

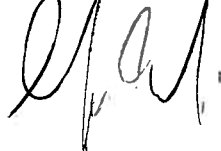
MEMORANDUM

DEPARTMENT OF AVIATION

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Director

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TO: DISTRIBUTION

FROM: GEORGE C. SIMS, PLANNER 

SUBJECT: JANUARY THROUGH MARCH 2012 NOISE COMPLAINT REPORTS

DATE: MAY 10, 2012

Attached for your review are the Clark County Department of Aviation's (CCDOA) Monthly Noise Complaint Reports for January through March 2012. Please note the following 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 either through the CCDOA's Noise Hotline (261-3694), the Noise Office (261-5600), or calls forwarded from LAS's toll free number (1-800-261-5704). Nellis Air Force Base noise complaints are forwarded to the Nellis Public Affairs Office (652-2750), and noise complaints regarding aircraft operations from the Boulder City Airport are forwarded to the Boulder City Airport Coordinator (293-9405). Individuals who express concerns regarding aircraft operations originating from private facilities (i.e., Valley Hospital, the private helipad located near Las Vegas Blvd. and Larson Lane, or the private helipad located near Cheyenne Road and North 5th Street) are asked to contact the individual property owner directly.

Exhibit 1 of each Monthly Noise Complaint Report illustrates the number of calls received by community as well as the number of individual callers or households. **Exhibit 2** illustrates the primary nature of the disturbance as identified by the caller. The second page of each monthly report (**Exhibit 3**) graphically illustrates all known origins of the calls received that month. **Exhibits 4 and 5** summarize arrival and departure runway use for large and non-large air carrier aircraft (new for the 2012 monthly reports). Arrival and departure corridor use for helicopters are summarized in **Exhibit 6** (also new for the 2012 monthly reports). **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 (non-large air carrier aircraft types were added to the 2012 monthly reports). **Exhibit 8** illustrates the general departure direction for large aircraft (historically only provided on an annual basis).

Lastly, **Exhibit 9** summarizes how well large aircraft and helicopters adhered to the preferred, non-regulated departure corridors (also historically provided on an annual basis for large aircraft, with helicopter analysis new for the 2012 monthly reports). Adherence to preferred departure corridors is voluntary, and neither Clark County nor the State of Nevada regulates aircraft in flight. The FAA, through the discretion of Congress, has sole authority over the safe and efficient utilization of the nation's navigable airspace. Therefore, local and state authorities cannot legally enforce the use of these departure corridors, or impose penalties to pilots who opt not to comply with preferred procedures. "Compliance gates" are located along these historical/fly-quietly departure routes. If all aircraft flew with advanced navigational technologies and operated under Required Navigational Precision (RNP) procedures, then it could be expected that up to 95% of all aircraft would be within 0.3 nautical miles (NM) of a fly-over point. Therefore, 0.3 NM is the threshold for compliance for large air carrier aircraft. The compliance threshold for helicopters is 500 feet.

The 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

January 2012: 41 total complaints - a 68% decrease from 2011 and a 2% decrease from 2010. On average, each caller (or household) issued 1.9 calls. The most calls received from one household totaled 17.

Calls by Community - (Exhibits 1 and 3)

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

Minority (between 10% and 50%): The **Spring Valley** community issued 17 calls (42%). This community is typically impacted by aircraft departing to the west (from Runway 25R and Runway 25L). This community is also impacted by aircraft departing to the north (from Runway 01R and Runway 01L) that turn left (to the west and south).

The **City of Henderson** community issued 9 calls (22%). This community is typically impacted by aircraft departing to the east (from Runway 07R and Runway 07L). This community is also impacted by aircraft arriving from the east (into Runway 25R and Runway 25L, LAS preferred departure configuration).

The **Paradise and Winchester** communities issued 7 calls (17%). 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 Las Vegas** community issued 4 calls (10%). This community is typically impacted by aircraft departing to the west (from Runway 25R and Runway 25L).

Repeat Caller Impact: One household issued 41% (17 calls) of all the calls received in January 2012.

Calls by Operation - (Exhibit 2)

- LAS:** 61% of the total calls were due to **LAS** fixed-wing operations.
- 54% were due to departures to the north from Runways 01L and 01R (77% from one household).
- VGT:** 5% of the total calls were due to **VGT** fixed-wing operations.
- HND:** 2% of the total calls were due to **HND** fixed-wing operations.
- Helos:** 32% of the total calls were due to **helicopter** operations.

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

- Overall:** 426 daily *departures*¹ – a 4% decrease from 2011 and 2% decrease from 2010.
- 69% of departures were to the west, 17% north, 12% south, and 2% east.
- 437 daily *arrivals* – a 1% decrease from 2011 and 1% decrease from 2010.
- 83% of arrivals were from the east, 9% from the south, and 8% north.

¹ Note: Due to the location of the radar south of Sunset Road, and the angle of the radar signal to avoid ground clutter, some aircraft that depart to the north from LAS are not captured until well north of Tropicana Avenue. Therefore, the AirScene application, used to determine runway use and traffic counts, does not tag these operations as either occurring at LAS or as a departure. Thus, total departure counts may be less than what likely occurred.

Daytime: 373 daily *departures*² – a 3% increase from 2011 and a 4% decrease from 2010.
▪ 67% of departures were to the west, 18% north, 13% south, and 2% east.
393 daily *arrivals* – a 2% decrease from 2011 and a 2% decrease from 2010.
▪ 83% of arrivals were from the east, 10% from the south, and 7% from the north.

Nighttime: 53 daily *departures*³ – a 6% increase from 2011 and a 17% increase from 2010.
▪ 82% of departures were to the west, 13% north, and 5% south.
44 daily *arrivals* – a 2% increase from 2011 and a 14% increase from 2010.
▪ 84% of arrivals were from the east, 12% from the north, and 4% from the south.

Daytime vs. Nighttime: Approximately 88% 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: 104 daily *departures*⁴ – a 5% increase from 2011 and 9% increase from 2010.
▪ 69% of departures were to the south, 17% north, 12% west, and 2% east.
109 daily *arrivals* – a 3% increase from 2011 and 11% increase from 2010.
▪ 66% of arrivals were from the north, 17% from the east, and 16% south.

Daytime: 97 daily *departures*⁵ – a 5% increase from 2011 and a 12% decrease from 2010.
▪ 68% of departures were to the south, 18% north, 12% west, and 2% east.
103 daily *arrivals* – a 4% increase from 2011 and a 12% increase from 2010.
▪ 65% of arrivals were from the north, 18% from the east, and 17% from the south.

Nighttime: 7 daily *departures*⁶ – a 7% increase from 2011 and a 19% decrease from 2010.
▪ 71% of departures were to the south, 16% west, 12% south, and 1% east.
6 daily *arrivals* – a 9% decrease from 2011 and a 12% decrease from 2010.
▪ 82% of arrivals were from the north, 13% south, 4% south, and 2% west.

Daytime vs. Nighttime: Approximately 93% of all *departures* and 94% of all *arrivals* occurred during the daytime hours.

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

Tropicana: 82 daily *departures* - a 2% decrease from 2011 and a 13% increase from 2010.

Charleston: 82 daily *arrivals* - a 3% decrease from 2011 and a 14% increase from 2010.

Strip: 23 daily *touch and goes* - a 5% increase from 2011 and a 35% increase from 2010.

Daytime vs. Nighttime: Approximately 98% of all helicopter tour operations occurred during the daytime hours.

² See footnote #1.

³ See footnote #1.

⁴ See footnote #1.

⁵ See footnote #1.

⁶ See footnote #1.

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 66% of the daily traffic.
- Medium:** *Medium* turbine-driven aircraft (those weighing more than 41,000 lbs. and less than 75,000 lbs.) accounted for 1% of the daily traffic.
- Small:** *Small* turbine-driven aircraft (those weighing 41,000 lbs. or less) accounted for 10% 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 6% 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 less than one operation per day.

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

- Primary:** In 2012, 69% departed to the *west* (from LAS's primary departure runways). This figure was 31% in 2011 and 76% in 2010.
- Secondary:** In 2012, 12% departed to the *south* (from LAS's secondary departure runways). This figure was 10% in 2011 and 10% in 2010.
- Alternate 1:** In 2012, 17% departed to the *north* (from LAS's alternate departure runways). This figure was 55% in 2011 and 12% in 2010. The large increase in 2011 was attributed to Runway 07L-25R being out of service during a portion of the month.
- Alternate 2:** In 2012, 2% departed to the *east* (from LAS's alternate departure runways). This figure was 4% in 2011 and 1% in 2010.

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

- SVHS:** In 2012, 93% of the large air carrier aircraft (excluding those destined to the Nevada Test Site) that departed to the west from Runways 25L or 25R and made a left-hand turn were within 0.3 NM of *Sierra Vista High School* (SVHS). This figure was 91% in 2011 and 92% in 2010.

The SVHS "compliance gate" is located southwest of Warm Springs Rd. and Buffalo Dr., approximately 5 miles due west and 1.5 miles due south of the extended runway centerline of Runways 25L and 25R. This gate was established along an existing noise abatement flight track which requests pilots to proceed runway heading to 3 nautical miles from the Las Vegas very-high frequency omnidirectional range tactical air navigation (VORTAC) facility before turning left (or towards the south) - where large air carrier aircraft have historically been encouraged to operate. This noise abatement flight track avoids

communities impacted by aircraft turning early along this corridor (like the Nevada Trails community) and aircraft turning late along this corridor (like the Rhodes Ranch community).

Peace: In 2012, 97% of the large air carrier aircraft (excluding those destined to the Nevada Test Site) that departed to the west from Runways 25L or 25R and made a right-hand turn were within 0.3 NM of the intersection of *Peace Way & Summers Shade Street*. This figure was 93% in 2011 and 94% in 2010.

The Peace “compliance gate” is located northeast of Tropicana Ave. and I-215, approximately 6 miles due west and 2 miles due north of the extended runway centerline of Runways 25L and 25R. This gate was also established along an existing noise abatement flight track which requests pilots to proceed runway heading to 4 nautical miles from the Las Vegas VORTAC before turning right (or towards the north) - where large air carrier aircraft have historically been encouraged to operate. This noise abatement flight track avoids communities impacted by aircraft turning early along this corridor (like the Spanish Trail community) and aircraft turning late along this corridor (like the Summerlin South community).

Pebble: In 2012, 98% of the large air carrier aircraft (excluding those destined to the Nevada Test Site) that departed to the south from Runways 19L or 19R were within 0.3 NM of the intersection of *Pebble Road & Arville Street*. This figure was 97% in 2011 and 95% in 2010.

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 2012, 79% of the large air carrier aircraft that departed to the north from Runways 01L or 01R were within 0.3 NM of the *UNLV sports complex*. This figure was 83% in 2011 and 22% in 2010.

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 2012, 94% of the large air carrier aircraft that departed to the north from Runways 07L or 07R were within 0.3 NM of the extended runway centerline, near *Boulder Highway*. This figure was 91% in 2011 and 91% in 2010.

The Boulder Hwy. “compliance gate” is located southeast of Russell Rd. and I-93/95, approximately 7 miles due east of the extended runway centerline of Runways 07L and 07R. This gate was also established along an existing noise abatement flight track which requests pilots to proceed runway heading to 7 nautical miles from the Las Vegas

VORTAC before turning - where large air carrier aircraft have historically been encouraged to operate. This noise abatement flight track avoids communities impacted by aircraft turning early along this corridor (like the Green Valley community, located in the City of Henderson, and older neighborhoods located north of Patrick Ln.).

Hualapai: In 2012, 97% of the large air carrier aircraft destined to the Nevada Test Site that departed to the west from Runways 25L or 25R were within 0.3 NM of the extended runway centerline, near *Hualapai Way*. This figure was not available in 2011 or 2010.

The Hualapai Way “compliance gate” is located northeast of Sunset Rd. and Hualapai Way, approximately 7 miles due west of the extended runway centerline of Runways 25L and 25R. This gate was established in May 2011 along a new noise abatement flight track which requests pilots of aircraft destined to the Nevada Test 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 2012, 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 97% in 2011 and 98% in 2010.

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 2012, 98% of the touring helicopters returning from areas east of the Las Vegas Valley were within 500 feet of the intersection of *Charleston Boulevard & Hollywood Boulevard*. This figure was 95% in 2011 and 92% in 2010.

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 2012, 89% 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 2011 and 73% in 2010.

The Stratosphere Tower “compliance gate” is located northeast of Sahara Avenue and Las Vegas Blvd., where an important turn in their fly-quietly routing structure begins near a historic portion of the urbanized area of the Las Vegas Valley.

The information denoted in this monthly summary represents **typical** residential complaints, flight activity, fleet mix, and gate compliance.

February 2012: 72 total complaints - a 12% decrease from 2011 and an 85% increase from 2010. On average, each caller (or household) issued 2.3 calls. The most calls received from one household totaled 11.

Calls by Community - (Exhibits 1 and 3)

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

Minority (between 10% and 50%): The *Paradise and Winchester* communities issued 20 calls (28%). (See January 2012 synopsis of typical aircraft overflight impacts on this community.)

The *City of Las Vegas* communities issued 17 calls (24%). (See January 2012 synopsis of typical aircraft overflight impacts on this community.)

The *Spring Valley* community issued 15 calls (21%). (See January 2012 synopsis of typical aircraft overflight impacts on this community.)

The *Sunrise Manor* community issued 10 calls (14%). This community is typically impacted by aircraft departing to the north (from Runway 01L and Runway 01R).

The *City of Henderson* community issued 9 calls (12%). (See January 2012 synopsis of typical aircraft overflight impacts on this community.)

Repeat Caller Impact: Three households issued 40% (29 calls) of all the calls received in February.

Calls by Operation - (Exhibit 2)

LAS: 81% of the total calls received were due to *LAS* fixed-wing operations.

- 31% were due to departures to the north from Runways 01L and 01R (82% from two households).
- 22% were due to departures to the east from Runways 07L and 07R (69% from one household).

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

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

Helis: 13% of the total calls received were due to *helicopter* operations.

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

Overall: 417 daily *departures*⁷ – a 2% decrease from 2011 and 3% decrease from 2010.

- 62% of departures were to the west, 21% north, 12% south, and 5% east.

447 daily *arrivals* – no change from 2011 and 2% increase from 2010.

- 78% of arrivals were from the east, 14% from the south, and 7% from the north.

Daytime: 363 daily *departures*⁸ – a 2% decrease from 2011 and 5% decrease from 2010.

- 60% of departures were to the west, 21% north, 13% south, and 6% east.

397 daily *arrivals* – a 1% decrease from 2011 and a 1% decrease from 2010.

