

MEMORANDUM

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Director

DEPARTMENT OF AVIATION

TO: DISTRIBUTION Digitally signed by George C. Sims

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

SUBJECT: JANUARY THROUGH MARCH 2022 NOISE COMPLAINT AND LAND USE REVIEW REPORTS

DATE: APRIL 20, 2022

Attached for your review are the Clark County Department of Aviation's (CCDOA) Monthly Noise Complaint and Land Use Review Reports for January through March 2021. Please note the following airport abbreviations: **Harry Reid International Airport (LAS)**, **North Las Vegas Airport (VGT)**, and **Henderson Executive Airport (HND)**.

The following reports describe noise complaints and operational data regarding helicopter and fixed-wing aircraft operations at LAS, VGT, and HND. Aircraft noise complaints are received either through the CCDOA's Noise Hotline (702-261-3694), the Noise Office (702-261-5600), or calls forwarded from LAS's toll free number (1-800-261-5704). Nellis Air Force Base noise complaints are forwarded to the Nellis Public Affairs Office (702-652-2750), and noise complaints regarding aircraft operations from the Boulder City Airport are forwarded to the Boulder City Airport Coordinator (702-293-9405). Individuals who express concerns regarding aircraft operations originating from private facilities (i.e., Valley Hospital or the private helipad located near Las Vegas Blvd. and Larson Lane are asked to contact the individual property owner directly.

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

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 following provides a synopsis of each monthly noise complaint report, land use reviews, 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

January 2022: 56 total complaints - a 195% increase from 2021 and an 83% decrease from 2020. On average, each caller (or household) issued 1.8 calls. The most calls received from one household totaled 11.

Calls by Community - (Exhibits 1 and 3)

Majority (more than 50%): The **Enterprise** community issued 36 calls (64%). This community is typically impacted by aircraft departing to the south (from Runway 19L and Runway 19R) as well as, aircraft departing to the south that turn right (to the west) immediately after departure.

Minority (between 10% and 50%): The **Paradise and Winchester** communities issued 9 calls (16%). These communities are typically impacted by aircraft departing to the north (from Runway 01R and Runway 01L) and aircraft arriving from the north (into Runways 19R and 19L).

The **City of Henderson** community issued 7 calls (13%). This community is typically impacted by aircraft departing to the east (from Runway 08R and Runway 08L), and helicopter tour operations.

Repeat Caller Impact: One household issued 20% (11 calls) of all the calls received in January 2022.

Calls by Operation - (Exhibit 2)

LAS: 62% of the total calls were due to **LAS** fixed-wing operations.

- 39% were due to departures to the south from Runways 19L and 19R (68% from two households).

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

HND: 34% of the total calls were due to **HND** fixed-wing operations (58% from one household).

Helos: 4% of the total calls were due to **helicopter** operations (100% from one household).

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

Overall: 422 daily *departures* – a 59% increase from 2021 and 19% decrease from 2020.

- 75% of departures were to the north, 20% west, 4% east, and 1% south.

412 daily *arrivals* – a 57% increase from 2021 and 20% decrease from 2020.

- 67% of arrivals were from the east, 33% south, and 1% north.

Daytime: 339 daily *departures* – a 46% increase from 2021 and 22% decrease from 2020.

- 76% of departures were to the north, 18% west, 5% east, and 2% south.

357 daily *arrivals* – a 47% increase from 2021 and 21% decrease from 2020.

- 65% of arrivals were from the east, 34% south, and 1% north.

Nighttime: 83 daily *departures* – a 143% increase from 2021 and 6% decrease from 2020.

- 72% of departures were to the north, and 28% west.

55 daily *arrivals* – a 193% increase from 2021 and 12% decrease from 2020.

- 74% of arrivals were from the east, 25% south, and 1% north.

Daytime vs. Nighttime: Approximately 80% of all *departures* and 87% of all *arrivals* occurred during the daytime hours.

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

Overall: 111 daily *departures* – an 81% increase from 2021 and 7% decrease from 2020.

- 76% of departures were to the north, 18% south, 4% east, and 2% west.

108 daily *arrivals* – an 84% increase from 2021 and 7% decrease from 2020.

- 54% of arrivals were from the south, 31% east, and 15% north.

Daytime: 103 daily *departures* – an 85% increase from 2021 and 6% decrease from 2020.

- 77% of departures were to the north, 17% south, 4% east, and 2% west.

104 daily *arrivals* – an 87% increase from 2021 and 5% decrease from 2020.

- 53% of arrivals were from the south, 31% east, and 15% north.

Nighttime: 7 daily *departures* – a 42% increase from 2021 and 20% decrease from 2020.

- 69% of departures were to the north, 28% south, and 3% west.

4 daily *arrivals* – a 31% increase from 2021 and 42% decrease from 2020.

- 63% of arrivals were from the south, 26% north, and 11% east.

Daytime vs. Nighttime: Approximately 93% of all *departures* and 96% of all *arrivals* occurred during the daytime hours.

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

Tropicana: 37 daily *departures* - a 202% increase from 2021 and a 19% decrease from 2020.

Charleston: 35 daily *arrivals* - a 195% increase from 2021 and a 21% decrease from 2020.

Strip: 68 daily *touch and go's* - a 19% increase from 2021 and a 10% increase from 2020.

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

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

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

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

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

Small: **Small** turbine-driven aircraft (those weighing 41,000 lbs. or less) accounted for 10% 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 17% 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 2022, 20% departed to the *west* (from LAS's primary departure runways). This figure was 71% in 2021 and 16% in 2020.

Secondary: In 2022, 1% departed to the *south* (from LAS's secondary departure runways). This figure was 10% in 2021 and 2% in 2020.

Alternate 1: In 2022, 75% departed to the *north* (from LAS's alternate departure runways). This figure was 15% in 2021 and 79% in 2020.

Alternate 2: In 2022, 4% departed to the *east* (from LAS's alternate departure runways). This figure was 4% in 2020 and 4% in 2020.

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

SVHS: In 2022, 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 2021 and 98% in 2020.

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 2022, 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 99% in 2021, and 98% in 2020.

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 2022 94% of the large air carrier aircraft (excluding those destined to the Nevada National Security Site) that departed to the south from Runways 19L or 19R were within 0.3 NM of the intersection of *Pebble Road & Arville Street*. This figure was 98% in 2021 and 99% in 2020.

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

UNLV: In 2022, 89% of the large air carrier aircraft that departed to the north from Runways 01L or 01R were within 0.3 NM of the *UNLV sports complex*. This figure was 90% in 2021 and 92% in 2020.

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 2022, 97% of the large air carrier aircraft that departed to the east from Runways 08L or 08R were within 0.3 NM of the extended runway centerline, near *Boulder Highway*. This figure was 99% in 2021 and 99% in 2020.

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.).

Eastern: In 2022, 96% of the touring helicopters destined east of the Las Vegas Valley were within 500 feet of the intersection of *Tropicana Avenue & Eastern Avenue*. This figure was 99% in 2021 and 99% in 2020.

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

Vegas VORTAC before turning. This noise abatement flight track avoids communities impacted by helicopters located north and south of the corridor.

Hollywood: In 2022, 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 2021 and 100% in 2020.

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 2022, 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 2021 and 99% in 2020.

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: 96 applications were reviewed (a 6% decrease from 2021), with 7 applications (7%) issued at least one comment.

Henderson: 33 applications were reviewed (a 11% decrease from 2021), with 6 applications (18%) issued at least one comment.

Las Vegas: 52 applications were reviewed (79% increase from 2021), with 2 applications (4%) issued at least one comment.

North Las Vegas: 20 applications were reviewed (a 11% increase from 2021), with 2 applications (10%) issued at least one comment.

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

Clark County: 7 comments were issued, with all 7 comments issued for “noise” concerns.

Henderson: 6 comments were issued, with all 6 comments issued for “noise” concerns.

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

North Las Vegas: 2 comments was issued, with both comments issued for “noise” concerns.

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

Clark County: 402 dwelling units were proposed in the commented applications, just outside the AEOD.

Henderson: 600 dwelling units were proposed in the commented applications, just outside the AEOD.

Las Vegas: 116 dwelling units were proposed in the commented applications, just outside the AEOD.

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

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

None

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.

February 2022: 119 total complaints - a 600% increase from 2021 and an 83% increase from 2020. On average, each caller (or household) issued 4.4 calls. The most calls received from one household totaled 33.

Calls by Community - (Exhibits 1 and 3)

Majority (more than 50%): The **Enterprise** community issued 104 calls (88%). (See January 2022 synopsis of typical aircraft overflight impacts on this community.)

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

Repeat Caller Impact: One household issued 28% (33 calls) of all the calls received in February 2022.

Calls by Operation - (Exhibit 2)

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

- 84% were due to departures to the south from Runways 19L and 19R (60% from three households).

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

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

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

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

- Overall:** 444 daily *departures* – a 71% increase from 2021 and 13% decrease from 2020.
▪ 67% of departures were to the north, 24% west, 5% east, and 3% south.
432 daily *arrivals* – a 69% increase from 2021 and 14% decrease from 2020.
▪ 63% of arrivals were from the east, 33% from the south, and 3% from the north.
- Daytime:** 351 daily *departures* – a 58% increase from 2021 and 17% decrease from 2020.
▪ 68% of departures were to the north, 23% west, 6% east, and 3% south.
371 daily *arrivals* – a 58% increase from 2021 and 16% decrease from 2020.
▪ 64% of arrivals were from the east, 34% from the south, and 3% from the north.
- Nighttime:** 93 daily *departures* – a 147% increase from 2021 and 5% increase from 2020.
▪ 66% of departures were to the north, 30% west, and 4% south.
62 daily *arrivals* – a 180% increase from 2021 and 7% decrease from 2020.
▪ 62% of arrivals were from the east, 30% south, and 7% north.

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

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

- Overall:** 127 daily *departures* – an 82% increase from 2021 and 12% increase from 2020.
▪ 69% of departures were to the north, 22% south, 6% east, and 3% west.
123 daily *arrivals* – a 78% increase from 2021 and 12% increase from 2020.
▪ 50% of arrivals were from the south, 31% east, and 18% north.
- Daytime:** 118 daily *departures* – an 84% increase from 2021 and 13% increase from 2020.
▪ 69% of departures were to the north, 21% south, 7% east, and 3% west.
117 daily *arrivals* – a 79% increase from 2021 and 13% increase from 2020.
▪ 50% of arrivals were from the south, 32% east, and 18% north.
- Nighttime:** 10 daily *departures* – a 58% increase from 2021 and 6% increase from 2020.
▪ 71% of departures were to the north, 24% south, and 5% west.
6 daily *arrivals* – a 66% increase from 2021 and 2% decrease from 2020.
▪ 57% of arrivals were from the south, 23% north, and 20 east.

Daytime vs. Nighttime: Approximately 92% of all *departures* and 95% of all *arrivals* occurred during the daytime hours.

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

Tropicana: 46 daily *departures* – a 159% increase from 2021 and a 12% increase from 2020.

Charleston: 44 daily *arrivals* - a 156% increase from 2021 and a 12% increase from 2020.

Strip: 85 daily *touch and go's* – no change from 2021 and a 60% increase from 2020.

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

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

- Heavies:** *Very large* air carrier turbine-driven aircraft (those weighing 300,000 lbs. or more) accounted for 2% of the daily traffic.
- Large:** *Large* air carrier turbine-driven aircraft (those weighing more than 75,000 lbs. and less than 300,000 lbs.) accounted for 61% of the daily traffic.
- Medium:** *Medium* turbine-driven aircraft (those weighing more than 41,000 lbs. and less than 75,000 lbs.) accounted for 3% of the daily traffic.
- Small:** *Small* turbine-driven aircraft (those weighing 41,000 lbs. or less) accounted for 10% of the daily traffic.
- Military:** *Military* turbine-driven aircraft accounted for less than 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 19% 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 2022, 24% departed to the *west* (from LAS's primary departure runways). This figure was 38% in 2021 and 16% in 2020.
- Secondary:** In 2022, 3% departed to the *south* (from LAS's secondary departure runways). This figure was 6% in 2021 and 2% in 2020.
- Alternate 1:** In 2022, 67% departed to the *north* (from LAS's alternate departure runways). This figure was 53% in 2021 and 79% in 2020.
- Alternate 2:** In 2022, 5% departed to the *east* (from LAS's alternate departure runways). This figure was 3% in 2021 and 4% in 2020.

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

- SVHS:** In 2022, 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 2021 and 98% in 2020. (See January 2022 synopsis for specific location of the SVHS gate.)
- Peace:** In 2022, 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 2021 and 98% in 2020. (See January 2022 synopsis for specific location of the Peace gate.)

- Pebble:** In 2022, 99% of the large air carrier aircraft (excluding those destined to the Nevada National Security Site) that departed to the south from Runways 19L or 19R were within 0.3 NM of the intersection of *Pebble Road & Arville Street*. This figure was 98% in 2021 and 98% in 2020. (See January 2022 synopsis for specific location of the Pebble gate.)
- UNLV:** In 2022, 88% 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 91% in 2021 and 91% in 2020. (See January 2022 synopsis for specific location of the UNLV gate.)
- Boulder:** In 2022, 99% of the large air carrier aircraft (excluding those destined to the Nevada National Security Site) that departed to the east from Runway 08L or 08R were within 0.3 NM of the extended runway centerline, near *Boulder Highway*. This figure was 95% in 2021 and 99% in 2020. (See January 2022 synopsis for specific location of the Boulder Hwy. gate.)
- Eastern:** In 2022, 97% of the touring helicopters destined east of the Las Vegas Valley were within 500 feet of the intersection of *Tropicana Avenue & Eastern Avenue*. This figure was 98% in 2021 and 99% in 2020. (See January 2022 synopsis for specific location of the Eastern gate.)
- Hollywood:** In 2022, 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 2021 and 99% in 2020. (See January 2022 synopsis for specific location of the Hollywood gate.)
- Stratosphere:** In 2022, 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 83% in 2021 and 100% in 2020. (See January 2022 synopsis for specific location of the Stratosphere gate.)

Land Use Application Reviews & Comments – (Exhibit 10)

Clark County: 104 applications were reviewed (a 25% increase from 2021), with 17 applications (16%) issued at least one comment.

Henderson: 53 applications were reviewed (a 15% increase from 2021), with 6 applications (11%) issued at least one comment.

Las Vegas: 35 applications were reviewed (3% increase from 2021), with 0 applications (0%) issued at least one comment.

North Las Vegas: 0 applications were reviewed (a 100% decrease from 2021).

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

Clark County: 17 comments were issued, with 13 comments issued for “noise” concerns.

Henderson: 7 comments were issued, with 2 comments issued for “noise” concerns.

Las Vegas: 0 comments were issued.

North Las Vegas: 0 applications were reviewed.

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

Clark County: 1,266 dwelling units were proposed in the commented applications, just outside the AEOD.

Henderson: 89 dwelling units were proposed in the commented applications within the AEOD. 213 dwelling units were proposed in the commented applications, just outside the AEOD.

Las Vegas: 0 comments were issued.

North Las Vegas: 0 applications were reviewed.

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

None

The information denoted in this monthly summary represents **typical** residential complaints (with the exception of the increased number of complaint calls), flight activity, (with the exception of increased departures to the north), fleet mix, and gate compliance.

March 2021: 211 total complaints - a 61% increase from 2021 and a 369% increase from 2020. On average, each caller (or household) issued 6.2 calls. The most calls received from one household totaled 66.

Calls by Community - (Exhibits 1 and 3)

Majority (more than 50%): The **Enterprise** community issued 191 calls (91%). (See January 2022 synopsis of typical aircraft overflight impacts on this community.)

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

Repeat Caller Impact: One household issued 31% (66 calls) of all the calls received in March 2022.

Calls by Operation - (Exhibit 2)

LAS: 97% of the total calls received were due to **LAS** fixed-wing operations.
▪ 88% were due to departures to the south from Runways 19L and 19R (57% from two households).

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

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

Helis: 0% of the total calls received were due to **helicopter** operations.

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

- Overall:** 462 daily *departures* – a 35% increase from 2021 and 21% increase from 2020.
▪ 44% of departures were to the north, 42% west, 9% east, and 4% south.
451 daily *arrivals* – a 34% increase from 2021 and 20% increase from 2020.
▪ 70% of arrivals were from the east, 25% south, 4% north, and 1% west.
- Daytime:** 363 daily *departures* – a 30% increase from 2021 and 21% increase from 2020.
▪ 43% of departures were to the north, 40% west, 12% east, and 5% south.
379 daily *arrivals* – a 29% increase from 2021 and 21% increase from 2020.
▪ 68% of arrivals were from the east, 27% south, 4% north, and 1% west.
- Nighttime:** 100 daily *departures* – a 60% increase from 2021 and 23% increase from 2020.
▪ 49% of departures were to the north, 49% west, 1% south, and 1% east.
71 daily *arrivals* – a 66% increase from 2020 and 13% increase from 2020.
▪ 82% of arrivals were from the east, 17% south, and 2% north.

Daytime vs. Nighttime: Approximately 78% of all *departures* and 84% of all *arrivals* occurred during the daytime hours.

