

Detroit Metro Wayne County International Airport Benchmarks

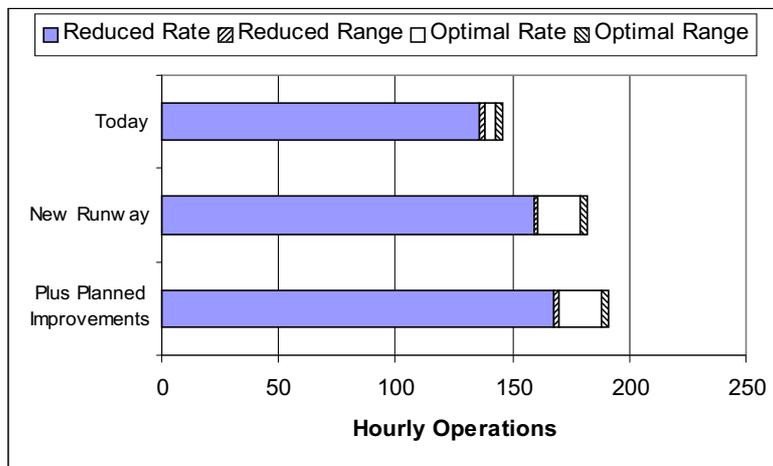
- The current capacity benchmark at Detroit Metro Wayne County Airport is 143-146 flights per hour in good weather.
- Current capacity falls to 136-138 flights (or fewer) per hour in adverse weather conditions, which may include poor visibility, unfavorable winds, or heavy precipitation.
- Arrival and departure demand tend to be complementary at Detroit so that capacity is adequate to handle current demand.
- Less than 2% of Detroit's flights are delayed more than 15 minutes.
- The planned new runway is expected to improve Detroit's capacity benchmark by 25% (to 179-182 flights per hour) in good weather and by 17% (to 159-161 flights per hour) in adverse weather. This assumes that airspace, ground infrastructure, and environmental constraints allow full use of the runway.
- In addition, technology and procedural improvements, when combined with the new runway are expected to increase Detroit's capacity benchmark by a total of 31% (to 188-191 flights per hour) in good weather over the next 10 years.
- The adverse weather capacity benchmark will increase by a total of 24% (to 168-170 flights per hour) compared to today.
- These capacity increases could be brought about as a result of:
 - ADS-B/CDTI (with LAAS), which provides a cockpit display of the location of other aircraft and will help the pilot maintain the desired separation more precisely.
 - FMS/RNAV routes, which allow a more consistent flow of aircraft to the runway.
- Demand at Detroit is projected to grow by 31% over the next decade, but it appears that capacity will keep pace with demand.

DTW – Detroit Metro Wayne County International Airport

Airport Capacity Benchmarks – These values are for total operations achievable under specific conditions:

- **Optimum Rate** – Visual Approaches (VAPS), unlimited ceiling and visibility
- **Reduced Rate** – Most commonly used instrument configuration, below visual approach minima

| Scenario | Optimum Rate | Reduced Rate |
|---------------------------|--------------|--------------|
| Today | 143-146 | 136-138 |
| New Runway | 179-182 | 159-161 |
| Plus planned improvements | 188-191 | 168-170 |