- 78% of arrivals were from the east, 15% from the south, and 7% from the north.

⁷ See footnote #1.

⁸ See footnote #1.

- Nighttime:** 55 daily *departures*⁹ – a 1% increase from 2011 and 21% increase from 2010.
- 77% of departures were to the west, 17% north, 5% south, and 2% east.
- 50 daily *arrivals* – a 7% increase from 2011 and a 31% increase from 2010.
- 80% of arrivals were from the east, 11% from the north, and 9% from the south.

Daytime vs. Nighttime: Approximately 87% of all *departures* and 89% of all *arrivals* occurred during the daytime hours. As stated in the January analysis, historically these percentages have been approximately 80%. Many of the traffic reductions at LAS are occurring during the nighttime hours.

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

- Overall:** 95 daily *departures*¹⁰ – a 5% increase from 2011 and 8% increase from 2010.
- 60% of departures were to the south, 24% north, 13% west, and 4% east.
- 110 daily *arrivals* – an 11% increase from 2011 and 10% increase from 2010.
- 55% of arrivals were from the north, 23% from the east, and 21% south.
- Daytime:** 87 daily *departures*¹¹ – a 4% increase from 2011 and a 9% increase from 2010.
- 59% of departures were to the south, 24% north, 12% west, and 5% east.
- 103 daily *arrivals* – a 13% increase from 2011 and a 10% increase from 2010.
- 55% of arrivals were from the north, 23% from the east, and 22% from the south.
- Nighttime:** 8 daily *departures*¹² – an 11% increase from 2011 and no change from 2010.
- 68% of departures were to the south, 18% north, and 13% west.
- 6 daily *arrivals* – a 16% decrease from 2011 and a 3% increase from 2010.
- 61% of arrivals were from the north, 19% south, 19% east, and 1% west.

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

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

Tropicana: 79 daily *departures* – no change from 2011 and a 8% increase from 2010.

Charleston: 79 daily *arrivals* - a 1% increase from 2011 and a 11% increase from 2010.

Strip: 32 daily *touch and goes* - a 33% increase from 2011 and a 60% increase from 2010.

Daytime vs. Nighttime: Approximately 98% of all helicopter tour operations occurred during the daytime hours.

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

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

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

⁹ See footnote #1.

¹⁰ See footnote #1.

¹¹ See footnote #1.

¹² See footnote #1.

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

Small: *Small* turbine-driven aircraft (those weighing 41,000 lbs. or less) accounted for 10% 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 6% 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 2012, 62% departed to the *west* (from LAS's primary departure runways). This figure was 5% in 2011 and 73% in 2010.

Secondary: In 2012, 12% departed to the *south* (from LAS's secondary departure runways). This figure was 42% in 2011 and 10% in 2010. The large increase in 2011 was attributed to Runway 07L-25R being out of service during a portion of the month.

Alternate 1: In 2012, 21% departed to the *north* (from LAS's alternate departure runways). This figure was 47% in 2011 and 14% in 2010. The large increase in 2011 was attributed to Runway 07L-25R being out of service during a portion of the month.

Alternate 2: In 2012, 6% departed to the *east* (from LAS's alternate departure runways). This figure was 6% in 2011 and 3% in 2010.

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

SVHS: In 2012, 93% of the large air carrier aircraft (excluding those destined to the Nevada Test Site) that departed to the west from Runways 25L or 25R and made a left-hand turn were within 0.3 NM of *Sierra Vista High School* (SVHS). This figure was 83% in 2011 and 91% in 2010. (See January 2012 synopsis for specific location of the SVHS gate.)

Peace: In 2012, 97% of the large air carrier aircraft (excluding those destined to the Nevada Test Site) that departed to the west from Runways 25L or 25R and made a right-hand turn were within 0.3 NM of the intersection of *Peace Way & Summers Shade Street*. This figure was 73% in 2011 and 92% in 2010. (See January 2012 synopsis for specific location of the Peace gate.)

Pebble: In 2012, 97% of the large air carrier aircraft (excluding those destined to the Nevada Test Site) that departed to the south from Runways 19L or 19R were within 0.3 NM of the intersection of *Pebble Road & Arville Street*. This figure was 97% in 2011 and 95% in 2010. (See January 2012 synopsis for specific location of the Pebble gate.)

UNLV: In 2012, 80% of the large air carrier aircraft that departed to the north from Runways 01L or 01R were within 0.3 NM of the *UNLV sports complex*. This figure was 79% in 2011 and 32% in 2010. (See January 2012 synopsis for specific location of the UNLV gate.)

- Boulder:** In 2012, 96% of the large air carrier aircraft that departed to the north from Runways 07L or 07R were within 0.3 NM of the extended runway centerline, near *Boulder Highway*. This figure was 93% in 2011 and 95% in 2010. (See January 2012 synopsis for specific location of the Boulder Hwy. gate.)
- Hualapai:** In 2012, 93% of the large air carrier aircraft destined to the Nevada Test Site that departed to the west from Runways 25L or 25R were within 0.3 NM of the extended runway centerline, near *Hualapai Way*. This figure was not available in 2011 or 2010. (See January 2012 synopsis for specific location of the Hualapai gate.)
- Eastern:** In 2012, 98% of the touring helicopters destined east of the Las Vegas Valley were within 500 feet of the intersection of *Tropicana Avenue & Eastern Avenue*. This figure was 96% in 2011 and 98% in 2010. (See January 2012 synopsis for specific location of the Eastern gate.)
- Hollywood:** In 2012, 98% of the touring helicopters returning from areas east of the Las Vegas Valley were within 500 feet of the intersection of *Charleston Boulevard & Hollywood Boulevard*. This figure was 96% in 2011 and 94% in 2010. (See January 2012 synopsis for specific location of the Hollywood gate.)
- Stratosphere:** In 2012, 87% 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 85% in 2011 and 67% in 2010. (See January 2012 synopsis for specific location of the Stratosphere gate.)

The information denoted in this monthly summary represents **typical** residential complaints, flight activity, fleet mix, and gate compliance.

March 2012: 42 total complaints - a 39% decrease from 2011 and a 61% decrease from 2010. On average, each caller (or household) issued 2.8 calls. The most calls received from one household totaled 18.

Calls by Community - (Exhibits 1 and 3)

Majority (more than 50%): The *City of Henderson* community issued 22 calls (52%). (See January 2012 synopsis of typical aircraft overflight impacts on this community.)

Minority (between 10% and 50%): The *Spring Valley* community issued 9 calls (22%). (See January 2012 synopsis of typical aircraft overflight impacts on this community.)

The *City of Las Vegas* communities issued 7 calls (17%). (See January 2012 synopsis of typical aircraft overflight impacts on this community.)

Repeat Caller Impact: One household issued 43% (18 calls) of all the calls received in March 2012.

Calls by Operation - (Exhibit 2)

LAS: 41% of the total calls received were due to *LAS* fixed-wing operations.
▪ 21% were due to departures to the west from Runways 25L and 25R.

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

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

Helis: 50% of the total calls received were due to *helicopter* operations (86% from one household).

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

Overall: 453 daily *departures*¹³ – a 4% decrease from 2011 and a 5% increase from 2010.
▪ 68% of departures were to the west, 15% south, 9% north, and 7% east.
479 daily *arrivals* – no change from 2011 and 5% increase from 2010.
▪ 80% of arrivals were from the east, 12% north, 7% south and 2% west.

Daytime: 382 daily *departures*¹⁴ – a 4% decrease from 2011 and 2% increase from 2010.
▪ 65% of departures were to the west, 17% south, 9% north, and 9% east.
416 daily *arrivals* – a 1% decrease from 2011 and 1% increase from 2010.
▪ 79% of arrivals were from the east, 12% north, 7% south, and 3% west.

Nighttime: 70 daily *departures*¹⁵ – no change from 2011 and 29% increase from 2010.
▪ 84% of departures were to the west, 10% north, and 6% south.
63 daily *arrivals* – a 7% increase from 2011 and 36% increase from 2010.
▪ 82% of arrivals were from the east, 12% from the north, and 5% from the south.

Daytime vs. Nighttime: Approximately 84% 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: 83 daily *departures*¹⁶ – a 21% decrease from 2011 and no change from 2010.
▪ 67% of departures were to the south, 16% west, 9% north, and 8% east.
98 daily *arrivals* – an 11% decrease from 2011 and a 4% decrease from 2010.
▪ 70% of arrivals were from the north, 17% from the east, 10% south, and 3% west.

Daytime: 76 daily *departures*¹⁷ – a 22% decrease from 2011 and no change from 2010.
▪ 67% of departures were to the south, 16% west, 9% east, and 8% north.
92 daily *arrivals* – an 11% decrease from 2011 and a 4% decrease from 2010.
▪ 69% of arrivals were from the north, 18% east, 10% south, and 4% west.

Nighttime: 8 daily *departures*¹⁸ – a 3% increase from 2011 and a 3% decrease from 2010.
▪ 67% of departures were to the south, 19% west, and 14% north.
6 daily *arrivals* – a 3% increase from 2011 and a 2% increase from 2010.
▪ 78% of arrivals were from the north, 11% east, 10% south, and 1% west.

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

¹³ See footnote #1.

¹⁴ See footnote #1.

¹⁵ See footnote #1.

¹⁶ See footnote #1.

¹⁷ See footnote #1.

¹⁸ See footnote #1.

Operations by Corridor for Helicopter Tours - (Exhibit 6)

Tropicana: 97 daily *departures* – a 13% decrease from 2011 and a 7% increase from 2010.

Charleston: 95 daily *arrivals* - a 14% decrease from 2011 and a 7% increase from 2010.

Strip: 38 daily *touch and goes* - a 27% increase from 2011 and a 73% increase from 2010.

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

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

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

Large: *Large* air carrier turbine-driven aircraft (those weighing more than 75,000 lbs. and less than 300,000 lbs.) accounted for 66% of the daily traffic.

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

Small: *Small* turbine-driven aircraft (those weighing 41,000 lbs. or less) accounted for 8% of the daily traffic.

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

Non-Jet: *Piston-driven* aircraft and unassigned aircraft types accounted for 5% 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 2012, 68% departed to the *west* (from LAS's primary departure runways). This figure was 37% in 2011 and 55% in 2010.

Secondary: In 2012, 15% departed to the *south* (from LAS's secondary departure runways). This figure was 45% in 2011 and 10% in 2010. The large increase in 2011 was attributed to Runway 07L-25R being out of service during a portion of the month.

Alternate 1: In 2012, 9% departed to the *north* (from LAS's alternate departure runways). This figure was 17% in 2011 and 29% in 2010.

Alternate 2: In 2012, 7% departed to the *east* (from LAS's alternate departure runways). This figure was less than 1% in 2011 and 6% in 2010.

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

- SVHS:** In 2012, 94% of the large air carrier aircraft (excluding those destined to the Nevada Test Site) that departed to the west from Runways 25L or 25R and made a left-hand turn were within 0.3 NM of *Sierra Vista High School* (SVHS). This figure was 91% in 2011 and 90% in 2010. (See January 2012 synopsis for specific location of the SVHS gate.)
- Peace:** In 2012, 95% of the large air carrier aircraft (excluding those destined to the Nevada Test Site) that departed to the west from Runways 25L or 25R and made a right-hand turn were within 0.3 NM of the intersection of *Peace Way & Summers Shade Street*. This figure was 89% in 2011 and 91% in 2010. (See January 2012 synopsis for specific location of the Peace gate.)
- Pebble:** In 2012, 98% of the large air carrier aircraft (excluding those destined to the Nevada Test Site) that departed to the south from Runways 19L or 19R were within 0.3 NM of the intersection of *Pebble Road & Arville Street*. This figure was 96% in 2011 and 96% in 2010. (See January 2012 synopsis for specific location of the Pebble gate.)
- UNLV:** In 2012, 77% 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 78% in 2011 and 34% in 2010. (See January 2012 synopsis for specific location of the UNLV gate.)
- Boulder:** In 2012, 95% of the large air carrier aircraft that departed to the north from Runways 07L or 07R were within 0.3 NM of the extended runway centerline, near *Boulder Highway*. This figure was 83% in 2011 and 97% in 2010. (See January 2012 synopsis for specific location of the Boulder Hwy. gate.)
- Hualapai:** In 2012, 91% of the large air carrier aircraft destined to the Nevada Test Site that departed to the west from Runways 25L or 25R were within 0.3 NM of the extended runway centerline, near *Hualapai Way*. This figure was not available in 2011 or 2010. (See January 2012 synopsis for specific location of the Hualapai gate.)
- Eastern:** In 2012, 98% of the touring helicopters destined east of the Las Vegas Valley were within 500 feet of the intersection of *Tropicana Avenue & Eastern Avenue*. This figure was 98% in 2011 and 97% in 2010. (See January 2012 synopsis for specific location of the Eastern gate.)
- Hollywood:** In 2012, 98% of the touring helicopters returning from areas east of the Las Vegas Valley were within 500 feet of the intersection of *Charleston Boulevard & Hollywood Boulevard*. This figure was 93% in 2011 and 92% in 2010. (See January 2012 synopsis for specific location of the Hollywood gate.)
- Stratosphere:** In 2012, 83% 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 81% in 2011 and 66% in 2010. (See January 2012 synopsis for specific location of the Stratosphere gate.)

The information denoted in this monthly summary represents **typical** residential complaints, flight activity, fleet mix, and gate compliance.

Other Notable Issues

Helicopter Operator Users Meeting: On March 15, 2012, DOA staff members met with FAA, local helicopter tour operators, and airline staff to discuss noise complaints tied to helicopter operations, route compliance, and operational growth.

VGT site visit with 702 Helicopters: On March 20, 2012, DOA staff members met with 702 Helicopters to discuss compliance issues tied to their operations out of VGT. DOA staff provided a review of their flight activity, as they intermingled with the tour group operators out of LAS. Additionally, 702 Helicopters were provided additional maps and displays to better educate pilots on DOA's fly-quietly program for touring helicopters. The site visit was a success, and DOA staff provided the company with follow-up material depicting the improvements of their flight activity between March 21 and April 17, 2012.

