Flight Path Analysis
Preliminary Findings Report

Presented to: Hollywood Burbank Airport Operations Committee
May 21, 2018
Presentation Agenda

– Opening Remarks
– Purpose of Analysis
  – To respond to community concerns about the recent increase in overflights as a result of the SoCal Metroplex project implementation
– Presentation of Findings
  – Community Input
  – Number of Operations over Time
  – Flight Corridor and Concentration
  – Frequency of Flights
  – Noise Monitor Levels
  – Roles and Responsibilities
### Community Members Summarized Comments

<table>
<thead>
<tr>
<th>Comment</th>
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<tbody>
<tr>
<td>Frequency of flights and flight track locations</td>
</tr>
<tr>
<td>Altitudes are very low</td>
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<tr>
<td>Concerned about impact on property values</td>
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<tr>
<td>Not just a Burbank issue, but also a Studio City issue</td>
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<tr>
<td>Concerned about air quality/health effects</td>
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<tr>
<td>Not able to enjoy outdoor space</td>
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<tr>
<td>Since March 2017 noise has gotten worse</td>
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<tr>
<td>Overnight flights have become an issue since Metroplex (March 2017)</td>
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<tr>
<td>Request that L&amp;B to come out to see aircraft events</td>
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<td>Concerned about continued growth at the airport</td>
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<td>Activity to/from Van Nuys Airport is part of the problem</td>
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<tr>
<td>Contacted FAA but received no answers/response</td>
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<td>Concern about the 90-day filing window against FAA decisions</td>
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<td>More concentration of departures over the same area</td>
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<td>Lack of Metroplex notices for areas other than Burbank</td>
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<tr>
<td>Request noise levels from noise monitors to be presented in number of events above a certain level</td>
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<tr>
<td>The mountains create a canyon effect with noise bouncing from side to side</td>
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<tr>
<td>Concerns about safety and allowable distances between departures</td>
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</tbody>
</table>
Community Input

– Emailed Snapshots of WebTrak
Community Input

– April 12, 2018 visit to Studio City
Community Input

– Drawing of Pre-Metroplex (pre-March 2017) Departure Path
Number of Operations over Time

– Total Monthly Operations


<table>
<thead>
<tr>
<th>Month</th>
<th>Air Carrier</th>
<th>Air Taxi</th>
<th>General Aviation</th>
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</thead>
<tbody>
<tr>
<td>Jan 08</td>
<td>5,500</td>
<td>1,500</td>
<td>2,000</td>
</tr>
<tr>
<td>Feb 08</td>
<td>5,000</td>
<td>1,000</td>
<td>1,500</td>
</tr>
<tr>
<td>Mar 08</td>
<td>4,500</td>
<td>900</td>
<td>1,000</td>
</tr>
<tr>
<td>Apr 08</td>
<td>4,000</td>
<td>800</td>
<td>900</td>
</tr>
<tr>
<td>May 08</td>
<td>3,500</td>
<td>700</td>
<td>800</td>
</tr>
<tr>
<td>Jun 08</td>
<td>3,000</td>
<td>600</td>
<td>700</td>
</tr>
<tr>
<td>Jul 08</td>
<td>2,500</td>
<td>500</td>
<td>600</td>
</tr>
<tr>
<td>Aug 08</td>
<td>2,000</td>
<td>400</td>
<td>500</td>
</tr>
<tr>
<td>Sep 08</td>
<td>1,500</td>
<td>300</td>
<td>400</td>
</tr>
<tr>
<td>Oct 08</td>
<td>1,000</td>
<td>200</td>
<td>300</td>
</tr>
<tr>
<td>Nov 08</td>
<td>500</td>
<td>100</td>
<td>200</td>
</tr>
<tr>
<td>Dec 08</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tbody>
</table>

**10-year peak:** July 2008 with 5,145 AC operations

**Metroplex:** March 2017 with 4,216 AC operations

**Recent peak:** August 2017 with 4,680 AC operations

**10-year low:** February 2015 with 2,900 AC operations
Flight Corridor and Concentration

– Hollywood Burbank Airport Area
Flight Corridor and Concentration

– Flight Procedure Charts – OROSZ TWO / SLAPP ONE / VVERA TWO (RNAV)

TAKEOFF MINIMUMS
Rwy 8: Standard with minimum climb of 420’ per NM to 2500.
Rwy 15: Standard with minimum climb of 340’ per NM to 2100.
Rwy 26: Standard with minimum climb of 380’ per NM to 4800.
Rwy 33: Standard with minimum climb of 460’ per NM to 4900.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION
TAKEOFF RUNWAYS 8, 15: Climbing right turn heading 210° or as assigned by ATC, expect vectors to cross TILLR at or above 8000, then on track 324° to cross OROSZ at or above 9000, thence. . . .
Flight Corridor and Concentration

