

# MEMORANDUM

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Director

## DEPARTMENT OF AVIATION

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TO: DISTRIBUTION Digitally signed by George C. Sims

FROM: GEORGE C. SIMS, PLANNER AND ANTHONY PERKINS, MANAGEMENT ANALYST

SUBJECT: OCTOBER, NOVEMBER, DECEMBER AND ANNUAL 2020  
NOISE COMPLAINT AND LAND USE REVIEW REPORTS

DATE: MARCH 4, 2021

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Attached for your review are the Clark County Department of Aviation's (CCDOA) Monthly Noise Complaint Reports for October, November, and December 2020. Also included is the 2020 Annual Noise Complaint Report, covering the period of January through December 2020. 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.

Added in 2019, Exhibits 10 through 17 summarize the CCDOA review of land use applications submitted to the Clark County Comprehensive Planning Department, as well as the Cities of North Las Vegas, Las Vegas, and Henderson. Applications may be issued a comment based on CCDOA concerns.

**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**. Totals for helicopter operations along the Strip include four operations originating from other airport facilities. **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.

**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.

**Exhibit 10** provides the total number of land use applications reviewed and the percentage of applications receiving a CCDOA comment. **Exhibit 11** breaks down the number of commented applications by airport concern. **Exhibit 12** provides the number of residential dwelling units per commented application. **Exhibit 13** gives the number of applications in which CCDOA recommends denial, as well as applications opposed in person at Commission and/or Council hearings. **Exhibit 14** displays the extent of the Airport Environs Overlay District (AEOD) for LAS, VGT, and HND. **Exhibit 15** depicts where noise-related comments were issued for applications around LAS. **Exhibit 16** depicts where noise-related comments were issued for applications around HND. Finally, **Exhibit 17** depicts where noise-related comments were issued for applications around VGT.

The Annual Noise Complaint Report includes additional information not provided in each monthly report. These additional illustrations (Exhibits 18 through 22) 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 18** of the annual report illustrates the number of calls and callers by month, between 2018 and 2020. **Exhibit 19** illustrates the general time when the complaint was received by the CCDOA. Monthly calls by airport or helicopter operation are depicted on **Exhibit 20**. **Exhibit 21** depicts monthly calls by community. The final annual report, **Exhibit 22**, 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 2020:** 18 total complaints - an 83% decrease from 2019 and an 89% decrease from 2018. On average, each caller (or household) issued 1.4 calls. The most calls received from one household totaled 6.

#### **Calls by Community - (Exhibits 1 and 3)**

**Majority (more than 50%):** The **Spring Valley** community issued 9 calls (50%). 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).

**Minority (between 10% and 50%):** The **City of Henderson** community issued 4 calls (22%). This community is typically impacted by aircraft departing to the east (from Runway 08R and Runway 08L), and helicopter tour operations operating from HND.

The **Enterprise** community issued 2 calls (11%). This community is typically impacted by aircraft departing to the south (from Runway 19L and Runway 19R).

The **Paradise and Winchester** communities issued 2 calls (11%). 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:** One household issued 33% (6 calls) of all the calls received in October 2020.

Calls by Operation - (Exhibit 2)

- LAS:** 67% of the total calls were due to **LAS** fixed-wing operations.
- 50% were due to departures to the north from Runways 01L and 01R (67% from one household).
- VGT:** 6% of the total calls were due to **VGT** fixed-wing operations.
- HND:** 28% of the total calls were due to **HND** fixed-wing operations.
- Helis:** 0% of the total calls were due to **helicopter** operations.

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

- Overall:** 301 daily *departures* – a 45% decrease from 2019 and 42% decrease from 2018.
- 64% of departures were to the west, 28% north, 6% south, and 2% east.
- 301 daily *arrivals* – a 44% decrease from 2019 and 42% decrease from 2018.
- 86% of arrivals were from the east, 11% south, 3% north, and 1% west.
- Daytime:** 269 daily *departures* – a 39% decrease from 2019 and 38% decrease from 2018.
- 61% of departures were to the west, 29% north, 7% south, and 2% east.
- 281 daily *arrivals* – a 40% decrease from 2019 and 38% decrease from 2018.
- 85% of arrivals were from the east, 11% south, 3% north, and 1% west.
- Nighttime:** 32 daily *departures* – a 70% decrease from 2019 and 64% decrease from 2018.
- 86% of departures were to the west, 13% north, and 1% south.
- 20 daily *arrivals* – a 73% decrease from 2019 and a 68% decrease from 2018.
- 90% of arrivals were from the east, 8% south, and 2% north.

**Daytime vs. Nighttime:** Approximately 89% of all *departures* and 93% of all *arrivals* occurred during the daytime hours.

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

- Overall:** 83 daily *departures* – a 30% decrease from 2019 and a 24% decrease from 2018.
- 65% of departures were to the south, 29% north, 4% west, and 2% east.
- 83 daily *arrivals* – a 30 decrease from 2019 and a 25% decrease from 2018.
- 62% of arrivals were from the north, 24% south, 12% east, and 1% west.
- Daytime:** 74 daily *departures* – a 33% decrease from 2019 and 26% decrease from 2018.
- 63% of departures were to the south, 31% north, 4% west, and 2% east.
- 77 daily *arrivals* – a 32% decrease from 2019 and a 25% decrease from 2018.
- 61% of arrivals were from the north, 25% south, 13% east, and 1% west.
- Nighttime:** 10 daily *departures* – no change from 2019 and 6% decrease from 2018.
- 80% of departures were to the south, 14% north, and 5% west.
- 6 daily *arrivals* – an 11% decrease from 2019 and a 17% decrease from 2018.
- 77% of arrivals were from the north, 14% south, and 10% east.

**Daytime vs. Nighttime:** Approximately 88% of all *departures* and 92% of all *arrivals* occurred during the daytime hours.

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

**Tropicana:** 15 daily *departures* – an 81% decrease from 2019 and an 82% decrease from 2018.

**Charleston:** 15 daily *arrivals* – an 81% decrease from 2019 and an 82% decrease from 2018.

**Strip:** 50 daily *touch and go's* - a 41% decrease from 2019 and a 34% decrease from 2018.

**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 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 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 6% of the daily traffic.

**Helos:** **Touring helicopters** accounted for 14% 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 2020, 64% departed to the **west** (from LAS's primary departure runways). This figure was 43% in 2019 and 40% in 2018.

**Secondary:** In 2020, 6% departed to the **south** (from LAS's secondary departure runways). This figure was 3% in 2019 and 14% in 2018.

**Alternate 1:** In 2020, 28% departed to the **north** (from LAS's alternate departure runways). This figure was 46% in 2019 and 32% in 2018.

**Alternate 2:** In 2020, 2% departed to the **east** (from LAS's alternate departure runways). This figure was 8% in 2019 and 14% in 2020.



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

**SVHS:** In 2020, 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 99% in 2019 and 98% in 2018.

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 2020, 99% 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 98% in 2019 and 98% in 2018.

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 2020, 96% 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 2019 and 97% in 2018.

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 2020, 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 93% in 2019 and 94% in 2018.

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 2020, 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 2019 and 99% in 2018.

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:** There were no 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 91% in 2019 and 88% in 2018.

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 2020, 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 2019 and 98% in 2018.

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 2020, 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 2019 and 99% in 2018.

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 2020, 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 2019 and 99% in 2018.

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.

#### Land Use Application Reviews & Comments – (Exhibit 10)

**Clark County:** 73 applications were reviewed (a 49% decrease from 2019), with 3 applications (4%) issued at least one comment.

**Henderson:** 12 applications were reviewed (a 77% decrease from 2019), with 2 applications (17%) issued at least one comment.

**Las Vegas:** 78 applications were reviewed (a 40% decrease from 2019), with 1 application (1%) issued at least one comment.

**North Las Vegas:** 14 applications were reviewed (a 27% increase from 2019), with 1 application (7%) issued at least one comment.

#### Land Use Application Comments by Airport Concern – (Exhibit 11)

**Clark County:** 3 comments were issued, with 1 comments issued for “noise” concerns.

**Henderson:** 2 comments were issued, with 1 comment issued for “noise” concerns.

**Las Vegas:** 1 comment was issued, with 0 comments issued “noise” concerns.

**North Las Vegas:** 1 comment was issued, with 1 comment issued for “noise” concerns.

#### Dwelling Units per “Noise,” Commented Application – (Exhibit 12)

**Clark County:** 0 dwelling units were proposed in the commented applications.

**Henderson:** 0 dwelling units were proposed in the commented applications.

**Las Vegas:** 0 dwelling units were proposed in the commented applications.

**North Las Vegas:** 380 dwelling units were proposed in the commented applications, just outside the AEOD.

Land Use Applications Denied and/or Opposed – (Exhibit 13)

0 applications were denied and/or opposed in person.

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.

**November 2020:** 26 total complaints - a 71% decrease from 2019 and a 70% decrease from 2018. On average, each caller (or household) issued 2.2 calls. The most calls received from one household totaled 12.

Calls by Community - (Exhibits 1 and 3)

**Majority (more than 50%):** The **Spring Valley** community issued 13 calls (50%). (See October 2020 synopsis of typical aircraft overflight impacts on this community.)

**Minority (between 10% and 50%):** The **City of Henderson** community issued 8 calls (31%). (See October 2020 synopsis of typical aircraft overflight impacts on this community.)

**Repeat Caller Impact:** One household issued 46% (12 calls) of all the calls received in November 2020.

Calls by Operation - (Exhibit 2)

- LAS:** 69% of the total calls received were due to **LAS** fixed-wing operations.
- 58% were due to departures to the north from Runways 01L and 01R. (80% from one household).
- VGT:** 11% of the total calls received were due to **VGT** fixed-wing operations.
- HND:** 15% of the total calls received were due to **HND** fixed-wing operations.
- Helis:** 4% of the total calls received were due to **helicopter** operations.

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

- Overall:** 321 daily *departures* – a 37% decrease from 2019 and a 35% decrease from 2018.
- 63% of departures were to the west, 30% north, and 7% south.
- 319 daily *arrivals* – a 36% decrease from 2019 and 34% decrease from 2018.
- 86% of arrivals were from the east, 10% south, and 3% north.
- Daytime:** 274 daily *departures* – a 33% decrease from 2019 and a 32% decrease from 2018.
- 59% of departures were to the west, 33% north, and 8% south.
- 293 daily *arrivals* – a 32% decrease from 2019 and a 30% decrease from 2018.
- 86% of arrivals were from the east, 11% south, and 3% north.
- Nighttime:** 47 daily *departures* – a 54% decrease from 2019 and a 47% decrease from 2018.
- 85% of departures were to the west, 13% north, and 2% south.
- 26 daily *arrivals* – a 63% decrease from 2019 and a 61% decrease from 2018.
- 94% of arrivals were from the east, 4% north, and 2% south.

**Daytime vs. Nighttime:** Approximately 85% of all *departures* and 92% of all *arrivals* occurred during the daytime hours.

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

**Overall:** 83 daily *departures* – a 25% decrease from 2019 and a 22% decrease from 2018.  
▪ 65% of departures were to the south, 30% north, and 4% west.  
77 daily *arrivals* – a 28% decrease from 2019 and 27% decrease from 2018.  
▪ 66% of arrivals were from the north, 22% south, 11% east, and 1% west.

**Daytime:** 73 daily *departures* – a 28% decrease from 2019 and a 24% decrease from 2018.  
▪ 63% of departures were to the south, 33% north, and 4% west.  
72 daily *arrivals* – a 28% decrease from 2019 and a 27% decrease from 2018.  
▪ 65% of arrivals were from the north, 23% south, 11% east, and 1% west.

**Nighttime:** 10 daily *departures* – a 2% increase from 2019 and a 4% decrease from 2018.  
▪ 82% of departures were to the south, 11% north, and 7% west.  
5 daily *arrivals* – a 36% decrease from 2019 and a 30% decrease from 2018.  
▪ 81% of arrivals were from the north, 11% south, 7% east, and 1% west.

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

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

**Tropicana:** 19 daily *departures* - a 67% decrease from 2019 and 73% decrease from 2018.

**Charleston:** 18 daily *arrivals* – a 66% decrease from 2019 and 72% decrease from 2018.

**Strip:** 62 daily *touch and go's* – a 26% decrease from 2019 and an 18% decrease from 2018.

**Daytime vs. Nighttime:** Approximately 97% of all helicopter tour operations occurred during the daytime hours.

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

**Heavies:** **Very large** air carrier turbine-driven aircraft (those weighing 300,000 lbs. or more) accounted for 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 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 5% of the daily traffic.

**Helos:** *Touring helicopters* accounted for 17% 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 2020, 63% departed to the *west* (from LAS's primary departure runways). This figure was 63% in 2019 and 45% in 2018.

**Secondary:** In 2020, 7% departed to the *south* (from LAS's secondary departure runways). This figure was 3% in 2019 and 3% in 2018.

**Alternate 1:** In 2020, 30% departed to the *north* (from LAS's alternate departure runways). This figure was 31% in 2019 and 48% in 2018.

**Alternate 2:** In 2020, <1% departed to the *east* (from LAS's alternate departure runways). This figure was 3% in 2019 and 3% in 2018.

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

**SVHS:** In 2020, 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 98% in 2019 and 98% in 2018. (See October 2020 synopsis for specific location of the SVHS gate.)

**Peace:** In 2020, 100% 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 98% in 2019 and 98% in 2018. (See October 2020 synopsis for specific location of the Peace gate.)

**Pebble:** In 2020, 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 2019 and 99% in 2018. (See October 2020 synopsis for specific location of the Pebble gate.)

**UNLV:** In 2020, 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 94% in 2019 and 94% in 2018. (See October 2020 synopsis for specific location of the UNLV gate.)

**Boulder:** In 2020, 92% 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 2019 and 99% in 2018. (See October 2020 synopsis for specific location of the Boulder Hwy. gate.)

**Hualapai:** In 2020, 100% 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 90% in 2019 and 89% in 2018. (See October 2020 synopsis for specific location of the Hualapai gate.)



**Eastern:** In 2020, 100% 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 2019 and 99% in 2018. (See October 2020 synopsis for specific location of the Eastern gate.)

**Hollywood:** In 2020, 100% of the touring helicopters returning from areas east of the Las Vegas Valley were within 500 feet of the intersection of *Charleston Boulevard & Hollywood Boulevard*. This figure was 98% in 2019 and 99% in 2018. (See October 2020 synopsis for specific location of the Hollywood gate.)

**Stratosphere:** In 2020, 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 2019 and 99% in 2018. (See October 2020 synopsis for specific location of the Stratosphere gate.)

#### Land Use Application Reviews & Comments – (Exhibit 10)

**Clark County:** 86 applications were reviewed (a 29% decrease from 2019), with 11 applications (13%) issued at least one comment.

**Henderson:** 58 applications were reviewed (a 26% increase from 2019), with 7 applications (12%) issued at least one comment.

**Las Vegas:** 0 applications were reviewed (a 0% change from 2019).

**North Las Vegas:** 13 applications were reviewed (a 13% decrease from 2019), with 3 applications (23%) issued at least one comment.

#### Land Use Application Comments by Airport Concern – (Exhibit 11)

**Clark County:** 15 comments were issued, with 9 comments issued for “noise” concerns. 1 misc. comment was issued regarding safety/security.

**Henderson:** 8 comments were issued, with 5 comments issued for “noise” concerns.

**Las Vegas:** 0 applications were reviewed.

**North Las Vegas:** 3 comments were issued, with 3 comments issued for “noise” concerns.

#### Dwelling Units per “Noise,” Commented Application – (Exhibit 12)

**Clark County:** 674 dwelling units were proposed in the commented applications, just outside the AEOD.

**Henderson:** 179 dwelling units were proposed in the commented applications, within the AEOD. 472 dwelling units were proposed in the commented applications, just outside the AEOD.

**Las Vegas:** 0 applications were reviewed.

**North Las Vegas:** 261 dwelling units were proposed in the commented applications, just outside the AEOD.



Land Use Applications Denied and/or Opposed – (Exhibit 13)

**Clark County – Opposed** – NZC-20-0289 and related application TM-20-500096, for residential uses in the AE-60 (67 units). APNs 163-34-501-011, 017, 023, 024, and a zone change from RE C2 to R2. Opposed in person 11/18/20 at the Zoning Commission. Applications approved.

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.

**December 2020:** 28 total complaints – a 78% decrease from 2019 and a 58% decrease from 2018. On average, each caller (or household) issued 3.1 calls. The most calls received from one household totaled 18.

Calls by Community - (Exhibits 1 and 3)

**Majority (more than 50%):** The **Spring Valley** community issued 18 calls (64%). (See October 2020 synopsis of typical aircraft overflight impacts on this community.)

**Minority (between 10% and 50%):** The **City of Henderson** community issued 3 calls (11%). (See October 2020 synopsis of typical aircraft overflight impacts on this community.)

**Repeat Caller Impact:** One household issued 64% (18 calls) of all the calls received in December 2020.

Calls by Operation - (Exhibit 2)

**LAS:** 82% of the total calls received were due to **LAS** fixed-wing operations.  
▪ 79% were due to departures to the north from Runways 01L and 01R (82% from one household).

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

**HND:** 14% of the total calls received were due to **HND** fixed-wing operations.

**Helis:** 4% of the total calls received were due to **helicopter** operations.

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

**Overall:** 289 daily *departures* – a 41% decrease from 2019 and 39% decrease from 2018.  
▪ 54% of departures were to the west, 35% north, 6% south, and 6% east.  
287 daily *arrivals* – a 41% decrease from 2019 and 38% decrease from 2018.  
▪ 79% of arrivals were from the east, 18% south, and 2% north.

**Daytime:** 245 daily *departures* – a 37% decrease from 2019 and a 37% decrease from 2018.  
▪ 51% of departures were to the west, 36% north, 7% south, and 6% east.  
265 daily *arrivals* – a 35% decrease from 2019 and a 35% decrease from 2018.  
▪ 78% of arrivals were from the east, 19% south, and 2% north.

**Nighttime:** 44 daily *departures* – a 57% decrease from 2019 and a 49% decrease from 2018.  
▪ 68% of departures were to the west, 30% north, 1% south, and 1% east.  
23 daily *arrivals* – a 70% decrease from 2019 and a 62% decrease from 2018.  
▪ 91% of arrivals were from the east, 7% south, and 3% north.

**Daytime vs. Nighttime:** Approximately 85% of all *departures* and 92% of all *arrivals* occurred during the daytime hours.

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

**Overall:** 68 daily *departures* – a 36% decrease from 2019 and a 31% decrease from 2018.  
▪ 54% of departures were to the south, 38% north, 5% east, and 4% west.  
64 daily *arrivals* – a 39% decrease from 2019 and 36% decrease from 2018.  
▪ 49% of arrivals were from the north, 36% south, and 15% east.

**Daytime:** 60 daily *departures* – a 39% decrease from 2019 and a 34% decrease from 2018.  
▪ 52% of departures were to the south, 39% north, 5% east, and 4% west.  
61 daily *arrivals* – a 39% decrease from 2019 and 36% decrease from 2018.  
▪ 48% of arrivals were from the north, 36% south, and 16% east.

**Nighttime:** 8 daily *departures* – an 11% decrease from 2019 and a 3% increase from 2018.  
▪ 63% of departures were to the south, 30% north, and 7% west.  
4 daily *arrivals* – a 46% decrease from 2019 and a 41% decrease from 2018.  
▪ 63% of arrivals were from the north, 29% south, and 8% east.

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

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

**Tropicana:** 15 daily *departures* - a 68% decrease from 2019 and a 73% decrease from 2018.

**Charleston:** 15 daily *arrivals* – a 68% decrease from 2019 and a 72% decrease from 2018.

**Strip:** 50 daily *touch and go's* - a 32% decrease from 2019 and a 33% decrease from 2018.

**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 5% 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 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 16% 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 2020, 54% departed to the *west* (from LAS's primary departure runways). This figure was 50% in 2019 and 73% in 2018.

**Secondary:** In 2020, 6% departed to the *south* (from LAS's secondary departure runways). This figure was 4% in 2019 and 3% in 2018.

**Alternate 1:** In 2020, 35% departed to the *north* (from LAS's alternate departure runways). This figure was 44% in 2019 and 24% in 2018.

**Alternate 2:** In 2020, 5% departed to the *east* (from LAS's alternate departure runways). This figure was 2% in 2019 and 1% in 2018.

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

**SVHS:** In 2020, 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 98% in 2019 and 99% in 2018. (See October 2020 synopsis for specific location of the SVHS gate.)

**Peace:** In 2020, 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 right-hand turn were within 0.3 NM of the intersection of *Peace Way & Summers Shade Street*. This figure was 97% in 2019 and 98% in 2018. (See October 2020 synopsis for specific location of the Peace gate.)

**Pebble:** In 2020, 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 99% in 2019 and 97% in 2018. (See October 2020 synopsis for specific location of the Pebble gate.)

**UNLV:** In 2020, 87% 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 2019 and 91% in 2018. (See October 2020 synopsis for specific location of the UNLV gate.)

**Boulder:** In 2020, 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 99% in 2019 and 100% in 2018. (See October 2020 synopsis for specific location of the Boulder Hwy. gate.)

**Hualapai:** In 2020, 100% 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 93% in 2019 and 94% in 2018. (See October 2020 synopsis for specific location of the Hualapai gate.)

**Eastern:** In 2020, 100% 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 2019 and 99% in 2018. (See October 2020 synopsis for specific location of the Eastern gate.)

**Hollywood:** In 2020, 100% 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 2019 and 99% in 2018. (See October 2020 synopsis for specific location of the Hollywood gate.)

**Stratosphere:** In 2020, 100% 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 2019 and 99% in 2018. (See October 2020 synopsis for specific location of the Stratosphere gate.)

#### Land Use Application Reviews & Comments – (Exhibit 10)

**Clark County:** 117 applications were reviewed (a 27% decrease from 2019), with 12 applications (10%) issued at least one comment.

**Henderson:** 41 applications were reviewed (a 156% increase from 2019), with 3 applications (7%) issued at least one comment.

**Las Vegas:** 37 applications were reviewed (a 54% decrease from 2019), with 2 applications (5%) issued at least one comment.

**North Las Vegas:** 16 applications were reviewed (a 45% increase from 2019), with 2 applications (13%) issued at least one comment.

#### Land Use Application Comments by Airport Concern – (Exhibit 11)

**Clark County:** 14 comments were issued, with 6 comments issued for “noise” concerns. 1 misc. comment was issued regarding the need for ongoing communication referencing potential development of DOA owned parcels.

**Henderson:** 5 comments were issued, with 2 comments issued for “noise” concerns.

**Las Vegas:** 2 comments were issued, with 1 comment issued for “noise” concerns.

**North Las Vegas:** 4 comments were issued, with 2 comments issued for “noise” concerns. 1 misc. comment was issued for Runway Protection Zone (RPZ) concerns.

#### Dwelling Units per “Noise,” Commented Application – (Exhibit 12)

**Clark County:** 694 dwelling units were proposed in the commented applications, just outside the AEOD.

**Henderson:** 366 dwelling units were proposed in the commented applications, just outside the AEOD.

**Las Vegas:** 25 dwelling units were proposed in the commented applications, just outside the AEOD.

**North Las Vegas:** 144 dwelling units were proposed in the commented applications, within the AEOD. 22 dwelling units were proposed in the commented applications, just outside the AEOD.

Land Use Applications Denied and/or Opposed – (Exhibit 13)

**North Las Vegas – Opposed** – AMP-000014-2020, T-MAP-000016-2020, ZN-000023-2020 – APNs 139-07-417-015, 016. A zone change from commercial PUD to R-CL (residential) in the AE-65 & AE-60 (144 units). Opposed via video (Covid-19 restrictions) at the 11/13/21 Planning Commission and 2/17/21 City Council meetings. Applications approved

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.

Annual Noise Complaint Summaries

**2020:** 659 total complaints – a 33% decrease from 2019 and a 60% decrease from 2018. On average, each caller (or household) issued 4.5 calls. The most calls received from one household totaled 244.

Calls by Community - (Exhibits 1 and 3)

**Majority (more than 50%):** The **Spring Valley** community issued 421 calls (64%). (See October 2020 synopsis of typical aircraft overflight impacts on this community.)

**Minority (between 10% and 50%):** The **Enterprise** community issued 89 calls (13%). (See October 2020 synopsis of typical aircraft overflight impacts on this community.)

The **Paradise and Winchester** communities issued 65 calls (10%). (See October 2020 synopsis of typical aircraft overflight impacts on this community.)

**Repeat Caller Impact:** One household issued 37% (244 calls) of all the calls received in 2020.

Calls by Operation - (Exhibit 2)

**LAS:** 90% of the total calls received were due to **LAS** fixed-wing operations.

- 71% were due to departures to the north from Runways 01L and 01R (78% from two households).

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

**HND:** 7% 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:** 307 daily *departures* – a 41% decrease from 2019 and a 39% decrease from 2018.

- 56% of departures were to the west, 33% north, 6% south, and 5% east.

305 daily *arrivals* – a 40% decrease from 2019 and 39% decrease from 2018.

- 77% of arrivals were from the east, 15% south, 6% north, and 1% west.

**Daytime:** 263 daily *departures* – a 36% decrease from 2019 and a 35% decrease from 2018.

- 55% of departures were to the west, 33% north, 6% east, and 6% south.

