


MEMORANDUM

DEPARTMENT OF AVIATION

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TO: DISTRIBUTION

FROM: GEORGE C. SIMS, PLANNER 

SUBJECT: JANUARY THROUGH MARCH 2013 NOISE COMPLAINT REPORTS

DATE: APRIL 15, 2013

Attached for your review are the Clark County Department of Aviation's (CCDOA) Monthly Noise Complaint Reports for January through March 2013. 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. 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 (non-large air carrier aircraft types were added to the 2012 monthly reports). **Exhibit 8** illustrates the general departure direction for large aircraft.

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

The 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 2013: 60 total complaints - a 46% increase from 2012 and a 53% decrease from 2011. On average, each caller (or household) issued 2.2 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 **City of Henderson** community issued 18 calls (30%). This community is typically impacted by aircraft departing to the east (from Runway 07R and Runway 07L), and helicopter tour operations.

The **Sunrise Manor** community issued 16 calls (27%). This community is typically impacted by aircraft departing to the north (from Runway 01L and Runway 01R), and helicopter tour operations.

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

The **Paradise and Winchester** communities issued 8 calls (13%). These communities are typically impacted by aircraft departing to the north (from Runway 01R and Runway 01L) and aircraft arriving from the north (into Runways 19R and 19L).

Repeat Caller Impact: One household issued 18% (11 calls) of all the calls received in January 2013.

Calls by Operation - (Exhibit 2)

- LAS:** 50% of the total calls were due to **LAS** fixed-wing operations.
- 30% were due to departures to the north from Runways 01L and 01R.
 - 61% (11 calls) from two households.
- VGT:** 2% of the total calls were due to **VGT** fixed-wing operations.
- HND:** 7% of the total calls were due to **HND** fixed-wing operations.
- Helos:** 42% of the total calls were due to **helicopter** operations.
- 44% (11 calls) from one household.

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

- Overall:** 378 daily *departures*¹ – an 11% decrease from 2012 and 8% decrease from 2011.
- 72% of departures were to the west, 25% north, 3% south, and 1% east.
- 426 daily *arrivals* – a 2% decrease from 2012 and 4% decrease from 2011.
- 82% of arrivals were from the east, 12% from the south, and 6% 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: 329 daily *departures*² – a 12% decrease from 2012 and a 9% decrease from 2011.
▪ 72% of departures were to the west, 25% north, 2% south, and 1% east.
387 daily *arrivals* – a 2% decrease from 2012 and a 3% decrease from 2012.
▪ 82% of arrivals were from the east, 12% from the south, and 6% from the north.

Nighttime: 49 daily *departures*³ – an 8% decrease from 2012 and a 2% decrease from 2011.
▪ 72% of departures were to the west, 25% north, and 4% south.
40 daily *arrivals* – a 10% decrease from 2012 and an 8% decrease from 2011.
▪ 80% of arrivals were from the east, 11% from the south, and 8% from the north.

Daytime vs. Nighttime: Approximately 87% of all *departures* and 91% of all *arrivals* occurred during the daytime hours.

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

Overall: 86 daily *departures*⁴ – an 18% decrease from 2012 and 13% decrease from 2011.
▪ 61% of departures were to the south, 24% north, 14% west, and 1% east.
100 daily *arrivals* – an 8% decrease from 2012 and 5% decrease from 2011.
▪ 59% of arrivals were from the north, 21% from the south, and 19% east.

Daytime: 79 daily *departures*⁵ – a 19% decrease from 2012 and a 15% decrease from 2011.
▪ 61% of departures were to the south, 24% north, 14% west, and 1% east.
94 daily *arrivals* – an 8% decrease from 2012 and a 5% increase from 2011.
▪ 60% of arrivals were from the north, 20% from the south, and 19% from the east.

Nighttime: 7 daily *departures*⁶ – a 6% decrease from 2012 and a 1% increase from 2011.
▪ 61% of departures were to the south, 27% north, and 11% west.
6 daily *arrivals* – a 3% decrease from 2012 and a 12% decrease from 2011.
▪ 49% of arrivals were from the north, 32% south, 16% east, 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: 84 daily *departures* - a 2% increase from 2012 and no change from 2011.

Charleston: 84 daily *arrivals* - a 3% increase from 2012 and no change from 2011.

Strip: 24 daily *touch and go's* - a 6% increase from 2012 and a 12% increase from 2011.

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 65% of the daily traffic.
- Medium:** *Medium* turbine-driven aircraft (those weighing more than 41,000 lbs. and less than 75,000 lbs.) accounted for 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 5% of the daily traffic.
- Helos:** *Touring helicopters* accounted for 17% of the daily traffic.
- Noisier Aircraft Types:** The hush-kitted Boeing 727 aircraft and Boeing 737 (100 & 200 series) aircraft accounted for less than one operation per day.

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

- Primary:** In 2013, 72% departed to the *west* (from LAS's primary departure runways). This figure was 69% in 2012 and 31% in 2011.
- Secondary:** In 2013, 3% departed to the *south* (from LAS's secondary departure runways). This figure was 12% in 2012 and 10% in 2011.
- Alternate 1:** In 2013, 25% departed to the *north* (from LAS's alternate departure runways). This figure was 17% in 2012 and 55% in 2011. The large increase in 2011 was attributed to Runway 07L-25R being out of service during a portion of the month.
- Alternate 2:** In 2013, 1% departed to the *east* (from LAS's alternate departure runways). This figure was 2% in 2012 and 4% in 2011.

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

- SVHS:** In 2013, 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 left-hand turn were within 0.3 NM of *Sierra Vista High School* (SVHS). This figure was 93% in 2012 and 91% in 2011.

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 2013, 98% 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 97% in 2012 and 93% in 2011.

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 2013, 95% of the large air carrier aircraft (excluding those destined to the Nevada Test Site) that departed to the south from Runways 19L or 19R were within 0.3 NM of the intersection of *Pebble Road & Arville Street*. This figure was 98% in 2012 and 97% in 2011.

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 2013, 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 79% in 2012 and 83% in 2011.

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 2013, 93% 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 94% in 2012 and 91% in 2011.

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 2013, 92% 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 97% in 2012 and not available 2011.

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 2013, 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 2012 and 97% in 2011.

The Eastern Ave. "compliance gate" is located at Tropicana Ave. and Eastern Ave, approximately 2 miles due west of their initial departure route. This gate was also established along an existing noise abatement flight track which requests helicopter pilots to proceed along the centerline of Tropicana Ave. until 10 nautical miles from the Las Vegas VORTAC before turning. This noise abatement flight track avoids communities impacted by helicopters located north and south of the corridor.

Hollywood: In 2013, 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 98% in 2012 and 95% in 2011.

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 2013, 94% 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 89% in 2012 and 83% in 2011.

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

The information denoted in this monthly summary represents **typical** residential complaints, flight activity, fleet mix, and gate compliance with the exception of increased departures to the north, and the number of complaints tied to helicopter versus fixed-wing aircraft operations.

February 2013: 27 total complaints - a 63% decrease from 2012 and a 67% decrease from 2011. On average, each caller (or household) issued 1.5 calls. The most calls received from one household totaled 4.

Calls by Community - (Exhibits 1 and 3)

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

Minority (between 10% and 50%): The *Paradise and Winchester* communities issued 9 calls (33%). (See January 2013 synopsis of typical aircraft overflight impacts on this community.)

The *Sunrise Manor* community issued 7 calls (30%). (See January 2013 synopsis of typical aircraft overflight impacts on this community.)

The *Spring Valley* community issued 4 calls (15%). (See January 2013 synopsis of typical aircraft overflight impacts on this community.)

Repeat Caller Impact: (Not applicable.)

Calls by Operation - (Exhibit 2)

LAS: 44% of the total calls received were due to *LAS* fixed-wing operations.
▪ 19% were due to departures to the north from Runways 01L and 01R.

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

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

Helis: 56% of the total calls received were due to *helicopter* operations.

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

Overall: 387 daily *departures*⁷ – a 7% decrease from 2012 and 9% decrease from 2011.
▪ 64% of departures were to the west, 22% north, 12% east, and 2% south.
434 daily *arrivals* – a 3% decrease from 2012 and 3% decrease from 2011.
▪ 72% of arrivals were from the east, 21% from the south, and 7% from the north.

⁷ See footnote #1.

- Daytime:** 329 daily *departures*⁸ – a 9% decrease from 2012 and 11 decrease from 2011.
- 61% of departures were to the west, 23% north, 14% east, and 2% south.
- 388 daily *arrivals* – a 2% decrease from 2012 and a 3% decrease from 2011.
- 71% of arrivals were from the east, 23% from the south, and 6% from the north.
- Nighttime:** 58 daily *departures*⁹ – a 6% increase from 2012 and 7% increase from 2011.
- 82% of departures were to the west, 15% north, and 3% south.
- 46 daily *arrivals* – a 7% decrease from 2012 and a 1% decrease from 2011.
- 82% of arrivals were from the east, 11% from the north, and 7% from the south.

Daytime vs. Nighttime: Approximately 85% of all *departures* and 89% of all *arrivals* occurred during the daytime hours.

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

- Overall:** 81 daily *departures*¹⁰ – a 15% decrease from 2012 and 11% decrease from 2011.
- 52% of departures were to the south, 26% north, 12% west, and 9% east.
- 95 daily *arrivals* – a 13% decrease from 2012 and 3% decrease from 2011.
- 54% of arrivals were from the north, 29% south, 16% east, and 1% west.
- Daytime:** 74 daily *departures*¹¹ – a 15% decrease from 2012 and a 12% decrease from 2011.
- 51% of departures were to the south, 27% north, 12% west, and 10% east.
- 88 daily *arrivals* – a 15% decrease from 2012 and a 3% decrease from 2011.
- 52% of arrivals were from the north, 30% south, 17% east, and 1% west.
- Nighttime:** 7 daily *departures*¹² – a 13% decrease from 2012 and a 3% decrease from 2011.
- 65% of departures were to the south, 19% west, 16 % north, and 1% east.
- 7 daily *arrivals* – a 14% increase from 2012 and a 4% decrease from 2011.
- 71% of arrivals were from the north, 15% south, 11% east, and 2% west.

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

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

- Tropicana:** 88 daily *departures* – a 12% increase from 2012 and a 12% increase from 2011.
- Charleston:** 87 daily *arrivals* - a 10% increase from 2012 and a 12% increase from 2011.
- Strip:** 26 daily *touch and go's* - an 18% decrease from 2012 and a 9% increase from 2011.

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

⁸ See footnote #1.

⁹ See footnote #1.

¹⁰ See footnote #1.

¹¹ See footnote #1.

¹² 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 9% of the daily traffic.
- Military:** *Military* turbine-driven aircraft accounted for less than 1% of the daily traffic.
- Non-Jet:** *Piston-driven* aircraft and unassigned aircraft types accounted for 5% of the daily traffic.
- Helos:** *Touring helicopters* accounted for 18% 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 2013, 64% departed to the *west* (from LAS's primary departure runways). This figure was 62% in 2012 and 5% in 2011.
- Secondary:** In 2013, 2% departed to the *south* (from LAS's secondary departure runways). This figure was 12% in 2012 and 42% in 2011. The large increase in 2011 was attributed to Runway 07L-25R being out of service during a portion of the month.
- Alternate 1:** In 2013, 22% departed to the *north* (from LAS's alternate departure runways). This figure was 21% in 2012 and 47% in 2011. The large increase in 2011 was attributed to Runway 07L-25R being out of service during a portion of the month.
- Alternate 2:** In 2013, 12% departed to the *east* (from LAS's alternate departure runways). This figure was 6% in 2012 and 6% in 2011.

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

- SVHS:** 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 left-hand turn were within 0.3 NM of *Sierra Vista High School* (SVHS). This figure was 93% in 2012 and 83% in 2011. (See January 2013 synopsis for specific location of the SVHS gate.)
- Peace:** In 2013, 98% 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 97% in 2012 and 73% in 2011. (See January 2013 synopsis for specific location of the Peace gate.)

