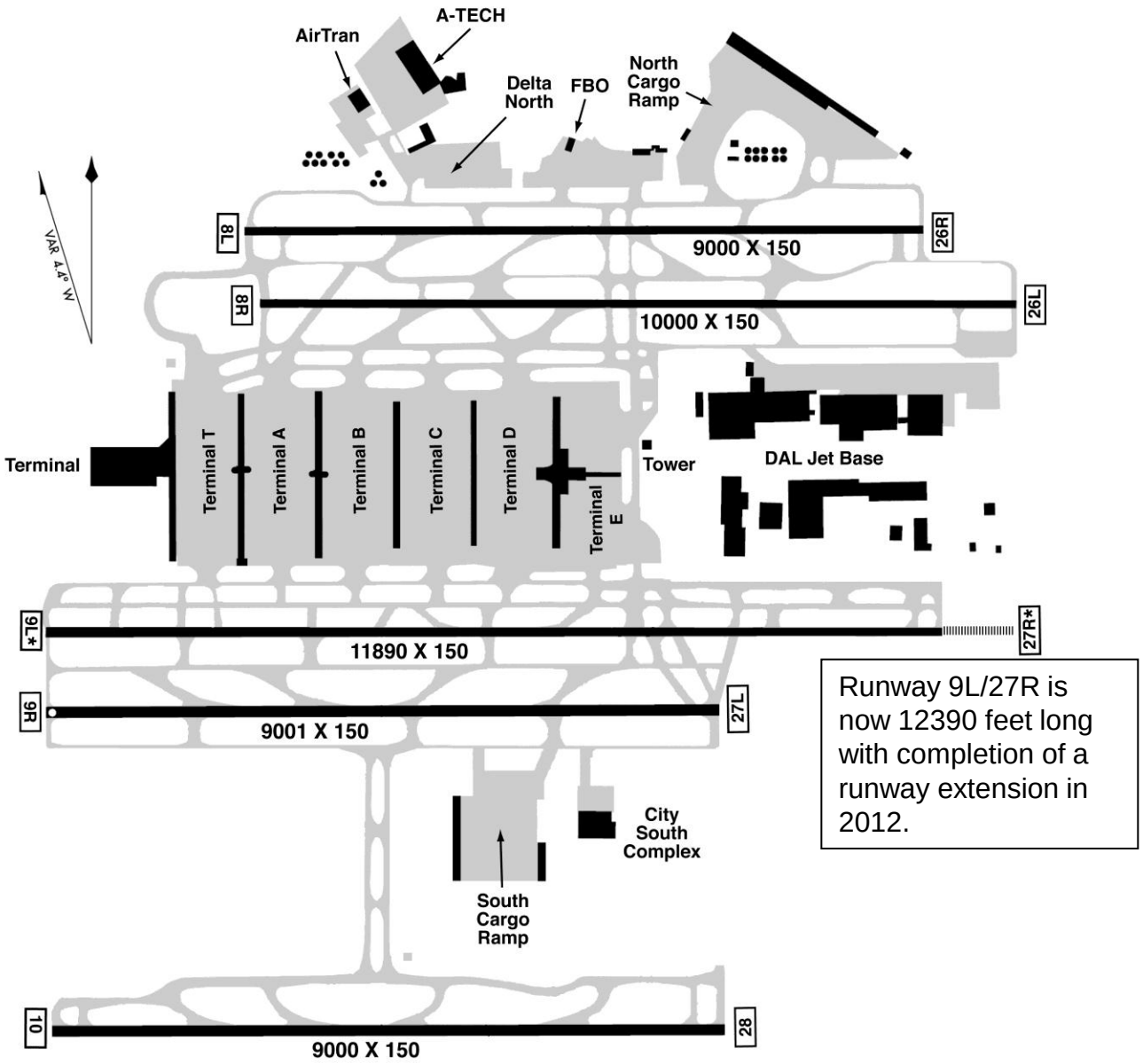
ATL HARTSFIELD-JACKSON ATLANTA INTERNATIONAL



Runway 9L/27R is now 12390 feet long with completion of a runway extension in 2012.

