MEMORANDUM

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Director

DEPARTMENT OF AVIATION

TO: DISTRIBUTION

Digitally signed by George C. Sims

FROM: GEORGE C. SIMS, PLANNER

SUBJECT: OCTOBER, NOVEMBER, DECEMBER AND ANNUAL 2015 NOISE COMPLAINT REPORTS

DATE: JANUARY 28, 2016

Attached for your review are the Clark County Department of Aviation's (CCDOA) Monthly Noise Complaint Reports for October, November, and December 2015. Also included is the 2015 Annual Noise Complaint Report, covering the period of January through December 2015. 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.

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 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 2013 and 2015. **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 2015: 579 total complaints - a 14% increase from 2014 and a 1,830% increase from 2013. On average, each caller (or household) issued 16.5 calls. The most calls received from one household totaled 517.

Calls by Community - (Exhibits 1 and 3)

Majority (more than 50%): The ***Paradise and Winchester*** communities issued 529 calls (91%). 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%): (Not applicable.)

Repeat Caller Impact: One household issued 89% (517 calls) of all the calls received in October 2015.

Calls by Operation - (Exhibit 2)

LAS: 97% of the total calls were due to ***LAS*** fixed-wing operations.
- 88% were due to departures to the south from Runways 19L and 19R (100% from one household).
- 6% were due to departures to the north from Runways 01L and 01R (71% from one household).

VGT: >1% of the total calls were due to ***VGT*** fixed-wing operations.

HND: 1% of the total calls were due to ***HND*** fixed-wing operations.

Helis: 2% of the total calls were due to ***helicopter*** operations.
- 78% from one household, which is the same household that issued 100% of the calls for LAS Runways 19L and 19R.

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

Overall: 489 daily *departures*[1] – due to a new independent NextGen radar feed which significantly increased the amount of departure operations captured, comparisons to data collected in 2013 and 2014 cannot be accomplished.
- 58% of departures were to the west, 34% north, 5% east, and 3% south.

488 daily *arrivals* – a 1% increase from 2014 and 2% increase from 2013.
- 77% of arrivals were from the east, 15% south, 6% north, and 1% west.

Daytime: 413 daily *departures*[2] – due to a new independent NextGen radar feed which significantly increased the amount of departure operations captured, comparisons to data collected in 2013 and 2014 cannot be accomplished.
- 55% of departures were to the west, 37% north, 5% east, and 3% south.

435 daily *arrivals* – no change from 2014 and no change from 2013.
- 76% of arrivals were from the east, 16% south, 6% north, and 1% west.

Nighttime: 77 daily *departures*[3] – due to a new independent NextGen radar feed which significantly increased the amount of departure operations captured, comparisons to data collected in 2013 and 2014 cannot be accomplished.
- 77% of departures were to the west, 18% north, 5% south, and 1% east.

53 daily *arrivals* – a 9% increase from 2014 and a 24% increase from 2013.
- 87% of arrivals were from the east, 8% north, and 5% 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: 94 daily *departures*[4] – due to a new independent NextGen radar feed which significantly increased the amount of departure operations captured, comparisons to data collected in 2013 and 2014 cannot be accomplished.
- 53% of departures were to the south, 34% north, 8% west, and 5% east.

93 daily *arrivals* – a 7% increase from 2014 and 3% decrease from 2013.
- 55% of arrivals were from the north, 26% south, 17% east, and 2% west.

Note: Runway use and traffic count totals for 2013 through September 2015 were compiled by the EnvironmentalVue application using a FAA-direct radar feed. Due to the location of the FAA 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. Runway use and traffic count totals for October 2015 and beyond were compiled by the EnvironmentalVue application using an independent NextGen radar feed. Although the NextGen radar feed increased data capture for departing fixed-wing aircraft, it decreased capture rates for helicopters. Therefore, totals compiled for Exhibit 6 for October, November, and December 2015 were modified to more accurately reflect the correct number of Operations by Corridor for Helicopter Tours.

[2] See footnote #1.

[3] See footnote #1.

[4] See footnote #1.

Daytime: 84 daily *departures*[5] – due to a new independent NextGen radar feed which significantly increased the amount of departure operations captured, comparisons to data collected in 2013 and 2014 cannot be accomplished.
- 50% of departures were to the south, 36% north, 9% west, and 5% east.

86 daily *arrivals* – a 6% increase from 2014 and a 3% decrease from 2013.
- 54% of arrivals were from the north, 27% south, 17% east, and 2% west.

Nighttime: 11 daily *departures*[6] – due to a new independent NextGen radar feed which significantly increased the amount of departure operations captured, comparisons to data collected in 2013 and 2014 cannot be accomplished.
- 75% of departures were to the south, 18% north, 6% west, and 1% east.

8 daily *arrivals* – a 16% increase from 2014 and a 4% increase from 2013.
- 69% of arrivals were from the north, 19% south, 10% east, and 2% west.

Daytime vs. Nighttime: Approximately 89% of all *departures* and 92% of all *arrivals* occurred during the daytime hours.

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

Tropicana: 138 daily *departures (estimated)* - a 15% increase from 2014 and an 11% increase from 2013.

Charleston: 137 daily *arrivals (estimated)* – a 12% increase from 2014 and a 10% increase from 2013.

Strip: 60 daily *touch and go's (estimated)* - a 56% increase from 2014 and a 49% increase from 2013.

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 61% 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 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 25% of the daily traffic.

[5] See footnote #1.
[6] See footnote #1.

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

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

Primary: In 2015, 58% departed to the ***west*** (from LAS's primary departure runways). This figure was 66% in 2014 and 75% in 2013.

Secondary: In 2015, 3% departed to the ***south*** (from LAS's secondary departure runways). This figure was 4% in 2014 and 3% in 2013.

Alternate 1: In 2015, 34% departed to the ***north*** (from LAS's alternate departure runways). This figure was 19% in 2014 and 18% in 2013.

Alternate 2: In 2015, 5% departed to the ***east*** (from LAS's alternate departure runways). This figure was 11% in 2014 and 4% in 2013.

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

SVHS: In 2015, 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 96% in 2014 and 94% in 2013.

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 2015, 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 97% in 2014 and 97% in 2013.

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 2015, 100% 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 99% in 2014 and 94% in 2013.

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 2015, 92% 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 2014 and 83% in 2013.

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 2015, 99% 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 2014 and 98% in 2013.

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 2015, 92% 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 92% in 2014 and 91% in 2013.

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 2015, 98% 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 93% in 2014 and 89% in 2013.

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 2015, 96% 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 2014 and 99% in 2013.

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 2015, 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 99% in 2014 and 87% in 2013.

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 increased departures to the north as a result of the closure of Rwy 25R/07L on October 28, 2015 for construction, the number of complaints tied to a single household, and the new radar feed for some comparative analysis.

November 2015: 489 total complaints - a 59% decrease from 2014 and a 1,093% increase from 2013. On average, each caller (or household) issued 21.3 calls. The most calls received from one household totaled 418.

Calls by Community - (Exhibits 1 and 3)

Majority (more than 50%): The ***Paradise and Winchester*** communities issued 428 calls (88%). (See October 2015 synopsis of typical aircraft overflight impacts on this community.)

Minority (between 10% and 50%): The ***Spring Valley*** community issued 47 calls (10%). 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 85% (418 calls) of all the calls received in November 2015.

Calls by Operation - (Exhibit 2)

LAS: 97% of the total calls received were due to ***LAS*** fixed-wing operations.
- 75% were due to departures to the south from Runways 19L and 19R. (99% from one household).
- 22% were due to departures to the north from Runways 01L and 01R. (88% from two households, one of which is the same household that issued 99% of the calls for LAS Runways 19L and 19R).

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

HND: 1% of the total calls received were due to ***HND*** fixed-wing operations.

Helis: 2% of the total calls received were due to ***helicopter*** operations.
- 67% from one household which is the same household that issued 99% of the calls from LAS Runways 19L and 19R and one of two households that issued 88% of the calls from LAS Runways 01L and 01R.

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

Overall: 475 daily *departures*[7] – due to a new independent NextGen radar feed which significantly increased the amount of departure operations captured, comparisons to data collected in 2013 and 2014 cannot be accomplished.
- 76% of departures were to the north, 18% south, 3% east, and 3% west.

472 daily *arrivals* – a 5% increase from 2014 and a 1% decrease from 2013.
- 60% of arrivals were from the east, 31% south, and 9% north.

Daytime: 394 daily *departures*[8] – due to a new independent NextGen radar feed which significantly increased the amount of departure operations captured, comparisons to data collected in 2013 and 2014 cannot be accomplished.
- 77% of departures were to the north, 18% south, 3% east, and 2% west.

417 daily *arrivals* – a 3% increase from 2014 and 3% decrease from 2013.
- 58% of arrivals were from the east, 33% south, and 9% north.

Nighttime: 81 daily *departures*[9] – due to a new independent NextGen radar feed which significantly increased the amount of departure operations captured, comparisons to data collected in 2013 and 2014 cannot be accomplished.
- 74% of departures were to the north, 17% south, and 9% west.

55 daily *arrivals* – a 23% increase from 2014 and 17% increase from 2013.
- 73% of arrivals were from the east, 22% south, and 5% north.

Daytime vs. Nighttime: Approximately 83% of all *departures* and 88% of all *arrivals* occurred during the daytime hours.

[7] See footnote #1.
[8] See footnote #1.
[9] See footnote #1.

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

Overall: 105 daily *departures*[10] – due to a new independent NextGen radar feed which significantly increased the amount of departure operations captured, comparisons to data collected in 2013 and 2014 cannot be accomplished.
- 80% of departures were to the north, 17% south, 2% east, and 1% west.

101 daily *arrivals* – a 13% increase from 2014 and a 14% increase from 2013.
- 55% of arrivals were from the south, 29% east, 16% north, and 1% west.

Daytime: 96 daily *departures*[11] – due to a new independent NextGen radar feed which significantly increased the amount of departure operations captured, comparisons to data collected in 2013 and 2014 cannot be accomplished.
- 80% of departures were to the north, 17% south, 2% east, and 1% west.

95 daily *arrivals* – a 15% increase from 2014 and 15% increase from 2013.
- 54% of arrivals were from the south, 30% east, 15% north, and 1% west.

Nighttime: 9 daily *departures*[12] – due to a new independent NextGen radar feed which significantly increased the amount of departure operations captured, comparisons to data collected in 2013 and 2014 cannot be accomplished.
- 78% of departures were to the north, 20% south, and 2% west.

6 daily *arrivals* – a 2% decrease from 2014 and 2% increase from 2013.
- 68% of arrivals were from the south, 21% north, 8% east, and 3% west.

Daytime vs. Nighttime: Approximately 91% of all *departures* and 94% of all *arrivals* occurred during the daytime hours.

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

Tropicana: 106 daily *departures (estimated)* - a 17% increase from 2014 and a 14% increase from 2013.

Charleston: 113 daily *arrivals (estimated)* – a 22% increase from 2014 and a 21% increase from 2013.

Strip: 53 daily *touch and go's (estimated)* - a 55% increase from 2014 and a 69% increase from 2013.

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 62% of the daily traffic.

[10] See footnote #1.
[11] See footnote #1.
[12] 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 9% of the daily traffic.

Military: ***Military*** turbine-driven aircraft accounted for 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 22% of the daily traffic.

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

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

Primary: In 2015, 3% departed to the ***west*** (from LAS's primary departure runways). This figure was 2% in 2014 and 82% in 2013.

Secondary: In 2015, 18% departed to the ***south*** (from LAS's secondary departure runways). This figure was 16% in 2014 and 3% in 2013.

Alternate 1: In 2015, 76% departed to the ***north*** (from LAS's alternate departure runways). This figure was 75% in 2014 and 6% in 2013.

Alternate 2: In 2015, 3% departed to the ***east*** (from LAS's alternate departure runways). This figure was 7% in 2014 and 9% in 2013.

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

SVHS: In 2015, 92% 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 2014 and 96% in 2013. (See October 2015 synopsis for specific location of the SVHS gate.)

Peace: In 2015, 41% 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 92% in 2014 and 98% in 2013. (See October 2015 synopsis for specific location of the Peace gate.)

Pebble: In 2015, 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 98% in 2014 and 99% in 2013. (See October 2015 synopsis for specific location of the Pebble gate.)

UNLV: In 2015, 92% 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 2014 and 78% in 2013. (See October 2015 synopsis for specific location of the UNLV gate.)

Boulder: In 2015, 99% 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 90% in 2014 and 89% in 2013. (See October 2015 synopsis for specific location of the Boulder Hwy. gate.)

Hualapai: In 2015, 82% 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 90% in 2014 and 86% in 2013. (See October 2015 synopsis for specific location of the Hualapai gate.)

Eastern: In 2015, 98% 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 89% in 2014 and 96% in 2013. (See October 2015 synopsis for specific location of the Eastern gate.)

Hollywood: In 2015, 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 96% in 2014 and 95% in 2013. (See October 2015 synopsis for specific location of the Hollywood gate.)

Stratosphere: In 2015, 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 99% in 2014 and 98% in 2013. (See October 2015 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 increased departures to the north as a result of the closure of Rwy 25R/07L on October 28, 2015 for construction, the number of complaints tied to a single household, and the new radar feed for some comparative analysis.

December 2015: 189 total complaints – a 72% decrease from 2014 and a 278% increase from 2013. On average, each caller (or household) issued 12.6 calls. The most calls received from one household totaled 133.

Calls by Community - (Exhibits 1 and 3)

Majority (more than 50%): The ***Paradise and Winchester*** communities issued 140 calls (74%). (See October 2015 synopsis of typical aircraft overflight impacts on this community.)

Minority (between 10% and 50%): The ***Spring Valley*** community issued 41 calls (22%). (See October 2015 synopsis of typical aircraft overflight impacts on this community.)

Repeat Caller Impact: One household issued 70% (133 calls) of all the calls received in December 2015.

Calls by Operation - (Exhibit 2)

LAS: 96% of the total calls received were due to ***LAS*** fixed-wing operations.
- 74% were due to departures to the north from Runways 01L and 01R (94% from one household).
- 22% were due to departures to the south from Runways 19L and 19R (98% from one household, which is the same household that issued 94% of the calls for LAS Runways 01L and 01R).

VGT: 1% of the total calls received were due to ***VGT*** fixed-wing operations.

HND: 1% of the total calls received were due to ***HND*** fixed-wing operations.

Helis: 2% of the total calls received were due to ***helicopter*** operations.
- 67% from one household which is the same household that issued 94% of the calls from LAS Runways 01L and 01R and 98% of the calls from LAS Runways 19L and 19R.

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

Overall: 467 daily *departures*[13] – due to a new independent NextGen radar feed which significantly increased the amount of departure operations captured, comparisons to data collected in 2013 and 2014 cannot be accomplished.
- 89% of departures were to the north, 8% south, 2% east, and 2% west.

463 daily *arrivals* – a 5% increase from 2014 and 3% increase from 2013.
- 61% of arrivals were from the east, 35% south, and 3% north.

Daytime: 382 daily *departures*[14] – due to a new independent NextGen radar feed which significantly increased the amount of departure operations captured, comparisons to data collected in 2013 and 2014 cannot be accomplished.
- 90% of departures were to the north, 7% south, 2% east, and 1% west.

410 daily *arrivals* – a 5% increase from 2014 and 3% increase from 2013.
- 60% of arrivals were from the east, 37% south, and 3% north.

Nighttime: 85 daily *departures*[15] – due to a new independent NextGen radar feed which significantly increased the amount of departure operations captured, comparisons to data collected in 2013 and 2014 cannot be accomplished.
- 83% of departures were to the north, 10% south, and 7% west.

53 daily *arrivals* – a 5% increase from 2014 and 10% increase from 2013.
- 74% of arrivals were from the east, 24% south, and 2% north.

Daytime vs. Nighttime: Approximately 82% of all *departures* and 89% of all *arrivals* occurred during the daytime hours.

[13] See footnote #1.
[14] See footnote #1.
[15] See footnote #1.

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

Overall: 84 daily *departures*[16] – due to a new independent NextGen radar feed which significantly increased the amount of departure operations captured, comparisons to data collected in 2013 and 2014 cannot be accomplished.
- 92% of departures were to the north, 6% south, and 1% east.

87 daily *arrivals* – a 5% increase from 2014 and 1% decrease from 2013.
- 60% of arrivals were from the south, 32% east, 7% north, and 1% west.

Daytime: 77 daily *departures*[17] – due to a new independent NextGen radar feed which significantly increased the amount of departure operations captured, comparisons to data collected in 2013 and 2014 cannot be accomplished.
- 93% of departures were to the north, 6% south, and 1% east.

81 daily *arrivals* – a 5% increase from 2014 and 1% decrease from 2013.
- 60% of arrivals were from the south, 33% east, 6% north, and 1% west.

Nighttime: 8 daily *departures*[18] – due to a new independent NextGen radar feed which significantly increased the amount of departure operations captured, comparisons to data collected in 2013 and 2014 cannot be accomplished.
- 88% of departures were to the north, 11% south, and 1% west.

6 daily *arrivals* – an 8% increase from 2014 and no change from 2013.
- 66% of arrivals were from the south, 33% east, 6% north, 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: 82 daily *departures (estimated)* - a 19% increase from 2014 and a 13% increase from 2013.

Charleston: 92 daily *arrivals (estimated)* – a 30% increase from 2014 and a 27% increase from 2013.

Strip: 47 daily *touch and go's (estimated)* - a 50% increase from 2014 and a 75% increase from 2013.

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 65% of the daily traffic.

[16] See footnote #1.
[17] See footnote #1.
[18] 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 less than 1% 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 20% of the daily traffic.

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

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

Primary: In 2015, 2% departed to the ***west*** (from LAS's primary departure runways). This figure was 1% in 2014 and 72% in 2013.

Secondary: In 2015, 8% departed to the ***south*** (from LAS's secondary departure runways). This figure was 6% in 2014 and 3% in 2013.

Alternate 1: In 2015, 89% departed to the ***north*** (from LAS's alternate departure runways). This figure was 86% in 2014 and 20% in 2013.

Alternate 2: In 2015, 2% departed to the ***east*** (from LAS's alternate departure runways). This figure was 6% in 2014 and 5% in 2013.

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

SVHS: In 2015, 93% 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 89% in 2014 and 94% in 2013. (See October 2015 synopsis for specific location of the SVHS gate.)

Peace: In 2015, 64% 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 100% in 2014 and 98% in 2013. (See October 2015 synopsis for specific location of the Peace gate.)

Pebble: In 2015, 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 2014 and 94% in 2013. (See October 2015 synopsis for specific location of the Pebble gate.)

UNLV: In 2015, 91% 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 2014 and 82% in 2013. (See October 2015 synopsis for specific location of the UNLV gate.)

Boulder: In 2015, 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 89% in 2014 and 91% in 2013. (See October 2015 synopsis for specific location of the Boulder Hwy. gate.)

Hualapai: In 2015, 71% 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 89% in 2014 and 89% in 2013. (See October 2015 synopsis for specific location of the Hualapai gate.)

Eastern: In 2015, 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 85% in 2014 and 95% in 2013. (See October 2015 synopsis for specific location of the Eastern gate.)

Hollywood: In 2015, 98% 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 2014 and 99% in 2013. (See October 2015 synopsis for specific location of the Hollywood gate.)

Stratosphere: In 2015, 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 99% in 2014 and 97% in 2013. (See October 2015 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 increased departures to the north as a result of the closure of Rwy 25R/07L on October 28, 2015 for construction, the number of complaints tied to a single household, and the new radar feed for some comparative analysis.

Annual Noise Complaint Summaries

2015: 3,963 total complaints – a 40% decrease from 2014 and an 869% increase from 2013. On average, each caller (or household) issued 18.3 calls. The most calls received from one household totaled 3,464.

Calls by Community - (Exhibits 1 and 3)

Majority (more than 50%): The ***Paradise and Winchester*** communities issued 3,615 calls (91%). (See October 2015 synopsis of typical aircraft overflight impacts on this community.)

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

Repeat Caller Impact: One household issued 87% (3,464 calls) of all the calls received in 2015.

Calls by Operation - (Exhibit 2)

LAS: 97% of the total calls received were due to ***LAS*** fixed-wing operations.
- 51% were due to departures to the south from Runways 19L and 19R (98% from one household).
- 43% were due to departures to the north from Runways 01L and 01R (86% from one household, which is the same household that issued 98% of the calls for LAS Runways 19L and 19R).
- 1% were due to departures to the west from Runways 25L and 25R (16% from one household, which is the same household that issued 98% of the calls for LAS Runways 19L and 19R, and 86% of the calls for LAS Runways 01L and 01R).

VGT: <1% of the total calls received were due to ***VGT*** fixed-wing operations.

HND: 1% of the total calls received were due to ***HND*** fixed-wing operations.

