

CHAPTER SEVEN

CUMULATIVE IMPACTS

Cumulative impacts are those impacts that can be reasonably expected to occur as a result of implementation of the proposed replacement airport, in conjunction with other past, present, and future reasonably foreseen activities, development, and/or projects that may be connected by geography or time.

7.1 CUMULATIVE AIRCRAFT NOISE EFFECTS

This section discloses the cumulative effects of aircraft noise on noise-sensitive Federal and state Department of Transportation (DOT) Section 4(f)/303(c) properties throughout the area surrounding St. George, Utah, with particular emphasis on Zion National Park. Cumulative aircraft noise effects consist of noise resulting from operations not only at the existing or proposed replacement airport at St. George, but also from other aviation activity, including operations in the enroute environment (high altitude overflights); activity to and from other airports (including Las Vegas area facilities); air tour operations; and operations by general aviation, military, and commercial users that may operate at any altitude, to the extent these operations can be quantified.

In Environmental Impact Statement (EIS) evaluations for new airport facilities, noise from overflights and other airports is typically of such low levels that its contribution to the cumulative noise energy at a noise-sensitive location is inconsequential to the total noise level near the study airport. However, this EIS is not typical and as such, noise levels from high altitude operations, from occasional flights by transient aircraft across the region, and from infrequent other operations have been found to contribute noticeably to the total noise energy at many of the 4(f)/303(c) locations in the area. Generally, beyond the immediate environs of the airport, where other air traffic contributes the vast majority of the noise in the area, the noise contribution from the St. George Airport is so low or the operations so infrequent that its total noise contribution is masked by noise from other operations that are not related to the existing or proposed replacement airport.

The analyses provided in this section are unique among EISs prepared for airport relocation and expansion proposals. In light of the Circuit Court's remand of the original Environmental Assessment (EA) to the Federal Aviation Administration (FAA), the analysis of potential noise effects from the replacement airport includes the following additional elements that the FAA does not typically include in an environmental evaluation:

- Quantitative 4f/303(c) screening analysis for cumulative aviation noise levels
- Large region of investigation
- Operator surveys of users at St. George and regional airports
- Comprehensive analysis of overflights at all altitudes

- Special analysis of Zion National Park for noise above ambient levels with and without human sounds
- Additional efforts at agency coordination

In **Section 7.1**, these elements were considered in determining the cumulative effects of all aviation noise sources in the region.

7.1.1 CUMULATIVE AIRCRAFT NOISE AT EXISTING AND REPLACEMENT AIRPORT SITES

Within the airport environs area surrounding the existing and replacement airport sites, the noise level of interest is 65 Day-Night Average Sound Level (DNL). At neither the existing nor replacement airport are dwellings, residents, or noise-sensitive public facilities exposed to noise above that level. Noise from other aviation sources contributes less than 35 decibels (dBA) for DNL to the area within the 65 DNL contour, and, since this level would equate to 1/1000th of the airport-related noise, other aviation noise was found to have no discernable effect on total noise levels in the environs of either the existing or replacement airport.

The proposed South Corridor would potentially pass within about a mile of the south end of the proposed runway at the replacement airport, and, based on its heavy usage and the potential levels of noise along it, may result in the extension of the airport noise contour from the replacement airport to the south toward the roadway, where the noise energy from both sources combines to increase the total noise effect. Cumulative noise levels above 65 DNL associated with the combination of these two sources would pass beyond the boundaries of the airport.

7.1.2 REQUIREMENT OF COURT'S DECISION IN GRAND CANYON TRUST V. FAA

In 1995, the FAA began working with the City of St. George, Utah, to determine the feasibility of continuing the use of the existing airport compared to development of a replacement airport at a new site. The replacement airport would accommodate existing and anticipated demand by business and general aviation users; demand that the existing airport facilities would be unable to accommodate due to the lack of area around the existing airport for expansion.

In response to comments received on the Draft EA for the development of a replacement airport at St. George, published on June 16, 2000, the FAA conducted a Supplemental Noise Analysis on the potential noise impacts of the replacement airport on Zion National Park; located approximately 20 miles northeast of the proposed replacement airport site. The FAA concluded that the noise impacts on Zion resulting from construction and operation of the replacement airport would be negligible and insignificant.

On January 30, 2001, the FAA issued a Record of Decision/Finding of No Significant Impact (ROD/FONSI) for the construction of the replacement airport at St. George. On April 2, 2001, the Grand Canyon Trust filed a lawsuit against the FAA in the U.S. Court of Appeals for the District of Columbia Circuit. The suit alleged that the EA did not address the cumulative noise impacts of other air flights over Zion, air tours in or near Zion, and reasonably foreseeable future aircraft activity and airport expansions that would contribute to the cumulative noise impact on Zion.

The court issued its decision on May 24, 2002, ruling that the FAA had not adequately analyzed the cumulative noise impacts that would result from the replacement airport. The court remanded the case to the FAA *"because the record is insufficient for the court to determine whether an EIS is required."*¹ The court directed that *"the FAA must evaluate the cumulative impact of noise pollution on the Park as a result of construction of the proposed replacement airport in light of air traffic near and over the Park, from whatever airport, air tours near or in the Park, and the acoustical data collected by the National Park Service in the Park in 1995 and 1998 mentioned in comments on the Draft Environmental Assessment (EA)."*

7.1.3 CUMULATIVE AIRCRAFT NOISE IN OR NEAR ZION NATIONAL PARK

As required by the court, this analysis addresses the effects within Zion National Park of not only that noise expected to result from the operation of St. George Municipal Airport (SGU) in its current or proposed location, but also the noise exposure within Zion that is expected to result from other aviation noise sources. The other aviation noise sources considered for this EIS analysis are:

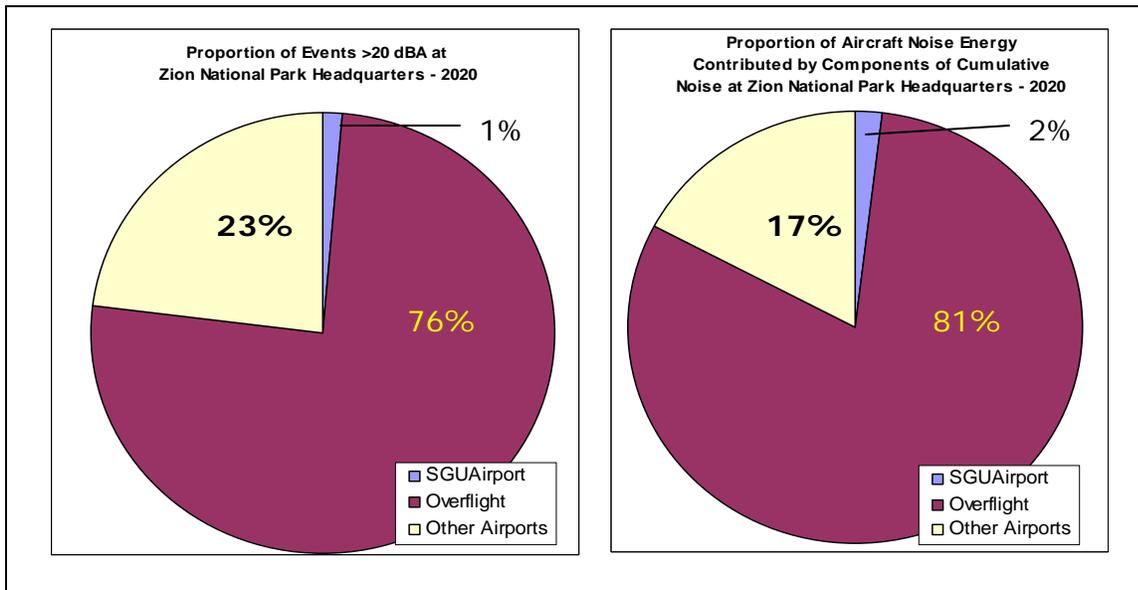
- High altitude aircraft overflights of the area as identified on radar between origins and destinations outside the study area that remain at generally constant altitudes throughout their passage
- Arrivals and departures from the Las Vegas area airports, as identified on radar, that climb to or descend from enroute cruise altitudes across the study area
- Operations conducted by air tour operators (ATOs) that do not stop at SGU during their tour of scenic areas in the west
- Operations at seven other airports within the study area
- Itinerant general aviation traffic crossing over, but not stopping within, the study area along the Victor Airways
- Military operations on special military training routes through the area

Importantly, each of these components of cumulative noise is forecast to contribute the same amount of noise to the study environs whether SGU is located at its current site or relocated to the proposed site. For this analysis then, the only difference for each future year of analysis between the cumulative

¹ United States Court of Appeals for the District of Columbia Circuit, No. 01-1154, Grand Canyon Trust v. Federal Aviation Administration. Decided May 24, 2002.

noise characteristics and metrics at any location within Zion will be the result of changes anticipated for the SGU location. As an illustration of the context of the noise exposure composition in the Zion environs, **Figure 7.1** indicates the relationship between the total aircraft noise energy modeled for the Zion Headquarters area and the number of noise events above 20 dBA modeled for the site. As is indicated by the figure, the noise associated with overflights from airports beyond the study area contributes the great majority of the total aircraft noise energy and number of events above 20 dBA to the location. Traffic from other airports (here almost entirely in the Las Vegas metropolitan area) contributes all but a small portion of the remaining energy and events. While the example provided by the figure is for the proposed airport in the year 2020, the relative proportions between the three contributing groups remain true for all other years and for the existing airport location.

Figure 7.1
RELATIONSHIP BETWEEN ST. GEORGE AIRPORT AND CUMULATIVE AVIATION NOISE LEVELS – ZION NATIONAL PARK HEADQUARTERS – 2020



Note: Overflights include radar-based overflights at altitude; other airports include Las Vegas and flights within the study area; airport is the airport only (future airport indicated here)

The typical analyses required under FAA Order 1050.1E and 5050.4A, includes: (1) noise exposure contours at the 65, 70, and 75 DNL; (2) analysis within the proposed alternative 65 DNL contour to identify noise-sensitive areas where noise will increase by 1.5 DNL; and (3) analysis within the 60 to 65 DNL contours to identify noise-sensitive areas where noise will increase by 3 DNL, only when 1.5 DNL increases are documented within the 65 DNL contour.

FAA Order 1050.1E also provides, however, that special consideration needs to be given to the evaluation of the significance of noise impacts on noise-sensitive areas within national parks, national wildlife refuges, and historic sites, including traditional cultural properties. For example, the DNL 65 dBA threshold does not

adequately address the effects of noise on visitors to areas within a national park or national wildlife refuge where other noise is very low and a quiet setting is a generally recognized purpose and attribute. This Draft EIS provides information regarding a number of additional supplemental noise metrics to account for the unique nature of this region. The FAA has approved the use of the following metrics:

- Day-Night Sound Exposure Level (DNL)
- 24-Hour Equivalent Noise Level ($Leq_{(24)}$)
- Daytime Equivalent Noise Level ($Leq_{(day)}$)
- Time Above Ambient Noise Level ($L50_{(existing)}$ and $L50_{(natural)}$)
- Single Event Maximum Noise Level (LAMax)
- Numbers of Events Above 20, 25, 35, 45, 55, and 60 dBA

To assess the cumulative effects of noise in the region, the noise effect from the various non-SGU sources was computed, summed, and added to the noise effect associated with the existing airport location as forecasted for 2010 and 2020 to form a basis of comparison for future years. The noise effect from non-SGU sources was summed and added to the noise effect associated with activity at the proposed replacement airport location for 2010 and 2020. The difference between the two resulting cases in the two future years was then determined and assessed for the significance of the resulting impact.

7.1.4 CUMULATIVE AIRCRAFT NOISE – OTHER 4(f)/303(c) LOCATIONS

While the impetus for the cumulative noise analysis was the requirement by the Court of Appeals that noise levels in Zion National Park be more extensively examined than had been the case with the Supplemental EA for the St. George Municipal Airport relocation, it was considered prudent to conduct similar analyses, to the extent feasible, on other 4(f)/303(c) locations within the region surrounding St. George. With the exception of Time Above Existing and Natural Ambient Noise levels, the same metrics above, as were assessed for Zion National Park, were evaluated for each of the 42 (see **Chapter Five, Table 5.2 and Table 5.3**) potentially noise-sensitive 4(f)/303(c) locations in the area. Because natural and existing noise levels had not been measured at these other locations, the existing L50 was used, as measured by Wyle Laboratories for the National Park Service (NPS), at 13 separate sites in Zion National Park in 2000. Those measurements were repeated three to four times during the year and allowed development of the ambient noise mapping of the park presented in **Chapter Six, Section 6.6.1**. At Little Black Mountain the difference between noise associated with the existing and replacement airport were sufficiently great that an additional measurement program was considered warranted (see **Chapter Six Section 6.6.3**). Further, rather than a computation of the Number of Events Above 60 dBA for properties administered by the NPS, the Number of Events Above 65 dBA were computed for each other noise-sensitive Federal and state property in the region.

7.1.5 CUMULATIVE AIRCRAFT NOISE – LITTLE BLACK MOUNTAIN

The Little Black Mountain Petroglyph Site lies near the south end of the proposed replacement airport, and so located, will be subject to numerous noise events from that facility. Noise levels there are not expected to reach the levels defining significant impact within the more urban environs surrounding the existing or replacement airport, so the noise contribution from other aviation sources is an important aspect of the consideration of the cumulative effect on the site. Metrics used to evaluate cumulative noise at Little Black Mountain are outlined in **Chapter Six, Section 6.6**, and are the same metrics used at other 4(f)/303(c) locations, with one exception. Since measurements were made at the Little Black Mountain to ascertain current noise levels there, the average $L50_{(existing)}$ of 20 dBA, as measured at three points within the site, was used to define the ambient level.

7.2 CUMULATIVE AIRCRAFT NOISE EXPOSURE ANALYSIS

7.2.1 COMPONENTS FOR DETERMINING INCREMENTAL INCREASES IN CUMULATIVE PROJECT EFFECTS

The components required for assessment of non-SGU contribution to the overall noise levels present within the region include the operations by aircraft other than those that are anticipated to use the St. George Municipal Airport, routes of flight over the area used by those aircraft, the time of day of their operation, and their levels of flight.

7.2.1.1 Aircraft Operations

Overflight operations include those aircraft that fly across the study area without stopping at area airports (or in the Las Vegas area). As described in **Appendix B**, these data were derived from information provided in radar files from the Los Angeles Air Traffic Control Center (ARTCC) and supplemented with information provided by the Reno Flight Service Station (FSS) for non-radar flights. The current and forecast overflight operations are provided in **Table 7.1**.

Operations from other airports in the study area and from Las Vegas area airports constitute the second component of the cumulative noise mix. These are addressed separately from overflights because they exhibit altitude changes over the study area that may have an effect on modeled noise levels. Operations that pass through the St. George area of study and associated with Las Vegas area airports are provided in **Table 7.2**, while other area airports are addressed in **Table 7.3**.

Table 7.1
CURRENT AND FORECAST OVERFLIGHT OPERATIONS

ACTIVITY CATEGORY	2003		2010 FORECAST		2020 FORECAST	
	ANNUAL	DAILY	ANNUAL	DAILY	ANNUAL	DAILY
Passenger	245,146	672	301,405	826	425,079	1,165
Air Cargo	2,405	7	2,956	8	4,170	11
Air Taxi	7,988	22	9,819	27	13,851	38
Business Jet	100,485	275	123,521	338	174,239	477
Military	4,407	12	5,417	15	7,642	21
Total	360,431	987	443,119	1,214	624,980	1,712

Source: Landrum & Brown analysis, 2004. See **Appendix B**.

Table 7.2
CURRENT AND FORECAST LAS VEGAS AREA AIRPORT OPERATIONS

ACTIVITY CATEGORY	2003		2010 FORECAST		2020 FORECAST	
	ANNUAL	DAILY	ANNUAL	DAILY	ANNUAL	DAILY
Passenger	93,655	265	96,810	265	122,522	336
Air Cargo	18	0	22	0	27	0
Air Taxi	1,330	3	1,261	3	1,596	4
Business Jet	10,966	33	12,078	33	15,285	42
Military	79	0	73	0	93	0
Total	106,047	302	110,243	302	139,523	382

Source: Landrum & Brown analysis, 2004. See **Appendix B**.

Regarding general aviation operations from regional airports and transiting the area, interviews with local airport pilots indicated little interest among them in flying in the vicinity of the park, owing to high altitudes and winds in the area. The information provided by pilots based at other facilities indicated a predominance of operations to airports in the Las Vegas or Salt Lake City areas, rather than to other airports in the study area, including St. George. While the information provided by users of the other area airports was not sufficient to provide an adequate basis to develop noise modeling characteristics to describe their location, altitudes, or numbers, the general data provided by pilots did indicate a preference to keep to low terrain and avoid high country. This preference would, in itself, suggest that the Zion area is generally avoided.

Table 7.3
CURRENT AND FORECAST OTHER AREA AIRPORT DAILY ITINERANT OPERATIONS

AREA AIRPORT	2003		2010 FORECAST		2020 FORECAST	
	ITINERANT	TO SGU	ITINERANT	TO SGU	ITINERANT	TO SGU
Cedar City Regional	30	6	45	7	63	7
Colorado City Municipal	7	3	8	3	19	4
Hurricane	12	1	15	2	18	2
Kanab Municipal	24	3	28	4	33	4
Mesquite	35	2	35	2	35	2
Panguitch Municipal	2	<1	3	<1	3	<1
Parowan	33	2	33	2	33	2
Total	143	18	167	19	203	20

Source: Landrum & Brown analysis, 2004. See **Appendix B** and **Appendix E**.

Military operations are generally accounted for by their inclusion in the radar data associated with flights at high altitude, or on approach or departure from the Las Vegas Area. In addition to these more common operations, a small number of other military aircraft pass through the study area on training missions. These missions are conducted at altitudes ranging from 500 to 8,000 feet above surface levels and are flown along Route IR126 or Route VR209 by aircraft from Dyess Air Force Base in Texas or Naval Air Station Lemoore in California. These flights total less than one flight per day, and come no closer to Zion National Park than three miles at the far north end of the park. The small number of operations and more particularly, the variety of flight altitudes used in various training missions, make it impractical to attempt to include these operations in the modeling of cumulative noise effects.

Finally, ATOs fly along routes over the study area, including several over Zion National Park, as they provide scenic flights to tourists interested in seeing the western landscape from the air. **Appendix C** details the results of a survey of ATOs flying over the study area that indicates that there are a limited number of flights that pass over the area and do not stop at SGU for rest or refueling. Air tour operations that do not stop at the airport currently account for an average of less than two flights per day over the study area, and are forecast to be less than three flights per day by 2020.

The aircraft types that were modeled to operate along each of these flight paths were drawn from the radar and local information sources discussed in **Appendix B**. That appendix also provides extensive information related to aircraft types used for each component of the cumulative noise conditions and their assignments to flight routes.

7.2.1.2 Flight Routes

Zion National Park Overflight Tracks

Flight routes flown by non-SGU aircraft that contribute to the cumulative noise condition are likely to occur any where above the study area. More specifically for Zion National Park, **Exhibit 7.1** indicates the Federal airways over the park, showing two jet routes (J60 and J100) intended for use by high altitude operations, and two victor airways (V8 and V235) intended for use by aircraft flying below 18,000 feet above sea level. Military route VR209 is indicated north of the park. Each airway is 10 miles wide and actual operations along the routes may occur any where within its boundary. These airways are used by pilots in flight planning and offer general guidance to flight locations. However, they are not the only routes flown by aircraft over the study area.

