

MEMORANDUM

DEPARTMENT OF AVIATION

TO: DISTRIBUTION

FROM: GEORGE C. SIMS, PLANNER

SUBJECT: OCTOBER, NOVEMBER, DECEMBER AND ANNUAL 2013
NOISE COMPLAINT REPORTS

DATE: JANUARY 17, 2014

Attached for your review are the Clark County Department of Aviation's (CCDOA) Monthly Noise Complaint Reports for October, November, and December 2013. Also included is the 2013 Annual Noise Complaint Report, covering the period of January through December 2013. Please note the following Clark County airport abbreviations: **McCarran International Airport (LAS)**, **North Las Vegas Airport (VGT)**, and **Henderson Executive Airport (HND)**.

The following reports describe noise complaints 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, or the private helipad located near Cheyenne Road and North 5th Street) 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 (historically only provided on an annual basis).

Lastly, **Exhibit 9** summarizes how well large aircraft and helicopters adhered to the preferred, non-regulated departure corridors (also historically provided on an annual basis for large aircraft, with helicopter analysis). 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 departure corridors, or impose penalties to pilots who opt not to comply with preferred procedures. "Compliance gates" are located along these historical/fly-quietly departure 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 Annual Noise Complaint Report includes additional information that is not provided in each monthly report. These additional illustrations (Exhibits 10 through 14) are helpful in assessing seasonal trends, comparisons of noise issues between various CCDOA facilities, noise complaint patterns between communities, long-term runway use trends, and long-term compliance determinations with the preferred departure corridors. **Exhibit 10** of the annual report illustrates the number of calls and callers by month, between 2011 and 2013. **Exhibit 11** illustrates the general time when the complaint was received by the CCDOA. Monthly calls by airport or helicopter operation are depicted on **Exhibit 12**. **Exhibit 13** depicts monthly calls by community. The final annual report, **Exhibit 14**, summarizes monthly calls by specific LAS operation.

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

October 2013: 30 total complaints - a 61% decrease from 2012 and a 42% decrease from 2011. On average, each caller (or household) issued 1.7 calls. The most calls received from one household totaled 8.

Calls by Community - (Exhibits 1 and 3)

Majority (more than 50%): The **Paradise and Winchester** communities issued 16 calls (53%). 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).

Minority (between 10% and 50%): The **Spring Valley** community issued 8 calls (27%). This community is typically impacted by aircraft departing to the west (from Runway 25R and Runway 25L). This community is also impacted by aircraft departing to the north (from Runway 01R and Runway 01L) that turn left (to the west and south).

Repeat Caller Impact: One household issued 27% (8 calls) of all the calls received in October 2013.

Calls by Operation - (Exhibit 2)

LAS: 87% of the total calls were due to **LAS** fixed-wing operations.

- 57% were due to departures to the north from Runways 01L and 01R (47% from one household).

VGT: 7% of the total calls were due to **VGT** fixed-wing operations.

HND: 3% of the total calls were due to **HND** fixed-wing operations.

Helis: 3% of the total calls were due to **helicopter** operations.

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

Overall: 424 daily *departures*¹ – a 2% increase from 2012 and 12% decrease from 2011.

- 75% of departures were to the west, 18% north, 4% east, and 3% south.

478 daily *arrivals* – a 1% increase from 2012 and 2% decrease from 2011.

- 83% of arrivals were from the east, 9% south, and 7% north.

Daytime: 369 daily *departures*² – a 5% increase from 2012 and a 12% decrease from 2011.

- 74% of departures were to the west, 19% north, 4% east, and 3% south.

435 daily *arrivals* – a 3% increase from 2012 and a 1% decrease from 2011.

- 83% of arrivals were from the east, 9% south, and 7% north.

Nighttime: 55 daily *departures*³ – an 11% decrease from 2012 and a 10% decrease from 2011.

- 81% of departures were to the west, 11% north, 5% east, and 4% south.

43 daily *arrivals* – a 19% decrease from 2012 and a 17% decrease from 2011.

- 83% of arrivals were from the east, 9% south, and 7% north.

Daytime vs. Nighttime: Approximately 87% of all *departures* and 91% of all *arrivals* occurred during the daytime hours.

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

Overall: 84 daily *departures*⁴ – no change from 2012 and 21% decrease from 2011.

- 48% of departures were to the south, 29% west, 20% north, and 3% east.

96 daily *arrivals* – a 4% decrease from 2012 and 11% decrease from 2011.

- 65% of arrivals were from the north, 20% east, 15% south, and 1% west.

Daytime: 76 daily *departures*⁵ – no change from 2012 and 23% decrease from 2011.

- 45% of departures were to the south, 31% west, 21% north, and 3% east.

89 daily *arrivals* – a 5% decrease from 2012 and a 13% decrease from 2011.

- 65% of arrivals were from the north, 20% east, 14% south, and 1% west.

Nighttime: 8 daily *departures*⁶ – a 5% decrease from 2012 and a 5% increase from 2011.

- 75% of departures were to the south, 12% west, 11% north, and 2% east.

8 daily *arrivals* – a 1% decrease from 2012 and a 23% increase from 2011.

- 65% of arrivals were from the north, 19% south, 15% east, and 1% west.

Daytime vs. Nighttime: Approximately 90% of all *departures* and 92% of all *arrivals* occurred during the daytime hours.

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 EnvironmentalVue 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.

³ See footnote #1.

⁴ See footnote #1.

⁵ See footnote #1.

⁶ See footnote #1.

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

Tropicana: 124 daily *departures* - a 6% increase from 2012 and a 1% increase from 2011.

Charleston: 124 daily *arrivals* - a 6% increase from 2012 and a 2% increase from 2011.

Strip: 40 daily *touch and go's* - a 10% increase from 2012 and a 19% increase 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 63% 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 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.

Helis: **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 almost no operations per day.

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

Primary: In 2013, 75% departed to the **west** (from LAS's primary departure runways). This figure was 78% in 2012 and 64% in 2011.

Secondary: In 2013, 3% departed to the **south** (from LAS's secondary departure runways). This figure was 4% in 2012 and 13% in 2011.

Alternate 1: In 2013, 18% departed to the **north** (from LAS's alternate departure runways). This figure was 16% in 2012 and 17% in 2011.

Alternate 2: In 2013, 4% departed to the **east** (from LAS's alternate departure runways). This figure was 2% in 2012 and 7% in 2011.

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

SVHS: In 2013, 94% 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.

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, 97% 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 96% in 2012 and 95% 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, 94% 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 99% 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 Springs Estates community) and aircraft turning late along this corridor (like the Southern Highlands community).

UNLV: In 2013, 83% 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 81% 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 96% in 2012 and 96% 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, 91% 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.

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, 89% 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 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, 80% 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 88% in 2012 and 83% 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, 99% 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 90% in 2012 and 85% 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.

The information denoted in this monthly summary represents **typical** residential complaints, flight activity, fleet mix, and gate compliance with the exception of helicopter route compliance near the Stratosphere.

November 2013: 41 total complaints - a 40% decrease from 2012 and a 2% decrease from 2011. On average, each caller (or household) issued 1.7 calls. The most calls received from one household totaled 12.

Calls by Community - (Exhibits 1 and 3)

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

Minority (between 10% and 50%): The *Paradise and Winchester* communities issued 19 calls (46%). (See October 2013 synopsis of typical aircraft overflight impacts on this community.)

The *Spring Valley* community issued 8 calls (20%). (See October 2013 synopsis of typical aircraft overflight impacts on this community.)

The *City of Henderson* community issued 5 calls (12%). This community is typically impacted by aircraft departing to the east (from Runway 07L and Runway 07R).

The *City of Las Vegas* community issued 4 calls (10%). This community is typically impacted by aircraft departing to the west (from Runway 25L and Runway 25R).

Repeat Caller Impact: Two households issued 34% (14 calls) of all the calls received in November 2013.

Calls by Operation - (Exhibit 2)

- LAS:** 76% of the total calls received were due to **LAS** fixed-wing operations.
- 39% were due to departures to the west from Runways 25L and 25R. (63% from one household).
- VGT:** 2% of the total calls received were due to **VGT** fixed-wing operations.
- HND:** 2% of the total calls received were due to **HND** fixed-wing operations.
- Helis:** 20% of the total calls received were due to **helicopter** operations.

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

- Overall:** 420 daily *departures*⁷ – a 3% increase from 2012 and 8% decrease from 2011.
- 82% of departures were to the west, 9% east, 6% north, and 3% south.
- 476 daily *arrivals* – a 5% increase from 2012 and 3% increase from 2011.
- 82% of arrivals were from the east, 12% south, and 6% north.
- Daytime:** 362 daily *departures*⁸ – a 4% increase from 2012 and 10% decrease from 2011.
- 81% of departures were to the west, 9% east, 7% north, and 3% south.
- 429 daily *arrivals* – a 6% increase from 2012 and 3% increase from 2011.
- 82% of arrivals were from the east, 12% south, and 6% north.
- Nighttime:** 58 daily *departures*⁹ – a 1% decrease from 2012 and 1% increase from 2011.
- 84% of departures were to the west, 9% east, 4% south, and 3% north.
- 47 daily *arrivals* – a 3% decrease from 2012 and 2% decrease from 2011.
- 74% of arrivals were from the east, 18% south, and 8% north.
- Daytime vs. Nighttime:** Approximately 86% of all *departures* and 90% of all *arrivals* occurred during the daytime hours.

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

- Overall:** 80 daily *departures*¹⁰ – a 3% decrease from 2012 and 15% decrease from 2011.
- 62% of departures were to the south, 24% west, 7% north, and 7% east.
- 88 daily *arrivals* – an 8% decrease from 2012 and an 8% decrease from 2011.
- 66% of arrivals were from the north, 18% east, 15% south, and 1% west.
- Daytime:** 72 daily *departures*¹¹ – a 2% decrease from 2012 and 16% decrease from 2011.
- 60% of departures were to the south, 25% west, 8% north, and 7% east.
- 82 daily *arrivals* – a 9% decrease from 2012 and 9% decrease from 2011.
- 65% of arrivals were from the north, 19% east, 15% south, and 1% west.

⁷ See footnote #1.

⁸ See footnote #1.

⁹ See footnote #1.

¹⁰ See footnote #1.

¹¹ See footnote #1.

Nighttime: 8 daily *departures*¹² – a 6% decrease from 2012 and 9% increase from 2011.
▪ 76% of departures were to the south, 16% west, 6% east, and 2% north.
6 daily *arrivals* – a 3% decrease from 2012 and 7% increase from 2011.
▪ 74% of arrivals were from the north, 19% south, 7% east, and 1% west.

Daytime vs. Nighttime: Approximately 91% of all *departures* and 93% of all *arrivals* occurred during the daytime hours.

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

Tropicana: 94 daily *departures* – a 5% decrease from 2012 and 6% decrease from 2011.

Charleston: 93 daily *arrivals* - a 4% decrease from 2011 and no change from 2011.

Strip: 31 daily *touch and go's* - a 7% decrease from 2012 and a 7% 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 67% 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 8% of the daily traffic.

Military: **Military** turbine-driven aircraft accounted for less than 1% of the daily traffic.

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

Helis: **Touring helicopters** accounted for 18% of the daily traffic.

Noisier Aircraft Types: The hush-kitted Boeing 727 aircraft and Boeing 737 (100 & 200 series) aircraft accounted for no operations per day.

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 94% in 2012 and 73% in 2011.

Secondary: In 2013, 3% departed to the **south** (from LAS's secondary departure runways). This figure was 3% in 2012 and 13% in 2011.

¹² See footnote #1.

Alternate 1: In 2013, 6% departed to the **north** (from LAS's alternate departure runways). This figure was 2% in 2012 and 12% in 2011.

Alternate 2: In 2013, 9% departed to the **east** (from LAS's alternate departure runways). This figure was 1% in 2012 and 2% 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 Test 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 93% in 2010. (See October 2013 synopsis for specific location of the SVHS gate.)

Peace: In 2013, 98% of the large air carrier aircraft (excluding those destined to the Nevada Test 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 98% in 2012 and 96% in 2011. (See October 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 Test 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 93% in 2012 and 98% in 2011. (See October 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 83% in 2012 and 78% in 2011. (See October 2013 synopsis for specific location of the UNLV gate.)

Boulder: In 2013, 89% 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 99% in 2012 and 98% in 2011. (See October 2013 synopsis for specific location of the Boulder Hwy. gate.)

Hualapai: In 2013, 86% of the large air carrier aircraft destined to the Nevada Test 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 92% in 2012 and not available in 2011. (See October 2013 synopsis for specific location of the Hualapai gate.)

Eastern: In 2013, 96% 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 99% in 2012 and 97% in 2011. (See October 2013 synopsis for specific location of the Eastern gate.)

Hollywood: In 2013, 95% 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 93% in 2012 and 97% in 2011. (See October 2013 synopsis for specific location of the Hollywood gate.)

Stratosphere: In 2013, 97% 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 85% in 2011. (See October 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 fixed wing route compliance near Boulder Highway.

December 2012: 50 total complaints – a 23% decrease from 2012 and no change from 2011. On average, each caller (or household) issued 2.6 calls. The most calls received from one household totaled 28.

Calls by Community - (Exhibits 1 and 3)

Majority (more than 50%): The **Paradise and Winchester** communities issued 41 calls (82%). (See October 2013 synopsis of typical aircraft overflight impacts on this community.)

Minority (between 10% and 50%): (Not applicable.)

Repeat Caller Impact: One household issued 56% (28 calls) of all the calls received in December 2013.

Calls by Operation - (Exhibit 2)

LAS: 84% of the total calls received were due to **LAS** fixed-wing operations.

- 44% were due to departures to the south from Runways 19L and 19R (95% from one household).
- 16% were due to departures to the west from Runways 25L and 25R (88% from one household).

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

HND: 4% of the total calls received were due to **HND** fixed-wing operations.

Helis: 12% of the total calls received were due to **helicopter** operations.

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

Overall: 400 daily *departures*¹³ – a 2% increase from 2012 and 8% decrease from 2011.

- 72% of departures were to the west, 20% north, 5% east, and 3% south.

448 daily *arrivals* – a 3% increase from 2012 and 1% increase from 2011.

- 81% of arrivals were from the east, 13% south, and 6% north.

Daytime: 341 daily *departures*¹⁴ – a 2% increase from 2012 and 10% decrease from 2011.

- 71% of departures were to the west, 21% north, 5% east, and 3% south.

400 daily *arrivals* – a 4% increase from 2012 and no change from 2011.

- 81% of arrivals were from the east, 13% south, and 6% north.

Nighttime: 60 daily *departures*¹⁵ – a 5% increase from 2012 and 6% increase from 2011.

- 78% of departures were to the west, 16% north, 4% south, and 3% east.

48 daily *arrivals* – a 3% decrease from 2012 and 1% increase from 2011.

- 84% of arrivals were from the east, 9% south, and 7% north.

¹³ See footnote #1.

¹⁴ See footnote #1.

¹⁵ See footnote #1.

Daytime vs. Nighttime: Approximately 85% of all *departures* and 89% of all *arrivals* occurred during the daytime hours.

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

Overall: 75 daily *departures*¹⁶ – a 1% decrease from 2013 and 13% decrease from 2011.
▪ 54% of departures were to the south, 24% north, 18% west, and 4% east.
88 daily *arrivals* – no change from 2012 and 8% decrease from 2011.
▪ 59% of arrivals were from the north, 22% south, 18% east, and 1% west.

Daytime: 70 daily *departures*¹⁷ – a 1% increase from 2012 and 13% decrease from 2011.
▪ 53% of departures were to the south, 24% north, 18% west, and 5% east.
82 daily *arrivals* – no change from 2012 and 8% decrease from 2011.
▪ 59% of arrivals were from the north, 22% south, 18% east, and 1% west.

Nighttime: 6 daily *departures*¹⁸ – a 12% decrease from 2012 and 11% decrease from 2011.
▪ 66% of departures were to the south, 20% north, 13% west, and 2% east.
6 daily *arrivals* – a 12% increase from 2012 and no change from 2011.
▪ 68% of arrivals were from the north, 21% south, 11% east, and 1% west.

Daytime vs. Nighttime: Approximately 92% of all *departures* and 94% of all *arrivals* occurred during the daytime hours.

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

Tropicana: 73 daily *departures* – a 4% decrease from 2012 and 8% increase from 2011.

Charleston: 72 daily *arrivals* - a 4% decrease from 2012 and 8% increase from 2011.

Strip: 27 daily *touch and go's* - a 4% decrease from 2012 and 11% increase from 2011.

Daytime vs. Nighttime: Approximately 97% 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 69% 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.

¹⁶ See footnote #1.

¹⁷ See footnote #1.

¹⁸ See footnote #1.

Military: *Military* turbine-driven aircraft accounted for less than 1% of the daily traffic.

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

Helis: *Touring helicopters* accounted for 16% of the daily traffic.

Noisier Aircraft Types: The hush-kitted Boeing 727 aircraft and Boeing 737 (100 & 200 series) aircraft accounted for almost no operations per day.

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

Primary: In 2013, 72% departed to the *west* (from LAS's primary departure runways). This figure was 72% in 2012 and 60% in 2011.

Secondary: In 2013, 3% departed to the *south* (from LAS's secondary departure runways). This figure was 4% in 2012 and 9% in 2011.

Alternate 1: In 2013, 20% departed to the *north* (from LAS's alternate departure runways). This figure was 20% in 2012 and 28% in 2011.

Alternate 2: In 2013, 5% departed to the *east* (from LAS's alternate departure runways). This figure was 4% in 2012 and 3% in 2010.

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

SVHS: In 2013, 94% of the large air carrier aircraft (excluding those destined to the Nevada Test 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 96% in 2012 and 93% in 2011. (See October 2013 synopsis for specific location of the SVHS gate.)

Peace: In 2013, 98% of the large air carrier aircraft (excluding those destined to the Nevada Test 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 99% in 2012 and 98% in 2011. (See October 2013 synopsis for specific location of the Peace gate.)

Pebble: In 2013, 94% of the large air carrier aircraft (excluding those destined to the Nevada Test 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 98% in 2011. (See October 2013 synopsis for specific location of the Pebble gate.)

UNLV: In 2013, 82% 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 82% in 2011. (See October 2013 synopsis for specific location of the UNLV gate.)

Boulder: In 2013, 91% 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 93% in 2011. (See October 2013 synopsis for specific location of the Boulder Hwy. gate.)

Hualapai: In 2013, 89% of the large air carrier aircraft destined to the Nevada Test 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 95% in 2012 and not available in 2011. (See October 2013 synopsis for specific location of the Hualapai gate.)

Eastern: In 2013, 95% 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 98% in 2011. (See October 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 98% in 2011. (See October 2013 synopsis for specific location of the Hollywood gate.)

Stratosphere: In 2013, 97% 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 97% in 2012 and 85% in 2011. (See October 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 repeat caller complaints, and northern departure amounts.

Annual Noise Complaint Summaries

2013: 409 total complaints – a 38% decrease from 2012 and a 27% decrease from 2011. On average, each caller (or household) issued 2.7 calls. The most calls received from one household totaled 53.

