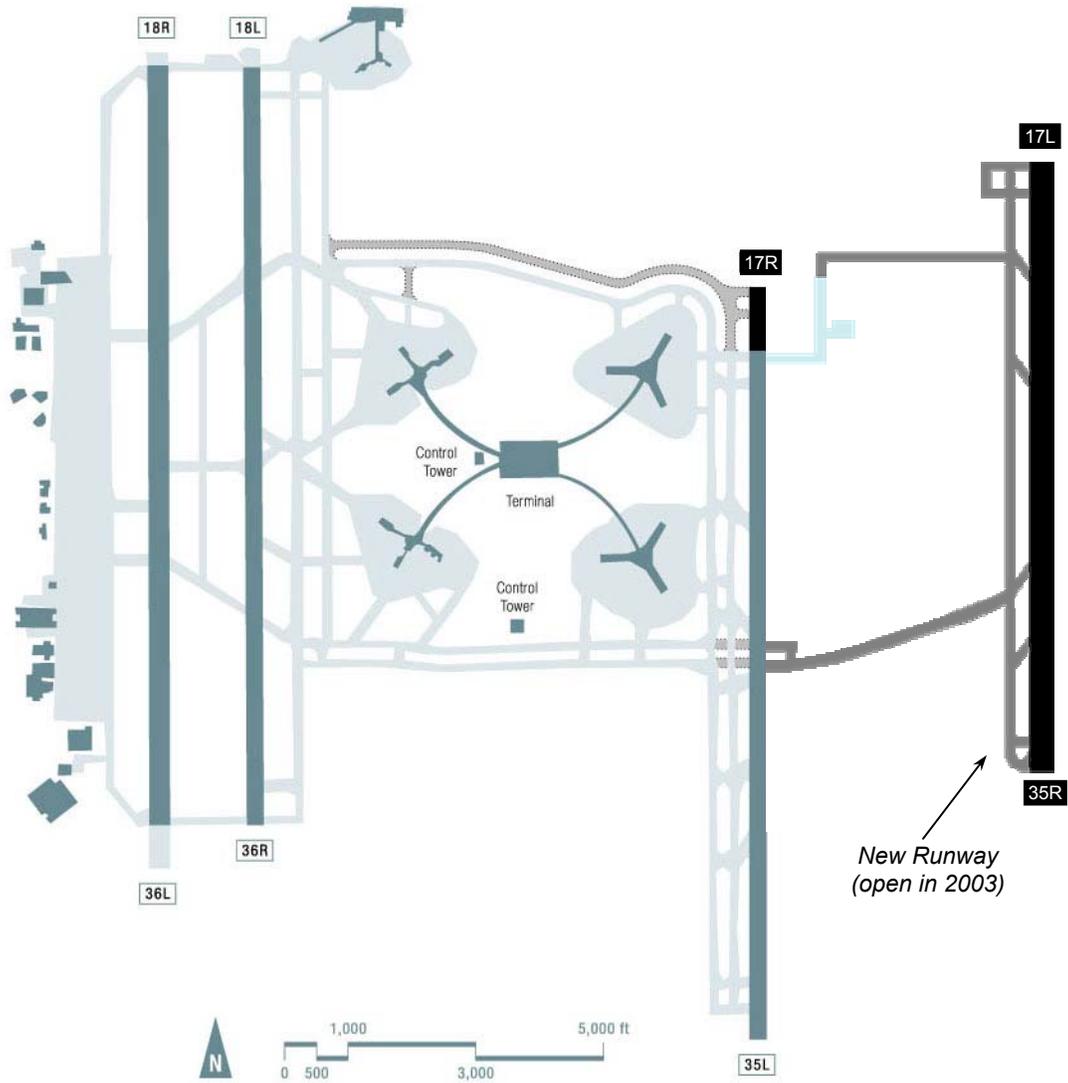


**ORLANDO – Orlando International (MCO)**



## ORLANDO – Orlando International Airport (MCO)

### Benchmark Results

- The capacity benchmark for Orlando International Airport today is 144-164 flights per hour (arrivals and departures) in Optimum weather, when visual approaches can be conducted.
- The benchmark rate decreases slightly to 132-144 flights per hour in Marginal conditions, and to 104-117 flights per hour in IFR conditions, for the most commonly used runway configuration in these conditions. Throughput may be less when ceiling and visibility are low, or if thunderstorms affect operations.
- These benchmarks represent balanced operations, with equal numbers of arrivals and departures per hour. Greater total throughput may be possible during arrival or departure peaks.
- A new runway opened at MCO in 2003. This runway will potentially allow triple simultaneous approaches, which would increase the benchmark capacity by 30-45 percent. However, triple simultaneous instrument approaches have not been implemented yet at MCO, and it is unlikely that such approaches would be implemented until required by traffic levels. The projected increase in the benchmark can occur *only* if ground infrastructure, environmental constraints, staffing and equipment requirements allow triple approaches at MCO. The increase in actual operations may be less if airspace restrictions prevent full use of the new runway.
- Other planned technological improvements at MCO would increase the benchmark rate by an additional 6-7 percentage points. This additional benefit derives from CEF, which will allow visual separations by suitably equipped aircraft in Marginal conditions, and from advanced wake vortex procedures for operations on Runways 18R and 18L. These improvements will also help to increase throughput during arrival and departure peaks.
- The following charts compare actual hourly traffic with the calculated capacity curves for MCO.

*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 airport or 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.***