As indicated in **Chapter Six, Section 6.2**, and as presented in **Appendix B** and **Appendix C**, aircraft also fly in other areas. **Exhibit 7.2** presents a compilation of the flight tracks modeled over the Zion National Park area that are not related to operations at SGU. These flight paths, coupled with the flight tracks from the existing or replacement airport illustrated in **Chapter Six, Section 6.6.1.1**, indicate the many locations that overflights occur above the park. Of particular interest are a set of high altitude flight tracks that cross the park from north to

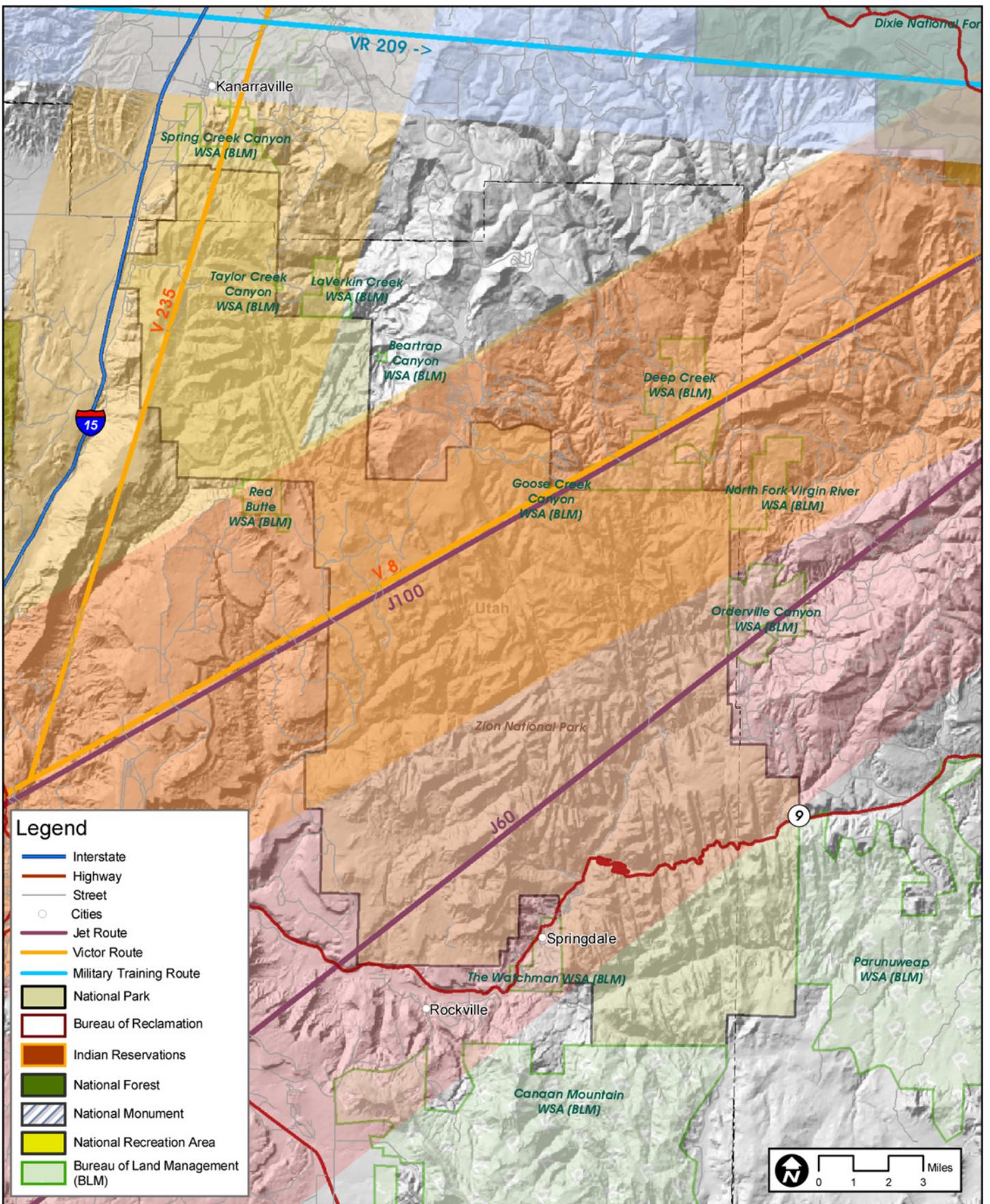
south that are used by flights between cities of the northwest (Seattle, Portland, Spokane, Salt Lake, etc.) and cities in Arizona (Tucson, Phoenix, Flagstaff, etc.). No Federal airway is indicated for use by these flights, yet they appear on radar as direct flight routes. A bundle of flight tracks across the northwest portion of the park are located along the V235 airway serving flights between Salt Lake City and the Las Vegas/Southern California areas. Flight tracks to and from the Las Vegas area, and by ATOs also are represented. As an exhibit of Integrated Noise Model (INM) flight tracks, it is important to note that these tracks are representative of tracks used by multiple operations, rather than by individual flights. Further, they are representative of the dispersion of flight operations across the broad areas depicted by an analysis of radar data.

Exhibit 7.3 indicates the flight paths that are reportedly used by ATOs who serve tourists to the area. Some of these operations do not use the existing, nor are expected to use, the replacement St. George Airport, but rather overfly the area from Las Vegas or other originating points. **Appendix C** discusses in detail the operations and flight tracks flown by these users.

Other DOT Section 4f/303(c) Property Overflight Tracks

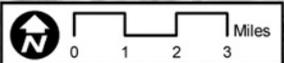
Overflights occur above the entire region under study. During the screening analysis of noise levels prepared to evaluate the necessity to conduct additional noise measurements and the adequacy of the preliminary area of effect associated with the proposed replacement airport, maps of overflights by traffic to and from the Las Vegas area airports, to other airports beyond the region, and within the region between St. George and other regional airports, as well as operations by ATOs were defined and considered. **Appendix B and Appendix C** provide illustrations and discussion of the construction of these flight paths and of the distribution of routes of flight throughout the region for each type of user evaluated during the noise assessment. **Exhibit 7.4** indicates the flight routes across the region used by aircraft flying to and from Las Vegas and eastern airports. The general paths of Las Vegas arrivals appear to generally follow the high altitude jet routes leading across the area from east to west or from the Salt Lake City area to the north, to Las Vegas to the southwest. Routes from Las Vegas to the east fly over the southern part of the area evaluated or along the jet route leading to the Salt Lake City area.

The paths used by aircraft crossing the region and not stopping in Las Vegas are indicated on **Exhibit 7.5**. They generally follow paths leading from the Phoenix area to the south toward Salt Lake City, beyond the north edge of the map, from the Las Vegas area (overflown by southern California traffic) toward Salt Lake City, and from the east toward southern California. Other, less prevalently used tracks are also reflected on the exhibit. The illustration clearly illustrates that there are few areas within the region that are not currently overflown by aircraft at high altitude. Flight paths used by ATOs within the area are illustrated on **Exhibit 7.3**.



Legend

- Interstate
- Highway
- Street
- Cities
- Jet Route
- Victor Route
- Military Training Route
- National Park
- Bureau of Reclamation
- Indian Reservations
- National Forest
- National Monument
- National Recreation Area
- Bureau of Land Management (BLM)



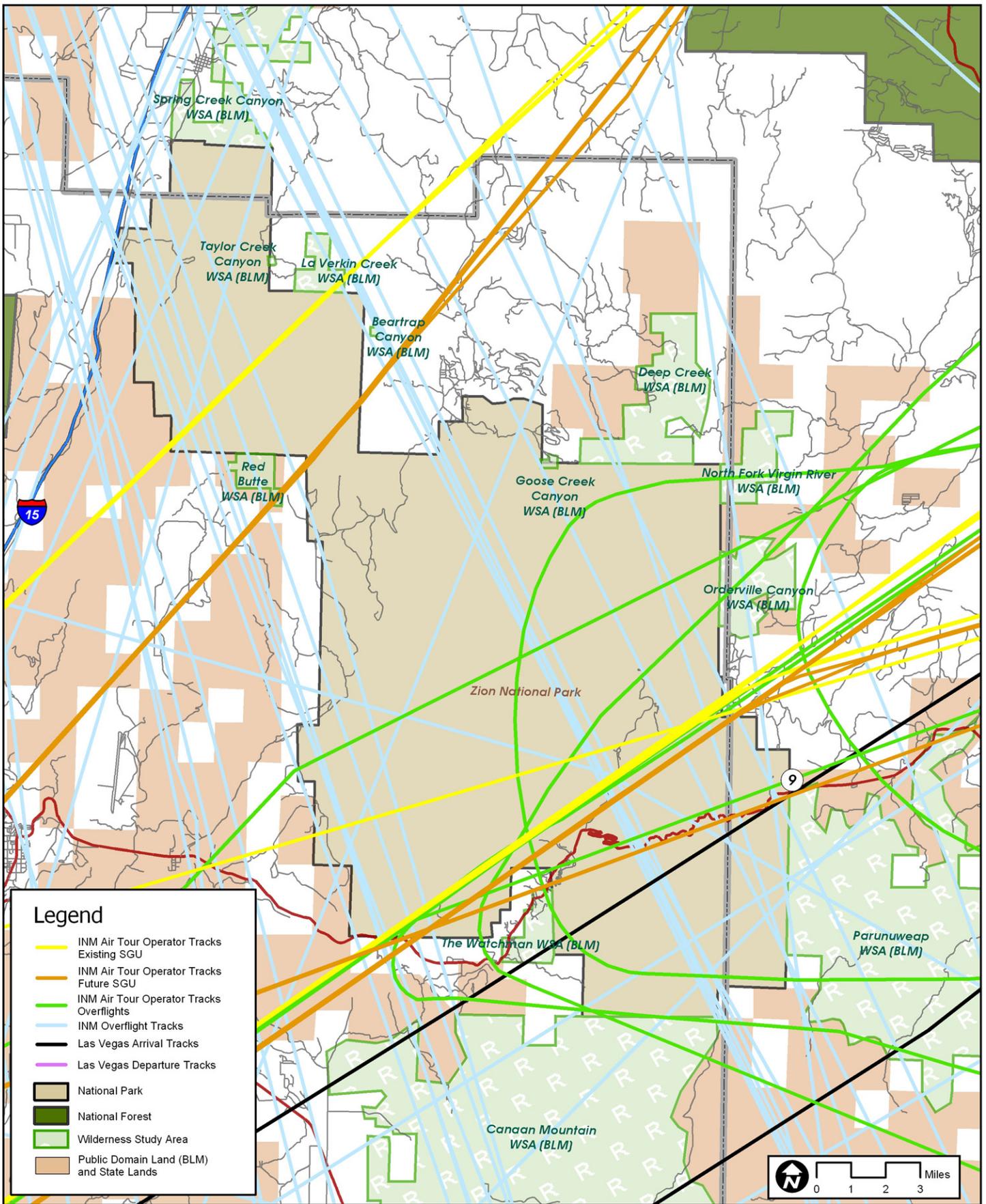
*St. George Municipal Airport
Environmental
Impact
Statement*



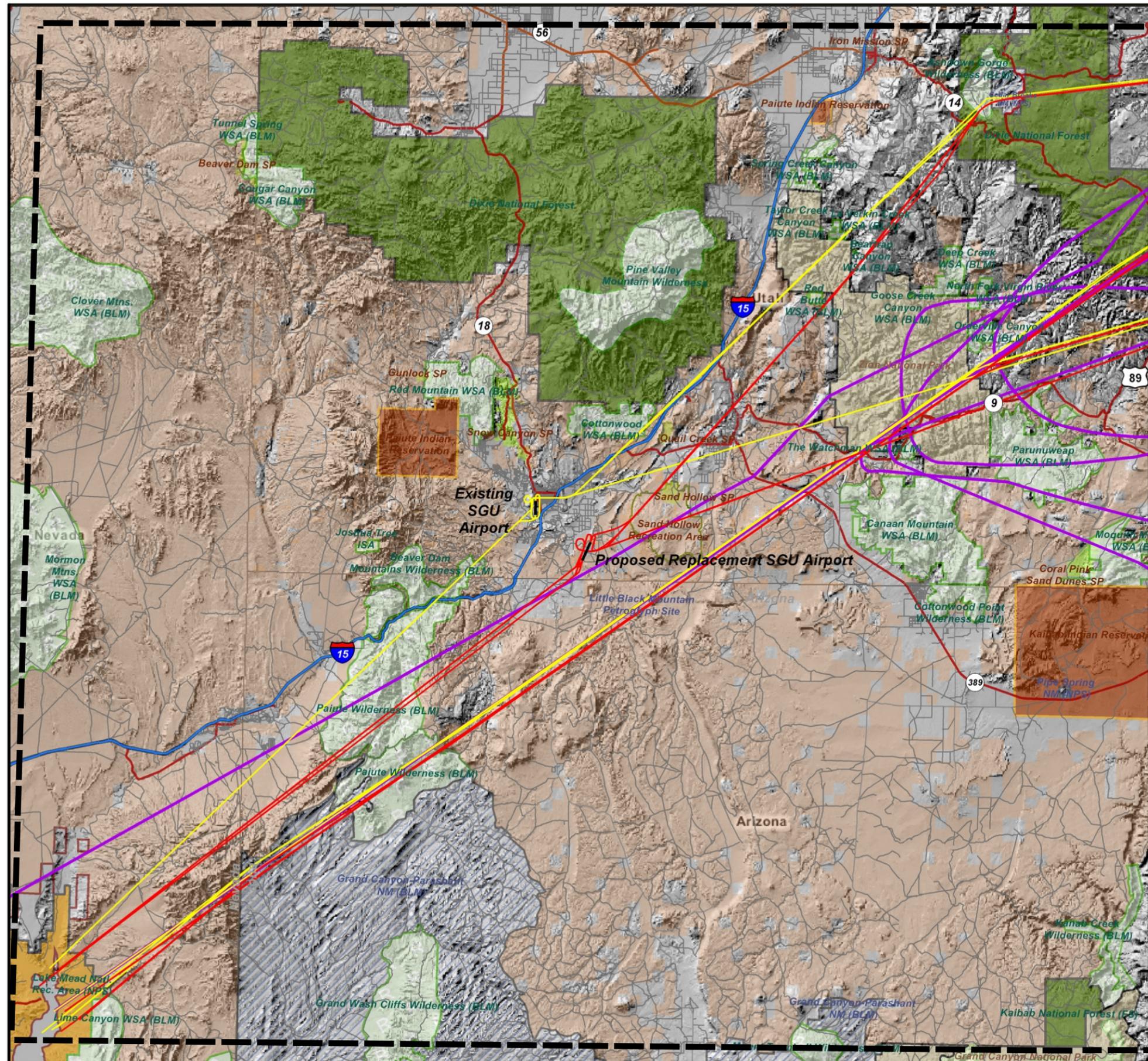
Zion National Park Federal Airways

**EXHIBIT
7.1**

06/09/2005
Prepared by: Landrum & Brown
Filename: Zion_Airspace



Non-SGU INM Flight Tracks Over Zion National Park

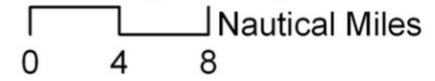


LEGEND

Highway	INM Air Tour Existing SGU
Interstate	INM Air Tour Replacement SGU
Street	INM Air Tour Operator Tracks Overflights
Cities	
National Park	
State Park (SP)	
Bureau of Reclamation	
Indian Reservations	
National Forest	
National Monument	
National Recreation Area	
Wilderness Area	
Wilderness Study Area	
Public Domain Land (BLM) and State Lands	
Initial Area of Investigation	

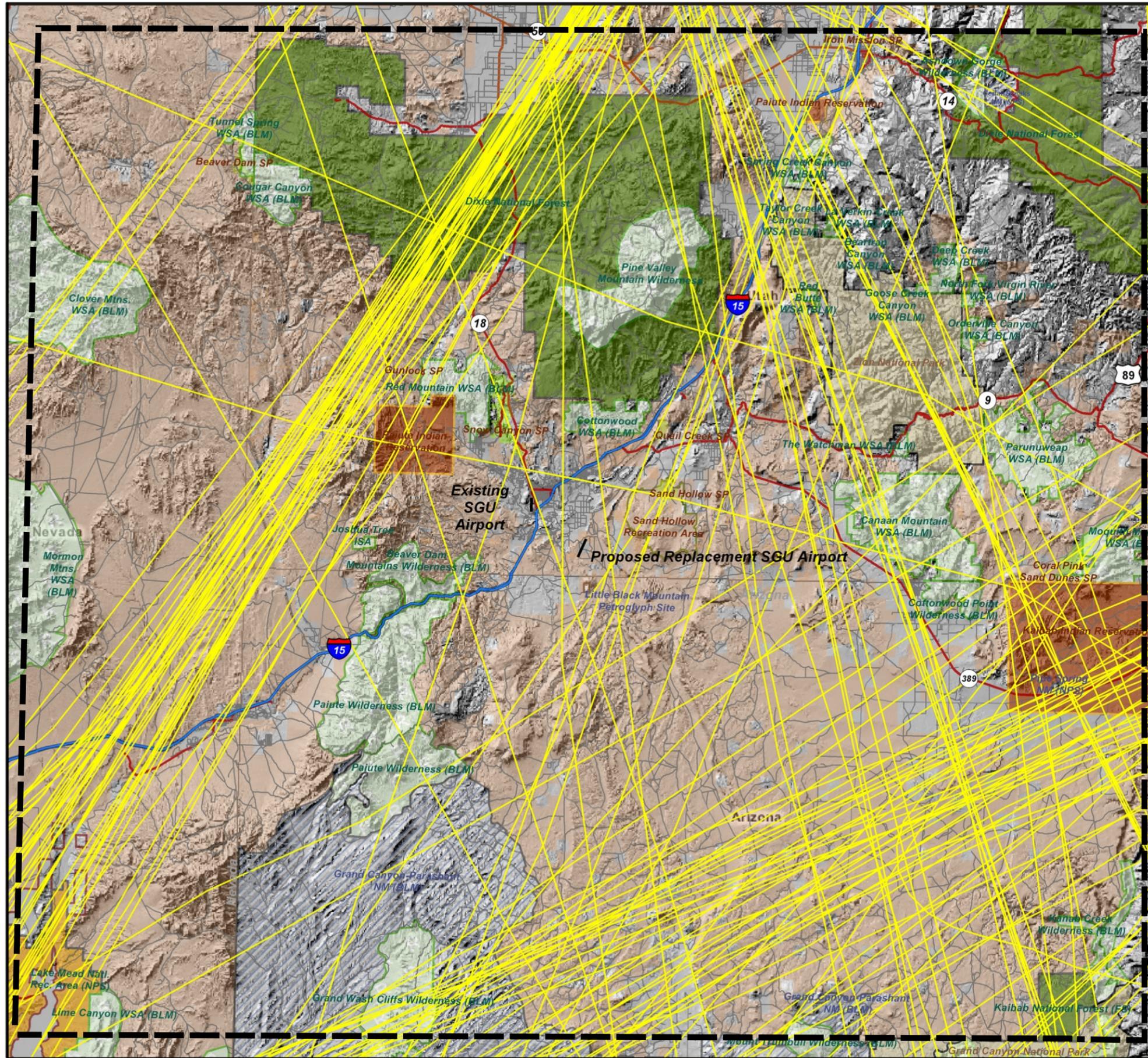
Source: Landrum & Brown analysis
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<http://atlas.utah.gov/>, Downloaded 2/04
 School and Institutional Trust Lands Administration (SITLA)
<http://atlas.utah.gov/>, Downloaded 2/04
 USGS Land Use and Land Cover (LULC)
<http://edc.usgs.gov/>, Downloaded 2/04

**Existing & Replacement
 SGU Air Tour Operator
 Flight Tracks -
 2003/2010/2020**

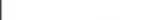


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	EXHIBIT
	7.3



LEGEND

-  Highway
-  Interstate
-  Street
-  Cities
-  National Park
-  State Park (SP)
-  Bureau of Reclamation
-  Indian Reservations
-  National Forest
-  National Monument
-  National Recreation Area
-  Wilderness Area
-  Wilderness Study Area
-  Public Domain Land (BLM) and State Lands
-  Initial Area of Investigation
-  INM Overflight Tracks

Source: Landrum & Brown analysis
 Base Map Compiled From:
 Utah Automated Geographic Reference Center (AGRC)
<http://atlas.utah.gov/>, Downloaded 2/04
 School and Institutional Trust Lands Administration (SITLA)
<http://atlas.utah.gov/>, Downloaded 2/04
 USGS Land Use and Land Cover (LULC)
<http://edc.usgs.gov/>, Downloaded 2/04

**Overflight
 Tracks
 2003/2010/2020**

0 4 8 Nautical Miles

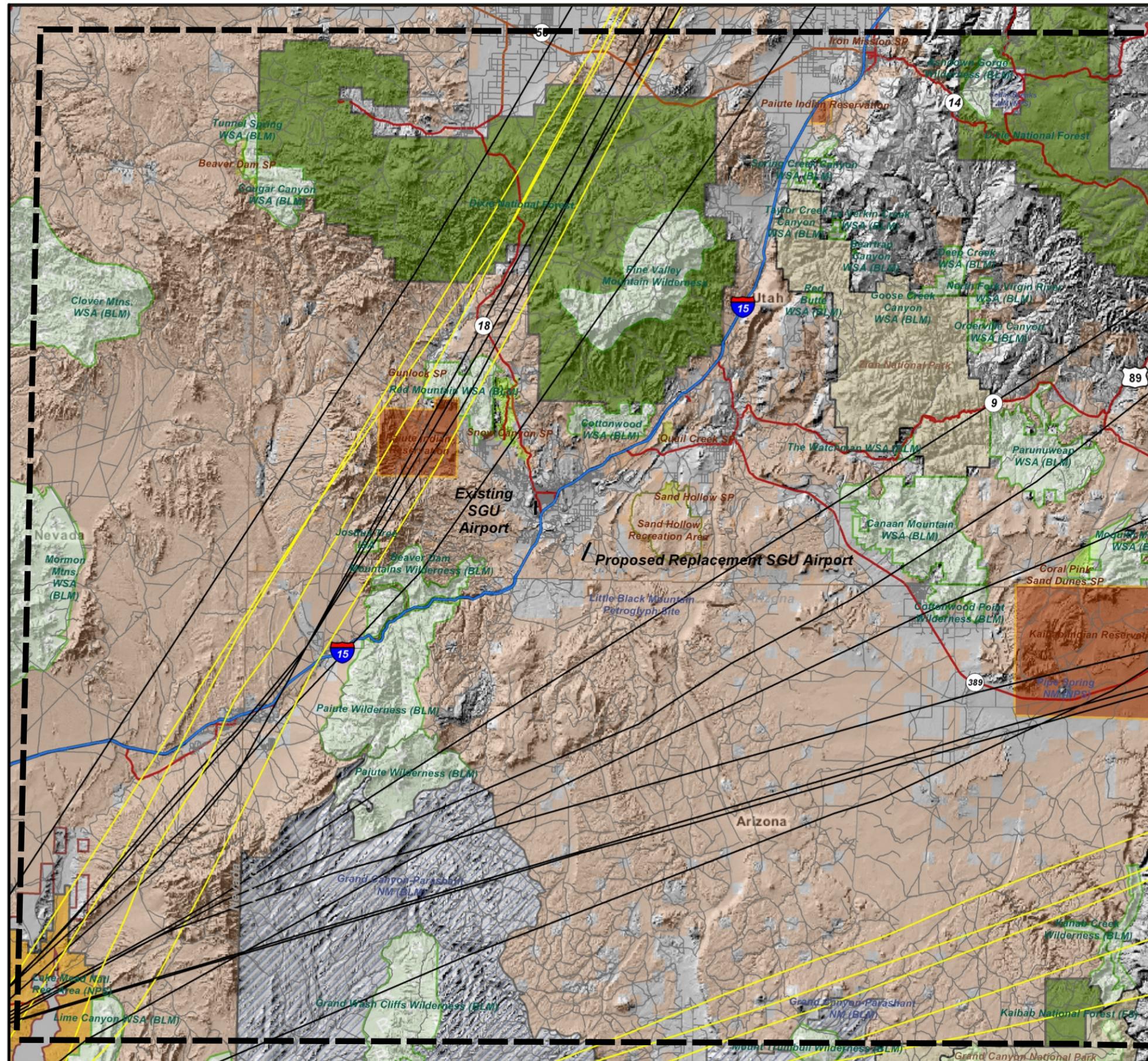
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NORTH

EXHIBIT

7.4



LEGEND

Highway	INM Arrival Overflight Tracks
Interstate	INM Departure Overflight Tracks
Street	
Cities	
National Park	
State Park (SP)	
Bureau of Reclamation	
Indian Reservations	
National Forest	
National Monument	
National Recreation Area	
Wilderness Area	
Wilderness Study Area	
Public Domain Land (BLM) and State Lands	
Initial Area of Investigation	

Source: Landrum & Brown analysis
 Base Map Compiled From:
 Utah Automated Geographic Reference Center (AGRC)
<http://atlas.utah.gov/>, Downloaded 2/04
 School and Institutional Trust Lands Administration (SITLA)
<http://atlas.utah.gov/>, Downloaded 2/04
 USGS Land Use and Land Cover (LULC)
<http://edc.usgs.gov/>, Downloaded 2/04

**Las Vegas Overflights
 Arrivals and
 Departures
 2003/2010/2020**

Nautical Miles

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NORTH

**EXHIBIT
 7.5**

7.2.1.3 Time of Day of Operation

The time of day that operations occur at the existing and proposed replacement airports at St. George are assumed for all operations to/from other airports within the region that are from/to St. George. The time of day for flights that cross the area to or from Las Vegas area or other airports beyond the region were accorded time-of-day percentages reflected by radar data and statistics gathered from the Los Angeles ARTCC. Nighttime (10:00 p.m. to 7:00 a.m.) traffic consists of approximately 3.8 percent of all overflight operations above the region. All ATOs are expected to occur during daytime (7:00 a.m. to 10:00 p.m. hours).

