.00	56.8	56.9	0.10
4F	Historic	69	3125 W 38Th St	41.824260	-87.703018	55	55.1	57.7	2.60	55.5	58.7	3.20
4F	Historic	70	3920-30 S Archer Ave	41.822531	-87.691058	55.5	55.7	58	2.30	56	58.6	2.60
4F	Historic	71	Lourdes High School	41.791795	-87.724967	59.6	59.8	59.8	0.00	60.3	60.4	0.10
4F	Historic	72	3907 W 82Nd Pl	41.742914	-87.719664	47	47.1	47.1	0.00	47.8	47.9	0.10
4F	Historic	73	2908 W Pershing Rd	41.822932	-87.697521	55.5	55.7	57.3	1.60	56	58	2.00
4F	Historic	74	3942-58 W 63Rd St	41.778949	-87.722349	53.9	54	54.3	0.30	54.9	55.2	0.30
4F	Historic	75	3738 W 63Rd Pl	41.778016	-87.716938	52.8	52.9	53.4	0.50	54	54.4	0.40
4F	Historic	76	5548 S Nordica Ave	41.790598	-87.797923	59.6	59.8	59.4	-0.40	60.3	59.8	-0.50
4F	Historic	77	4428 S Homan Ave	41.812681	-87.709337	59.9	60	60.6	0.60	60.3	60.9	0.60
4F	Historic	78	3700-16 S Rockwell St	41.826170	-87.690593	54.2	54.3	56.6	2.30	54.6	57.3	2.70
4F	Historic	79	3442 W 62Nd St	41.779590	-87.709723	52.6	52.8	53	0.20	53.6	53.9	0.30
4F	Historic	80	5151 S Albany Ave	41.799370	-87.701041	59.6	59.8	59.4	-0.40	60.2	59.8	-0.40
4F	Historic	81	3721 W 83Rd Pl	41.741151	-87.715338	47.3	47.5	47.3	-0.20	48.1	48	-0.10
4F	Historic	82	Colony Theater	41.786573	-87.703714	55.8	55.9	55.8	-0.10	56.5	56.4	-0.10
4F	Historic	83	3412 W 84Th St	41.740809	-87.707597	49.7	49.9	49.3	-0.60	50.5	49.9	-0.60
4F	Historic	84	5514 Christianna Ave	41.792948	-87.707525	58.4	58.5	58.6	0.10	59.1	59.2	0.10
4F	Historic	85	4426-50 S Homan Ave	41.812765	-87.709348	59.9	60	60.5	0.50	60.3	60.8	0.50
4F	Historic	86	Engine Company 65, Truck 52	41.803741	-87.735355	62.8	62.9	62.8	-0.10	63.4	63.6	0.20
4F	Historic	87	Illinois Central Swing Bridge	41.828648	-87.714411	53.9	54.1	53.9	-0.20	54.5	54.3	-0.20
4F	Historic	88	Chicago Sanitary And Ship Canal District	41.823171	-87.731419	56.3	56.5	56.1	-0.40	56.9	56.5	-0.40
4F	Historic	89	Riverside Landscape Architecture District	41.826524	-87.805519	51.3	51.6	52.1	0.50	53	54.4	1.40
4F	Historic	90	Chicago Portage National Historic Site	41.811394	-87.807295	53.3	53.6	53	-0.60	55	54.3	-0.70
4F	Historic	0INM	5046 S Kolin Ave	41.800900	-87.732219	67.8	68	67.5	-0.50	68.3	67.8	-0.50
4F	Historic	1INM	6248-58 S Central Av	41.77837148	-87.76204753	73.9	74.0	73.9	-0.10	74.3	74.2	-0.10
4F	Historic	2INM	5600-08 W 63rd St	41.77820002	-87.76204158	74.2	74.3	74.3	0.00	74.6	74.5	-0.10
4F	Historic	3INM	Illinois National Guard Armory	41.77852238	-87.75667162	73.5	73.6	73.7	0.10	74.1	74.3	0.20

Appendix H COORDINATION AND CONSULTATION

H.1 PUBLIC INVOLVEMENT

This chapter describes the FAA's public involvement process, which the FAA has undertaken in accordance with CEQ regulations and FAA Order 1050.1E. The subsequent sections present information on the review and comment process for this EA involving Native American Tribes, Federal, state and local government agencies, elected officials, and the public (including non-governmental organizations, trade associations, and other stakeholder representatives). Appendix H, *Coordination and Consultation*, presents documentation of notices sent, public meetings scheduled and held, and comments received.

The FAA Air Traffic Organization (ATO) – Central Service Center, the FAA Airports Division – Great Lakes Region, and the City of Chicago – Department of Aviation (CDA) have jointly coordinated the public involvement process undertaken in conjunction with this EA.

H.1.1 Draft EA Publication and Public Comment Period

For publication of the Draft EA and the concurrently released Draft Part 150 Update, "Notices of Public Comment Period" were posted in the *Chicago Sun-Times* on February 17 and 19, 2013. See Appendix H.3 for copies of these public notices.

The Draft EA was then made available for public review on the CDA web site and in paper format at the FAA Chicago Airports District Office and several local libraries.

Written comments on the Draft EA were also solicited by mail and email. All comments were carefully reviewed if postmarked or received by April 5, 2013, and substantive comments were addressed in the Final EA. In addition, the following public agencies and municipalities received the Draft EA for review and comment:

- US Department of Transportation - FAA, Great Lakes Region - Chicago Airports District Office
- US Environmental Protection Agency
- US Department of the Interior – Fish and Wildlife Service
- Illinois Department of Transportation – Division of Aeronautics
- Illinois Environmental Protection Agency
- Chicago Metropolitan Agency for Planning (CMAP)
- Northwestern Indiana Regional Planning Commission (NIRPC)
- Chicago Midway International Airport
- Midway Noise Compatibility Commission
- Cook County
- Village of Bedford Park
- Village of Bridgeview
- City of Burbank
- Town of Cicero
- Village of Forest View
- Village of Lyons
- Village of Stickney
- Village of Summit

Appendix H.4 includes all public and agency comments received during the public comment period, as well as their respective FAA responses. As appropriate, edits to the Final EA were made to address issues raised during the public comment period.

H.1.2 Draft EA Public Hearing

After publication of the Draft EA and the Draft Part 150 Update, "Notices of Public Hearing" were posted in the *Chicago Sun-Times* on February 17 and 19, 2013, published in conjunction with the "Notices of Public Comment Period." See Appendix H.3 for copies of these public notices.

The FAA and CDA co-facilitated the Public Hearing regarding the Draft EA and Draft Part 150 update on March 21, 2013 at The Mayfield (6072 South Archer Avenue, Chicago, IL 60638). Both verbal and written comments were accepted by a court reporter. Appendix H.4 includes all comments received during the public hearing, as well as their respective FAA responses. As appropriate, edits to the Final EA were made to address issues raised during the public hearing.

H.1.3 Final EA Publication

The Final EA is available for review as of May 25, 2013, for a period of at least at least 30 days, posted on the CDA "Midway Residential Sound Insulation Program" web page (http://www.flychicago.com/midway/en/AboutUs/NoiseManagement/RSIP/Pages/Residential-SIP.aspx) and in paper format at the following locations:

Federal Aviation Administration
Chicago Airports District Office
2300 E. Devon Ave., Rm. 320
Des Plaines, Illinois 60018

Chicago Department of Aviation

Chicago O'Hare International Airport
10510 W. Zemke Rd.
Chicago, IL 60666
For appointments to review, call (773) 686-3563.

