

*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.*

## DEFINITION

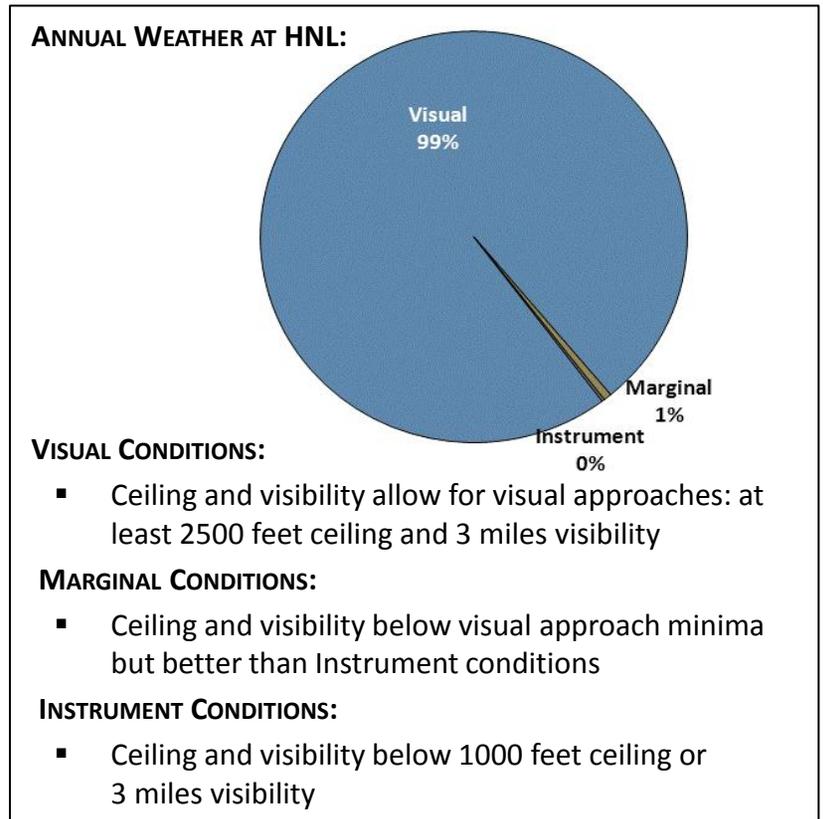
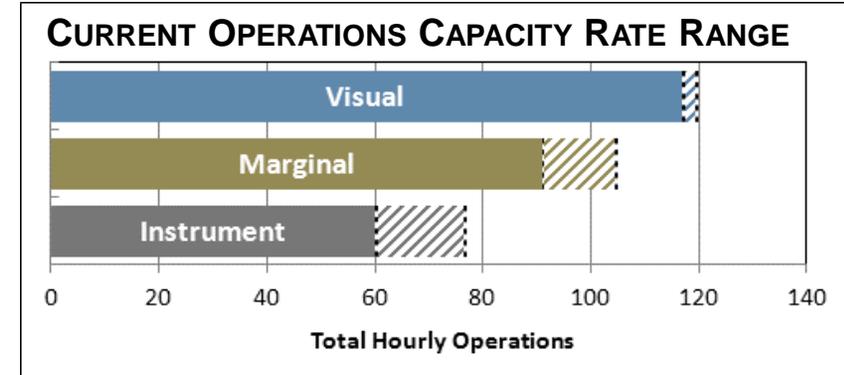
- The capacity profile shows the hourly throughput that an airport is able to sustain during periods of high demand, represented as the range between the model-estimated capacity and the ATC facility reported rate (called rate). Each weather condition has a unique capacity rate range.
- The following charts compare actual hourly traffic with the estimated capacity curves for HNL. The actual hourly traffic data at HNL is based on filed IFR flight plans, and thus does not include a significant number of general aviation flights that operated under Visual Flight Rules (VFR).

## FUTURE IMPROVEMENTS AT HNL

- No capacity improvements were modeled at HNL.