Calls by Community - (Exhibits 1 and 3)

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

Minority (between 10% and 50%): The **Paradise and Winchester** communities issued 132 calls (32%). (See October 2013 synopsis of typical aircraft overflight impacts on this community.)

The **Sunrise Manor** community issued 73 calls (18%). This community is typically impacted by aircraft departing to the north (from Runway 01L and Runway 01R), and helicopter tour operations.

The **City of Henderson** communities issued 70 calls (17%). (See November 2013 synopsis of typical aircraft overflight impacts on this community.)

The **Spring Valley** community issued 50 calls (12%). (See October 2013 synopsis of typical aircraft overflight impacts on this community.)

Repeat Caller Impact: One household issued 13% (53 calls) of all the calls received in 2013.

Calls by Operation - (Exhibit 2)

- LAS:** 60% of the total calls received were due to **LAS** fixed-wing operations.
- 22% were due to departures to the north from Runways 01L and 01R.
 - 9% were due to departures to the south from Runways 19L and 19R (71% from one household).
- VGT:** 2% of the total calls received were due to **VGT** fixed-wing operations.
- HND:** 7% of the total calls received were due to **HND** fixed-wing operations.
- Helis:** 31% of the total calls received were due to **helicopter** operations.

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

- Overall:** 415 daily *departures*¹⁹ – a 4% decrease from 2012 and 11% decrease from 2011.
- 75% of departures were to the west, 12% north, 10% east, and 3% south.
- 463 daily *arrivals* – a 1% decrease from 2012 and 2% decrease from 2011.
- 77% of arrivals were from the east, 11% north, 10% south and 2% west.
- Daytime:** 348 daily *departures*²⁰ – a 5% decrease from 2012 and 13% decrease from 2011.
- 73% of departures were to the west, 13% north, 11% east, and 2% south.
- 411 daily *arrivals* – a 1% decrease from 2012 and 2% decrease from 2011.
- 77% of arrivals were from the east, 11% north, 10% south, and 3% west.
- Nighttime:** 67 daily *departures*²¹ – no change from 2012 and 3% increase from 2011.
- 84% of departures were to the west, 9% north, 4% east, and 3% south.
- 52 daily *arrivals* – a 6% decrease from 2012 and 5% decrease from 2011.
- 82% of arrivals were from the east, 11% north, and 7% south.

Daytime vs. Nighttime: Approximately 84% of all *departures* and 89% of all *arrivals* occurred during the daytime hours.

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

- Overall:** 78 daily *departures*²² – a 7% decrease from 2012 and 16% decrease from 2011.
- 53% of departures were to the south, 23% west, 15% north, and 10% east.
- 90 daily *arrivals* – a 7% decrease from 2012 and 7% decrease from 2011.
- 66% of arrivals were from the north, 16% east, 15% south, and 3% west.
- Daytime:** 70 daily *departures*²³ – an 8% decrease from 2012 and 18% decrease from 2011.
- 51% of departures were to the south, 23% west, 16% north, and 10% east.
- 84 daily *arrivals* – a 7% decrease from 2012 and 8% decrease from 2011.
- 65% of arrivals were from the north, 16% east, 15% south, and 4% west.

¹⁹ See footnote #1.

²⁰ See footnote #1.

²¹ See footnote #1.

²² See footnote #1.

²³ See footnote #1.

Nighttime: 8 daily *departures*²⁴ – a 3% increase from 2012 and 4% increase from 2011.
▪ 66% of departures were to the south, 21% west, 9% north, and 3% east.
6 daily *arrivals* – a 2% decrease from 2012 and 7% increase from 2011.
▪ 73% of arrivals were from the north, 14% south, 11% 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: 112 daily *departures* – a 5% increase from 2012 and no change from 2011.

Charleston: 111 daily *arrivals* - a 6% increase from 2012 and 1% increase from 2011.

Strip: 37 daily *touch and go's* - a 2% decrease from 2012 and 9% increase from 2011.

Daytime vs. Nighttime: Approximately 96% 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 65% 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 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.

Helos: **Touring helicopters** accounted for 21% of the daily traffic.

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

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

Primary: In 2013, 75% departed to the **west** (from LAS's primary departure runways). This figure was 68% in 2012 and 63% in 2011.

Secondary: In 2013, 3% departed to the **south** (from LAS's secondary departure runways). This figure was 8% in 2012 and 13% in 2011.

²⁴ See footnote #1.

Alternate 1: In 2013, 12% departed to the **north** (from LAS's alternate departure runways). This figure was 12% in 2012 and 17% in 2011.

Alternate 2: In 2013, 10% departed to the **east** (from LAS's alternate departure runways). This figure was 13% in 2012 and 7% in 2011.

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

SVHS: In 2013, 95% of the large air carrier aircraft (excluding those destined to the Nevada Test 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 94% in 2011. (See October 2013 synopsis for specific location of the SVHS gate.)

Peace: In 2013, 97% of the large air carrier aircraft (excluding those destined to the Nevada Test 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 96% in 2012 and 94% in 2011. (See October 2013 synopsis for specific location of the Peace gate.)

Pebble: In 2013, 95% of the large air carrier aircraft (excluding those destined to the Nevada Test 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 97% in 2011. (See October 2013 synopsis for specific location of the Pebble gate.)

UNLV: In 2013, 80% 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 81% in 2012 and 80% in 2011. (See October 2013 synopsis for specific location of the UNLV gate.)

Boulder: In 2013, 96% 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 96% in 2011. (See October 2013 synopsis for specific location of the Boulder Hwy. gate.)

Hualapai: In 2013, 92% of the large air carrier aircraft destined to the Nevada Test 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 93% in 2012 and not available in 2011. (See October 2013 synopsis for specific location of the Hualapai gate.)

Eastern: In 2013, 96% 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 October 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 98% in 2012 and 96% in 2011. (See October 2013 synopsis for specific location of the Hollywood gate.)

Stratosphere: In 2013, 88% 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 87% in 2012 and 83% in 2011. (See October 2013 synopsis for specific location of the Stratosphere gate.)

Calls by Month - (Exhibit 10)

Seasonal Trends: The majority of the calls received for 2013 occurred in January thru April (46% of the total number of complaint calls received). The vast majority of calls received were associated with wind conditions from the north as well as helicopter tour group operations. While historical weather conditions for the Las Vegas Valley reflect the majority of departures from LAS that utilize Runway 25L and Runway 25R whenever wind and weather conditions dictate, the FAA will utilize a variety of runway configurations to better manage traffic levels in a safe and efficient manner. Additionally, when weather conditions are temperate and residents opt to leave their windows and doors open during the spring and fall months, the number of noise complaints tends to increase, as indicated on the exhibit.

Calls by Time of Day - (Exhibit 11)

Daytime versus Nighttime: Approximately 84% of the total calls received by the CCDOA were issued between the hours of 7 AM and 10 PM while the remaining 16% were received between the hours of 10 PM and 7 AM.

Calls by Airport/Operation - (Exhibit 12)

Airport Trends: A majority (60%) of the total calls received in 2013 were attributed to LAS operations. 31% of the total calls received in 2013 were attributed to helicopter operations.

Calls by Community - (Exhibit 13)

Community Trends: A majority of the total calls (67%) were shared from three communities: *Paradise and Winchester, Sunrise Manor, and Henderson*. The *Paradise and Winchester* communities issued 32% of the calls; the *Sunrise Manor* community issued approximately 18% of the calls; and the *Henderson* community issued approximately 17% of the calls. Approximately 50% of the calls received from *Paradise, Winchester and Sunrise Manor* were attributed to northbound departures from Runway 01R. However, 40% of the total 205 calls received from these two communities are from two households, which were attributed to departures to the north and south from LAS, and helicopter tour operations along Charleston Blvd. Of the 17% (70 calls) from the *Henderson* community, 83% (58 calls) were attributed to general aviation and helicopter flights.

Calls by LAS Operations - (Exhibit 14)

LAS Trends: The majority (36%) of the total calls received were associated with non-typical increased departures to the north from Runways 01R and 01L.

Other Notable Issues

Helicopter Operator Users Meeting: On December 19, 2013, DOA staff members met with FAA, local helicopter tour operators, Las Vegas Metro Police Department, and a representative from Commissioner Scow's office to discuss noise complaints tied to helicopter operations, route compliance, and operational growth. DOA staff provided updated information about the transition to a new radar feed. Upon completion, this fusion of surveillance data, from FAA en route and terminal radars will provide timely and detailed flight track data.

Voluntary Land Acquisition Program: The CCDOA received approval from the Board of County Commissioners (BOCC) to implement a multi-year, multi-grant voluntary land acquisition program. Over 400 parcels are eligible to participate in the program, and the number of impacted dwelling units exceeding one thousand. The implementation of this program addresses two of LAS's noise mitigation policies of land acquisition in neighborhoods impacted by elevated noise levels (Noise Mitigation Measure #1: Acquire airport-incompatible land uses in the 70 DNL and higher, and Noise Mitigation Measure #2: Acquire properties developed with airport-incompatible land uses in the 65 DNL and higher).

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

January 17, 2014

Page 20 of 42

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
Saeed Bonabian
Judy Villalta

Stephen J. Lloyd (FAA TRACON)
Jim Burgan (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)
Mike Jeck (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)

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

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* - October 2013

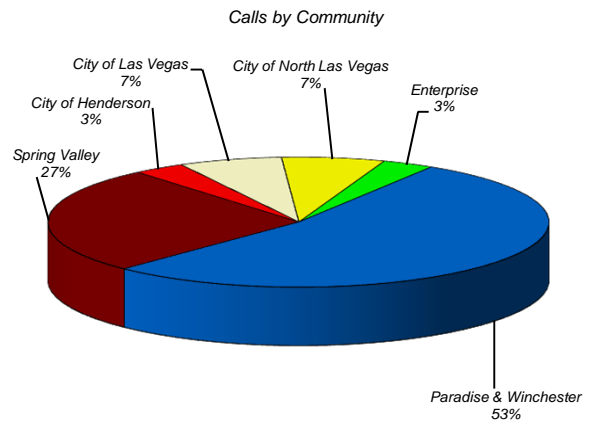
| Community | No. of Calls in 2013 | No. of Callers in 2013 | No. of Calls in 2012 | No. of Calls in 2011 |
|-------------------------|----------------------|------------------------|----------------------|----------------------|
| City of Boulder City | 1 | 1 | 27 | 10 |
| City of Henderson | 2 | 2 | 5 | 8 |
| City of Las Vegas | 2 | 2 | | 1 |
| City of North Las Vegas | 1 | 1 | 5 | 7 |
| Enterprise | | | 1 | 1 |
| Lone Mountain | 16 | 11 | 18 | 14 |
| Paradise & Winchester | 8 | 1 | 13 | 11 |
| Spring Valley | | | 7 | |
| Summerlin South | | | 1 | |
| Sunrise Manor | | | | |
| Whitney | | | | |
| Location unknown | | | | |
| Overall Total | 30 | 18 | 77 | 52 |

Difference between 2013 and 2012 Total Calls: -61%

Difference between 2013 and 2011 Total Calls: -42%

Average Number of Calls per Caller: 1.7

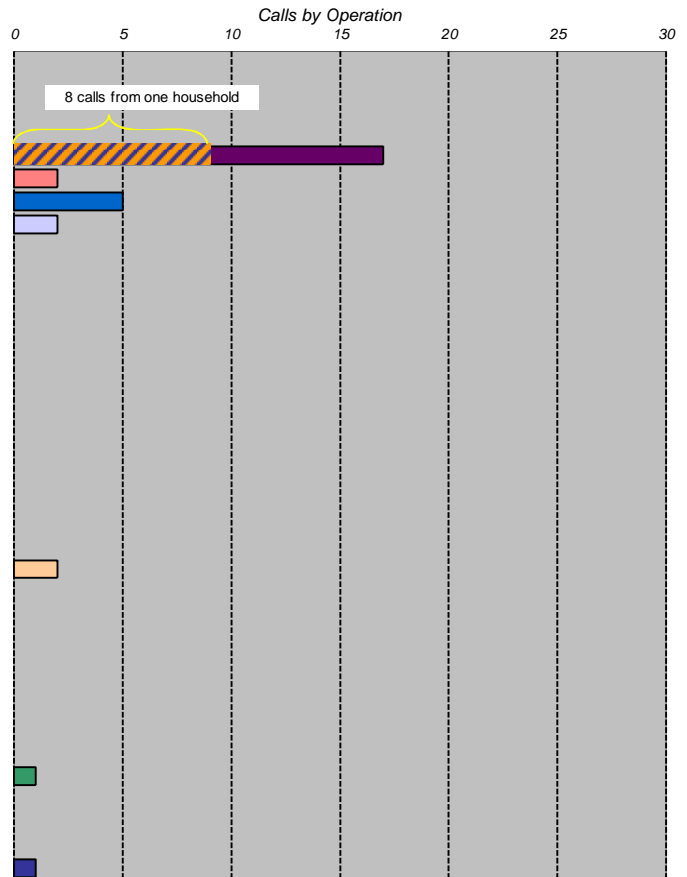
Most calls received from one household: 8



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

Exhibit 2: Noise Complaint Calls by Type of Operation - October 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 | | | | 1 |
| LAS 07R/L Arrivals | | | 1 | |
| LAS 19R/L Arrivals | | | 1 | 1 |
| LAS 25R/L Arrivals | 17 | 56.7% | 26 | 24 |
| LAS 01R/L Departures | 2 | 6.7% | 1 | 3 |
| LAS 07R/L Departures | 5 | 16.7% | 2 | 4 |
| LAS 19R/L Departures | 2 | 6.7% | 12 | 6 |
| LAS 25R/L Departures | | | | |
| LAS Run-ups | | | | |
| LAS GA | | | | |
| LAS Other | | | | |
| LAS Total | 26 | 86.7% | 43 | 39 |
| 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 | 2 | 6.7% | | 2 |
| VGT Other | | | | |
| VGT Total | 2 | 6.7% | 0 | 2 |
| HND 17R/L Arrivals | | | | |
| HND 35R/L Arrivals | | | | |
| HND 17R/L Departures | | | | |
| HND 35R/L Departures | | | | |
| HND Run-ups | | | | |
| HND GA | 1 | 3.3% | 4 | 3 |
| HND Other | | | | |
| HND Total | 1 | 3.3% | 4 | 3 |
| Helicopters** | 1 | 3.3% | 30 | 8 |
| Overall Total | 30 | 100% | 77 | 52 |