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

May 10, 2012

Page 15 of 30

Distribution: Commissioner Brager, Chair
Commissioner Sisolak, Vice-Chair
Commissioner Collins
Commissioner Weekly
Rosemary Vassiliadis
Donald G. Burnette
Ralph LePore
Harry Waters
Bob Kingston
Teresa Motley
Cecil Johnson
Alan Pinkerton
Dan Kezar
Linda Healey
Candice Seeley

John Craft, (FAA Tower Mgr., LAS)
John Holman (FAA TRACON)
Stephen J. Lloyd (FAA TRACON)
Del Meadows (FAA TRACON)
Charlie Halterman (HND Tower)
Peter Yiakof (FAA FSDO)
Ellington Bristol (COH)
Elizabeth Macias Quillin (COH)
Margo Wheeler (CLV)
Vicki Mayes (CBC)
Mayor Carolyn Goodman (CLV)
Councilman Stavros Anthony (CLV)
Councilman Steve Wolfson (CLV)
Councilwoman L. Tarkanian (CLV)
Mayor Pro Tem G. Reese (CLV)
Councilman Ricki Barlow (CLV)
Councilman Steven Ross (CLV)
Bradford Jerbic, (CLV)
Mayor Roger Tobler (CBC)
Brok Armantrout (CBC)
David Parks (Nevada State Assembly)
J. Gordon Arkin (Foley & Lardner)
John Williams (Ricondo)
Douglas Pomeroy (FAA ADO)
La Nea M. Conner (Boeing)
Neal Phillips (Metro Wash. Air Auth.)
Frank Fiori (CNLV)
Michelle Plawecki (Detroit Metro Airport)
Stan Shepherd (SEATAC)
Eric Sheng (Long Beach Airport)

Commissioner Giunchigliani
Commissioner Brown
Commissioner Scow
Joe Kubacki
E. Lee Thomson
Sam Ingalls
Chris Jones
Dawn Holden
Barbara Bolton
Jeff Jacquart
Charlie Hall
Lisa Johnson
Ben Czyzewski
Dennis Anderson

James Erbeck (CLV)
Nick Harrington (FAA FSDO)
Nancy Myrick (FAA Tower Manager, NLVA)
Sydney Lowe (University Libraries)
Bob Brown (BBA)
Charles Ramey (Nellis AFB)
Lissa Butterfield (Reno-Tahoe Airport)
Andrea Christensen (Denver Airport)
Jennifer Lewis (Scottsdale Airport)
Frank Iacovino (Mass Port Authority)
Jon Collette (Philadelphia Airport)
Robert Butler (Papillon Helicopters)
Christine Gerencher (American Airlines)
Bert Ganoung (SFO)
Nigel Turner (Heli USA Airways)
San Diego Airport Noise Management
Jeannie Denham (Citizen)
Judge Bob Johnston (Citizen)
Roy Fuhrmann (Metro Airports Commission)
Tom Schaus (Sundance Helicopters)
Brooke Satern (Port of Portland)
Gary Brodt (Citizen)
Capt. Amanda Ferrell (Nellis AFB)

Exhibit 1: Noise Complaint Calls by Community* - January 2012

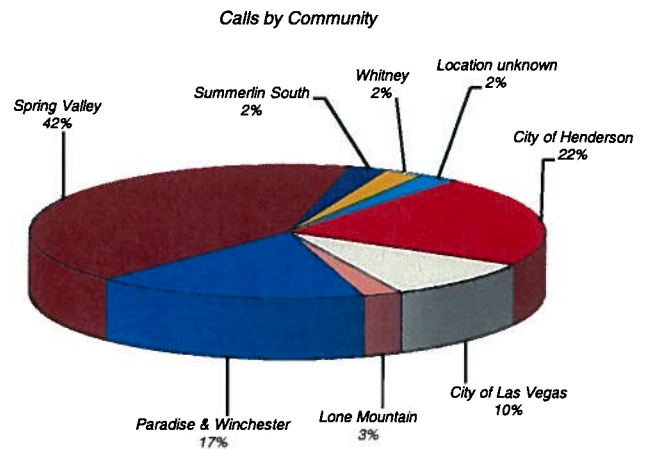
Community	No. of Calls in 2012	No. of Callers in 2012	No. of Calls in 2011	No. of Calls in 2010
City of Boulder City			8	3
City of Henderson	4	3	10	10
City of Las Vegas			1	
City of North Las Vegas			14	9
Enterprise				
Lone Mountain	1	1		
Paradise & Winchester	7	6	64	
Spring Valley	17	1	12	7
Summerlin South	1	1		1
Sunrise Manor			17	12
Whitney	1	1	3	
Location unknown	1	1		
Overall Total	41	22	129	42

Difference between 2012 and 2011 Total Calls: -68%

Difference between 2012 and 2010 Total Calls: -2%

Average Number of Calls per Caller: 1.9

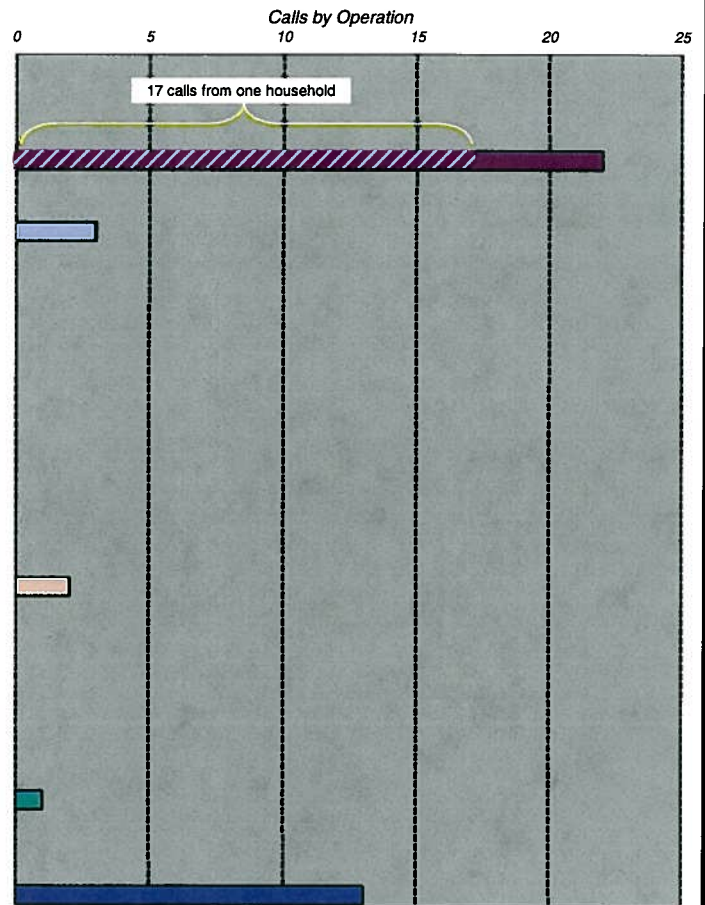
Most calls received from one household: 17



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

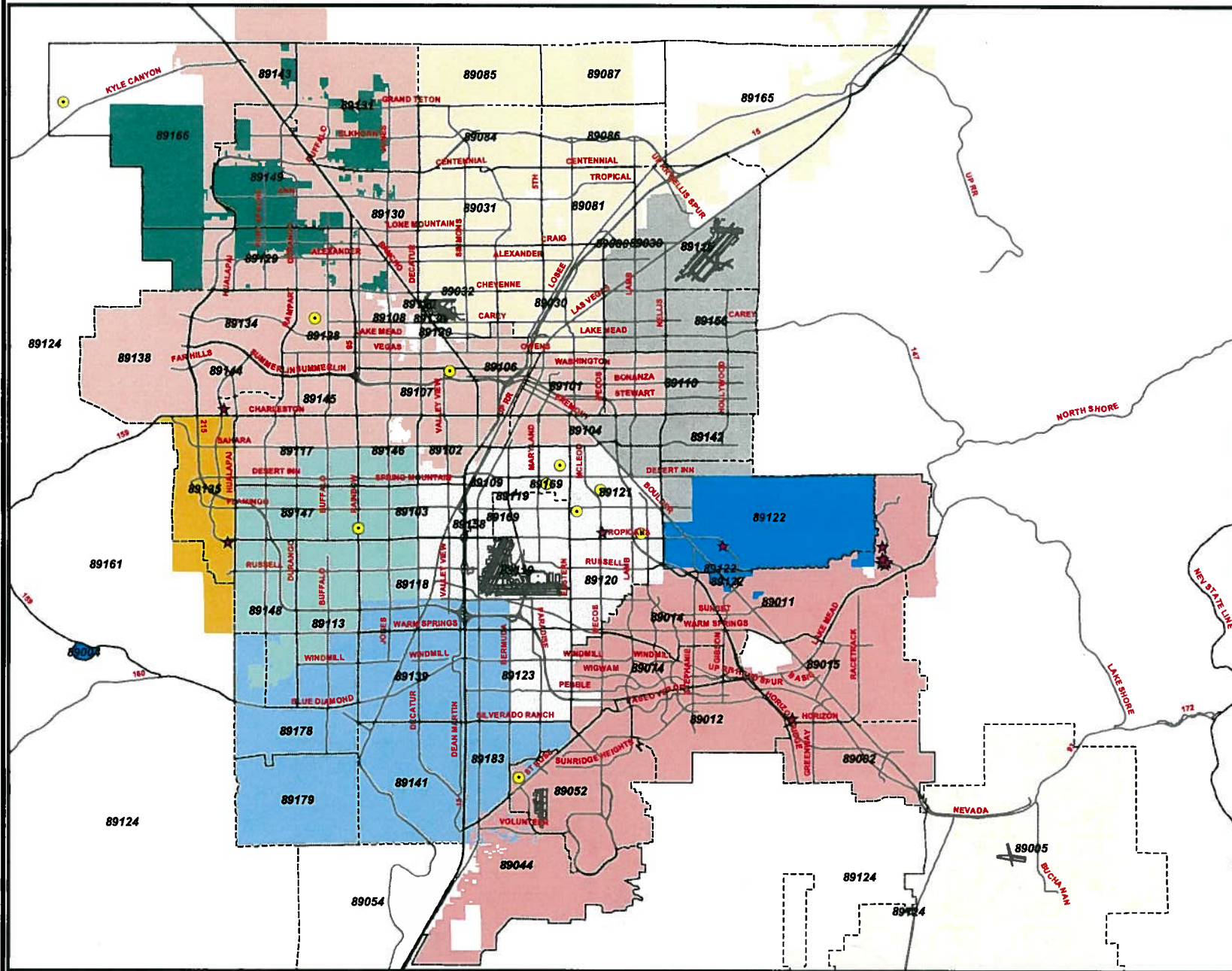
Exhibit 2: Noise Complaint Calls by Type of Operation - January 2012

Operation	No. of Calls in 2012	Percent of Overall Total	No. of Calls in 2011	No. of Calls in 2010
LAS 01R/L Arrivals			3	
LAS 07R/L Arrivals				
LAS 19R/L Arrivals			1	
LAS 25R/L Arrivals				1
LAS 01R/L Departures	22	53.7%	108	9
LAS 07R/L Departures				1
LAS 19R/L Departures			6	1
LAS 25R/L Departures	3	7.3%		26
LAS Run-ups				
LAS GA				
LAS Other				
LAS Total	25	61.0%	118	38
VGT 07 Arrivals				
VGT 12R/L Arrivals				
VGT 25 Arrivals				
VGT 30R/L Arrivals				
VGT 07 Departures				
VGT 12R/L Departures				
VGT 25 Departures				
VGT 30R/L Departures				
VGT Run-ups				
VGT GA	2	4.9%	1	1
VGT Other				
VGT Total	2	4.9%	1	1
HND 17R/L Arrivals				
HND 35R/L Arrivals				
HND 17R/L Departures				
HND 35R/L Departures				
HND Run-ups				
HND GA	1	2.4%	7	1
HND Other				
HND Total	1	2.4%	7	1
Helicopters**	13	31.7%	3	2
Overall Total	41	100%	129	42



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

Exhibit 3: Aircraft Noise Complaints by Community - January 2012



Legend

January 2012
Total Complaints: 41

- Aircraft Complaints Received 28, Mapped 28
- Helicopter Complaints Received 13, Mapped 13

- Major Streets
- Airports
- Zip Code Boundaries

- Unincorporated Clark County
- Boulder City
- Whitney
- Henderson
- Las Vegas
- North Las Vegas
- Paradise/Winchester
- Summerlin
- Spring Valley
- Sunrise Manor
- Winchester
- Enterprise
- Lone Mountain

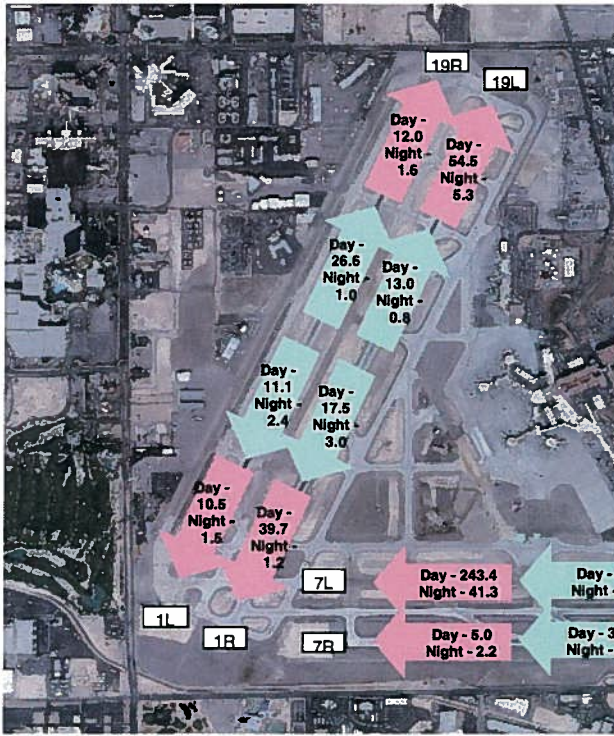
Department of Aviation
I.S. Division
Geographic Information Systems

May 1, 2012

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

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Exhibit 4: LAS Daily Average Operations Runway for Large Air Carrier Aircraft* - January 2012