Helis: 2% of the total calls received were due to ***helicopter*** operations.
- 56% from one household which is the same household that issued 98% of the calls from LAS Runways 19L and 19R and 86% of the calls from LAS Runways 01L and 01R.

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

Overall: 431 daily *departures*[19] – due to a new independent NextGen radar feed which significantly increased the amount of departure operations captured, comparisons to data collected in 2013 and 2014 cannot be accomplished.
- 42% of departures were to the west, 38% north, 11% east, and 9% south.

478 daily *arrivals* – a 3% increase from 2014 and 3% increase from 2013.
- 67% of arrivals were from the east, 19% south, 11% north and 3% west.

Daytime: 350 daily *departures*[20] – due to a new independent NextGen radar feed which significantly increased the amount of departure operations captured, comparisons to data collected in 2013 and 2014 cannot be accomplished.
- 39% of departures were to the west, 39% north, 13% east, and 9% south.

414 daily *arrivals* – a 1% increase from 2014 and 1% increase from 2013.
- 65% of arrivals were from the east, 20% south, 11% north, and 3% west.

Nighttime: 81 daily *departures*[21] – due to a new independent NextGen radar feed which significantly increased the amount of departure operations captured, comparisons to data collected in 2013 and 2014 cannot be accomplished.
- 54% of departures were to the west, 34% north, 10% south, and 3% east.

64 daily *arrivals* – a 20% increase from 2014 and 23% increase from 2013.
- 80% of arrivals were from the east, 12% south, and 8% north.

Daytime vs. Nighttime: Approximately 81% of all *departures* and 87% of all *arrivals* occurred during the daytime hours.

[19] See footnote #1.
[20] See footnote #1.
[21] See footnote #1.

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

Overall: 82 daily *departures*[22] – due to a new independent NextGen radar feed which significantly increased the amount of departure operations captured, comparisons to data collected in 2013 and 2014 cannot be accomplished.
- 43% of departures were to the north, 40% south, 10% east, and 6% west.

91 daily *arrivals* – a 1% decrease from 2014 and 1% increase from 2013.
- 44% of arrivals were from the north, 33% south, 19% east, and 4% west.

Daytime: 74 daily *departures*[23] – due to a new independent NextGen radar feed which significantly increased the amount of departure operations captured, comparisons to data collected in 2013 and 2014 cannot be accomplished.
- 44% of departures were to the north, 39% south, 11% east, and 6% west.

85 daily *arrivals* – a 1% decrease from 2014 and 1% increase from 2013.
- 43% of arrivals were from the north, 33% south, 19% east, and 5% west.

Nighttime: 9 daily *departures*[24] – due to a new independent NextGen radar feed which significantly increased the amount of departure operations captured, comparisons to data collected in 2013 and 2014 cannot be accomplished.
- 53% of departures were to the south, 36% north, 9% west, and 2% east.

7 daily *arrivals* – an 8% increase from 2014 and 6% increase from 2013.
- 57% of arrivals were from the north, 32% 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: 108 daily *departures* – no change from 2014 and 3% decrease from 2013.

Charleston: 111 daily *arrivals* - a 2% increase from 2014 and no change from 2013.

Strip: 55 daily *touch and go's* - a 41% increase from 2014 and 48% increase from 2013.

Daytime vs. Nighttime: Approximately 94% 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.

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.

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[22] See footnote #1.
[23] See footnote #1.
[24] See footnote #1.

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 3% of the daily traffic.

Helos: ***Touring helicopters*** accounted for 23% 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 2015, 42% departed to the ***west*** (from LAS's primary departure runways). This figure was 60% in 2014 and 75% in 2013.

Secondary: In 2015, 9% departed to the ***south*** (from LAS's secondary departure runways). This figure was 4% in 2014 and 3% in 2013.

Alternate 1: In 2015, 39% departed to the ***north*** (from LAS's alternate departure runways). This figure was 22% in 2014 and 12% in 2013.

Alternate 2: In 2015, 11% departed to the ***east*** (from LAS's alternate departure runways). This figure was 14% in 2014 and 10% in 2013.

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

SVHS: In 2015, 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 95% in 2014 and 95% in 2013. (See October 2015 synopsis for specific location of the SVHS gate.)

Peace: In 2015, 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 right-hand turn were within 0.3 NM of the intersection of ***Peace Way & Summers Shade Street***. This figure was 96% in 2014 and 97% in 2013. (See October 2015 synopsis for specific location of the Peace gate.)

Pebble: In 2015, 97% 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 2014 and 95% in 2013. (See October 2015 synopsis for specific location of the Pebble gate.)

UNLV: In 2015, 86% 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 2014 and 80% in 2013. (See October 2015 synopsis for specific location of the UNLV gate.)

Boulder: In 2015, 94% 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 95% in 2014 and 96% in 2013. (See October 2015 synopsis for specific location of the Boulder Hwy. gate.)

Hualapai: In 2015, 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 90% in 2014 and 92% in 2013. (See October 2015 synopsis for specific location of the Hualapai gate.)

Eastern: In 2015, 81% 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 94% in 2014 and 96% in 2013. (See October 2015 synopsis for specific location of the Eastern gate.)

Hollywood: In 2015, 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 2014 and 99% in 2013. (See October 2015 synopsis for specific location of the Hollywood gate.)

Stratosphere: In 2017, 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 96% in 2014 and 88% in 2013. (See October 2015 synopsis for specific location of the Stratosphere gate.)

Calls by Month - (Exhibit 10)

Seasonal Trends: The majority of the calls received for 2015 occurred in January, March, and October (41% of the total number of complaint calls received). The vast majority of calls received were associated with departures to the north and south, with most of the calls originating from a single household. While historical weather conditions for the Las Vegas Valley reflect the majority of departures from LAS will 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. Construction activities on Runway 25R/07L, the primary departure runway for LAS, have resulted in increased use of Runway 01L and 01R and Runway 19L and 19R. 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 66% of the total calls received by the CCDOA were issued between the hours of 7 AM and 10 PM (83% from one household) while the remaining 34% were received between the hours of 10 PM and 7 AM (96% from one household, which is the same household that issued 83% of the calls between the hours of 7 AM and 10 PM).

Calls by Airport/Operation - (Exhibit 12)

Airport Trends: A majority (97%) of the total calls received in 2015 were attributed to LAS operations (89% from one household, which is the same household that issued 83% of the calls between 7 AM and 10 PM, and 96% of the calls between 10 PM and 7 AM).

Calls by Community - (Exhibit 13)

Community Trends: A majority of the total calls (91%) originated from the *Paradise and Winchester* communities. Calls received from *Paradise and Winchester* were attributed to southbound departures from Runway 19L and northbound departures from Runway 01R. However, 95% of the total 3,615 calls received from these two communities were from a single household.

Calls by LAS Operations - (Exhibit 14)

LAS Trends: The majority (53%) of the total calls received were associated with non-typical increased departures to the south from Runways 19R and 19L (98% from one household, which is the same household that issued 83% of the calls between 7 AM and 10 PM, and 96% of the calls between 10 PM and 7 AM, and 89% of the total calls attributed to LAS operations).

Other Notable Issues

Runway Renovation: On October 28, 2015, the Clark County Department of Aviation began the second phase of the most significant capital improvement project to occur at McCarran International Airport since the opening of Terminal 3. LAS Runway 25R/07L was closed to air traffic as crews began the demolition portion of the $67 million project that will replace the runway's current asphalt with more durable concrete. This project is financed through a combination of Federal Aviation Administration (FAA) grants and airport-generated funds, no local tax dollars, and will support approximately 250 full-time equivalent construction jobs, including surveyors, contractors, fabricators, engineers and other service providers. The project was scheduled to be completed in two, six-month-long periods, the first of which (October 2014 to April 2015) focused on the eastern half of the runway. Upon completion Runway 25R/07L reopened to serve McCarran during the peak summer travel season. The second closure period began in late October 2015 and focus will be on the resurfacing of the western half of the runway through the project's conclusion in late April/early May 2016. LAS Runway 25R/07L typically handles one-third of all takeoffs and landings annually. The timing of the construction project was carefully planned to occur during the expected shift in runway use normally experienced during the winter months. Runway use during the October-through-May period shifts many flights to the north-south runways due to changing weather patterns.

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

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Commissioner Brown, Vice-Chair
Commissioner Brager
Commissioner Giunchigliani
Commissioner Kirkpatrick
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Sydney Lowe (University Libraries)
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Lisa Butterfield (Reno-Tahoe Airport)
Elizabeth Fretwell (CLV)
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Councilman Bob Coffin (CLV)
Robert Butler (Papillon Helicopters)
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Christine Gerencher (American Airlines)
Councilman S. Anthony (CLV)
Bert Ganoung (SFO)
Councilman Ricki Barlow (CLV)
Nigel Turner (Heli USA Airways)
Mayor Pro Tem Steven Ross (CLV)
San Diego Airport Noise Management
Bradford Jerbic, (CLV)
Jeannie Denham (Citizen)
Brok Armantrout (CBC)
Judge Bob Johnston (Citizen)
David Parks (Nevada State Assembly)
Roy Fuhrmann (Metro Airports Commission)
J. Gordon Arkin (Foley & Lardner)
Tom Schaus (Sundance Helicopters)
John Williams (Ricondo)
Brooke Satern (Port of Portland)
Douglas Pomeroy (FAA ADO)
Gary Brodt (Citizen)
La Nea M. Conner (Boeing)
James P. Callahan (Nellis AFB)
Mike Jeck (Metro Wash. Air Auth.)
Stan Shepherd (SEATAC)
Grey Blackburn (CNLV)
Eric Sheng (Long Beach Airport)
James Davies (Sky Harbor Airport)
Jason Schwartz (Portland Airport)
Karen Everitt (Dallas City Hall)
Todd Lobato (Nellis AFB)
Thomas Miller (Nellis AFB)
William Olivieri (Citizen)
Stephanie Garcia-Vause (COH)
Samuel Carter (ITT)
Andrew Powell (COH)
Steven Peacock (Dallas City Hall)
William Ruggiero (FAA TRACON)
John Dietz (FAA TRACON)

Exhibit 1: Noise Complaint Calls by Community* - October 2015

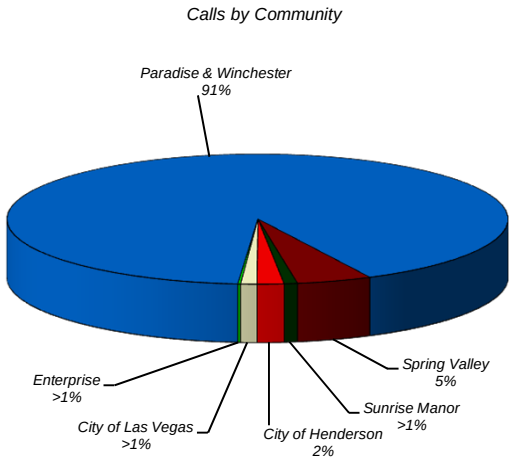
Community	No. of Calls in 2015	No. of Callers in 2015	No. of Calls in 2014	No. of Calls in 2013
City of Boulder City				
City of Henderson	10	8	13	1
City of Las Vegas	6	6	1	2
City of North Las Vegas			1	2
Enterprise	1	1		1
Lone Mountain				
Paradise & Winchester	529	10	477	16
Spring Valley	28	5	15	8
Summerlin South				
Sunrise Manor	5	5	3	
Whitney				
Location unknown				
Overall Total	**579**	**35**	**510**	**30**

Difference between 2015 and 2014 Total Calls: **14%**

Difference between 2015 and 2013 Total Calls: **1,830%**

Average Number of Calls per Caller: **16.5**

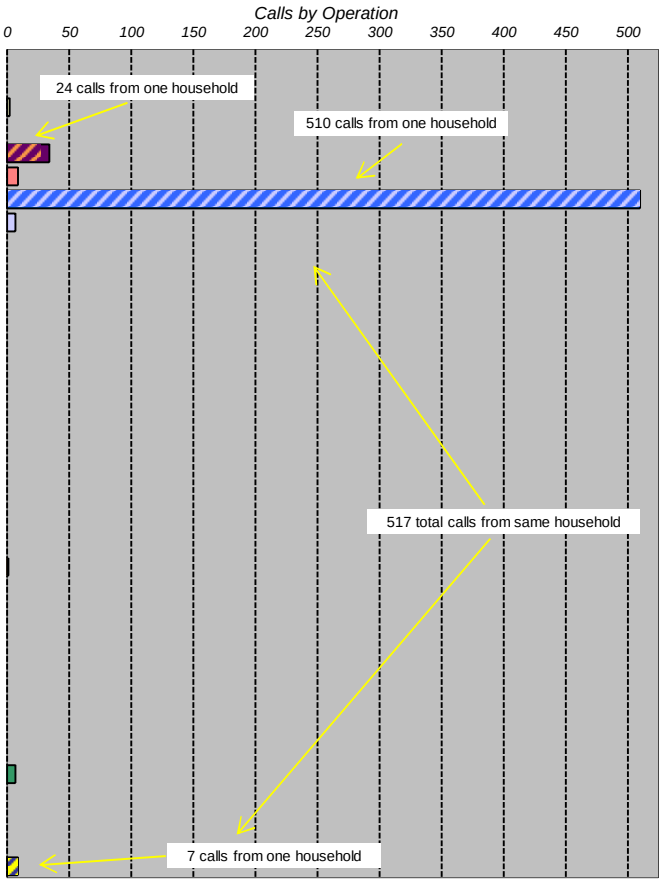
Most calls received from one household: **517**



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

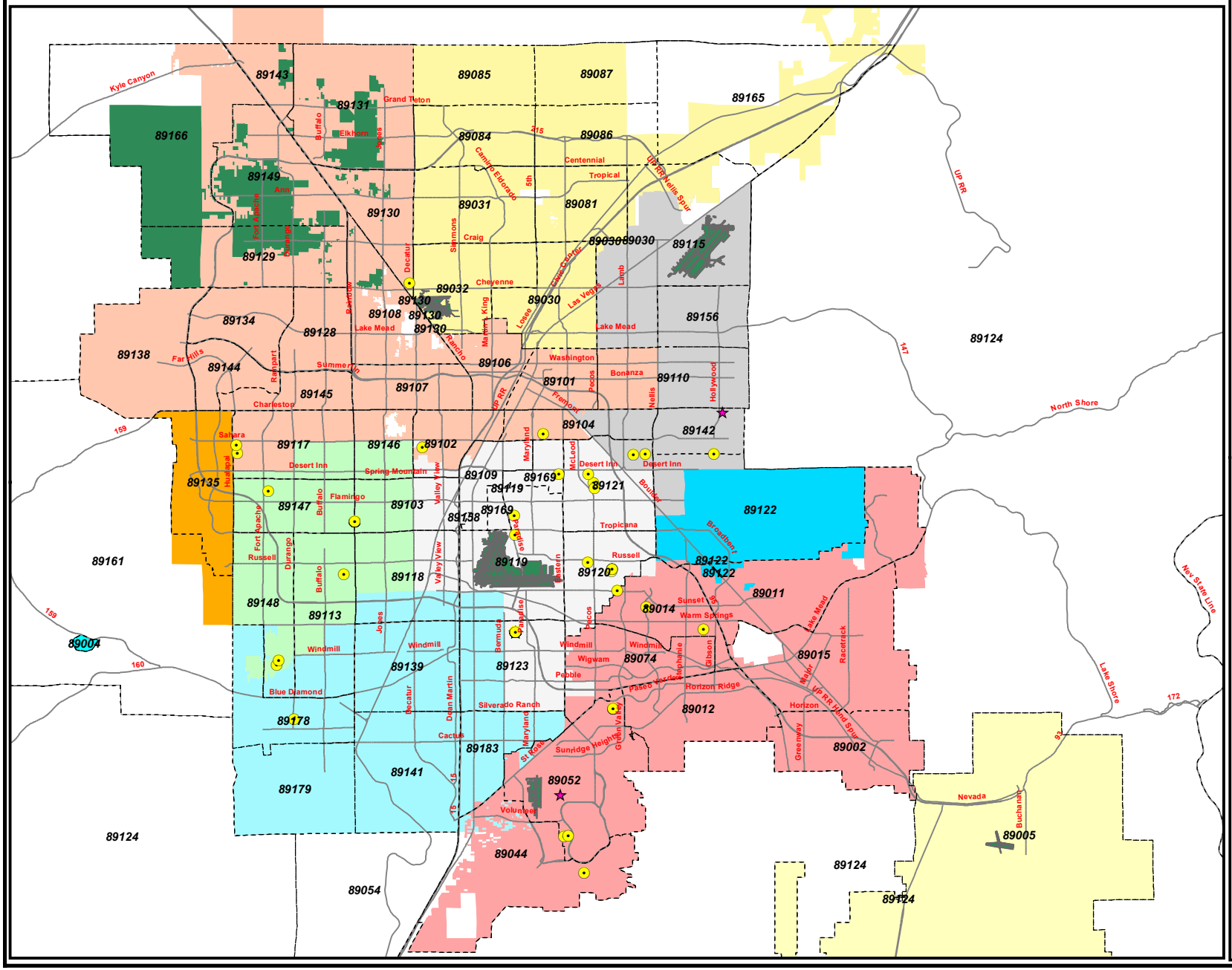
Exhibit 2: Noise Complaint Calls by Type of Operation - October 2015

Operation	No. of Calls in 2015	Percent of Overall Total	No. of Calls in 2014	No. of Calls in 2013
LAS 01R/L Arrivals				
LAS 07R/L Arrivals				
LAS 19R/L Arrivals	2	0.3%		
LAS 25R/L Arrivals			1	
LAS 01R/L Departures	34	5.9%	40	17
LAS 07R/L Departures	9	1.6%	9	2
LAS 19R/L Departures	510	88.1%	1	5
LAS 25R/L Departures	7	1.2%	441	2
LAS Run-ups				
LAS GA				
LAS Other				
LAS Total	**562**	**97.1%**	**492**	**26**
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	0.2%	1	2
VGT Other				
VGT Total	**1**	**0.2%**	**1**	**2**
HND 17R/L Arrivals				
HND 35R/L Arrivals				
HND 17R/L Departures				
HND 35R/L Departures				
HND Run-ups				
HND GA	7	1.2%	10	1
HND Other				
HND Total	**7**	**1.2%**	**10**	**1**
Helicopters**	**9**	**1.6%**	**7**	**1**
Overall Total	**579**	**100%**	**510**	**30**



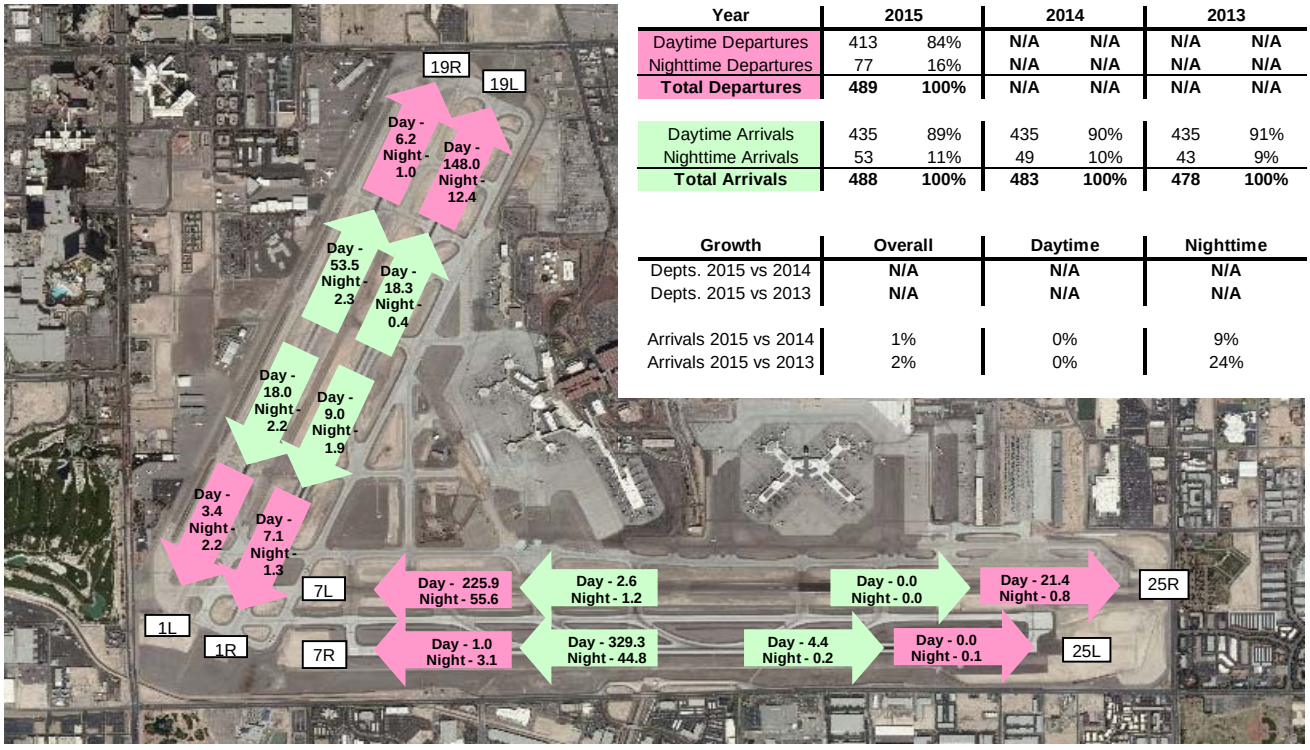
** Note that helicopter noise complaints are not tied to a specific facility since the operation cannot always be associated to a specific airport. Additionally, helicopter calls do not include those associated with operations conducted by the Metropolitan Police Department or those associated with operations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