7.2.1.4 Flight Profiles

The amount of aircraft noise received on the ground is generally a function of the loudness of the source and the distance between the source and the receiver. The aircraft type and its mode of operation determine the loudness of the source. The distance from the source to the receiver is a function of both ground projected flight route and the altitude above the surface at which the aircraft is operated. Called the "slant-range distance" the true distance from source to receiver is the hypotenuse of a triangle formed by the ground distance from the source to the nearest point of the flight track, and the altitude of the source above the receiver elevation. By guidance, evaluations of changes to air traffic routes conducted by the FAA do not evaluate the effects of noise by aircraft that operate 10,000 feet or more above the surface or approaches that are 7,000 feet or more above the surface².

In contrast, this EIS has been required by the Federal court to assess the effects of cumulative aircraft noise in the environs of Zion National Park, associated with "air traffic near and over the Park, from whatever airport." Consequently, aircraft at all altitudes were assessed for this study. Therefore, descriptions of the altitudes used by aircraft as they crossed the study area were prepared for INM modeling, based on the altitudes of those aircraft derived from the available radar data and from information provided by survey respondents.

Radar data was separated into those flights that served the Las Vegas area and those flights that flew over Las Vegas. This separation allowed the definition of climb and descent profiles as the enroute aircraft departed or approached the Las Vegas area. Generally, across the study area, such aircraft passed through the eastern side of the study area at altitudes of approximately 30,000 feet and through the west side of the study area at altitudes of approximately 15,000 to 18,000 feet. These altitudes were judged to be representative of conditions now, or in the future with the potential construction of a supplemental

² Departure tracks below 10,000 feet must be evaluated for air traffic assessments when below 10,000 feet above the surface (FAA Order 1050.1E, paragraph 14.5e); arrivals between 3,000 and 7,000 feet above the surface by large jet aircraft are to be addressed for air traffic analyses under guidance provided by the Air Traffic Noise Screening Model (ATNS) User Manual, at 3-7.

commercial-service airport in southern Nevada. The change in altitude is important in the defining the 'slant-range' distance between an aircraft source and a receiver on the ground for the calculation of noise effects.

In contrast, overflights that did not terminate or originate in the Las Vegas area did not present substantial changes in altitude during their passage across the study area. Generally, these flights did not vary by more than 2,000 to 4,000 feet in altitude across the area, and were typically conducted at altitudes between 24,000 and 44,000 feet above sea level, although a limited number of profiles for flight tracks were defined that were at altitudes as low as 10,000 feet above the surface.

Profiles flown by ATOs are much nearer the surface than enroute overflights. These are discussed in **Appendix C**. Modeled profiles were developed for each flight track used by ATOs to represent the altitudes provided in surveys. Typical altitudes were 1,000 to 4,000 feet above the surface along their routes.

7.2.1.5 Sample of Cumulative Noise Levels Without Airport Contribution

Modeled operations for the noise analysis of this EIS capture all aircraft operations over the study area for which adequate information was available to rationally define numbers, types, locations, and altitudes of aircraft, regardless of source. Those operations that have nothing to do with SGU, whether in its current or proposed location constitute the underlying condition of aviation noise in the area. Computations of the cumulative noise were made throughout the study area, in Zion National Park, at Little Black Mountain and within 45 other noise-sensitive park, cultural, forest, and wilderness sites. Cumulative noise contribution is reported in detail for all such locations in **Appendix B**.

Table 7.4 presents a sample of the underlying aviation noise levels resulting from INM noise modeling at the 13 NPS measurement sites in Zion National Park and five sites located under flight paths to the northeast in Cedar Breaks National Monument, southeast in Pipe Springs National Monument, north in Pine Valley Mountain Wilderness, and southwest in the Paiute Wilderness, respectively, to capture a sampling of cumulative noise levels across the region. The cumulative levels are projected for the year 2020, however SGU noise is not included. The summary tables presented in **Chapter Six, Section 6.6.1.2, Section 6.6.2.2, and Section 6.6.3.2** provide greater detail about the cumulative noise from both airport and other aviation sources.

The table indicates that underlying aviation noise levels throughout the area are similar for all cumulative metrics. This effect is largely the result of aircraft traffic passing over the area at altitudes 10,000 feet or more above the surface terrain.

Table 7.4
REPRESENTATIVE UNDERLYING AVIATION NOISE EFFECTS – 2020
WITHOUT AIRPORT CONTRIBUTIONS

SITE	GRID ID	GRID GROUP	CUMULATIVE EFFECTS - 2020					EVENTS ABOVE 25 DBA
			I	J	DNL	Leq ₍₂₄₎	Leq _(day)	
Zion - Chinle Trail	CHINLE	N/A	1	1	34.7	33.2	35.1	346
Zion - Crazy Quilt Mesa	CRZQLT	N/A	1	1	34.6	33.0	34.8	325
Zion - East Rim Mesa Trail	EASTRM	N/A	1	1	34.4	32.9	34.8	301
Zion - Hop Valley Trail	HOPVAL	N/A	1	1	34.2	33.1	35.0	244
Zion - Kolob Canyon Overlook	KOLOBC	N/A	1	1	34.0	32.8	34.7	251
Zion - Lava Point Lookout	LAVAPT	N/A	1	1	34.0	32.9	34.7	231
Zion - Upper Kolob Terrace Road	LCREEK	N/A	1	1	34.2	33.1	35.0	238
Zion - Tabernacle Dome area	LFRKTD	N/A	1	1	35.3	34.2	36.1	296
Zion - Lower Kolob Terrace Road	NCREEK	N/A	1	1	35.3	34.1	36.0	299
Zion - Parunweap Canyon	PRWEAP	N/A	1	1	34.3	32.6	34.4	356
Zion - Scouts Lookout	SCOUTS	N/A	1	1	34.2	32.8	34.7	294
Zion - Wildcat Trail	WILDCT	N/A	1	1	34.9	33.8	35.6	258
Zion - Zion Headquarters	ZHQ	N/A	1	1	34.2	32.6	34.5	347
Cedar Breaks National Monument	PAIUTEW3	3	4	3	37.5	35.8	37.0	379
Little Black Mountain	NEWGRID5	18	1	1	34.9	33.6	35.5	315
Paiute Wilderness Area	PAIUTE14	15	3	3	30.9	29.1	31.0	207
Pine Valley Mountain Wilderness	PINEV10	10	4	3	31.9	30.4	32.2	252
Pipe Springs National Monument	KAIBAB17	17	4	2	34.6	33.5	35.3	309

Note: Detailed information for all grid points evaluated may be found in **Appendix B**.

Source: Landrum & Brown analysis, 2004-5.

Measurements were addressed in **Chapter Six, Section 6.6** to introduce the concept of ambient noise for a discussion of airport impacts on the Section 4f/303(c) properties.

7.2.3 ANALYSIS OF CUMULATIVE NOISE EFFECTS IN ZION NATIONAL PARK

This section considers the levels of aircraft noise in and around Zion National Park associated with the cumulative aircraft activity in the region as discussed in earlier sections of this chapter. Cumulative noise also includes the landings and takeoffs at SGU based on current and forecast future conditions with and without the Proposed Replacement Airport.

Chapter Six, *Environmental Consequences*, in conjunction with the previous sections of this chapter have presented an overview of the input data and methods used for the noise analysis at Zion National Park. The following sections present the results of the analysis for the cumulative aircraft noise as forecast for the years 2010 and 2020. The noise metrics presented are the same as those presented in **Chapter Six** for the airport-only noise analysis and are as follows:

- Day-Night Sound Level (DNL)
- Equivalent Noise Levels for 24-hours and daytime hours
- Time (in minutes) of exposure to noise above L50 ambient (existing) levels
- Time (in minutes) of exposure to noise above L50 ambient (natural) levels
- Single Event Maximum Noise Level (L_{Amax}), leading to:
 - Number of events contributing to time above 20 dBA
 - Number of events contributing to time above 25 dBA
 - Number of events contributing to time above 35 dBA
 - Number of events contributing to time above 45 dBA
 - Number of events contributing to time above 55 dBA
 - Number of events contributing to time above 60 dBA

7.2.3.1 Cumulative Summary Metrics

The cumulative DNL, $Leq_{(24)}$, and $Leq_{(day)}$ metrics were computed for numerous grid point locations within Zion National Park. Details on all locations within the park are reported in **Appendix B** while the results for selected grid points are summarized in **Table 6.25 through Table 6.27** presented in **Section 6.6 of Chapter Six**. **Table 7.5 through Table 7.7** present a summary of the minimum, maximum, and average cumulative noise values over the entire Zion property for the three summary metrics in each year of interest. These tables also include summary data on the change in cumulative noise levels associated with the proposed replacement airport.

As the tables indicate, the proposed replacement airport would increase the DNL by a maximum 0.4 dBA or less throughout the property for either year of assessment. Many of the locations have cumulative DNLs less than the natural or existing L50 ambient levels in the park.

The 24-hour Leq metric is similar to the DNL, but does not carry a penalty for night operations. For this metric, the tables indicate that the proposed airport would increase the 24-hour Leq by a maximum of 0.3 dBA or less throughout the property with average changes tending toward 0.0 dBA. Again, many of the locations have cumulative 24-hour $Leqs$ less than the natural or existing L50 ambient levels in the park.

Table 7.5
Noise Level Summary at Zion National Park
Cumulative DNL - 2010/2020
St. George Municipal Airport EIS

		2010									2020								
		Existing			Replacement			Change			Existing			Replacement			Change		
		Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
Existing Ambient	95	34.1	31.3	33.1	34.2	31.3	33.2	0.3	-0.2	0.0	35.6	32.8	34.5	35.6	32.8	34.6	0.4	-0.2	0.0
Natural Ambient	95	34.1	31.3	33.1	34.2	31.3	33.1	0.3	-0.2	0.0	35.6	32.8	34.5	35.6	32.8	34.6	0.4	-0.2	0.0

Table 7.6
Noise Level Summary at Zion National Park
Cumulative Leq(24) - 2010/2020
St. George Municipal Airport EIS

		2010									2020								
		Existing			Replacement			Change			Existing			Replacement			Change		
		Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
Existing Ambient	95	32.8	30.0	31.8	32.8	30.0	31.8	0.3	-0.3	0.0	34.3	31.5	33.2	34.3	31.5	33.2	0.3	-0.9	0.0
Natural Ambient	95	32.8	30.0	31.7	32.8	30.0	31.7	0.3	-0.3	0.0	34.3	31.5	33.2	34.3	31.5	33.2	0.3	-0.9	0.0

Table 7.7
Noise Level Summary at Zion National Park
Cumulative Leq(day) - 2010/2020
St. George Municipal Airport EIS

		2010									2020								
		Existing			Replacement			Change			Existing			Replacement			Change		
		Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
Existing Ambient	95	34.7	31.9	33.6	34.7	31.9	33.6	0.3	-0.3	0.0	36.2	33.4	35.1	36.2	33.4	35.1	0.3	-0.9	0.0
Natural Ambient	95	34.7	31.9	33.6	34.7	31.9	33.6	0.3	-0.3	0.0	36.2	33.4	35.1	36.2	33.4	35.1	0.3	-0.9	0.0

The $Leq_{(day)}$ metric reports the average noise level for that period between 7:00 a.m. and 10:00 p.m. and is intended as a surrogate to represent the hours for day-use park visitors. Those visitors who participate in overnight programs are more affected by the 24-hour Leq or DNL levels, but the majority of the park visitor activity takes place in the morning, afternoon, and early evening hours. As the summary tables indicate, the proposed airport would increase the $Leq_{(day)}$ by a maximum of 0.3 dBA or less throughout the property with average changes tending toward 0.0 dBA. Again, many of the locations have cumulative $Leq_{(day)}$'s less than the natural or existing L50 ambient levels in the park. **Exhibit 7.6** illustrates the distribution of change of $Leq_{(day)}$ anticipated for the year 2020 within the park.

7.2.3.2 Cumulative Time Above Ambient (existing and natural)

Of potential interest to the users of Zion National Park is the change in the amount of time that locations in the park will be exposed to aircraft noise from all sources above ambient levels. Again, the details on all locations within the park are reported in **Appendix B** and the results for selected grid points are summarized in **Table 6.28** presented in **Section 6.6** of **Chapter Six**.

Table 7.8 presents summary statistics for the both the Time (in Minutes) Above the $L50_{(existing)}$ and the Time Above the $L50_{(natural)}$ ambient experienced throughout the grid points analyzed for Zion National Park for both years of analysis. **Exhibit 7.7** and **Exhibit 7.8** present the changes in Time Above the existing and natural ambient level within the park for the year 2020. Further illustrations and tables are available in **Appendix B** that detail all other grid points within the park for each year and map 2010 conditions.

The data presented in the summary table indicates that operations at the proposed replacement airport would result in small increases in the minutes that various locations are exposed to noise above the natural and existing L50 ambient levels. The maximum increase present in the data was found for a site located approximately 1.5 miles west of Scouts Lookout, where the time above the natural ambient level is forecast to increase by slightly more than five minutes during the average day in 2020. In general, across the park in locations with low existing ambient noise levels, the replacement airport would increase the time of exposure to aircraft noise above the existing ambient by one percent or less. The same findings are true of the natural ambient condition.

7.2.3.3 Number of Events Above Selected Noise Levels

Also of potential interest to the users of Zion National Park is the change in the number of events above specific noise thresholds that are projected to occur in the future with the replacement airport. This cumulative Number of Events Above metric is reported for all grid points in **Appendix B** with the results for selected grid points presented in **Table 7.9** and **Table 7.10**. **Table 7.11**

presents the maximum number of events forecast to exceed a range of noise levels throughout the Zion National Park for both 2010 and 2020. In addition, the maximum, minimum, and average L_{Amax} values are presented for the property.

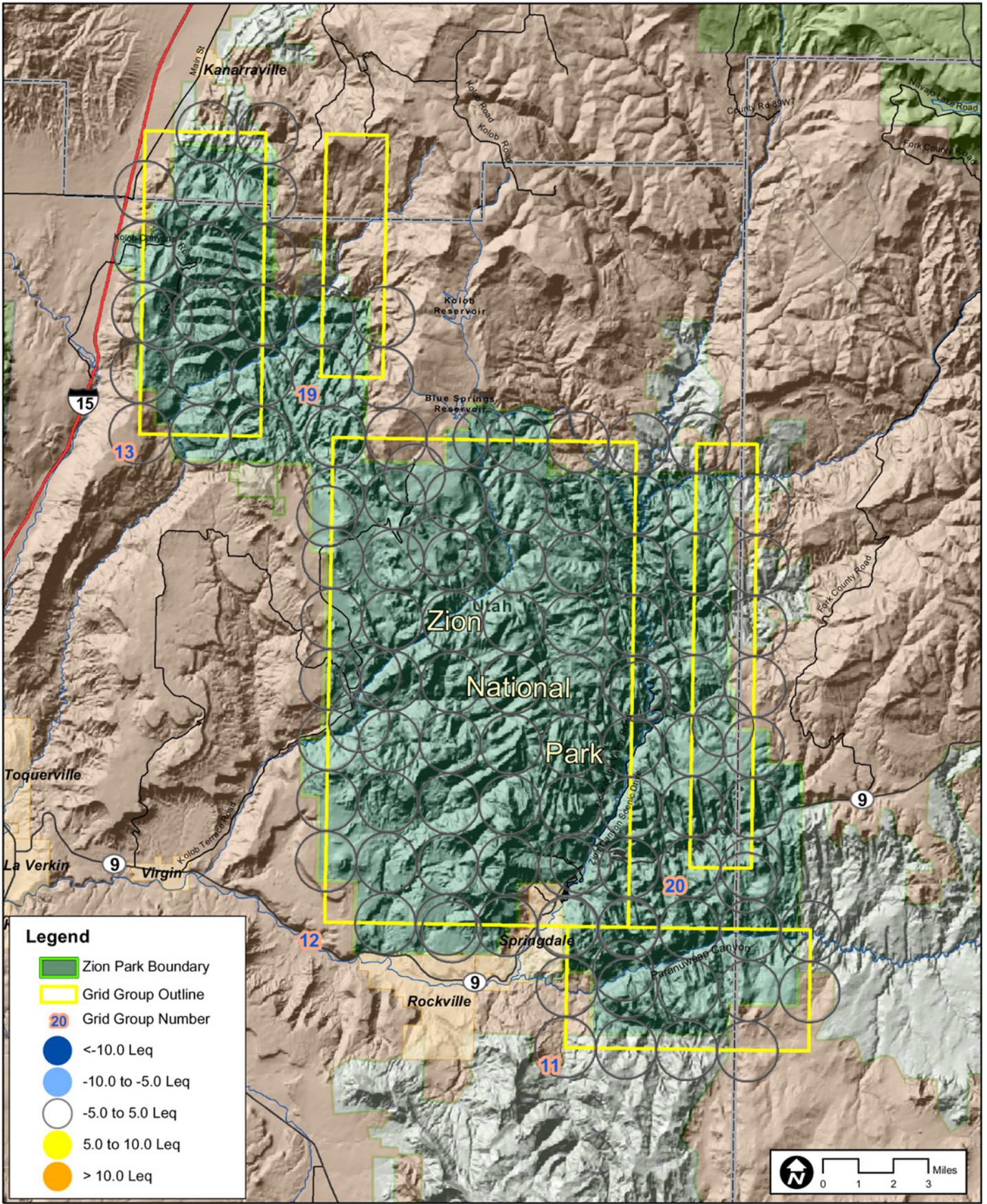
As the table indicates, the maximum change in the number of events above various noise levels resulting from the replacement airport is generally very small as compared to the cumulative number of events at each level. This highlights the relatively small contribution that the SGU airport-only events make to the overall cumulative noise levels in the area. There would be no change in L_{Amax} values resulting from the replacement airport throughout the park for both future years, thus indicating that the loudest aircraft events are not specific to either the existing or replacement airport traffic.

Two series of six exhibits each are provided on **Exhibit 7.9 through Exhibit 7.20** which illustrate the changes anticipated to the number of events above each of the selected noise levels (20, 25, 35, 45, 55, and 60 dBA) presented in **Table 7.9 and Table 7.10**. Above the L_{Amax} of 60 dBA, the effect of change generally disappears in the park.

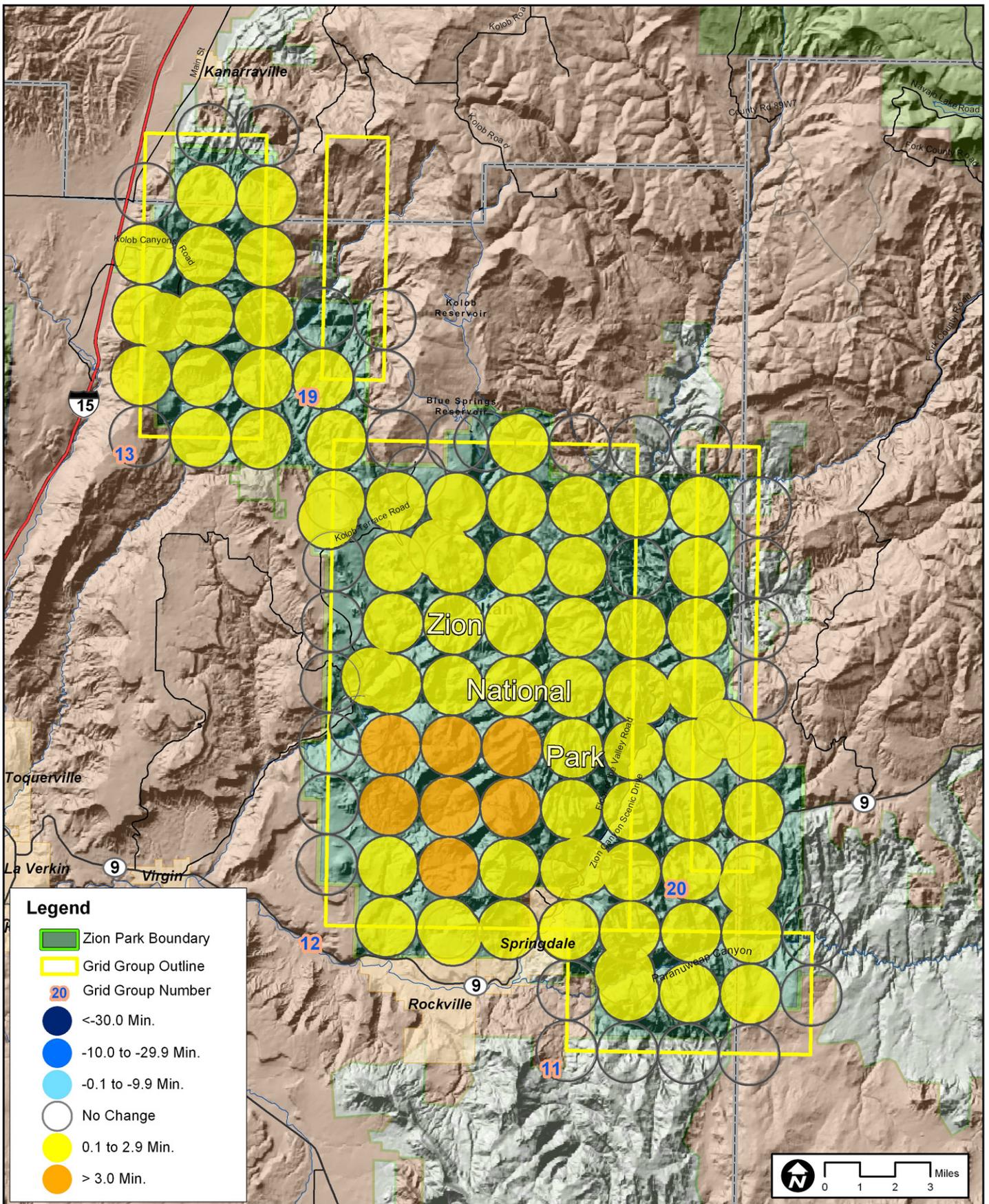
7.2.3.4 Discussion of Audibility Metric

Audibility (Percent Time Audible) is a key metric used by the NPS for soundscape management and analysis of impacts in units of the National Park System, together with Percent Time Above Natural Ambient (unweighted) and Maximum dBA (i.e., L_{Amax}). Audibility differs somewhat from the A-weighted Time Above Ambient (TAA) descriptor in that it makes use of frequency-based 1/3 octave band sound data. Audibility may show that an attentive listener can hear or detect an intrusive noise source at decibel levels lower than the overall natural or existing ambient (A-weighted). This is due to the fact that the human ear can discern sounds at varying decibel levels between different frequencies. This is why one sound does not necessarily mask a second even if the first is louder.

