


MEMORANDUM

DEPARTMENT OF AVIATION

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TO: DISTRIBUTION

FROM: GEORGE C. SIMS, PLANNER 

SUBJECT: APRIL THROUGH JUNE 2013 NOISE COMPLAINT REPORTS

DATE: JULY 22, 2013

Attached for your review are the Clark County Department of Aviation's (CCDOA) Monthly Noise Complaint Reports for April through June 2013. Please note the following airport abbreviations: **McCarran International Airport (LAS)**, **North Las Vegas Airport (VGT)**, and **Henderson Executive Airport (HND)**.

The following reports describe noise complaints and operational data regarding helicopter and fixed-wing aircraft operations at LAS, VGT, and HND. Aircraft noise complaints are received either through the CCDOA's Noise Hotline (261-3694), the Noise Office (261-5600), or calls forwarded from LAS's toll free number (1-800-261-5704). Nellis Air Force Base noise complaints are forwarded to the Nellis Public Affairs Office (652-2750), and noise complaints regarding aircraft operations from the Boulder City Airport are forwarded to the Boulder City Airport Coordinator (293-9405). Individuals who express concerns regarding aircraft operations originating from private facilities (i.e., Valley Hospital, the private helipad located near Las Vegas Blvd. and Larson Lane, etc. are asked to contact the individual property owner directly.

Exhibit 1 of each Monthly Noise Complaint Report illustrates the number of calls received by community as well as the number of individual callers or households. **Exhibit 2** illustrates the primary nature of the disturbance as identified by the caller. The second page of each monthly report (**Exhibit 3**) graphically illustrates all known origins of the calls received that month. **Exhibits 4 and 5** summarize arrival and departure runway use for large and non-large air carrier aircraft. Arrival and departure corridor use for helicopters are summarized in **Exhibit 6**. **Exhibit 7** provides a complete arrival fleet mix of all aircraft landing at LAS and highlights the two noisier aircraft types, the Boeing 727 series and Boeing 737-100 and 737-200 series. **Exhibit 8** illustrates the general departure direction for large aircraft.

Lastly, **Exhibit 9** summarizes how well large aircraft and helicopters adhered to the preferred, non-regulated departure corridors. Adherence to preferred departure corridors is voluntary, and neither Clark County nor the State of Nevada regulates aircraft in flight. The FAA, through the discretion of Congress, has sole authority over the safe and efficient utilization of the nation's navigable airspace. Therefore, local and state authorities cannot legally enforce the use of these corridors, or impose penalties to pilots who opt not to comply with preferred procedures. "Compliance gates" are located along historical/fly-quietly routes. If all aircraft flew with advanced navigational technologies and operated under Required Navigational Precision (RNP) procedures, then it could be expected that up to 95% of all aircraft would be within 0.3 nautical miles (NM) of a fly-over point. Therefore, 0.3 NM is the threshold for compliance for large air carrier aircraft. The compliance threshold for helicopters is 500 feet.

The following provides a synopsis of each monthly noise complaint report and additional noise-related issues addressed during the reporting period. Please refer to each noise complaint report for more detailed information.

Monthly Noise Complaint Summaries

April 2013: 59 total complaints - a 3% decrease from 2012 and an 84% increase from 2011. On average, each caller (or household) issued 2.3 calls. The most calls received from one household totaled 11.

Calls by Community - (Exhibits 1 and 3)

Majority (more than 50%): (Not applicable.)

Minority (between 10% and 50%): The **City of Henderson** community issued 19 calls (32%). This community is typically impacted by LAS aircraft departing to the east (from Runway 07R and Runway 07L), some helicopter operations, and operations at HND. 32% of the calls came from one household.

The **Sunrise Manor** community issued 19 calls (32%). This community is typically impacted by aircraft departing to the north (from Runway 01L and Runway 01R), and helicopter tour operations. 58% of the calls came from one household.

The **Lone Mountain** community issued 7 calls (12%). This community is typically impacted by aircraft departing to the west (from Runway 25R and Runway 25L). All the calls came from one household.

Repeat Caller Impact: Three households issued 41% of the total calls.

Calls by Operation - (Exhibit 2)

- LAS:** 49% of the total calls were due to **LAS** fixed-wing operations.
- 29% were due to departures to the west from Runways 25L and 25R (41% from one household).
- VGT:** 0% of the total calls were due to **VGT** fixed-wing operations.
- HND:** 24% of the total calls were due to **HND** fixed-wing operations.
- 43% from one household. All calls were tied to an airshow event at the airport.
- Helos:** 27% of the total calls were due to **helicopter** operations.

LAS Operations & Runway Use by Large Air Carriers - (Exhibit 4)

- Overall:** 422 daily *departures*¹ – an 8% decrease from 2012 and 10% decrease from 2011.
- 73% of departures were to the west, 16% north, 8% east, and 3% south.
- 473 daily *arrivals* – a 3% decrease from 2012 and 1% decrease from 2011.
- 77% of arrivals were from the east, 15% south, and 7% north.
- Daytime:** 345 daily *departures*² – a 10% decrease from 2012 and 14% decrease from 2011.
- 72% of departures were to the west, 16% north, 9% east, and 3% south.
- 417 daily *arrivals* – a 3% decrease from 2012 and no change from 2011.
- 77% of arrivals were from the east, 16% south, and 7% north.

¹ Note: Due to the location of the radar south of Sunset Road, and the angle of the radar signal to avoid ground clutter, some aircraft that depart to the north from LAS are not captured until well north of Tropicana Avenue. Therefore, the AirScene application, used to determine runway use and traffic counts, does not tag these operations as either occurring at LAS or as a departure. Thus, total departure counts may be less than what likely occurred.

² See footnote #1.

Nighttime: 77 daily *departures*³ – a 5% increase from 2012 and 10% increase from 2011.
▪ 82% of departures were to the west, 13% north, 3% south, and 2% east.
57 daily *arrivals* – a 7% decrease from 2012 and 2% decrease from 2011.
▪ 80% of arrivals were from the east, 12% from the north, and 8% from the south.

Daytime vs. Nighttime: Approximately 82% of all *departures* and 88% of all *arrivals* occurred during the daytime hours.

LAS Operations & Runway Use by **Non-Large Air Carriers** - (Exhibit 5)

Overall: 81 daily *departures*⁴ – a 2% increase from 2012 and 8% decrease from 2011.
▪ 62% of departures were to the south, 19% north, 13% west, and 6% east.
95 daily *arrivals* – a 3% increase from 2012 and 1% increase from 2011.
▪ 62% of arrivals were from the north, 21% south, 16% east, and 1% west.

Daytime: 73 daily *departures*⁵ – no change from 2012 and a 9% decrease from 2011.
▪ 61% of departures were to the south, 19% north, 13% west, and 7% east.
89 daily *arrivals* – a 3% increase from 2012 and 1% increase from 2011.
▪ 62% of arrivals were from the north, 21% south, 16% east, and 1% west.

Nighttime: 8 daily *departures*⁶ – a 23% increase from 2012 and 1% increase from 2011.
▪ 69% of departures were to the south, 15% west, 14% north, and 2% east.
6 daily *arrivals* – a 7% increase from 2012 and 7% increase from 2011.
▪ 76% of arrivals were from the north, 13% south, 10% east, and 1% west.

Daytime vs. Nighttime: Approximately 90% of all *departures* and 93% of all *arrivals* occurred during the daytime hours.

Operations by Corridor for **Helicopter Tours** - (Exhibit 6)

Tropicana: 125 daily *departures* - a 6% increase from 2012 and a 5% decrease from 2011.

Charleston: 125 daily *arrivals* - a 6% increase from 2012 and a 4% decrease from 2011.

Strip: 33 daily *touch and go's* - a 12% decrease from 2012 and a 6% decrease from 2011.

Daytime vs. Nighttime: Approximately 98% of all helicopter tour operations occurred during the daytime hours.

LAS Fleet Mix for All Aircraft Types - (Exhibit 7)

Heavies: **Very large** air carrier turbine-driven aircraft (those weighing 300,000 lbs. or more) accounted for 2% of the daily traffic.

Large: **Large** air carrier turbine-driven aircraft (those weighing more than 75,000 lbs. and less than 300,000 lbs.) accounted for 64% of the daily traffic.

³ See footnote #1.

⁴ See footnote #1.

⁵ See footnote #1.

⁶ See footnote #1.

Medium: *Medium* turbine-driven aircraft (those weighing more than 41,000 lbs. and less than 75,000 lbs.) accounted for 1% of the daily traffic.

Small: *Small* turbine-driven aircraft (those weighing 41,000 lbs. or less) accounted for 8% of the daily traffic.

Military: *Military* turbine-driven aircraft accounted for virtually 0% of the daily traffic.

Non-Jet: *Piston-driven* aircraft and unassigned aircraft types accounted for 4% of the daily traffic.

Heli: *Touring helicopters* accounted for 22% of the daily traffic.

Noisier Aircraft Types: The hush-kitted Boeing 727 aircraft and Boeing 737 (100 & 200 series) aircraft accounted for virtually zero operations.

LAS General Departure Direction for Large Aircraft - (Exhibit 8)

Primary: In 2013, 74% departed to the *west* (from LAS's primary departure runways). This figure was 64% in 2012 and 68% in 2011.

Secondary: In 2013, 3% departed to the *south* (from LAS's secondary departure runways). This figure was 11% in 2012 and 10% in 2011.

Alternate 1: In 2013, 16% departed to the *north* (from LAS's alternate departure runways). This figure was 16% in 2012 and 19% in 2011.

Alternate 2: In 2013, 8% departed to the *east* (from LAS's alternate departure runways). This figure was 9% in 2012 and 3% in 2011.

Gate Compliance for Large Aircraft and Helicopters - (Exhibit 9)

SVHS: In 2013, 96% of the large air carrier aircraft (excluding those destined to the Nevada National Security Site) that departed to the west from Runways 25L or 25R and made a left-hand turn were within 0.3 NM of *Sierra Vista High School* (SVHS). This figure was 94% in 2012 and 95% in 2011.

The SVHS "compliance gate" is located southwest of Warm Springs Rd. and Buffalo Dr., approximately 5 miles due west and 1.5 miles due south of the extended runway centerline of Runways 25L and 25R. This gate was established along an existing noise abatement flight track which requests pilots to proceed runway heading to 3 nautical miles from the Las Vegas very-high frequency omnidirectional range tactical air navigation (VORTAC) facility before turning left (or towards the south) - where large air carrier aircraft have historically been encouraged to operate. This noise abatement flight track avoids communities impacted by aircraft turning early along this corridor (like the Nevada Trails community) and aircraft turning late along this corridor (like the Rhodes Ranch community).

Peace: In 2013, 96% of the large air carrier aircraft (excluding those destined to the Nevada National Security Site) that departed to the west from Runways 25L or 25R and made a right-hand turn were within 0.3 NM of the intersection of *Peace Way & Summers Shade Street*. This figure was 95% in 2012 and 94% in 2011.

The Peace “compliance gate” is located northeast of Tropicana Ave. and I-215, approximately 6 miles due west and 2 miles due north of the extended runway centerline of Runways 25L and 25R. This gate was also established along an existing noise abatement flight track which requests pilots to proceed runway heading to 4 nautical miles from the Las Vegas VORTAC before turning right (or towards the north) - where large air carrier aircraft have historically been encouraged to operate. This noise abatement flight track avoids communities impacted by aircraft turning early along this corridor (like the Spanish Trail community) and aircraft turning late along this corridor (like the Summerlin South community).

Pebble: In 2013, 93% of the large air carrier aircraft (excluding those destined to the Nevada National Security Site) that departed to the south from Runways 19L or 19R were within 0.3 NM of the intersection of *Pebble Road & Arville Street*. This figure was 97% in 2012 and 96% in 2011.

The Pebble “compliance gate” is located southeast of Blue Diamond Rd. and Decatur Blvd., approximately 4 miles due south by southwest of the extended runway centerline of Runways 19L and 19R. This gate was also established along an existing noise abatement flight track which requests pilots to proceed runway heading to 3 nautical miles from the Las Vegas VORTAC before turning - where large air carrier aircraft have historically been encouraged to operate. This noise abatement flight track avoids communities impacted by aircraft turning early along this corridor (like the Warm Spring Estates community) and aircraft turning late along this corridor (like the Southern Highlands community).

UNLV: In 2013, 77% of the large air carrier aircraft that departed to the north from Runways 01L or 01R were within 0.3 NM of the *UNLV sports complex*. This figure was 83% in 2012 and 78% in 2011.

The UNLV “compliance gate” is located southeast of Flamingo Rd. and Paradise Rd., approximately 1 mile due north by northeast of the extended runway centerline of Runways 01L and 01R. This gate was also established along an existing noise abatement flight track which requests pilots to proceed runway heading to 2 nautical miles from the Las Vegas VORTAC before turning - where large air carrier aircraft have historically been encouraged to operate. This noise abatement flight track avoids communities impacted by aircraft turning early along this corridor, located due east and due west of UNLV.

Boulder: In 2013, 98% of the large air carrier aircraft that departed to the north from Runways 07L or 07R were within 0.3 NM of the extended runway centerline, near *Boulder Highway*. This figure was 97% in 2012 and 97% in 2011.

The Boulder Hwy. “compliance gate” is located southeast of Russell Rd. and I-93/95, approximately 7 miles due east of the extended runway centerline of Runways 07L and 07R. This gate was also established along an existing noise abatement flight track which requests pilots to proceed runway heading to 7 nautical miles from the Las Vegas VORTAC before turning - where large air carrier aircraft have historically been encouraged to operate. This noise abatement flight track avoids communities impacted by aircraft turning early along this corridor (like the Green Valley community, located in the City of Henderson, and older neighborhoods located north of Patrick Ln.).

Hualapai: In 2013, 93% of the large air carrier aircraft destined to the Nevada National Security Site that departed to the west from Runways 25L or 25R were within 0.3 NM of the extended runway centerline, near *Hualapai Way*. This figure was 89% in 2012 and not available 2011.

The Hualapai Way “compliance gate” is located northeast of Sunset Rd. and Hualapai Way, approximately 7 miles due west of the extended runway centerline of Runways 25L and 25R. This gate was established in May 2011 along a new noise abatement flight track which requests pilots of aircraft destined to the Nevada National Security Site to proceed runway heading to 7 nautical miles from the Las Vegas VORTAC before turning. This noise abatement flight track avoids communities impacted by aircraft turning early along this corridor (like the Spanish Trail community and the Summerlin South community).

Eastern: In 2013, 99% of the touring helicopters destined east of the Las Vegas Valley were within 500 feet of the intersection of *Tropicana Avenue & Eastern Avenue*. This figure was 98% in 2012 and 97% in 2011.

The Eastern Ave. “compliance gate” is located at Tropicana Ave. and Eastern Ave, approximately 2 miles due west of the their initial departure route. This gate was also established along an existing noise abatement flight track which requests helicopter pilots to proceed along the centerline of Tropicana Ave. until 10 nautical miles from the Las Vegas VORTAC before turning. This noise abatement flight track avoids communities impacted by helicopters located north and south of the corridor.

Hollywood: In 2013, 99% of the touring helicopters returning from areas east of the Las Vegas Valley were within 500 feet of the intersection of *Charleston Boulevard & Hollywood Boulevard*. This figure was 99% in 2012 and 96% in 2011.

The Hollywood Blvd. “compliance gate” is located at Charleston Blvd. and Los Feliz St., where their initial arrival route begins over the urbanized area of the Las Vegas Valley. This gate was also established along an existing noise abatement flight track which requests helicopter pilots to proceed along the centerline of Charleston Blvd. This noise abatement flight track avoids communities impacted by helicopters located north and south of the corridor.

Stratosphere: In 2013, 90% of the north-bound helicopters providing tours of the Las Vegas Strip were within 500 feet of the intersection of Oakey Boulevard & Las Vegas Boulevard, *northeast of the Stratosphere Tower*. This figure was 88% in 2012 and 77% in 2011.

The Stratosphere Tower “compliance gate” is located northeast of Sahara Avenue and Las Vegas Blvd., where an important turn in their fly-quietly routing structure begins near a historic portion of the urbanized area of the Las Vegas Valley.

Except for the repeat caller impact (three households accounted for 41% of the total calls), and fewer large air carrier departures to the south (from Runway 19L and 19R at LAS), the information denoted in this monthly summary represents **typical** residential complaints, flight activity, fleet mix, and gate compliance with the exception of the number of complaints tied to helicopter versus fixed-wing aircraft operations.