Exhibit 3: Aircraft Noise Complaints by Community - October 2015



2015 Noise Complaint Report

Exhibit 4: LAS Daily Average Operations Runway for Large Air Carrier Aircraft* - October 2015

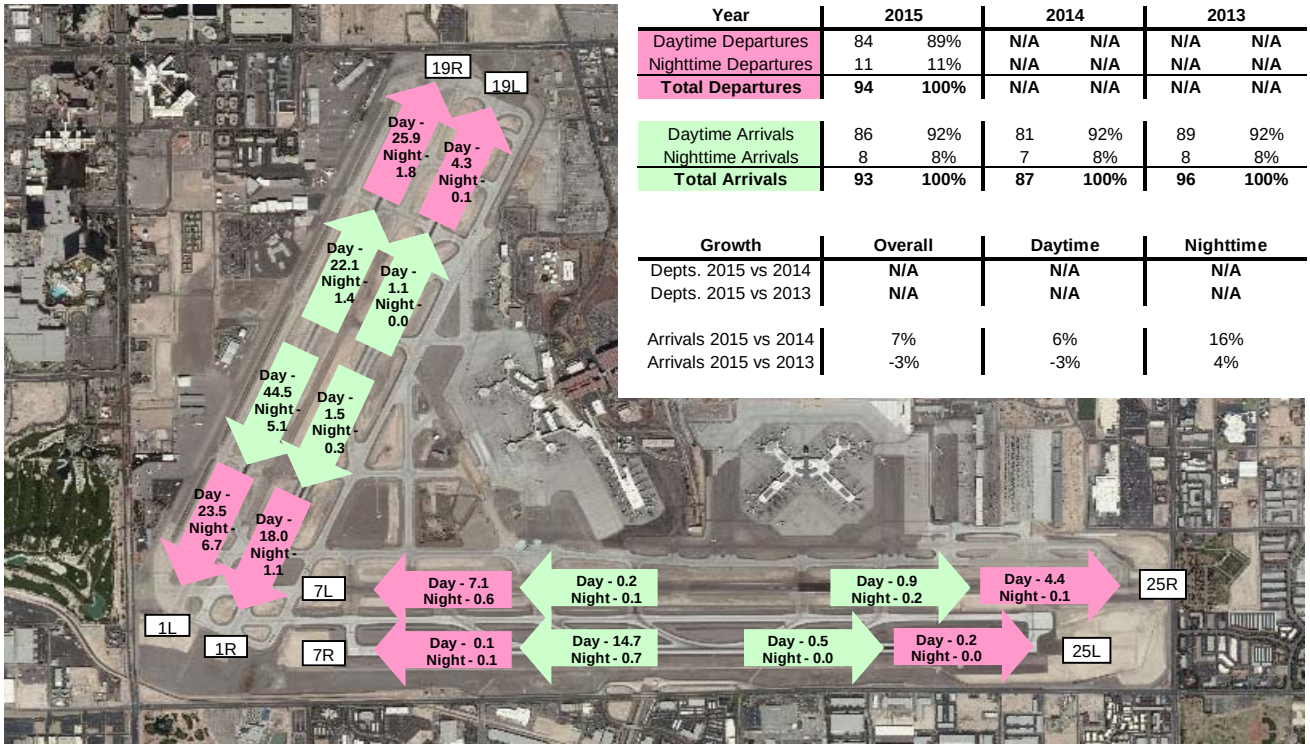


Year	2015		2014		2013	
Daytime Departures	413	84%	N/A	N/A	N/A	N/A
Nighttime Departures	77	16%	N/A	N/A	N/A	N/A
Total Departures	**489**	**100%**	**N/A**	**N/A**	**N/A**	**N/A**
Daytime Arrivals	435	89%	435	90%	435	91%
Nighttime Arrivals	53	11%	49	10%	43	9%
Total Arrivals	**488**	**100%**	**483**	**100%**	**478**	**100%**

Growth	Overall	Daytime	Nighttime
Depts. 2015 vs 2014	N/A	N/A	N/A
Depts. 2015 vs 2013	N/A	N/A	N/A
Arrivals 2015 vs 2014	1%	0%	9%
Arrivals 2015 vs 2013	2%	0%	24%

* Aircraft types: All aircraft with a maximum gross take of 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 2015

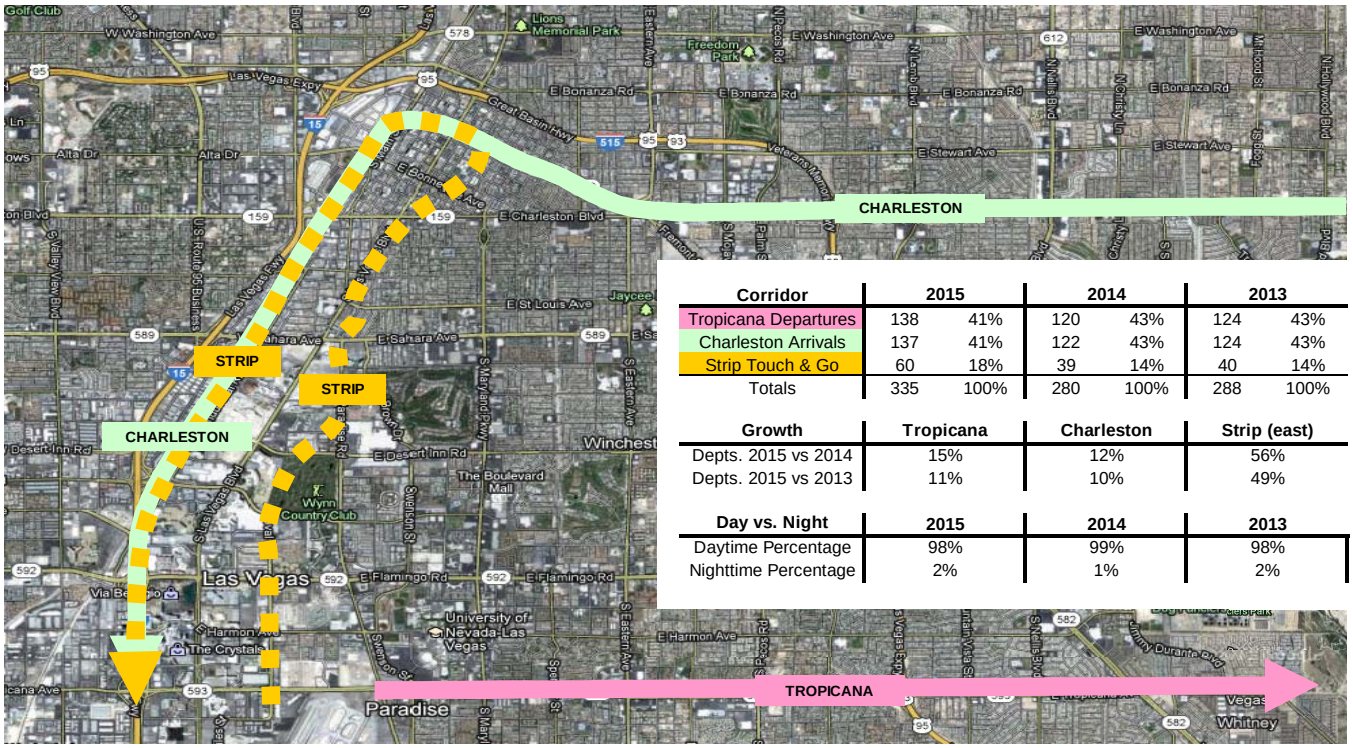


Year	2015		2014		2013	
Daytime Departures	84	89%	N/A	N/A	N/A	N/A
Nighttime Departures	11	11%	N/A	N/A	N/A	N/A
Total Departures	**94**	**100%**	**N/A**	**N/A**	**N/A**	**N/A**
Daytime Arrivals	86	92%	81	92%	89	92%
Nighttime Arrivals	8	8%	7	8%	8	8%
Total Arrivals	**93**	**100%**	**87**	**100%**	**96**	**100%**

Growth	Overall	Daytime	Nighttime
Depts. 2015 vs 2014	N/A	N/A	N/A
Depts. 2015 vs 2013	N/A	N/A	N/A
Arrivals 2015 vs 2014	7%	6%	16%
Arrivals 2015 vs 2013	-3%	-3%	4%

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

Exhibit 6: LAS Daily Average Operations by Corridor for Helicopter Tours - October 2015



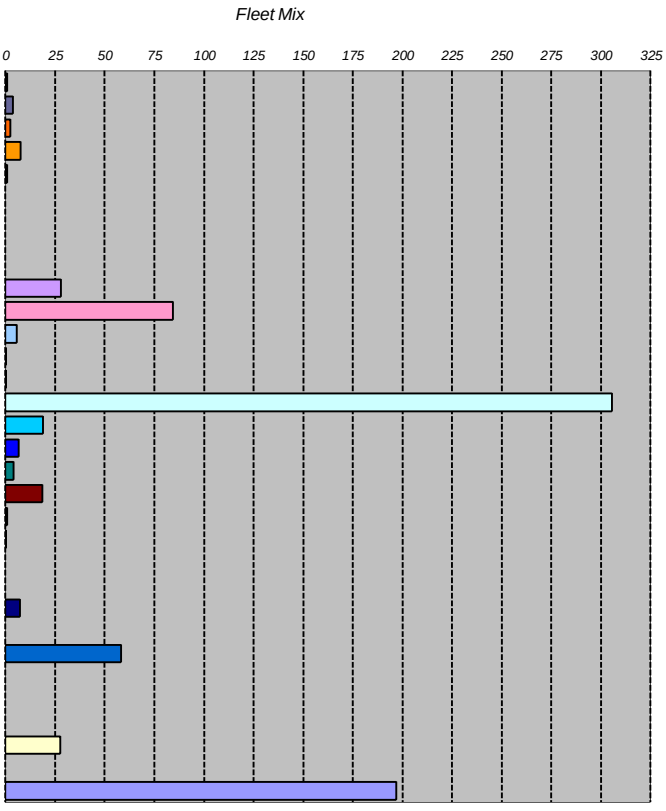
Corridor	2015		2014		2013	
Tropicana Departures	138	41%	120	43%	124	43%
Charleston Arrivals	137	41%	122	43%	124	43%
Strip Touch & Go	60	18%	39	14%	40	14%
Totals	335	100%	280	100%	288	100%

Growth	Tropicana	Charleston	Strip (east)
Depts. 2015 vs 2014	15%	12%	56%
Depts. 2015 vs 2013	11%	10%	49%

Day vs. Night	2015	2014	2013
Daytime Percentage	98%	99%	98%
Nighttime Percentage	2%	1%	2%

Exhibit 7: LAS Aircraft Arrival Fleet Mix* - October 2014

Operation	Daily Average in 2014	Percent of Overall Total	Daily Average in 2013	Daily Average in 2012
A300s, A310s	0.81	0.1%	0.77	0.74
A330s, A340s	3.61	0.5%	3.19	2.52
B747s	2.32	0.3%	2.29	2.23
B767s	7.48	1.0%	5.06	3.45
B777s	1.00	0.1%	0.90	0.74
DC10, L1011, MD11	0.00	0.0%	1.52	1.61
Misc. (B707s, DC8s, etc.)	0.00	0.0%	0.00	0.00
Heavy Jets (>300,000 lbs.)	**15.23**	**2.0%**	**13.74**	**11.29**
A318s, A319s	28.00	3.6%	26.65	34.65
A320s, A321s	84.48	10.9%	73.55	63.84
B717s	5.58	0.7%	0.00	0.00
B727s	0.03	0.0%	0.00	0.06
B737-100s, -200s	0.06	0.0%	0.03	0.03
B737-300s to -900s	305.39	39.3%	309.35	294.39
B757s	18.84	2.4%	22.55	33.90
BAC 111s, E170s, E190s	6.55	0.8%	0.06	1.71
CRJ7s, CRJ9s	4.23	0.5%	11.61	6.84
MD80s	18.52	2.4%	23.03	30.19
MD90s	0.90	0.1%	2.23	0.39
Misc. (Bae 146s, DC9s)	0.19	0.0%	0.23	0.29
Large Jets (>75,000 lbs.)	**472.77**	**60.8%**	**469.29**	**466.29**
Medium Jets (>41,000	**7.45**	**1.0%**	**6.03**	**7.29**
Small Jets (<41,000 lbs.)	**58.19**	**7.5%**	**56.90**	**61.58**
Military Jets	**0.00**	**0.0%**	**0.16**	**0.06**
Non-Jets & Unknowns	**27.58**	**3.5%**	**24.13**	**27.23**
Helicopter Tours	**196.80**	**25.3%**	**160.20**	**164.06**
Overall Total*	**778**	**100%**	**730**	**738**



* 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 2015 to 2013

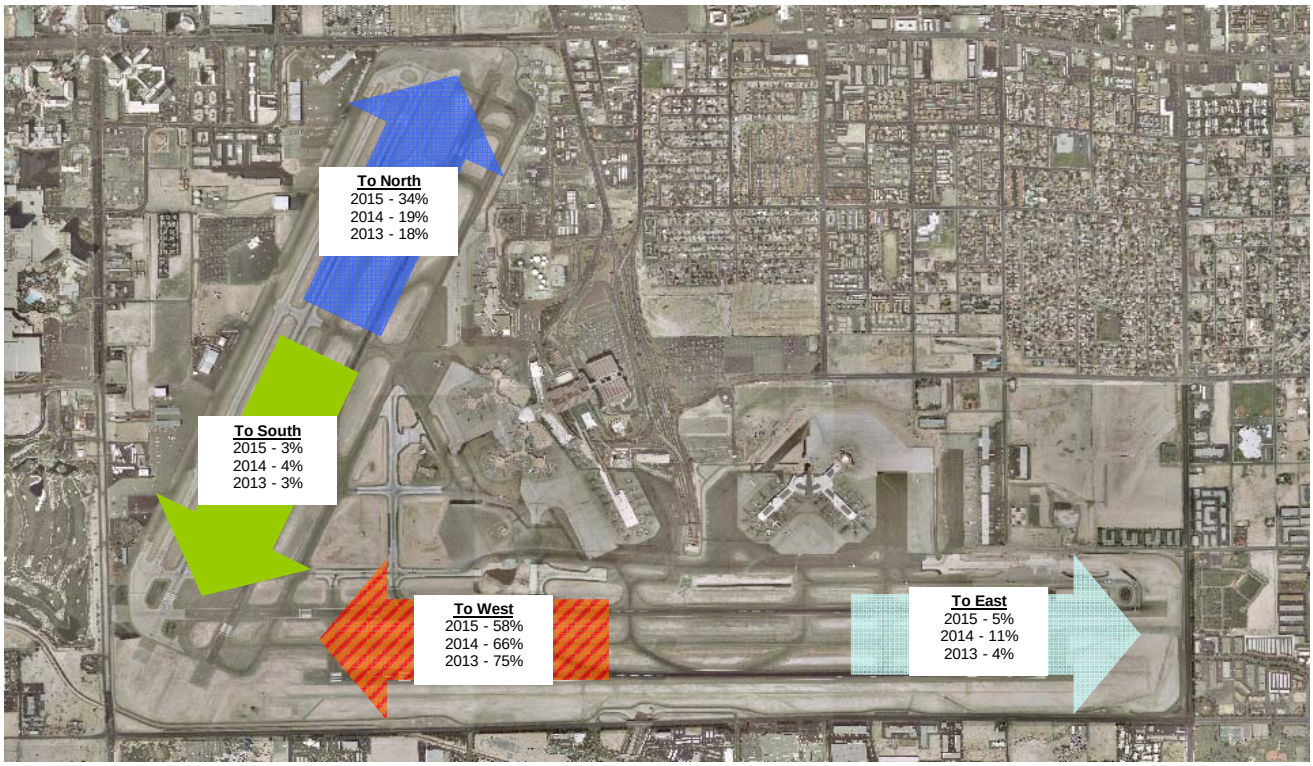
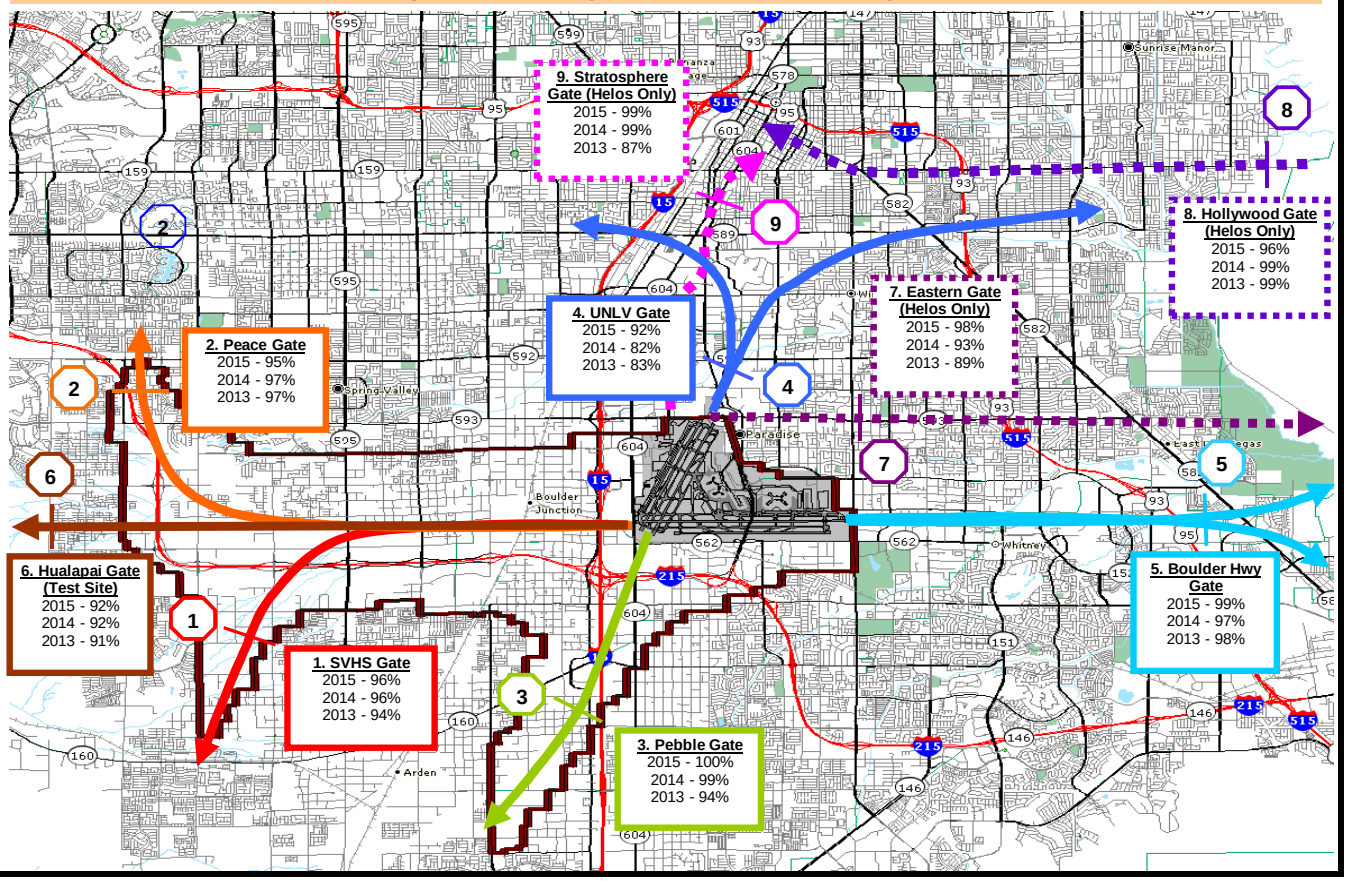


Exhibit 9: "Gate" Compliance for Large Aircraft* & LAS Helicopter Tours - October 2015



* Aircraft types: All aircraft with a maximum gross take of 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 1: Noise Complaint Calls by Community* - November 2015

