

MEMORANDUM

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Director

DEPARTMENT OF AVIATION

TO: DISTRIBUTION

FROM: GEORGE C. SIMS, PLANNER

SUBJECT: OCTOBER, NOVEMBER, DECEMBER AND ANNUAL 2018
NOISE COMPLAINT REPORTS

DATE: FEBRUARY 5, 2019

Digitally signed by George C. Sims

Attached for your review are the Clark County Department of Aviation's (CCDOA) Monthly Noise Complaint Reports for October, November, and December 2018. Also included is the 2018 Annual Noise Complaint Report, covering the period of January through December 2018. 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 and operational data regarding helicopter and fixed-wing aircraft operations at LAS, VGT, and HND. Aircraft noise complaints are received through either the CCDOA's Noise Hotline (702-261-3694), the Noise Office (702-261-5600), 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 (702-652-2750), and noise complaints regarding aircraft operations from the Boulder City Airport are forwarded to the Boulder City Airport Coordinator (702-293-9405). Individuals who express concerns regarding aircraft operations originating from private facilities (i.e., Valley Hospital or the private helipad located near Las Vegas Blvd. and Larson Lane are asked to contact the individual property owner directly.

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

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

The Annual Noise Complaint Report includes additional information 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 2016 and 2018. **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 2018: 164 total complaints - a 93% increase from 2017 and a 193% increase from 2016. On average, each caller (or household) issued 3.2 calls. The most calls received from one household totaled 38.

Calls by Community - (Exhibits 1 and 3)

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

Minority (between 10% and 50%): The **Spring Valley** community issued 71 calls (43%). This community is typically impacted by aircraft departing to the west (from Runway 26R and Runway 26L). 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). The **Paradise and Winchester** communities issued 67 calls (41%). 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).

Repeat Caller Impact: Two households issued 38% (63 calls) of all the calls received in October 2018.

Calls by Operation - (Exhibit 2)

- LAS:** 99% of the total calls were due to **LAS** fixed-wing operations.
- 57% were due to departures to the north from Runways 01L and 01R (28% from two households).
 - 31% were due to departures to the west from Runways 26L and 26R (74% from two households, which are also the same households that issued 28% of the calls for LAS Runways 01L and 01R).
- VGT:** 0% 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:** 1% of the total calls were due to **helicopter** operations.

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

- Overall:** 522 daily *departures*¹ – a 1% increase from 2017 and 2% increase from 2016.
▪ 46% of departures were to the west, 37% north, 16% east, and 2% south.
517 daily *arrivals* – a 2% decrease from 2017 and 2% increase from 2016.
▪ 64% of arrivals were from the east, 25% south, 8% north, and 3% west.
- Daytime:** 434 daily *departures*² – a 2% increase from 2017 and no change from 2016.
▪ 41% of departures were to the west, 39% north, 18% east, and 2% south.
453 daily *arrivals* – a 1% decrease from 2017 and no change from 2016.
▪ 62% of arrivals were from the east, 27% south, 8% north, and 3% west.
- Nighttime:** 88 daily *departures*³ – a 1% decrease from 2017 and 12% increase from 2016.
▪ 68% of departures were to the west, 23% north, 6% east and 3% south.
64 daily *arrivals* – a 7% decrease from 2017 and an 18% increase from 2016.
▪ 75% of arrivals were from the east, 15% south, 9% north, and 2% west.

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

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

- Overall:** 109 daily *departures*⁴ – a 2% decrease from 2017 and a 10% increase from 2016.
▪ 42% of departures were to the north, 39% south, 14% east, and 5% west.
110 daily *arrivals* – an 8% increase from 2017 and a 14% increase from 2016.
▪ 40% of arrivals were from the north, 39% south, 17% east, and 4% west.
- Daytime:** 99 daily *departures*⁵ – a 2% decrease from 2017 and 11% increase from 2016.
▪ 44% of departures were to the north, 37% south, 15% east, and 4% west.
102 daily *arrivals* – an 8% increase from 2017 and a 15% increase from 2016.
▪ 40% of arrivals were from the south, 38% north, 17% east, and 4% west.
- Nighttime:** 11 daily *departures*⁶ – a 7% increase from 2017 and 3% decrease from 2016.
▪ 59% of departures were to the south, 24% north, 13% west, and 4% east.
8 daily *arrivals* – a 3% increase from 2017 and a 4% decrease from 2016.
▪ 62% of arrivals were from the north, 24% south, 12% east, and 3% west.

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

¹ Note: Runway use and traffic counts totals through September 2015 were compiled by the EnvironmentalVue application using a FAA-direct radar feed. Due to the location of the radar south of Sunset Road, and the angle of the radar signal to avoid ground clutter, some aircraft that departed to the north from LAS were not captured until well north of Tropicana Avenue. Therefore, the EnvironmentalVue application, used to determine runway use and traffic counts, did not tag these operations as either occurring at LAS or as a departure. Thus, total departure counts were less than what likely occurred. Runway use and traffic count totals for October 2015 and later were compiled by the EnvironmentalVue application using an independent NextGen radar feed and the departure capture rate increased significantly. Therefore, it is inappropriate to compare any departure data prior to October 2015 with any departure data after October 2015.

² See footnote #1.

³ See footnote #1.

⁴ See footnote #1.

⁵ See footnote #1.

⁶ See footnote #1.

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

Tropicana: 86 daily *departures* - a 12% decrease from 2017 and a 29% decrease from 2016.

Charleston: 81 daily *arrivals* – a 15% decrease from 2017 and a 34% decrease from 2016.

Strip: 76 daily *touch and go's* - a 10% increase from 2017 and a 1% increase from 2016.

Daytime vs. Nighttime: Approximately 95% 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 4% of the daily traffic.

Large: **Large** air carrier turbine-driven aircraft (those weighing more than 75,000 lbs. and less than 300,000 lbs.) accounted for 62% of the daily traffic.

Medium: **Medium** turbine-driven aircraft (those weighing more than 41,000 lbs. and less than 75,000 lbs.) accounted for 2% 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 2018, 40% departed to the **west** (from LAS's primary departure runways). This figure was 64% in 2017 and 81% in 2016.

Secondary: In 2018, 14% departed to the **south** (from LAS's secondary departure runways). This figure was 2% in 2017 and 4% in 2016.

Alternate 1: In 2018, 32% departed to the **north** (from LAS's alternate departure runways). This figure was 26% in 2017 and 13% in 2016.

Alternate 2: In 2018, 14% departed to the **east** (from LAS's alternate departure runways). This figure was 8% in 2017 and 3% in 2016.

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

SVHS: In 2018, 98% of the large air carrier aircraft (excluding those destined to the Nevada National Security Site) that departed to the west from Runways 26L or 26R and made a left-hand turn were within 0.3 NM of **Sierra Vista High School** (SVHS). This figure was 97% in 2017 and 97% in 2016.

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 26L and 26R. 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 2018, 98% of the large air carrier aircraft (excluding those destined to the Nevada National Security Site) that departed to the west from Runways 26L or 26R and made a right-hand turn were within 0.3 NM of the intersection of **Peace Way & Summers Shade Street**. This figure was 95% in 2017 and 93% in 2016.

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 26L and 26R. 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 2018, 97% of the large air carrier aircraft (excluding those destined to the Nevada National Security Site) that departed to the south from Runways 19L or 19R were within 0.3 NM of the intersection of **Pebble Road & Arville Street**. This figure was 97% in 2017 and 98% in 2016.

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 2018, 94% 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 94% in 2017 and 90% in 2016.

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 2018, 99% of the large air carrier aircraft that departed to the north from Runways 08L or 08R were within 0.3 NM of the extended runway centerline, near **Boulder Highway**. This figure was 99% in 2017 and 97% in 2016.

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 08L and 08R. 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 2018, 88% of the large air carrier aircraft destined to the Nevada National Security Site that departed to the west from Runways 26L or 26R were within 0.3 NM of the extended runway centerline, near **Hualapai Way**. This figure was 70% in 2017 and 90% in 2016.

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 26L and 26R. 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 2018, 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 99% in 2017 and 98% in 2016.

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 2018, 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 97% in 2017 and 97% in 2016.

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 2018, 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 2017 and 99% in 2016.

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, (with the exception of increased departures to the north), fleet mix, and gate compliance. The northbound departure increase was a result of a direction change of winds from the north, necessitating increased use of the north/south runways for departures.

November 2018: 86 total complaints - a 258% increase from 2017 and a 56% increase from 2016. On average, each caller (or household) issued 2.5 calls. The most calls received from one household totaled 27.

Calls by Community - (Exhibits 1 and 3)

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

Minority (between 10% and 50%): The *Spring Valley* community issued 39 calls (46%). (See October 2018 synopsis of typical aircraft overflight impacts on this community.)

The *Paradise and Winchester* communities issued 24 calls (28%). (See October 2018 synopsis of typical aircraft overflight impacts on this community.)

Repeat Caller Impact: One household issued 31% (27 calls) of all the calls received in November 2018.

Calls by Operation - (Exhibit 2)

LAS: 94% of the total calls received were due to *LAS* fixed-wing operations.

- 62% were due to departures to the north from Runways 01L and 01R. (38% from two households).
- 26% were due to departures to the west from Runways 26L and 26R. (77% from one household, which is one of the same households that issued 38% of the calls for LAS Runways 01L and 01R).

VGT: 4% of the total calls received were due to *VGT* fixed-wing operations. (One household issued a call associated with Perkins Field, located in Moapa Valley).

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

Helis: 2% of the total calls received were due to *helicopter* operations.

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

- Overall:** 494 daily *departures*⁷ – a 2% increase from 2017 and a 1% increase from 2016.
▪ 48% of departures were to the north, 45% west, 4% east, and 3% south.
486 daily *arrivals* – no change from 2017 and 1% increase from 2016.
▪ 72% of arrivals were from the east, 23% south, and 5% north.
- Daytime:** 405 daily *departures*⁸ – a 3% increase from 2017 and a 1% decrease from 2016.
▪ 49% of departures were to the north, 43% west, 4% east, and 3% south.
421 daily *arrivals* – a 2% increase from 2017 and a 2% decrease from 2016.
▪ 71% of arrivals were from the east, 24% south, and 5% north.
- Nighttime:** 89 daily *departures*⁹ – a 1% decrease from 2017 and a 17% increase from 2016.
▪ 53% of departures were to the west, 45% north, and 3% south.
66 daily *arrivals* – an 8% decrease from 2017 and a 21% increase from 2016.
▪ 79% of arrivals were from the east, 17% south, and 5% north.

Daytime vs. Nighttime: Approximately 82% of all *departures* and 87% of all *arrivals* occurred during the daytime hours.

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

- Overall:** 106 daily *departures*¹⁰ – a 7% increase from 2017 and a 12% increase from 2016.
▪ 53% of departures were to the north, 37% south, 5% west, and 5% east.
106 daily *arrivals* – a 15% increase from 2017 and 16% increase from 2016.
▪ 41% of arrivals were from the south, 37% north, and 22% east.
- Daytime:** 96 daily *departures*¹¹ – a 7% increase from 2017 and a 12% increase from 2016.
▪ 54% of departures were to the north, 36% south, 5% west, and 5% east.
99 daily *arrivals* – a 16% increase from 2017 and a 14% increase from 2016.
▪ 40% of arrivals were from the south, 37% north, 22% east, and 1% west.
- Nighttime:** 10 daily *departures*¹² – a 14% increase from 2017 and a 16% increase from 2016.
▪ 46% of departures were to the south, 46% north, and 8% west.
7 daily *arrivals* – a 10% increase from 2017 and a 35% increase from 2016.
▪ 45% of arrivals were from the south, 44% north, and 11% east.

Daytime vs. Nighttime: Approximately 90% of all *departures* and 94% of all *arrivals* occurred during the daytime hours.

⁷ See footnote #1.

⁸ See footnote #1.

⁹ See footnote #1.

¹⁰ See footnote #1.

¹¹ See footnote #1.

¹² See footnote #1.

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

Tropicana: 69 daily *departures* - a 12% decrease from 2017 and 24% decrease from 2016.

Charleston: 65 daily *arrivals* – a 16% decrease from 2017 and 29% decrease from 2016.

Strip: 75 daily *touch and go's* – a 12% increase from 2017 and a 12% increase from 2016.

Daytime vs. Nighttime: Approximately 96% of all helicopter tour operations occurred during the daytime hours.

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

Heavies: **Very large** air carrier turbine-driven aircraft (those weighing 300,000 lbs. or more) accounted for 4% of the daily traffic.

Large: **Large** air carrier turbine-driven aircraft (those weighing more than 75,000 lbs. and less than 300,000 lbs.) accounted for 62% of the daily traffic.

Medium: **Medium** turbine-driven aircraft (those weighing more than 41,000 lbs. and less than 75,000 lbs.) accounted for 3% 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 19% of the daily traffic.

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

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

Primary: In 2018, 45% departed to the **west** (from LAS's primary departure runways). This figure was 86% in 2017 and 75% in 2016.

Secondary: In 2018, 3% departed to the **south** (from LAS's secondary departure runways). This figure was 4% in 2017 and 3% in 2016.

Alternate 1: In 2018, 48% departed to the **north** (from LAS's alternate departure runways). This figure was 10% in 2017 and 17% in 2016.

Alternate 2: In 2018, 3% departed to the **east** (from LAS's alternate departure runways). This figure was 1% in 2017 and 5% in 2016.

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

- SVHS:** In 2018, 98% of the large air carrier aircraft (excluding those destined to the Nevada Test Site) that departed to the west from Runways 26L or 26R and made a left-hand turn were within 0.3 NM of **Sierra Vista High School** (SVHS). This figure was 97% in 2017 and 97% in 2016. (See October 2018 synopsis for specific location of the SVHS gate.)
- Peace:** In 2018, 98% of the large air carrier aircraft (excluding those destined to the Nevada Test Site) that departed to the west from Runways 26L or 26R and made a right-hand turn were within 0.3 NM of the intersection of **Peace Way & Summers Shade Street**. This figure was 95% in 2017 and 94% in 2016. (See October 2018 synopsis for specific location of the Peace gate.)
- Pebble:** In 2018, 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 2017 and 99% in 2016. (See October 2018 synopsis for specific location of the Pebble gate.)
- UNLV:** In 2018, 94% 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 90% in 2017 and 85% in 2016. (See October 2018 synopsis for specific location of the UNLV gate.)
- Boulder:** In 2018, 99% of the large air carrier aircraft that departed to the north from Runways 08L or 08R were within 0.3 NM of the extended runway centerline, near **Boulder Highway**. This figure was 99% in 2017 and 99% in 2016. (See October 2018 synopsis for specific location of the Boulder Hwy. gate.)
- Hualapai:** In 2018, 89% of the large air carrier aircraft destined to the Nevada Test Site that departed to the west from Runways 26L or 26R were within 0.3 NM of the extended runway centerline, near **Hualapai Way**. This figure was 77% in 2017 and 86% in 2016. (See October 2018 synopsis for specific location of the Hualapai gate.)
- Eastern:** In 2018, 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 99% in 2017 and 97% in 2016. (See October 2018 synopsis for specific location of the Eastern gate.)
- Hollywood:** In 2018, 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 94% in 2017 and 94% in 2016. (See October 2018 synopsis for specific location of the Hollywood gate.)
- Stratosphere:** In 2018, 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 2017 and 99% in 2016. (See October 2018 synopsis for specific location of the Stratosphere gate.)

The information denoted in this monthly summary represents **typical** residential complaints, flight activity, (with the exception of increased departures to the north), fleet mix, and gate compliance. The northbound departure increase was a result of a direction change of winds from the north, necessitating increased use of the north/south runways for departures.

December 2018: 67 total complaints – a 148% increase from 2017 and a 68% increase from 2016. On average, each caller (or household) issued 4.2 calls. The most calls received from one household totaled 48.

Calls by Community - (Exhibits 1 and 3)

Majority (more than 50%): The **Spring Valley** community issued 53 calls (79%). (See October 2018 synopsis of typical aircraft overflight impacts on this community.)

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

Repeat Caller Impact: One household issued 72% (48 calls) of all the calls received in December 2018.

Calls by Operation - (Exhibit 2)

LAS: 96% of the total calls received were due to **LAS** fixed-wing operations.

- 70% were due to departures to the west from Runways 26L and 26R (89% from one household).
- 22% were due to departures to the north from Runways 01L and 01R (67% from two households, one of which is also one of the same household that issued 89% of the calls for LAS Runways 26L and 26R).

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

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

Helis: 1% of the total calls received were due to **helicopter** operations.

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

Overall: 476 daily *departures*¹³ – a 1% increase from 2017 and 1% increase from 2016.

- 72% of departures were to the west, 24% north, 2% south, and 1% east.

469 daily *arrivals* – a 1% decrease from 2017 and 1% increase from 2016.

- 85% of arrivals were from the east, 11% south, and 4% north.

Daytime: 390 daily *departures*¹⁴ – a 1% increase from 2017 and no change from 2016.

- 71% of departures were to the west, 25% north, 2% east, and 2% south.

409 daily *arrivals* – a 1% increase from 2017 and a 2% increase from 2016.

- 84% of arrivals were from the east, 11% south, and 4% north.

Nighttime: 85 daily *departures*¹⁵ – no change from 2017 and a 9% increase from 2016.

- 78% of departures were to the west, 19% north, and 3% south.

60 daily *arrivals* – a 13% decrease from 2017 and a 4% decrease from 2016.

- 88% of arrivals were from the east, 7% south, and 5% north.

Daytime vs. Nighttime: Approximately 82% of all *departures* and 87% 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: 98 daily *departures*¹⁶ – a 10% increase from 2017 and a 15% increase from 2016.

- 65% of departures were to the south, 26% north, 7% west, and 1% east.

100 daily *arrivals* – an 18% increase from 2017 and 17% increase from 2016.

- 61% of arrivals were from the north, 23% south, 15% east, and 1% west.

Daytime: 91 daily *departures*¹⁷ – an 11% increase from 2017 and a 17% increase from 2016.

- 65% of departures were to the south, 26% north, 7% west, and 2% east.

94 daily *arrivals* – a 19% increase from 2017 and a 17% increase from 2016.

- 61% of arrivals were from the north, 24% south, and 15% east.

Nighttime: 8 daily *departures*¹⁸ – a 1% decrease from 2017 and a 4% decrease from 2016.

- 68% of departures were to the south, 18% north, and 14% west.

6 daily *arrivals* – a 9% increase from 2017 and a 17% increase from 2016.

- 68% of arrivals were from the north, 21% south, 10% east, and 1% west.

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

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

Tropicana: 55 daily *departures* - a 13% decrease from 2017 and an 18% decrease from 2016.

Charleston: 52 daily *arrivals* – a 14% decrease from 2017 and a 24% decrease from 2016.

Strip: 75 daily *touch and go's* - an 18% increase from 2017 and a 34% increase from 2016.

Daytime vs. Nighttime: Approximately 96% of all helicopter tour operations occurred during the daytime hours.

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

Heavies: **Very large** air carrier turbine-driven aircraft (those weighing 300,000 lbs. or more) accounted for 4% of the daily traffic.

Large: **Large** air carrier turbine-driven aircraft (those weighing more than 75,000 lbs. and less than 300,000 lbs.) accounted for 63% of the daily traffic.

Medium: **Medium** turbine-driven aircraft (those weighing more than 41,000 lbs. and less than 75,000 lbs.) accounted for 3% of the daily traffic.

Small: **Small** turbine-driven aircraft (those weighing 41,000 lbs. or less) accounted for 7% of the daily traffic.

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

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

¹⁶ See footnote #1.

¹⁷ See footnote #1.

¹⁸ See footnote #1.