May 2013: 30 total complaints - a 23% decrease from 2012 and a 6% decrease from 2011. On average, each caller (or household) issued 1.5 calls. The most calls received from one household totaled 7.

Calls by Community - (Exhibits 1 and 3)

Majority (more than 50%): (Not applicable.)

Minority (between 10% and 50%): The **Sunrise Manor** community issued 11 calls (37%). (See April 2013 synopsis of typical aircraft overflight impacts on this community.)

The **Paradise and Winchester** communities issued 6 calls (20%). These communities are typically impacted by aircraft departing to the north (from Runway 01R and Runway 01L) and aircraft arriving from the north (into Runways 19R and 19L).

The **Spring Valley** community issued 4 calls (13%). This community is typically impacted by aircraft departing to the west (from Runway 25R and Runway 25L) and by aircraft departing to the north (from Runway 01R and Runway 01L) that turn left (to the west and south).

The **City of Henderson** community issued 3 calls (10%). (See April 2013 synopsis of typical aircraft overflight impacts on this community.)

The **City of Las Vegas** community issued 3 calls (10%). This community is typically impacted by aircraft departing to the west (from Runway 25R and Runway 25L).

The **Enterprise** community issued 3 calls (10%). This community is typically impacted by aircraft departing to the south (from Runway 19L and Runway 19R).

Repeat Caller Impact: One household issued 23% of the total calls.

Calls by Operation - (Exhibit 2)

LAS: 47% of the total calls received were due to **LAS** fixed-wing operations.

VGT: 0% of the total calls received were due to **VGT** fixed-wing operations.

HND: 0% of the total calls received were due to **HND** fixed-wing operations.

Helis: 53% of the total calls received were due to **helicopter** operations.

- 44% from one household.

LAS Operations & Runway Use by **Large Air Carriers** - (Exhibit 4)

Overall: 426 daily *departures*⁷ – a 3% decrease from 2012 and 12% decrease from 2011.

- 73% of departures were to the west, 15% north, 9% east, and 3% south.

477 daily *arrivals* – a 1% decrease from 2012 and 1% decrease from 2011.

- 77% of arrivals were from the east, 11% south, 10% north, and 2% from the west.

⁷ See footnote #1.

Daytime: 348 daily *departures*⁸ – a 7% decrease from 2012 and 16% decrease from 2011.
▪ 72% of departures were to the west, 16% north, 9% east, and 3% south.
419 daily *arrivals* – a 2% decrease from 2012 and a 2% decrease from 2011.
▪ 76% of arrivals were from the east, 13% south, 9% north, and 2% from the west.

Nighttime: 78 daily *departures*⁹ – an 18% increase from 2012 and 15% increase from 2011.
▪ 78% of departures were to the west, 10% north, 9% east, and 3% south.
58 daily *arrivals* – a 1% increase from 2012 and a 1% increase from 2011.
▪ 75% of arrivals were from the east, 13% north, 11% south, and 1% from the west.

Daytime vs. Nighttime: Approximately 82% of all *departures* and 88% of all *arrivals* occurred during the daytime hours.

LAS Operations & Runway Use by **Non-Large Air Carriers** - (Exhibit 5)

Overall: 88 daily *departures*¹⁰ – a 3% decrease from 2012 and 19% decrease from 2011.
▪ 57% of departures were to the south, 18% west, 17% north, and 8% east.
101 daily *arrivals* – a 6% decrease from 2012 and 7% decrease from 2011.
▪ 65% of arrivals were from the north, 17% south, 16% east, and 2% west.

Daytime: 77 daily *departures*¹¹ – a 6% decrease from 2012 and a 22 decrease from 2011.
▪ 56% of departures were to the south, 18% north, 18% west, and 8% east.
95 daily *arrivals* – a 6% decrease from 2012 and a 6% decrease from 2011.
▪ 64% of arrivals were from the north, 17% south, 16% east, and 3% west.

Nighttime: 10 daily *departures*¹² – a 34% increase from 2012 and a 14% increase from 2011.
▪ 62% of departures were to the south, 23% west, 8% east, and 7% north.
6 daily *arrivals* – a 6% decrease from 2012 and a 20% decrease from 2011.
▪ 74% of arrivals were from the north, 16% south, 8% east, and 2% west.

Daytime vs. Nighttime: Approximately 88% of all *departures* and 94% of all *arrivals* occurred during the daytime hours.

Operations by Corridor for **Helicopter Tours** - (Exhibit 6)

Tropicana: 134 daily *departures* – a 20% increase from 2012 and a 9% increase from 2011.

Charleston: 134 daily *arrivals* - a 19% increase from 2012 and a 10% increase from 2011.

Strip: 44 daily *touch and go's* - a 5% decrease from 2012 and a 4% increase from 2011.

Daytime vs. Nighttime: Approximately 95% of all helicopter tour operations occurred during the daytime hours.

⁸ See footnote #1.

⁹ See footnote #1.

¹⁰ See footnote #1.

¹¹ See footnote #1.

¹² See footnote #1.

LAS Fleet Mix for All Aircraft Types - (Exhibit 7)

- Heavies:** *Very large* air carrier turbine-driven aircraft (those weighing 300,000 lbs. or more) accounted for 1% of the daily traffic.
- Large:** *Large* air carrier turbine-driven aircraft (those weighing more than 75,000 lbs. and less than 300,000 lbs.) accounted for 62% of the daily traffic.
- Medium:** *Medium* turbine-driven aircraft (those weighing more than 41,000 lbs. and less than 75,000 lbs.) accounted for 1% of the daily traffic.
- Small:** *Small* turbine-driven aircraft (those weighing 41,000 lbs. or less) accounted for 9% of the daily traffic.
- Military:** *Military* turbine-driven aircraft accounted for virtually 0% of the daily traffic.
- Non-Jet:** *Piston-driven* aircraft and unassigned aircraft types accounted for 4% of the daily traffic.
- Heli:** *Touring helicopters* accounted for 24% of the daily traffic.
- Noisier Aircraft Types:** The hush-kitted Boeing 727 aircraft and Boeing 737 (100 & 200 series) aircraft accounted for virtually zero operations per day.

LAS General Departure Direction for Large Aircraft - (Exhibit 8)

- Primary:** In 2013, 73% departed to the *west* (from LAS's primary departure runways). This figure was 55% in 2012 and 83% in 2011.
- Secondary:** In 2013, 3% departed to the *south* (from LAS's secondary departure runways). This figure was 9% in 2012 and 4% in 2011.
- Alternate 1:** In 2013, 15% departed to the *north* (from LAS's alternate departure runways). This figure was 21% in 2012 and 11% in 2011.
- Alternate 2:** In 2013, 9% departed to the *east* (from LAS's alternate departure runways). This figure was 14% in 2012 and 3% in 2011.

Gate Compliance for Large Aircraft and Helicopters - (Exhibit 9)

- SVHS:** In 2013, 96% of the large air carrier aircraft (excluding those destined to the Nevada National Security Site) that departed to the west from Runways 25L or 25R and made a left-hand turn were within 0.3 NM of *Sierra Vista High School* (SVHS). This figure was 95% in 2012 and 94% in 2011. (See April 2013 synopsis for specific location of the SVHS gate.)
- Peace:** In 2013, 95% of the large air carrier aircraft (excluding those destined to the Nevada National Security Site) that departed to the west from Runways 25L or 25R and made a right-hand turn were within 0.3 NM of the intersection of *Peace Way & Summers Shade Street*. This figure was 94% in 2012 and 94% in 2011. (See April 2013 synopsis for specific location of the Peace gate.)

- Pebble:** In 2013, 90% of the large air carrier aircraft (excluding those destined to the Nevada National Security Site) that departed to the south from Runways 19L or 19R were within 0.3 NM of the intersection of **Pebble Road & Arville Street**. This figure was 97% in 2012 and 94% in 2011. (See April 2013 synopsis for specific location of the Pebble gate.)
- UNLV:** In 2013, 78% of the large air carrier aircraft that departed to the north from Runways 01L or 01R were within 0.3 NM of the **UNLV sports complex**. This figure was 84% in 2012 and 77% in 2011. (See April 2013 synopsis for specific location of the UNLV gate.)
- Boulder:** In 2013, 98% of the large air carrier aircraft that departed to the north from Runways 07L or 07R were within 0.3 NM of the extended runway centerline, near **Boulder Highway**. This figure was 97% in 2012 and 98% in 2011. (See April 2013 synopsis for specific location of the Boulder Hwy. gate.)
- Hualapai:** In 2013, 97% of the large air carrier aircraft destined to the Nevada National Security Site that departed to the west from Runways 25L or 25R were within 0.3 NM of the extended runway centerline, near **Hualapai Way**. This figure was 91% in 2012 and not available in 2011. (See April 2013 synopsis for specific location of the Hualapai gate.)
- Eastern:** In 2013, 99% of the touring helicopters destined east of the Las Vegas Valley were within 500 feet of the intersection of **Tropicana Avenue & Eastern Avenue**. This figure was 98% in 2012 and 97% in 2011. (See April 2013 synopsis for specific location of the Eastern gate.)
- Hollywood:** In 2013, 99% of the touring helicopters returning from areas east of the Las Vegas Valley were within 500 feet of the intersection of **Charleston Boulevard & Hollywood Boulevard**. This figure was 99% in 2012 and 95% in 2011. (See April 2013 synopsis for specific location of the Hollywood gate.)
- Stratosphere:** In 2013, 80% of the north-bound helicopters providing tours of the Las Vegas Strip were within 500 feet of the intersection of Oakey Boulevard & Las Vegas Boulevard, **northeast of the Stratosphere Tower**. This figure was 72% in 2012 and 72% in 2011. (See April 2013 synopsis for specific location of the Stratosphere gate.)

Except for the repeat caller impact (one household accounted for 23% of the total calls), the information denoted in this monthly summary represents **typical** residential complaints, flight activity, fleet mix, and gate compliance with the exception of the number of complaints tied to helicopter versus fixed-wing aircraft operations.

June 2013: 7 total complaints – a 61% decrease from 2012 and a 61% decrease from 2011. On average, each caller (or household) issued 1.2 calls. The most calls received from one household totaled 2.

Calls by Community - (Exhibits 1 and 3)

Majority (more than 50%): (Not applicable.)

Minority (between 10% and 50%): The **Spring Valley** community issued 2 calls (29%). (See May 2013 synopsis of typical aircraft overflight impacts on this community.)

The **Sunrise Manor** community issued 2 calls (29%). (See April 2013 synopsis of typical aircraft overflight impacts on this community.)

The **City of Henderson** community issued 2 calls (28%). (See April 2013 synopsis of typical aircraft overflight impacts on this community.)

The **City of Las Vegas** community issued 1 call (14%). (See May 2013 synopsis of typical aircraft overflight impacts on this community.)

Repeat Caller Impact: (Not applicable.)

Calls by Operation - (Exhibit 2)

- LAS:** 43% of the total calls received were due to **LAS** fixed-wing operations.
- 29% were due to departures to the west from Runways 25L and 25R.
- VGT:** 0% of the total calls received were due to **VGT** fixed-wing operations.
- HND:** 14% of the total calls received were due to **HND** fixed-wing operations.
- Helis:** 43% of the total calls received were due to **helicopter** operations.

LAS Operations & Runway Use by **Large Air Carriers** - (Exhibits 4)

- Overall:** 431 daily *departures*¹³ – a 6% decrease from 2012 and a 13% decrease from 2011.
- 82% of departures were to the west, 13% east, 3% south, and 2% north.
- 474 daily *arrivals* – a 2% decrease from 2012 and 4% decrease from 2011.
- 77% of arrivals were from the east, 16% north, 5% west and 2% south.
- Daytime:** 346 daily *departures*¹⁴ – an 8% decrease from 2012 and 17% decrease from 2011.
- 79% of departures were to the west, 15% east, 4% south, and 2% north.
- 407 daily *arrivals* – a 3% decrease from 2012 and 5% decrease from 2010.
- 76% of arrivals were from the east, 16% north, 6% west, and 2% south.
- Nighttime:** 85 daily *departures*¹⁵ – a 7% increase from 2012 and 10% increase from 2011.
- 96% of departures were to the west, 2% south, 1% north, and 1% east.
- 67 daily *arrivals* – a 5% increase from 2012 and 5% increase from 2011.
- 87% of arrivals were from the east, and 13% from the north.

Daytime vs. Nighttime: Approximately 80% of all *departures* and 86% of all *arrivals* occurred during the daytime hours.

LAS Operations & Runway Use by **Non-Large Air Carriers** - (Exhibit 5)

- Overall:** 69 daily *departures*¹⁶ – a 10% decrease from 2012 and a 24% decrease from 2011.
- 62% of departures were to the south, 22% west, 14% east, and 2% north.
- 76 daily *arrivals* – a 17% decrease from 2012 and a 19% decrease from 2011.
- 77% of arrivals were from the north, 13% east, 8% west, and 2% south.

¹³ See footnote #1.

¹⁴ See footnote #1.

¹⁵ See footnote #1.

¹⁶ See footnote #1.

Daytime: 60 daily *departures*¹⁷ – a 13% decrease from 2012 and a 26% decrease from 2011.
▪ 61% of departures were to the south, 21% west, 16% east, and 2% north.
70 daily *arrivals* – an 18% decrease from 2012 and a 20% decrease from 2011.
▪ 77% of arrivals were from the north, 12% east, 9% west, and 2% south.

Nighttime: 9 daily *departures*¹⁸ – an 11% increase from 2012 and a 2% decrease from 2011.
▪ 71% of departures were to the south, 27% west, 2% east, and 1% north.
6 daily *arrivals* – a 5% increase from 2012 and an 11% decrease from 2011.
▪ 77% of arrivals were from the north, 16% east, 4% south, and 3% west.

Daytime vs. Nighttime: Approximately 87% of all *departures* and 92% of all *arrivals* occurred during the daytime hours.

Operations by Corridor for **Helicopter Tours** - (Exhibit 6)

Tropicana: 120 daily *departures* – a 7% increase from 2012 and a 7% decrease from 2011.

Charleston: 120 daily *arrivals* - an 8% increase from 2012 and a 6% decrease from 2011.

Strip: 55 daily *touch and go's* - a 9% increase from 2012 and a 17% increase from 2011.

Daytime vs. Nighttime: Approximately 91% of all helicopter tour operations occurred during the daytime hours.

LAS Fleet Mix for All Aircraft Types - (Exhibit 7)

Heavies: **Very large** air carrier turbine-driven aircraft (those weighing 300,000 lbs. or more) accounted for 1% of the daily traffic.

Large: **Large** air carrier turbine-driven aircraft (those weighing more than 75,000 lbs. and less than 300,000 lbs.) accounted for 64% of the daily traffic.

Medium: **Medium** turbine-driven aircraft (those weighing more than 41,000 lbs. and less than 75,000 lbs.) accounted for 1% of the daily traffic.

Small: **Small** turbine-driven aircraft (those weighing 41,000 lbs. or less) accounted for 6% of the daily traffic.

Military: **Military** turbine-driven aircraft accounted for virtually 0% of the daily traffic.

Non-Jet: **Piston-driven** aircraft and unassigned aircraft types accounted for 3% of the daily traffic.

Heli: **Touring helicopters** accounted for 24% of the daily traffic.

Noisier Aircraft Types: The hush-kitted Boeing 727 aircraft and Boeing 737 (100 & 200 series) aircraft accounted for virtually zero operations per day.

¹⁷ See footnote #1.

¹⁸ See footnote #1.

LAS General Departure Direction for Large Aircraft - (Exhibit 8)

- Primary:** In 2013, 82% departed to the **west** (from LAS's primary departure runways). This figure was 65% in 2012 and 80% in 2011.
- Secondary:** In 2013, 3% departed to the **south** (from LAS's secondary departure runways). This figure was 8% in 2012 and 5% in 2011.
- Alternate 1:** In 2013, 2% departed to the **north** (from LAS's alternate departure runways). This figure was 6% in 2012 and 3% in 2010.
- Alternate 2:** In 2013, 13% departed to the **east** (from LAS's alternate departure runways). This figure was 21% in 2012 and 12% in 2011. Temperatures in excess of 100 degrees on 22 of the 30 days resulted in increased departures to the east.