276 daily *arrivals* – a 37% decrease from 2019 and a 36% decrease from 2018.

- 76% of arrivals were from the east, 16% south, 7% north, and 2% west.

- Nighttime:** 44 daily *departures* – a 58% decrease from 2019 and a 54% decrease from 2018.
- 65% of departures were to the west, 32% north, and 2% south.
- 29 daily *arrivals* – a 60% decrease from 2019 and a 60% decrease from 2018.
- 85% of arrivals were from the east, 12% south, and 3% north.

**Daytime vs. Nighttime:** Approximately 86% of all *departures* and 90% of all *arrivals* occurred during the daytime hours.

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

- Overall:** 75 daily *departures* – a 31% decrease from 2019 and a 30% decrease from 2018.
- 55% of departures were to the south, 33% north, 7% west, and 5% east.
- 71 daily *arrivals* – a 33% increase from 2019 and 31% decrease from 2018.
- 54% of arrivals were from the north, 25% south, 19% east, and 3% west.

- Daytime:** 66 daily *departures* – a 3% decrease from 2019 and a 31% decrease from 2018.
- 54% of departures were to the south, 34% north, 7% west, and 5% east.
- 66 daily *arrivals* – a 33% decrease from 2019 and 31% decrease from 2018.
- 53% of arrivals were from the north, 25% south, 19% east, and 3% west.

- Nighttime:** 9 daily *departures* – a 10% decrease from 2019 and 16% decrease from 2018.
- 67% of departures were to the south, 23% north, and 9% west.
- 5 daily *arrivals* – a 32% decrease from 2019 and a 32% decrease from 2018.
- 64% of arrivals were from the north, 21% south, 14% east, and 1% west.

**Daytime vs. Nighttime:** Approximately 88% of all *departures* and 93% of all *arrivals* occurred during the daytime hours.

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

**Tropicana:** 18 daily *departures* – a 74% decrease from 2019 and 77% decrease from 2018.

**Charleston:** 18 daily *arrivals* - a 74% decrease from 2019 and 76% decrease from 2018.

**Strip:** 43 daily *touch and go's* - a 47% decrease from 2019 and 42% decrease from 2018.

**Daytime vs. Nighttime:** Approximately 89% 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 5% of the daily traffic.

**Large:** **Large** air carrier turbine-driven aircraft (those weighing more than 75,000 lbs. and less than 300,000 lbs.) accounted for 65% of the daily traffic.

**Medium:** **Medium** turbine-driven aircraft (those weighing more than 41,000 lbs. and less than 75,000 lbs.) accounted for 3% 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 less than 1% of the daily traffic.

**Non-Jet:** *Piston-driven* aircraft and unassigned aircraft types accounted for 5% of the daily traffic.

**Helos:** *Touring helicopters* accounted for 14% 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 2020, 57% departed to the *west* (from LAS's primary departure runways). This figure was 62% in 2019 and 66% in 2018.

**Secondary:** In 2020, 6% departed to the *south* (from LAS's secondary departure runways). This figure was 5% in 2019 and 5% in 2018.

**Alternate 1:** In 2020, 33% departed to the *north* (from LAS's alternate departure runways). This figure was 24% in 2019 and 17% in 2018.

**Alternate 2:** In 2020, 5% departed to the *east* (from LAS's alternate departure runways). This figure was 9% in 2019 and 13% in 2018.

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

**SVHS:** In 2020, 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 98% in 2019 and 98% in 2018. (See October 2020 synopsis for specific location of the SVHS gate.)

**Peace:** In 2020, 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 98% in 2019 and 97% in 2018. (See October 2020 synopsis for specific location of the Peace gate.)

**Pebble:** In 2020, 96% 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 2019 and 97% in 2018. (See October 2020 synopsis for specific location of the Pebble gate.)

**UNLV:** In 2020, 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 93% in 2019 and 93% in 2018. (See October 2020 synopsis for specific location of the UNLV gate.)

**Boulder:** In 2020, 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 2019 and 99% in 2018. (See October 2020 synopsis for specific location of the Boulder Hwy. gate.)



**Hualapai:** In 2020, 72% 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 97% in 2019 and 87% in 2018. (See October 2020 synopsis for specific location of the Hualapai gate.)

**Eastern:** In 2020, 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 2019 and 98% in 2018. (See October 2020 synopsis for specific location of the Eastern gate.)

**Hollywood:** In 2020, 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 2019 and 97% in 2018. (See October 2020 synopsis for specific location of the Hollywood gate.)

**Stratosphere:** In 2020, 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 2019 and 99% in 2018. (See October 2020 synopsis for specific location of the Stratosphere gate.)

#### Land Use Application Reviews & Comments – (Exhibit 10)

**Clark County:** 1,049 applications were reviewed (a 40% decrease from 2019), with 88 applications (8%) issued at least one comment.

**Henderson:** 505 applications were reviewed (a 7% decrease from 2019), with 46 applications (9%) issued at least one comment.

**Las Vegas:** 533 applications were reviewed (a 50% decrease from 2019), with 7 applications (1%) issued at least one comment.

**North Las Vegas:** 153 applications were reviewed (a 35% decrease from 2019), with 20 applications (13%) issued at least one comment.

#### Land Use Application Comments by Airport Concern – (Exhibit 11)

**Clark County:** 106 comments were issued, with 58 comments issued for “noise” concerns. 2 misc. comments were issued with detailed information available in the monthly reports.

**Henderson:** 62 comments were issued, with 31 comments issued for “noise” concerns.

**Las Vegas:** 7 comments were issued, with 2 comments issued for “noise” concerns.

**North Las Vegas:** 22 comments were issued, with 18 comments issued for “noise” concerns. 1 misc. comment was issued with detailed information available in the monthly reports.

#### Dwelling Units per “Noise,” Commented Application – (Exhibit 12)

**Clark County:** 136 dwelling units were proposed in the commented applications, within the AEOD. 5,746 dwelling units were proposed in the commented applications, just outside the AEOD.

**Henderson:** 630 dwelling units were proposed in the commented applications, within the AEOD. 4,200 dwelling units were proposed in the commented applications, just outside the AEOD.

**Las Vegas:** 260 dwelling units were proposed in the commented applications, just outside the AEOD.

**North Las Vegas:** 300 dwelling units were proposed in the commented applications, within the AEOD. 3,462 dwelling units were proposed in the commented applications, just outside the AEOD.

Land Use Applications Denied and/or Opposed – (Exhibit 13)

\* Detailed information is available in the monthly reports.

**Clark County:** 2 applications CCDOA recommended denial. 4 applications CCDOA opposed at hearings.

**Henderson:** 1 application CCDOA recommended denial.

**Las Vegas:** 0 applications CCDOA recommended denial and/or opposed.

**North Las Vegas:** 2 applications CCDOA recommend denial.

Calls by Month - (Exhibit 18)

**Seasonal Trends:** The majority of the calls received for 2020 occurred in January (51% of the total number of complaint calls received). The vast majority of calls received were associated with departures to the north, with 73% 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 19)

**Daytime versus Nighttime:** Approximately 82% of the total calls received by the CCDOA were issued between the hours of 7 AM and 10 PM (30% from one household) while the remaining 18% were received between the hours of 10 PM and 7 AM (68% from one household, which is the same household that issued 30% of the calls between the hours of 7 AM and 10 PM).

Calls by Airport/Operation - (Exhibit 20)

**Airport Trends:** A majority (90%) of the total calls received in 2020 were attributed to LAS operations (41% from one household, which is the same household that issued 30% of the calls between 7 AM and 10 PM, and 68% of the calls between 10 PM and 7 AM).

Calls by Community - (Exhibit 21)

**Community Trends:** A majority of the total calls (64%) originated from the *Spring Valley* community. Calls received from *Spring Valley* were attributed to westbound departures from Runway 26R, and northbound departures turning west then south from Runway 01R. However, 57% of the total 421 calls received from this community were from a single household.

Calls by LAS Operations - (Exhibit 22)

**LAS Trends:** The majority (79%) of the total calls received were associated with typical increased departures to the north from Runways 01R and 01L, and to the west from Runways 26R and 26L (51% from one household, which is the same household that issued 30% of the calls between 7 AM and 10 PM, and 68% of the calls between 10 PM and 7 AM, and 41% of the total calls attributed to LAS operations).

Other Notable Issues

**Las Vegas Metroplex Project:** The Federal Aviation Administration (FAA) implemented the Las Vegas Metroplex project on February 25, 2021. The comprehensive project utilizes satellite navigation to move air traffic more safely and efficiently through the area. New routes for McCarran International Airport, Henderson Executive Airport, and North Las Vegas Airport will be more direct, automatically separated from each other and have efficient climb and descent profiles. It is one of 11 Metroplex projects nationwide. Community involvement was a critical part of the project's environmental process. The FAA conducted a thorough environmental review and extensive public engagement for the project, including 11 public workshops in 2017 and 2019. The agency also held four public comment periods totaling more than 120 days, and evaluated and responded to more than 140 comments. After the FAA implements the new procedures, some flight track dispersion will continue to occur as it does today. Additionally, air traffic controllers will continue to sometimes direct aircraft off published routes for safety or efficiency or to reroute them around weather systems. The FAA issued the Finding of No Significant Impact-Record of Decision (FONSI-ROD) for the Las Vegas Metroplex project in July 2020. The agency's initial plan to implement the new routes in November 2020 was delayed by the COVID-19 public health emergency. After issuing the FONSI-ROD, the FAA made minor adjustments to five procedures that are part of the project. The agency conducted a thorough review of the changes and confirmed they did not warrant a supplement to the final Environmental Assessment, consistent with FAA environmental policy. The Las Vegas Metroplex environmental website includes Google Earth features that enable the public to view historic and projected flight paths associated with the project, as well as the noise analysis the FAA conducted at more than 172,000 grid points throughout the projected General Study Area.

**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

March 4, 2021

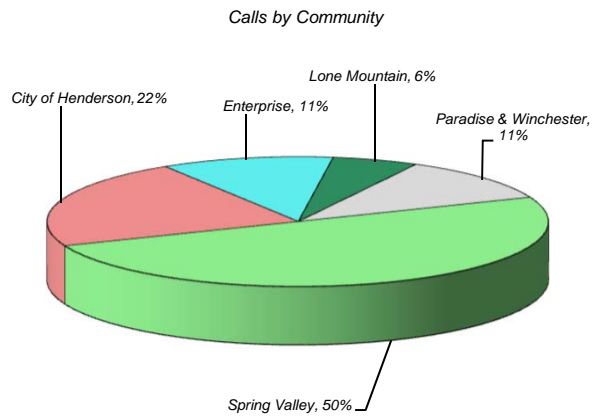
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Jon Holman (FAA ATC)	Jennifer Lewis (Scottsdale Airport)
Charlie Halterman (HND Tower)	Frank Iacovino (Mass Port Authority)
Richard Falcon (FAA FSDO)	Robert Butler (Papillon Helicopters)
Bristol Ellington (COH)	Christine Gerencher (American Airlines)
Elizabeth Fretwell (CLV)	Bert Ganoung (SFO)
Mayor Carolyn Goodman (CLV)	San Diego Airport Noise Management
Mayor Pro Tem Lois Tarkanian (CLV)	Jeannie Denham (Citizen)
Councilman S. Anthony (CLV)	Judge Bob Johnston (Citizen)
Councilman Bob Coffin (CLV)	Roy Fuhrmann (Metro Airports Commission)
Councilman Steven S. Seroka (CLV)	Tom Schaus (Sundance Helicopters)
Councilwoman Michele Fiore (CLV)	Brooke Satern (Port of Portland)
Councilman Cedric Crear (CLV)	Gary Brodt (Citizen)
Brok Armantrout (CBC)	James P. Callahan (Nellis AFB)
David Parks (Nevada State Assembly)	Stan Shepherd (SEATAC)
J. Gordon Arkin (Foley & Lardner)	Eric Sheng (Long Beach Airport)
John Williams (Ricondo)	Jason Schwartz (Portland Airport)
Douglas Pomeroy (FAA ADO)	Todd Lobato (Nellis AFB)
La Nea M. Conner (Boeing)	Steven Peacock (Dallas City Hall)
Mike Jeck (Metro Wash. Air Auth.)	William Olivieri (Citizen)
Karen Everitt (Dallas City Hall)	
Samuel Carter (Harris)	

### Exhibit 1: Noise Complaint Calls by Community\* - October 2020

Community	No. of Calls in 2020	No. of Callers in 2020	No. of Calls in 2019	No. of Calls in 2018
City of Boulder City	4	4	3	4
City of Henderson			2	2
City of Las Vegas			1	
City of North Las Vegas				
Enterprise	2	2	3	15
Lone Mountain	1	1		
Paradise & Winchester	2	2	14	67
Spring Valley	9	4	82	71
Summerlin South				1
Sunrise Manor				
Whitney				4
Location unknown				
<b>Overall Total</b>	<b>18</b>	<b>13</b>	<b>105</b>	<b>164</b>



**Difference between 2020 and 2019 Total Calls: -83%**

**Difference between 2020 and 2018 Total Calls: -89%**

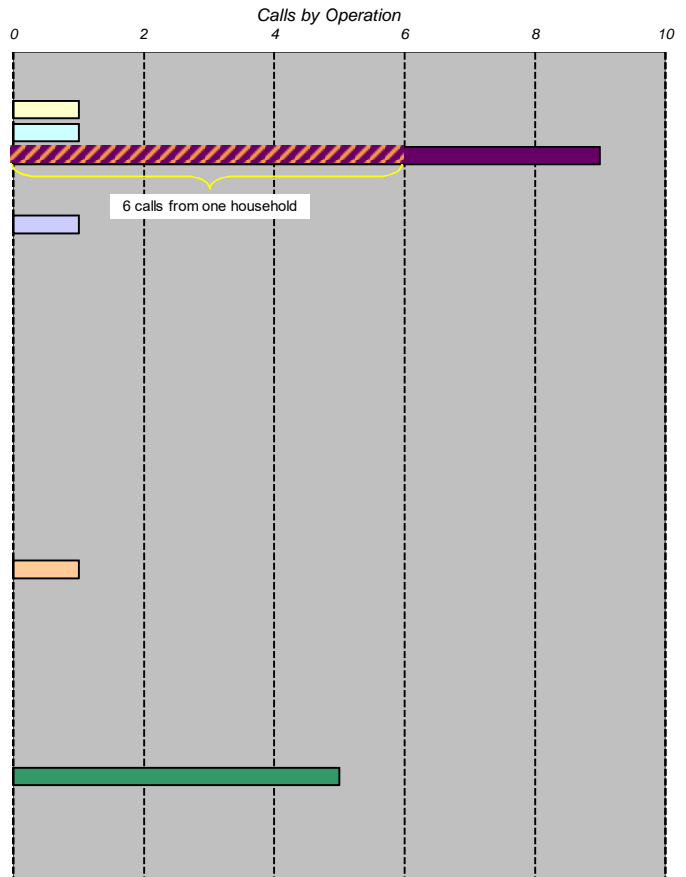
**Average Number of Calls per Caller: 1.4**

**Most calls received from one household: 6**

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

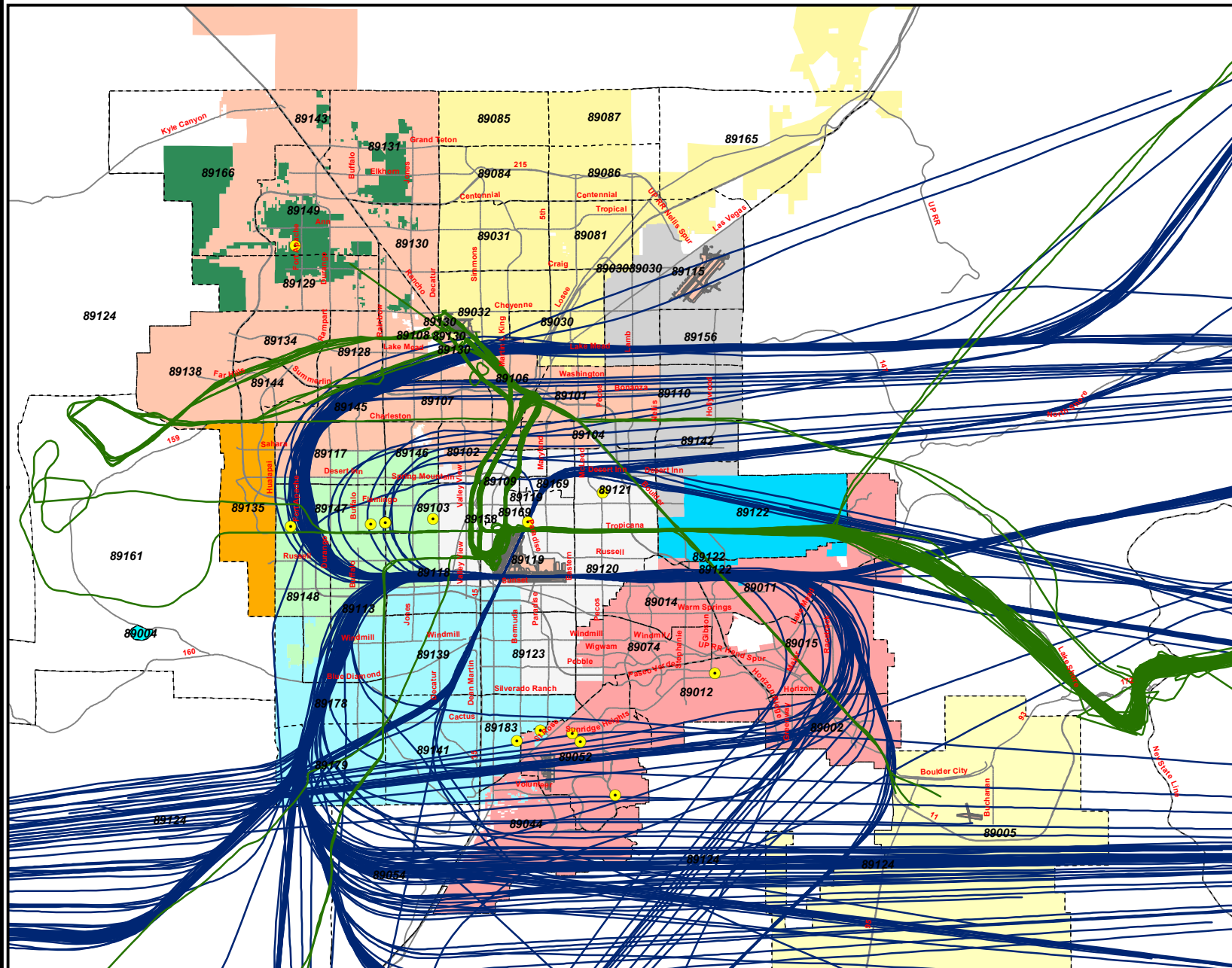
### Exhibit 2: Noise Complaint Calls by Type of Operation - October 2020

Operation	No. of Calls in 2020	Percent of Overall Total	No. of Calls in 2019	No. of Calls in 2018
LAS 01R/L Arrivals			1	5
LAS 08R/L Arrivals				1
LAS 19R/L Arrivals	1	5.6%		
LAS 26R/L Arrivals	1	5.6%	1	9
LAS 01R/L Departures	9	50.0%	88	93
LAS 08R/L Departures				3
LAS 19R/L Departures			2	1
LAS 26R/L Departures	1	5.6%	9	50
LAS Run-ups				
LAS GA				
LAS Other				
<b>LAS Total</b>	<b>12</b>	<b>66.7%</b>	<b>101</b>	<b>162</b>
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			1	
VGT GA	1	5.6%	1	
VGT Other				
<b>VGT Total</b>	<b>1</b>	<b>5.6%</b>	<b>2</b>	<b>0</b>
HND 17R/L Arrivals				
HND 35R/L Arrivals				
HND 17R/L Departures				
HND 35R/L Departures				
HND Run-ups				
HND GA	5	27.8%	1	1
HND Other				
<b>HND Total</b>	<b>5</b>	<b>27.8%</b>	<b>1</b>	<b>1</b>
<b>Helicopters**</b>			<b>1</b>	<b>1</b>
<b>Overall Total</b>	<b>18</b>	<b>100%</b>	<b>105</b>	<b>164</b>



\*\* 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 2020



**Legend**

October 2020  
Total Complaints: 18

- Aircraft Complaints Received 18 Mapped 18
- ★ Helicopter Complaints Received 0 Mapped 0
- Major Streets
- Airports
- - - Zip Code Boundaries
- Typical Large Air Carrier Departure Tracks
- Typical Touring Helicopter Tracks
- 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

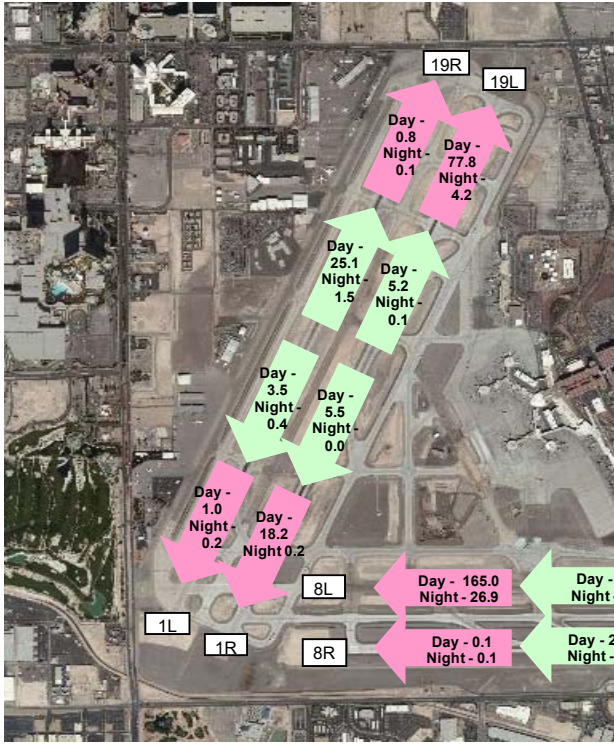
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Note: This information is for display purposes only. No liability is assumed with the accuracy of the data displayed hereon.