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

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

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

Primary: In 2018, 73% departed to the *west* (from LAS's primary departure runways). This figure was 72% in 2017 and 52% in 2016.

Secondary: In 2018, 3% departed to the *south* (from LAS's secondary departure runways). This figure was 2% in 2017 and 8% in 2016.

Alternate 1: In 2018, 24% departed to the *north* (from LAS's alternate departure runways). This figure was 24% in 2017 and 28% in 2016.

Alternate 2: In 2018, 1% departed to the *east* (from LAS's alternate departure runways). This figure was 1% in 2017 and 2% in 2016.

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

SVHS: In 2018, 99% of the large air carrier aircraft (excluding those destined to the Nevada Test Site) that departed to the west from Runways 26L or 26R and made a left-hand turn were within 0.3 NM of *Sierra Vista High School* (SVHS). This figure was 97% in 2017 and 97% in 2016. (See October 2018 synopsis for specific location of the SVHS gate.)

Peace: In 2018, 98% of the large air carrier aircraft (excluding those destined to the Nevada Test Site) that departed to the west from Runways 26L or 26R 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 2017 and 94% in 2016. (See October 2018 synopsis for specific location of the Peace gate.)

Pebble: In 2018, 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 95% in 2017 and 97% in 2016. (See October 2018 synopsis for specific location of the Pebble gate.)

UNLV: In 2018, 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 86% in 2017 and 86% in 2016. (See October 2018 synopsis for specific location of the UNLV gate.)

Boulder: In 2018, 100% of the large air carrier aircraft that departed to the north from Runways 08L or 08R were within 0.3 NM of the extended runway centerline, near *Boulder Highway*. This figure was 98% in 2017 and 99% in 2016. (See October 2018 synopsis for specific location of the Boulder Hwy. gate.)

Hualapai: In 2018, 94% of the large air carrier aircraft destined to the Nevada Test Site that departed to the west from Runways 26L or 26R were within 0.3 NM of the extended runway centerline, near *Hualapai Way*. This figure was 82% in 2017 and 86% in 2016. (See October 2018 synopsis for specific location of the Hualapai gate.)

Eastern: In 2018, 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 99% in 2017 and 98% in 2016. (See October 2018 synopsis for specific location of the Eastern gate.)

Hollywood: In 2018, 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 2017 and 97% in 2016. (See October 2018 synopsis for specific location of the Hollywood gate.)

Stratosphere: In 2018, 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 2017 and 99% in 2016. (See October 2018 synopsis for specific location of the Stratosphere gate.)

The information denoted in this monthly summary represents **typical** residential complaints (with the exception of the number of complaints from one household), flight activity, fleet mix, and gate compliance.

Annual Noise Complaint Summaries

2018: 1664 total complaints – a 180% increase from 2017 and a 165% increase from 2016. On average, each caller (or household) issued 9.6 calls. The most calls received from one household totaled 865.

Calls by Community - (Exhibits 1 and 3)

Majority (more than 50%): The **Summerlin South** community issued 872 calls (52%). This community is typically impacted by aircraft departing to the west (from Runway 26R and Runway 26L).

Minority (between 10% and 50%): The **Spring Valley** community issued 447 calls (27%). (See October 2018 synopsis of typical aircraft overflight impacts on this community.)

The **Paradise and Winchester** communities issued 199 calls (12%). (See October 2018 synopsis of typical aircraft overflight impacts on this community.)

Repeat Caller Impact: One household issued 52% (865 calls) of all the calls received in 2018.

Calls by Operation - (Exhibit 2)

LAS: 96% of the total calls received were due to **LAS** fixed-wing operations.

- 76% were due to departures to the west from Runways 26L and 26R (69% from one household).
- 16% were due to departures to the north from Runways 01L and 01R (52% from three households).

VGT: <1% of the total calls received were due to **VGT** fixed-wing operations (68% from one household).

HND: 2% of the total calls received were due to **HND** fixed-wing operations.

Helis: 2% of the total calls received were due to **helicopter** operations.

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

- Overall:** 502 daily *departures*¹⁹ – a 1% increase from 2017 and a 2% increase from 2016.
▪ 66% of departures were to the west, 18% north, 13% east, and 3% south.
502 daily *arrivals* – a 1% increase from 2017 and 3% increase from 2016.
▪ 73% of arrivals were from the east, 13% north, 10% south, and 4% west.
- Daytime:** 408 daily *departures*²⁰ – no change from 2017 and no change from 2016.
▪ 63% of departures were to the west, 18% north, 15% east, and 3% south.
428 daily *arrivals* – no change from 2017 and no change from 2016.
▪ 71% of arrivals were from the east, 14% north, 10% south, and 5% west.
- Nighttime:** 94 daily *departures*²¹ – a 6% increase from 2017 and a 9% increase from 2016.
▪ 79% of departures were to the west, 14% north, 4% south, and 3% east.
74 daily *arrivals* – a 6% increase from 2017 and a 21% increase from 2016.
▪ 80% of arrivals were from the east, 12% north, 7% south, and 1% west.

Daytime vs. Nighttime: Approximately 81% of all *departures* and 85% of all *arrivals* occurred during the daytime hours.

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

- Overall:** 107 daily *departures*²² – a 6% increase from 2017 and a 15% increase from 2016.
▪ 58% of departures were to the south, 21% north, 12% east, and 9% west.
103 daily *arrivals* – an 8% increase from 2017 and 14% increase from 2016.
▪ 65% of arrivals were from the north, 17% south, 13% east, and 6% west.
- Daytime:** 96 daily *departures*²³ – a 6% increase from 2017 and a 15% increase from 2016.
▪ 57% of departures were to the south, 21% north, 14% east, and 9% west.
95 daily *arrivals* – an 8% increase from 2017 and 14% increase from 2016.
▪ 64% of arrivals were from the north, 17% south, 13% east, and 6% west.
- Nighttime:** 11 daily *departures*²⁴ – a 5% increase from 2017 and 11% increase from 2016.
▪ 67% of departures were to the south, 16% north, 14% west, and 3% east.
7 daily *arrivals* – a 6% increase from 2017 and a 12% increase from 2016.
▪ 70% of arrivals were from the north, 17% south, 12% east, and 1% west.

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

¹⁹ See footnote #1.

²⁰ See footnote #1.

²¹ See footnote #1.

²² See footnote #1.

²³ See footnote #1.

²⁴ See footnote #1.

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

Tropicana: 77 daily *departures* – a 19% decrease from 2017 and 24% decrease from 2016.

Charleston: 72 daily *arrivals* - a 23% decrease from 2017 and 28% decrease from 2016.

Strip: 74 daily *touch and go's* - a 1% increase from 2017 and 12% increase from 2016.

Daytime vs. Nighttime: Approximately 93% 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 4% of the daily traffic.

Large: **Large** air carrier turbine-driven aircraft (those weighing more than 75,000 lbs. and less than 300,000 lbs.) accounted for 63% of the daily traffic.

Medium: **Medium** turbine-driven aircraft (those weighing more than 41,000 lbs. and less than 75,000 lbs.) accounted for 2% 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 2018, 66% departed to the **west** (from LAS's primary departure runways). This figure was 66% in 2017 and 52% in 2016.

Secondary: In 2018, 5% departed to the **south** (from LAS's secondary departure runways). This figure was 3% in 2017 and 8% in 2016.

Alternate 1: In 2018, 17% departed to the **north** (from LAS's alternate departure runways). This figure was 18% in 2017 and 32% in 2016.

Alternate 2: In 2018, 13% departed to the **east** (from LAS's alternate departure runways). This figure was 12% in 2017 and 8% in 2016.

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

- SVHS:** In 2018, 98% of the large air carrier aircraft (excluding those destined to the Nevada Test Site) that departed to the west from Runways 26L or 26R and made a left-hand turn were within 0.3 NM of **Sierra Vista High School** (SVHS). This figure was 97% in 2017 and 97% in 2016. (See October 2018 synopsis for specific location of the SVHS gate.)
- Peace:** In 2018, 97% of the large air carrier aircraft (excluding those destined to the Nevada Test Site) that departed to the west from Runways 26L or 26R and made a right-hand turn were within 0.3 NM of the intersection of **Peace Way & Summers Shade Street**. This figure was 95% in 2017 and 94% in 2016. (See October 2018 synopsis for specific location of the Peace gate.)
- Pebble:** In 2018, 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 98% in 2017 and 99% in 2016. (See October 2018 synopsis for specific location of the Pebble gate.)
- UNLV:** In 2018, 93% 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 89% in 2017 and 90% in 2016. (See October 2018 synopsis for specific location of the UNLV gate.)
- Boulder:** In 2018, 99% of the large air carrier aircraft that departed to the north from Runways 08L or 08R were within 0.3 NM of the extended runway centerline, near **Boulder Highway**. This figure was 98% in 2017 and 96% in 2016. (See October 2018 synopsis for specific location of the Boulder Hwy. gate.)
- Hualapai:** In 2018, 87% of the large air carrier aircraft destined to the Nevada Test Site that departed to the west from Runways 26L or 26R were within 0.3 NM of the extended runway centerline, near **Hualapai Way**. This figure was 81% in 2017 and 90% in 2016. (See October 2018 synopsis for specific location of the Hualapai gate.)
- Eastern:** In 2018, 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 98% in 2017 and 96% in 2016. (See October 2018 synopsis for specific location of the Eastern gate.)
- Hollywood:** In 2018, 97% 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 97% in 2017 and 97% in 2016. (See October 2018 synopsis for specific location of the Hollywood gate.)
- Stratosphere:** In 2018, 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 97% in 2017 and 99% in 2016. (See October 2018 synopsis for specific location of the Stratosphere gate.)

Calls by Month - (Exhibit 10)

Seasonal Trends: The majority of the calls received for 2018 occurred August, September and October (69% of the total number of complaint calls received). The vast majority of calls received were associated with departures to the west, with 52% of the calls originating from one household. While historical weather conditions for the Las Vegas Valley reflect the majority of departures from LAS will utilize Runway 26L and Runway 26R, whenever wind and weather conditions dictate, the FAA will utilize a variety of runway configurations to better manage traffic levels in a safe and efficient manner. Additionally, when weather conditions are temperate and residents opt to leave their windows and doors open during the spring and fall months, the number of noise complaints tends to increase, as indicated on the exhibit.

Calls by Time of Day - (Exhibit 11)

Daytime versus Nighttime: Approximately 68% of the total calls received by the CCDOA were issued between the hours of 7 AM and 10 PM (45% from one household) while the remaining 32% were received between the hours of 10 PM and 7 AM (66% from one household, which is the same household that issued 45% of the calls between the hours of 7 AM and 10 PM).

Calls by Airport/Operation - (Exhibit 12)

Airport Trends: A majority (96%) of the total calls received in 2018 were attributed to LAS operations (54% from one household, which is the same household that issued 45% of the calls between 7 AM and 10 PM, and 66% of the calls between 10 PM and 7 AM).

Calls by Community - (Exhibit 13)

Community Trends: A majority of the total calls (52%) originated from the *Summerlin South* community. Calls received from *Summerlin South* were attributed to westbound departures from Runway 26R. However, 99% of the total 872 calls received from this community were from a single household.

Calls by LAS Operations - (Exhibit 14)

LAS Trends: The majority (79%) of the total calls received were associated with typical increased departures to the west from Runways 26R and 26L (69% from one household, which is the same household that issued 45% of the calls between 7 AM and 10 PM, and 66% of the calls between 10 PM and 7 AM, and 54% of the total calls attributed to LAS operations).

Other Notable Issues

In its 70th year of operation, McCarran International Airport welcomed 49.7 million arriving and departing passengers, making 2018 the busiest year in the airport's history. In addition to this new annual record, McCarran posted multiple all-time-high months over the course of the year, including October 2018 logging the highest single-month passenger volume in airport history. With a 2.5 percent rise in passenger volume, this is the eighth consecutive year the commercial airport serving Southern Nevada has experienced a year-over-year increase.

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

GCS:jj

Attachments

Airport Noise Report

February 5, 2019

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Distribution:

Commissioner Kirkpatrick, Chair	Sean Roebuck
Commissioner Weekly, Vice-Chair	Bruce Daugherty
Commissioner Naft	Sam Ingalls
Commissioner Brown	Chris Jones
Commissioner Segerblom	Christine Crews
Commissioner Jones	Tina Frias
Commissioner Gibson	Jeff Jacquart
Yolanda King	Charlie Hall
Rosemary Vassiliadis	Scott Kichline
James Chrisley	Stephanie Garcia-Vause (COH)
Joseph Piurkowski	Andrew Powell (COH)
Jennifer Lopez	William Ruggiero (FAA TRACON)
Sandra Cikity	Thomas Miller (Nellis AFB)
Judy Villalta	Michael Mooror (FAA ATCT)
Ben Czyzewski	James Erbeck (CLV)
Karina Tarnowska	Paul Alukonis (FAA FSDO)
Donna Bergstrom	Sydney Lowe (University Libraries)
Curtis Hedgepeth	Lisa Butterfield (Reno-Tahoe Airport)
Jon Holman (FAA ATC)	Andrea Christensen (Denver Airport)
Charlie Halterman (HND Tower)	Jennifer Lewis (Scottsdale Airport)
Richard Falcon (FAA FSDO)	Frank Iacovino (Mass Port Authority)
Bristol Ellington (COH)	Robert Butler (Papillon Helicopters)
Elizabeth Fretwell (CLV)	Christine Gerencher (American Airlines)
Mayor Carolyn Goodman (CLV)	Bert Ganoung (SFO)
Mayor Pro Tem Lois Tarkanian (CLV)	San Diego Airport Noise Management
Councilman S. Anthony (CLV)	Jeannie Denham (Citizen)
Councilman Bob Coffin (CLV)	Judge Bob Johnston (Citizen)
Councilman Steven S. Seroka (CLV)	Roy Fuhrmann (Metro Airports Commission)
Councilwoman Michele Fiore (CLV)	Tom Schaus (Sundance Helicopters)
Councilman Cedric Crear (CLV)	Brooke Satern (Port of Portland)
Brok Armantrout (CBC)	Gary Brodt (Citizen)
David Parks (Nevada State Assembly)	James P. Callahan (Nellis AFB)
J. Gordon Arkin (Foley & Lardner)	Stan Shepherd (SEATAC)
John Williams (Ricondo)	Eric Sheng (Long Beach Airport)
Douglas Pomeroy (FAA ADO)	Jason Schwartz (Portland Airport)
La Nea M. Conner (Boeing)	Todd Lobato (Nellis AFB)
Mike Jeck (Metro Wash. Air Auth.)	Steven Peacock (Dallas City Hall)
Karen Everitt (Dallas City Hall)	John Dietz (FAA TRACON)
Samuel Carter (Harris)	William Olivieri (Citizen)
Blanca Vazquez	Susan Gersh

Exhibit 1: Noise Complaint Calls by Community* - October 2018

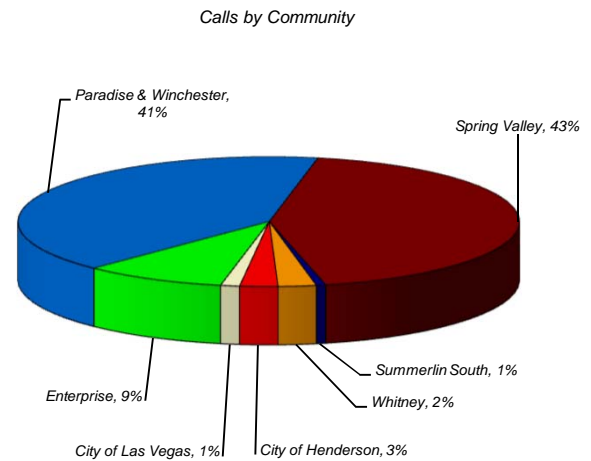
Community	No. of Calls in 2018	No. of Callers in 2018	No. of Calls in 2017	No. of Calls in 2016
City of Boulder City	4	4	1	9
City of Henderson	2	1	1	6
City of Las Vegas	2	1	1	6
City of North Las Vegas			2	2
Enterprise	15	9	7	6
Lone Mountain				
Paradise & Winchester	67	28	43	6
Spring Valley	71	7	24	25
Summerlin South	1	1	1	1
Sunrise Manor			6	
Whitney	4	2		1
Location unknown				
Overall Total	164	52	85	56

Difference between 2018 and 2017 Total Calls: 93%

Difference between 2018 and 2016 Total Calls: 193%

Average Number of Calls per Caller: 3.2

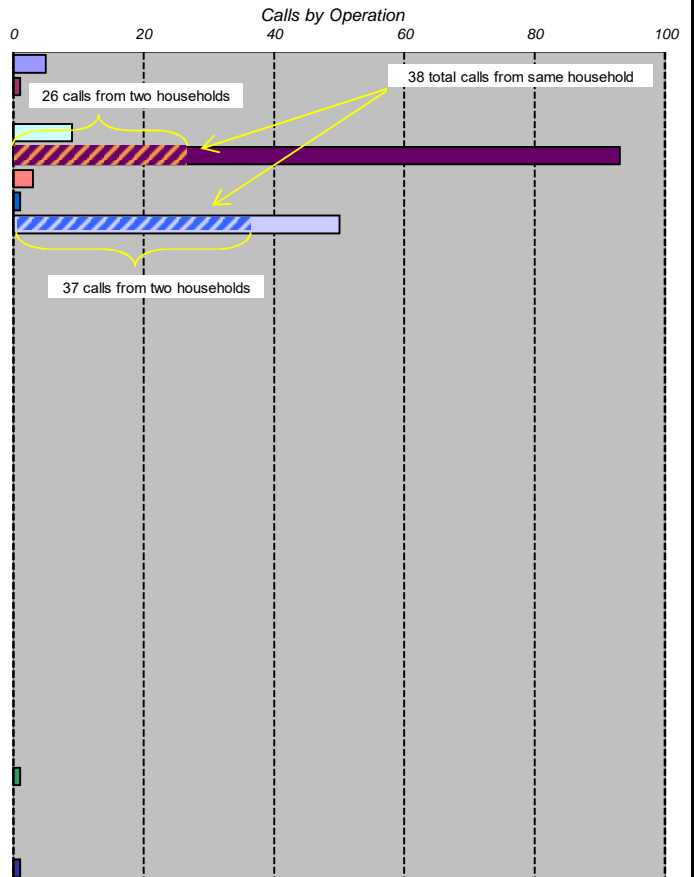
Most calls received from one household: 38



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

Exhibit 2: Noise Complaint Calls by Type of Operation - October 2018

Operation	No. of Calls in 2018	Percent of Overall Total	No. of Calls in 2017	No. of Calls in 2016
LAS 01R/L Arrivals	5	3.0%		
LAS 08R/L Arrivals	1	0.6%		
LAS 19R/L Arrivals			4	1
LAS 26R/L Arrivals	9	5.5%		1
LAS 01R/L Departures	93	56.7%	61	12
LAS 08R/L Departures	3	1.8%	1	1
LAS 19R/L Departures	1	0.6%	2	
LAS 26R/L Departures	50	30.5%	13	30
LAS Run-ups				
LAS GA				
LAS Other				
LAS Total	162	98.8%	81	45
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	2
VGT Other				
VGT Total	0	0.0%	2	2
HND 17R/L Arrivals				
HND 35R/L Arrivals				
HND 17R/L Departures				
HND 35R/L Departures				
HND Run-ups				
HND GA	1	0.6%		4
HND Other				
HND Total	1	0.6%	0	4
Helicopters**	1	0.6%	2	5
Overall Total	164	100%	85	56