Gate Compliance for Large Aircraft and Helicopters - (Exhibit 9)

- SVHS:** In 2013, 96% of the large air carrier aircraft (excluding those destined to the Nevada National Security Site) that departed to the west from Runways 25L or 25R and made a left-hand turn were within 0.3 NM of **Sierra Vista High School** (SVHS). This figure was 95% in 2012 and 94% in 2012. (See April 2013 synopsis for specific location of the SVHS gate.)
- Peace:** In 2013, 95% of the large air carrier aircraft (excluding those destined to the Nevada National Security Site) that departed to the west from Runways 25L or 25R and made a right-hand turn were within 0.3 NM of the intersection of **Peace Way & Summers Shade Street**. This figure was 94% in 2012 and 93% in 2011. (See April 2013 synopsis for specific location of the Peace gate.)
- Pebble:** In 2013, 99% of the large air carrier aircraft (excluding those destined to the Nevada National Security Site) that departed to the south from Runways 19L or 19R were within 0.3 NM of the intersection of **Pebble Road & Arville Street**. This figure was 96% in 2012 and 96% in 2011. (See April 2013 synopsis for specific location of the Pebble gate.)
- UNLV:** In 2013, 81% of the large air carrier aircraft that departed to the north from Runways 01L or 01R were within 0.3 NM of the **UNLV sports complex**. This figure was 82% in 2012 and 80% in 2011. (See April 2013 synopsis for specific location of the UNLV gate.)
- Boulder:** In 2013, 97% of the large air carrier aircraft that departed to the north from Runways 07L or 07R were within 0.3 NM of the extended runway centerline, near **Boulder Highway**. This figure was 97% in 2012 and 98% in 2011. (See April 2013 synopsis for specific location of the Boulder Hwy. gate.)
- Hualapai:** In 2013, 95% of the large air carrier aircraft destined to the Nevada National Security Site that departed to the west from Runways 25L or 25R were within 0.3 NM of the extended runway centerline, near **Hualapai Way**. This figure was 94% in 2012 and not available in 2011. (See April 2013 synopsis for specific location of the Hualapai gate.)

Eastern: In 2013, 99% of the touring helicopters destined east of the Las Vegas Valley were within 500 feet of the intersection of *Tropicana Avenue & Eastern Avenue*. This figure was 98% in 2012 and 96% in 2011. (See April 2013 synopsis for specific location of the Eastern gate.)

Hollywood: In 2013, 99% of the touring helicopters returning from areas east of the Las Vegas Valley were within 500 feet of the intersection of *Charleston Boulevard & Hollywood Boulevard*. This figure was 99% in 2012 and 97% in 2011. (See April 2013 synopsis for specific location of the Hollywood gate.)

Stratosphere: In 2013, 79% of the north-bound helicopters providing tours of the Las Vegas Strip were within 500 feet of the intersection of Oakey Boulevard & Las Vegas Boulevard, *northeast of the Stratosphere Tower*. This figure was 70% in 2012 and 77% in 2011. (See April 2013 synopsis for specific location of the Stratosphere gate.)

The information denoted in this monthly summary represents **typical** residential complaints, flight activity, fleet mix, and gate compliance with the exception of the number of complaints tied to helicopter versus fixed-wing aircraft operations.

Other Notable Issues

Home Visit: On April 8, 2013, DOA staff responded to a residential request to observe helicopter tour operations centered on the return route of the tour, along Charleston Blvd near the intersection of Hollywood Blvd. Helicopters are closely monitored for gate compliance and typically successful in flying westbound along the centermost portion of Charleston Blvd, to mitigate noise. After discussing the details of tour operations and listening to feedback from residents, DOA staff created additional gates at reduced horizontal width to further analyze the success of the route.

New Director of Aviation: On June 3, 2013, Randall Walker ended his tenure as Director of Aviation, and is succeeded by Rosemary A. Vassiliadis. She had previously served as Deputy Director of Aviation since December 1997. She oversees all operations at McCarran International Airport in Las Vegas, as well as general aviation airports in North Las Vegas, Henderson, Jean and Overton, Nevada. Vassiliadis is the eleventh person to lead Clark County's aviation system since McCarran was established in 1948, and is the first woman to serve as Director. McCarran annually ranks among the world's busiest airports, serving more than 41 million passengers in 2012. Under Vassiliadis' leadership, the airport has developed an industry-leading security program while maintaining a strong commitment to world-class customer service. Vassiliadis manages the work of nearly 1,500 employees, ensuring that the airport system's operational plans are efficiently and effectively implemented.

Helicopter Operator Users Meeting: On June 20, 2013, DOA met with FAA, local helicopter tour operators, and Las Vegas Metropolitan Police to discuss noise complaints tied to helicopter operations, route compliance, and operational growth. Attendees also discussed the successful use of a modified route to accommodate helicopter flights to and from the Las Vegas Motor Speedway, for the Electric Daisy Carnival concert event. Helicopters maintained a high rate of route compliance resulting in zero noise complaints tied to this route.

Electric Daisy Carnival: On June 21 thru 23, 2013, this concert event was at the Las Vegas Motor Speedway, with a total attendance in excess of 300,000 people. Total revenue for this concert exceeded \$200 million for Clark County. Helicopter tour operators provided an estimated 250 passenger flights to and from the event over the three day period, resulting in zero noise complaint issued.

Safety and Security Threats: Any threats to DOA staff or an aircraft in flight are taken seriously, and such threats will be forwarded to the appropriate law enforcement agencies.

GCS:jj

Attachments

Airport Noise Report

July 22, 2013

Page 16 of 31

Distribution: Commissioner Brager,
Commissioner Sisolak, Chair
Commissioner Collins
Commissioner Weekly
Rosemary Vassiliadis
Donald G. Burnette
Ralph LePore
Harry Waters
Teresa Motley
Cecil Johnson
Dan Kezar
Linda Healey
Tucker Field
Maureen Merry-Lamoureux
Tina Frias

Commissioner Giunchigliani
Commissioner Brown, Vice-Chair
Commissioner Scow
Joe Kubacki
E. Lee Thomson
Sam Ingalls
Chris Jones
Barbara Bolton
Jeff Jacquart
Charlie Hall
Ben Czyzewski
Dennis Anderson
Tom Peterson
Mark Silverstein
Donna Bergstrom

Stephen J. Lloyd (FAA TRACON)
Jim Borgan (FAA ATC)
Jon Holman (FAA ATC)
Charlie Halterman (HND Tower)
Reid Walburg (FAA FSDO)
Bristol Ellington (COH)
Josh Reid (COH)
Elizabeth Fretwell (CLV)
Vicki Mayes (CBC)
Mayor Carolyn Goodman (CLV)
Councilman Bob Beers (CLV)
Councilman Bob Coffin (CLV)
Councilwoman L. Tarkanian (CLV)
Mayor Pro Tem S. Anthony (CLV)
Councilman Ricki Barlow (CLV)
Councilman Steven Ross (CLV)
Bradford Jerbic, (CLV)
Mayor Roger Tobler (CBC)
Brok Armantrout (CBC)
David Parks (Nevada State Assembly)
J. Gordon Arkin (Foley & Lardner)
John Williams (Ricondo)
Douglas Pomeroy (FAA ADO)
La Nea M. Conner (Boeing)
Neal Phillips (Metro Wash. Air Auth.)
Frank Fiori (CNLV)
James Davies (Sky Harbor Airport)
Karen Everitt (Dallas City Hall)
Thomas Miller (Nellis AFB)
Raymond Chiang (FAA)
Stephanie Garcia-Vause (COH)
Andrew Powell (COH)
William Ruggiero (FAA TRACON)

James Erbeck (CLV)
Wayne M. Niimi (FAA ATC)
Paul Alukonis (FAA FSDO)
Nancy Myrick (FAA Tower Manager, NLVA)
Sydney Lowe (University Libraries)
Bob Brown (BBA)
Lisa Butterfield (Reno-Tahoe Airport)
Andrea Christensen (Denver Airport)
Jennifer Lewis (Scottsdale Airport)
Frank Iacovino (Mass Port Authority)
Jon Collette (Philadelphia Airport)
Robert Butler (Papillon Helicopters)
Christine Gerencher (American Airlines)
Bert Ganoung (SFO)
Nigel Turner (Heli USA Airways)
San Diego Airport Noise Management
Jeannie Denham (Citizen)
Judge Bob Johnston (Citizen)
Roy Fuhrmann (Metro Airports Commission)
Tom Schaus (Sundance Helicopters)
Brooke Satern (Port of Portland)
Gary Brodt (Citizen)
Capt. Amanda Ferrell (Nellis AFB)
James P. Callahan (Nellis AFB)
Stan Shepherd (SEATAC)
Eric Sheng (Long Beach Airport)
Jason Schwartz (Portland Airport)
Todd Lobato (Nellis AFB)
William Olivieri (Citizen)
Samuel Carter (ITT)
Steven Peacock (Dallas City Hall)
Jacob Snow (COH)
John Dietz (FAA TRACON)

Exhibit 1: Noise Complaint Calls by Community* - April 2013

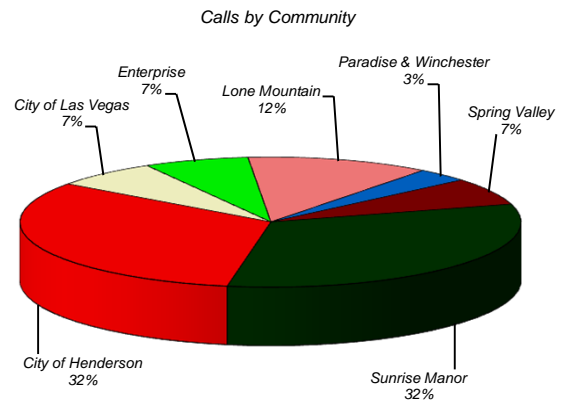
Community	No. of Calls in 2013	No. of Callers in 2013	No. of Calls in 2012	No. of Calls in 2011
City of Boulder City			2	
City of Henderson	19	10	31	8
City of Las Vegas	4	2	2	7
City of North Las Vegas			1	1
Enterprise	4	2	1	7
Lone Mountain	7	1		
Paradise & Winchester	2	2	8	4
Spring Valley	4	3	14	1
Summerlin South				1
Sunrise Manor	19	6	2	1
Whitney				2
Location unknown				
Overall Total	59	26	61	32

Difference between 2013 and 2012 Total Calls: -3%

Difference between 2013 and 2011 Total Calls: 84%

Average Number of Calls per Caller: 2.3

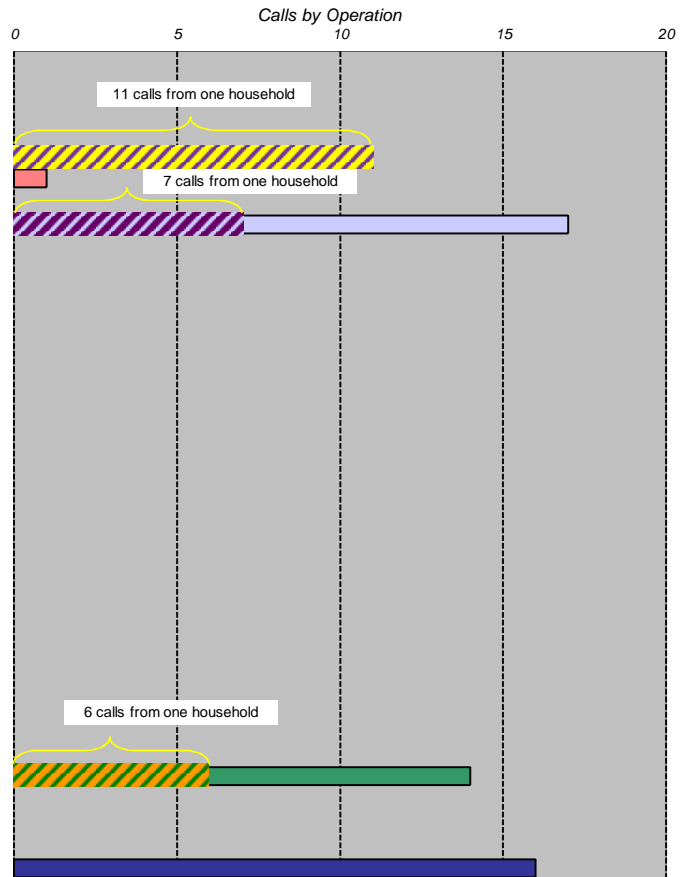
Most calls received from one household: 11



* See map on reverse side for community boundaries and location of known noise complaints.

Exhibit 2: Noise Complaint Calls by Type of Operation - April 2013

Operation	No. of Calls in 2013	Percent of Overall Total	No. of Calls in 2012	No. of Calls in 2011
LAS 01R/L Arrivals				3
LAS 07R/L Arrivals				
LAS 19R/L Arrivals				
LAS 25R/L Arrivals			2	2
LAS 01R/L Departures	11	18.6%	15	3
LAS 07R/L Departures	1	1.7%		3
LAS 19R/L Departures				5
LAS 25R/L Departures	17	28.8%	7	7
LAS Run-ups				
LAS GA				
LAS Other				
LAS Total	29	49.2%	24	23
VGT 07 Arrivals				
VGT 12R/L Arrivals				
VGT 25 Arrivals				
VGT 30R/L Arrivals				
VGT 07 Departures				
VGT 12R/L Departures				
VGT 25 Departures				
VGT 30R/L Departures				
VGT Run-ups				
VGT GA			1	
VGT Other				
VGT Total	0	0.0%	1	0
HND 17R/L Arrivals				
HND 35R/L Arrivals				
HND 17R/L Departures				
HND 35R/L Departures				
HND Run-ups				
HND GA	14	23.7%	2	4
HND Other				
HND Total	14	23.7%	2	4
Helicopters**	16	27.1%	34	5
Overall Total	59	100%	61	32



** Note that helicopter noise complaints are not tied to a specific facility since the operation cannot always be associated to a specific airport. Additionally, helicopter calls do not include those associated with operations conducted by the Metropolitan Police Department or those associated with operations conducted at non-DOA facilities.