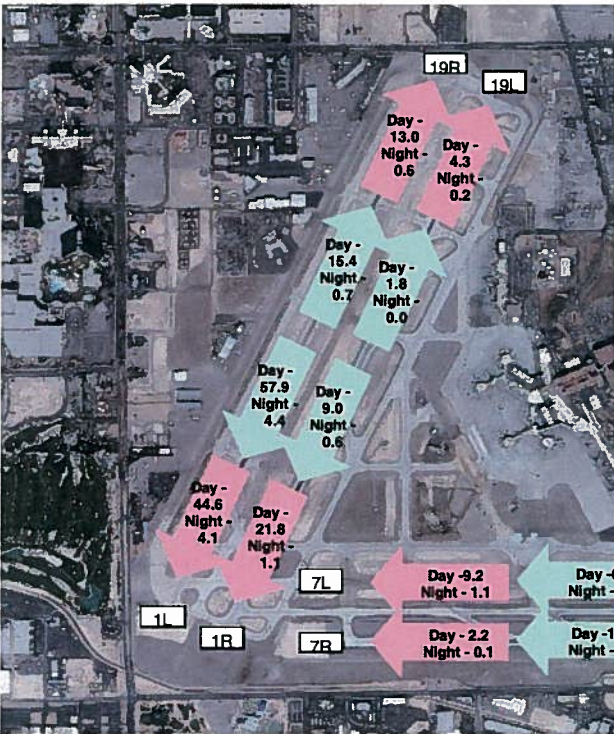


Year	2012		2011		2010	
Daytime Departures	373	88%	361	88%	388	90%
Nighttime Departures	53	12%	50	12%	45	10%
Total Departures	426	100%	411	100%	433	100%
Daytime Arrivals	393	90%	400	90%	401	91%
Nighttime Arrivals	44	10%	43	10%	39	9%
Total Arrivals	437	100%	443	100%	440	100%

Growth	Overall	Daytime	Nighttime
Depts. 2012 vs 2011	4%	3%	6%
Depts. 2012 vs 2010	-2%	-4%	17%
Arrivals 2012 vs 2011	-1%	-2%	2%
Arrivals 2012 vs 2010	-1%	-2%	14%

* 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** - January 2012



Year	2012		2011		2010	
Daytime Departures	97	93%	92	93%	87	91%
Nighttime Departures	7	7%	7	7%	9	9%
Total Departures	104	100%	99	100%	96	100%
Daytime Arrivals	103	94%	99	94%	92	93%
Nighttime Arrivals	6	6%	7	6%	7	7%
Total Arrivals	109	100%	106	100%	99	100%

Growth	Overall	Daytime	Nighttime
Depts. 2012 vs 2011	5%	5%	7%
Depts. 2012 vs 2010	9%	12%	-19%
Arrivals 2012 vs 2011	3%	4%	-9%
Arrivals 2012 vs 2010	11%	12%	-12%

** 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 - January 2012

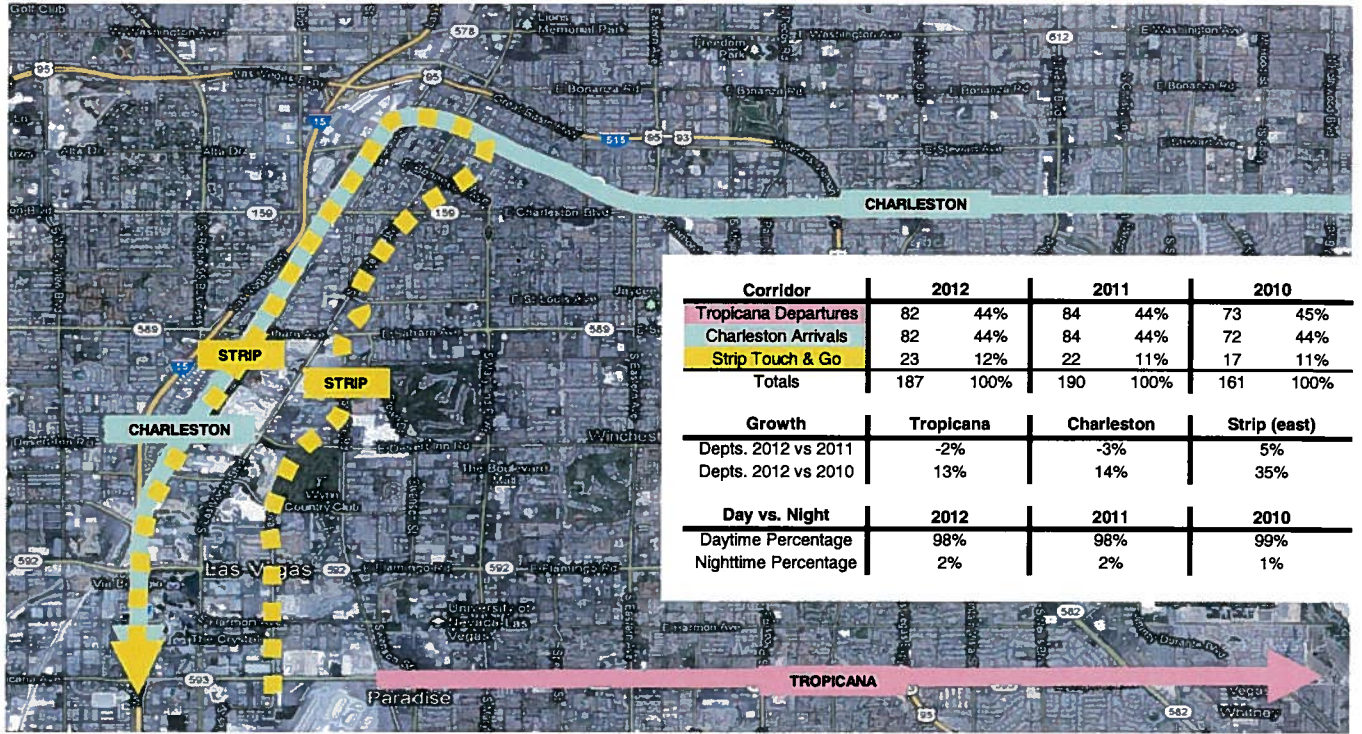
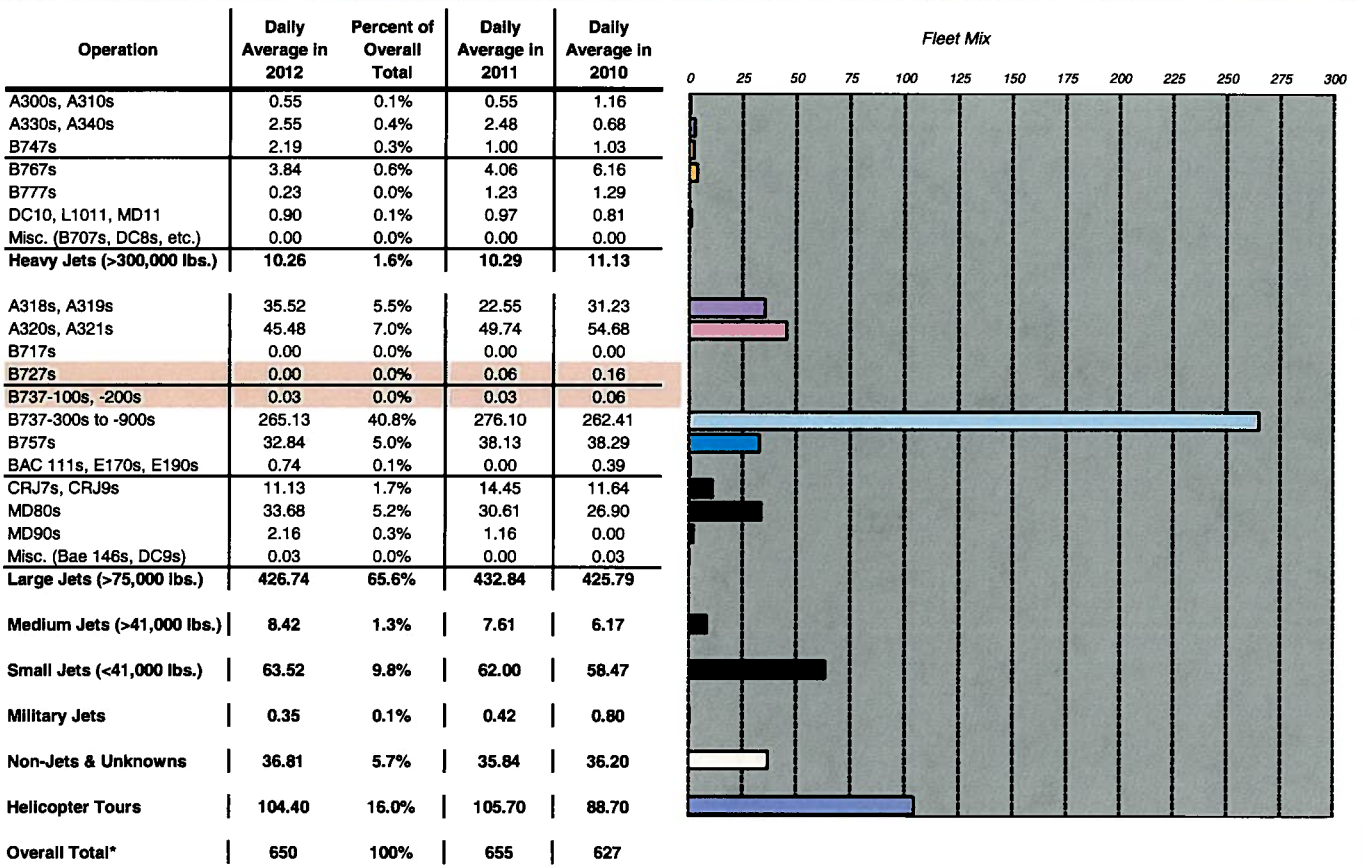


Exhibit 7: LAS Aircraft Arrival Fleet Mix* - January 2012



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

Exhibit 8: LAS General Departure Direction for Large Air Carrier Aircraft* - January 2012 to 2010

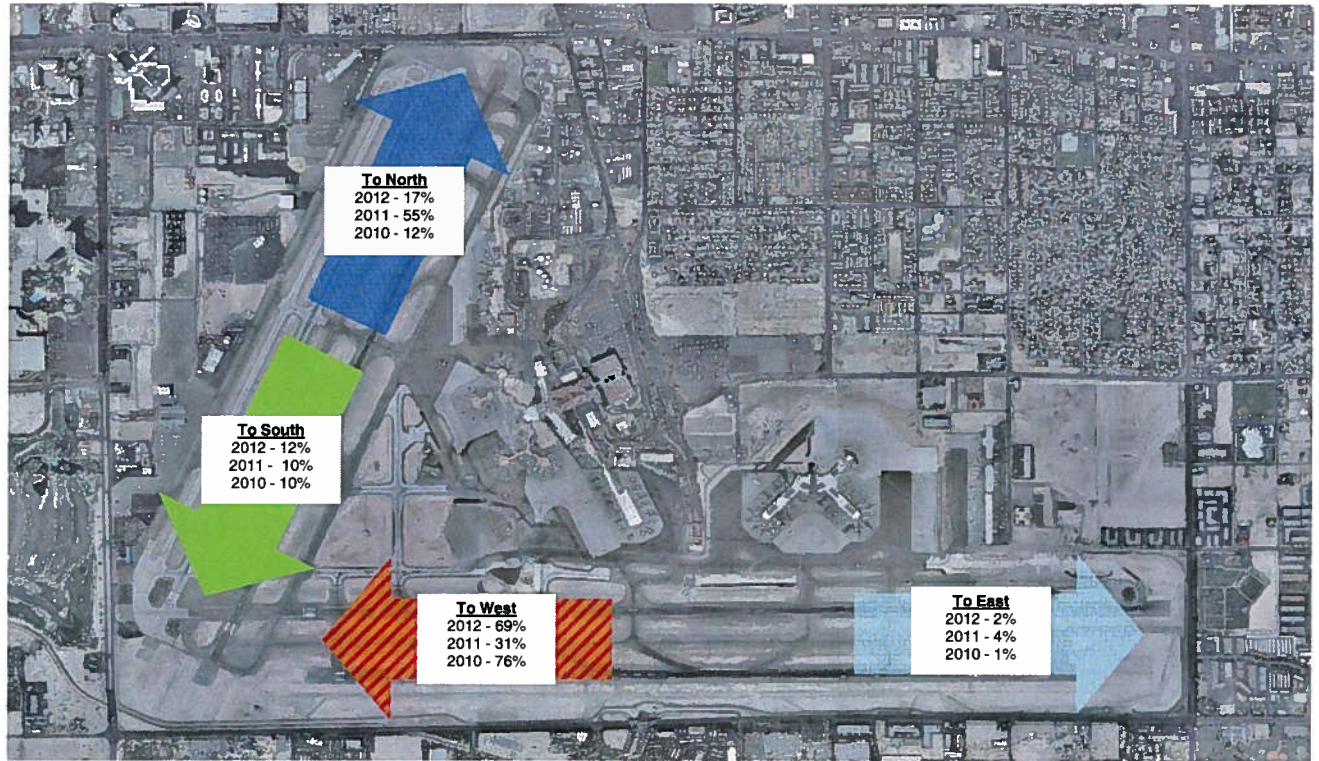
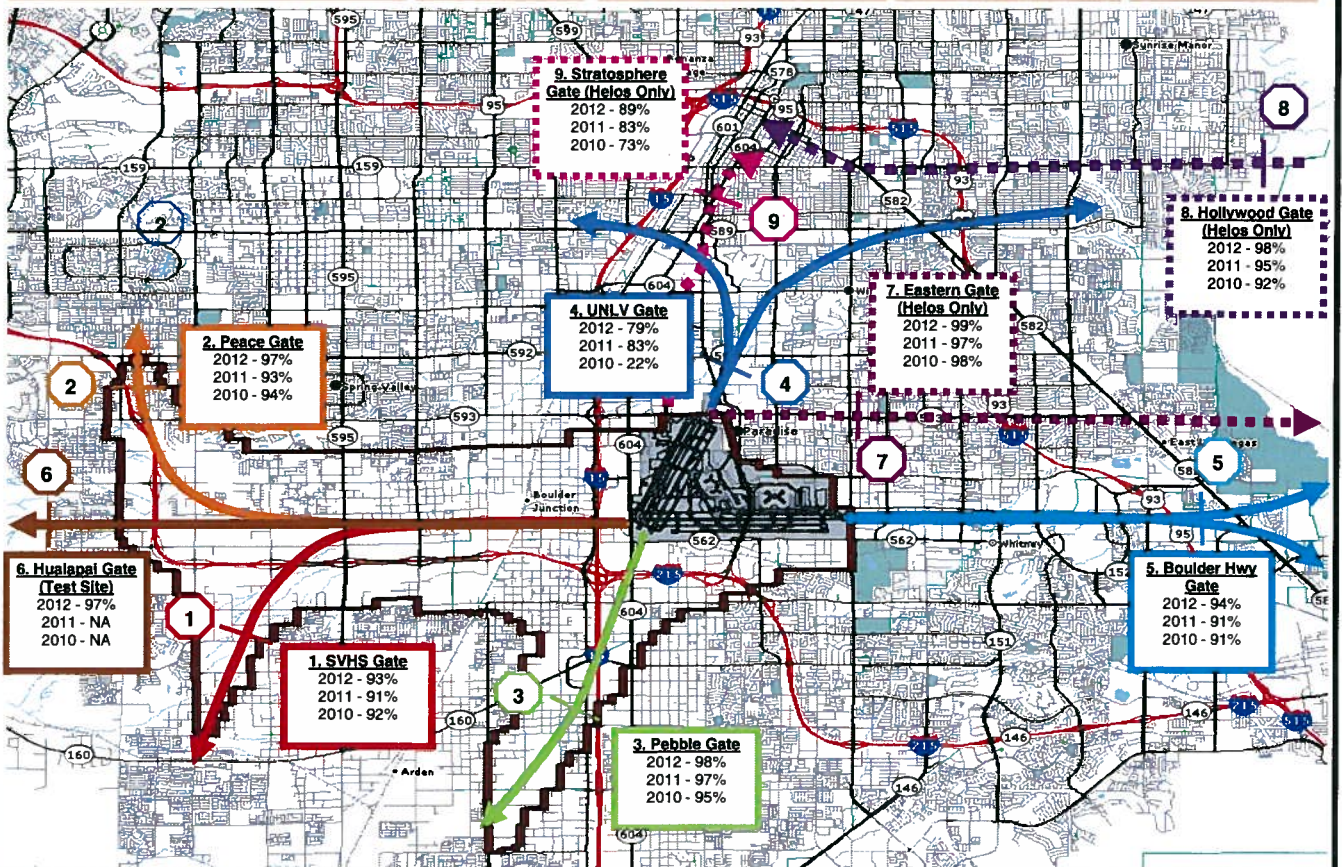


