



**Federal Aviation
Administration**

Welcome to the Public Workshop

Draft Environmental Assessment and
Draft General Conformity Determination
for the Proposed Terminal Area Plan
and Air Traffic Procedures at Chicago
O'Hare International Airport





Why is the FAA doing an Environmental Assessment?

The Federal Aviation Administration (FAA) is conducting an Environmental Assessment (EA) to evaluate changes proposed for Chicago O'Hare International Airport.

The City of Chicago Department of Aviation (CDA) proposes to make these changes:

- Terminal Area Plan
- Capital Improvement Program projects
- Hotel developments

The FAA proposes to make this change:

- Permanently implement offset (angled) air traffic approach procedures at O'Hare for Runway 10R/28L



What is an Environmental Assessment?

- An **Environmental Assessment** is a public document that provides information and environmental analysis to help determine paths forward for a proposed project.
- The FAA prepares the Environmental Assessment under the National Environmental Policy Act, National Historic Preservation Act, Clean Water Act, Clean Air Act, and other applicable laws.
- This assessment determines whether a proposed project has the potential to significantly affect the environment.
- An Environmental Assessment helps determine whether the FAA will need to complete an Environmental Impact Statement or issue a Finding of No Significant Impact for a proposed project.



What is the National Environmental Policy Act (NEPA)?

- NEPA is a federal law that requires all branches of the government to consider environmental impacts of their proposed actions prior to making decisions.
- Using the NEPA process, agencies evaluate the environmental and related social and economic effects of their proposed actions.
- Agencies also provide opportunities for public review and comment on those evaluations.



How is the public involved in this Environmental Assessment?

- **Scoping:** The FAA sought input from the public and other agencies to define the range of environmental issues and possible alternatives to study in the Environmental Assessment. The FAA held a 45-day public comment period for the scoping process for this project from May 26 — July 9, 2021.
- **Consultation and Coordination:** The FAA coordinated and consulted with other agencies throughout the Environmental Assessment process, such as federal, state, tribal, and local officials.
- **Comments on the Draft Environmental Assessment:** The FAA has invited the public and other agencies to comment on the draft version of the Environmental Assessment. The 45-day comment period for the Draft Environmental Assessment is June 2 — July 18, 2022. The FAA will respond to the comments in the Final Environmental Assessment.



What are the steps in the Environmental Assessment and Scoping Process?

We are here



Next Steps

- The FAA's responses to comments on the Draft Environmental Assessment will be included in the Final Environmental Assessment.



Why are these projects being proposed?

Improvements at O'Hare are needed to provide adequate terminal, gate, and apron areas, and to efficiently accommodate the existing and projected activity.

The range of projects has five major goals:

- **Groups 1, 3, and 5:** Meet FAA design standards
- **Group 1:** Provide terminal facilities that meet industry-recommended standards and modern customer service expectations
- **Group 2:** Maintain CDA financial independence and meet financial obligations
- **Group 4:** Maximize employee parking and screening capability while also optimizing safety and security of goods processing and commercial vehicle holding
- **Group 5:** Retain operational efficiency and prevent additional delay



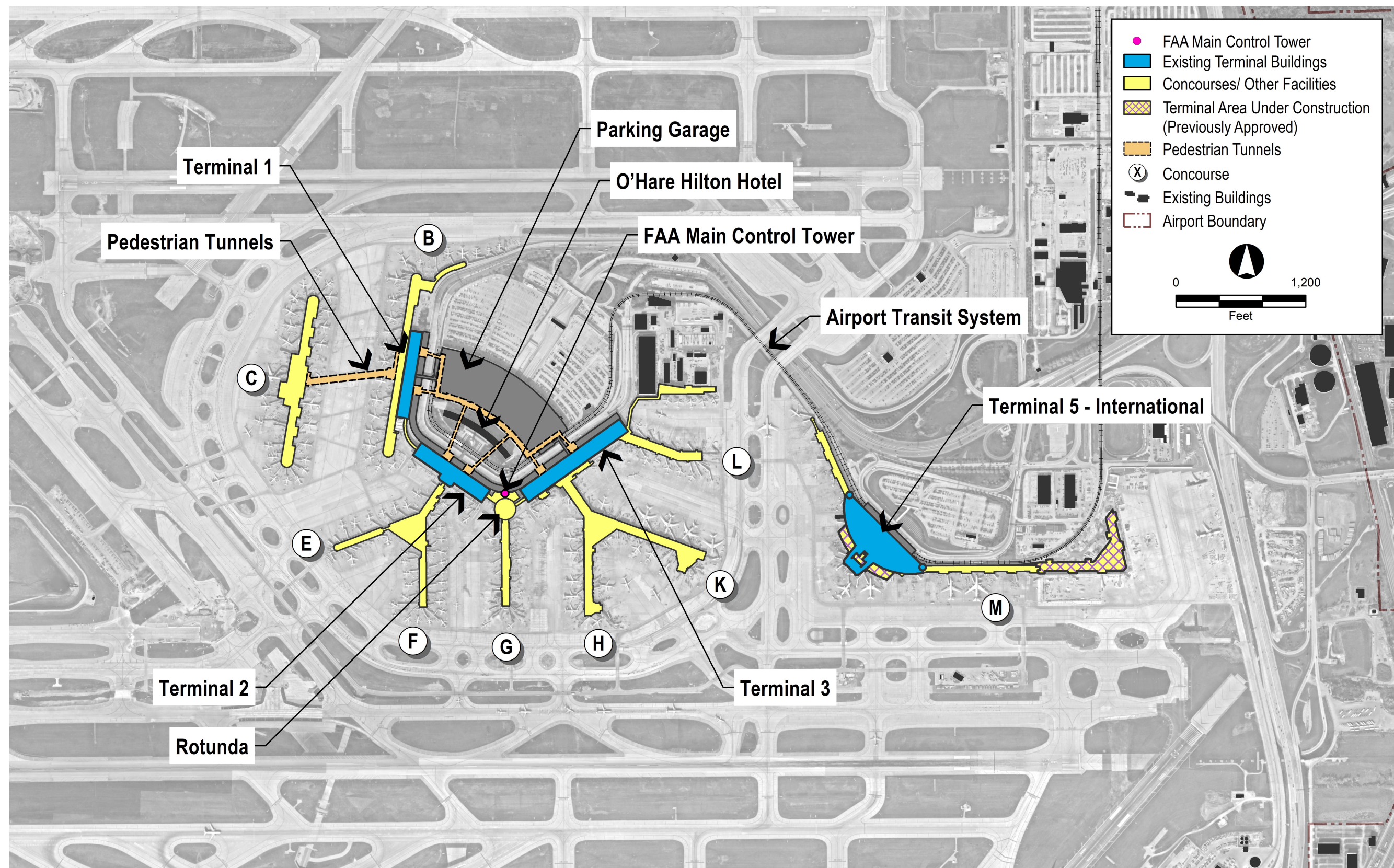
What is the Proposed Action?

The Proposed Action is organized into five groups:



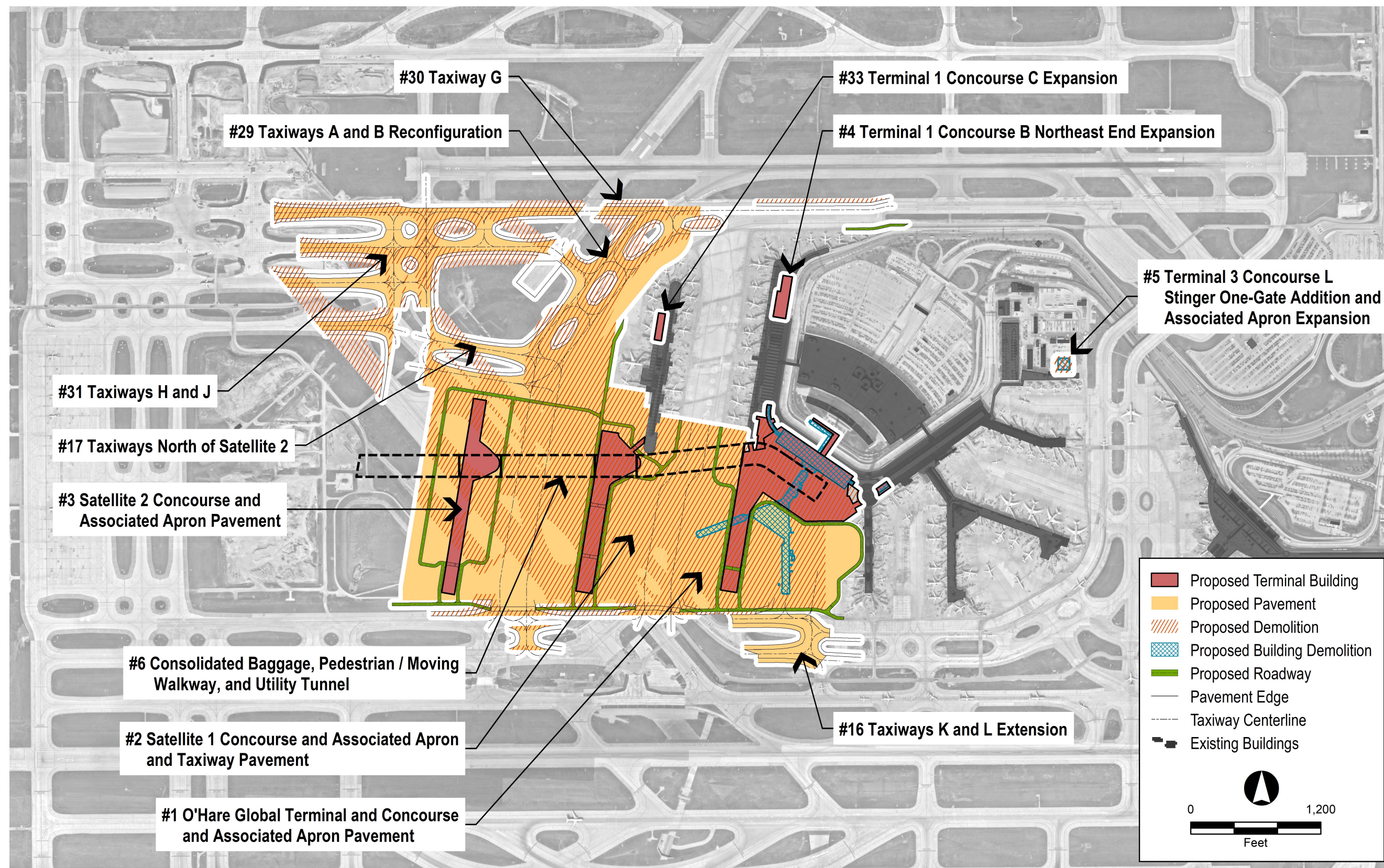


Current O'Hare Terminal Configuration



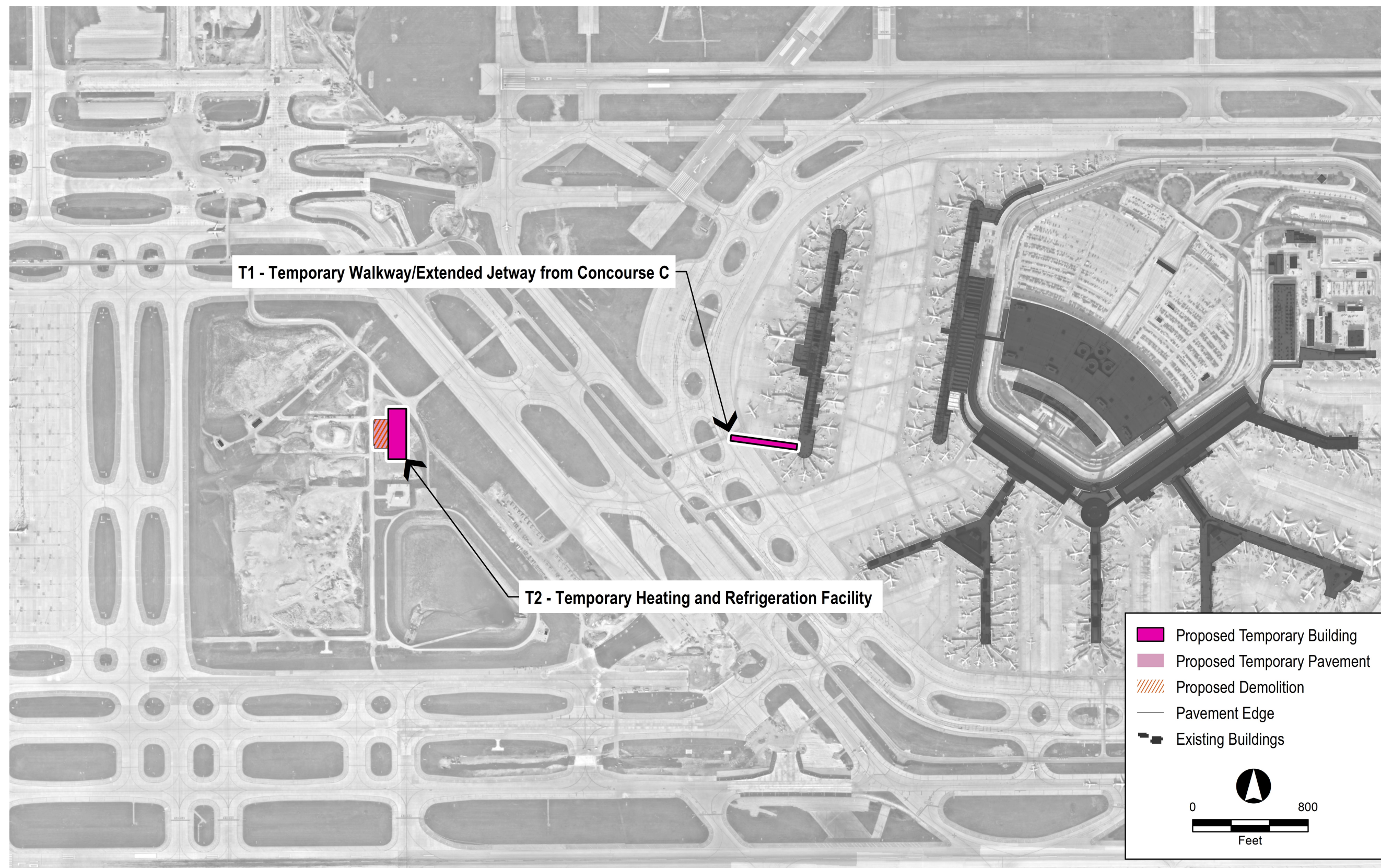


Terminal Projects – O'Hare Global Terminal and Satellite Terminal Projects



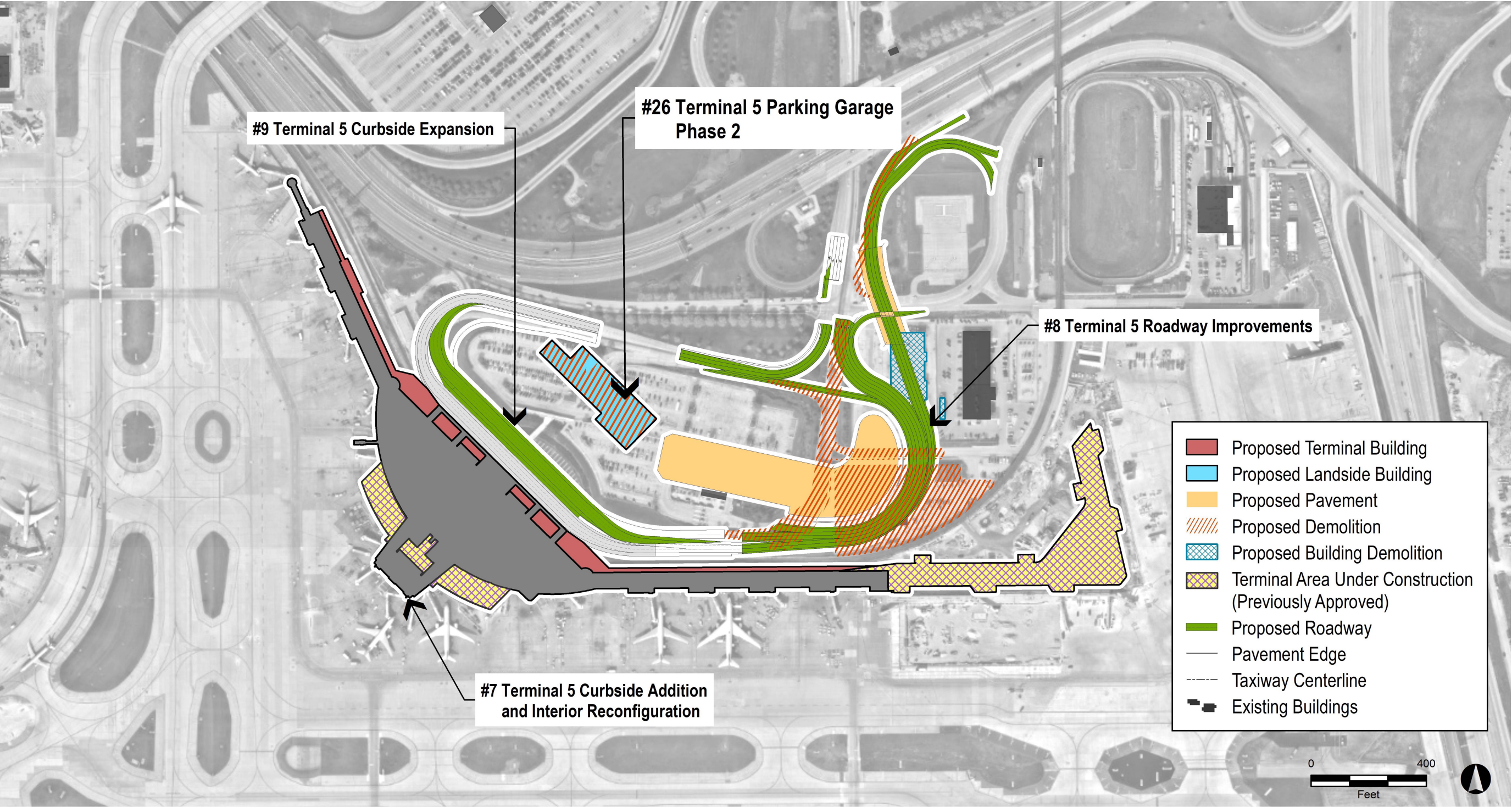


Terminal Projects – O'Hare Global Terminal and Satellite Terminal Projects



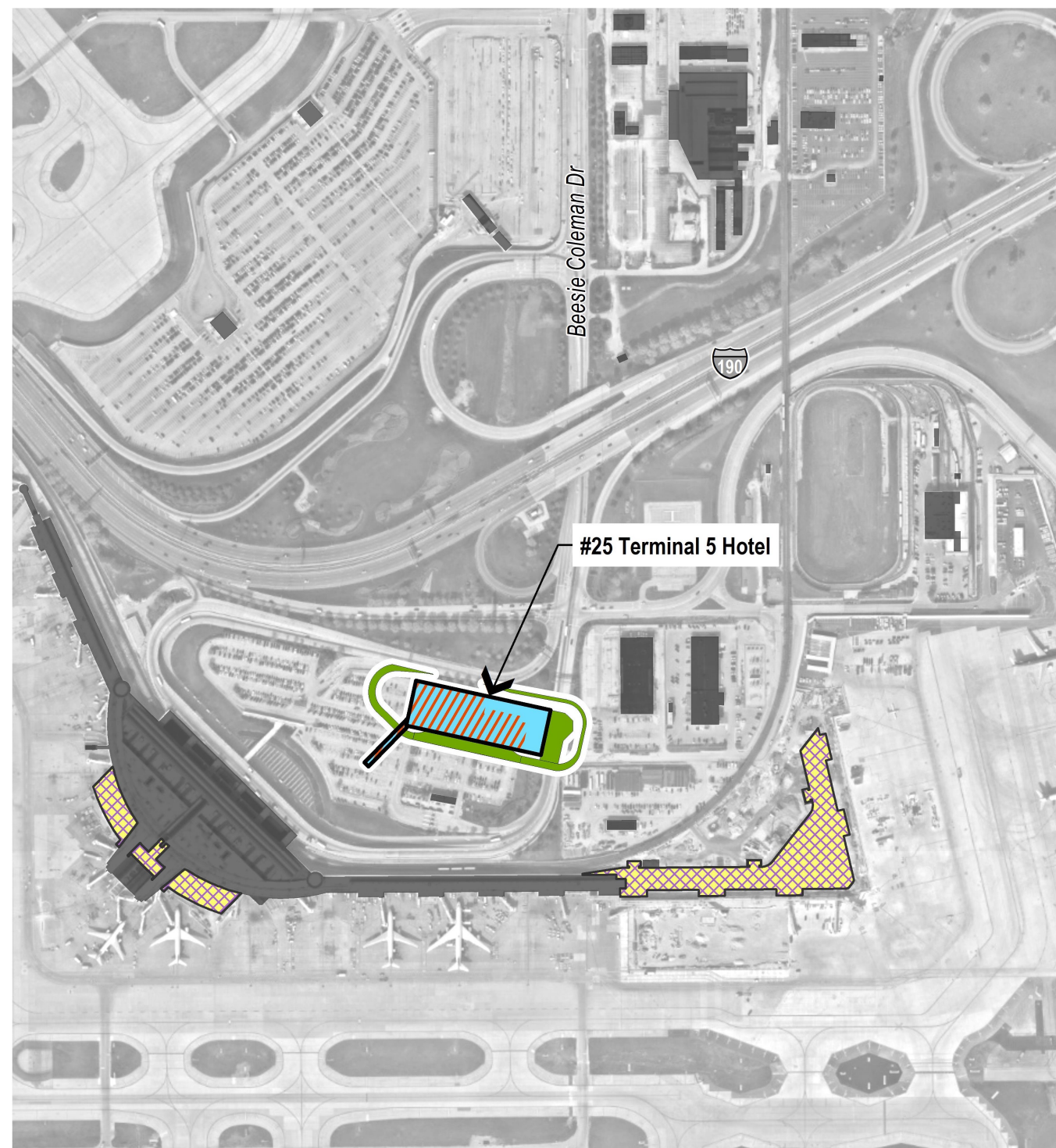


Terminal Projects – Terminal 5 Projects



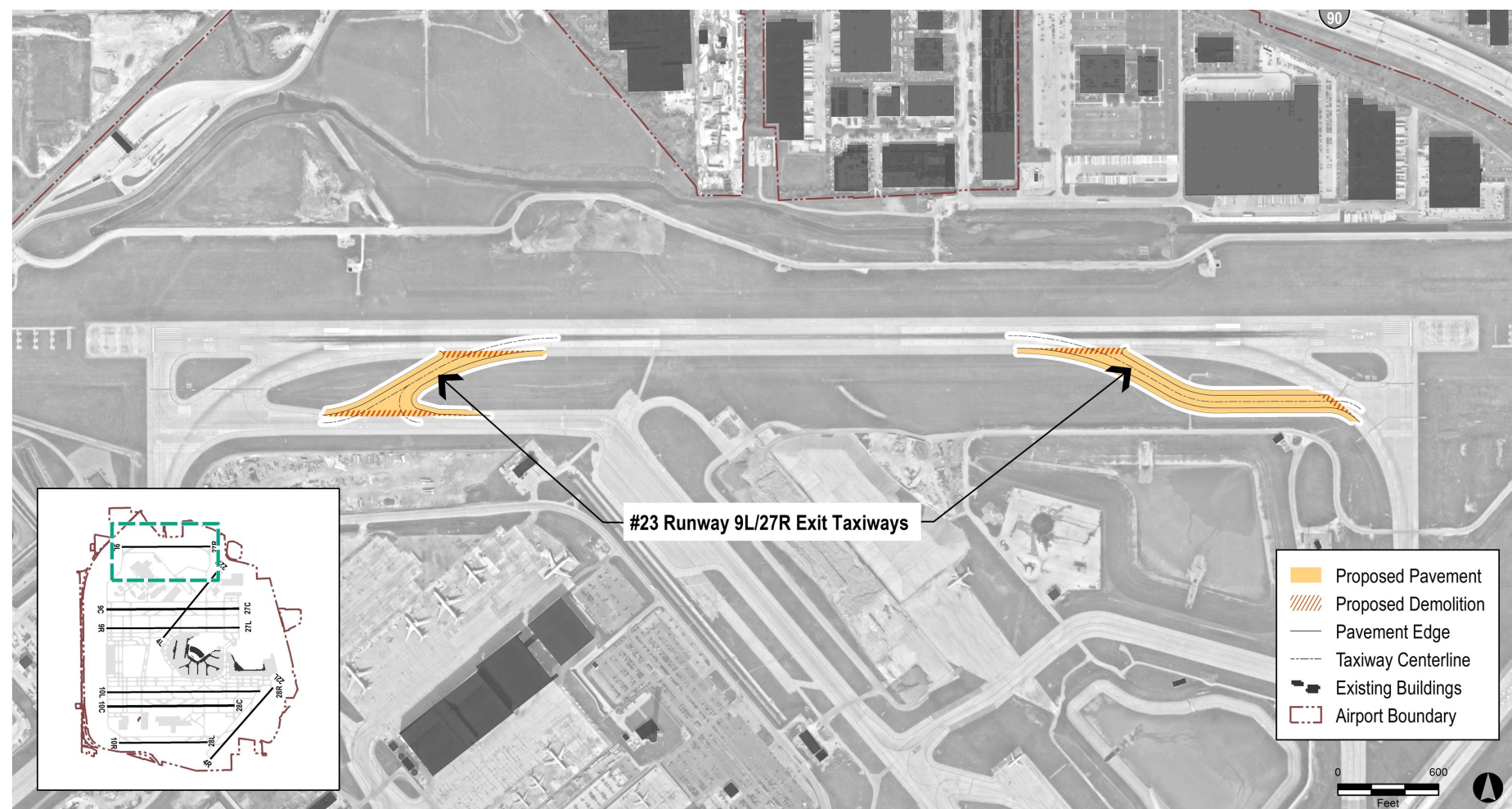
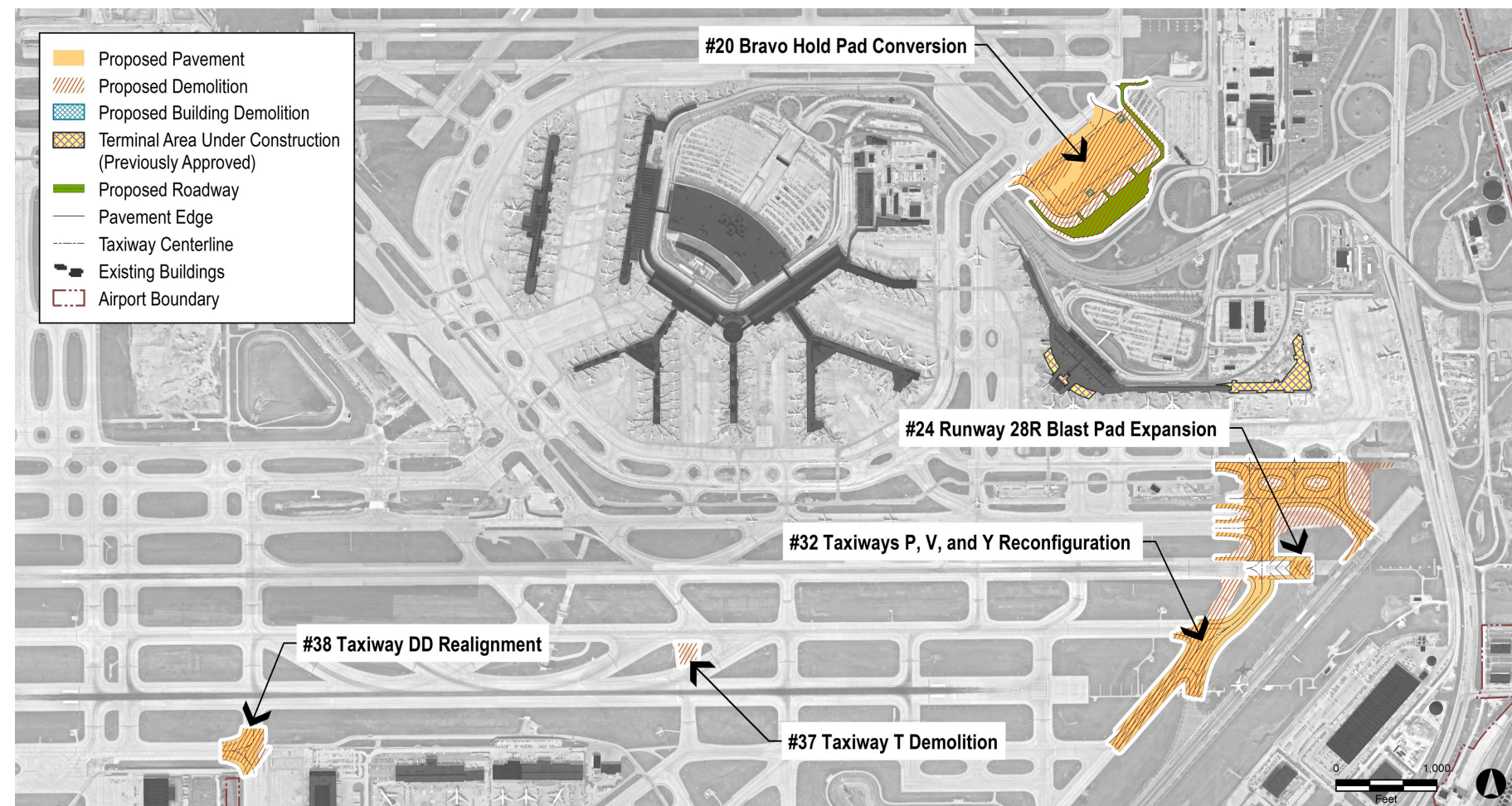