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

- Overall:** 141 daily *departures* – a 76% increase from 2021 and 111% increase from 2020.
▪ 49% of departures were to the north, 38% south, 10% east, and 4% west.
139 daily *arrivals* – a 78% increase from 2021 and 119% increase from 2020.
▪ 38% of arrivals were from the south, 33% north, 28% east, and 1% west.
- Daytime:** 131 daily *departures* – a 76% increase from 2021 and 112% increase from 2020.
▪ 48% of departures were to the north, 37% south, 11% east, and 4% west.
132 daily *arrivals* – a 79% increase from 2021 and 121% increase from 2020.
▪ 38% of arrivals were from the south, 33% north, 28% east, and 1% west.
- Nighttime:** 10 daily *departures* – a 74% increase from 2021 and 94% increase from 2020.
▪ 51% of departures were to the north, 44% south, 4% west, and 1% east.
7 daily *arrivals* – a 47% increase from 2021 and 74% increase from 2020.
▪ 45% of arrivals were from the north, 38% south, and 17% east.

Daytime vs. Nighttime: Approximately 93% of all *departures* and 95% of all *arrivals* occurred during the daytime hours.

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

Tropicana: 56 daily *departures* – a 103% increase from 2021 and 165% increase from 2020.

Charleston: 54 daily *arrivals* - a 114% increase from 2021 and a 159% increase from 2020.

Strip: 86 daily *touch and go's* - a 17% decrease from 2021 and a 285% increase from 2020.

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

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

- Heavies:** *Very large* air carrier turbine-driven aircraft (those weighing 300,000 lbs. or more) accounted for 2% of the daily traffic.
- Large:** *Large* air carrier turbine-driven aircraft (those weighing more than 75,000 lbs. and less than 300,000 lbs.) accounted for 59% of the daily traffic.
- Medium:** *Medium* turbine-driven aircraft (those weighing more than 41,000 lbs. and less than 75,000 lbs.) accounted for 4% of the daily traffic.
- Small:** *Small* turbine-driven aircraft (those weighing 41,000 lbs. or less) accounted for 11% of the daily traffic.
- Military:** *Military* turbine-driven aircraft accounted for less than 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 19% 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 2022, 42% departed to the *west* (from LAS's primary departure runways). This figure was 60% in 2021 and 76% in 2020.
- Secondary:** In 2022, 4% departed to the *south* (from LAS's secondary departure runways). This figure was 9% in 2021 and 8% in 2020.
- Alternate 1:** In 2022, 44% departed to the *north* (from LAS's alternate departure runways). This figure was 23% in 2021 and 12% in 2020.
- Alternate 2:** In 2022, 9% departed to the *east* (from LAS's alternate departure runways). This figure was 8% in 2021 and 4% in 2020.

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

- SVHS:** In 2022, 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 98% in 2021 and 98% in 2020. (See January 2022 synopsis for specific location of the SVHS gate.)
- Peace:** In 2022, 98% of the large air carrier aircraft (excluding those destined to the Nevada National Security Site) that departed to the west from Runways 26L or 26R and made a right-hand turn were within 0.3 NM of the intersection of *Peace Way & Summers Shade Street*. This figure was 99% in 2021 and 99% in 2020. (See January 2022 synopsis for specific location of the Peace gate.)

- Pebble:** In 2022, 100% of the large air carrier aircraft (excluding those destined to the Nevada National Security Site) that departed to the south from Runways 19L or 19R were within 0.3 NM of the intersection of *Pebble Road & Arville Street*. This figure was 84% in 2021 and 99% in 2020. (See January 2022 synopsis for specific location of the Pebble gate.)
- UNLV:** In 2022, 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 93% in 2021 and 87% in 2020. (See January 2022 synopsis for specific location of the UNLV gate.)
- Boulder:** In 2022, 99% of the large air carrier aircraft that departed to the east from Runways 08L or 08R were within 0.3 NM of the extended runway centerline, near *Boulder Highway*. This figure was 100% in 2021 and 98% in 2020. (See January 2022 synopsis for specific location of the Boulder Hwy. gate.)
- Eastern:** In 2022, 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 2021 and 99% in 2020. (See January 2022 synopsis for specific location of the Eastern gate.)
- Hollywood:** In 2022, 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 2021 and 99% in 2020. (See January 2022 synopsis for specific location of the Hollywood gate.)
- Stratosphere:** In 2022, 99% of the north-bound helicopters providing tours of the Las Vegas Strip were within 500 feet of the intersection of Oakey Boulevard & Las Vegas Boulevard, *northeast of the Stratosphere Tower*. This figure was 97% in 2021 and 99% in 2020. (See January 2022 synopsis for specific location of the Stratosphere gate.)

Land Use Application Reviews & Comments – (Exhibit 10)

- Clark County:** 120 applications were reviewed (a 13% decrease from 2021), with 14 applications (12%) issued at least one comment.
- Henderson:** 67 applications were reviewed (a 0% change from 2021), with 6 applications (9%) issued at least one comment.
- Las Vegas:** 43 applications were reviewed (4% decrease from 2021), with 2 applications (5%) issued at least one comment.
- North Las Vegas:** 15 applications were reviewed (a 32% decrease from 2021), with 3 applications (20%) issued at least one comment.

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

- Clark County:** 14 comments were issued, with 9 comments issued for “noise” concerns.
- Henderson:** 7 comments were issued, with 3 comments issued for “noise” concerns.
- Las Vegas:** 2 comments were issued, with 0 comments issued for “noise” concerns.
- North Las Vegas:** 3 comments were issued, with all 3 comments issued for “noise” concerns.

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

Clark County: 476 dwelling units were proposed in the commented applications, just outside the AEOD.

Henderson: 692 dwelling units were proposed in the commented applications, just outside the AEOD.

Las Vegas: 0 comments were issued for “noise” concerns.

North Las Vegas: 161 dwelling units were proposed in the commented applications, just outside the AEOD.

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

None

The information denoted in this monthly summary represents **typical** residential complaints, (with the exception of increased complaint calls tied to implementation of the Metroplex Project and the number of complaints tied to Runway 19L and 19R), flight activity, fleet mix, and gate compliance.

Other Notable Issues

Helicopter Operator Users Meeting: On January 27, 2022, DOA staff members met virtually via video conferencing with FAA, and local helicopter tour operators to discuss noise complaints tied to helicopter operations, route compliance, operational growth, and a land use development project close to McCarran International Airport.

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:sk

Attachments

Airport Noise Report

April 20, 2022

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Distribution:

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

Exhibit 1: Noise Complaint Calls by Community* - January 2022

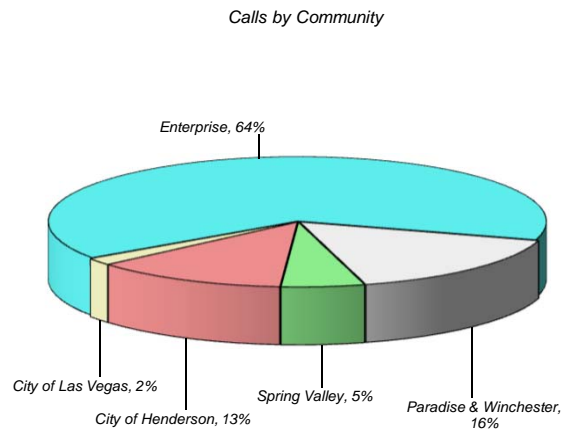
Community	No. of Calls in 2022	No. of Callers in 2022	No. of Calls in 2021	No. of Calls in 2020
City of Boulder City	7	7	7	5
City of Henderson	1	1		7
City of Las Vegas				1
City of North Las Vegas				
Enterprise	36	11	6	11
Lone Mountain				
Paradise & Winchester	9	9	2	31
Spring Valley	3	3	4	277
Summerlin South				
Sunrise Manor				2
Whitney				3
Location unknown				
Overall Total	56	31	19	337

Difference between 2022 and 2021 Total Calls: 195%

Difference between 2022 and 2020 Total Calls: -83%

Average Number of Calls per Caller: 1.8

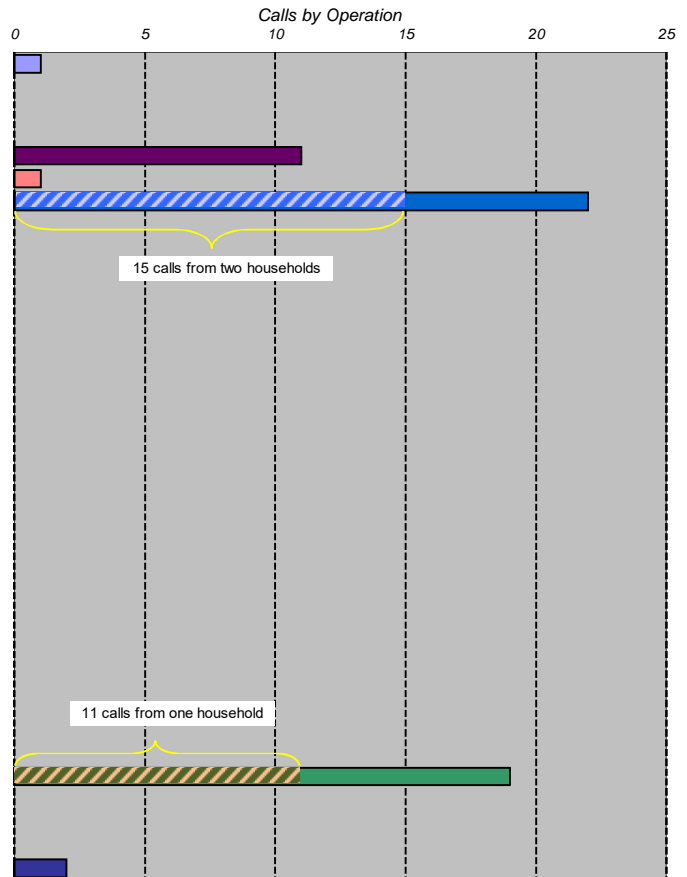
Most calls received from one household: 11



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

Exhibit 2: Noise Complaint Calls by Type of Operation - January 2022

Operation	No. of Calls in 2022	Percent of Overall Total	No. of Calls in 2021	No. of Calls in 2020
LAS 01R/L Arrivals	1	1.8%		9
LAS 08R/L Arrivals				
LAS 19R/L Arrivals				
LAS 26R/L Arrivals			1	
LAS 01R/L Departures	11	19.6%	3	311
LAS 08R/L Departures	1	1.8%	2	
LAS 19R/L Departures	22	39.3%		3
LAS 26R/L Departures			1	4
LAS Run-ups				
LAS GA				
LAS Other				
LAS Total	35	62.5%	7	327
VGT 07 Arrivals				
VGT 12R/L Arrivals				
VGT 25 Arrivals				
VGT 30R/L Arrivals				
VGT 07 Departures				
VGT 12R/L Departures				
VGT 25 Departures				
VGT 30R/L Departures				
VGT Run-ups				
VGT GA				1
VGT Other				
VGT Total	0	0.0%	0	1
HND 17R/L Arrivals				
HND 35R/L Arrivals				
HND 17R/L Departures				
HND 35R/L Departures				
HND Run-ups				
HND GA	19	33.9%	10	3
HND Other				
HND Total	19	33.9%	10	3
Helicopters**	2	3.6%	2	6
Overall Total	56	100%	19	337



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

Exhibit 3: Aircraft Noise Complaints by Community - Jan 2022

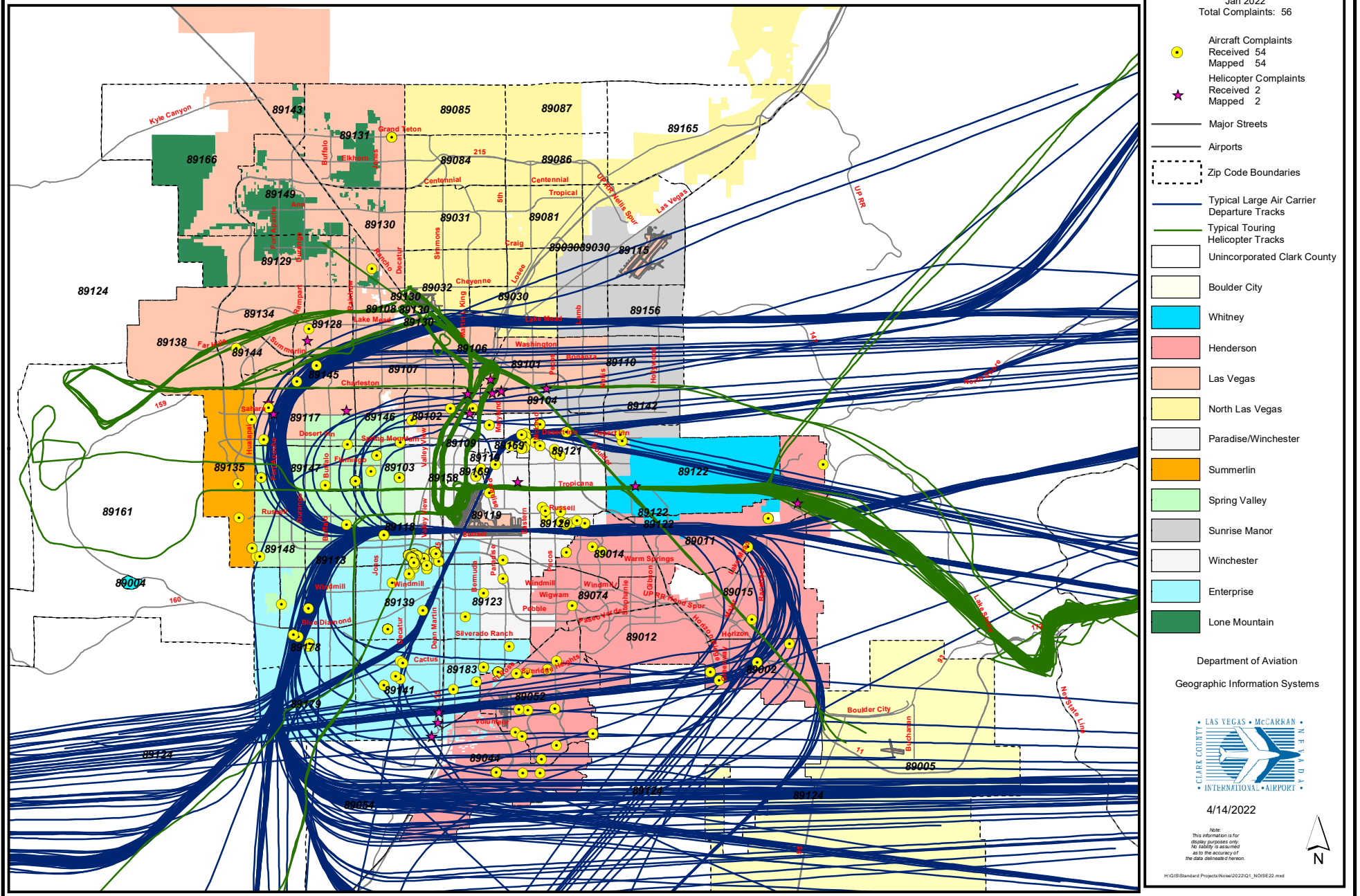
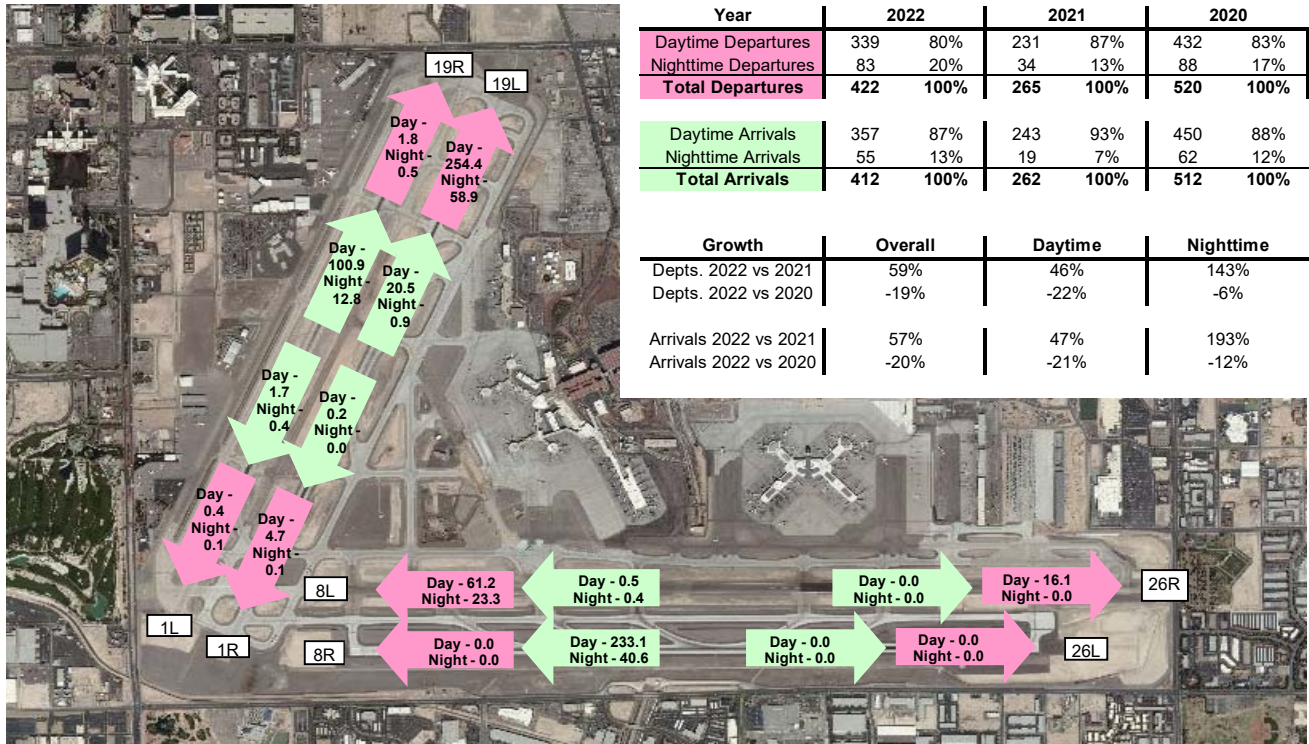
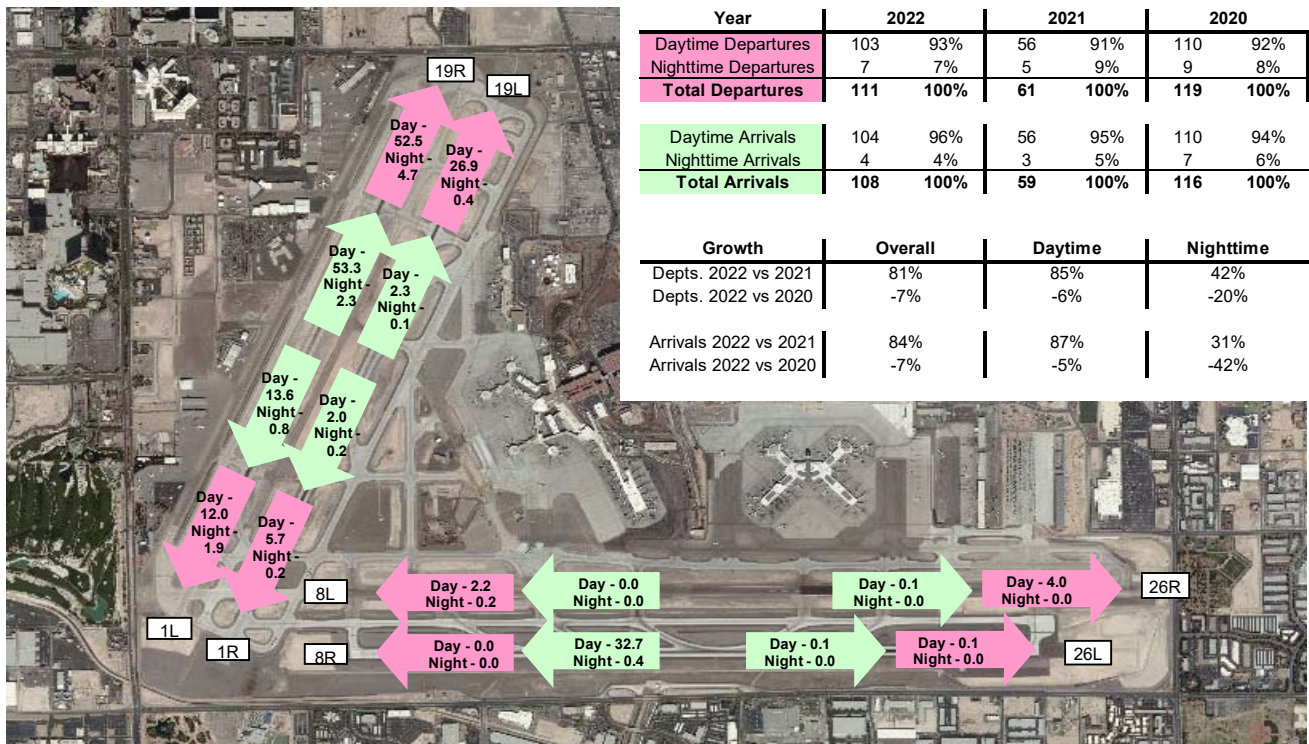