** 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 - Oct 2018

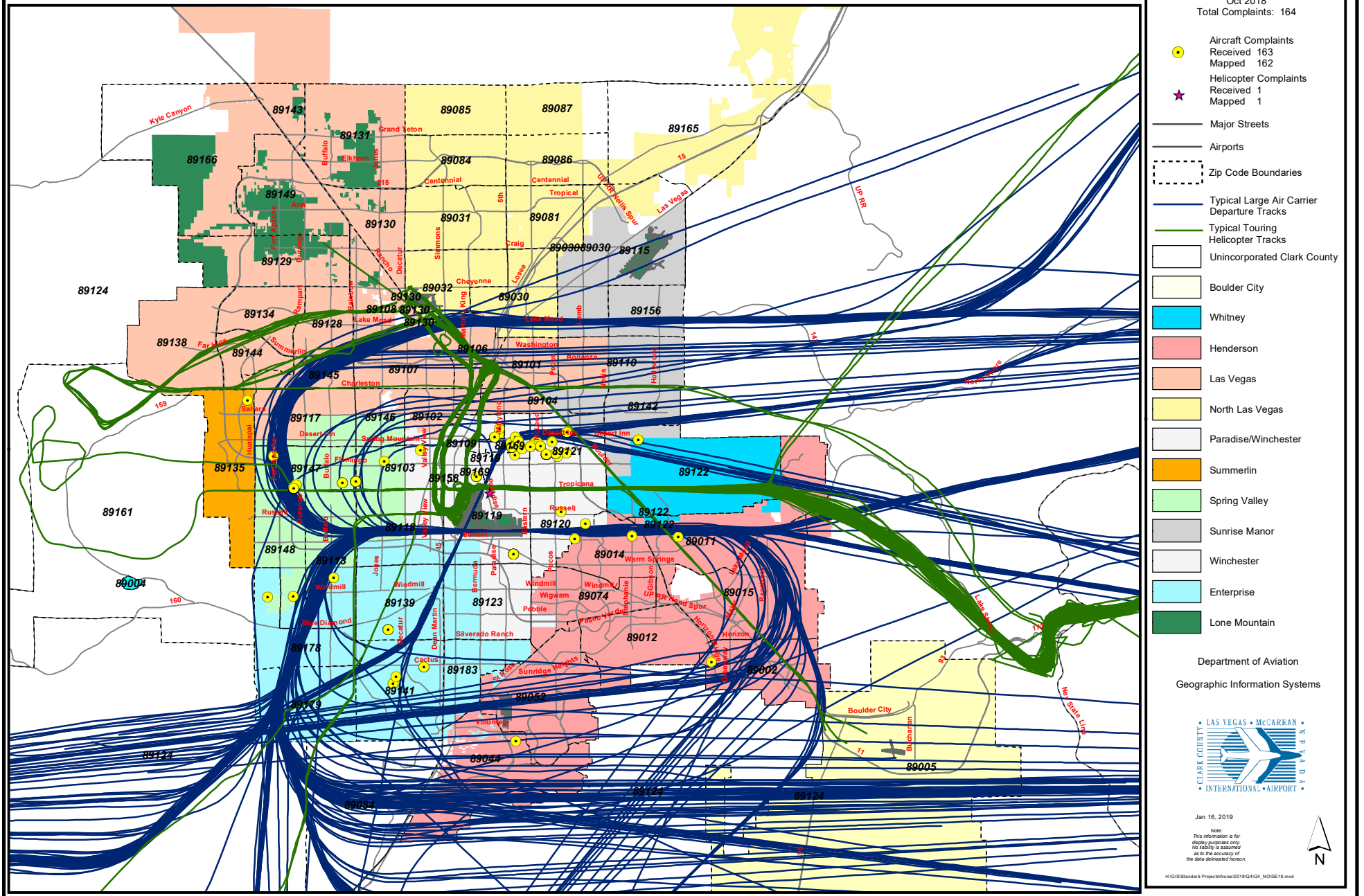
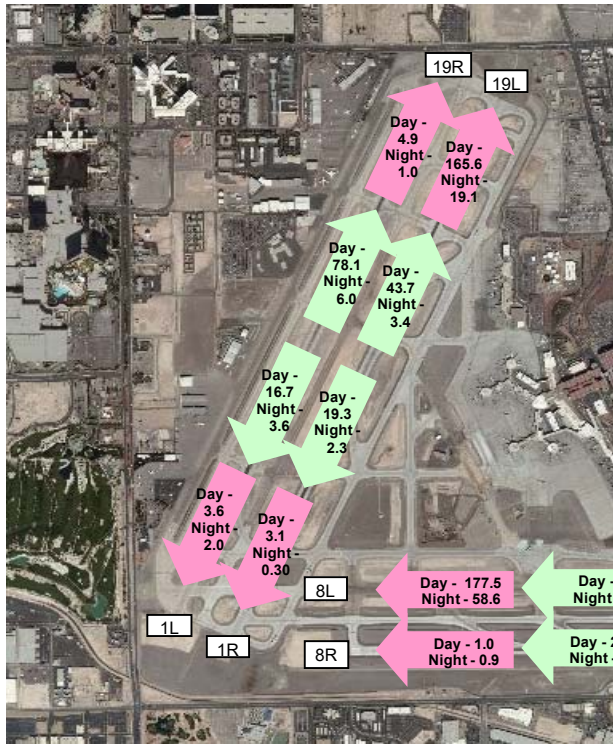


Exhibit 4: LAS Daily Average Operations Runway for Large Air Carrier Aircraft* - October 2018



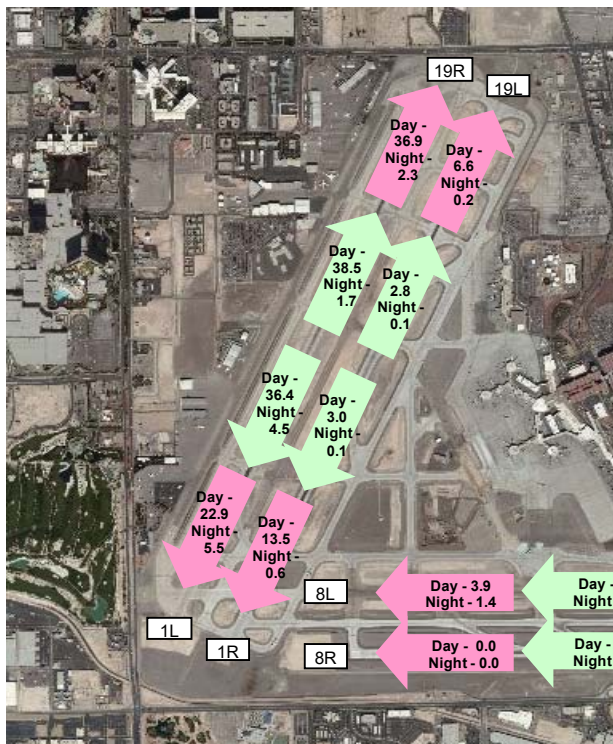
Year	2018		2017		2016	
Daytime Departures	434	83%	426	83%	433	85%
Nighttime Departures	88	17%	89	17%	78	15%
Total Departures	522	100%	514	100%	511	100%

Daytime Arrivals	453	88%	456	87%	453	89%
Nighttime Arrivals	64	12%	69	13%	55	11%
Total Arrivals	517	100%	525	100%	508	100%

Growth	Overall	Daytime	Nighttime
Depts. 2018 vs 2017	1%	2%	-1%
Depts. 2018 vs 2016	2%	0%	12%
Arrivals 2018 vs 2017	-2%	-1%	-7%
Arrivals 2018 vs 2016	2%	0%	18%

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

Exhibit 5: LAS Daily Average Operations by Runway for Non-Large Air Carrier Aircraft** - October 2018



Year	2018		2017		2016	
Daytime Departures	99	90%	101	91%	89	89%
Nighttime Departures	11	10%	10	9%	11	11%
Total Departures	109	100%	111	100%	100	100%

Daytime Arrivals	102	93%	95	93%	89	92%
Nighttime Arrivals	8	7%	7	7%	8	8%
Total Arrivals	110	100%	102	100%	97	100%

Growth	Overall	Daytime	Nighttime
Depts. 2018 vs 2017	-2%	-2%	7%
Depts. 2018 vs 2016	10%	11%	-3%
Arrivals 2018 vs 2017	8%	8%	3%
Arrivals 2018 vs 2016	14%	15%	-4%

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

Exhibit 6: LAS Daily Average Operations by Corridor for Helicopter Tours* - October 2018

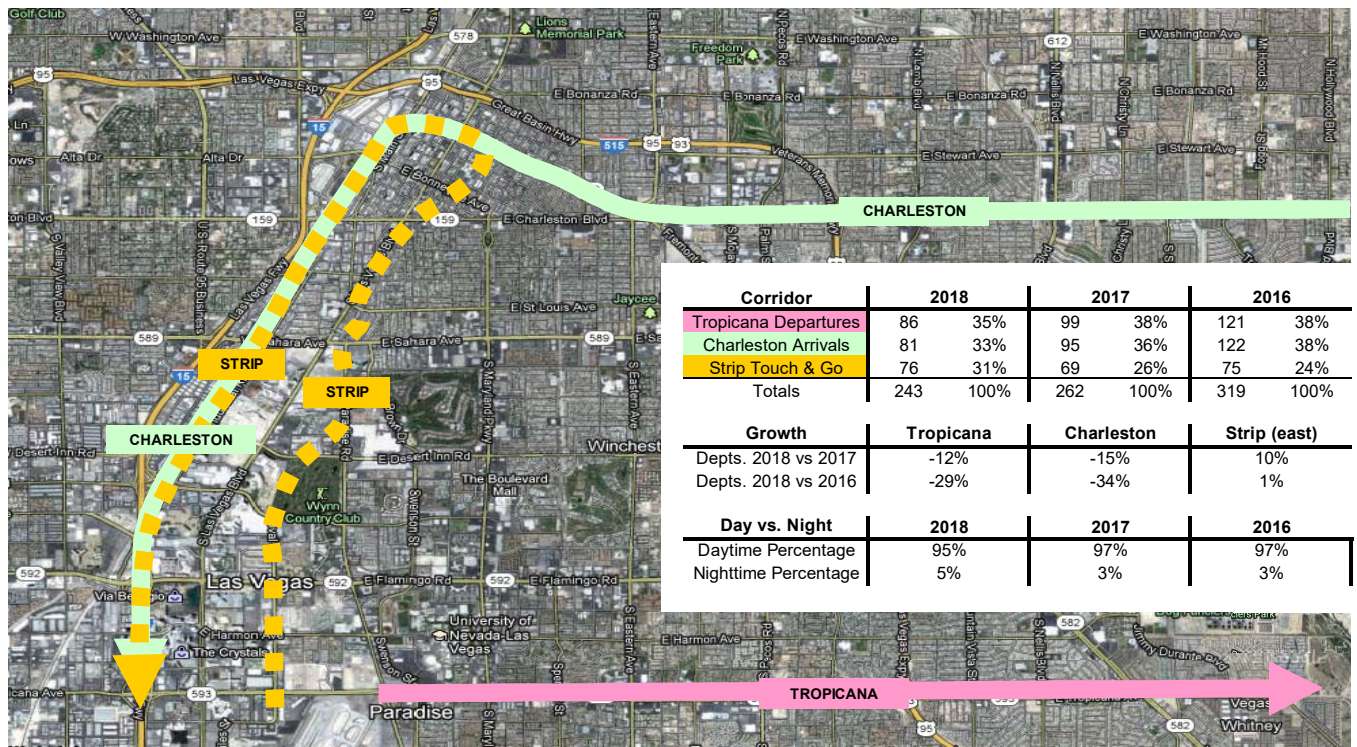
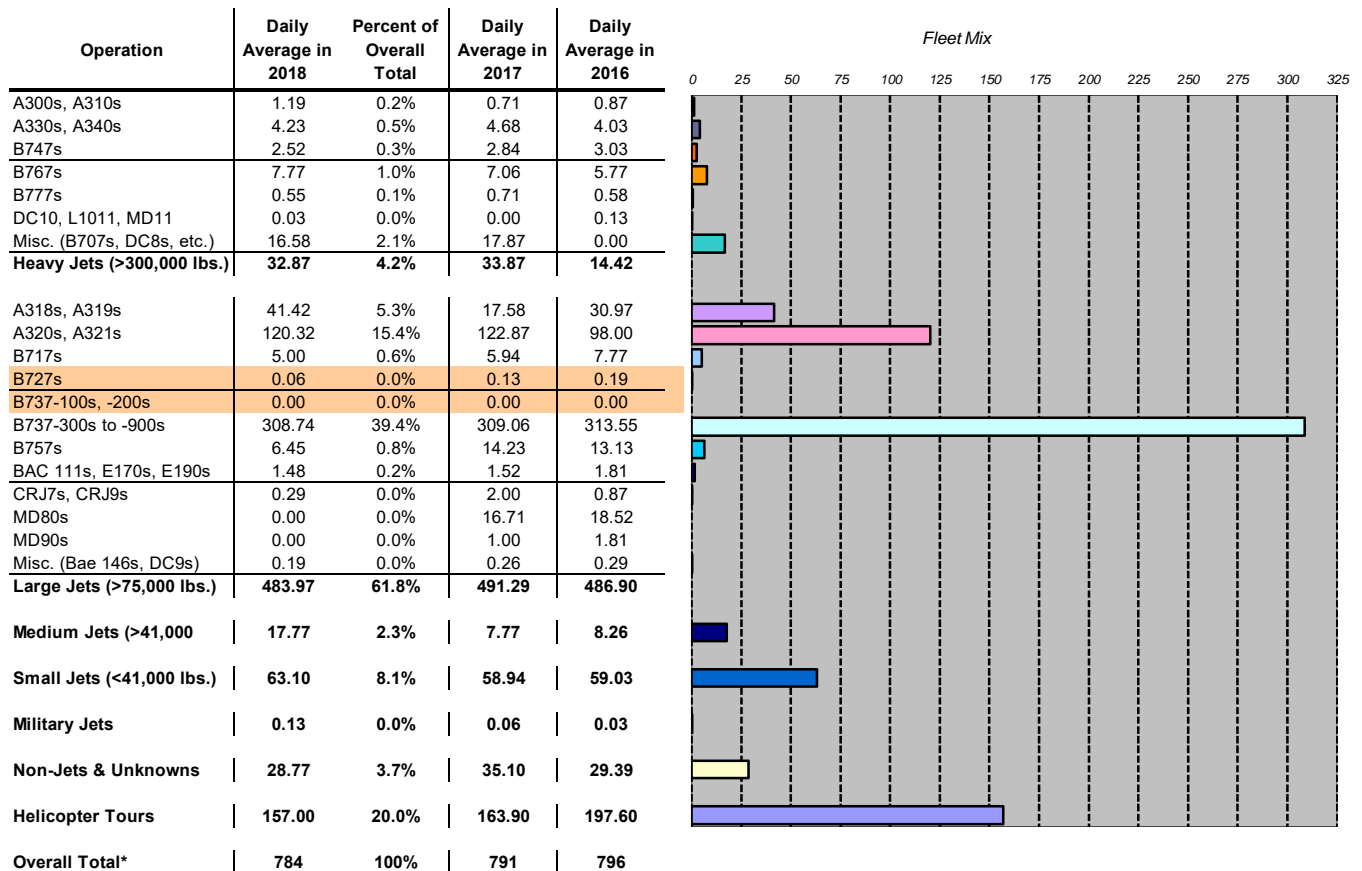


Exhibit 7: LAS Aircraft Arrival Fleet Mix** - October 2018



** Overall Total: Note that operation type and runway use counts are estimated by Harris Corp. EnvironmentalVue Noise and Monitoring Operations 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 2018 to 2016

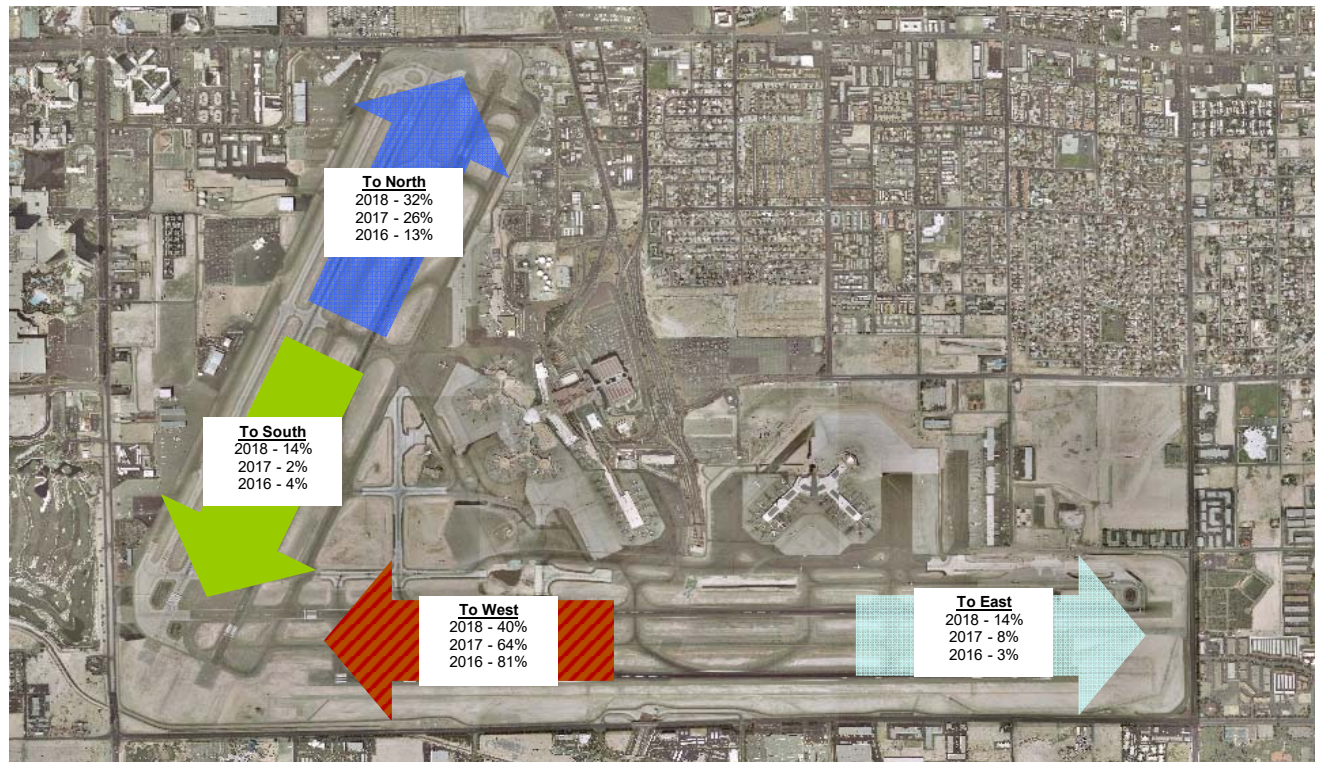
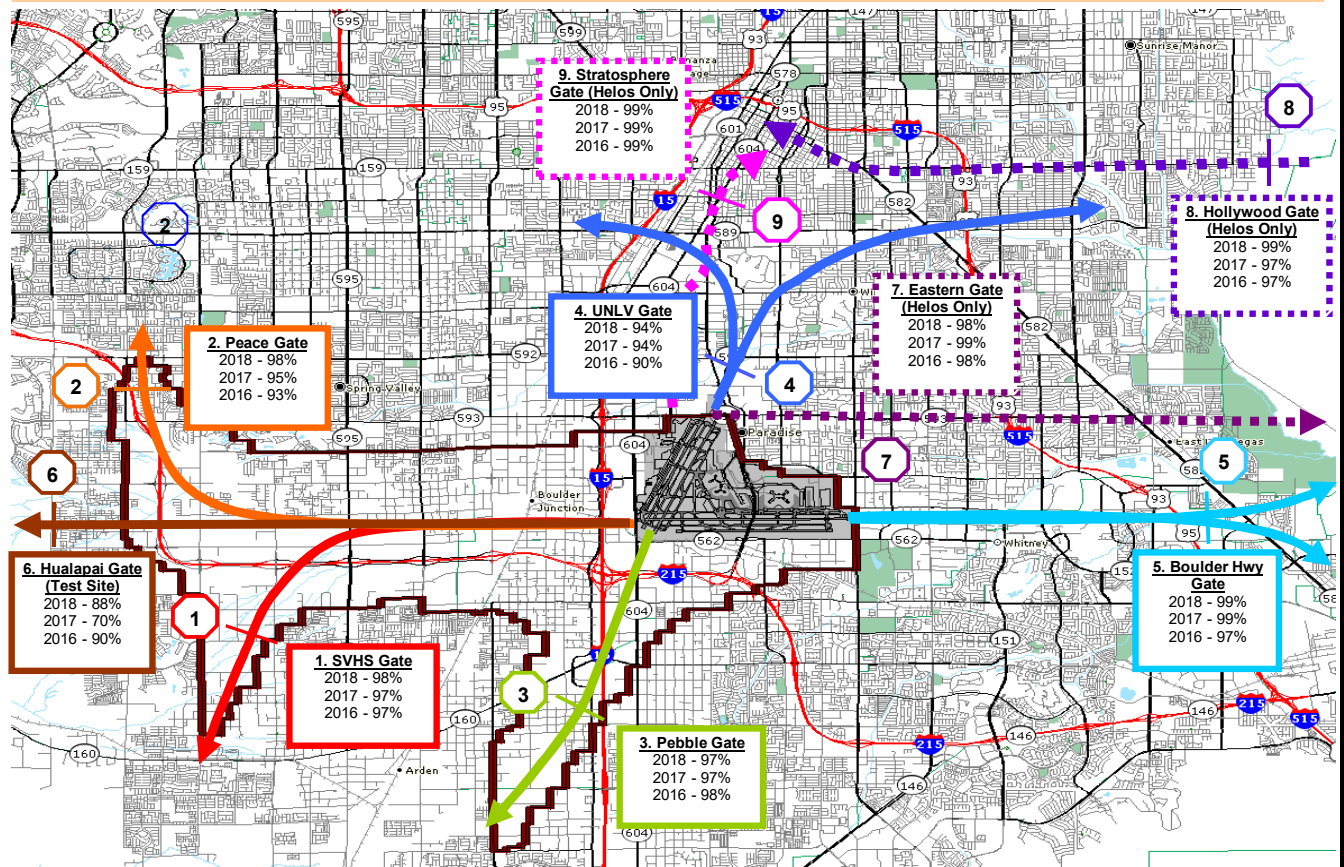