Airport capacity profile estimates were created using a standard set of performance characteristics and do not take into account non-runway constraints, unless otherwise noted. The capacity estimates developed for this report are not intended to replace the results of any detailed analysis that would precede an environmental, investment, or policy decision.

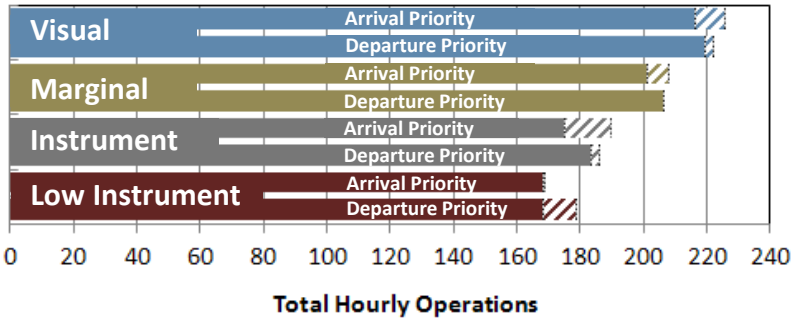
The list of Future Improvements and their expected effects on capacity does not imply FAA commitment to, or approval of, any item on the list.

ATL HARTSFIELD-JACKSON ATLANTA INTERNATIONAL

DEFINITION

- The capacity profile shows the hourly throughput that an airport is able to sustain during periods of high demand, represented as the range between the model-estimated capacity and the ATC facility reported rate (called rate). Each weather condition has a unique capacity rate range.
- To maximize capacity, ATL tends to operate in an arrival or departure priority mode, as opposed to a balanced operation. An arrival or departure priority operation is only feasible when the airport's flight schedule is unbalanced for sustained periods of time.
- The following charts compare actual hourly traffic with the estimated capacity curves for ATL. Some hourly traffic points fall outside the estimated capacity curves. There are many reasons why this may occur without affecting operational safety. For example, use of Runway 10/28 may have been different than was assumed in the analysis. Also, actual weather may have been better for part of the hour than that recorded for the hour, allowing more efficient ATC procedures than were modeled.
- Four weather conditions have been modeled for ATL due to distinct operational differences between Instrument and Low Instrument conditions.

CURRENT OPERATIONS CAPACITY RATE RANGE



RECENT CAPACITY IMPROVEMENTS AT ATL

- In 2006 ATL commissioned a new parallel runway, 10/28, which is dedicated to arrivals or departures as needed.
- Precision Runway Monitor (PRM) is a high update radar system installed at ATL, that allows simultaneous instrument approaches to parallel runways as close as 3000 feet apart.
- Implementation of Traffic Management Advisor (TMA) helps to improve the flow of arrivals to the runways.

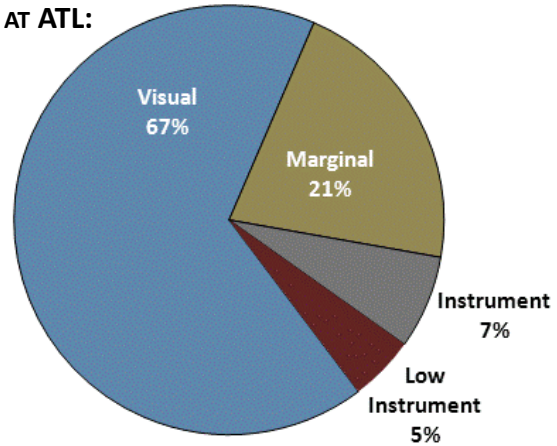
FUTURE IMPROVEMENTS AT ATL

- *Same Runway Departure Fanning* using Equivalent Lateral Spacing Operations (ELSO) is now in use at ATL. This improvement allows reduced separation between successive departures due to the availability of new Standard Instrument Departure (SID) procedures which provide more precise guidance and control for departing aircraft.
- *Improved Runway Delivery Accuracy*: The combined effects of several new capabilities, including ADS-B Out, CDTI, and TBM in the terminal area, will improve the ability of controllers by 2020 to deliver aircraft to the runway with the desired separation from the preceding aircraft. This will reduce the average spacing between arrivals and boost arrival capacity.
- *Runway Extension:* Runway 9L/27R has been lengthened by 500 feet to the east (2012). The extension reduces payload restrictions incurred by some long-haul flights, but is not expected to affect capacity. As such, this improvement has not been explicitly modeled.
- Additional information on these improvements may be found in this report under "Future Operation Assumptions."