For a number of years, FAA and NPS have worked to develop a computer model that can be used to calculate aircraft audibility in national parks. After some time of making enhancements to separate models, both agencies have agreed to accept the recommendations of the Federal Interagency Committee on Aviation Noise (FICAN), made on January 27 and formally provided in writing on May 12, 2005, to use the INM Version 6.2 (INM 6.2) for aircraft audibility. INM 6.2 is in the final stage of beta testing prior to public release in the near future, and FAA and NPS are refining the ambient data collection protocol that is a critical part of audibility calculations. The INM 6.2 audibility descriptor will be used in future proposals, in addition to other appropriate supplemental metrics, to model aircraft related impacts on NPS properties, as appropriate to project circumstances and potential severity of impacts which will be considered during project scoping and in consultation with NPS.



**Change in 2020 Noise Levels
 Leq(D) Above Natural Ambient
 with Proposed
 Replacement Airport**



Legend

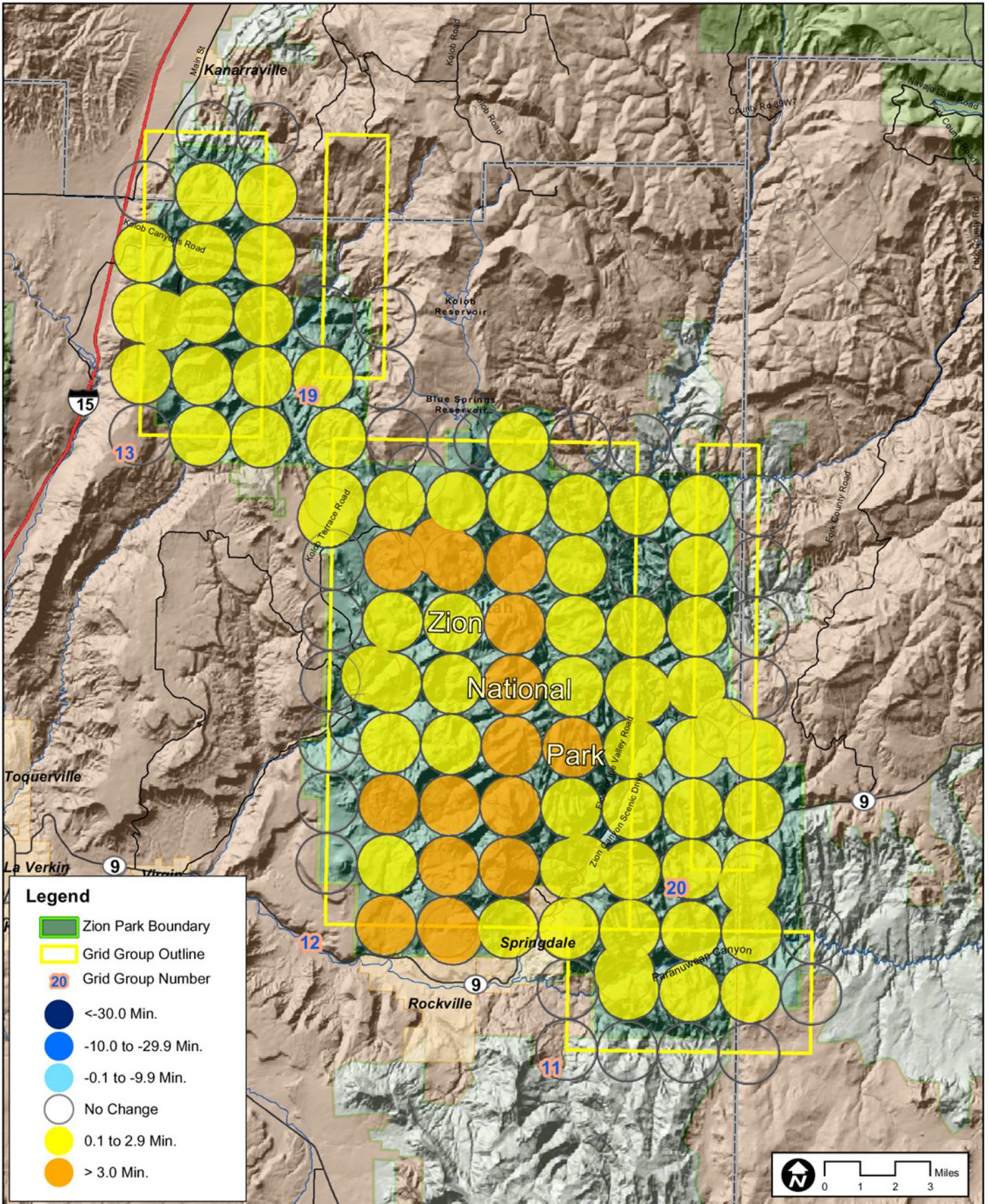
- Zion Park Boundary
- Grid Group Outline
- Grid Group Number
- <math>< -30.0 \text{ Min.}</math>
- $-10.0 \text{ to } -29.9 \text{ Min.}$
- $-0.1 \text{ to } -9.9 \text{ Min.}$
- No Change
- $0.1 \text{ to } 2.9 \text{ Min.}$
- $> 3.0 \text{ Min.}$

*St. George Municipal Airport
Environmental
Impact
Statement*



**Change in Time Above
Existing Ambient - 2020
with Replacement Airport**

EXHIBIT
7.7



Change in Time Above Natural Ambient - 2020 with Replacement Airport

Table 7.8
Noise Level Summary at Zion National Park
Cumulative Time Above Ambient (minutes/day) - 2010/2020
St. George Municipal Airport EIS

	# of Pts	2010									2020								
		Existing			Replacement			Change			Existing			Replacement			Change		
		Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
Existing Ambient	95	295.5	1.5	131.8	296.7	1.5	132.5	1.7	-0.1	0.7	404.4	2.3	181.6	406.7	2.3	183.3	4.1	0.0	1.7
Natural Ambient	95	399.3	1.6	168.6	400.8	1.6	169.4	2.0	-0.3	0.8	546.8	2.3	232.2	549.7	2.3	234.3	5.1	0.0	2.2

Table 7.9.Zion (From Table B.47)
Noise Level Changes - Number of Events Above LMax Thresholds 2010
St. George Municipal Airport Only
Zion National Park

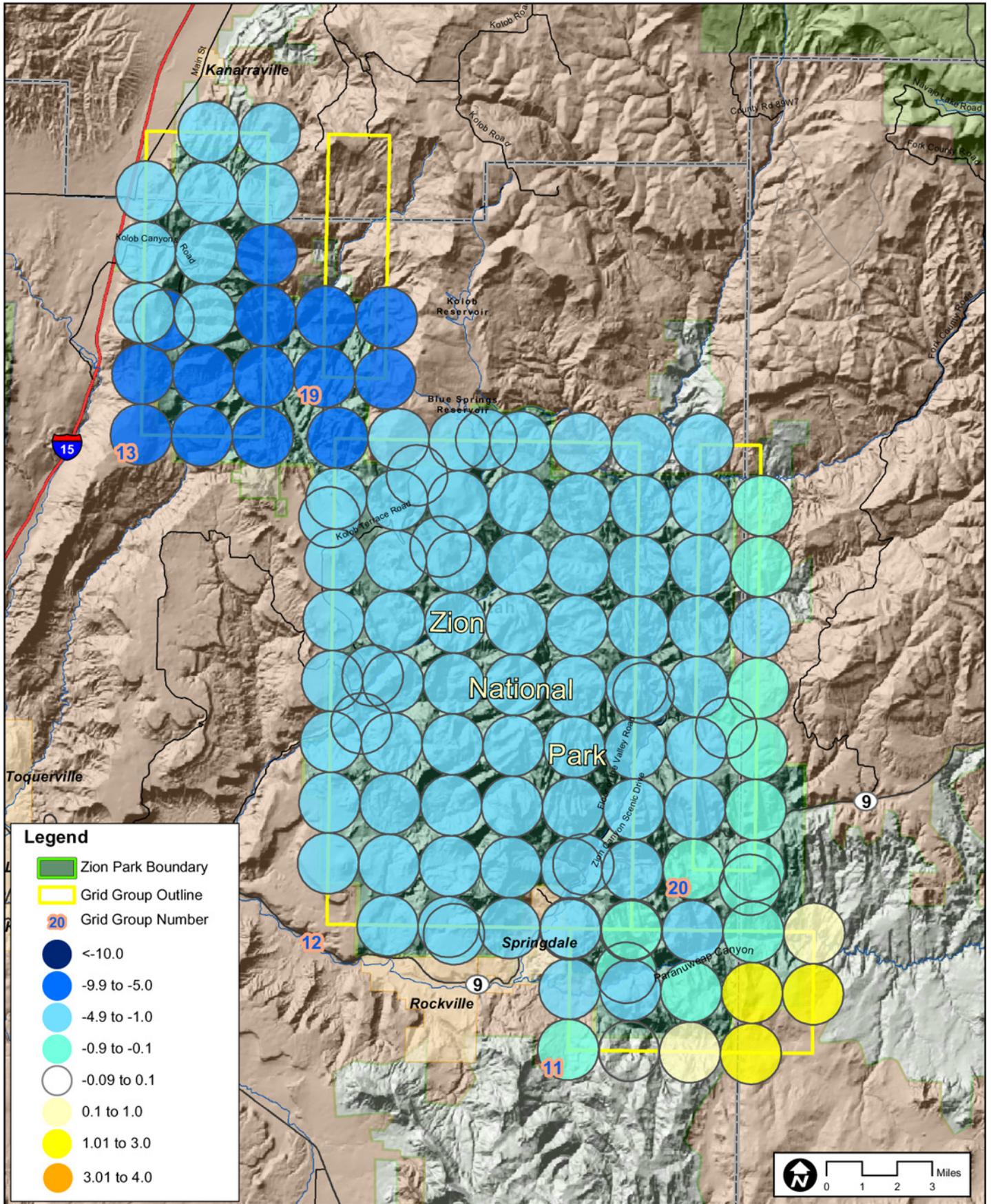
Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010											
				20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	60 dBA		20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	60 dBA		20 dBA	%	25 dBA	%	35 dBA	%	45 dBA	%	55 dBA	%	60 dBA	%
Zion National Park																													
HOPVAL	1	1	74.7	261.0	181.6	96.0	16.9	2.2	1.2	74.7	256.9	177.8	94.2	16.9	2.2	1.2	0.0	-4.0	-1.5%	-3.8	-2.1%	-1.8	-1.9%	0.0	0.3%	0.0	0.0%	0.0	0.0%
LFRKTD	1	1	70.6	285.0	219.4	105.3	15.9	1.7	1.2	70.6	281.6	218.4	105.6	16.1	1.7	1.2	0.0	-3.4	-1.2%	-1.0	-0.5%	0.3	0.3%	0.2	1.1%	0.0	0.2%	0.0	0.0%
WILDCT	1	1	72.4	260.5	191.0	82.9	19.0	1.9	1.2	72.4	257.0	189.2	83.8	19.1	1.9	1.2	0.0	-3.5	-1.3%	-1.7	-0.9%	0.9	1.1%	0.1	0.3%	0.0	0.0%	0.0	0.0%
ZION11	2	3	69.3	320.2	258.8	123.1	31.8	2.2	1.5	69.3	319.4	259.4	123.1	31.8	2.2	1.5	0.0	-0.9	-0.3%	0.7	0.3%	0.0	0.0%	0.1	0.2%	0.0	0.0%	0.0	0.0%
ZION11	4	3	70.8	333.1	244.7	127.4	26.0	2.2	1.1	70.8	332.3	245.2	127.5	26.0	2.2	1.1	0.0	-0.8	-0.2%	0.6	0.2%	0.1	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%
ZION12	1	5	70.5	285.7	211.0	105.4	15.5	3.4	1.3	70.5	282.4	209.8	104.9	15.7	3.4	1.3	0.0	-3.4	-1.2%	-1.2	-0.6%	-0.5	-0.5%	0.2	1.4%	0.0	0.1%	0.0	0.0%
ZION12	1	9	75.1	252.7	176.0	86.9	14.8	1.9	1.0	75.1	247.6	171.4	84.8	14.9	1.9	1.0	0.0	-5.1	-2.0%	-4.6	-2.6%	-2.0	-2.3%	0.1	0.4%	0.1	3.1%	0.1	5.8%
ZION12	2	4	71.1	292.7	222.2	109.4	19.2	2.4	1.1	71.1	289.7	220.4	110.5	19.8	2.4	1.1	0.0	-3.0	-1.0%	-1.8	-0.8%	1.1	1.0%	0.6	2.9%	0.0	0.4%	0.0	0.0%
ZION12	2	8	74.8	254.8	178.0	90.0	19.7	2.1	1.2	74.8	251.2	175.3	89.8	19.7	2.1	1.2	0.0	-3.6	-1.4%	-2.7	-1.5%	-0.2	-0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%
ZION12	3	4	72.8	300.0	223.3	101.1	18.8	2.0	1.1	72.8	297.3	222.0	102.2	19.8	2.0	1.1	0.0	-2.6	-0.9%	-1.3	-0.6%	1.2	1.1%	0.9	5.0%	0.0	0.0%	0.0	0.0%
ZION12	3	8	73.9	252.1	176.1	78.4	16.0	1.8	1.2	73.9	248.6	174.3	78.7	16.2	1.8	1.2	0.0	-3.5	-1.4%	-1.8	-1.0%	0.3	0.3%	0.2	1.3%	0.0	-0.1%	0.0	0.0%
ZION12	4	3	75.0	306.2	239.6	122.1	26.5	2.7	1.0	75.0	304.3	239.1	123.1	27.1	2.7	1.0	0.0	-1.9	-0.6%	-0.5	-0.2%	1.0	0.8%	0.6	2.1%	-0.1	-2.4%	-0.1	-6.4%
ZION12	4	7	70.8	262.5	203.4	76.5	14.8	1.8	1.0	70.8	260.1	201.8	77.2	14.9	1.8	1.0	0.0	-2.4	-0.9%	-1.6	-0.8%	0.7	0.9%	0.1	0.5%	0.0	0.0%	0.0	0.0%
ZION12	5	2	72.4	316.7	255.3	123.6	30.0	2.3	1.0	72.4	314.8	255.6	124.2	30.1	2.4	1.0	0.0	-1.9	-0.6%	0.2	0.1%	0.6	0.5%	0.1	0.2%	0.1	4.1%	0.0	2.7%
ZION12	5	6	72.1	287.0	201.0	78.7	17.6	1.9	1.2	72.1	285.2	200.6	79.5	17.7	1.9	1.2	0.0	-1.8	-0.6%	-0.4	-0.2%	0.8	1.0%	0.1	0.4%	0.0	0.0%	0.0	0.0%
ZION12	6	2	71.4	315.8	255.0	117.5	31.4	2.3	1.4	71.4	314.3	255.9	117.6	31.5	2.3	1.4	0.0	-1.5	-0.5%	0.9	0.4%	0.1	0.1%	0.1	0.3%	0.1	2.9%	0.0	1.3%
ZION12	6	6	73.2	292.4	200.3	76.6	14.5	2.4	1.1	73.2	290.8	199.7	77.9	14.6	2.4	1.1	0.0	-1.6	-0.6%	-0.6	-0.3%	1.3	1.7%	0.2	1.1%	0.0	0.0%	0.0	0.0%
ZION13	1	3	70.8	260.5	199.6	104.7	21.6	3.4	0.7	70.8	255.8	194.5	99.3	19.9	3.4	0.7	0.0	-4.8	-1.8%	-5.1	-2.5%	-5.4	-5.2%	-1.7	-8.0%	0.0	0.0%	0.0	0.0%
ZION13	2	3	70.7	261.1	192.8	88.4	14.7	3.5	1.0	70.7	256.2	186.0	84.6	14.2	3.5	1.0	0.0	-4.8	-1.8%	-6.8	-3.5%	-3.8	-4.3%	-0.5	-3.4%	0.0	0.0%	0.0	0.0%
ZION13	3	2	72.6	262.2	192.9	85.0	13.6	1.8	1.1	72.6	256.3	187.4	82.5	13.6	1.7	1.0	0.0	-5.9	-2.2%	-5.5	-2.8%	-2.5	-2.9%	-0.1	-0.4%	-0.1	-3.2%	-0.1	-5.3%
ZION19	1	1	73.7	255.0	181.4	80.0	14.9	1.9	1.1	73.7	249.1	176.4	77.6	15.0	1.9	1.1	0.0	-5.9	-2.3%	-5.0	-2.7%	-2.3	-2.9%	0.1	0.6%	0.0	0.0%	0.0	0.0%
ZION20	1	3	74.2	310.5	219.5	107.7	19.3	2.5	1.2	74.2	309.1	220.7	108.6	19.5	2.5	1.2	0.0	-1.4	-0.5%	1.2	0.5%	1.0	0.9%	0.2	0.8%	0.0	0.0%	0.0	0.0%
ZION20	1	7	71.5	252.7	170.4	64.6	10.3	2.0	1.1	71.5	251.1	171.8	65.4	10.3	2.0	1.1	0.0	-1.5	-0.6%	1.4	0.8%	0.8	1.2%	0.1	0.5%	0.0	0.0%	0.0	0.0%

Table 7.10.Zion (From Table B.47)
Noise Level Changes - Number of Events Above LAmix Thresholds 2020
St. George Municipal Airport Only
Zion National Park

Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2020 w/ Existing Airport	Number of Events Per Average Day Above LAmix Thresholds with Existing Airport 2020						LA(max) 2020 w/ Repl. Airport	Number of Events Per Average Day Above LAmix Thresholds with Replacement Airport 2020						LA(max) 2020 Net Change	Change in Number of Events Per Average Day Above LAmix Thresholds with Replacement Airport 2020											
				20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	60 dBA		20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	60 dBA		20 dBA	%	25 dBA	%	35 dBA	%	45 dBA	%	55 dBA	%	60 dBA	%
Zion National Park																													
HOPVAL	1	1	74.7	359.8	252.2	134.4	23.7	3.1	1.8	74.7	354.3	247.2	131.7	23.8	3.1	1.8	0.0	-5.4	-1.5%	-5.0	-2.0%	-2.8	-2.1%	0.1	0.3%	0.0	0.0%	0.0	0.0%
LFKTD	1	1	70.6	391.7	303.4	146.6	22.3	2.4	1.7	70.6	386.9	301.8	147.6	22.7	2.4	1.7	0.0	-4.8	-1.2%	-1.6	-0.5%	1.0	0.7%	0.4	1.7%	0.0	0.1%	0.0	0.0%
WILDCT	1	1	72.4	359.4	264.3	115.8	26.6	2.6	1.7	72.4	354.0	261.8	117.5	26.9	2.6	1.7	0.0	-5.3	-1.5%	-2.6	-1.0%	1.7	1.5%	0.3	1.0%	0.0	0.1%	0.0	0.0%
ZION11	2	3	69.3	438.5	354.9	169.2	43.0	3.0	2.1	69.3	437.6	356.5	169.4	43.0	3.0	2.1	0.0	-1.0	-0.2%	1.6	0.4%	0.2	0.1%	0.1	0.2%	0.0	0.0%	0.0	0.0%
ZION11	4	3	70.8	455.9	335.1	175.3	35.4	3.1	1.6	70.8	455.4	336.5	175.5	35.4	3.1	1.6	0.0	-0.5	-0.1%	1.4	0.4%	0.1	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%
ZION12	1	5	70.5	392.7	291.5	146.8	21.7	4.8	1.8	70.5	387.8	289.4	146.3	22.1	4.8	1.8	0.0	-4.9	-1.2%	-2.1	-0.7%	-0.5	-0.4%	0.4	1.8%	0.0	0.1%	0.0	0.0%
ZION12	1	9	75.1	348.5	244.6	121.4	20.8	2.6	1.4	75.1	341.8	238.0	118.5	20.9	2.7	1.5	0.0	-6.7	-1.9%	-6.5	-2.7%	-2.9	-2.4%	0.1	0.4%	0.1	2.8%	0.1	5.3%
ZION12	2	4	71.1	401.6	307.1	152.3	26.5	3.3	1.5	71.1	396.8	304.5	154.4	27.6	3.3	1.5	0.0	-4.8	-1.2%	-2.6	-0.8%	2.1	1.4%	1.1	4.1%	0.0	0.3%	0.0	0.0%
ZION12	2	8	74.8	351.5	247.3	125.9	27.7	2.9	1.7	74.8	346.3	243.4	125.9	27.7	2.9	1.7	0.0	-5.2	-1.5%	-4.0	-1.6%	-0.1	-0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%
ZION12	3	4	72.8	412.2	307.3	140.7	26.0	2.8	1.5	72.8	408.0	305.2	142.8	27.6	2.8	1.5	0.0	-4.2	-1.0%	-2.2	-0.7%	2.2	1.5%	1.6	6.2%	0.0	0.0%	0.0	0.0%
ZION12	3	8	73.9	348.1	244.8	109.7	22.4	2.5	1.7	73.9	342.6	242.1	110.6	22.9	2.5	1.7	0.0	-5.5	-1.6%	-2.7	-1.1%	0.9	0.9%	0.5	2.2%	0.0	0.0%	0.0	0.0%
ZION12	4	3	75.0	419.9	329.4	168.0	36.6	3.9	1.4	75.0	416.8	328.7	169.8	37.7	3.8	1.4	0.0	-3.1	-0.7%	-0.6	-0.2%	1.8	1.0%	1.1	3.1%	-0.1	-2.1%	-0.1	-5.7%
ZION12	4	7	70.8	362.4	281.1	106.3	20.9	2.6	1.5	70.8	358.3	279.2	108.2	21.3	2.6	1.5	0.0	-4.1	-1.1%	-2.0	-0.7%	1.9	1.8%	0.4	1.9%	0.0	0.0%	0.0	0.0%
ZION12	5	2	72.4	434.1	350.1	170.4	40.8	3.3	1.4	72.4	431.3	350.7	171.6	40.9	3.4	1.5	0.0	-2.9	-0.7%	0.6	0.2%	1.2	0.7%	0.2	0.4%	0.1	3.0%	0.1	4.1%
ZION12	5	6	72.1	394.3	277.8	109.3	24.4	2.7	1.6	72.1	391.5	277.4	111.0	24.5	2.7	1.6	0.0	-2.8	-0.7%	-0.4	-0.1%	1.7	1.6%	0.1	0.4%	0.0	0.0%	0.0	0.0%
ZION12	6	2	71.4	432.9	349.6	161.5	42.4	3.2	2.0	71.4	430.7	351.4	162.2	42.5	3.2	2.0	0.0	-2.2	-0.5%	1.8	0.5%	0.7	0.4%	0.1	0.3%	0.1	2.6%	0.0	2.2%
ZION12	6	6	73.2	401.7	275.3	106.3	19.9	3.3	1.6	73.2	399.3	275.3	108.4	20.2	3.3	1.6	0.0	-2.3	-0.6%	0.1	0.0%	2.1	2.0%	0.3	1.6%	0.0	0.0%	0.0	0.0%
ZION13	1	3	70.8	356.8	273.2	142.6	28.1	4.8	0.9	70.8	350.0	265.6	135.6	26.0	4.8	0.9	0.0	-6.8	-1.9%	-7.6	-2.8%	-7.0	-4.9%	-2.0	-7.2%	0.0	0.0%	0.0	0.0%
ZION13	2	3	70.7	357.8	264.3	122.7	20.5	5.0	1.4	70.7	350.7	254.9	117.8	19.6	5.0	1.4	0.0	-7.1	-2.0%	-9.4	-3.6%	-5.0	-4.1%	-0.9	-4.4%	0.0	0.0%	0.0	0.0%
ZION13	3	2	72.6	360.2	265.6	118.5	19.0	2.5	1.5	72.6	352.0	257.8	115.2	18.9	2.5	1.4	0.0	-8.2	-2.3%	-7.8	-2.9%	-3.3	-2.8%	-0.1	-0.7%	-0.1	-2.9%	-0.1	-4.9%
ZION19	1	1	73.7	352.0	251.8	111.5	20.8	2.7	1.5	73.7	343.8	244.4	108.2	20.9	2.7	1.5	0.0	-8.2	-2.3%	-7.4	-2.9%	-3.3	-2.9%	0.1	0.4%	0.0	0.0%	0.0	0.0%
ZION20	1	3	74.2	426.1	301.1	147.8	26.5	3.4	1.6	74.2	424.0	303.4	149.3	26.7	3.4	1.6	0.0	-2.1	-0.5%	2.2	0.7%	1.5	1.0%	0.2	0.8%	0.0	0.0%	0.0	0.0%
ZION20	1	7	71.5	347.5	234.7	89.4	14.4	2.9	1.7	71.5	345.4	237.7	90.8	14.5	2.9	1.7	0.0	-2.1	-0.6%	2.9	1.2%	1.4	1.6%	0.1	0.4%	0.0	0.0%	0.0	0.0%

Table 7.11
Noise Level Summary at Zion National Park
Cumulative L(max) & Number of Events Above LAmix Thresholds - 2010/2020
St. George Municipal Airport EIS

YEAR	LA(max)									MAX NUMBER OF EVENTS ABOVE																	
	Existing			Replacement			Change			Existing						Replacement						Change					
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	20	25	35	45	55	60	20	25	35	45	55	60	20	25	35	45	55	60
2010	75.4	68.8	72.3	75.4	68.8	72.3	0.0	0.0	0.0	333.1	265.0	137.7	34.3	4.6	0.8	332.5	265.6	137.7	34.2	4.6	0.9	1.2	1.8	1.3	0.9	0.3	0.3
2020	75.4	68.8	72.3	75.4	68.8	72.3	0.0	0.0	0.0	455.9	363.0	189.5	46.0	6.4	1.1	456.1	364.8	190.2	46.0	6.3	1.2	2.8	3.2	2.2	1.6	0.3	0.3

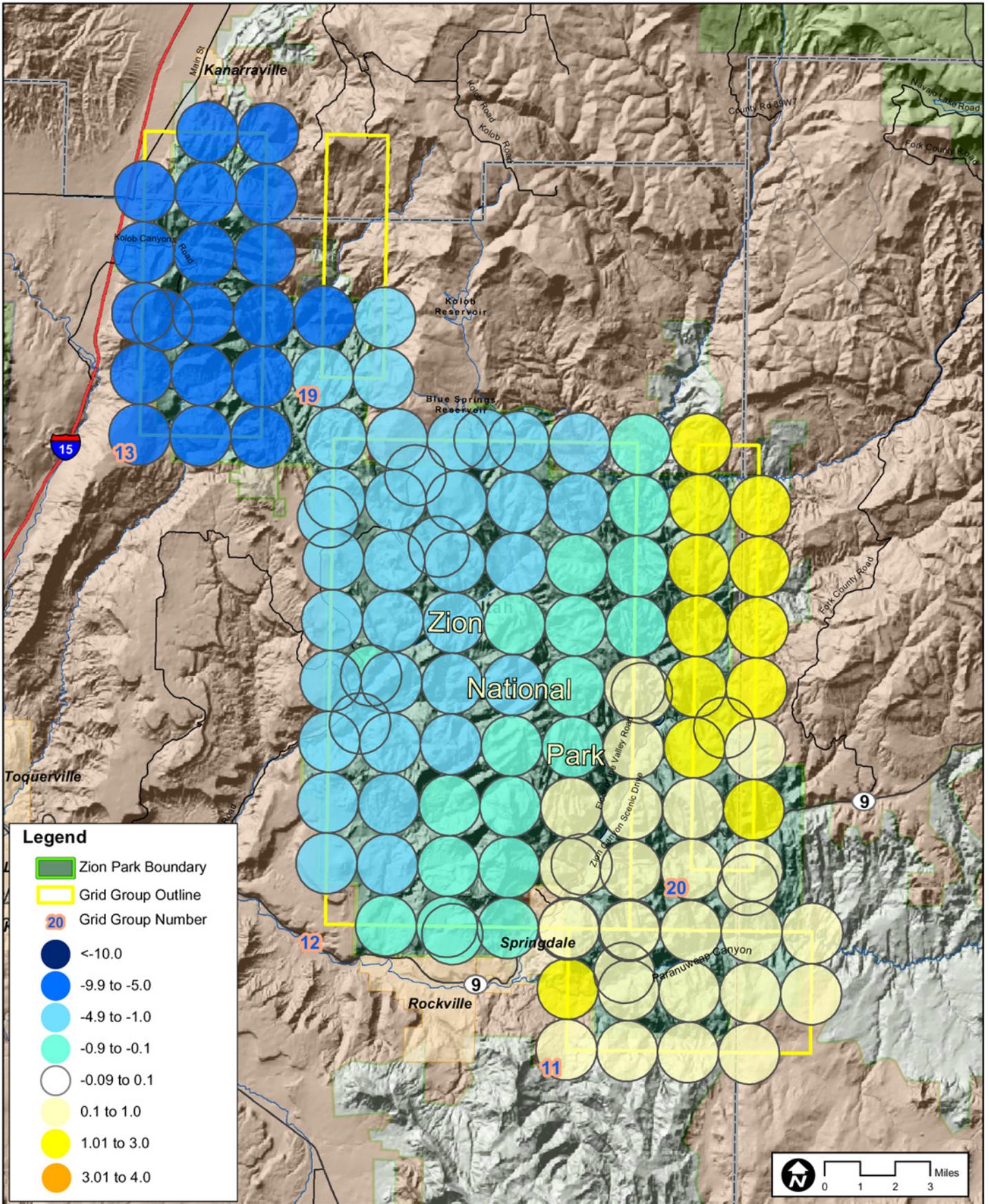


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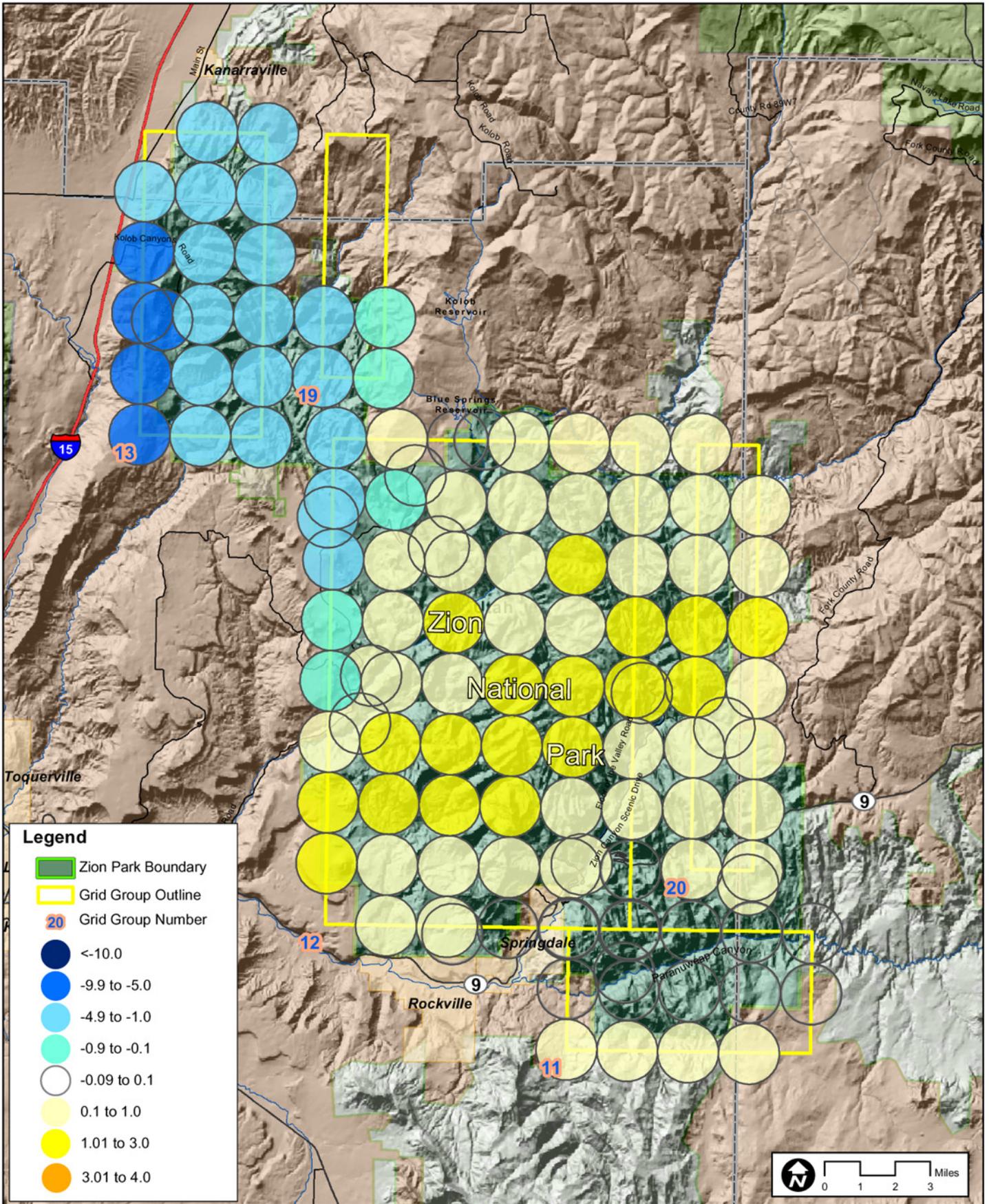


**Change In 2010 Cumulative
 Noise With Proposed
 Replacement Airport
 Number of Events Above 20 dBA**

EXHIBIT
7.9
 3/14/2005
 Prepared by: Landrum & Brown
 Filename: Zion_Events_2010.mxd



**Change In 2010 Cumulative
 Noise With Proposed
 Replacement Airport
 Number of Events Above 25 dBA**

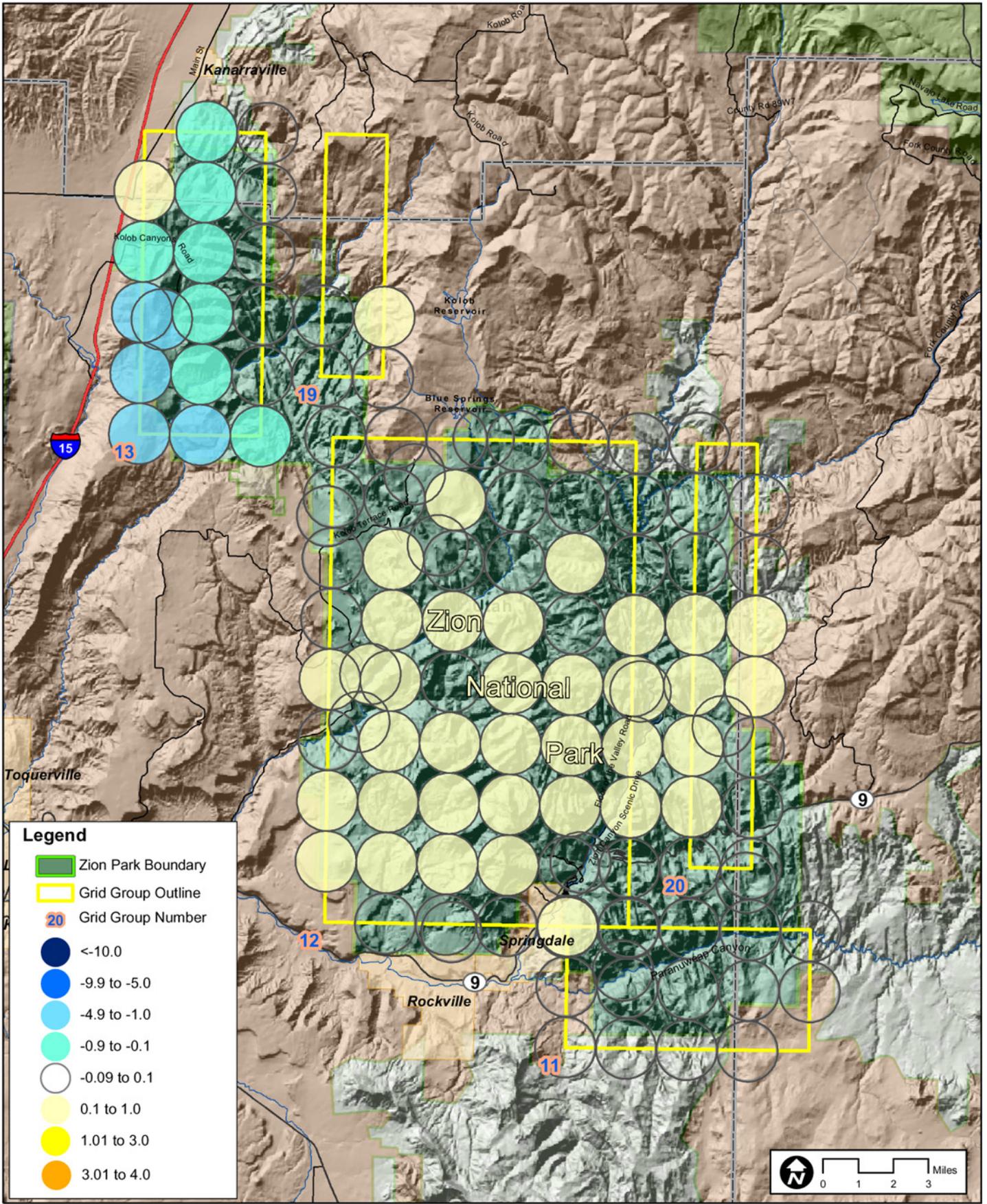


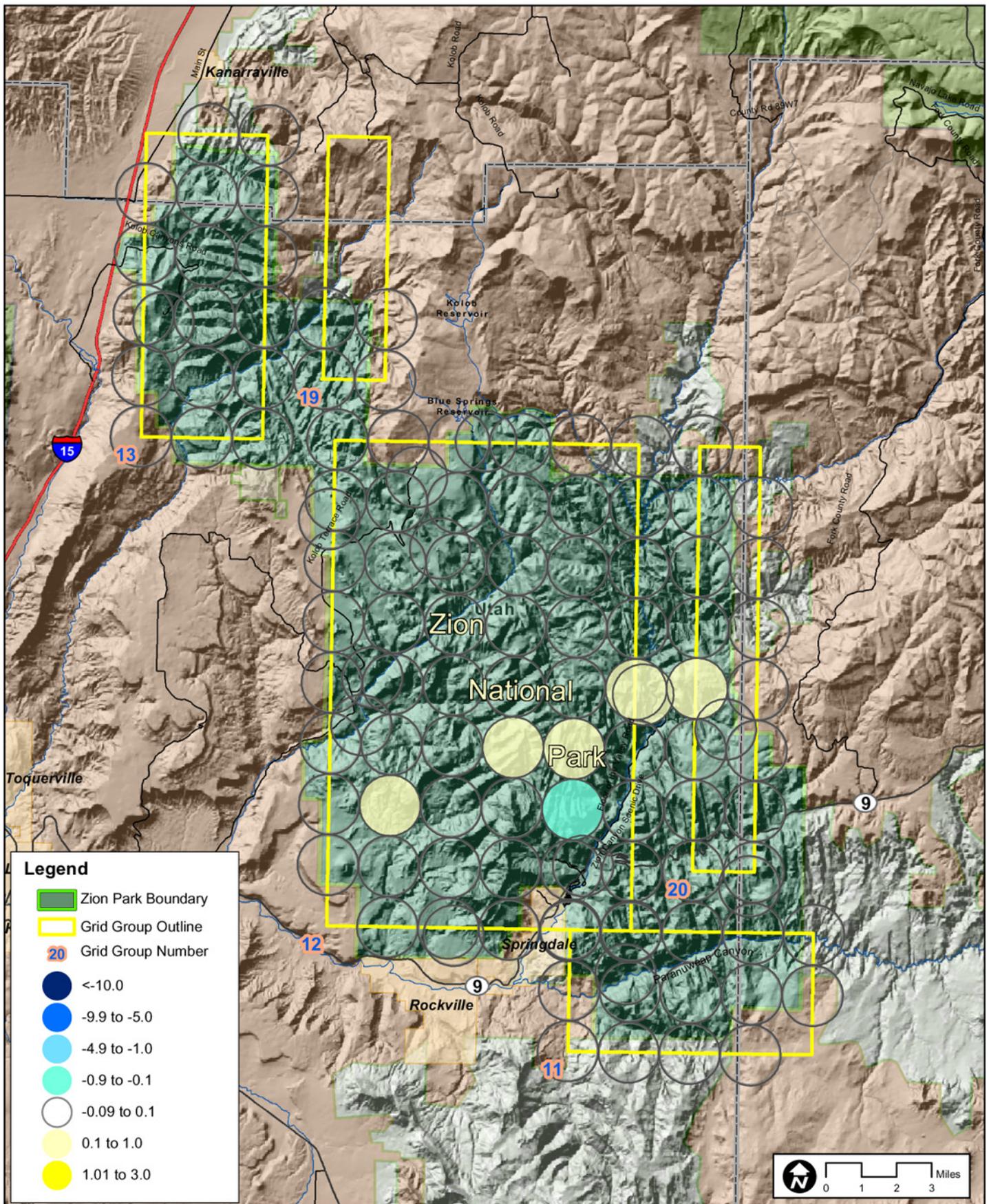
St. George Municipal Airport
 Environmental
 Impact
 Statement