Exhibit 4: LAS Daily Average Operations Runway for Large Air Carrier Aircraft* - January 2022



* 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** - January 2022



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

NOTE: As of December 17, 2020 some flight data deemed "sensitive" by the FAA, DoD, and DHS has been removed, reducing total aircraft counts.

Exhibit 6: LAS Daily Average Operations by Corridor for Helicopter Tours* - January 2022

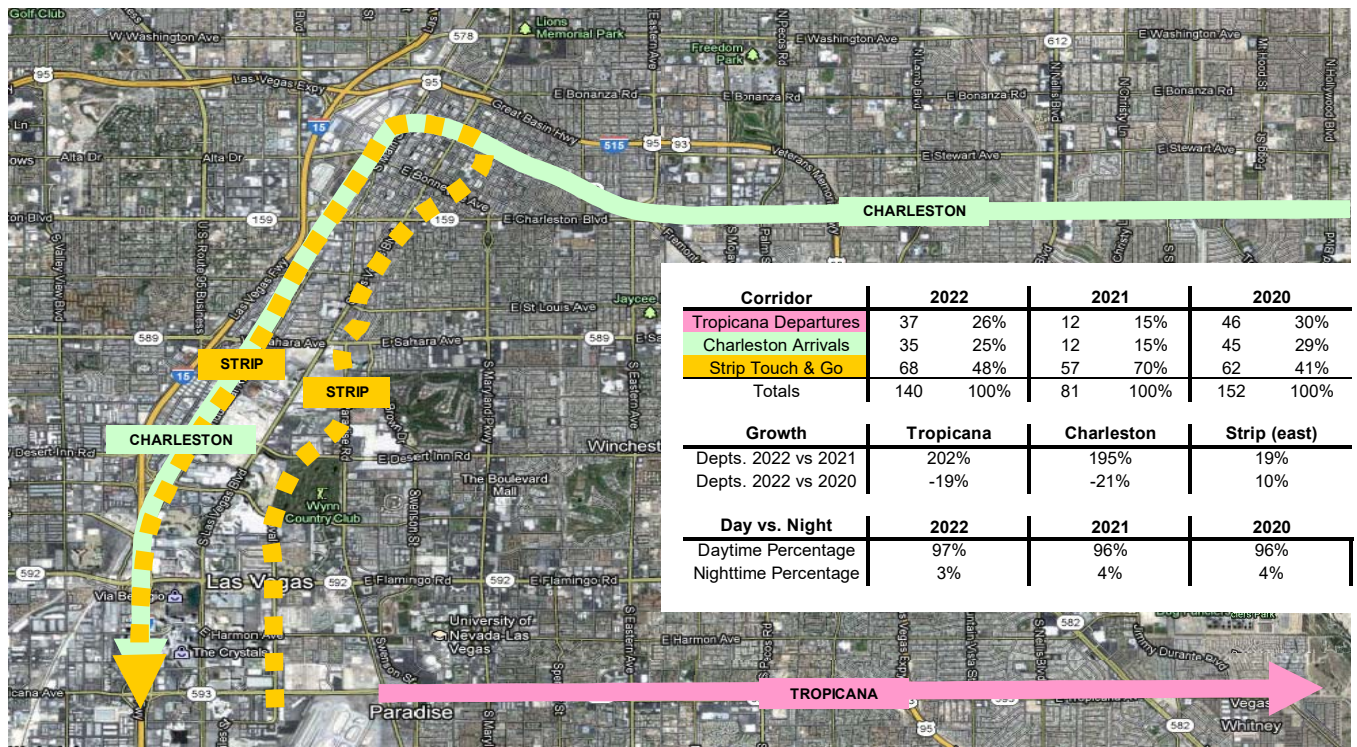
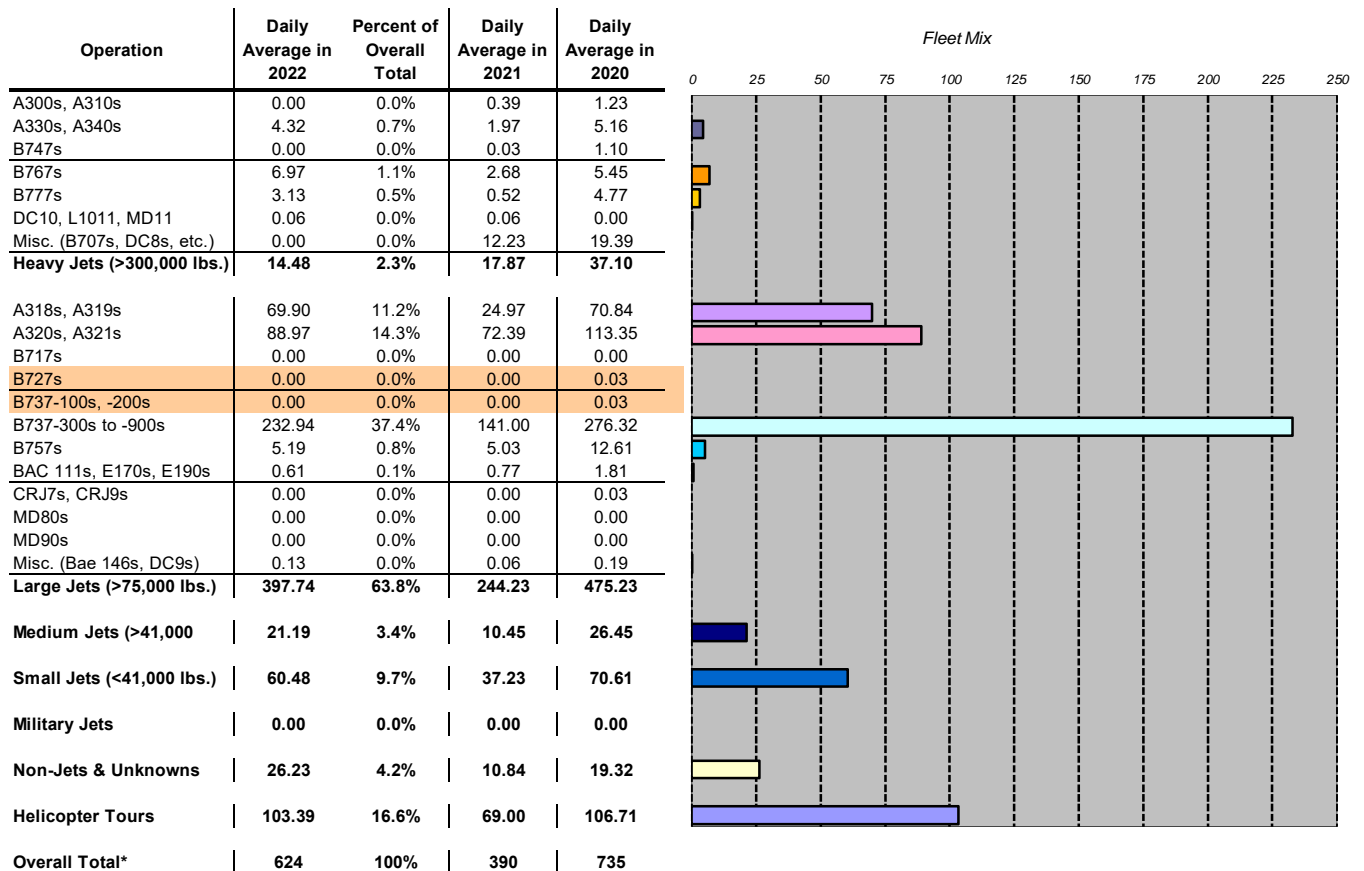


Exhibit 7: LAS Aircraft Arrival Fleet Mix** - January 2022



** 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. Please see footnote for Exhibit 5.

Exhibit 8: LAS General Departure Direction for Large Air Carrier Aircraft* - January 2022 to 2020

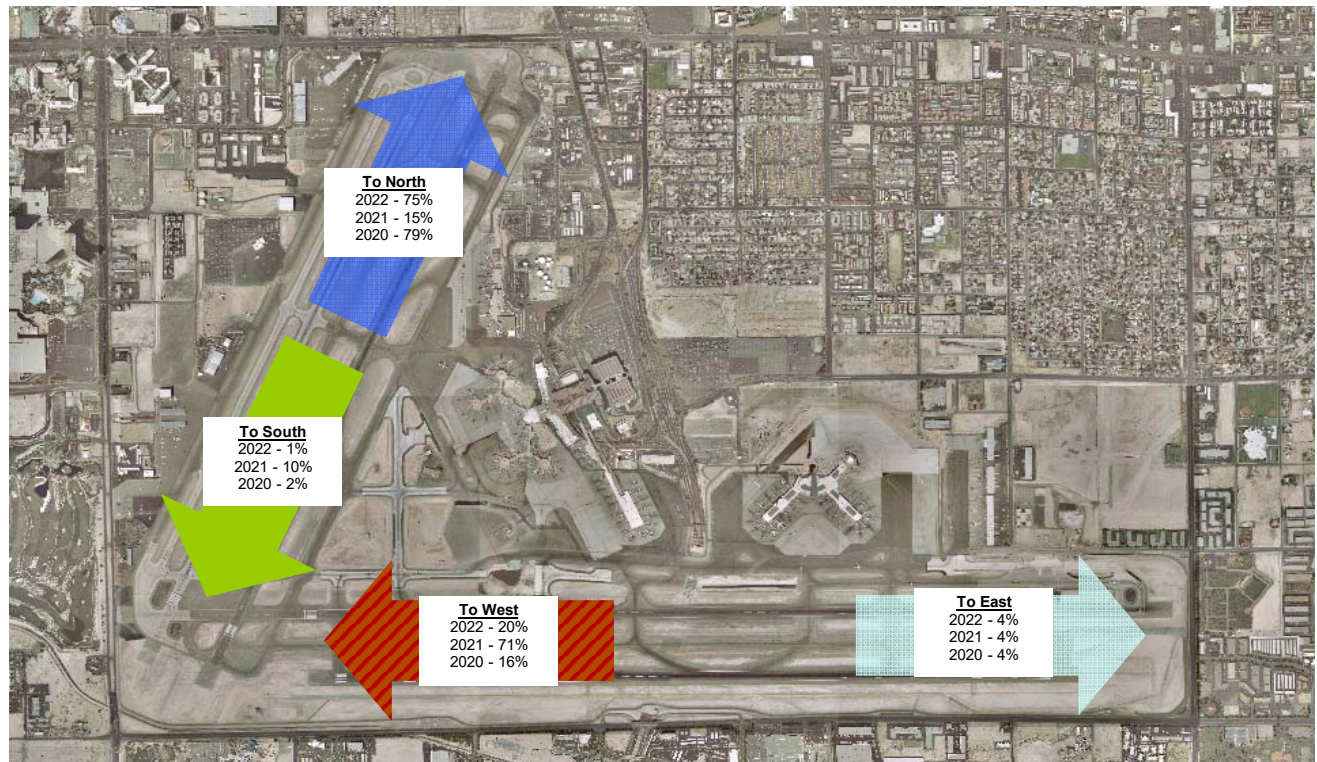
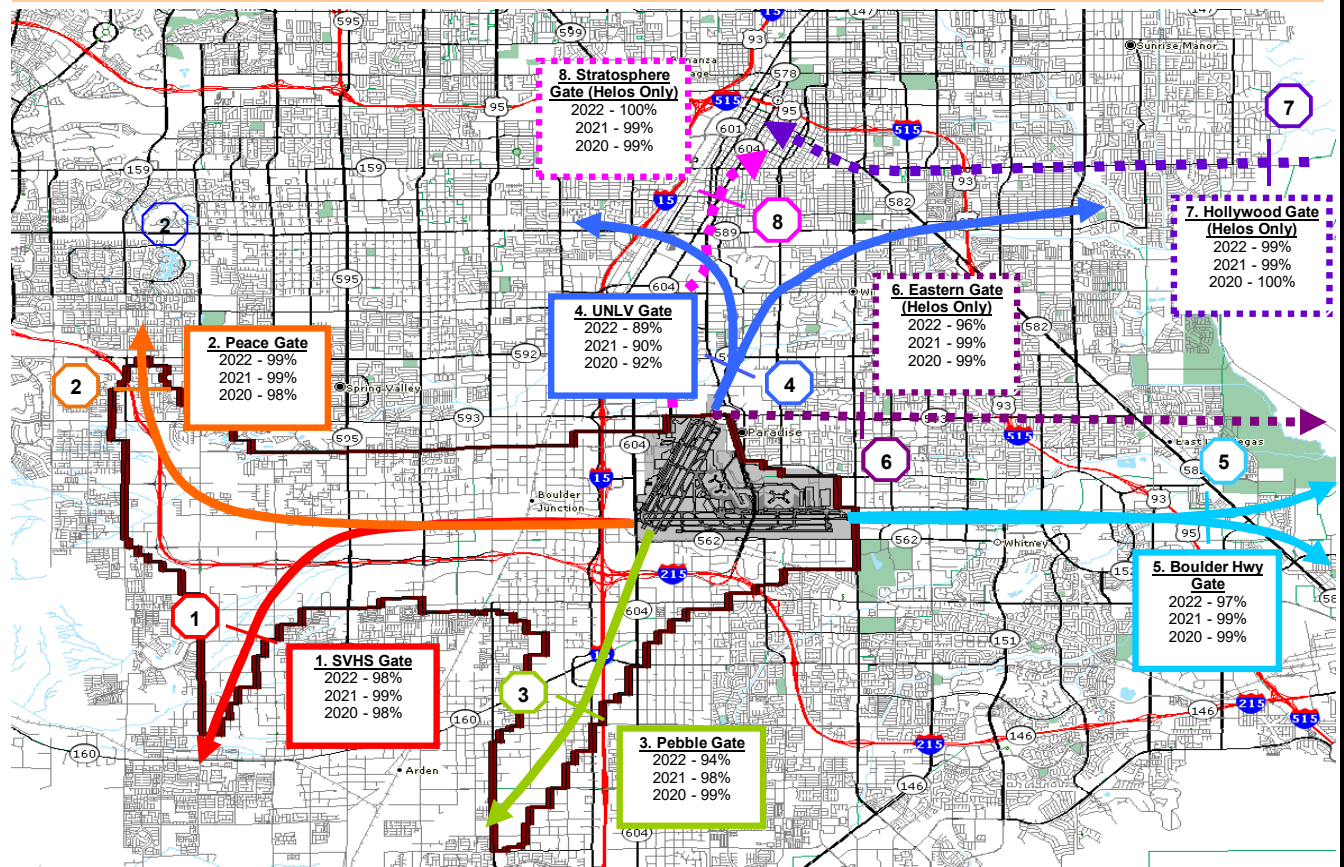