On-Airport Hotels



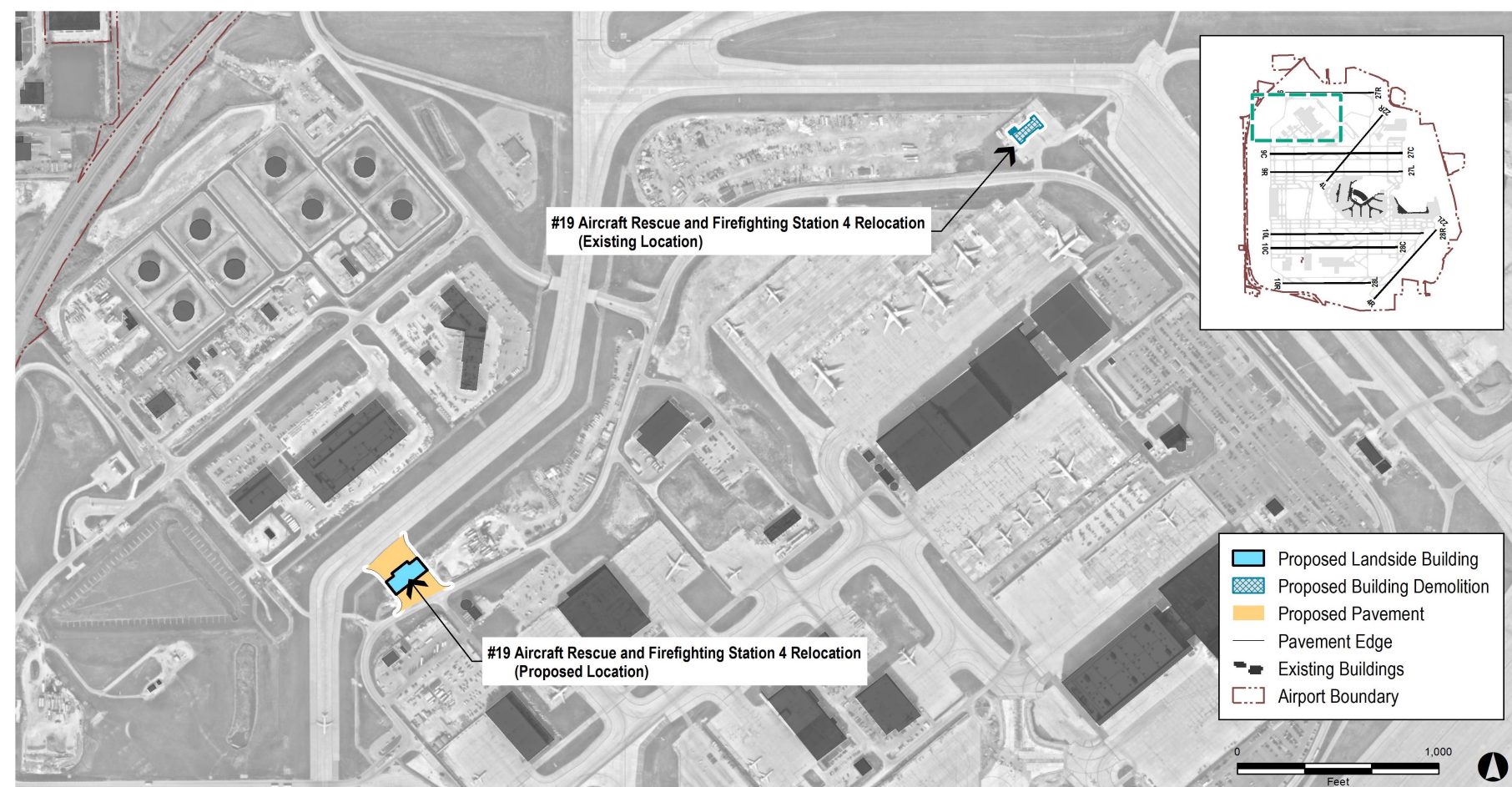


Airfield and Taxiway Improvements Not Required by the Terminal Projects



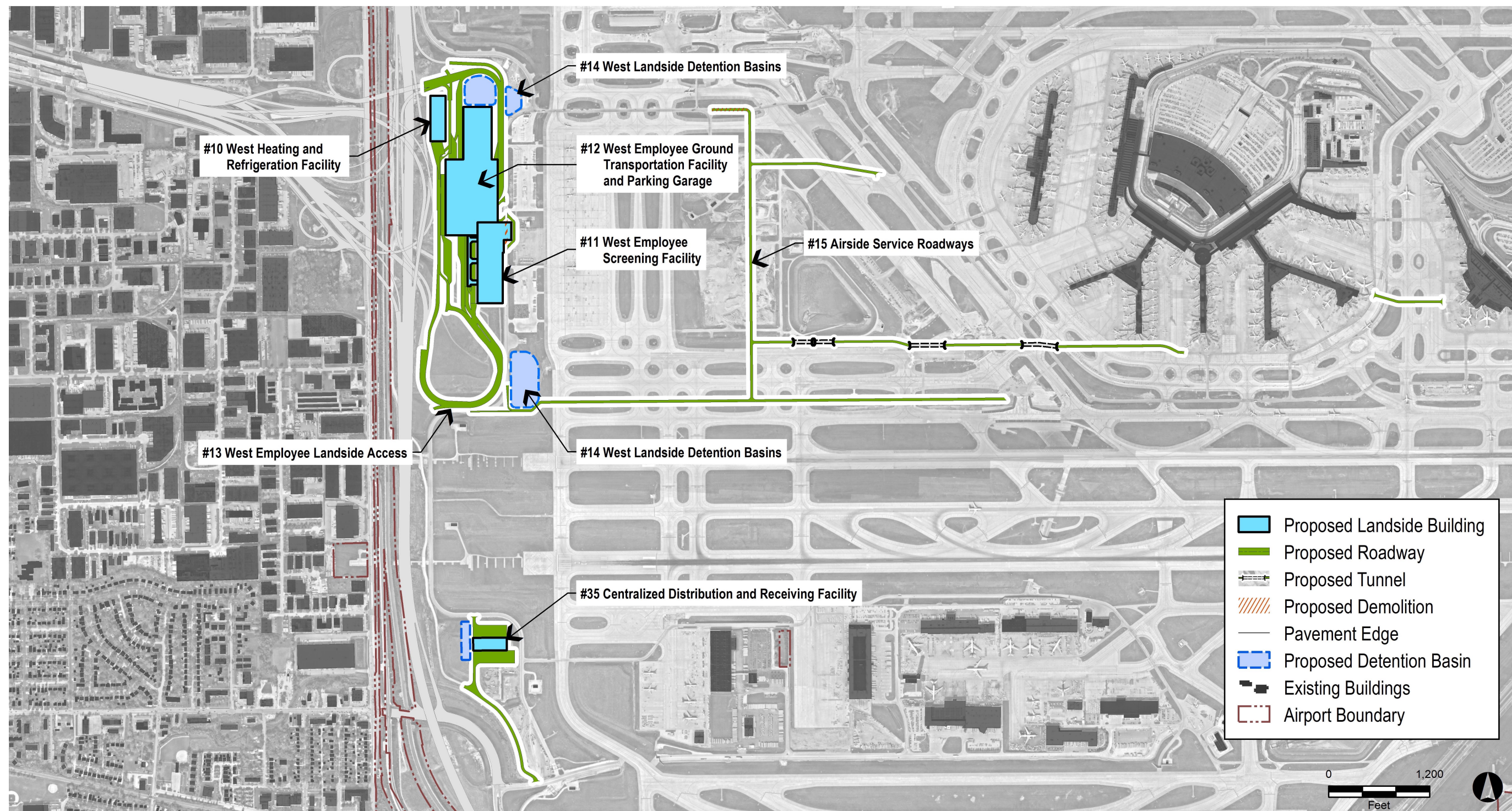


Support Facilities that have Independent Utility from the Terminal Projects





Support Facilities that have Independent Utility from the Terminal Projects



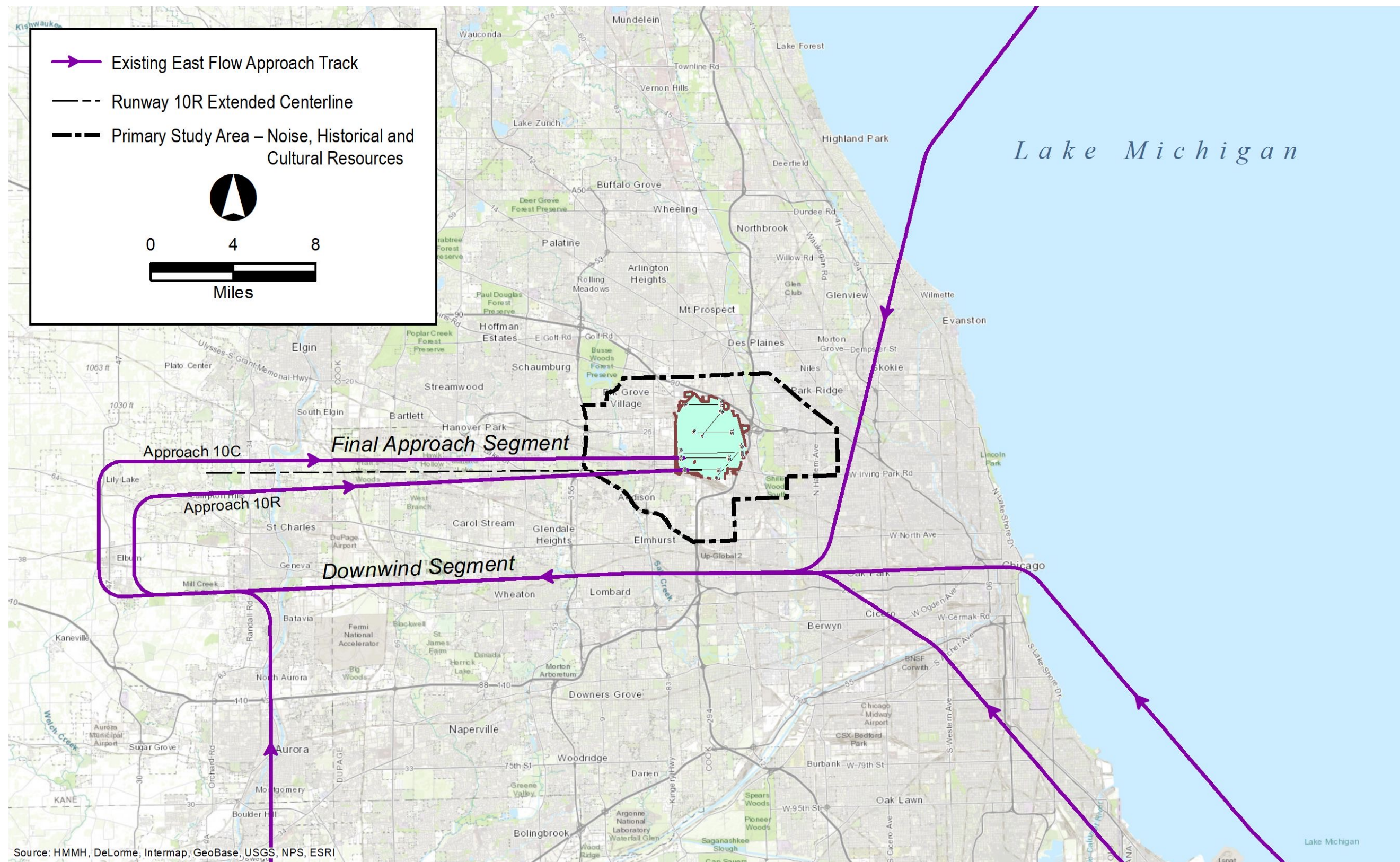


What are the Proposed Air Traffic Actions?

- The proposed air traffic actions would retain existing offset approaches to Runway 10R/28L.
- Currently, these procedures allow for use of simultaneous approaches to three runways and enable previously approved simultaneous approaches to four runways in the future.
- The 2015 Written Re-Evaluation of the O'Hare Modernization Environmental Impact Statement approved these offset approaches for temporary use.

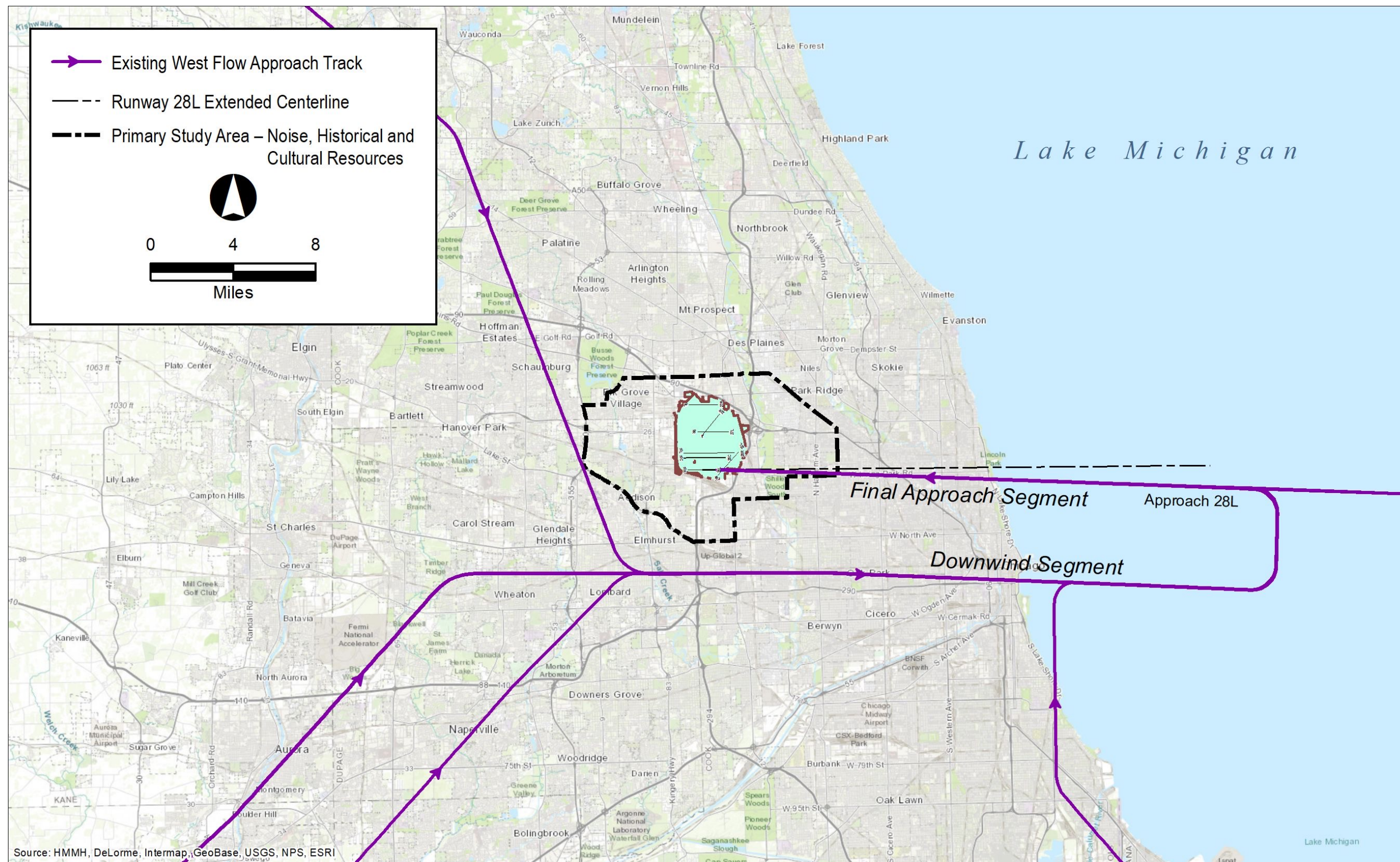


Air Traffic Actions: 2.5 Degree Offset Approaches for Existing Condition East Flow





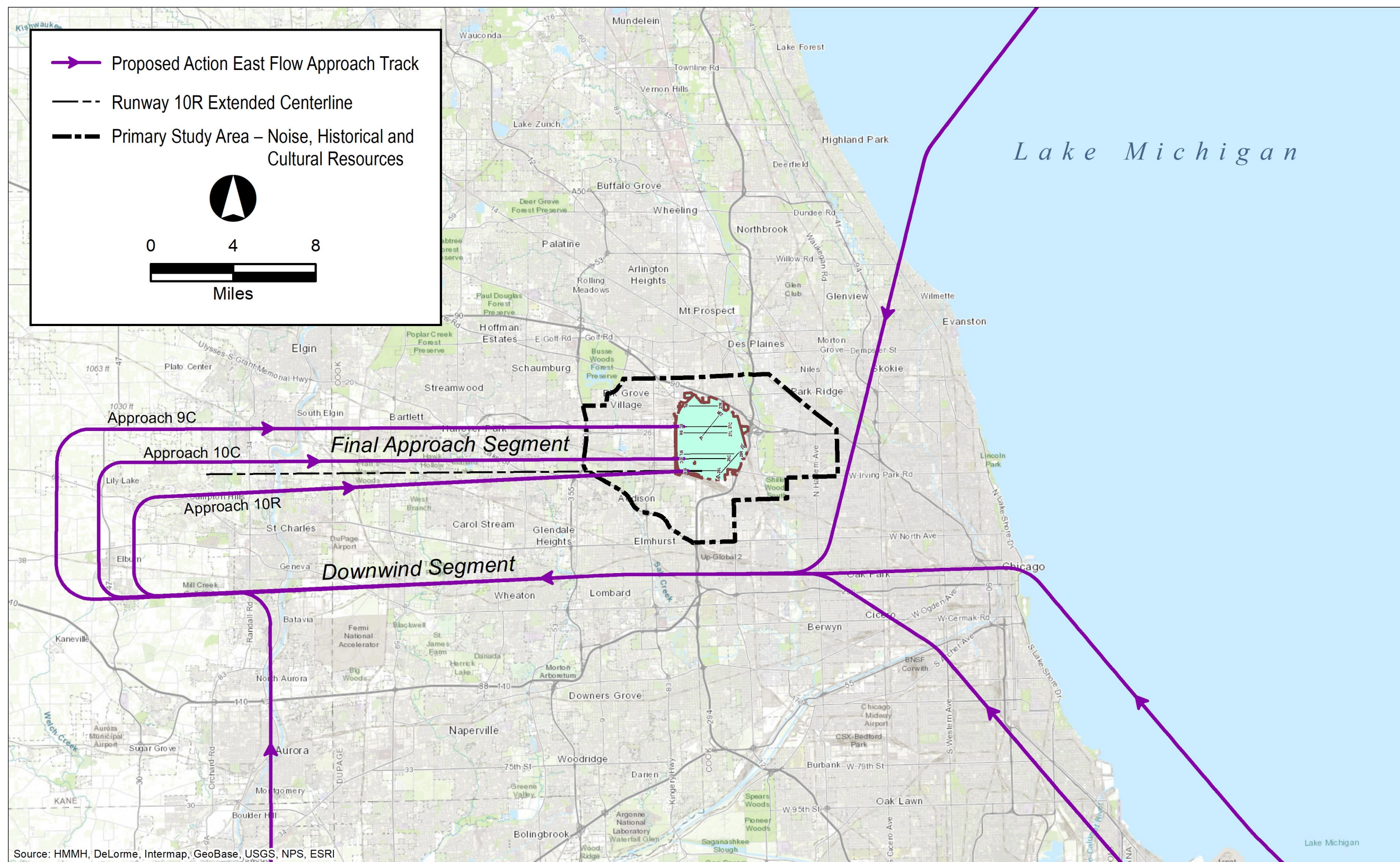
Air Traffic Actions: 2.5 Degree Offset Approaches for Existing Condition West Flow