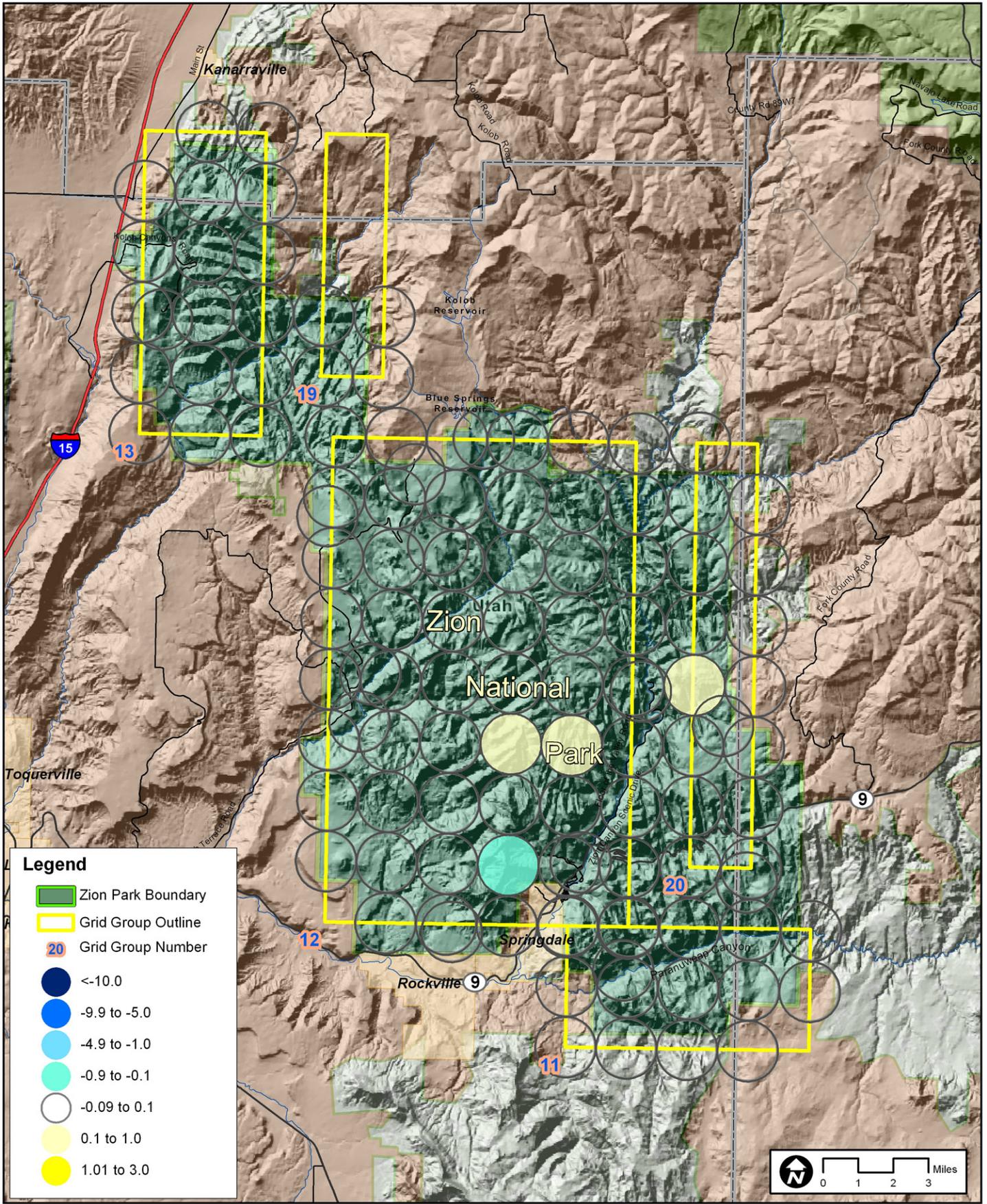


**Change In 2010 Cumulative
 Noise With Proposed
 Replacement Airport
 Number of Events Above 35 dBA**

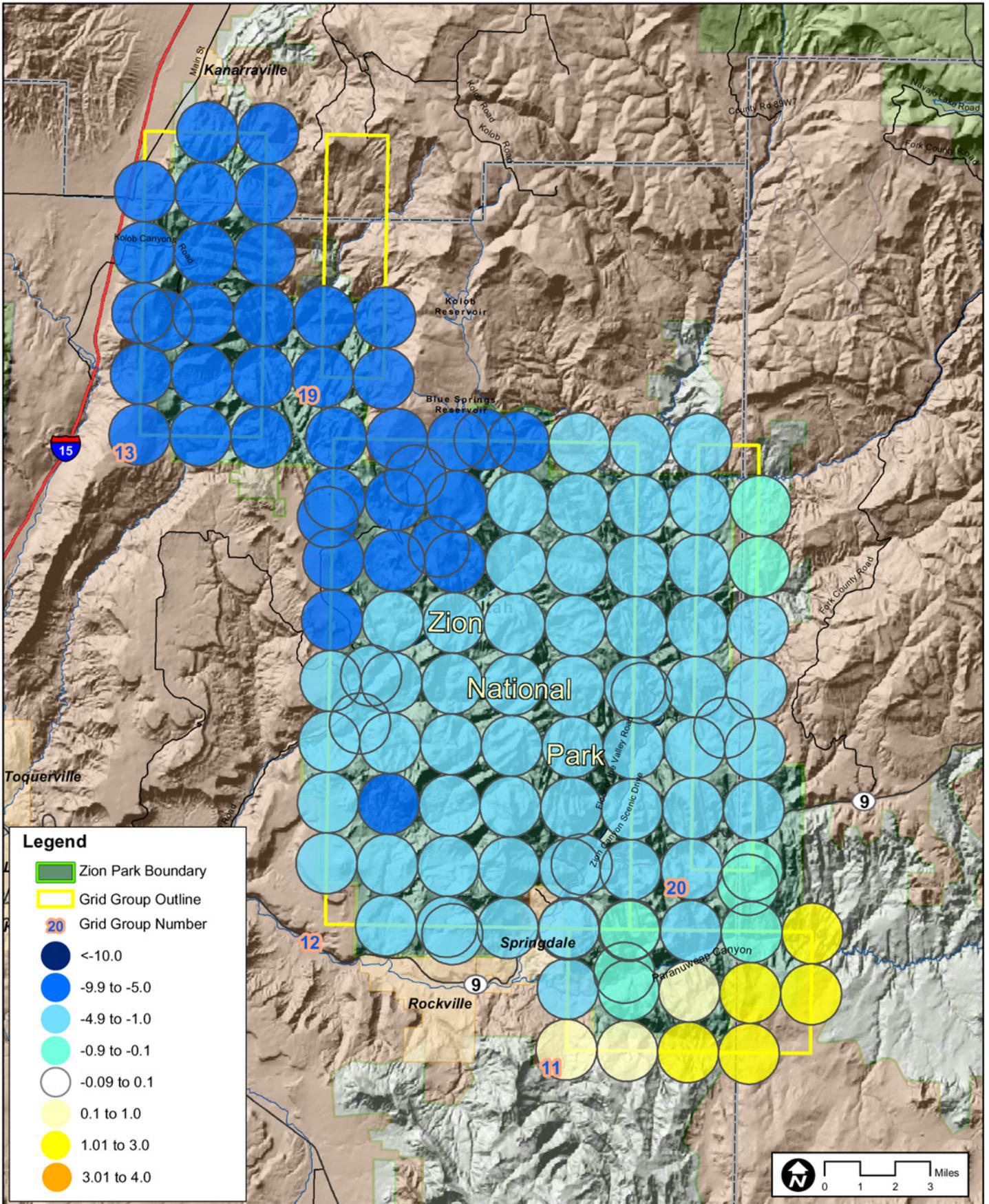
EXHIBIT
7.11
 3/14/2005
 Prepared by: Landrum & Brown
 Filename: Zion_Events_2010.mxd



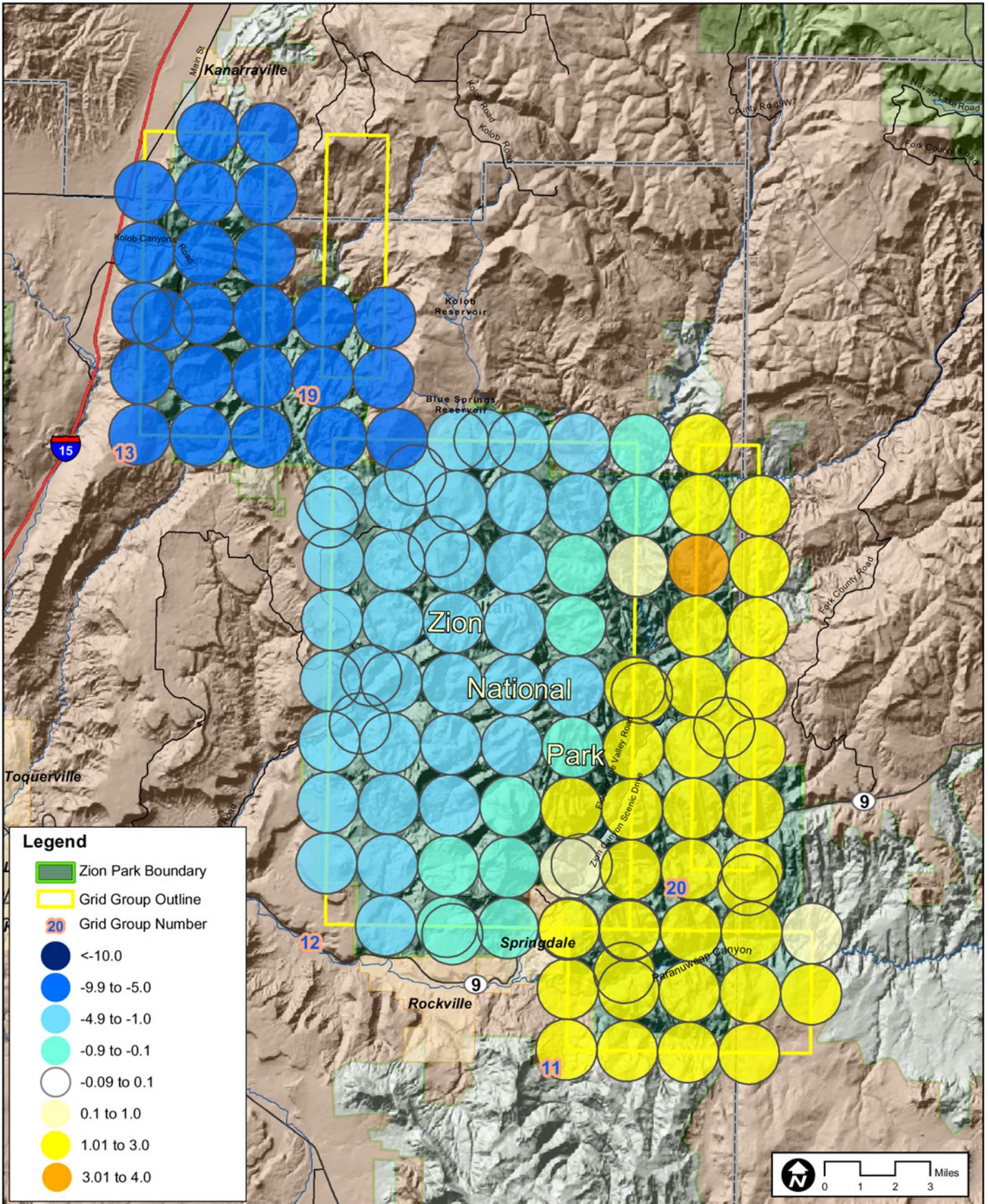




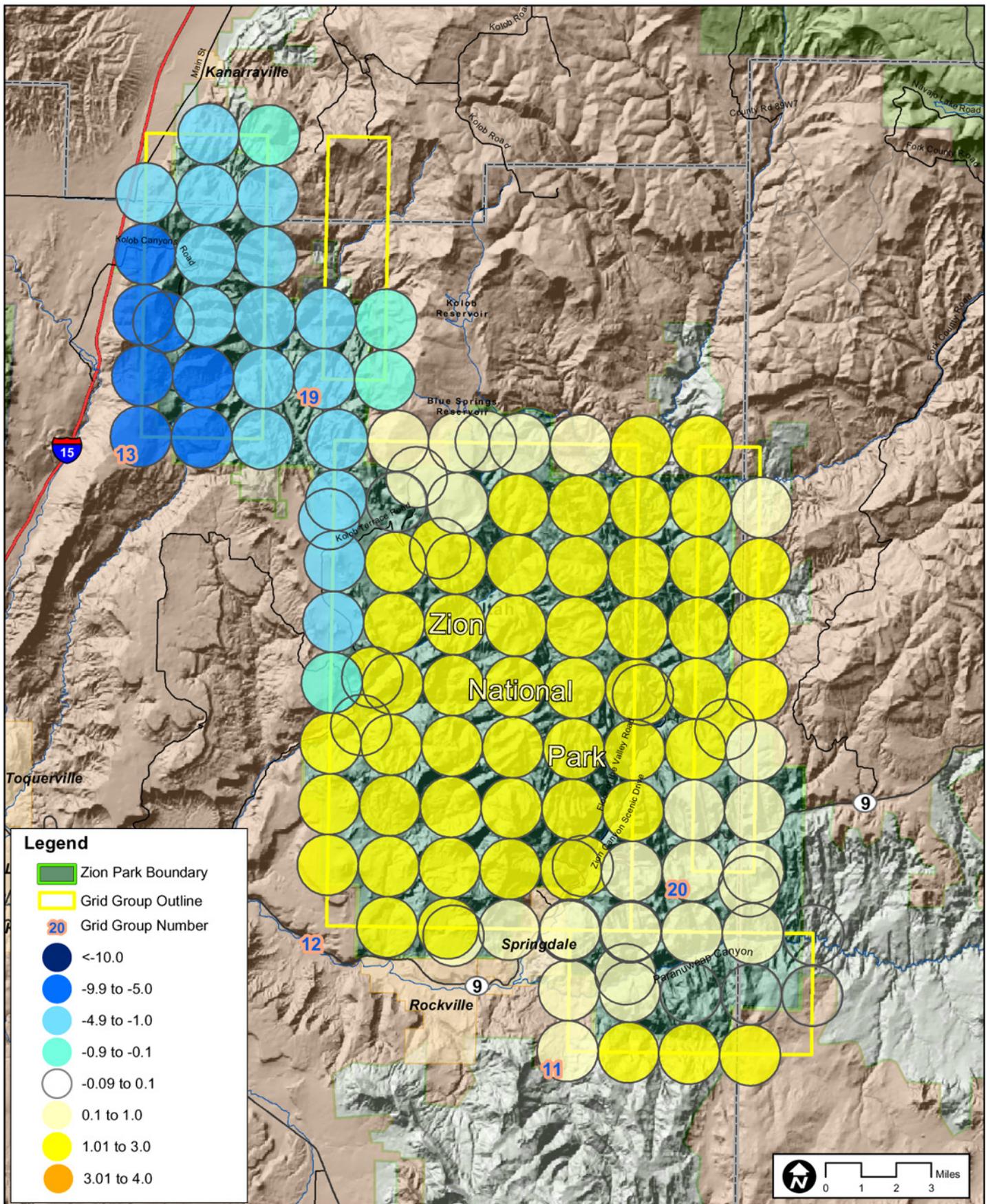
**Change In 2010 Cumulative
 Noise With Proposed
 Replacement Airport
 Number of Events Above 60 dBA**

