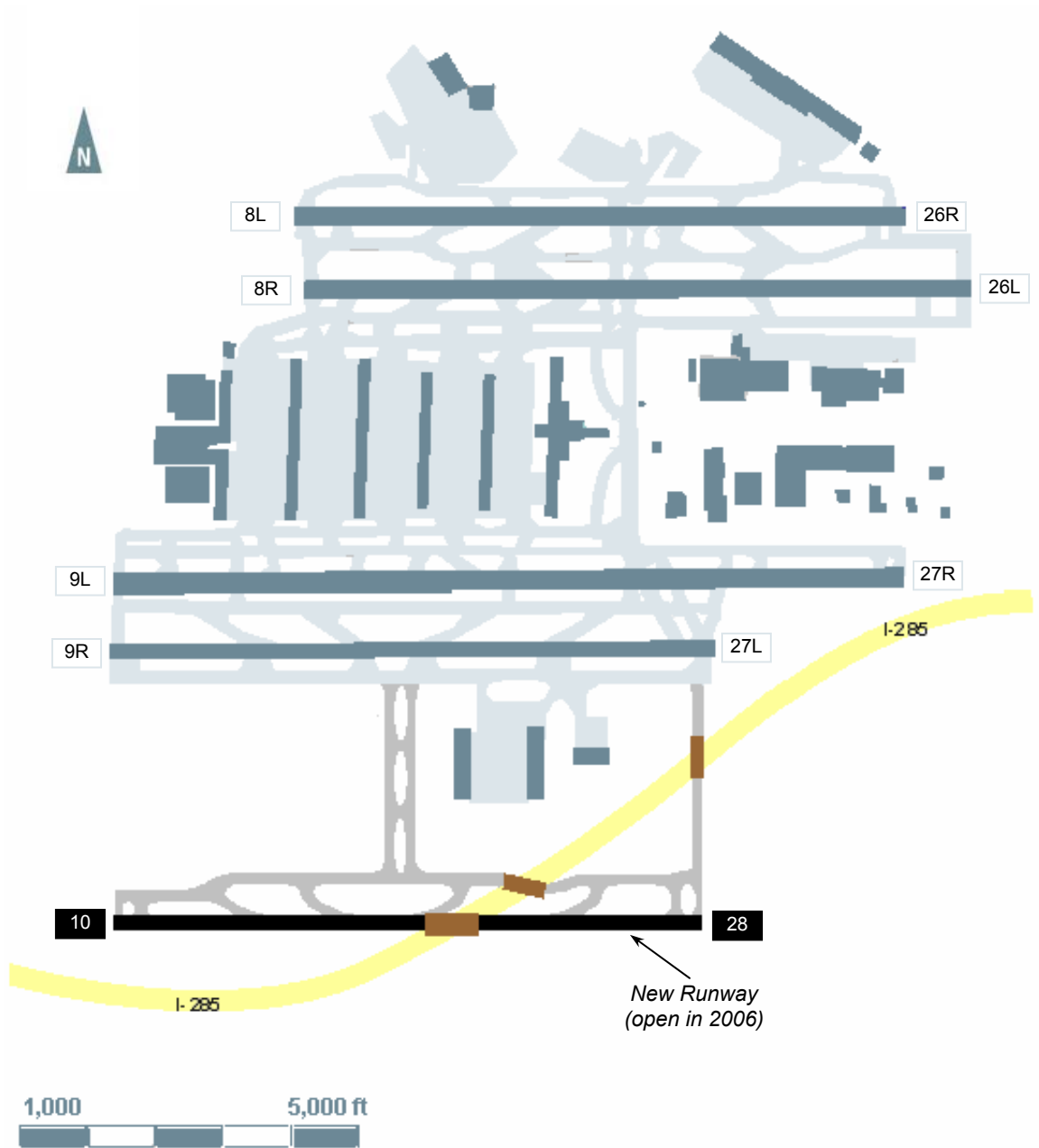


**ATLANTA – Hartsfield-Jackson Atlanta International (ATL)**



## ATLANTA – Hartsfield-Jackson Atlanta International Airport (ATL)

### Benchmark Results

- The capacity benchmark for Hartsfield-Jackson Atlanta International Airport today is 180-188 flights per hour (arrivals and departures) in Optimum weather, when visual approaches can be conducted.
- The benchmark decreases slightly, to 172-174 flights per hour in Marginal conditions, and to 158-162 flights per hour in IFR conditions, for the most commonly used runway configuration in these conditions. Additional operations may be possible under other conditions, such as additional arrivals on a departure runway. On the other hand, throughput may be less when ceiling and visibility are low, or if adverse winds affect aircraft performance.
- Note that if the facility reported rates are significantly unbalanced (i.e., unequal numbers of arrivals and departures), the benchmark rate will be unbalanced as well. The facility reported rates reflect current operations at the airport during a busy hour, but such unbalanced rates cannot be sustained for extended periods.
- A new runway, planned for completion in 2006, will allow triple simultaneous approaches and an additional departure stream, increasing the benchmark rate by 28-33 percent. This increase can occur *only* if ground infrastructure (including a PRM system), environmental constraints, and other operational factors allow the planned use of the new runway. The increase in actual operations may be less if airspace restrictions prevent full use of the new runway.
- Other planned technological improvements at ATL would increase the benchmark rate slightly in Optimum and Marginal conditions, but by up to 12 additional percentage points in IFR conditions, compared to today. The additional benefit in IFR conditions derives mainly from improved delivery accuracy that is assumed to result from advanced TMA and RNAV procedures.
- This increased delivery accuracy, together with the new runway, is also expected to increase throughput significantly during arrival peaks.
- In the following charts, please note that a number of hourly traffic points fall outside the calculated capacity curves at ATL. There are many possible reasons why this may occur without affecting operational safety. The departure runways at ATL are sometimes used for arrivals as well, increasing arrival throughput. Efficient aircraft sequencing or above-average pilot and controller performance can also contribute to higher throughputs. Also, actual weather conditions during the hour may have been better than the hourly readings in the database, allowing more efficient ATC procedures than were modeled.