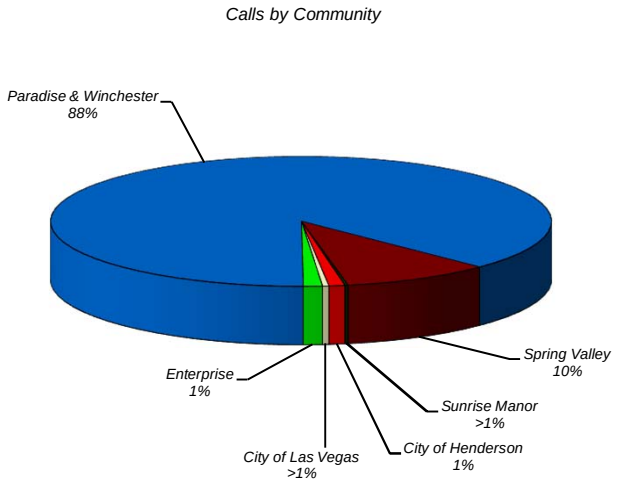
Community	No. of Calls in 2015	No. of Callers in 2015	No. of Calls in 2014	No. of Calls in 2013
City of Boulder City				2
City of Henderson	5	4	12	5
City of Las Vegas	2	2	6	4
City of North Las Vegas			2	
Enterprise	6	6	59	2
Lone Mountain				
Paradise & Winchester	428	9	1108	19
Spring Valley	47	1	10	8
Summerlin South			1	
Sunrise Manor	1	1	6	1
Whitney				
Location unknown				
Overall Total	**489**	**23**	**1,204**	**41**

Difference between 2015 and 2014 Total Calls: **-59%**

Difference between 2015 and 2013 Total Calls: **1,093%**

Average Number of Calls per Caller: **21.3**

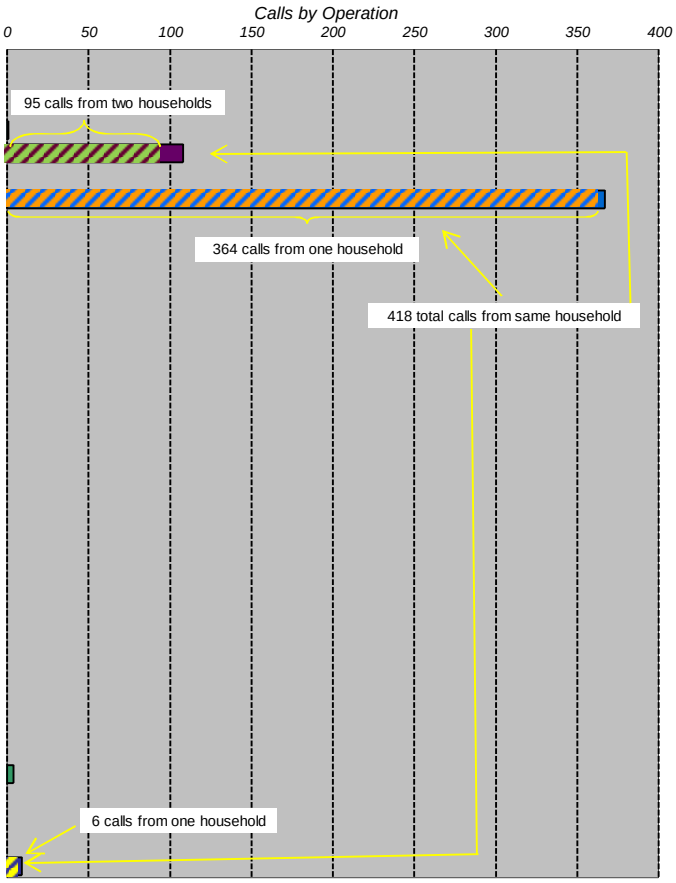
Most calls received from one household: **418**



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

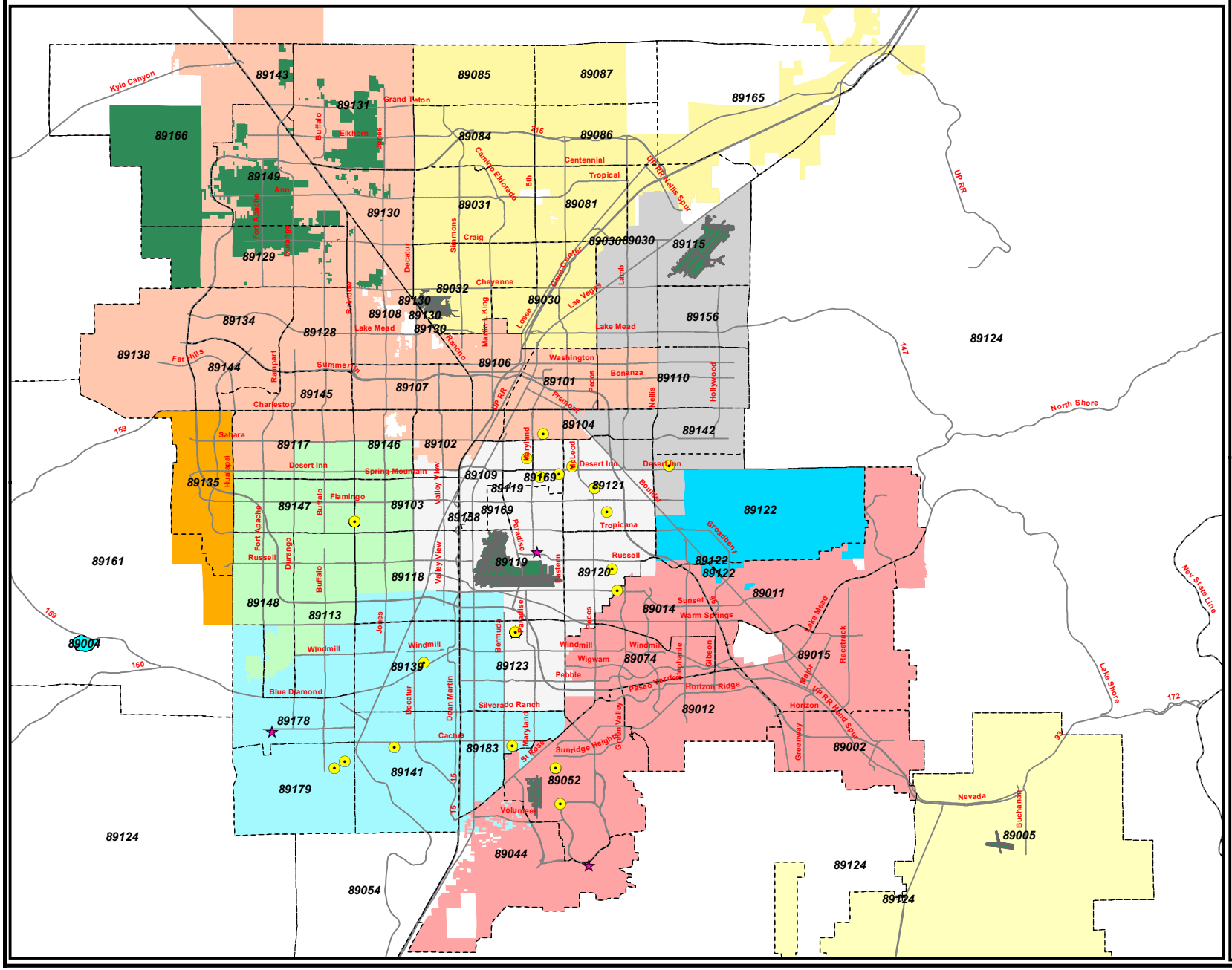
Exhibit 2: Noise Complaint Calls by Type of Operation - November 2015

Operation	No. of Calls in 2015	Percent of Overall Total	No. of Calls in 2014	No. of Calls in 2013
LAS 01R/L Arrivals			2	1
LAS 07R/L Arrivals				
LAS 19R/L Arrivals			2	
LAS 25R/L Arrivals	1	0.2%		
LAS 01R/L Departures	108	22.1%	764	5
LAS 07R/L Departures		0.0%	4	6
LAS 19R/L Departures	367	75.1%	416	2
LAS 25R/L Departures				16
LAS Run-ups				1
LAS GA				
LAS Other			1	
LAS Total	**476**	**97.3%**	**1,189**	**31**
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			3	1
VGT Other				
VGT Total	**0**	**0.0%**	**3**	**1**
HND 17R/L Arrivals				
HND 35R/L Arrivals				
HND 17R/L Departures				
HND 35R/L Departures				
HND Run-ups				
HND GA	4	**0.8%**	7	1
HND Other				
HND Total	**4**	**0.8%**	**7**	**1**
Helicopters**	**9**	**1.8%**	**5**	**8**
Overall Total	**489**	**100%**	**1,204**	**41**



** 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 2015



Legend

November 2015
Total Complaints: 489

Aircraft Complaints
Received 480
Mapped 479

Helicopter Complaints
Received 9
Mapped 9

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

Geographic Information Systems

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January 26, 2016

Note:
This information is for display purposes only. No liability is assumed as to the accuracy of the data delineated hereon.

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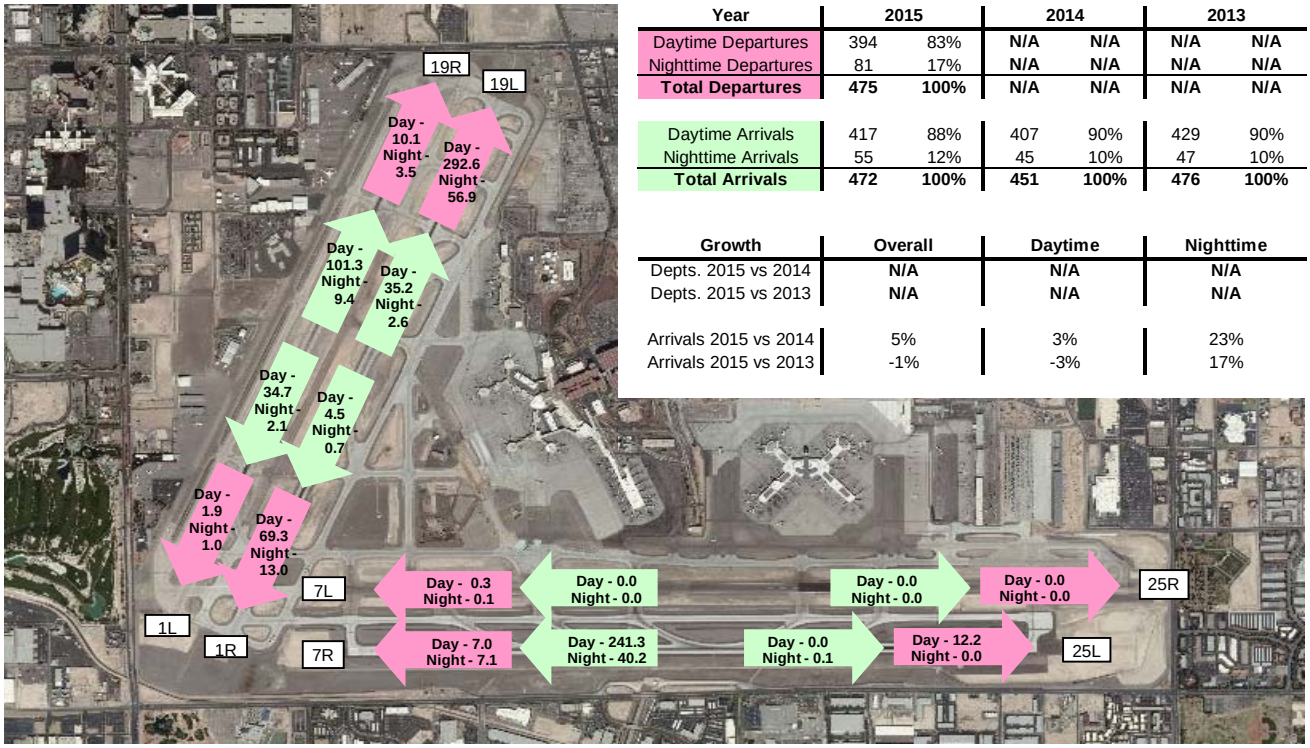
2015 Noise Complaint Report

Exhibit 4: LAS Daily Average Operations Runway for Large Air Carrier Aircraft* - November 2015

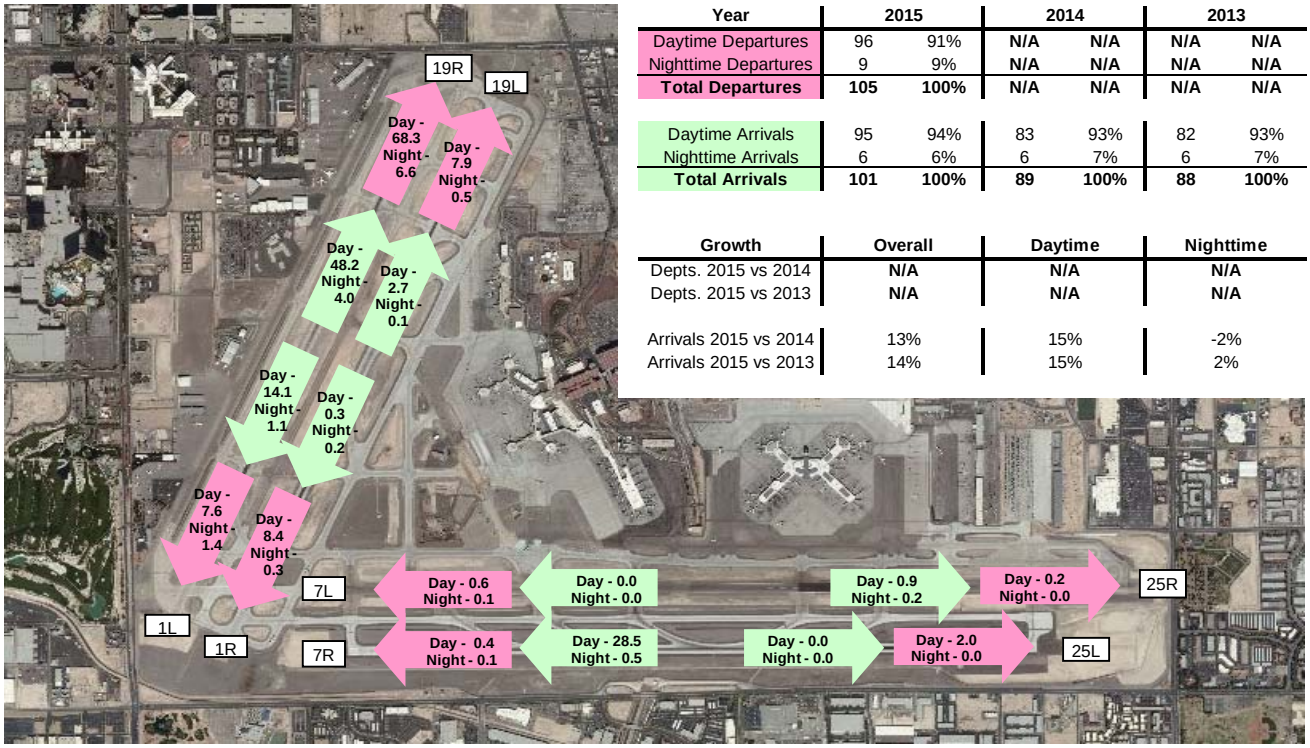


Year	2015		2014		2013	
Daytime Departures	394	83%	N/A	N/A	N/A	N/A
Nighttime Departures	81	17%	N/A	N/A	N/A	N/A
Total Departures	**475**	**100%**	**N/A**	**N/A**	**N/A**	**N/A**
Daytime Arrivals	417	88%	407	90%	429	90%
Nighttime Arrivals	55	12%	45	10%	47	10%
Total Arrivals	**472**	**100%**	**451**	**100%**	**476**	**100%**

Growth	Overall	Daytime	Nighttime
Depts. 2015 vs 2014	N/A	N/A	N/A
Depts. 2015 vs 2013	N/A	N/A	N/A
Arrivals 2015 vs 2014	5%	3%	23%
Arrivals 2015 vs 2013	-1%	-3%	17%

* Aircraft types: All aircraft with a maximum gross take of 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 2015

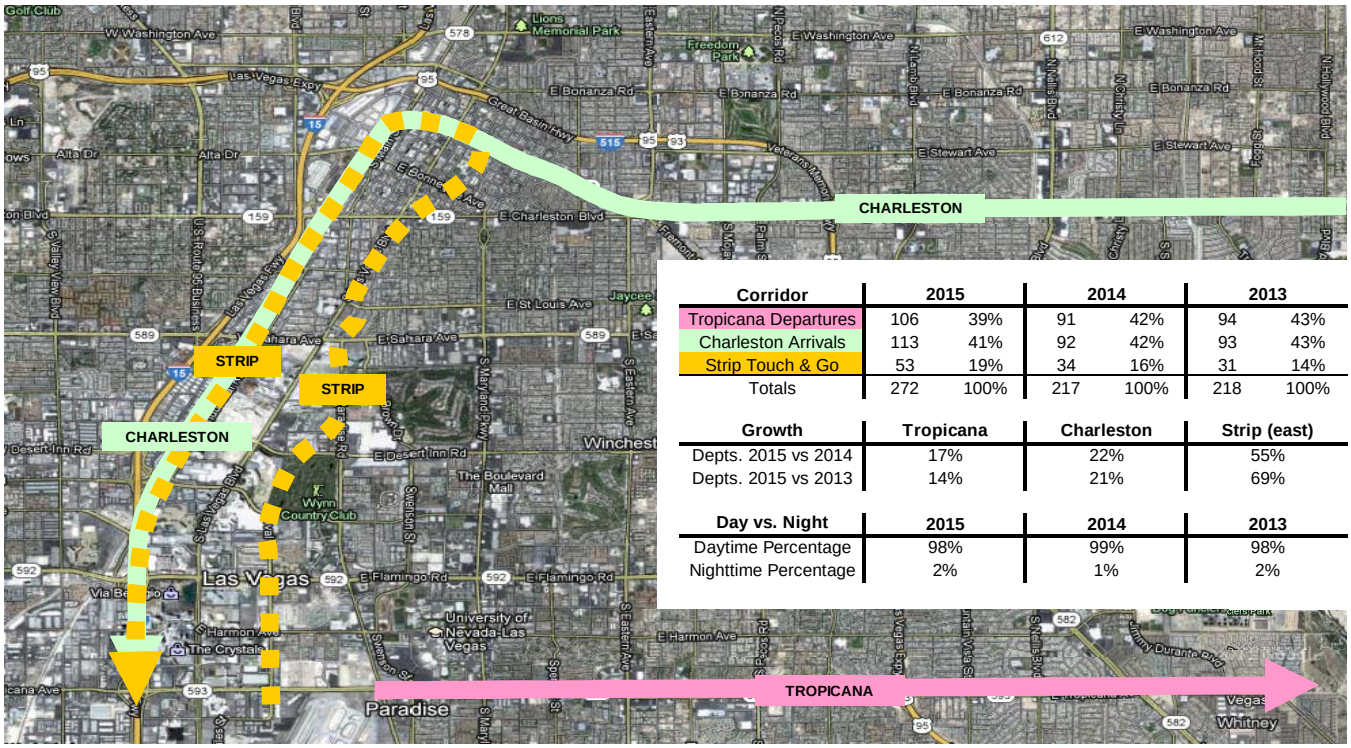


Year	2015		2014		2013	
Daytime Departures	96	91%	N/A	N/A	N/A	N/A
Nighttime Departures	9	9%	N/A	N/A	N/A	N/A
Total Departures	**105**	**100%**	**N/A**	**N/A**	**N/A**	**N/A**
Daytime Arrivals	95	94%	83	93%	82	93%
Nighttime Arrivals	6	6%	6	7%	6	7%
Total Arrivals	**101**	**100%**	**89**	**100%**	**88**	**100%**

Growth	Overall	Daytime	Nighttime
Depts. 2015 vs 2014	N/A	N/A	N/A
Depts. 2015 vs 2013	N/A	N/A	N/A
Arrivals 2015 vs 2014	13%	15%	-2%
Arrivals 2015 vs 2013	14%	15%	2%

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

Exhibit 6: LAS Daily Average Operations by Corridor for Helicopter Tours - November 2015