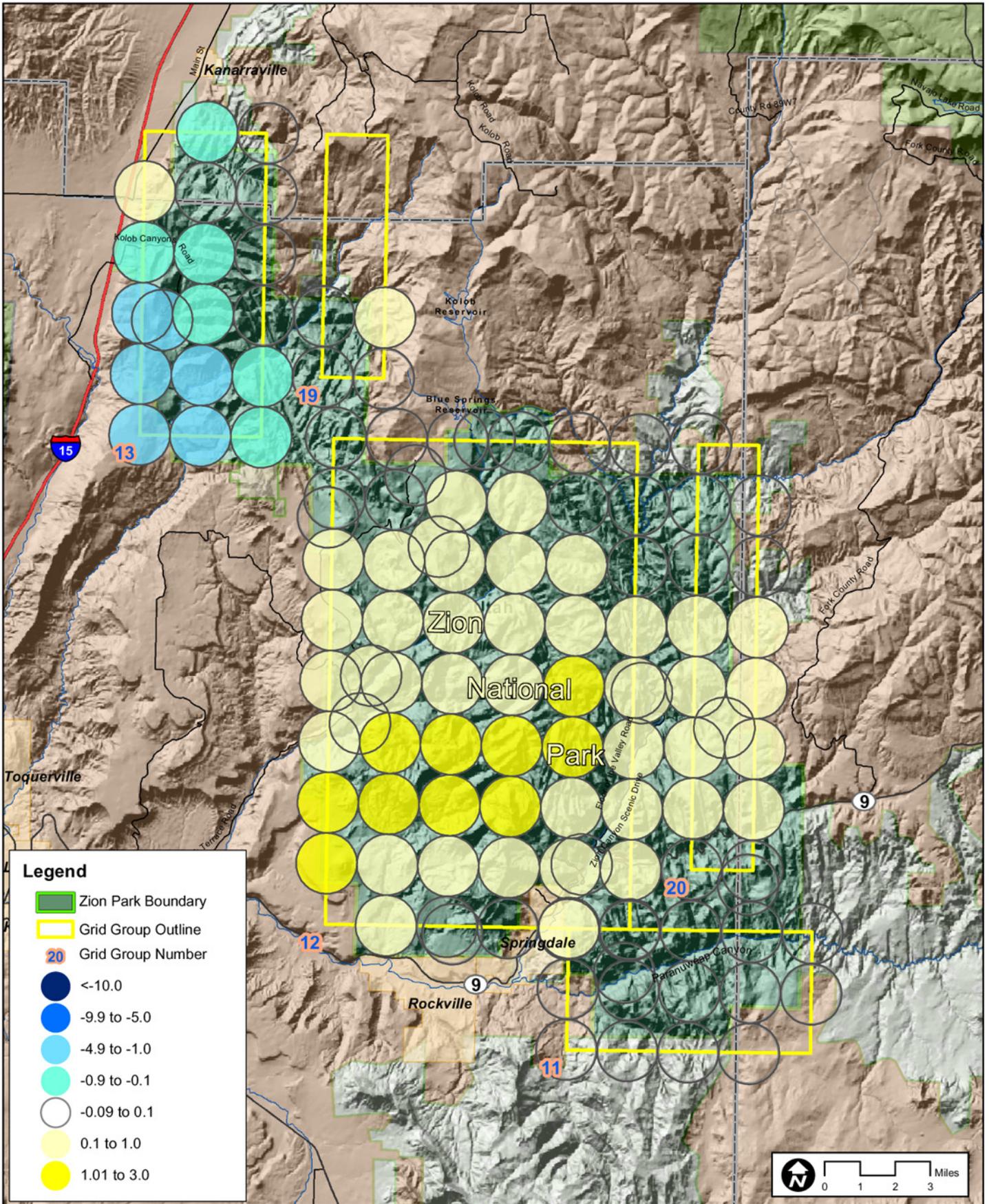


**Change In 2020 Cumulative
Noise With Proposed
Replacement Airport
Number of Events Above 20 dBA**



**Change In 2020 Cumulative
Noise With Proposed
Replacement Airport
Number of Events Above 25 dBA**



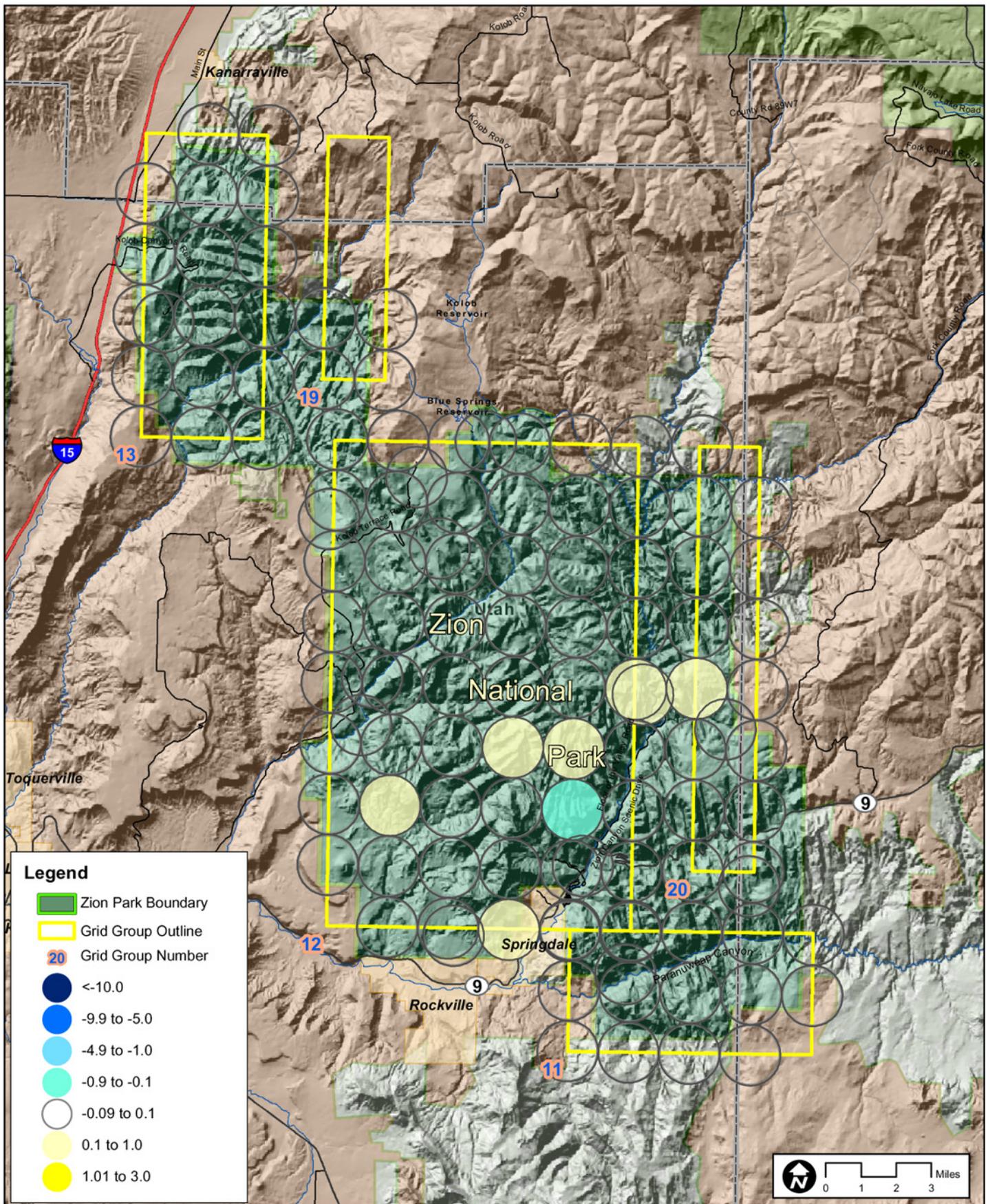


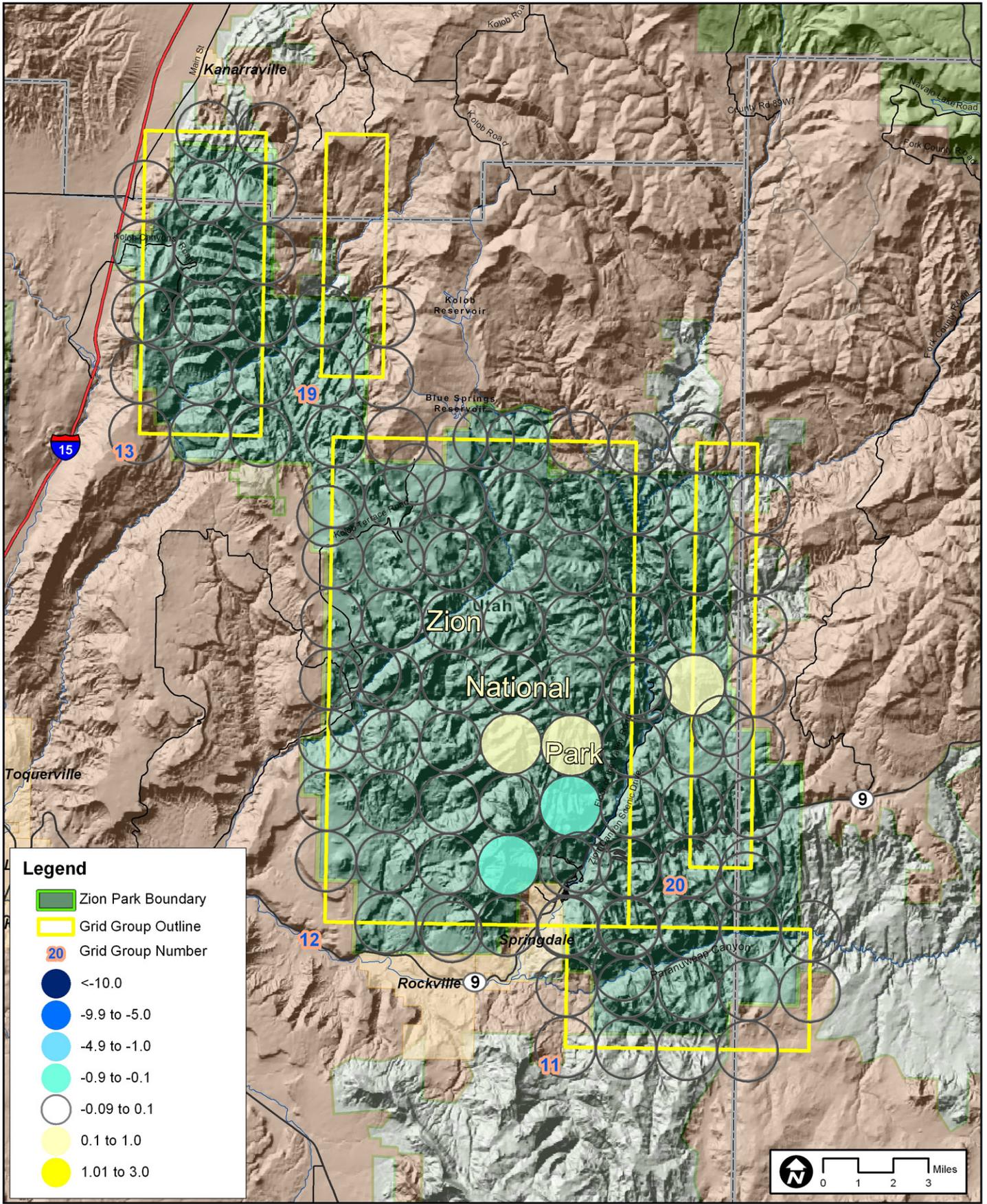
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 Environmental
 Impact
 Statement



**Change In 2020 Cumulative
 Noise With Proposed
 Replacement Airport
 Number of Events Above 45 dBA**

EXHIBIT
7.18
 3/14/2005
 Prepared by: Landrum & Brown
 Filename: Zion_Events_2020.mxd





**Change In 2020 Cumulative
 Noise With Proposed
 Replacement Airport
 Number of Events Above 60 dBA**

The work on the noise analysis for the St. George EIS began in the summer of 2004, using the current publicly-available noise model INM 6.1. The analysis uses a variety of noise metrics, but does not include audibility. INM 6.1 does not have the capability to calculate audibility. FAA and NPS have reviewed the results of the multi-metric noise analysis and have agreed that it is reasonable to rely on these metrics plus an additional Time Above Ambient, A-weighted analysis to represent possible aircraft related impacts on the natural soundscape of Zion National Park. The metrics show a consistent pattern of noise impacts of the proposed replacement airport, both as an individual project and on the basis of its cumulative effects. An audibility analysis would produce more information, but would be expected to show the same trends. For FAA's National Environmental Policy Act (NEPA) analyses, audibility is a supplemental metric that may be used, but is not a required or designated a key metric. NPS remains strongly interested in an audibility analysis of all aircraft operating over Zion National Park for soundscape management purposes, and FAA and NPS have committed to perform such an analysis in conjunction with air tour management planning, which will be developed for the park in the foreseeable future.

7.2.3.5 Aircraft Noise Exposure of Zion National Park Management Zones

This portion of the DEIS cumulative noise analysis depicts aircraft-related noise at Zion National Park by percentage of day and by percentage of area in park management zones, using "Percent Time Above Natural Ambient L50 Sound Level (%TAA) A-Weighted." These zones, established in the 2001 Zion National Park General Management Plan (GMP)³, are displayed in **Exhibit 7.21**. For purposes of this analysis, the FAA and NPS have agreed to the use of the %TAA A-weighted descriptor to depict aircraft-related noise in Zion National Park.

The park had made clear their soundscape goals in terms of Percent Time Above Ambient-Unweighted, Percent Time Audible, and L_Amax. These goals are specific to Zion National Park and represent the park's expression of a desired condition.⁴ No nationwide NPS noise criteria or standards currently exist, although the FAA and NPS are engaged in a national research and management program to develop such criteria for National Park overflights.⁵ Analysis of L_Amax in terms of numbers of events above various thresholds is addressed in **Section 7.2.3.3** and Percent Time Audible is discussed above in **Section 7.2.3.4**.

Percent Time Above Ambient-A-Weighted should be distinguished from Percent Time Above Ambient-Weighted (1/3 octave bands, 20-20,000 Hz). Percent Time

³ Soundscape goals were communicated by the Zion National Park Superintendent to FAA in two letters, dated February 4 and April 26, 2005. (See **Appendix N, Coordination with the National Park Service**.)

⁴ Desired Future Conditions are used to establish resource and visitory experience objectives as specified in National Park Service Management Policies, Chapter 2.2, 2001 and *Program Standards for Park Planning*. National Park Service, 2004.

⁵ Air Tour management Plan (ATMP) Program.

Above Ambient-Unweighted is a standard NPS proposes to use to manage soundscapes in Zion National Park. A-weighting reflects human hearing capabilities, while an unweighted metric is intended to monitor sound at frequencies beyond the limitation of human hearing, that may affect other park resources. Neither NPS nor FAA can currently assess noise with unweighted metrics because all existing models assess noise only relative to weighted metrics.

Exhibits 7.22 through 7.25 present graphic depictions of the %TAA (A-weighted) attributable to aircraft-related noise over the various grid points within the park.

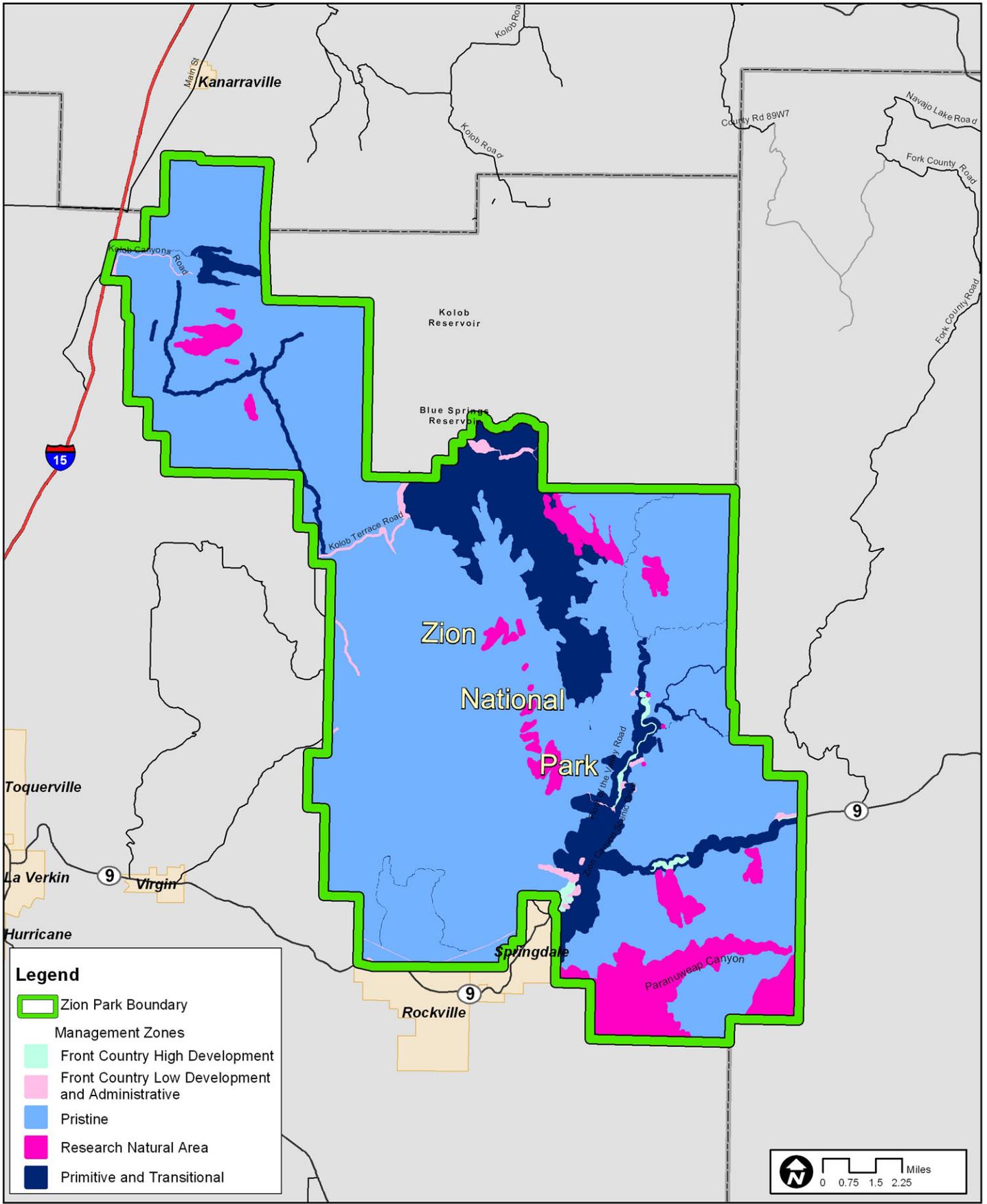
Table 7.11A reports the percentage of time each grid point within Zion National Park is exposed to cumulative aircraft noise, based on %TAA (A-weighted). Information is presented for 2010 and 2020 for conditions for the existing SGU and for the proposed replacement airport.

Percent area provides a spatial representation of aircraft noise within each park management zone. **Table 7.11B** provides the percent of area within each management zone exposed to cumulative aircraft noise, based on %TAA (A-weighted) for two alternative airport conditions (existing airport and replacement airport) in 2010 and 2020.

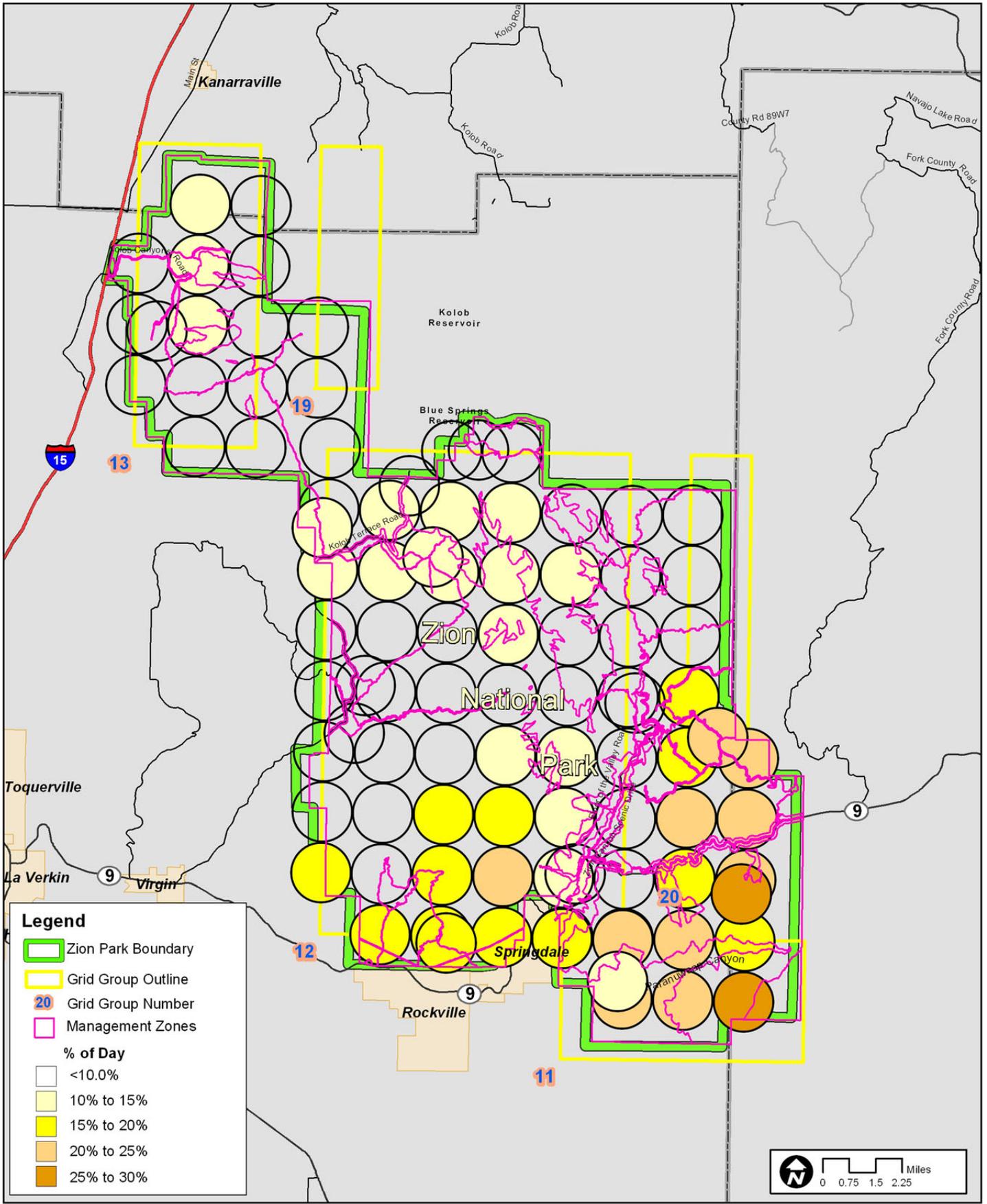
Cumulative aircraft noise in this analysis includes all aviation traffic input data from the various sources described previously for other noise metrics described in **Chapter 6** and **Chapter 7**. The exhibits indicate that the southeast quadrant of the park is the area most affected by cumulative aircraft noise from all aviation sources. The two tables indicate little variation in time and acres impacted in the five zones between the two alternative conditions.

7.2.3.6 Summary of Aircraft Noise Effects Over Zion National Park

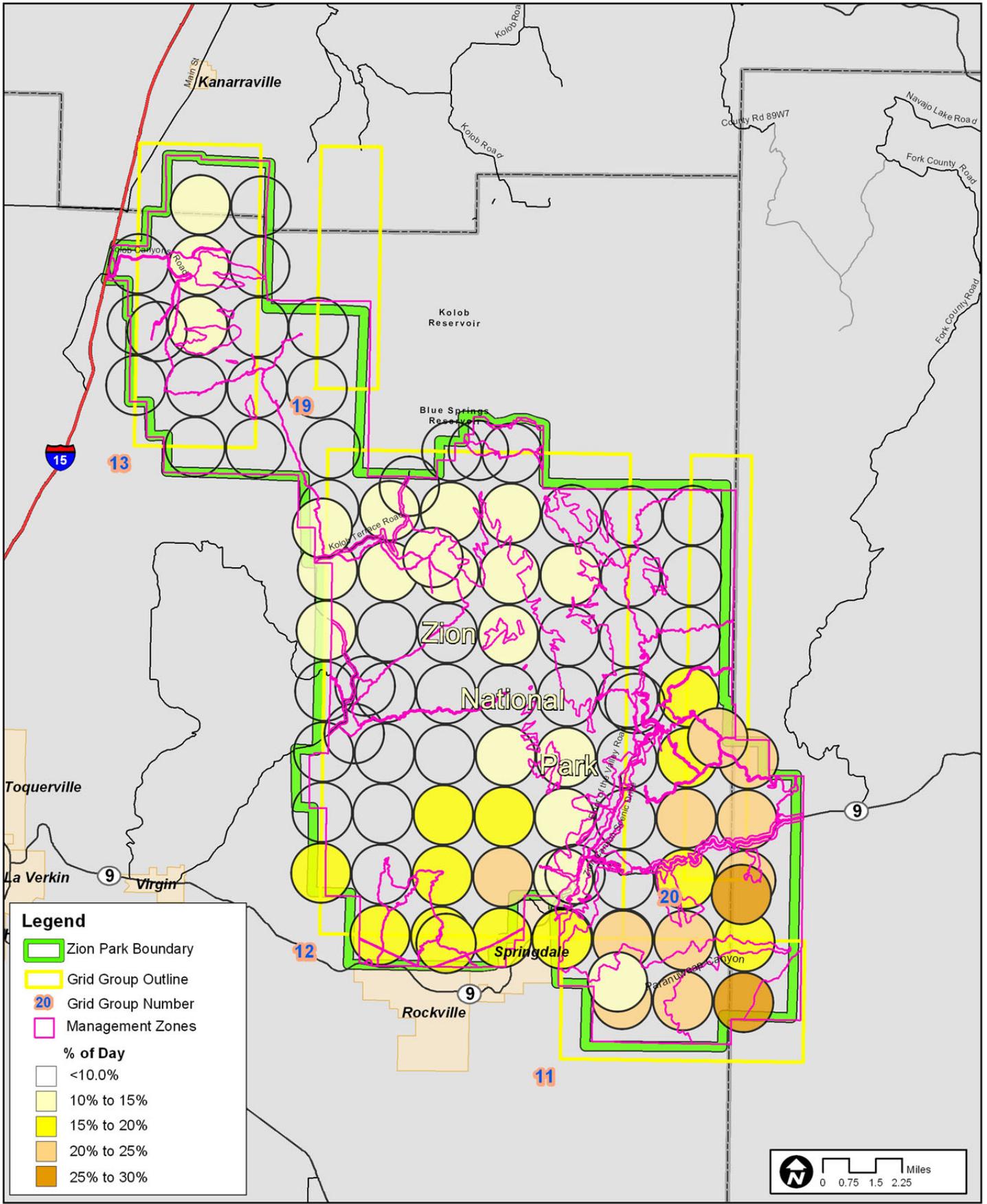
The cumulative changes of the summary metrics (DNL, $Leq_{(24)}$, and $Leq_{(day)}$) associated with the proposed replacement airport seldom exceed 0.1 dBA. The proportion of change in the detailed metrics (time above ambient and numbers of events above thresholds) resulting from the proposed project seldom exceed more than one to two percent of the total aircraft contribution of noise over the area evaluated. The information provided in the preceding pages and made available in **Appendix B** demonstrates that the effects associated with the proposed project action at St. George to relocate the airport from its existing location to a new site would have small effects on the cumulative aircraft noise levels over Zion National Park.



