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

- No capacity improvements were modeled at SNA.

**DATA SOURCES**

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

**ANNUAL WEATHER AT SNA:**

- **Visual Conditions:** Ceiling and visibility allow for visual approaches: at least 3000 feet ceiling and 5 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 49-68 operations per hour.
- This is SNA’s dominant configuration. The airport operates in variations of this configuration approximately 94% of the time in Visual weather conditions (totaling 77% annually).
- A Settlement Agreement with the surrounding community (amended in 2003) restricts the number of commercial operations and passengers SNA can accommodate. There are no limits to general aviation activity, however these operations must comply with county noise restrictions.
- SNA’s facility reported rate and actual hourly traffic reflect commercial and other IFR operations.
- On average, in Visual weather conditions, about two out of every five operations is a general aviation aircraft operating under VFR.
- Operations on Runway 19L are typically limited to a subset of smaller aircraft due to length and close proximity to Runway 19R.

<table>
<thead>
<tr>
<th>SNA Scenario</th>
<th>Arrival Runways</th>
<th>Departure Runways</th>
<th>Procedures</th>
<th>Hourly Rate</th>
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</thead>
<tbody>
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<td><strong>Future Improvements</strong></td>
<td>19R, 19L</td>
<td>19R, 19L</td>
<td></td>
<td>N/A, 68</td>
</tr>
</tbody>
</table>
The capacity rate range in Marginal conditions is currently 46-53 operations per hour.

SNA operates in variations of this configuration approximately 95% of the time in Marginal weather conditions (totaling 13% annually).

A Settlement Agreement with the surrounding community (amended in 2003) restricts the number of commercial operations and passengers SNA can accommodate. There are no limits to general aviation activity, however these operations must comply with county noise restrictions.

SNA's facility reported rate and actual hourly traffic reflect commercial and other IFR operations.

Departures on Runway 19L are typically limited to a subset of smaller aircraft due to length and close proximity to Runway 19R.
<table>
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<tr>
<th>SNA Scenario</th>
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<tbody>
<tr>
<td><strong>CURRENT OPERATIONS</strong></td>
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<td>19R</td>
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<tr>
<td><strong>FUTURE IMPROVEMENTS</strong></td>
<td>19R</td>
<td>19R</td>
<td></td>
<td>N/A</td>
</tr>
</tbody>
</table>

- The capacity rate range in Instrument conditions is currently 43-44 operations per hour.
- SNA operates in variations of this configuration more than 99% of the time in Instrument weather conditions (totaling 4% annually).
- A Settlement Agreement with the surrounding community (amended in 2003) restricts the number of commercial operations and passengers SNA can accommodate. There are no limits to general aviation activity, however these operations must comply with a county noise restrictions.
- SNA’s facility reported rate and actual hourly traffic reflect commercial and other IFR operations.
- Poor weather conditions significantly reduce the number of general aviation operations at SNA, as they must be properly equipped and certified for IFR operations.