Exhibit 9: "Gate" Compliance for Large Aircraft* & LAS Helicopter Tours - January 2022



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

Exhibit 10: Land Use Application Reviews & Comments - January 2022

Land Use Application Review Summary	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2022 Total	2021 Total	2020 Total
No. of Land Use Applications Reviewed	96	33	52	20	201	186	244
No. of Applications where CCDOA Issued a Comment	7	6	2	2	17	13	26
Percent of Applications where Comment Issued	7%	18%	4%	10%	8%	7%	11%

Exhibit 11: Land Use Application Comments by Airport Concern - January 2022

Summary by Comment Type	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2022 Total	2021 Total	2020 Total
Deed Restrictions	0	0	0	0	0	0	0
Height-Penetrates Part 77 100:1 Surfaces >200'	0	0	0	0	0	7	10
Height-Penetrates Part 77 PATH-C Surfaces*	0	0	0	0	0	1	3
Helipad/Helipad	0	0	0	0	0	0	0
Noise-Commercial within AEOD**	0	0	0	2	2	1	4
Noise-Residential within the AEOD**	0	0	0	0	0	1	3
Noise-Residential Just Outside the AEOD**	7	6	2	0	15	6	13
Misc.-If applicable, detailed info. provided within the written summary	0	0	0	0	0	0	0
Total***	7	6	2	2	17	16	33

* 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* - January 2022

Dwelling Units Proposed in Commented Applications	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2022 Total	2021 Total	2020 Total
Within the AEOD	0	0	0	0	0	4	2
Just Outside the AEOD	402	600	116	0	1,118	601	2,090

*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* - January 2022

Summary of LUA Opposed	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2022 Total	2021 Total	2020 Total
Recommend Denial	0	0	0	0	0	0	0
Opposed at Hearings	0	0	0	0	0	1	0

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

Exhibit 14: Airport Environs Overlay Districts & Noise Comments - Valley Wide - January 2022

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 Reid (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.

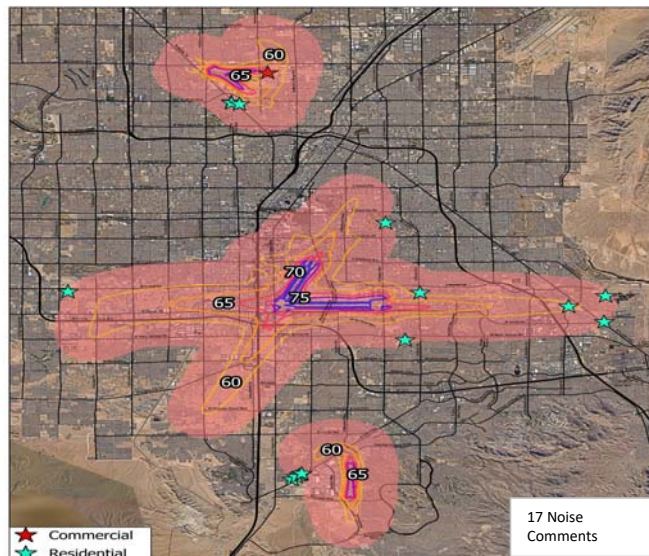


Exhibit 15: Noise Comments - LAS Detail - January 2022

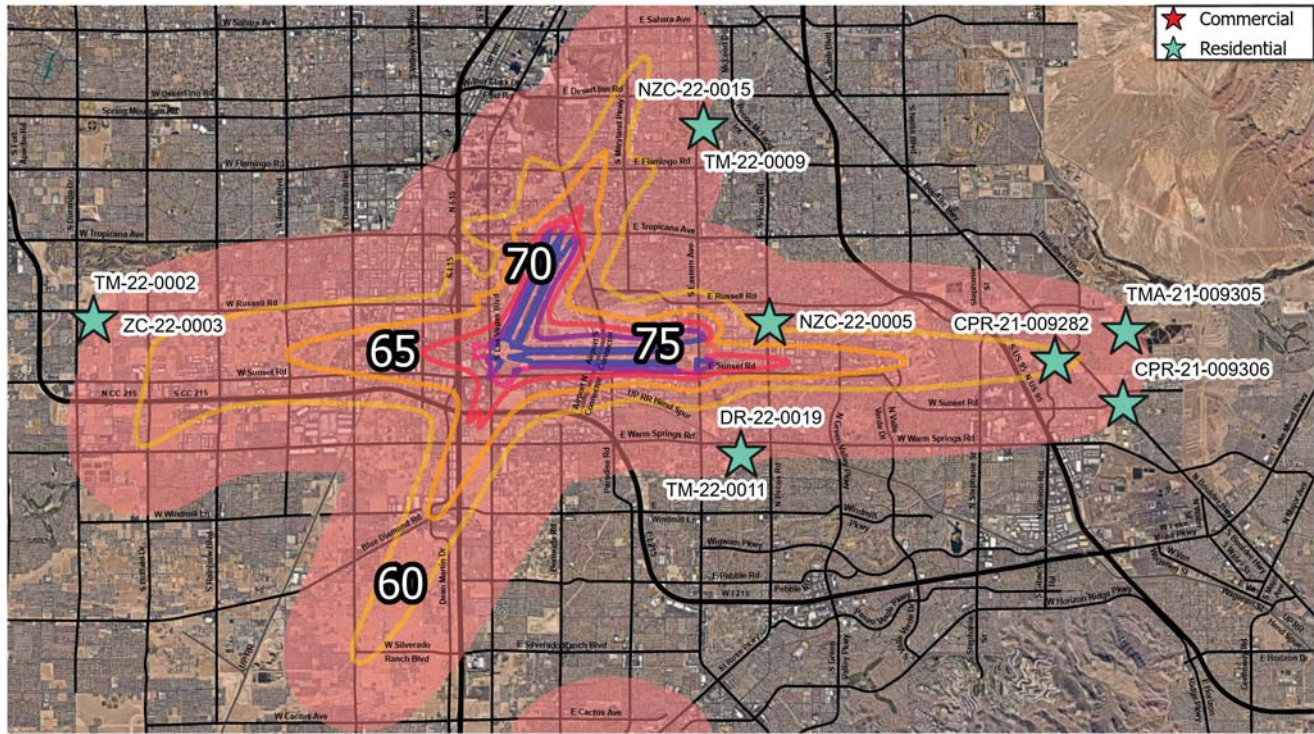


Exhibit 16: Noise Comments - HND Detail - January 2022

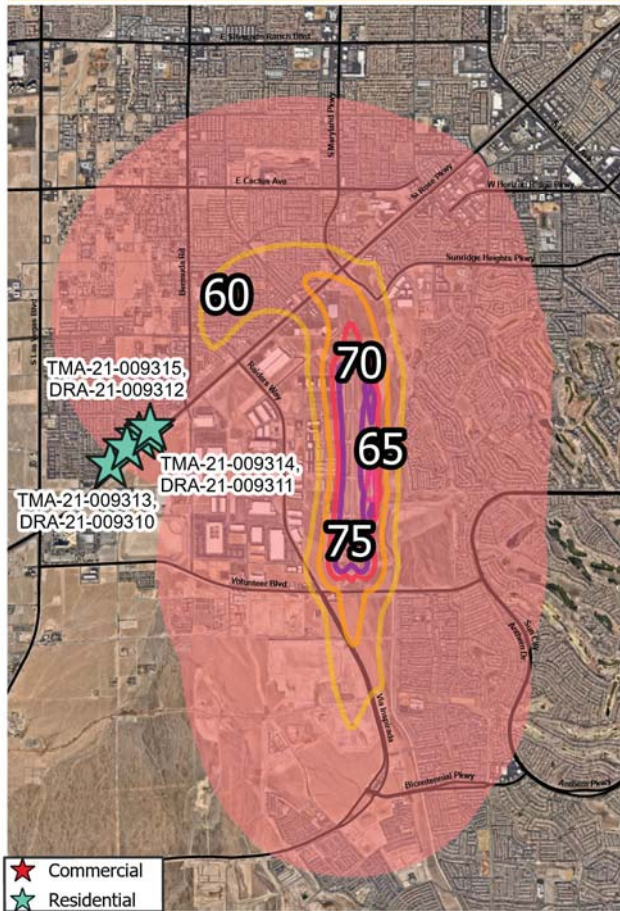


Exhibit 17: Noise Comments - VGT Detail - January 2022

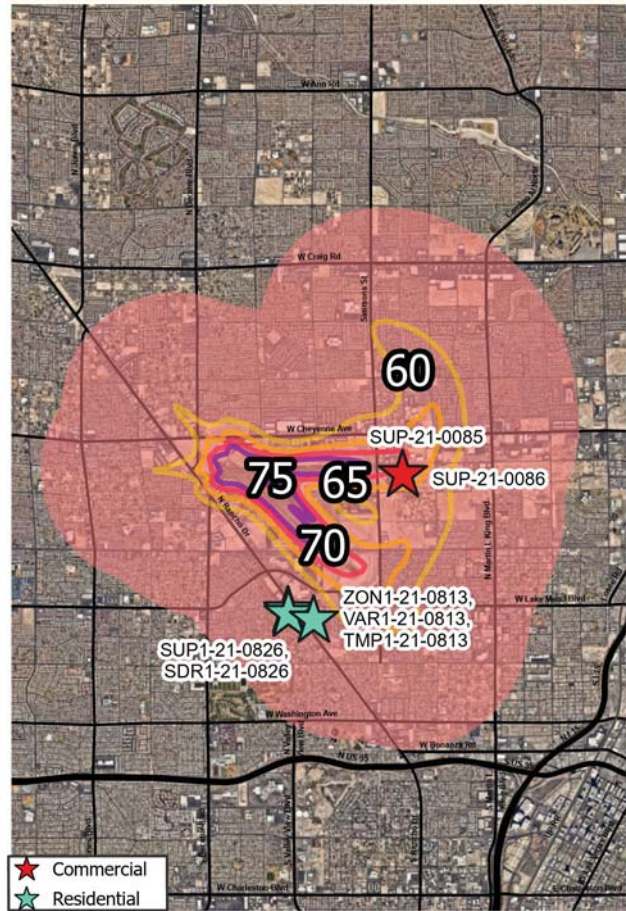


Exhibit 1: Noise Complaint Calls by Community* - February 2022

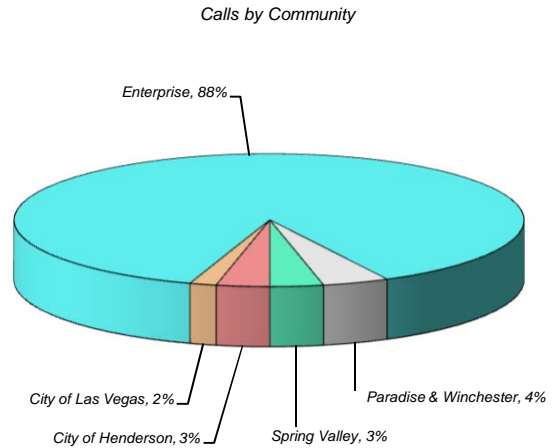
Community	No. of Calls in 2022	No. of Callers in 2022	No. of Calls in 2021	No. of Calls in 2020
City of Boulder City	4	4	2	5
City of Henderson	2	2	2	1
City of Las Vegas				1
City of North Las Vegas				1
Enterprise	104	13	1	9
Lone Mountain				
Paradise & Winchester	5	4	2	23
Spring Valley	4	4	9	19
Summerlin South			1	2
Sunrise Manor				5
Whitney				
Location unknown				
Overall Total	119	27	17	65

Difference between 2022 and 2021 Total Calls: 600%

Difference between 2022 and 2020 Total Calls: 83%

Average Number of Calls per Caller: 4.4

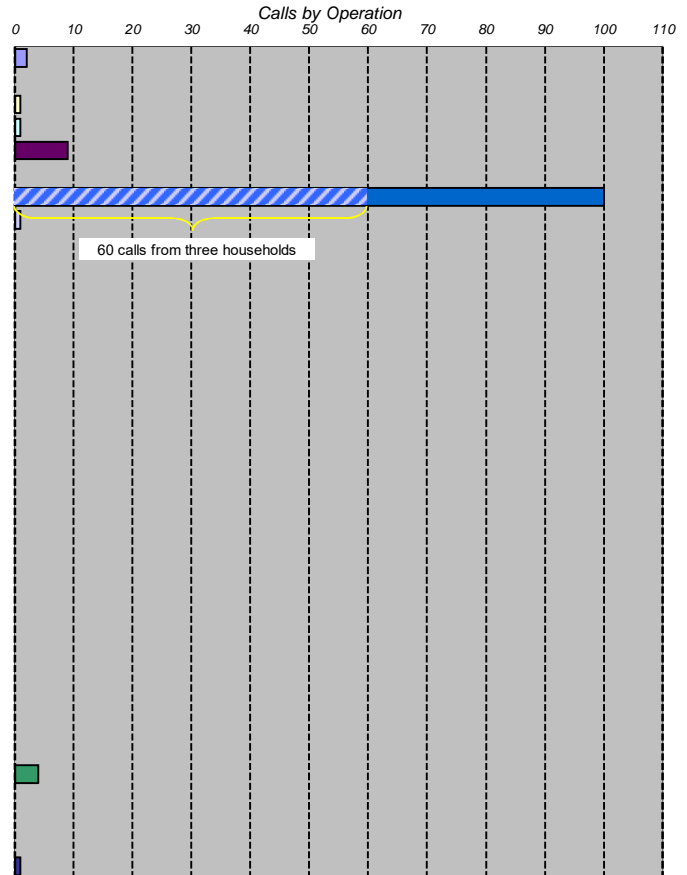
Most calls received from one household: 33



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

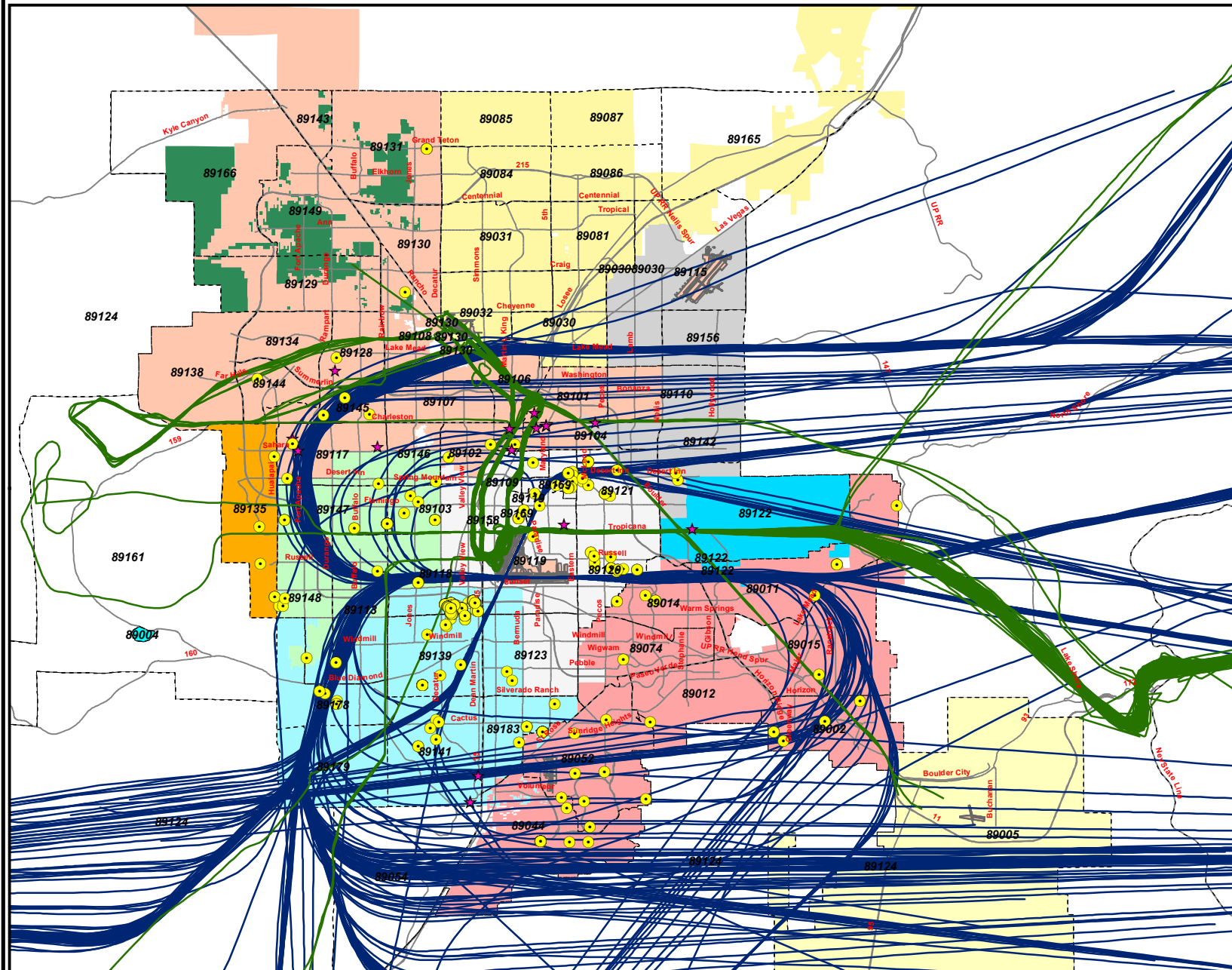
Exhibit 2: Noise Complaint Calls by Type of Operation - February 2022