Chicago Midway International Airport
6201 S. Laramie Ave.
Chicago, IL 60638
For appointments to review, call (773) 838-0757.

Local Libraries

Archer Heights Public Library
5055 S. Archer Ave.
Chicago, IL 60632

West Lawn Public Library
4020 W. 63rd St.
Chicago, IL 60629

In addition, the Final EA is available in CD-ROM format at the following library locations:

Bridgeview Public Library
7840 W. 79th St.
Bridgeview, IL 60455

Prairie Trails Public Library
8449 Moody Ave.
Burbank, IL 60459

Chicago Public Library
6151 S. Normal Blvd.
Chicago, IL 60621

Stickney-Forest View Public Library
6800 43rd St.
Berwyn, IL 60402

Harold Washington Chicago Public Library
400 S. State St.
Chicago, IL 60605

Summit Public Library
6233 S. Archer Rd.
Summit Argo, IL 60501

Wrightwood-Ashburn Public Library
8530 S. Kedzie Ave.
Chicago, IL 60652

H.2 LETTERS TO GOVERNMENT AGENCIES, AND ELECTED OFFICIALS

H.2.1 Sample Notice of Availability

U.S. Department of Transportation
Federal Aviation Administration

Air Traffic Organization
Central Service Center

2601 Meacham Blvd.
Fort Worth, TX 76137

February 18, 2013

Notice of Availability: Chicago Midway Proposed Air Traffic Procedural Changes Draft Environmental Assessment (EA)

This letter is to inform you that the Federal Aviation Administration (FAA) has prepared an Environmental Assessment (EA) to consider the potential environmental impacts arising from implementation of the proposed air traffic procedural changes at Chicago Midway International Airport, Chicago, Illinois.

The FAA proposes changes in aircraft flight paths and altitudes at Chicago Midway International Airport (MDW). Specifically, the FAA proposes to publish and implement standard arrival and instrument approach procedures, serving MDW and changes in departures. The proposed action would not cause any ground disturbance nor increase the number of aircraft operations at MDW. The analysis of potential environmental impacts in the EA was conducted in accordance with FAA Order 1050.1E, *Environmental Impacts: Policies and Procedures*.

As of the date of this letter, the Draft EA is released and made publicly available for review and comment. The documents are available online at:

http://www.flychicago.com/midway/en/AboutUs/Community/default.aspx

If you desire to provide comments, please provide them by letter or email, before April 5, 2013 to the undersigned at the following address:

Ms. Nan Terry – AJV-C2
Federal Aviation Administration
ATO CSC OSG
2601 Meacham Boulevard
Fort Worth, Texas 76137
Via email: Nan.L.Terry@faa.gov

The public is also invited to attend a joint Public Hearing regarding the Midway Draft EA. Staff with the FAA and consultants will be available to answer questions and on the Draft EA at a public hearing detailed below. The public hearing will be held in an open house workshop style, and both verbal and written comments will be accepted by a court reporter. No formal presentation will be made. General materials provided at the hearing will be available in English only.

SAMPLE

February 18, 2013 2

Public hearing details:

Draft EA Public Hearing
Open House Format
Thursday, March 21, 2013
5:00 p.m. to 9:00 p.m.
The Mayfield, 6072 S. Archer Avenue, Chicago, Illinois 60638

FAA would like to thank you for your interest in this project. If you have any questions about the information provided, please feel free to contact me.

Sincerely,

Nan Terry
Environmental Specialist

Enclosure: Chicago Air Traffic Procedural Changes, Draft EA – on CD

SAMPLE

H.2.2 List of Government Agency and Elected Official Document Recipients

	Salutation	Firstname	Lastname	Title	Agency	Address 1	Address 2	City	State	Zip
1	Mr.	John	Bacone	Director	Indiana Department of Natural Resources	Division of Nature Preserves	402 W. Washington St., Room W267	Indianapolis	IN	46204
2	Mr.	Thomas	Baliga	Commission Chair	Midway Noise Compatibility Commission	4733 S. Kilpatrick Ave.		Chicago	IL	60632
3	Mr.	Derek	Blaida	MNCC - Member	Board of Commissioners of Cook County	118 N. Clark St.	Room 537	Chicago	IL	60602
4	Mayor	David	Brady	MNCC - Member	Village of Bedford Park	6701 S. Archer Ave.		Bedford Park	IL	60501
5	Ms.	Bonnie	Braughn	Parks & Wildlife Manager	Illinois Department of Natural Resources	One Natural Resource Way		Springfield	IL	62702
6	Mr.	Edward	Burke	Alderman	Chicago Ward 14	2650 W. 51st Street		Chicago	IL	60632
7	Mr.	Robert	Carter Jr.	Director	Indiana Department of Natural Resources (SHPO)	402 W. Washington St.	Room W256	Indianapolis	IN	46204
8	Ms.	Louise	Clemency	Field Supervisor	U.S. Fish and Wildlife Service	Chicago Field Office	1250 S. Grove, Ste. 103	Barrington	IL	60010
9	Mr.	Brian	Conway	State Historic Preservation Officer	Michigan State Housing Development Authority	702 W. Kalamazoo Street		Lansing	MI	48909
10	Ms.	Gail	Conwell	Residential Committee Chair	Midway Noise Compatibility Commission	6425 S. LaCrosse Ave.		Chicago	IL	60638
11	Mr.	John	Bacone	Director	Indiana Department of Natural Resources	Division of Nature Preserves	403 W. Washington St., Room W267	Indianapolis	IN	56700.9
12	Mr.	Thomas	Baliga	Commission Chair	Midway Noise Compatibility Commission	4734 S. Kilpatrick Ave.		Chicago	IL	56700.4
14	Ms.	Teri	Dixon	Planning & Programming	Chicago Metropolitan Agency for Planning	Transportation Division	233 South Wacker Dr., Ste	Chicago	IL	60606
15	Mayor	Larry	Dominick	MNCC - Member	Town of Cicero	4949 W. Cermak Road		Cicero	IL	60804
16	Col.	Fredric	Drummond	Commander - Chicago District	US Army Corp of Engineers	111 N. Canal, Ste. 600		Chicago	IL	60606
17	Mr.	Nance	Dulaj	Commission Member	Midway Noise Compatibility Commission	7235 S. Avers Ave.		Chicago	IL	60629
18	Ms.	Toni	Foulkes	Alderman	Chicago Ward 15	3045 W. 63rd Street		Chicago	IL	60629
19	Mr.	Aaron	Frame	Assistant Commissioner	Chicago Department of Aviation	10510 W. Zemke Road		Chicago	IL	60666
20	Mr.	David	Fronczak	Wildlife Biologist	U.S. Fish and Wildlife Service	Bishop Henry Whipple Federal Bldg.	1 Federal Drive	Ft. Snelling	MN	55111
21	Mayor	Christopher	Getty	MNCC - Member	Village of Lyons	4200 S. Lawndale Ave.		Lyons	IL	60534
22	Dr.	James	Glass	Director	Indiana Department of Natural Resources	Division of Historic Preservation and Archaeology	402 W. Washington St., Room 274	Indianapolis	IN	46204
23	Ms.	Susan	Glimcher	Director, Office of Communications,	Advisory Council on Historic Preservation	Old Post Office Bldg.	1100 Pennsylvania Ave., NW, Ste. 803	Washington	DC	20004
24	Mayor	Richard	Grenvich	MNCC - Member	Village of Forest View	7000 W. 46th Street		Forest View	IL	60402
25	Mr.	Larry	Gryczewski	MNCC - Member, Designee	Village of Bedford Park	6701 S. Archer Ave.		Bedford Park	IL	60501
26	Ms.	Susan	Hedman	Region 5 Administrator	U.S. Environmental Protection Agency, Region 5	77 W. Jackson Blvd.		Chicago	IL	60604
27	Mr.	Terry	Higgins	MNCC - Member, Designee	Town of Cicero	4949 W. Cermak Road		Cicero	IL	60804
28	Mr.	John	Kim	Director	Illinois Environmental Protection Agency	1021 N. Grand Ave. East	P.O. Box 19276	Springfield	IL	62794-92
29	Mayor	Harry	Klein	MNCC - Vice Chair	City of Burbank	6530 W. 79th Street		Burbank	IL	60459
30	Mr.	Christopher	Koczwara	Commission Member	Midway Noise Compatibility Commission	Law Office	5838 S. Archer Ave.	Chicago	IL	60638
31	Mayor	Steven	Landek	MNCC - Member	Village of Bridgeview	7500 S. Oketo Ave.		Bridgeview	IL	60455
32	Ms.	Lona	Lane	Alderman	Chicago Ward 18	8108 S. Western Ave.		Chicago	IL	60652
33	Mr.	Stan	Lihosit	Commission Member	Midway Noise Compatibility Commission	4634 S. Kedvale Ave.		Chicago	IL	60629
34	Dr.	Joseph	Loduca	School Committee Chair	Midway Noise Compatibility Commission	6016 S. Austin Ave.		Chicago	IL	60638
35	Mr.	Forest	Lombaer	Chief Asst. Corporation Counsel	Chicago Department of Law	30 N. LaSalle Street	14th Floor	Chicago	IL	60602
36	Mr.	Cody	Mares	MNCC - Member, Designee	Village of Stickney	6533 W. Pershing Road		Stickney	IL	60402
37	Ms.	Amy	Martin	Director	Illinois Historic Preservation Agency	313 South Sixth St.		Springfield	IL	62701