- Pebble:** In 2013, 96% of the large air carrier aircraft (excluding those destined to the Nevada Test Site) that departed to the south from Runways 19L or 19R were within 0.3 NM of the intersection of *Pebble Road & Arville Street*. This figure was 97% in 2012 and 97% in 2011. (See January 2013 synopsis for specific location of the Pebble gate.)
- UNLV:** In 2013, 81% 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 80% in 2012 and 79% in 2011. (See January 2013 synopsis for specific location of the UNLV gate.)
- Boulder:** In 2013, 99% of the large air carrier aircraft that departed to the north from Runways 07L or 07R were within 0.3 NM of the extended runway centerline, near *Boulder Highway*. This figure was 96% in 2012 and 93% in 2011. (See January 2013 synopsis for specific location of the Boulder Hwy. gate.)
- Hualapai:** In 2013, 98% 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 93% in 2012 and not available in 2011. (See January 2013 synopsis for specific location of the Hualapai gate.)
- Eastern:** In 2013, 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 98% in 2012 and 96% in 2011. (See January 2013 synopsis for specific location of the Eastern gate.)
- Hollywood:** In 2013, 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 98% in 2012 and 96% in 2011. (See January 2013 synopsis for specific location of the Hollywood gate.)
- Stratosphere:** In 2013, 91% 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 87% in 2012 and 85% in 2011. (See January 2013 synopsis for specific location of the Stratosphere gate.)

The information denoted in this monthly summary represents **typical** residential complaints, flight activity, fleet mix, and gate compliance, with the exception of the number of complaints tied to helicopters versus fixed-wing aircraft operations.

March 2013: 41 total complaints - a 2% decrease from 2012 and a 41% decrease from 2011. On average, each caller (or household) issued 1.5 calls. The most calls received from one household totaled 5.

Calls by Community - (Exhibits 1 and 3)

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

Minority (between 10% and 50%): The *Sunrise Manor* community issued 13 calls (32%). (See January 2013 synopsis of typical aircraft overflight impacts on this community.)

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

The **City of Henderson** community issued 6 calls (15%). (See January 2013 synopsis of typical aircraft overflight impacts on this community.)

The **Paradise and Winchester** communities issued 5 calls (12%). (See January 2013 synopsis of typical aircraft overflight impacts on this community.)

The **Summerlin South** community issued 5 calls (12%). This community is typically impacted by aircraft departing to the west (from Runway 25R and Runway 25L that turn toward the north (or right).

Repeat Caller Impact: (Not applicable.)

Calls by Operation - (Exhibit 2)

- LAS:** 34% of the total calls received were due to **LAS** fixed-wing operations.
- 20% were due to departures to the north from Runways 01L and 01R.
- VGT:** 0% 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:** 59% of the total calls received were due to **helicopter** operations.

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

- Overall:** 417 daily *departures*¹³ – an 8% decrease from 2012 and an 11% decrease from 2011.
- 76% of departures were to the west, 12% north, 9% east, and 3% south.
- 465 daily *arrivals* – a 3% decrease from 2012 and 3% increase from 2011.
- 78% of arrivals were from the east, 12% south, 9% north and 1% west.
- Daytime:** 344 daily *departures*¹⁴ – a 10% decrease from 2012 and 14% decrease from 2011.
- 74% of departures were to the west, 13% north, 11% east, and 3% south.
- 408 daily *arrivals* – a 2% decrease from 2012 and 3% decrease from 2011.
- 77% of arrivals were from the east, 13% south, 9% north, and 1% west.
- Nighttime:** 74 daily *departures*¹⁵ – a 5% increase from 2012 and 5% increase from 2011.
- 86% of departures were to the west, 9% north, 4% south and 1% east.
- 57 daily *arrivals* – a 10% decrease from 2012 and 3% decrease from 2011.
- 84% of arrivals were from the east, 11% north, and 5% south.

Daytime vs. Nighttime: Approximately 82% of all *departures* and 88% of all *arrivals* occurred during the daytime hours.

¹³ See footnote #1.

¹⁴ See footnote #1.

¹⁵ See footnote #1.

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

- Overall:** 81 daily *departures*¹⁶ – a 3% decrease from 2012 and a 23% decrease from 2011.
▪ 58% of departures were to the south, 17% west, 17% north, and 8% east.
93 daily *arrivals* – a 5% decrease from 2012 and a 15% decrease from 2011.
▪ 64% of arrivals were from the north, 19% south, 15% east, and 2% west.
- Daytime:** 73 daily *departures*¹⁷ – a 4% decrease from 2012 and a 25% decrease from 2011.
▪ 56% of departures were to the south, 18% north, 16% west, and 9% east.
87 daily *arrivals* – a 5% decrease from 2012 and a 16% decrease from 2011.
▪ 63% of arrivals were from the north, 20% south, 16% east, and 2% west.
- Nighttime:** 8 daily *departures*¹⁸ – a 3% increase from 2012 and a 5% increase from 2011.
▪ 70% of departures were to the south, 20% west, 8% north, and 2% east.
6 daily *arrivals* – a 2% decrease from 2012 and a 2% increase from 2011.
▪ 79% of arrivals were from the north, 12% south, and 9% east.

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

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

Tropicana: 106 daily *departures* – a 9% increase from 2012 and a 5% decrease from 2011.

Charleston: 105 daily *arrivals* - an 11% increase from 2012 and a 4% decrease from 2011.

Strip: 34 daily *touch and go's* - an 11% decrease from 2012 and a 12% increase from 2011.

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.
- Medium:** **Medium** turbine-driven aircraft (those weighing more than 41,000 lbs. and less than 75,000 lbs.) accounted for 1% of the daily traffic.
- Small:** **Small** turbine-driven aircraft (those weighing 41,000 lbs. or less) accounted for 8% of the daily traffic.
- Military:** **Military** turbine-driven aircraft accounted for less than 1% of the daily traffic.
- Non-Jet:** **Piston-driven** aircraft and unassigned aircraft types accounted for 4% of the daily traffic.

¹⁶ See footnote #1.

¹⁷ See footnote #1.

¹⁸ See footnote #1.

Helos: *Touring helicopters* accounted for 20% of the daily traffic.

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

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

Primary: In 2013, 76% departed to the *west* (from LAS's primary departure runways). This figure was 68% in 2012 and 37% in 2011.

Secondary: In 2013, 3% departed to the *south* (from LAS's secondary departure runways). This figure was 15% in 2012 and 45% in 2011. The large increase in 2011 was attributed to Runway 07L-25R being out of service during a portion of the month.

Alternate 1: In 2013, 12% departed to the *north* (from LAS's alternate departure runways). This figure was 9% in 2012 and 17% in 2011.

Alternate 2: In 2013, 9% departed to the *east* (from LAS's alternate departure runways). This figure was 7% in 2012 and less than 1% in 2011.

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

SVHS: In 2013, 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 left-hand turn were within 0.3 NM of *Sierra Vista High School* (SVHS). This figure was 94% in 2012 and 91% in 2011. (See January 2012 synopsis for specific location of the SVHS gate.)

Peace: In 2013, 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 95% in 2012 and 89% in 2011. (See January 2012 synopsis for specific location of the Peace gate.)

Pebble: In 2013, 97% of the large air carrier aircraft (excluding those destined to the Nevada Test Site) that departed to the south from Runways 19L or 19R were within 0.3 NM of the intersection of *Pebble Road & Arville Street*. This figure was 98% in 2012 and 96% in 2011. (See January 2012 synopsis for specific location of the Pebble gate.)

UNLV: In 2013, 84% 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 77% in 2012 and 78% in 2011. (See January 2012 synopsis for specific location of the UNLV gate.)

Boulder: In 2013, 98% of the large air carrier aircraft that departed to the north from Runways 07L or 07R were within 0.3 NM of the extended runway centerline, near *Boulder Highway*. This figure was 95% in 2012 and 83% in 2011. (See January 2012 synopsis for specific location of the Boulder Hwy. gate.)

Hualapai: In 2013, 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 91% in 2012 and not available in 2011. (See January 2012 synopsis for specific location of the Hualapai gate.)

Eastern: In 2013, 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 98% in 2012 and 98% in 2011. (See January 2012 synopsis for specific location of the Eastern gate.)

Hollywood: In 2013, 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 98% in 2012 and 93% in 2011. (See January 2012 synopsis for specific location of the Hollywood gate.)

Stratosphere: In 2013, 85% 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 2012 and 81% in 2011. (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, with the exception of the number of complaints tied to helicopters versus fixed-wing aircraft operations.

Other Notable Issues

Lake Las Vegas Community Presentation: On January 23, 2013, in response to a request from the Lake Las Vegas Master Association, CCDOA presented helicopter tour operations and route compliance criteria over the community. Association members and attendees were provided historical information about helicopter tours and details explaining the safety and efficiency issues impacting operations.

Orientation Flight: On February 7, 2013, a member of the BOCC participated in an orientation helicopter tour flight over the Lake Las Vegas Community. The purpose of the flight was two-fold; first, to better familiarize a local elected official with the successful improvement in route compliance by helicopter tour operators, and second, to gather information on the merits of a proposed change to the portion of the tour route that passes over part of the Lake Las Vegas Community. The success of this flight enabled the elected official to better understand the mutual decision of the FAA and tour operators to maintain the existing route unchanged for safety and efficiency.

Helicopter Association International (HAI) Heli-Expo 2013: On March 4 thru 7, 2013, CCDOA participated in this annual event. The expo was held at the Las Vegas Convention Center, and featured more than 700 exhibiting companies offering a variety of products and services from the latest in helicopter technology to education seminars. CCDOA provided attendees valuable information on fly-quietly procedures used at LAS, HND and VGT. A time-delayed radar feed was used to visually demonstrate the high level of compliance maintained by local helicopter tour operators.

Helicopter Operator Users Meeting: On March 21, 2013, CCDOA met with FAA, local helicopter tour operators, and Las Vegas Metropolitan Police to discuss noise complaints tied to helicopter operations, route compliance, and operational growth. Attendees also discussed the successful use of a modified route to accommodate helicopter flights to and from the Las Vegas Motor Speedway, for an annual NASCAR racing event. Helicopters maintained a high rate of route compliance resulting in zero noise complaints tied to this route for the event.

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April 12, 2013
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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

Distribution: Commissioner Brager,
Commissioner Sisolak, Chair
Commissioner Collins
Commissioner Weekly
Rosemary Vassiliadis
Donald G. Burnette
Ralph LePore
Harry Waters
Teresa Motley
Cecil Johnson
Dan Kezar
Linda Healey
Tucker Field
Maureen Merry-Lamoureux

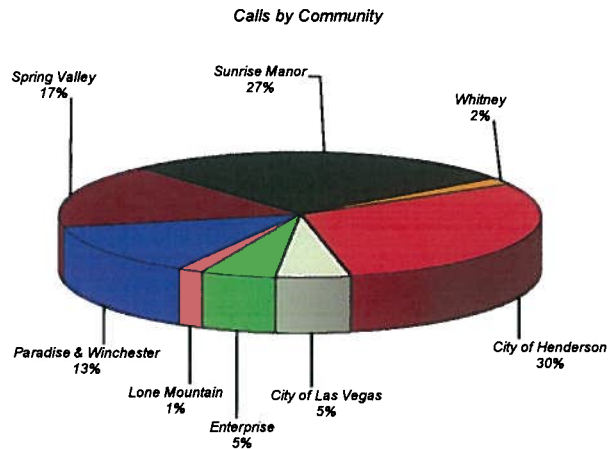
Commissioner Giunchigliani
Commissioner Brown, Vice-Chair
Commissioner Scow
Joe Kubacki
E. Lee Thomson
Sam Ingalls
Chris Jones
Barbara Bolton
Jeff Jacquart
Charlie Hall
Ben Czyzewski
Dennis Anderson
Tom Peterson
Mark Silverstein
Donna Bergstrom

Stephen J. Lloyd (FAA TRACON)
Jim Burgan (FAA ATC)
Jon Holman (FAA ATC)
Charlie Halterman (HND Tower)
Peter Yiakof (FAA FSDO)
Bristol Ellington (COH)
Josh Reid (COH)
Elizabeth Fretwell (CLV)
Vicki Mayes (CBC)
Mayor Carolyn Goodman (CLV)
Councilman Bob Beers (CLV)
Councilman Bob Coffin (CLV)
Councilwoman L. Tarkanian (CLV)
Mayor Pro Tem S. Anthony (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)
James Davies (Sky Harbor Airport)
Karen Everitt (Dallas City Hall)
Thomas Miller (Nellis AFB)
Raymond Chiang (FAA)
Stephanie Garcia-Vause (COH)
Andrew Powell (COH)
William Ruggiero (FAA TRACON)