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### Exhibit 4: LAS Daily Average Operations Runway for Large Air Carrier Aircraft\* - October 2020



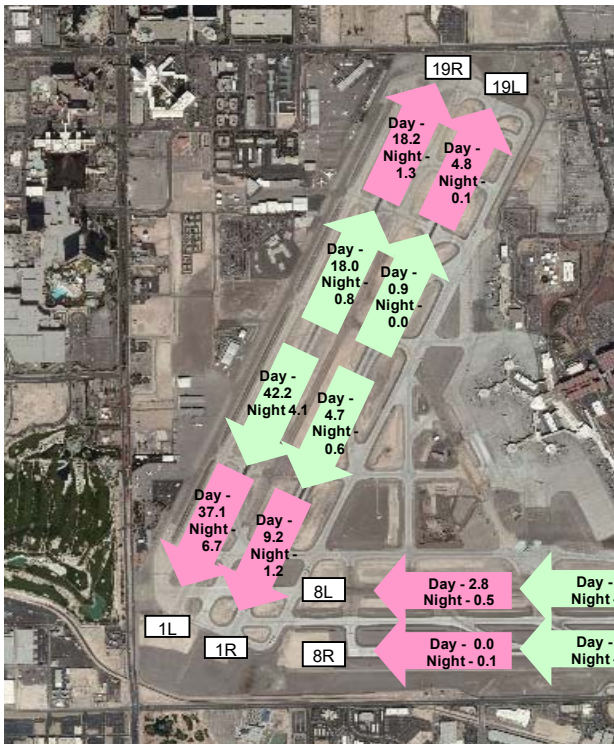
Year	2020		2019		2018	
Daytime Departures	269	89%	443	81%	434	83%
Nighttime Departures	32	11%	104	19%	88	17%
<b>Total Departures</b>	<b>301</b>	<b>100%</b>	<b>547</b>	<b>100%</b>	<b>522</b>	<b>100%</b>

Daytime Arrivals	281	93%	466	86%	453	88%
Nighttime Arrivals	20	7%	74	14%	64	12%
<b>Total Arrivals</b>	<b>301</b>	<b>100%</b>	<b>541</b>	<b>100%</b>	<b>517</b>	<b>100%</b>

Growth	Overall	Daytime	Nighttime
Depts. 2020 vs 2019	-45%	-39%	-70%
Depts. 2020 vs 2018	-42%	-38%	-64%
Arrivals 2020 vs 2019	-44%	-40%	-73%
Arrivals 2020 vs 2018	-42%	-38%	-68%

\* 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 2020



Year	2020		2019		2018	
Daytime Departures	74	88%	110	92%	99	90%
Nighttime Departures	10	12%	10	8%	11	10%
<b>Total Departures</b>	<b>83</b>	<b>100%</b>	<b>120</b>	<b>100%</b>	<b>109</b>	<b>100%</b>

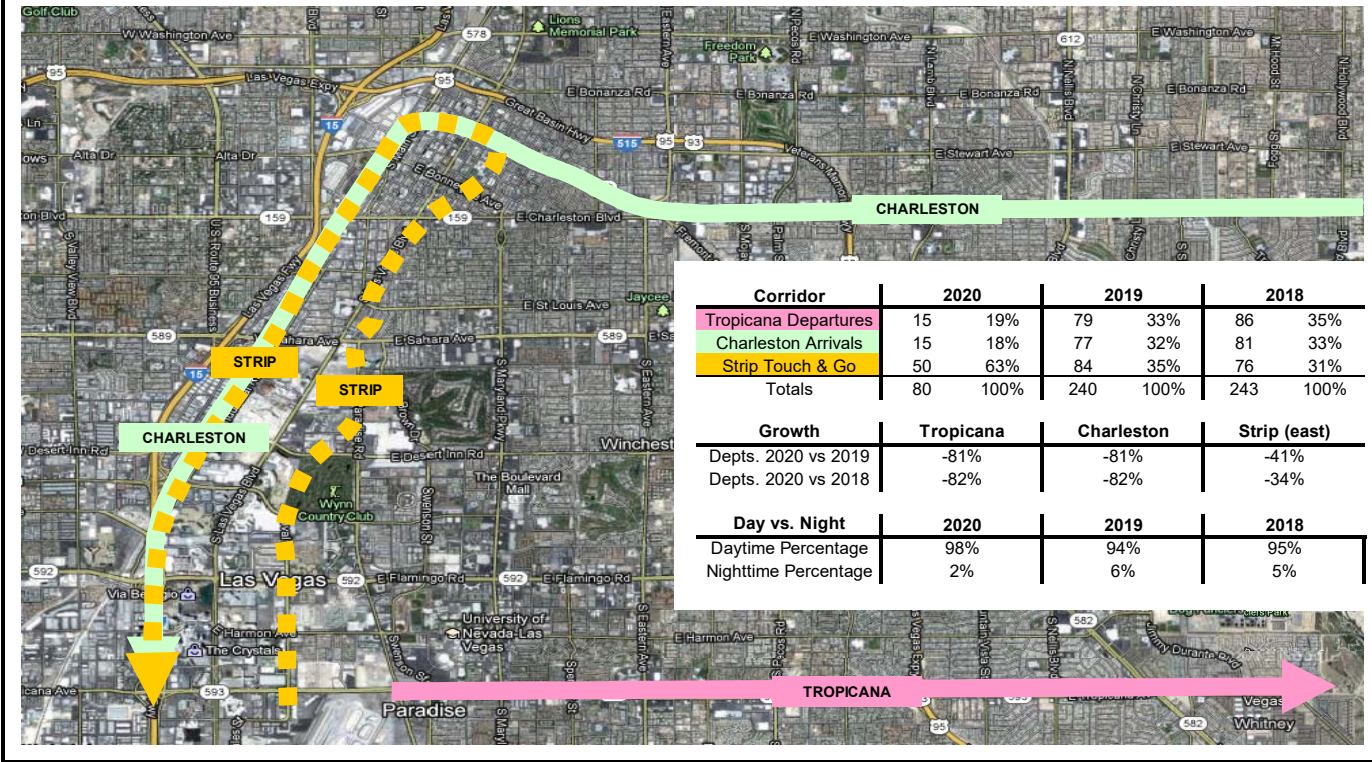
Daytime Arrivals	77	93%	112	94%	102	93%
Nighttime Arrivals	6	7%	7	6%	8	7%
<b>Total Arrivals</b>	<b>83</b>	<b>100%</b>	<b>119</b>	<b>100%</b>	<b>110</b>	<b>100%</b>

Growth	Overall	Daytime	Nighttime
Depts. 2020 vs 2019	-30%	-33%	0%
Depts. 2020 vs 2018	-24%	-26%	-6%
Arrivals 2020 vs 2019	-30%	-32%	-11%
Arrivals 2020 vs 2018	-25%	-25%	-17%

\*\* 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 2020



Corridor	2020		2019		2018	
Tropicana Departures	15	19%	79	33%	86	35%
Charleston Arrivals	15	18%	77	32%	81	33%
Strip Touch & Go	50	63%	84	35%	76	31%
<b>Totals</b>	<b>80</b>	<b>100%</b>	<b>240</b>	<b>100%</b>	<b>243</b>	<b>100%</b>

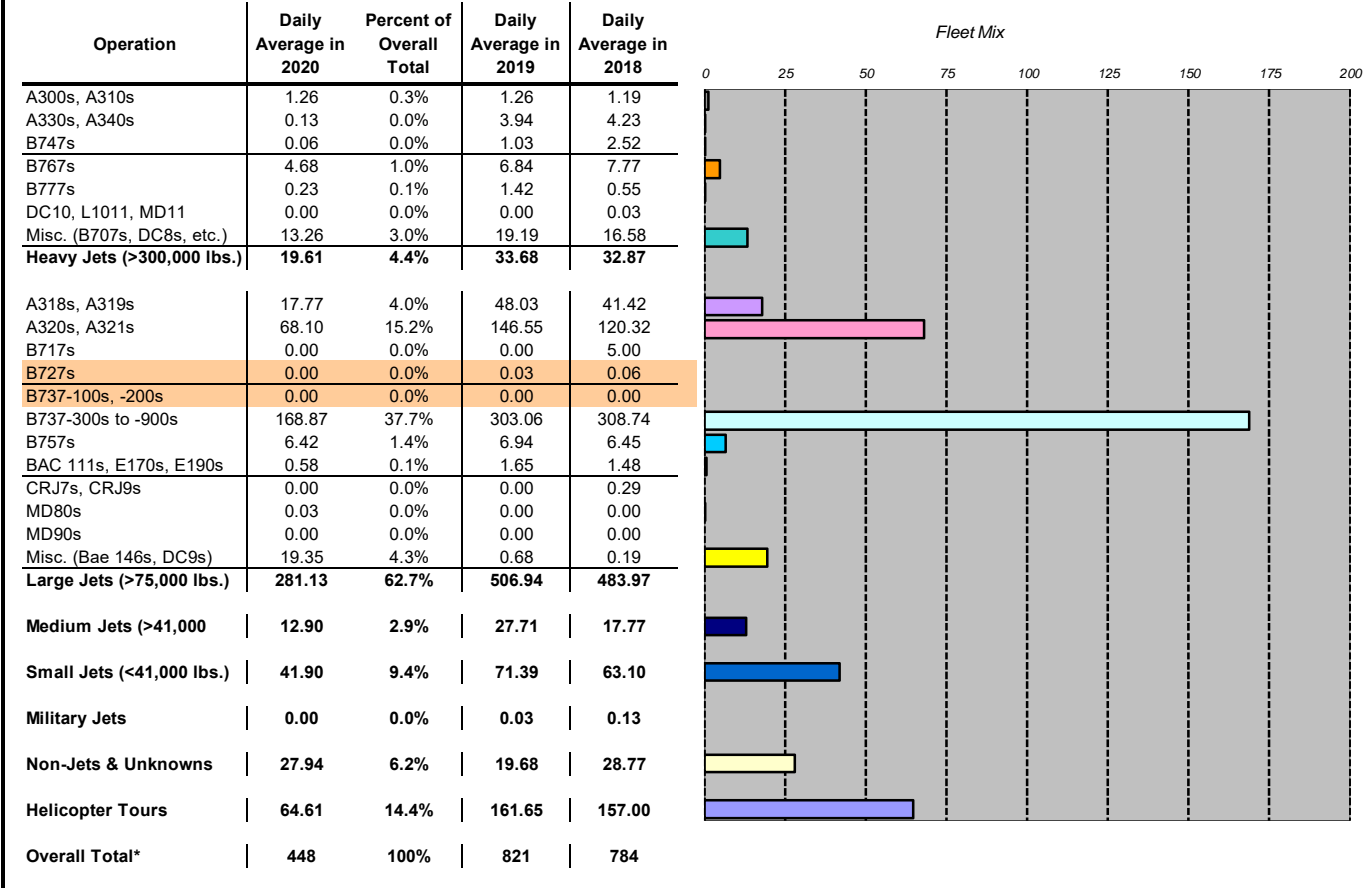
  

Growth	Tropicana	Charleston	Strip (east)
Depts. 2020 vs 2019	-81%	-81%	-41%
Depts. 2020 vs 2018	-82%	-82%	-34%

Day vs. Night	2020	2019	2018
Daytime Percentage	98%	94%	95%
Nighttime Percentage	2%	6%	5%

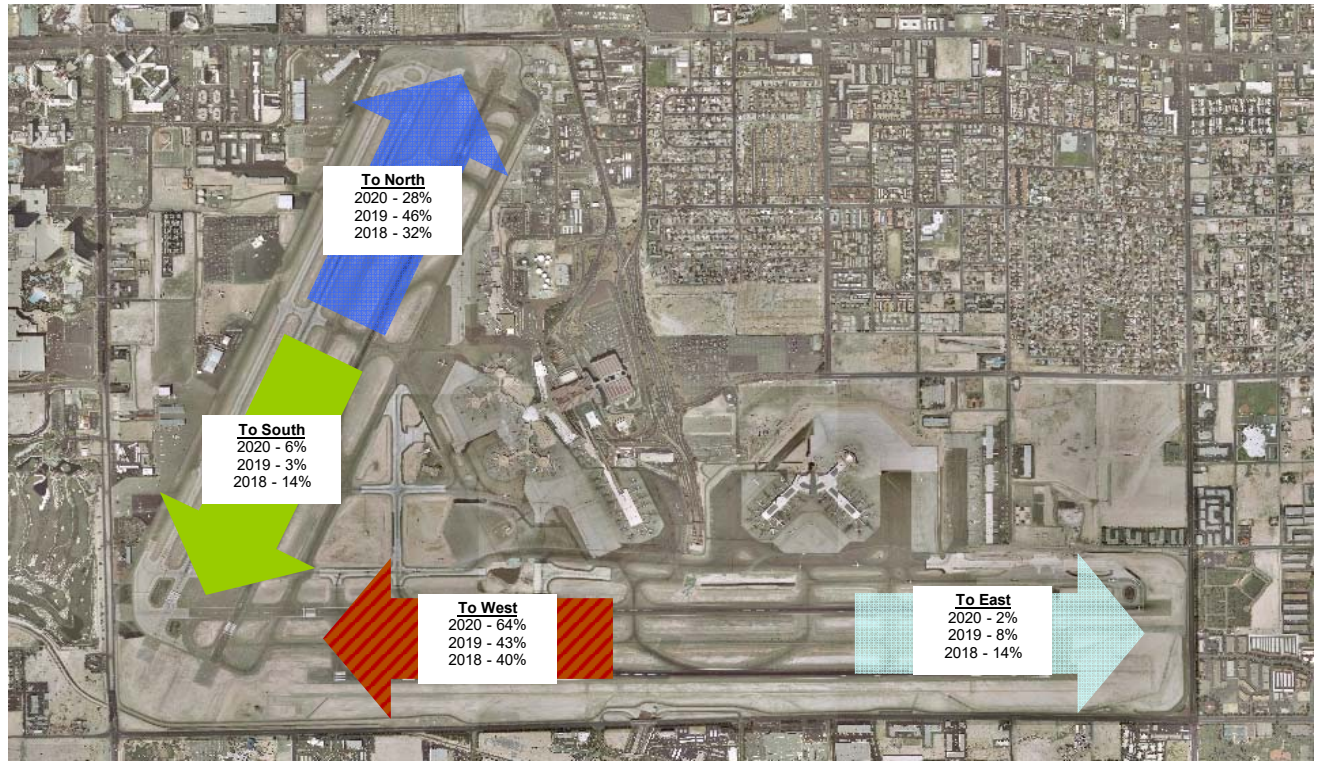
### Exhibit 7: LAS Aircraft Arrival Fleet Mix\*\* - October 2020



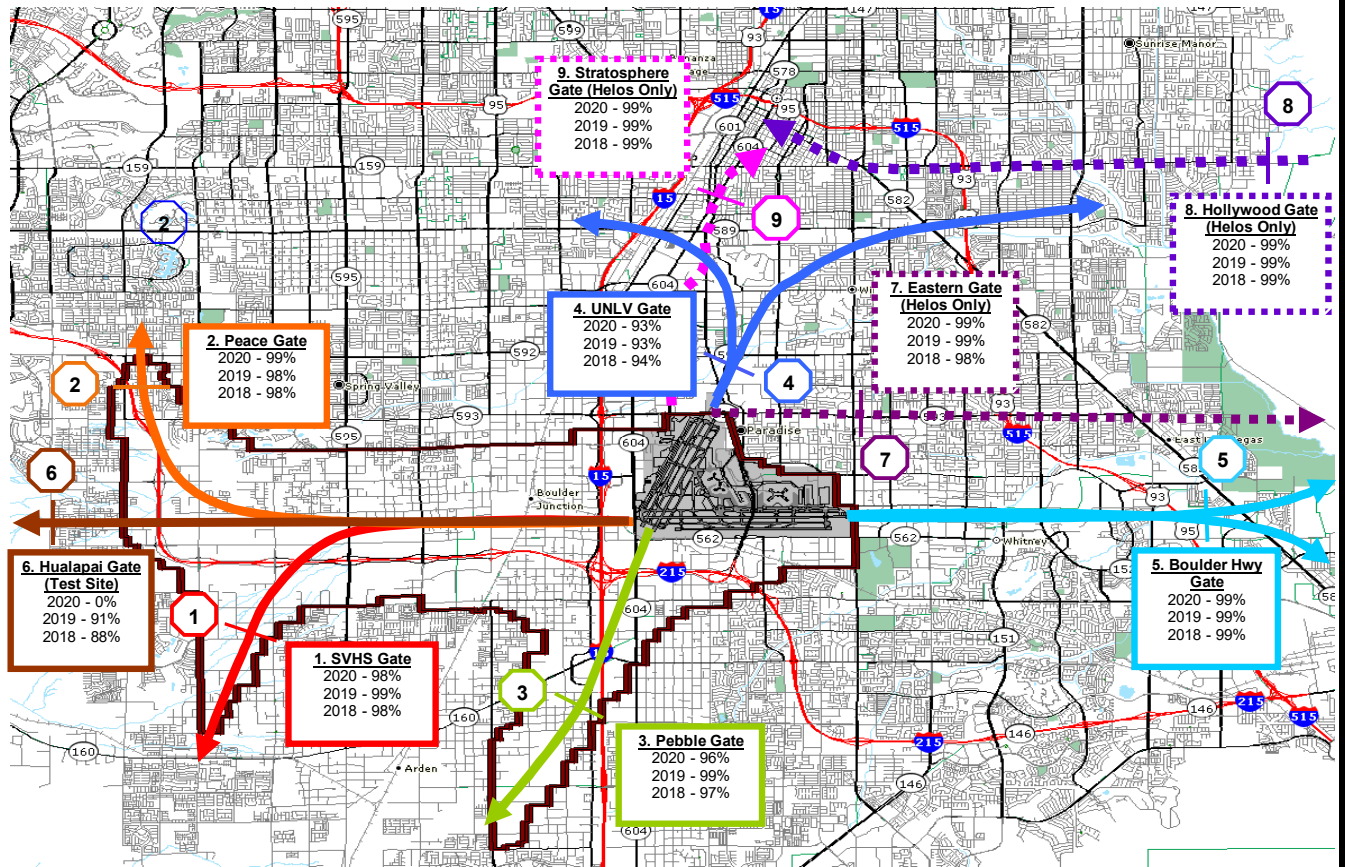
\*\* Overall Total: Note that operation type and runway use counts are estimated by Harris Corp. EnvironmentalVue Noise and Monitoring Operations system based on radar data. Due to limitations of radar data, information for aircraft weighing less than 75,000 lbs is inexact.



**Exhibit 8: LAS General Departure Direction for Large Air Carrier Aircraft\* - October 2020 to 2018**



**Exhibit 9: "Gate" Compliance for Large Aircraft\* & LAS Helicopter Tours - October 2020**



\* 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: Land Use Application Reviews & Comments - October 2020

Land Use Application Review Summary	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2020 Total	2019 Total	2018 Total
No. of Land Use Applications Reviewed	73	12	78	14	177	335	N/A
No. of Applications where CCDOA Issued a Comment	3	2	1	1	7	20	N/A
Percent of Applications where Comment Issued	4%	17%	1%	7%	4%	6%	N/A

### Exhibit 11: Land Use Application Comments by Airport Concern - October 2020

Summary by Comment Type	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2020 Total	2019 Total	2018 Total
Deed Restrictions	0	0	0	0	0	0	N/A
Height-Penetrates Part 77 100:1 Surfaces >200'	2	1	1	0	4	6	N/A
Height-Penetrates Part 77 PATH-C Surfaces*	0	0	0	0	0	0	N/A
Helipport/Helipad	0	0	0	0	0	0	N/A
Noisy-Commercial within AEOD**	1	1	0	0	2	3	N/A
Noisy-Residential within the AEOD**	0	0	0	0	0	1	N/A
Noisy-Residential Just Outside the AEOD**	0	0	0	1	1	11	N/A
<b>Total***</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>7</b>	<b>21</b>	<b>N/A</b>

\* Primary, Approach, Transition, Horizontal, Conical as defined by Federal Aviation Regulation (FAR) Part 77.

\*\*AEOD-Airport Environs Overlay District (defined below).

\*\*\*Comment Concern totals will not always match Comment Applications total. Some applications are issued more than one type of CCDOA comment.

### Exhibit 12: Dwelling Units per Commented Application\* - October 2020

Dwelling Units Proposed in Commented Applications	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2020 Total	2019 Total	2018 Total
Within the AEOD	0	0	0	0	0	480	N/A
Just Outside the AEOD	0	0	0	380	380	1,416	N/A

\*Due to high variability in many land use proposals, dwelling units proposed may not reflect actual number of units built. In addition, some projects will require more than one type of application, resulting in the project total counted more than once.

### Exhibit 13: Land Use Applications Denied and/or Opposed\* - October 2020

Summary of LUA Opposed	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2020 Total	2019 Total	2018 Total
Recommend Denial	0	0	0	0	0	0	N/A
Opposed at Hearings	0	0	0	0	0	0	N/A

\*If denied or opposed at a hearing, detailed information provided within the written summary portion.

### Exhibit 14: Airport Environs Overlay Districts & Noisy Comments - Valley Wide - October 2020

AEOD - Airport Environs Overlay Districts - Noise Contours  
Clark County Code (CCC) 30.48.010. The AEOD is established to:

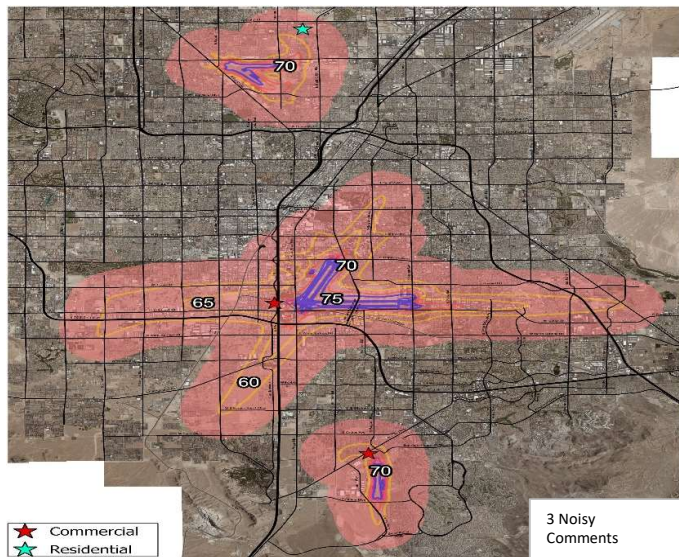
1. Provide for a range of uses compatible with airport hazard and noise exposure areas.
2. Prohibit the development of incompatible uses that are detrimental to the general health, safety, and welfare.
3. Require noise attenuated construction, as indicated by Table 30.48-AE, in accordance with the noise attenuation construction standards of Chapter 22.22 of the CCC, within these airport environs. The regulations of the AEOD shall supersede the regulations of the underlying district if there is a conflict.
4. Comply with the Federal Aviation Administration regulations.

2008-Most recent update to the AEOD in CCC, updated the AEOD for McCarran (LAS), and added an AEOD to the North Las Vegas Airport (VGT) and the Henderson Executive Airport (HND).

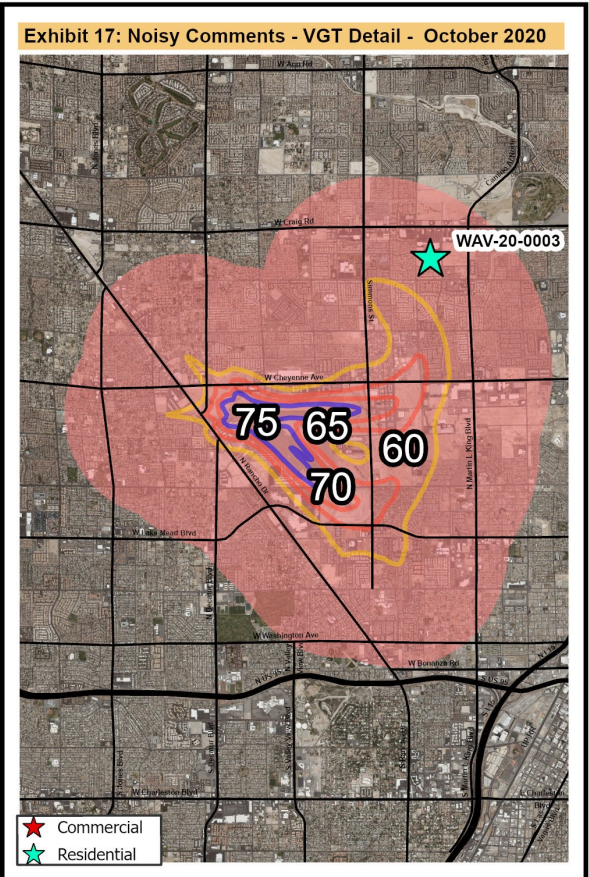
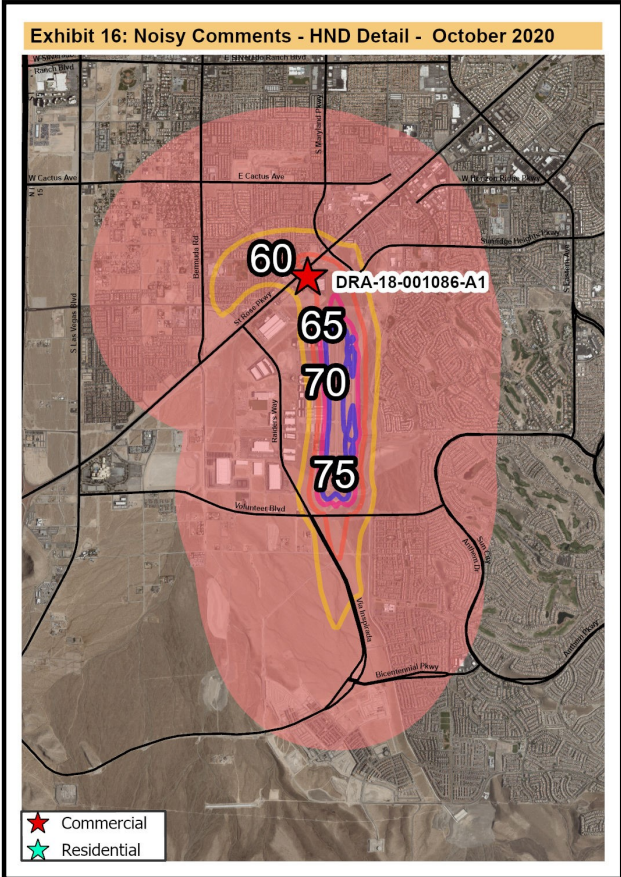
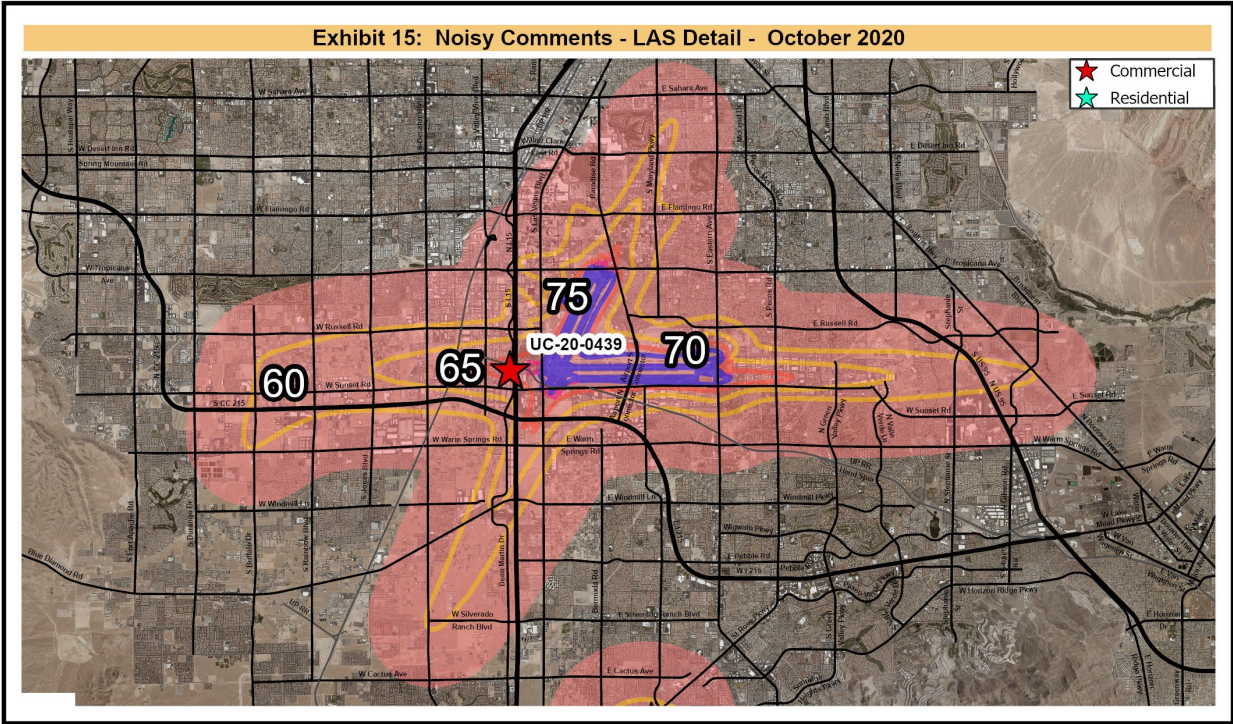
2011-AEOD adopted by the cities of North Las Vegas and Henderson.