Exhibit 9: "Gate" Compliance for Large Aircraft* & LAS Helicopter Tours - October 2018



* Aircraft types: All aircraft with a maximum gross takeoff 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 2018

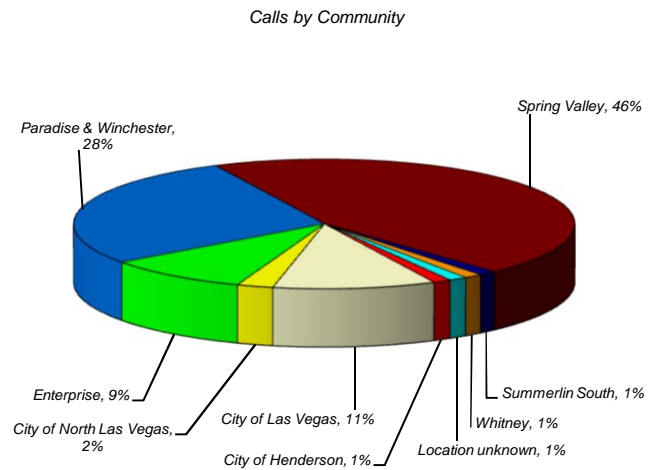
Community	No. of Calls in 2018	No. of Callers in 2018	No. of Calls in 2017	No. of Calls in 2016
City of Boulder City	1	1	3	2
City of Henderson	9	3	1	4
City of Las Vegas	2	2		
City of North Las Vegas	8	6	5	5
Enterprise	24	12	5	18
Lone Mountain	39	7	10	26
Paradise & Winchester	1	1		
Spring Valley				
Summerlin South	1	1		
Sunrise Manor	1	1		
Whitney	1	1		
Location unknown	1	1		
Overall Total	86	34	24	55

Difference between 2018 and 2017 Total Calls: 258%

Difference between 2018 and 2016 Total Calls: 56%

Average Number of Calls per Caller: 2.5

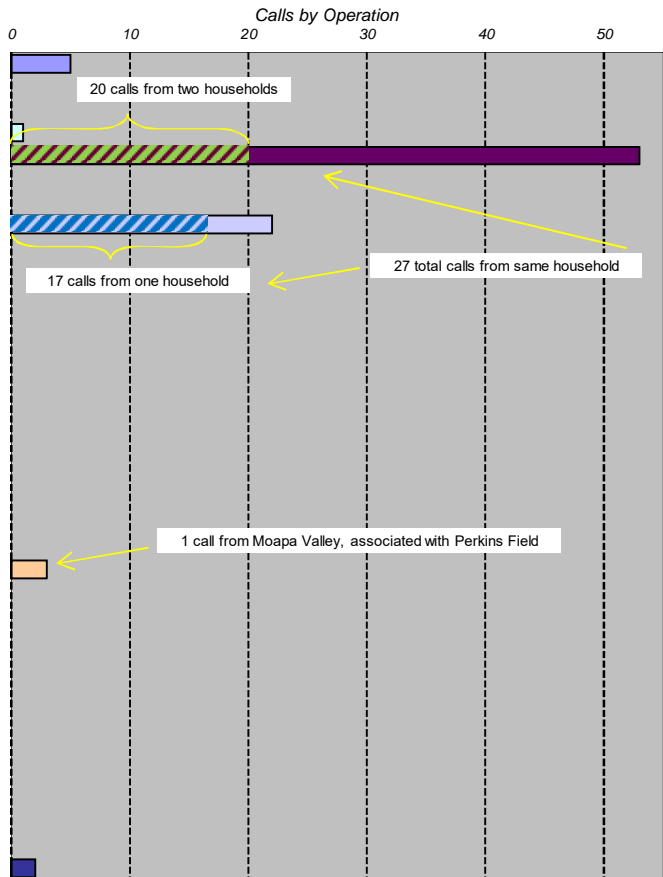
Most calls received from one household: 27



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

Exhibit 2: Noise Complaint Calls by Type of Operation - November 2018

Operation	No. of Calls in 2018	Percent of Overall Total	No. of Calls in 2017	No. of Calls in 2016
LAS 01R/L Arrivals	5	5.8%		
LAS 08R/L Arrivals			1	3
LAS 19R/L Arrivals			1	1
LAS 26R/L Arrivals	1	1.2%		
LAS 01R/L Departures	53	61.6%	7	28
LAS 08R/L Departures			2	1
LAS 19R/L Departures			10	18
LAS 26R/L Departures	22	25.6%		
LAS Run-ups				
LAS GA				
LAS Other				
LAS Total	81	94.2%	21	52
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	3.5%		
VGT Other				
VGT Total	3	3.5%	0	0
HND 17R/L Arrivals				
HND 35R/L Arrivals				
HND 17R/L Departures				
HND 35R/L Departures				
HND Run-ups			2	
HND GA				
HND Other				
HND Total	0	0.0%	2	0
Helicopters**	2	2.3%	1	3
Overall Total	86	100%	24	55



** 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 - Nov 2018

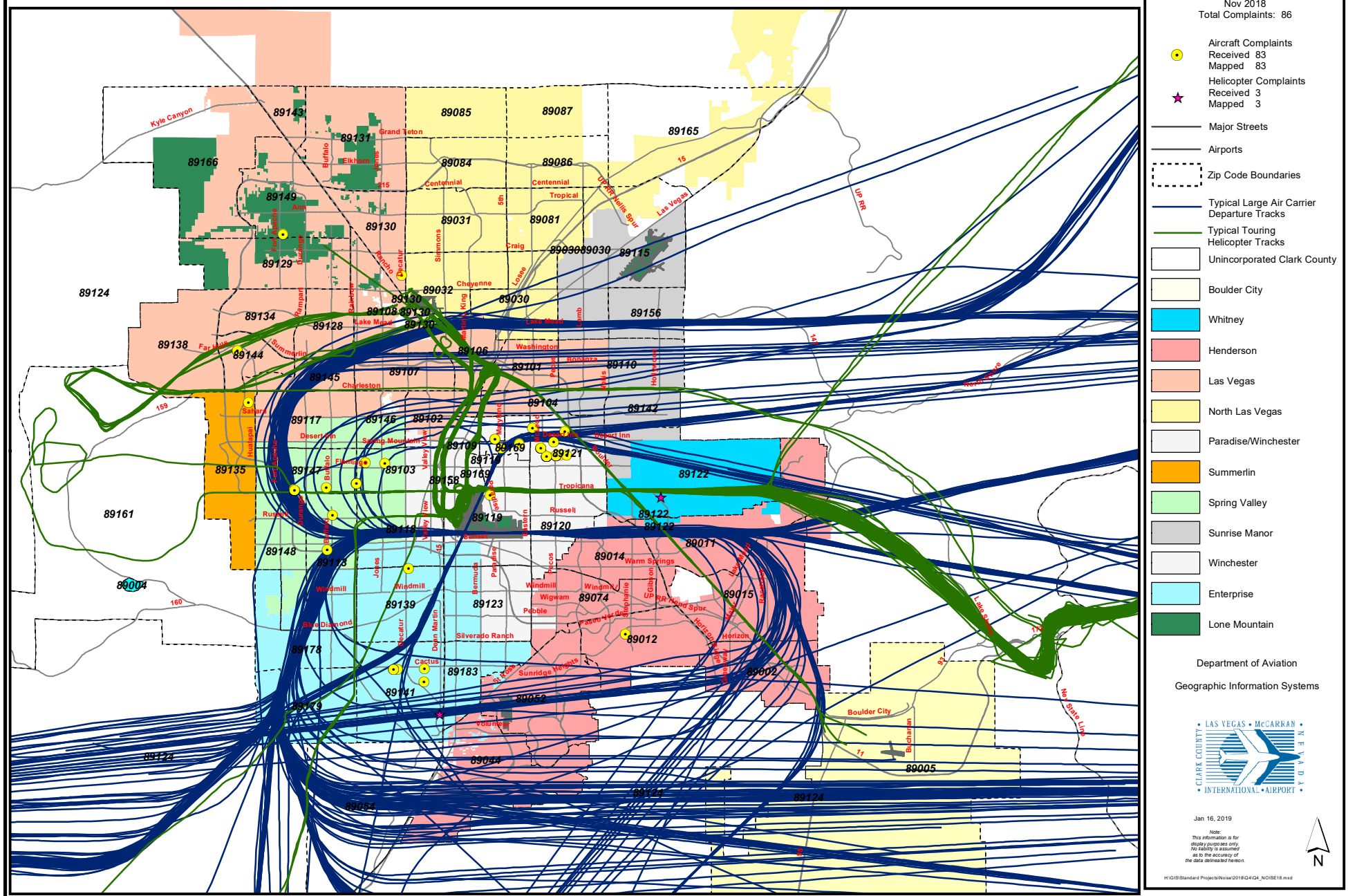
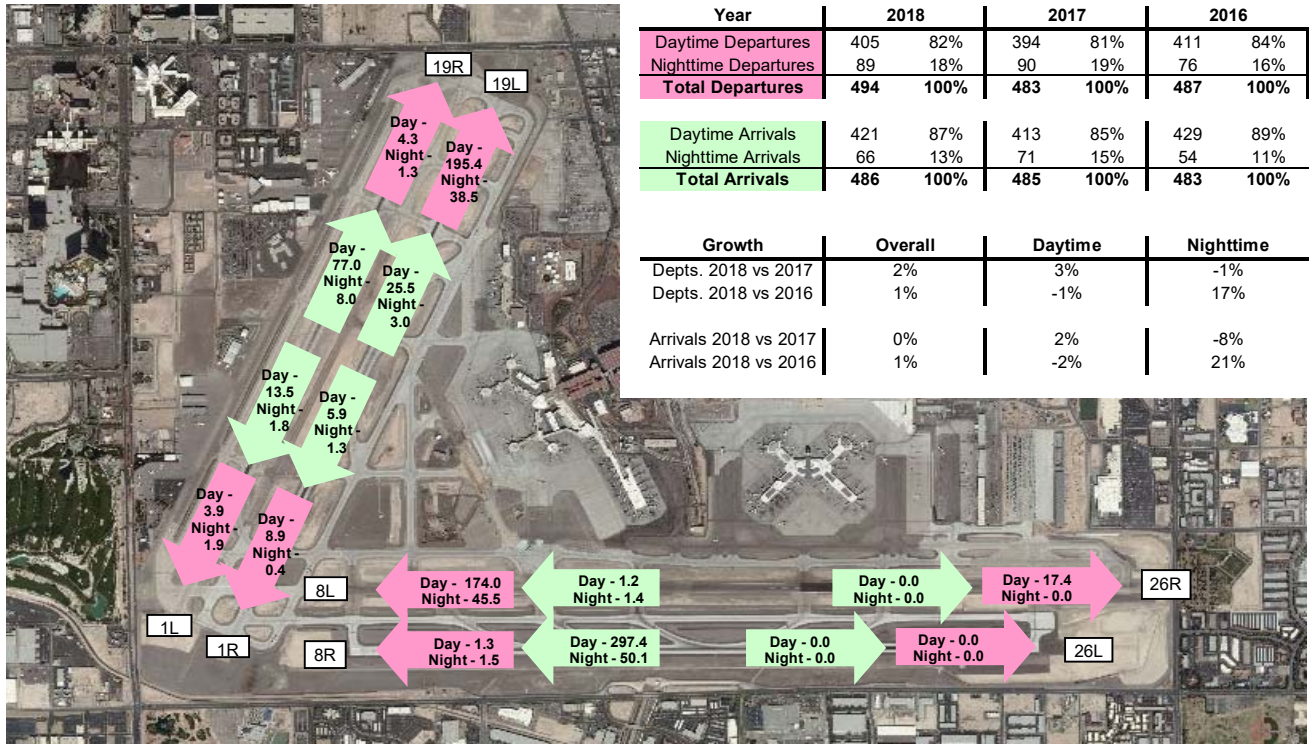
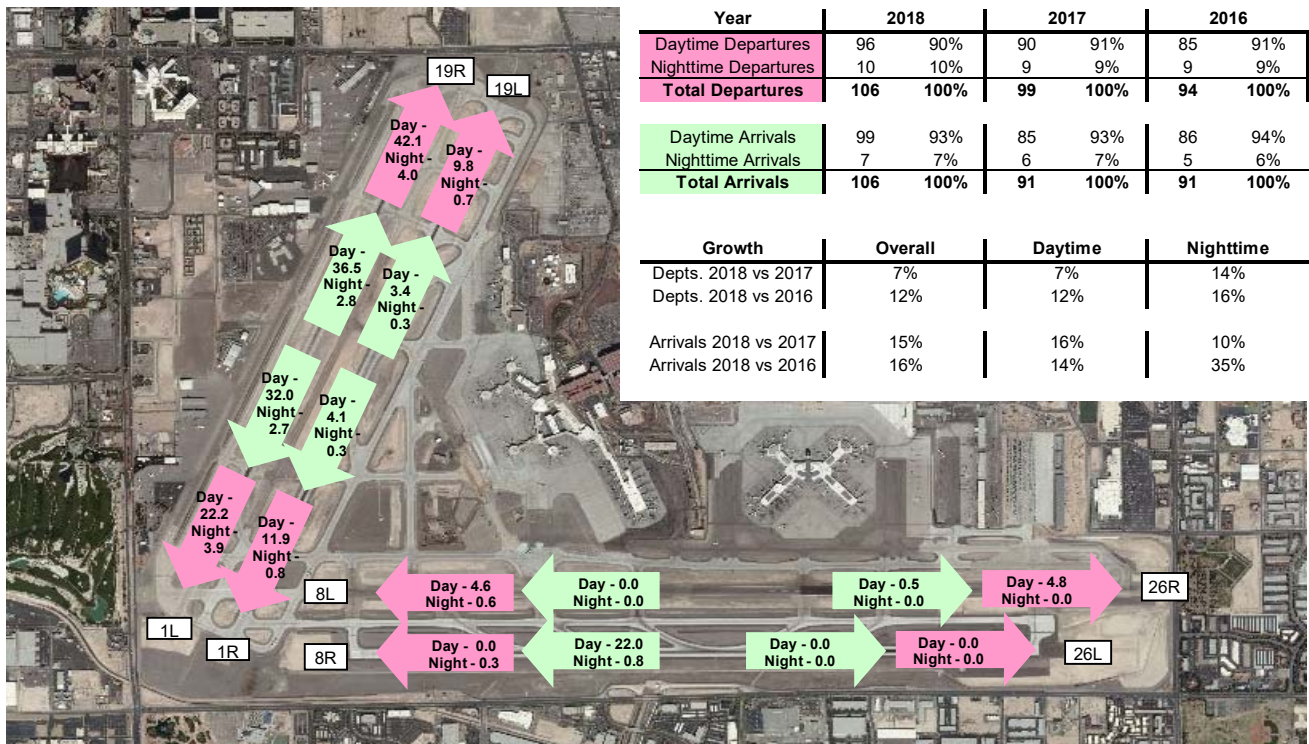


Exhibit 4: LAS Daily Average Operations Runway for Large Air Carrier Aircraft* - November 2018



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

Exhibit 5: LAS Daily Average Operations by Runway for Non-Large Air Carrier Aircraft** - November 2018



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

Exhibit 6: LAS Daily Average Operations by Corridor for Helicopter Tours* - November 2018