James Erbeck (CLV)
Wayne M. Niimi (FAA ATC)
Paul Alukonis (FAA FSDO)
Nancy Myrick (FAA Tower Manager, NLVA)
Sydney Lowe (University Libraries)
Bob Brown (BBA)
Lisa 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)
James P. Callahan (Nellis AFB)
Stan Shepherd (SEATAC)
Eric Sheng (Long Beach Airport)
Jason Schwartz (Portland Airport)
Todd Lobato (Nellis AFB)
William Olivieri (Citizen)
Samuel Carter (ITT)
Steven Peacock (Dallas City Hall)
Jacob Snow (COH)
John Dietz (FAA TRACON)

Exhibit 1: Noise Complaint Calls by Community* - January 2013

Community	No. of Calls in 2013	No. of Callers in 2013	No. of Calls in 2012	No. of Calls in 2011
City of Boulder City				
City of Henderson	18	8	9	8
City of Las Vegas	3	3	4	10
City of North Las Vegas				1
Enterprise	3	2		14
Lone Mountain	1	1	1	
Paradise & Winchester	8	7	7	64
Spring Valley	10	3	17	12
Summerlin South			1	
Sunrise Manor	16	2		17
Whitney	1	1	1	3
Location unknown			1	
Overall Total	60	27	41	129



Difference between 2013 and 2012 Total Calls: 46%

Difference between 2013 and 2011 Total Calls: -53%

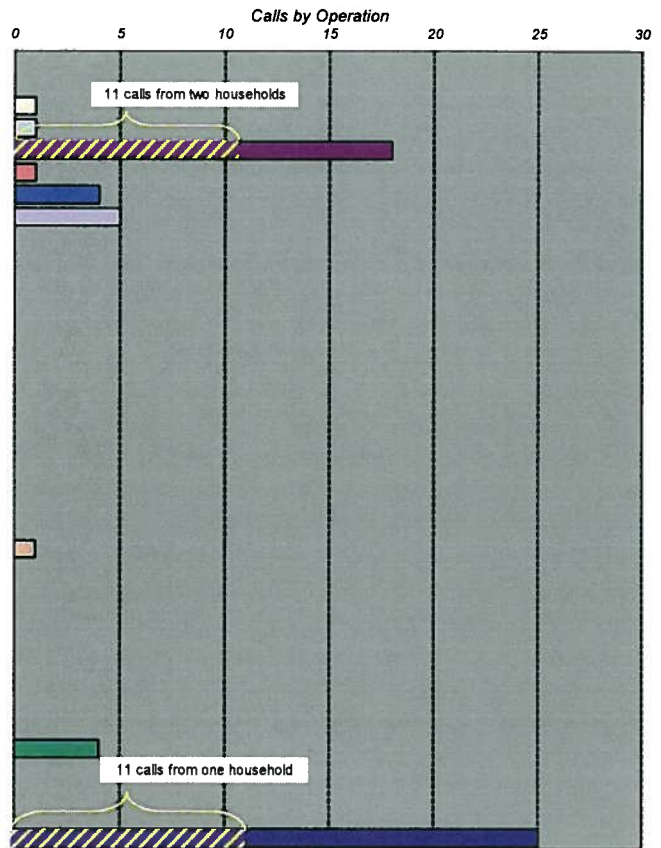
Average Number of Calls per Caller: 2.2

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 2013

Operation	No. of Calls in 2013	Percent of Overall Total	No. of Calls in 2012	No. of Calls in 2011
LAS 01R/L Arrivals				3
LAS 07R/L Arrivals				
LAS 19R/L Arrivals	1	1.7%		1
LAS 25R/L Arrivals	1	1.7%		
LAS 01R/L Departures	18	30.0%	22	108
LAS 07R/L Departures	1	1.7%		
LAS 19R/L Departures	4	6.7%		6
LAS 25R/L Departures	5	8.3%	3	
LAS Run-ups				
LAS GA				
LAS Other				
LAS Total	30	50.0%	25	118
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	1.7%	2	1
VGT Other				
VGT Total	1	1.7%	2	1
HND 17R/L Arrivals				
HND 35R/L Arrivals				
HND 17R/L Departures				
HND 35R/L Departures				
HND Run-ups				
HND GA	4	6.7%	1	7
HND Other				
HND Total	4	6.7%	1	7
Helicopters**	25	41.7%	13	3
Overall Total	60	100%	41	129



** 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 2013

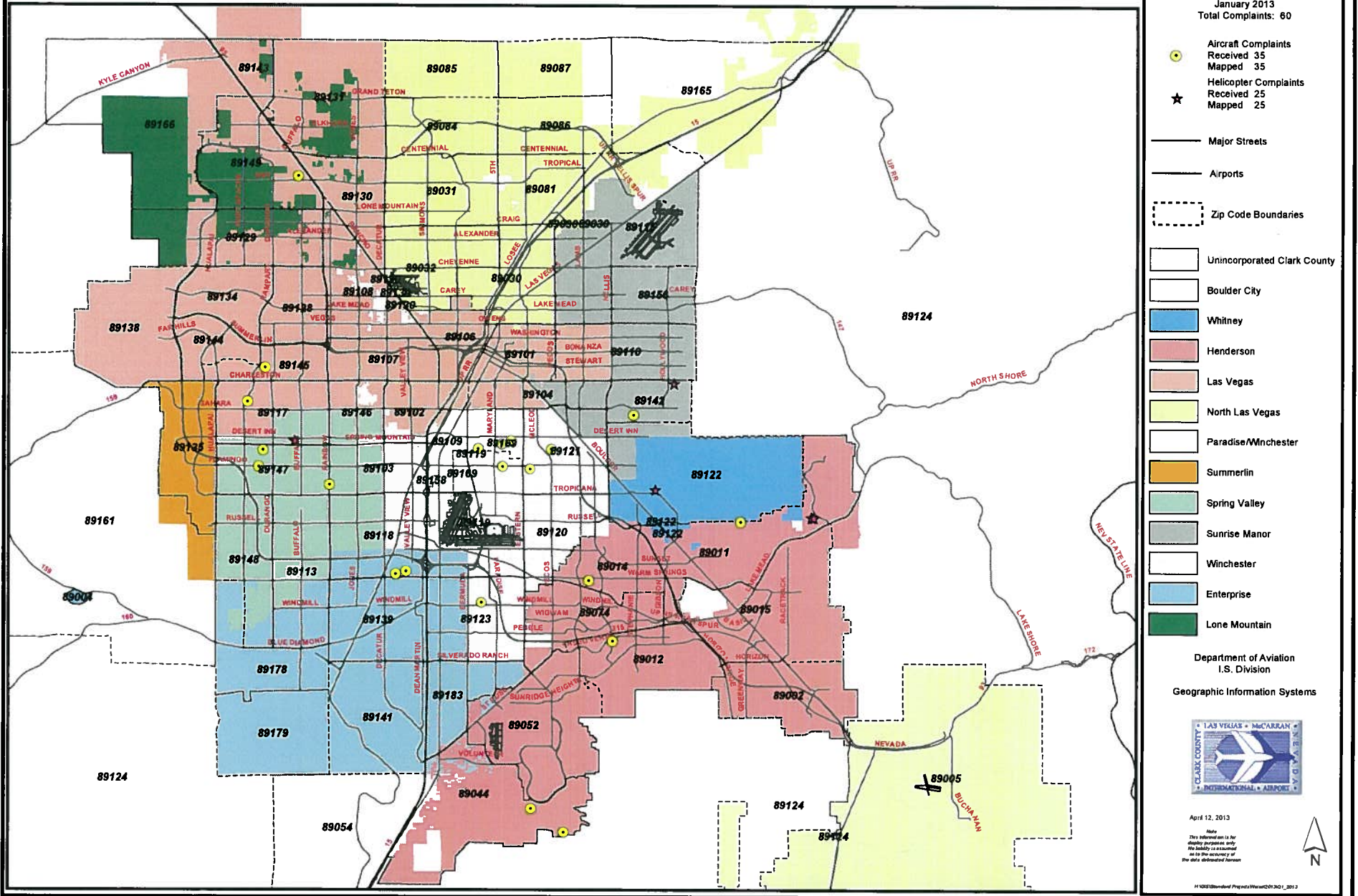
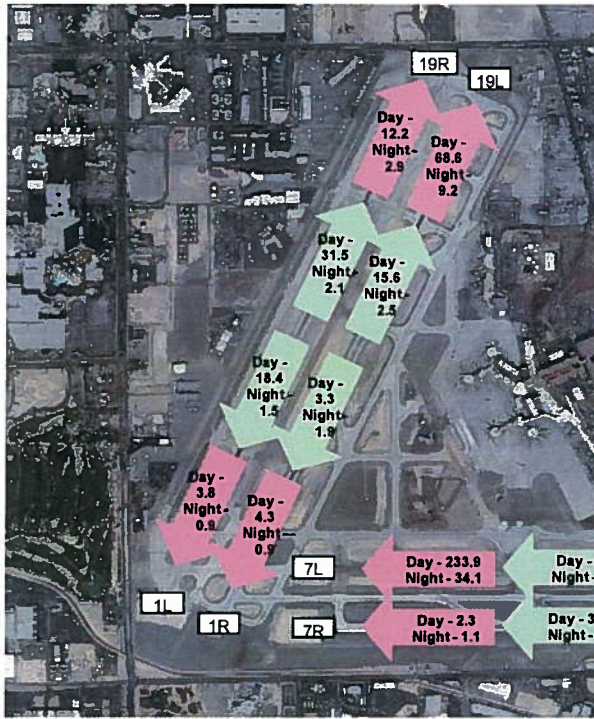


Exhibit 4: LAS Daily Average Operations Runway for Large Air Carrier Aircraft* - January 2013



Year	2013		2012		2011	
Daytime Departures	329	87%	373	88%	361	88%
Nighttime Departures	49	13%	53	12%	50	12%
Total Departures	378	100%	426	100%	411	100%
Daytime Arrivals	387	91%	393	90%	400	90%
Nighttime Arrivals	40	9%	44	10%	43	10%
Total Arrivals	426	100%	437	100%	443	100%

Growth	Overall	Daytime	Nighttime
Depts. 2013 vs 2012	-11%	-12%	-8%
Depts. 2013 vs 2011	-8%	-9%	-2%
Arrivals 2013 vs 2012	-2%	-2%	-10%
Arrivals 2013 vs 2011	-4%	-3%	-8%

* 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 2013**



Year	2013		2012		2011	
Daytime Departures	79	92%	97	93%	92	93%
Nighttime Departures	7	8%	7	7%	7	7%
Total Departures	86	100%	104	100%	99	100%
Daytime Arrivals	94	94%	103	94%	99	94%
Nighttime Arrivals	6	6%	6	6%	7	6%
Total Arrivals	100	100%	109	100%	106	100%

Growth	Overall	Daytime	Nighttime
Depts. 2013 vs 2012	-18%	-19%	-6%
Depts. 2013 vs 2011	-13%	-15%	1%
Arrivals 2013 vs 2012	-8%	-8%	-3%
Arrivals 2013 vs 2011	-5%	-5%	-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 2013