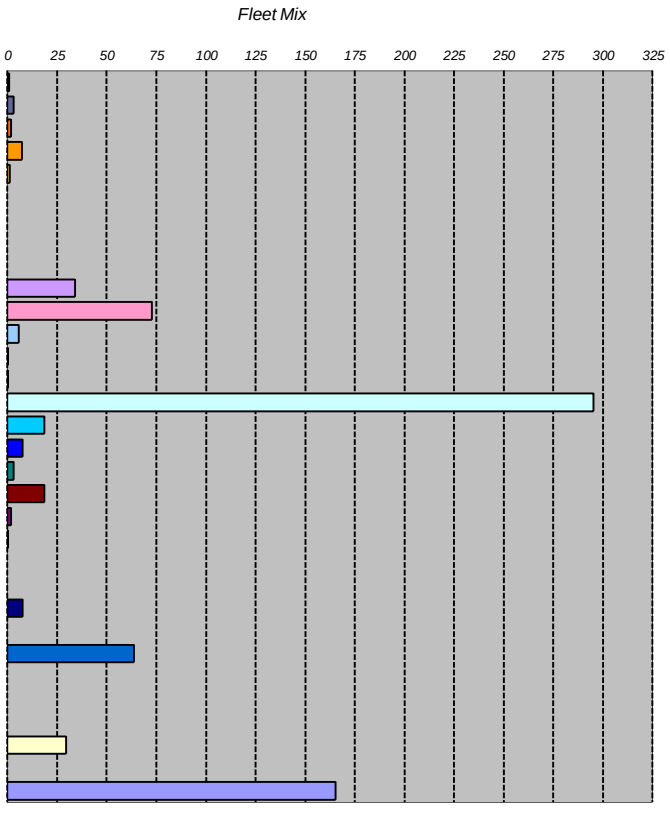
Corridor	2015		2014		2013	
Tropicana Departures	106	39%	91	42%	94	43%
Charleston Arrivals	113	41%	92	42%	93	43%
Strip Touch & Go	53	19%	34	16%	31	14%
Totals	272	100%	217	100%	218	100%

Growth	Tropicana	Charleston	Strip (east)
Depts. 2015 vs 2014	17%	22%	55%
Depts. 2015 vs 2013	14%	21%	69%

Day vs. Night	2015	2014	2013
Daytime Percentage	98%	99%	98%
Nighttime Percentage	2%	1%	2%

Exhibit 7: LAS Aircraft Arrival Fleet Mix* - November 2015

Operation	Daily Average in 2015	Percent of Overall Total	Daily Average in 2014	Daily Average in 2013
A300s, A310s	0.87	0.1%	0.80	0.70
A330s, A340s	3.00	0.4%	2.63	2.60
B747s	1.87	0.3%	2.00	2.00
B767s	7.40	1.0%	8.43	6.03
B777s	1.07	0.1%	0.87	0.93
DC10, L1011, MD11	0.00	0.0%	0.17	1.60
Misc. (B707s, DC8s, etc.)	0.00	0.0%	0.00	0.00
Heavy Jets (>300,000 lbs.)	**14.20**	**1.9%**	**14.90**	**13.87**
A318s, A319s	34.17	4.6%	36.17	41.90
A320s, A321s	72.80	9.9%	57.73	53.43
B717s	5.77	0.8%	0.00	0.00
B727s	0.03	0.0%	0.00	0.00
B737-100s, -200s	0.03	0.0%	0.03	0.00
B737-300s to -900s	295.37	40.0%	282.53	301.10
B757s	18.57	2.5%	17.97	28.03
BAC 111s, E170s, E190s	7.63	1.0%	1.40	0.20
CRJ7s, CRJ9s	3.03	0.4%	13.23	5.27
MD80s	18.50	2.5%	25.57	31.80
MD90s	1.70	0.2%	1.80	0.03
Misc. (Bae 146s, DC9s)	0.27	0.0%	0.10	0.03
Large Jets (>75,000 lbs.)	**457.87**	**62.0%**	**436.53**	**461.80**
Medium Jets (>41,000	**7.60**	**1.0%**	**4.97**	**6.70**
Small Jets (<41,000 lbs.)	**63.80**	**8.6%**	**59.27**	**55.70**
Military Jets	**0.00**	**0.0%**	**0.63**	**0.37**
Non-Jets & Unknowns	**29.40**	**4.0%**	**24.03**	**25.67**
Helicopter Tours	**165.20**	**22.4%**	**126.00**	**124.50**
Overall Total*	**738**	**100%**	**666**	**689**



* 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 2015 to 2013

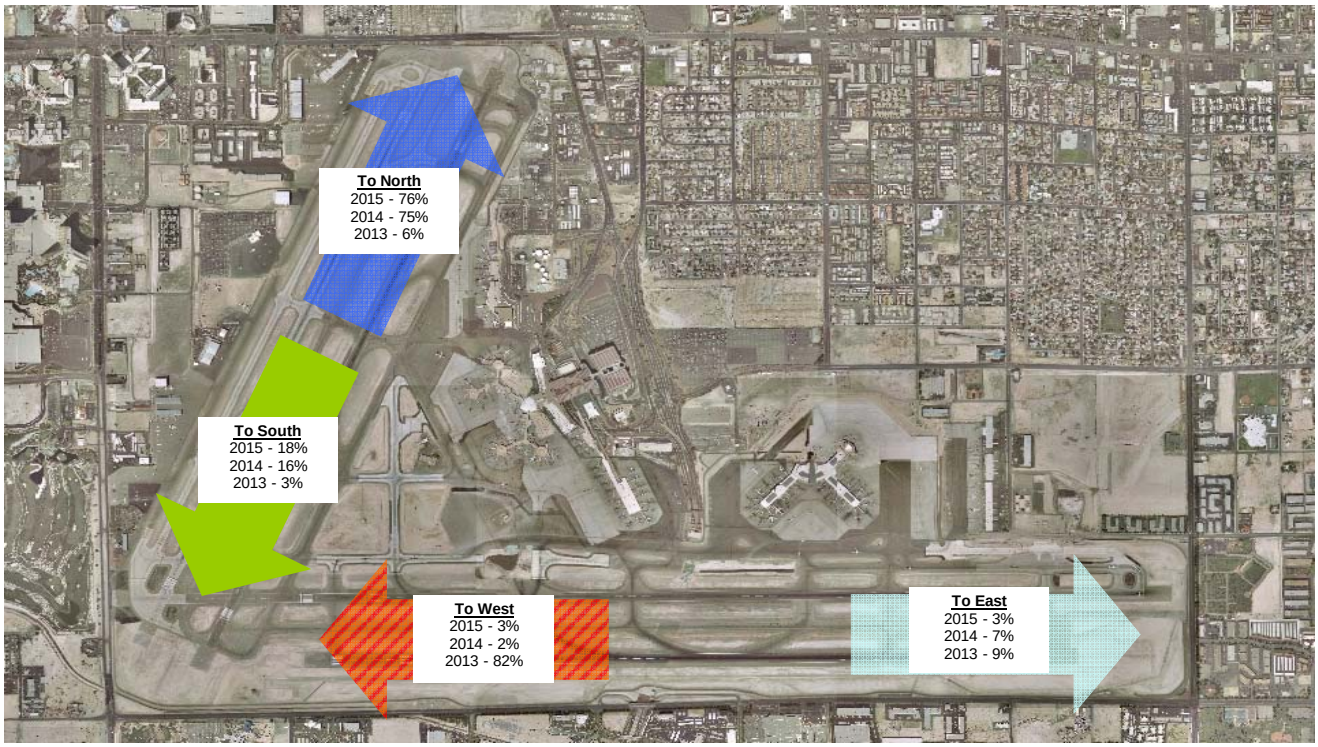
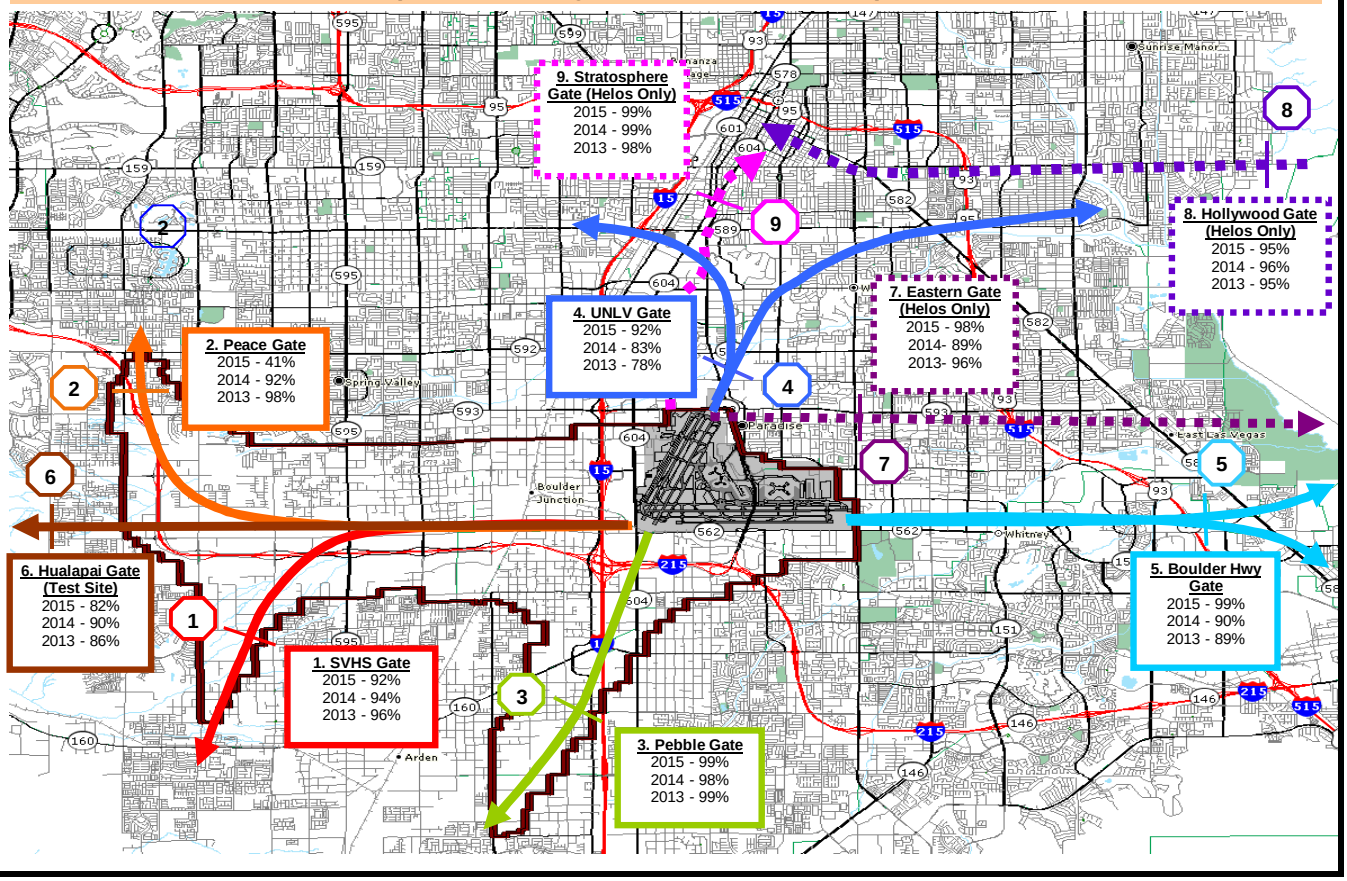


Exhibit 9: "Gate" Compliance for Large Aircraft* & LAS Helicopter Tours - November 2015

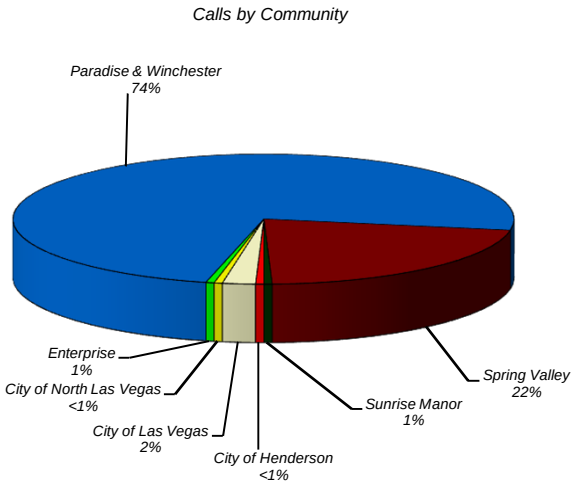


* Aircraft types: All aircraft with a maximum gross take of weight of at least 75,000 pounds, including but not limited to, A306, A310, A311, A318, A319, A320, A330, A
B707, B717, B727, B737, B747, B757, B767, B777, CRJ7, CRJ9, DC8, DC9, DC10, E170, E190, HA4T, L1011, MD80, MD90, MD10, MD11, VC10.

Exhibit 1: Noise Complaint Calls by Community* - December 2015

Community	No. of Calls in 2015	No. of Callers in 2015	No. of Calls in 2014	No. of Calls in 2013
City of Boulder City				
City of Henderson	1	1	12	4
City of Las Vegas	4	4	5	
City of North Las Vegas	1	1	1	
Enterprise	1	1	17	1
Lone Mountain				
Paradise & Winchester	140	6	616	41
Spring Valley	41	1	6	2
Summerlin South				
Sunrise Manor	1	1	4	2
Whitney			3	
Location unknown				
Overall Total	**189**	**15**	**664**	**50**

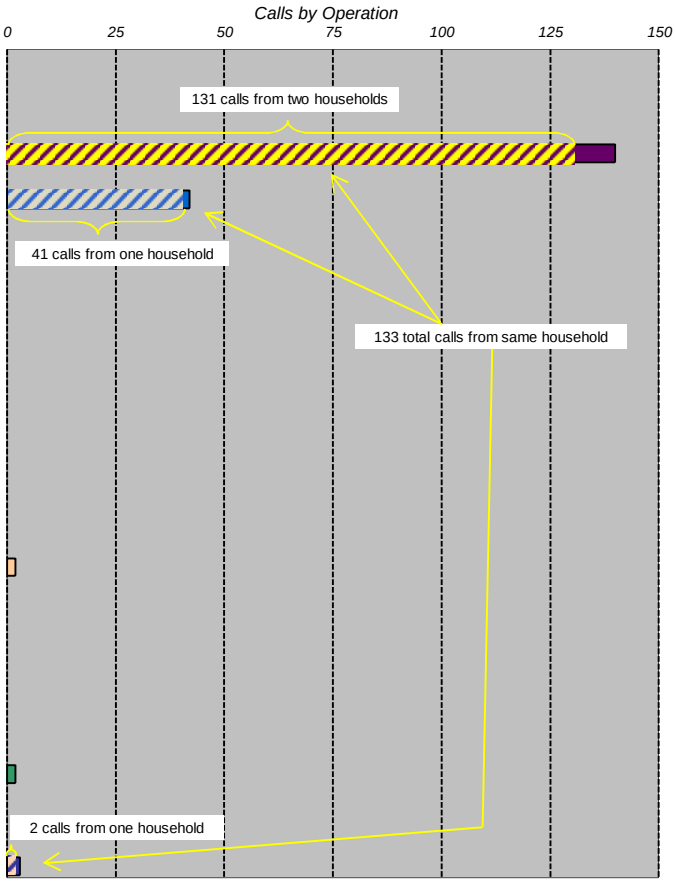
Difference between 2015 and 2014 Total Calls:	**-72%**
Difference between 2015 and 2013 Total Calls:	**278%**
Average Number of Calls per Caller:	**12.6**
Most calls received from one household:	**133**



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

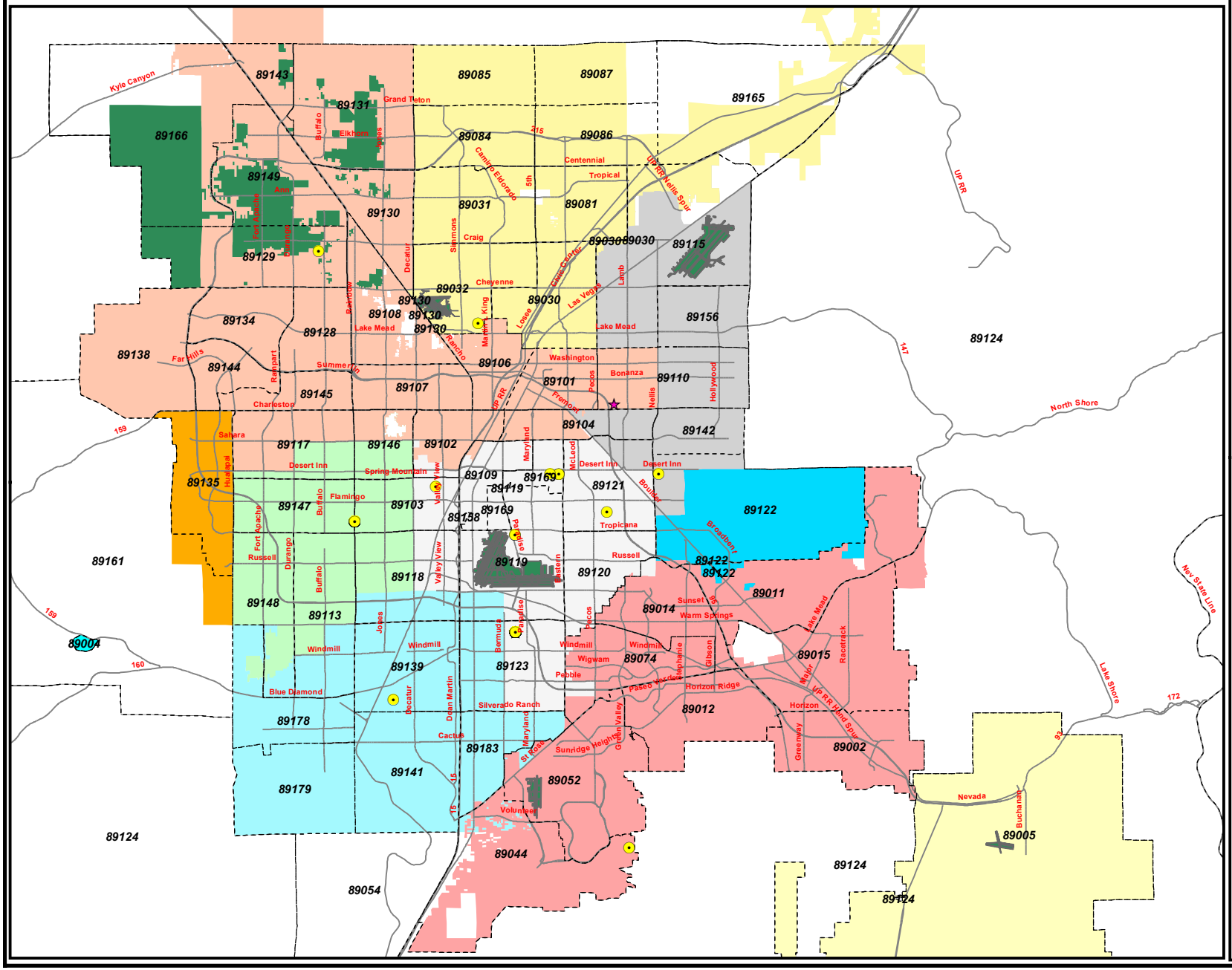
Exhibit 2: Noise Complaint Calls by Type of Operation - December 2015

Operation	No. of Calls in 2015	Percent of Overall Total	No. of Calls in 2014	No. of Calls in 2013
LAS 01R/L Arrivals				
LAS 07R/L Arrivals				
LAS 19R/L Arrivals				
LAS 25R/L Arrivals				1
LAS 01R/L Departures	140	74.1%	627	8
LAS 07R/L Departures				3
LAS 19R/L Departures	42	22.2%	20	22
LAS 25R/L Departures				8
LAS Run-ups				
LAS GA				
LAS Other				
LAS Total	**182**	**96.3%**	**647**	**42**
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	1.1%	2	
VGT Other				
VGT Total	**2**	**1.1%**	**2**	**0**
HND 17R/L Arrivals				
HND 35R/L Arrivals				
HND 17R/L Departures				
HND 35R/L Departures				
HND Run-ups				
HND GA	2	1.1%	5	2
HND Other				
HND Total	**2**	**1.1%**	**5**	**2**
Helicopters**	**3**	**1.6%**	**10**	**6**
Overall Total	**189**	**100%**	**664**	**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 2015



Legend

December 2015
Total Complaints: 189

Aircraft Complaints
Received 186
Mapped 184

Helicopter Complaints
Received 3
Mapped 3

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

Geographic Information Systems

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January 26, 2016

Note:
This information is for display purposes only. No liability is assumed as to the accuracy of the data delineated hereon.