DATA SOURCES

- Actual hourly ATL operations, weather and configuration data were obtained from the FAA ASPM database, and represent operational hours from 7am to 11pm local time for all of Fiscal Years 2009 and 2010. Actual configuration usage is determined by multiple operational factors, including weather conditions.
- Facility reported rates were provided by ATC personnel at ATL.
- Model-estimated rates are derived from operational information provided by ATC.

ANNUAL WEATHER AT ATL:



VISUAL CONDITIONS:

- Ceiling and visibility allow for visual approaches: at least 3600 feet ceiling and 7 miles visibility

MARGINAL CONDITIONS:

- Ceiling and visibility below visual approach minima but better than instrument conditions

INSTRUMENT CONDITIONS:

- Ceiling and visibility below 1000 feet ceiling or 3 miles visibility but better than low instrument conditions

LOW INSTRUMENT CONDITIONS:

- Ceiling and visibility below 500 feet ceiling or 1 mile visibility

VISUAL

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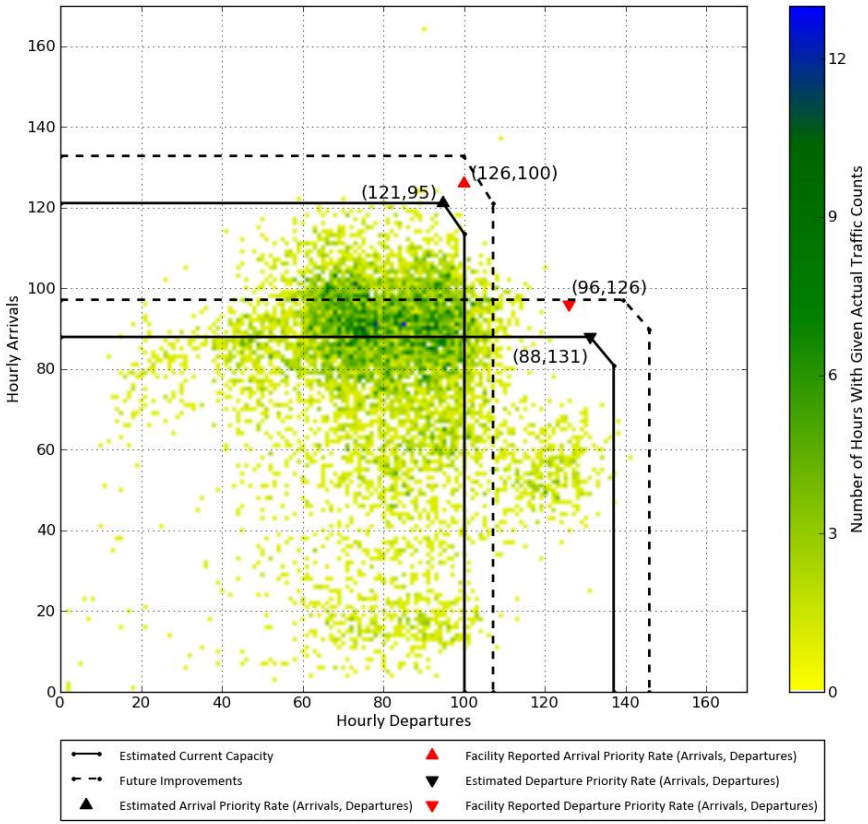
ATL Scenario		Arrival Runways	Departure Runways	Procedures	Hourly Rate	
					ATC Facility Reported	Model-Estimated
CURRENT OPERATIONS	ARRIVAL PRIORITY	26R, 27L, 28	26L, 27R	Visual Approaches, Visual Separation	226	216
	DEPARTURE PRIORITY	26R, 27L	26L, 27R, 28		222	219
FUTURE IMPROVEMENTS Same Runway Departure Fanning Improved Runway Delivery Accuracy	ARRIVAL PRIORITY	26R, 27L, 28	26L, 27R		N/A	233
	DEPARTURE PRIORITY	26R, 27L	26L, 27R, 28		N/A	236