The AEOD has not been formally adopted by the City of Las Vegas. Only a small, already developed portion of the VGT AEOD lies within the incorporated City of Las Vegas boundaries.

Salmon color indicates a 1 mile zone outside the AEOD.

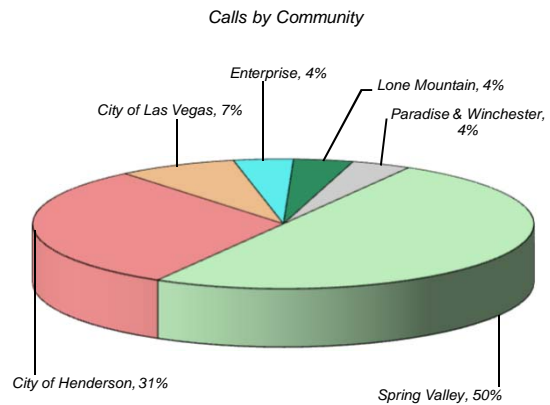






### Exhibit 1: Noise Complaint Calls by Community\* - November 2020

Community	No. of Calls in 2020	No. of Callers in 2020	No. of Calls in 2019	No. of Calls in 2018
City of Boulder City	8	5	1	1
City of Henderson	2	2		9
City of Las Vegas				2
City of North Las Vegas				8
Enterprise	1	1	1	
Lone Mountain	1	1		
Paradise & Winchester	1	1	30	24
Spring Valley	13	2	58	39
Summerlin South				1
Sunrise Manor				
Whitney				1
Location unknown				1
<b>Overall Total</b>	<b>26</b>	<b>12</b>	<b>90</b>	<b>86</b>



Difference between 2020 and 2019 Total Calls: -71%

Difference between 2020 and 2018 Total Calls: -70%

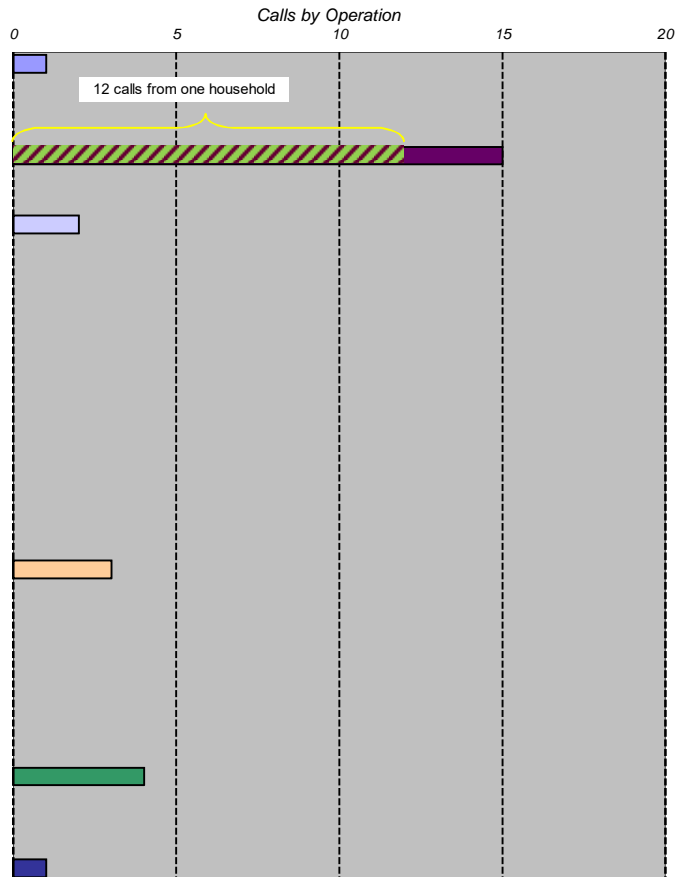
Average Number of Calls per Caller: 2.2

Most calls received from one household: 12

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

### Exhibit 2: Noise Complaint Calls by Type of Operation - November 2020

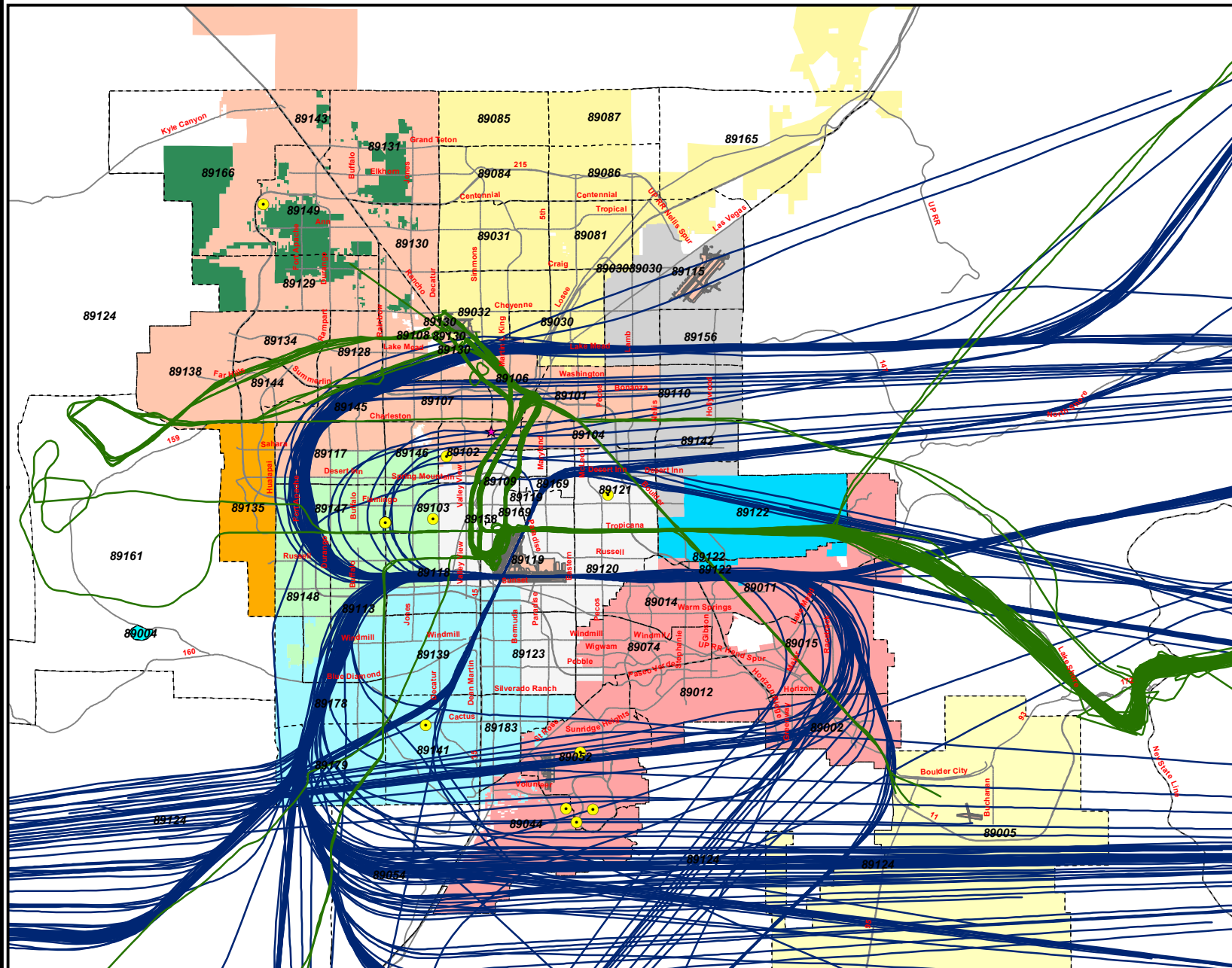
Operation	No. of Calls in 2020	Percent of Overall Total	No. of Calls in 2019	No. of Calls in 2018
LAS 01R/L Arrivals	1	3.8%	1	5
LAS 08R/L Arrivals				
LAS 19R/L Arrivals				
LAS 26R/L Arrivals				1
LAS 01R/L Departures	15	57.7%	53	53
LAS 08R/L Departures				
LAS 19R/L Departures				
LAS 26R/L Departures	2	7.7%	35	22
LAS Run-ups				
LAS GA				
LAS Other				
<b>LAS Total</b>	<b>18</b>	<b>69.2%</b>	<b>89</b>	<b>81</b>
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	11.5%		3
VGT Other				
<b>VGT Total</b>	<b>3</b>	<b>11.5%</b>	<b>0</b>	<b>3</b>
HND 17R/L Arrivals				
HND 35R/L Arrivals				
HND 17R/L Departures				
HND 35R/L Departures				
HND Run-ups				
HND GA	4	15.4%		
HND Other				
<b>HND Total</b>	<b>4</b>	<b>15.4%</b>	<b>0</b>	<b>0</b>
<b>Helicopters**</b>	<b>1</b>	<b>3.8%</b>	<b>1</b>	<b>2</b>
<b>Overall Total</b>	<b>26</b>	<b>100%</b>	<b>90</b>	<b>86</b>



\*\* 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 2020



**Legend**

November 2020  
Total Complaints: 26

- Aircraft Complaints Received 25 Mapped 21
- ★ Helicopter Complaints Received 1 Mapped 1
- Major Streets
- Airports
- - - Zip Code Boundaries
- Typical Large Air Carrier Departure Tracks
- Typical Touring Helicopter Tracks
- 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

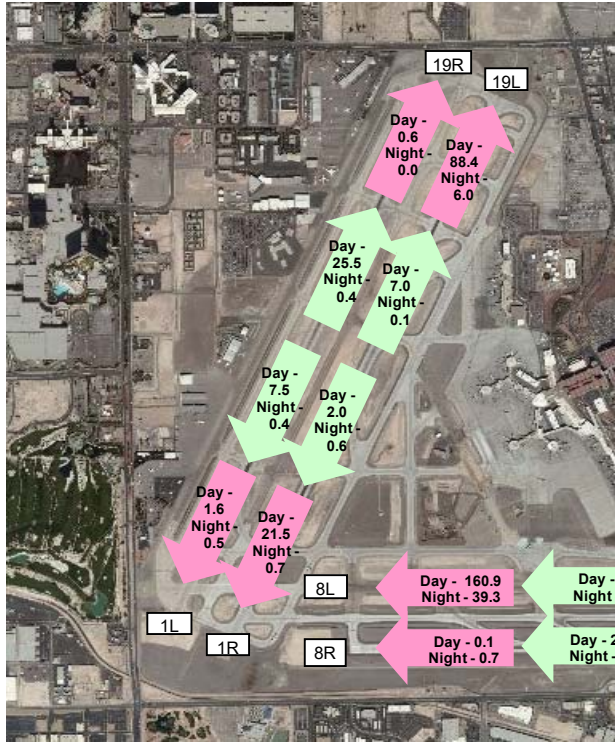
**CLARK COUNTY • LAS VEGAS • MCCARRAN • NEVADA • INTERNATIONAL AIRPORT**

2/18/2021

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

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### Exhibit 4: LAS Daily Average Operations Runway for Large Air Carrier Aircraft\* - November 2020



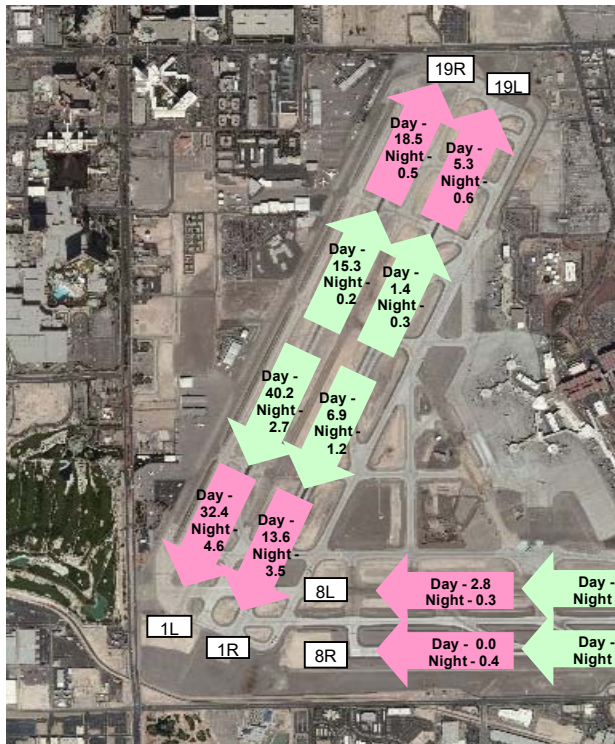
Year	2020		2019		2018	
Daytime Departures	274	85%	409	80%	405	82%
Nighttime Departures	47	15%	102	20%	89	18%
<b>Total Departures</b>	<b>321</b>	<b>100%</b>	<b>511</b>	<b>100%</b>	<b>494</b>	<b>100%</b>

Daytime Arrivals	293	92%	431	86%	421	87%
Nighttime Arrivals	26	8%	69	14%	66	13%
<b>Total Arrivals</b>	<b>319</b>	<b>100%</b>	<b>500</b>	<b>100%</b>	<b>486</b>	<b>100%</b>

Growth	Overall	Daytime	Nighttime
Depts. 2020 vs 2019	-37%	-33%	-54%
Depts. 2020 vs 2018	-35%	-32%	-47%
Arrivals 2020 vs 2019	-36%	-32%	-63%
Arrivals 2020 vs 2018	-34%	-30%	-61%

\* 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 2020



Year	2020		2019		2018	
Daytime Departures	73	88%	101	91%	96	90%
Nighttime Departures	10	12%	10	9%	10	10%
<b>Total Departures</b>	<b>83</b>	<b>100%</b>	<b>110</b>	<b>100%</b>	<b>106</b>	<b>100%</b>

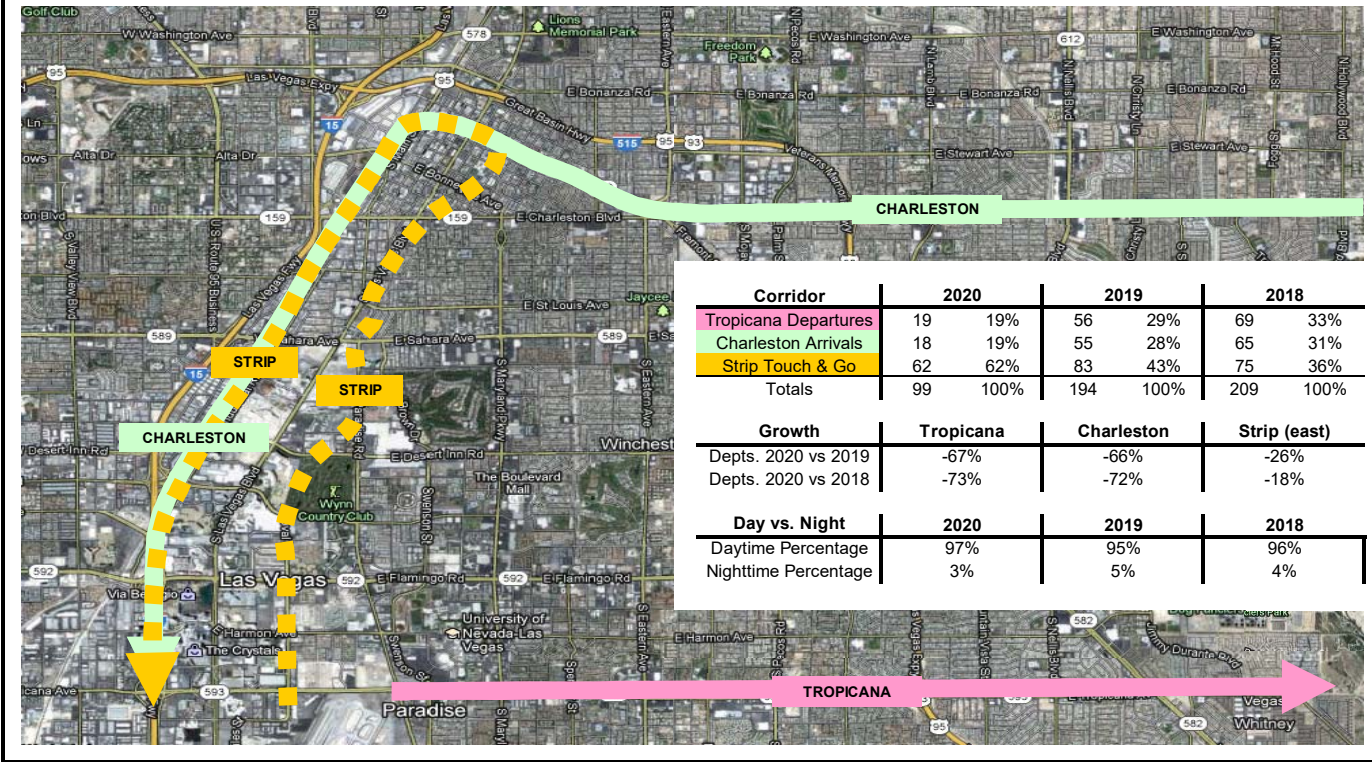
Daytime Arrivals	72	94%	100	93%	99	93%
Nighttime Arrivals	5	6%	8	7%	7	7%
<b>Total Arrivals</b>	<b>77</b>	<b>100%</b>	<b>107</b>	<b>100%</b>	<b>106</b>	<b>100%</b>

Growth	Overall	Daytime	Nighttime
Depts. 2020 vs 2019	-25%	-28%	2%
Depts. 2020 vs 2018	-22%	-24%	-4%
Arrivals 2020 vs 2019	-28%	-28%	-36%
Arrivals 2020 vs 2018	-27%	-27%	-30%

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

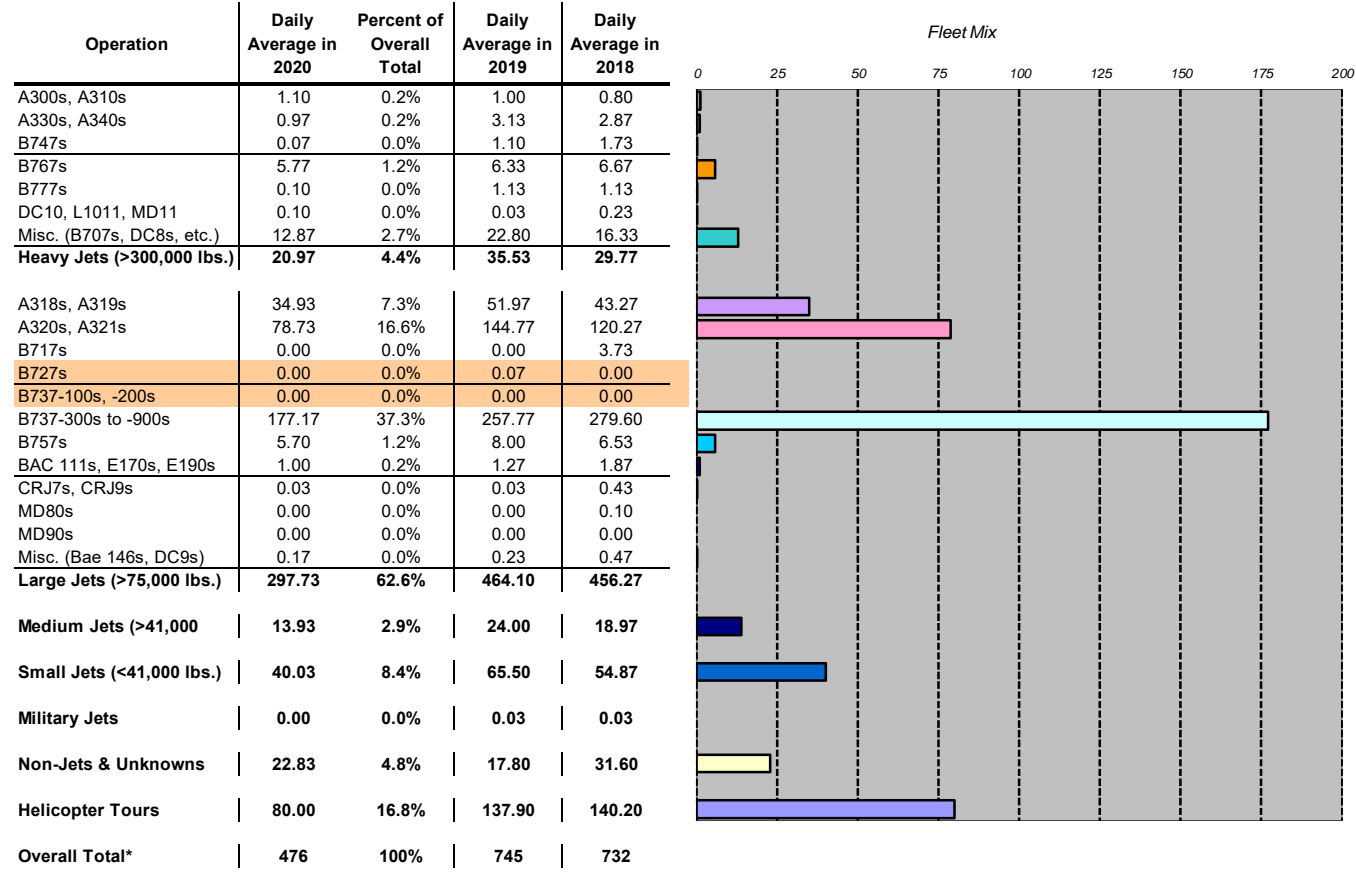


### Exhibit 6: LAS Daily Average Operations by Corridor for Helicopter Tours\* - November 2020



Corridor	2020	2019	2018
Tropicana Departures	19 19%	56 29%	69 33%
Charleston Arrivals	18 19%	55 28%	65 31%
Strip Touch & Go	62 62%	83 43%	75 36%
<b>Totals</b>	<b>99 100%</b>	<b>194 100%</b>	<b>209 100%</b>
<b>Growth</b>	<b>Tropicana</b>	<b>Charleston</b>	<b>Strip (east)</b>
Depts. 2020 vs 2019	-67%	-66%	-26%
Depts. 2020 vs 2018	-73%	-72%	-18%
<b>Day vs. Night</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>
Daytime Percentage	97%	95%	96%
Nighttime Percentage	3%	5%	4%

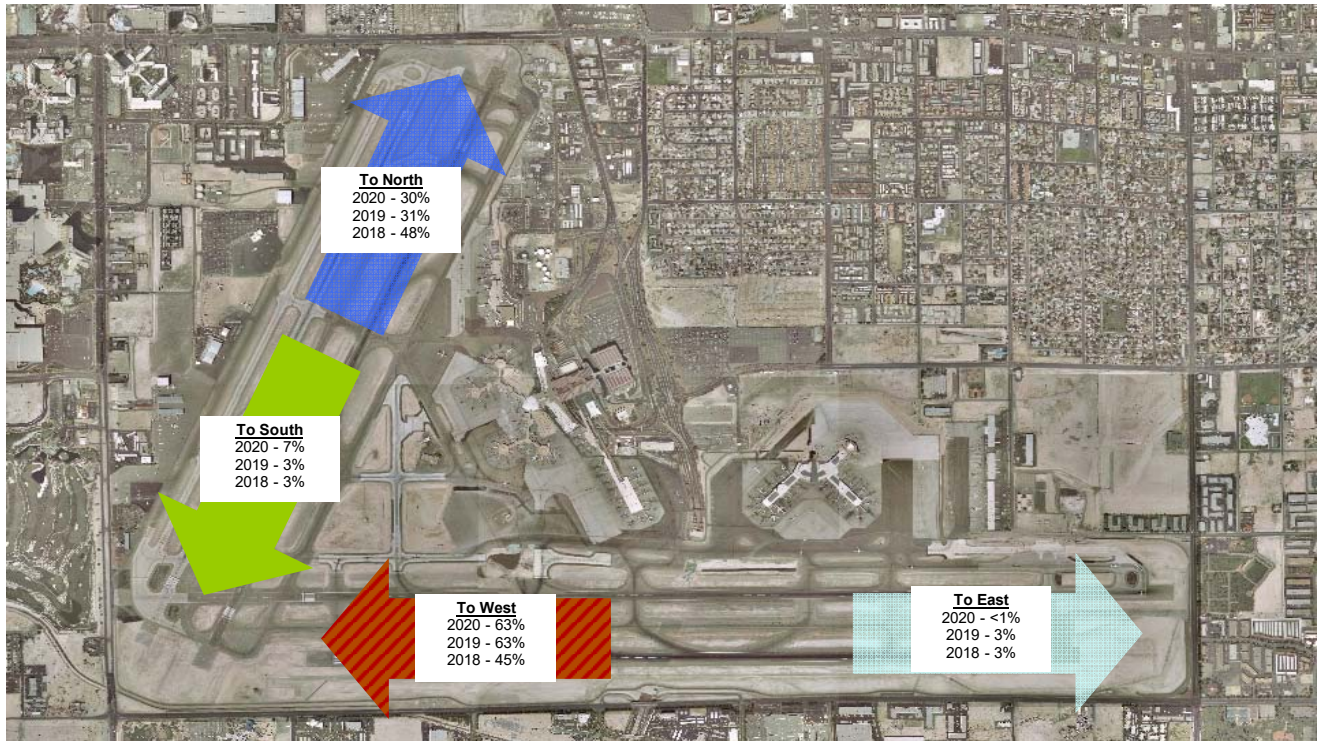
### Exhibit 7: LAS Aircraft Arrival Fleet Mix\*\* - November 2020