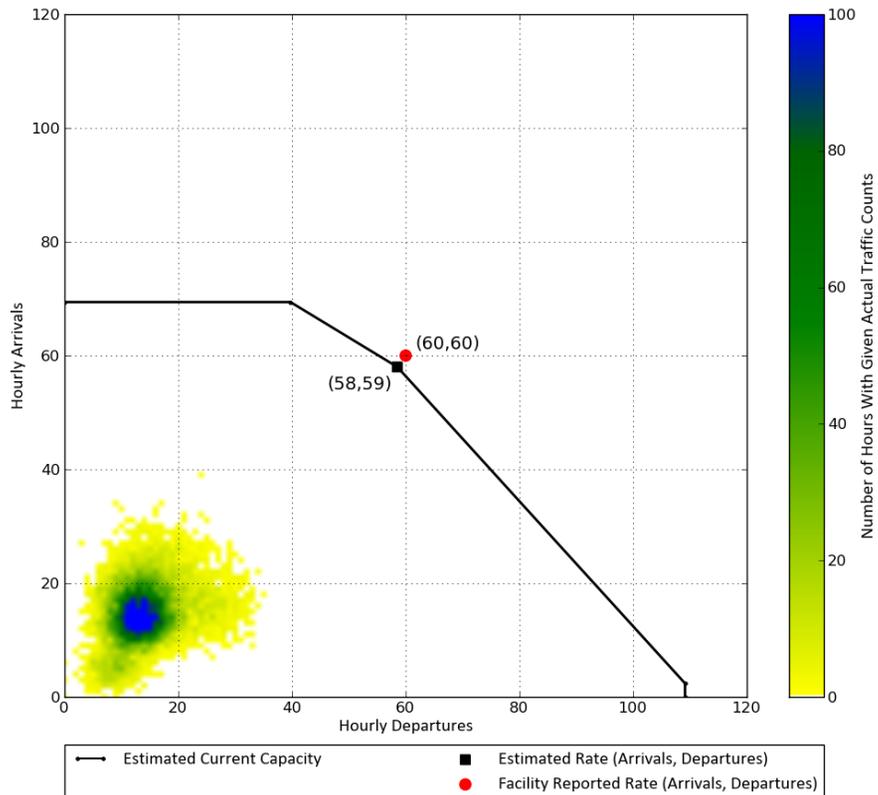
## DATA SOURCES

- Actual hourly HNL 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 HNL.
- Model-estimated rates are derived from operational information provided by ATC.



HNL Scenario	Arrival Runways	Departure Runways	Procedures	Hourly Rate	
				ATC Facility Reported	Model-Estimated
<b>CURRENT OPERATIONS</b>	4R, 4L, 8L	4R, 4L, 8R, 8L	Converging Visual Approaches, Visual Separation	120	117
<b>FUTURE IMPROVEMENTS</b>	4R, 4L, 8L	4R, 4L, 8R, 8L		N/A	117

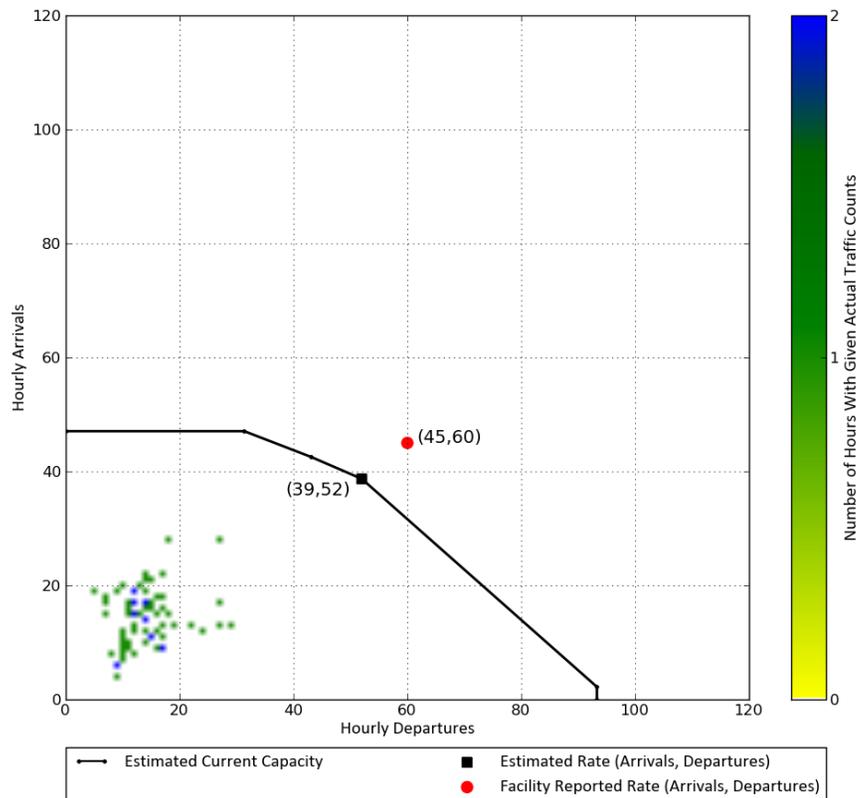
## VISUAL WEATHER CONDITIONS



- The capacity rate range Visual conditions is currently 117-120 operations per hour.
- This is HNL's dominant configuration. The airport operates in variations of this configuration approximately 83% of the time in Visual weather conditions (totaling 83% annually).
- HNL's actual hourly traffic data does not reflect the significant quantity of general aviation operations that occur in Visual weather conditions. On average, about one out of every four operations is a general aviation aircraft operating under VFR.
- Only a limited type of smaller aircraft operate on Runway 4L due to close proximity with Runway 4R.
- Departures on Runway 4R and 4L are limited to smaller aircraft that meet weight and procedural requirements.
- HNL utilizes land and hold short (LAHSO) operations for specific combinations of aircraft operations on 4L and 8L.
- This profile does not include additional capacity available for seaplane operations.