*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.***

**ATLANTA – Hartsfield-Jackson Atlanta International Airport (ATL)**

| <b>Weather</b>   | <b>Scenario</b>  | <b>Configuration</b>  | <b>Procedures</b>  | <b>Benchmark Rate<br/>(per hour)</b> |
|--|--|---|--|--------------------------------------|
| <b>Optimum Rate</b><br><br>Ceiling and visibility above minima for visual approaches (3600 ft ceiling and 7 mi visibility)<br><br><i>Occurrence: 76%</i> | <b>Today</b>   | Arrivals on Runways 26R, 27L<br>Departures on 26L, 27R<br><i>Frequency of Use: 68% in Optimum conditions</i>  | Visual approaches, visual separation                     | <b>180-188</b>                       |
|  | <b>New Runway (2006)</b>                                 | Arrivals on Runways 26R, 27L, 28<br>Departures on 26L, 27R, 28  | Same, with triple simultaneous visual approaches         | <b>237</b>                           |
|  | <b>Planned improvements (2013), including new runway</b> | Same  |  | <b>243</b>                           |
| <b>Marginal Rate</b><br><br>Below visual approach minima but better than instrument conditions<br><br><i>Occurrence: 14%</i>                             | <b>Today</b>   | Arrivals on Runways 26R, 27L<br>Departures on 26L, 27R<br><i>Frequency of Use: 60% in Marginal conditions</i> | Instrument approaches, visual separation                 | <b>172-174</b>                       |
|  | <b>New Runway (2006)</b>                                 | Arrivals on Runways 26R, 27L, 28<br>Departures on 26L, 27R, 28  | Same, with triple simultaneous approaches                | <b>229</b>                           |
|  | <b>Planned improvements (2013), including new runway</b> | Same  | Triple simultaneous visual approaches, visual separation | <b>240</b>                           |
| <b>IFR Rate</b><br><br>Instrument conditions (ceiling < 1000 ft or visibility < 3.0 miles)<br><br><i>Occurrence: 10%</i>                                 | <b>Today</b>   | Arrivals on Runways 8L, 9R<br>Departures on 8R, 9L<br><i>Frequency of Use: 65% in IFR conditions</i>          | Instrument approaches, radar separation                  | <b>158-162</b>                       |
|  | <b>New Runway (2006)</b>                                 | Arrivals on Runways 8L, 9R, 10<br>Departures on 8R, 9L, 10  | Same, with triple simultaneous instrument approaches     | <b>202</b>                           |
|  | <b>Planned improvements (2013), including new runway</b> | Same  |  | <b>221</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 PRM, to enable triple simultaneous instrument approaches, and an airspace redesign to deliver aircraft efficiently to the approaches.