38	Ms.	Erin	O'Donnell	Managing Deputy Commissioner	Chicago Department of Aviation	5757 S. Cicero Avenue		Chicago	IL	60638
39	Mayor	Daniel	O'Reilly	MNCC - Member	Village of Stickney	6533 W. Pershing Road		Stickney	IL	60402
40	Mr.	Kenneth	Pannaralla	Commission Member	Midway Noise Compatibility Commission	6525 S. Kostner Ave.		Chicago	IL	60629
41	Mr.	Bourke	Patton	Executive Director	Indiana Natural Resource Foundation	402 W. Washington St.	Room 256	Indianapolis	IN	46204
42	Mr.	Anthony	Philbin	Commission Member	Midway Noise Compatibility Commission	8108 S. Western Ave.		Chicago	IL	60652
43	Ms.	Norma	Pinion	Village Trustee, Designee	Midway Noise Compatibility Commission	7914 W. 76th Street		Bridgeview	IL	60455
44	Mr.	Martin	Quinn	Alderman	Chicago Ward 13	6500 S. Pulaski Road		Chicago	IL	60629
45	Mr.	James	Ranfranz	Executive Director	Northwestern Indiana Regional Planning Commission	1600 Southport Rd.		Portage	IN	46368
46	Ms.	Nora	Rasure	Acting Regional Forester	U.S. Dept. of Agriculture	Forest Service - Eastern Region (9)	626 E. Wisconsin Ave.	Milwaukee	WI	53202
47	Mr.	Mark	Reiter	Director	Indiana Department of Natural Resources	Division of Fish and Wildlife	402 W. Washington St., Room W273	Indianapolis	IN	46204
48	Mr.	Michael	Reynolds	Regional Director - Midwest Region	National Park Service	US Department of the Interior	601 Riverfront Dr.	Omaha	NE	68102
49	Mr.	Samuel	Rivers	Commission Member	Midway Noise Compatibility Commission	Ward 15 Office	3045 W. 63rd Street	Chicago	IL	60629
50	Ms.	Diane	Rosen	Midwest Regional Director	U.S. Dept. of the Interior	Bureau of Indian Affairs	5600 W. American Blvd., Ste. 500	Bloomington	MN	55347
51	Ms.	Susan	Shea	Director	Illinois Department of Transportation	Division of Aeronautics	1 Langhorne Bond Dr.	Springfield	IL	62702
52	Mr.	Thomas	Sheahan	MNCC - Member, Designee	Village of Lyons	4200 S. Lawndale Ave.		Lyons	IL	60534
53	Mr.	Jerry	Stermer	Director	Governor's Office of Management and Budget	603 Stratton Bldg.	401 South Spring	Springfield	IL	62706
54	Mr.	Mark	Storzer	Northeastern States Field Manager	U.S. Dept. of the Interior	Bureau of Land Management	626 E. Wisconsin Ave., Ste. 200	Milwaukee	IL	53202
55	Mayor	Joseph	Strzelczyk	MNCC - Member	Village of Summit	7321 W. 59th Street		Summit	IL	60501
56	Mr.	Chester	Strzelczyk	MNCC - Member, Designee	Village of Summit	7321 W. 59th Street		Summit	IL	60501
57	Ms.	Renee	Thakali	Natural Resource Planner	U.S. Dept. of Agriculture	Forest Service - Midewin National Tallgrass Prairie	30239 S. State Route 53	Wilmington	IL	60481
58	Mr.	Jimmy	Thompson	Regional Coordinator	Illinois Emergency Management Agency	Region Four	9511 W. Harrison St.	Des Plaines	IL	60016
59	Mr.	Alan	Walts	Director, Office of Enforcment & Compliance Assurance	Environmental Protection Agency, Region 5	77 W. Jackson Blvd.		Chicago	IL	60604
60	Mr.	Michael	Zalewski	Alderman	Chicago Ward 23	6247 S. Archer Ave.		Chicago	IL	60638
61	Mr.	Jim	Modglin		Illinois Department of Natural Resources	Region I Office	2317 E. Lincoln Way, Ste. A	Sterling	IL	61081
62		Chris	Rollins		Illinois Department of Natural Resources	Region II Office	2050 West Steams Road	Bartlett	IL	60103
63	Ms.	Debbie	Combs		Illinois Department of Natural Resources	Region III Office	15676 State Highway 54	Clinton	IL	61727

H.3 PUBLIC NOTICES

Draft EA Public Notice Text, as posted in Chicago Sun-Times, Feb. 17 and 19, 2013

PUBLIC NOTICE

NOTICE OF PUBLIC COMMENT PERIOD AND
NOTICE OF PUBLIC HEARING

The Chicago Department of Aviation (CDA), the owner and operator of Midway International Airport (MDW), is conducting an update to a FAR Part 150 Airport Noise Compatibility Study (Draft Part 150 Update). The CDA submitted the original Part 150 Study in 1992, and the Federal Aviation Administration (FAA) approved the study in 1993. The CDA has three primary purposes for the Update: 1) updating the 65 DNL noise contour for Midway; 2) updating the status of the original sixteen noise compatibility measures from the 1992 Study; and 3) adding noise compatibility measures in order to make those measures eligible for FAA grant funding.