HNL Scenario	Arrival Runways	Departure Runways	Procedures	Hourly Rate	
				ATC Facility Reported	Model-Estimated
<b>CURRENT OPERATIONS</b>	4R, 8L	4R, 8R, 8L	Instrument Approaches, Radar Separation	105	91
<b>FUTURE IMPROVEMENTS</b>	4R, 8L	4R, 8R, 8L		N/A	91

## MARGINAL WEATHER CONDITIONS



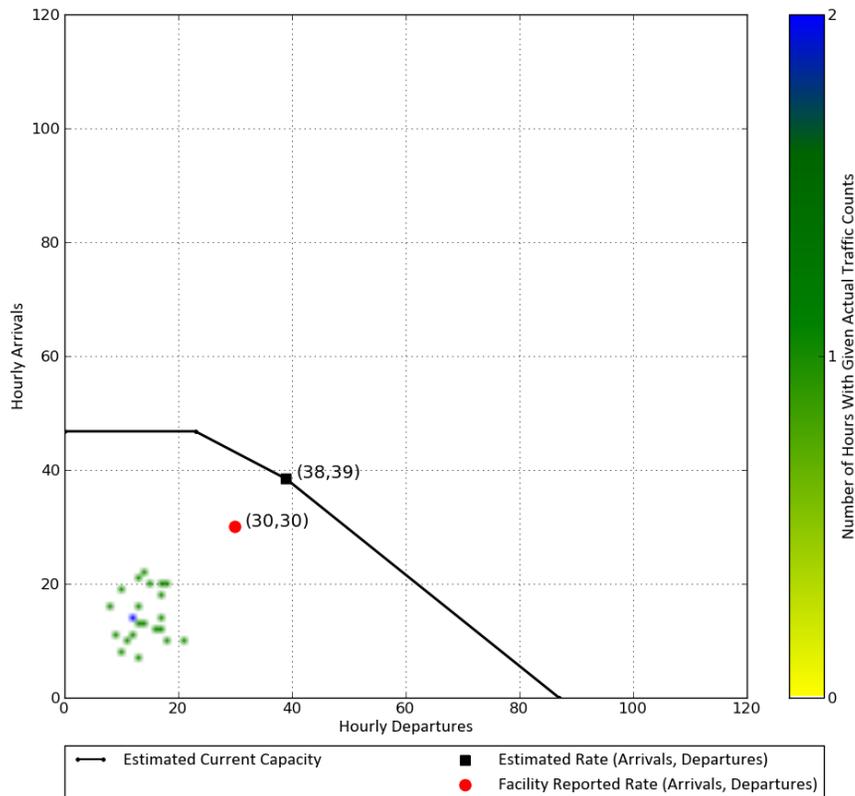
- The capacity rate range in Marginal conditions is currently 91-105 operations per hour.
- HNL operates in variations of this configuration approximately 82% of the time in Marginal weather conditions (totaling less than 1% annually).
- Departures on Runway 4R are limited to smaller aircraft that meet weight and procedural requirements.
- This profile does not include additional capacity available for seaplane operations.

# INSTRUMENT

# HONOLULU INTERNATIONAL

HNL Scenario	Arrival Runways	Departure Runways	Procedures	Hourly Rate	
				ATC Facility Reported	Model-Estimated
<b>CURRENT OPERATIONS</b>	4R, 8L	4R, 8R, 8L	Instrument Approaches, Radar Separation	60	77
<b>FUTURE IMPROVEMENTS</b>	4R, 8L	4R, 8R, 8L		N/A	77

## INSTRUMENT WEATHER CONDITIONS



- The capacity rate range in Instrument conditions is currently 60-77 operations per hour.
- HNL operates in variations of this configuration approximately 78% of the time in Instrument weather conditions (totaling less than 1% annually).
- Poor weather conditions significantly reduce the number of general aviation operations at HNL, as they must be properly equipped and certified for instrument operations.
- Departures on Runway 4R are limited to smaller aircraft that meet weight and procedural requirements.
- This profile does not include additional capacity available for seaplane operations.