VISUAL WEATHER CONDITIONS



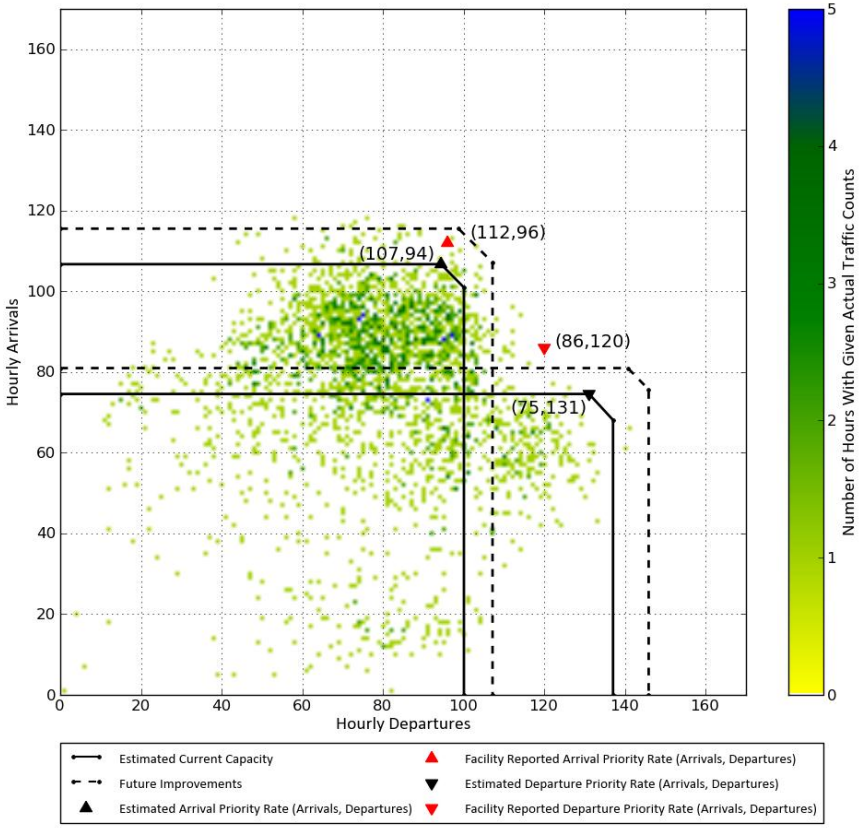
- The capacity rate range in Visual conditions is currently 216-226 operations per hour in arrival priority and 219-222 in departure priority.
- ATL has two primary directional traffic flows. The airport operates in variations of this configuration approximately 66% of the time in Visual weather conditions (totaling 56% annually).
- Same runway departure fanning is conducted from Runways 9L/27R and 8R/26L. This procedure enables higher departure throughput by reducing the minimum time required between successive departures.

MARGINAL

HARTSFIELD-JACKSON ATLANTA INTERNATIONAL

ATL Scenario		Arrival Runways	Departure Runways	Procedures	Hourly Rate	
					ATC Facility Reported	Model-Estimated
CURRENT OPERATIONS	ARRIVAL PRIORITY	26R, 27L, 28	26L, 27R	Simultaneous Instrument Approaches, Visual Separation	208	201
	DEPARTURE PRIORITY	26R, 27L	26L, 27R, 28		206	206
FUTURE IMPROVEMENTS Same Runway Departure Fanning Improved Runway Delivery Accuracy	ARRIVAL PRIORITY	26R, 27L, 28	26L, 27R		N/A	215
	DEPARTURE PRIORITY	26R, 27L	26L, 27R, 28		N/A	222