## ORLANDO – Orlando International Airport (MCO)

<b>Weather</b>	<b>Scenario</b>	<b>Configuration</b>	<b>Procedures</b>	<b>Benchmark Rate (per hour)</b>
<b>Optimum Rate</b>  Ceiling and visibility above minima for visual approaches (2500 ft ceiling and 3 mi visibility)  <i>Occurrence: 91%</i>	<b>Today</b>	Arrivals on Runways 18R, 18L, 17R Departures on 18R, 18L, 17R <i>Frequency of Use: 63% in Optimum conditions</i>	Visual approaches, visual separation	<b>144-164</b>
	<b>New Runway (2003)</b>	Arrivals on Runways 18R, 18L, 17R, 17L Departures on 18R, 18L, 17R, 17L		<b>221</b>
	<b>Planned improvements (2013), including new runway</b>	Same		<b>221</b>
<b>Marginal Rate</b>  Below visual approach minima but better than instrument conditions  <i>Occurrence: 4%</i>	<b>Today</b>	Arrivals on Runways 18R, 17R Departures on 18L, 17R <i>Frequency of Use: 60% in Marginal conditions</i>	Instrument approaches, visual separation	<b>132-144</b>
	<b>New Runway (2003)</b>	Arrivals on Runways 18R, 17R, 17L Departures on 18L, 17R, 17L		<b>193</b>
	<b>Planned improvements (2013), including new runway</b>	Same	Visual approaches, visual separation	<b>204</b>
<b>IFR Rate</b>  Instrument conditions (ceiling < 1000 ft or visibility < 3.0 miles)  <i>Occurrence: 5%</i>	<b>Today</b>	Arrivals on Runways 18R, 17R Departures on 18L, 17R <i>Frequency of Use: 65% in IFR conditions</i>	Instrument approaches, radar separation	<b>104-117</b>
	<b>New Runway (2003)</b>	Arrivals on Runways 18R, 17R, 17L Departures on 18L, 17R, 17L		<b>167</b>
	<b>Planned improvements (2013), including new runway</b>	Same		<b>174</b>

**NOTE:** Data on frequency of occurrence of weather and runway configuration usage is based on FAA ASPM data for January 2000 to July 2002 (excluding 11-14 September 2001), 7 AM to 10 PM local time.

**Full operational use** of the new parallel runway will require digital controller displays (but not PRM) to enable triple simultaneous instrument approaches, and an airspace redesign to deliver aircraft efficiently to the approaches.

