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 OAK. The actual hourly traffic data at OAK 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 OAK**

- No capacity improvements were modeled at OAK.

**DATA SOURCES**

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

**ANNUAL WEATHER AT OAK:**

- **Visual Conditions:** Ceiling and visibility allow for visual approaches: at least 2500 feet ceiling and 8 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
## Visual Weather Conditions

- The capacity rate range in Visual conditions is currently 105-138 operations per hour.
- OAK has two primary directional traffic flows. The airport operates in variations of this configuration approximately 94% of the time in Visual weather conditions (totaling 71% annually).
- Operations on Runways 27L and 27R are typically limited to general aviation and cargo aircraft due to length and environmental restrictions.
- On average, in Visual weather conditions, about one in every five operations is a general aviation aircraft operating under VFR.
- This capacity profile does not take into consideration operating configurations at nearby airports, such as SFO.

### Table: OAK Scenario

<table>
<thead>
<tr>
<th>OAK Scenario</th>
<th>Arrival Runways</th>
<th>Departure Runways</th>
<th>Procedures</th>
<th>Hourly Rate</th>
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<tbody>
<tr>
<td><strong>Future Improvements</strong></td>
<td>27L, 27R, 29</td>
<td>27L, 27R, 29</td>
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</tbody>
</table>

### Diagram: Estimated Current Capacity

- Estimated Current Capacity
- Estimated Rate (Arrivals, Departures)
- Facility Reported Rate (Arrivals, Departures)
The capacity rate range in Marginal conditions is currently 71-115 operations per hour.

OAK has two primary directional traffic flows. The airport operates in variations of this configuration approximately 88% of the time in Marginal weather conditions (totaling 14% annually).

Operations on Runways 27L and 27R are typically limited to general aviation and cargo aircraft due to length and environmental restrictions.

This capacity profile does not take into consideration operating configurations at nearby airports, such as SFO.
## Instrument Weather Conditions

- The capacity rate range in Instrument conditions is currently 67-75 operations per hour.
- OAK has two primary directional traffic flows. The airport operates in variations of this configuration approximately 93% of the time in Instrument weather conditions (totaling 8% annually).
- Operations on Runways 27L and 27R are typically limited to general aviation and cargo aircraft due to length and environmental restrictions.
- This capacity profile does not take into consideration operating configurations at nearby airports, such as SFO.

### Instrument Conditions

<table>
<thead>
<tr>
<th>OAK Scenario</th>
<th>Arrival Runways</th>
<th>Departure Runways</th>
<th>Procedures</th>
<th>Hourly Rate</th>
</tr>
</thead>
<tbody>
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### Model-Estimated vs ATC Reported Rate

<table>
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<tr>
<th>ATC Facility Reported</th>
<th>Model-Estimated</th>
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