Source: HMMH, DeLorme, Intermap, GeoBase, USGS, NPS, ESRI

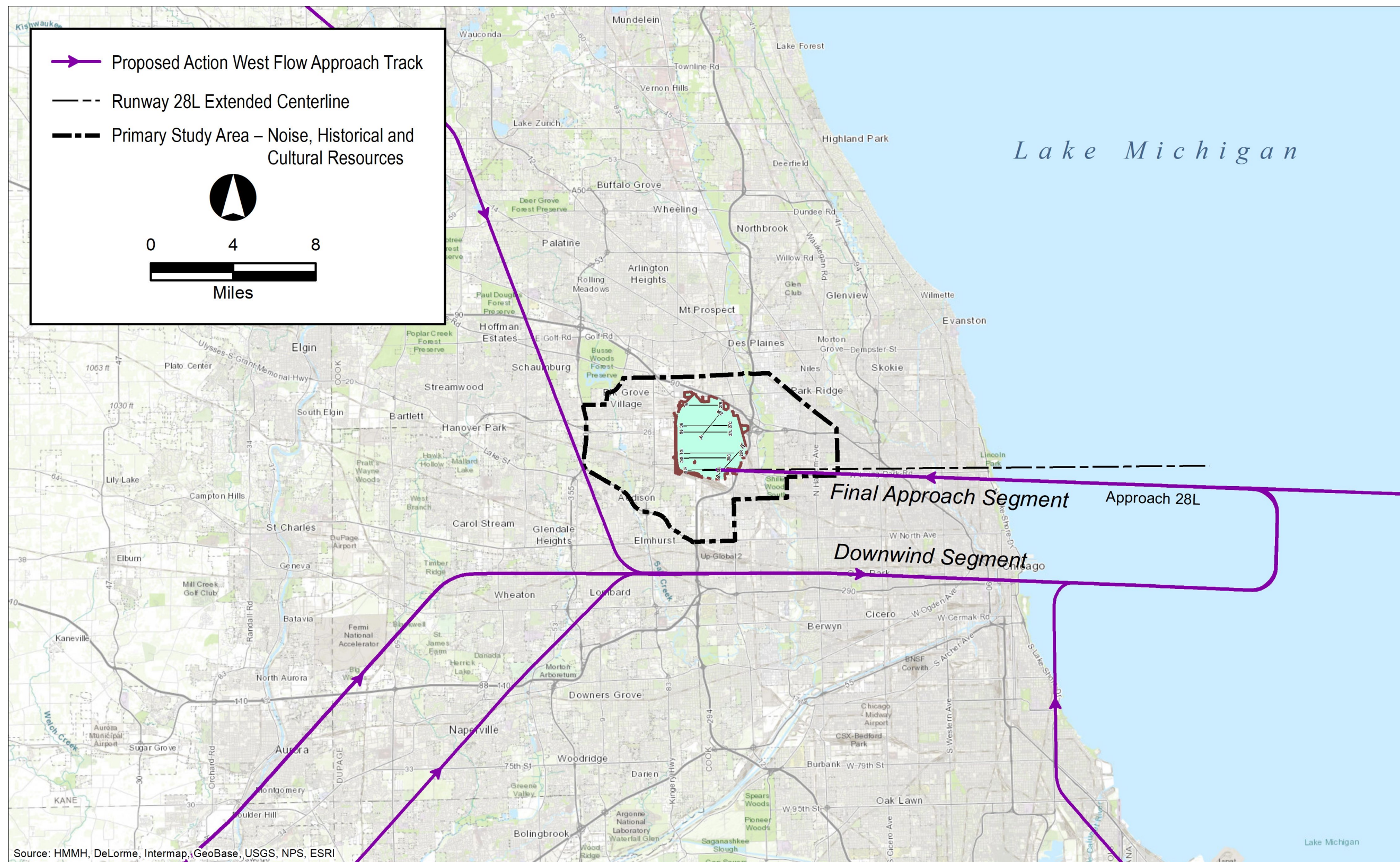


Air Traffic Actions: 2.5 Degree Offset Approaches for Proposed Action East Flow



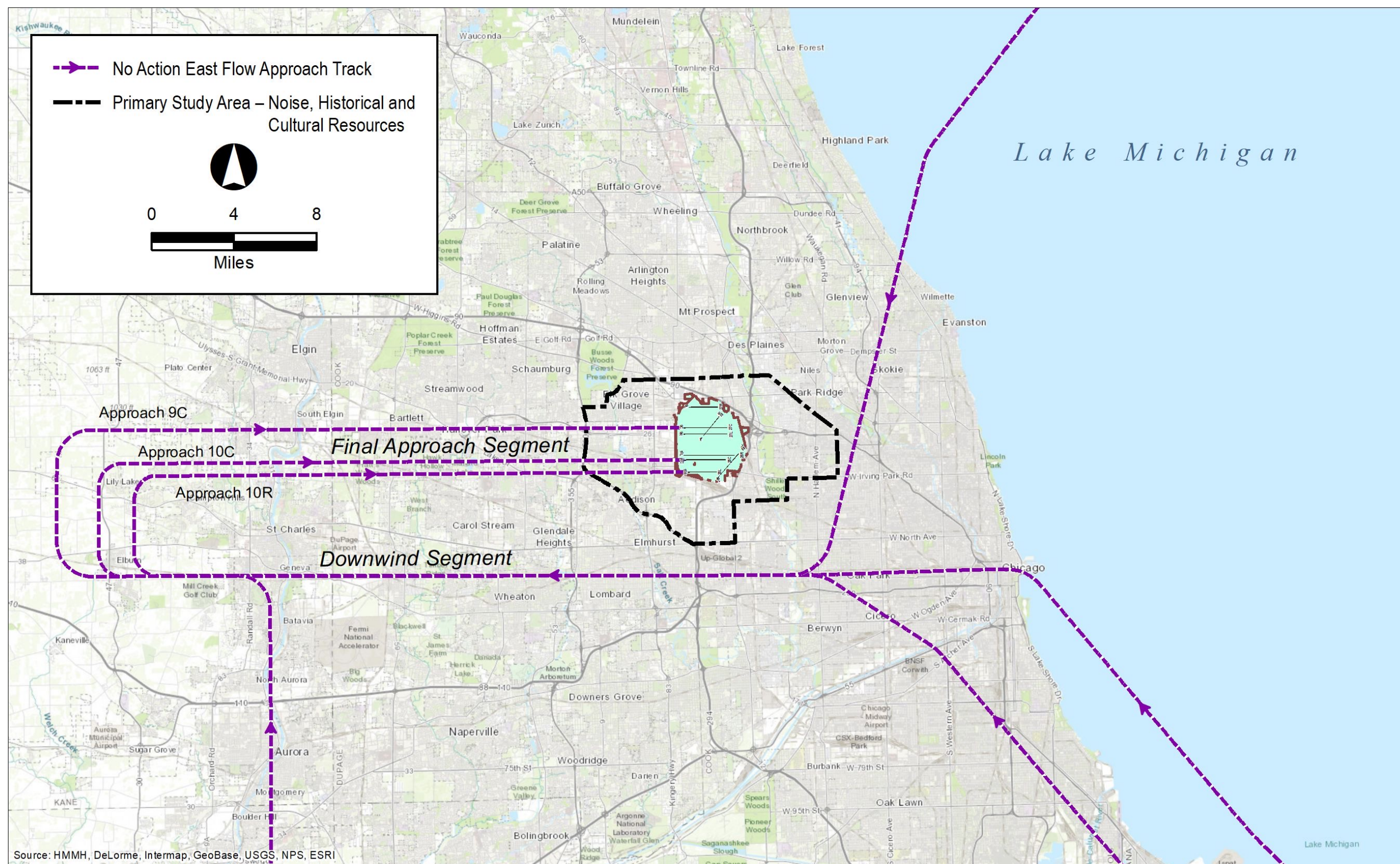


Air Traffic Actions: 2.5 Degree Offset Approaches for Proposed Action West Flow



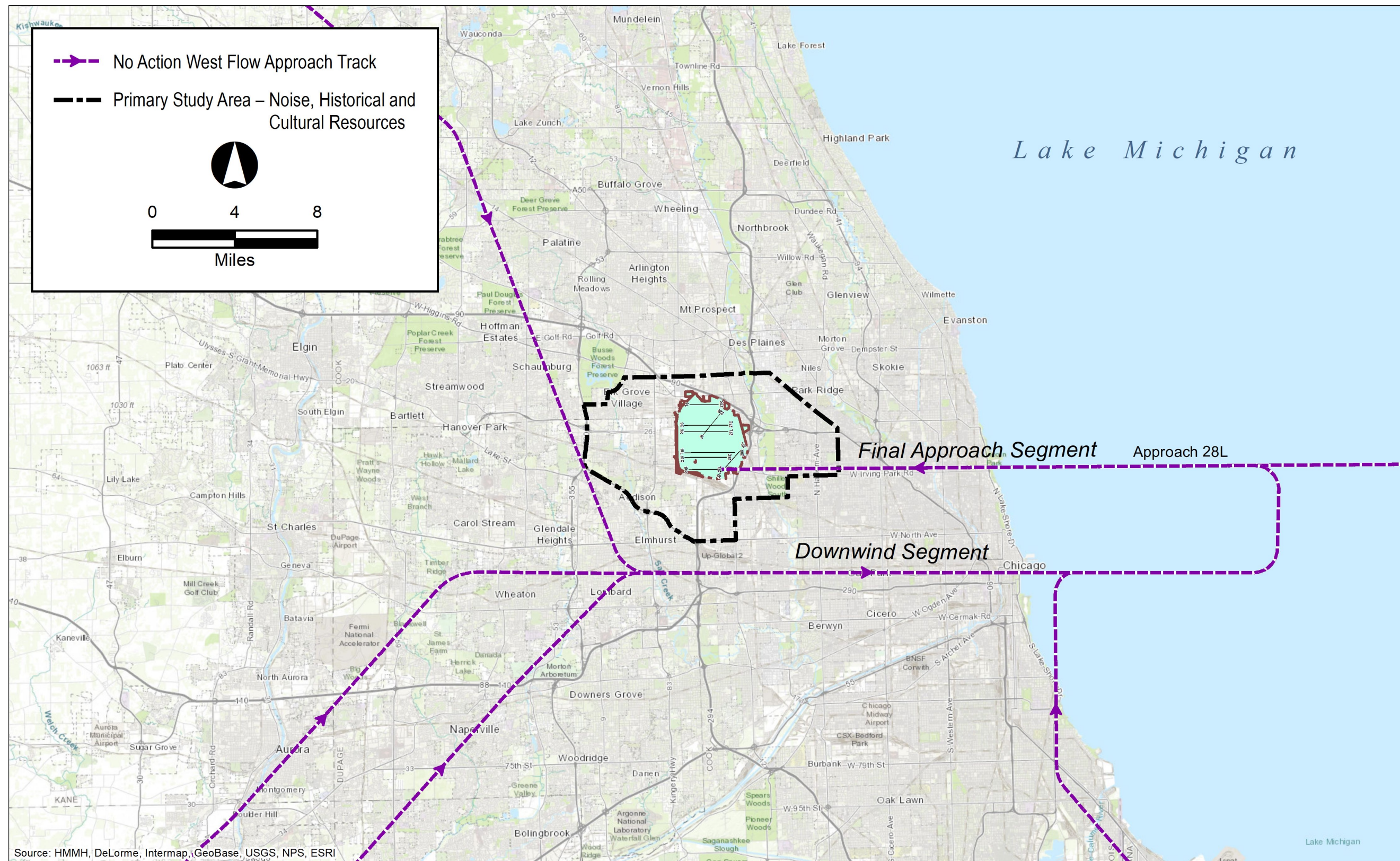


Air Traffic Actions: East Flow No Action





Air Traffic Actions: West Flow No Action





Did the FAA Evaluate Alternatives to the Proposed Projects?

- Yes, the FAA evaluated alternatives to the Proposed Project.
- The FAA evaluated alternatives that might:
 - Meet the purpose and need of the Proposed Project
 - Meet sound engineering principles and be feasible to construct
 - Avoid or minimize impacts to special purpose protected resources
- The FAA solicited alternatives from stakeholders during the scoping process. No alternatives were provided during the scoping process.



What Alternatives did the FAA consider for the Proposed Action?

- Alternatives were considered for each group of projects under the Proposed Action.
- A range of alternatives was developed for Group 1 and Group 5 project groups, as detailed on the following two slides.
- Groups 2, 3, and 4 are not anticipated to cause significant environmental consequences or unresolved conflicts, resulting in consideration of only two alternatives for each group: Proposed Action Alternative and No Action Alternative.



What Alternatives did the FAA consider for the Terminal Projects?

- No Action (without the Proposed Action)
- Off-airport Alternatives, including Use of Other Modes of Transportation/ Other Airports
- On-airport Alternatives relative to the existing central terminal core, including development to the North, South, East, and West
- Design Variations to the On-Airport West Improvement and Expansion (West-Central) Development Alternative to minimize impacts to special purpose law protected resources (Proposed Action Alternative)



What Alternatives did the FAA consider for the Proposed Air Traffic Actions?

- No Action (without the offset approach)
- 2.5 Degree Offset Alternative
- 3.0 Degree Offset Alternative



What Conditions were evaluated?

The Environmental Assessment studied the conditions in three time periods:

- The Existing Condition (A year before the Proposed Project begins)
- An Interim Year
- The year after construction of the Proposed Project completion



What Environmental Resource Categories were studied?

- Air Quality
- Climate
- Noise and Noise-Compatible Land Use
- Historical, Architectural, Archaeological, and Cultural Resources
- Department of Transportation Act Section 4(f)
- Biological Resources
- Light Emissions and Visual Impacts
- Hazardous Materials, Solid Waste and Pollution Prevention
- Natural Resources and Energy Supply
- Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks
- Surface Transportation and Parking
- Water Resources
- Irreversible and Irretrievable Commitment of Resources
- Cumulative Impacts
- Coastal Resources, Farmlands, and Land Use categories were not studied, as they would not be impacted by the Proposed Action



Environmental Resource Conditions that are not impacted by the Proposed Action

- Coastal Resources
- Farmlands
- Land Use



Air Traffic Forecasts – Annual Passengers

The FAA reviewed the CDA's forecasts of annual passengers and found them appropriate for environmental modeling purposes.

Key Findings

- The CDA used the FAA Terminal Area Forecast (TAF) for enplaned passengers at O'Hare after confirming it was consistent with forecast growth in economic activity and O'Hare's historical share of U.S. total enplanements.
- The CDA examined the potential for induced demand should additional facilities become available and found that existing facilities could accommodate forecast activity, meaning there was no potential for induced demand.
- The FAA examined historical demand performance following the provision of additional facilities and changes in airline business strategies but found no induced demand at O'Hare.



Air Traffic Forecasts – Annual Operations

The FAA reviewed the CDA's forecasts of annual aircraft operations, including passenger, cargo, general aviation, and military and found them appropriate for environmental modeling purposes.

Key Findings

- The CDA and the FAA reviewed the FAA TAF and found that passenger aircraft operations were underrepresented for environmental modeling purposes.
- The CDA developed an appropriate forecast of aircraft operations based on future fleet mix, aircraft capacity, and load factors showing growth of 0.9% per annum. This is appropriate for environmental modeling purposes and compares favorably to the 0.2% growth per annum in the FAA TAF.
- The CDA cargo forecast was based on O'Hare's historical share of U.S. cargo volume, and cargo operations were forecast by applying average aircraft size, loads, and routes.
- The CDA appropriately used the FAA TAF forecasts of the very limited general aviation and military activity at O'Hare.



Air Traffic Forecasts – Impact of Construction Timetable and COVID-19

The FAA reviewed the impact of changes to the construction timetable and the impact of COVID-19 and found the forecast flight schedules of activity appropriate for environmental modeling.

Key Findings

- The CDA's future flight schedules of aviation activity at the conclusion of construction at O'Hare would remain appropriate for environmental modeling purposes because the forecast of activity growth during those years is relatively modest, and the future flight schedules assumed relatively high levels of activity during the design day.
- The likely impact of the COVID-19 pandemic is to delay domestic passenger demand growth at O'Hare by two years. The CDA's future flight schedule of aviation activity would remain appropriate for environmental modeling purposes because the forecasts of activity growth during those years is relatively modest, and the future flight schedules assumed relatively high levels of activity during the design day.



Airfield and Airspace Modeling

Each of the future alternatives were simulated using a Design Day Flight Schedule in the Total Airspace and Airport Modeler (TAAM). These simulations were conducted by the City of Chicago's Consultant Team with direction, oversight, review, and approval by the FAA.

Why Simulation Modeling?

Simulation modeling is used to:

- Understand operational issues in the airfield and airspace environments
- Enable rapid analysis of how operations might differ due to changes to airfield infrastructure (e.g., runways, taxiways, gates, etc.), as well as changes to air traffic procedures and associated airspace
- Provide inputs to other models used to undertake environmental analysis for noise, air quality, and surface traffic.

Key Findings

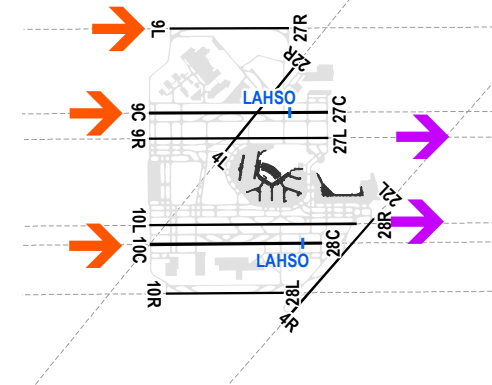
The Build Out Proposed Action resulted in lower delay compared to the Build Out No Action in all configurations, especially in East Flow Instrument Flight Rules (IFR), which is reduced by almost 11 minutes.

	Build Out No Action (minutes)	Build Out Proposed Action (minutes)
VFR West with LAHSO		
VFR West without LAHSO	4.9	4.3
IFR West	10.5	9.0
VFR East with LAHSO	4.8	4.5
VFR East without LAHSO	5.5	4.8
IFR East	21.3	10.4
Total		
Sources: CDA Simulation Data Packages, Table 2-8, November 2020		

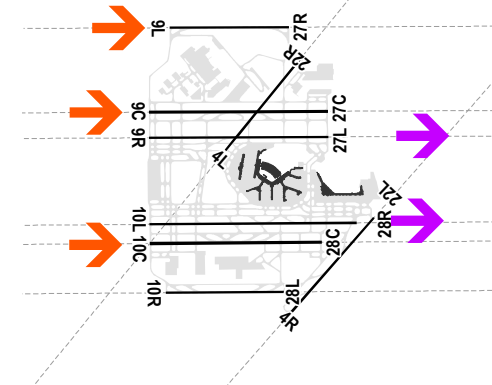


Interim Proposed Action

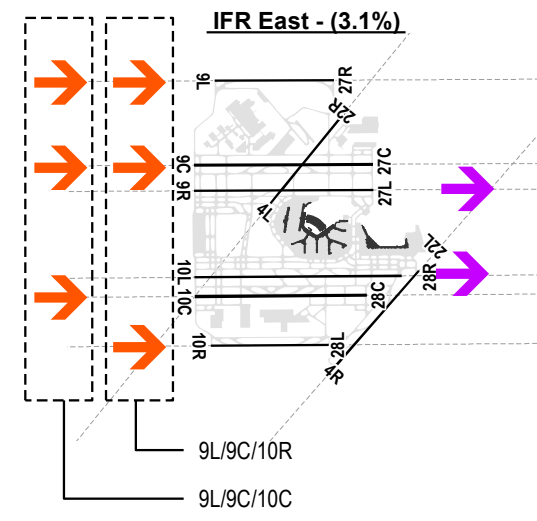
**VFR East with Land and
Hold Short Operations (LAHSO) - (24.3%)**



VFR East without LAHSO - (16.1%)



IFR East - (3.1%)



→ Typical Arrivals
← Typical Departures

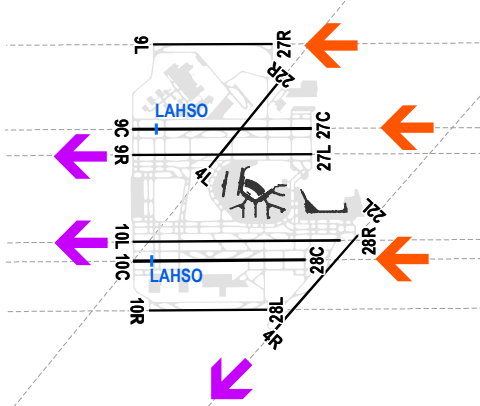




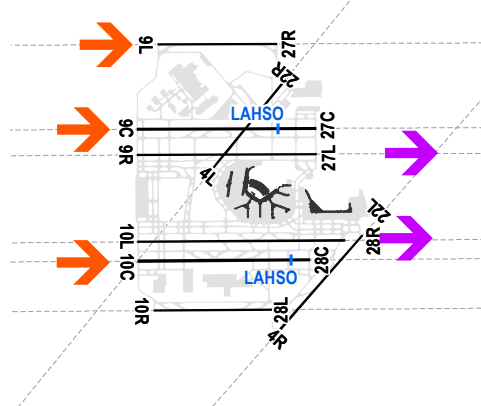
Simulated Operating Configurations

Build Out No Action

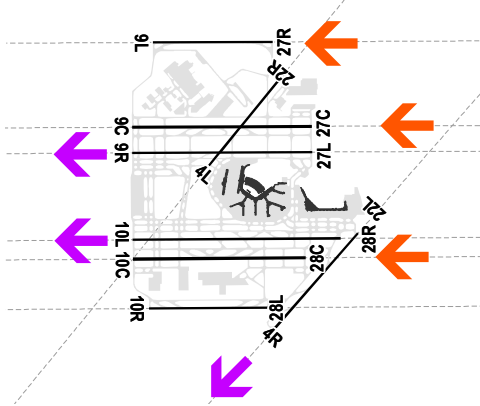
VFR West with Land and Hold Short Operations (LAHSO) - (37.7%)



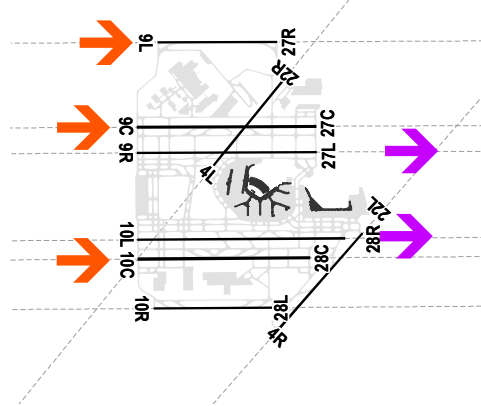
VFR East with Land and Hold Short Operations (LAHSO) - (24.3%)



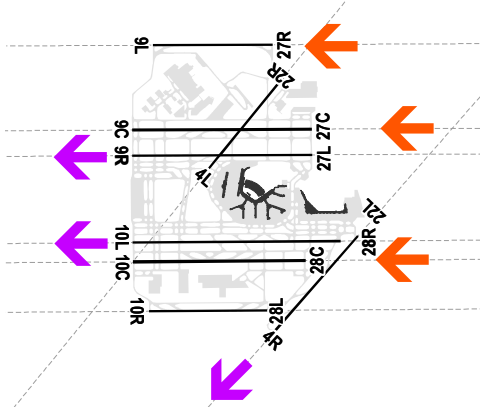
VFR West without LAHSO - (14.5%)



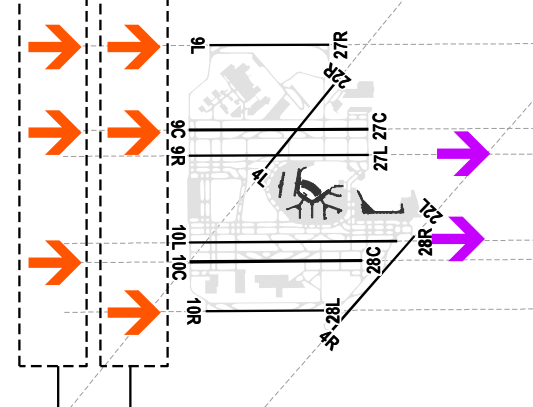
VFR East without LAHSO - (16.1%)



IFR West - (4.3%)



IFR East - (3.1%)