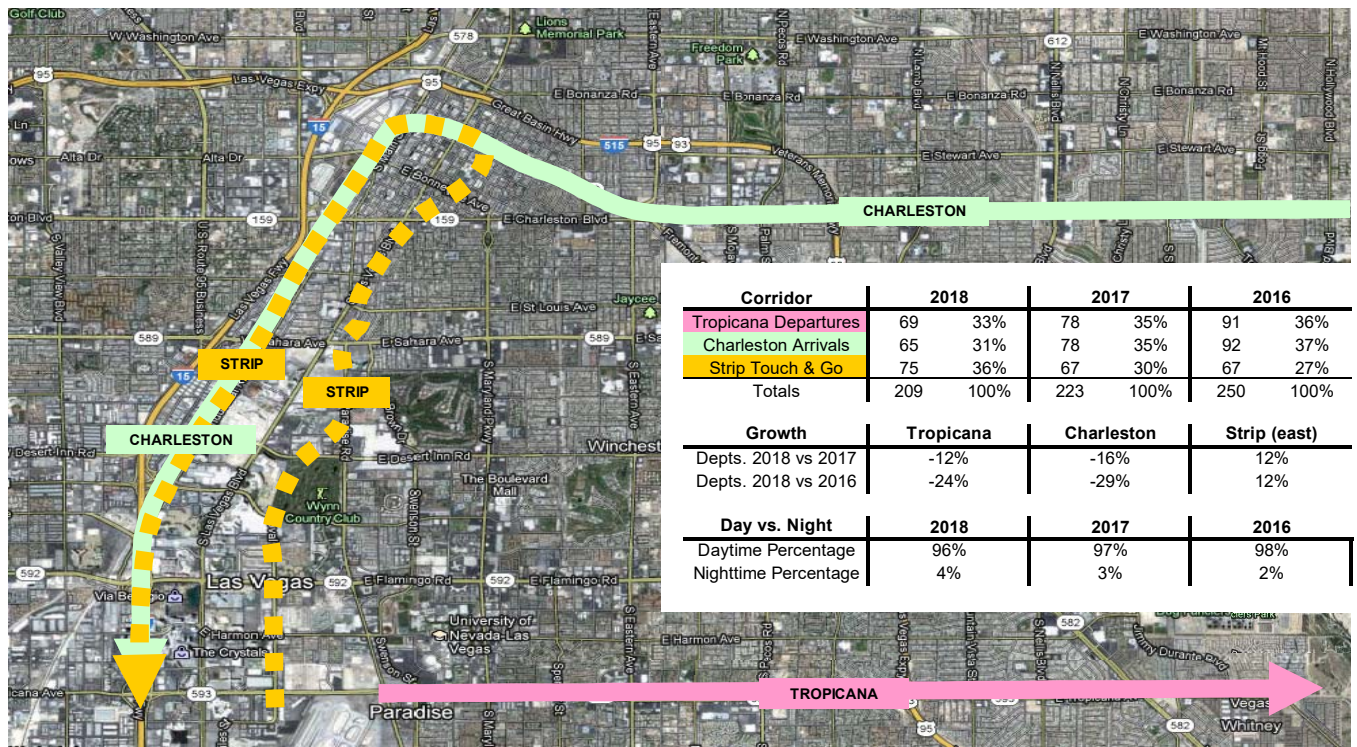
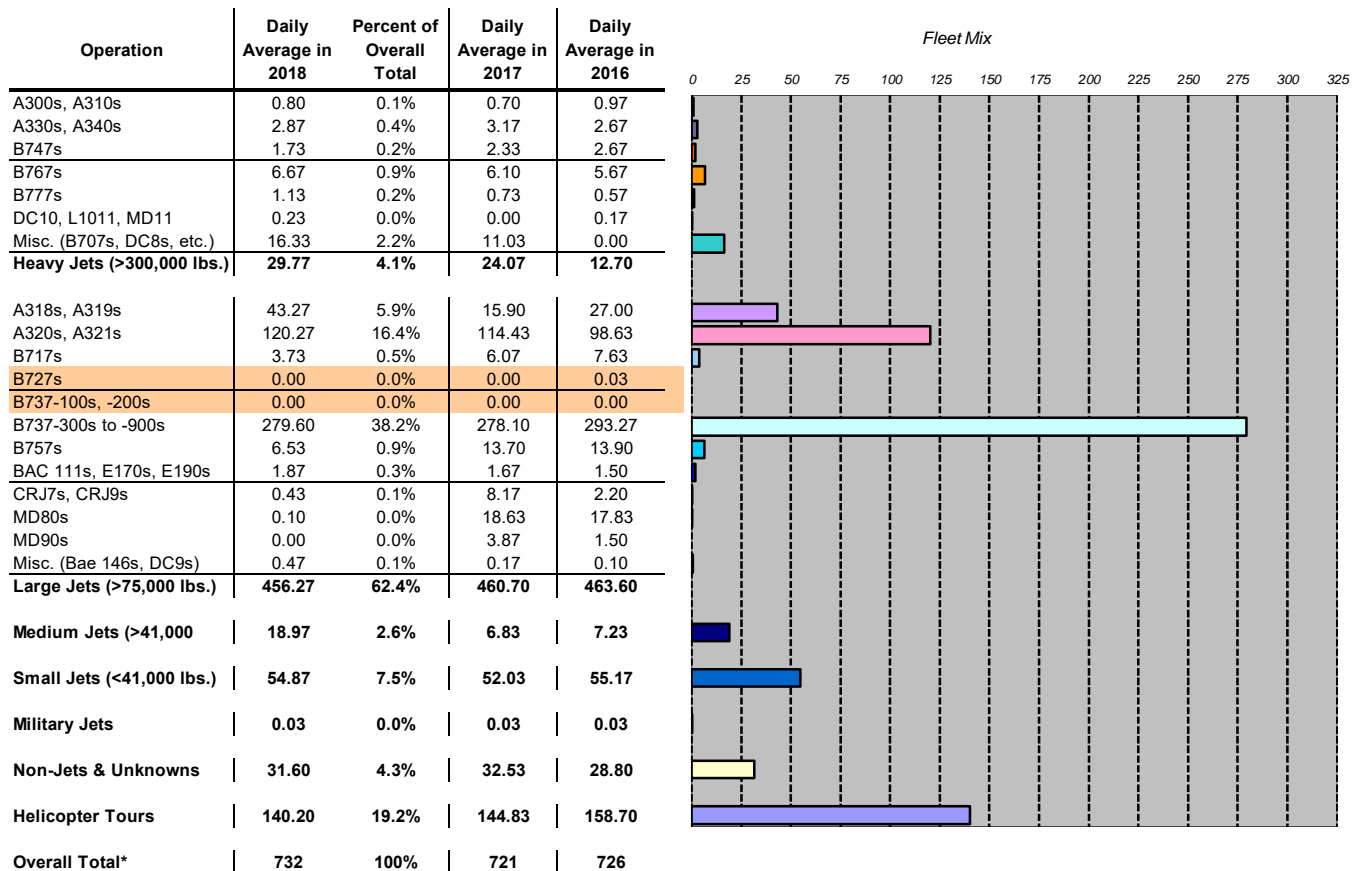


Exhibit 7: LAS Aircraft Arrival Fleet Mix** - November 2018



** Overall Total: Note that operation type and runway use counts are estimated by Harris Corp. EnvironmentalVue Noise and Monitoring Operations 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 2018 to 2016

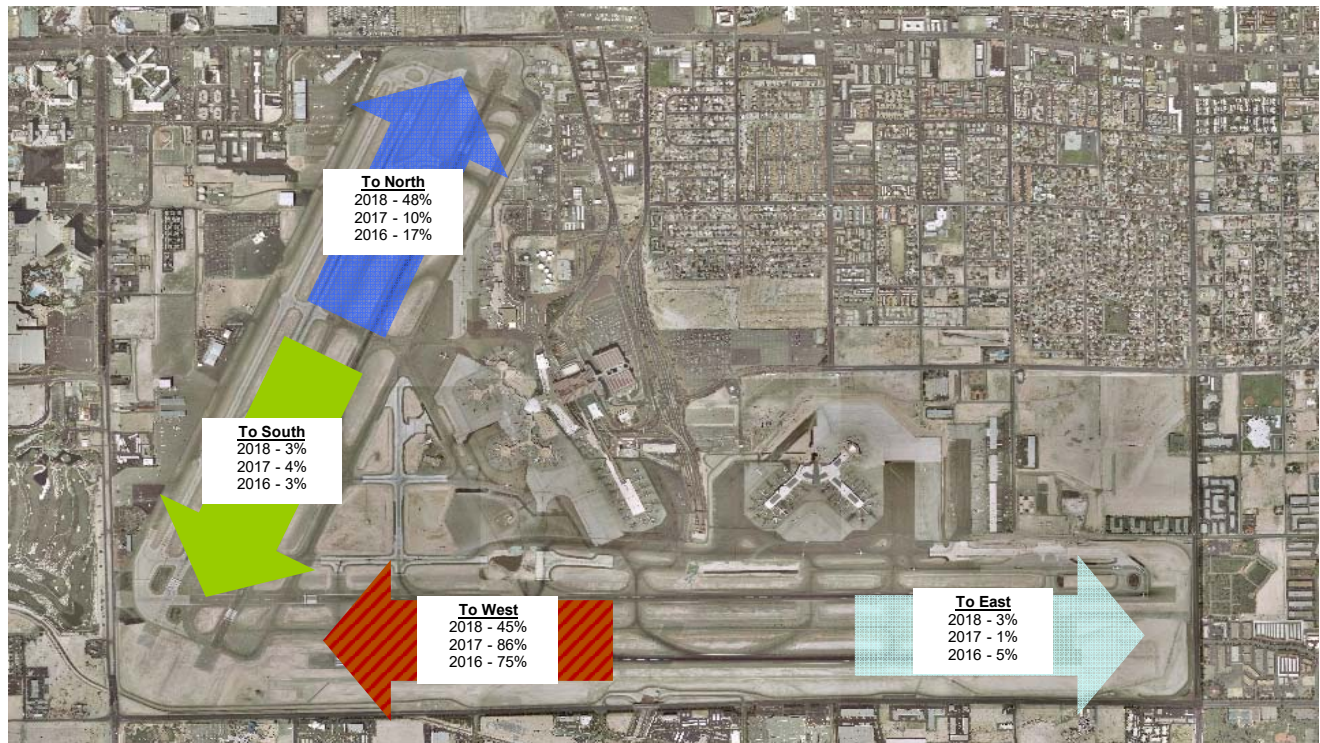
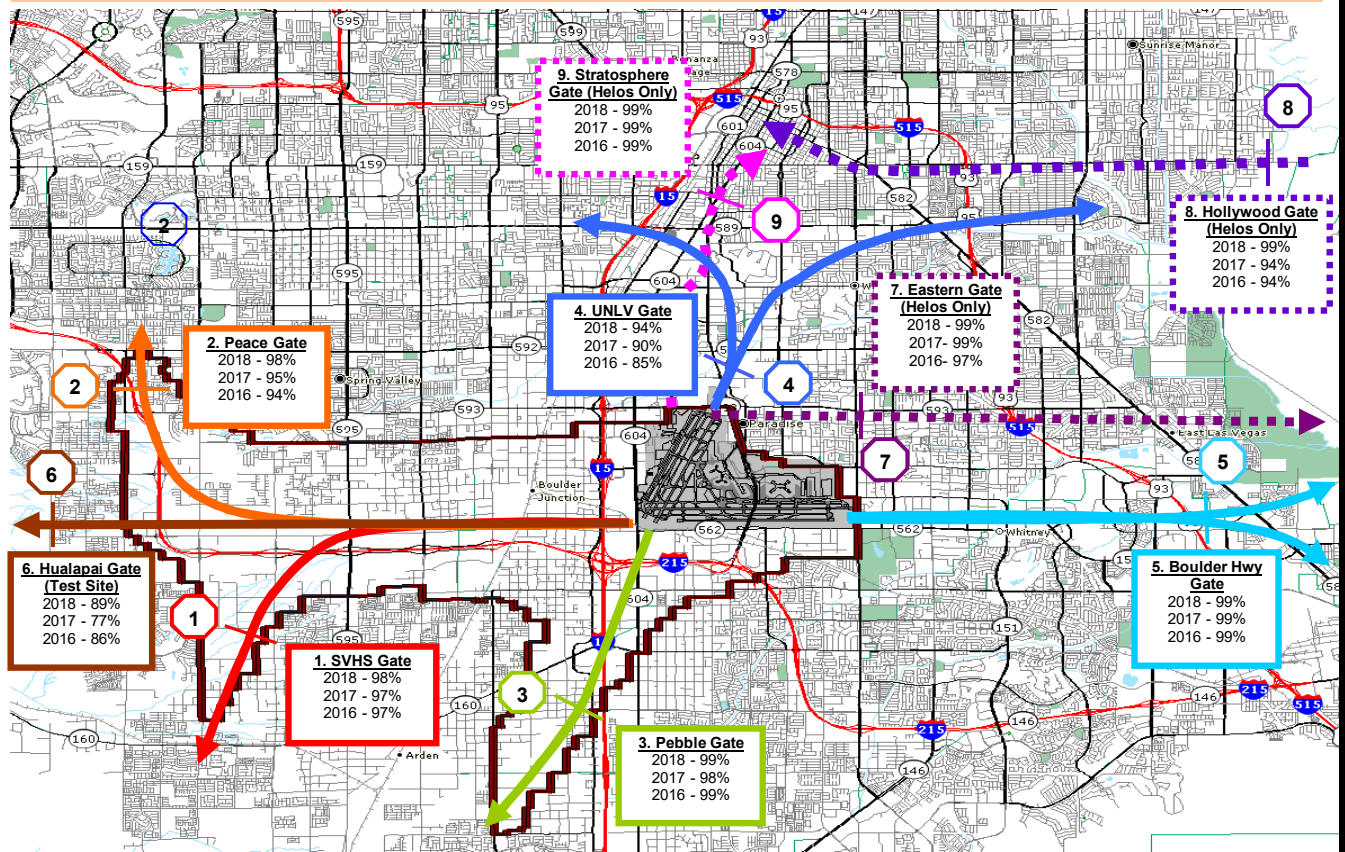


Exhibit 9: "Gate" Compliance for Large Aircraft* & LAS Helicopter Tours - November 2018



* 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, A3707, 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 2018

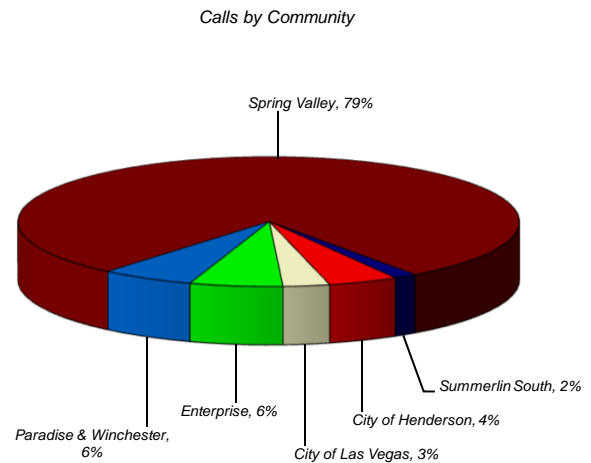
Community	No. of Calls in 2018	No. of Callers in 2018	No. of Calls in 2017	No. of Calls in 2016
City of Boulder City	3	3	3	1
City of Henderson	2	2		4
City of Las Vegas				
City of North Las Vegas				
Enterprise	4	4	3	2
Lone Mountain				
Paradise & Winchester	4	4	15	16
Spring Valley	53	2	6	17
Summerlin South	1	1		
Sunrise Manor				
Whitney				
Location unknown				
Overall Total	67	16	27	40

Difference between 2018 and 2017 Total Calls: 148%

Difference between 2018 and 2016 Total Calls: 68%

Average Number of Calls per Caller: 4.2

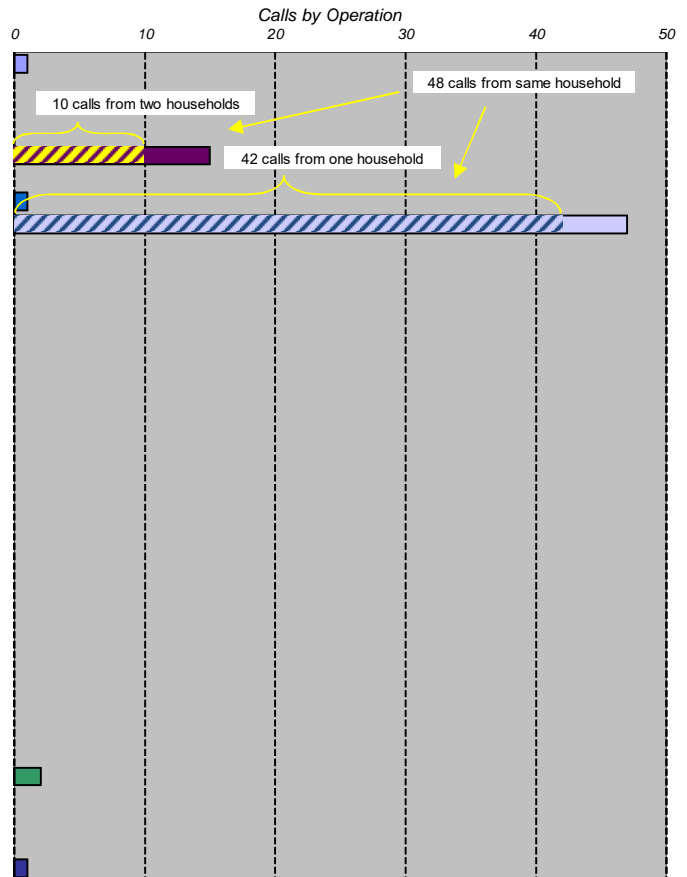
Most calls received from one household: 48



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

Exhibit 2: Noise Complaint Calls by Type of Operation - December 2018

Operation	No. of Calls in 2018	Percent of Overall Total	No. of Calls in 2017	No. of Calls in 2016
LAS 01R/L Arrivals	1	1.5%	1	
LAS 08R/L Arrivals				
LAS 19R/L Arrivals			1	
LAS 26R/L Arrivals				
LAS 01R/L Departures	15	22.4%	18	26
LAS 08R/L Departures				
LAS 19R/L Departures	1	1.5%		
LAS 26R/L Departures	47	70.1%	4	10
LAS Run-ups			1	
LAS GA				
LAS Other				
LAS Total	64	95.5%	25	36
VGT 07 Arrivals				
VGT 12R/L Arrivals				
VGT 25 Arrivals				
VGT 30R/L Arrivals				
VGT 07 Departures				
VGT 12R/L Departures				
VGT 25 Departures				
VGT 30R/L Departures				
VGT Run-ups				
VGT GA				
VGT Other				
VGT Total	0	0.0%	0	0
HND 17R/L Arrivals				
HND 35R/L Arrivals				
HND 17R/L Departures				
HND 35R/L Departures				
HND Run-ups				
HND GA	2	3.0%	2	
HND Other				
HND Total	2	3.0%	2	0
Helicopters**	1	1.5%		4
Overall Total	67	100%	27	40