Operation	No. of Calls in 2022	Percent of Overall Total	No. of Calls in 2021	No. of Calls in 2020
LAS 01R/L Arrivals	2	1.7%		8
LAS 08R/L Arrivals				
LAS 19R/L Arrivals	1	0.8%		
LAS 26R/L Arrivals	1	0.8%	1	3
LAS 01R/L Departures	9	7.6%	11	50
LAS 08R/L Departures				
LAS 19R/L Departures	100	84.0%	1	1
LAS 26R/L Departures	1	0.8%	2	
LAS Run-ups				
LAS GA				
LAS Other				
LAS Total	114	95.8%	15	62
VGT 07 Arrivals				
VGT 12R/L Arrivals				
VGT 25 Arrivals				
VGT 30R/L Arrivals				
VGT 07 Departures				
VGT 12R/L Departures				
VGT 25 Departures				
VGT 30R/L Departures				
VGT Run-ups				
VGT GA				
VGT Other				
VGT Total	0	0.0%	0	0
HND 17R/L Arrivals				
HND 35R/L Arrivals				
HND 17R/L Departures				
HND 35R/L Departures				
HND Run-ups				
HND GA	4	3.4%	1	
HND Other				
HND Total	4	3.4%	1	0
Helicopters**	1	0.8%	1	3
Overall Total	119	100%	17	65



** 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 - Feb 2022



Legend

Feb 2022
Total Complaints: 119

- Aircraft Complaints
Received 118
Mapped 117
- 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

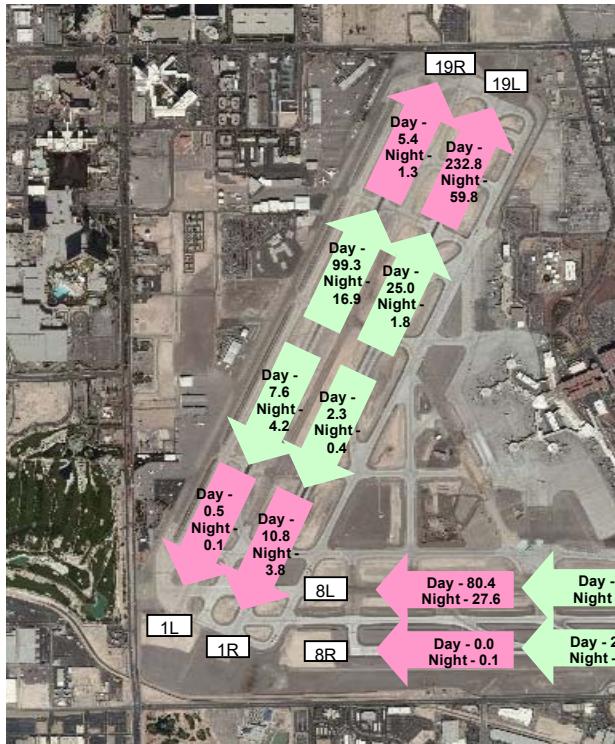
CLARK COUNTY • LAS VEGAS • MCCARRAN • NEVADA • INTERNATIONAL AIRPORT

4/14/2022

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 by Runway for Large Air Carrier Aircraft* - February 2022



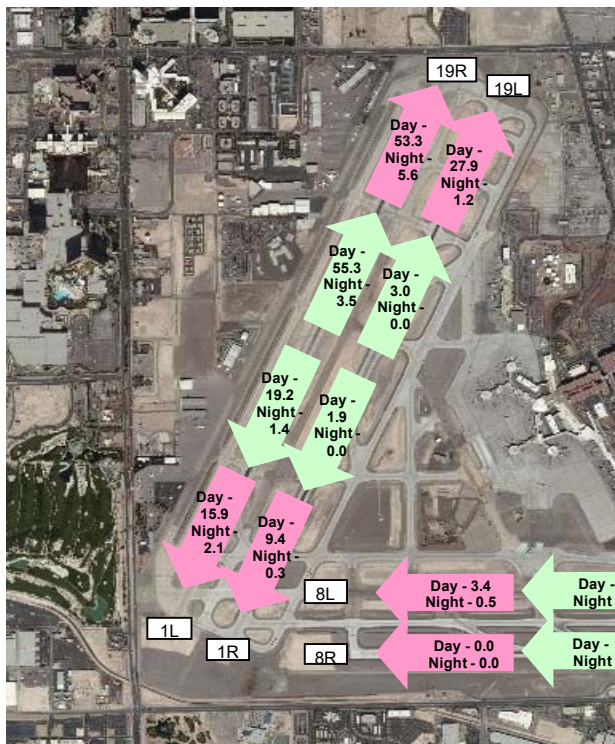
Year	2022		2021		2020	
Daytime Departures	351	79%	222	86%	423	83%
Nighttime Departures	93	21%	38	14%	88	17%
Total Departures	444	100%	260	100%	511	100%

Daytime Arrivals	371	86%	235	91%	440	87%
Nighttime Arrivals	62	14%	22	9%	66	13%
Total Arrivals	432	100%	257	100%	506	100%

Growth	Overall	Daytime	Nighttime
Depts. 2022 vs 2021	71%	58%	147%
Depts. 2022 vs 2020	-13%	-17%	5%
Arrivals 2022 vs 2021	69%	58%	180%
Arrivals 2022 vs 2020	-14%	-16%	-7%

* 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** - February 2022



Year	2022		2021		2020	
Daytime Departures	118	93%	64	91%	105	92%
Nighttime Departures	10	7%	6	9%	9	8%
Total Departures	127	100%	70	100%	114	100%

Daytime Arrivals	117	95%	65	95%	103	94%
Nighttime Arrivals	6	5%	4	5%	6	6%
Total Arrivals	123	100%	69	100%	109	100%

Growth	Overall	Daytime	Nighttime
Depts. 2022 vs 2021	82%	84%	58%
Depts. 2022 vs 2020	12%	13%	6%
Arrivals 2022 vs 2021	78%	79%	66%
Arrivals 2022 vs 2020	12%	13%	-2%

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

NOTE: As of December 17, 2020 some flight data deemed "sensitive" by the FAA, DoD, and DHS has been removed, reducing total aircraft counts.

Exhibit 6: LAS Daily Average Operations by Corridor for Helicopter Tours* - February 2022

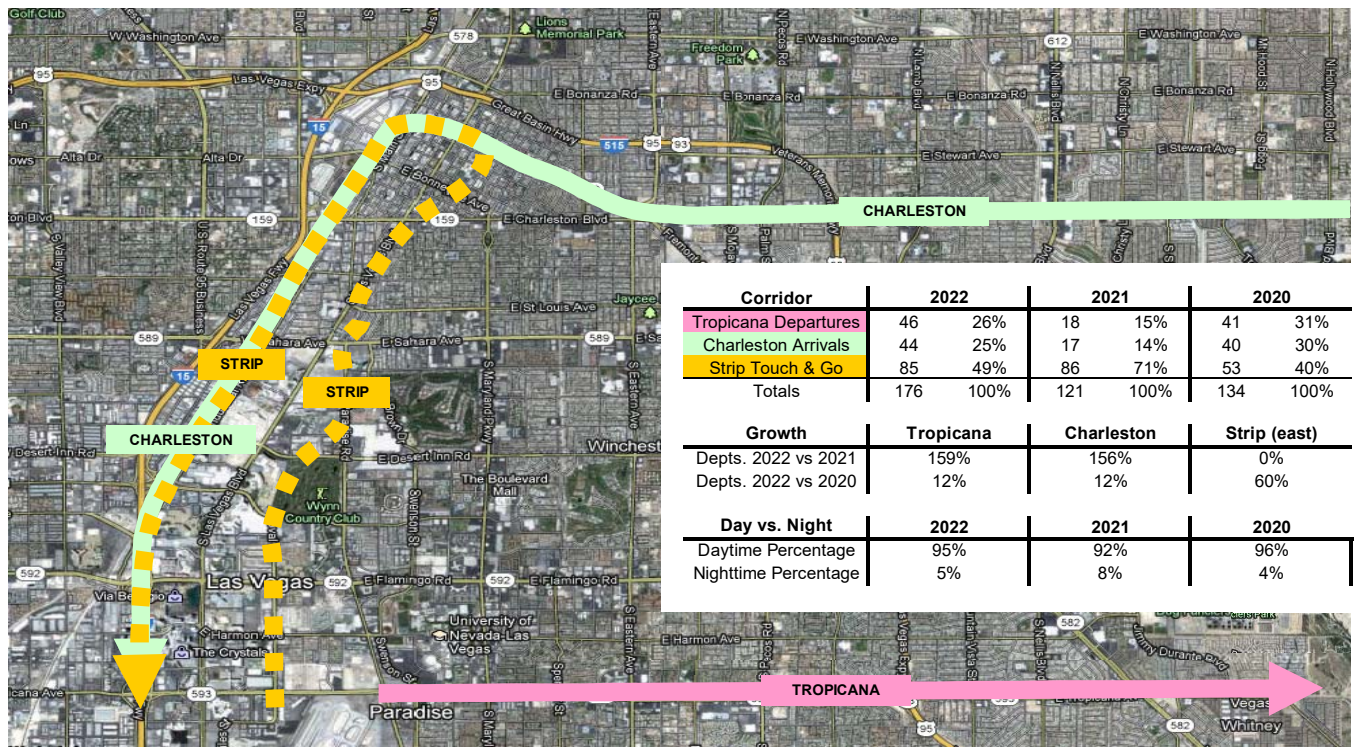
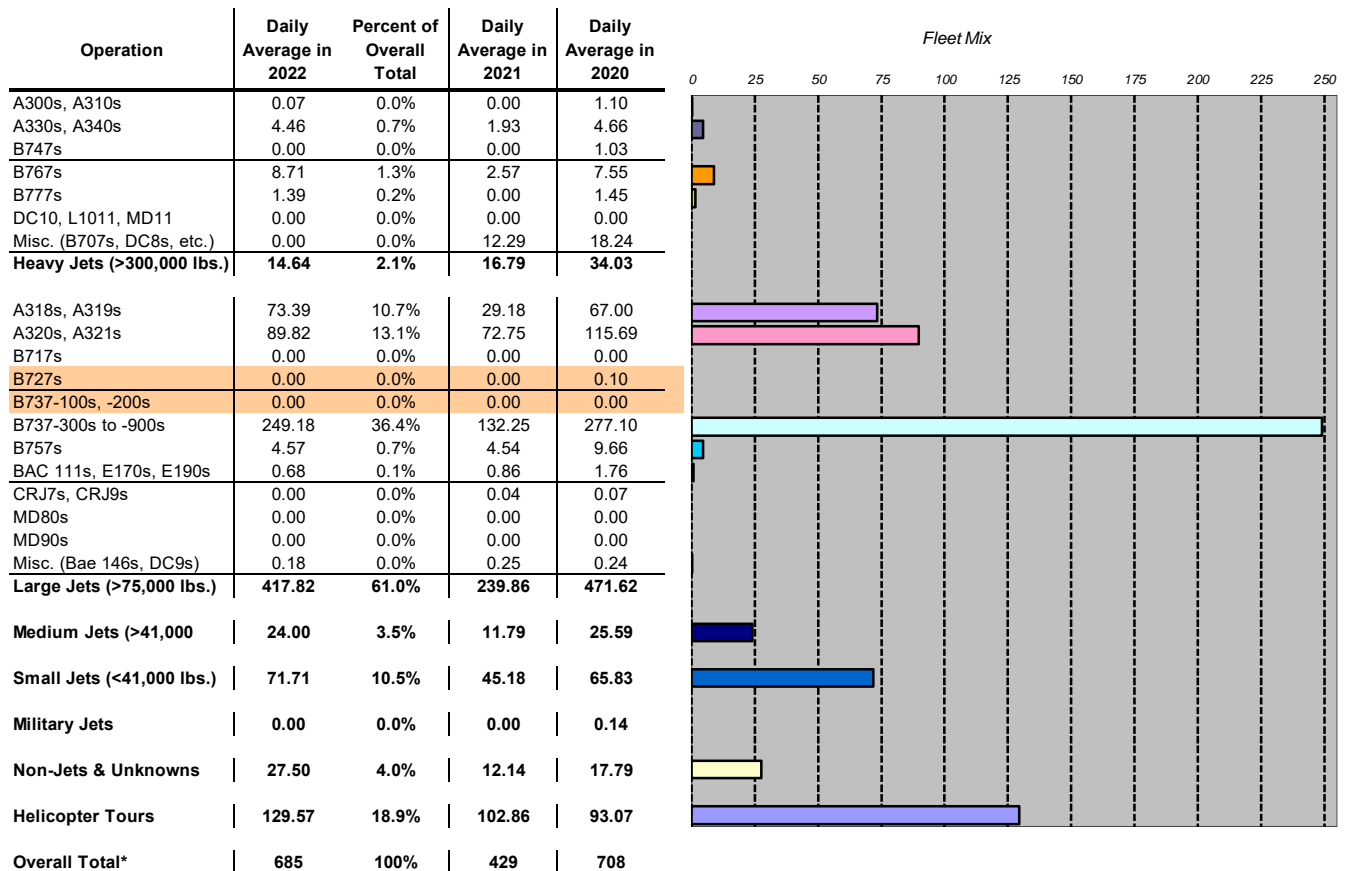


Exhibit 7: LAS Aircraft Arrival Fleet Mix** - February 2022



** 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. Please see footnote for Exhibit 5.

Exhibit 8: LAS General Departure Direction for Large Air Carrier Aircraft* - February 2022 to 2020