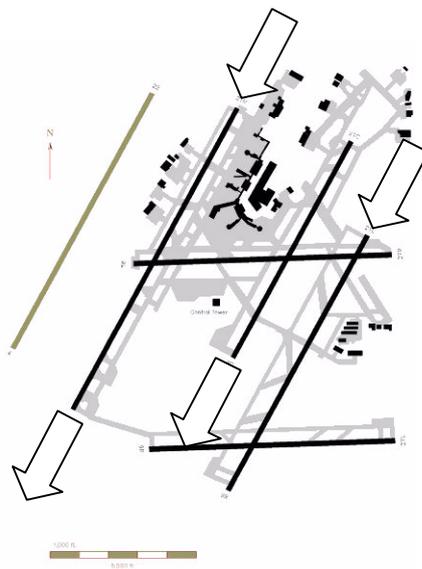
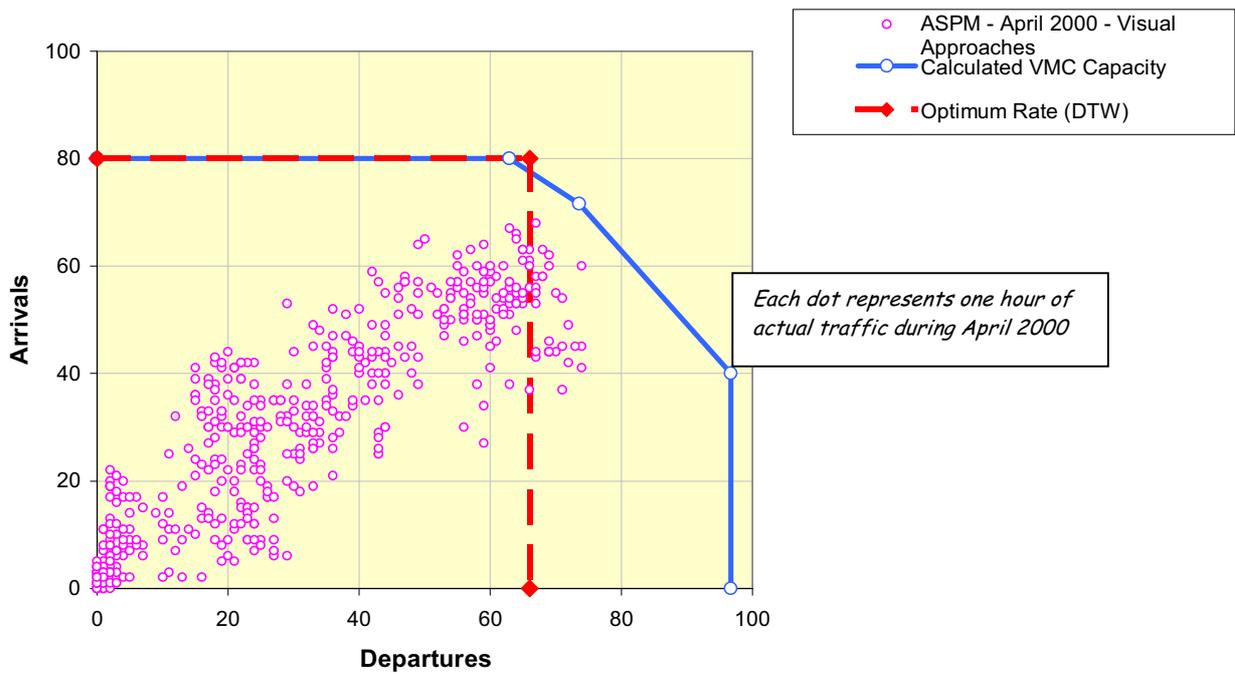
- The benchmarks describe an achievable level of performance for the given conditions, which can occasionally be exceeded. Lower rates can be expected under adverse conditions. Note: In some cases, facilities provided separate unbalanced maximum arrival and departure rates.
- Planned Improvements include:
 - ADS-B/CDTI (with LAAS) – provides a cockpit display of the location of other aircraft. This will help the pilot maintain the desired separation more precisely.
 - FMS/RNAV Routes – allows more consistent delivery of aircraft to the runway threshold.
- Benefits from Planned Improvements assume that all required infrastructure and regulatory approvals will be in place. This includes aircraft equipage, airspace design, environmental reviews, frequencies, training, etc. as needed.
- **Note:** These benchmarks do not consider any limitation on airport traffic flow that may be caused by non-runway constraints at the airport or elsewhere in the NAS. Such constraints may include:
 - Taxiway and gate congestion, runway crossings, slot controls, construction activity
 - Terminal airspace, especially limited departure headings
 - Traffic flow restrictions caused by en route miles-in-trail restrictions, weather or congestion problems at other airports

These values were calculated for the Capacity Benchmarking task and should not be used for other purposes, particularly if more detailed analyses have been performed for the individual programs.

The list of Planned Improvements and their expected effects on capacity does not imply FAA commitment to or approval of any item on the list.