MARGINAL WEATHER CONDITIONS



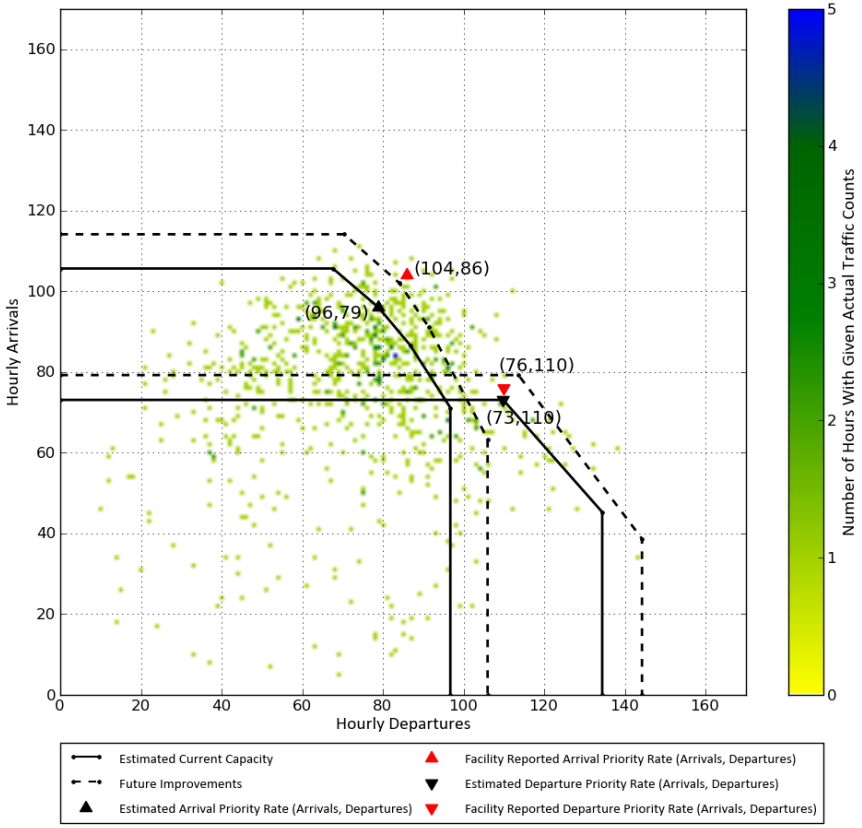
- The capacity rate range in Marginal conditions is currently 201-208 operations per hour in arrival priority and 206 in departure priority.
- ATL has two primary directional traffic flows. The airport operates in variations of this configuration approximately 60% of the time in Marginal weather conditions (totaling 13% annually).
- Reduced separation (2.5 NM) between arrivals is authorized for approaches to Runways 26R, 27L, and 28 at ATL.
- For the arrival priority mode, triple simultaneous instrument approaches require the availability of Precision Runway Monitor (PRM). However, if PRM is unavailable, triple simultaneous instrument approaches can be conducted using less operationally preferred configurations.
- Same runway departure fanning is conducted from Runways 9L/27R and 8R/26L. This procedure enables higher departure throughput by reducing the minimum time required between successive departures.

INSTRUMENT

HARTSFIELD-JACKSON ATLANTA INTERNATIONAL

ATL Scenario		Arrival Runways	Departure Runways	Procedures	Hourly Rate	
					ATC Facility Reported	Model-Estimated
CURRENT OPERATIONS	ARRIVAL PRIORITY	8L, 9R, 10	8R, 9L	Simultaneous Instrument Approaches, Radar Separation	190	175
	DEPARTURE PRIORITY	8L, 9R	8R, 9L, 10		186	183
FUTURE IMPROVEMENTS Same Runway Departure Fanning Improved Runway Delivery Accuracy	ARRIVAL PRIORITY	8L, 9R, 10	8R, 9L		N/A	186
	DEPARTURE PRIORITY	8L, 9R	8R, 9L, 10		N/A	193