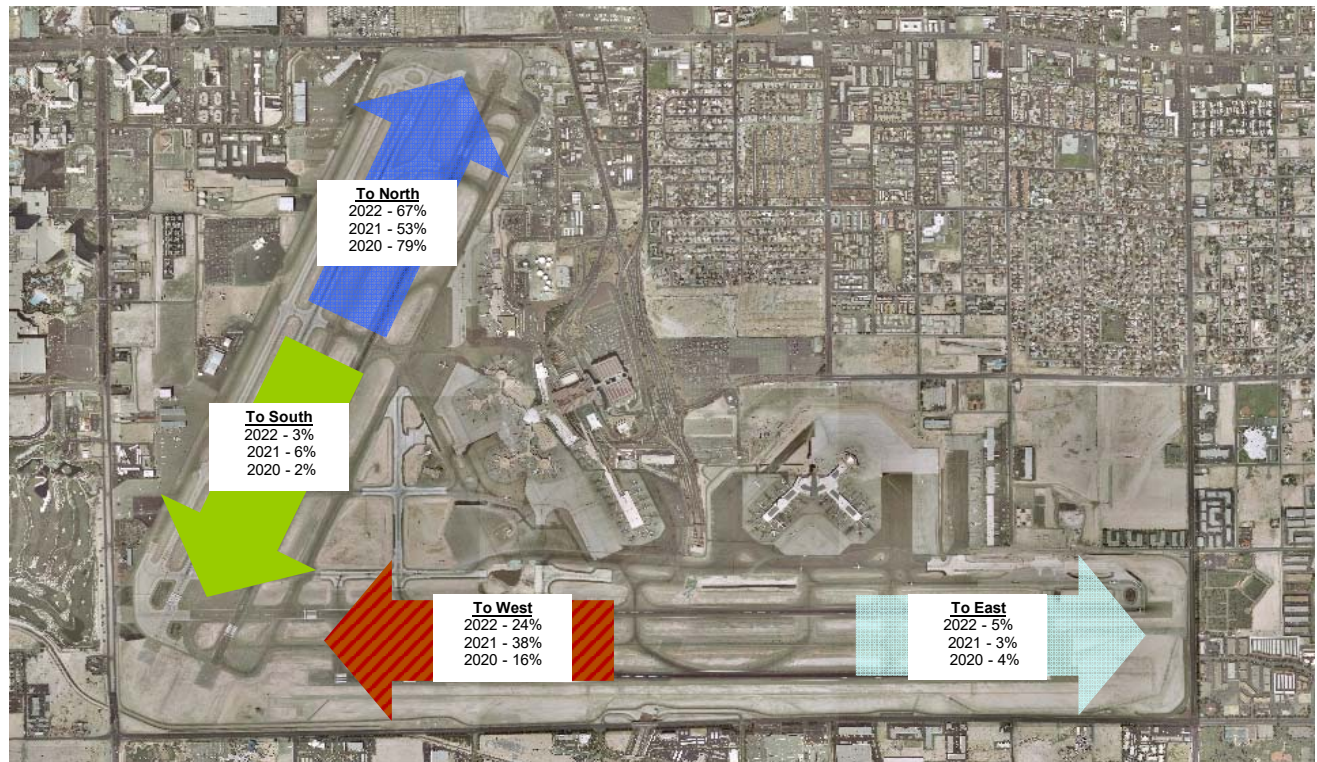
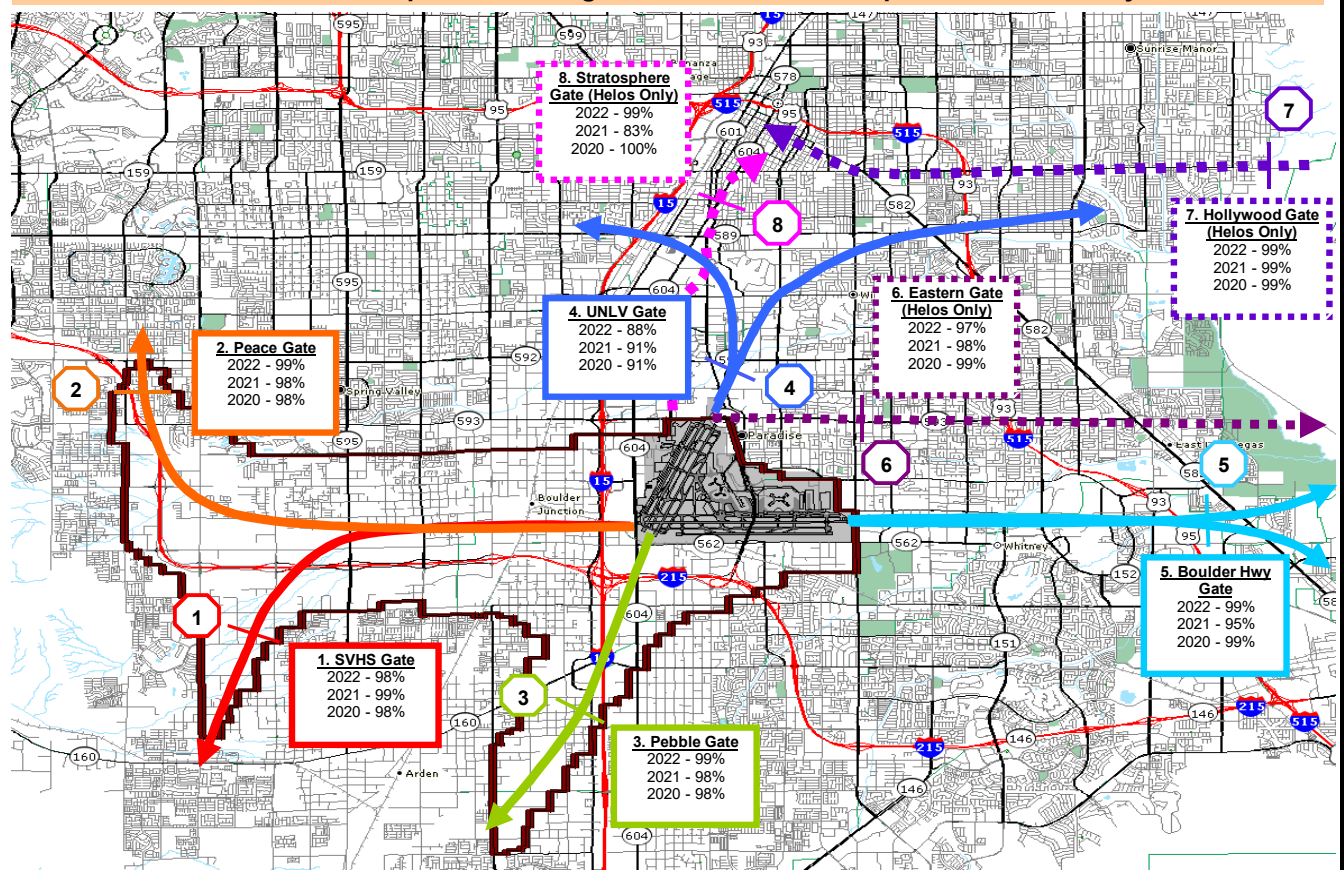


Exhibit 9: "Gate" Compliance for Large Aircraft* & LAS Helicopter Tours - February 2022



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

Exhibit 10: Land Use Application Reviews & Comments - February 2022

Land Use Application Review Summary	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2022 Total	2021 Total	2020 Total
No. of Land Use Applications Reviewed	104	53	35	0	192	176	221
No. of Applications where CCDOA Issued a Comment	17	6	0	0	23	9	22
Percent of Applications where Comment Issued	16%	11%	0%	#DIV/0!	12%	5%	10%

Exhibit 11: Land Use Application Comments by Airport Concern - February 2022

Summary by Comment Type	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2022 Total	2021 Total	2020 Total
Deed Restrictions	0	0	0	0	0	1	2
Height-Penetrates Part 77 100:1 Surfaces >200'	3	4	0	0	7	3	11
Height-Penetrates Part 77 PATH-C Surfaces*	1	0	0	0	1	0	1
Helipad/Helipad	0	1	0	0	1	0	0
Noise-Commercial within AEOD**	3	0	0	0	3	0	2
Noise-Residential within the AEOD**	0	1	0	0	1	0	0
Noise-Residential Just Outside the AEOD**	10	1	0	0	11	5	8
Misc.-If applicable, detailed info. provided within the written summary	0	0	0	0	0	0	0
Total***	17	7	0	0	24	9	24

* 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* - February 2022

Dwelling Units Proposed in Commented Applications	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2022 Total	2021 Total	2020 Total
Within the AEOD	0	89	0	0	89	0	0
Just Outside the AEOD	1,266	213	0	0	1,479	426	2,389

*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* - February 2022

Summary of LUA Opposed	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2022 Total	2021 Total	2020 Total
Recommend Denial	0	0	0	0	0	0	0
Opposed at Hearings	0	0	0	0	0	1	0

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

Exhibit 14: Airport Environs Overlay Districts & Noise Comments - Valley Wide - February 2022

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 Reid (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.

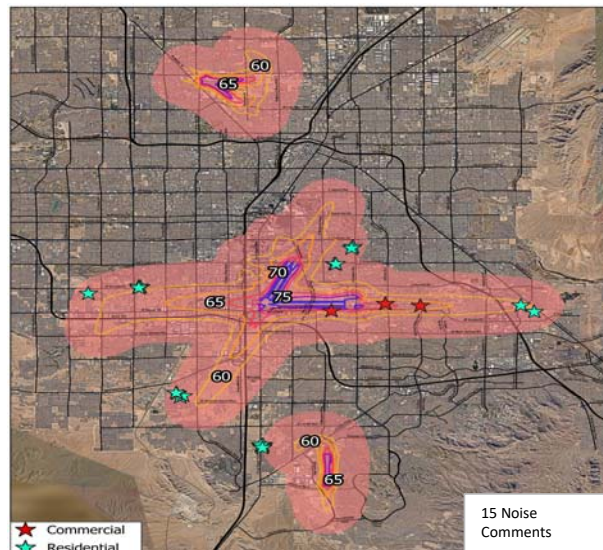


Exhibit 15: Noise Comments - LAS Detail - February 2022

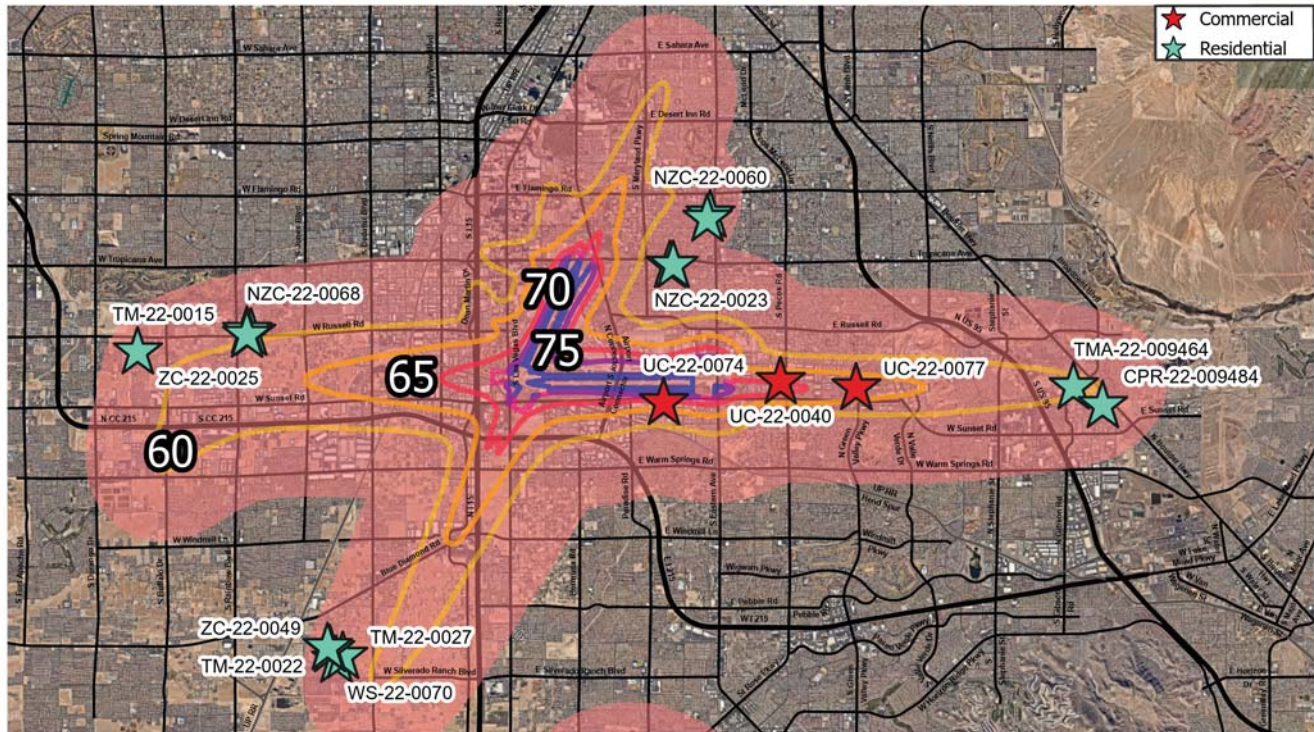


Exhibit 16: Noise Comments - HND Detail - February 2022

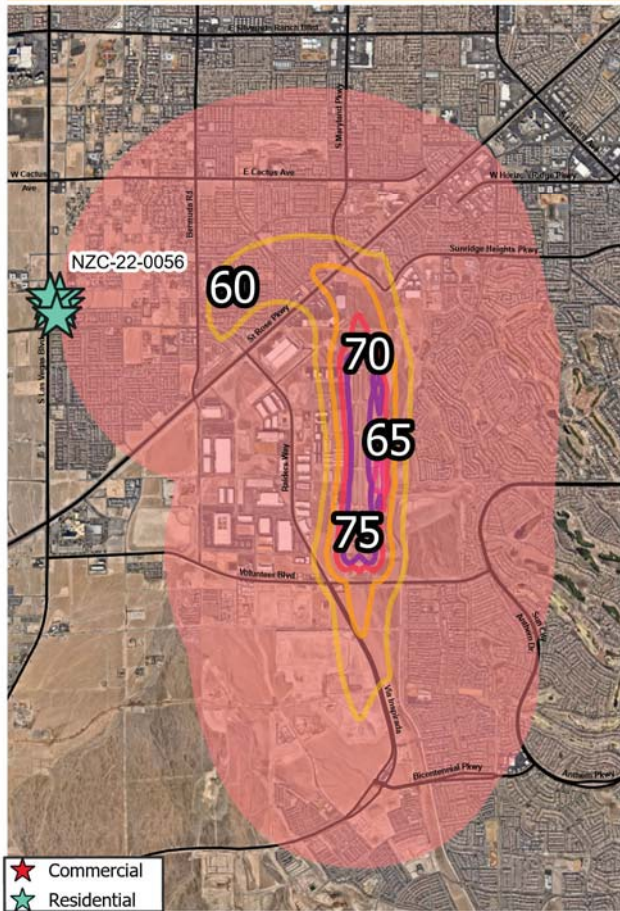


Exhibit 17: Noise Comments - VGT Detail - February 2022

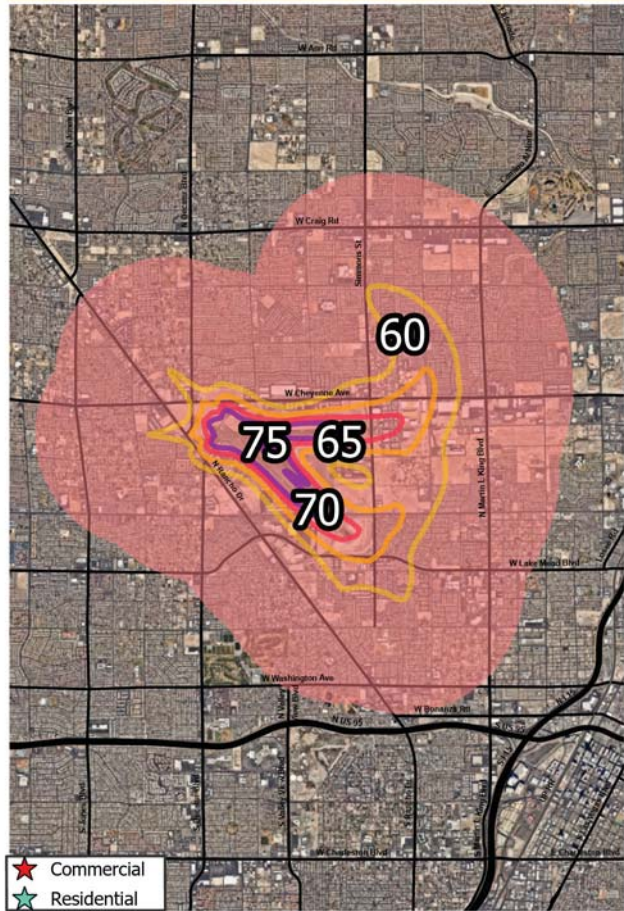


Exhibit 1: Noise Complaint Calls by Community* - March 2022

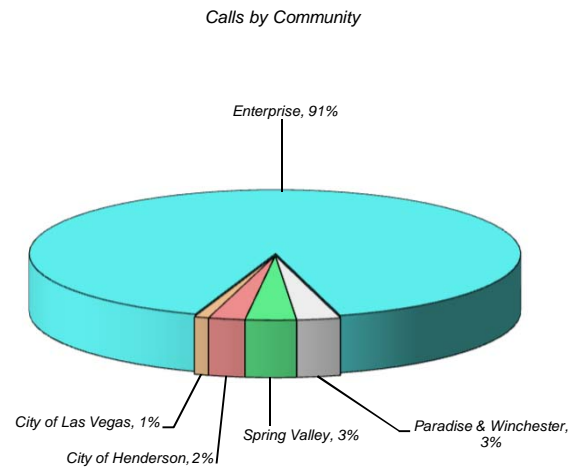
Community	No. of Calls in 2022	No. of Callers in 2022	No. of Calls in 2021	No. of Calls in 2020
City of Boulder City	5	3	4	2
City of Henderson	2	2	7	4
City of Las Vegas				
City of North Las Vegas				
Enterprise	191	19	112	27
Lone Mountain				
Paradise & Winchester	6	4	1	2
Spring Valley	7	6	6	9
Summerlin South				
Sunrise Manor			1	1
Whitney				
Location unknown				
Overall Total	211	34	131	45

Difference between 2022 and 2021 Total Calls: 61%

Difference between 2022 and 2020 Total Calls: 369%

Average Number of Calls per Caller: 6.2

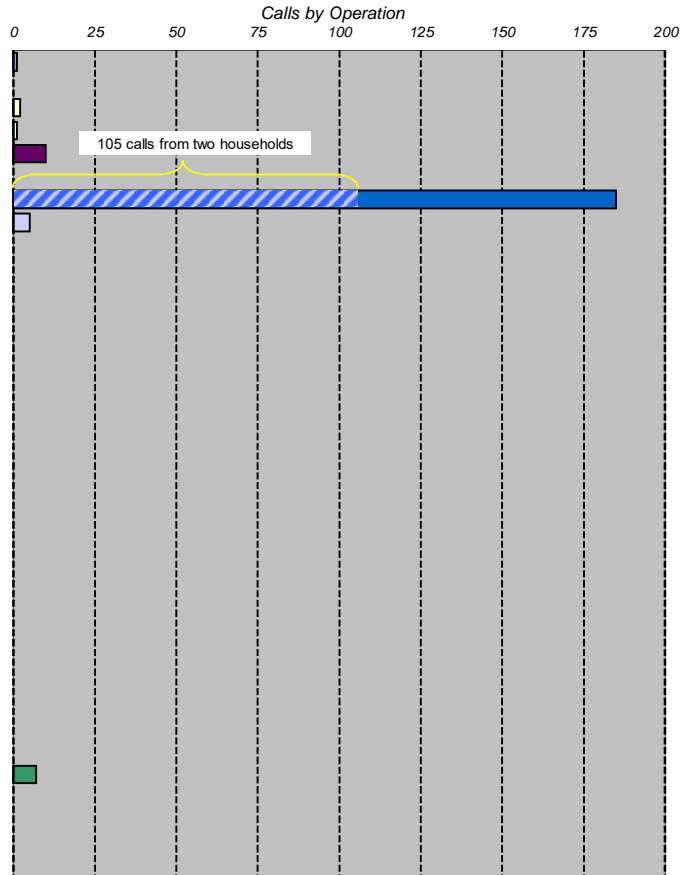
Most calls received from one household: 66