Concurrently, as part of its effort to achieve Next Generation Air Transportation System (NextGen) goals, the FAA proposes to implement new Area Navigation (RNAV) flight routes and procedures, inclusive of Required Navigation Performance (RNP), at MDW. These changes will enable the FAA to manage air traffic more efficiently, while maintaining or improving safety associated with aircraft flying into and out of MDW. FAA has prepared a Draft Environmental Assessment (EA) to identify the potential environmental impacts associated with these changes. In accordance with the National Environmental Policy Act of 1969 (NEPA) as amended, and the Airport and Airway Improvement Act of 1982 as amended, the FAA must consider the environmental impact of Federal actions such as the modification of RNAV/RNP procedures and the changes to departure headings as proposed at MDW.

The public is invited to provide public comment on the Draft Part 150 Update and the Draft EA for a 45-day period beginning on Tuesday, February 19, 2013, and ending on Friday, April 5, 2013. Written comments on the Draft Part 150 Update should be addressed to Mr. Aaron Frame, Assistant Commissioner, Chicago O'Hare International Airport, 10510 W. Zemke Road, Chicago, Illinois 60666. Any written comments may also e-mailed to the CDA at midwaypart150@cityofchicago.org. Written comments on the Draft EA should be addressed to Ms. Nan Terry, Federal Aviation Administration, 2601 Meacham Boulevard, ATO CSC OSG, ATTN: AJV-C2, Fort Worth, Texas 76137. Any written comments on the Draft EA may also be e-mailed to the FAA at Nan.L.Terry@faa.gov.

Copies of the Draft Part 150 Update are available for public review at the locations below. For an electronic version on the Internet, go to www.flychicago.com/mdwp150. For a paper version, please visit these offices:

CDA Environment Division
Chicago O'Hare International Airport
10510 W. Zemke Road
Chicago, IL 60666
Call Aaron Frame at 773.686.3563 for an appointment to review the document Monday through Friday between 9:00 a.m. and 5:00 p.m.

Airport Maintenance Complex
Chicago Midway International Airport
6201 S. Laramie Avenue
Chicago, IL 60638
Call 773.838.0757 for an appointment to review the document Monday through Friday between 8:00 a.m. and 4:00 p.m.

Archer Heights Public Library
5055 S. Archer Avenue
Chicago, IL 60632

West Lawn Public Library
4020 W. 63rd Street
Chicago, IL 60629

Copies of the Draft EA are available for public review at the locations listed below. For an electronic version on the Internet, go to:
http://www.flychicago.com/midway/en/AboutUs/Community/default.aspx

For a paper version, please visit these offices:

Federal Aviation Administration
2300 E. Devon Avenue, Room 320
Des Plaines, IL 60018

Archer Heights Public Library
5055 S. Archer Avenue
Chicago, IL 60632

West Lawn Public Library
4020 W. 63rd Street
Chicago, IL 60629

The public is also invited to attend a joint Public Hearing regarding the Draft Part 150 Update and the Draft EA. The CDA staff and consultants preparing the Draft Part 150 Update will be available to answer questions on the Update, and FAA staff and consultants will be available to answer questions on the Draft EA at a public hearing detailed below. The public hearing will be held in an open house style, and both verbal and written comments will be accepted by a court reporter. No formal presentation will be made. General materials provided at the hearing will be available in English only. If special assistance or translation services are necessary for the public hearing, please contact Assistant Commissioner Aaron Frame before 4:00 p.m. on Thursday, March 14, 2013. Written comments will be accepted for a two-week period after the public hearing until Friday, April 5, 2013.

Public hearing details:
Draft Part 150 Update and Draft EA Public Hearing
Open House Format
Thursday, March 21, 2013
5:00 p.m. to 9:00 p.m.
The Mayfield, 6072 S. Archer Avenue, Chicago, Illinois 60638

Draft EA Public Notice, Chicago Sun-Times, February 17, 2013

CHICAGO SUN-TIMES

Publication Date: 02/17/2013

Ad Number: 506305-01 | Client Name: CITY OF CHICAGO, DEPT OF AVIATION
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38 ☆ Chicago Sun-Times Sunday, February 17, 2013

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PUBLIC NOTICE

NOTICE OF PUBLIC COMMENT PERIOD AND NOTICE OF PUBLIC HEARING

The Chicago Department of Aviation (CDA), the owner and operator of Midway International Airport (MDW), is conducting an update to a FAR Part 150 Airport Noise Compatibility Study (Draft Part 150 Update). The CDA submitted the original Part 150 Study in 1992, and the Federal Aviation Administration (FAA) approved the study in 1993. The CDA has three primary purposes for the Update: 1) updating the 65 DNL noise contour for Midway; 2) updating the status of the original airport noise compatibility measures from the 1992 Study; and 3) adding noise compatibility measures in order to make those measures eligible for FAA grant funding.

Concurrently, as part of its effort to achieve Next Generation Air Transportation System (NextGen) goals, the FAA proposes to implement new Area Navigation (RNAV) flight routes and procedures, inclusive of Required Navigation Performance (RNP), at MDW. These changes will enable the FAA to manage air traffic more efficiently, while maintaining or improving safety associated with aircraft flying into and out of MDW. FAA has prepared a Draft Environmental Assessment (EA) to identify the potential environmental impacts associated with those changes. In accordance with the National Environmental Policy Act of 1969 (NEPA) as amended, and the Airport and Airway Improvement Act of 1982 as amended, the FAA must consider the environmental impact of Federal actions such as the modification of RNAV/RNP procedures and the changes to departure headings as proposed at MDW.

The public is invited to provide public comment on the Draft Part 150 Update and the Draft EA for a 45-day period beginning on Tuesday, February 19, 2013, and ending on Friday, April 5, 2013. Written comments on the Draft Part 150 Update should be addressed to Mr. Aaron Frame, Assistant Commissioner, Chicago O'Hare International Airport, 10510 W. Zemike Road, Chicago, Illinois 60666. Any written comments may also e-mailed to the CDA at midwaypart150@cityofchicago.org. Written comments on the Draft EA should be addressed to Ms. Nan Terry, Federal Aviation Administration, 2601 Meacham Boulevard, ATO CSC OSG, ATTN: AJV-C2, Fort Worth, Texas 76137. Any written comments on the Draft EA may also be e-mailed to the FAA at Nan.L.Terry@faa.gov.

Copies of the Draft Part 150 Update are available for public review at the locations below. For an electronic version on the Internet, go to www.flychicago.com/midway150. For a paper version, please visit those offices:

CDA Environment Division
Chicago O'Hare International Airport
10510 W. Zemike Road, Chicago, IL 60666
Call Aaron Frame at 773.686.3663 for an appointment to review the document Monday through Friday between 9:00 a.m. and 5:00 p.m.

Airport Maintenance Complex
Chicago Midway International Airport
6201 S. Laramie Avenue, Chicago, IL 60638
Call 773.838.0757 for an appointment to review the document Monday through Friday between 8:00 a.m. and 4:00 p.m.