** 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

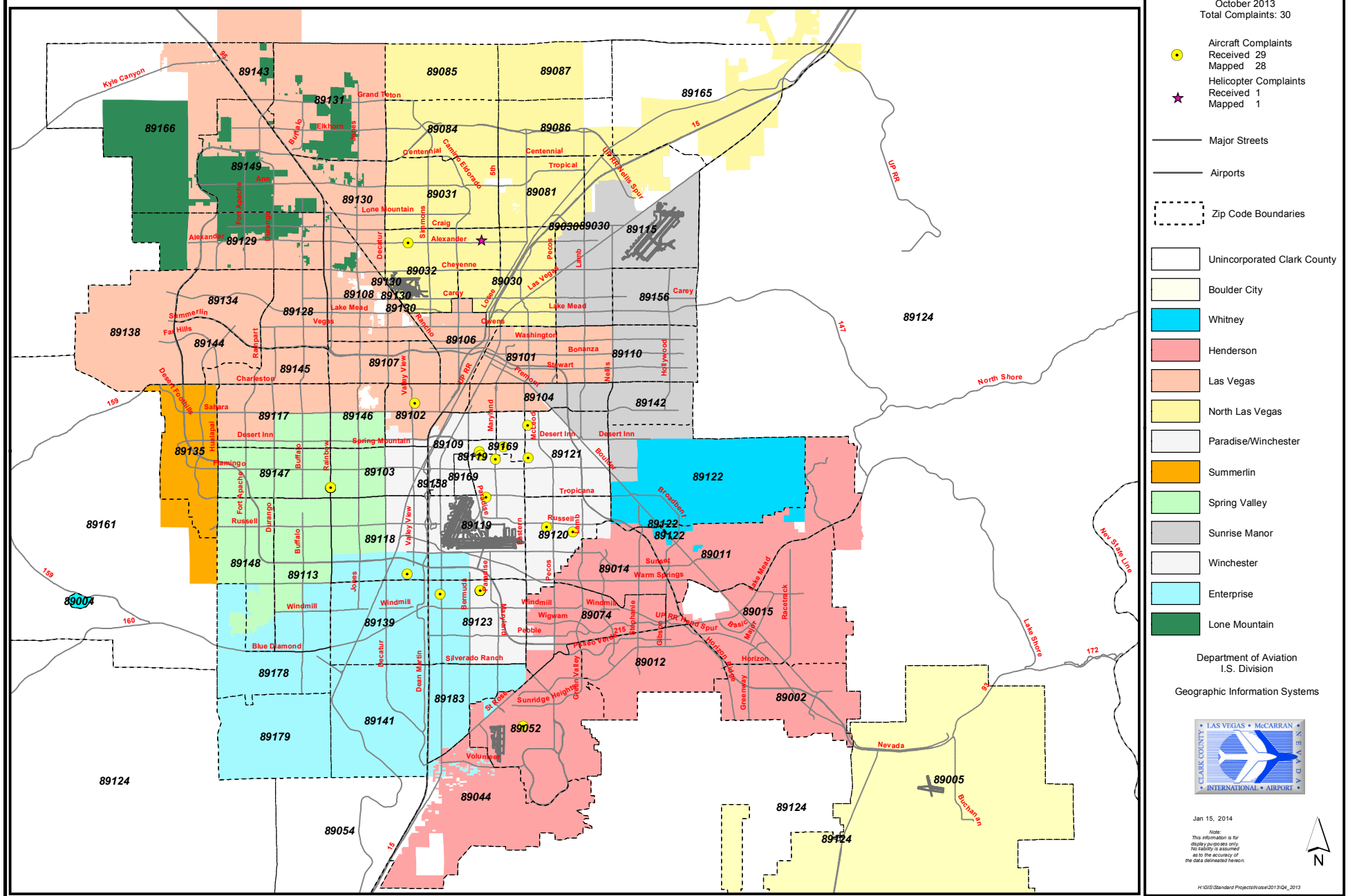
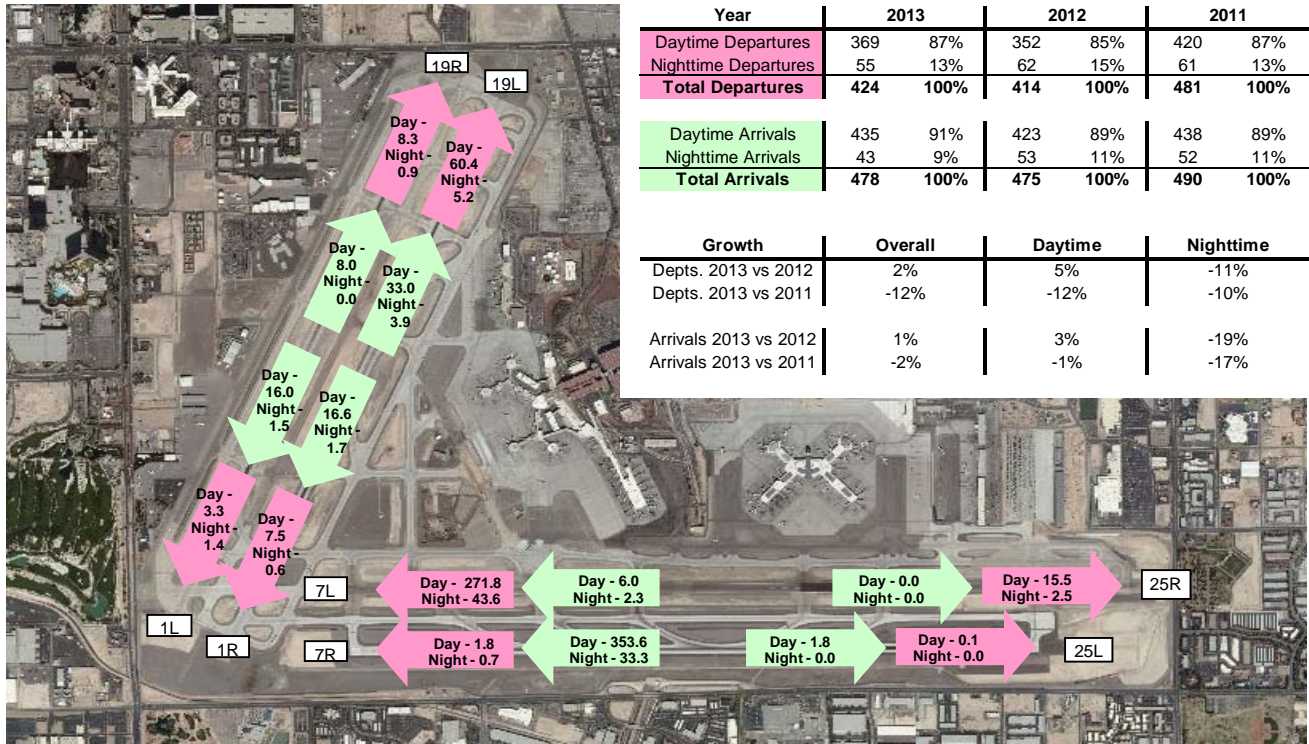
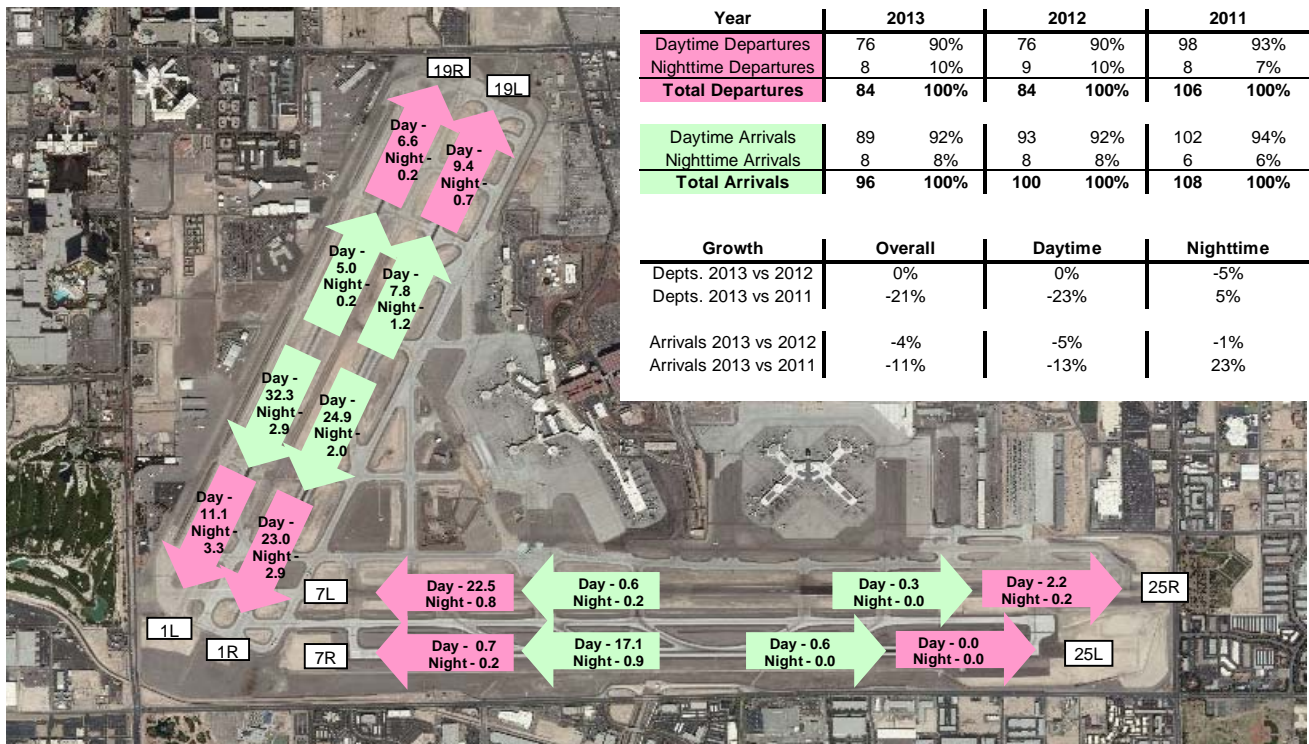


Exhibit 4: LAS Daily Average Operations Runway for Large Air Carrier Aircraft* - October 2013



* 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** - October 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 - October 2013

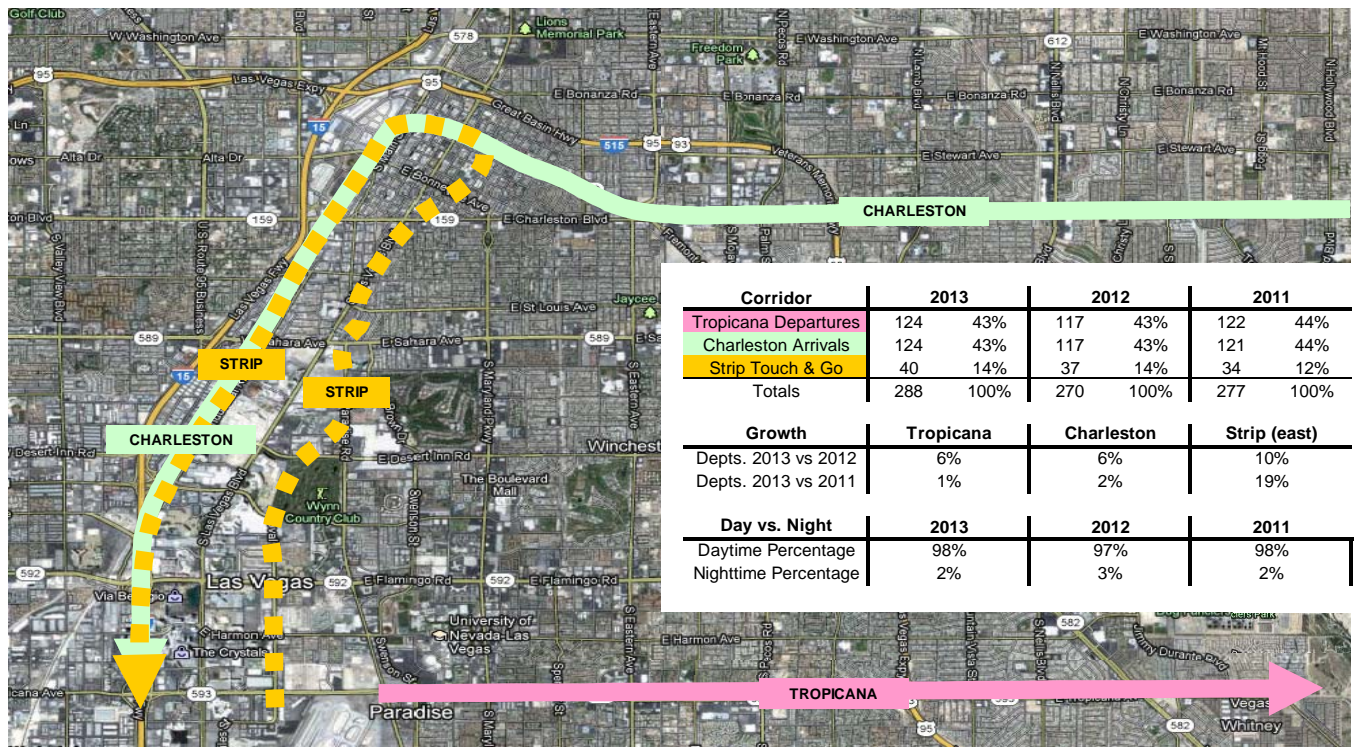
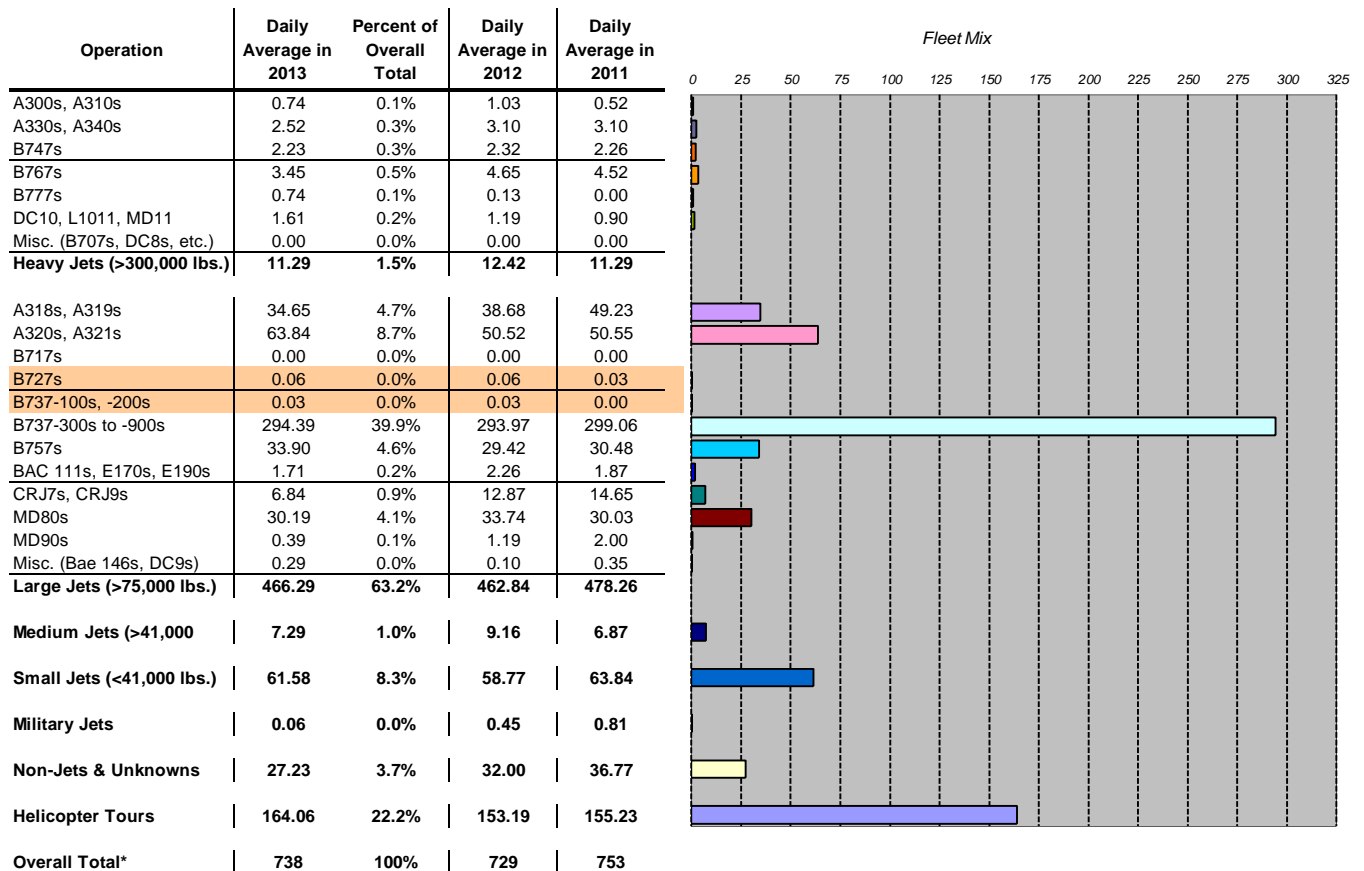


Exhibit 7: LAS Aircraft Arrival Fleet Mix* - October 2013



* 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* - October 2013 to 2011

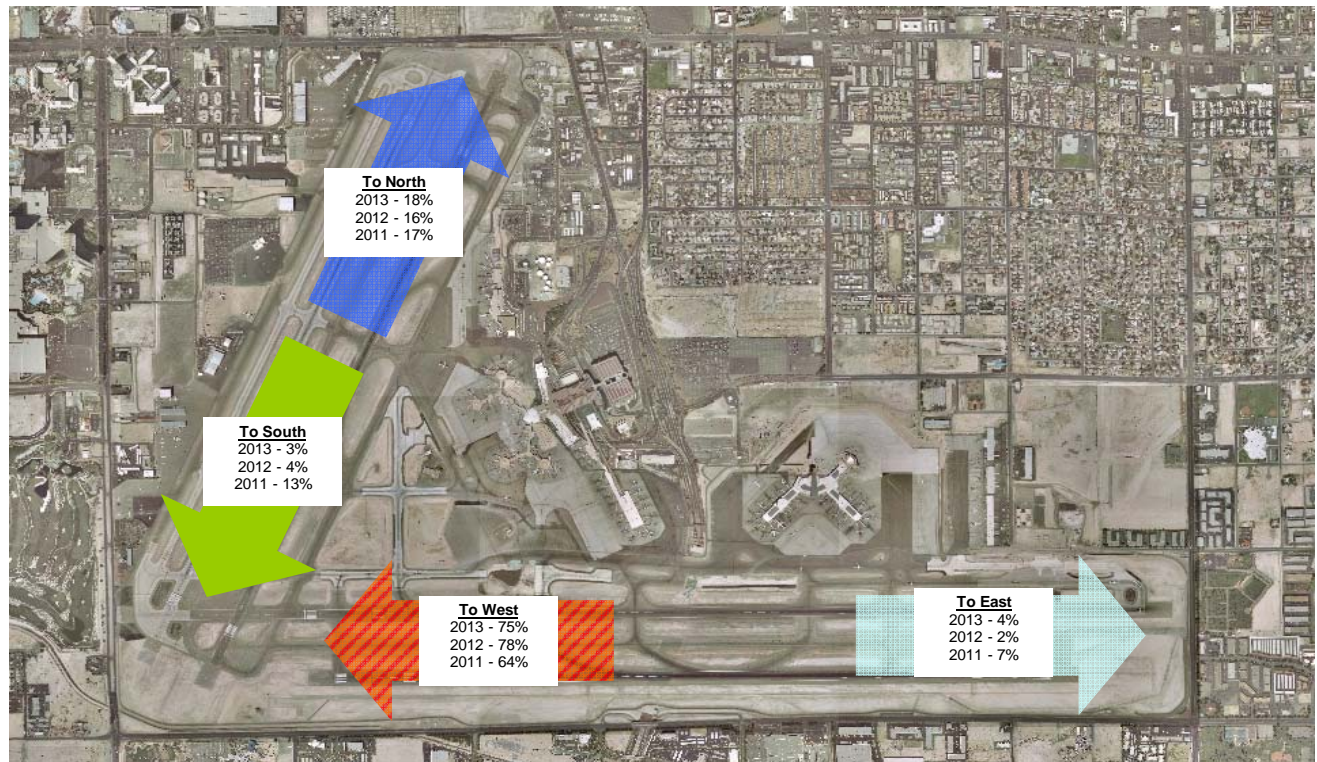
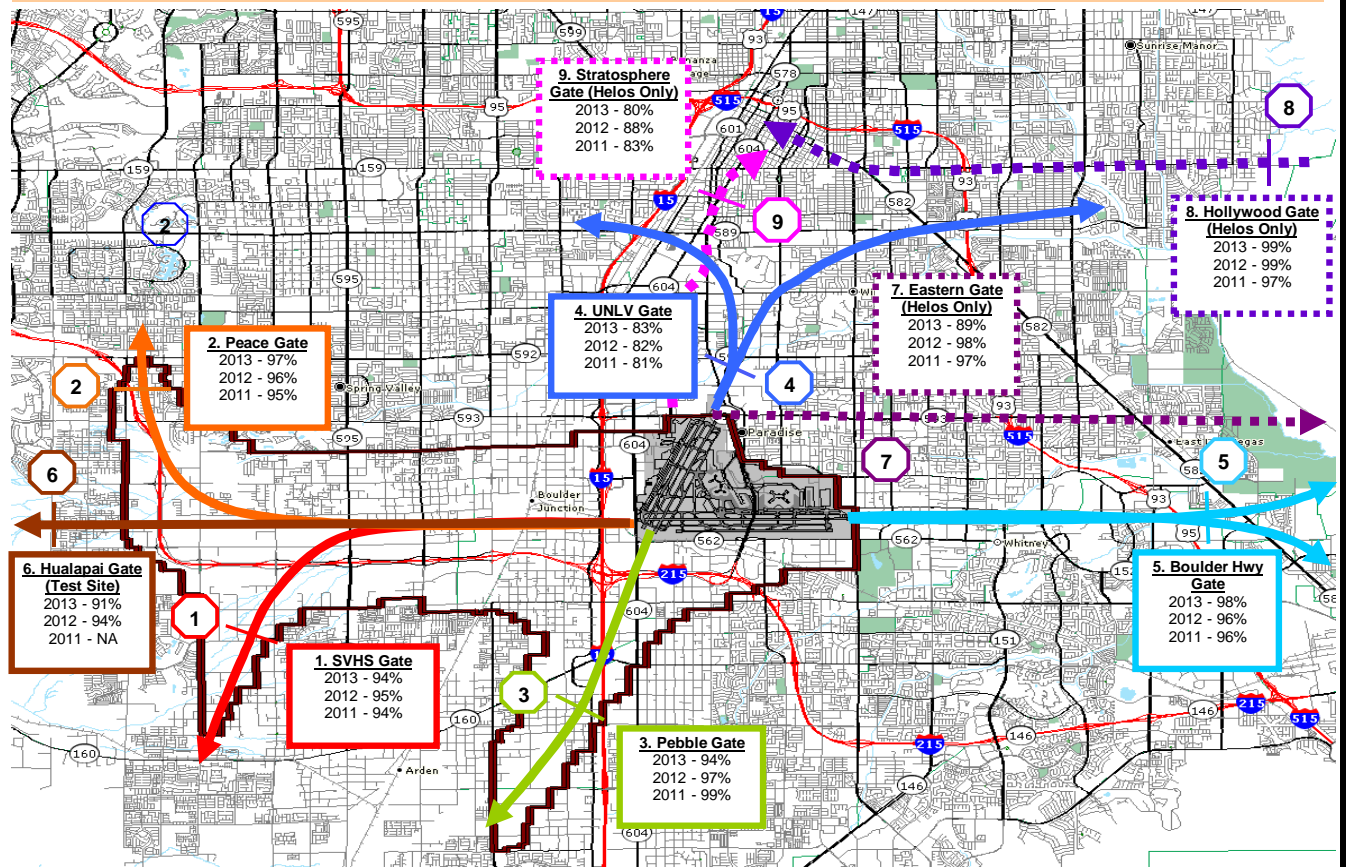