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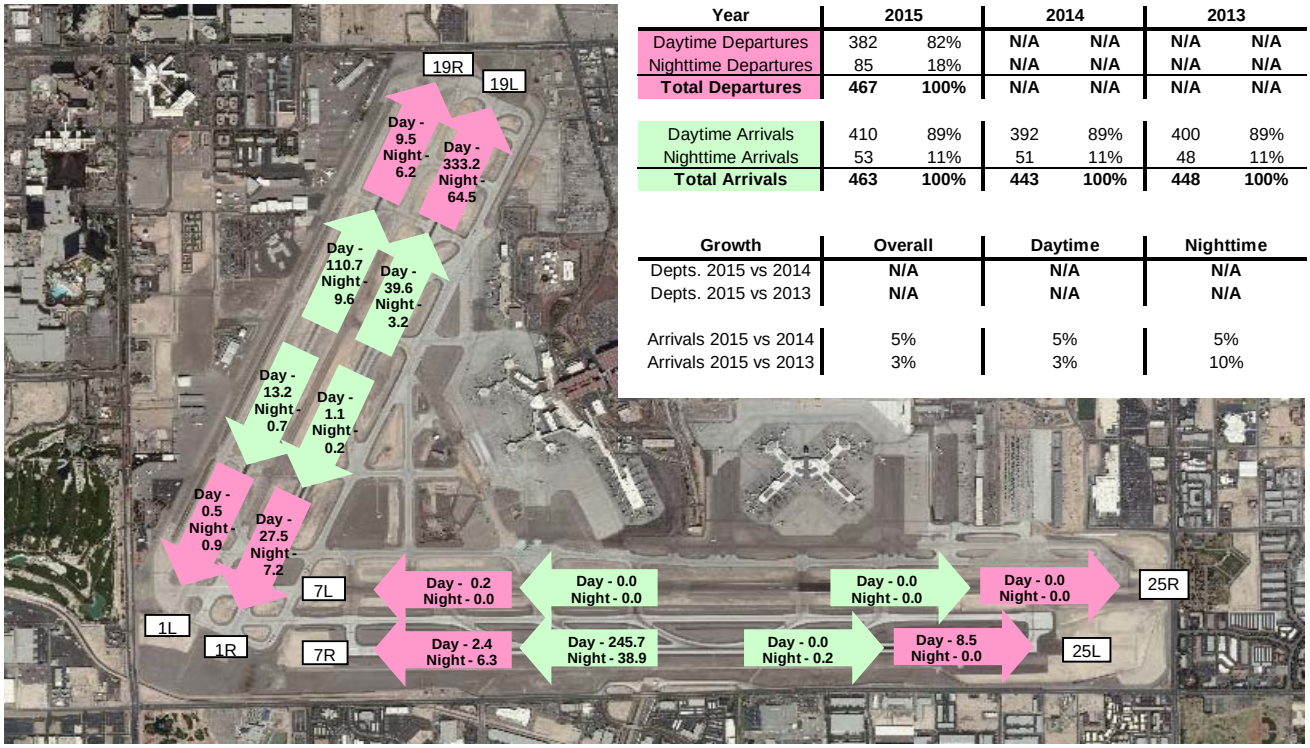
2015 Noise Complaint Report

Exhibit 4: LAS Daily Average Operations Runway for Large Air Carrier Aircraft* - December 2015

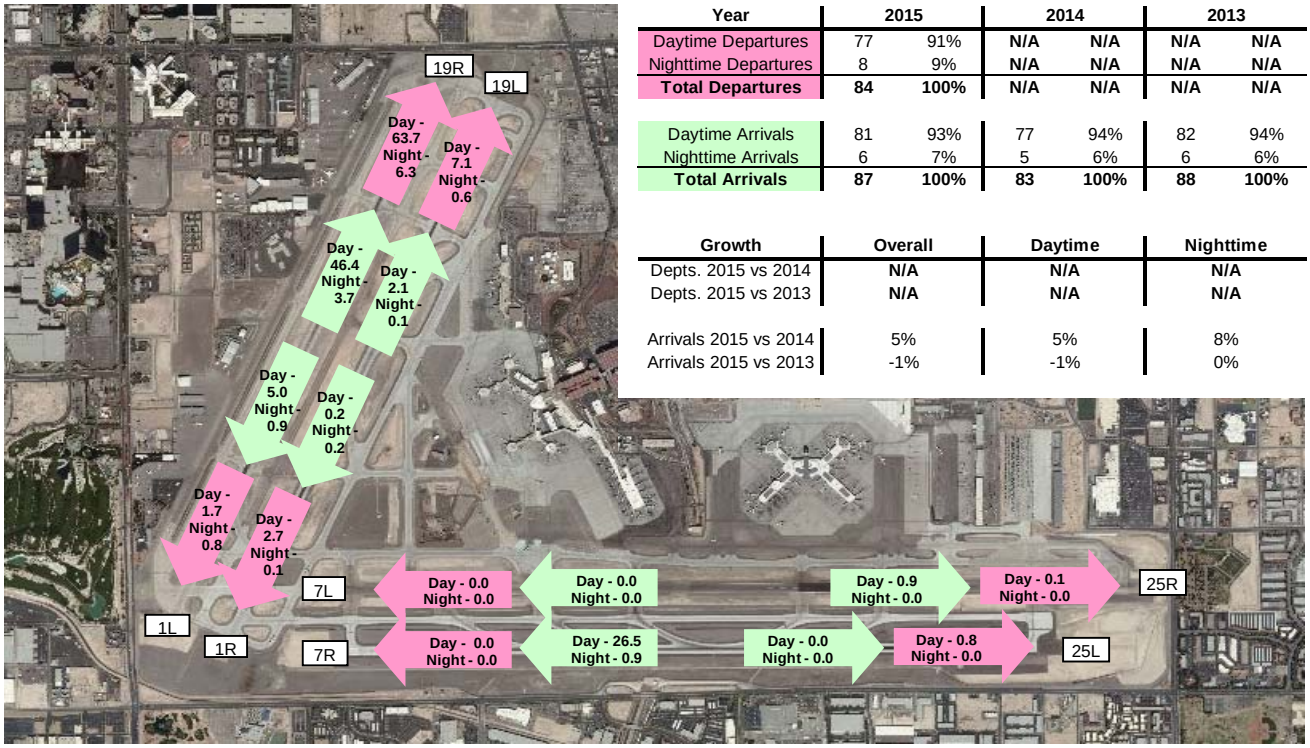


Year	2015		2014		2013	
Daytime Departures	382	82%	N/A	N/A	N/A	N/A
Nighttime Departures	85	18%	N/A	N/A	N/A	N/A
Total Departures	**467**	**100%**	**N/A**	**N/A**	**N/A**	**N/A**
Daytime Arrivals	410	89%	392	89%	400	89%
Nighttime Arrivals	53	11%	51	11%	48	11%
Total Arrivals	**463**	**100%**	**443**	**100%**	**448**	**100%**

Growth	Overall	Daytime	Nighttime
Depts. 2015 vs 2014	N/A	N/A	N/A
Depts. 2015 vs 2013	N/A	N/A	N/A
Arrivals 2015 vs 2014	5%	5%	5%
Arrivals 2015 vs 2013	3%	3%	10%

* Aircraft types: All aircraft with a maximum gross take of 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 2015

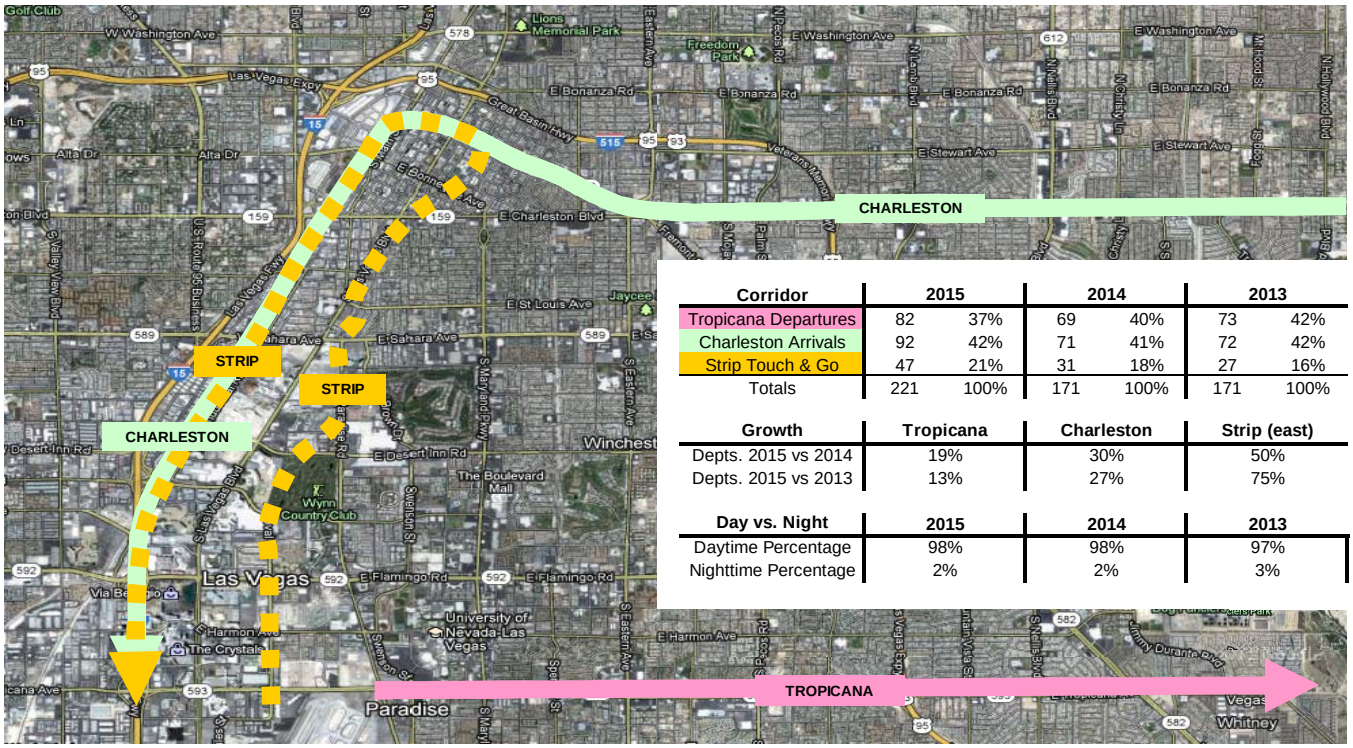


Year	2015		2014		2013	
Daytime Departures	77	91%	N/A	N/A	N/A	N/A
Nighttime Departures	8	9%	N/A	N/A	N/A	N/A
Total Departures	**84**	**100%**	**N/A**	**N/A**	**N/A**	**N/A**
Daytime Arrivals	81	93%	77	94%	82	94%
Nighttime Arrivals	6	7%	5	6%	6	6%
Total Arrivals	**87**	**100%**	**83**	**100%**	**88**	**100%**

Growth	Overall	Daytime	Nighttime
Depts. 2015 vs 2014	N/A	N/A	N/A
Depts. 2015 vs 2013	N/A	N/A	N/A
Arrivals 2015 vs 2014	5%	5%	8%
Arrivals 2015 vs 2013	-1%	-1%	0%

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

Exhibit 6: LAS Daily Average Operations by Corridor for Helicopter Tours - December 2015



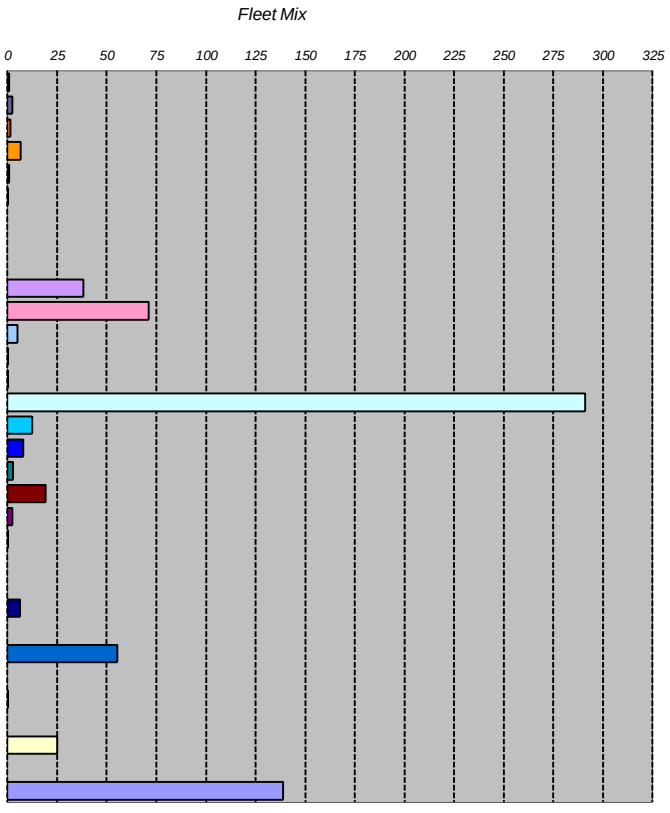
Corridor	2015		2014		2013	
Tropicana Departures	82	37%	69	40%	73	42%
Charleston Arrivals	92	42%	71	41%	72	42%
Strip Touch & Go	47	21%	31	18%	27	16%
Totals	221	100%	171	100%	171	100%

Growth	Tropicana	Charleston	Strip (east)
Depts. 2015 vs 2014	19%	30%	50%
Depts. 2015 vs 2013	13%	27%	75%

Day vs. Night	2015	2014	2013
Daytime Percentage	98%	98%	97%
Nighttime Percentage	2%	2%	3%

Exhibit 7: LAS Aircraft Arrival Fleet Mix* - December 2014

Operation	Daily Average in 2015	Percent of Overall Total	Daily Average in 2014	Daily Average in 2013
A300s, A310s	0.84	0.1%	1.32	0.61
A330s, A340s	2.52	0.4%	2.61	2.35
B747s	1.61	0.2%	1.61	1.84
B767s	6.61	1.0%	7.32	4.03
B777s	0.94	0.1%	0.58	0.84
DC10, L1011, MD11	0.06	0.0%	0.19	1.74
Misc. (B707s, DC8s, etc.)	0.00	0.0%	0.00	0.00
Heavy Jets (>300,000 lbs.)	**12.58**	**1.8%**	**13.65**	**11.42**
A318s, A319s	38.32	5.6%	35.65	41.19
A320s, A321s	71.03	10.3%	59.13	47.06
B717s	5.13	0.7%	0.00	0.00
B727s	0.03	0.0%	0.00	0.06
B737-100s, -200s	0.03	0.0%	0.00	0.00
B737-300s to -900s	291.06	42.3%	276.55	288.42
B757s	12.35	1.8%	15.06	23.42
BAC 111s, E170s, E190s	7.84	1.1%	2.13	0.10
CRJ7s, CRJ9s	2.77	0.4%	12.06	6.74
MD80s	19.23	2.8%	27.16	28.74
MD90s	2.58	0.4%	0.90	0.55
Misc. (Bae 146s, DC9s)	0.23	0.0%	0.10	0.10
Large Jets (>75,000 lbs.)	**450.61**	**65.4%**	**428.74**	**436.39**
Medium Jets (>41,000	**6.29**	**0.9%**	**5.52**	**5.42**
Small Jets (<41,000 lbs.)	**55.42**	**8.0%**	**55.32**	**55.13**
Military Jets	**0.06**	**0.0%**	**0.29**	**0.42**
Non-Jets & Unknowns	**25.06**	**3.6%**	**21.55**	**26.94**
Helicopter Tours	**138.70**	**20.1%**	**102.00**	**98.90**
Overall Total*	**689**	**100%**	**627**	**635**



* 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 2015 to 2013

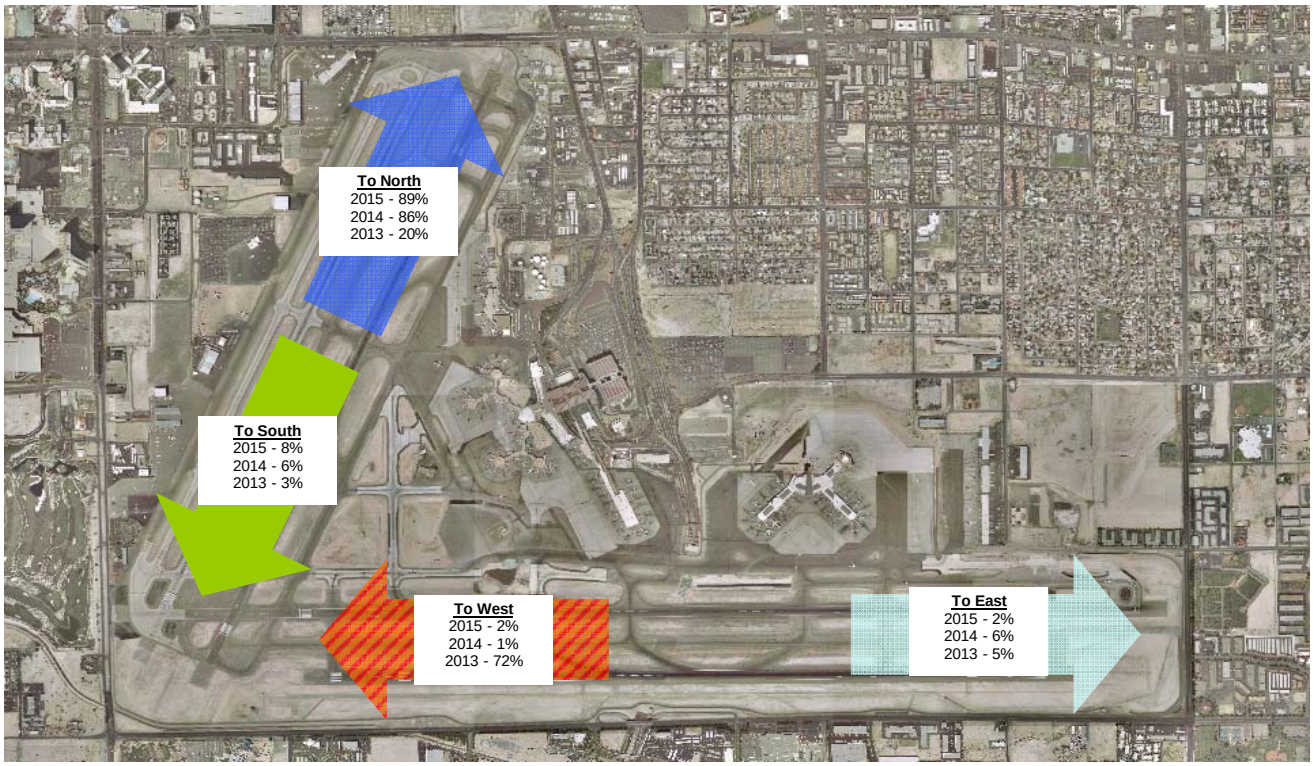
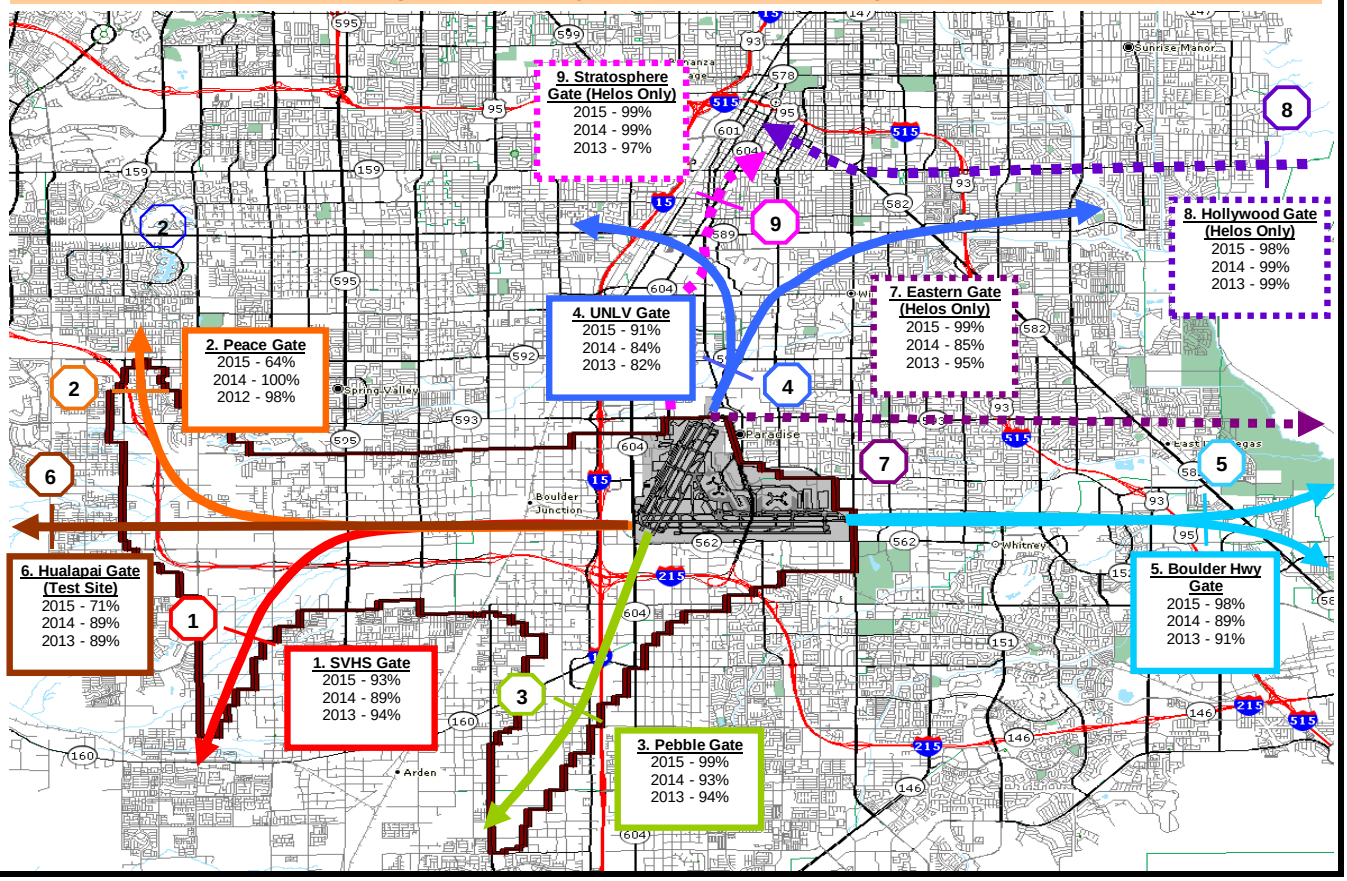