INSTRUMENT WEATHER CONDITIONS



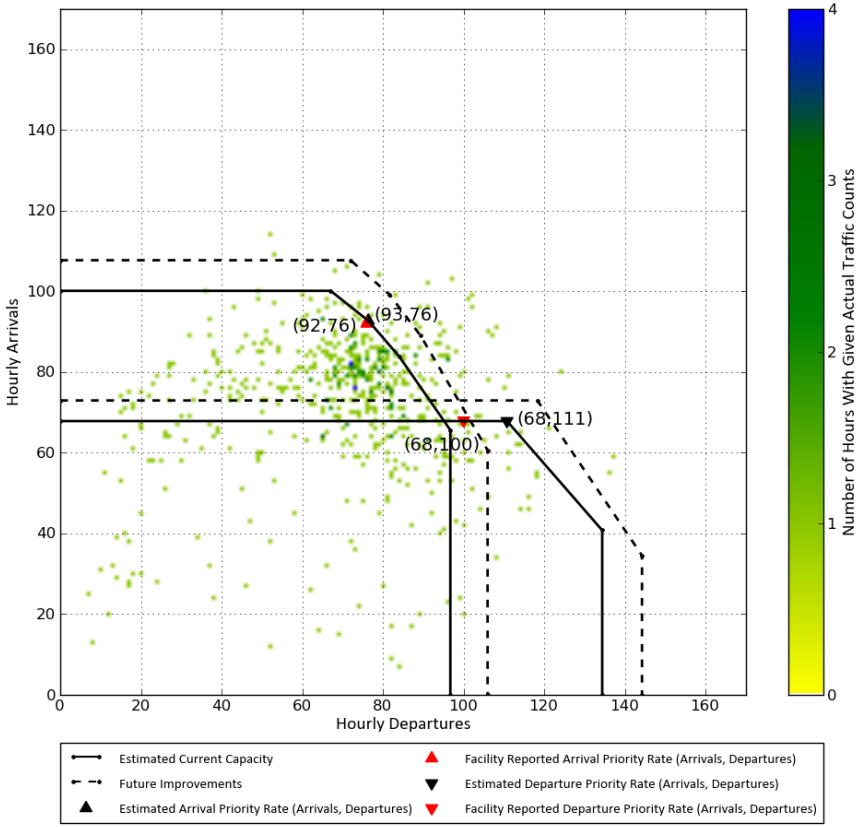
- The capacity rate range in Instrument conditions is currently 175-190 operations per hour in arrival priority and 183-186 in departure priority.
- ATL has two primary directional traffic flows. The airport operates in variations of this configuration approximately 63% of the time in Instrument weather conditions (totaling 4% annually).
- Reduced separation (2.5 NM) between arrivals is authorized for approaches to Runways 8L, 9R, and 10 at ATL.
- For the arrival priority mode, triple simultaneous instrument approaches require the availability of Precision Runway Monitor (PRM). However, if PRM is unavailable, triple simultaneous instrument approaches can be conducted using less operationally preferred configurations.
- Same runway departure fanning is conducted from Runways 9L/27R and 8R/26L. This procedure enables higher departure throughput by reducing the minimum time required between successive departures.

Low Instrument

Hartsfield-Jackson Atlanta International

ATL Scenario		Arrival Runways	Departure Runways	Procedures	Hourly Rate	
					ATC Facility Reported	Model Estimated
Current Operations	Arrival Priority	8L, 9R, 10	8R, 9L	Simultaneous Instrument Approaches, Radar Separation	168	169
	Departure Priority	8L, 9R	8R, 9L, 10		168	179
Future Improvements Same Runway Departure Fanning Improved Runway Delivery Accuracy	Arrival Priority	8L, 9R, 10	8R, 9L		N/A	181
	Departure Priority	8L, 9R	8R, 9L, 10		N/A	191

Low Instrument Weather Conditions



- The capacity rate range in Low Instrument conditions is currently 168-169 operations per hour in arrival priority and 168-179 in departure priority.
- ATL has two primary directional traffic flows. The airport operates in variations of this configuration approximately 83% of the time in Low Instrument weather conditions (totaling 4% annually).
- Reduced separation between arrivals is not available during Low Instrument conditions.
- For the arrival priority mode, triple simultaneous instrument approaches require the availability of Precision Runway Monitor (PRM). However, if PRM is unavailable, triple simultaneous instrument approaches can be conducted using less operationally preferred configurations.
- Same runway departure fanning is currently conducted from Runways 9L and 26L. This procedure enables higher departure throughput by reducing the minimum time required between successive departures. Additional departure fanning from Runways 8R and 27R will be available in the future.