Exhibit 9: "Gate" Compliance for Large Aircraft* & LAS Helicopter Tours - January 2012



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

Exhibit 1: Noise Complaint Calls by Community* - February 2012

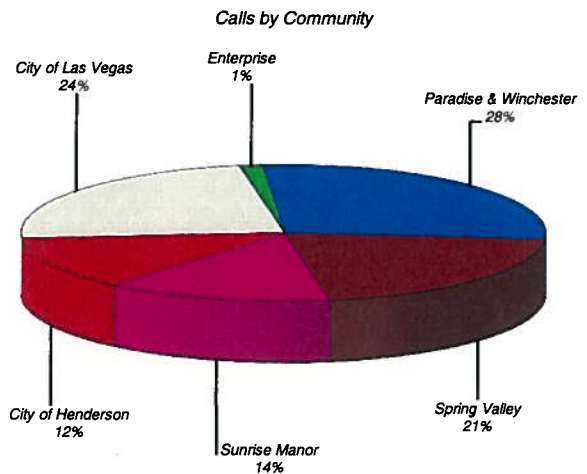
Community	No. of Calls in 2012	No. of Callers in 2012	No. of Calls in 2011	No. of Calls in 2010
City of Boulder City				
City of Henderson	9	6	1	1
City of Las Vegas	17	10	2	8
City of North Las Vegas			1	
Enterprise	1	1	36	5
Lone Mountain				
Paradise & Winchester	20	9	28	5
Spring Valley	15	5	8	17
Summerlin South			1	
Sunrise Manor	10	1	4	3
Whitney			1	
Location unknown				
Overall Total	72	32	82	39

Difference between 2012 and 2011 Total Calls: -12%

Difference between 2012 and 2010 Total Calls: 85%

Average Number of Calls per Caller: 2.3

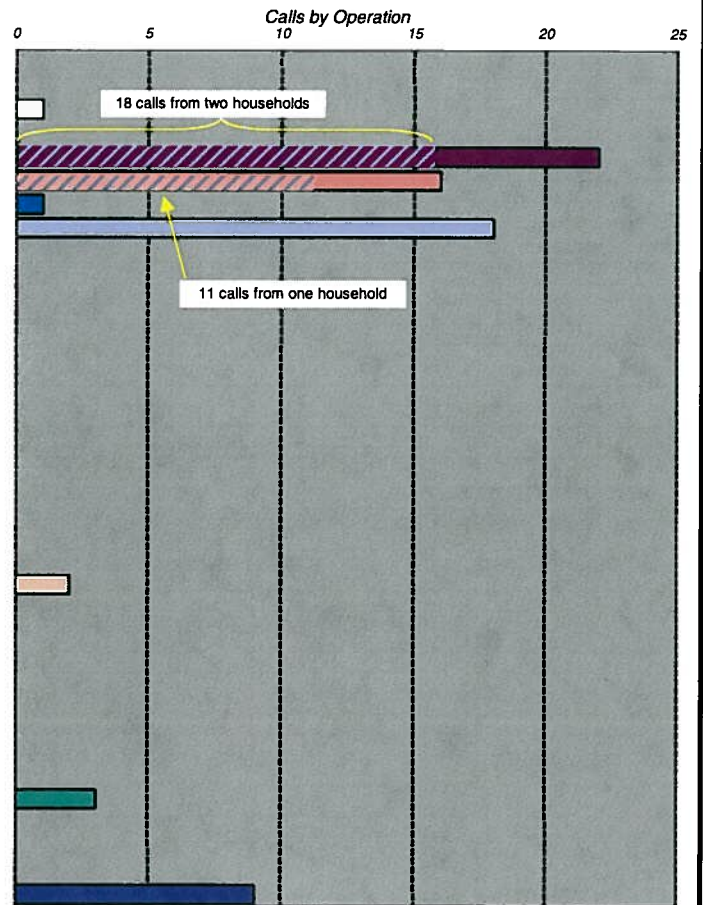
Most calls received from one household: 11



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

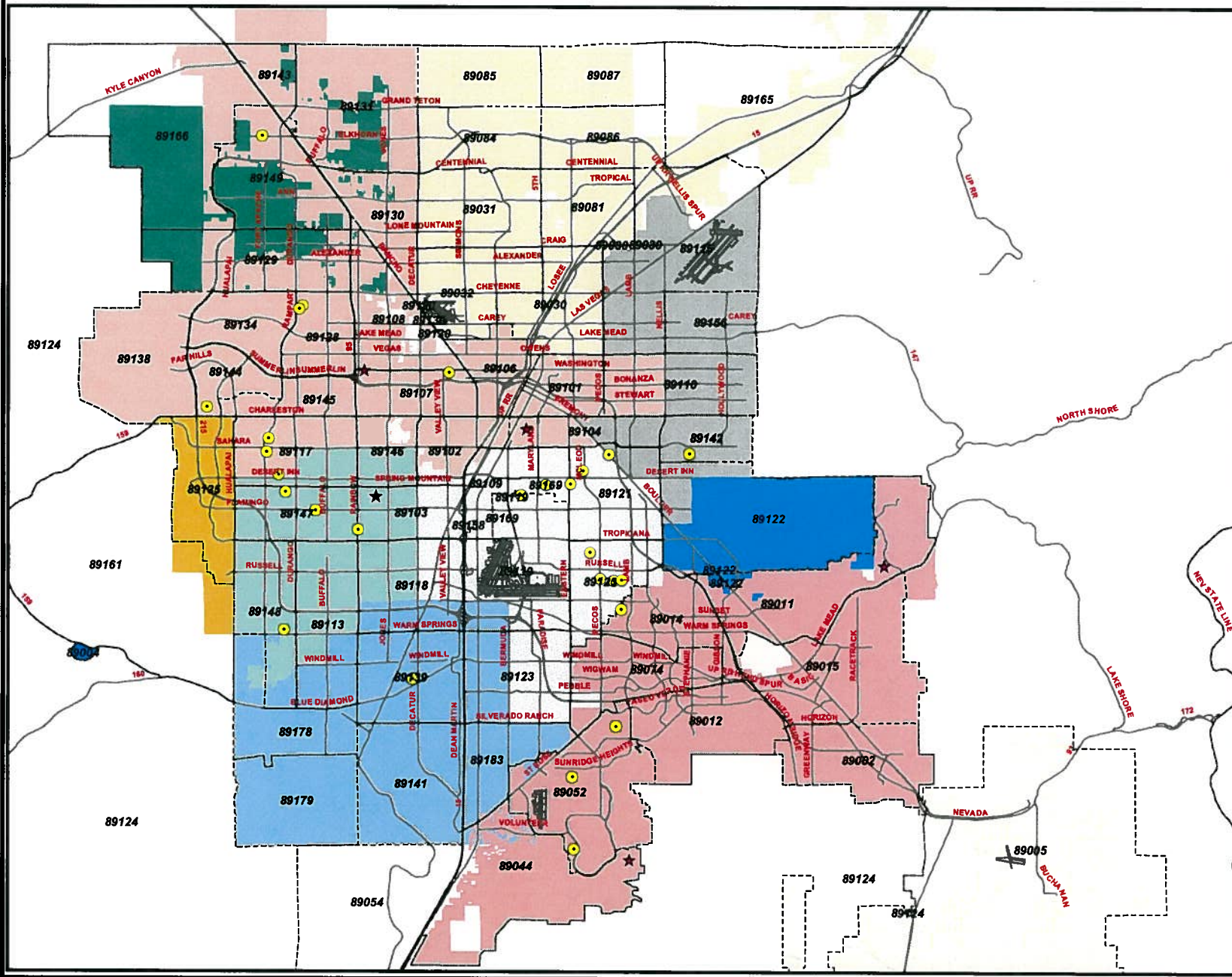
Exhibit 2: Noise Complaint Calls by Type of Operation - February 2012

Operation	No. of Calls in 2012	Percent of Overall Total	No. of Calls in 2011	No. of Calls in 2010
LAS 01R/L Arrivals			1	
LAS 07R/L Arrivals				
LAS 19R/L Arrivals	1	1.4%		
LAS 25R/L Arrivals				
LAS 01R/L Departures	22	30.6%	41	17
LAS 07R/L Departures	16	22.2%		3
LAS 19R/L Departures	1	1.4%	36	1
LAS 25R/L Departures	18	25.0%		15
LAS Run-ups				
LAS GA				
LAS Other				
LAS Total	58	80.6%	78	36
VGT 07 Arrivals				
VGT 12R/L Arrivals				
VGT 25 Arrivals				
VGT 30R/L Arrivals				
VGT 07 Departures				
VGT 12R/L Departures				
VGT 25 Departures				
VGT 30R/L Departures				
VGT Run-ups				
VGT GA	2	2.8%	1	1
VGT Other				
VGT Total	2	2.8%	1	1
HND 17R/L Arrivals				
HND 35R/L Arrivals				
HND 17R/L Departures				
HND 35R/L Departures				
HND Run-ups				
HND GA	3	4.2%	0	0
HND Other				
HND Total	3	4.2%	0	0
Helicopters**	9	12.5%	3	2
Overall Total	72	100%	82	39



** 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 - February 2012




Legend

February 2012
Total Complaints: 72

- Aircraft Complaints Received 63
Mapped 63
- ★ Helicopter Complaints Received 9
Mapped 9
- Major Streets
- Airports
- - - Zip Code Boundaries
- Unincorporated Clark County
- Boulder City
- Whitney
- Henderson
- Las Vegas
- North Las Vegas
- Paradise/Winchester
- Summerlin
- Spring Valley
- Sunrise Manor
- Winchester
- Enterprise
- Lone Mountain

Department of Aviation
I.S. Division
Geographic Information Systems



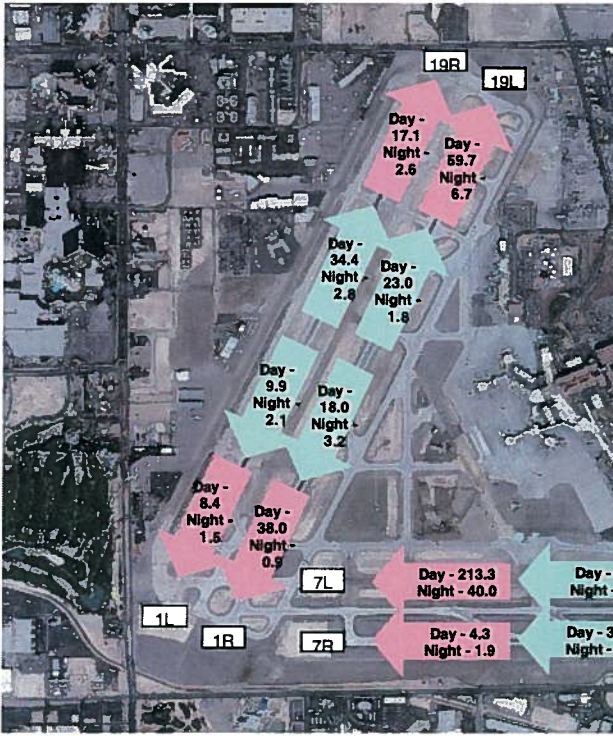
May 1, 2012

This information is for display purposes only. No liability is assumed for the accuracy of the data obtained from person.