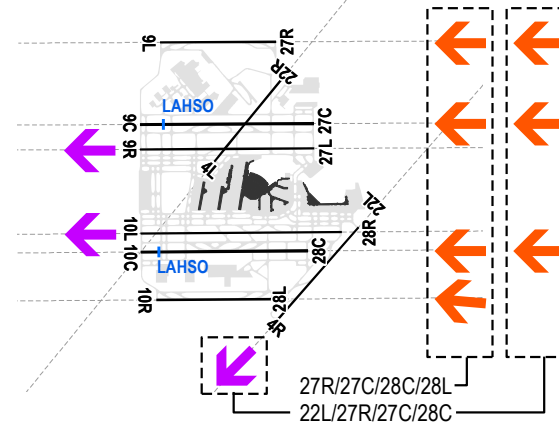


→ Typical Arrivals
← Typical Departures

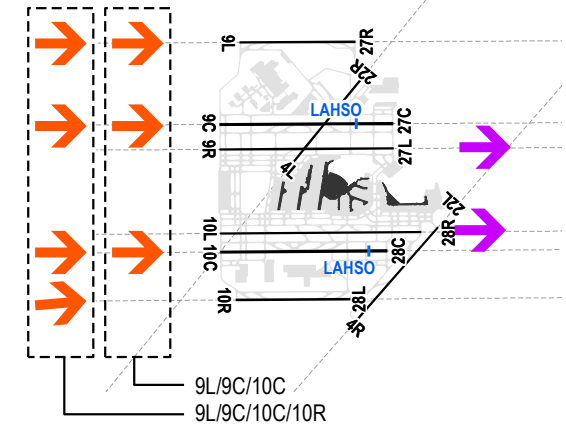


Build Out Proposed Action

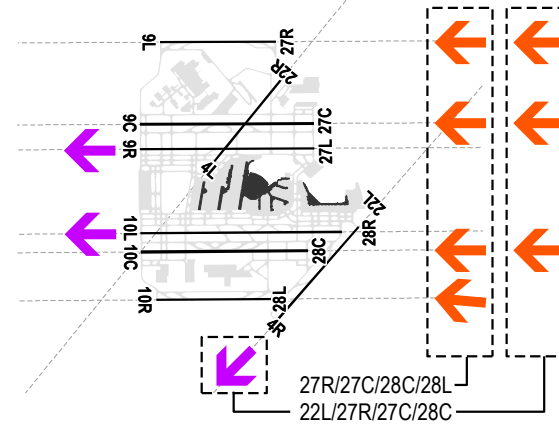
VFR West with Land and Hold Short Operations (LAHSO) - (37.2%)



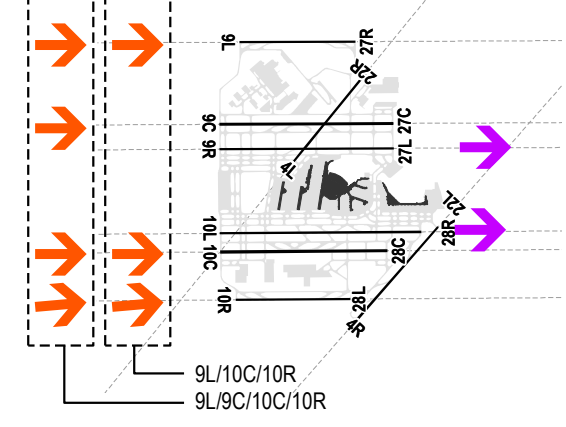
VFR East with Land and Hold Short Operations (LAHSO) - (24.6%)



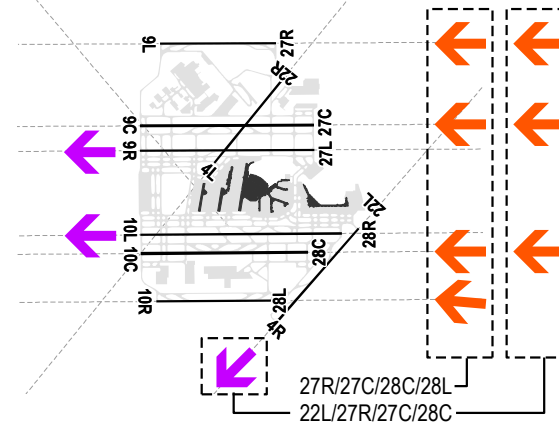
VFR West without LAHSO - (14.2%)



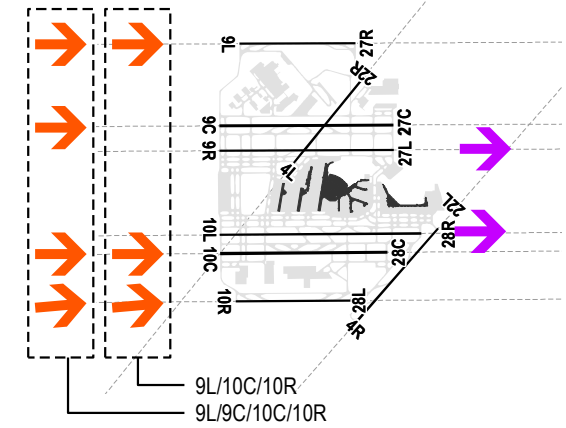
VFR East without LAHSO - (16.6%)



IFR West - (2.2%)



IFR East - (5.2%)



→ Typical Arrivals

← Typical Departures





Air Quality Overview

Two types of air quality analysis were performed:

- Emissions inventories provided estimates of the amount of air pollutant emissions.
- Dispersion modeling provided estimates of air pollutant concentrations.

Key Findings

- There would be greater air pollutant emissions associated with the Interim Proposed Action compared to the Interim No Action. The increase would not be significant.
- There would be less CO, VOC, and SO_x emissions and greater NO_x, PM₁₀, and PM_{2.5} emissions associated with the Build Out Proposed Action compared to the Build Out No Action. The increase would not be significant.
- Interim Proposed Action and Build Out Proposed Action would not result in a predicted violation of the National Ambient Air Quality Standards for any of the evaluated air pollutants.



Operational Air Emissions Inventory

Alternative	Annual Emissions (Tons)					
	CO	VOC	NOx	SOx	PM10	PM _{2.5}
Existing Condition	8,032	779	4,405	445	91	67
Interim No Action	6,895	632	5,048	457	84	58
Interim Proposed Action	7,236	658	5,117	474	85	59
Difference (Interim)	341	26	69	16	1	1
Build Out No Action	6,835	610	5,914	518	83	57
Build Out Proposed Action	6,739	605	5,923	515	85	59
Difference (Build Out)	-96	-4	10	-3	2	2

Notes: Values reflect rounding
CO – carbon monoxide, VOC – volatile organic compounds, NOx – nitrogen oxides, SOx – sulfur oxides, PM10 – particulate matter less than 10 micrometers, and PM2.5 – particulate matter less than 2.5 micrometers



Air Dispersion Modeling

Alternative	Maximum Predicted Pollutant Concentrations (µg/m ³)								
	CO		NO ₂		SO ₂		PM ₁₀	PM _{2.5}	
	1-Hour	8-Hour	1-Hour	Annual	1-Hour	3-Hour	24-Hour	24-Hour	Annual
Existing Condition	4,085	2,468	178	37	94	93	68	26	11
Interim No Action	3,701	2,160	185	30	84	91	66	24	10
Interim Proposed Action	3,757	2,193	185	32	94	87	66	26	10
Build Out No Action	3,361	2,118	209	30	86	87	69	25	10
Build Out Proposed Action	3,542	2,237	182	34	124	115	66	24	10
NAAQS	40,000	10,000	188	100	196	1,300	150	35	12

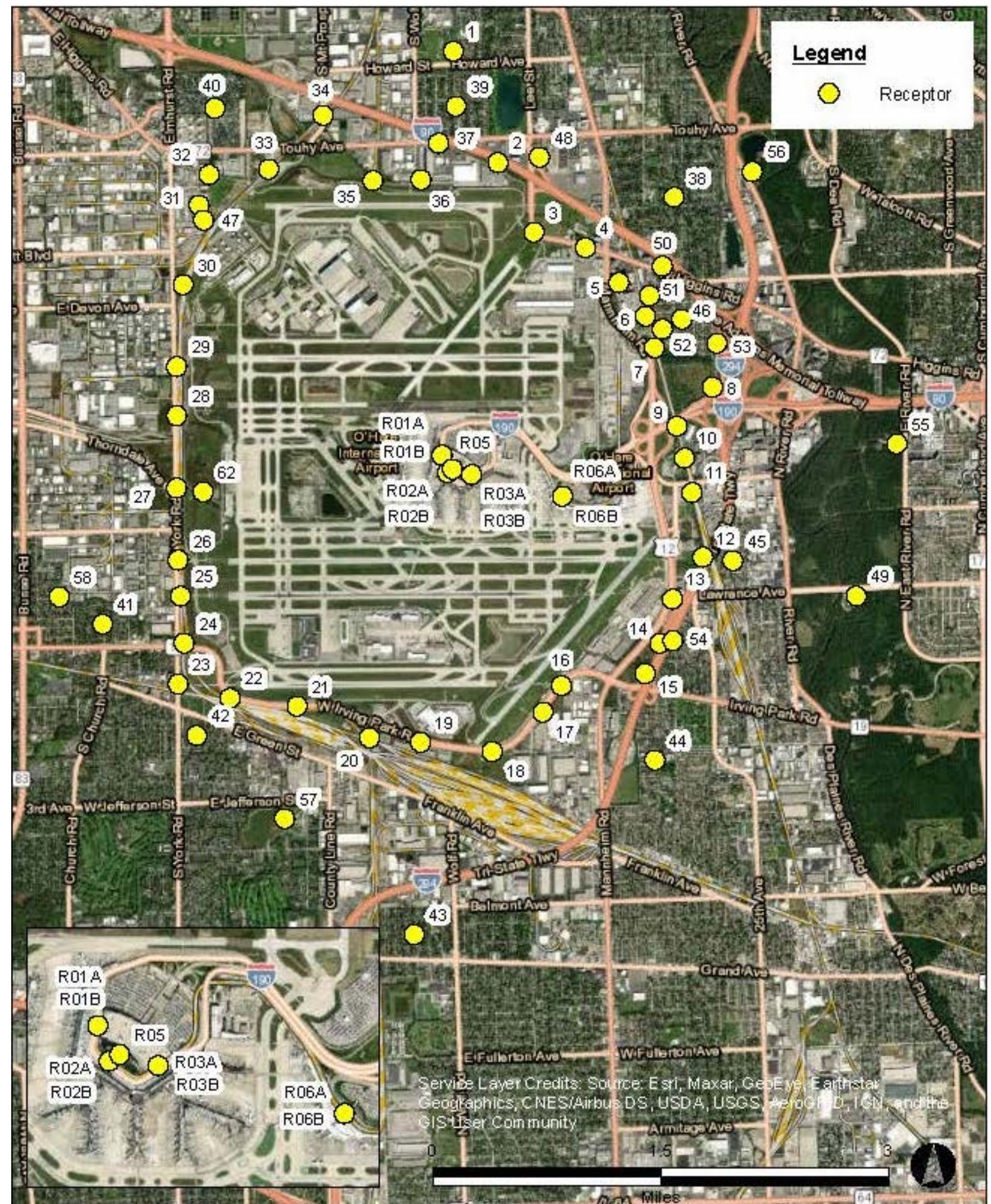
Values include airport-related emission sources plus background concentration.

CO – carbon monoxide, NO_x – nitrogen oxides, SO_x – sulfur oxides, PM₁₀ – particulate matter less than 10 micrometers, and PM_{2.5} – particulate matter less than 2.5 micrometers

NAAQS – National Ambient Air Quality Standards



Air Dispersion Modeling Receptors





Air Quality: General Conformity

Requirements

The Clean Air Act requires that federal agencies ensure that certain actions proposed in a maintenance or nonattainment area conform to a State Implementation Plan (SIP) through General Conformity analysis.

Since the airport is in a nonattainment area for ozone, conformity analysis was required to address expected ozone pollution level exceedances (from NO_x and VOC precursors) from the project.

Conformity can be demonstrated by documenting that emissions are accounted for in the applicable SIP (40 CFR 93.158(a)(1)).

Key Findings

FAA provided emissions data to the Illinois EPA (IEPA), and the IEPA determined on November 30, 2021 that the ozone emissions are accounted for in the SIP.



Climate Overview

The most prevalent greenhouse gas (GHG) at airports is carbon dioxide (CO₂) as compared to other GHGs measured by CO₂ equivalency based on its global warming potential.

Although it is well established that GHG emissions affect climate, there were no significance thresholds or regulatory ambient standards.

Key Findings

- Interim Proposed Action would result in an increase of 57,527 metric tons of CO₂ compared to the Interim No Action.
- Build Out Proposed Action would result in an increase of 62,728 metric tons of CO₂ compared to the Build Out No Action.



Noise and Noise-Compatible Land Use Overview

The EA evaluated aircraft flight operations at the airport and up to 7,000 feet in altitude to include review of the proposed air traffic actions. The EA also evaluated aircraft ground noise and noise levels at all noise-sensitive sites within the Primary Study Area.

Key Findings

- The Build Out Proposed Action results in 11,379 housing units within the 65 Day-Night Average Sound Level (DNL), and 6,277 housing units have not been previously mitigated by CDA due to prior potential eligibility status.
- Compared to the Build Out No Action, the Build Out Proposed Action results in 571 housing units added to the 65 DNL and 247 housing units removed from the 65 DNL, resulting in a net increase of 324 housing units.
- 227 of the additional housing units would be Significantly Impacted.
- Of the 227 housing units, 224 were previously mitigated, two housing units are scheduled to be mitigated, and one declined and is considered compatible with aircraft noise.
- Therefore, no residential housing units are Significantly Impacted by the Proposed Action, as they are all compatible with aircraft noise according to FAA criteria.



Noise and Noise-Compatible Land Use Evaluation

- **DNL Contours** – Noise contours developed from average annual day operations, runway use, and model flight tracks
- **DNL Noise Thresholds** – FAA evaluated changes in DNLs over noise-sensitive land use by comparing the Build Out Proposed Action to the Build Out No Action

	65 DNL or Greater	Greater than or equal to 60 DNL but less than 65 DNL	Greater than or equal to 45 DNL but less than 60 DNL
Minimum Change in Proposed Action Alternative DNL		3.0 dB	5.0 dB
Level of Change			
Sources: FAA Order 1050.1F and the 1050.1F 2020 Desk Reference			

- **DNL at Noise-Sensitive Sites** – DNL results and level of change were also reported at noise-sensitive sites (schools, parks, places of worship, etc.)



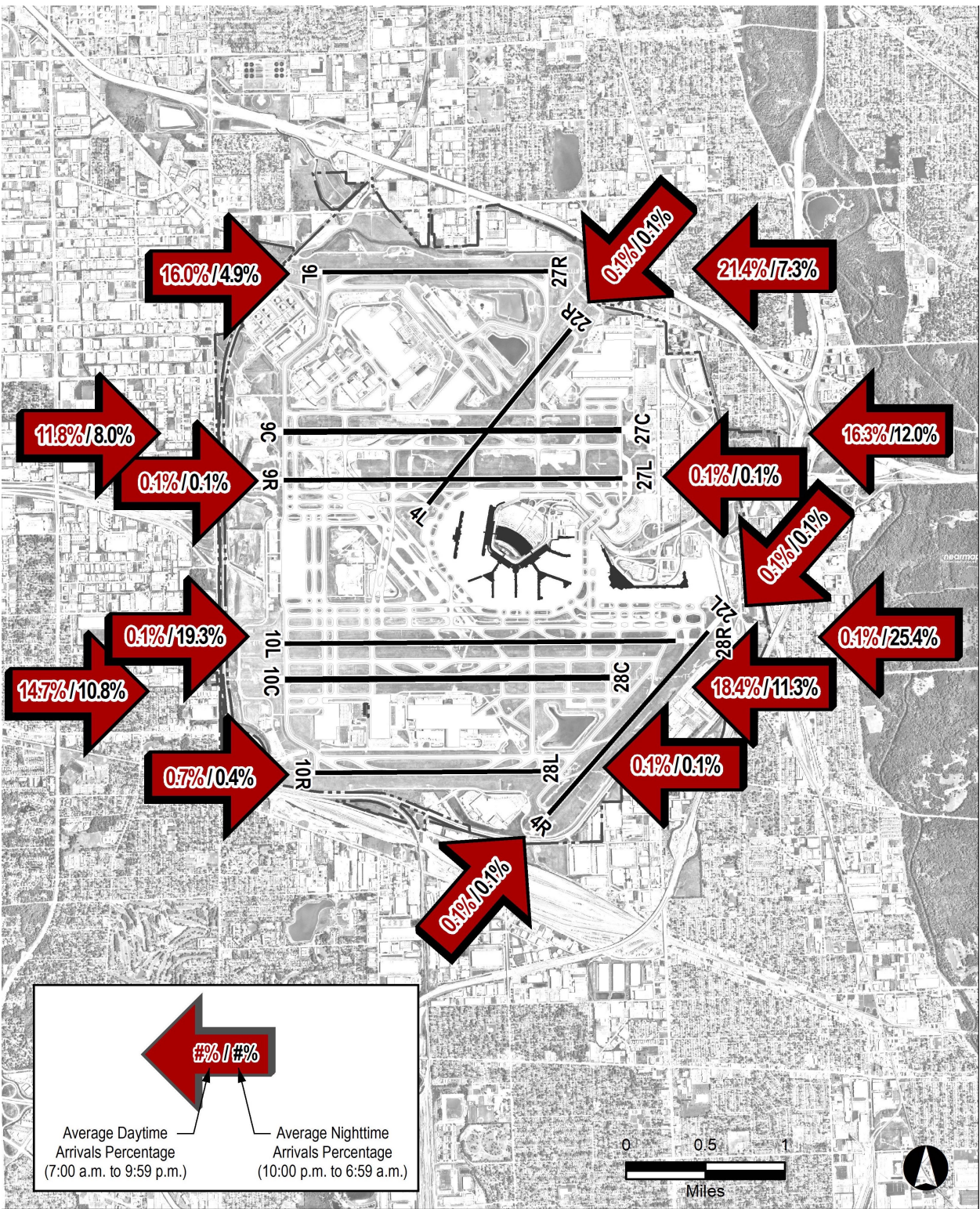
Noise and Noise-Compatible Land Use Summary