Archer Heights Public Library
5055 S. Archer Avenue
Chicago, IL 60632

West Lawn Public Library
4020 W. 63rd Street
Chicago, IL 60629

Copies of the Draft EA are available for public review at the locations listed below. For an electronic version on the Internet, go to:

http://www.flychicago.com/midway/en/AboutUs/Community/default.aspx

For a paper version, please visit these offices:

Federal Aviation Administration
2300 E. Devon Avenue, Room 320
Des Plaines, IL 60018

Archer Heights Public Library
5055 S. Archer Avenue
Chicago, IL 60632

West Lawn Public Library
4020 W. 63rd Street,
Chicago, IL 60629

The public is also invited to attend a joint Public Hearing regarding the Draft Part 150 Update and the Draft EA. The CDA staff and consultants preparing the Draft Part 150 Update will be available to answer questions on the Update, and FAA staff and consultants will be available to answer questions on the Draft EA at a public hearing detailed below. The public hearing will be held in an open house style, and both verbal and written comments will be accepted by a court reporter. No formal presentation will be made. General materials provided at the hearing will be available in English only. If special assistance or translation services are necessary for the public hearing, please contact Assistant Commissioner Aaron Frame before 4:00 p.m. on Thursday, March 14, 2013. Written comments will be accepted for a two-week period after the public hearing until Friday, April 5, 2013.

Public hearing details:
Draft Part 150 Update and Draft EA Public Hearing
Open House Format
Thursday, March 21, 2012
5:00 p.m. to 9:00 p.m.
The Mayfield, 6072 S. Archer Avenue, Chicago, Illinois 60638
(773) 284-2675

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Draft EA Public Notice, Chicago Sun-Times, February 19, 2013

CHICAGO SUN-TIMES

Publication Date: 02/19/2013

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PUBLIC NOTICE

NOTICE OF PUBLIC COMMENT PERIOD AND NOTICE OF PUBLIC HEARING

This Chicago Department of Aviation (CDA), the owner and operator of Midway International Airport (MDW), is conducting an update to a FAR Part 150 Airport Noise Compatibility Study (Draft Part 150 Update). The CDA submitted the original Part 150 Study in 1992, and the Federal Aviation Administration (FAA) approved the study in 1993. The CDA has three primary purposes for the Update: 1) updating the 65 DNL noise contour for Midway; 2) updating the status of the original sixteen noise compatibility measures from the 1992 Study; and 3) adding noise compatibility measures in order to make those measures eligible for FAA grant funding.

Concurrently, as part of its effort to achieve Next Generation Air Transportation System (NextGen) goals, the FAA proposes to implement new Area Navigation (RNAV) flight routes and procedures, inclusive of Required Navigation Performance (RNP), at MDW. These changes will enable the FAA to manage air traffic more efficiently, while maintaining or improving safety associated with aircraft flying into and out of MDW. FAA has prepared a Draft Environmental Assessment (EA) to identify the potential environmental impacts associated with these changes. In accordance with the National Environmental Policy Act of 1969 (NEPA), as amended, and the Airport and Airway Improvement Act of 1982 as amended, the FAA must consider the environmental impact of Federal actions such as the modification of RNAV/RNP procedures and the changes to departure headings as proposed at MDW.

The public is invited to provide public comment on the Draft Part 150 Update and the Draft EA for a 45-day period beginning on Tuesday, February 19, 2013, and ending on Friday, April 5, 2013. Written comments off the Draft Part 150 Update should be addressed to Mr. Aaron Frame, Assistant Commissioner, Chicago O'Hare International Airport, 10510 W. Zemke Road, Chicago, Illinois 60666. Any written comments may also e-mailed to the CDA at midwaypart150@cityofchicago.org. Written comments on the Draft EA should be addressed to Ms. Nan Terry, Federal Aviation Administration, 2601 Meacham Boulevard, ATO CSC OSG, ATTN: AJV-C2, Fort Worth, Texas 76137. Any written comments on the Draft EA may also be e-mailed to the FAA at Nan.L.Terry@faa.gov.

Copies of the Draft Part 150 Update are available for public review at the locations below. For an electronic version on the Internet, go to www.flychicago.com/mdwp150. For a paper version, please visit these offices:

CDA Environment Division
Chicago O'Hare International Airport
10510 W. Zemke Road, Chicago, IL 60666
Call Aaron Frame at 773.686.3993 for an appointment to review the document Monday through Friday between 9:00 a.m. and 5:00 p.m.

Airport Maintenance Complex
Chicago Midway International Airport
6201 S. Laramie Avenue, Chicago, IL 60638
Call 773.838.0767 for an appointment to review the document Monday through Friday between 8:00 a.m. and 4:00 p.m.

Archer Heights Public Library
5055 S. Archer Avenue
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Copies of the Draft EA are available for public review at the locations listed below. For an electronic version on the Internet, go to:

http://www.flychicago.com/midway/en/AboutUs/Comm-info/default.aspx

For a paper version, please visit these offices:

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2300 E. Devon Avenue, Room 320
Des Plaines, IL 60018

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5055 S. Archer Avenue
Chicago, IL 60632

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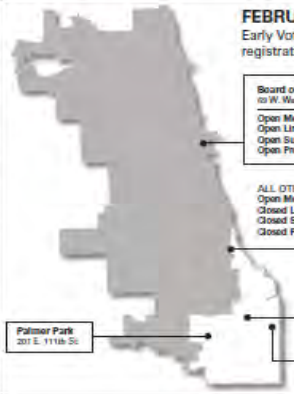

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Public Notices

The Chicago Department of Public Health (CDPH) is releasing a Request for Proposals (RFPs) for Improving Immunization coverage levels under RFP #DA-41-3375-02-2013-002, Coordinating Community Immunization Education.
CDPH is releasing this RFP for community based organizations to improve immunization levels through public education. A total of $110,000 for the contract period beginning June 1, 2013 through December 31, 2013 will be available to support public education activities. One contract will be awarded to a community based organization providing services to Chicago residents.
For additional details and to download the RFP, please visit **http://www.cityofchicago.org/health** (under the Alerts) beginning on Tuesday, February 19, 2013.
The bidder's conference for this RFP will be held on Friday, March 1, 2013. The conference will be held at:
Chicago Department of Public Health
Large Conference Room
2160 W. Ogden
Chicago, Illinois 60612
10:30 AM - 11:30 AM
Applications are due no later than **4:00 pm CST on Tuesday, March 19, 2013.**
For more information please contact Maribel Chavez-Torres at 312-746-6120 or maribel.chavez-torres@cityofchicago.org.
Pub: 02/19 - 02/22/13 505498

The Chicago Department of Public Health (CDPH) is releasing a Request for Proposals (RFP) for Improving Immunization coverage levels under RFP #DA-41-3375-02-2013-004, Coordinating Healthcare Provider Immunization Education.
CDPH is releasing this RFP for healthcare provider professional organizations to improve immunization levels through healthcare provider education. A total of $145,000 for the contract period beginning June 1, 2013 through December 31, 2013 will be available to support healthcare provider education activities. One contract will be awarded to a professional organization whose members provide healthcare services to children and adolescents in Chicago.
For additional details and to download the RFP, please visit **http://www.cityofchicago.org/health** (under the Alerts) beginning on Tuesday, February 19, 2013.
The bidder's conference for this RFP will be held on Friday, March 1, 2013. The conference will be held at:
Chicago Department of Public Health
Large Conference Room
2160 W. Ogden
Chicago, Illinois 60612
9:30 AM - 10:00 AM
Applications are due no later than **4:00 pm CST on Tuesday, March 19, 2013.**
For more information please contact Maribel Chavez-Torres at 312-746-6120 or maribel.chavez-torres@cityofchicago.org.
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Final EA Public Notice text, as posted in Chicago Sun-Times, May 25, 2013

PUBLIC NOTICE
NOTICE OF AVAILABILITY OF FINAL ENVIRONMENTAL ASSESSMENT
AND NOTICE OF PUBLIC COMMENT PERIOD FOR THE DRAFT FINDING OF NO SIGNIFICANT IMPACT

As part of its effort to achieve Next Generation Air Transportation System (NextGen) goals, the FAA proposes to implement new Area Navigation (RNAV) flight routes and procedures, inclusive of Required Navigation Performance (RNP), at Chicago Midway International Airport (MDW). These changes will enable the FAA to manage air traffic more efficiently, while maintaining or improving safety associated with aircraft flying into and out of MDW. In accordance with the National Environmental Policy Act of 1969 (NEPA) as amended, the FAA has prepared a Final Environmental Assessment (EA) to identify the potential environmental impacts associated with these changes. In addition, FAA has prepared a Draft Finding of No Significant Impacts (FONSI).