Exhibit 3: Aircraft Noise Complaints by Community - April 2013

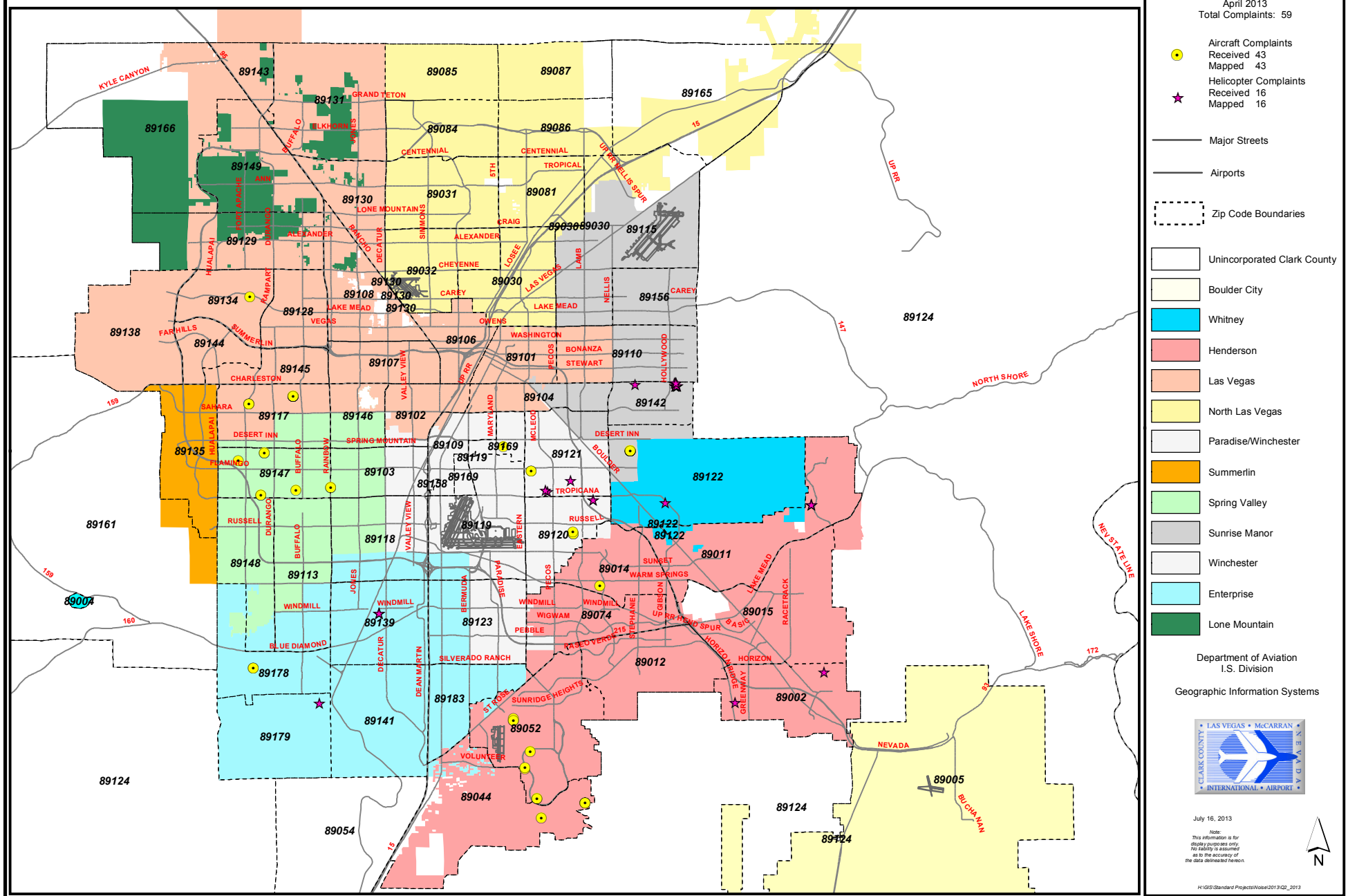
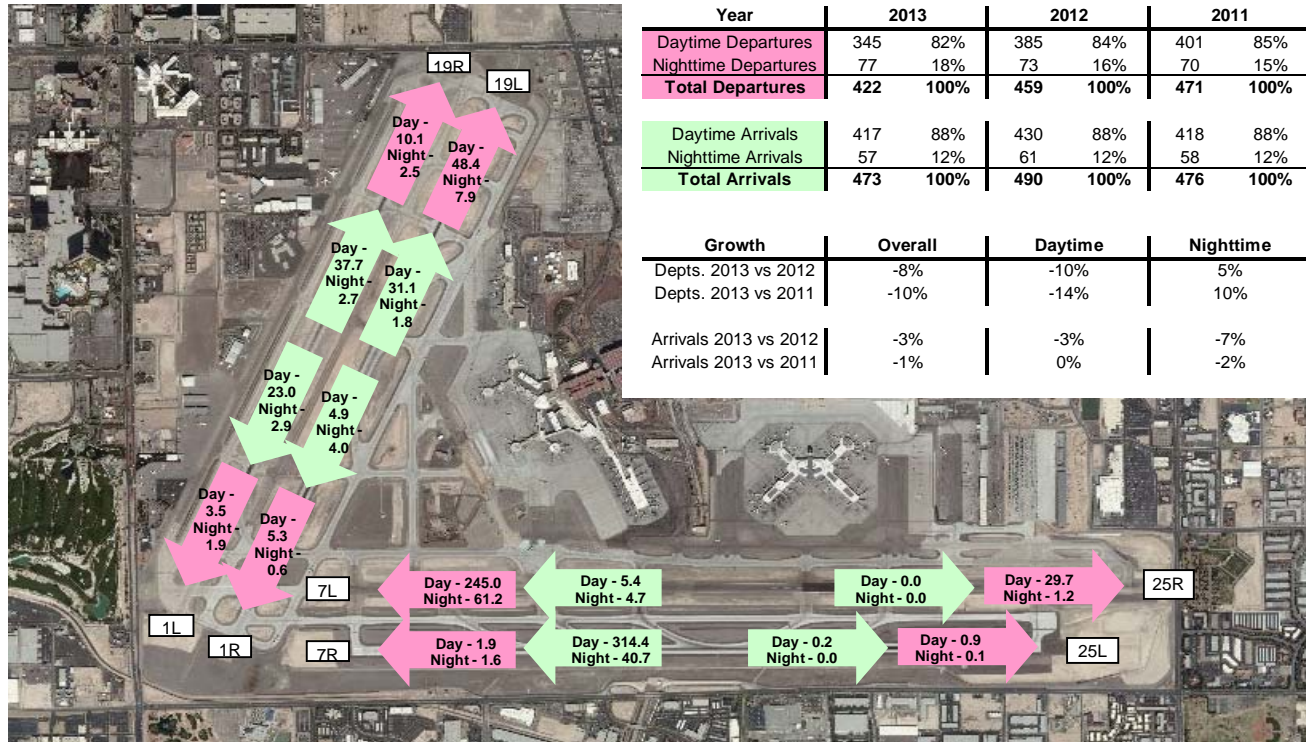
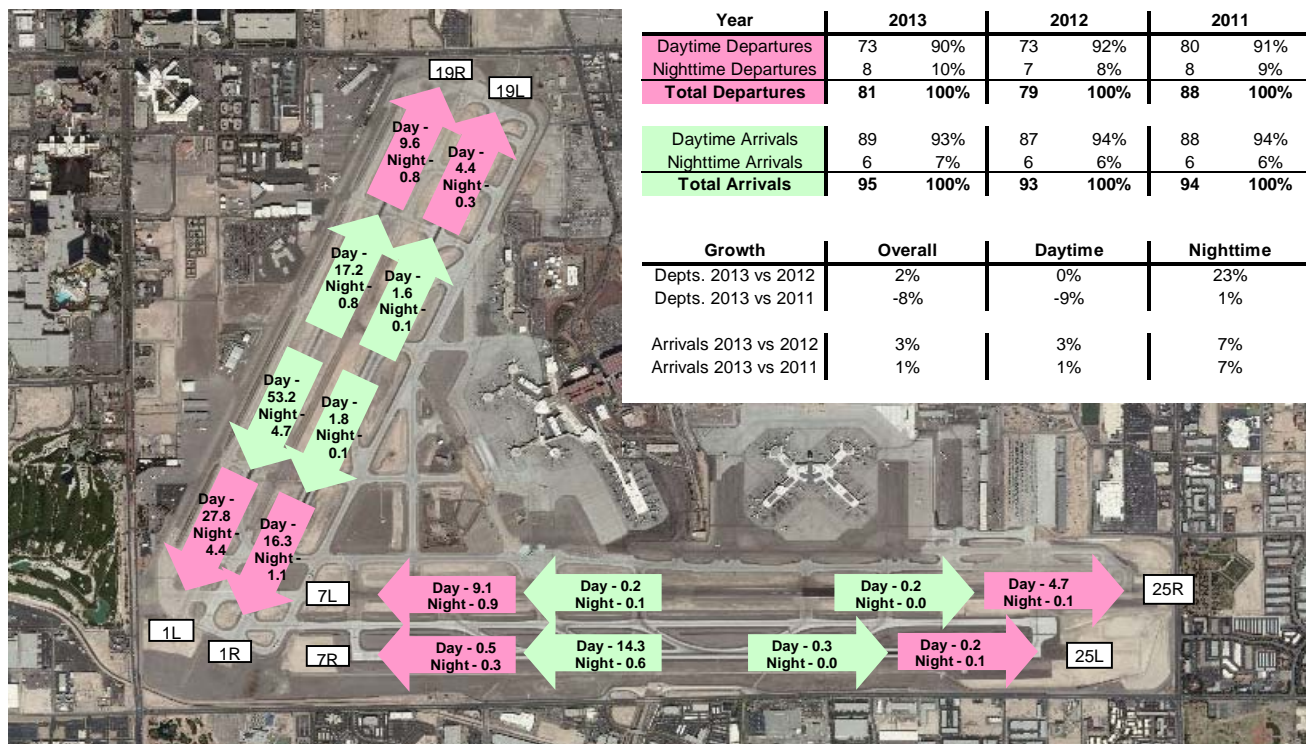


Exhibit 4: LAS Daily Average Operations Runway for Large Air Carrier Aircraft* - April 2013



* Aircraft types: All aircraft with a maximum gross take off weight of at least 75,000 pounds, including but not limited to, A306, A310, A311, A318, A319, A320, A330, A340, B707, B717, B727, B737, B747, B757, B767, B777, CRJ7, CRJ9, DC8, DC9, DC10, E170, E190, HA4T, L1011, MD80, MD90, MD10, MD11, VC10.

Exhibit 5: LAS Daily Average Operations by Runway for Non-Large Air Carrier Aircraft** - April 2013



** Aircraft types: All aircraft with a maximum gross take off weight less than 75,000 pounds, excluding helicopters.

Exhibit 6: LAS Daily Average Operations by Corridor for Helicopter Tours - April 2013

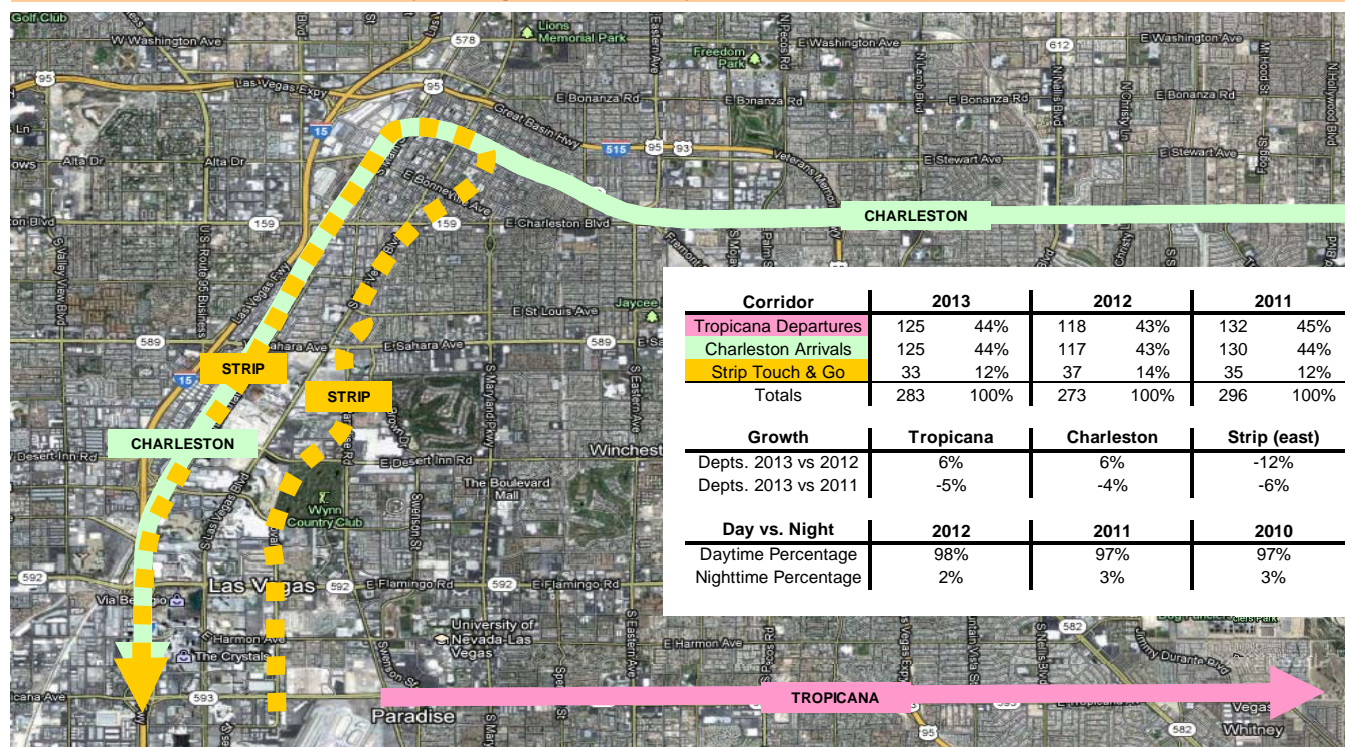
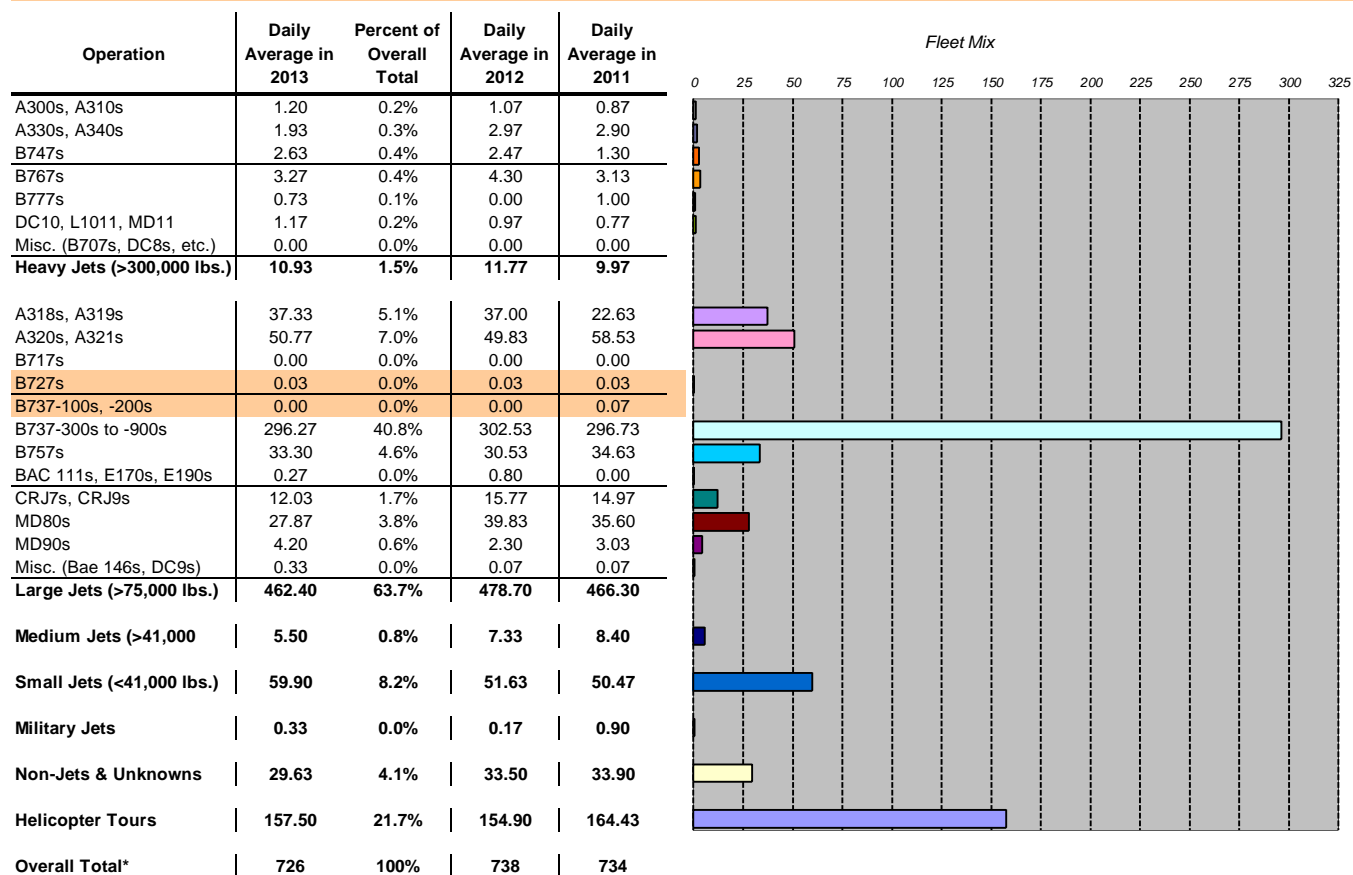


Exhibit 7: LAS Aircraft Arrival Fleet Mix* - April 2013



* Overall Total: Note that operation type and runway use counts are estimated by ITT Exelis AirScene.com Noise and Monitoring Operations (NOMS) system based on radar data. Due to limitations of radar data, information for aircraft weighing less than 75,000 lbs. is inexact.