– Flight Tracks
2nd Quarter 2008
Flight Corridor and Concentration

- Flight Tracks
  1st Quarter 2018
Flight Corridor and Concentration

– Flight Track Concentration
  2nd Quarter 2008
– Flight Track Concentration
1st Quarter 2018
Flight Track Concentration Changes from 2nd Quarter 2008 to 2nd Quarter 2013
Flight Concentration Changes

- Flight Track Concentration Changes from 2\textsuperscript{nd} Quarter 2013 to 4\textsuperscript{th} Quarter 2016
Flight Concentration Changes

- Flight Track Concentration Changes from 4th Quarter 2016 to 2nd Quarter 2017
- Pre/Post Metroplex
Flight Concentration Changes

- Flight Track Concentration Changes from 2nd Quarter 2017 to 1st Quarter 2018
Frequency of Flights

– Average Hourly Departures

Average Hourly Departures - Air Carrier (7am-12pm)
Frequency of Flights

– Average Hourly Departures

Average Hourly Departures - Air Carrier (12pm-5pm)
Frequency of Flights

– Average Hourly Departures

Average Hourly Departures - Air Carrier (5pm-10pm)

Hour of Day

- 5pm
- 6pm
- 7pm
- 8pm
- 9pm

Hourly Departures

- 2008
- 2009
- 2010
- 2011
- 2012
- 2013
- 2014
- 2015
- 2016
- 2017
Frequency of Flights

– Average Hourly Departures

Average Hourly Departures - Air Carrier (10pm-7am)
Noise Monitor Levels

- Noise Monitor Map
Noise Monitor Levels

- Noise Monitor Map
Roles and Responsibilities

– Federal Aviation Administration
  – Air Traffic Organization (ATO)
    – Is responsible for safe and efficient flight activity
    – Has sole authority over the controlling of aircraft in flight and on the ground
    – Assigns aircrafts to runways based on operational factors
    – Modifies and develops new procedures at airports to improve safety and efficiency of the National Airspace System (NAS)
  – Airports Division (AD)
    – Ensures that the NAS is safe, efficient, and environmentally responsible and meets the needs of the traveling public
    – Works with airports to ensure that they meet FAA safety guidelines, to develop plans for future growth, and to address environmental impacts.
    – Provides funding through entitlements and grants to assist airport to maintain and improve facilities
Roles and Responsibilities

– Hollywood Burbank Airport
  – Provides a safe, efficient, and financially sustainable facility for airlines, general aviation users, tenants and the traveling public
  – Strives to be a good neighbor to nearby communities by working with the FAA and aircraft operators
  – Addresses community concerns regarding airport facilities and airport operations
  – Complies with FAA safety and operational guidelines
  – Promotes continuing air service
  – Generates continuous economic benefits for the community at large
  – Does not have the authority to control aircraft operations or design arrival or departure routes
Roles and Responsibilities

– Airlines
  – Are responsible for the transport of people and cargo to and from an airport in a safe, comfortable, and financially profitable way.
  – Schedule their flights according to market demand and their business models as well as select the appropriate aircraft.
  – Airlines must comply with FAA air traffic control instructions and comply with airport voluntary noise abatement procedures when feasible.
Preliminary Conclusions

– Air Carrier operations have fluctuated over the past 10 years.
  – Depended on aviation market demand and not the SoCal Metroplex project implementation

– Departure flight track concentration shifted south during periods before and after the SoCal Metroplex implementation in March 2017

– Noise levels at monitors south of the airport increased due to an increase in airport operations. Not attributed to the SoCal Metroplex implementation

– The frequency of flights has remained consistent over the past 10 years. However, the frequency under the concentrated path has increased. The SoCal Metroplex implementation was not a factor
Thank You

–Questions?
Flight Corridor and Concentration

– Flight Tracks
2nd Quarter 2013
Flight Corridor and Concentration

– Flight Track Concentration
2nd Quarter 2013
Flight Corridor and Concentration

– Flight Tracks
  4th Quarter 2016
Flight Corridor and Concentration

- Flight Track Concentration
  4th Quarter 2016
Flight Corridor and Concentration

– Flight Tracks
2nd Quarter 2017
Flight Corridor and Concentration

- Flight Track Concentration 2nd Quarter 2017