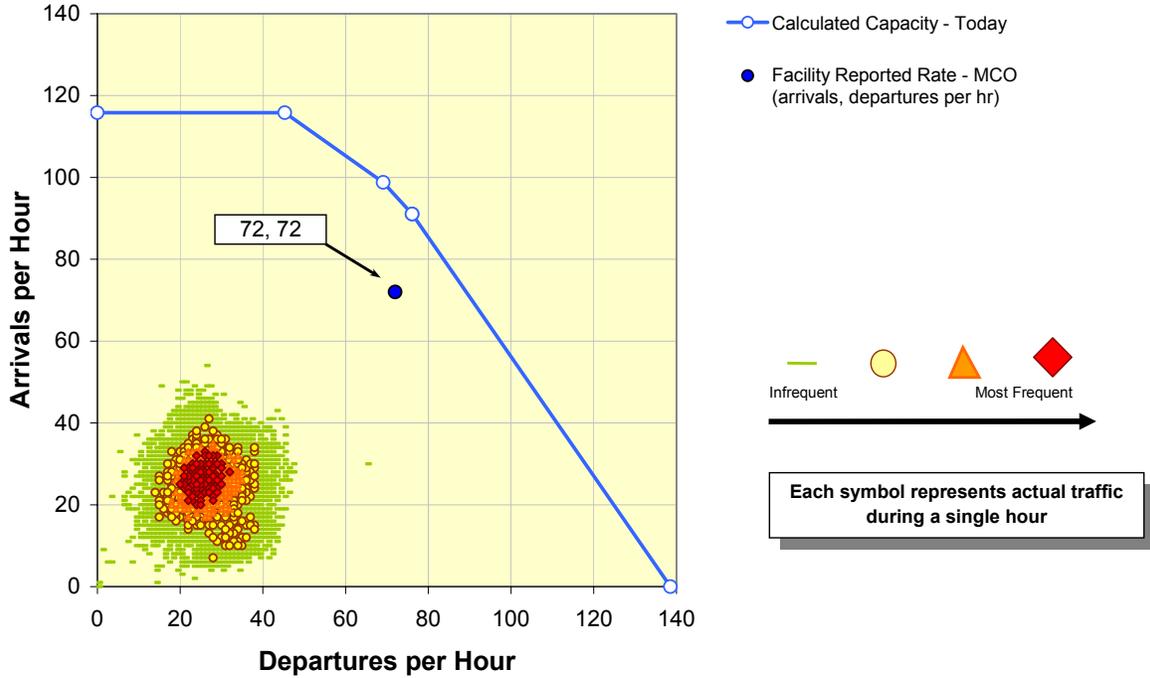
**Other Planned Improvements** at MCO include:

- CEFRR, for reduced in-trail separations between arrivals in Marginal conditions.
- Improved wake vortex procedures, for reduced separation between consecutive arrivals or consecutive departures to the close parallel runways 18R/36L and 18L/36R.

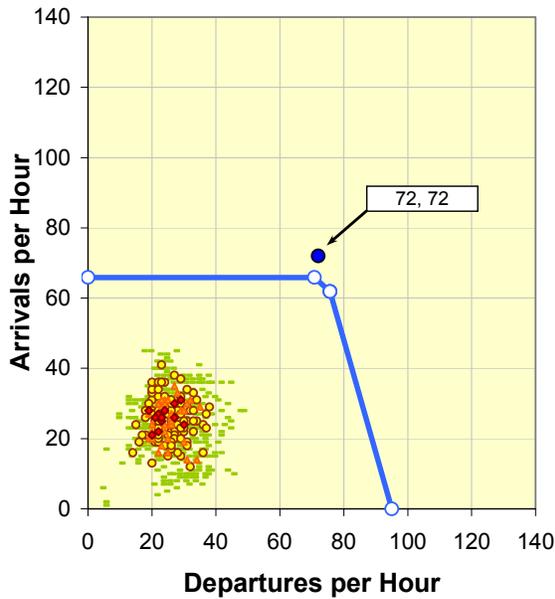
Additional information on these improvements may be found in the Introduction and Overview of this report, under “Assumptions.”

**Calculated Capacity (Today) and Actual Throughput**

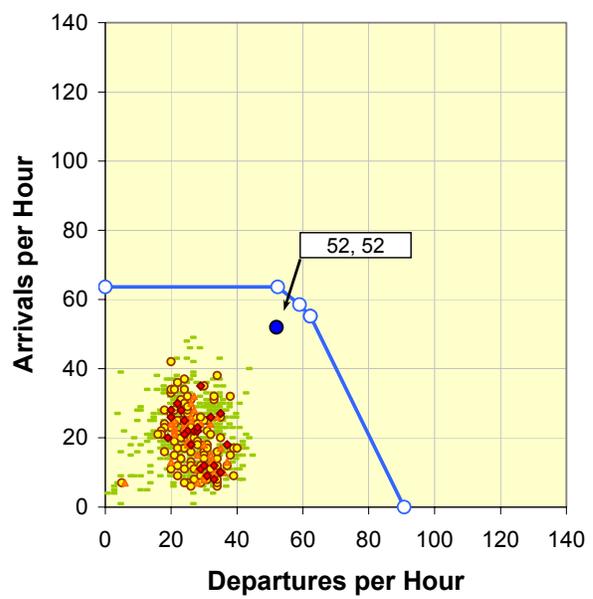
**Optimum Rate**



**Marginal Rate**



**IFR Rate**



Hourly traffic data was obtained from the FAA ASPM database for January 2000 to July 2002 (excluding 11-14 September 2001), 7 AM to 10 PM local time. Facility reported rates were provided by ATC personnel at MCO.