Exhibit 9: "Gate" Compliance for Large Aircraft* & LAS Helicopter Tours - October 2013



* 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* - November 2013

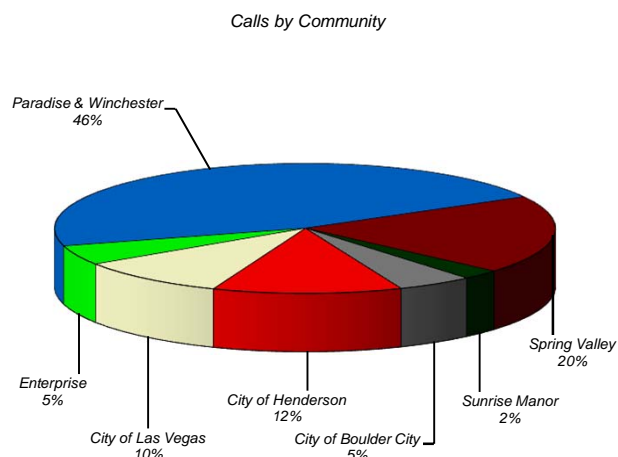
| Community | No. of Calls in 2013 | No. of Callers in 2013 | No. of Calls in 2012 | No. of Calls in 2011 |
|-------------------------|----------------------|------------------------|----------------------|----------------------|
| City of Boulder City | 2 | 2 | | |
| City of Henderson | 5 | 4 | 30 | 10 |
| City of Las Vegas | 4 | 4 | 3 | 8 |
| City of North Las Vegas | | | | |
| Enterprise | 2 | 2 | 7 | 3 |
| Lone Mountain | | | | |
| Paradise & Winchester | 19 | 7 | 4 | 1 |
| Spring Valley | 8 | 4 | 5 | 16 |
| Summerlin South | | | 1 | 1 |
| Sunrise Manor | 1 | 1 | 18 | 3 |
| Whitney | | | | |
| Location unknown | | | | |
| Overall Total | 41 | 24 | 68 | 42 |

Difference between 2013 and 2012 Total Calls: -40%

Difference between 2013 and 2011 Total Calls: -2%

Average Number of Calls per Caller: 1.7

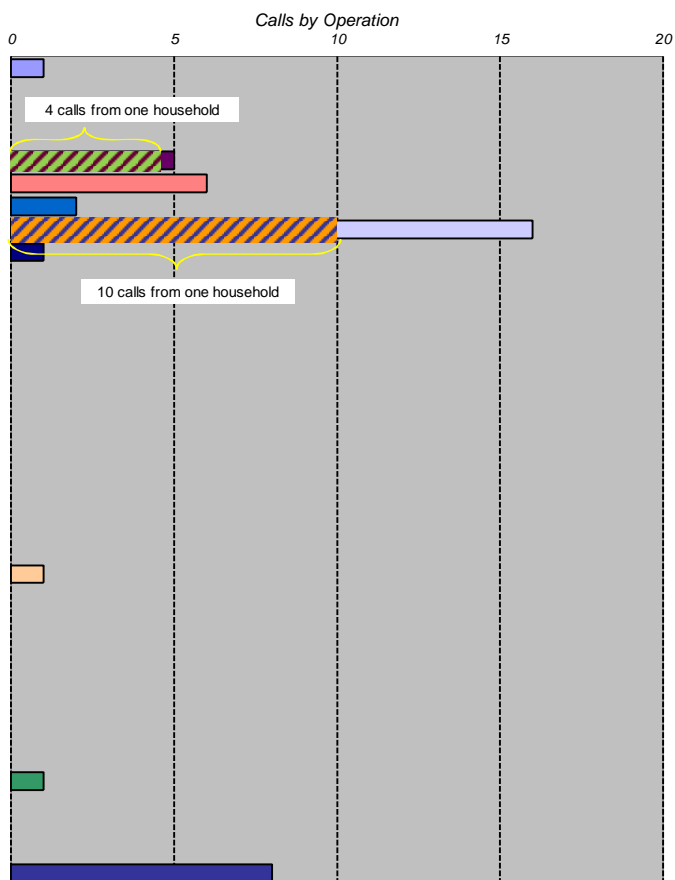
Most calls received from one household: 12



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

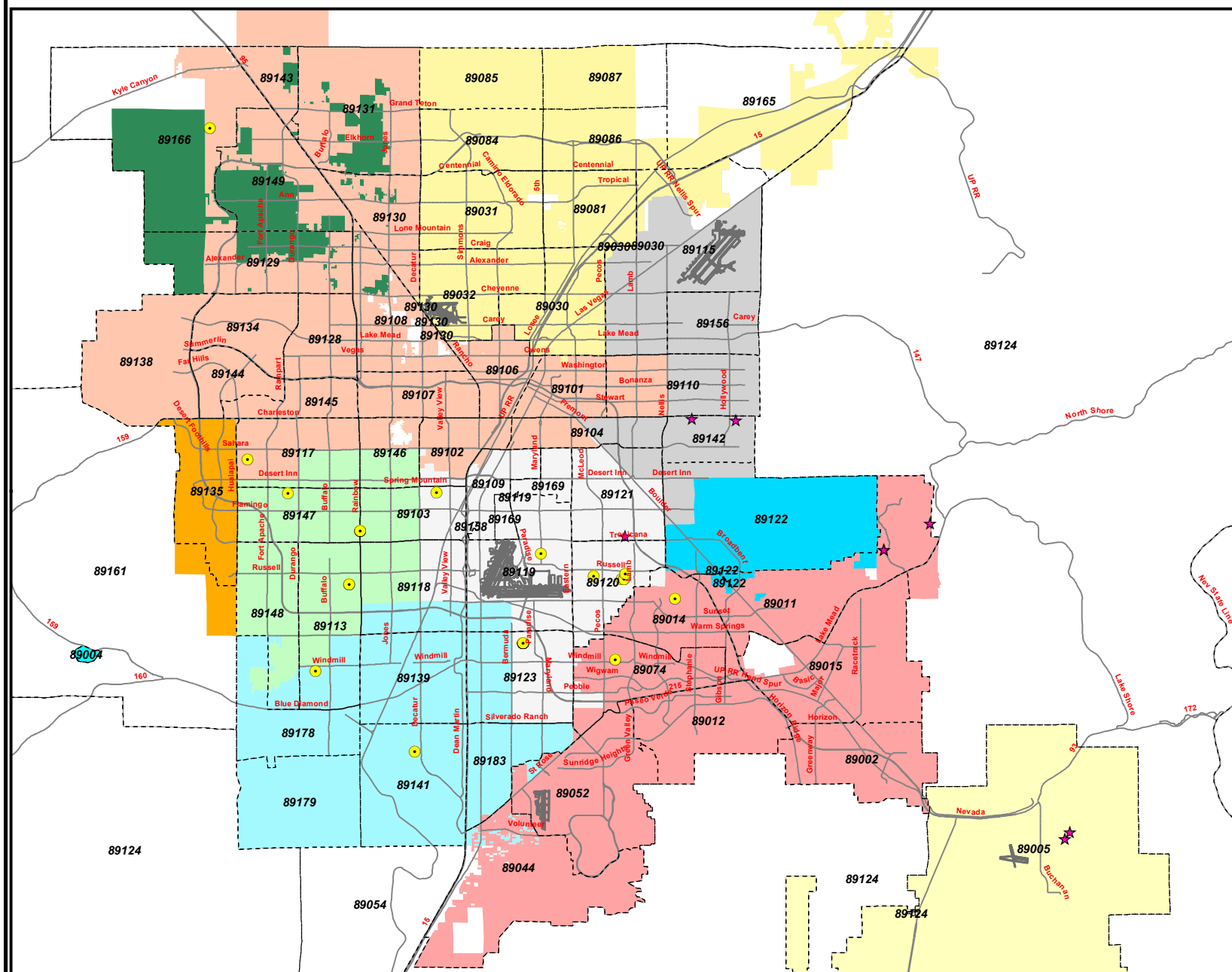
Exhibit 2: Noise Complaint Calls by Type of Operation - November 2013

| Operation | No. of Calls in 2013 | Percent of Overall Total | No. of Calls in 2012 | No. of Calls in 2011 |
|----------------------|----------------------|--------------------------|----------------------|----------------------|
| LAS 01R/L Arrivals | 1 | 2.4% | | |
| LAS 07R/L Arrivals | | | 2 | |
| LAS 19R/L Arrivals | | | 2 | |
| LAS 25R/L Arrivals | | | | |
| LAS 01R/L Departures | 5 | 12.2% | 2 | 11 |
| LAS 07R/L Departures | 6 | 14.6% | 2 | |
| LAS 19R/L Departures | 2 | 4.9% | 6 | 3 |
| LAS 25R/L Departures | 16 | 39.0% | 7 | 14 |
| LAS Run-ups | 1 | 2.4% | | |
| LAS GA | | | | |
| LAS Other | | | | |
| LAS Total | 31 | 75.6% | 21 | 28 |
| 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 | 2.4% | | |
| VGT Other | | | | |
| VGT Total | 1 | 2.4% | 0 | 0 |
| HND 17R/L Arrivals | | | | |
| HND 35R/L Arrivals | | | | |
| HND 17R/L Departures | | | | |
| HND 35R/L Departures | | | | |
| HND Run-ups | | | | |
| HND GA | 1 | 2.4% | 1 | 2 |
| HND Other | | | | |
| HND Total | 1 | 2.4% | 1 | 2 |
| Helicopters** | 8 | 19.5% | 46 | 12 |
| Overall Total | 41 | 100% | 68 | 42 |



** 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 - November 2013



Legend

November 2013
Total Complaints: 41

- Aircraft Complaints
Received 33
Mapped 32
- Helicopter Complaints
Received 8
Mapped 8
- Major Streets
- Airports
- Zip Code Boundaries
- Unincorporated Clark County
- Boulder City
- Whitney
- Henderson
- Las Vegas
- North Las Vegas
- Paradise/Winchester
- Summerlin
- Spring Valley
- Sunrise Manor
- Winchester
- Enterprise
- Lone Mountain

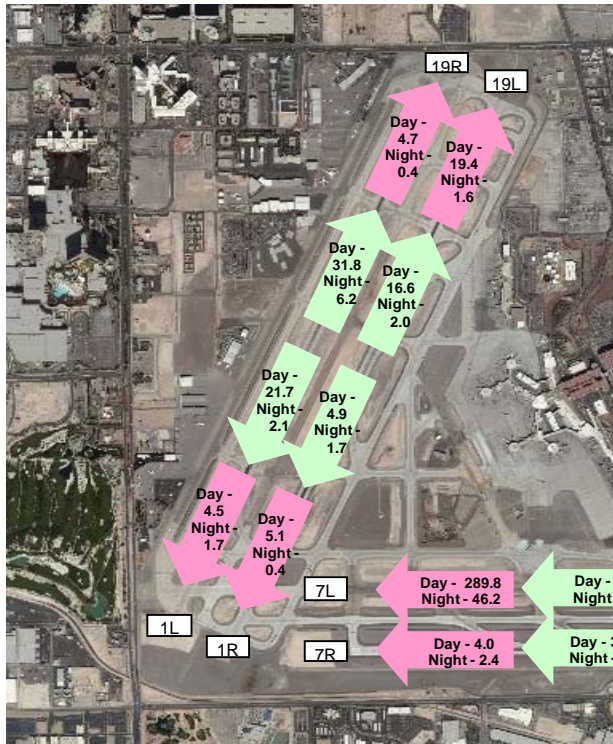
Department of Aviation
I.S. Division

Geographic Information Systems

Jan 15, 2014

Note:
This information is for display purposes only.
No liability is assumed
with the accuracy of
the data delineated herein.

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



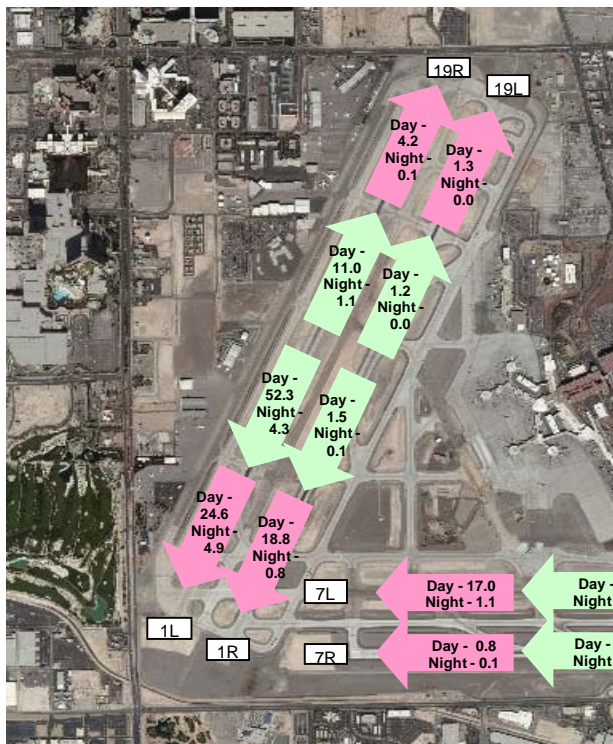
| Year | 2013 | | 2012 | | 2011 | |
|-------------------------|------------|-------------|------------|-------------|------------|-------------|
| Daytime Departures | 362 | 86% | 348 | 86% | 401 | 88% |
| Nighttime Departures | 58 | 14% | 59 | 14% | 57 | 12% |
| Total Departures | 420 | 100% | 406 | 100% | 458 | 100% |

| | | | | | | |
|-----------------------|------------|-------------|------------|-------------|------------|-------------|
| Daytime Arrivals | 429 | 90% | 404 | 89% | 415 | 90% |
| Nighttime Arrivals | 47 | 10% | 48 | 11% | 48 | 10% |
| Total Arrivals | 476 | 100% | 452 | 100% | 463 | 100% |

| Growth | Overall | Daytime | Nighttime |
|-----------------------|---------|---------|-----------|
| Depts. 2013 vs 2012 | 3% | 4% | -1% |
| Depts. 2013 vs 2011 | -8% | -10% | 1% |
| Arrivals 2013 vs 2012 | 5% | 6% | -3% |
| Arrivals 2013 vs 2011 | 3% | 3% | -2% |

* 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** - November 2013



| Year | 2013 | | 2012 | | 2011 | |
|-------------------------|-----------|-------------|-----------|-------------|-----------|-------------|
| Daytime Departures | 72 | 91% | 74 | 90% | 86 | 93% |
| Nighttime Departures | 8 | 9% | 8 | 10% | 7 | 7% |
| Total Departures | 80 | 100% | 82 | 100% | 93 | 100% |

| | | | | | | |
|-----------------------|-----------|-------------|-----------|-------------|-----------|-------------|
| Daytime Arrivals | 82 | 93% | 90 | 94% | 91 | 94% |
| Nighttime Arrivals | 6 | 7% | 6 | 6% | 6 | 6% |
| Total Arrivals | 88 | 100% | 96 | 100% | 96 | 100% |

| Growth | Overall | Daytime | Nighttime |
|-----------------------|---------|---------|-----------|
| Depts. 2013 vs 2012 | -3% | -2% | -6% |
| Depts. 2013 vs 2011 | -15% | -16% | 9% |
| Arrivals 2013 vs 2012 | -8% | -9% | -3% |
| Arrivals 2013 vs 2011 | -8% | -9% | 7% |