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

Exhibit 2: Noise Complaint Calls by Type of Operation - March 2022

Operation	No. of Calls in 2022	Percent of Overall Total	No. of Calls in 2021	No. of Calls in 2020
LAS 01R/L Arrivals	1	0.5%		2
LAS 08R/L Arrivals				
LAS 19R/L Arrivals	2	0.9%		
LAS 26R/L Arrivals	1	0.5%	8	1
LAS 01R/L Departures	10	4.7%	5	8
LAS 08R/L Departures				2
LAS 19R/L Departures	185	87.7%	106	25
LAS 26R/L Departures	5	2.4%	4	5
LAS Run-ups				
LAS GA				
LAS Other				
LAS Total	204	96.7%	123	43
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		0.0%	3	1
VGT Other				
VGT Total	0	0.0%	3	1
HND 17R/L Arrivals				
HND 35R/L Arrivals				
HND 17R/L Departures				
HND 35R/L Departures				
HND Run-ups				
HND GA	7	3.3%	2	
HND Other				
HND Total	7	3.3%	2	0
Helicopters**		0.0%	3	1
Overall Total	211	100%	131	45



** 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 - Mar 2022

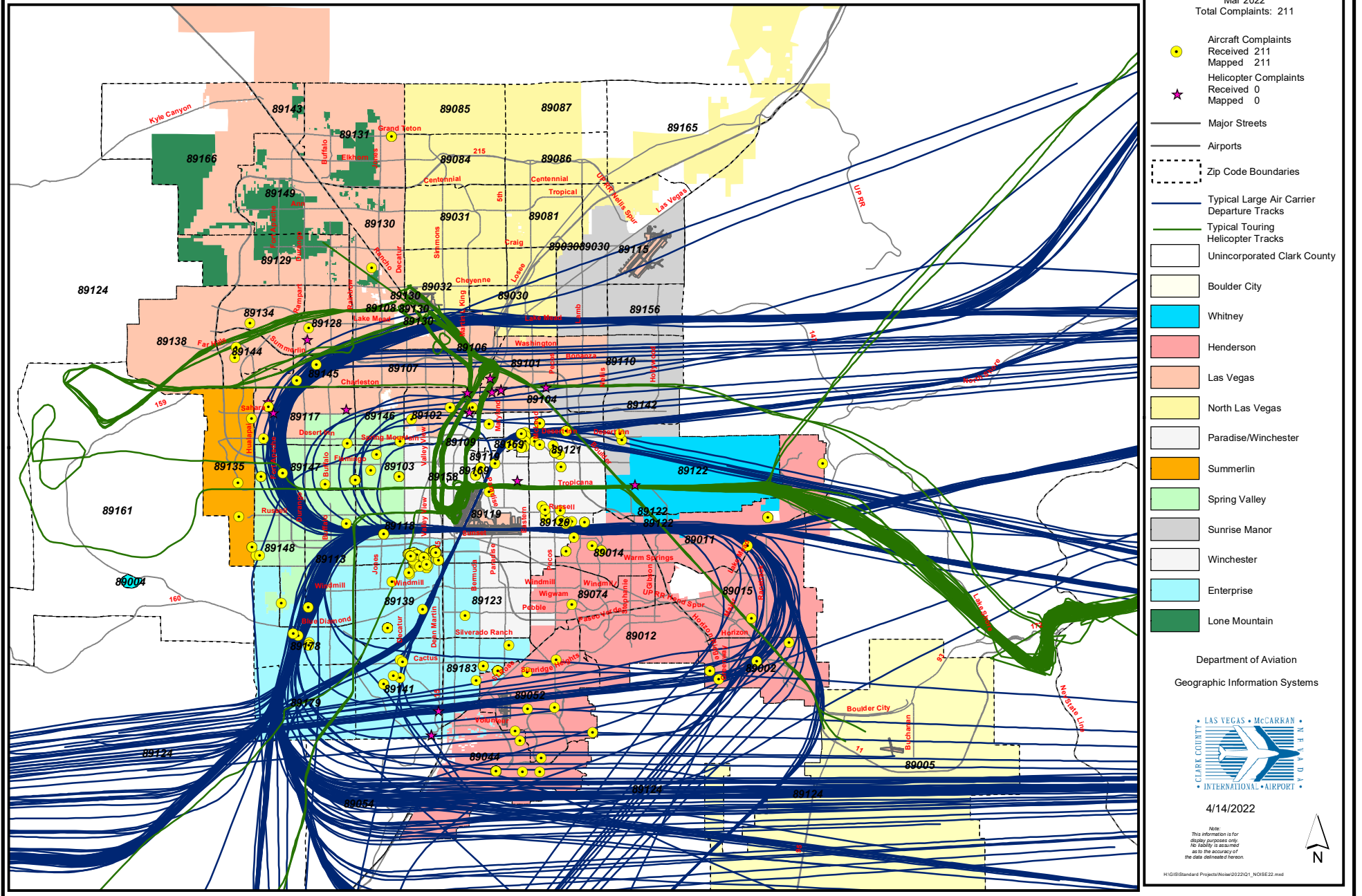
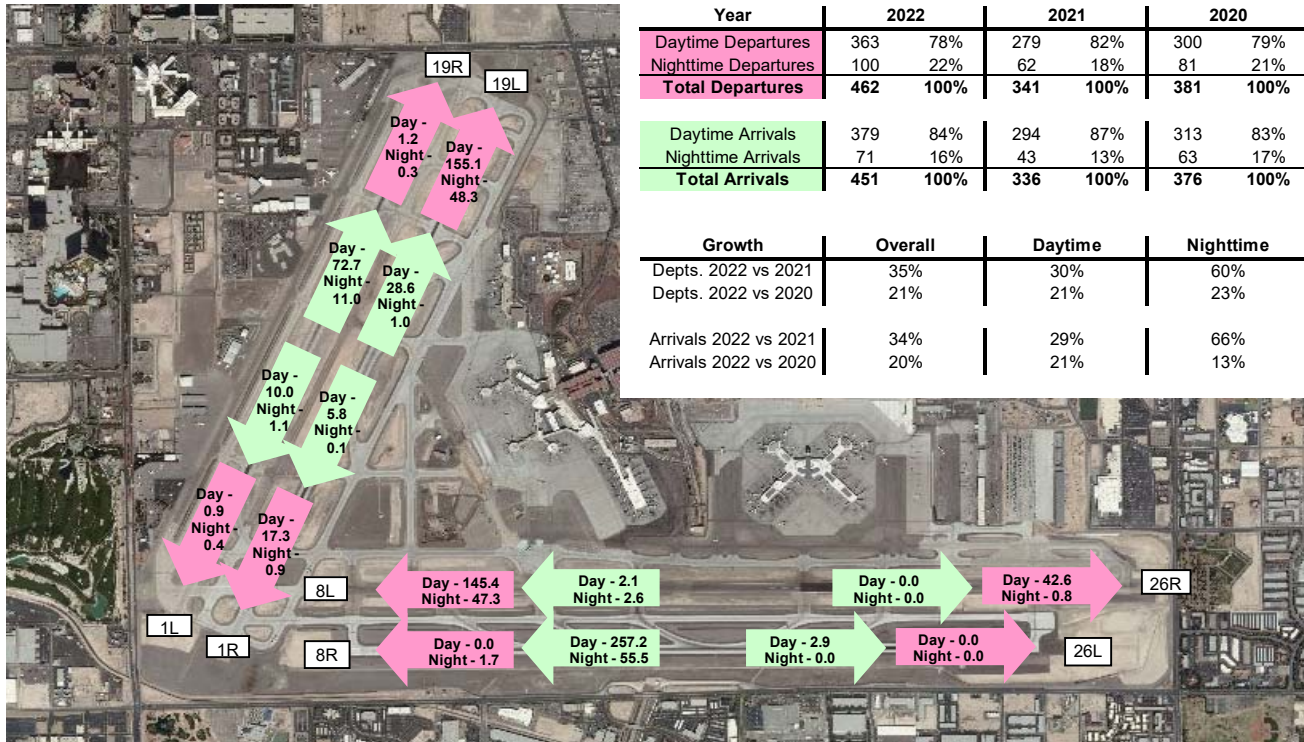
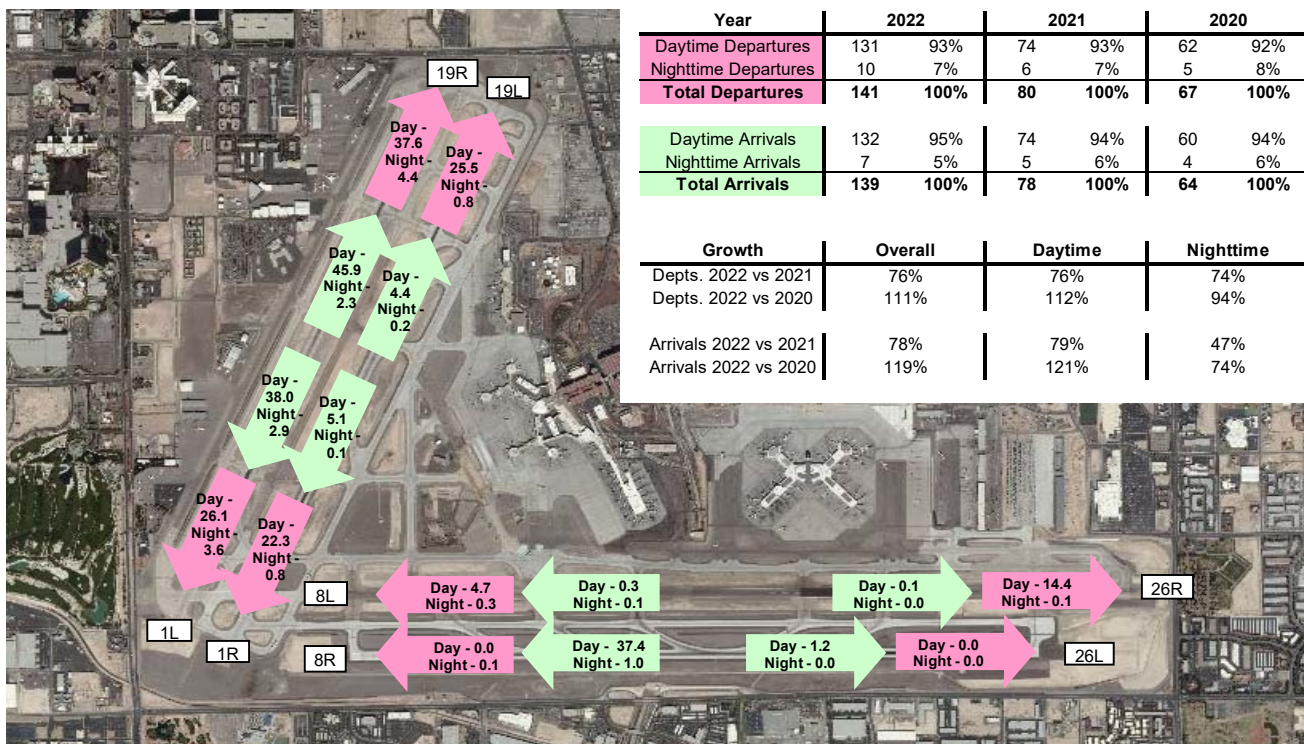


Exhibit 4: LAS Daily Average Operations by Runway for Large Air Carrier Aircraft* - March 2022



* 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** - March 2022



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

NOTE: As of December 17, 2020 some flight data deemed "sensitive" by the FAA, DoD, and DHS has been removed, reducing total aircraft counts.

Exhibit 6: LAS Daily Average Operations by Corridor for Helicopter Tours - March 2022

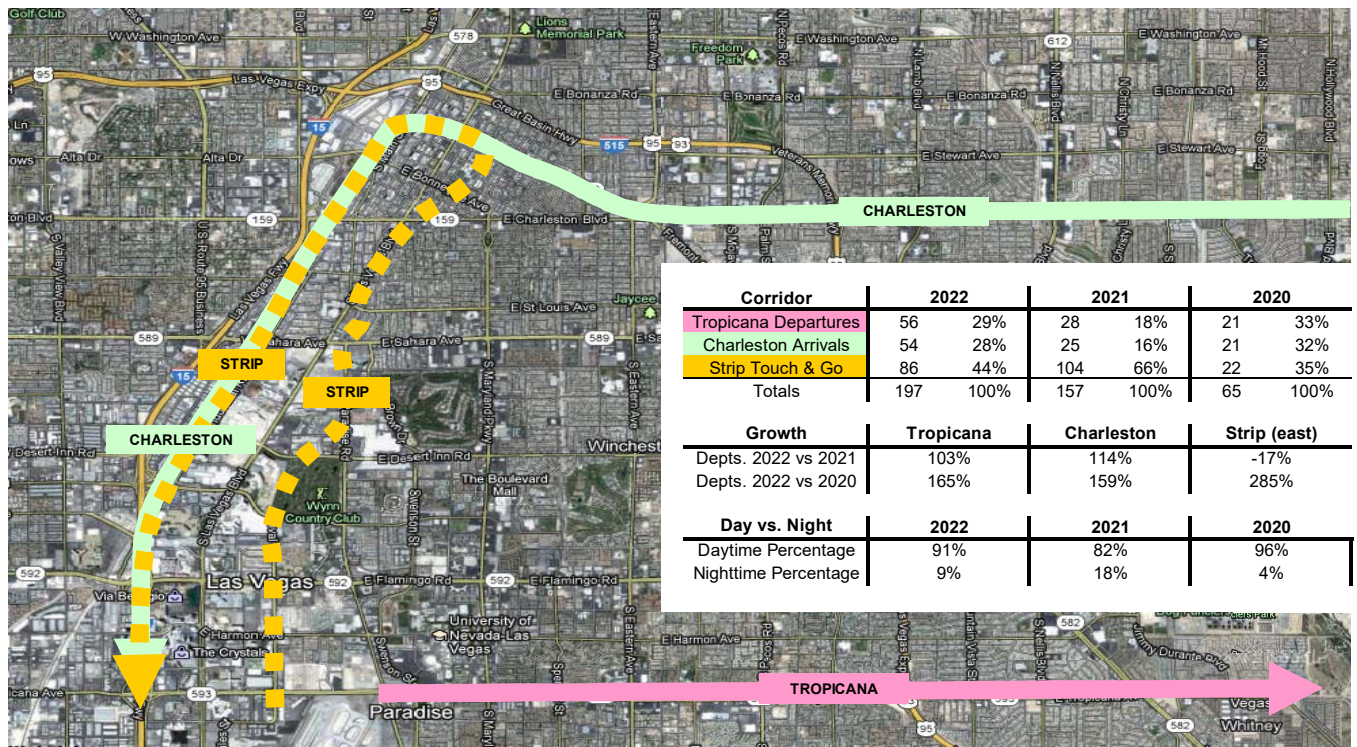
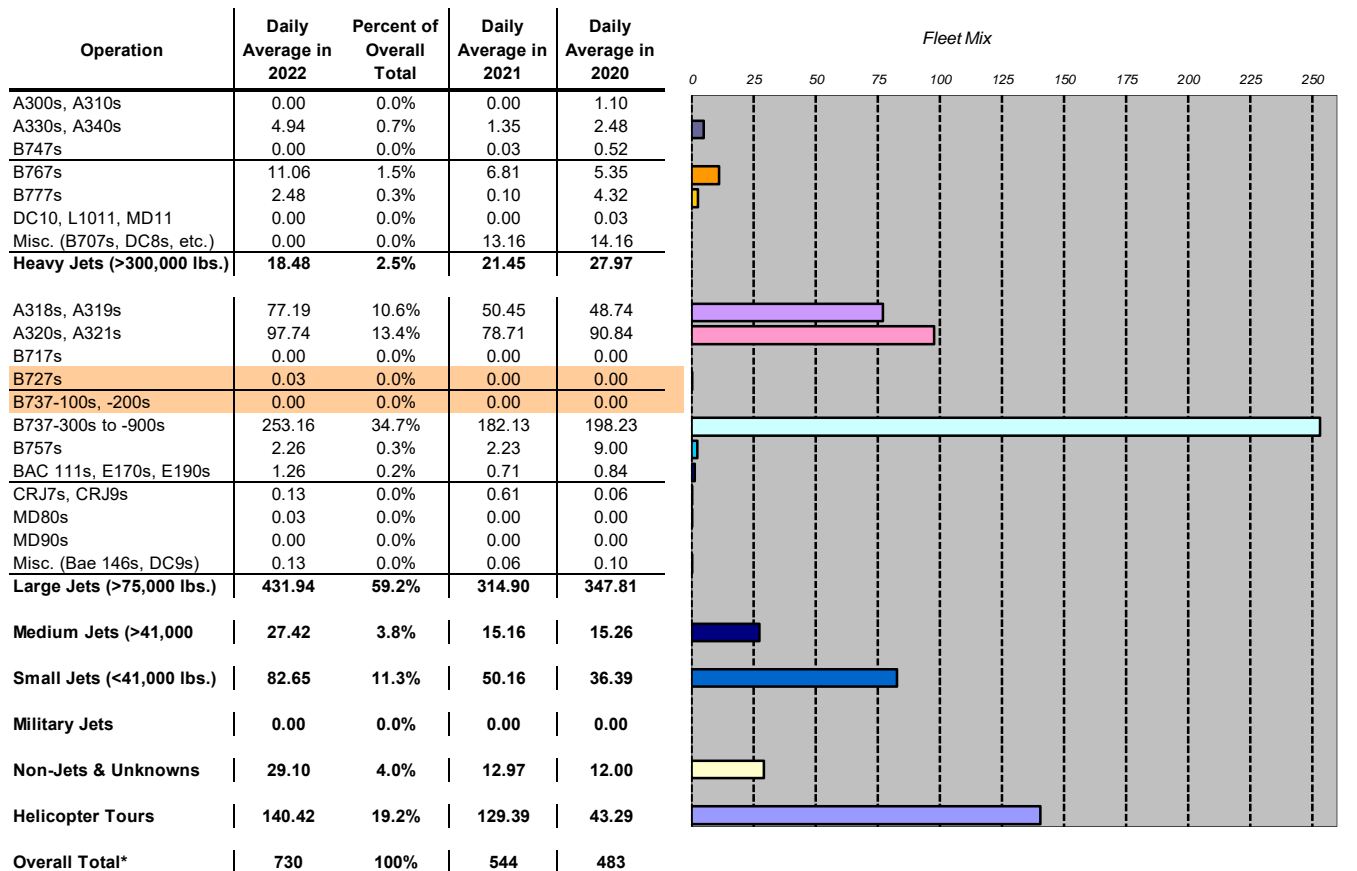


Exhibit 7: LAS Aircraft Arrival Fleet Mix* - March 2022



* 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. Please see footnote for Exhibit 5.