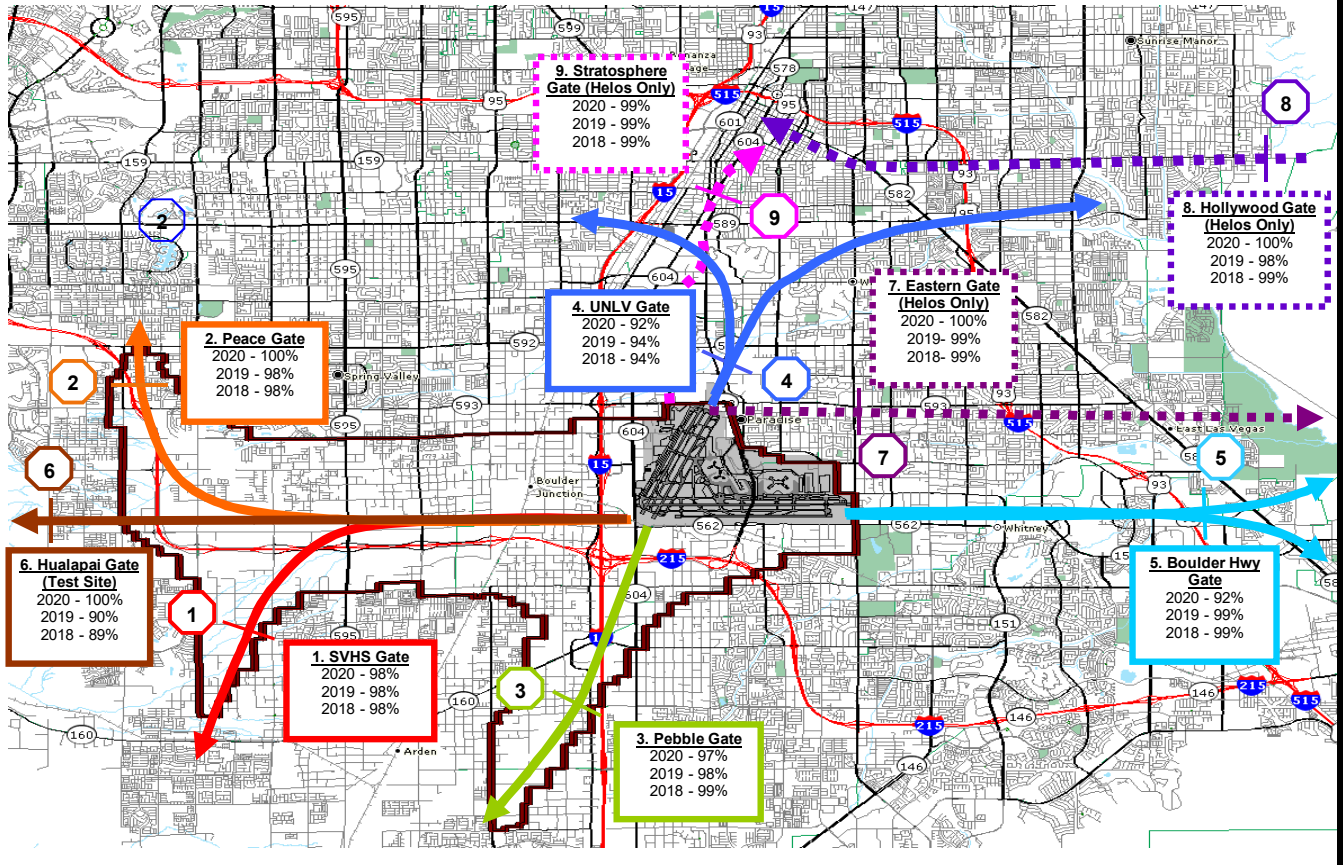
\*\* Overall Total: Note that operation type and runway use counts are estimated by Harris Corp. EnvironmentalVue Noise and Monitoring Operations system based on radar data. Due to limitations of radar data, information for aircraft weighing less than 75,000 lbs is inexact.



**Exhibit 8: LAS General Departure Direction for Large Air Carrier Aircraft\* - November 2020 to 2018**



**Exhibit 9: "Gate" Compliance for Large Aircraft\* & LAS Helicopter Tours - November 2020**



\* 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, A350, B707, B717, B727, B737, B747, B757, B767, B777, CRJ7, CRJ9, DC8, DC9, DC10, E170, E190, HA4T, L1011, MD80, MD90, MD10, MD11, VC10.

### Exhibit 10: Land Use Application Reviews & Comments - November 2020

Land Use Application Review Summary	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2020 Total	2019 Total	2018 Total
No. of Land Use Applications Reviewed	86	58	0	13	157	182	N/A
No. of Applications where CCDOA Issued a Comment	11	7	0	3	21	15	N/A
Percent of Applications where Comment Issued	13%	12%	#DIV/0!	23%	13%	8%	N/A

### Exhibit 11: Land Use Application Comments by Airport Concern - November 2020

Summary by Comment Type	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2020 Total	2019 Total	2018 Total
Deed Restrictions	0	0	0	0	0	0	N/A
Height-Penetrates Part 77 100:1 Surfaces/>200'	4	3	0	0	7	8	N/A
Height-Penetrates Part 77 PATH-C Surfaces*	1	0	0	0	1	0	N/A
Heliport/Helipad	0	0	0	0	0	0	N/A
Noisy-Commercial within AEOD**	3	1	0	0	4	1	N/A
Noisy-Residential within the AEOD**	0	1	0	0	1	1	N/A
Noisy-Residential Just Outside the AEOD**	6	3	0	3	12	8	N/A
Misc.-If applicable, detailed info. provided within the written summary	1	0	0	0	1	0	N/A
<b>Total***</b>	<b>15</b>	<b>8</b>	<b>0</b>	<b>3</b>	<b>26</b>	<b>18</b>	<b>N/A</b>

\* Primary, Approach, Transition, Horizontal, Conical as defined by Federal Aviation Regulation (FAR) Part 77.

\*\*AEOD-Airport Environs Overlay District (defined below).

\*\*\*Comment Concern totals will not always match Comment Applications total. Some applications are issued more than one type of CCDOA comment.

### Exhibit 12: Dwelling Units per Commented Application\* - November 2020

Dwelling Units Proposed in Commented Applications	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2020 Total	2019 Total	2018 Total
Within the AEOD	0	179	0	0	179	4	N/A
Just Outside the AEOD	674	472	0	261	1,407	1,226	N/A

\*Due to high variability in many land use proposals, dwelling units proposed may not reflect actual number of units built. In addition, some projects will require more than one type of application, resulting in the project total counted more than once.

### Exhibit 13: Land Use Applications Denied and/or Opposed\* - November 2020

Summary of LUA Opposed	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2020 Total	2019 Total	2018 Total
Recommend Denial	0	0	0	0	0	0	N/A
Opposed at Hearings	2	0	0	0	2	0	N/A

\*If denied or opposed at a hearing, detailed information provided within the written summary portion.

### Exhibit 14: Airport Environs Overlay Districts & Noisy Comments - Valley Wide - November 2020

AEOD - Airport Environs Overlay Districts - Noise Contours  
Clark County Code (CCC) 30.48.010. The AEOD is established to:

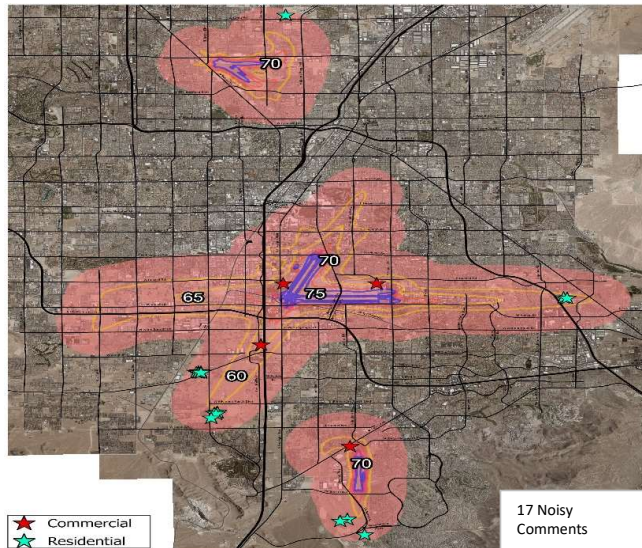
1. Provide for a range of uses compatible with airport hazard and noise exposure areas.
2. Prohibit the development of incompatible uses that are detrimental to the general health, safety, and welfare.
3. Require noise attenuated construction, as indicated by Table 30.48-AE, in accordance with the noise attenuation construction standards of Chapter 22.22 of the CCC, within these airport environs. The regulations of the AEOD shall supersede the regulations of the underlying district if there is a conflict.
4. Comply with the Federal Aviation Administration regulations.

2008-Most recent update to the AEOD in CCC, updated the AEOD for McCarran (LAS), and added an AEOD to the North Las Vegas Airport (VGT) and the Henderson Executive Airport (HND).

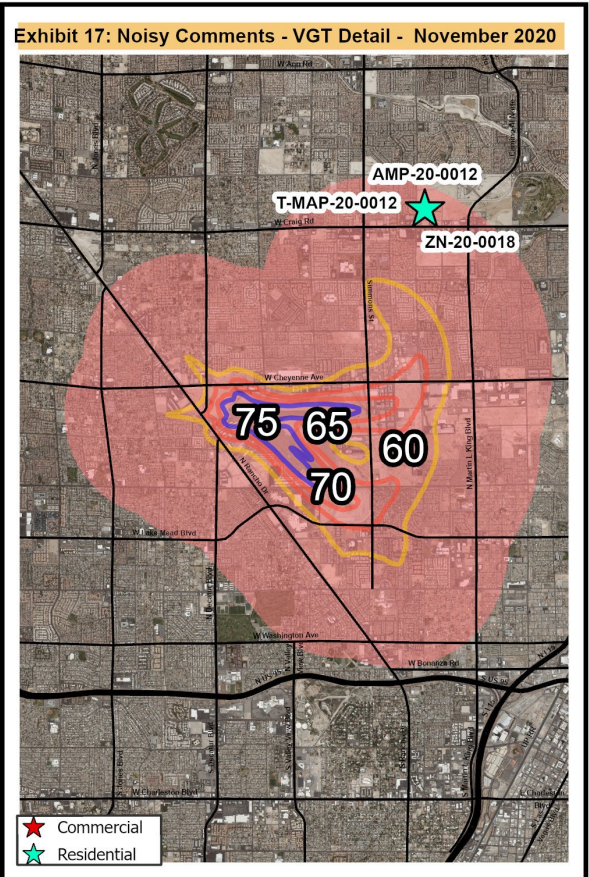
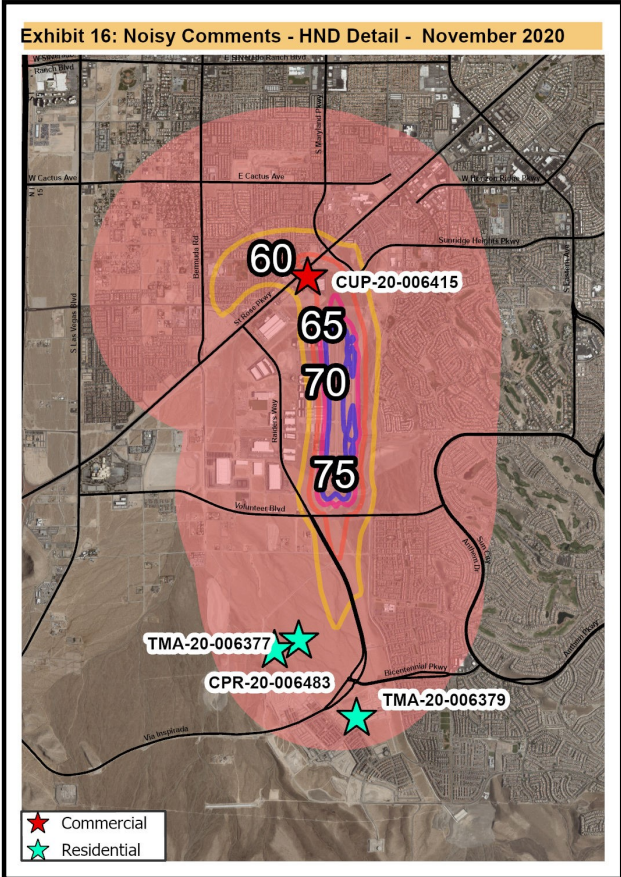
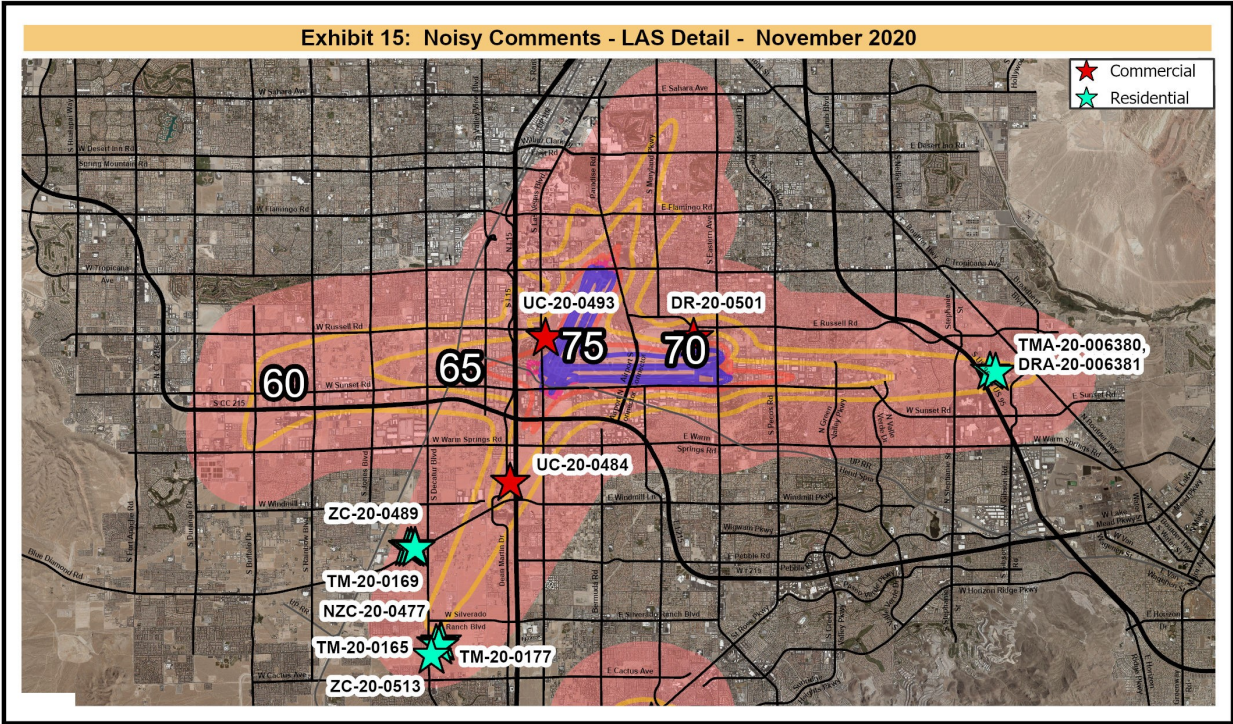
2011-AEOD adopted by the cities of North Las Vegas and Henderson.

The AEOD has not been formally adopted by the City of Las Vegas. Only a small, already developed portion of the VGT AEOD lies within the incorporated City of Las Vegas boundaries.

Salmon color indicates a 1 mile zone outside the AEOD.







### Exhibit 1: Noise Complaint Calls by Community\* - December 2020

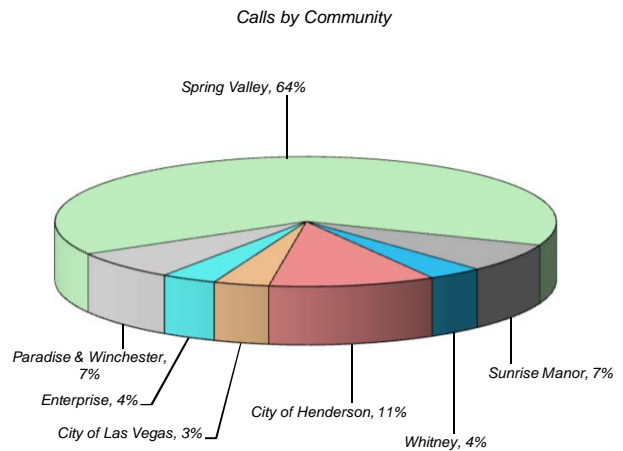
Community	No. of Calls in 2020	No. of Callers in 2020	No. of Calls in 2019	No. of Calls in 2018
City of Boulder City	3	1	3	3
City of Henderson	1	1	3	2
City of Las Vegas	1	1	1	2
City of North Las Vegas			1	
Enterprise	1	1	4	4
Lone Mountain				
Paradise & Winchester	2	2	11	4
Spring Valley	18	1	101	53
Summerlin South			3	1
Sunrise Manor	2	2	3	
Whitney	1	1		
Location unknown				
<b>Overall Total</b>	<b>28</b>	<b>9</b>	<b>129</b>	<b>67</b>

Difference between 2020 and 2019 Total Calls: -78%

Difference between 2020 and 2018 Total Calls: -58%

Average Number of Calls per Caller: 3.1

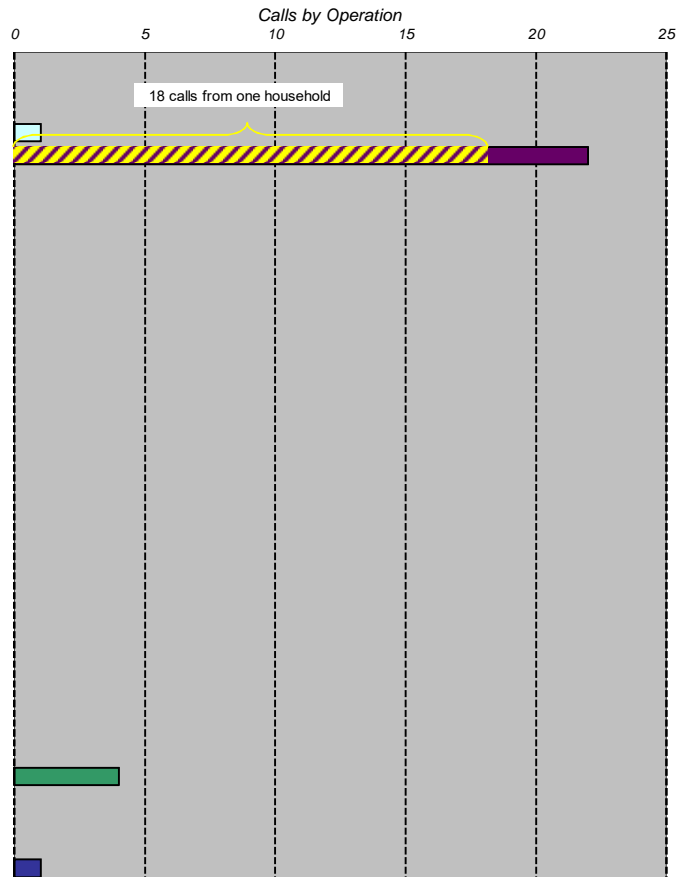
Most calls received from one household: 18



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

### Exhibit 2: Noise Complaint Calls by Type of Operation - December 2020

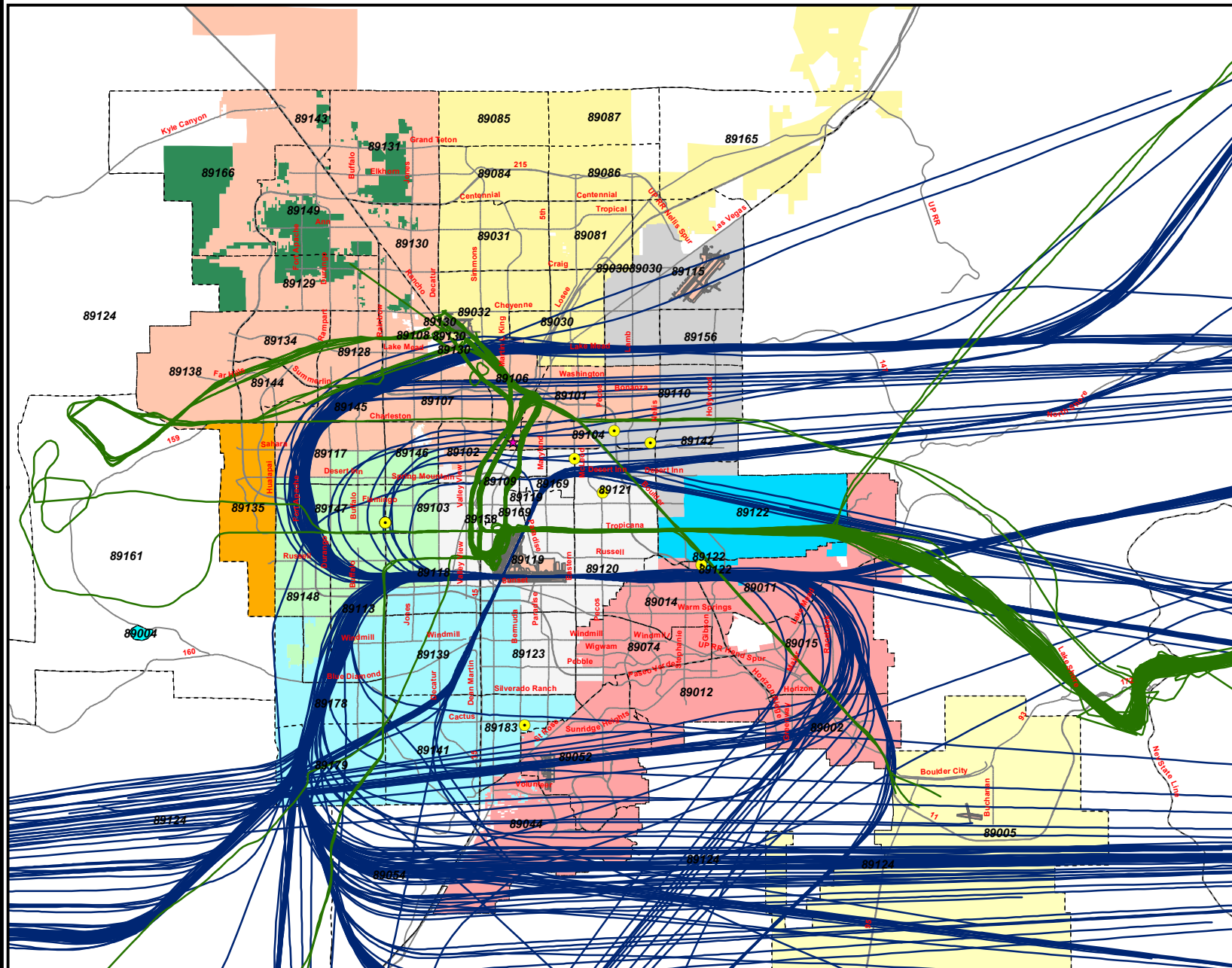
Operation	No. of Calls in 2020	Percent of Overall Total	No. of Calls in 2019	No. of Calls in 2018
LAS 01R/L Arrivals			2	1
LAS 08R/L Arrivals				
LAS 19R/L Arrivals				
LAS 26R/L Arrivals	1	3.6%	2	
LAS 01R/L Departures	22	78.6%	112	15
LAS 08R/L Departures				
LAS 19R/L Departures			2	1
LAS 26R/L Departures			8	47
LAS Run-ups				
LAS GA				
LAS Other				
<b>LAS Total</b>	<b>23</b>	<b>82.1%</b>	<b>126</b>	<b>64</b>
VGT 07 Arrivals				
VGT 12R/L Arrivals				
VGT 25 Arrivals				
VGT 30R/L Arrivals				
VGT 07 Departures				
VGT 12R/L Departures				
VGT 25 Departures				
VGT 30R/L Departures				
VGT Run-ups				
VGT GA			1	
VGT Other				
<b>VGT Total</b>	<b>0</b>	<b>0.0%</b>	<b>1</b>	<b>0</b>
HND 17R/L Arrivals				
HND 35R/L Arrivals				
HND 17R/L Departures				
HND 35R/L Departures				
HND Run-ups				
HND GA	4	14.3%	1	2
HND Other				
<b>HND Total</b>	<b>4</b>	<b>14.3%</b>	<b>1</b>	<b>2</b>
<b>Helicopters**</b>	<b>1</b>	<b>3.6%</b>	<b>1</b>	<b>1</b>
<b>Overall Total</b>	<b>28</b>	<b>100%</b>	<b>129</b>	<b>67</b>