** 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 - Dec 2018

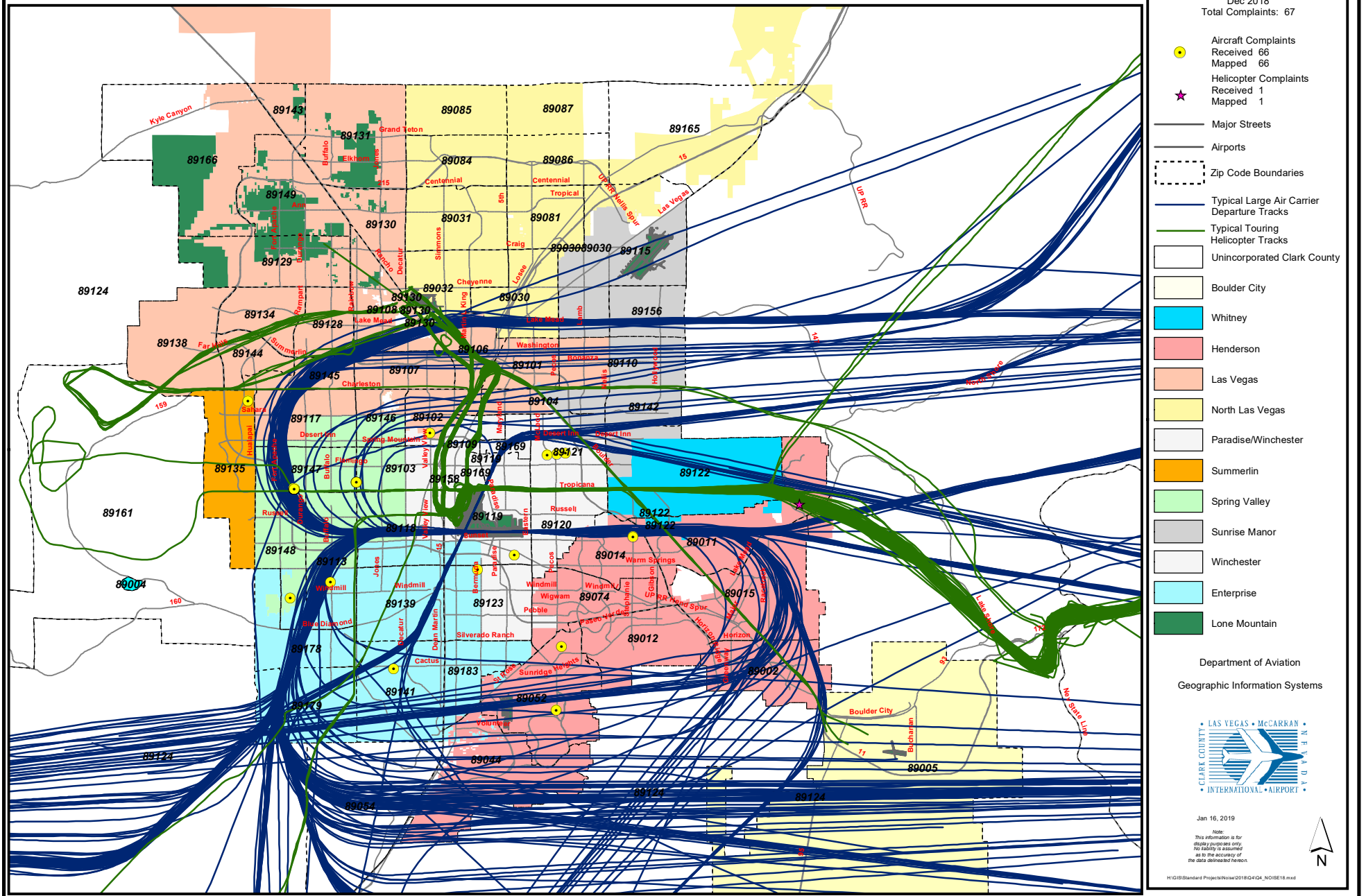
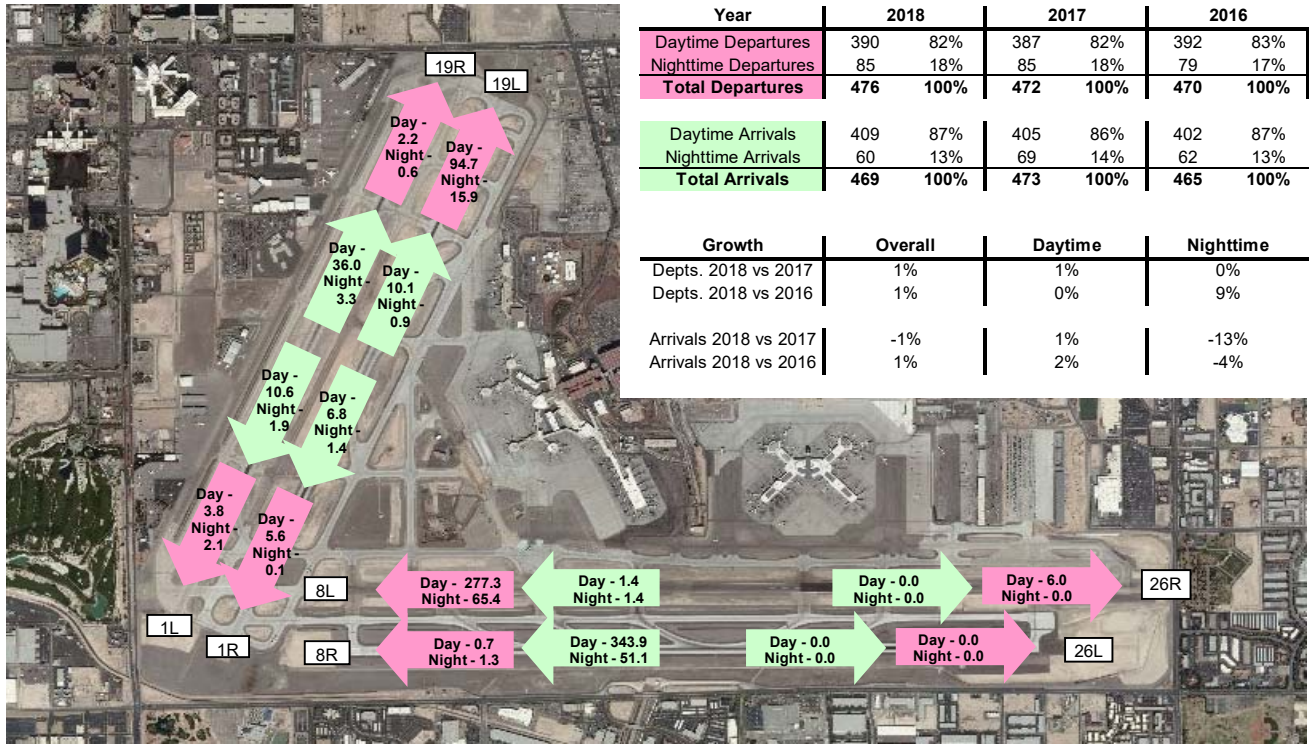
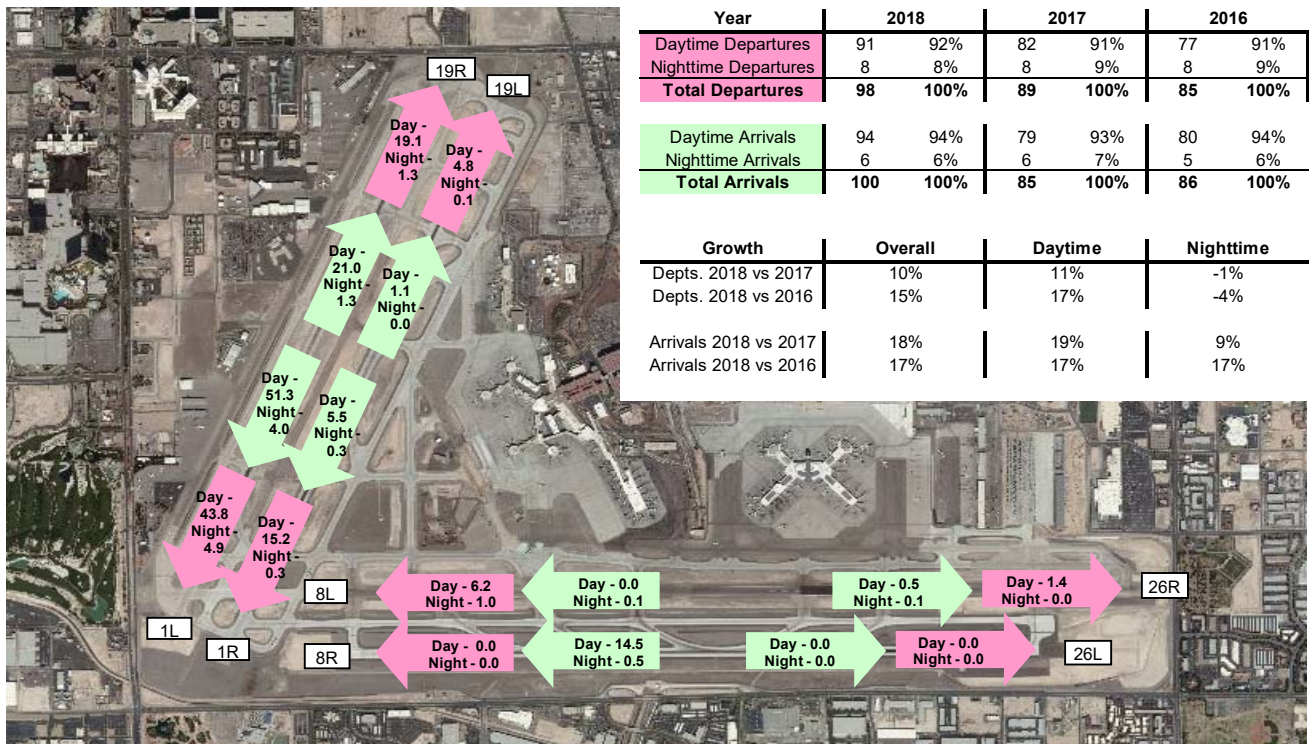


Exhibit 4: LAS Daily Average Operations Runway for Large Air Carrier Aircraft* - December 2018



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

Exhibit 5: LAS Daily Average Operations by Runway for Non-Large Air Carrier Aircraft** - December 2018



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

Exhibit 6: LAS Daily Average Operations by Corridor for Helicopter Tours* - December 2018

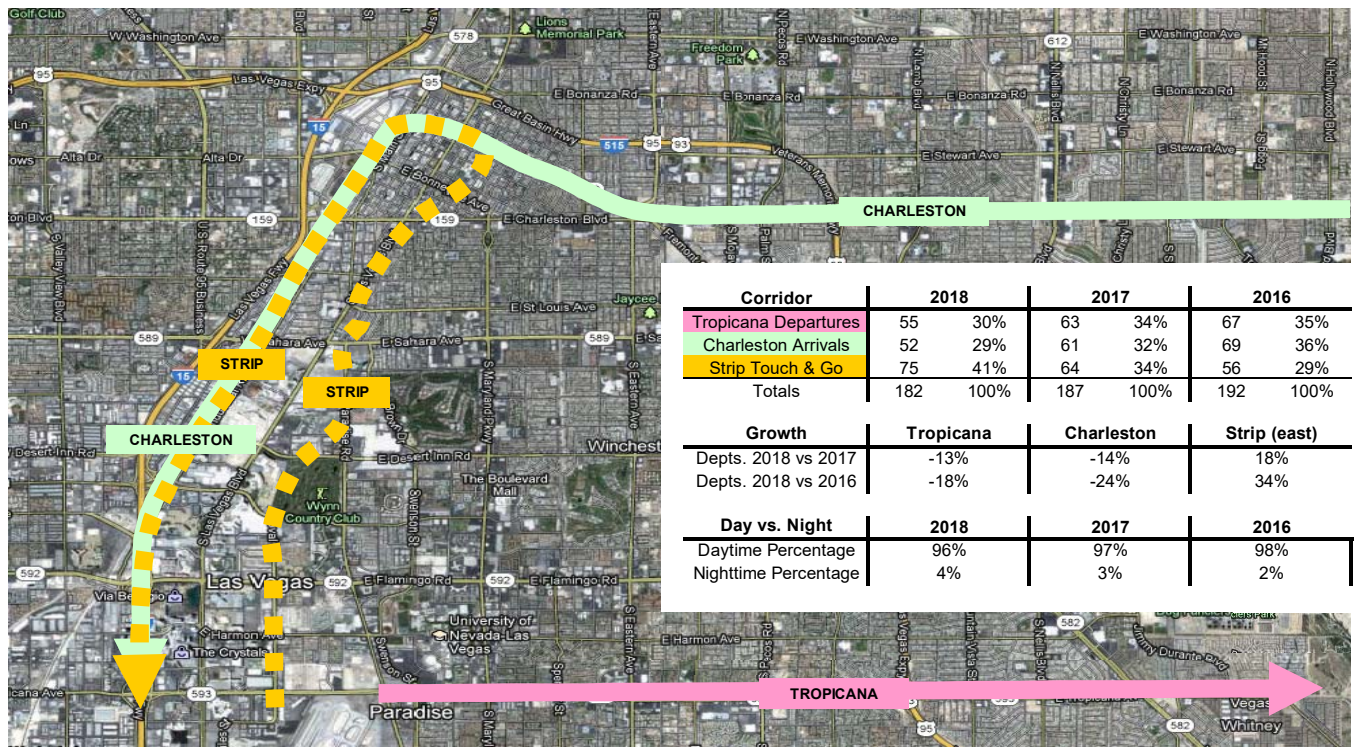
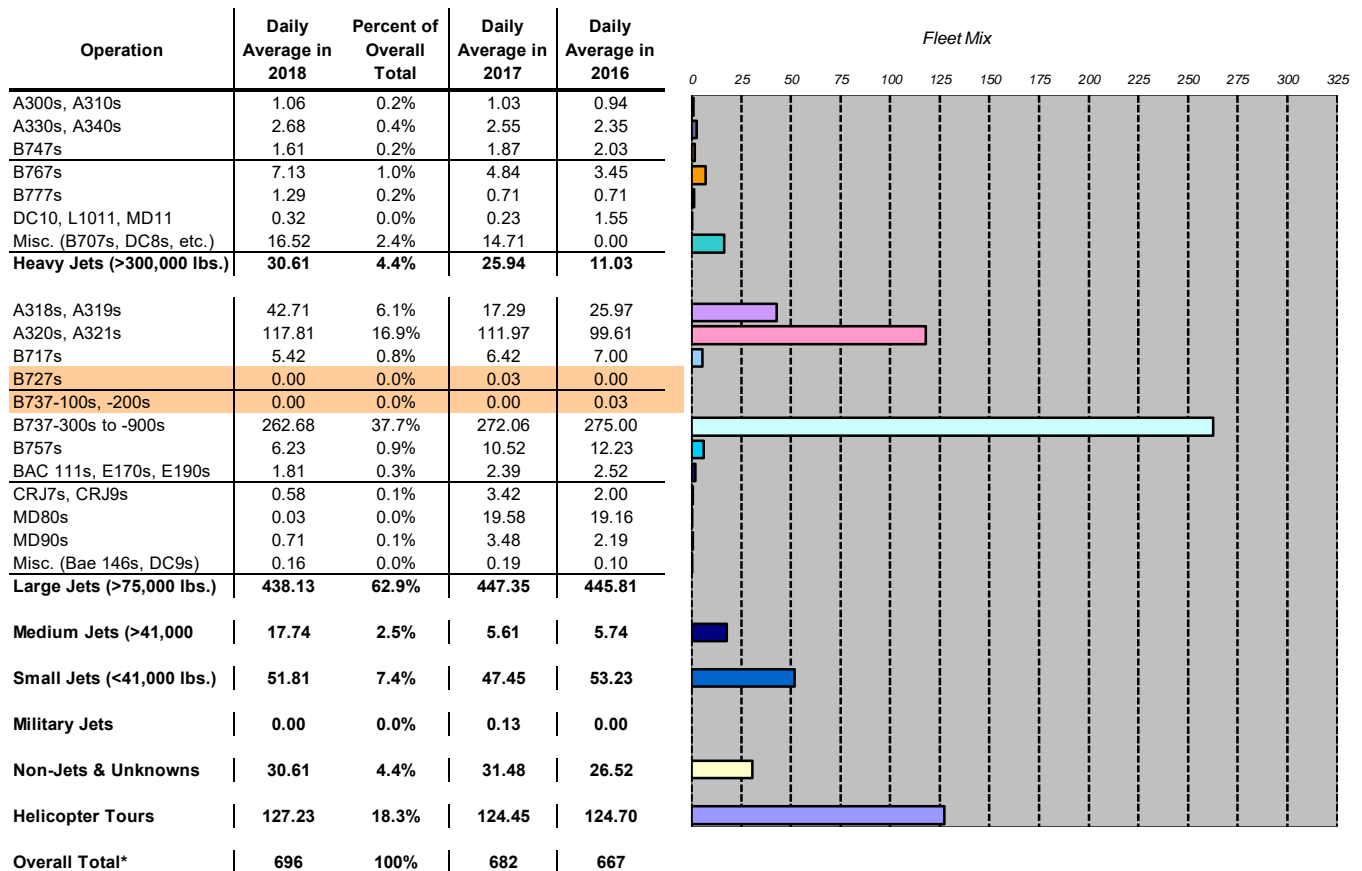


Exhibit 7: LAS Aircraft Arrival Fleet Mix** - December 2018



** Overall Total: Note that operation type and runway use counts are estimated by Harris Corp. EnvironmentalVue Noise and Monitoring Operations 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 2018 to 2016

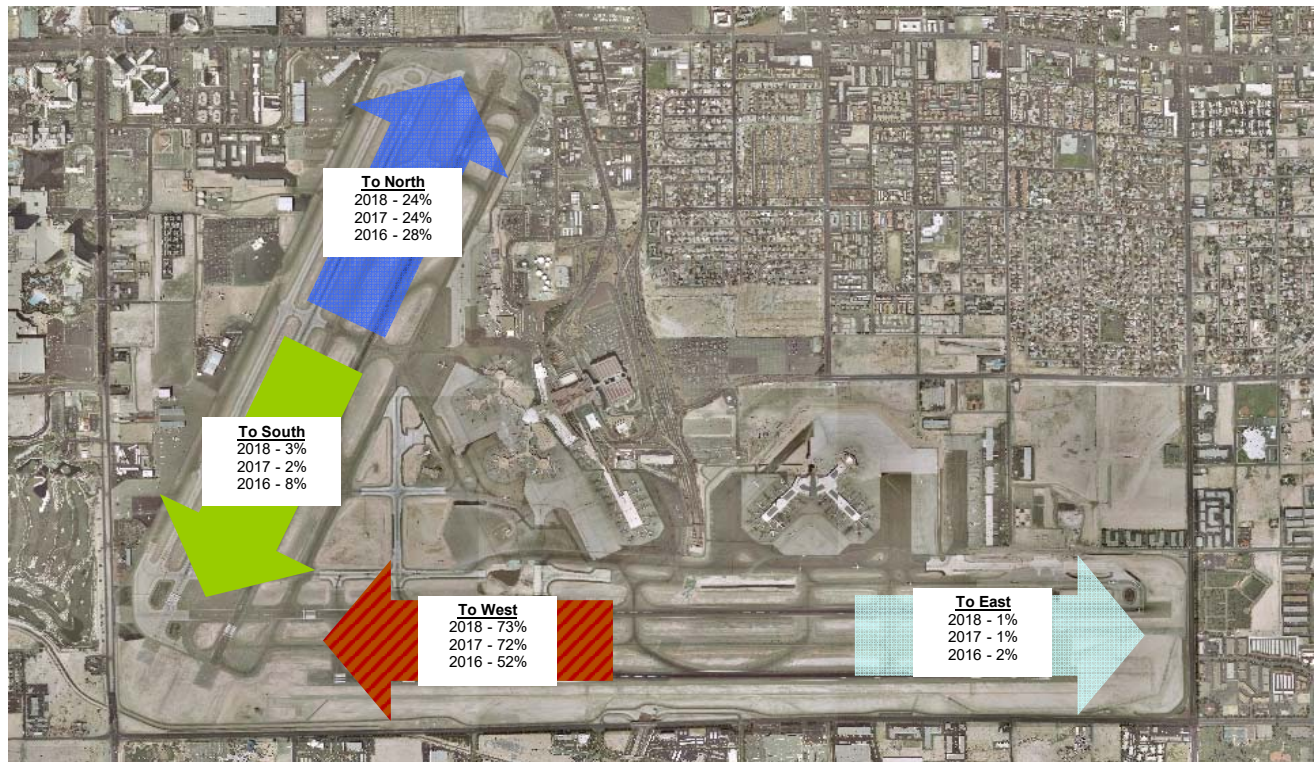
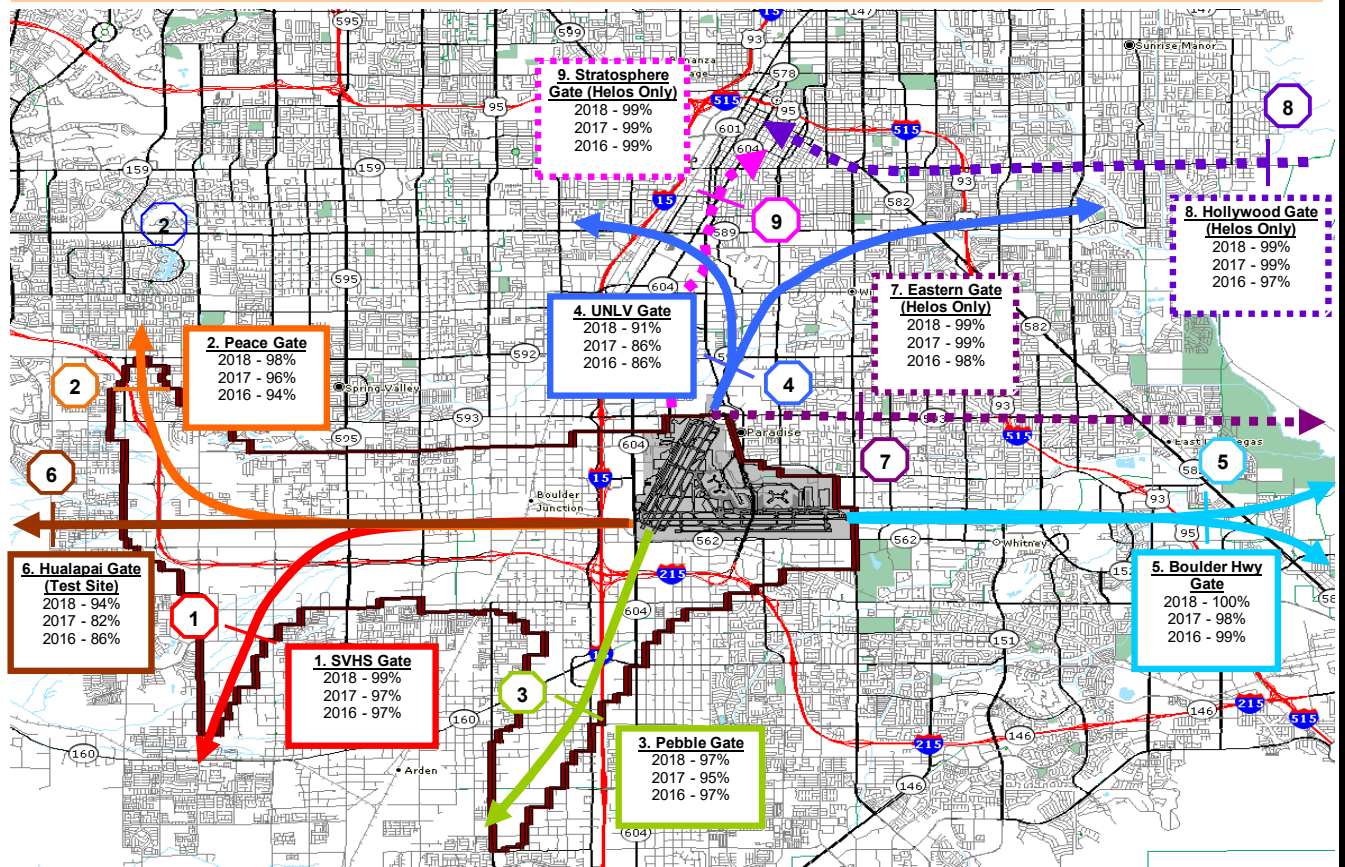