	Build Out Condition		
	Build Out No Action	Build Out Proposed Action	Difference between Proposed Action and No Action
Operations			
Day	892,988	893,065	77
Night	120,868	120,791	-77
Total	1,013,856	1,013,856	0
Land Use (Acres) 65+			
Subtotal Noncompatible Area (acres)	1,577.1	1,589.3	12.2
Subtotal Compatible Area (acres)	1,268.6	11,033.5	-235.1
Total Area (acres)	12,845.7	12,622.8	-222.9
Off-airport Total Area (acres)	6,917.3	6,696.8	-220.5
Noise-Sensitive Facilities (count) 65 +	57	67	10
Population and Housing (count)			
Population	27,783	28,503	720
Housing Units	11,055	11,379	324
Non-mitigated single-family housing units (Included above)	3,682	3,766	84
Non-mitigated multi-family housing units (Included above)	2,489	2,511	22
Total non-mitigated housing units	6,171	6,277	106
Enrolled in Phase 18 or Phase 19 of the existing RSIP (included- above)	259	266	7
Remaining eligible units under the existing RSIP (Included above)	370	360	-10
Sound insulated single-family housing units (included above)	4,868	5,086	218
Sound insulated multi-family housing units (included above)	16	16	0
Total Sound Insulated housing units	4,884	5,102	218

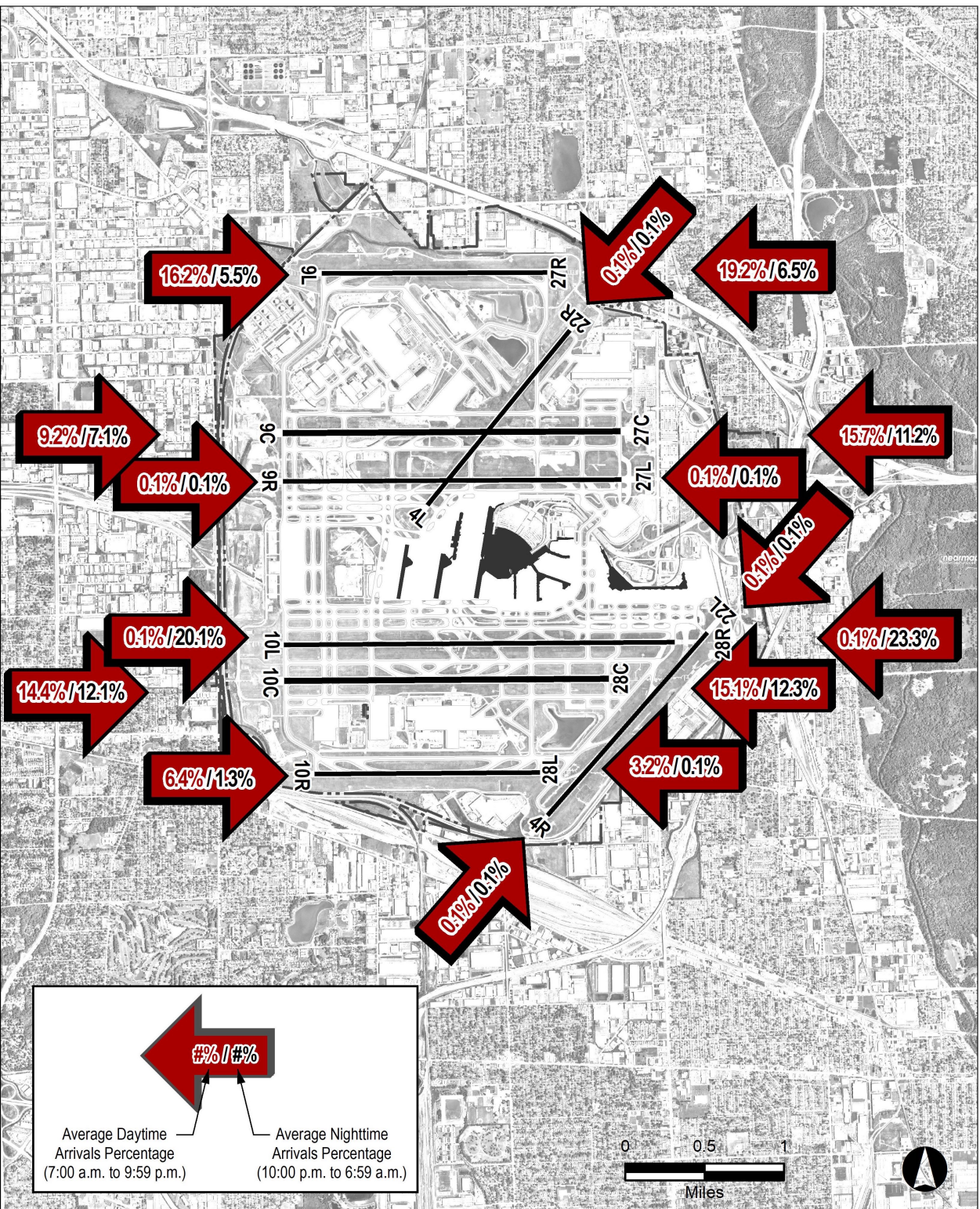


Arrival Runway Use

Build Out No Action



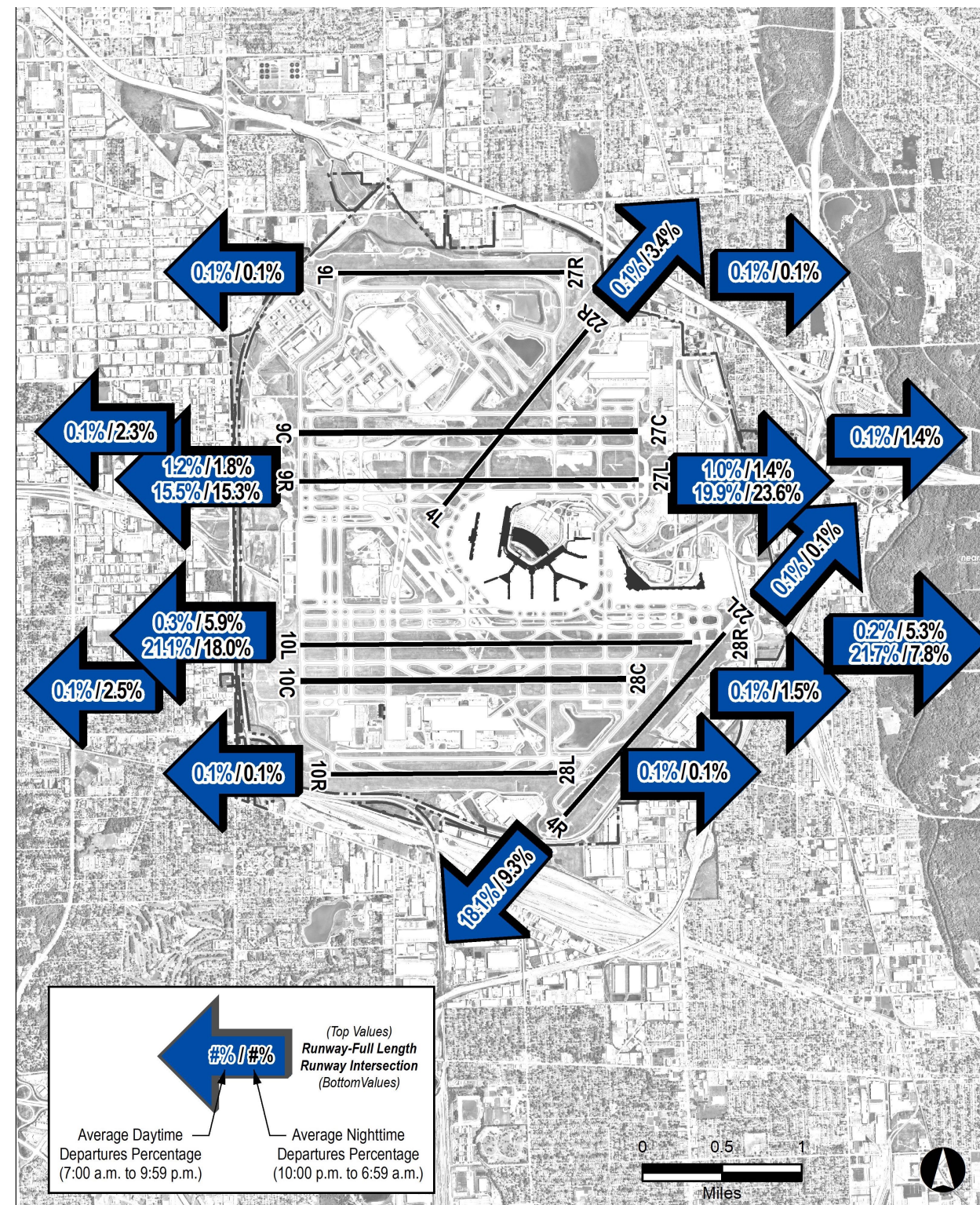
Build Out Proposed Action



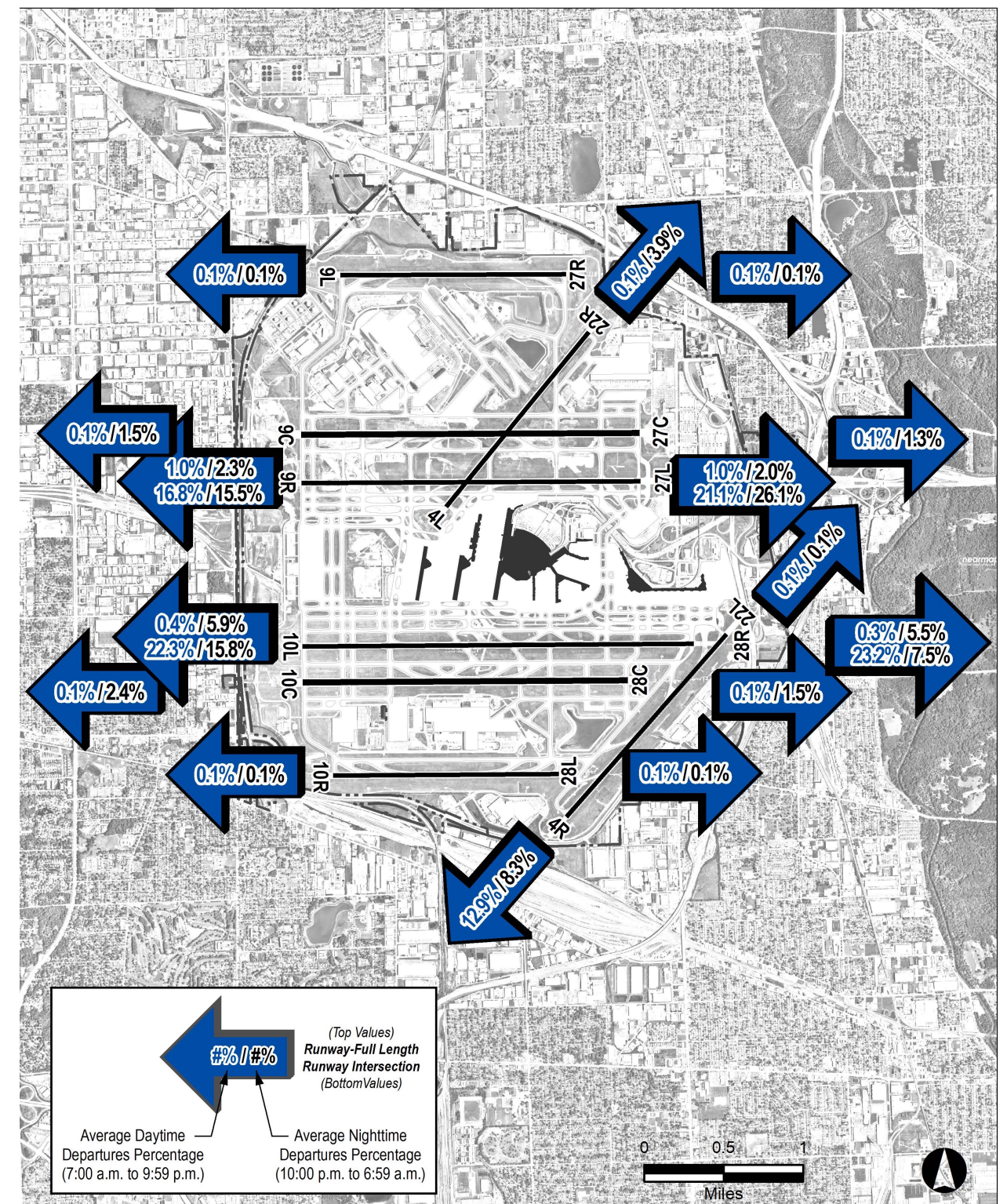


Departure Runway Use

Build Out No Action

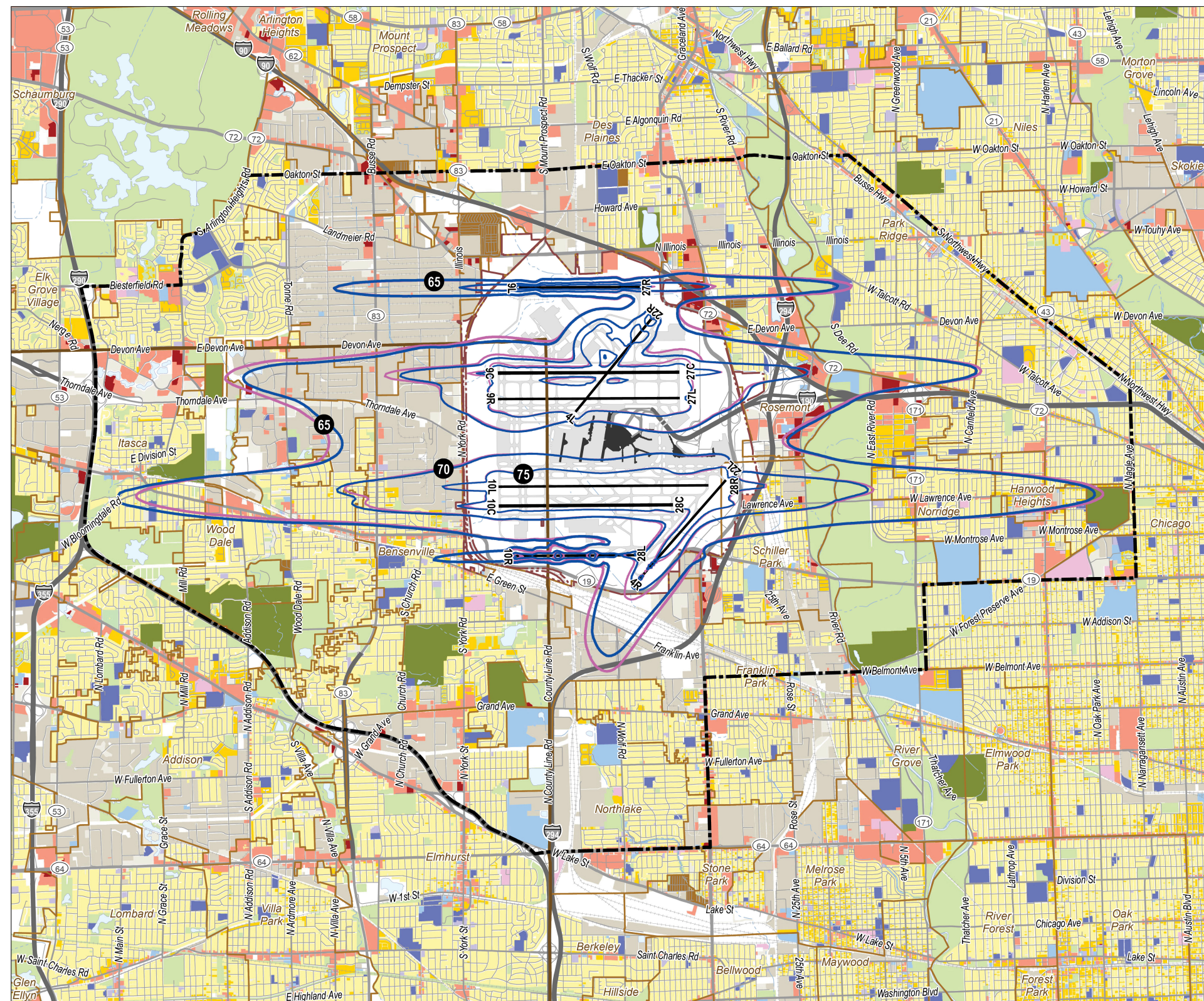


Build Out Proposed Action





Noise Results – DNL Contour Comparison



Terminal Area Plan and Air Traffic Procedures Environmental Assessment

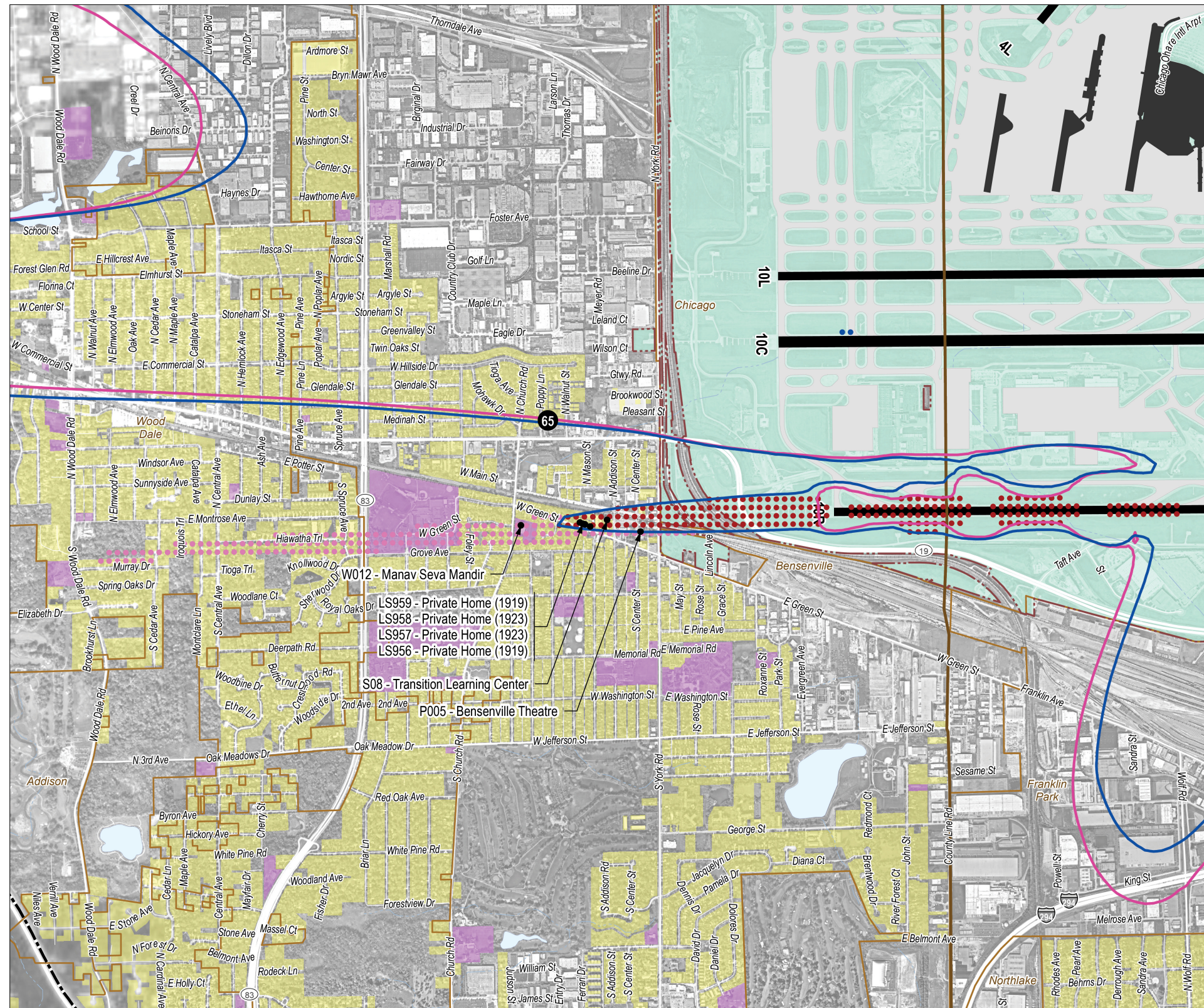
- Build Out Proposed Action DNL Contours (65, 70, 75 dB)
- Build Out No Action DNL Contours (65, 70, 75 dB)
- Primary Study Area
- Airport Boundary
- Runways
- County Boundary
- Highway
- Secondary Roads
- Railroad Lines
- Taxiway / Apron
- Community Boundary
- Primary Roads
- Local Roads
- Single Family Residential
- Multi-Family Residential
- Mobile Home
- Transient Lodging
- School / Education
- Place of Worship
- Hospital / Medical
- Water / Stream
- Public Use
- Commercial
- Industrial
- Agriculture
- Open Space Recreation
- Golf
- Vacant / Undefined