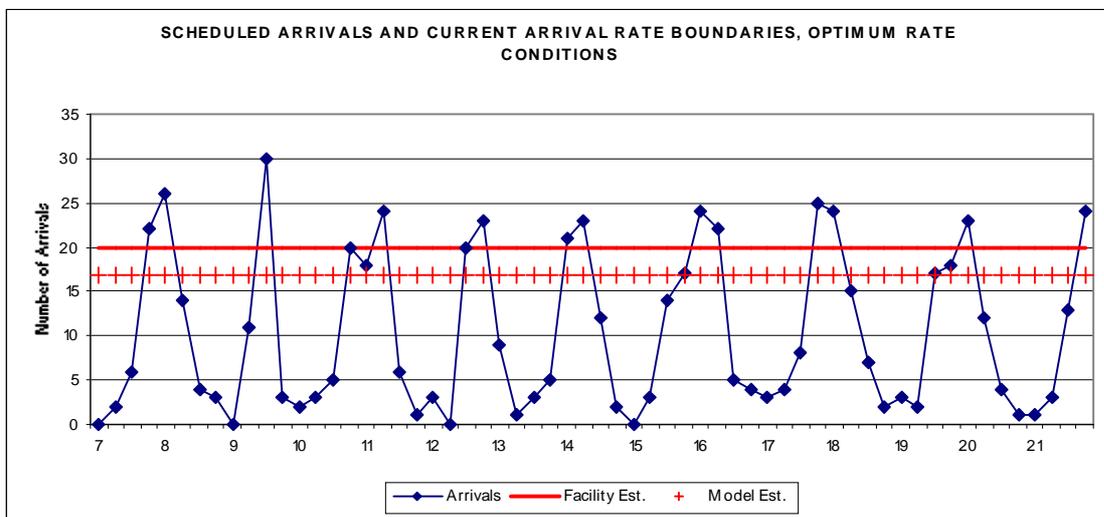
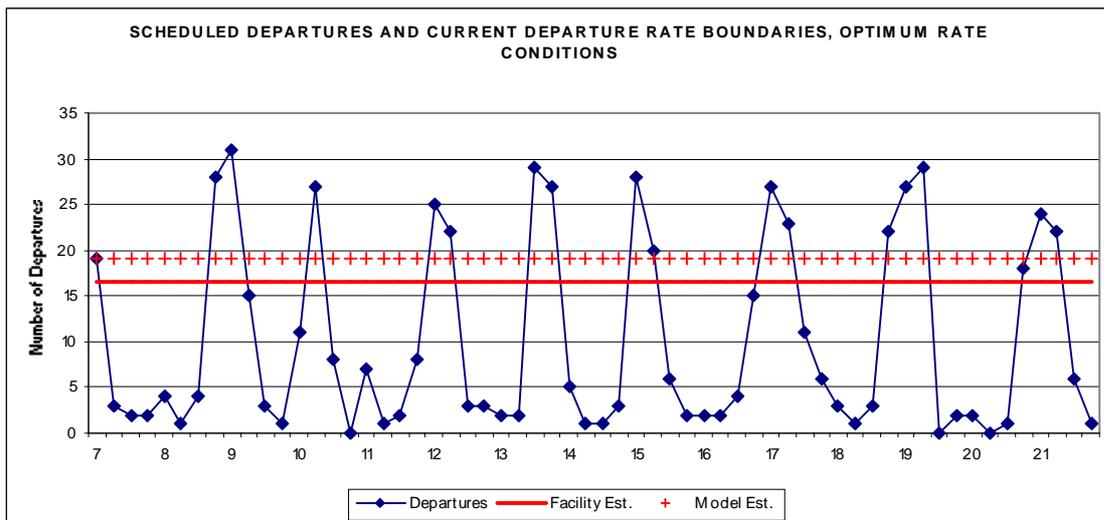
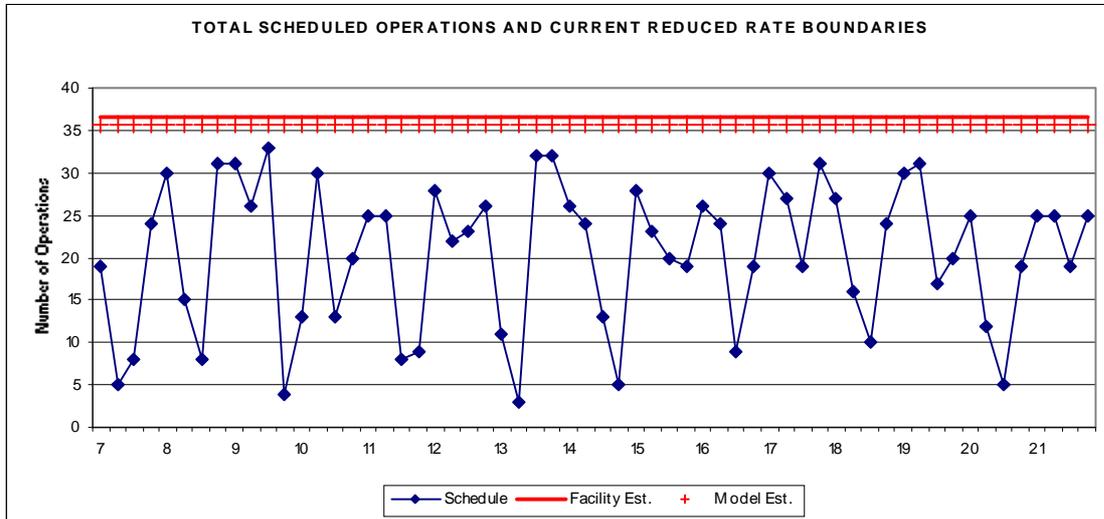
Current Operations – Optimum Rate