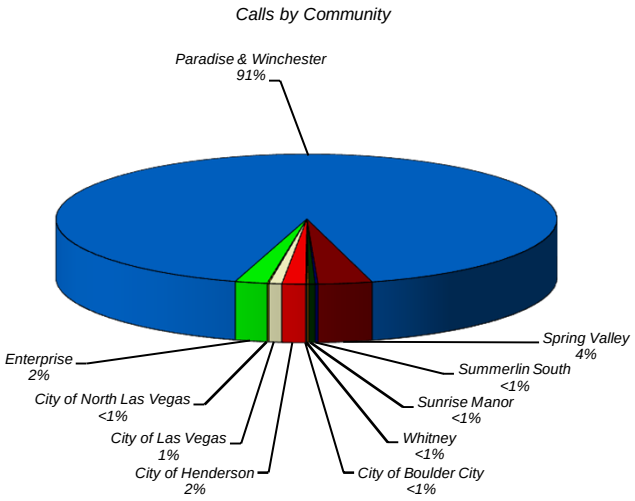
Exhibit 9: "Gate" Compliance for Large Aircraft* & LAS Helicopter Tours - December 2015



* Aircraft types: All aircraft with a maximum gross take of weight of at least 75,000 pounds, including but not limited to, A306, A310, A311, A318, A319, A320, A330, A
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 2015

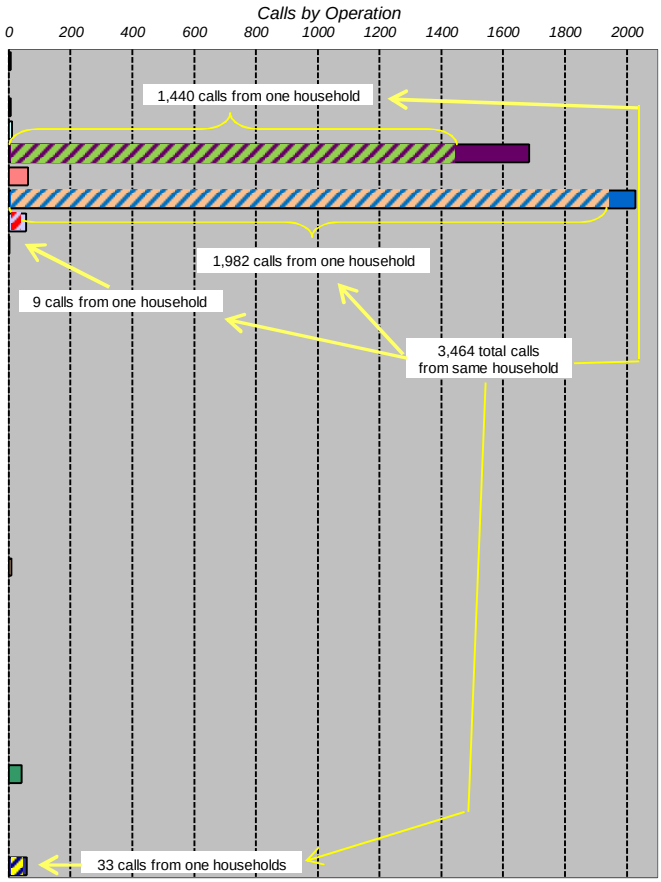
Community	No. of Calls in 2015	No. of Callers in 2015	No. of Calls in 2014	No. of Calls in 2013
City of Boulder City	3	1		2
City of Henderson	60	34	71	70
City of Las Vegas	33	24	34	33
City of North Las Vegas	4	4	5	3
Enterprise	82	42	105	26
Lone Mountain				11
Paradise & Winchester	3615	72	6220	132
Spring Valley	138	17	98	50
Summerlin South	7	7	2	6
Sunrise Manor	17	13	19	73
Whitney	4	3	3	3
Location unknown				
Overall Total	**3,963**	**217**	**6,557**	**409**
Difference between 2015 and 2014 Total Calls:				**-40%**
Difference between 2015 and 2013 Total Calls:				**869%**
Average Number of Calls per Caller:				**18.3**
Most calls received from one household:				**3,464**



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

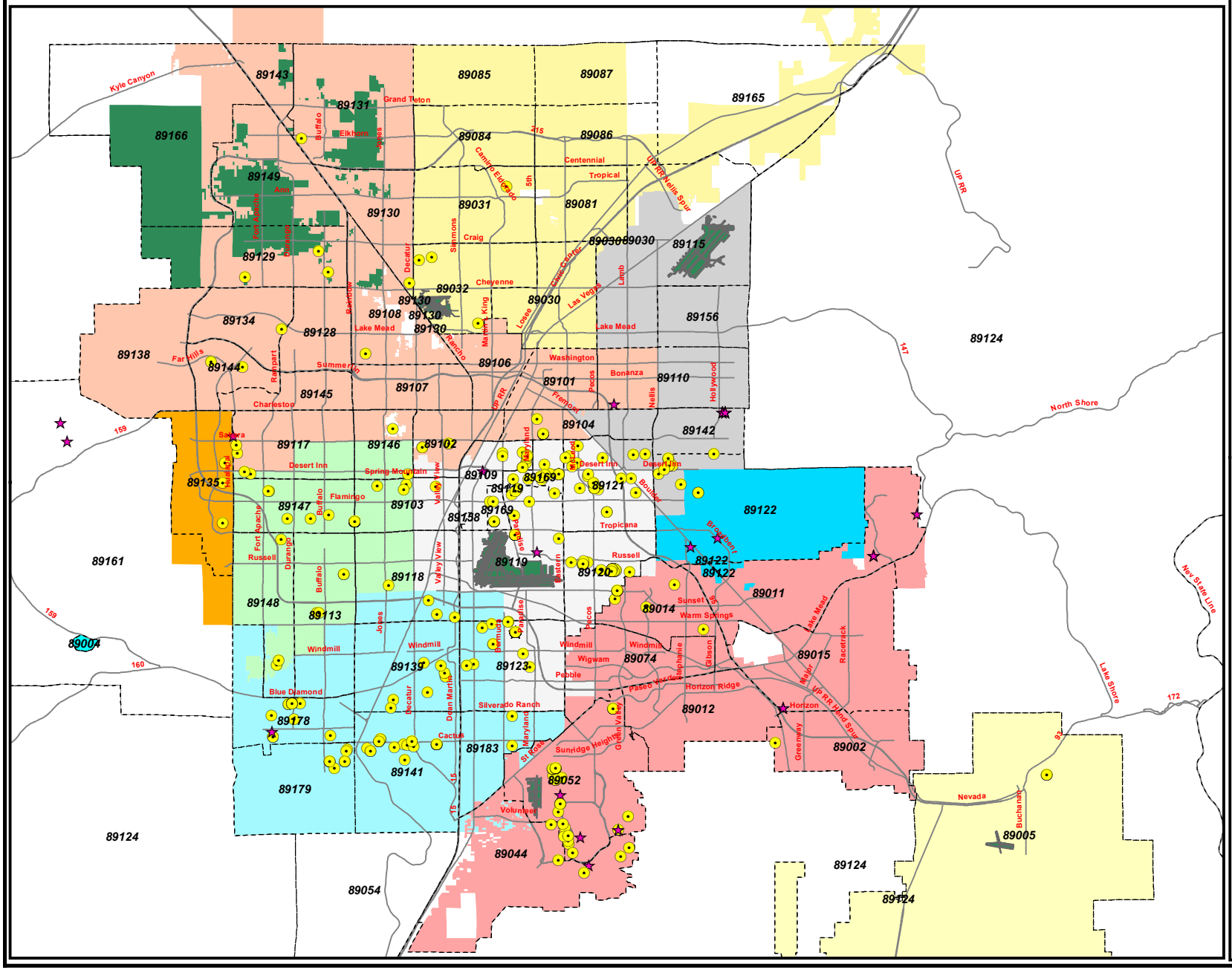
Exhibit 2: Noise Complaint Calls by Type of Operation - Annual 2015

Operation	No. of Calls in 2015	Percent of Overall Total	No. of Calls in 2014	No. of Calls in 2013
LAS 01R/L Arrivals	6	0.2%	6	2
LAS 07R/L Arrivals				1
LAS 19R/L Arrivals	6	0.2%	3	1
LAS 25R/L Arrivals	10	0.3%	3	5
LAS 01R/L Departures	1,683	42.5%	3,189	89
LAS 07R/L Departures	62	1.6%	124	33
LAS 19R/L Departures	2,028	51.2%	485	38
LAS 25R/L Departures	57	1.4%	2,609	73
LAS Run-ups	2	0.1%	2	2
LAS GA				2
LAS Other			1	
LAS Total	**3,854**	**97.2%**	**6,422**	**246**
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	9	0.2%	11	7
VGT Other				
VGT Total	**9**	**0.2%**	**11**	**7**
HND 17R/L Arrivals				
HND 35R/L Arrivals				
HND 17R/L Departures				
HND 35R/L Departures				
HND Run-ups				
HND GA	41	1.0%	43	30
HND Other				
HND Total	**41**	**1.0%**	**43**	**30**
Helicopters**	**59**	**1.5%**	**81**	**126**
Overall Total	**3,963**	**100%**	**6,557**	**409**



** 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 - Jan - Dec 2015



Legend

Jan - Dec 2015
Total Complaints: 3963

Aircraft Complaints
Received 3903
Mapped 3889

Helicopter Complaints
Received 60
Mapped 59

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

Geographic Information Systems

CLARK COUNTY • LAS VEGAS • McCARRAN • INTERNATIONAL • AIRPORT • NEVADA

January 26, 2016

Note:
This information is for display purposes only. No liability is assumed as to the accuracy of the data delineated hereon.

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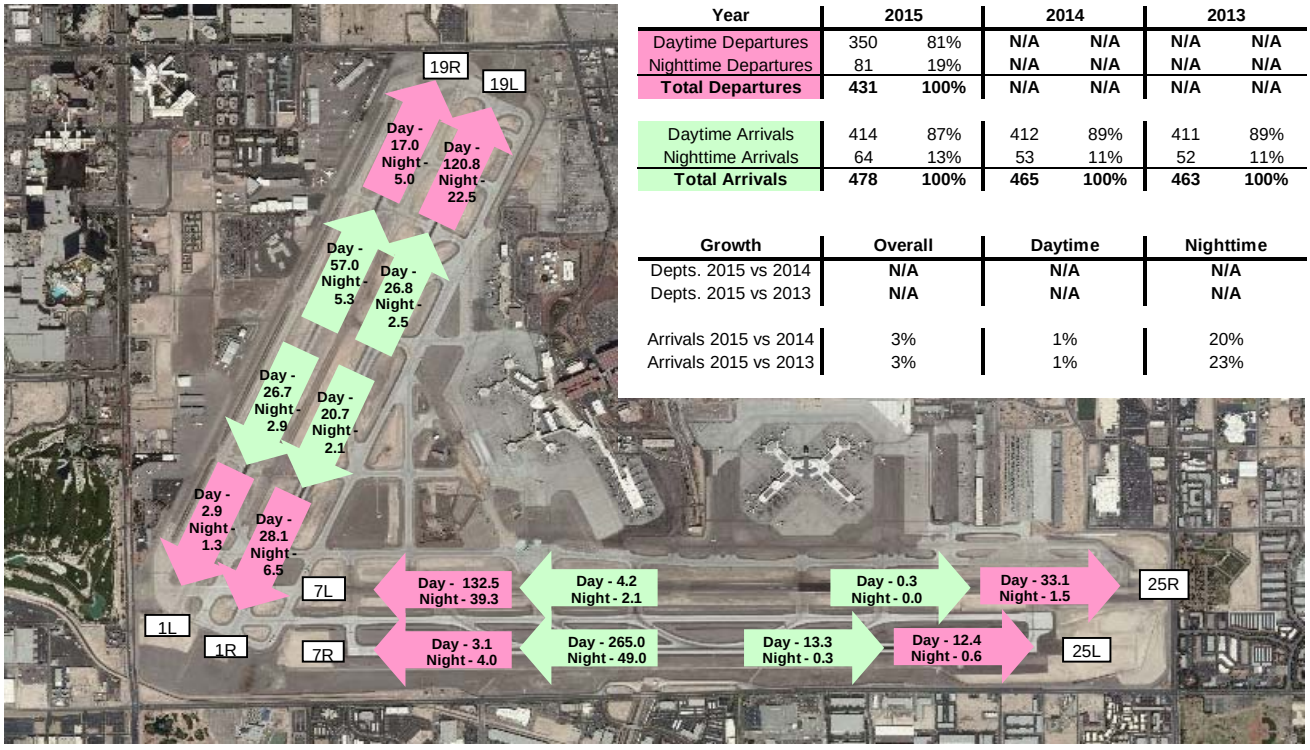
2015 Noise Complaint Report

Exhibit 4: LAS Daily Average Operations Runway for Large Air Carrier Aircraft* - Annual 2015

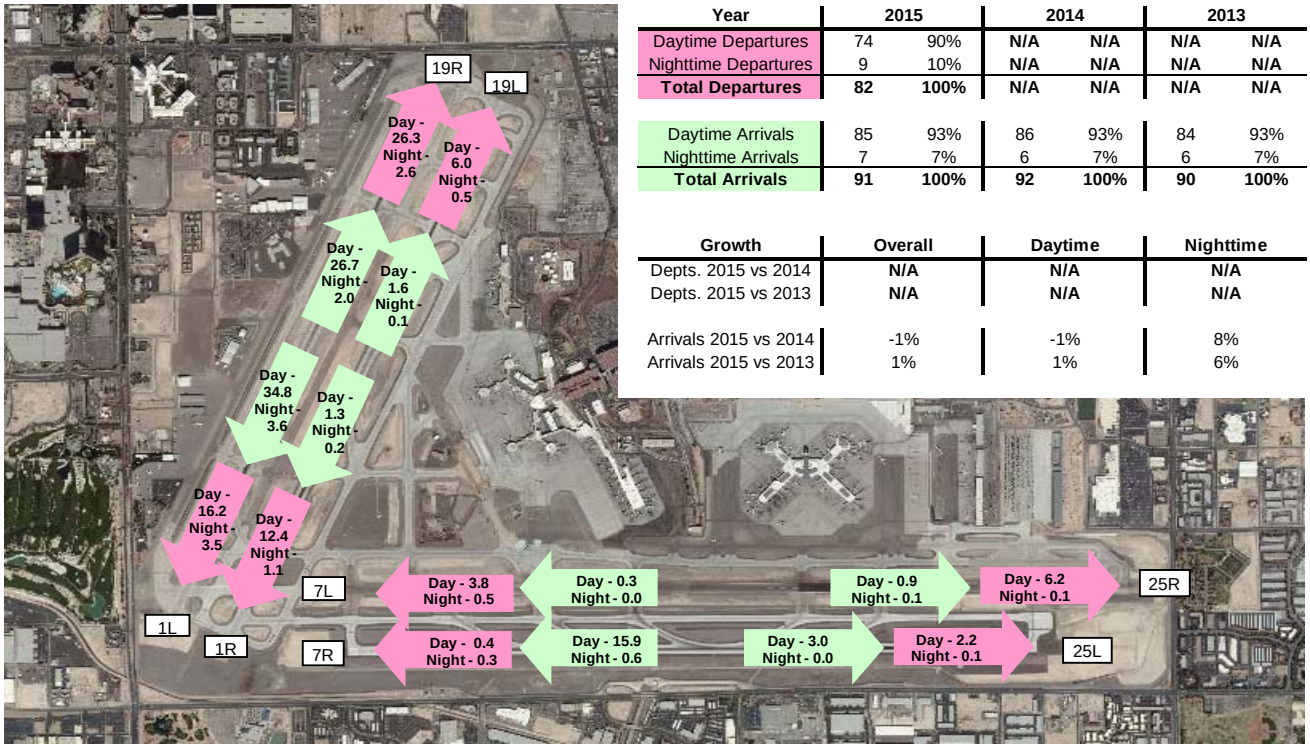


Year	2015		2014		2013	
Daytime Departures	350	81%	N/A	N/A	N/A	N/A
Nighttime Departures	81	19%	N/A	N/A	N/A	N/A
Total Departures	**431**	**100%**	**N/A**	**N/A**	**N/A**	**N/A**
Daytime Arrivals	414	87%	412	89%	411	89%
Nighttime Arrivals	64	13%	53	11%	52	11%
Total Arrivals	**478**	**100%**	**465**	**100%**	**463**	**100%**

Growth	Overall	Daytime	Nighttime
Depts. 2015 vs 2014	N/A	N/A	N/A
Depts. 2015 vs 2013	N/A	N/A	N/A
Arrivals 2015 vs 2014	3%	1%	20%
Arrivals 2015 vs 2013	3%	1%	23%

* Aircraft types: All aircraft with a maximum gross take of 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 2015

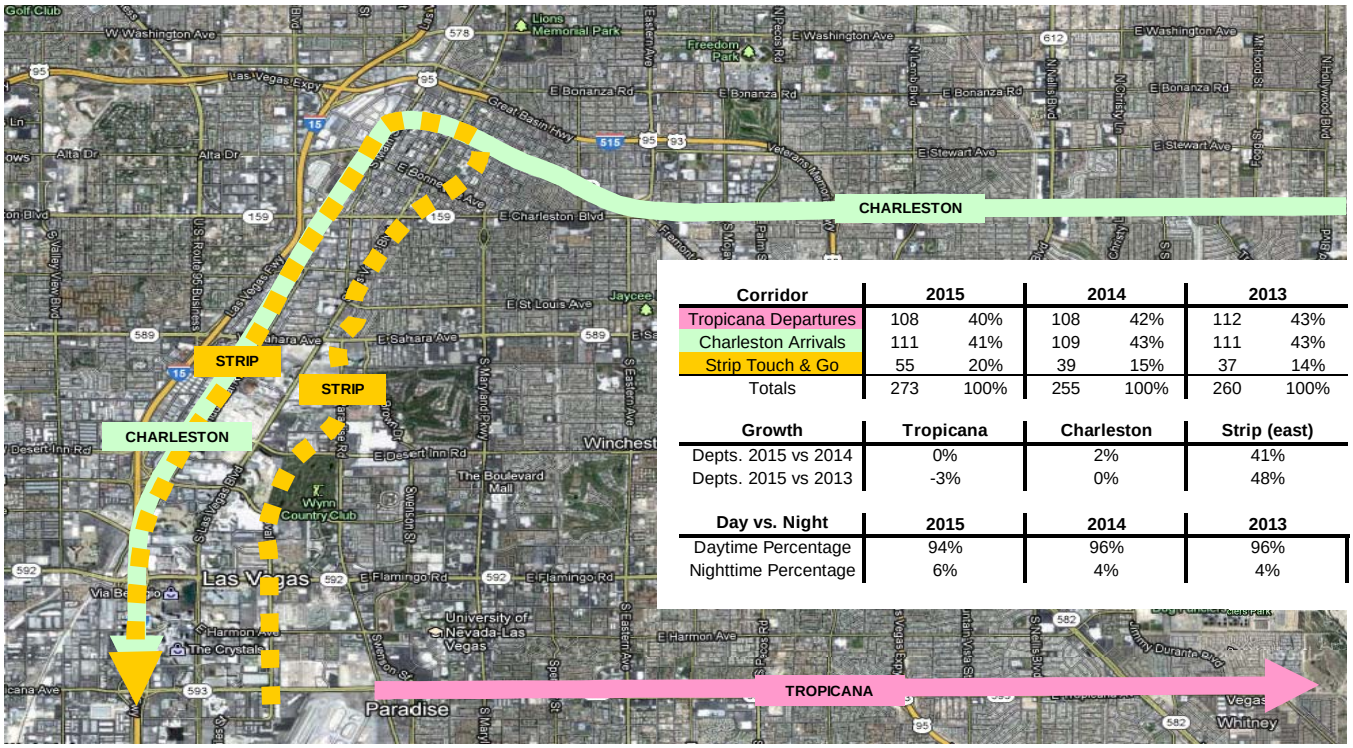


Year	2015		2014		2013	
Daytime Departures	74	90%	N/A	N/A	N/A	N/A
Nighttime Departures	9	10%	N/A	N/A	N/A	N/A
Total Departures	**82**	**100%**	**N/A**	**N/A**	**N/A**	**N/A**
Daytime Arrivals	85	93%	86	93%	84	93%
Nighttime Arrivals	7	7%	6	7%	6	7%
Total Arrivals	**91**	**100%**	**92**	**100%**	**90**	**100%**