Exhibit 9: "Gate" Compliance for Large Aircraft* & LAS Helicopter Tours - December 2018



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

Exhibit 1: Noise Complaint Calls by Community* - Annual 2018

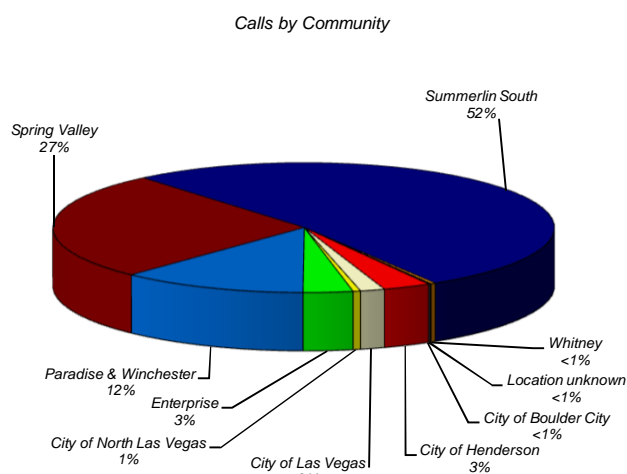
Community	No. of Calls in 2018	No. of Callers in 2018	No. of Calls in 2017	No. of Calls in 2016
City of Boulder City	2	1		2
City of Henderson	51	30	50	37
City of Las Vegas	26	11	50	76
City of North Las Vegas	8	8	7	2
Enterprise	53	29	50	66
Lone Mountain			13	1
Paradise & Winchester	199	61	188	312
Spring Valley	447	23	223	108
Summerlin South	872	6	2	3
Sunrise Manor			8	19
Whitney	5	3	2	3
Location unknown	1	1	1	
Overall Total	1,664	173	594	629

Difference between 2018 and 2017 Total Calls: 180%

Difference between 2018 and 2016 Total Calls: 165%

Average Number of Calls per Caller: 9.6

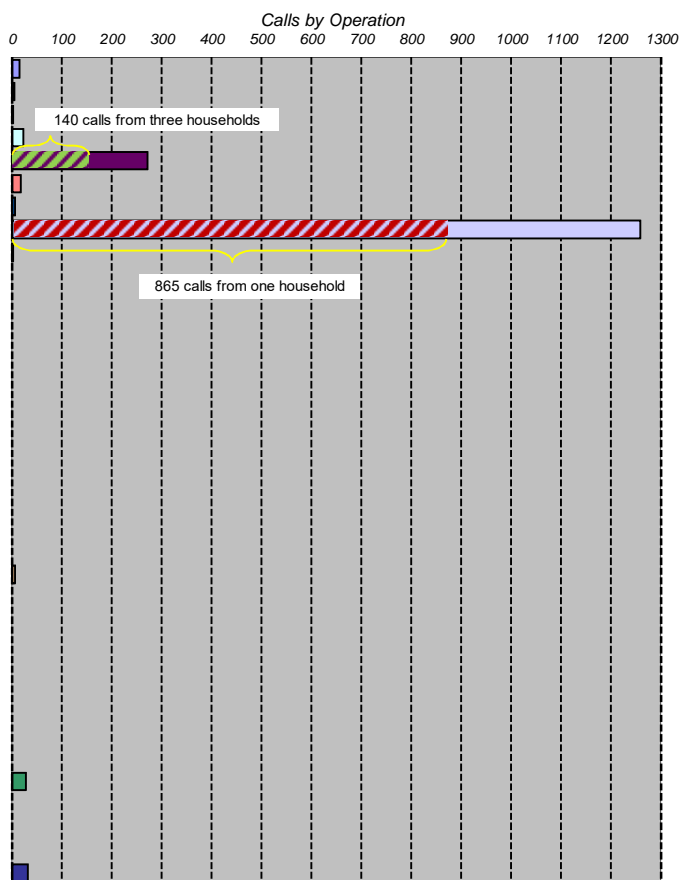
Most calls received from one household: 865



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

Exhibit 2: Noise Complaint Calls by Type of Operation - Annual 2018

Operation	No. of Calls in 2018	Percent of Overall Total	No. of Calls in 2017	No. of Calls in 2016
LAS 01R/L Arrivals	15	0.9%	7	3
LAS 08R/L Arrivals	4	0.2%	2	1
LAS 19R/L Arrivals	2	0.1%	14	6
LAS 26R/L Arrivals	23	1.4%	14	10
LAS 01R/L Departures	271	16.3%	268	326
LAS 08R/L Departures	18	1.1%	24	22
LAS 19R/L Departures	6	0.4%	8	43
LAS 26R/L Departures	1,258	75.6%	164	125
LAS Run-ups	1	0.1%	2	1
LAS GA				
LAS Other				
LAS Total	1,598	96.0%	503	537
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	6	0.4%	19	8
VGT Other				
VGT Total	6	0.4%	19	8
HND 17R/L Arrivals				
HND 35R/L Arrivals				
HND 17R/L Departures				
HND 35R/L Departures				
HND Run-ups				
HND GA	28	1.7%	25	11
HND Other				
HND Total	28	1.7%	25	11
Helicopters**	32	1.9%	47	73
Overall Total	1,664	100%	594	629



** 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 2018

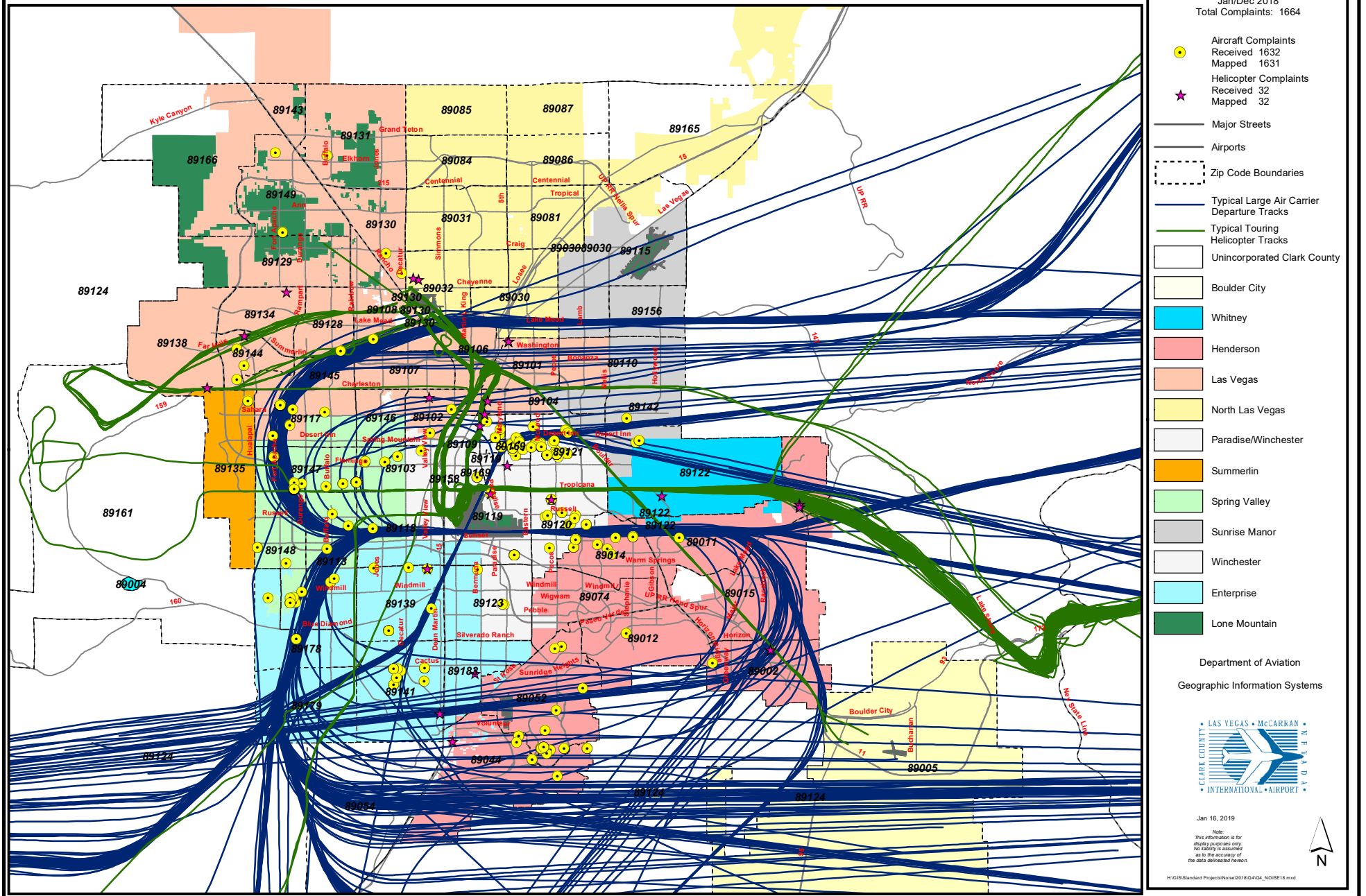
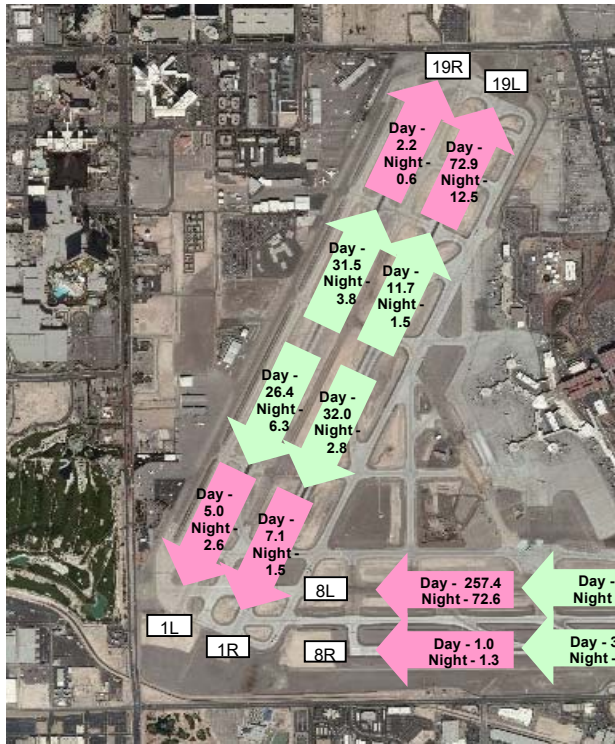


Exhibit 4: LAS Daily Average Operations Runway for Large Air Carrier Aircraft* - Annual 2018



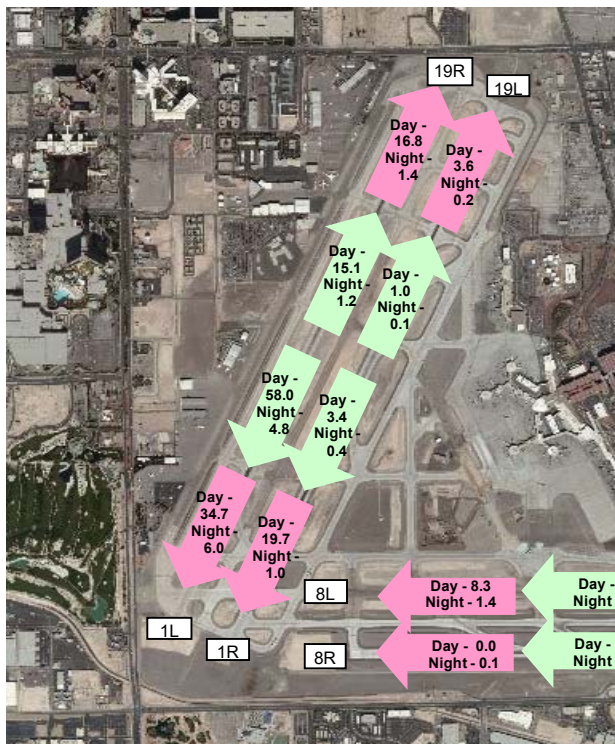
Year	2018		2017		2016	
Daytime Departures	408	81%	409	82%	406	83%
Nighttime Departures	94	19%	88	18%	86	17%
Total Departures	502	100%	497	100%	492	100%

Daytime Arrivals	428	85%	428	86%	428	88%
Nighttime Arrivals	74	15%	70	14%	61	12%
Total Arrivals	502	100%	498	100%	489	100%

Growth	Overall	Daytime	Nighttime
Depts. 2018 vs 2017	1%	0%	6%
Depts. 2018 vs 2016	2%	0%	9%
Arrivals 2018 vs 2017	1%	0%	6%
Arrivals 2018 vs 2016	3%	0%	21%

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

Exhibit 5: LAS Daily Average Operations by Runway for Non-Large Air Carrier Aircraft** - Annual 2018



Year	2018		2017		2016	
Daytime Departures	96	90%	91	90%	84	90%
Nighttime Departures	11	10%	10	10%	10	10%
Total Departures	107	100%	101	100%	93	100%

Daytime Arrivals	95	93%	88	93%	84	93%
Nighttime Arrivals	7	7%	7	7%	7	7%
Total Arrivals	103	100%	95	100%	91	100%

Growth	Overall	Daytime	Nighttime
Depts. 2018 vs 2017	6%	6%	5%
Depts. 2018 vs 2016	15%	15%	11%
Arrivals 2018 vs 2017	8%	8%	6%
Arrivals 2018 vs 2016	14%	14%	12%

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

Exhibit 6: LAS Daily Average Operations by Corridor for Helicopter Tours* - Annual 2018