\*\* 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 2020



**Legend**

December 2020  
Total Complaints: 28

- Aircraft Complaints Received 27 Mapped 24
- ★ Helicopter Complaints Received 1 Mapped 1
- Major Streets
- Airports
- - - Zip Code Boundaries
- Typical Large Air Carrier Departure Tracks
- Typical Touring Helicopter Tracks
- 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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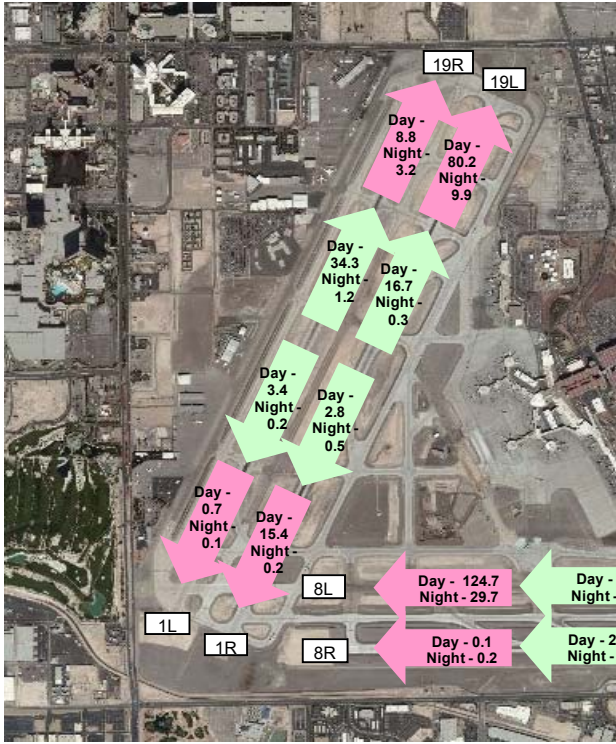
2/18/2021

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

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### Exhibit 4: LAS Daily Average Operations Runway for Large Air Carrier Aircraft\* - December 2020



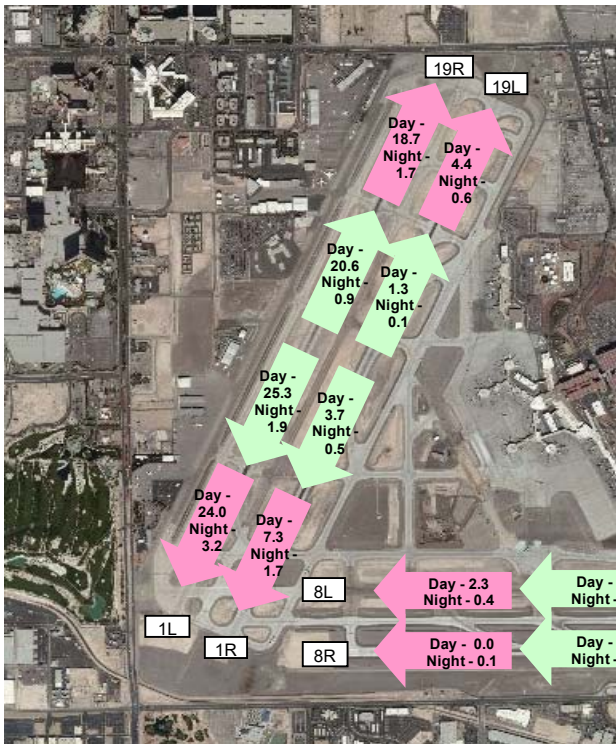
Year	2020		2019		2018	
Daytime Departures	245	85%	392	80%	390	82%
Nighttime Departures	44	15%	101	20%	85	18%
<b>Total Departures</b>	<b>289</b>	<b>100%</b>	<b>493</b>	<b>100%</b>	<b>476</b>	<b>100%</b>

Daytime Arrivals	265	92%	408	84%	409	87%
Nighttime Arrivals	23	8%	75	16%	60	13%
<b>Total Arrivals</b>	<b>287</b>	<b>100%</b>	<b>483</b>	<b>100%</b>	<b>469</b>	<b>100%</b>

Growth	Overall	Daytime	Nighttime
Depts. 2020 vs 2019	-41%	-37%	-57%
Depts. 2020 vs 2018	-39%	-37%	-49%
Arrivals 2020 vs 2019	-41%	-35%	-70%
Arrivals 2020 vs 2018	-39%	-35%	-62%

\* 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 2020



Year	2020		2019		2018	
Daytime Departures	60	88%	97	92%	91	92%
Nighttime Departures	8	12%	9	8%	8	8%
<b>Total Departures</b>	<b>68</b>	<b>100%</b>	<b>106</b>	<b>100%</b>	<b>98</b>	<b>100%</b>

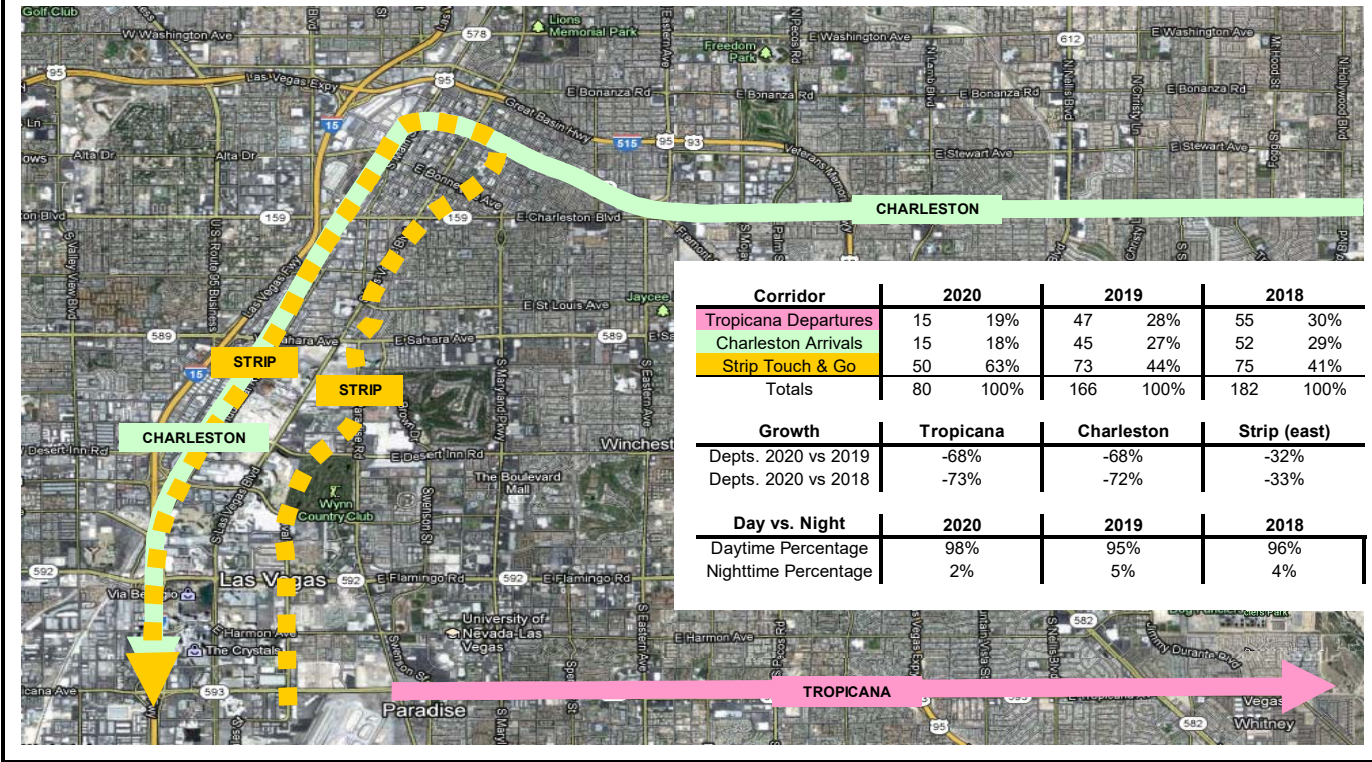
Daytime Arrivals	61	94%	99	93%	94	94%
Nighttime Arrivals	4	6%	7	7%	6	6%
<b>Total Arrivals</b>	<b>64</b>	<b>100%</b>	<b>106</b>	<b>100%</b>	<b>100</b>	<b>100%</b>

Growth	Overall	Daytime	Nighttime
Depts. 2020 vs 2019	-36%	-39%	-11%
Depts. 2020 vs 2018	-31%	-34%	3%
Arrivals 2020 vs 2019	-39%	-39%	-46%
Arrivals 2020 vs 2018	-36%	-36%	-41%

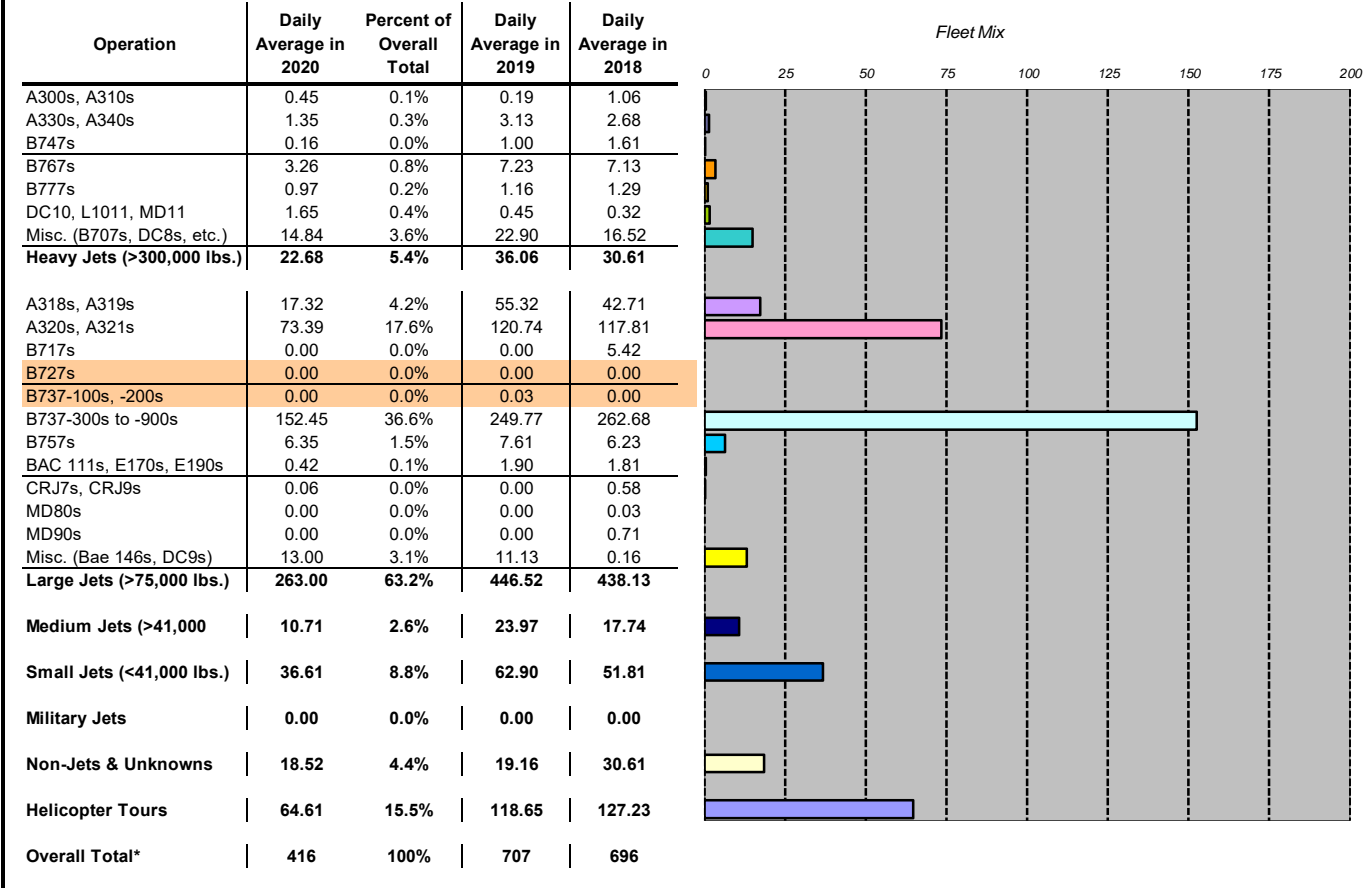
\*\* Aircraft types: All aircraft with a maximum gross take of weight less than 75,000 pounds, excluding helicopters.



### Exhibit 6: LAS Daily Average Operations by Corridor for Helicopter Tours\* - December 2020



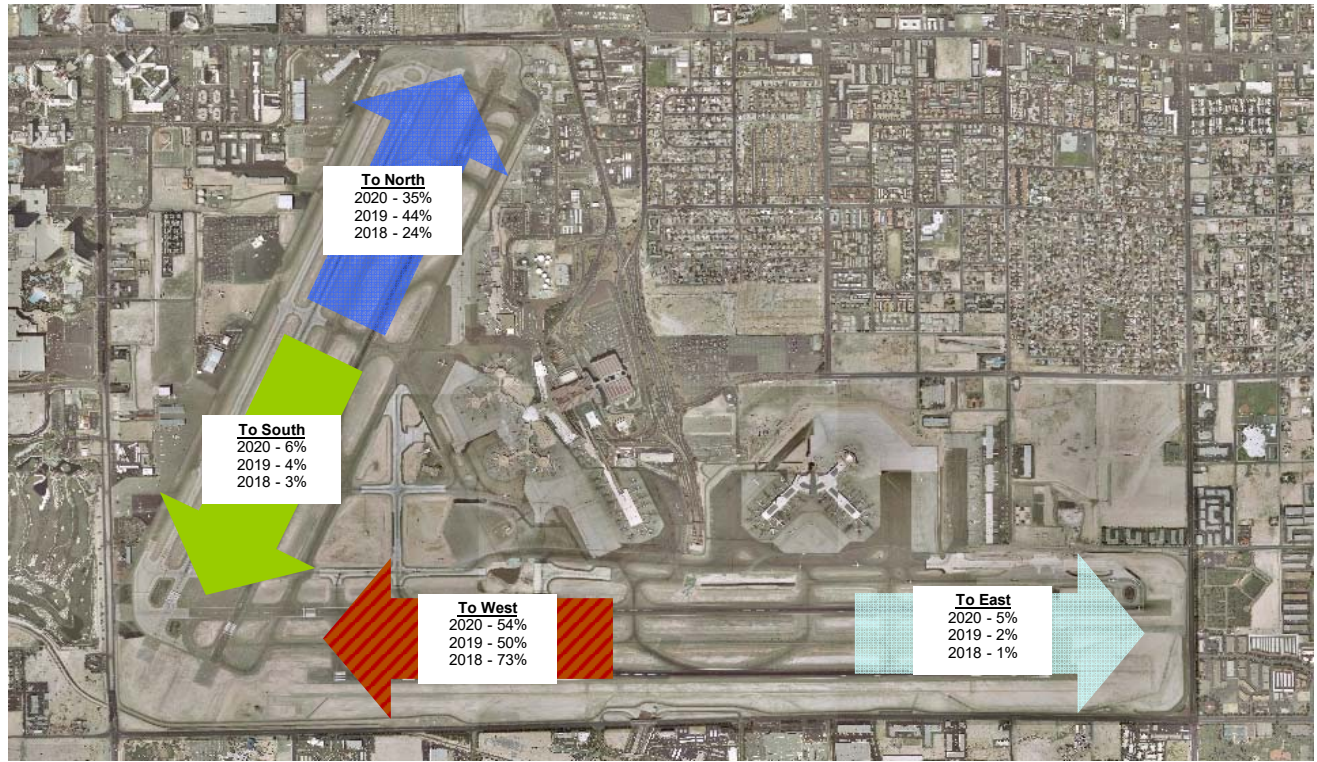
### Exhibit 7: LAS Aircraft Arrival Fleet Mix\*\* - December 2020



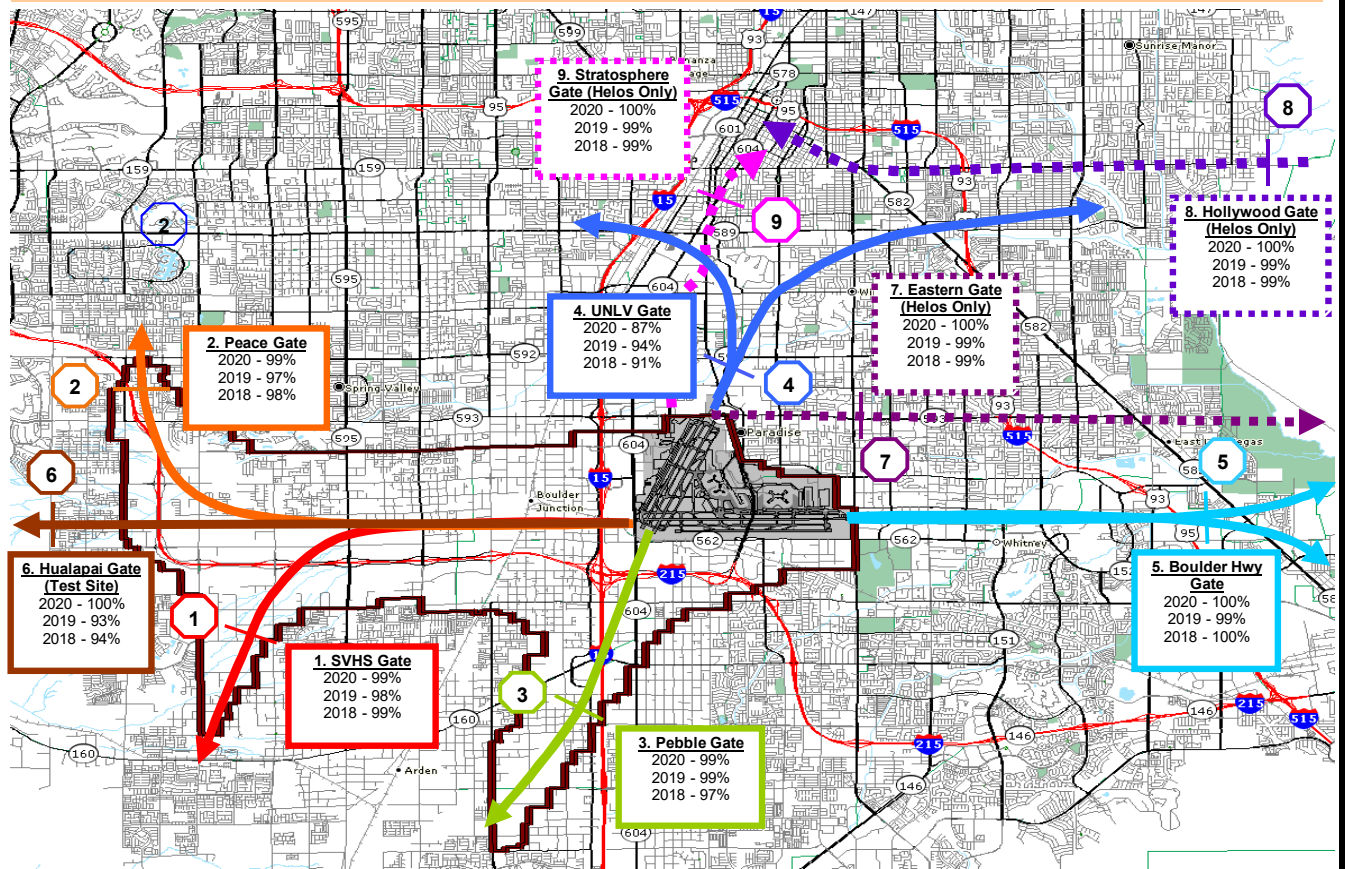
\*\* Overall Total: Note that operation type and runway use counts are estimated by Harris Corp. EnvironmentalVue Noise and Monitoring Operations system based on radar data. Due to limitations of radar data, information for aircraft weighing less than 75,000 lbs is inexact.



**Exhibit 8: LAS General Departure Direction for Large Air Carrier Aircraft\* - December 2020 to 2018**



**Exhibit 9: "Gate" Compliance for Large Aircraft\* & LAS Helicopter Tours - December 2020**



\* 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, A370, B707, B717, B727, B737, B747, B757, B767, B777, CRJ7, CRJ9, DC8, DC9, DC10, E170, E190, HA4T, L1011, MD80, MD90, MD10, MD11, VC10.

### Exhibit 10: Land Use Application Reviews & Comments - December 2020

Land Use Application Review Summary	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2020 Total	2019 Total	2018 Total
No. of Land Use Applications Reviewed	117	41	37	16	211	267	N/A
No. of Applications where CCDOA Issued a Comment	12	3	2	2	19	17	N/A
Percent of Applications where Comment Issued	10%	7%	5%	13%	9%	6%	N/A

### Exhibit 11: Land Use Application Comments by Airport Concern - December 2020

Summary by Comment Type	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2020 Total	2019 Total	2018 Total
Deed Restrictions	1	0	0	0	1	0	N/A
Height-Penetrates Part 77 100:1 Surfaces/>200'	6	3	1	1	11	6	N/A
Height-Penetrates Part 77 PATH-C Surfaces*	0	0	0	0	0	2	N/A
Helipport/Helipad	0	0	0	0	0	0	N/A
Noisy-Commercial within AEOD**	0	0	0	0	0	4	N/A
Noisy-Residential within the AEOD**	0	0	0	1	1	0	N/A
Noisy-Residential Just Outside the AEOD**	6	2	1	1	10	8	N/A
Misc.-If applicable, detailed info. provided within the written summary	1	0	0	1	2	0	N/A
<b>Total***</b>	<b>14</b>	<b>5</b>	<b>2</b>	<b>4</b>	<b>25</b>	<b>20</b>	<b>N/A</b>

\* Primary, Approach, Transition, Horizontal, Conical as defined by Federal Aviation Regulation (FAR) Part 77.

\*\*AEOD-Airport Environs Overlay District (defined below).

\*\*\*Comment Concern totals will not always match Comment Applications total. Some applications are issued more than one type of CCDOA comment.

### Exhibit 12: Dwelling Units per Commented Application\* - December 2020

Dwelling Units Proposed in Commented Applications	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2020 Total	2019 Total	2018 Total
Within the AEOD	0	0	0	144	144	0	N/A
Just Outside the AEOD	694	366	25	22	1,107	1,328	N/A

\*Due to high variability in many land use proposals, dwelling units proposed may not reflect actual number of units built. In addition, some projects will require more than one type of application, resulting in the project total counted more than once.

### Exhibit 13: Land Use Applications Denied and/or Opposed\* - December 2020

Summary of LUA Opposed	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2020 Total	2019 Total	2018 Total
Recommend Denial	0	0	0	1	1	0	N/A
Opposed at Hearings	0	0	0	0	0	0	N/A

\*If denied or opposed at a hearing, detailed information provided within the written summary portion.

### Exhibit 14: Airport Environs Overlay Districts & Noisy Comments - Valley Wide - December 2020

AEOD - Airport Environs Overlay Districts - Noise Contours  
Clark County Code (CCC) 30.48.010. The AEOD is established to:

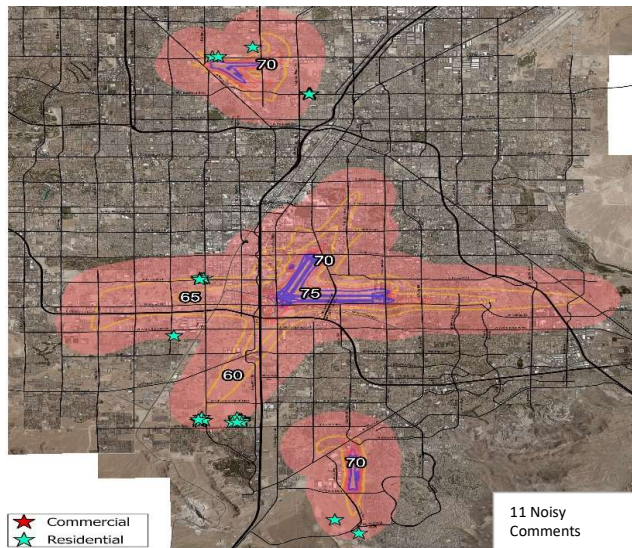
1. Provide for a range of uses compatible with airport hazard and noise exposure areas.
2. Prohibit the development of incompatible uses that are detrimental to the general health, safety, and welfare.
3. Require noise attenuated construction, as indicated by Table 30.48-AE, in accordance with the noise attenuation construction standards of Chapter 22.22 of the CCC, within these airport environs. The regulations of the AEOD shall supersede the regulations of the underlying district if there is a conflict.
4. Comply with the Federal Aviation Administration regulations.