The public is invited to provide comments on the Draft FONSI for a 30-day period beginning on Saturday, May 25, 2013, and ending on Monday, June 24, 2013. Written comments on the Draft FONSI should be addressed to: Ms. Nan Terry, Federal Aviation Administration, 2601 Meacham Boulevard, ATO CSC OSG, ATTN: AJV-C2, Fort Worth, Texas 76137 and may also be e-mailed to the FAA at: Nan.L.Terry@faa.gov.

Copies of the Final EA and Draft FONSI are available for public review at the locations listed below. For an electronic version on the Internet, go to http://www.flychicago.com/midway/en/AboutUs/NoiseManagement/RSIP/Pages/Residential-SIP.aspx.

Hard Copy Review Locations:
CDA Environment Division
Chicago O'Hare International Airport
10510 W. Zemke Road, Chicago, IL 60666
Call Aaron Frame at 773.686.3563 for an appointment to review the document Monday through Friday between 9:00 a.m. and 5:00 p.m.

Airport Maintenance Complex
Chicago Midway International Airport
6201 S. Laramie Avenue, Chicago, IL 60638
Call 773.838.0757 for an appointment to review the document Monday through Friday between 8:00 a.m. and 4:00 p.m.

Federal Aviation Administration	Archer Heights Public Library	West Lawn Public Library
2300 E. Devon Avenue, Room 320	5055 S. Archer Avenue	4020 W. 63rd Street,
Des Plaines, IL 60018	Chicago, IL 60632	Chicago, IL 60629

H.4 COMMENTS AND RESPONSES

Comments Received for MDW Draft EA and FAA Responses

Agency/Organization	Name	Letter Date	Comment Number	Comment	FAA Response
Illinois Environmental Protection Agency	Lisa Bonnett	2/21/2013	IEPA1	The Agency has reviewed this submission and has no comments or objections to the proposed project at this time	Comment noted
Environmental Protection Agency	Kenneth Westlake	4/3/2013	EPA1	The Draft EA states (p. 110), "Implementation of the Proposed Action would result in DNL [Day-Night Average Sound Level] increases of 1.5 dB [decibels] or more in noise sensitive areas exposed to aircraft noise at or above DNL 65 dB. However, these impacts would be mitigated through the City of Chicago Department of Aviation's ongoing sound insulation program as part of their Part 150 Study." These increases would occur northeast of Midway Airport. Recommendation: In the Final EA, EPA requests that an additional section on sound mitigation be provided; specifically, what specific mitigation measures are proposed for these areas? In what time frame will mitigation measures be implemented, and how will implementation be scheduled between 2013 and 2018? While the Draft EA states that these areas of impacted land use would be evaluated, and mitigation measures proposed, under the framework of the Part 150 Noise Study, EPA requests that the Final EA provide additional information on what a Part 150 Noise Study is and how it relates to noise contour increases associated with the Proposed Action. Information should be provided in plain language. Additionally, EPA requests that FAA discern between single-family and multi-family residences, and distinguish if mitigation measures will be provided for both single-family and multi-family homes.	See revised text in Chapter 4 and 5 Compatible Land Use sections for discussion of mitigation measures for this resource category and a description of the Part 150 program, generally.

Comments Received for MDW Draft EA and FAA Responses

Agency/Organization	Name	Letter Date	Comment Number	Comment	FAA Response
Environmental Protection Agency	Kenneth Westlake	4/3/2013	EPA2	The Draft EA (page 165) states, "the Proposed Action would result in reportable and significant noise impacts associated with minority and low-income populations." However, the Draft EA is silent with regard to discussion of mitigation of impacts to potential environmental justice communities. Recommendation: EPA recommends that the Final EA include a narrative discussion of mitigation measures to ensure that impacts to environmental justice communities are not disproportionate	See revised text in Chapter 4 and 5 Compatible Land Use sections for discussion of mitigation measures for this resource category and a description of the Part 150 program, generally. The RSIP is a voluntary program and eligibility for participation is a function of whether an existing incompatible dwelling is or would be exposed to incompatible levels of aircraft noise, subject to available funding and the Congressional authorization and appropriations process. Eligibility for participation is determined without regard to race, color, creed, national origin, gender, or household income levels. The FAA has determined that ongoing implementation and continuance of the MDW Part 150 programs in general, and the RSIP in particular would reduce the impact from aircraft noise (and its corresponding effect on compatible land use) to less than significant levels. Under the provisions of EO 12898 *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations* and CEQ guidance, in the absence of a significant impact a disproportionate impact to minority or low-income populations would not occur. However, as encouraged by the EO and CEQ guidance, the FAA discloses in section 5.10.3.1 where significant impacts would occur (prior to mitigation) and their setting and context with respect to minority or low-income populations at the census block and block group levels, respectively. See revised text in FEA.
Environmental Protection Agency	Kenneth Westlake	4/3/2013	EPA3	The Draft EA (page 172) indicates that census blocks that have significant noise increases have minority populations that range from 70.7 percent to 85.6 percent of the total population, and that the Hispanic/Latino minority group comprises the largest percentage of the minority population therein. However, the Draft EA is silent on how FAA is ensuring that affected minority populations are aware of the proposed project, and on whether or not FAA has undertaken public outreach or public meetings with these communities. Recommendation: EPA recommends that the Final EA include additional information on measures FAA has taken/will take to ensure that environmental justice communities are aware of the proposal and have the opportunity and understanding on how to comment on the proposed project. EPA recommends that outreach strategies consider the range of appropriate languages or dialects of the impacted communities so that meaningful public participation can be achieved.	Appendix H of the FEA describes the process employed for coordination and consultation with agencies of special expertise and the public. FAA mailed copies of the Draft EA to the US Fish and Wildlife Service, the State Historic Preservation Officer for the State of Illinois, and the Illinois Department of Natural Resources on February 18, 2013. FAA has not received any comments from these agencies. FAA will mail these same agencies copies of the FEA and the Draft FONSI/ROD.