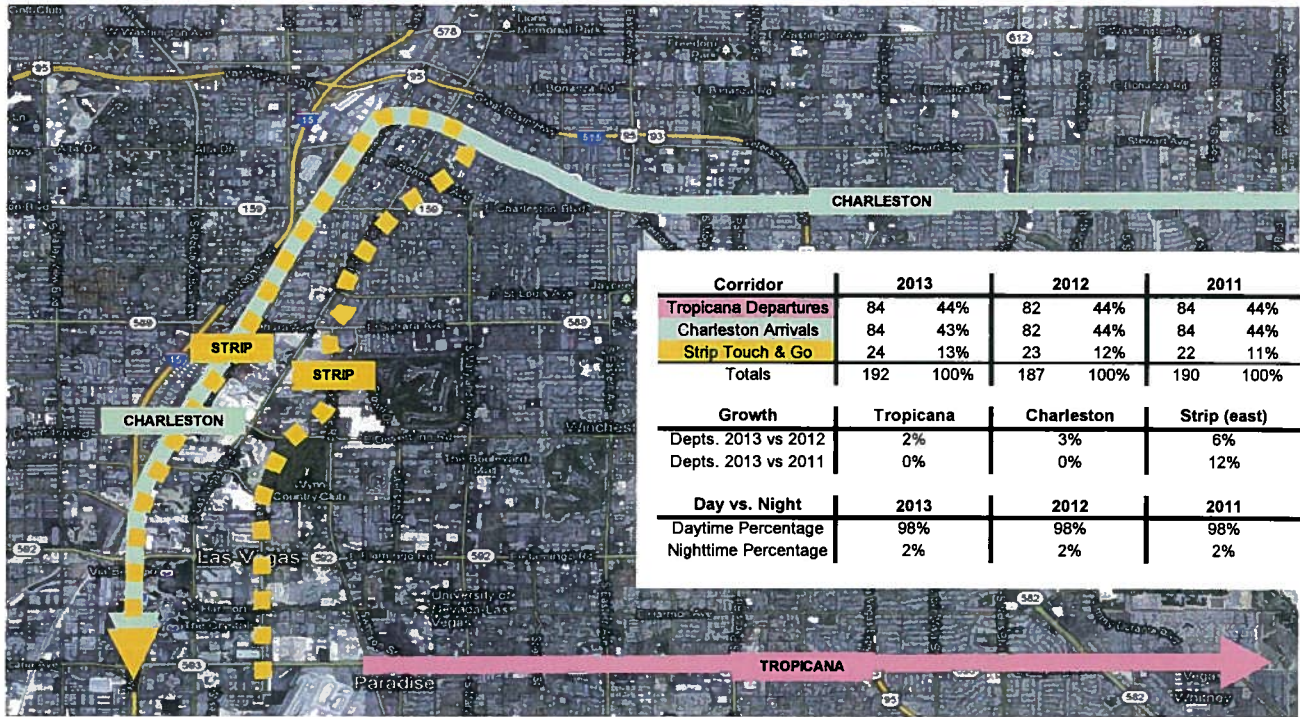
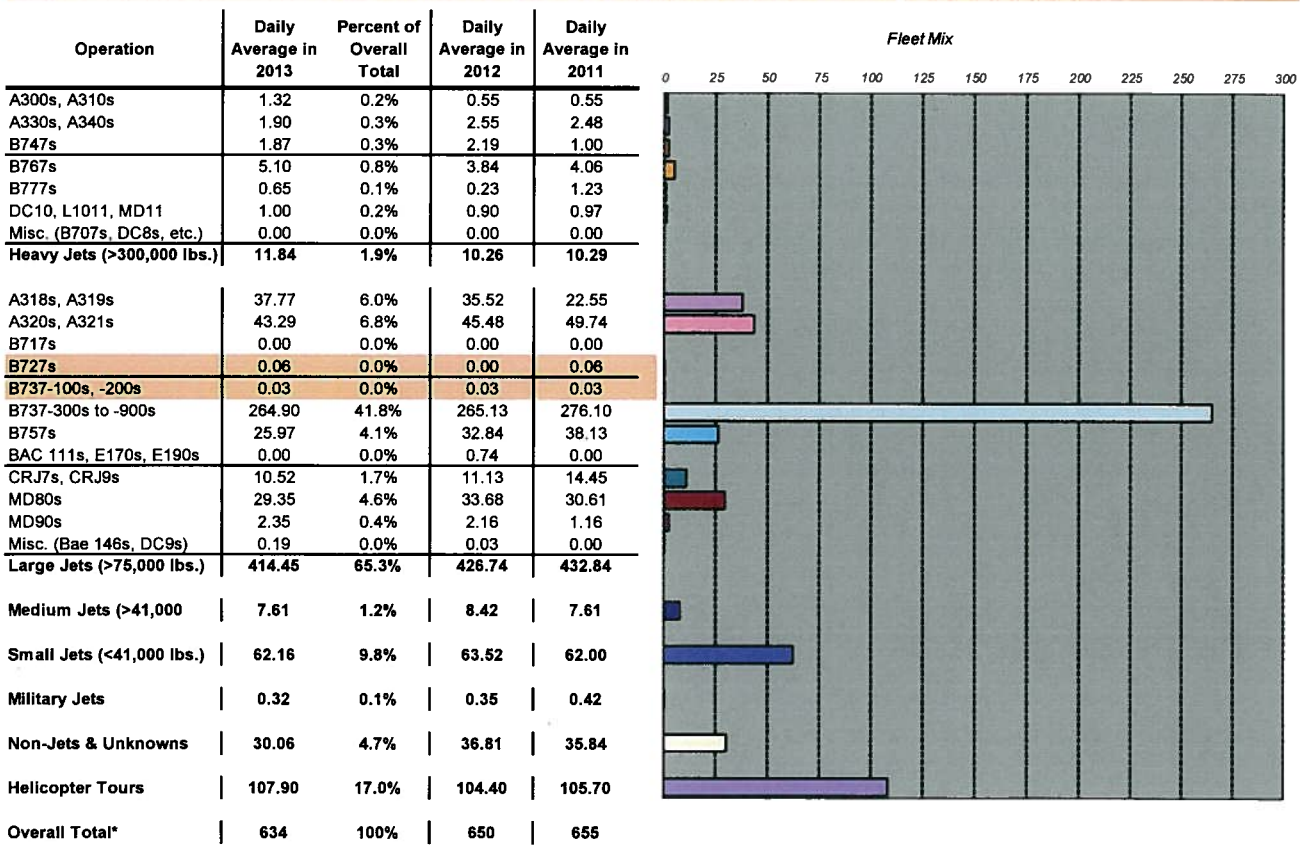


Exhibit 7: LAS Aircraft Arrival Fleet Mix* - January 2013



* 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 2013 to 2011

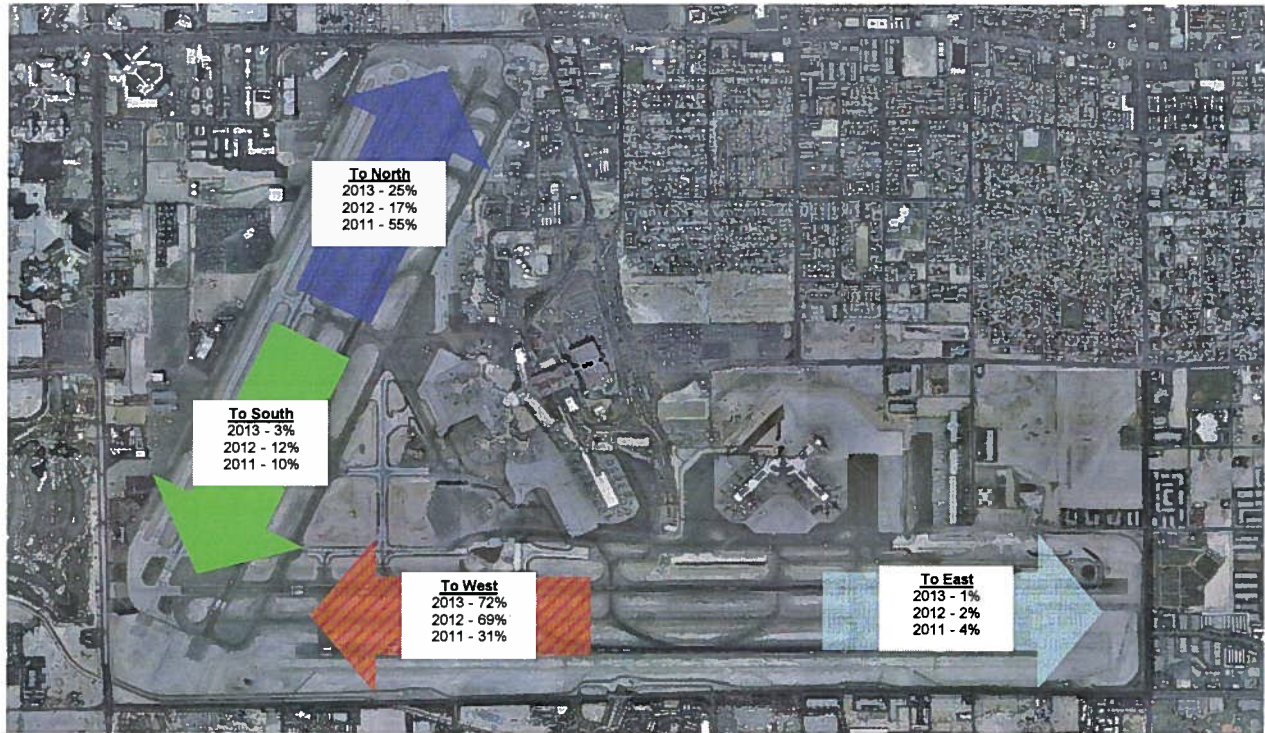
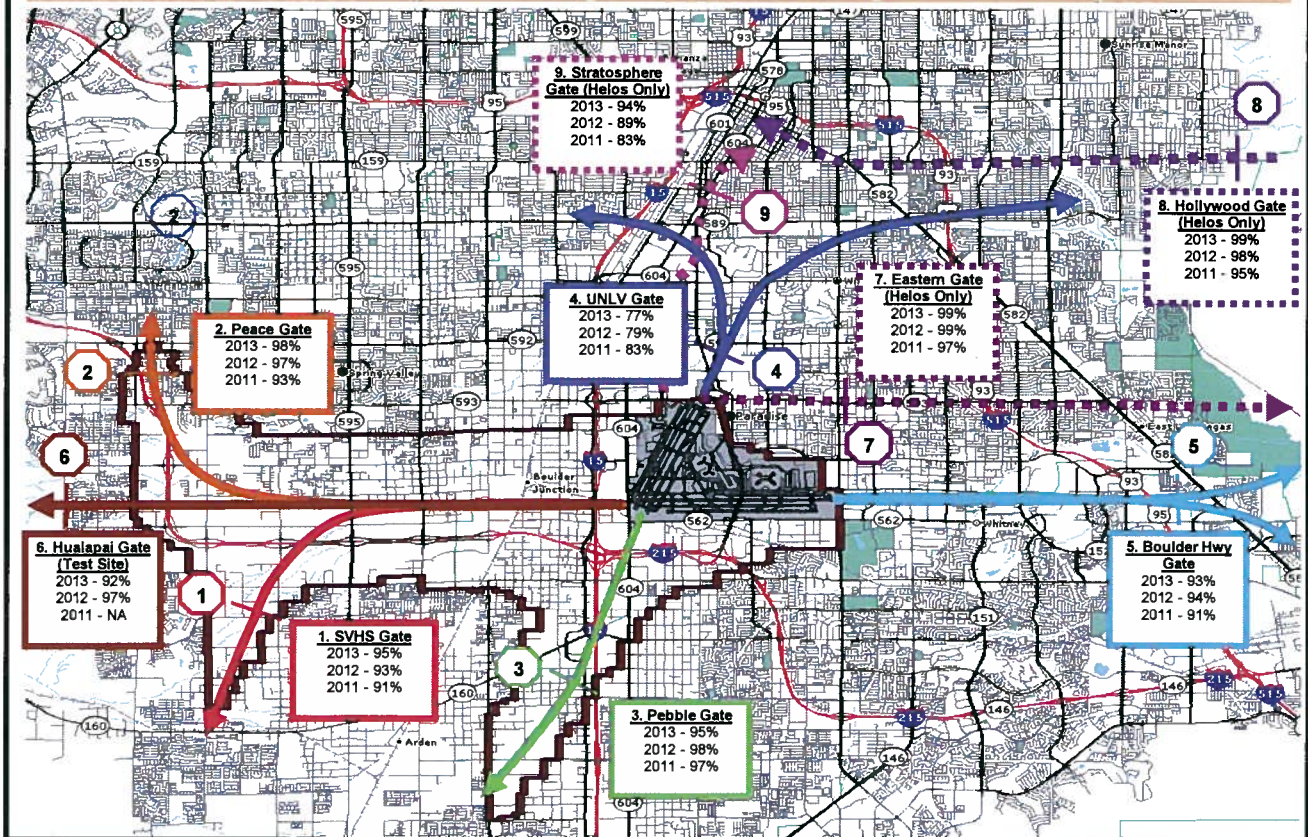