2008-Most recent update to the AEOD in CCC, updated the AEOD for McCarran (LAS), and added an AEOD to the North Las Vegas Airport (VGT) and the Henderson Executive Airport (HND).

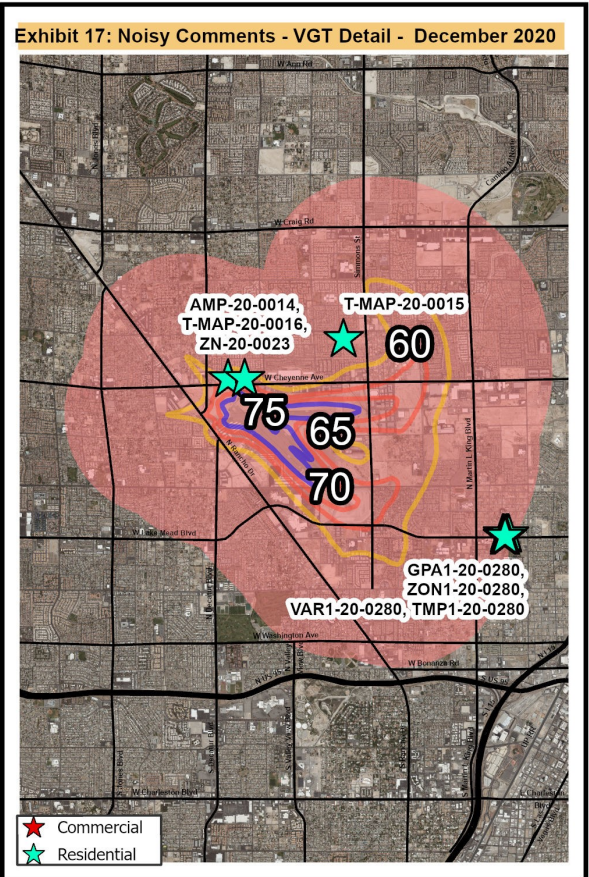
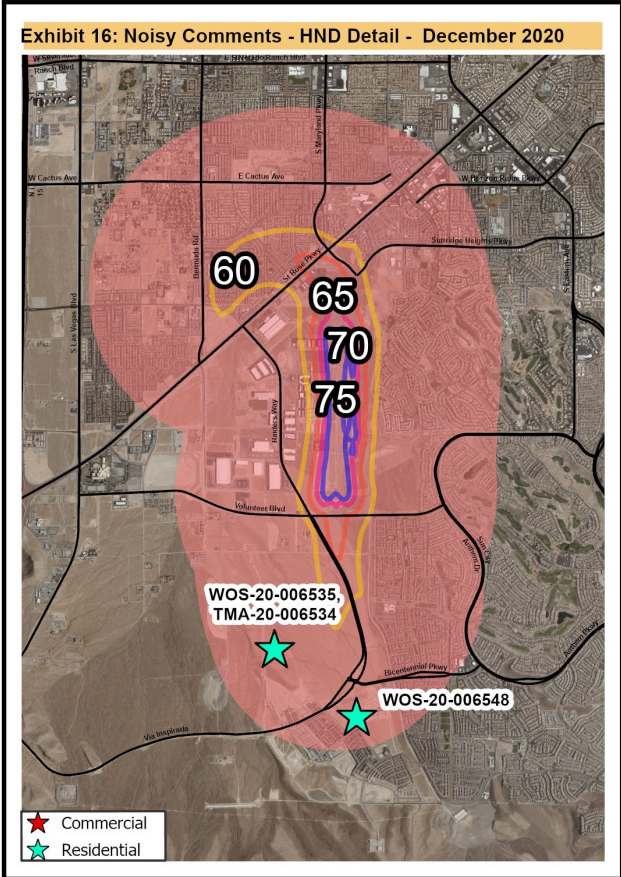
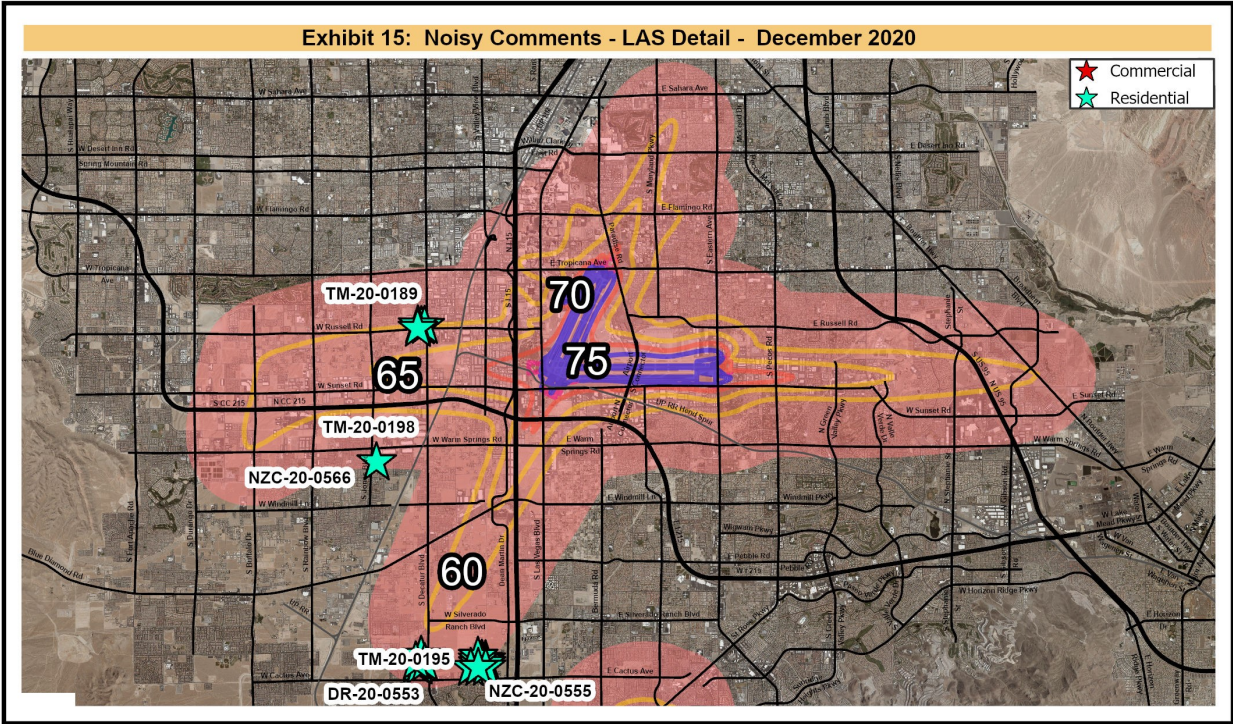
2011-AEOD adopted by the cities of North Las Vegas and Henderson.

The AEOD has not been formally adopted by the City of Las Vegas. Only a small, already developed portion of the VGT AEOD lies within the incorporated City of Las Vegas boundaries.

Salmon color indicates a 1 mile zone outside the AEOD.









### Exhibit 1: Noise Complaint Calls by Community\* - Annual 2020

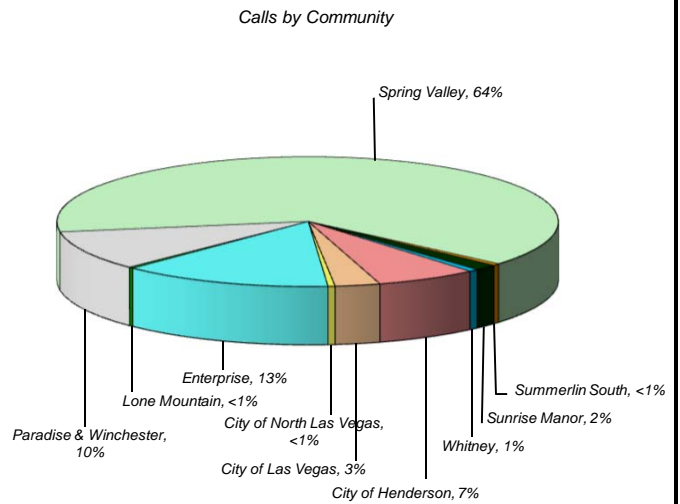
Community	No. of Calls in 2020	No. of Callers in 2020	No. of Calls in 2019	No. of Calls in 2018
City of Boulder City	43	29	54	2
City of Henderson	19	14	14	26
City of Las Vegas	3	2	6	8
City of North Las Vegas	89	28	66	53
Enterprise	2	2		
Lone Mountain	65	44	101	199
Paradise & Winchester	421	14	726	447
Spring Valley	3	2	6	872
Summerlin South	10	10	6	
Sunrise Manor	4	2	1	5
Whitney				1
Location unknown				
<b>Overall Total</b>	<b>659</b>	<b>147</b>	<b>980</b>	<b>1664</b>

**Difference between 2020 and 2019 Total Calls: -33%**

**Difference between 2020 and 2018 Total Calls: -60%**

**Average Number of Calls per Caller: 4.5**

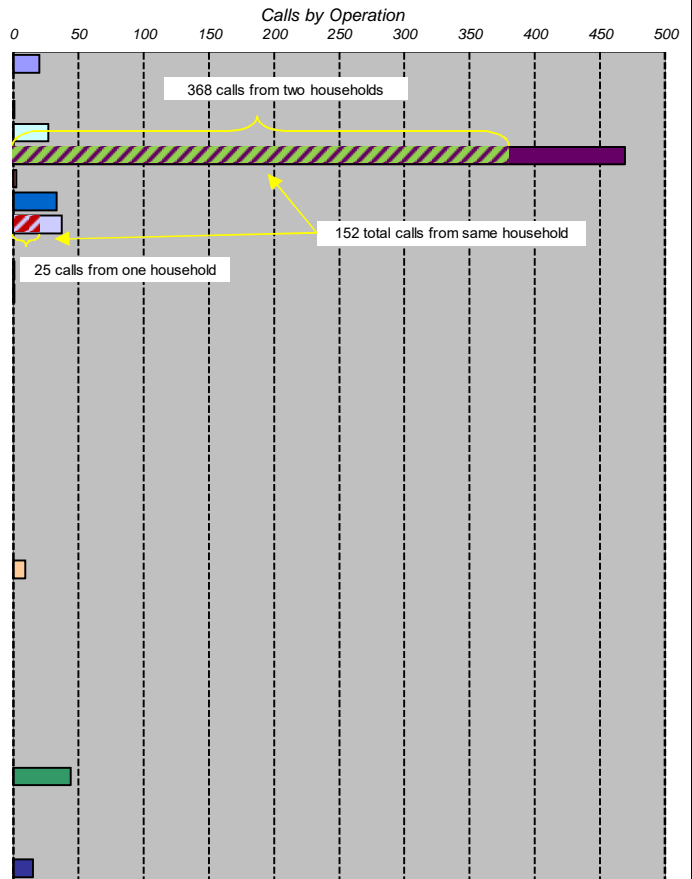
**Most calls received from one household: 244**



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

### Exhibit 2: Noise Complaint Calls by Type of Operation - Annual 2020

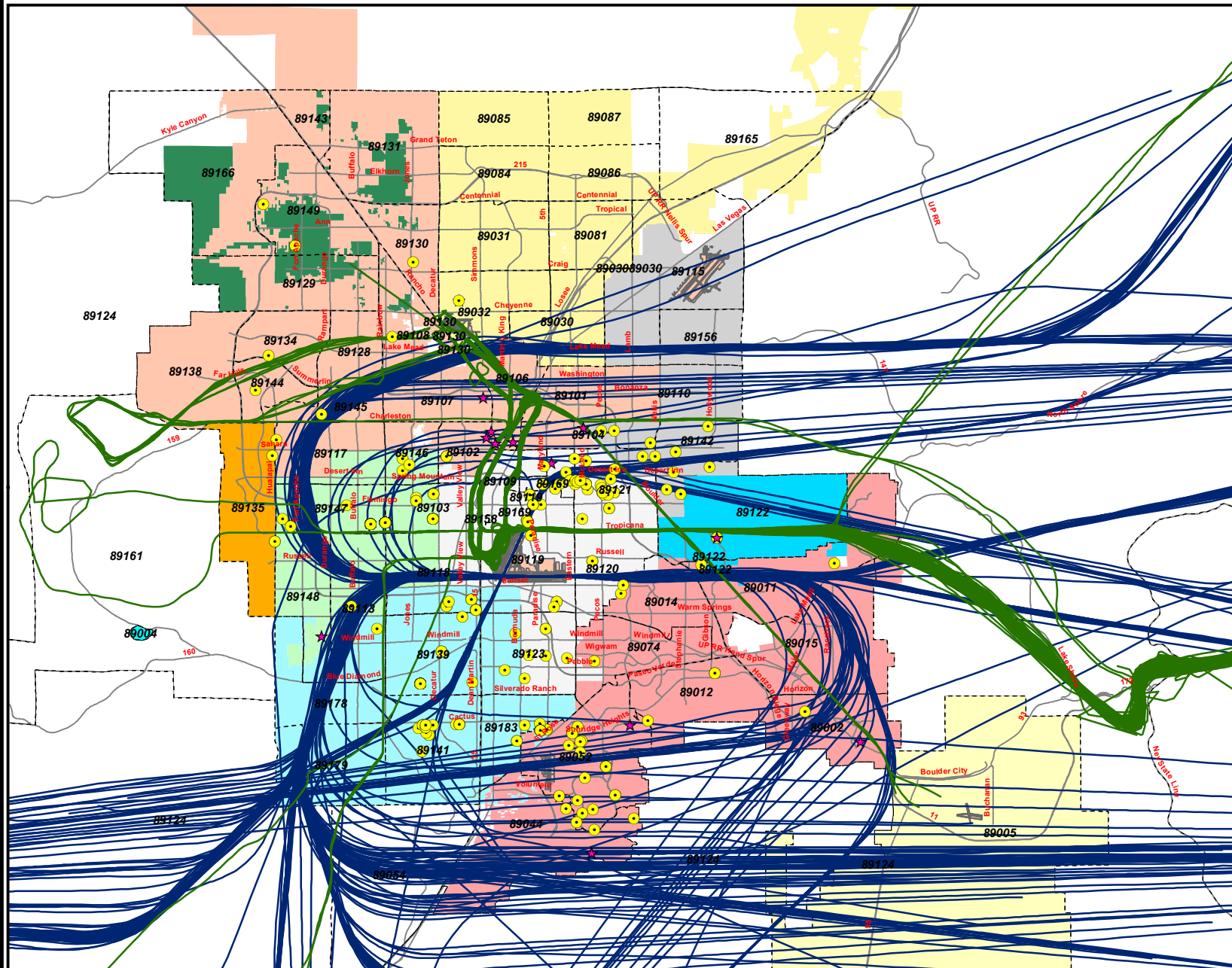
Operation	No. of Calls in 2020	Percent of Overall Total	No. of Calls in 2019	No. of Calls in 2018
LAS 01R/L Arrivals	20	3.0%	16	15
LAS 08R/L Arrivals			3	4
LAS 19R/L Arrivals	1	0.2%	2	2
LAS 26R/L Arrivals	27	4.1%	29	23
LAS 01R/L Departures	469	71.2%	459	271
LAS 08R/L Departures	2	0.3%	5	18
LAS 19R/L Departures	33	5.0%	20	6
LAS 26R/L Departures	37	5.6%	391	1,258
LAS Run-ups				1
LAS GA	1	0.2%		
LAS Other	1	0.2%		
<b>LAS Total</b>	<b>591</b>	<b>89.7%</b>	<b>925</b>	<b>1,598</b>
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	1.4%	5	6
VGT Other				
<b>VGT Total</b>	<b>9</b>	<b>1.4%</b>	<b>5</b>	<b>6</b>
HND 17R/L Arrivals				
HND 35R/L Arrivals				
HND 17R/L Departures				
HND 35R/L Departures				
HND Run-ups			1	
HND GA	44	6.7%	21	28
HND Other				
<b>HND Total</b>	<b>44</b>	<b>6.7%</b>	<b>22</b>	<b>28</b>
<b>Helicopters**</b>	<b>15</b>	<b>2.3%</b>	<b>28</b>	<b>32</b>
<b>Overall Total</b>	<b>659</b>	<b>100%</b>	<b>980</b>	<b>1664</b>



\*\* 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 - JanDec 2020



**Legend**

JanDec 2020  
Total Complaints: 659

- Aircraft Complaints Received 644 Mapped 634
- ★ Helicopter Complaints Received 15 Mapped 15
- Major Streets
- Airports
- - - Zip Code Boundaries
- Typical Large Air Carrier Departure Tracks
- Typical Touring Helicopter Tracks
- Unincorporated Clark County
- Boulder City
- Whitney
- Henderson
- Las Vegas
- North Las Vegas
- Paradise/Winchester
- Summerlin
- Spring Valley
- Sunrise Manor
- Winchester
- Enterprise
- Lone Mountain

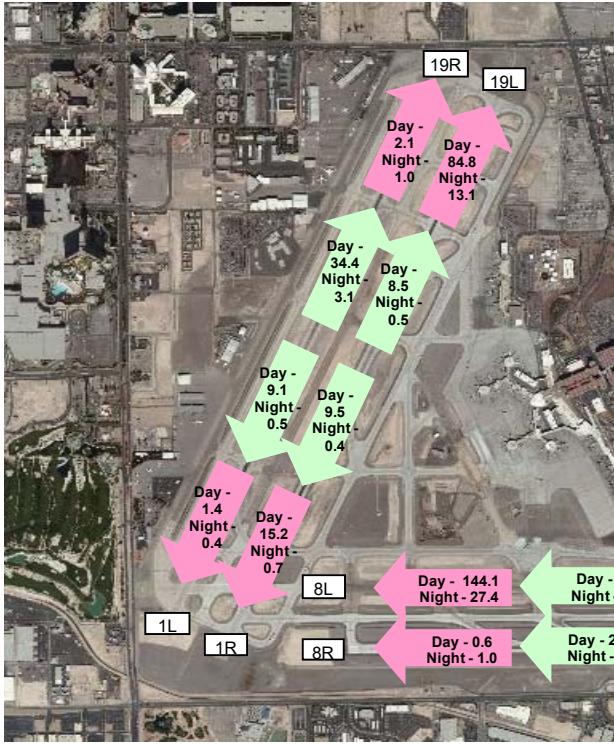
Department of Aviation  
Geographic Information Systems

2/18/2021

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

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### Exhibit 4: LAS Daily Average Operations Runway for Large Air Carrier Aircraft\* - Annual 2020

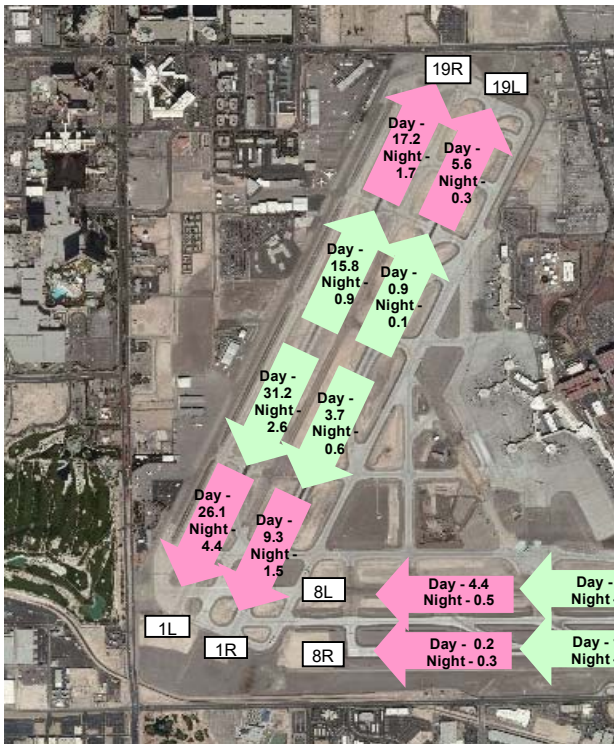


Year	2020		2019		2018	
Daytime Departures	263	86%	413	80%	408	81%
Nighttime Departures	44	14%	103	20%	94	19%
<b>Total Departures</b>	<b>307</b>	<b>100%</b>	<b>516</b>	<b>100%</b>	<b>502</b>	<b>100%</b>
Daytime Arrivals	276	90%	435	86%	428	85%
Nighttime Arrivals	29	10%	74	14%	74	15%
<b>Total Arrivals</b>	<b>305</b>	<b>100%</b>	<b>509</b>	<b>100%</b>	<b>502</b>	<b>100%</b>

Growth	Overall	Daytime	Nighttime
Depts. 2020 vs 2019	-41%	-36%	-58%
Depts. 2020 vs 2018	-39%	-35%	-54%
Arrivals 2020 vs 2019	-40%	-37%	-60%
Arrivals 2020 vs 2018	-39%	-36%	-60%

\* 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 2020



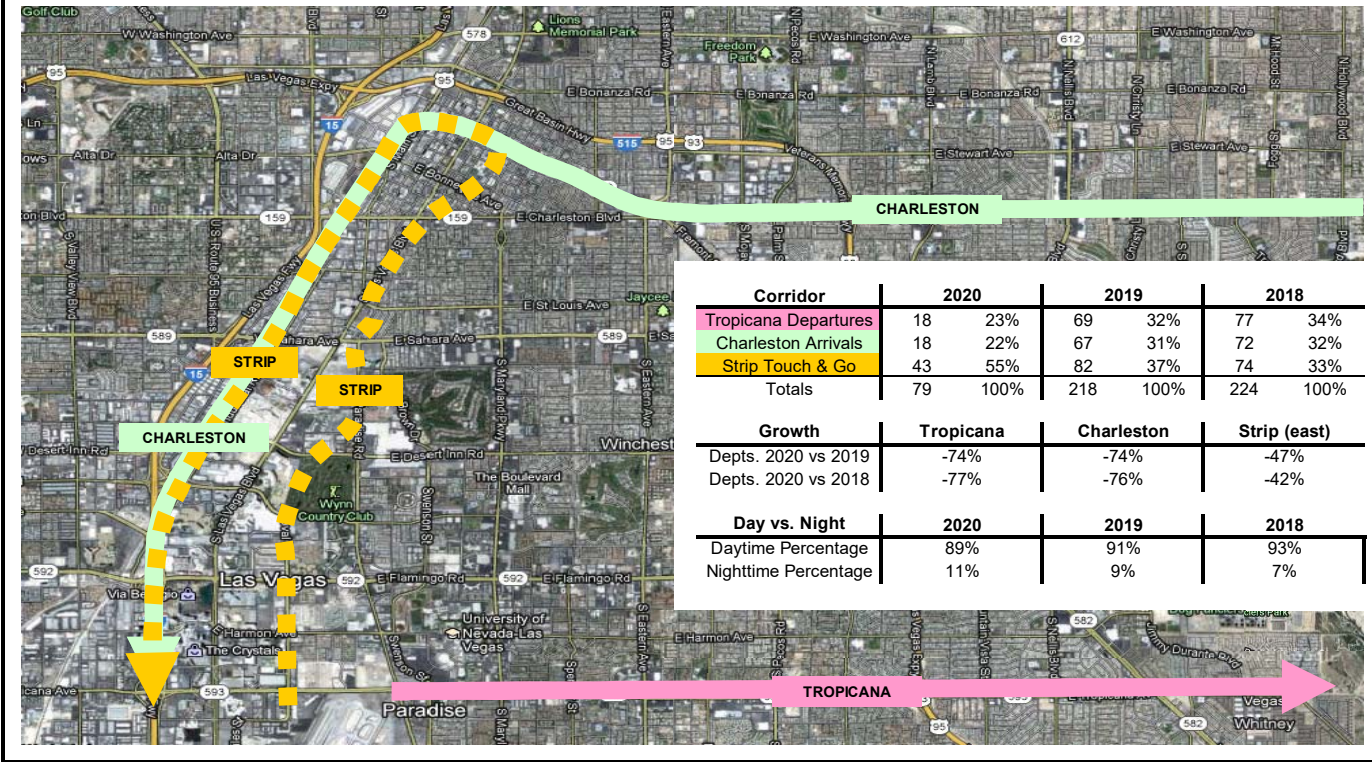
Year	2020		2019		2018	
Daytime Departures	66	88%	98	91%	96	90%
Nighttime Departures	9	12%	10	9%	11	10%
<b>Total Departures</b>	<b>75</b>	<b>100%</b>	<b>108</b>	<b>100%</b>	<b>107</b>	<b>100%</b>
Daytime Arrivals	66	93%	99	93%	95	93%
Nighttime Arrivals	5	7%	7	7%	7	7%
<b>Total Arrivals</b>	<b>71</b>	<b>100%</b>	<b>106</b>	<b>100%</b>	<b>103</b>	<b>100%</b>

Growth	Overall	Daytime	Nighttime
Depts. 2020 vs 2019	-31%	-33%	-10%
Depts. 2020 vs 2018	-30%	-31%	-16%
Arrivals 2020 vs 2019	-33%	-33%	-32%
Arrivals 2020 vs 2018	-31%	-31%	-32%

\*\* 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 2020



Corridor	2020	2019	2018
Tropicana Departures	18 23%	69 32%	77 34%
Charleston Arrivals	18 22%	67 31%	72 32%
Strip Touch & Go	43 55%	82 37%	74 33%
<b>Totals</b>	<b>79 100%</b>	<b>218 100%</b>	<b>224 100%</b>