- Visual approaches, visual separation
 - Using 21L/C/R
- ASPM data is actual hourly traffic count



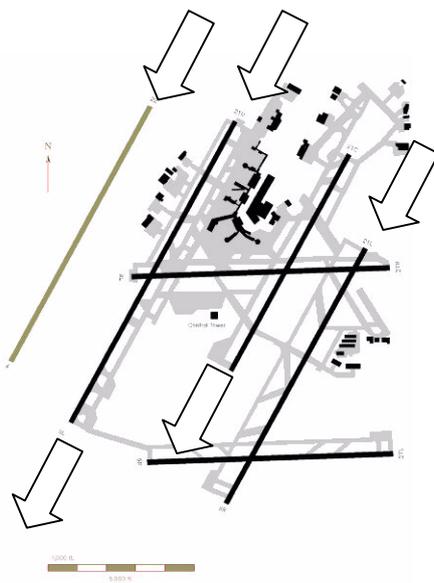
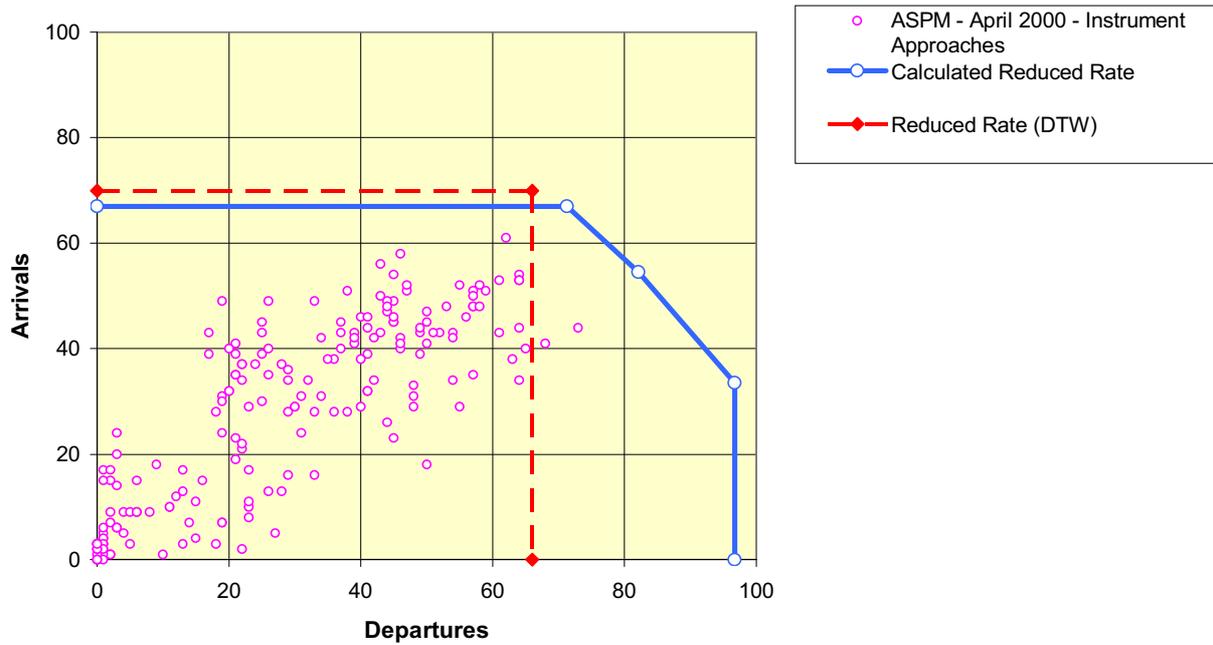
DTW – Detroit Metro Wayne County International Airport

Scheduled Departures and Arrivals and Current Departure and Arrival Rate Boundaries (15-Minute Periods) Under Optimum Rate Conditions



Current Operations – Reduced Rate

- Instrument approaches (below Visual Approach Minima)
 - Using 21L/C/R
- ASPM data for “Instrument Approaches” can include marginal VFR, with higher acceptance rates.



DTW – Detroit Metro Wayne County International Airport

Scheduled Departures and Arrivals and Current Departure and Arrival Rate Boundaries (15-Minute Periods) Under Reduced Rate Conditions