** 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 - November 2013

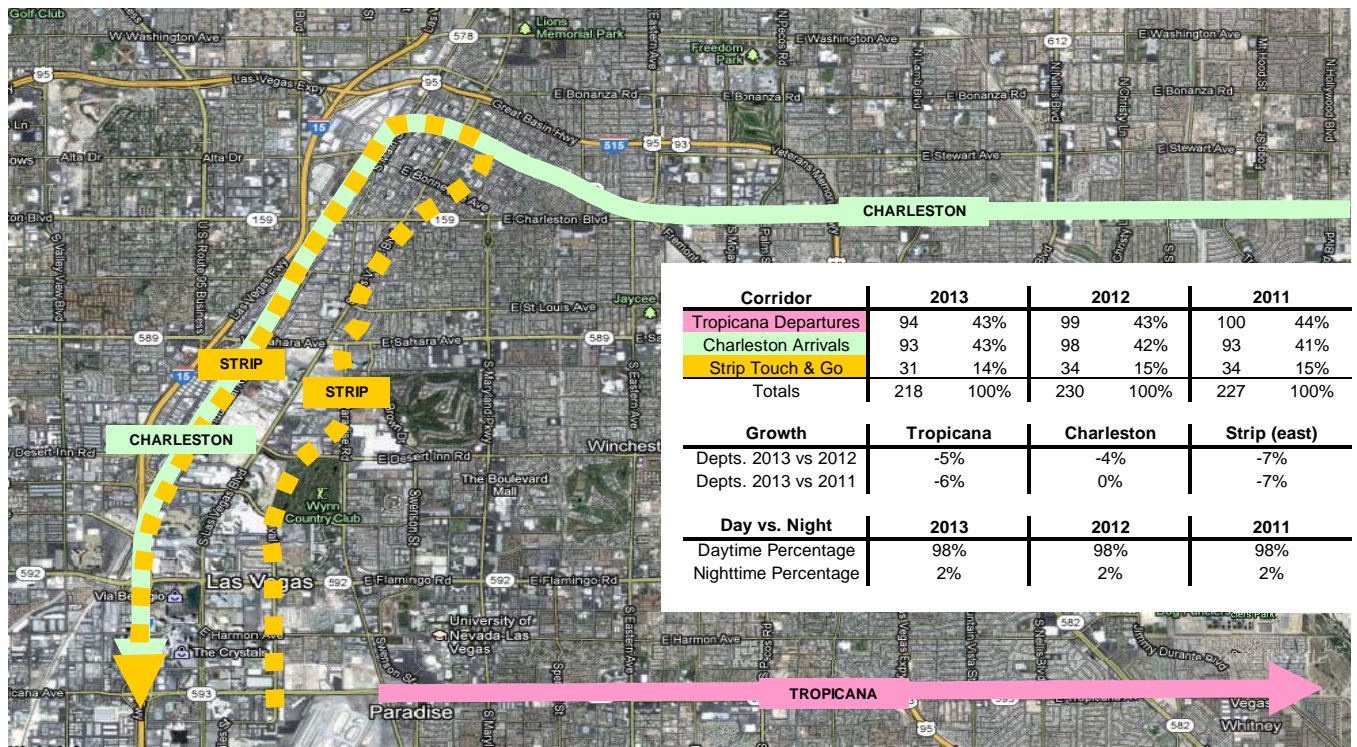
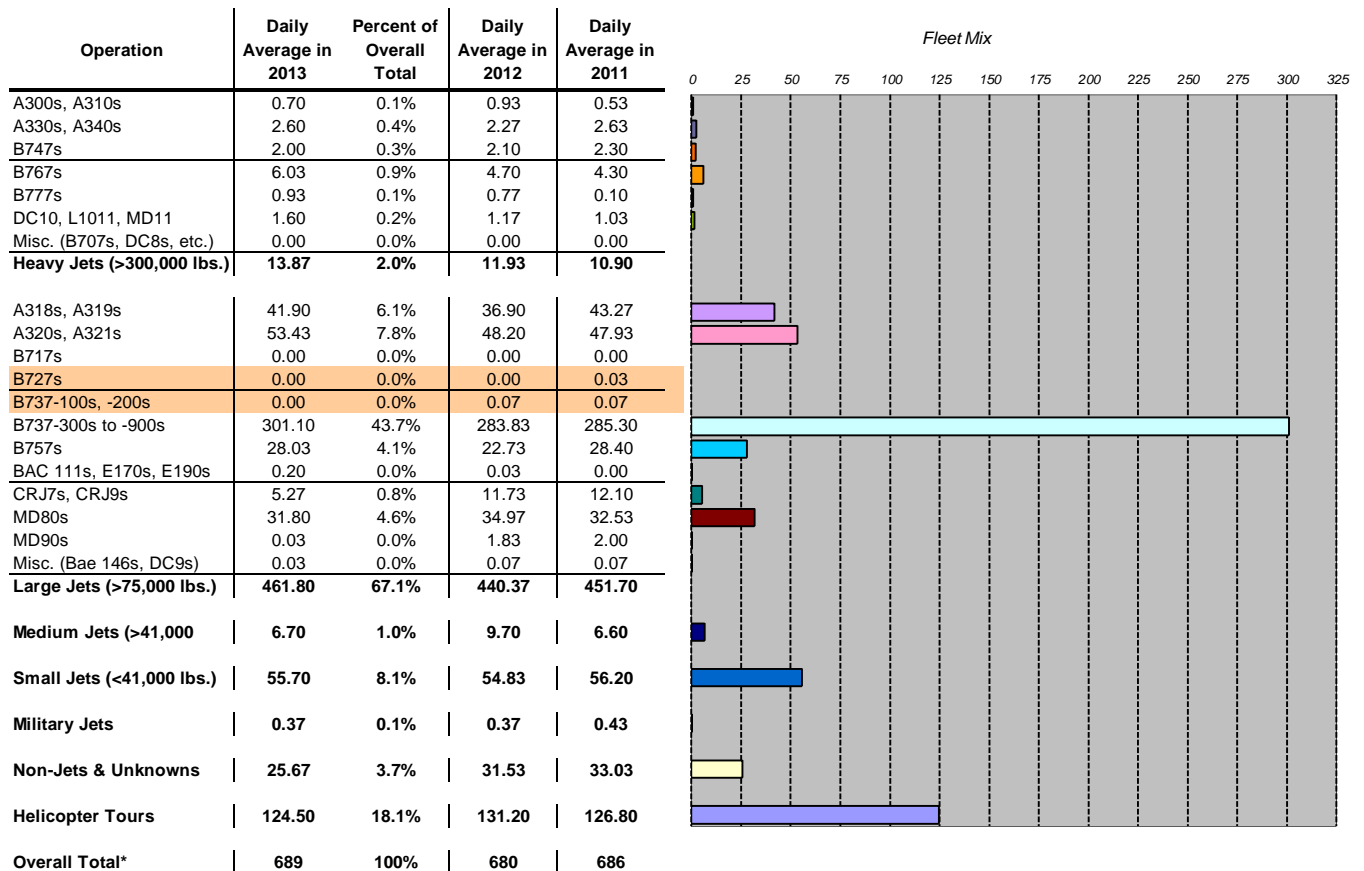


Exhibit 7: LAS Aircraft Arrival Fleet Mix* - November 2013



* 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* - November 2013 to 2011

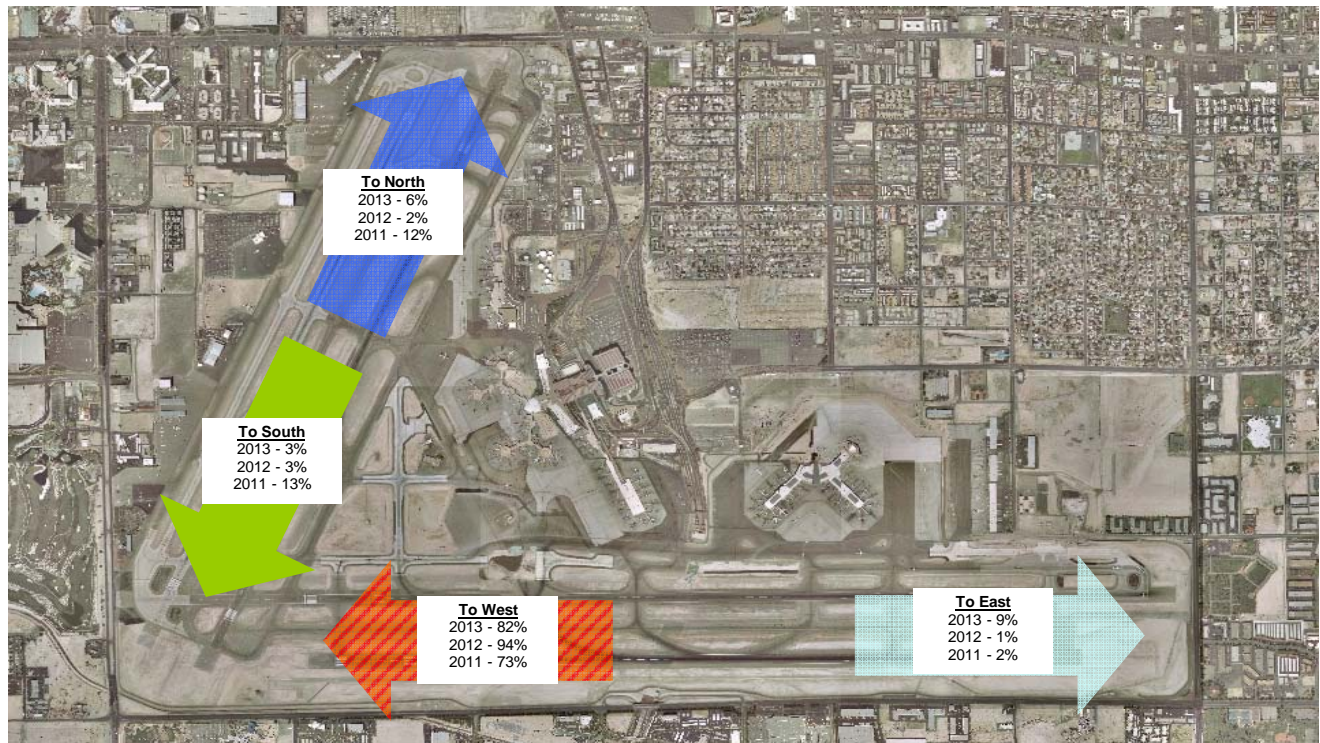
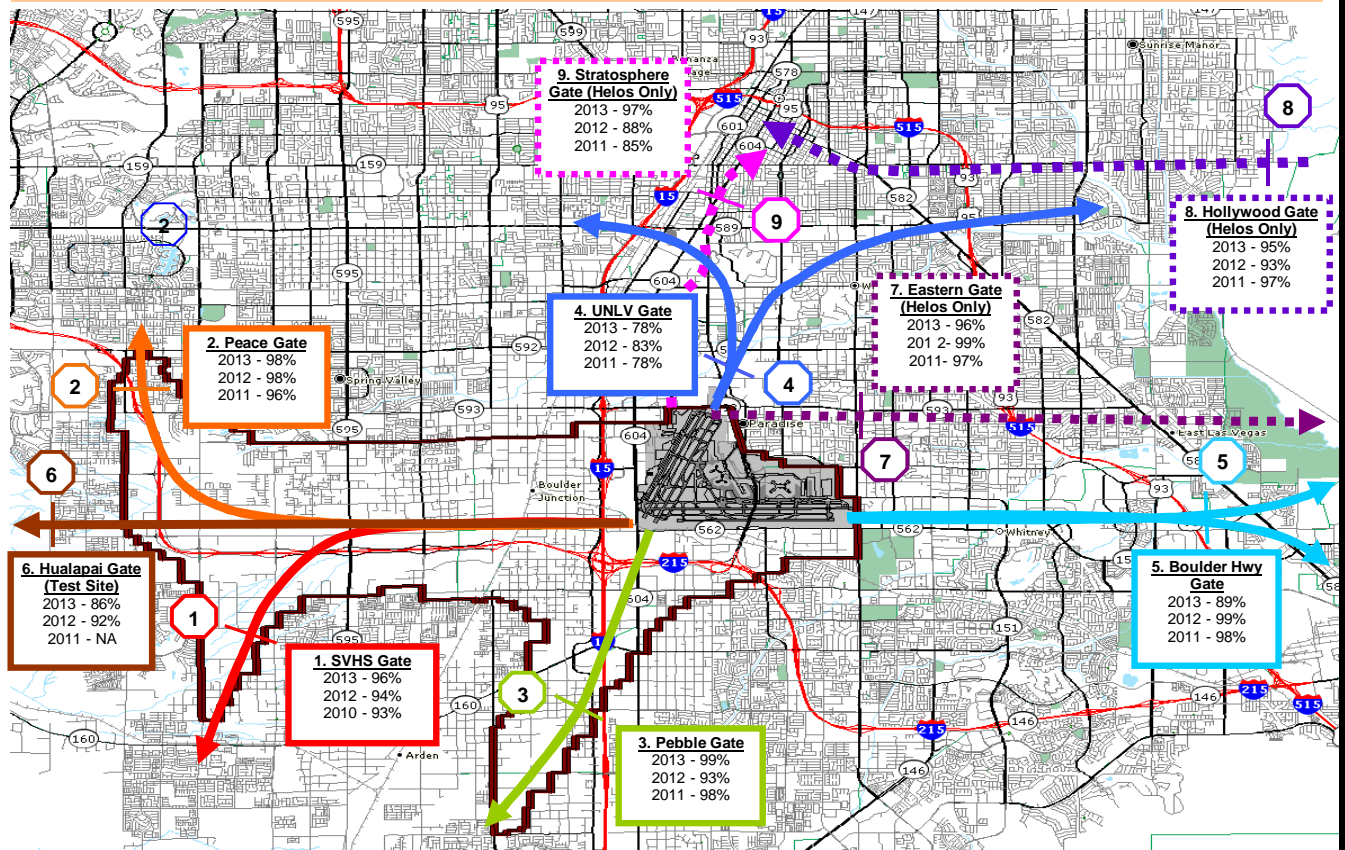


Exhibit 9: "Gate" Compliance for Large Aircraft* & LAS Helicopter Tours - November 2013



* 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* - December 2013

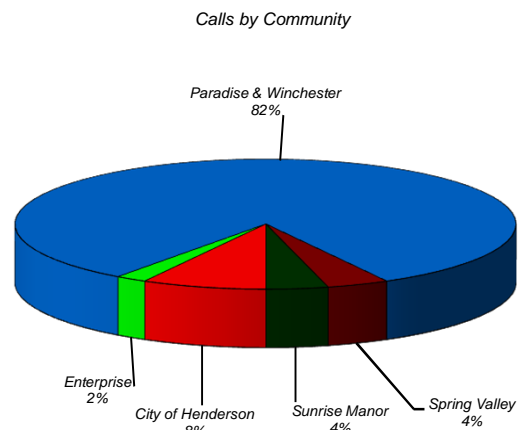
| Community | No. of Calls in 2013 | No. of Callers in 2013 | No. of Calls in 2012 | No. of Calls in 2011 |
|-------------------------|----------------------|------------------------|----------------------|----------------------|
| City of Boulder City | 4 | 4 | 18 | 7 |
| City of Henderson | | | 1 | 2 |
| City of Las Vegas | | | | |
| City of North Las Vegas | | | | |
| Enterprise | 1 | 1 | 1 | 8 |
| Lone Mountain | | | | |
| Paradise & Winchester | 41 | 10 | 11 | 9 |
| Spring Valley | 2 | 2 | 21 | 20 |
| Summerlin South | | | | 2 |
| Sunrise Manor | 2 | 2 | 13 | 2 |
| Whitney | | | | |
| Location unknown | | | | |
| Overall Total | 50 | 19 | 65 | 50 |

Difference between 2013 and 2012 Total Calls: -23%

Difference between 2012 and 2011 Total Calls: 0%

Average Number of Calls per Caller: 2.6

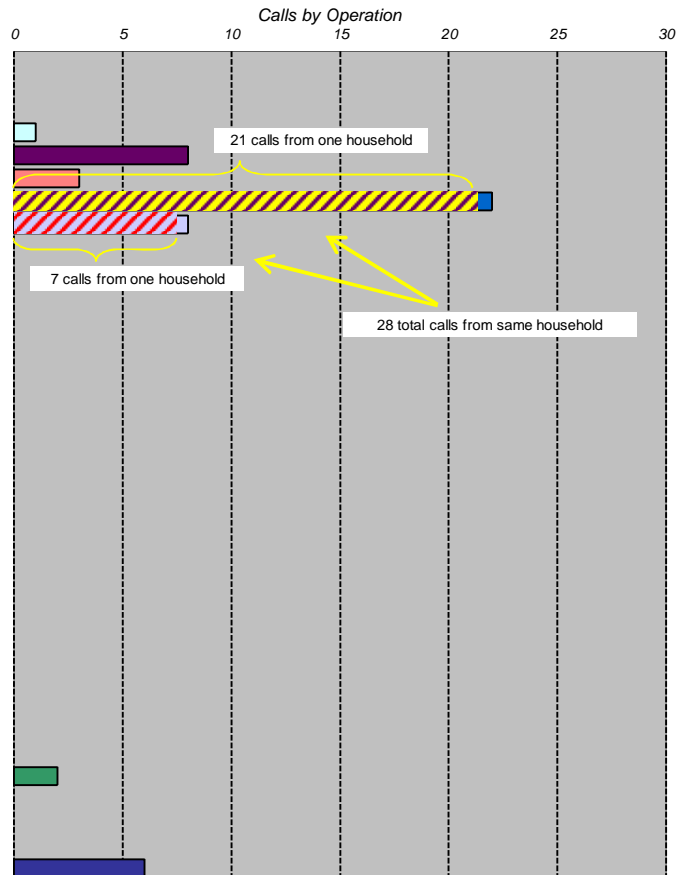
Most calls received from one household: 28



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

Exhibit 2: Noise Complaint Calls by Type of Operation - December 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 | 1 | 2.0% | 1 | |
| LAS 01R/L Departures | 8 | 16.0% | 22 | 27 |
| LAS 07R/L Departures | 3 | 6.0% | 1 | |
| LAS 19R/L Departures | 22 | 44.0% | 6 | 6 |
| LAS 25R/L Departures | 8 | 16.0% | 6 | 5 |
| LAS Run-ups | | | | |
| LAS GA | | | | |
| LAS Other | | | | |
| LAS Total | 42 | 84.0% | 30 | 38 |
| 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 | | | | |
| VGT Other | | | | |
| VGT Total | 0 | 0.0% | 0 | 0 |
| HND 17R/L Arrivals | | | | |
| HND 35R/L Arrivals | | | | |
| HND 17R/L Departures | | | | |
| HND 35R/L Departures | | | | |
| HND Run-ups | | | | |
| HND GA | 2 | 4.0% | 8 | 1 |
| HND Other | | | | |
| HND Total | 2 | 4.0% | 8 | 1 |
| Helicopters** | 6 | 12.0% | 27 | 11 |
| Overall Total | 50 | 100% | 65 | 50 |