0 1 2
Miles





Noise Results – DNL Change



Terminal Area Plan and Air Traffic Procedures Environmental Assessment

- Build Out Proposed Action DNL Contour (65 dB)
- Build Out No Action DNL Contour (65 dB)
- Grid Points 65 DNL or Greater**
 - Increase ≥ 1.5 dB re Proposed Action
 - Decrease ≥ 1.5 dB re No Action
- Grid Points Between 60 DNL and 65 DNL**
 - Increase ≥ 3 dB re Proposed Action
 - Decrease ≥ 3 dB re No Action
- Airport Boundary
- Runways
- County Boundary
- Residential
- Public, Hospital, Institutional
- Compatible
- Water / Stream
- Taxiway / Apron
- Community Boundary

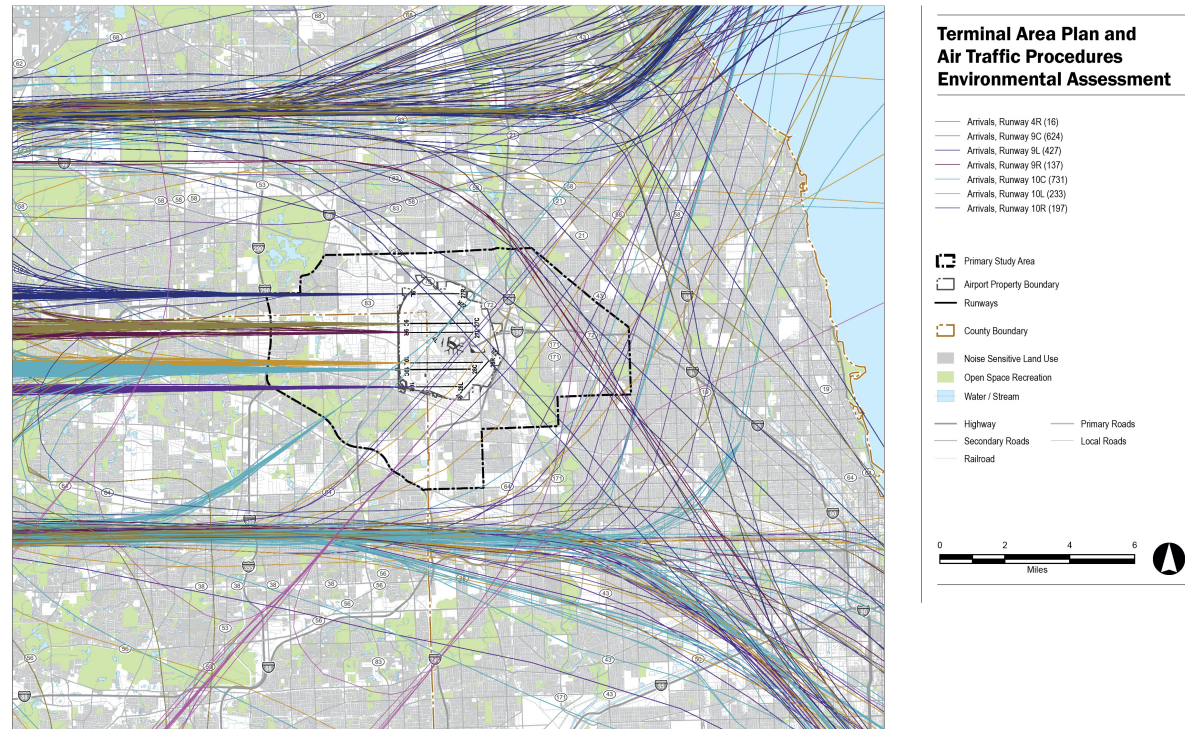
0 1,000 2,000
Feet



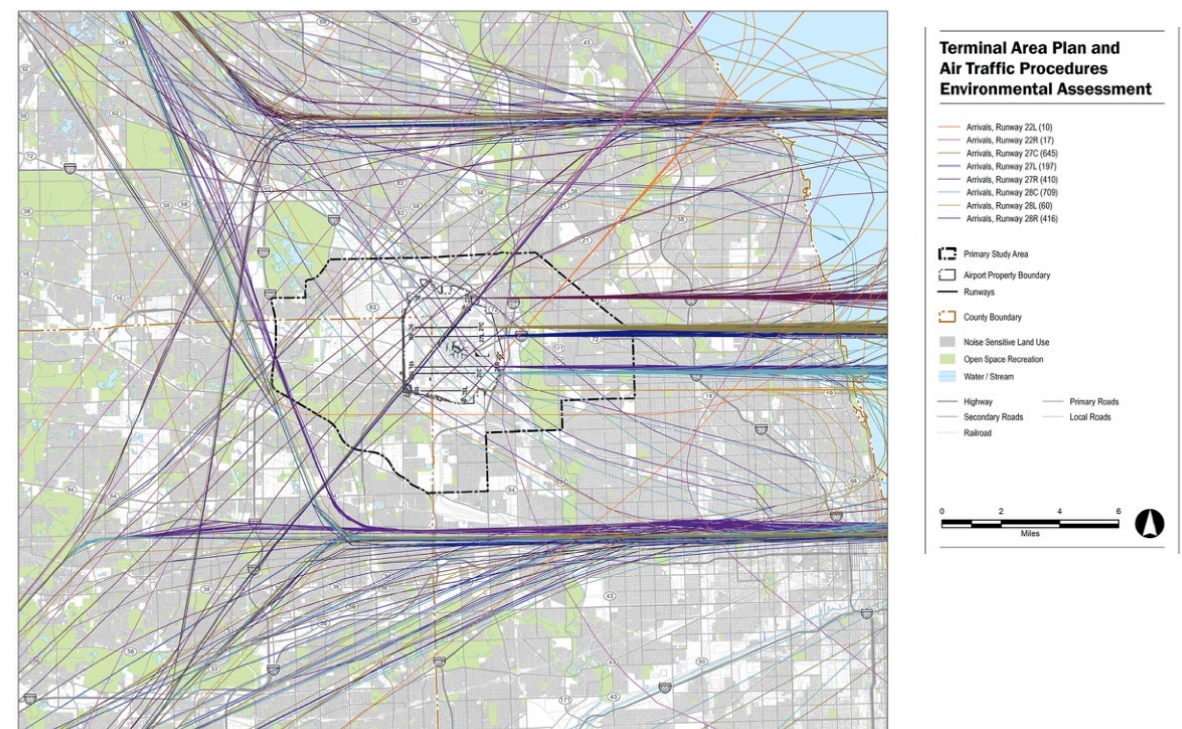


Modeled Arrival Flight Tracks

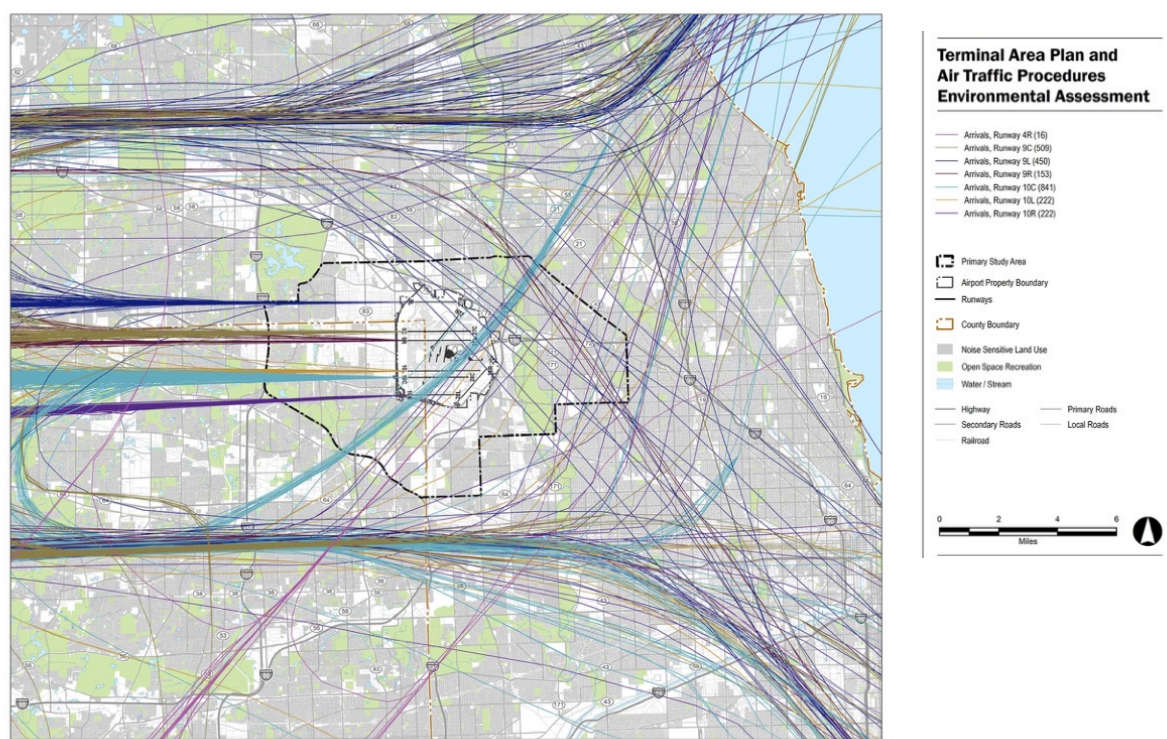
Build Out No Action – East Flow



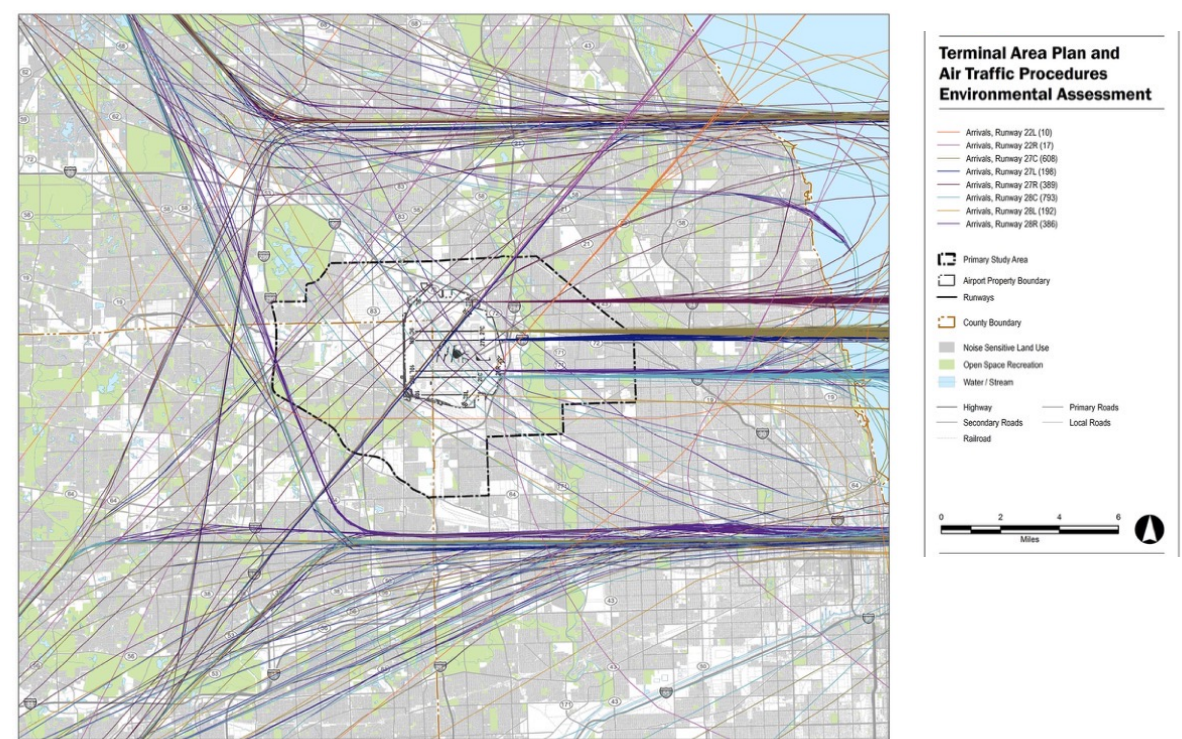
Build Out No Action – West Flow



Build Out Proposed Action – East Flow



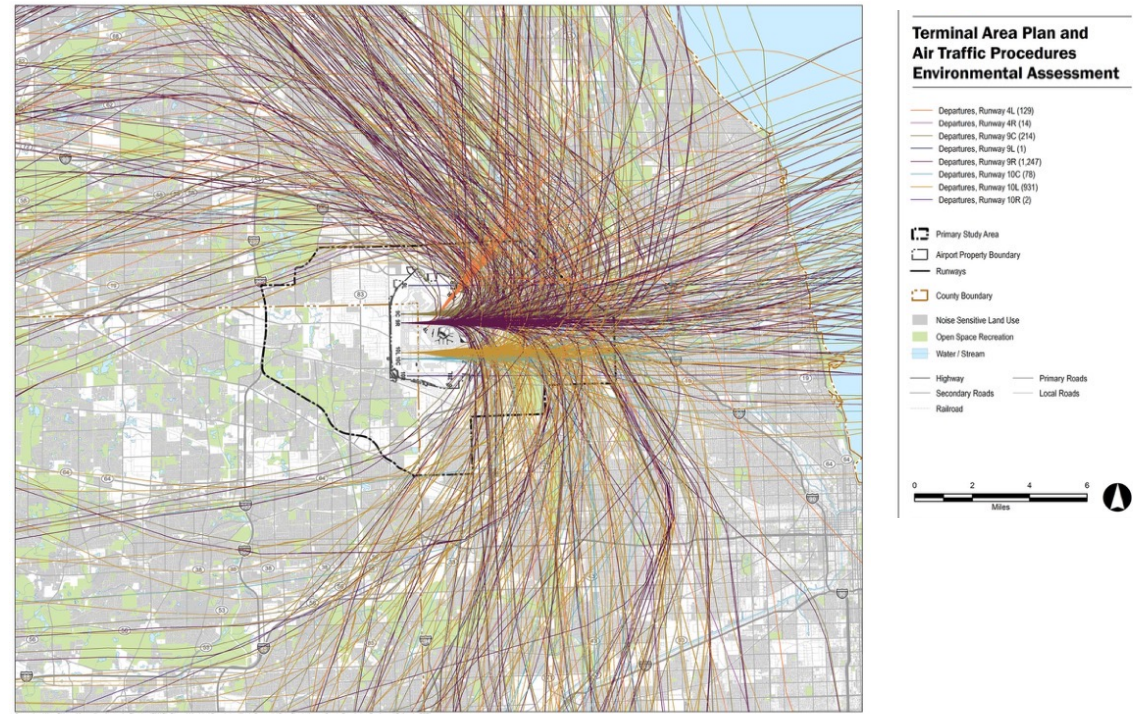
Build Out Proposed Action – West Flow



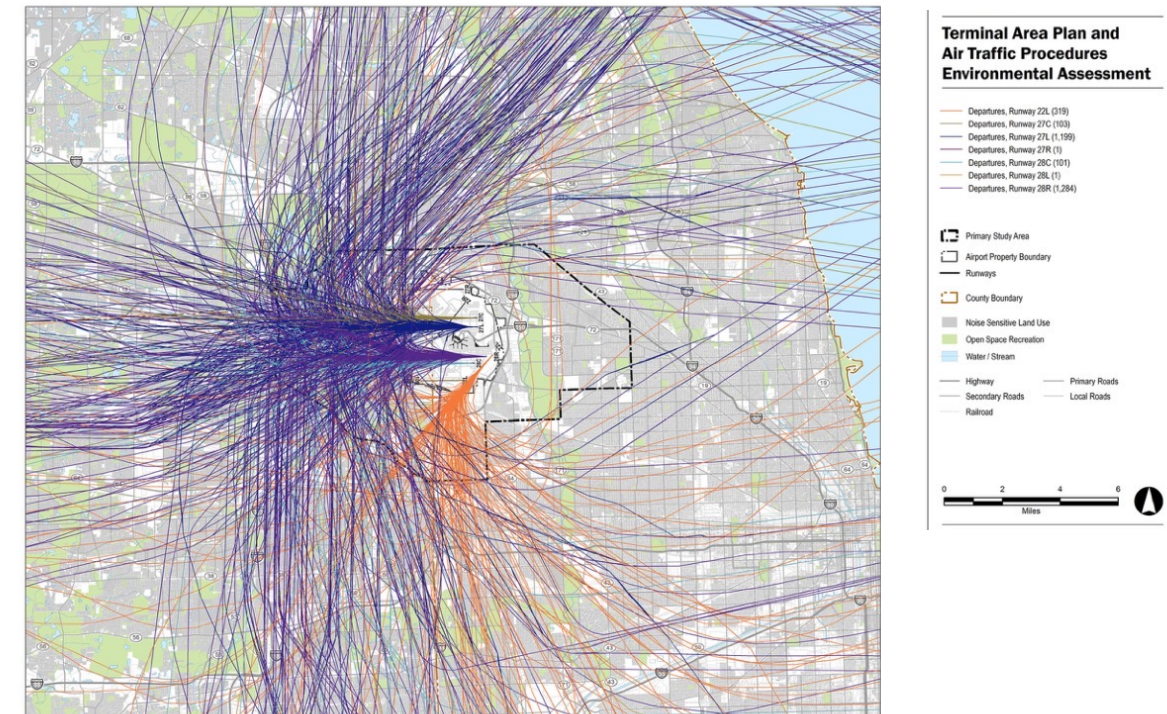


Modeled Departure Flight Tracks

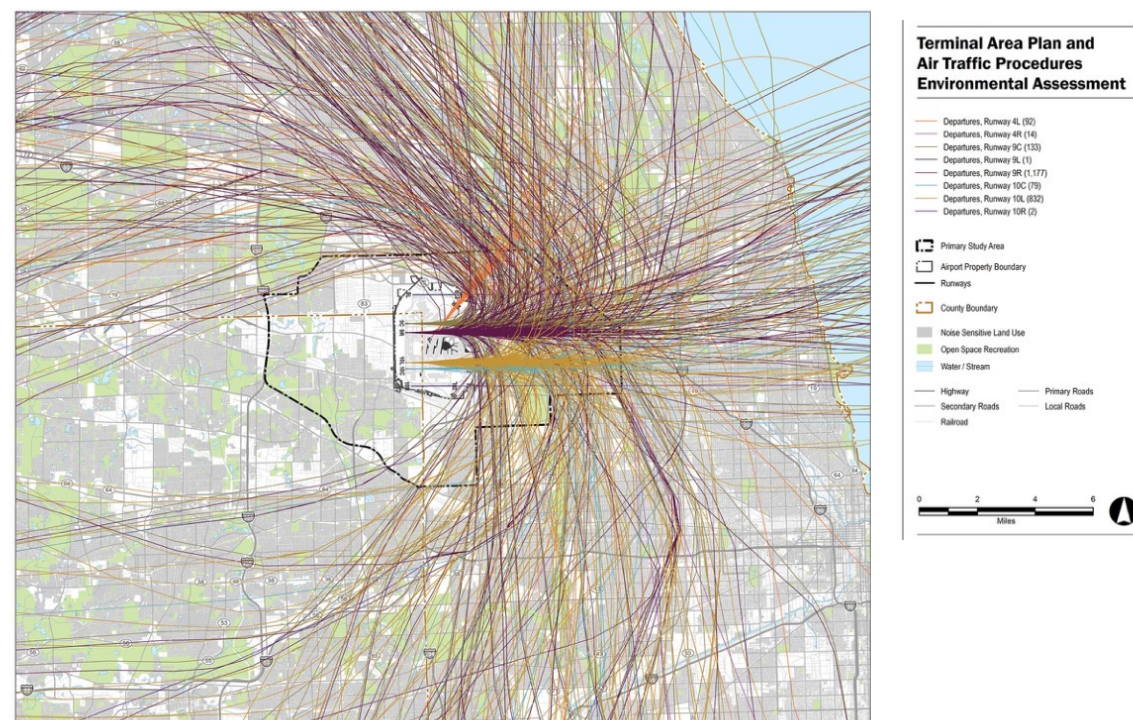
Build Out No Action – East Flow



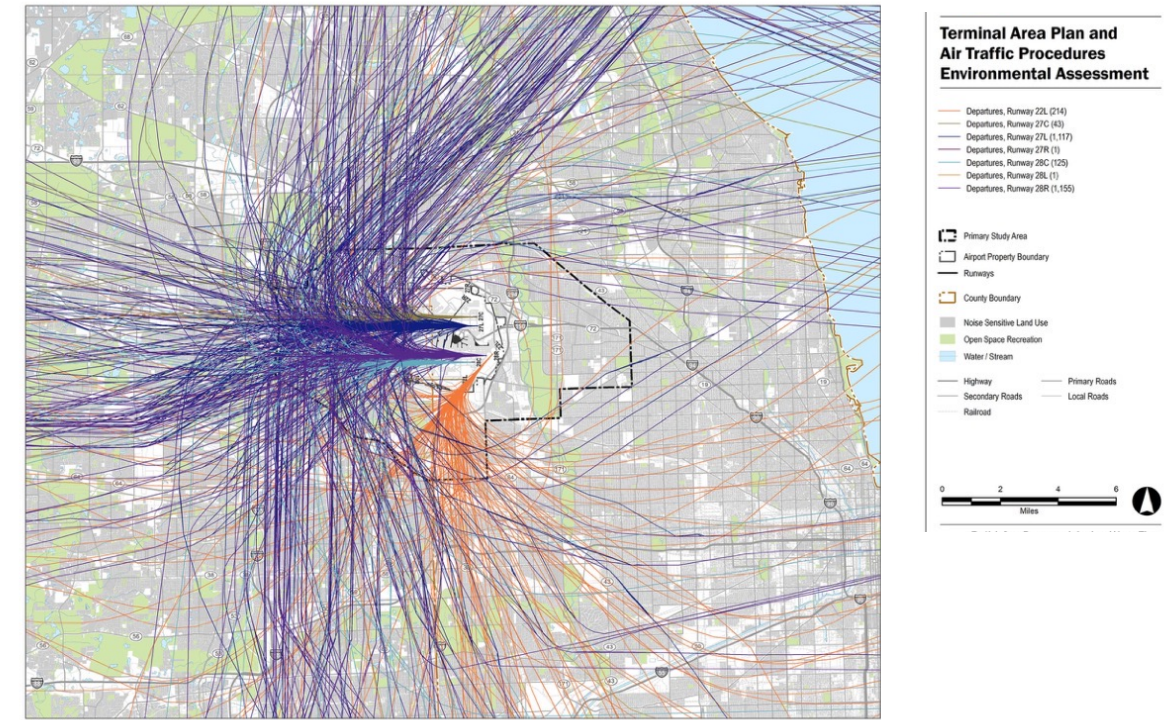
Build Out No Action – West Flow



Build Out Proposed Action – East Flow



Build Out Proposed Action – West Flow





Historical, Architectural, Archaeological, and Cultural Resources Overview

Section 106 of the National Historic Preservation Act, as amended:

Requires that federal agencies with jurisdiction over a proposed project, in this case the FAA, take into account any effects of the proposed project on historic properties

Key Findings

- Three on-airport historic properties were determined eligible for the National Register of Historic Places (NRHP): Terminal 1, CDA Control Tower, Rotunda
- Off-airport locally important sites were treated as eligible for the NRHP



CDA Control Tower



Historical, Architectural, Archaeological, and Cultural Resources Overview

Key Findings

- Determination of no effect on CDA Control Tower
- Determination of no effect on off-airport historic properties
- Determination of no adverse effect on Terminal 1 and Rotunda
- Alterations to Terminal 1 and Rotunda consistent with the *Secretary of the Interior's Standards for Rehabilitation*



Terminal 1



Rotunda



Department of Transportation (DOT)

Section 4(f) Overview

Considered the impact of the Proposed Action on historic sites and public parks, recreational areas, wildlife and, waterfowl refuges of national, state, or local significance.

Key Findings

- Direct impact to two historic properties on-airport (Terminal 1 and Rotunda); no adverse effect determination.
- Indirect impacts considered: air quality/climate, noise, surface transportation, water resources, and visual conditions. No constructive use effects to off-airport Section 4(f) lands.
- FAA determined there would be a *de minimis* impact under Section 4(f) for the on-airport properties of Terminal 1 and Rotunda and no impact for the CDA Control Tower.
- No significant DOT 4(f) impacts.



Biological Resources Overview

The Endangered Species Act (ESA) requires all federal agencies to conserve threatened and endangered species and, in consultation with the U.S. Fish & Wildlife Service (USFWS), to ensure that federal actions do not jeopardize the existence of or destroy critical habitat of threatened and endangered species.

Key Findings

- Plant communities at the airport were previously disturbed by historical land conversion and ongoing airfield construction activities
- Nine federal and state listed plants and animals identified in consultation with USFWS and Illinois Department of Natural Resources
- No critical habitat present on airport
- No impacts to listed threatened or endangered species are expected



Light Emissions and Visual Impacts Overview

Light emissions were analyzed for construction effects and changes to aircraft flight procedures.

Key Findings

- Construction of the MMF Hotel is the only construction activity sufficiently close to an airport boundary to emit light off-airport. Light emissions from the construction site (on airport) are possible. When completed, the MMF Hotel could emit light from roof-top aviation lighting and parking illumination.
- Emissions from aircraft would primarily be affected by the removal of the Offset Approach for arrivals to Runways 10R and 28L.
- Removal of the Offset Approach flight procedure would shift aircraft positions as they approach the runway about 2,500 feet south when they are 60,000 feet from landing.
- The changes in airplane light emissions would be very small:
 - When aircraft are low to the ground and bright (200 feet overhead), the two positions would be close to one another (10 feet apart).
 - When the two positions are far, further from landing (60,000 feet), the aircraft are high up, and the light seen at ground level would be less than 0.5% its ground-level brightness.



Hazardous Materials, Solid Waste, and Pollution Prevention Overview

No significant impacts are anticipated due to construction or operational changes for hazardous materials or solid waste.

Key Findings

- Construction solid waste: historically, the City of Chicago has recycled up to 99% of construction and demolition debris. With equivalent or improved requirements, solid waste from construction activities is expected to be minimal, with little to no materials entering landfills.
- Hazardous materials: all handling of hazardous materials will follow federal, state, and local requirements to minimize impacts.
- Solid waste from operations was assumed to increase proportionally with increased passengers. However, any increased solid waste would be accommodated at existing disposal facilities without compromising capacity.



Natural Resources and Energy Supply Overview