Comments Received for MDW Draft EA and FAA Responses

Agency/Organization	Name	Letter Date	Comment Number	Comment	FAA Response
Environmental Protection Agency	Kenneth Westlake	4/3/2013	EPA4	The Draft EA (page 154) states the Proposed Action, "is not anticipated to have an adverse impact" on historic resources. The Draft EA (page 161) also states, "no increased risk of impacts to Federally- or state-listed species or migratory birds are [sic] expected to occur. Therefore, there are no anticipated impacts to airborne wildlife, including migratory birds and Federally- or state-listed species." Recommendation: To document coordination efforts among agencies, including, but not limited to, the U.S. Fish and Wildlife Service (USFWS), the Illinois Department of Natural Resources (IDNR), and the State Historic Preservation Office (SHPO), EPA recommends that you provide all correspondence sent to, and received from, other agencies as an appendix to the Final EA.	Appendix H of the FEA describes the process employed for coordination and consultation with agencies of special expertise and the public.
Self	Unknown	3/21/2013	UNK1	I am a homeowner in the 4000 block of South Kostner. I'm just one block north of the 65 DNL line. I do have planes that flgy over my house at times. I am affected by the noise.	The FAA acknowledges that the commenter is exposed to noise from aircraft operations and that aircraft may fly in the vicintity of his/her dwelling. However, as acknowledged in the comment, his/her dwelling does not lie within the DNL 65 dB noise contour.
Self	Unknown	3/21/2013	UNK2	The noise from the planes between the brick buildings seems like it echoes more, enhancing the noise from the planes. The noise does affect my sleep, my way of life, watching TV and conversations.	The FAA acknowledges that the commenter is exposed to noise from aircraft operations; however, his/her dwelling does not lie within the DNL 65 dB noise contour. Noise modeling and impact analysis were conducted in accordance with FAAO Order 1050.1E. Appendix E.1 of the EA describes in general terms the potential effects from exposure to aircraft noise at varying levels, including potential for sleep disturbance or speech interference. The predicted noise exposure from the aircraft operations at specific locations in the vicinity of Chicago Midway International Airport is presented in Chapter 5.

Comments Received for MDW Draft EA and FAA Responses

Agency/Organization	Name	Letter Date	Comment Number	Comment	FAA Response
Self	Unknown	3/21/2013	UNK3	Myself and neighbors I spoke with that couldn't come today agree that we'd like to be included in the sound insulation program because of the noise that we receive from the planes.	The FAA acknowledges that the commenter, like many residents in the vicinity of Chicago Midway International Airport, is exposed to noise from aircraft operations. However, his/her dwelling would not lie within the DNL 65 dB noise contour associated with aircraft operations at Chicago Midway International Airport that would occur under the Proposed Action (2018). The predicted noise exposure from this level of activity is depicted in the EA in Chapter 5 on Figure 18 in the EA. This same level of activity appears as "Noise Exposure Map - 2" in the Chicago Midway International Airport Part 150 Study Update. Implementation of the Proposed Action would not have a significant noise impact on a sensitive noise receiver (i.e., residence) in the commenter's block as the predicted noise exposure from aircraft operations would not exceed DNL 65 dB. The FAA Part 150 Program, of which sound insulation is an element, applies to properties exposed to noise levels equaling or exceeding DNL 65 dB.
Self	Cassandra Rodriguez	3/21/2013	CR1	I don't understand how the contour doesn't cover my block. It cuts off the block before and starts another seven blocks later, but the planes, mostly on the return flight to Midway -- and I know they are going to change direction, but at this time we have been excluded from the new proposal for sound insulation. I believe it's the 150 plan.	The FAA acknowledges that the commenter, like many residents in the vicinity of Chicago Midway International Airport, is exposed to noise from aircraft operations. However, as the commenter notes, her dwelling would not lie within the DNL 65 dB noise contour associated with aircraft operations at Chicago Midway International Airport that would occur under the Proposed Action (2018). The predicted noise exposure from this level of activity is depicted in the EA in Chapter 5 on Figure 18 in the EA. This same level of activity appears as "Noise Exposure Map - 2" in the Chicago Midway International Airport Part 150 Study Update. Implementation of the Proposed Action would not have a significant noise impact on a sensitive noise receiver (i.e., residence) in the commenter's block as the predicted noise exposure from aircraft operations would not exceed DNL 65 dB and experience a 1.5 dB increase. The FAA Part 150 Program, of which sound insulation is an element, applies to properties exposed to noise levels equaling or exceeding DNL 65 dB.
Self	Michael Kroposki Esq.	4/1/2013	MK1	The EA should state specifically the algorithm used to calculate take off weights and specifically state the assumptions made in the calculations. While use of the default settings 65% payload may have been realistic in 1970, the current Load Factors clearly show it is not so today [The FAA recently reported the national average domestic Load Factor as 83.2%]. A more realistic average weight is most likely near 100% payload.	The EA, in Appendix E2, Section 2.4.6 , "Aircraft Weight and Trip Length" at page E29 provides a discussion of take off weights. A load factor of near 100% is not realistic when computing average annual day conditions. INM and NIRS have a standard passenger load factor built into the model. The average weight calculation includes more than passenger load factor. It also includes the weight of the aircraft, cargo, and fuel.

Comments Received for MDW Draft EA and FAA Responses

Agency/Organization	Name	Letter Date	Comment Number	Comment	FAA Response
Self	Michael Kroposki Esq.	4/1/2013	MK2	INM noise calculations are especially sensitive to variations in take off weight. One study of input sensitivities has shown that a 10% variation in take off weight leads to an error of 3-7 dB [2].	Noise calculations are sensitive to many noise modeling input variables. It is not technically sound to look at one variable, e.g. takeoff weight, in isolation. The commenter did not include references or a listing of literature cited with his comment letter. FAA notes that this comment was made by the commenter at other locations including footnote reference. If this is the intent of the commenter, the FAA references that footnote to be as follows: [2] "Sensitivity of FAA Integrated Noise Model to Input Parameters" , Applied Acoustics, Vol 66, Issue 3, March 2005, pages 263-276. If so, the commenter has misstated the data in the referenced study. The study reports in Table 8 that a 10 percent weight increase can result in a SEL (not DNL) variation of +0.70 decibels to +2.20 decibels.
Self	Michael Kroposki Esq.	4/1/2013	MK3	Since large jet aircraft are most likely the largest contributors of noise energy, an error in the largest contributors to DNL will predominate since noise as measured by DNL is aggregated logarithmically. Assuming unrealistically low take off weights have been used in the draft EA, it may be assumed that the calculated DNL's are significantly underestimated!	The commenter's assumption that calculated DNLs are significantly underestimated is not accurate and appears to be based on his assumption that the passenger load factor is the prevailing variable in the noise model. Noise calculations are sensitive to many noise modeling input variables. For example, the noise model uses a conservative value of 100% thrust for departure procedures, although airlines typically do not use 100% power in takeoff. Thrust reduction at takeoff varies. Therefore, the 100% thrust assumption will result in higher noise calculations than may occur for particular departures. The goal of the noise analysis is to capture the average annual conditions at the airport.