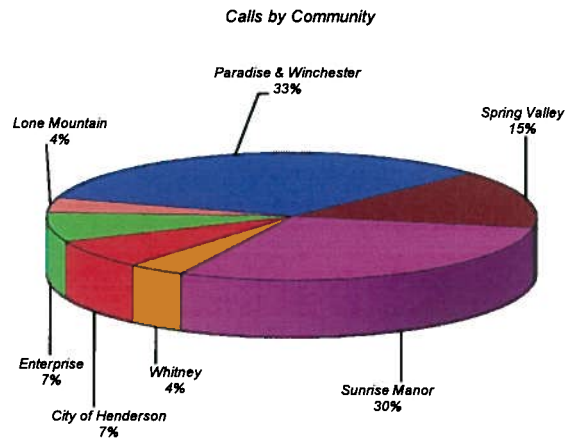
Exhibit 9: "Gate" Compliance for Large Aircraft* & LAS Helicopter Tours - January 2013



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

Exhibit 1: Noise Complaint Calls by Community* - February 2013

Community	No. of Calls in 2013	No. of Callers in 2013	No. of Calls in 2012	No. of Calls in 2011
City of Boulder City				
City of Henderson	2	2	9	1
City of Las Vegas			17	2
City of North Las Vegas				1
Enterprise	2	2	1	36
Lone Mountain	1	1		
Paradise & Winchester	9	6	20	28
Spring Valley	4	3	15	8
Summerlin South				1
Sunrise Manor	8	4	10	4
Whitney	1	1		1
Location unknown				
Overall Total	27	19	72	82



Difference between 2013 and 2012 Total Calls: -63%

Difference between 2013 and 2011 Total Calls: -67%

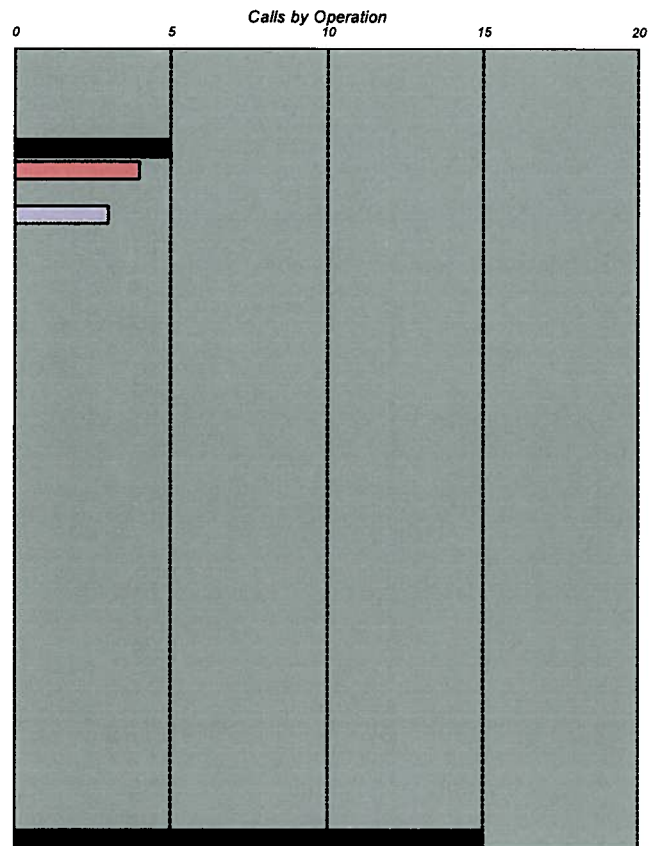
Average Number of Calls per Caller: 1.4

Most calls received from one household: 4

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

Exhibit 2: Noise Complaint Calls by Type of Operation - February 2013

Operation	No. of Calls in 2013	Percent of Overall Total	No. of Calls in 2012	No. of Calls in 2011
LAS 01R/L Arrivals				1
LAS 07R/L Arrivals				
LAS 19R/L Arrivals			1	
LAS 25R/L Arrivals				
LAS 01R/L Departures	5	18.5%	22	41
LAS 07R/L Departures	4	14.8%	16	
LAS 19R/L Departures			1	36
LAS 25R/L Departures	3	11.1%	18	
LAS Run-ups				
LAS GA				
LAS Other				
LAS Total	12	44.4%	58	78
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	0.0%	2	1
VGT Other				
VGT Total	0	0.0%	2	1
HND 17R/L Arrivals				
HND 35R/L Arrivals				
HND 17R/L Departures				
HND 35R/L Departures				
HND Run-ups				
HND GA	0	0.0%	3	0
HND Other				
HND Total	0	0.0%	3	0
Helicopters**	15	55.6%	9	3
Overall Total	27	100%	72	82



** 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 2013

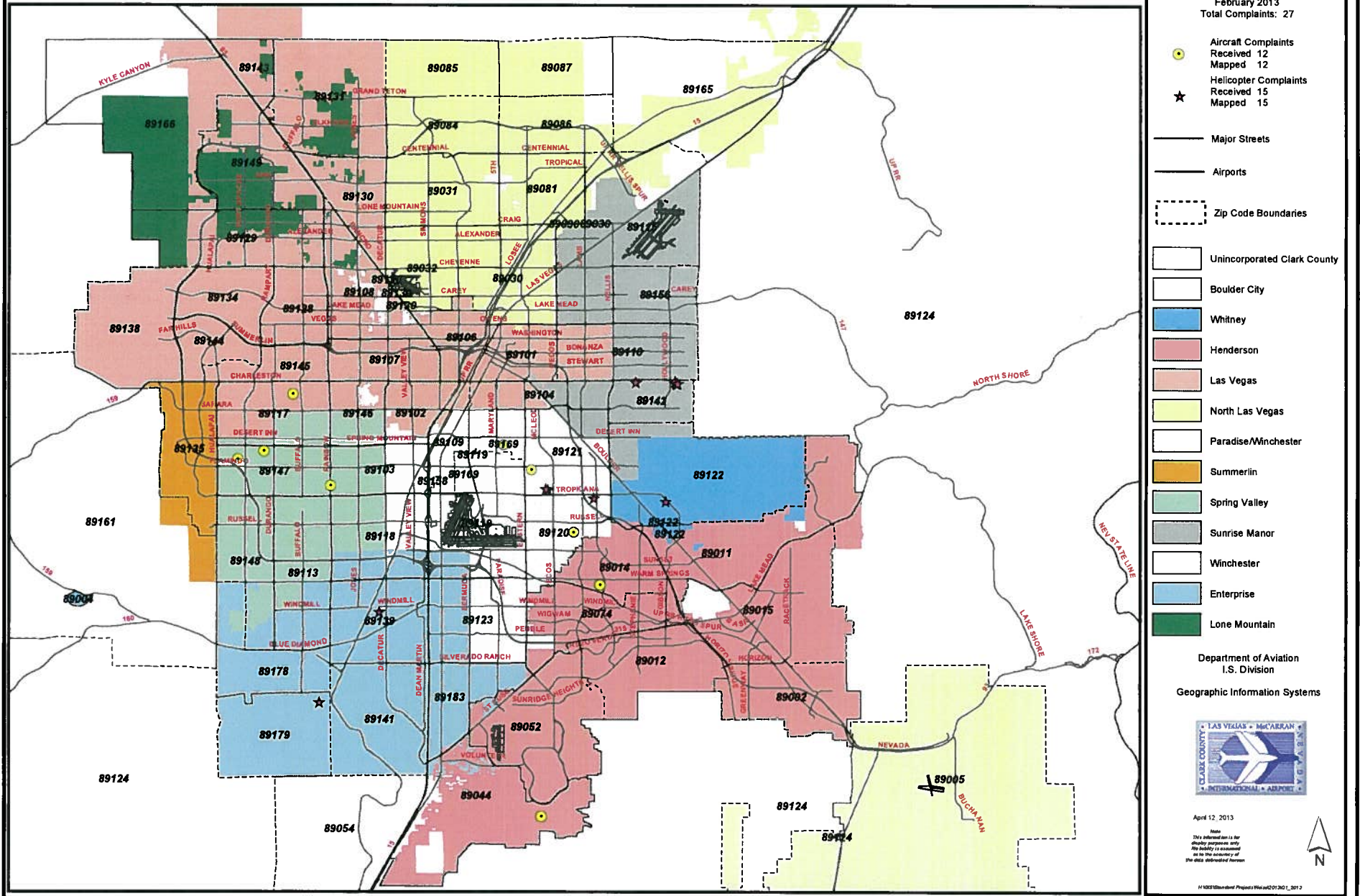
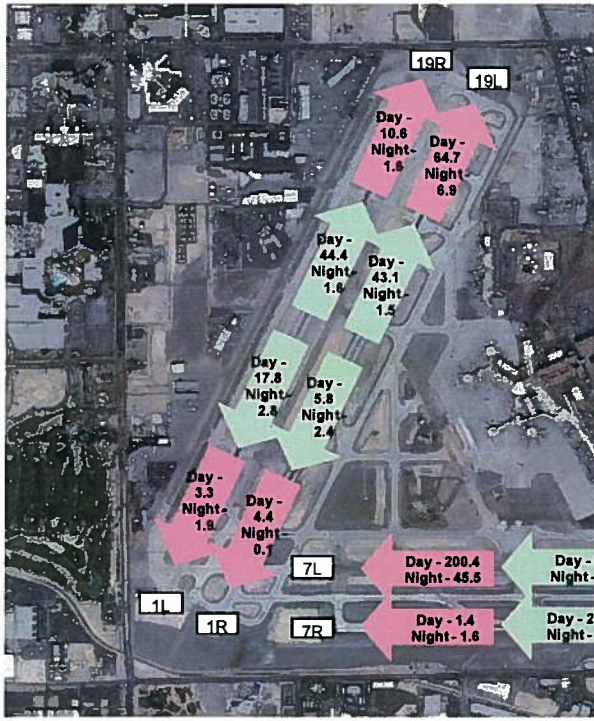


Exhibit 4: LAS Daily Average Operations by Runway for Large Air Carrier Aircraft* - February 2013



Year	2013		2012		2011	
Daytime Departures	329	85%	363	87%	370	87%
Nighttime Departures	58	15%	55	13%	54	13%
Total Departures	387	100%	417	100%	424	100%
Daytime Arrivals	388	89%	397	89%	400	90%
Nighttime Arrivals	46	11%	50	11%	47	10%
Total Arrivals	434	100%	447	100%	446	100%

Growth	Overall	Daytime	Nighttime
Depts. 2013 vs 2012	-7%	-9%	6%
Depts. 2013 vs 2011	-9%	-11%	7%
Arrivals 2013 vs 2012	-3%	-2%	-7%
Arrivals 2013 vs 2011	-3%	-3%	-1%

* 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 2013



Year	2013		2012		2011	
Daytime Departures	74	92%	87	92%	84	92%
Nighttime Departures	7	8%	8	8%	7	8%
Total Departures	81	100%	95	100%	91	100%
Daytime Arrivals	88	92%	103	94%	91	92%
Nighttime Arrivals	7	8%	6	6%	8	8%
Total Arrivals	95	100%	110	100%	99	100%

Growth	Overall	Daytime	Nighttime
Depts. 2013 vs 2012	-15%	-15%	-13%
Depts. 2013 vs 2011	-11%	-12%	-3%
Arrivals 2013 vs 2012	-13%	-15%	14%
Arrivals 2013 vs 2011	-3%	-3%	-4%

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

Exhibit 6: LAS Daily Average Operations by Corridor for Helicopter Tours - February 2013