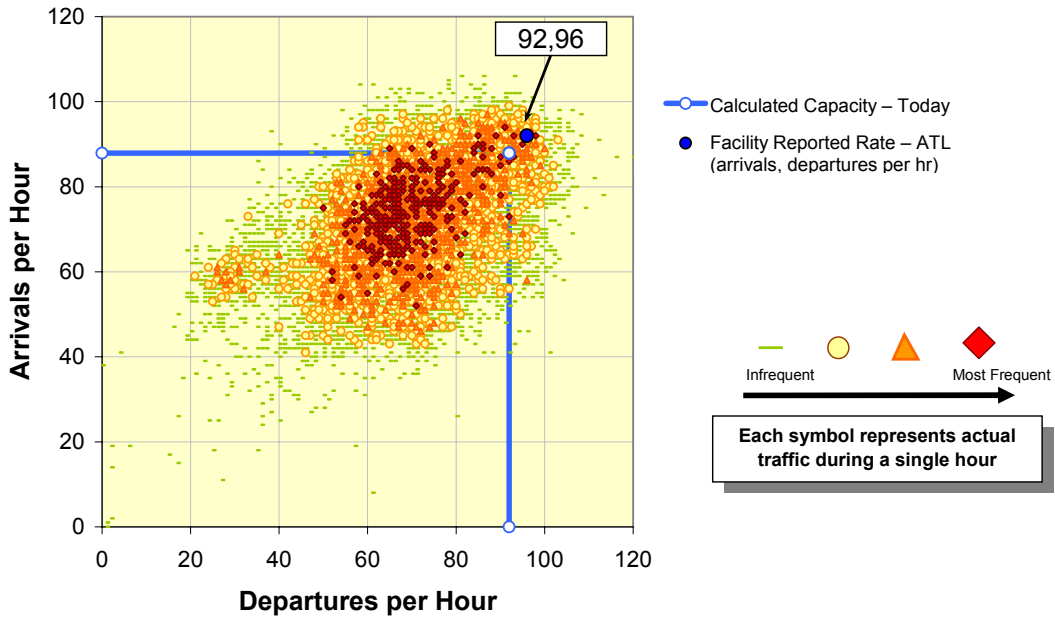
**Other planned Improvements** at ATL include:

- CEFR, for reduced in-trail separations between arrivals in Marginal conditions.
- Advanced TMA/RNAV, to improve delivery accuracy and help ATL consistently utilize available capacity.

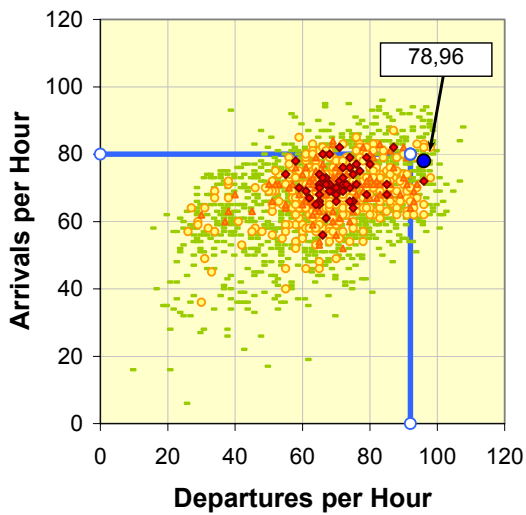
Additional information on these improvements may be found in the Introduction and Overview of this report, under “Assumptions.”

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

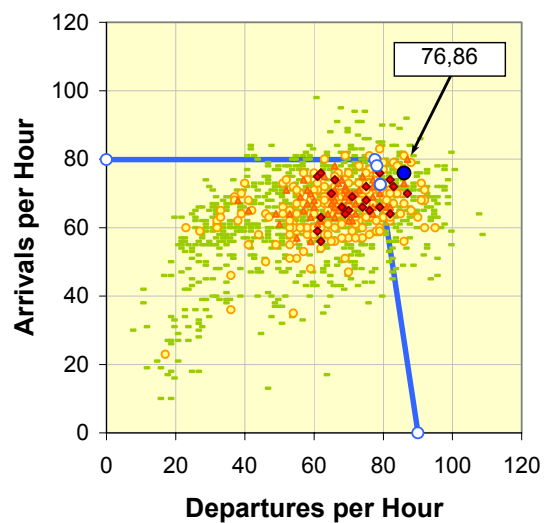
**Optimum Rate**



**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 coordinated with ATC personnel at ATL.