Exhibit 8: LAS General Departure Direction for Large Air Carrier Aircraft* - March 2022 to 2020

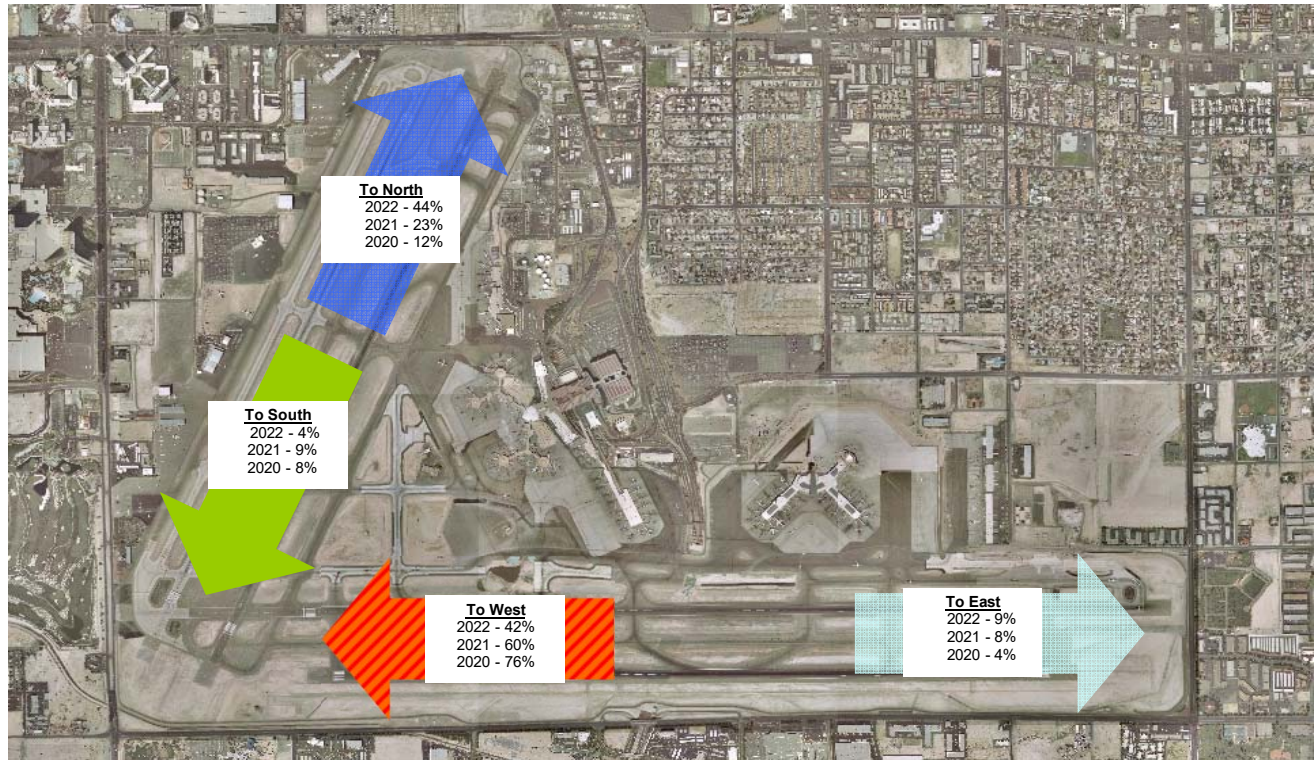
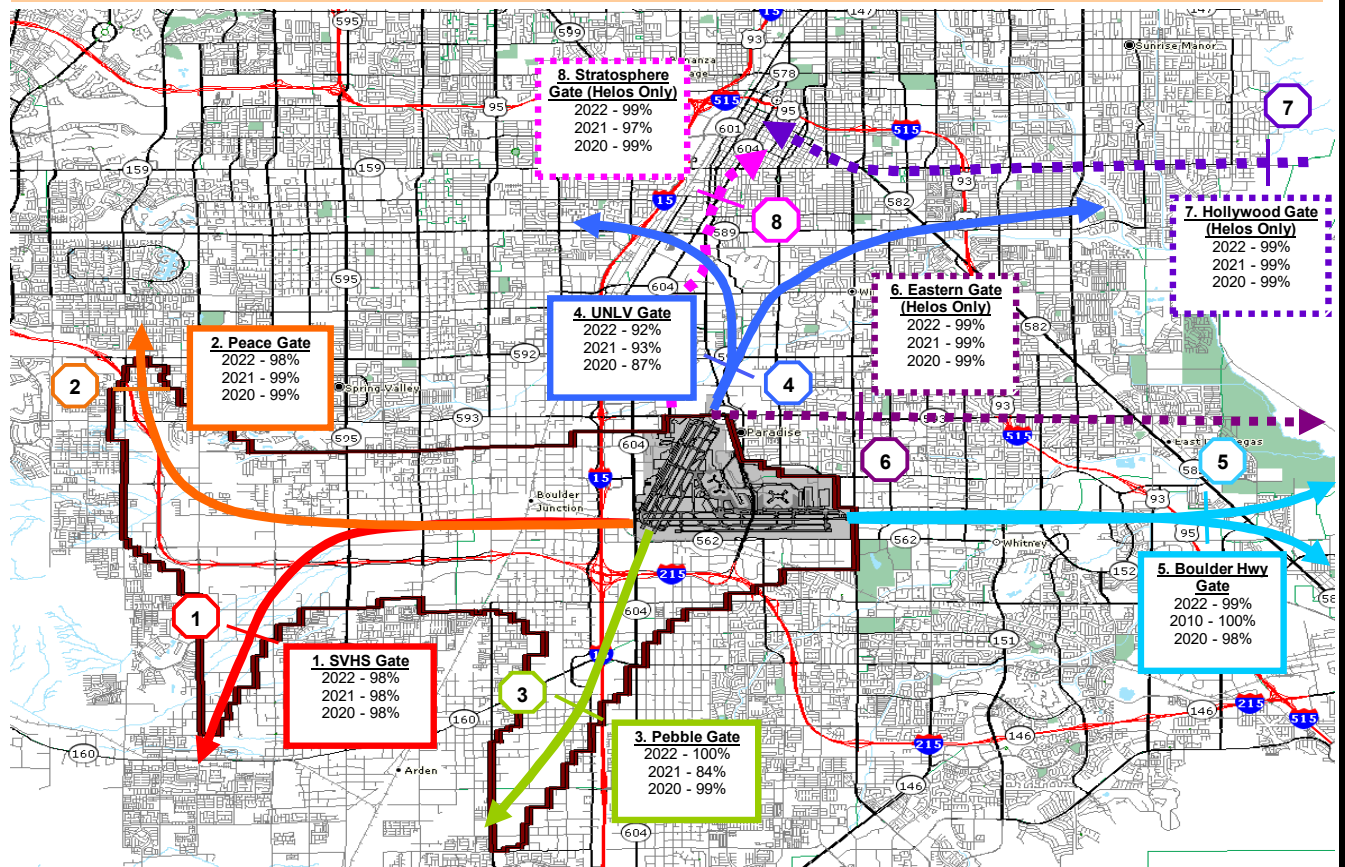


Exhibit 9: "Gate" Compliance for Large Aircraft* & LAS Helicopter Tours - March 2022



* Aircraft types: All aircraft with a maximum gross take of weight of at least 75,000 pounds, including but not limited to, A306, A310, A311, A318, A319, A320, A330, A3707, B717, B727, B737, B747, B757, B767, B777, CRJ7, CRJ9, DC8, DC9, DC10, E170, E190, HA4T, L1011, MD80, MD90, MD10, MD11, VC10.

Exhibit 10: Land Use Application Reviews & Comments - March 2022

Land Use Application Review Summary	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2022 Total	2021 Total	2020 Total
No. of Land Use Applications Reviewed	120	67	43	15	245	272	239
No. of Applications where CCDOA Issued a Comment	14	6	2	3	25	27	14
Percent of Applications where Comment Issued	12%	9%	5%	20%	10%	10%	6%

Exhibit 11: Land Use Application Comments by Airport Concern - March 2022

Summary by Comment Type	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2022 Total	2021 Total	2020 Total
Deed Restrictions	1	0	0	0	1	0	1
Height-Penetrates Part 77 100:1 Surfaces >200'	2	4	2	0	8	7	11
Height-Penetrates Part 77 PATH-C Surfaces*	2	0	0	0	2	2	0
Helipad/Helipad	0	0	0	0	0	0	0
Noise-Commercial within AEOD**	4	0	0	2	6	5	1
Noise-Residential within the AEOD**	0	0	0	0	0	3	0
Noise-Residential Just Outside the AEOD**	5	3	0	1	9	16	10
Misc.-If applicable, detailed info. provided within the written summary	0	0	0	0	0	0	0
Total***	14	7	2	3	26	33	23

* 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* - March 2022

Dwelling Units Proposed in Commented Applications	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2022 Total	2021 Total	2020 Total
Within the AEOD	0	0	0	0	0	132	0
Just Outside the AEOD	476	692	0	161	1,329	1,734	1,369

*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* - March 2022

Summary of LUA Opposed	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	2022 Total	2021 Total	2020 Total
Recommend Denial	0	0	0	0	0	0	0
Opposed at Hearings	0	0	0	0	0	0	0

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

Exhibit 14: Airport Environs Overlay Districts & Noise Comments - Valley Wide - March 2022

AEOD - Airport Environs Overlay Districts - Noise Contours

Clark County Code (CCC) 30.48.010. The AEOD is established to:

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4. Comply with the Federal Aviation Administration regulations.

2008-Most recent update to the AEOD in CCC, updated the AEOD for Reid (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.

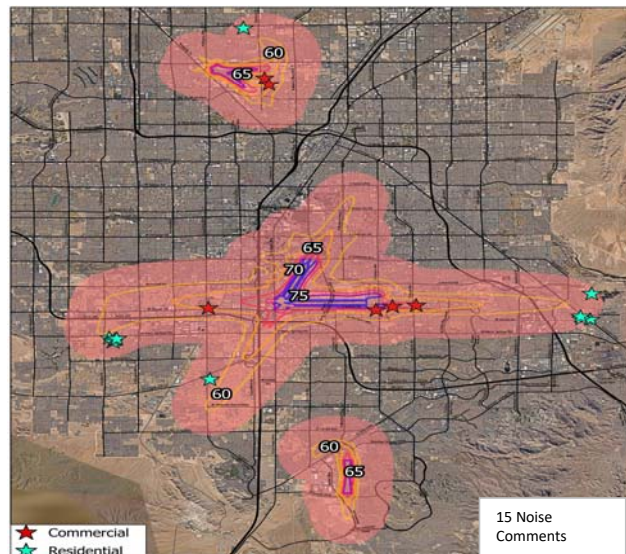


Exhibit 15: Noise Comments - LAS Detail - March 2022

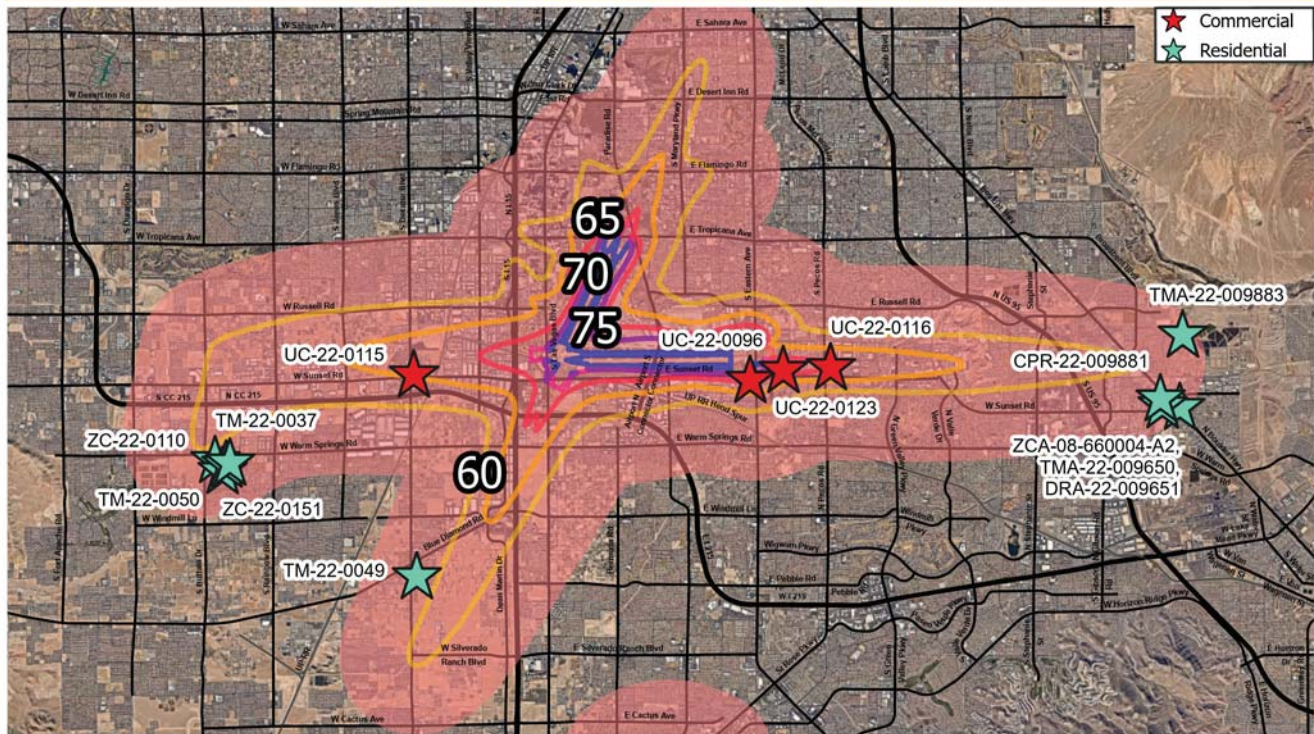


Exhibit 16: Noise Comments - HND Detail - March 2022

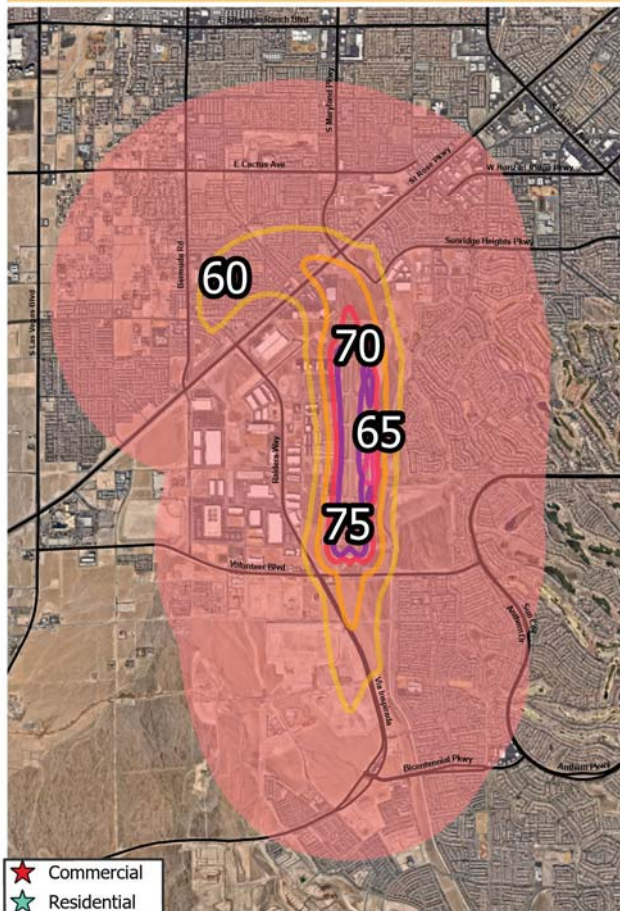


Exhibit 17: Noise Comments - VGT Detail - March 2022