Growth	Overall	Daytime	Nighttime
Depts. 2015 vs 2014	N/A	N/A	N/A
Depts. 2015 vs 2013	N/A	N/A	N/A
Arrivals 2015 vs 2014	-1%	-1%	8%
Arrivals 2015 vs 2013	1%	1%	6%

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

Exhibit 6: LAS Daily Average Operations by Corridor for Helicopter Tours - Annual 2015



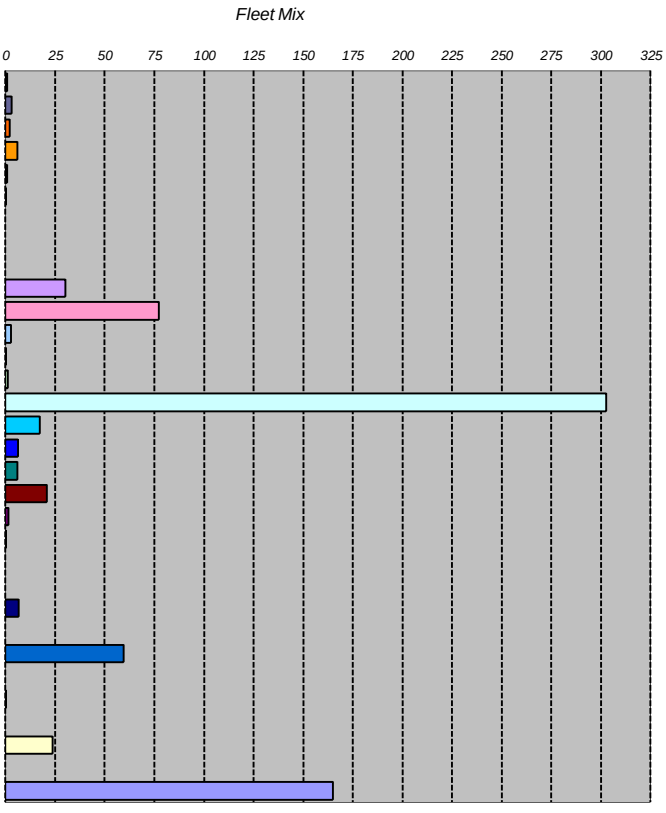
Corridor	2015		2014		2013	
Tropicana Departures	108	40%	108	42%	112	43%
Charleston Arrivals	111	41%	109	43%	111	43%
Strip Touch & Go	55	20%	39	15%	37	14%
Totals	273	100%	255	100%	260	100%

Growth	Tropicana	Charleston	Strip (east)
Depts. 2015 vs 2014	0%	2%	41%
Depts. 2015 vs 2013	-3%	0%	48%

Day vs. Night	2015	2014	2013
Daytime Percentage	94%	96%	96%
Nighttime Percentage	6%	4%	4%

Exhibit 7: LAS Aircraft Arrival Fleet Mix* - Annual 2015

Operation	Daily Average in 2015	Percent of Overall Total	Daily Average in 2014	Daily Average in 2013
A300s, A310s	0.84	0.1%	0.83	1.04
A330s, A340s	3.15	0.4%	2.92	2.30
B747s	2.10	0.3%	2.12	2.17
B767s	5.95	0.8%	4.06	3.75
B777s	0.93	0.1%	0.85	0.78
DC10, L1011, MD11	0.04	0.0%	1.28	1.27
Misc. (B707s, DC8s, etc.)	0.00	0.0%	0.00	0.00
Heavy Jets (>300,000 lbs.)	**13.00**	**1.8%**	**12.05**	**11.31**
A318s, A319s	30.04	4.1%	33.20	36.33
A320s, A321s	77.16	10.5%	60.72	54.55
B717s	2.85	0.4%	0.00	0.00
B727s	0.03	0.0%	0.02	0.04
B737-100s, -200s	1.02	0.1%	1.01	1.02
B737-300s to -900s	302.65	41.2%	294.95	290.78
B757s	17.27	2.4%	22.13	28.64
BAC 111s, E170s, E190s	6.47	0.9%	0.40	1.12
CRJ7s, CRJ9s	5.99	0.8%	13.45	8.39
MD80s	20.84	2.8%	26.29	30.06
MD90s	1.50	0.2%	1.76	1.87
Misc. (Bae 146s, DC9s)	0.21	0.0%	0.20	0.15
Large Jets (>75,000 lbs.)	**466.03**	**63.5%**	**454.14**	**452.96**
Medium Jets (>41,000	**6.76**	**0.9%**	**6.17**	**5.87**
Small Jets (<41,000 lbs.)	**59.50**	**8.1%**	**58.62**	**56.90**
Military Jets	**0.30**	**0.0%**	**0.36**	**0.27**
Non-Jets & Unknowns	**23.73**	**3.2%**	**25.71**	**26.05**
Helicopter Tours	**165.00**	**22.5%**	**147.10**	**147.80**
Overall Total*	**734**	**100%**	**704**	**701**



* 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 2015 to 2013

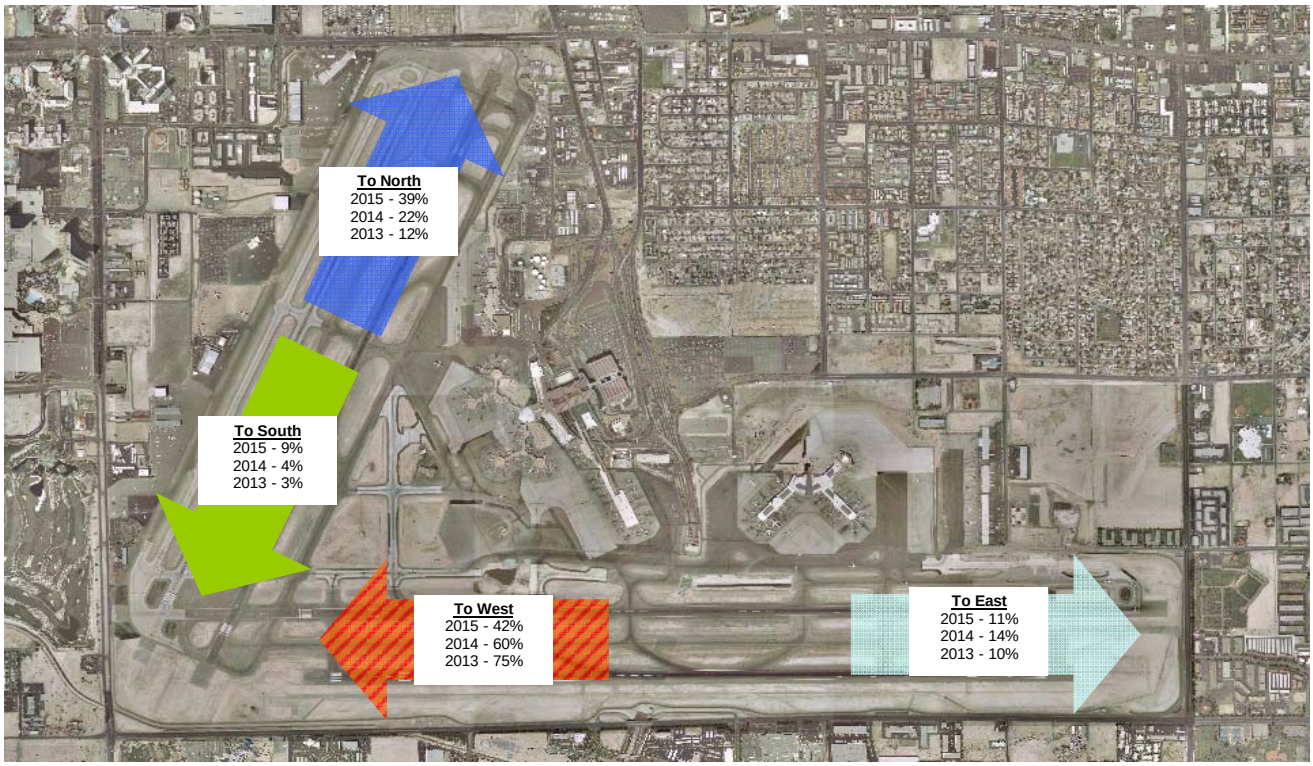


Exhibit 9: "Gate" Compliance for Large Aircraft* & LAS Helicopter Tours - Annual 2015

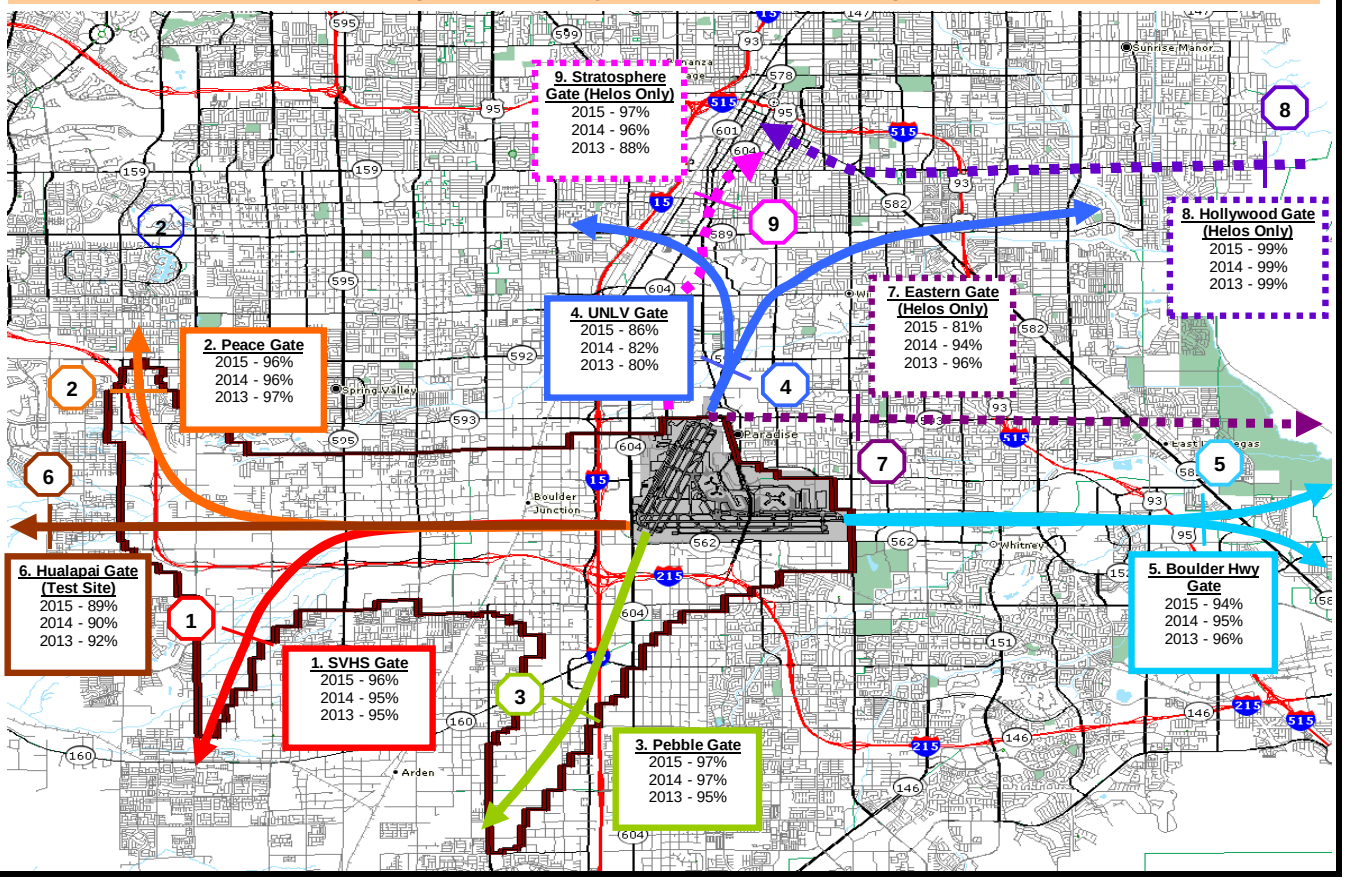


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Exhibit 10: Total Calls/Callers by Month - 2013 through 2015

Year	January	February	March	April	May	June	July	August	September	October	November	December	January through December Total	Average No. of Calls per Caller
2015 Number of Calls	518	401	524	269	256	111	92	54	481	579	489	189	3,963	18.3
2015 Number of Callers	50	29	48	16	26	17	19	15	19	35	23	15	217	
2014 Number of Calls	254	862	864	773	453	146	273	379	175	510	1,204	664	6,557	32.1
2014 Number of Callers	16	21	21	22	21	7	13	20	16	23	56	60	204	
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	

Total Calls by Month

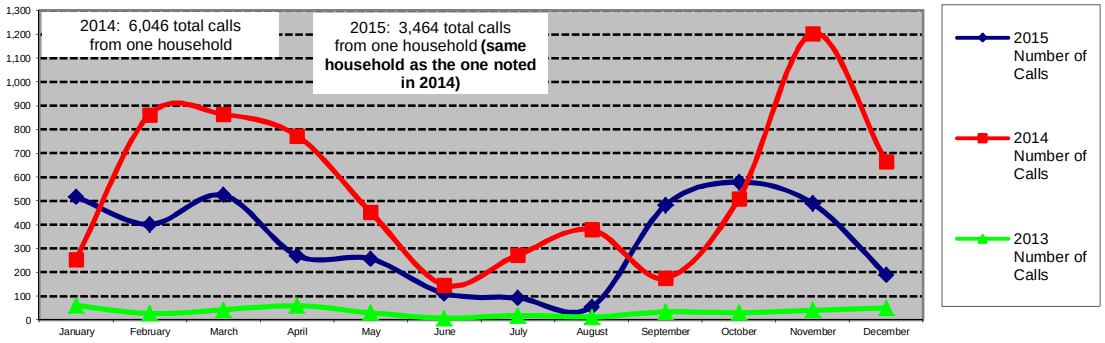

Exhibit 11: Total Monthly Calls by Time of Day - Annual 2015

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.)	357	217	346	148	183	75	72	50	307	367	369	111	2,602	65.7%
Night Hours (10:00 p.m. to 6:59 a.m.)	161	184	178	121	73	36	20	4	174	212	120	78	1,361	34.3%
Total	**518**	**401**	**524**	**269**	**256**	**111**	**92**	**54**	**481**	**579**	**489**	**189**	**3,963**	**100.0%**

Exhibit 12: Total Monthly Calls by Airport/Operation - Annual 2015

Airport	January	February	March	April	May	June	July	August	September	October	November	December	January through December Total	Percent
McCarran International	512	395	512	269	247	96	83	53	467	562	476	182	3,854	97.2%
North Las Vegas	1	0	0	0	2	1	1	0	1	1	0	2	9	0.2%
Henderson Executive	2	1	9	0	5	4	1	0	6	7	4	2	41	1.0%
Helicopter	3	5	3	0	2	10	7	1	7	9	9	3	59	1.5%
Total	**518**	**401**	**524**	**269**	**256**	**111**	**92**	**54**	**481**	**579**	**489**	**189**	**3,963**	**100.0%**

Total Calls by Airport/Operation

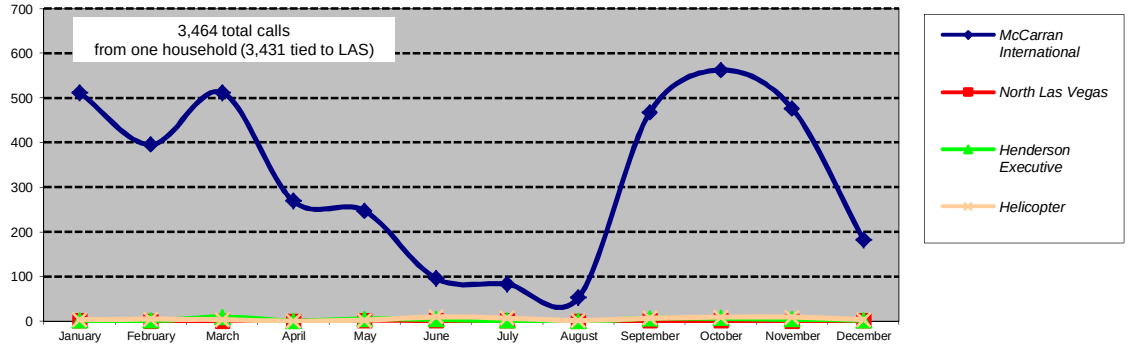

Exhibit 13: Total Monthly Calls by Community - Annual 2015

Community	January	February	March	April	May	June	July	August	September	October	November	December	January through December Total	Perrcent
City of Boulder City		1	2										3	0.1%
City of Henderson	4	3	13	2	5	5	1	1	10	10	5	1	60	1.5%
City of Las Vegas		4	3		5		2	2	5	6	2	4	33	0.8%
City of North Las Vegas	1				1	1						1	4	0.1%
Enterprise	6	12	21	7	7	10	8	2	1	1	6	1	82	2.1%
Lone Mountain													0	0.0%
Paradise & Winchester	496	376	482	256	235	90	79	43	461	529	428	140	3,615	91.2%
Spring Valley	6			3	2	3		5	3	28	47	41	138	3.5%
Summerlin	2	1		1	1	1	1						7	0.2%
Sunrise Manor	1	4	3				1		1	5	1	1	17	0.4%
Whitney	2					1		1					4	0.1%
Location unknown													0	0.0%
Overall Total	**518**	**401**	**524**	**269**	**256**	**111**	**92**	**54**	**481**	**579**	**489**	**189**	**3,963**	**100%**

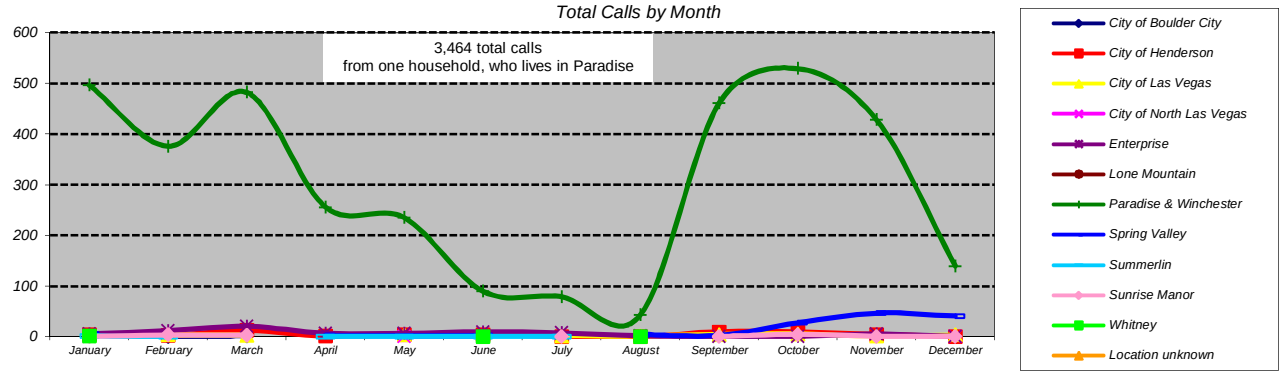

Exhibit 14: Total Monthly Calls by LAS Operation - Annual 2015

MIA Operations	January	February	March	April	May	June	July	August	September	October	November	December	January through December Total	Perrcent
LAS 01R/L Arrivals		1	2	1				2					6	0.2%
LAS 07R/L Arrivals													0	0.0%
LAS 19R/L Arrivals					1				3	2			6	0.2%
LAS 25R/L Arrivals	2		1			1		1	4		1		10	0.3%
LAS 01R/L Departures	509	301	478	104	2	1	1	5	1	33	108	140	1,683	43.7%
LAS 07R/L Departures		2	3		13	6	8	11	10	9			62	1.6%
LAS 19R/L Departures	1	83	27	160	221	76	65	30	445	511	367	42	2,028	52.6%
LAS 25R/L Departures		8		4	10	12	8	4	4	7			57	1.5%
LAS Run-ups			1				1						2	0.1%
LAS GA													0	0.0%
LAS Canyon													0	0.0%
LAS Other													0	0.0%
LAS Total	**512**	**395**	**512**	**269**	**247**	**96**	**83**	**53**	**467**	**562**	**476**	**182**	**3,854**	**100.0%**