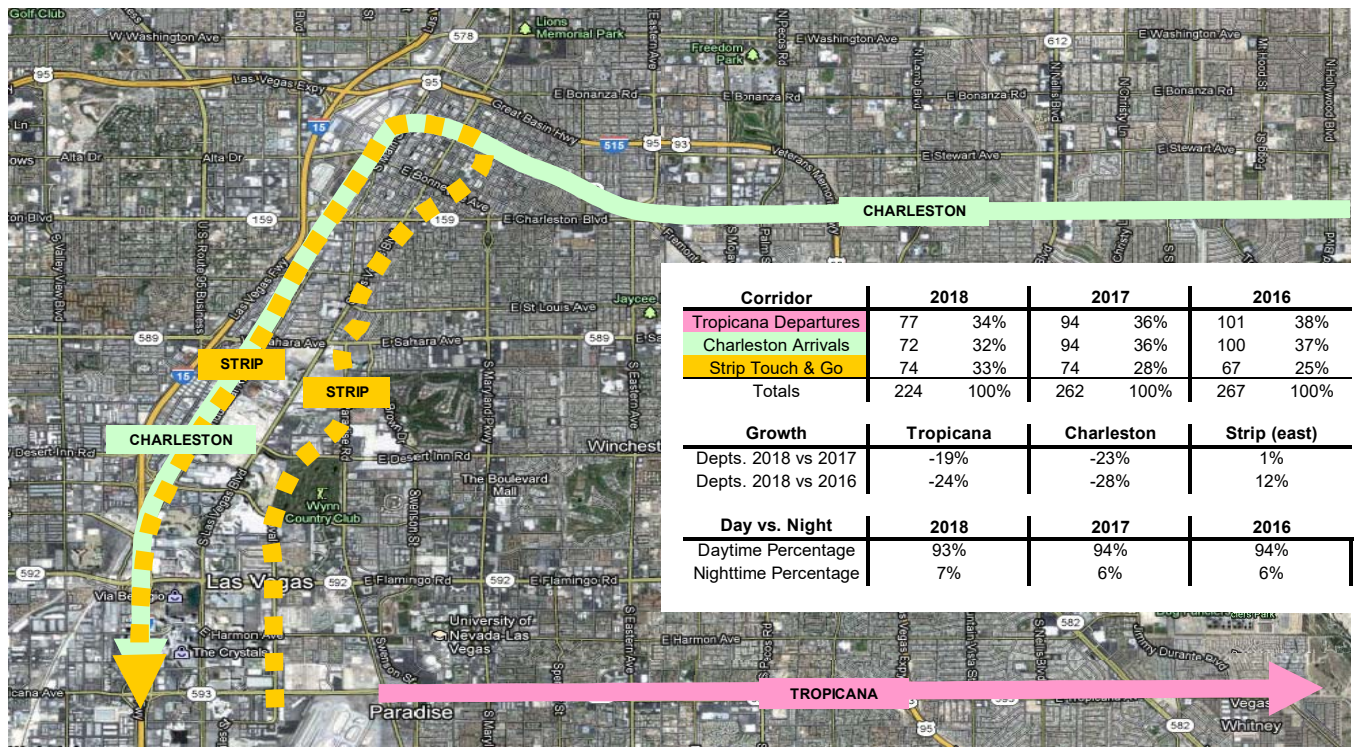
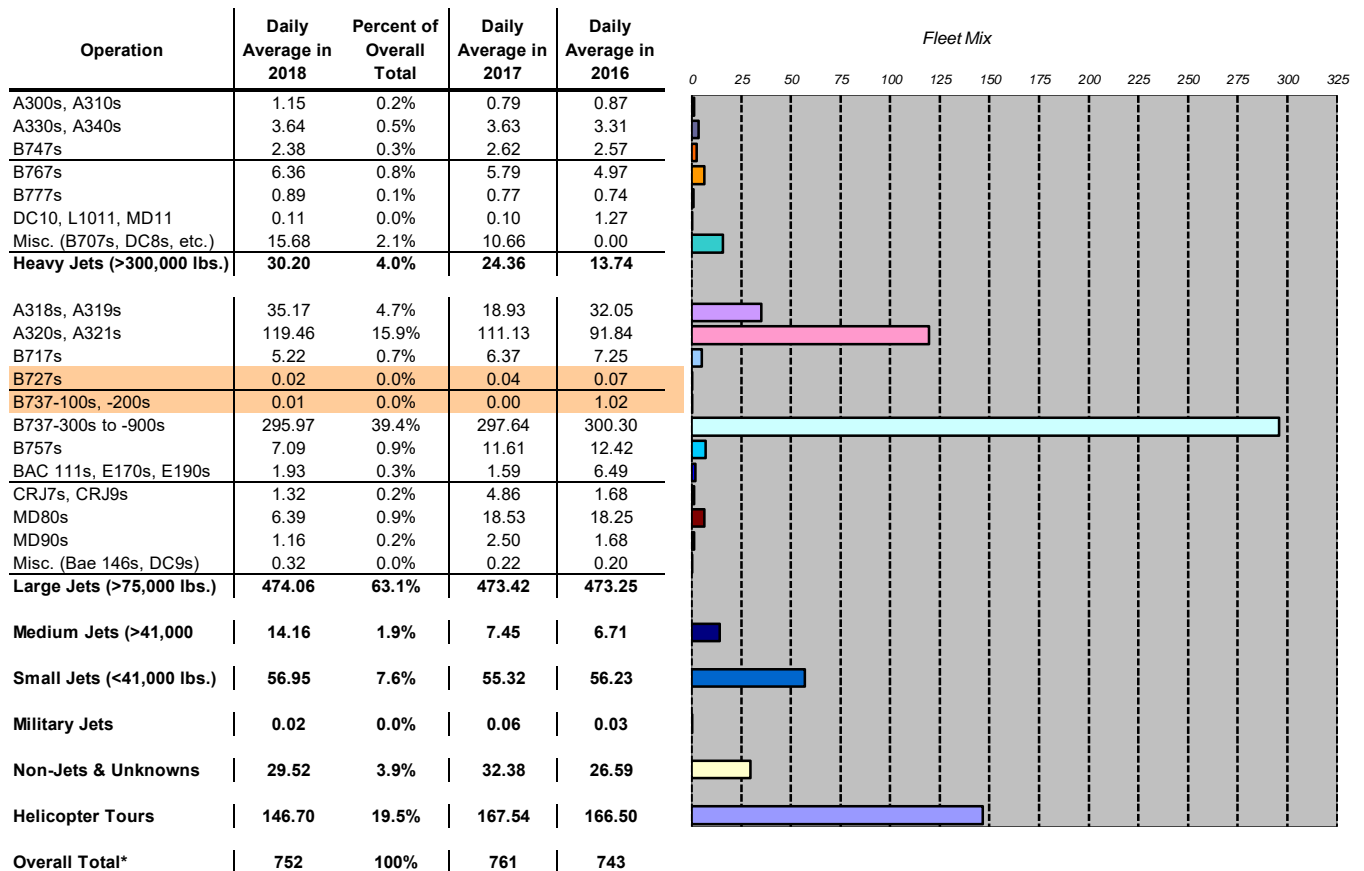


Exhibit 7: LAS Aircraft Arrival Fleet Mix** - Annual 2018



** Overall Total: Note that operation type and runway use counts are estimated by Harris Corp. EnvironmentalVue Noise and Monitoring Operations 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 2018 to 2016

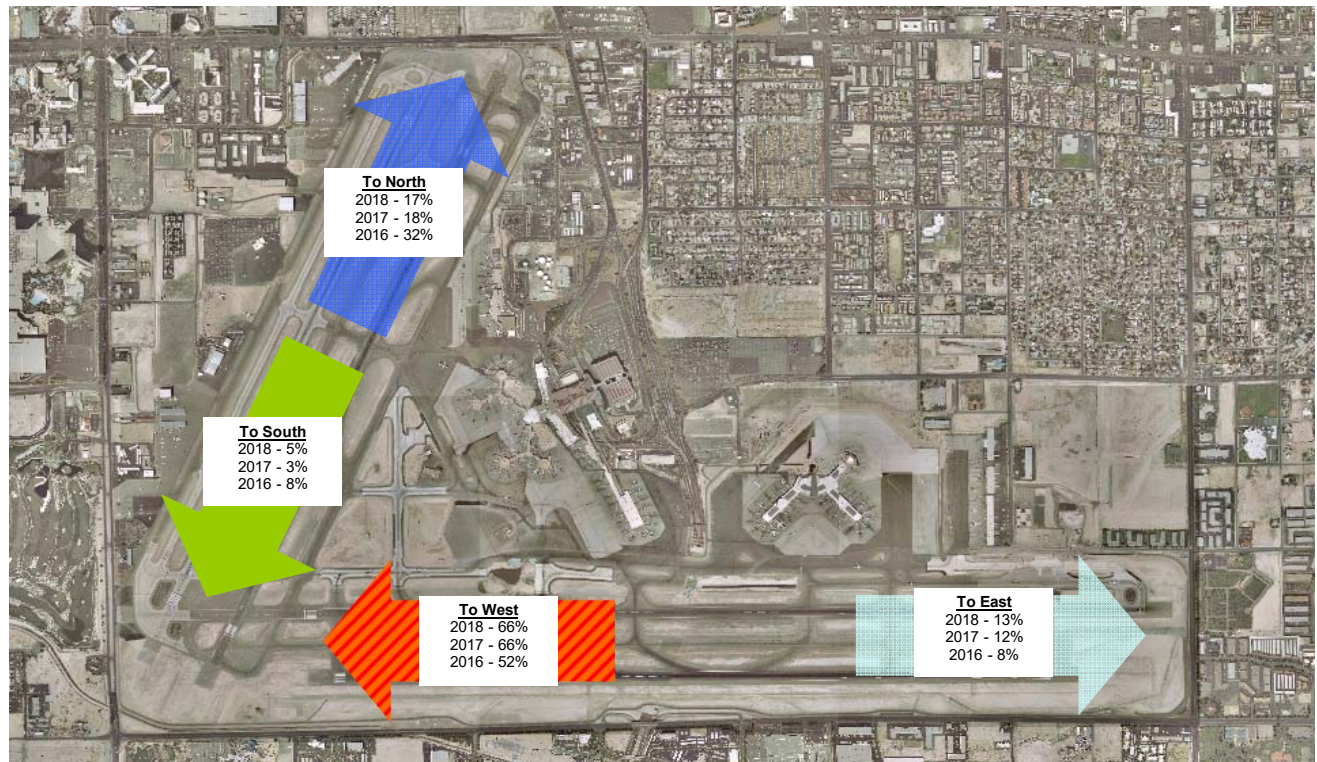
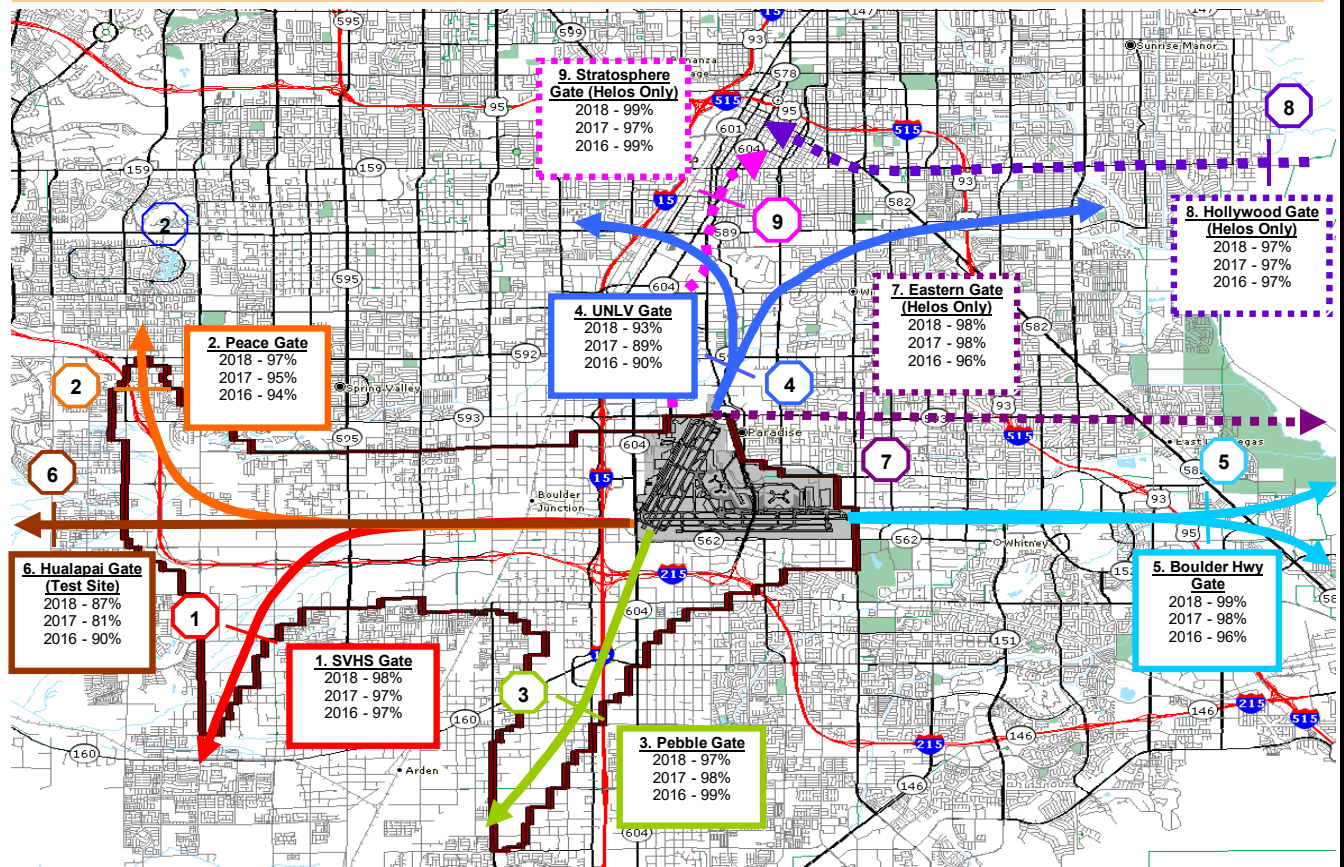


Exhibit 9: "Gate" Compliance for Large Aircraft* & LAS Helicopter Tours - Annual 2018



* 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 10: Total Calls/Callers by Month - 2016 through 2018

Year	January	February	March	April	May	June	July	August	September	October	November	December	January through December Total	Average No. of Calls per Caller
2018 Number of Calls	47	35	68	28	45	55	77	790	202	164	86	67	1,664	9.8
2018 Number of Callers	27	19	39	12	19	6	17	9	15	52	34	16	170	
2017 Number of Calls	58	62	65	46	62	26	24	38	77	85	24	27	594	3.5
2017 Number of Callers	26	23	30	28	31	9	13	20	39	32	17	14	169	
2016 Number of Calls	69	81	60	85	98	17	14	25	29	56	55	40	629	3.1
2016 Number of Callers	28	20	33	48	54	12	10	22	17	31	24	15	205	

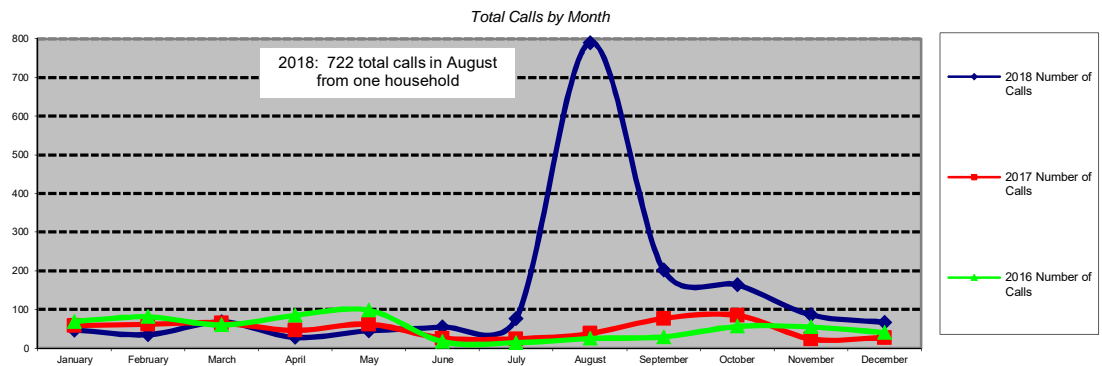


Exhibit 11: Total Monthly Calls by Time of Day - Annual 2018

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.)	43	30	58	23	33	40	51	456	152	131	69	52	1,138	68.4%
Night Hours (10:00 p.m. to 6:59 a.m.)	4	5	10	5	12	15	26	334	50	33	17	15	526	31.6%
Total	47	35	68	28	45	55	77	790	202	164	86	67	1,664	100.0%

Exhibit 12: Total Monthly Calls by Airport/Operation - Annual 2018

Airport	January	February	March	April	May	June	July	August	September	October	November	December	January through December Total	Percent
McCarran International	27	31	58	22	34	54	77	788	200	162	81	64	1,598	96.0%
North Las Vegas	0	0	1	1	2	0	0	0	0	0	2	0	6	0.4%
Henderson Executive	11	3	5	1	4	0	0	0	1	1	0	2	28	1.7%
Helicopter	9	1	4	4	5	1	0	2	1	1	3	1	32	1.9%
Total	47	35	68	28	45	55	77	790	202	164	86	67	1,664	100.0%

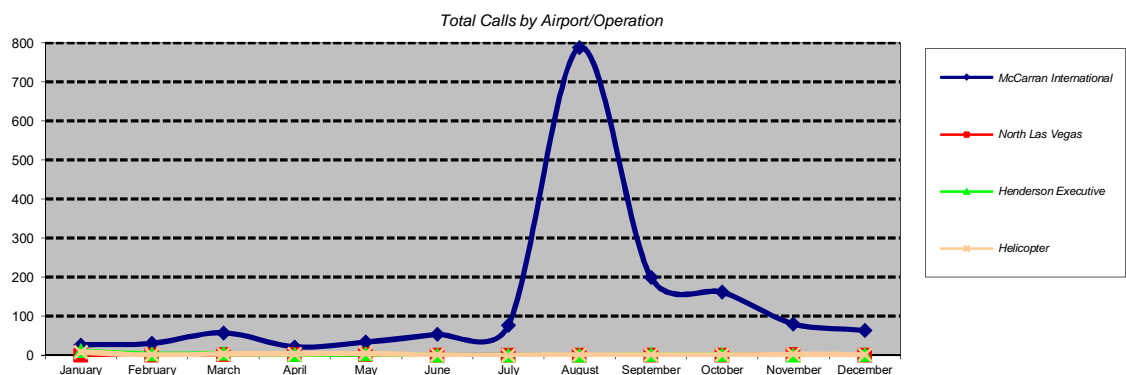


Exhibit 13: Total Monthly Calls by Community - Annual 2018

Community	January	February	March	April	May	June	July	August	September	October	November	December	January through December Total	Percnt
City of Boulder City	0	0	0	2	0	0	0	0	0	0	0	0	2	0.1%
City of Henderson	14	4	8	2	5	1	3	2	4	4	1	3	51	3.1%
City of Las Vegas	4	2	2	1	2	0	1	1	0	2	9	2	26	1.6%
City of North Las Vegas	0	0	2	1	2	0	1	0	0	0	2	0	8	0.5%
Enterprise	6	5	4	1	2	0	3	1	4	15	8	4	53	3.2%
Lone Mountain	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Paradise & Winchester	11	16	39	14	9	2	4	2	7	67	24	4	199	12.0%
Spring Valley	12	7	13	6	24	51	56	62	53	71	39	53	447	26.9%
Summerlin	0	1	0	1	1	1	9	722	134	1	1	1	872	52.4%
Sunrise Manor	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Whitney	0	0	0	0	0	0	0	0	0	4	1	0	5	0.3%
Location unknown	0	0	0	0	0	0	0	0	0	0	1	0	1	0.1%
Overall Total	47	35	68	28	45	55	77	790	202	164	86	67	1,664	100%

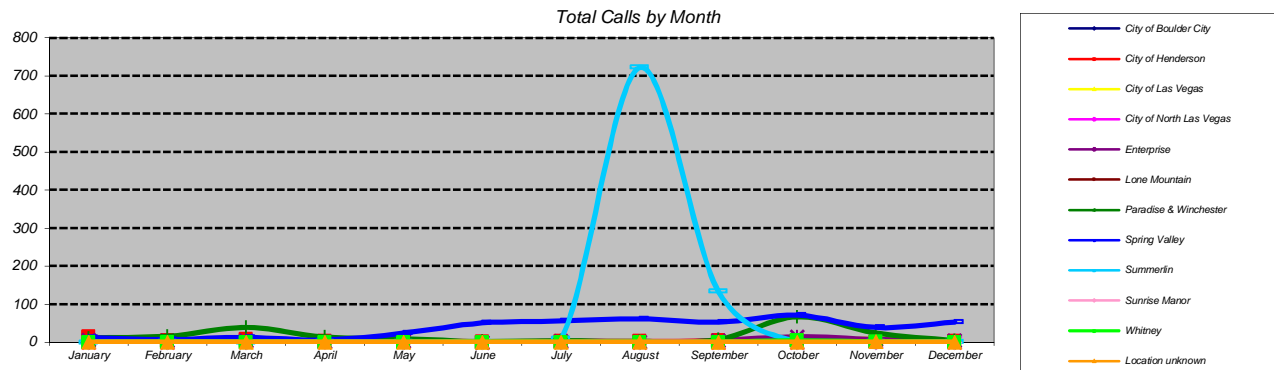


Exhibit 14: Total Monthly Calls by LAS Operation - Annual 2018

LAS Operations	January	February	March	April	May	June	July	August	September	October	November	December	January through December Total	Percnt
LAS 01R/L Arrivals	0	2	2	0	0	0	0	0	0	5	5	1	15	0.9%
LAS 08R/L Arrivals	0	0	0	0	0	0	2	1	0	1	0	0	4	0.3%
LAS 19R/L Arrivals	0	0	1	0	0	0	1	0	0	0	0	0	2	0.1%
LAS 26R/L Arrivals	2	2	3	1	0	0	0	0	5	9	1	0	23	1.4%
LAS 01R/L Departures	11	23	41	19	11	1	2	0	2	93	53	15	271	17.0%
LAS 08R/L Departures	0	0	2	0	1	2	7	1	2	3	0	0	18	1.1%
LAS 19R/L Departures	0	2	2	0	0	0	0	0	0	1	0	1	6	0.4%
LAS 26R/L Departures	13	2	7	2	22	51	65	786	191	50	22	47	1,258	78.7%
LAS Run-ups	1	0	0	0	0	0	0	0	0	0	0	0	1	0.1%
LAS GA	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
LAS Canyon	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
LAS Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
LAS Total	27	31	58	22	34	54	77	788	200	162	81	64	1,598	100.0%