Comments Received for MDW Draft EA and FAA Responses

Agency/Organization	Name	Letter Date	Comment Number	Comment	FAA Response
Self	Michael Kroposki Esq.	4/1/2013	MK4	The consequence of this conclusion has direct impact on the overall environmental impact determination because even the underestimated DNLs were extremely close to the 65 dB level of regulatory significance. If they in fact exceed this level, a finding of significant impacts is warranted instead of the finding of no significant impact stated in the EA draft	See response to MK3 above. Noise calculations are sensitive to many noise modeling input variables. The goal of the noise analysis is to capture the average annual conditions at the airport. The FAA has determined that the DNL results do not exceed the FAA's threshold for a significant noise impact.
Self	Michael Kroposki Esq.	4/1/2013	MK5	The draft EA confuses DNL with YDNL. On page 65 of the draft EA there is a referenced [sic] to "annual DNL" which would appear to be the same as YDNL. Order 1050.1E paragraph 14.3, SIGNIFICANT IMPACT THRESHOLDS, speaks in terms of DNL which is a widely recognized term in most federal agencies. While Paragraph 14.1a mentions yearly DNL, paragraph 14.4b	The draft EA does not contain the quoted text "annual DNL" indicated by the commenter. Results presented are in terms of DNL.

Comments Received for MDW Draft EA and FAA Responses

Agency/Organization	Name	Letter Date	Comment Number	Comment	FAA Response
Self	Michael Kroposki Esq.	4/1/2013	MK6	I was very surprised to see in the draft EA reference to calculated DNLs 58.1 and 66.6 [page 79]. These numbers are meaningless and therefore misleading because it is my understanding that the precision and accuracy of INM output is at best about +/- 1.0 dB . Also the NIRS output DNL and therefore population numbers calculated there most likely have no better precision and accuracy than INM [NIRS uses the INM calculation module] and it is most likely less due to errors introduced by truncation, round off and averaging.	As required by FAA Order 1050.1E, Appendix A, Section 14.5e, the FAA conducted noise modeling using INM (in vicinity of the aiport) and NIRS (beyond the immediate vicinity of the airport where the action would include portions of the study area where aircraft would operate at or above 3,000 feet above ground level). See Section 4.3.1, specificially page 58 where this methodology is presented. The noise values presented in the EA are those reported by INM and NIRS. Reporting results to 0.1 dB is consistent with FAA Order 1050.1E, under which the criterion for signficant noise impact is expressed to units of 0.1 dB (see FAA Order 1050.1E, Appendix A, Section 14.3).
Self	Michael Kroposki Esq.	4/1/2013	MK7	The final EA should state the uncertainty in the output by indicating the validated range of the output numbers, for example 63.45 +/- 0.05dB. This range is commonly referred to as the confidence interval at a stated level of significance, ie 95%.	FAA noise models do not provide confidence interval information.
Self	Michael Kroposki Esq.	4/1/2013	MK8	Since AEDT uses modeling calculations very similar to INM it is likely the levels of uncertainty found in the AEDT sensitivity analysis are likely to also be present in the NIRS output. The recently studied AEDT levels of uncertainty should be cited as a guide to uncertainty in the similar NIRS software.	The AEDT uncertainty quantification, still under preparation, is not an applicable guide for previous noise models. The AEDT uncertainty quantification will not provide confidence interval information for noise.
Self	Michael Kroposki Esq.	4/1/2013	MK9	The range of uncertainty in the reported DNLs should be stated along with a table of all actual DNL values calculated. In addition a noise contour map of the actual calculated DNLs are important for the public understanding of the project's noise impacts. Noise is the central problem being addressed in this EA and needs to be clearly and completely stated for the public's understanding of the environmental impact of the proposed action.	Please see response to previous comment [MK6]

Comments Received for MDW Draft EA and FAA Responses

Agency/Organization	Name	Letter Date	Comment Number	Comment	FAA Response
Self	Michael Kroposki Esq.	4/1/2013	MK10	The FAA NEPA regulations use whole numbers, for example 65 dB, with one exception 1.5 dB (Order 1050.1E section 14), however table 22 in the draft EA on page 110 cites the noise limits as 3.0 and 5.0 dB. These are different numbers. A change of 4.6 dB would satisfy the 5 dB limit under standard numerical nomenclature but would not be valid according to table 23. Table 23 should be revised in accordance with Order 1050.1E	It is not necessary to revise Table 23 because this table presents modeled annual aircraft operations. With respect to Table 22, the presentation of the significant impact thresold and the reportable increase criteria in Table 22 is consistent with FAA Order 1050.1E, Appendix A, Section 14. The fact that some numbers in the Order are presented as whole numbers is a matter of formatting and stylistic convention. The Order does not use decimals with "zero" values, e.g. 63.0. See for example Appendix A, section 14.3: "For example, an increase from 63.5 to 65 dB is considered a significant impact." Thus, a change of 4.6 dB would not be rounded to 5 dB for comparison to the criteria in section 14.5e. The EA presents the noise values as reported by INMN and NIRS, which round to the nearest 1/10th of a dB. For comparison to noise criteria, FAA applied the criteria to the nearest 1/10th of a dB (consistent with the above reference Appendix A, section 14.3). FAA consistently applied this methodology throughout the analysis.
Self	Michael Kroposki Esq.	4/1/2013	MK11	RNAV air procedures when compared to conventional air procedures show a noise focusing directly along the center line of the flight path of the air procedure . While this focusing results in less noise impact for many people away from the center line, those under the flight path have a significant noise impact. Contour maps which are of sufficient detail to show this phenomena are need so that the public is fully informed of the noise impact of the RNAV air procedures included in this draft EA. Paragraph 14.4d of Order 1050.1E requires a noise contour map which is "Large enough and clear enough to be readily understood" (14-4e). The draft should be amended to include such a noise contour map. The population centroid maps are not detailed enough or clear enough to be readily understood	It is not necessary to revise the presentation of noise effects in the EA as it conforms to FAA Order 1050.1E. Noise contours from INM are presented for those areas in the immediate of Chicago Midway International Airport. See Figure 11 (page 61), Figure 18 (page 115), or Figure 19 (page 118) for noise contour depictions. For those areas not in the immediate vicinity of Chicago Midway International Airport, noise contours are not prepared, which is in accordance with FAA Order 1050.1E, Appendix A, Paragraph 14.5e.

Comments Received for MDW Draft EA and FAA Responses

Agency/Organization	Name	Letter Date	Comment Number	Comment	FAA Response
Self	Michael Kroposki Esq.	4/1/2013	MK12	In the EA draft on page 64 it is stated that "the FAA estimated the exposure to various noise levels of all census block centroids in the study area, categorized in ranges of DNL (e.g., less than 45 dB, 45-50 dB, etc.). The FAA then estimated the population exposed to those noise levels as the number of people residing in each census block. As noise levels may vary throughout a census block, the actual number of people affected at a given noise level may be more or less than the total population of that census block." The method of making the above stated estimates needs to be explained. This statement should be clarified by also stating if the DNL for the block is a maximum number for any resident of the block and not an average. That is, could the actual number of people significantly impacted also be more? The accuracy and precision or the range of uncertainty in the number of people impacted should be stated.	Footnote 50 (page 64) of the EA defines what a census block centriod is, defining it as a single point in the geographic center of a census block. Noise exposure was calculated for the census block centroids (points) that fall within the study area. The EA states this on page 64: "However, as noted in the EA text cited by the commenter, the actual number of persons affected at a given noise level (i.e. the noise level calculated for the centriod) may be more or less than the total population of the census block. In fact, the distribution of population may or may not be uniform throughout a census block. However, the census block is the smallest unit of measure in census geography and represents the best available data despite its limitations. It would not be accurate to state that noise exposure level at a particular census block centroid is the maximum number for any resident of the census block. Nor, however, is it an average of noise exposure for the census block. Rather it is the noise exposure at the geographic center of the census block. No changes to the EA were made in response to this comment.