** 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 - December 2013

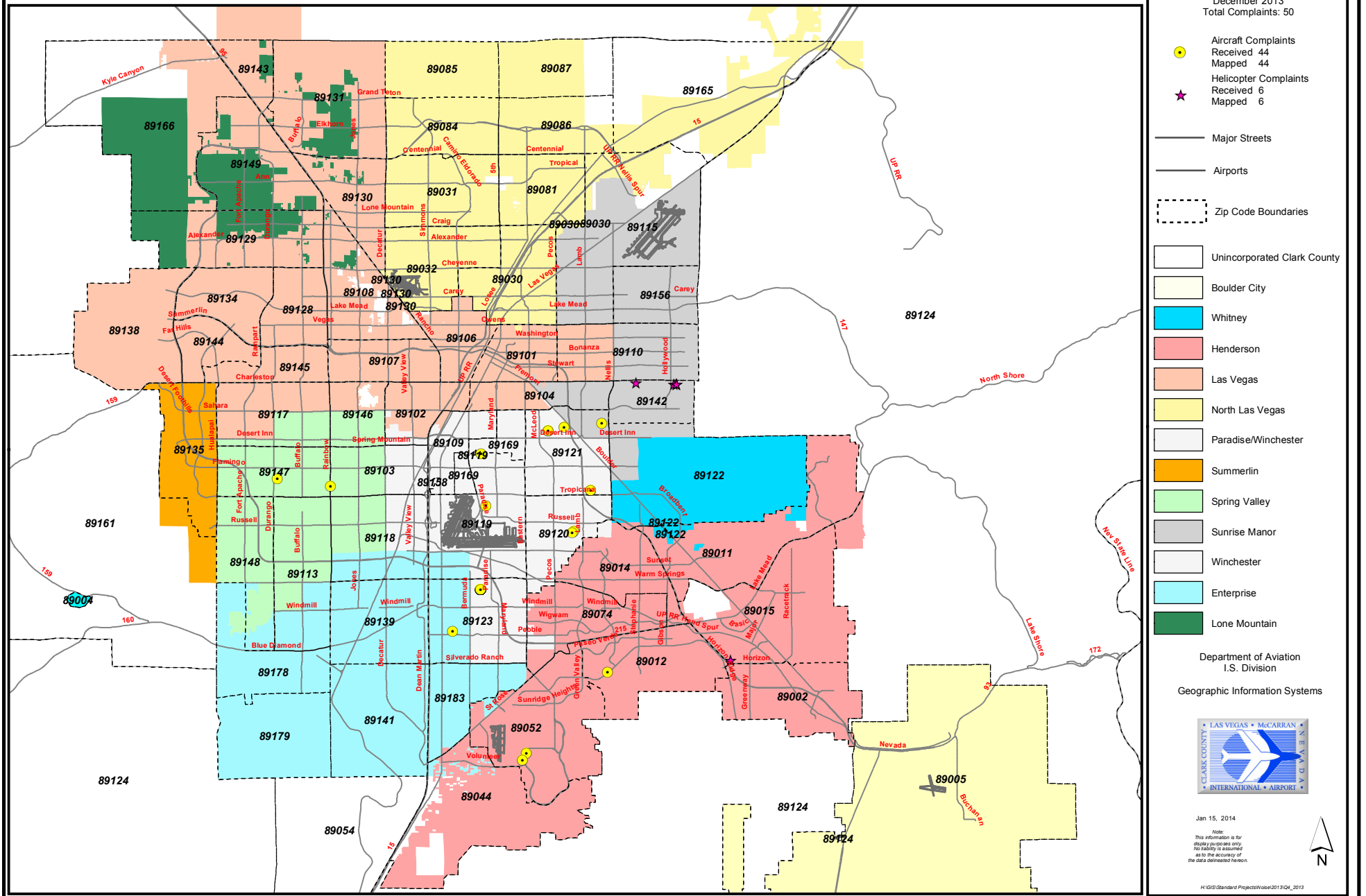
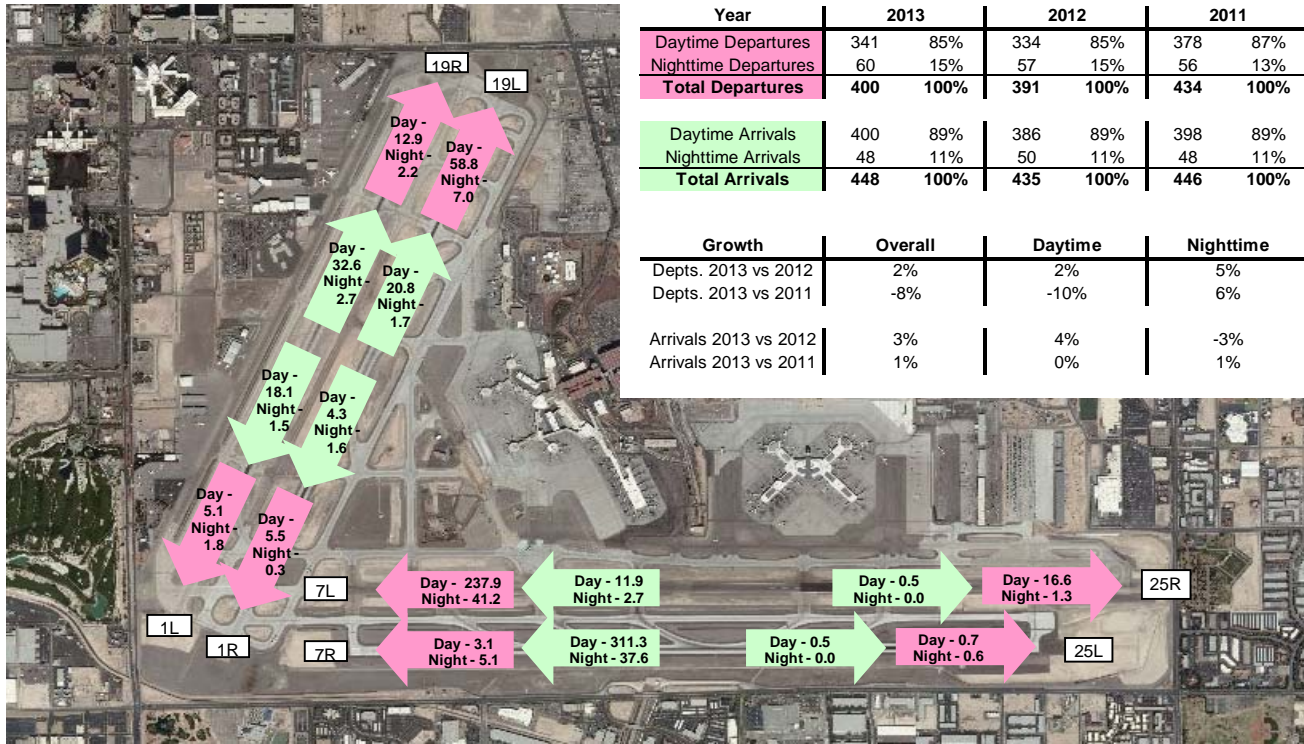
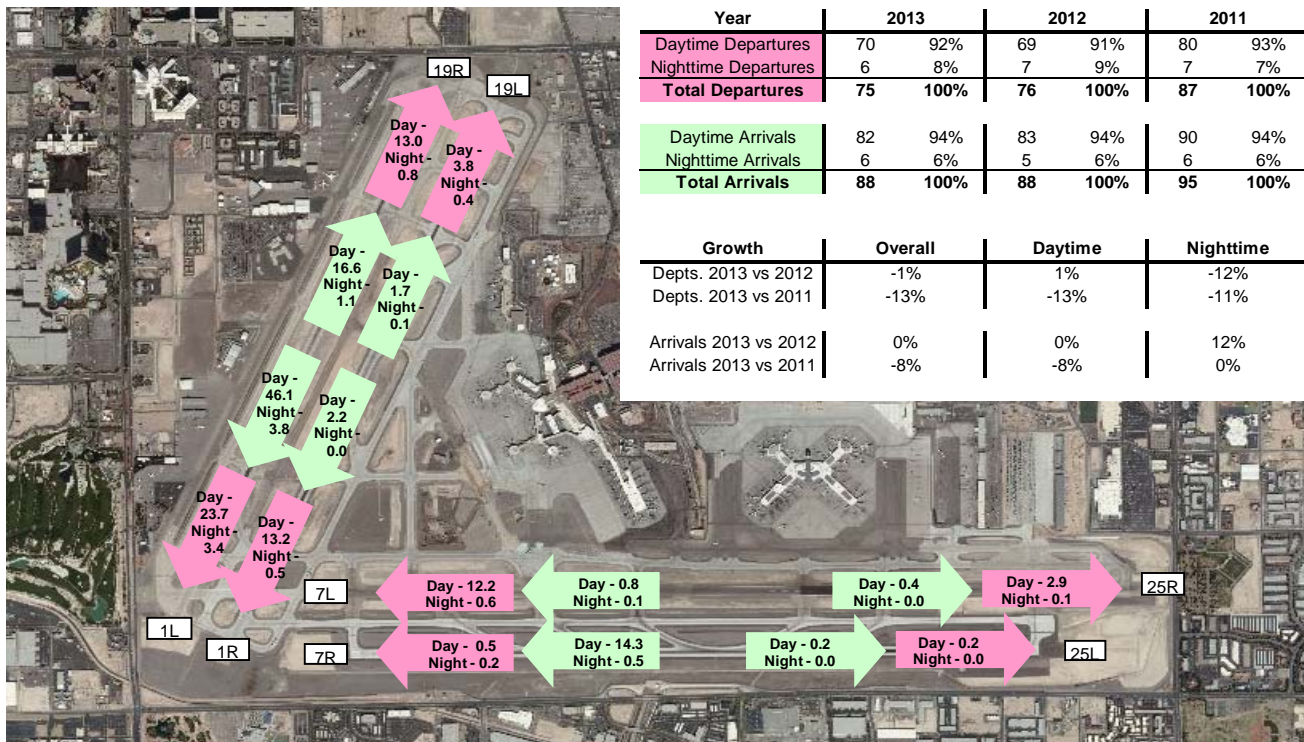


Exhibit 4: LAS Daily Average Operations Runway for Large Air Carrier Aircraft* - December 2013



* 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** - December 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 - December 2013

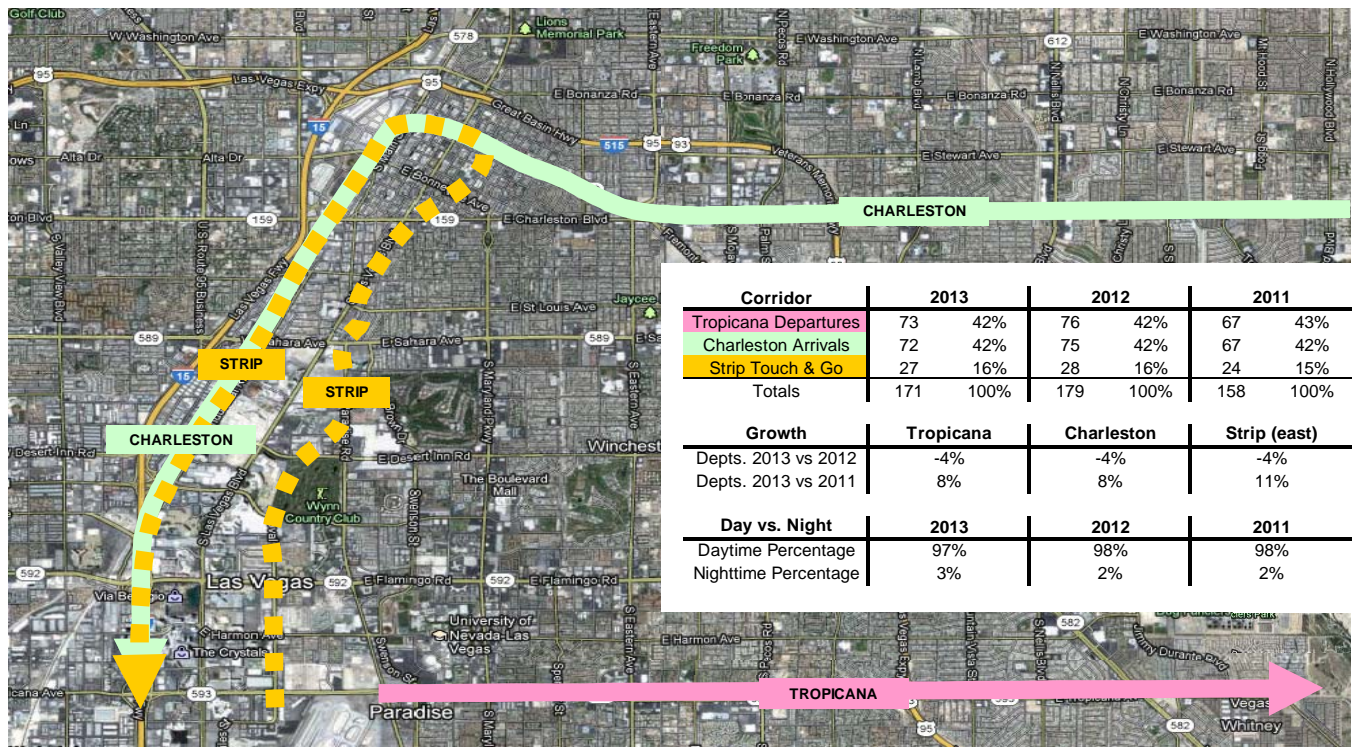
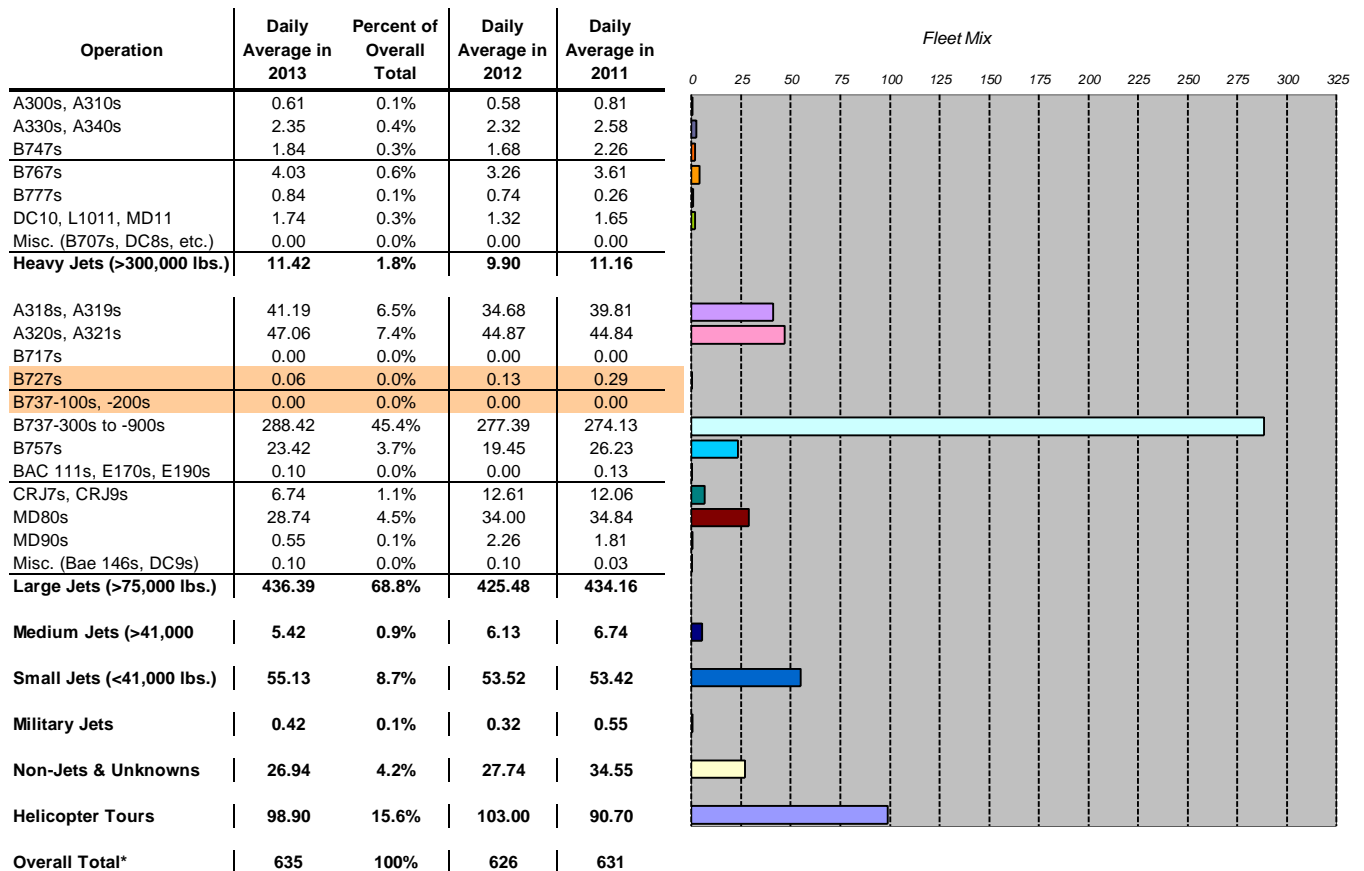


Exhibit 7: LAS Aircraft Arrival Fleet Mix* - December 2013



* 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* - December 2013 to 2011

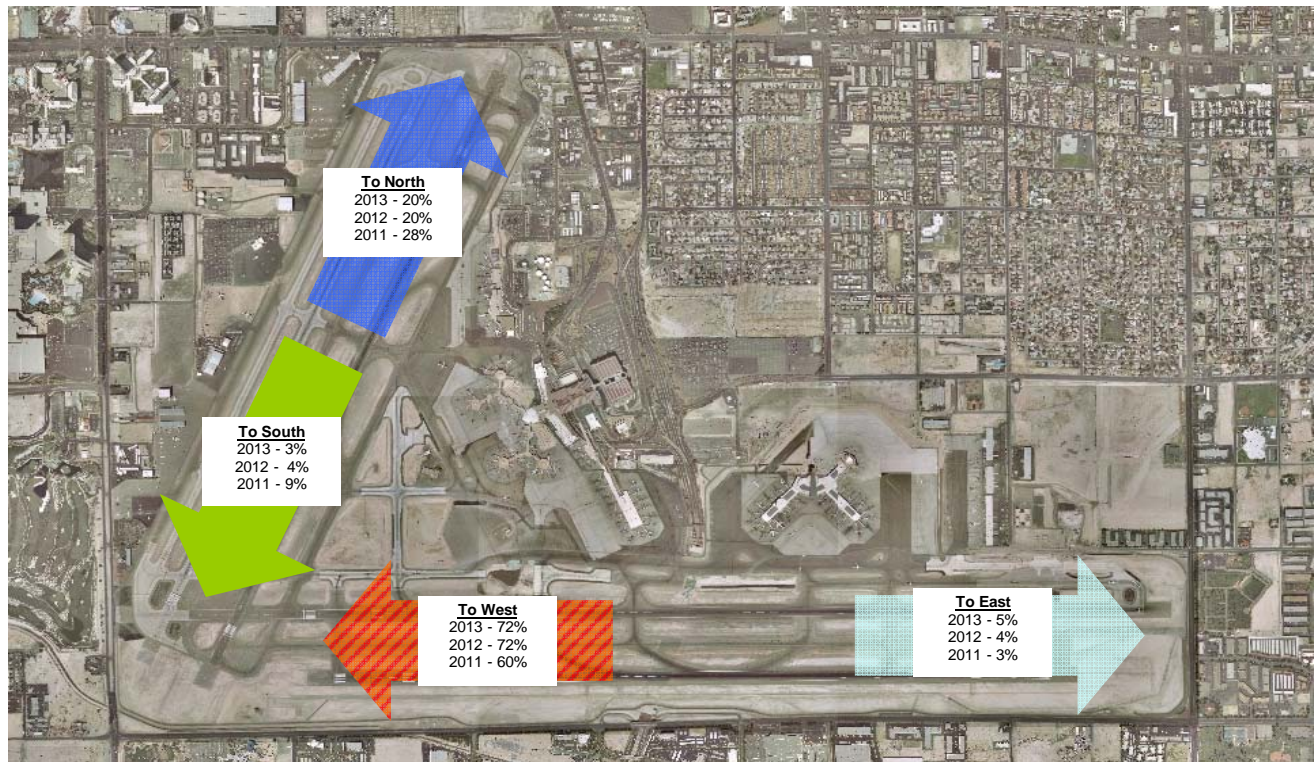
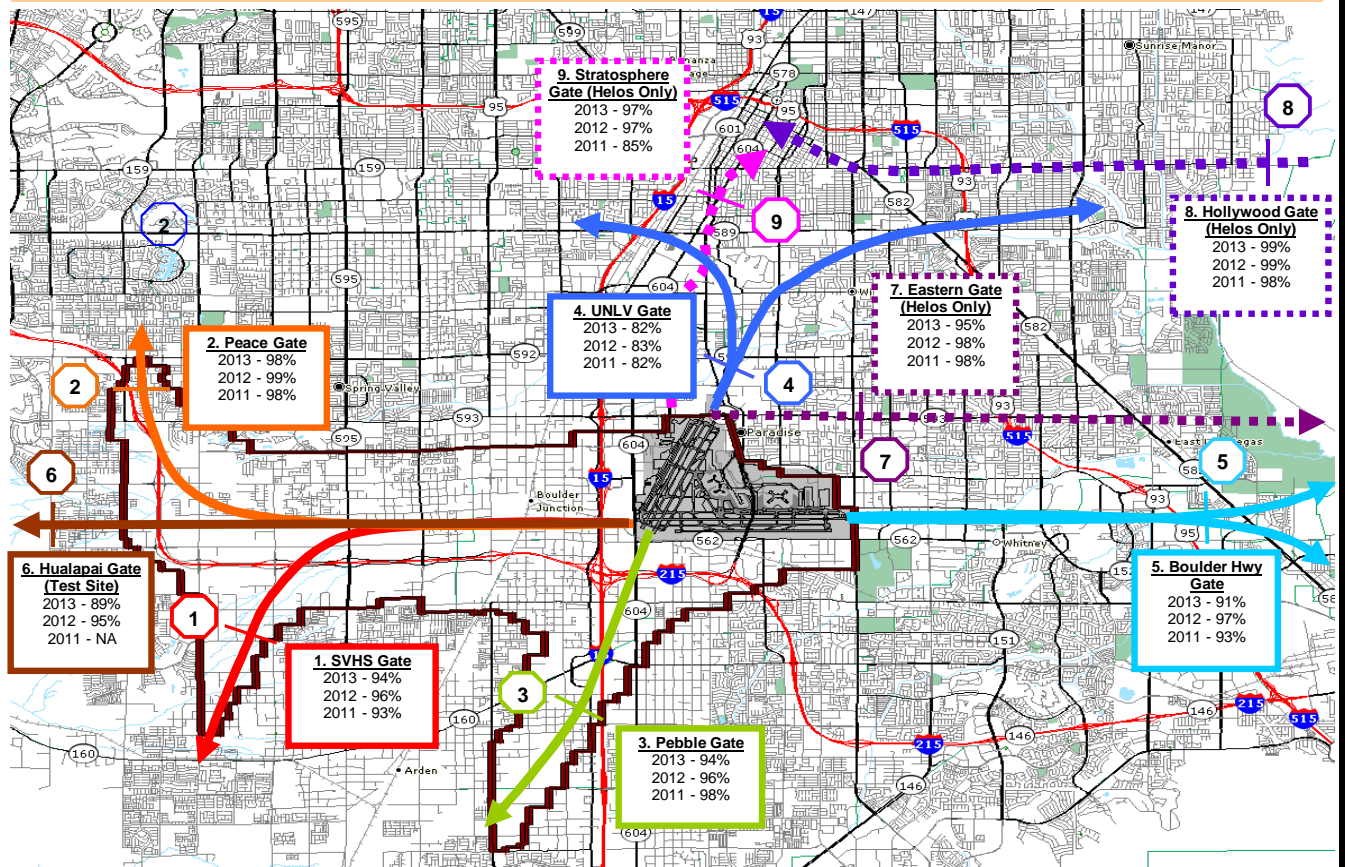