Operation of O'Hare requires consumption of energy, including electricity, natural gas, fuel oil, aviation fuel, diesel fuel, and gasoline, by both stationary airport facilities and mobile vehicles. Natural resources are consumed as building materials during construction of the Proposed Action. Water use supports construction and ongoing operations of many airport facilities and systems.

Key Findings

- While there would be increased demand for natural resources and energy supply under the Proposed Action, there would be adequate supplies; therefore, mitigation would not be required.
- The CDA has identified several sustainability practices in the Sustainable Airport Manual that are intended to minimize the use of natural resources and energy in project construction and operation.



Socioeconomics and Children's Environmental Health and Safety Overview

A socioeconomic analysis evaluates how elements of the human environment such as population, employment, housing, and public services might be affected. A children's environmental health and safety analysis identifies and assesses environmental health and safety risks that may disproportionately affect children.

Key Findings

- No land acquisition, displacement of person or businesses, loss of community tax base or changes to the fabric of the community
- Socioeconomics dismissed except for analysis limited to surface transportation and parking
- No increase in environmental health and safety risk that could disproportionately affect children.



Surface Transportation and Parking Overview

The O'Hare surface transportation system consists of surface transportation and parking resources, including all roadways, parking garages, and surface lots for all vehicle types within the defined study area.

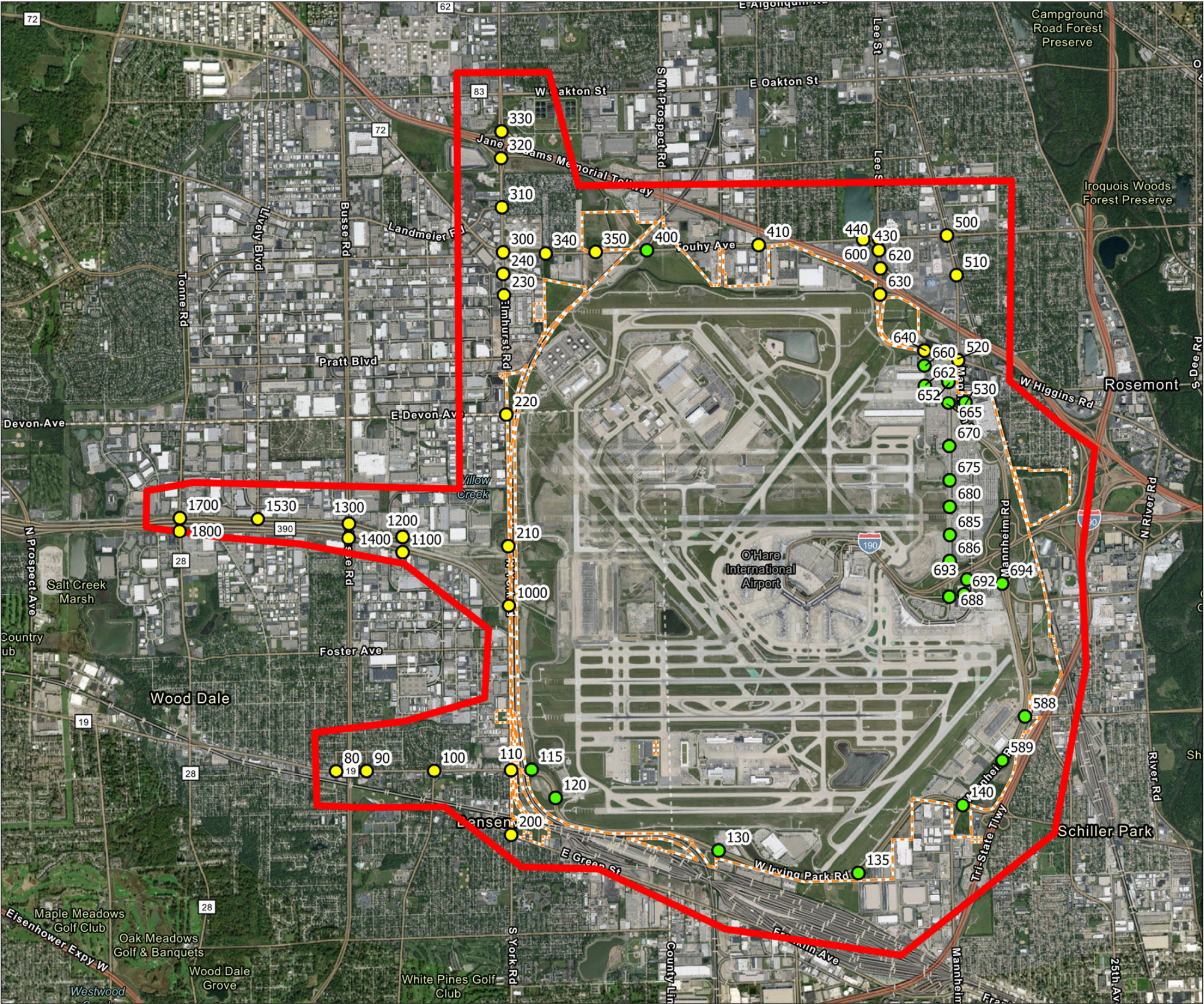
The surface transportation and parking assessment evaluated the potential impacts on intersections and roadway links to determine changes in operational levels of service.

Key Findings

- All roadway links within the study area resulted in improved operational levels of service from the Build Out No Action to the Build Out Proposed Action.
- Three intersections within the study area showed a decrease in operational level of service from the Build Out No Action to the Build Out Proposed Action. Analysis of these intersections determined that traffic would continue to be processed through each of the intersections without residual impact to any adjacent intersection and does not result in significant impacts to the transportation network.
- The remaining intersections within the study area resulted in improved operational levels of service from the Build Out No Action to the Build Out Proposed Action.

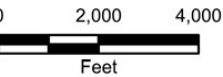


Surface Transportation and Parking Overview



Terminal Area Plan and Air Traffic Procedures Environmental Assessment

- Intersections/Nodes Owned and Operated by the CDA
- Intersections/Nodes Owned and Operated by Other Municipalities
- Existing Airport Property
- Study Area



ESRI base mapping ArcPro Version 2.8



Environmental Justice Overview

An environmental justice analysis considers the potential of federal actions to cause disproportionately high and adverse effects on low-income or minority populations.

Key Findings

- Analysis focused on potential noise impacts to environmental justice areas.
- Three Census Blocks within two Block Groups may be significantly impacted.
- 227 residences would experience potentially significant noise impacts.
- 224 of the 227 have previously received sound insulation.
- Two of remaining three residences will receive sound insulation in 2022.
- Remaining one residence declined the invitation for sound insulation and is thus, determined compatible for noise purposes.
- No resulting disproportionate impact due to residential sound insulation measures at impacted households decreasing noise impact below significant.



Water Resources: Wetlands, Floodplains, Surface Waters, and Groundwater Overview

Key Findings

- Wetlands and waters delineation completed in 2019 and Approved Jurisdictional Determination issued December 20, 2019.
- Total of 1.48 acres of impacts to non-jurisdictional wetlands and waters.
- Impacted wetlands are not natural; efforts will be made to minimize impacts during construction, and no mitigation is proposed.
- No impacts to regulatory 100-year floodplains, groundwater resources, or wild and scenic rivers.
- Increased impervious area and changes to drainage patterns and stormwater infrastructure will occur.
- Adequate storage exists to meet the regulatory release rate and storage requirements for the project.
- Impacts to water resources for the project are not significant.



Cumulative Impact Overview

Cumulative Impacts are those that “result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, whether Federal or non-Federal” (FAA Order 1050.1F, paragraph 4.2(d)).

Key Findings

- Analyzed Proposed Action impacts combined with the impacts of 181 known past, present, and reasonably foreseeable future projects up to 2032.
- No significant cumulative impacts found.



How do I submit my comments?

You can submit your comments via:

Web: www.faa.gov/airports/great_lakes/TAPandATEA

Email: ORD_TAPandATEA@hmmh.com

Mail:

FAA care of HMMH
Attn: ORD TAP and AT EA Comments
700 District Avenue, Suite 800
Burlington, MA 01803

Comments must be postmarked, submitted online, or submitted via email by midnight, **July 18, 2022.**



What if I have other questions about O'Hare?

- General Information about O'Hare: www.flychicago.com
- O'Hare Noise Management: www.flychicago.com/community/ORDnoise
- O'Hare Residential and School Sound Insulation Programs: www.flychicago.com/community/ORDnoise/SoundInsulation
- O'Hare Noise Compatibility Commission: www.oharenoise.org
- Doing business at O'Hare: www.flychicago.com/business/opportunities



Thank You!