Exhibit 8: LAS General Departure Direction for Large Air Carrier Aircraft* - April 2013 to 2011

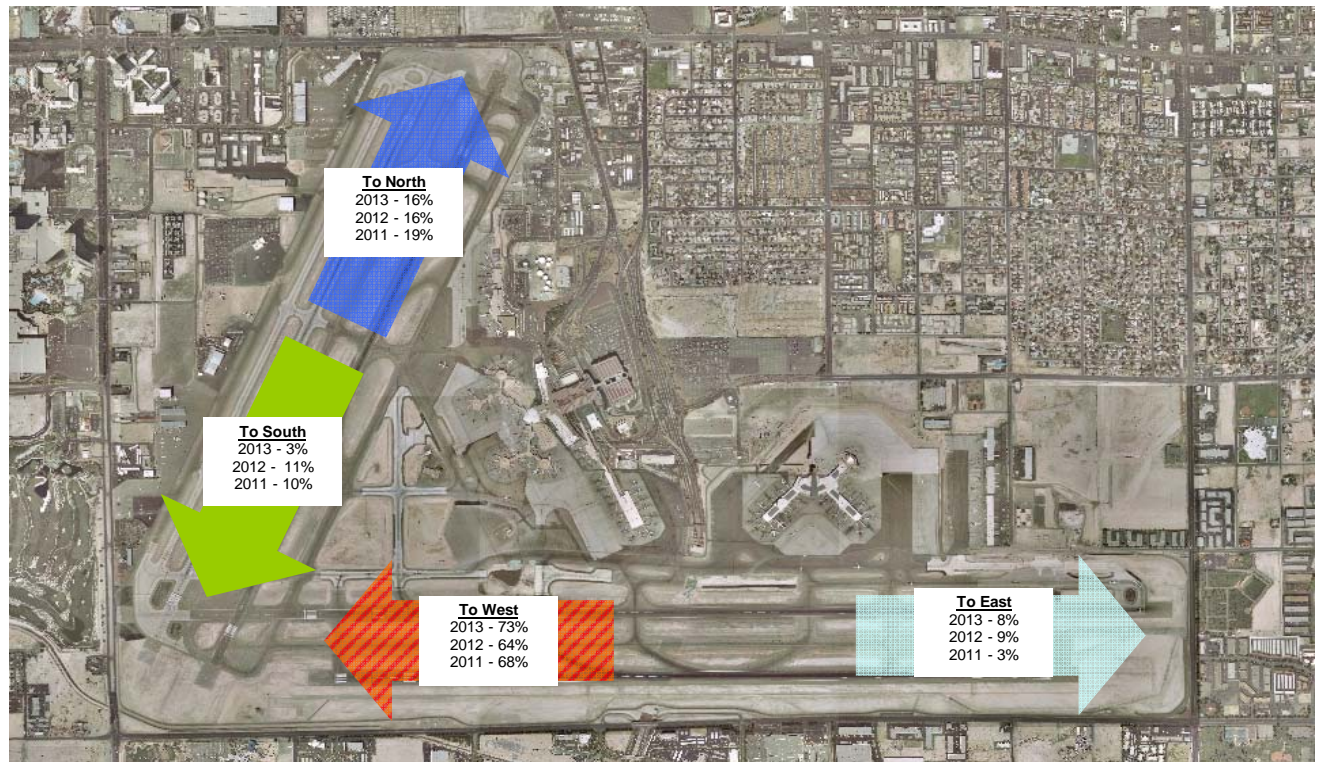
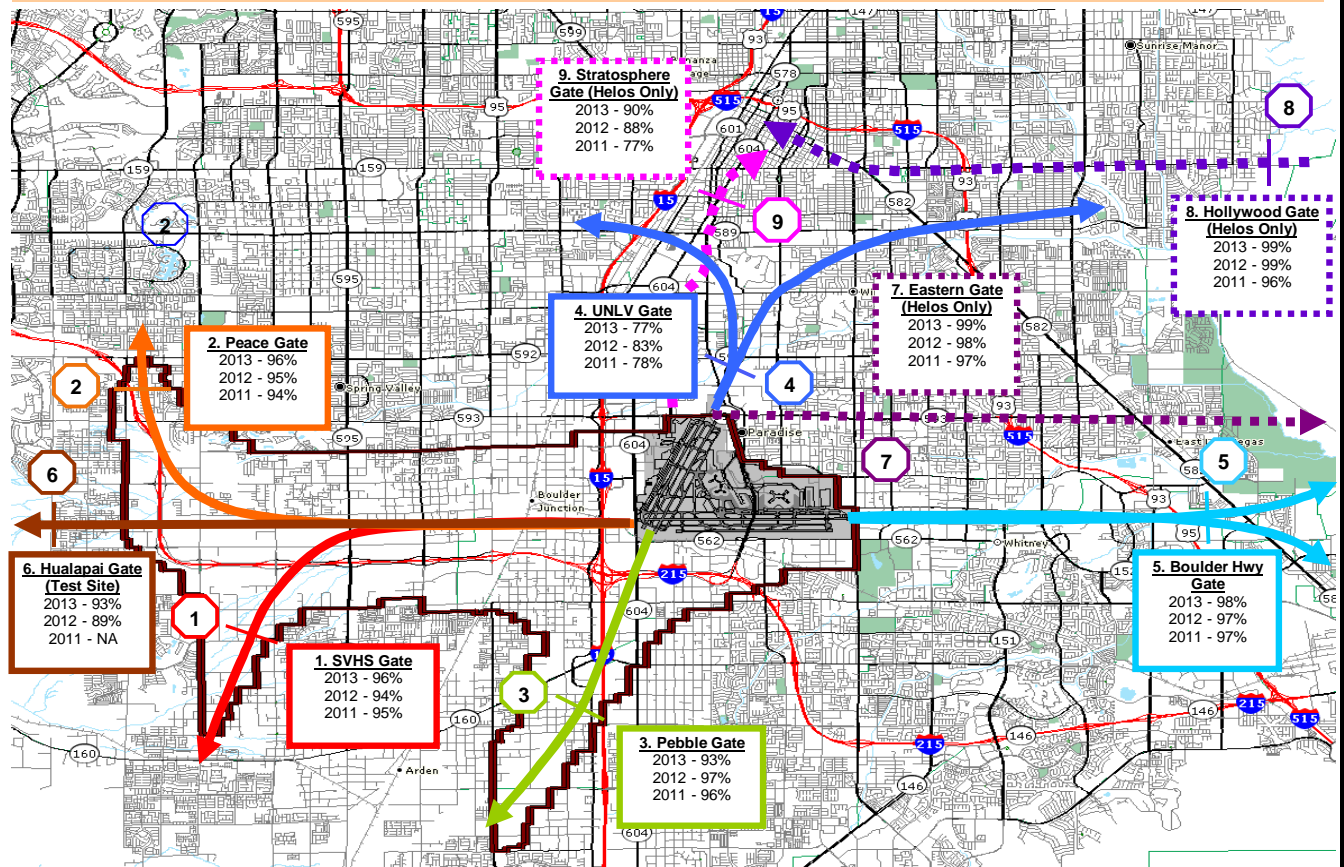


Exhibit 9: "Gate" Compliance for Large Aircraft* & LAS Helicopter Tours - April 2013



* Aircraft types: All aircraft with a maximum gross take off weight of at least 75,000 pounds, including but not limited to, A306, A310, A311, A318, A319, A320, A330, A350, B707, B717, B727, B737, B747, B757, B767, B777, CRJ7, CRJ9, DC8, DC9, DC10, E170, E190, HA4T, L1011, MD80, MD90, MD10, MD11, VC10.

Exhibit 1: Noise Complaint Calls by Community* - May 2013

Community	No. of Calls in 2013	No. of Callers in 2013	No. of Calls in 2012	No. of Calls in 2011
City of Boulder City	3	3	15	5
City of Henderson	3	2	2	5
City of Las Vegas				
City of North Las Vegas				
Enterprise	3	2		6
Lone Mountain			1	
Paradise & Winchester	6	6	7	7
Spring Valley	4	2	10	6
Summerlin South				
Sunrise Manor	11	5	3	3
Whitney			1	
Location unknown				
Overall Total	30	20	39	32

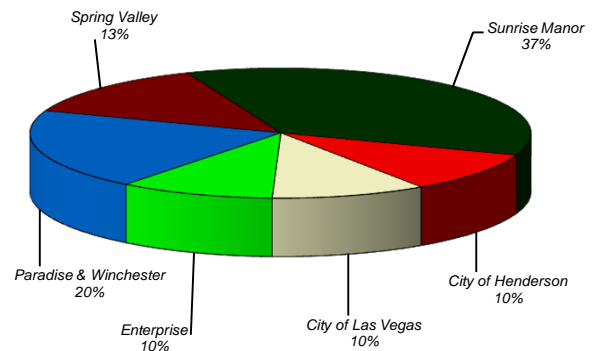
Difference between 2013 and 2012 Total Calls: -23%

Difference between 2013 and 2011 Total Calls: -6%

Average Number of Calls per Caller: 1.5

Most calls received from one household: 7

Calls by Community

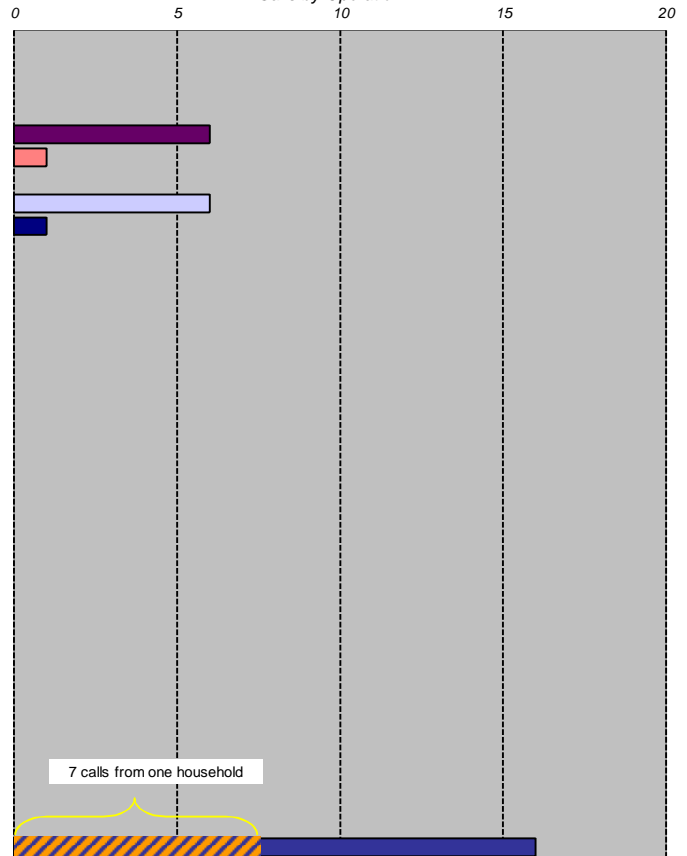


* See map on reverse side for community boundaries and location of known noise complaints.

Exhibit 2: Noise Complaint Calls by Type of Operation - May 2013

Operation	No. of Calls in 2013	Percent of Overall Total	No. of Calls in 2012	No. of Calls in 2011
LAS 01R/L Arrivals				
LAS 07R/L Arrivals				2
LAS 19R/L Arrivals				
LAS 25R/L Arrivals				
LAS 01R/L Departures	6	20.0%	16	9
LAS 07R/L Departures	1	3.3%	3	
LAS 19R/L Departures				4
LAS 25R/L Departures	6	20.0%	4	3
LAS Run-ups	1	3.3%		
LAS GA				
LAS Other				
LAS Total	14	46.7%	23	18
VGT 07 Arrivals				
VGT 12R/L Arrivals				
VGT 25 Arrivals				
VGT 30R/L Arrivals				
VGT 07 Departures				
VGT 12R/L Departures				
VGT 25 Departures				
VGT 30R/L Departures				
VGT Run-ups				
VGT GA			1	4
VGT Other				
VGT Total	0	0.0%	1	4
HND 17R/L Arrivals				
HND 35R/L Arrivals				
HND 17R/L Departures				
HND 35R/L Departures				
HND Run-ups				
HND GA			2	3
HND Other				
HND Total	0	0.0%	2	3
Helicopters**	16	53.3%	13	7
Overall Total	30	100%	39	32

Calls by Operation



** Note that helicopter noise complaints are not tied to a specific facility since the operation cannot always be associated to a specific airport. Additionally, helicopter calls do not include those associated with operations conducted by the Metropolitan Police Department or those associated with operations conducted at non-DOA facilities.

Exhibit 3: Aircraft Noise Complaints by Community - May 2013

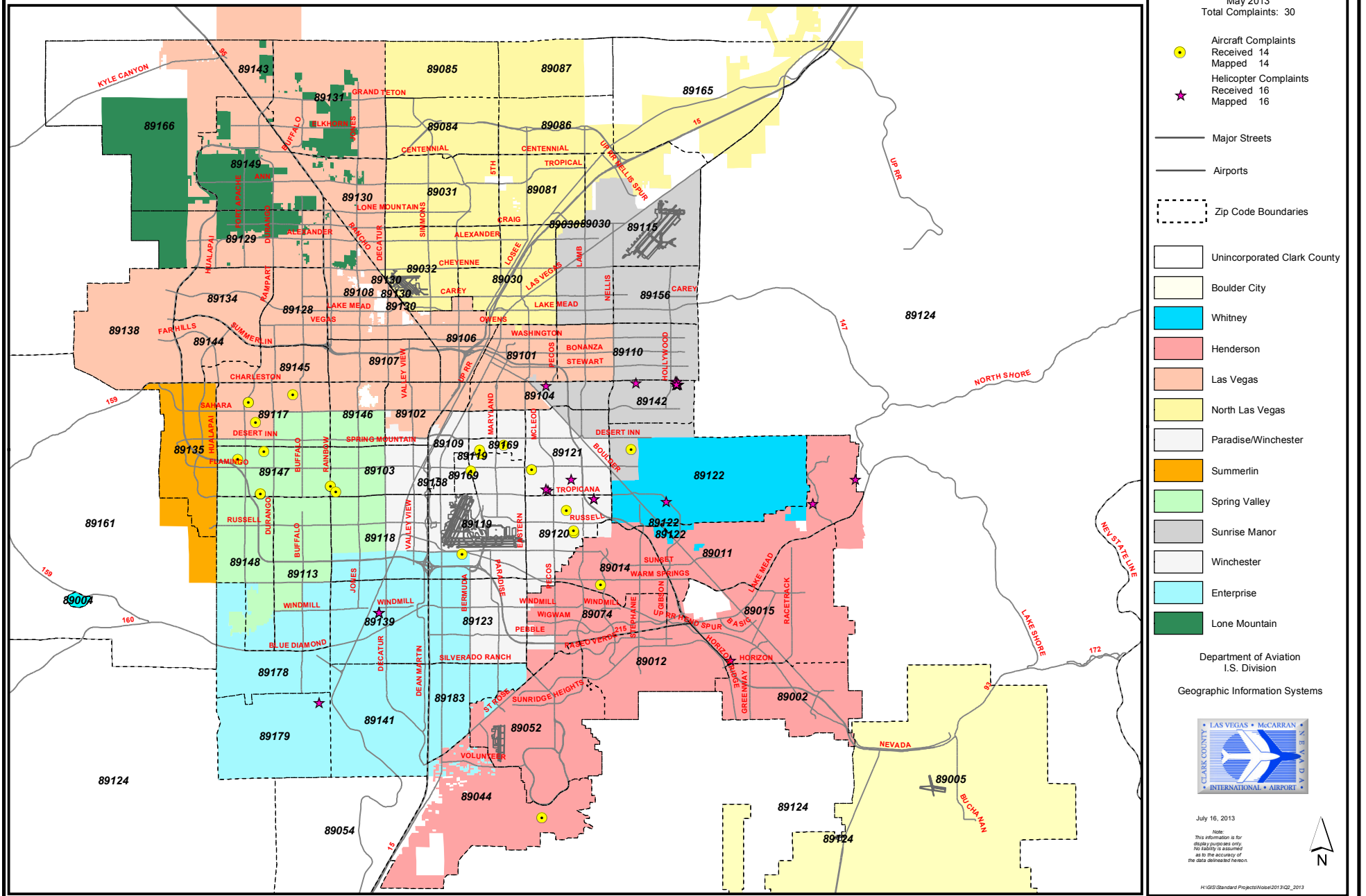
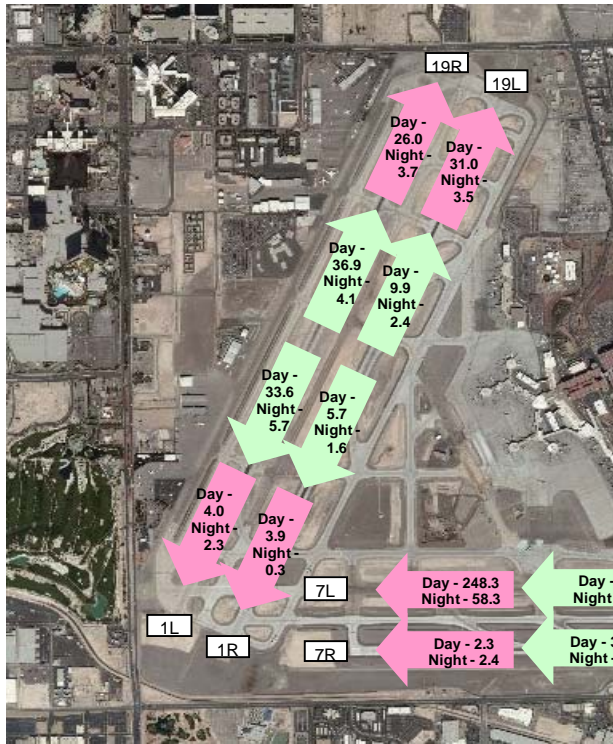