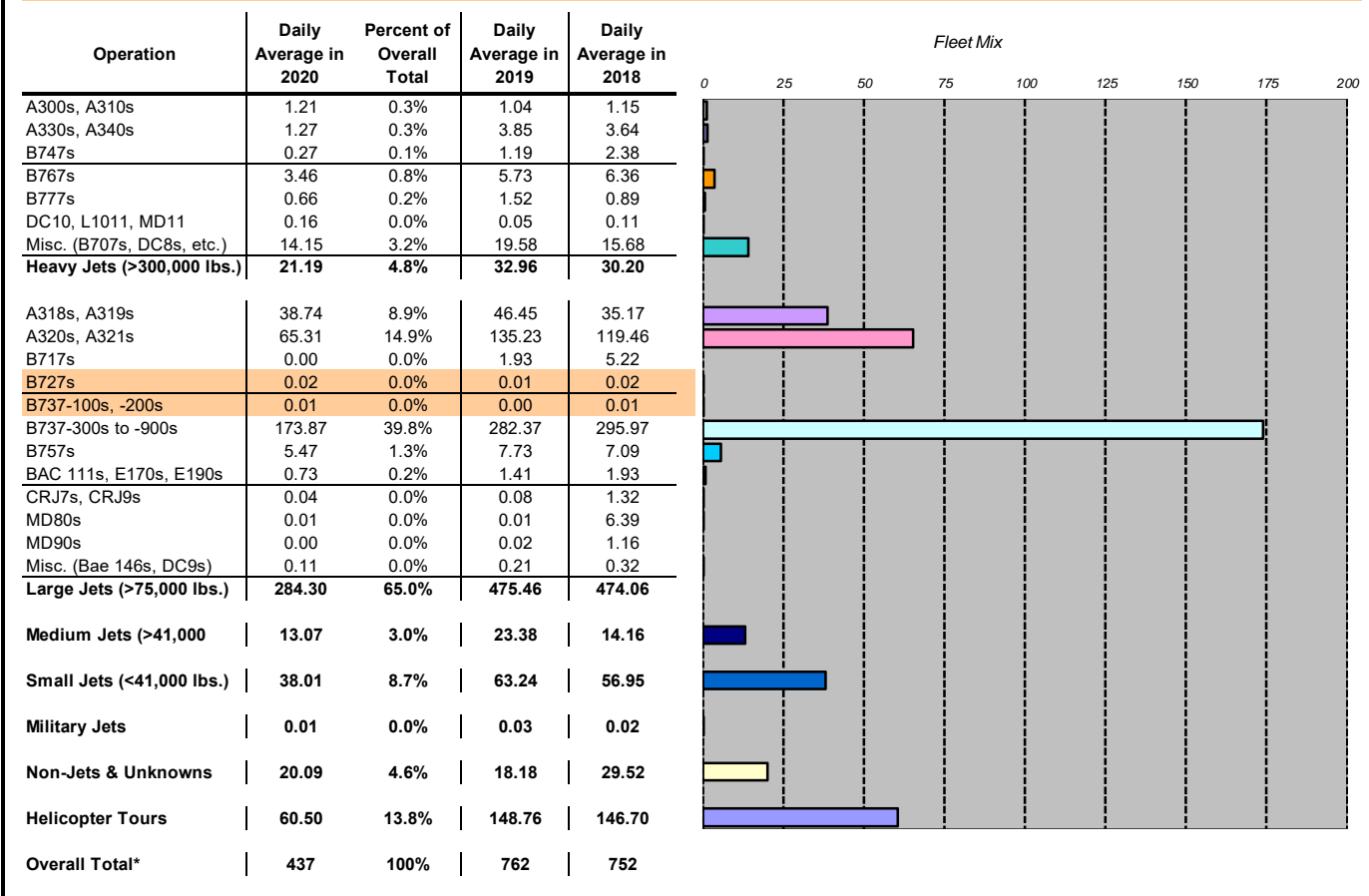
  

Growth	Tropicana	Charleston	Strip (east)
Depts. 2020 vs 2019	-74%	-74%	-47%
Depts. 2020 vs 2018	-77%	-76%	-42%

Day vs. Night	2020	2019	2018
Daytime Percentage	89%	91%	93%
Nighttime Percentage	11%	9%	7%

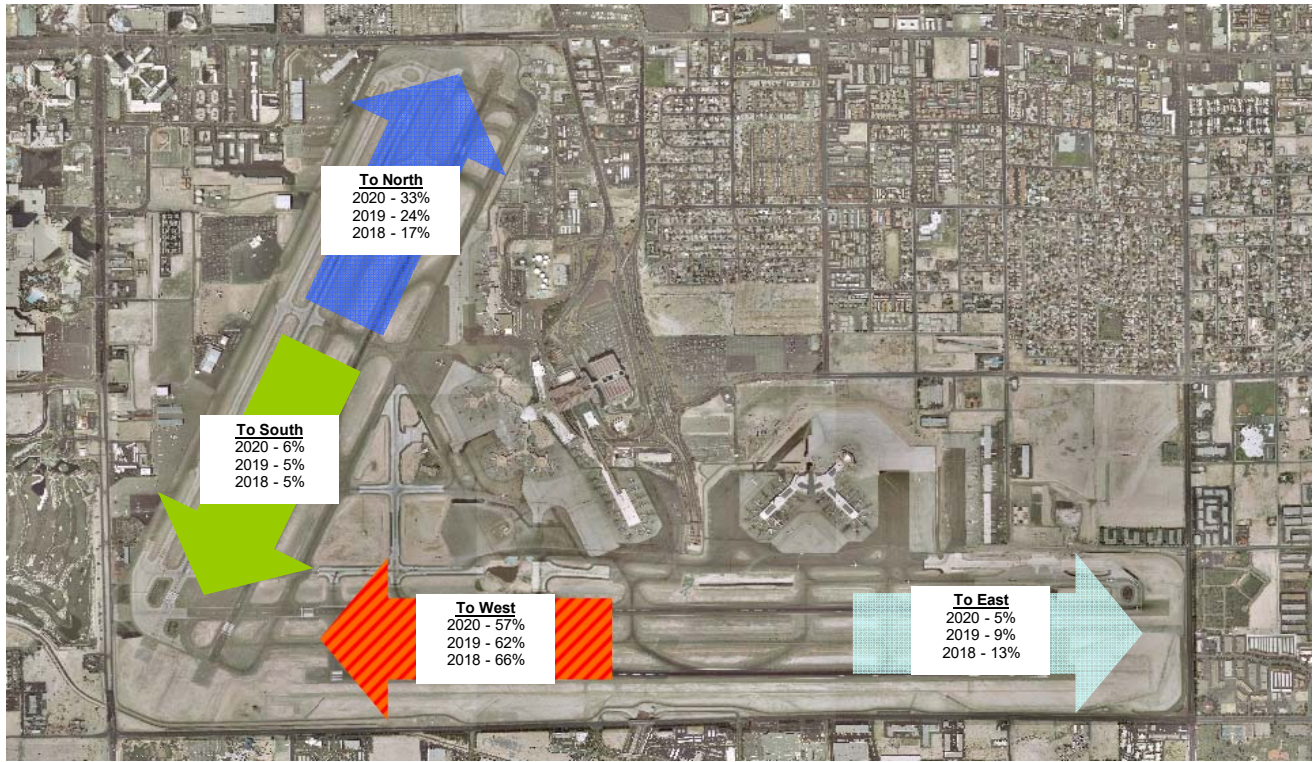
### Exhibit 7: LAS Aircraft Arrival Fleet Mix\*\* - Annual 2020



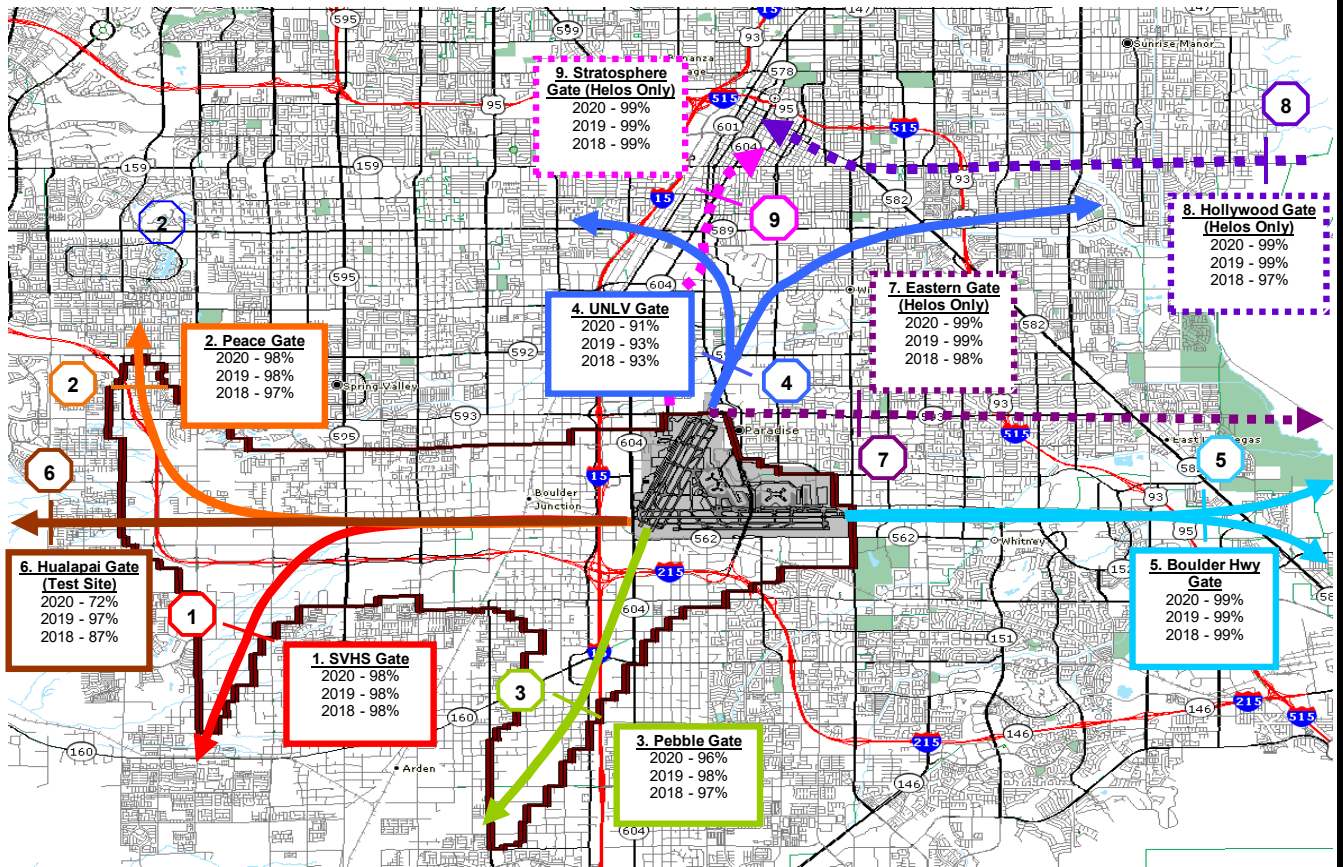
\*\* Overall Total: Note that operation type and runway use counts are estimated by Harris Corp. EnvironmentalVue Noise and Monitoring Operations system based on radar data. Due to limitations of radar data, information for aircraft weighing less than 75,000 lbs is inexact.



**Exhibit 8: LAS General Departure Direction for Large Air Carrier Aircraft\* - Annual 2020 to 2018**



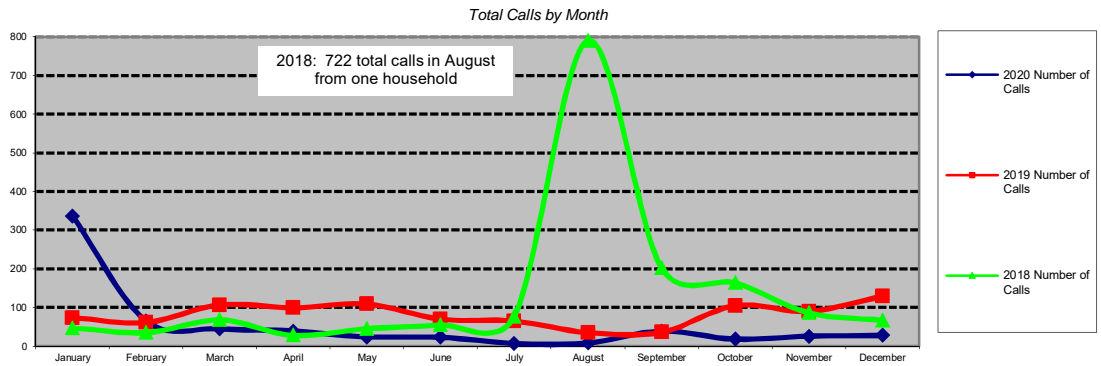
**Exhibit 9: "Gate" Compliance for Large Aircraft\* & LAS Helicopter Tours - Annual 2020**



\* 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 18: Total Calls/Callers by Month - 2018 through 2020

Year	January	February	March	April	May	June	July	August	September	October	November	December	January through December Total	Average No. of Calls per Caller
2020 Number of Calls	337	65	45	39	24	23	7	8	39	18	26	28	659	4.6
2020 Number of Callers	53	42	23	5	7	8	7	7	14	13	12	9	144	
2019 Number of Calls	74	61	107	99	109	70	65	35	36	105	90	129	980	6.6
2019 Number of Callers	11	11	28	34	33	12	9	6	17	22	14	35	149	
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	

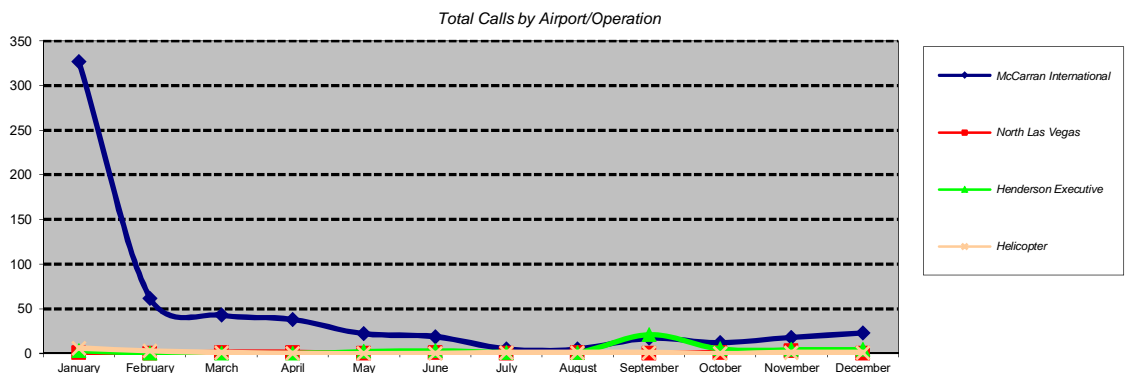


### Exhibit 19: Total Monthly Calls by Time of Day - Annual 2020

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.)	242	52	42	38	24	22	6	7	36	18	25	26	538	81.6%
Night Hours (10:00 p.m. to 6:59 a.m.)	95	13	3	1	0	1	1	1	3	0	1	2	121	18.4%
<b>Total</b>	<b>337</b>	<b>65</b>	<b>45</b>	<b>39</b>	<b>24</b>	<b>23</b>	<b>7</b>	<b>8</b>	<b>39</b>	<b>18</b>	<b>26</b>	<b>28</b>	<b>659</b>	<b>100.0%</b>

### Exhibit 20: Total Monthly Calls by Airport/Operation - Annual 2020

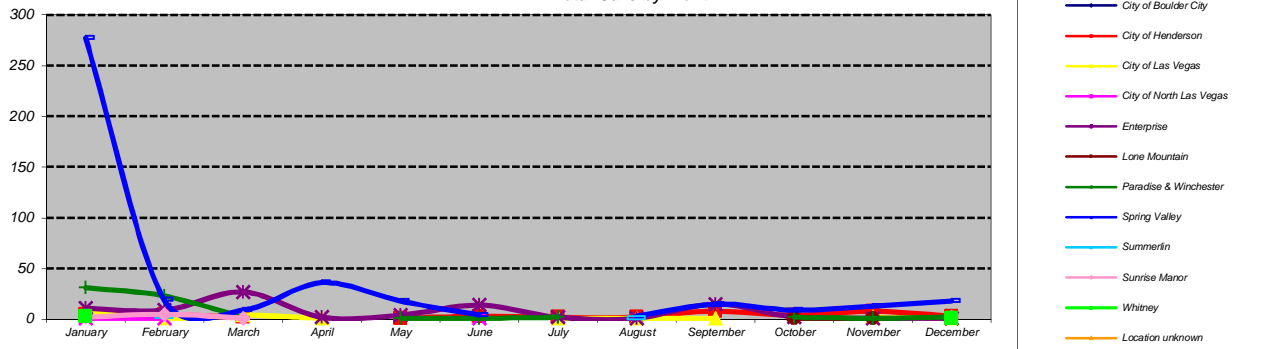
Airport	January	February	March	April	May	June	July	August	September	October	November	December	January through December Total	Percent
McCarran International	327	62	43	38	22	19	5	5	17	12	18	23	591	89.7%
North Las Vegas	1	0	1	1	0	1	0	1	0	1	3	0	9	1.4%
Henderson Executive	3	0	0	0	2	3	1	1	21	5	4	4	44	6.7%
Helicopter	6	3	1	0	0	0	1	1	1	0	1	1	15	2.3%
<b>Total</b>	<b>337</b>	<b>65</b>	<b>45</b>	<b>39</b>	<b>24</b>	<b>23</b>	<b>7</b>	<b>8</b>	<b>39</b>	<b>18</b>	<b>26</b>	<b>28</b>	<b>659</b>	<b>100.0%</b>



### Exhibit 21: Total Monthly Calls by Community - Annual 2020

Community	January	February	March	April	May	June	July	August	September	October	November	December	January through December Total	Percnt
City of Boulder City	5	5	2		1	3	2	2	8	4	8	3	0	0.0%
City of Henderson	7	1	4	1				1	1		2	1	43	6.5%
City of Las Vegas													19	2.9%
City of North Las Vegas	1	1				1							3	0.5%
Enterprise	11	9	27	2	4	14	2	1	15	2	1	1	89	13.5%
Lone Mountain										1	1		2	0.3%
Paradise & Winchester	31	23	2		1	1	2			2	1	2	65	9.9%
Spring Valley	277	19	9	36	18	4		3	15	9	13	18	421	63.9%
Summerlin		2						1					3	0.5%
Sunrise Manor	2	5	1										10	1.5%
Whitney	3												4	0.6%
Location unknown													0	0.0%
<b>Overall Total</b>	<b>337</b>	<b>65</b>	<b>45</b>	<b>39</b>	<b>24</b>	<b>23</b>	<b>7</b>	<b>8</b>	<b>39</b>	<b>18</b>	<b>26</b>	<b>28</b>	<b>659</b>	<b>100%</b>

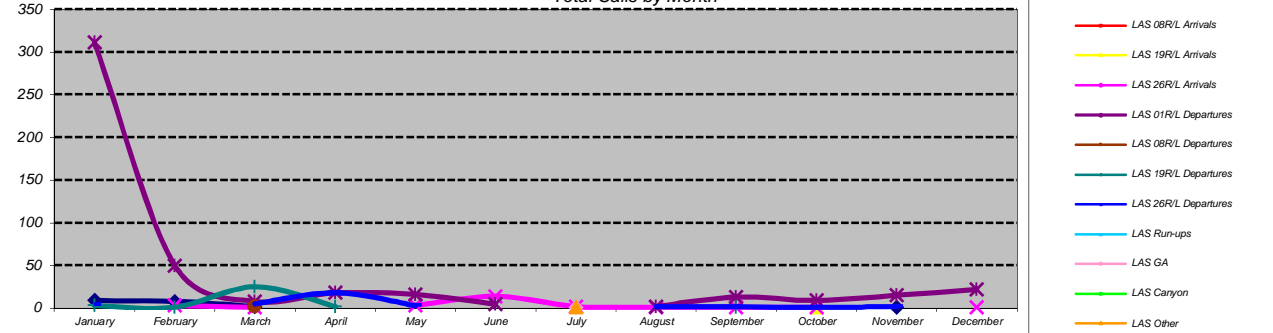
Total Calls by Month



### Exhibit 22: Total Monthly Calls by LAS Operation - Annual 2020

LAS Operations	January	February	March	April	May	June	July	August	September	October	November	December	January through December Total	Percnt
LAS 01R/L Arrivals	9	8	2										20	3.4%
LAS 08R/L Arrivals													0	0.0%
LAS 19R/L Arrivals										1			1	0.2%
LAS 26R/L Arrivals		3	1		3	14	2	1	1	1			27	4.6%
LAS 01R/L Departures	311	50	8	18	16	5		2	13	9	15	22	469	79.4%
LAS 08R/L Departures			2										2	0.3%
LAS 19R/L Departures	3	1	25	2			1		1				33	5.6%
LAS 26R/L Departures	4		5	18	3			2	2	1	2		37	6.3%
LAS Run-ups													0	0.0%
LAS GA							1						1	0.2%
LAS Canyon													0	0.0%
LAS Other							1						1	0.2%
<b>LAS Total</b>	<b>327</b>	<b>62</b>	<b>43</b>	<b>38</b>	<b>22</b>	<b>19</b>	<b>5</b>	<b>5</b>	<b>17</b>	<b>12</b>	<b>18</b>	<b>23</b>	<b>591</b>	<b>100.0%</b>

Total Calls by Month





### Exhibit 10: Land Use Application Reviews & Comments - 2020

Land Use Application Review Summary	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2020 Total	2019 Total	2018 Total
No. of Land Use Applications Reviewed	1,049	505	533	153	2,240	3,595	N/A
No. of Applications where CCDOA Issued a Comment	88	46	7	20	161	219	N/A
Percent of Applications where Comment Issued	8%	9%	1%	13%	7%	6%	N/A

### Exhibit 11: Land Use Application Comments by Airport Concern - 2020

Summary by Comment Type	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2020 Total	2019 Total	2018 Total
Deed Restrictions	8	0	0	0	8	4	N/A
Height-Penetrates Part 77 100:1 Surfaces/>200'	33	30	5	3	71	94	N/A
Height-Penetrates Part 77 PATH-C Surfaces*	5	0	0	0	5	7	N/A
Helipad/Helipad	0	1	0	0	1	0	N/A
Noisy-Commercial within AEOD**	14	2	0	2	18	42	N/A
Noisy-Residential within the AEOD**	4	5	0	2	11	12	N/A
Noisy-Residential Just Outside the AEOD**	40	24	2	14	80	103	N/A
Misc.-If applicable, detailed info. provided within the written summary	2	0	0	1	3	0	N/A
<b>Total***</b>	<b>106</b>	<b>62</b>	<b>7</b>	<b>22</b>	<b>197</b>	<b>262</b>	<b>N/A</b>

\* Primary, Approach, Transition, Horizontal, Conical as defined by Federal Aviation Regulation (FAR) Part 77.

\*\*AEOD-Airport Environs Overlay District (defined below).

\*\*\*Comment Concern totals will not always match Comment Applications total. Some applications are issued more than one type of CCDOA comment.

### Exhibit 12: Dwelling Units per Commented Application\* - 2020

Dwelling Units Proposed in Commented Applications	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2020 Total	2019 Total	2018 Total
Within the AEOD	136	630	0	300	1,066	1,410	N/A
Just Outside the AEOD	5,746	4,200	260	3,462	13,668	15,247	N/A

\*Due to high variability in many land use proposals, dwelling units proposed may not reflect actual number of units built. In addition, some projects will require more than one type of application, resulting in the project total counted more than once.

### Exhibit 13: Land Use Applications Denied and/or Opposed\* - 2020

Summary of LUA Opposed	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2020 Total	2019 Total	2018 Total
Recommend Denial	2	1	0	2	5	6	N/A
Opposed at Hearings	4	0	0	0	4	4	N/A

\*If denied or opposed at a hearing, detailed information provided within the written summary portion.

### Exhibit 14: Airport Environs Overlay Districts & Noisy Comments - Valley Wide - 2020

AEOD - Airport Environs Overlay Districts - Noise Contours  
Clark County Code (CCC) 30.48.010. The AEOD is established to:

1. Provide for a range of uses compatible with airport hazard and noise exposure areas.
2. Prohibit the development of incompatible uses that are detrimental to the general health, safety, and welfare.
3. Require noise attenuated construction, as indicated by Table 30.48-AE, in accordance with the noise attenuation construction standards of Chapter 22.22 of the CCC, within these airport environs. The regulations of the AEOD shall supersede the regulations of the underlying district if there is a conflict.
4. Comply with the Federal Aviation Administration regulations.

2008-Most recent update to the AEOD in CCC, updated the AEOD for McCarran (LAS), and added an AEOD to the North Las Vegas Airport (VGT) and the Henderson Executive Airport (HND).

2011-AEOD adopted by the cities of North Las Vegas and Henderson.

The AEOD has not been formally adopted by the City of Las Vegas. Only a small, already developed portion of the VGT AEOD lies within the incorporated City of Las Vegas boundaries.

Salmon color indicates a 1 mile zone outside the AEOD.