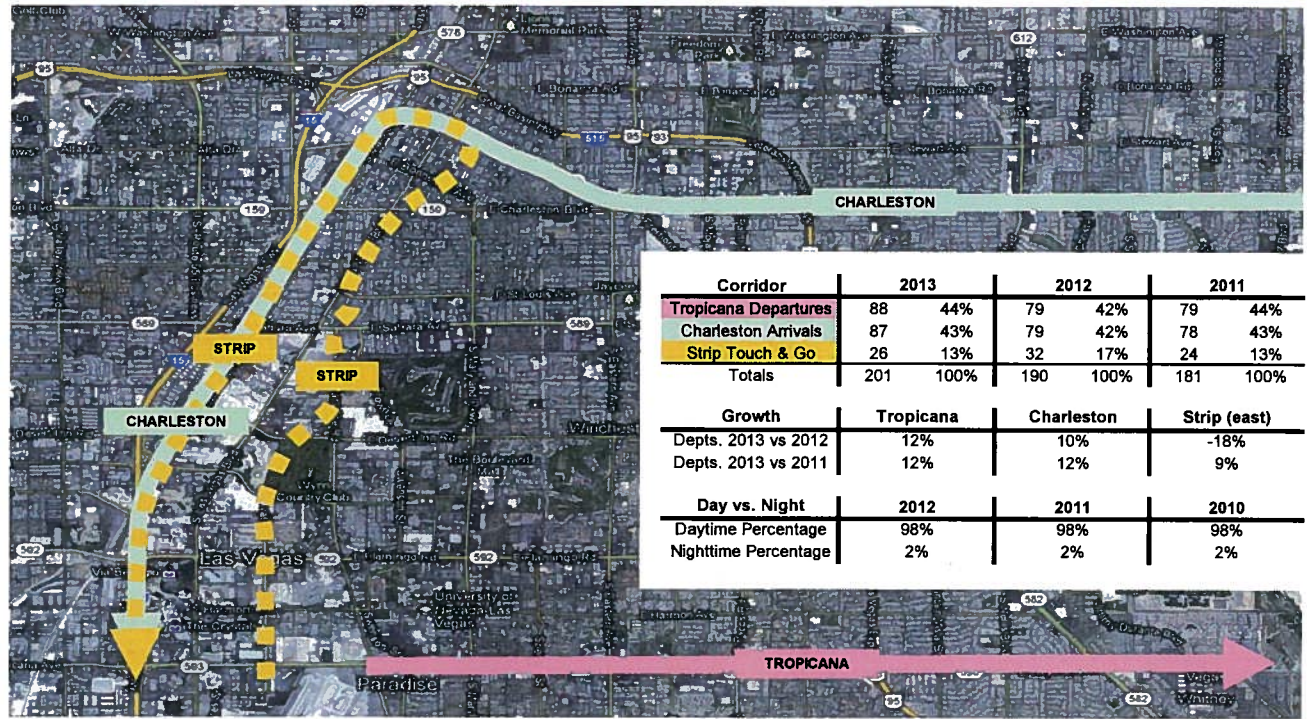
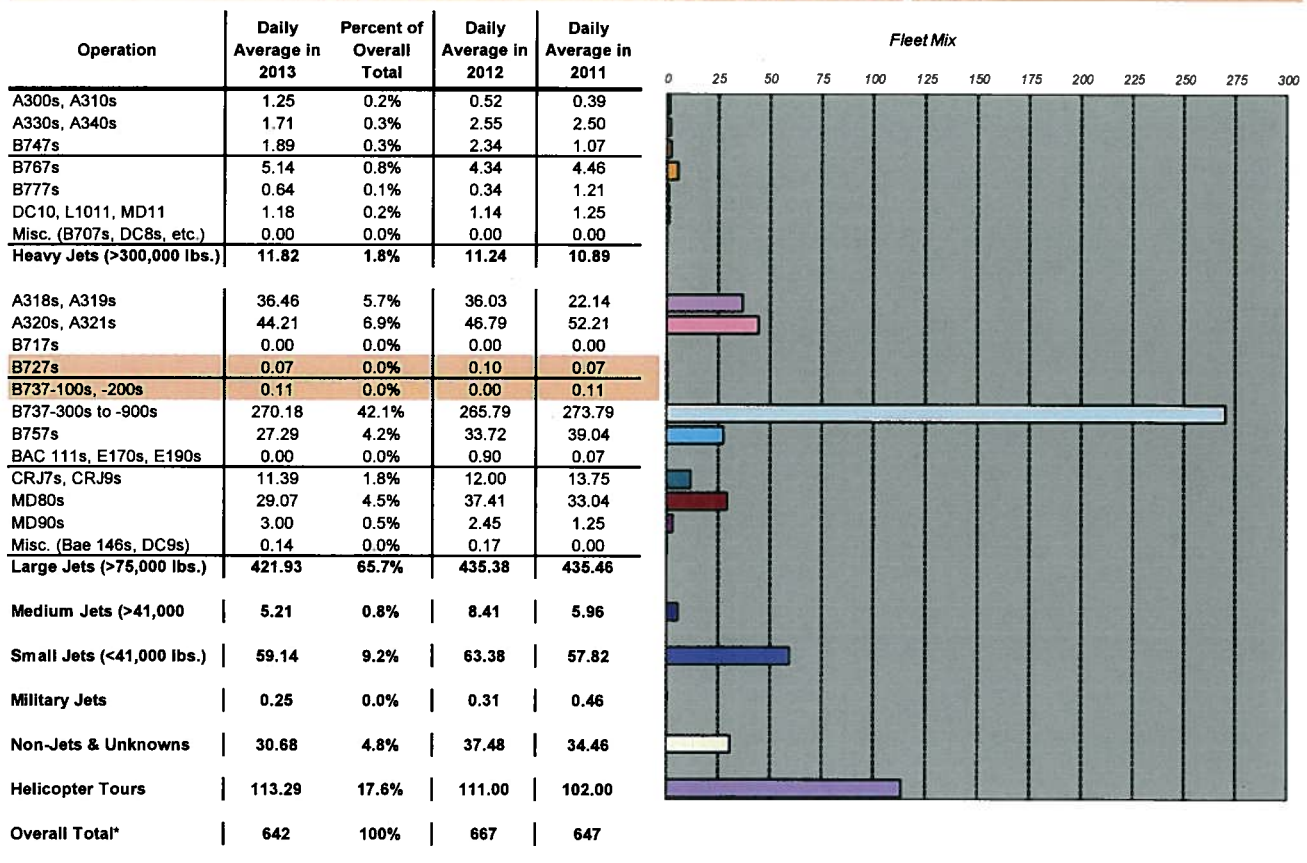


Exhibit 7: LAS Aircraft Arrival Fleet Mix* - February 2013



* 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 2013 to 2011

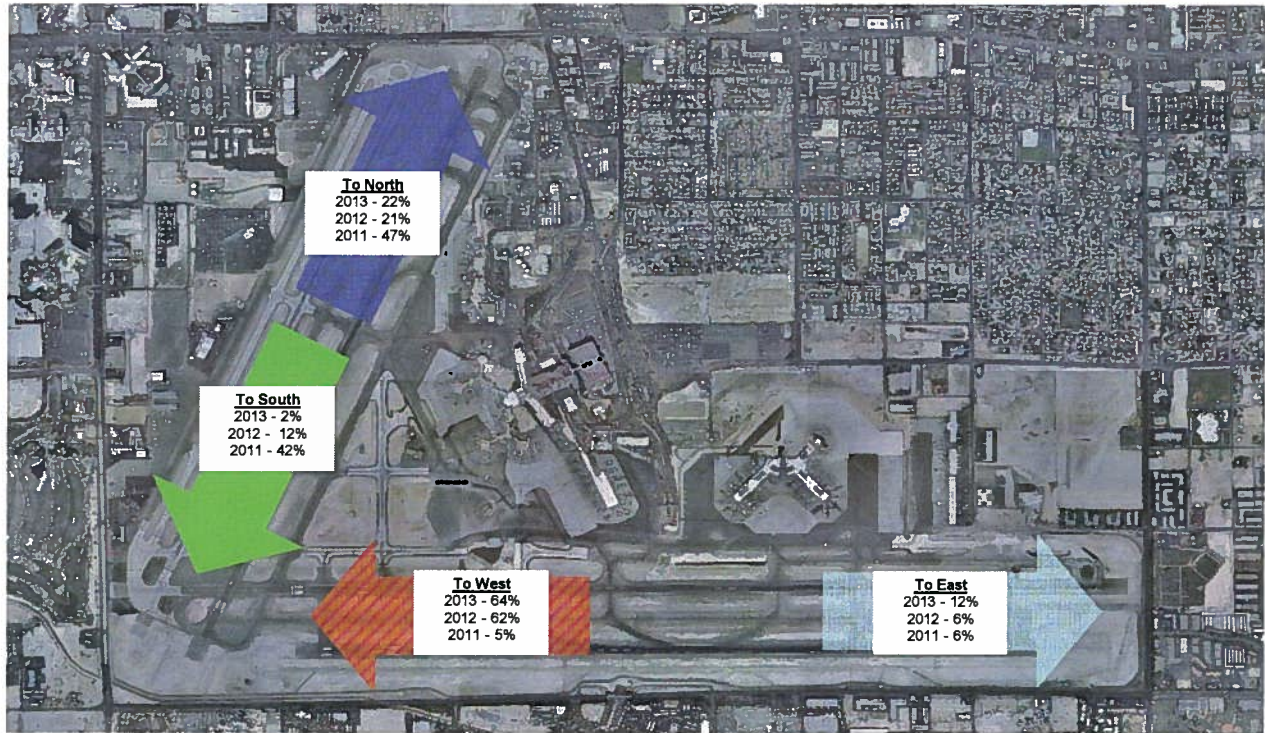
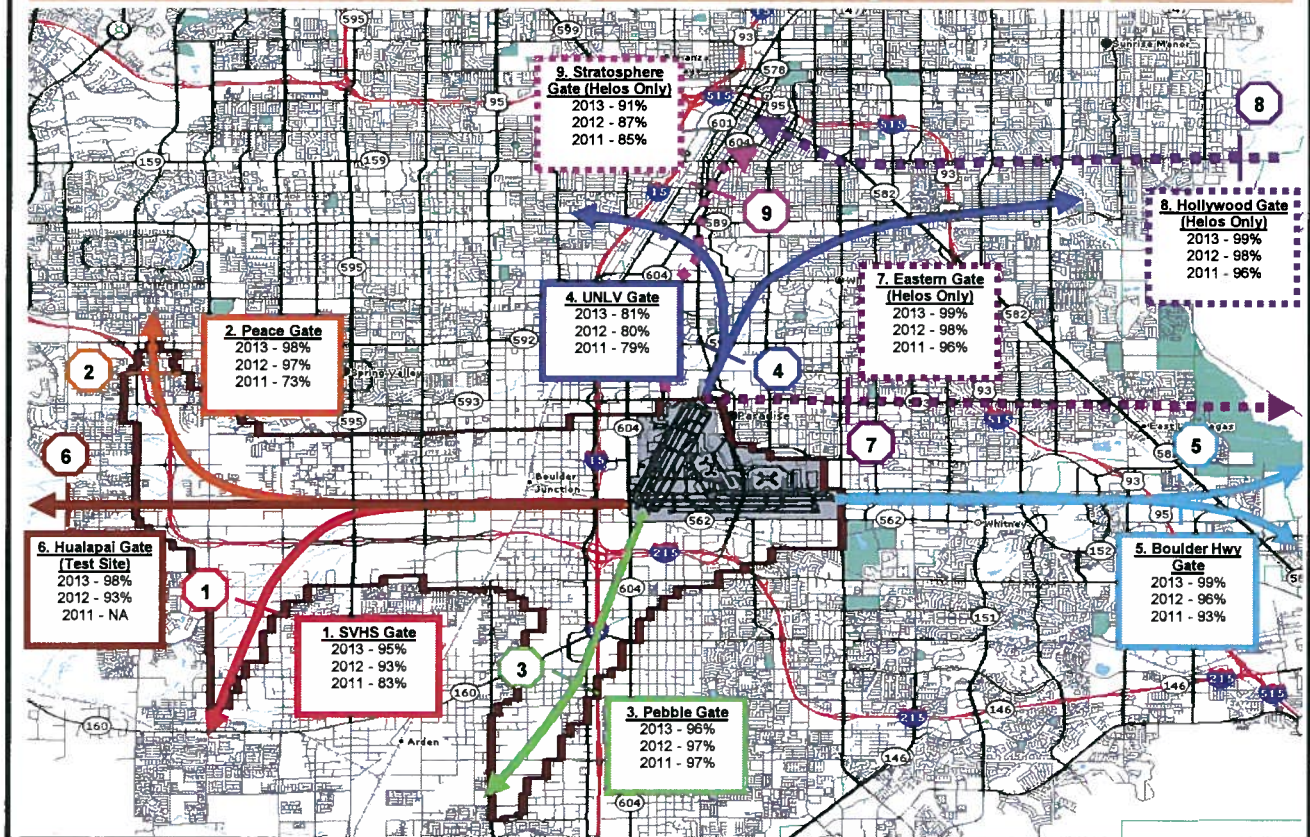