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Exhibit 4: LAS Daily Average Operations by Runway for Large Air Carrier Aircraft* - February 2012

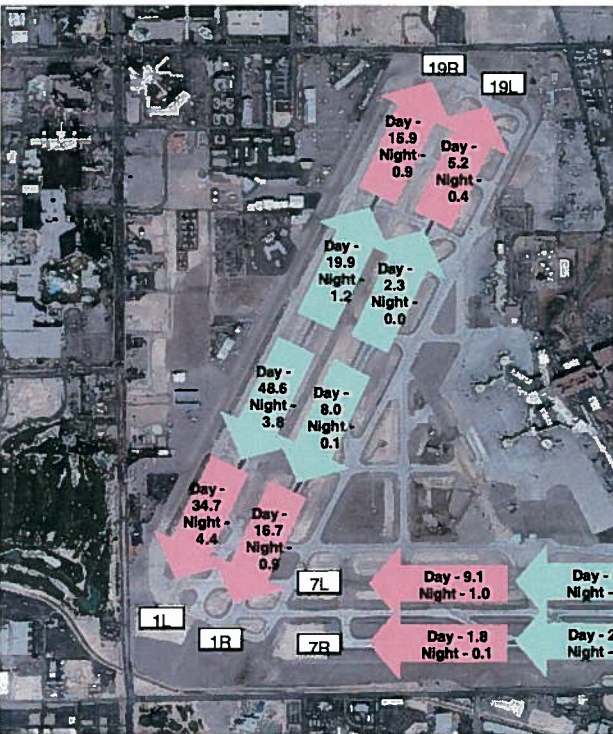


Year	2012		2011		2010	
Daytime Departures	363	87%	370	87%	383	89%
Nighttime Departures	55	13%	54	13%	45	11%
Total Departures	417	100%	424	100%	428	100%
Daytime Arrivals	397	89%	400	90%	402	91%
Nighttime Arrivals	50	11%	47	10%	38	9%
Total Arrivals	447	100%	446	100%	440	100%

Growth	Overall	Daytime	Nighttime
Depts. 2012 vs 2011	-2%	-2%	1%
Depts. 2012 vs 2010	-3%	-5%	21%
Arrivals 2012 vs 2011	0%	-1%	7%
Arrivals 2012 vs 2010	2%	-1%	31%

* 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** - February 2012



Year	2012		2011		2010	
Daytime Departures	87	92%	84	92%	80	91%
Nighttime Departures	8	8%	7	8%	8	9%
Total Departures	95	100%	91	100%	88	100%
Daytime Arrivals	103	94%	91	92%	94	94%
Nighttime Arrivals	6	6%	8	8%	6	6%
Total Arrivals	110	100%	99	100%	100	100%

Growth	Overall	Daytime	Nighttime
Depts. 2012 vs 2011	5%	4%	11%
Depts. 2012 vs 2010	8%	9%	0%
Arrivals 2012 vs 2011	11%	13%	-16%
Arrivals 2012 vs 2010	10%	10%	3%

** 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 - February 2012

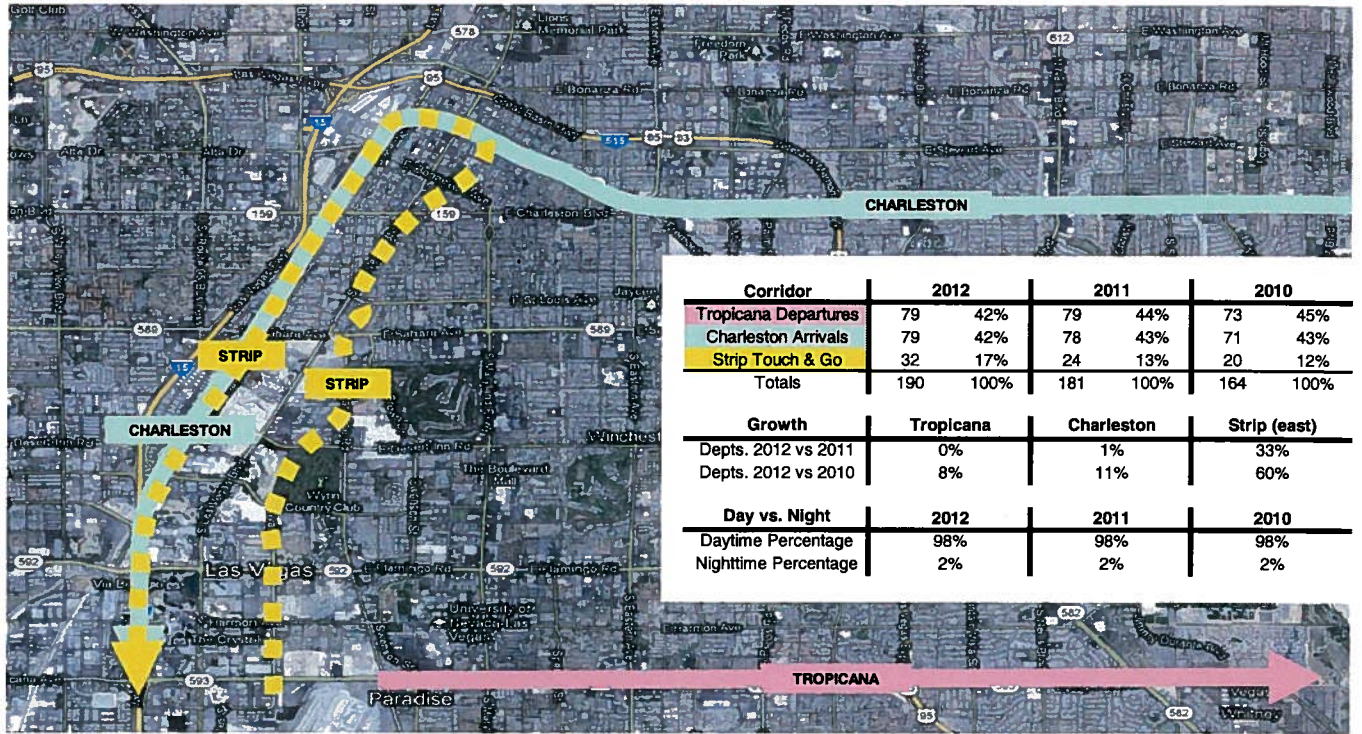
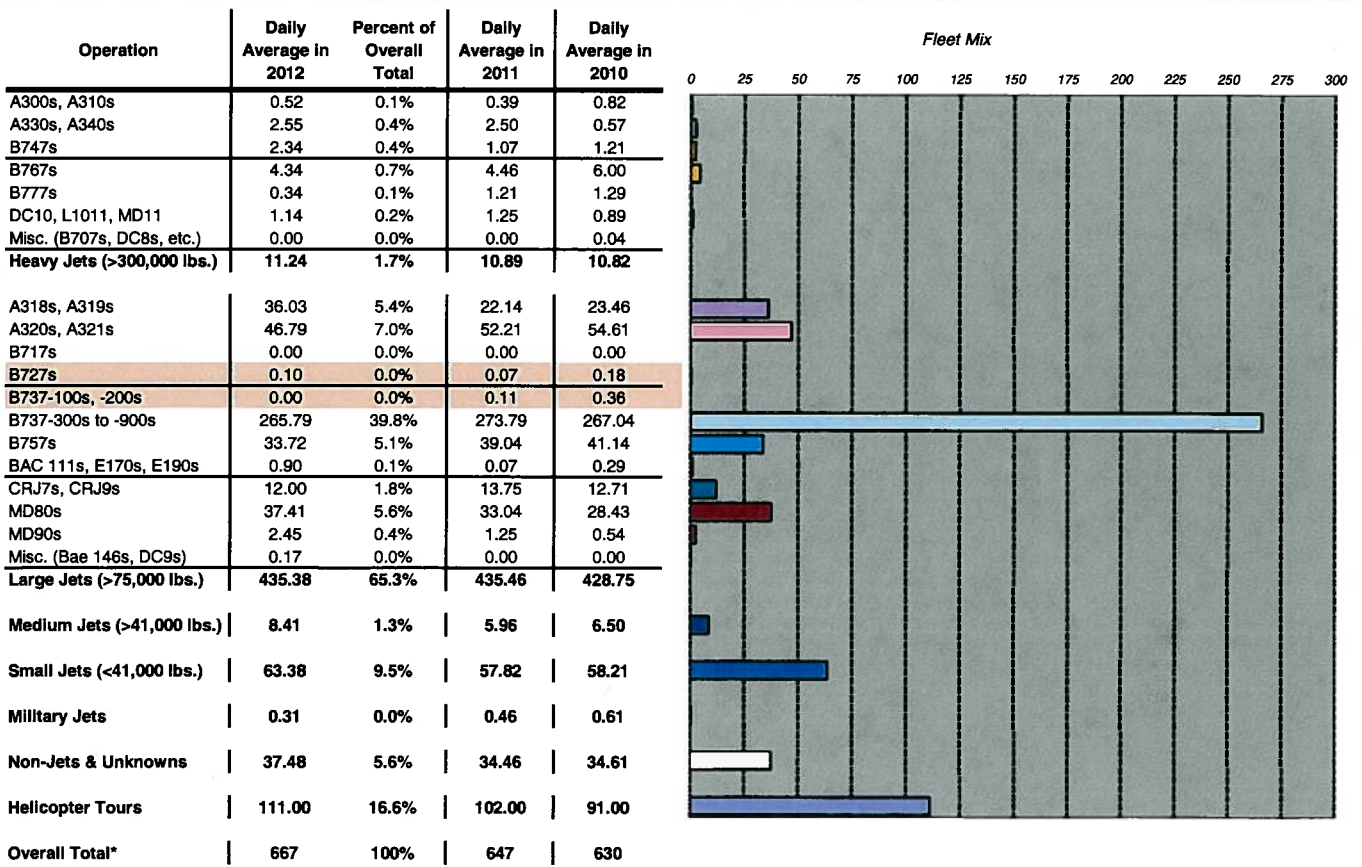


Exhibit 7: LAS Aircraft Arrival Fleet Mix* - February 2012



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

Exhibit 8: LAS General Departure Direction for Large Air Carrier Aircraft* - February 2012 to 2010

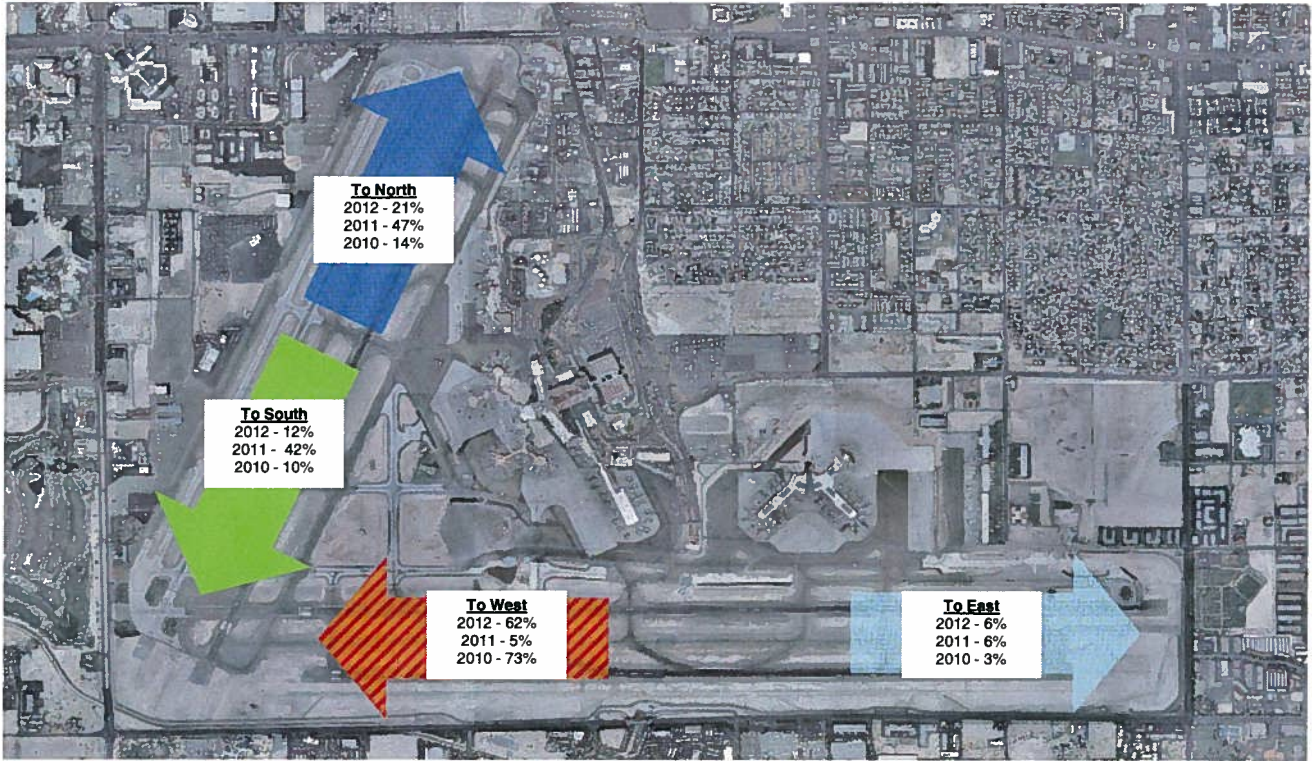
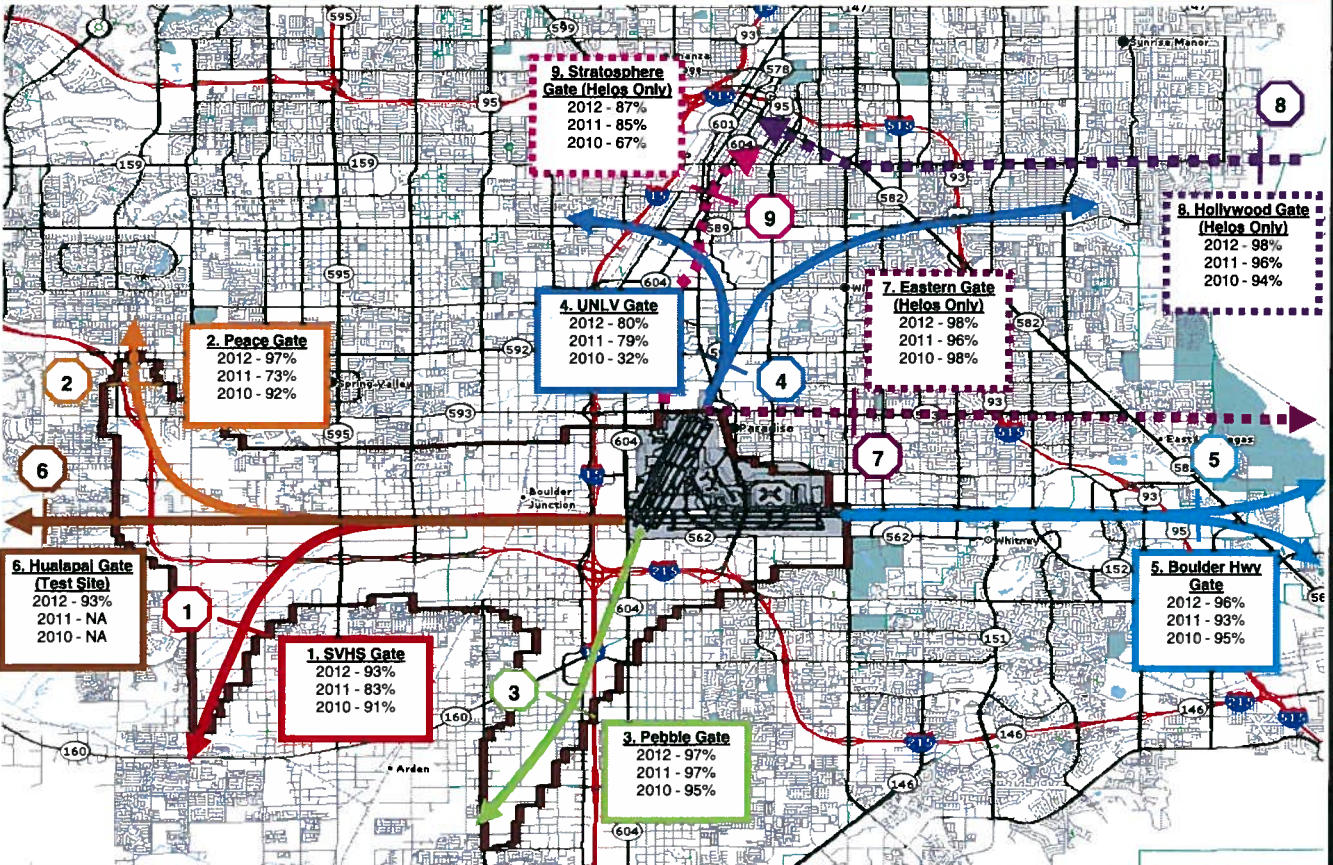