Exhibit 4: LAS Daily Average Operations Runway for Large Air Carrier Aircraft* - May 2013



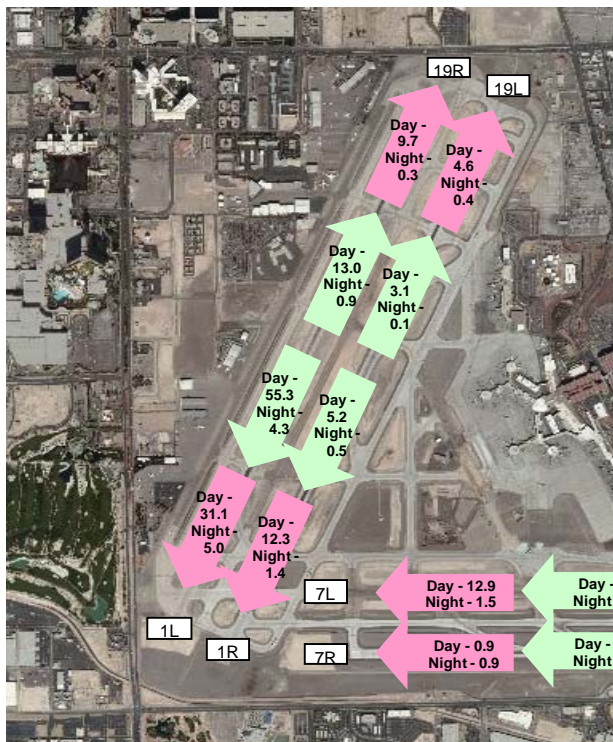
Year	2013		2012		2011	
Daytime Departures	348	82%	374	85%	414	86%
Nighttime Departures	78	18%	66	15%	68	14%
Total Departures	426	100%	440	100%	482	100%

Daytime Arrivals	419	88%	426	88%	427	88%
Nighttime Arrivals	58	12%	57	12%	57	12%
Total Arrivals	477	100%	483	100%	484	100%

Growth	Overall	Daytime	Nighttime
Depts. 2013 vs 2012	-3%	-7%	18%
Depts. 2013 vs 2011	-12%	-16%	15%
Arrivals 2013 vs 2012	-1%	-2%	1%
Arrivals 2013 vs 2011	-1%	-2%	1%

* Aircraft types: All aircraft with a maximum gross take off weight of at least 75,000 pounds, including but not limited to, A306, A310, A311, A318, A319, A320, A330, A340, B707, B717, B727, B737, B747, B757, B767, B777, CRJ7, CRJ9, DC8, DC9, DC10, E170, E190, HA4T, L1011, MD80, MD90, MD10, MD11, VC10.

Exhibit 5: LAS Daily Average Operations by Runway for Non-Large Air Carrier Aircraft** - May 2013



Year	2013		2012		2011	
Daytime Departures	77	88%	83	91%	99	92%
Nighttime Departures	10	12%	8	9%	9	8%
Total Departures	88	100%	90	100%	108	100%

Daytime Arrivals	95	94%	101	94%	101	93%
Nighttime Arrivals	6	6%	7	6%	8	7%
Total Arrivals	101	100%	107	100%	109	100%

Growth	Overall	Daytime	Nighttime
Depts. 2013 vs 2012	-3%	-6%	34%
Depts. 2013 vs 2011	-19%	-22%	14%
Arrivals 2013 vs 2012	-6%	-6%	-6%
Arrivals 2013 vs 2011	-7%	-6%	-20%

** Aircraft types: All aircraft with a maximum gross take off weight less than 75,000 pounds, excluding helicopters.

Exhibit 6: LAS Daily Average Operations by Corridor for Helicopter Tours - May 2013

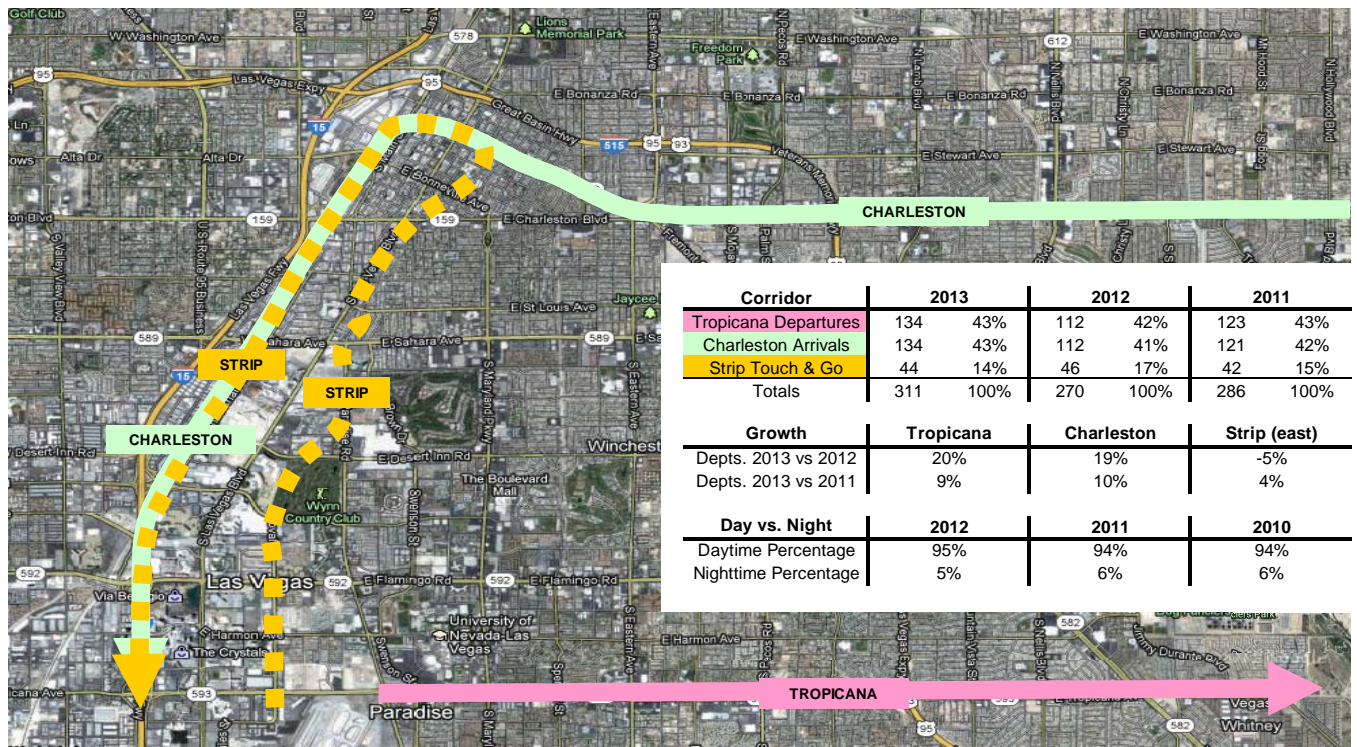
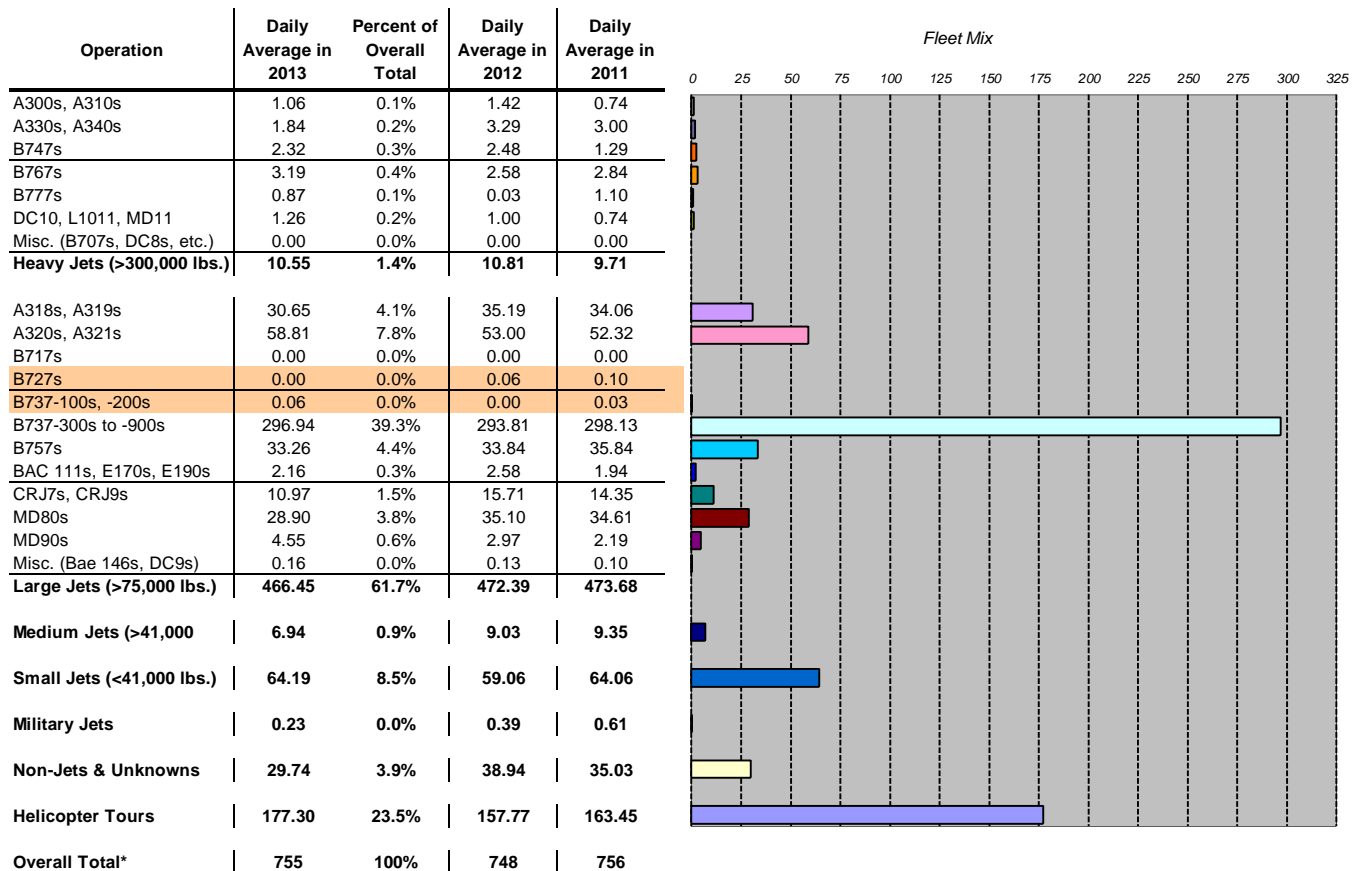


Exhibit 7: LAS Aircraft Arrival Fleet Mix* - May 2013



* Overall Total: Note that operation type and runway use counts are estimated by ITT Exelis AirScene.com Noise and Monitoring Operations (NOMS) system based on radar data. Due to limitations of radar data, information for aircraft weighing less than 75,000 lbs. is inexact.

Exhibit 8: LAS General Departure Direction for Large Air Carrier Aircraft* - May 2013 to 2011

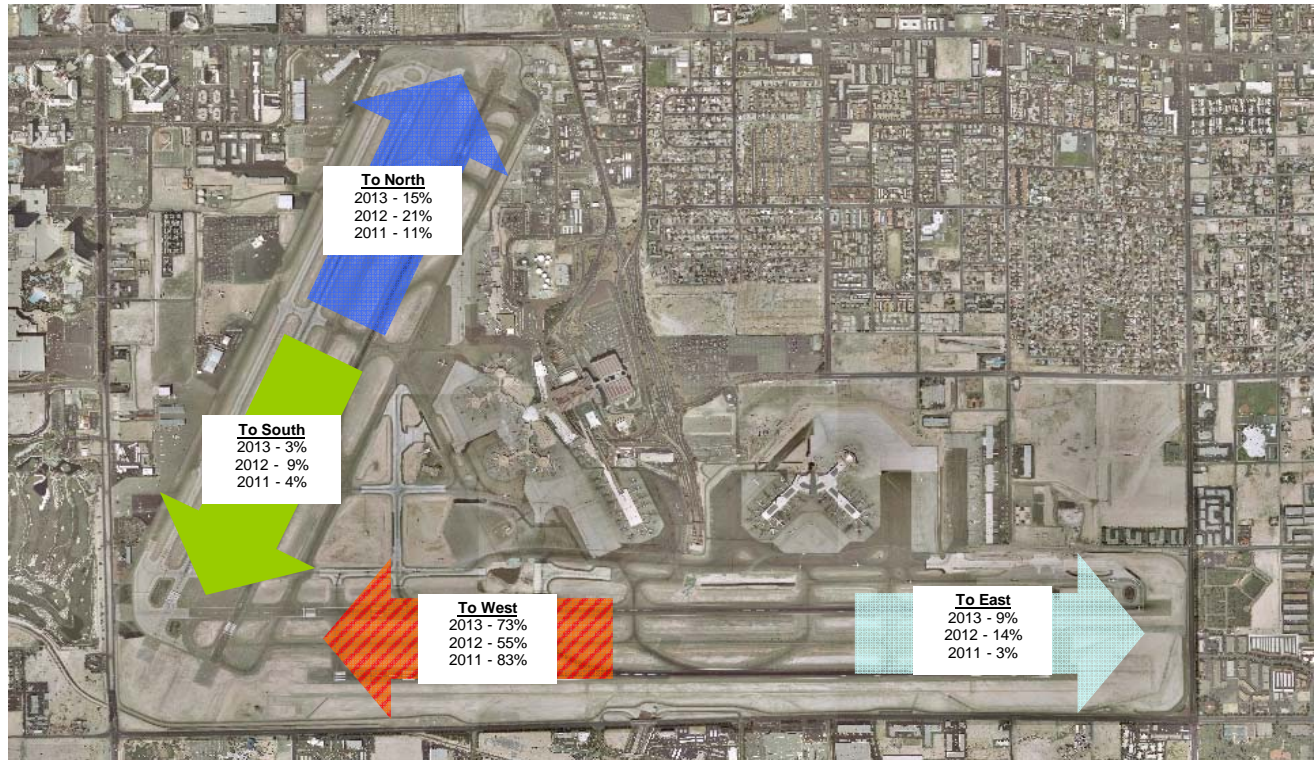
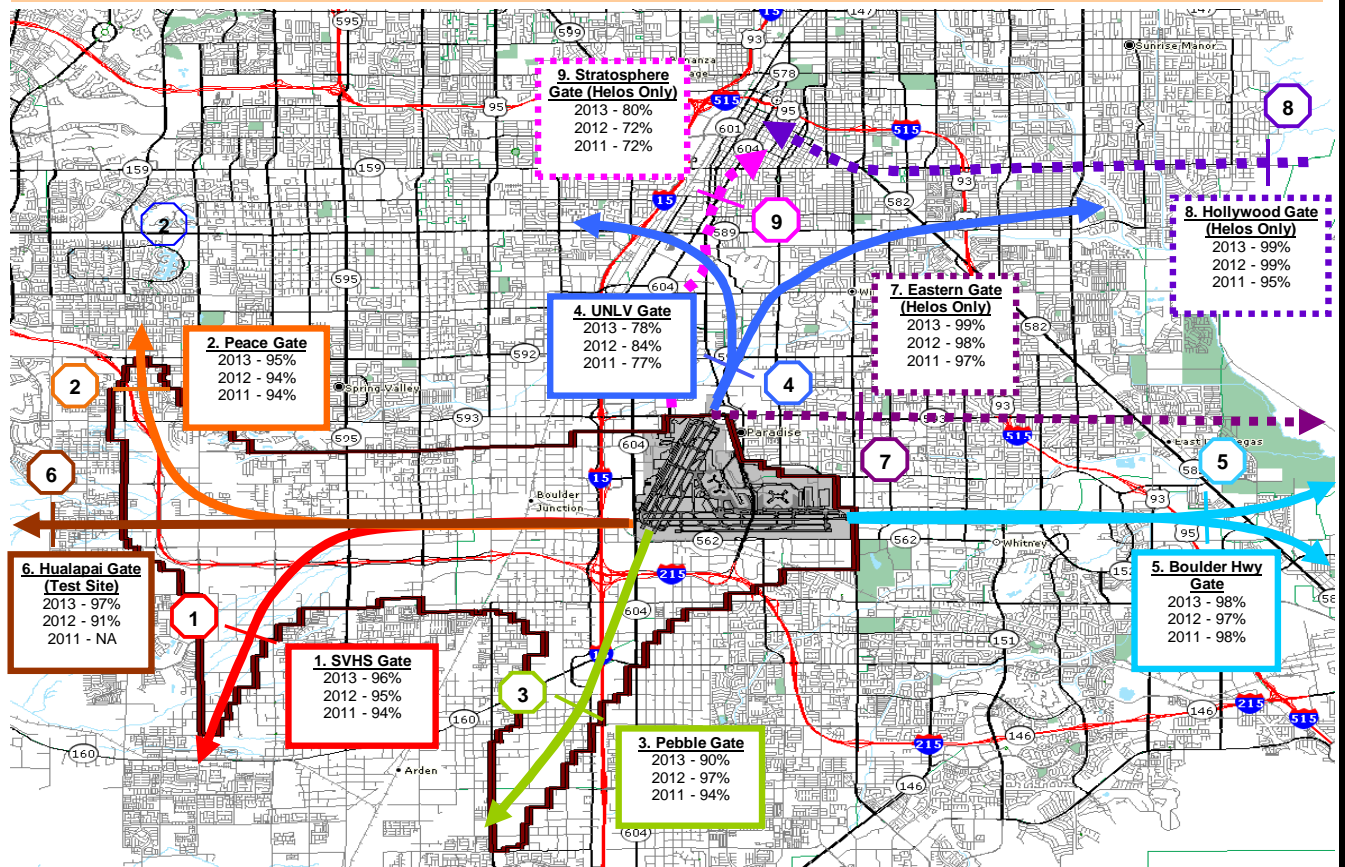