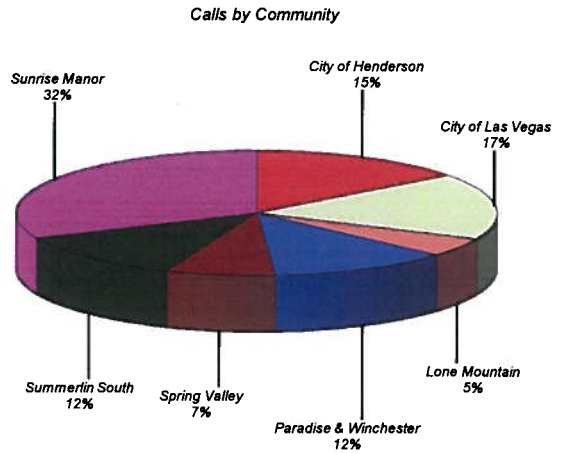
Exhibit 9: "Gate" Compliance for Large Aircraft* & LAS Helicopter Tours - February 2013



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

Exhibit 1: Noise Complaint Calls by Community* - March 2013

Community	No. of Calls in 2013	No. of Callers in 2013	No. of Calls in 2012	No. of Calls in 2011
City of Boulder City				
City of Henderson	6	4	22	4
City of Las Vegas	7	6	7	11
City of North Las Vegas			1	1
Enterprise			1	32
Lone Mountain	2	2	1	2
Paradise & Winchester	5	4	1	10
Spring Valley	3	2	9	3
Summerlin South	5	3		1
Sunrise Manor	13	6	1	5
Whitney				
Location unknown				
Overall Total	41	27	42	69



Difference between 2013 and 2012 Total Calls: -2%

Difference between 2013 and 2011 Total Calls: -41%

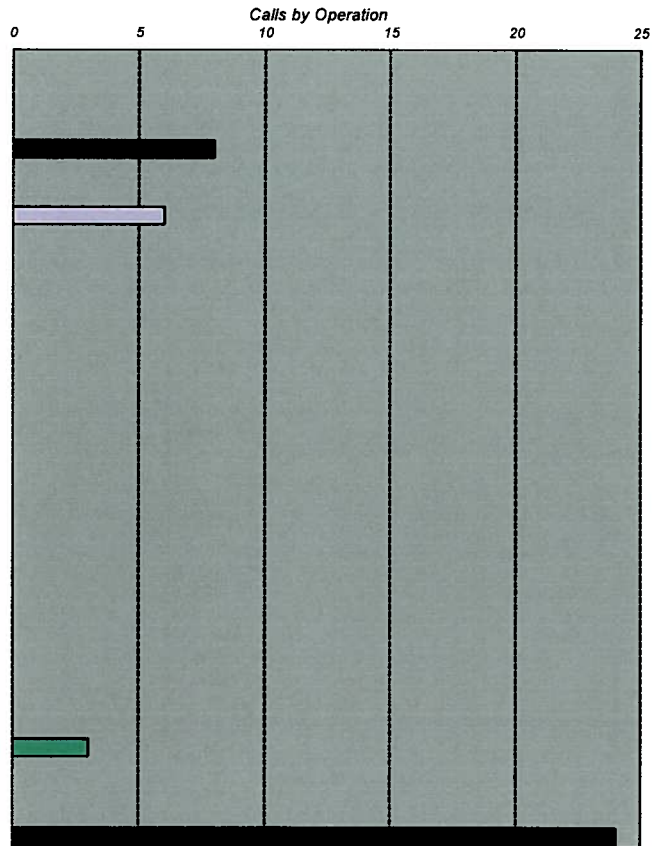
Average Number of Calls per Caller: 1.5

Most calls received from one household: 5

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

Exhibit 2: Noise Complaint Calls by Type of Operation - March 2013

Operation	No. of Calls in 2013	Percent of Overall Total	No. of Calls in 2012	No. of Calls in 2011
LAS 01R/L Arrivals				
LAS 07R/L Arrivals				
LAS 19R/L Arrivals				
LAS 25R/L Arrivals				
LAS 01R/L Departures	8	19.5%	7	14
LAS 07R/L Departures				
LAS 19R/L Departures			1	30
LAS 25R/L Departures	6	14.6%	9	15
LAS Run-ups				
LAS GA				
LAS Other				
LAS Total	14	34.1%	17	59
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	0.0%	1	1
VGT Other				
VGT Total	0	0.0%	1	1
HND 17R/L Arrivals				
HND 35R/L Arrivals				
HND 17R/L Departures				
HND 35R/L Departures				
HND Run-ups				
HND GA	3	7.3%	3	3
HND Other				
HND Total	3	7.3%	3	3
Helicopters**	24	58.5%	21	6
Overall Total	41	100%	42	69



** 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 2013

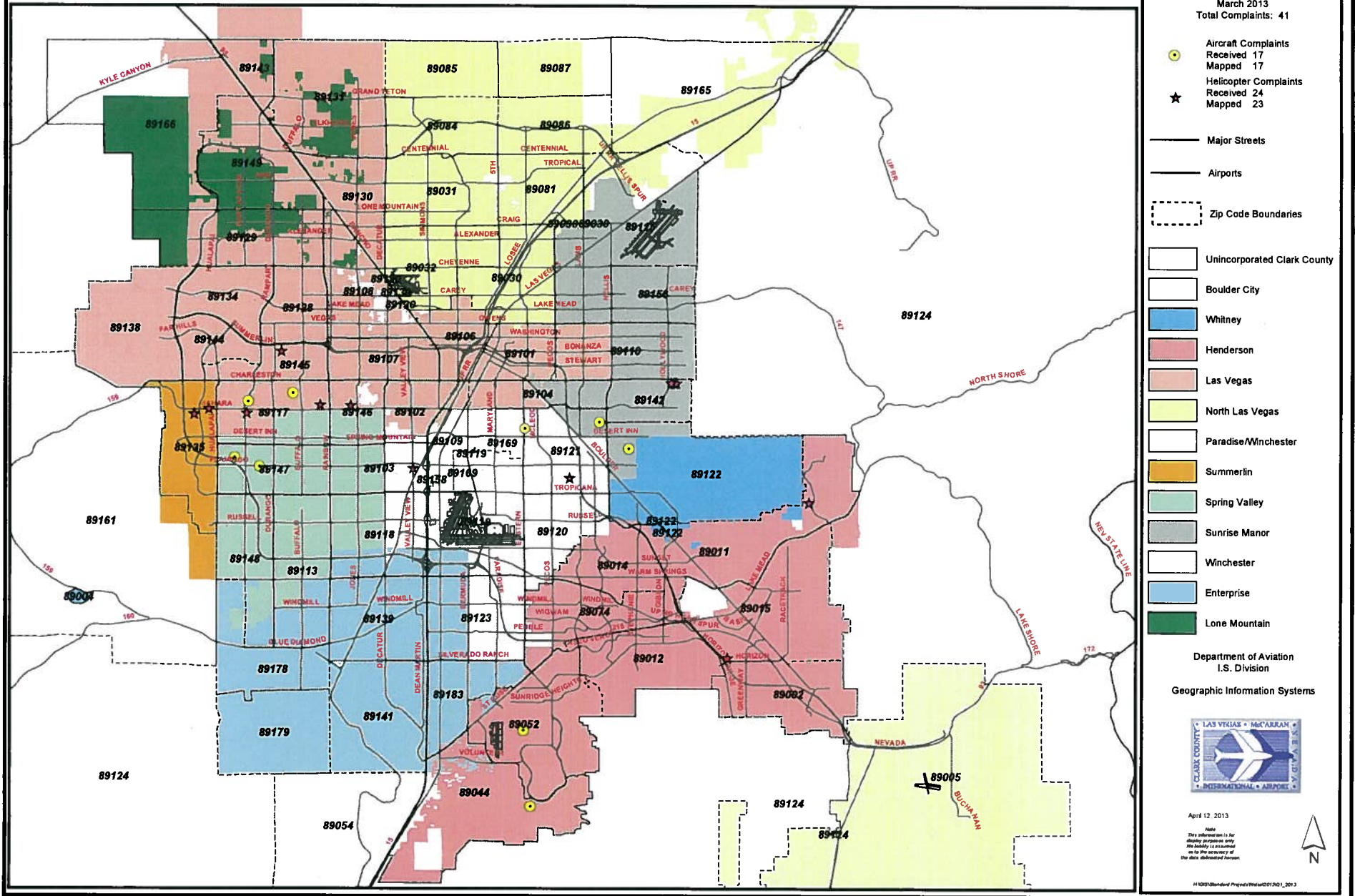
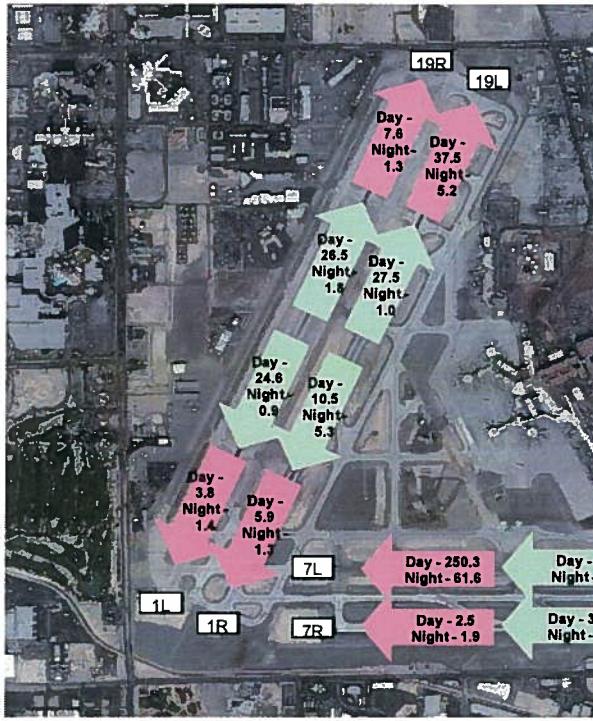


Exhibit 4: LAS Daily Average Operations by Runway for Large Air Carrier Aircraft* - March 2013



Year	2013		2012		2011	
Daytime Departures	344	82%	382	84%	400	85%
Nighttime Departures	74	18%	70	16%	70	15%
Total Departures	417	100%	453	100%	470	100%
Daytime Arrivals	408	88%	416	87%	419	88%
Nighttime Arrivals	57	12%	63	13%	59	12%
Total Arrivals	465	100%	479	100%	478	100%

Growth	Overall	Daytime	Nighttime
Depts. 2013 vs 2012	-8%	-10%	5%
Depts. 2013 vs 2011	-11%	-14%	5%
Arrivals 2013 vs 2012	-3%	-2%	-10%
Arrivals 2013 vs 2011	-3%	-3%	-3%

* 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** - March 2013



Year	2013		2012		2011	
Daytime Departures	73	90%	76	91%	97	93%
Nighttime Departures	8	10%	8	9%	8	7%
Total Departures	81	100%	83	100%	105	100%
Daytime Arrivals	87	94%	92	94%	103	95%
Nighttime Arrivals	6	6%	6	6%	6	5%
Total Arrivals	93	100%	98	100%	109	100%

Growth	Overall	Daytime	Nighttime
Depts. 2013 vs 2012	-3%	-4%	3%
Depts. 2013 vs 2011	-23%	-25%	5%
Arrivals 2013 vs 2012	-5%	-5%	-2%
Arrivals 2013 vs 2011	-15%	-16%	2%

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

Exhibit 6: LAS Daily Average Operations by Corridor for Helicopter Tours - March 2013