Exhibit 9: "Gate" Compliance for Large Aircraft* & LAS Helicopter Tours - December 2013



* 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* - Annual 2013

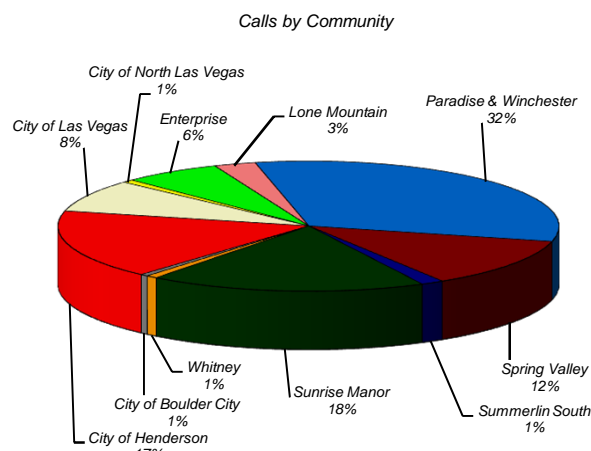
| Community | No. of Calls in 2013 | No. of Callers in 2013 | No. of Calls in 2012 | No. of Calls in 2011 |
|-------------------------|----------------------|------------------------|----------------------|----------------------|
| City of Boulder City | 2 | 2 | 2 | 70 |
| City of Henderson | 70 | 36 | 250 | 67 |
| City of Las Vegas | 33 | 21 | 55 | 5 |
| City of North Las Vegas | 3 | 3 | 2 | 123 |
| Enterprise | 26 | 14 | 24 | 6 |
| Lone Mountain | 11 | 2 | 5 | 146 |
| Paradise & Winchester | 132 | 43 | 131 | 91 |
| Spring Valley | 50 | 12 | 123 | 6 |
| Summerlin South | 6 | 3 | 2 | 36 |
| Sunrise Manor | 73 | 15 | 59 | 7 |
| Whitney | 3 | 3 | 4 | 1 |
| Location unknown | | | 1 | |
| Overall Total | 409 | 154 | 658 | 557 |

Difference between 2013 and 2012 Total Calls: -38%

Difference between 2013 and 2011 Total Calls: -27%

Average Number of Calls per Caller: 2.7

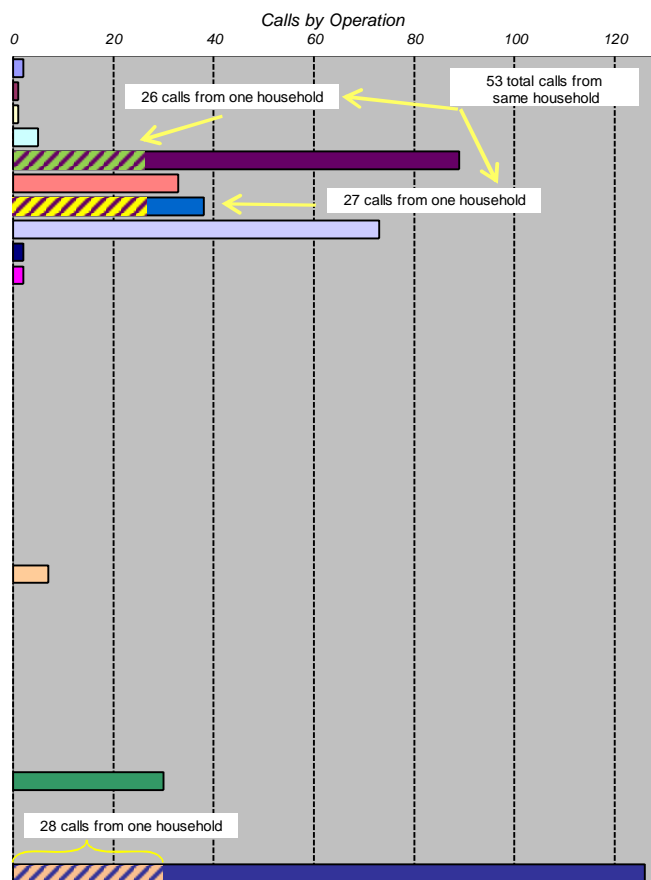
Most calls received from one household: 53



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

Exhibit 2: Noise Complaint Calls by Type of Operation - Annual 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 | 2 | 0.5% | 1 | 8 |
| LAS 07R/L Arrivals | 1 | 0.2% | | |
| LAS 19R/L Arrivals | 1 | 0.2% | 7 | 3 |
| LAS 25R/L Arrivals | 5 | 1.2% | 8 | 4 |
| LAS 01R/L Departures | 89 | 21.8% | 150 | 250 |
| LAS 07R/L Departures | 33 | 8.1% | 75 | 9 |
| LAS 19R/L Departures | 38 | 9.3% | 14 | 100 |
| LAS 25R/L Departures | 73 | 17.8% | 93 | 69 |
| LAS Run-ups | 2 | 0.5% | 3 | |
| LAS GA | 2 | 0.5% | | 1 |
| LAS Other | | | | |
| LAS Total | 246 | 60.1% | 351 | 444 |
| 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 | 7 | 1.7% | 8 | 10 |
| VGT Other | | | | |
| VGT Total | 7 | 1.7% | 8 | 10 |
| HND 17R/L Arrivals | | | | |
| HND 35R/L Arrivals | | | | |
| HND 17R/L Departures | | | | |
| HND 35R/L Departures | | | | |
| HND Run-ups | | | | |
| HND GA | 30 | 7.3% | 31 | 28 |
| HND Other | | | | |
| HND Total | 30 | 7.3% | 31 | 28 |
| Helicopters** | 126 | 30.8% | 268 | 75 |
| Overall Total | 409 | 100% | 658 | 557 |



** 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

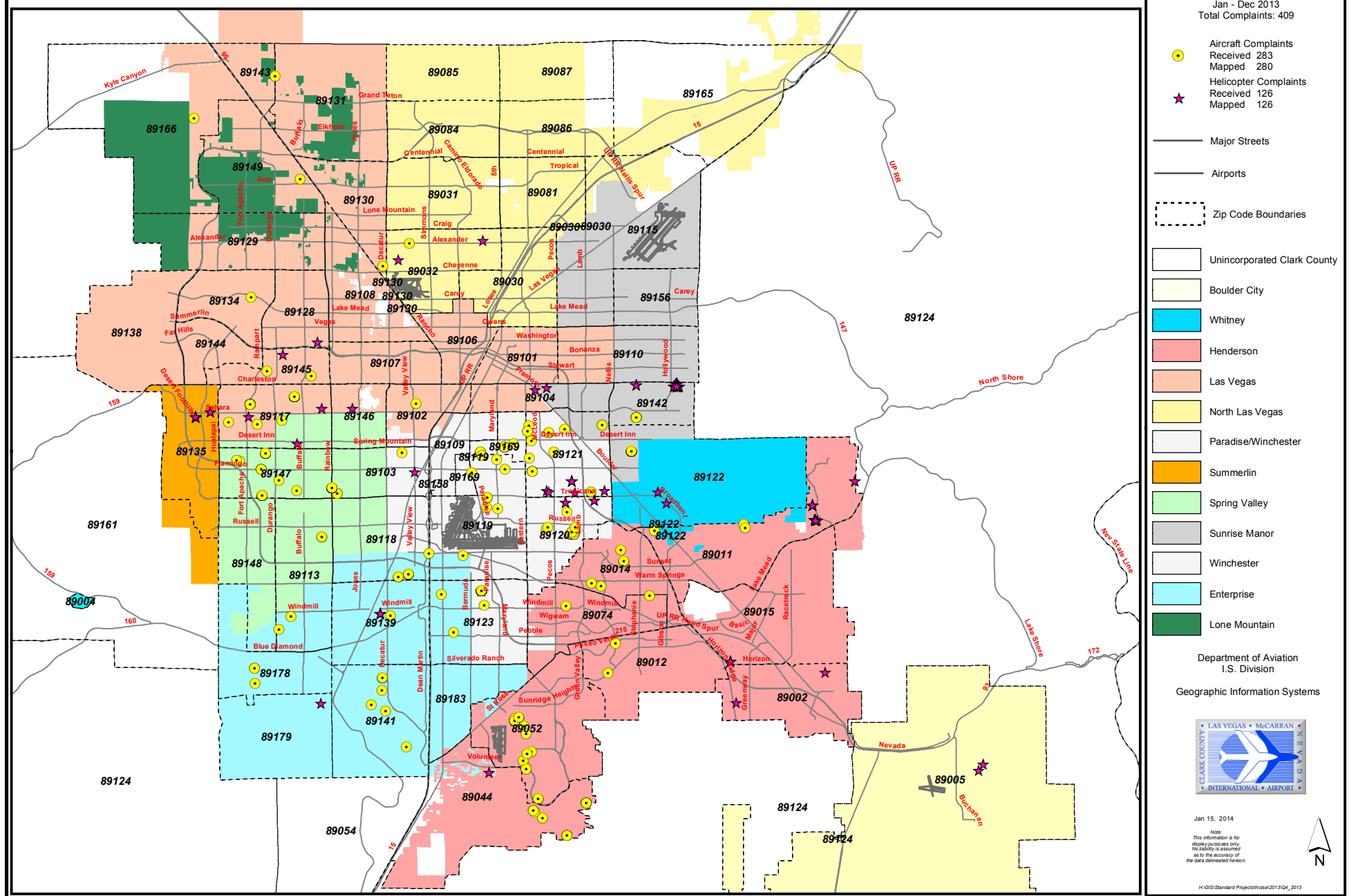
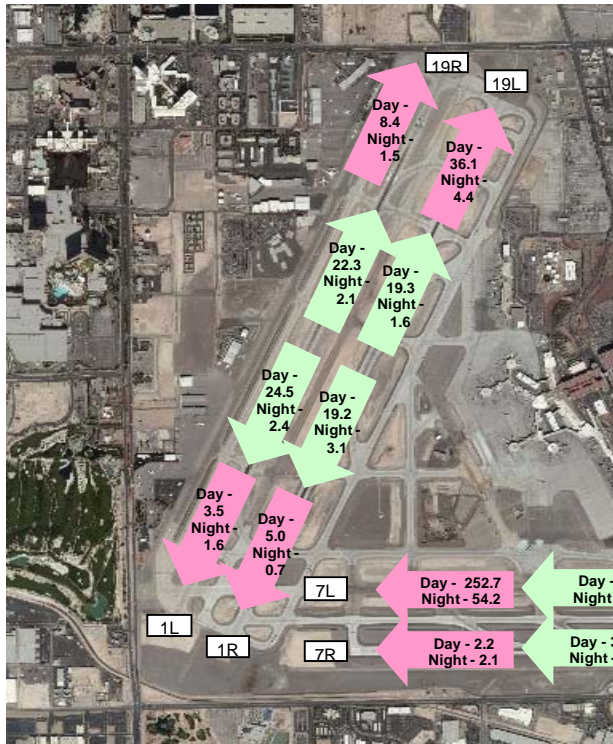


Exhibit 4: LAS Daily Average Operations Runway for Large Air Carrier Aircraft* - Annual 2013



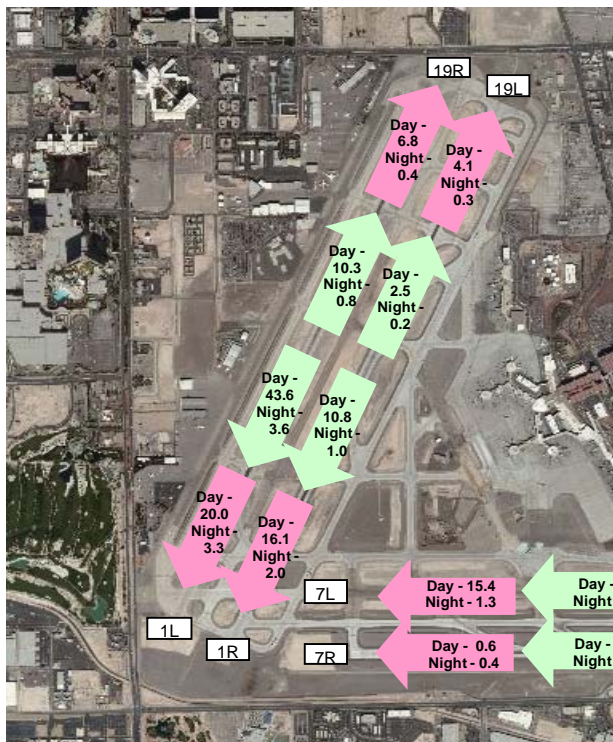
| Year | 2013 | | 2012 | | 2011 | |
|-------------------------|------------|-------------|------------|-------------|------------|-------------|
| Daytime Departures | 348 | 84% | 367 | 85% | 401 | 86% |
| Nighttime Departures | 67 | 16% | 67 | 15% | 65 | 14% |
| Total Departures | 415 | 100% | 434 | 100% | 467 | 100% |

| | | | | | | |
|-----------------------|------------|-------------|------------|-------------|------------|-------------|
| Daytime Arrivals | 411 | 89% | 414 | 88% | 420 | 88% |
| Nighttime Arrivals | 52 | 11% | 56 | 12% | 55 | 12% |
| Total Arrivals | 463 | 100% | 469 | 100% | 475 | 100% |

| Growth | Overall | Daytime | Nighttime |
|-----------------------|---------|---------|-----------|
| Depts. 2013 vs 2012 | -4% | -5% | 0% |
| Depts. 2013 vs 2011 | -11% | -13% | 3% |
| Arrivals 2013 vs 2012 | -1% | -1% | -6% |
| Arrivals 2013 vs 2011 | -2% | -2% | -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** - Annual 2013



| Year | 2013 | | 2012 | | 2011 | |
|-------------------------|-----------|-------------|-----------|-------------|-----------|-------------|
| Daytime Departures | 70 | 90% | 76 | 91% | 85 | 92% |
| Nighttime Departures | 8 | 10% | 8 | 9% | 8 | 8% |
| Total Departures | 78 | 100% | 84 | 100% | 93 | 100% |

| | | | | | | |
|-----------------------|-----------|-------------|-----------|-------------|-----------|-------------|
| Daytime Arrivals | 84 | 93% | 90 | 93% | 91 | 94% |
| Nighttime Arrivals | 6 | 7% | 7 | 7% | 6 | 6% |
| Total Arrivals | 90 | 100% | 97 | 100% | 97 | 100% |

| Growth | Overall | Daytime | Nighttime |
|-----------------------|---------|---------|-----------|
| Depts. 2013 vs 2012 | -7% | -8% | 3% |
| Depts. 2013 vs 2011 | -16% | -18% | 4% |
| Arrivals 2013 vs 2012 | -7% | -7% | -2% |
| Arrivals 2013 vs 2011 | -7% | -8% | 7% |