Exhibit 9: "Gate" Compliance for Large Aircraft* & LAS Helicopter Tours - May 2013



* Aircraft types: All aircraft with a maximum gross take off weight of at least 75,000 pounds, including but not limited to, A306, A310, A311, A318, A319, A320, A330, A350, B707, B717, B727, B737, B747, B757, B767, B777, CRJ7, CRJ9, DC8, DC9, DC10, E170, E190, HA4T, L1011, MD80, MD90, MD10, MD11, VC10.

Exhibit 1: Noise Complaint Calls by Community* - June 2013

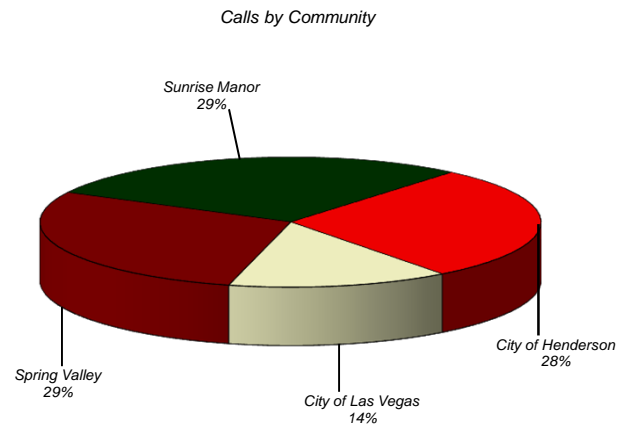
Community	No. of Calls in 2013	No. of Callers in 2013	No. of Calls in 2012	No. of Calls in 2011
City of Boulder City	2	2	10	1
City of Henderson	1	1		8
City of Las Vegas				
City of North Las Vegas				
Enterprise				3
Lone Mountain				1
Paradise & Winchester			7	2
Spring Valley	2	2	1	3
Summerlin South				
Sunrise Manor	2	1		
Whitney				
Location unknown				
Overall Total	7	6	18	18

Difference between 2013 and 2012 Total Calls: -61%

Difference between 2013 and 2011 Total Calls: -61%

Average Number of Calls per Caller: 1.2

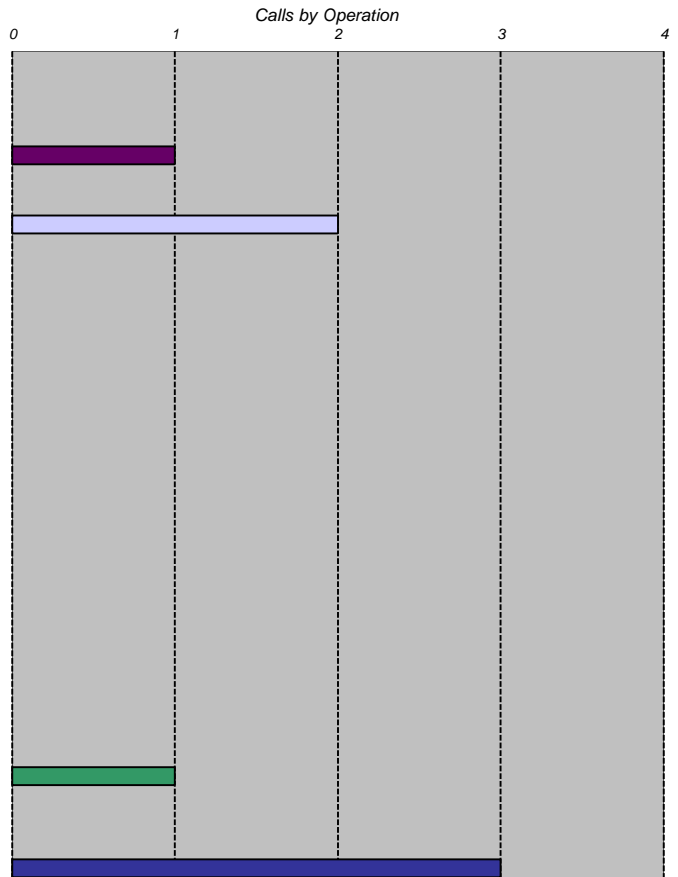
Most calls received from one household: 2



* See map on reverse side for community boundaries and location of known noise complaints.

Exhibit 2: Noise Complaint Calls by Type of Operation - June 2013

Operation	No. of Calls in 2013	Percent of Overall Total	No. of Calls in 2012	No. of Calls in 2011
LAS 01R/L Arrivals				
LAS 07R/L Arrivals				
LAS 19R/L Arrivals				
LAS 25R/L Arrivals			2	
LAS 01R/L Departures	1	14.3%	1	3
LAS 07R/L Departures			4	
LAS 19R/L Departures				2
LAS 25R/L Departures	2	28.6%		7
LAS Run-ups			3	
LAS GA				
LAS Other				
LAS Total	3	42.9%	10	12
VGT 07 Arrivals				
VGT 12R/L Arrivals				
VGT 25 Arrivals				
VGT 30R/L Arrivals				
VGT 07 Departures				
VGT 12R/L Departures				
VGT 25 Departures				
VGT 30R/L Departures				
VGT Run-ups				
VGT GA				1
VGT Other				
VGT Total	0	0.0%	0	1
HND 17R/L Arrivals				
HND 35R/L Arrivals				
HND 17R/L Departures				
HND 35R/L Departures				
HND Run-ups				
HND GA	1	14.3%	1	1
HND Other				
HND Total	1	14.3%	1	1
Helicopters**	3	42.9%	7	4
Overall Total	7	100%	18	18



** Note that helicopter noise complaints are not tied to a specific facility since the operation cannot always be associated to a specific airport. Additionally, helicopter calls do not include those associated with operations conducted by the Metropolitan Police Department or those associated with operations conducted at non-DOA facilities.

2013 Noise Complaint Report

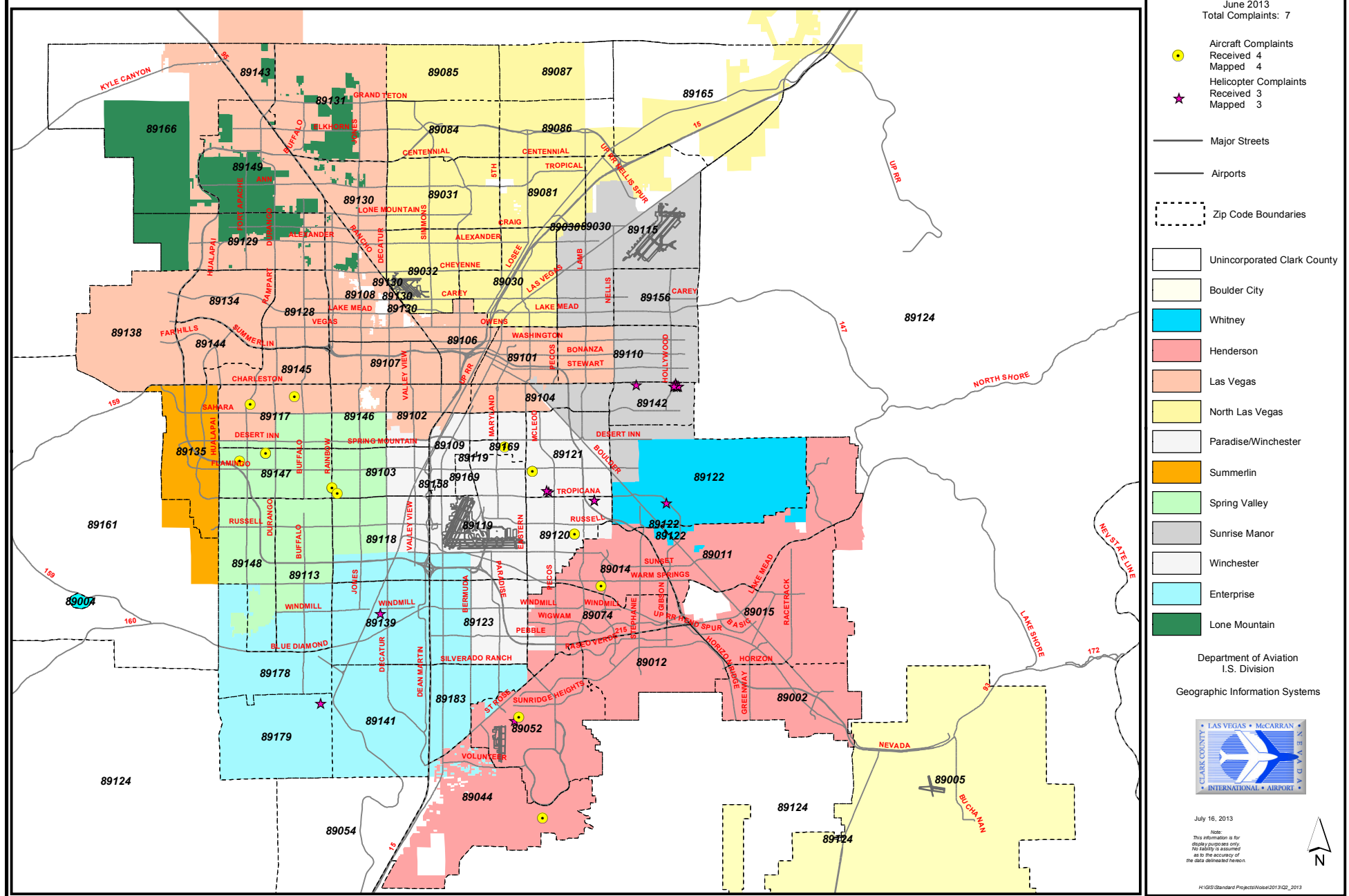
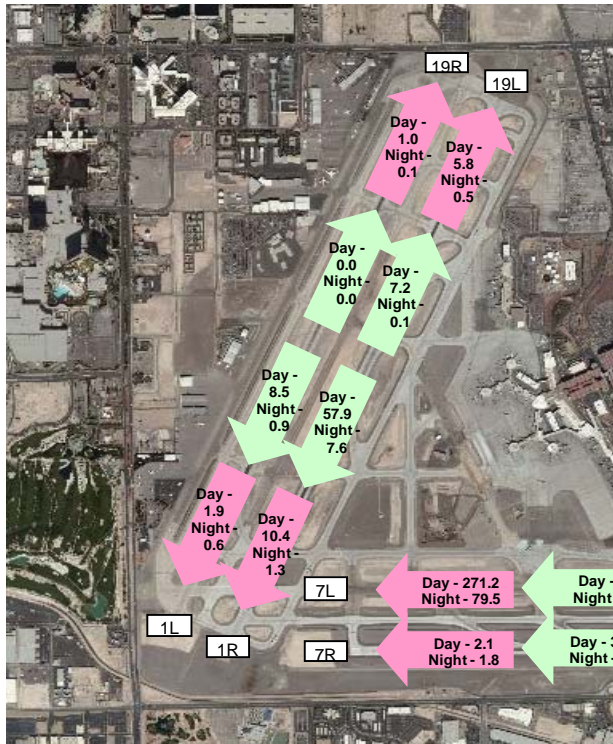


Exhibit 4: LAS Daily Average Operations Runway for Large Air Carrier Aircraft* - June 2013



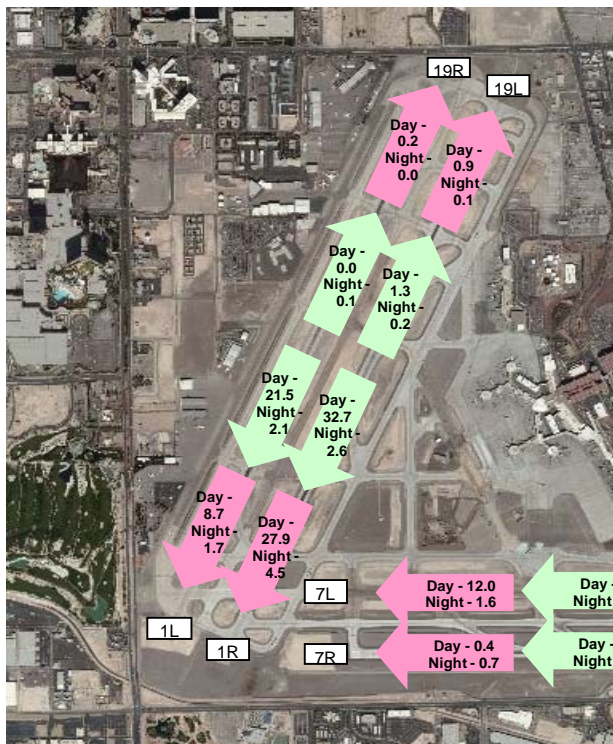
Year	2013		2012		2011	
Daytime Departures	346	80%	377	83%	416	84%
Nighttime Departures	85	20%	79	17%	77	16%
Total Departures	431	100%	456	100%	493	100%

Daytime Arrivals	407	86%	420	87%	429	87%
Nighttime Arrivals	67	14%	64	13%	64	13%
Total Arrivals	474	100%	484	100%	493	100%

Growth	Overall	Daytime	Nighttime
Depts. 2013 vs 2012	-6%	-8%	7%
Depts. 2013 vs 2011	-13%	-17%	10%
Arrivals 2013 vs 2012	-2%	-3%	5%
Arrivals 2013 vs 2011	-4%	-5%	5%

* Aircraft types: All aircraft with a maximum gross take off weight of at least 75,000 pounds, including but not limited to, A306, A310, A311, A318, A319, A320, A330, A340, B707, B717, B727, B737, B747, B757, B767, B777, CRJ7, CRJ9, DC8, DC9, DC10, E170, E190, HA4T, L1011, MD80, MD90, MD10, MD11, VC10.