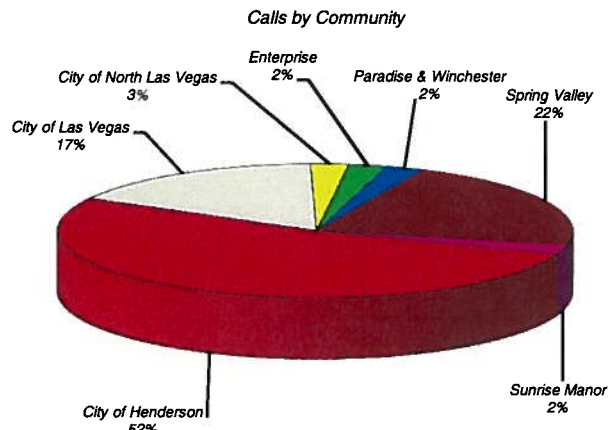
Exhibit 9: "Gate" Compliance for Large Aircraft* & LAS Helicopter Tours - February 2012



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

Exhibit 1: Noise Complaint Calls by Community* - March 2012

Community	No. of Calls in 2012	No. of Callers in 2012	No. of Calls in 2011	No. of Calls in 2010
City of Boulder City				
City of Henderson	22	4	4	7
City of Las Vegas	7	3	11	16
City of North Las Vegas	1	1	1	1
Enterprise	1	1	32	15
Lone Mountain			2	
Paradise & Winchester	1	1	10	19
Spring Valley	9	4	3	30
Summerlin South			1	
Sunrise Manor	1	1	5	20
Whitney				
Location unknown				
Overall Total	42	15	69	108



Difference between 2012 and 2011 Total Calls: -39%

Difference between 2012 and 2010 Total Calls: -61%

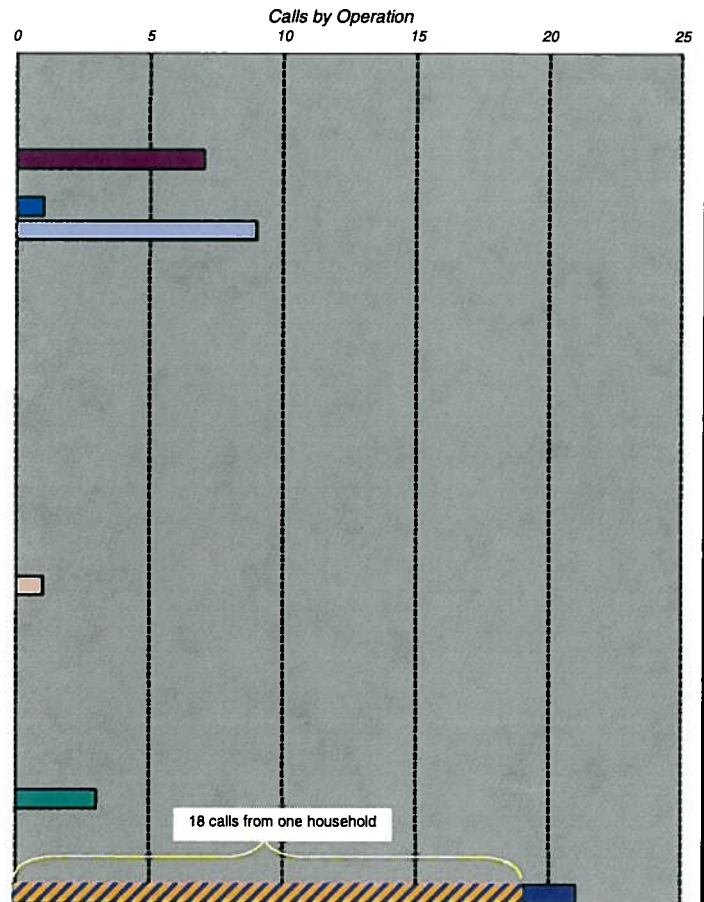
Average Number of Calls per Caller: 2.8

Most calls received from one household: 18

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

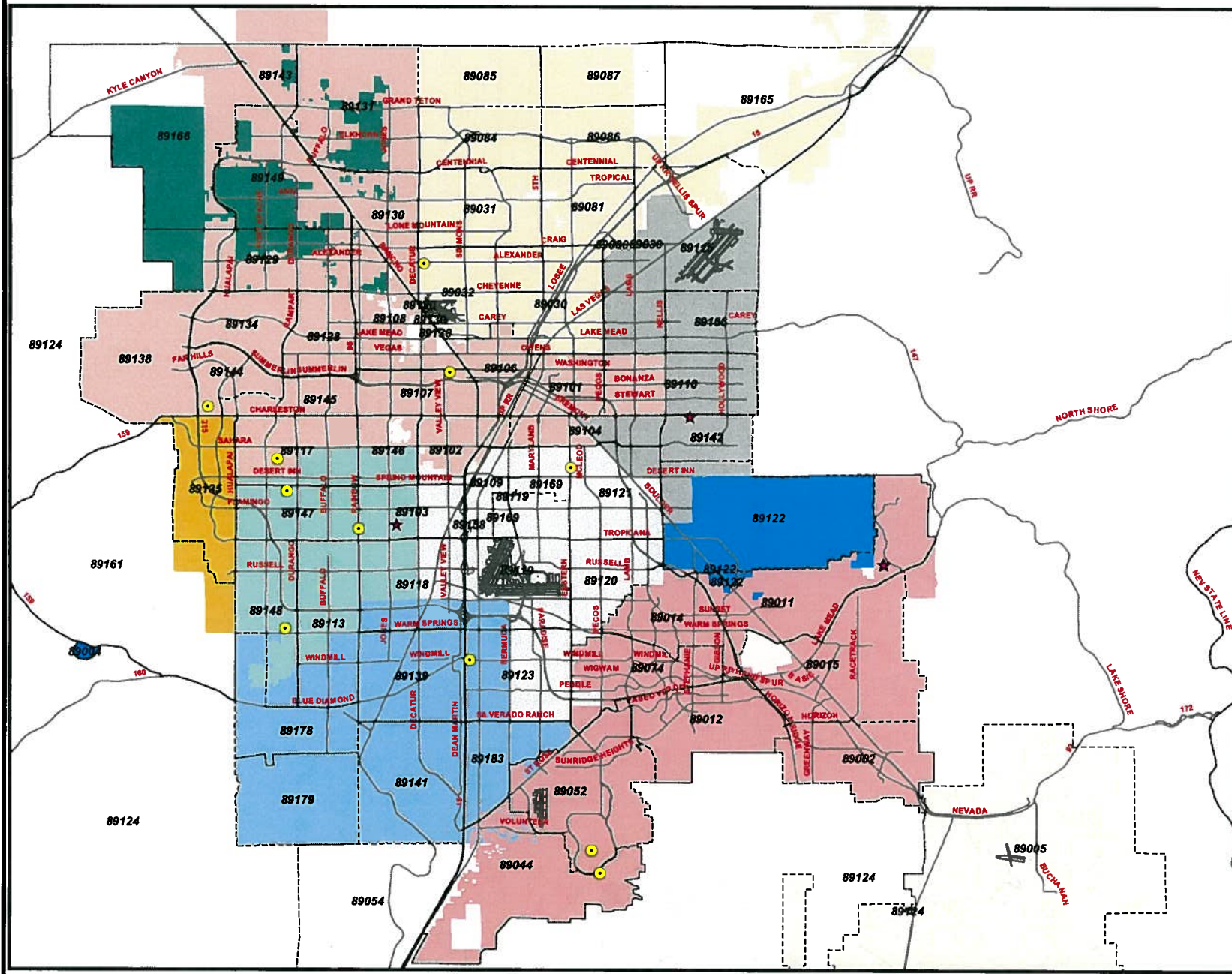
Exhibit 2: Noise Complaint Calls by Type of Operation - March 2012

Operation	No. of Calls in 2012	Percent of Overall Total	No. of Calls in 2011	No. of Calls in 2010
LAS 01R/L Arrivals				2
LAS 07R/L Arrivals				
LAS 19R/L Arrivals				
LAS 25R/L Arrivals				
LAS 01R/L Departures	7	16.7%	14	54
LAS 07R/L Departures				5
LAS 19R/L Departures	1	2.4%	30	11
LAS 25R/L Departures	9	21.4%	15	27
LAS Run-ups				
LAS GA				
LAS Other				
LAS Total	17	40.5%	59	99
VGT 07 Arrivals				
VGT 12R/L Arrivals				
VGT 25 Arrivals				
VGT 30R/L Arrivals				
VGT 07 Departures				
VGT 12R/L Departures				
VGT 25 Departures				
VGT 30R/L Departures				
VGT Run-ups				
VGT GA	1	2.4%	1	1
VGT Other				
VGT Total	1	2.4%	1	1
HND 17R/L Arrivals				
HND 35R/L Arrivals				
HND 17R/L Departures				
HND 35R/L Departures				
HND Run-ups				
HND GA	3	7.1%	3	2
HND Other				
HND Total	3	7.1%	3	2
Helicopters**	21	50.0%	6	6
Overall Total	42	100%	69	108



** 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 - March 2012



Legend

March 2012
Total Complaints: 42

- Aircraft Complaints Received 21 Mapped 21
- ★ Helicopter Complaints Received 21 Mapped 21
- Major Streets
- Airports
- - - Zip Code Boundaries
- Unincorporated Clark County
- Boulder City
- Whilney
- Henderson
- Las Vegas
- North Las Vegas
- Paradise/Winchester
- Summerlin
- Spring Valley
- Sunrise Manor
- Winchester
- Enterprise
- Lone Mountain

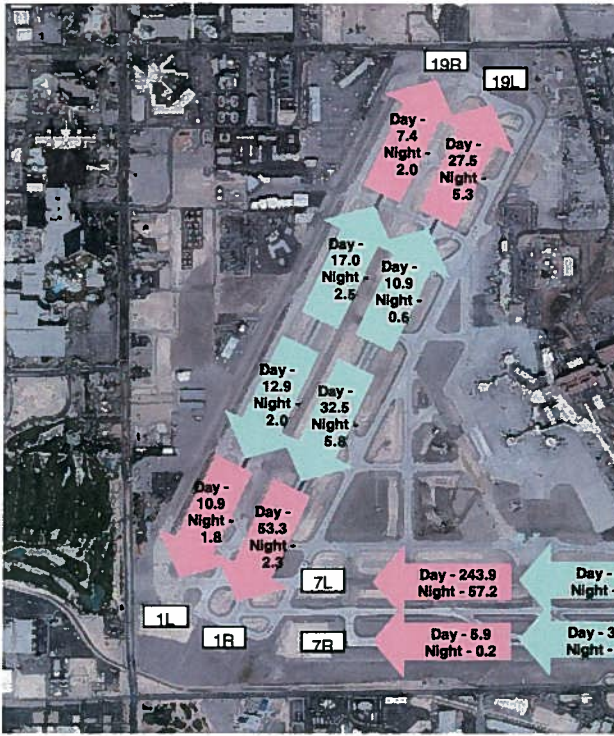
Department of Aviation
I.S. Division
Geographic Information Systems

May 1, 2012

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

H:\GIS\Projects\4484\Map\Map012012_012

Exhibit 4: LAS Daily Average Operations by Runway for Large Air Carrier Aircraft* - March 2012

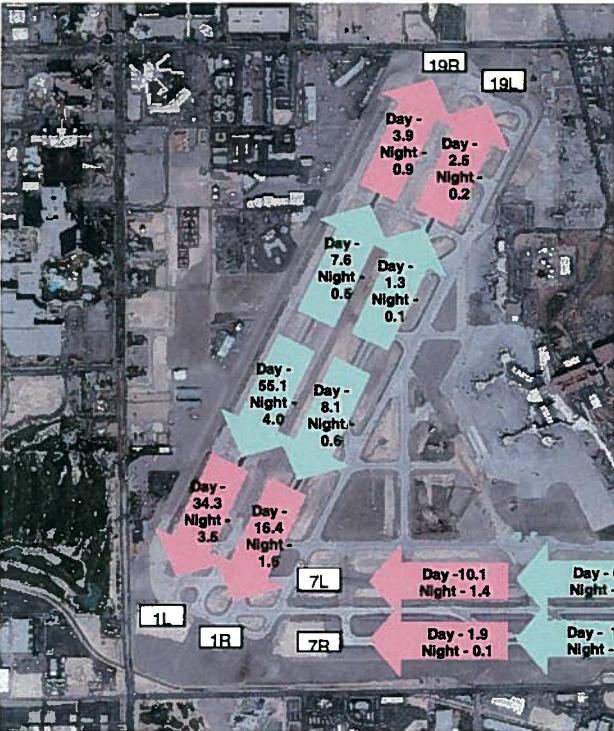


Year	2012		2011		2010	
Daytime Departures	382	84%	400	85%	376	87%
Nighttime Departures	70	16%	70	15%	55	13%
Total Departures	453	100%	470	100%	431	100%
Daytime Arrivals	416	87%	419	88%	412	90%
Nighttime Arrivals	63	13%	59	12%	46	10%
Total Arrivals	479	100%	478	100%	458	100%

Growth	Overall	Daytime	Nighttime
Depts. 2012 vs 2011	-4%	-4%	0%
Depts. 2012 vs 2010	5%	2%	29%
Arrivals 2012 vs 2011	0%	-1%	7%
Arrivals 2012 vs 2010	5%	1%	36%

* 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 2012**



Year	2012		2011		2010	
Daytime Departures	76	91%	97	93%	76	91%
Nighttime Departures	8	9%	8	7%	8	9%
Total Departures	83	100%	105	100%	84	100%
Daytime Arrivals	92	94%	103	95%	96	94%
Nighttime Arrivals	6	6%	6	5%	6	6%
Total Arrivals	98	100%	109	100%	102	100%

Growth	Overall	Daytime	Nighttime
Depts. 2012 vs 2011	-21%	-22%	3%
Depts. 2012 vs 2010	0%	0%	-3%
Arrivals 2012 vs 2011	-11%	-11%	3%
Arrivals 2012 vs 2010	-4%	-4%	2%