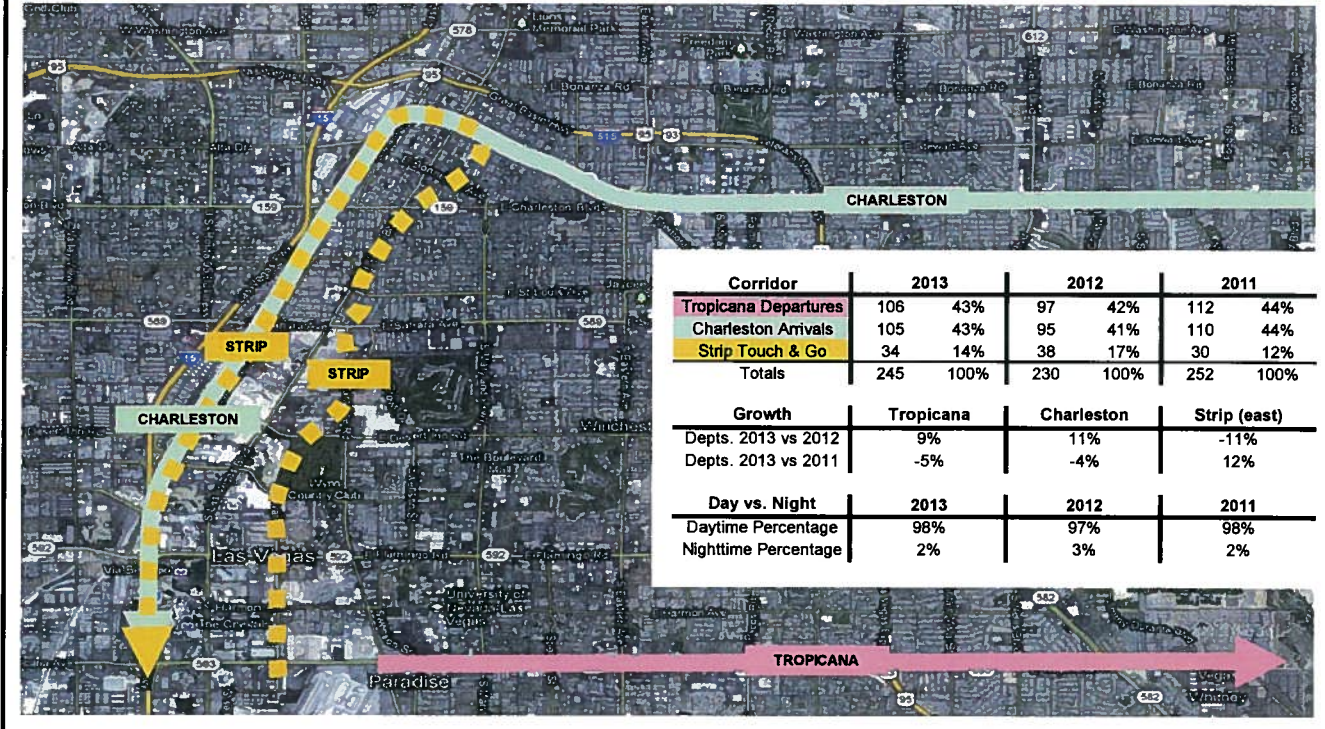
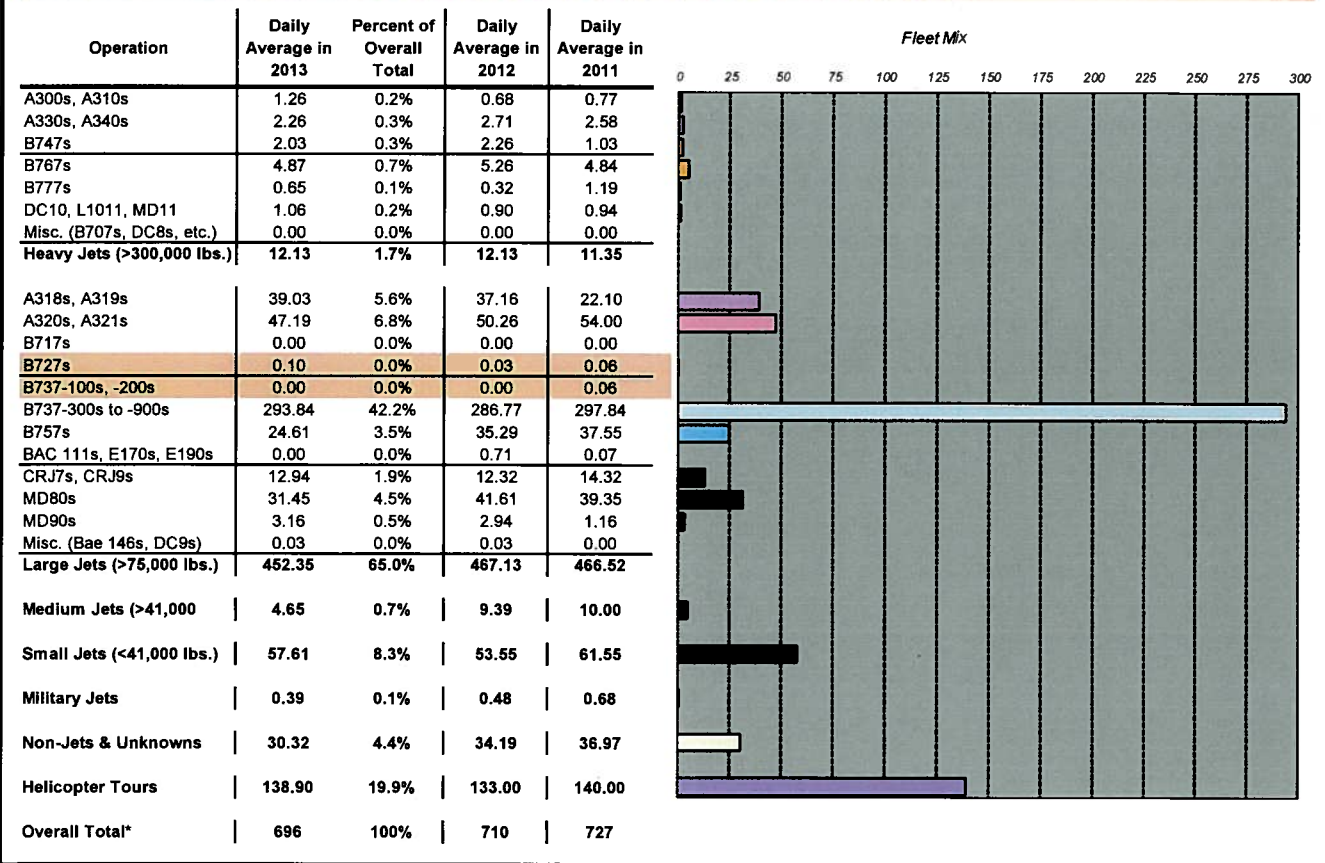


Exhibit 7: LAS Aircraft Arrival Fleet Mix* - March 2012



* 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 2013 to 2011

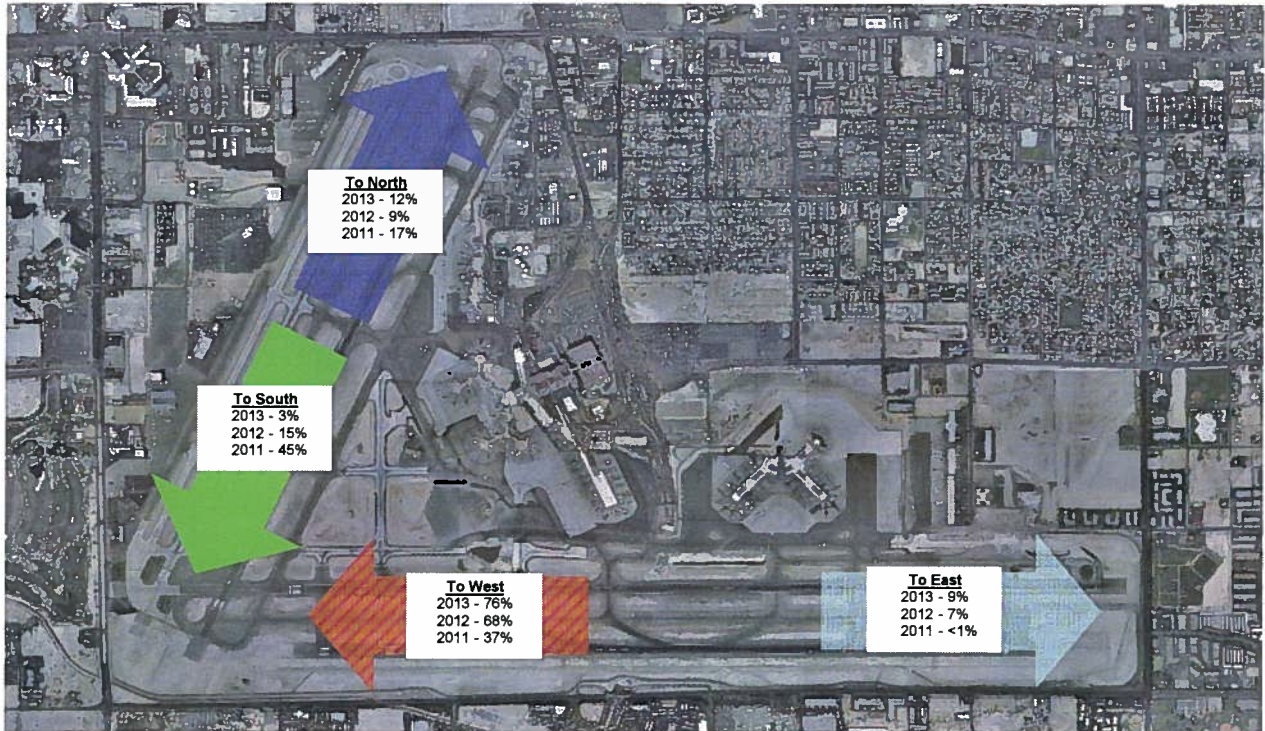
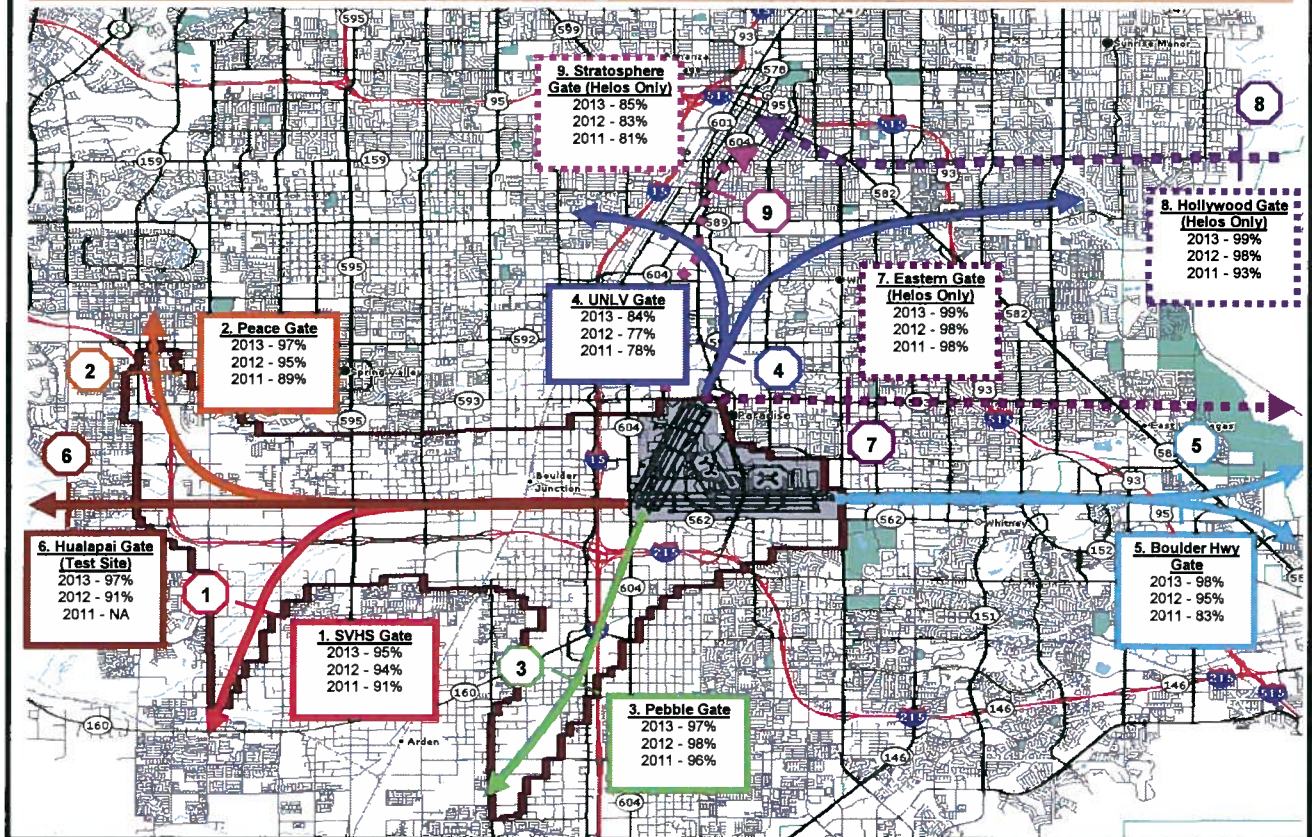


Exhibit 9: "Gate" Compliance for Large Aircraft* & LAS Helicopter Tours - March 2013



* 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.