Exhibit 5: LAS Daily Average Operations by Runway for Non-Large Air Carrier Aircraft** - June 2013



Year	2013		2012		2011	
Daytime Departures	60	87%	69	90%	81	90%
Nighttime Departures	9	13%	8	10%	9	10%
Total Departures	69	100%	77	100%	90	100%

Daytime Arrivals	70	92%	85	94%	87	93%
Nighttime Arrivals	6	8%	6	6%	7	7%
Total Arrivals	76	100%	91	100%	94	100%

Growth	Overall	Daytime	Nighttime
Depts. 2013 vs 2012	-10%	-13%	11%
Depts. 2013 vs 2011	-24%	-26%	-2%
Arrivals 2013 vs 2012	-17%	-18%	5%
Arrivals 2013 vs 2011	-19%	-20%	-11%

** Aircraft types: All aircraft with a maximum gross take off weight less than 75,000 pounds, excluding helicopters.

Exhibit 6: LAS Daily Average Operations by Corridor for Helicopter Tours - June 2013

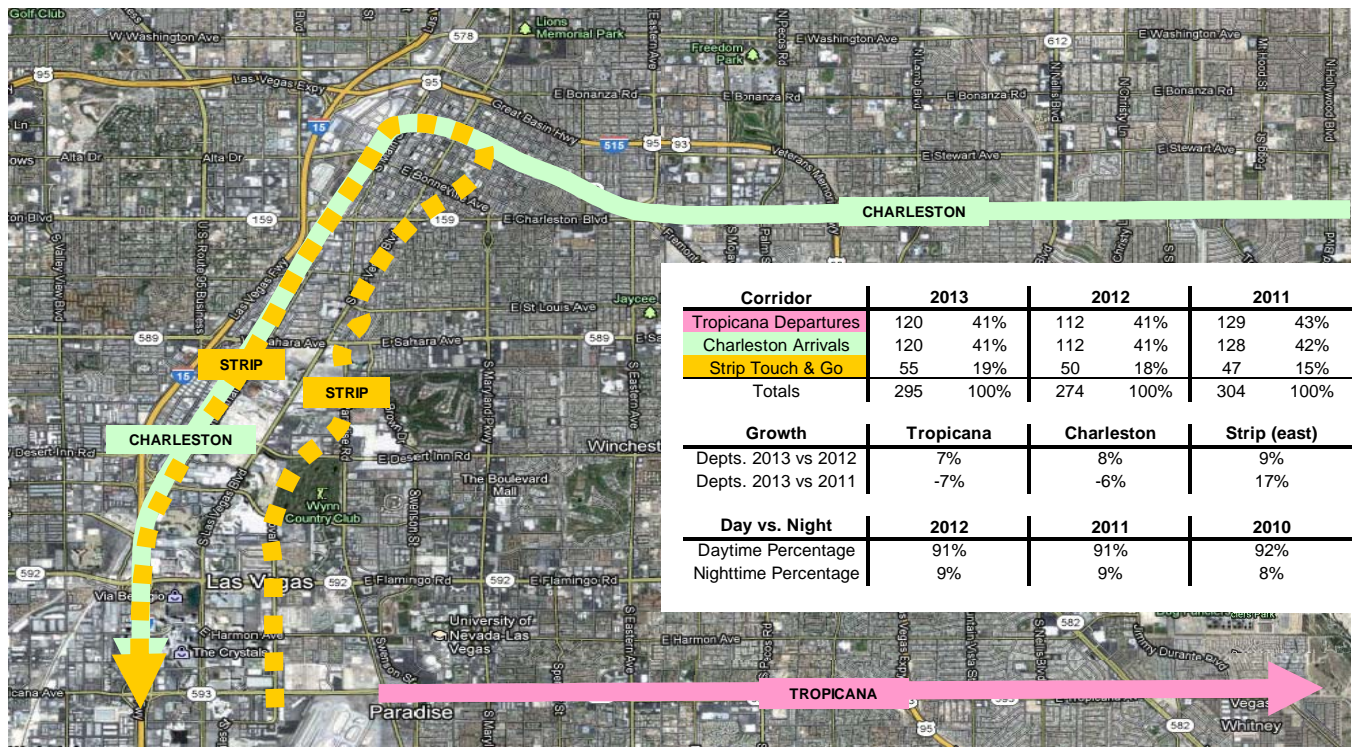
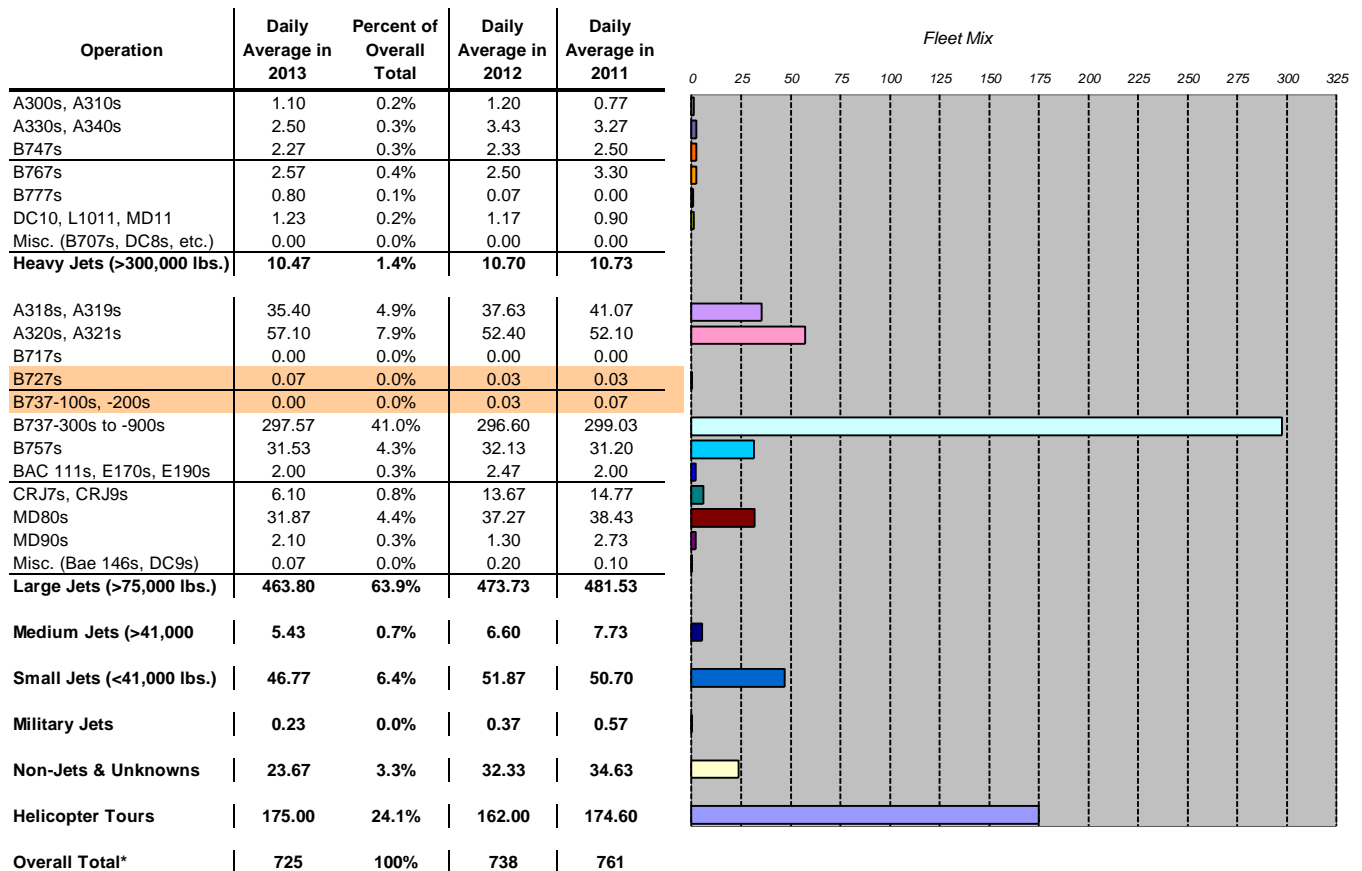


Exhibit 7: LAS Aircraft Arrival Fleet Mix* - June 2013



* Overall Total: Note that operation type and runway use counts are estimated by ITT Exelis AirScene.com Noise and Monitoring Operations (NOMS) system based on radar data. Due to limitations of radar data, information for aircraft weighing less than 75,000 lbs. is inexact.

Exhibit 8: LAS General Departure Direction for Large Air Carrier Aircraft* - June 2013 to 2011

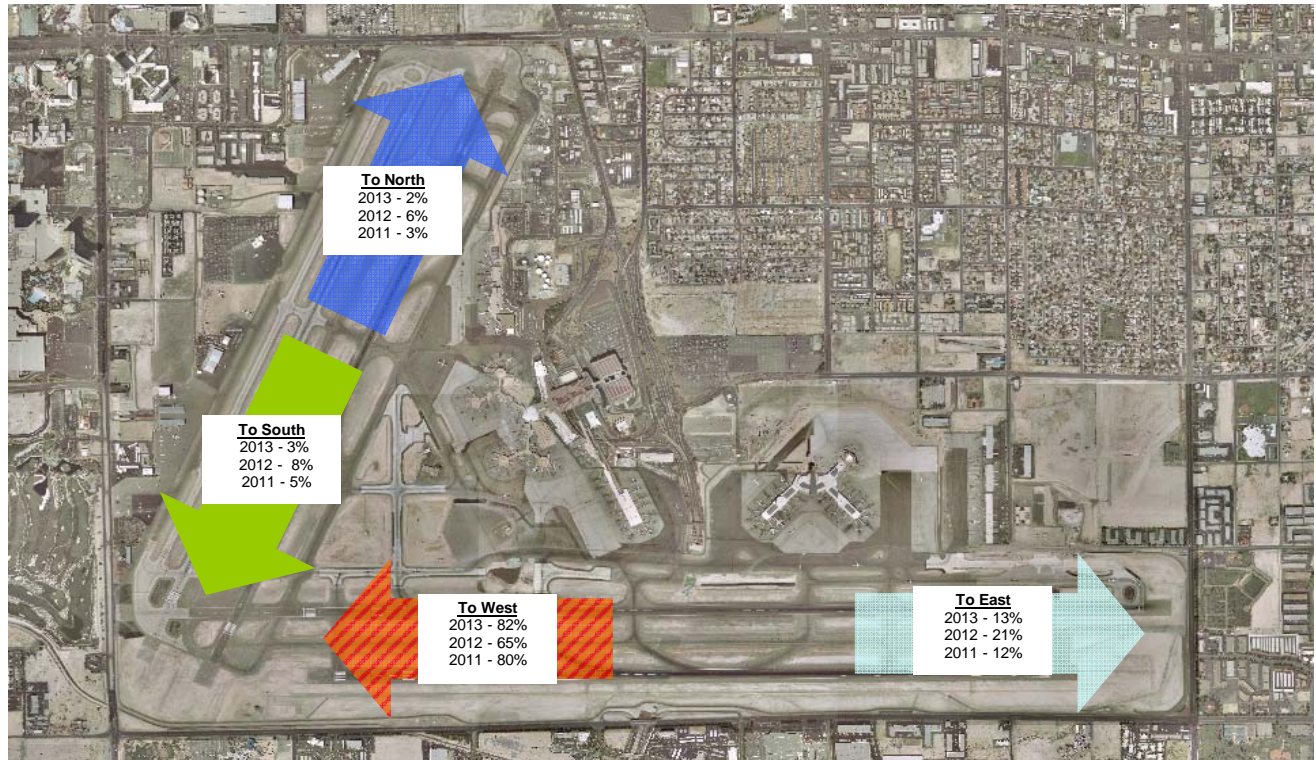
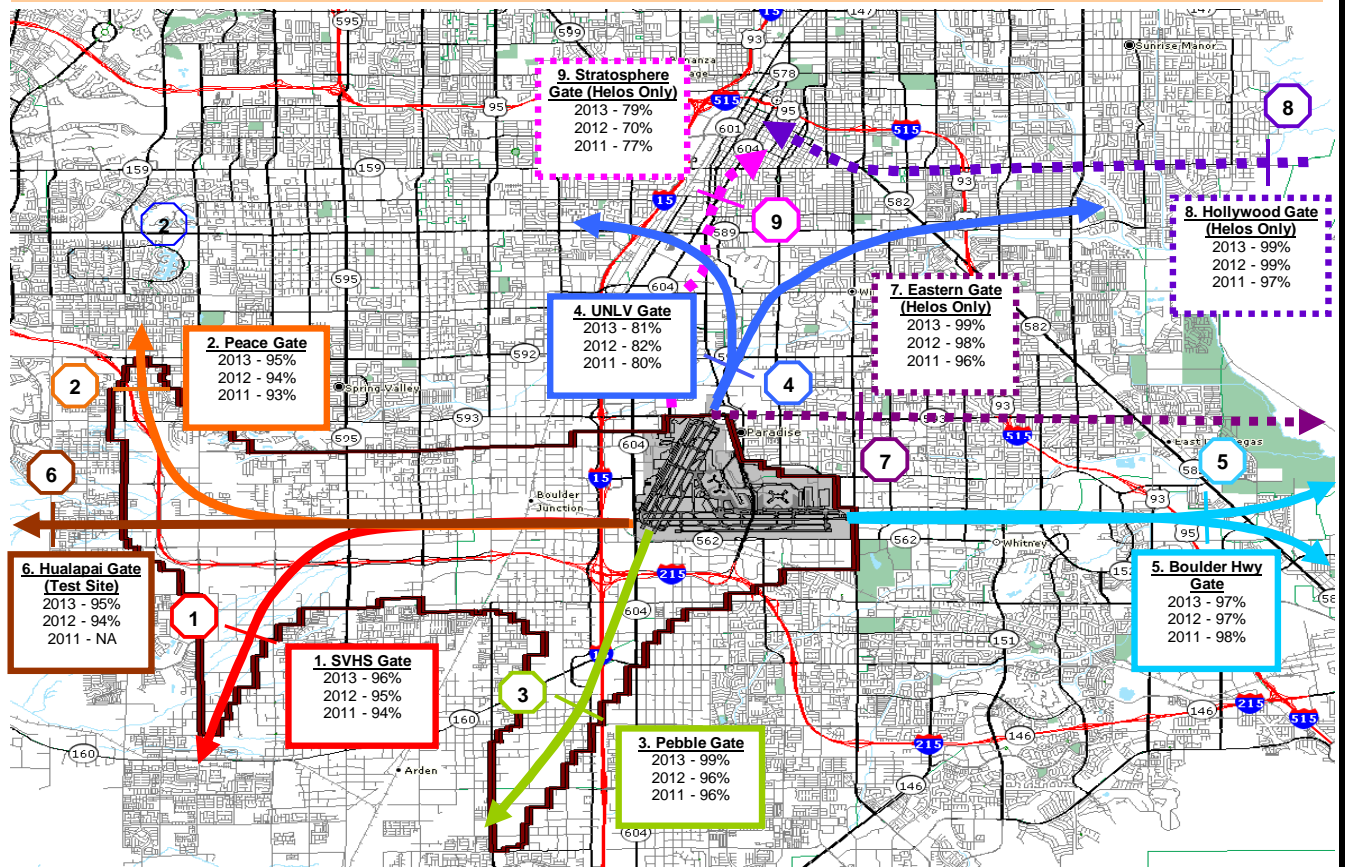


Exhibit 9: "Gate" Compliance for Large Aircraft* & LAS Helicopter Tours - June 2013



* Aircraft types: All aircraft with a maximum gross take off weight of at least 75,000 pounds, including but not limited to, A306, A310, A311, A318, A319, A320, A330, A350, B707, B717, B727, B737, B747, B757, B767, B777, CRJ7, CRJ9, DC8, DC9, DC10, E170, E190, HA4T, L1011, MD80, MD90, MD10, MD11, VC10.