** 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 - March 2012

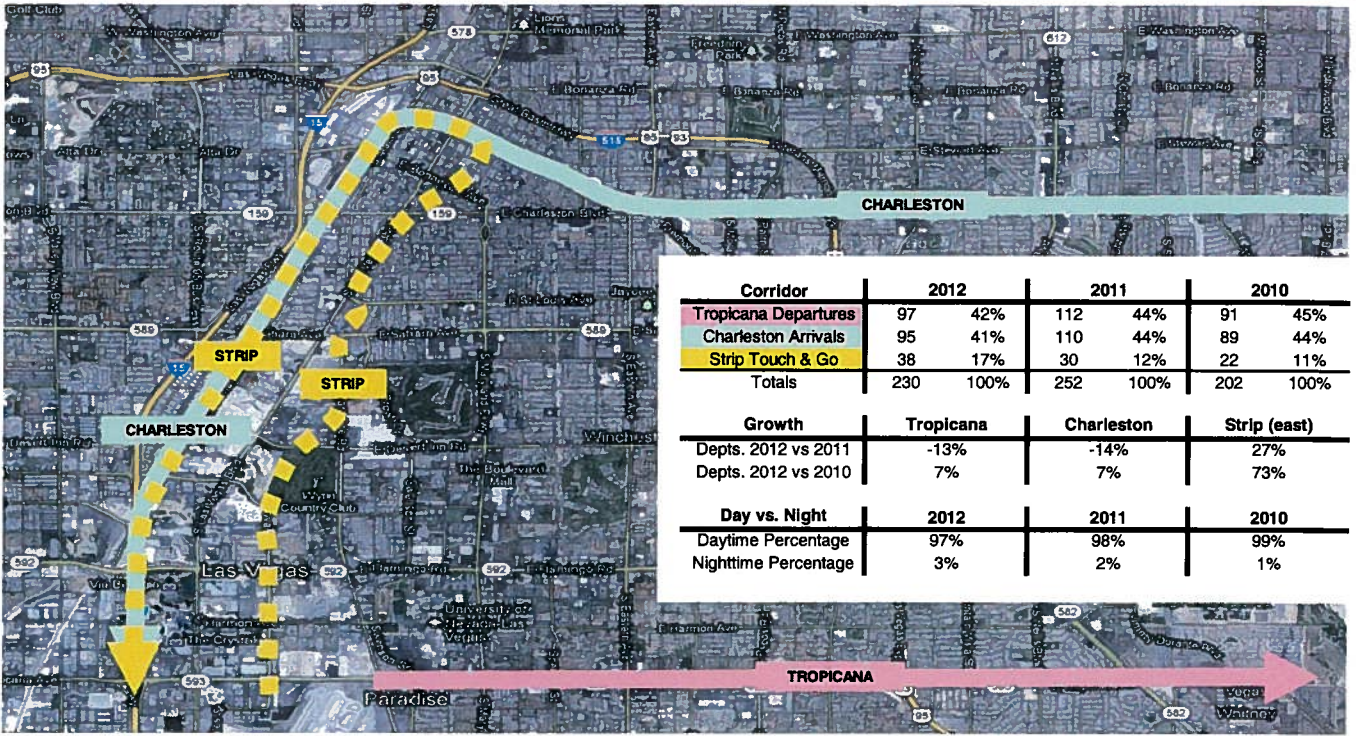
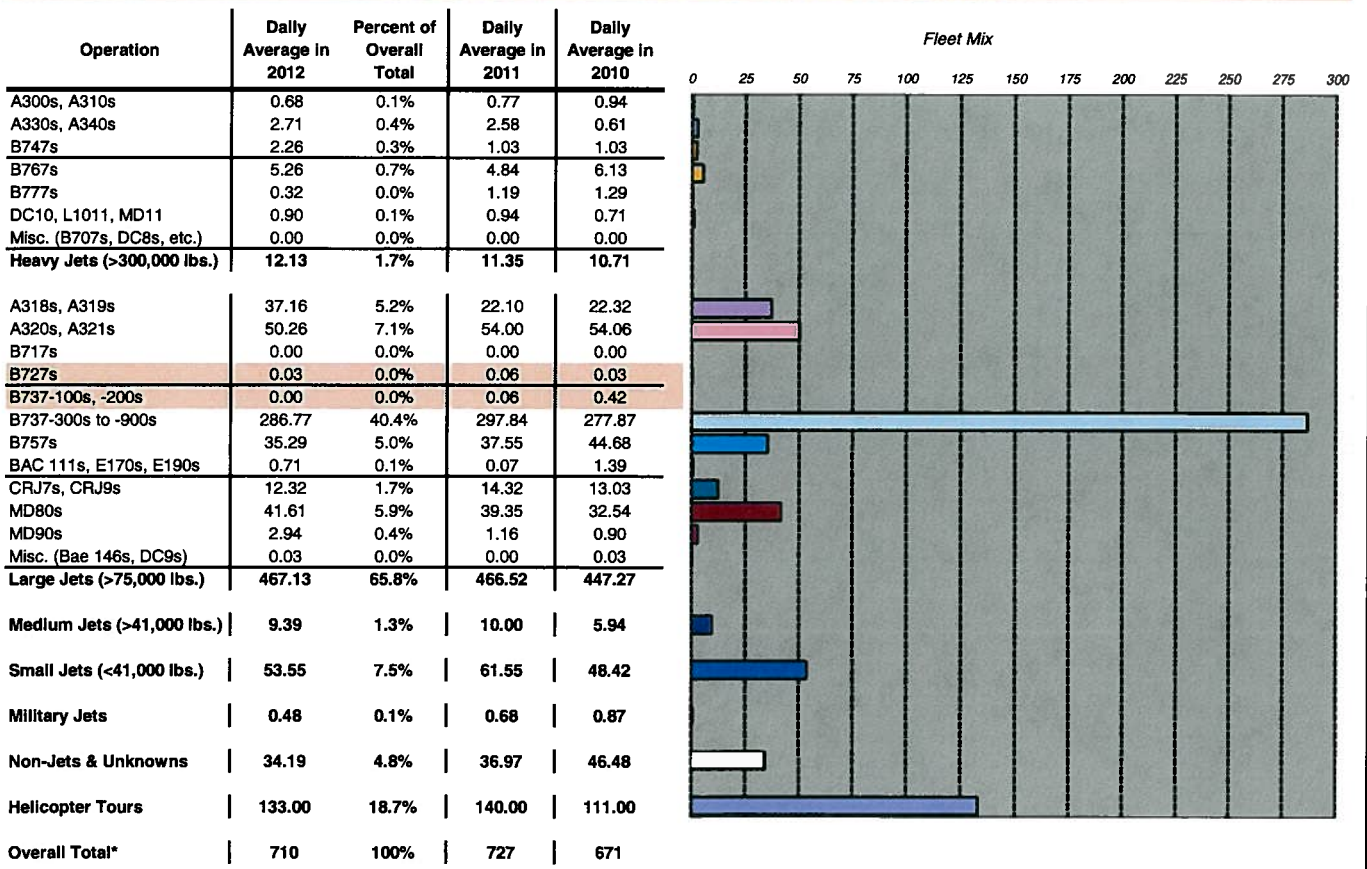


Exhibit 7: LAS Aircraft Arrival Fleet Mix* - March 2012



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

Exhibit 8: LAS General Departure Direction for Large Air Carrier Aircraft* - March 2012 to 2010

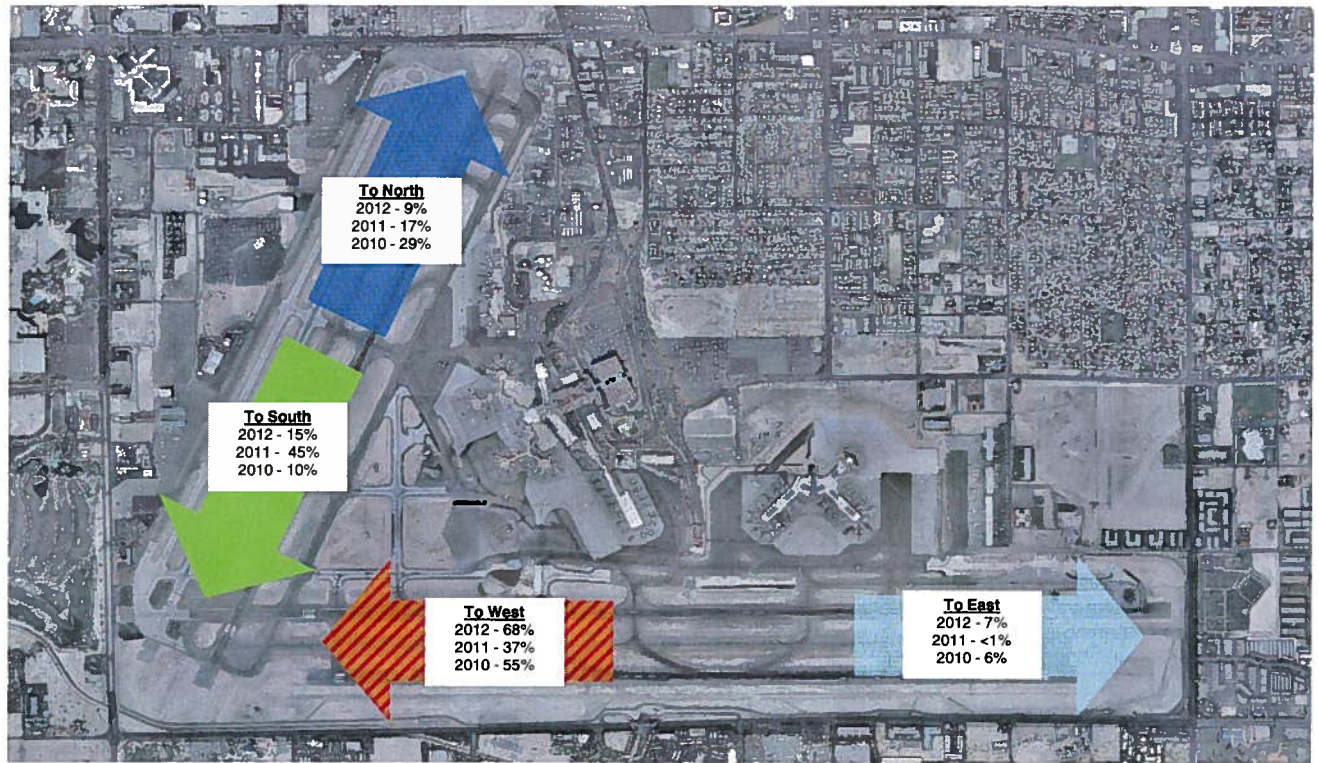
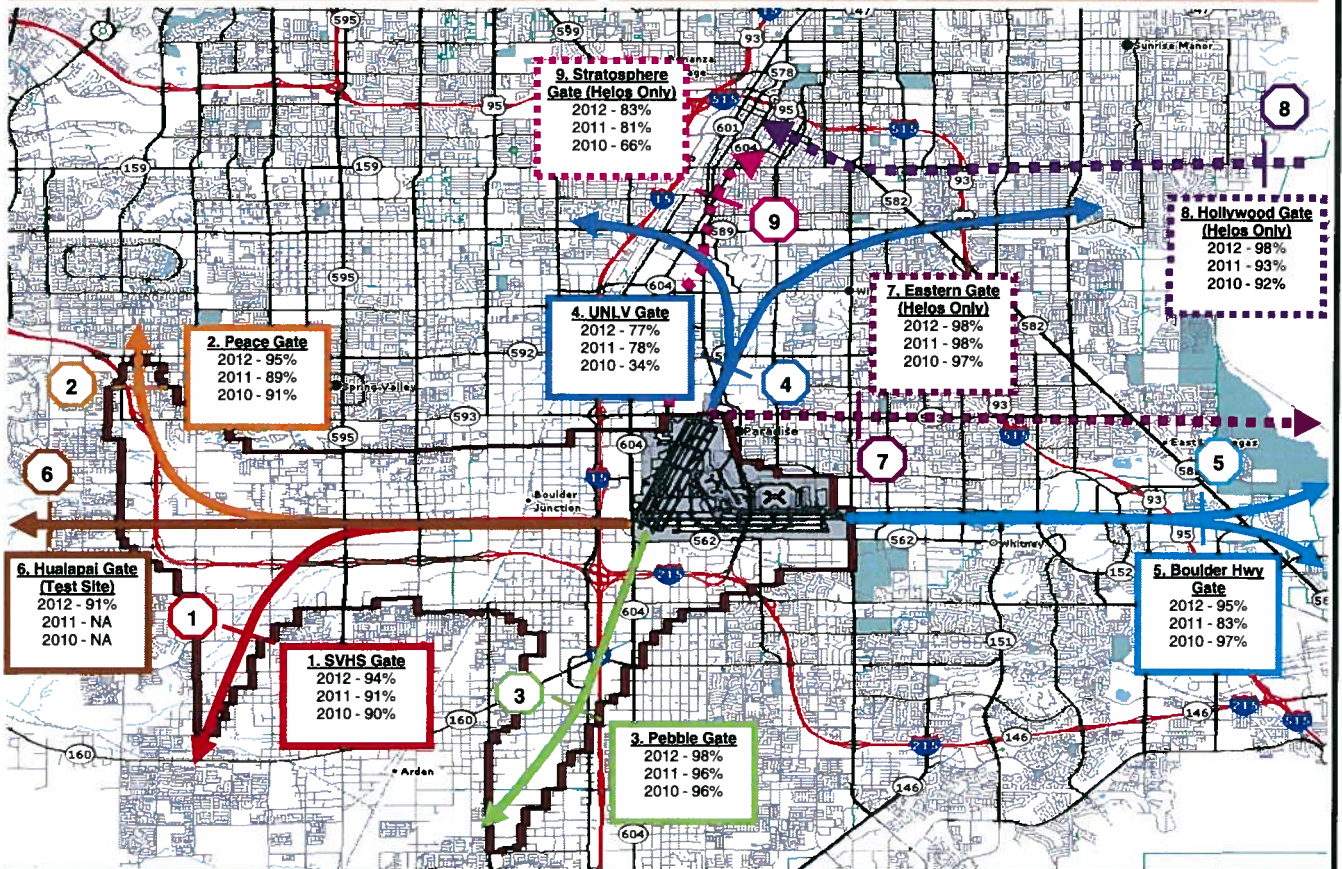


Exhibit 9: "Gate" Compliance for Large Aircraft* & LAS Helicopter Tours - March 2012



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