** 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 - Annual 2013

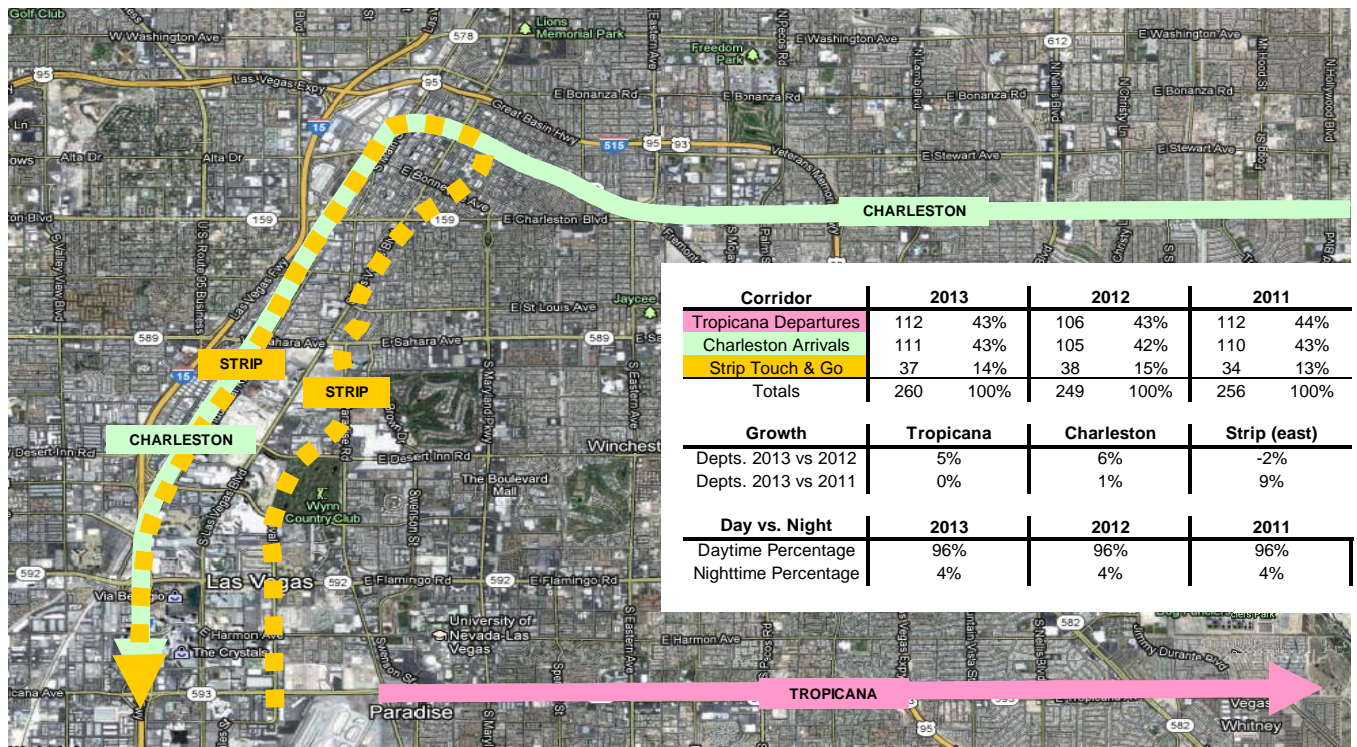
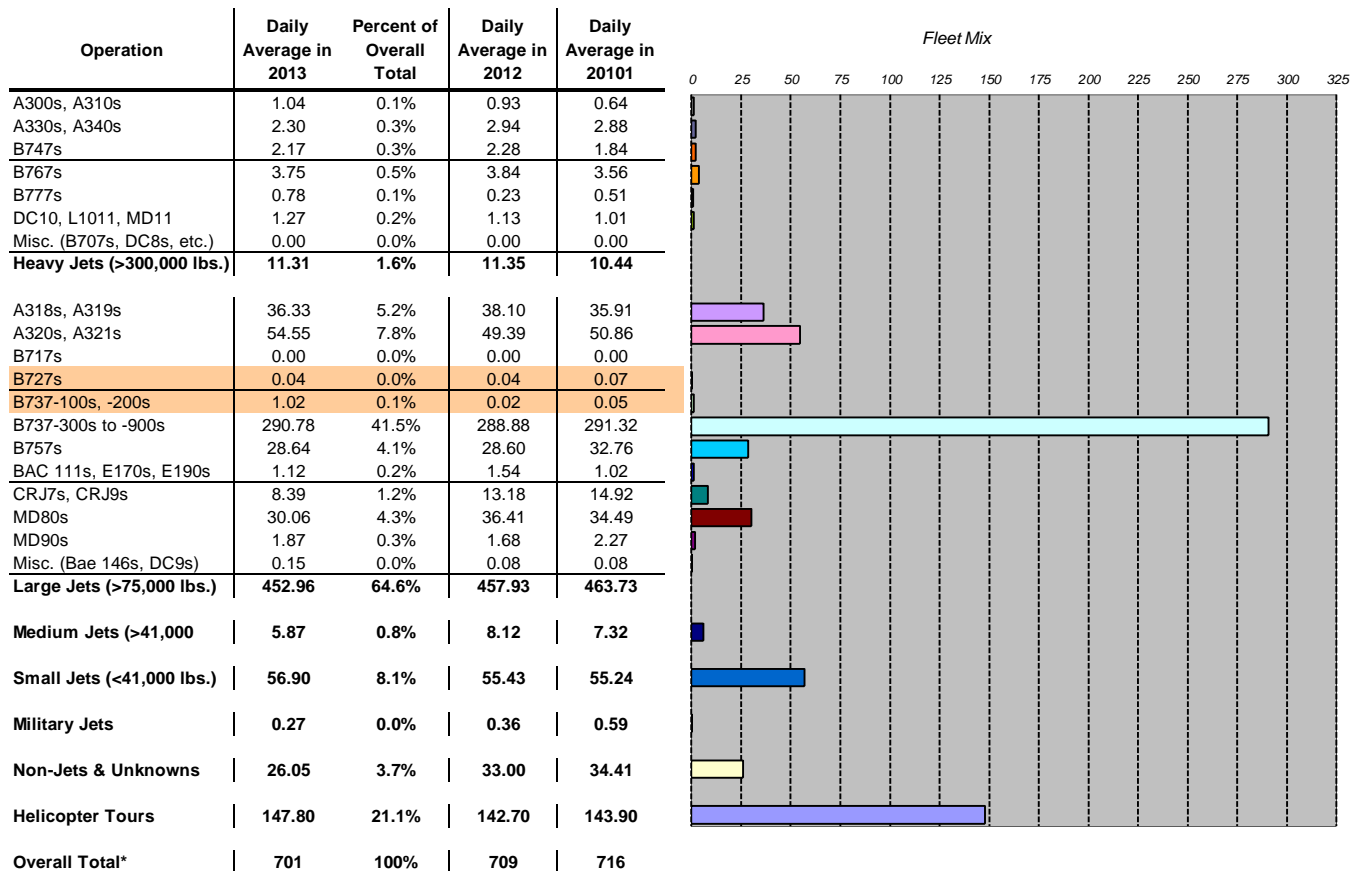


Exhibit 7: LAS Aircraft Arrival Fleet Mix* - Annual 2013

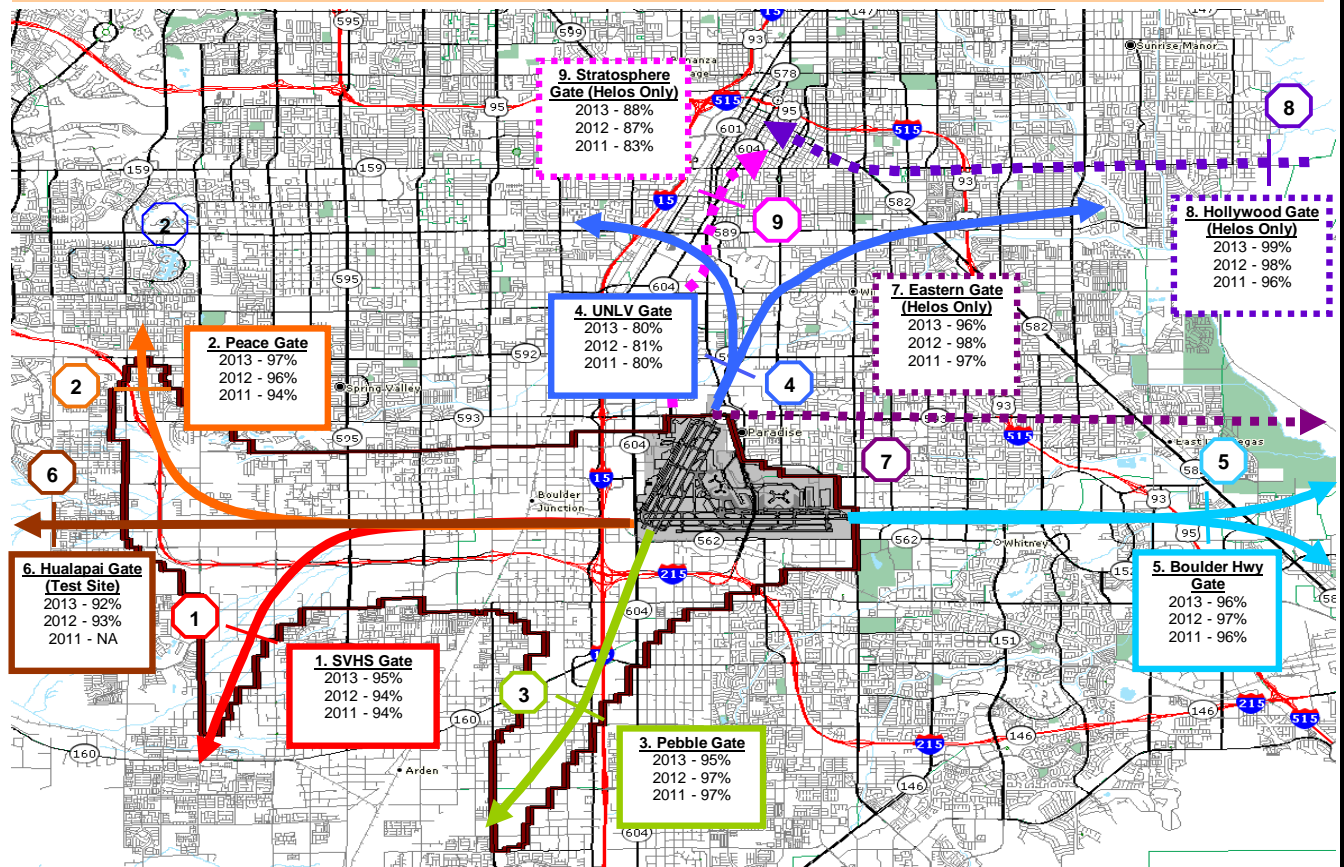


* Overall Total: Note that operation type and runway use counts are estimated by ITT Exelis AirScene.com Noise and Monitoring Operations (NOMS) system based on radar data. Due to limitations of radar data, information for aircraft weighing less than 75,000 lbs. is inexact.

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



Exhibit 9: "Gate" Compliance for Large Aircraft* & LAS Helicopter Tours - Annual 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 10: Total Calls/Callers by Month - 2011 through 2013

| Year | January | February | March | April | May | June | July | August | September | October | November | December | January through December Total | Average No. of Calls per Caller |
|------------------------|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|--------------------------------|---------------------------------|
| 2013 Number of Calls | 60 | 27 | 42 | 59 | 30 | 7 | 18 | 12 | 33 | 30 | 41 | 50 | 409 | 2.7 |
| 2013 Number of Callers | 28 | 20 | 26 | 26 | 20 | 6 | 11 | 8 | 23 | 18 | 24 | 19 | 154 | |
| 2012 Number of Calls | 41 | 72 | 43 | 61 | 39 | 18 | 56 | 50 | 69 | 77 | 68 | 65 | 659 | 3.8 |
| 2012 Number of Callers | 22 | 32 | 15 | 24 | 16 | 12 | 22 | 19 | 34 | 37 | 26 | 25 | 172 | |
| 2011 Number of Calls | 129 | 82 | 69 | 32 | 32 | 18 | 13 | 10 | 28 | 52 | 42 | 50 | 557 | 2.5 |
| 2011 Number of Callers | 71 | 35 | 31 | 13 | 12 | 4 | 7 | 5 | 16 | 14 | 12 | 6 | 226 | |

Total Calls by Month

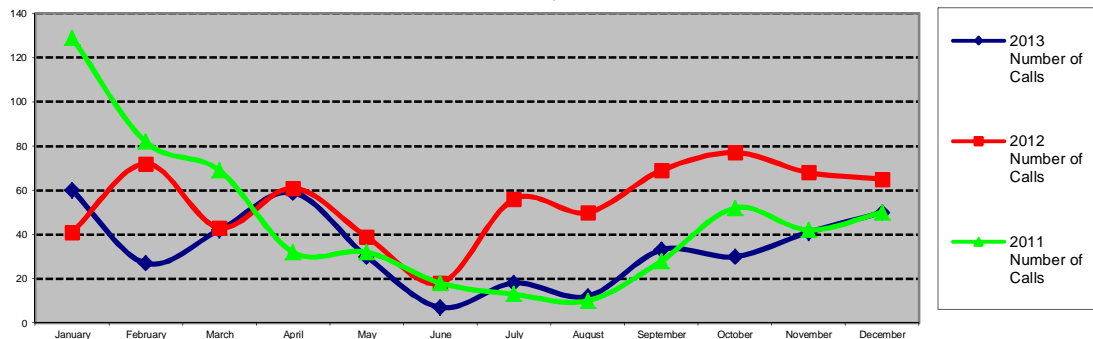


Exhibit 11: Total Monthly Calls by Time of Day - Annual 2013

| Time Complaint Received | January | February | March | April | May | June | July | August | September | October | November | December | January through December Total | Percent |
|--|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|--------------------------------|---------------|
| Day Hours (7:00 a.m. to 9:59 p.m.) | 48 | 27 | 38 | 55 | 27 | 6 | 14 | 11 | 33 | 28 | 31 | 27 | 345 | 84.4% |
| Night Hours (10:00 p.m. to 6:59 a.m.) | 12 | 0 | 4 | 4 | 3 | 1 | 4 | 1 | 0 | 2 | 10 | 23 | 64 | 15.6% |
| Total | 60 | 27 | 42 | 59 | 30 | 7 | 18 | 12 | 33 | 30 | 41 | 50 | 409 | 100.0% |

Exhibit 12: Total Monthly Calls by Airport/Operation - Annual 2013

| Airport | January | February | March | April | May | June | July | August | September | October | November | December | January through December Total | Percent |
|------------------------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|--------------------------------|---------------|
| McCarran International | 30 | 12 | 14 | 29 | 14 | 3 | 12 | 6 | 27 | 26 | 31 | 42 | 246 | 60.1% |
| North Las Vegas | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 2 | 1 | 0 | 7 | 1.7% |
| Henderson Executive | 4 | 0 | 3 | 14 | 0 | 1 | 1 | 0 | 3 | 1 | 1 | 2 | 30 | 7.3% |
| Helicopter | 25 | 15 | 25 | 16 | 16 | 3 | 3 | 6 | 2 | 1 | 8 | 6 | 126 | 30.8% |
| Total | 60 | 27 | 42 | 59 | 30 | 7 | 18 | 12 | 33 | 30 | 41 | 50 | 409 | 100.0% |

Total Calls by Airport/Operation

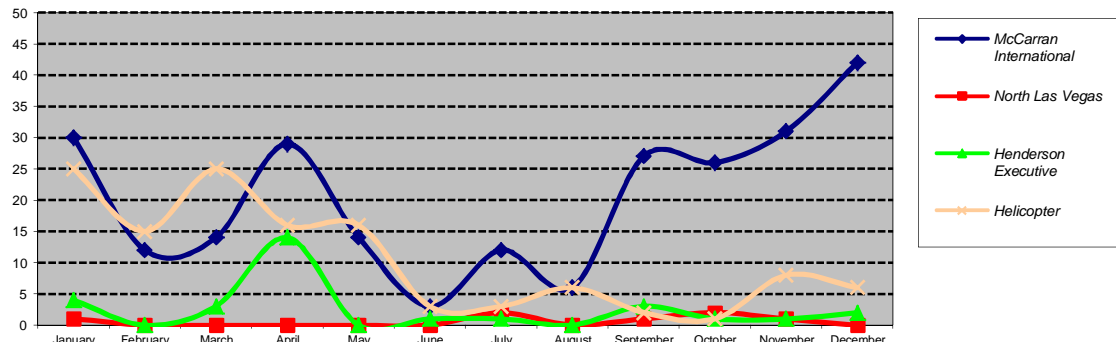


Exhibit 13: Total Monthly Calls by Community - Annual 2013

| Community | January | February | March | April | May | June | July | August | September | October | November | December | January through December Total | Perrcent |
|-------------------------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|--------------------------------|-------------|
| City of Boulder City | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0.5% |
| City of Henderson | 18 | 2 | 6 | 19 | 3 | 2 | 2 | 2 | 6 | 1 | 5 | 4 | 70 | 17.1% |
| City of Las Vegas | 3 | 0 | 7 | 4 | 3 | 1 | 2 | 1 | 6 | 2 | 4 | 0 | 33 | 8.1% |
| City of North Las Vegas | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 3 | 0.7% |
| Enterprise | 3 | 2 | 0 | 4 | 3 | 0 | 5 | 1 | 4 | 1 | 2 | 1 | 26 | 6.4% |
| Lone Mountain | 1 | 1 | 2 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 2.7% |
| Paradise & Winchester | 8 | 9 | 6 | 2 | 6 | 0 | 7 | 8 | 10 | 16 | 19 | 41 | 132 | 32.3% |
| Spring Valley | 10 | 4 | 3 | 4 | 4 | 2 | 0 | 0 | 5 | 8 | 8 | 2 | 50 | 12.2% |
| Summerlin | 0 | 0 | 5 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 6 | 1.5% |
| Sunrise Manor | 16 | 8 | 13 | 19 | 11 | 2 | 0 | 0 | 1 | 0 | 1 | 2 | 73 | 17.8% |
| Whitney | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 0.7% |
| Location unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0% |
| Overall Total | 60 | 27 | 42 | 59 | 30 | 7 | 18 | 12 | 33 | 30 | 41 | 50 | 409 | 100% |

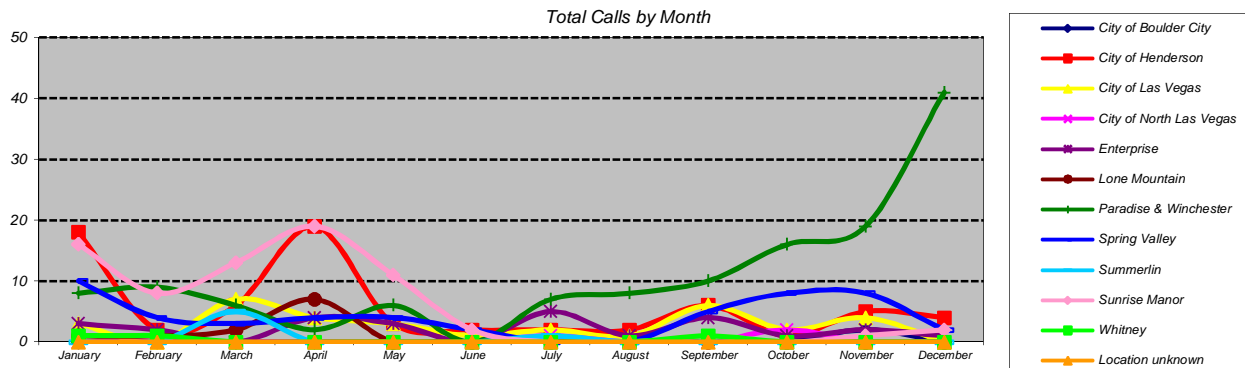


Exhibit 14: Total Monthly Calls by LAS Operation - Annual 2013

| MIA Operations | January | February | March | April | May | June | July | August | September | October | November | December | January through December Total | Perrcent |
|----------------------|-----------|-----------|-----------|-----------|-----------|----------|-----------|----------|-----------|-----------|-----------|-----------|--------------------------------|---------------|
| LAS 01R/L Arrivals | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 0.8% |
| LAS 07R/L Arrivals | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0.4% |
| LAS 19R/L Arrivals | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.4% |
| LAS 25R/L Arrivals | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 1 | 5 | 2.0% |
| LAS 01R/L Departures | 18 | 5 | 8 | 11 | 6 | 1 | 0 | 1 | 9 | 17 | 5 | 8 | 89 | 36.2% |
| LAS 07R/L Departures | 1 | 4 | 0 | 1 | 1 | 0 | 6 | 3 | 6 | 2 | 6 | 3 | 33 | 13.4% |
| LAS 19R/L Departures | 4 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 3 | 5 | 2 | 22 | 38 | 15.4% |
| LAS 25R/L Departures | 5 | 3 | 6 | 17 | 6 | 2 | 2 | 0 | 6 | 2 | 16 | 8 | 73 | 29.7% |
| LAS Run-ups | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0.8% |
| LAS GA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0.8% |
| LAS Canyon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0% |
| LAS Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0% |
| LAS Total | 30 | 12 | 14 | 29 | 14 | 3 | 12 | 6 | 27 | 26 | 31 | 42 | 246 | 100.0% |