Zion National Park Management Zones



**Cumulative Aviation Noise
 Percent of Time Above Natural Ambient
 with Existing Airport
 2010**

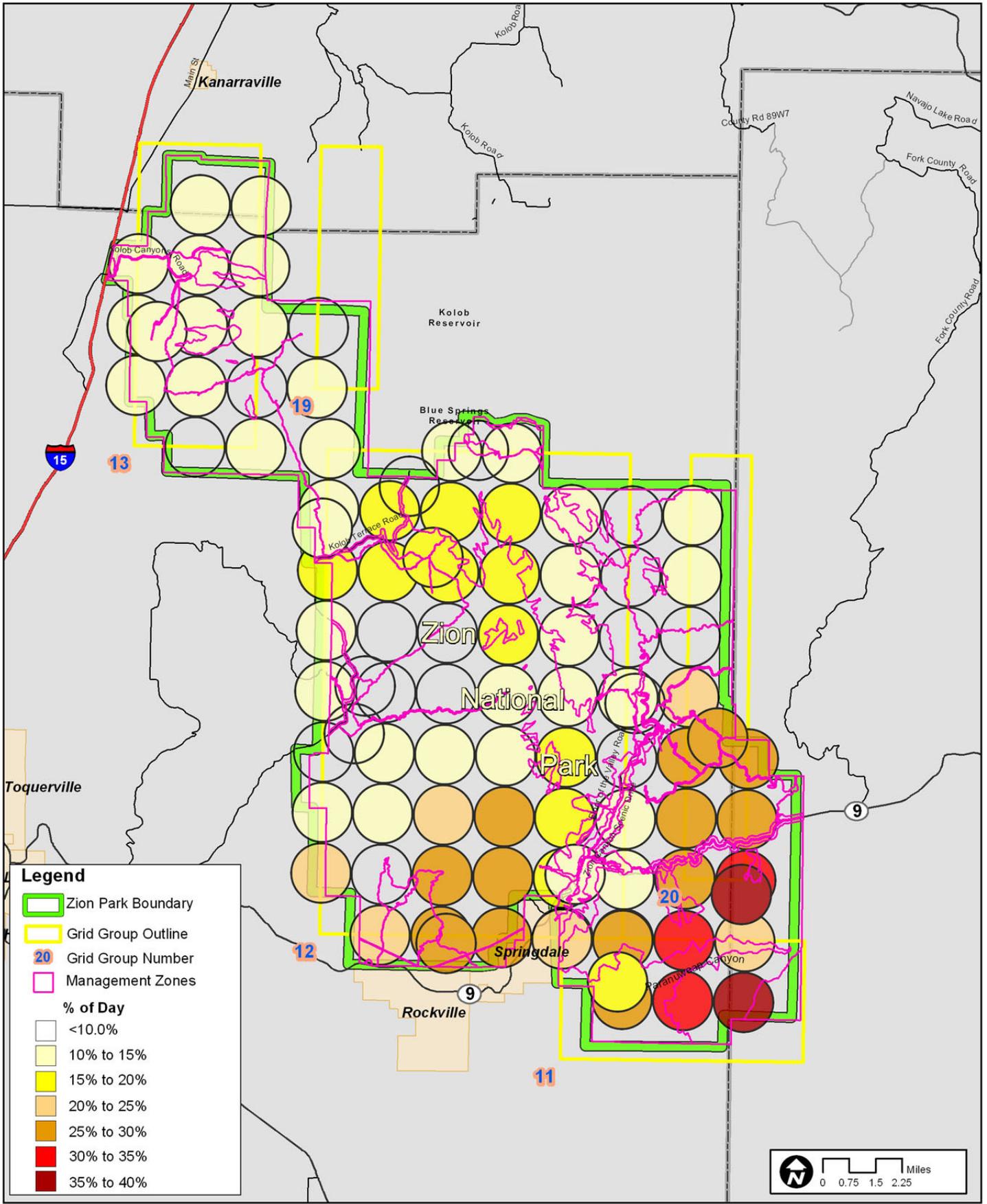


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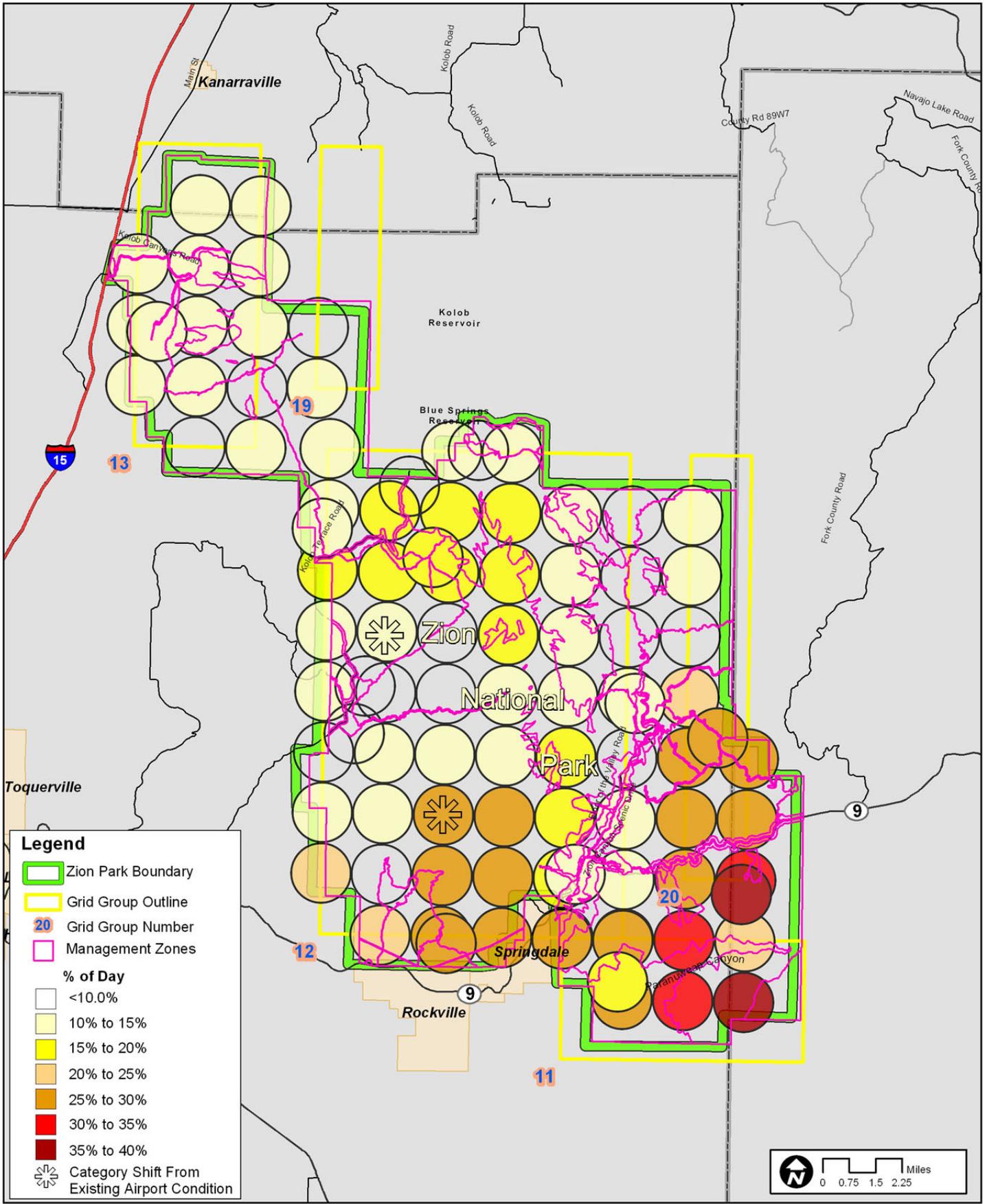


**Cumulative Aviation Noise
Percent of Time Above Natural Ambient
with Replacement Airport
2010**

EXHIBIT
7.23
7/29/2005
Prepared by: Landrum & Brown
Filename: Zion_%_Management.mxd



**Cumulative Aviation Noise
Percent of Time Above Natural Ambient
with Existing Airport
2020**



**Cumulative Aviation Noise
 Percent of Time Above Natural Ambient
 with Replacement Airport
 2020**

Table 7.11A
Noise Level Changes in Zion National Park
Cumulative Percent of Time Above Ambient (Natural) 2010/2020

Legend			
Percent of Minutes Per Day Above L50 Natural Ambient Levels			
less than 10%			
10% - 15%		25% - 30%	
15% - 20%		30% - 35%	
20% - 25%		35% - 40%	

Grid Group Name	Column in Grid Group	Row in Grid Group	Ground Elevation (in feet)	Ambient Natural	2010 Cumulative Noise				2020 - Cumulative Noise			
					Existing Airport		Replacement Airport		Existing Airport		Replacement Airport	
					Minutes	% of DAY	Minutes	% of DAY	Minutes	% of DAY	Minutes	% of DAY
ZION11	1	3	4546.2	24.1	259.9	18.0%	260.9	18.1%	355.1	24.7%	357.5	24.8%
ZION11	2	2	4815.7	23.0	300.0	20.8%	301.2	20.9%	410.0	28.5%	412.5	28.6%
ZION11	2	3	5304.8	22.0	317.2	22.0%	318.6	22.1%	434.3	30.2%	437.1	30.4%
ZION11	3	2	6029.4	22.0	325.7	22.6%	327.0	22.7%	445.7	31.0%	448.2	31.1%
ZION11	3	3	5597.1	20.9	356.7	24.8%	358.2	24.9%	488.5	33.9%	491.3	34.1%
ZION11	4	2	5972.5	20.0	399.3	27.7%	400.8	27.8%	546.8	38.0%	549.7	38.2%
ZION11	4	3	4424.3	25.0	224.5	15.6%	225.5	15.7%	306.8	21.3%	308.2	21.4%
ZION12	1	2	4585.9	23.0	250.1	17.4%	251.7	17.5%	345.4	24.0%	350.4	24.3%
ZION12	1	3	4565.8	29.1	124.1	8.6%	125.5	8.7%	172.4	12.0%	175.7	12.2%
ZION12	1	4	4071.2	32.0	82.5	5.7%	83.2	5.8%	115.1	8.0%	117.1	8.1%
ZION12	1	5	5188.5	30.0	101.9	7.1%	102.6	7.1%	142.5	9.9%	144.8	10.1%
ZION12	1	6	6139.6	26.0	150.8	10.5%	152.0	10.6%	211.0	14.7%	214.4	14.9%
ZION12	1	7	6573.2	24.0	176.0	12.2%	177.1	12.3%	246.4	17.1%	249.7	17.3%
ZION12	1	8	6481.8	25.0	149.8	10.4%	150.2	10.4%	209.9	14.6%	211.3	14.7%
ZION12	1	9	7072.6	25.0	142.6	9.9%	143.0	9.9%	199.7	13.9%	200.7	13.9%
ZION12	2	1	3798.2	24.0	251.3	17.5%	252.7	17.5%	345.2	24.0%	349.0	24.2%
ZION12	2	2	4211.1	37.3	43.3	3.0%	43.7	3.0%	59.8	4.2%	60.9	4.2%
ZION12	2	3	4638.1	29.1	129.5	9.0%	130.8	9.1%	179.2	12.4%	182.6	12.7%
ZION12	2	4	6001.0	30.0	111.6	7.8%	112.7	7.8%	155.1	10.8%	157.8	11.0%
ZION12	2	5	5216.6	32.3	76.3	5.3%	76.7	5.3%	106.7	7.4%	108.3	7.5%
ZION12	2	6	5852.7	30.0	97.1	6.7%	97.9	6.8%	136.0	9.4%	138.2	9.6%
ZION12	2	7	6624.1	24.0	185.7	12.9%	187.0	13.0%	259.5	18.0%	263.0	18.3%
ZION12	2	8	7437.3	24.0	170.3	11.8%	171.1	11.9%	238.3	16.5%	240.5	16.7%
ZION12	3	1	4191.1	23.0	291.9	20.3%	293.3	20.4%	399.7	27.8%	403.4	28.0%
ZION12	3	2	4308.1	23.0	274.8	19.1%	276.5	19.2%	377.4	26.2%	381.8	26.5%
ZION12	3	3	4398.2	23.0	258.3	17.9%	260.3	18.1%	355.6	24.7%	360.7	25.0%
ZION12	3	4	6355.5	30.0	111.1	7.7%	112.3	7.8%	154.2	10.7%	156.9	10.9%
ZION12	3	5	5117.5	32.0	78.8	5.5%	79.5	5.5%	109.7	7.6%	111.4	7.7%
ZION12	3	6	5613.5	43.4	7.8	0.5%	7.8	0.5%	10.9	0.8%	11.0	0.8%
ZION12	3	7	6469.1	25.0	167.4	11.6%	168.8	11.7%	233.5	16.2%	236.9	16.5%
ZION12	3	8	7758.6	24.0	167.5	11.6%	168.5	11.7%	234.2	16.3%	236.8	16.4%
ZION12	3	9	7987.8	26.6	120.1	8.3%	120.3	8.4%	168.2	11.7%	168.9	11.7%
ZION12	4	1	4327.5	23.7	271.1	18.8%	272.3	18.9%	370.7	25.7%	373.6	25.9%
ZION12	4	2	7146.9	22.0	299.0	20.8%	300.3	20.9%	409.8	28.5%	413.6	28.7%
ZION12	4	3	6756.6	22.0	285.0	19.8%	286.8	19.9%	392.1	27.2%	396.6	27.5%
ZION12	4	4	6650.6	27.0	156.2	10.8%	157.7	11.0%	215.5	15.0%	218.9	15.2%
ZION12	4	5	5189.8	27.0	145.8	10.1%	147.2	10.2%	202.1	14.0%	205.1	14.2%
ZION12	4	6	7013.6	25.0	173.2	12.0%	174.5	12.1%	240.5	16.7%	243.7	16.9%
ZION12	4	7	6121.0	25.0	164.3	11.4%	165.5	11.5%	228.4	15.9%	231.5	16.1%
ZION12	4	8	7342.3	24.0	167.3	11.6%	168.5	11.7%	233.0	16.2%	235.8	16.4%
ZION12	4	9	7219.2	26.6	103.6	7.2%	104.0	7.2%	144.9	10.1%	145.9	10.1%
ZION12	5	1	4552.5	24.0	261.9	18.2%	262.9	18.3%	358.0	24.9%	360.3	25.0%
ZION12	5	2	4315.6	26.9	183.5	12.7%	184.5	12.8%	251.2	17.4%	253.1	17.6%
ZION12	5	3	6759.0	27.0	165.9	11.5%	166.8	11.6%	227.7	15.8%	230.0	16.0%
ZION12	5	4	6333.4	26.0	172.7	12.0%	174.2	12.1%	237.5	16.5%	240.6	16.7%
ZION12	5	5	6966.6	27.0	139.2	9.7%	140.5	9.8%	192.4	13.4%	195.1	13.5%
ZION12	5	6	7029.1	27.0	130.7	9.1%	131.9	9.2%	181.1	12.6%	183.4	12.7%
ZION12	5	7	6784.2	25.0	155.6	10.8%	156.9	10.9%	215.7	15.0%	218.5	15.2%
ZION12	5	8	5810.9	25.0	143.9	10.0%	145.0	10.1%	199.7	13.9%	202.2	14.0%
ZION12	6	1	5447.8	22.0	317.3	22.0%	318.6	22.1%	434.4	30.2%	437.2	30.4%
ZION12	6	2	5112.7	28.8	141.8	9.8%	142.3	9.9%	193.8	13.5%	194.9	13.5%
ZION12	6	3	4974.2	29.5	118.4	8.2%	119.1	8.3%	161.6	11.2%	162.9	11.3%
ZION12	6	4	4726.3	37.0	37.1	2.6%	37.5	2.6%	50.5	3.5%	51.2	3.6%
ZION12	6	5	5759.6	28.0	121.7	8.5%	122.9	8.5%	167.2	11.6%	169.2	11.8%
ZION12	6	6	5963.3	29.2	96.6	6.7%	97.6	6.8%	133.4	9.3%	134.9	9.4%
ZION12	6	7	4803.6	49.8	1.6	0.1%	1.6	0.1%	2.3	0.2%	2.3	0.2%
ZION12	6	8	5997.0	35.9	29.4	2.0%	29.6	2.1%	41.1	2.9%	41.4	2.9%
ZION13	1	2	5973.1	28.0	115.3	8.0%	115.2	8.0%	156.3	10.9%	158.1	11.0%
ZION13	1	3	6163.7	26.0	146.4	10.2%	146.6	10.2%	198.4	13.8%	201.0	14.0%
ZION13	1	4	5532.4	28.7	116.0	8.1%	116.2	8.1%	155.6	10.8%	157.7	11.0%
ZION13	2	1	5393.0	30.3	77.0	5.3%	77.0	5.3%	107.5	7.5%	108.4	7.5%
ZION13	2	2	5195.9	28.0	108.2	7.5%	108.2	7.5%	148.7	10.3%	150.3	10.4%
ZION13	2	3	5934.0	25.0	157.1	10.9%	156.8	10.9%	216.0	15.0%	218.0	15.1%
ZION13	2	4	5937.3	25.0	160.7	11.2%	160.6	11.2%	219.4	15.2%	221.7	15.4%
ZION13	2	5	6745.5	25.0	161.3	11.2%	161.5	11.2%	220.1	15.3%	222.8	15.5%
ZION13	3	1	6096.9	26.0	130.6	9.1%	130.7	9.1%	182.8	12.7%	184.2	12.8%
ZION13	3	2	5833.6	29.0	88.7	6.2%	88.8	6.2%	124.3	8.6%	125.3	8.7%
ZION13	3	3	6453.8	26.9	114.9	8.0%	115.0	8.0%	160.1	11.1%	161.5	11.2%
ZION13	3	4	7607.6	25.0	142.2	9.9%	142.3	9.9%	197.3	13.7%	199.2	13.8%
ZION13	3	5	7384.4	25.0	141.9	9.9%	141.9	9.9%	195.9	13.6%	198.0	13.8%
ZION19	1	1	6750.3	25.0	140.7	9.8%	140.9	9.8%	196.9	13.7%	198.1	13.8%
ZION19	1	2	6517.5	34.4	36.8	2.6%	36.8	2.6%	51.5	3.6%	51.5	3.6%
ZION20	1	1	5608.9	22.6	282.8	19.6%	283.8	19.7%	386.6	26.8%	388.4	27.0%
ZION20	1	2	6812.4	21.0	317.9	22.1%	319.2	22.2%	434.9	30.2%	437.4	30.4%
ZION20	1	3	6786.0	21.3	293.0	20.3%	294.6	20.5%	401.6	27.9%	404.3	28.1%
ZION20	1	4	6133.7	22.0	254.1	17.6%	255.9	17.8%	348.7	24.2%	351.5	24.4%
ZION20	1	5	5285.0	31.7	68.5	4.8%	69.2	4.8%	94.4	6.6%	95.2	6.6%
ZION20	1	6	6479.4	27.0	119.5	8.3%	120.2	8.3%	164.8	11.4%	166.0	11.5%
ZION20	1	7	6433.3	27.0	111.6	7.8%	112.1	7.8%	154.2	10.7%	155.5	10.8%
ZION20	2	1	5956.0	21.0	332.0	23.1%	333.0	23.1%	454.1	31.5%	455.8	31.7%
ZION20	2	2	6593.2	21.2	307.2	21.3%	308.4	21.4%	419.3	29.1%	420.9	29.2%
ZION20	2	3	6613.4	21.0	298.4	20.7%	299.6	20.8%	407.9	28.3%	409.7	28.5%
CHINLE	1	1	4200.2	23.0	293.9	20.4%	295.1	20.5%	402.3	27.9%	405.8	28.2%
CRZQLT	1	1	5620.8	20.0	376.9	26.2%	378.4	26.3%	515.7	35.8%	518.0	36.0%
EASTRM	1	1	6396.8	21.0	296.5	20.6%	298.0	20.7%	406.1	28.2%	408.5	28.4%
HOPVAL	1	1	6380.3	25.0	152.6	10.6%	153.1	10.6%	213.7	14.8%	215.4	15.0%
KOLOBC	1	1	6140.9	26.0	143.4	10.0%	143.4	10.0%	195.4	13.6%	197.6	13.7%
LAVAPT	1	1	7798.0	36.8	22.2	1.5%	22.2	1.5%	31.2	2.2%	31.2	2.2%
LCREEK	1	1	7598.9	39.6	17.1	1.2%	17.1	1.2%	24.0	1.7%	24.0	1.7%
LFKRTD	1	1	5056.0	36.7	39.7	2.8%	39.9	2.8%	55.6	3.9%	56.3	3.9%
NCREEK	1	1	4205.0	49.9	2.0	0.1%	2.0	0.1%	2.9	0.2%	2.9	0.2%
PRWEAP	1	1	4023.1	28.0	172.1	12.0%	173.0	12.0%	235.6	16.4%	237.0	16.5%
SCOUTS	1	1	5445.8	29.7	98.5	6.8%	99.6	6.9%	135.2	9.4%	136.9	9.5%
WILDCT	1	1	6955.5	24.4	175.9	12.2%	177.2	12.3%	245.5	17.0%	248.8	17.3%
ZHQ	1	1	4046.3	30.3	116.2	8.1%	116.8	8.1%	159.1	11.0%	160.3	11.1%

Table 7.11B
Proportions of Zion National Park Management Zones Exposed to Aviation Noise Above L50 Natural Ambient Levels

% of Day Exposed to Noise Above L50 Natural Ambient	2010 Conditions				2020 Conditions			
	Existing Airport		Replacement Airport		Existing Airport		Replacement Airport	
	Acres	% of Total	Acres	% of Total	Acres	% of Total	Acres	% of Total
Front Country High Development Zone								
<10% (less than 144 minutes)	203.1	32%	202.8	32%	126.1	20%	113.8	18%
10-15% (144 to 216 minutes)	267.8	42%	267.8	42%	165.8	26%	165.8	26%
15-20% (216 to 288 minutes)	68.1	11%	68.1	11%	190.2	30%	190.2	30%
20-25% (288 to 360 minutes)	97.7	15%	97.7	15%	30.3	5%	-	0%
25-30% (360 to 432 minutes)	-	0%	-	0%	124.0	19%	166.6	26%
Zone Total Acreage	636.4	100%	636.4	100%	636.4	100%	636.4	100%
Front Country Low Development and Administrative Zones								
<10% (less than 144 minutes)	519.6	49%	455.1	43%	310.6	29%	312.7	29%
10-15% (144 to 216 minutes)	446.4	42%	510.9	48%	333.0	31%	333.0	31%
15-20% (216 to 288 minutes)	98.7	9%	98.7	9%	351.1	33%	351.1	33%
20-25% (288 to 360 minutes)	-	0%	-	0%	31.6	3%	31.2	3%
25-30% (360 to 432 minutes)	-	0%	-	0%	38.3	4%	36.6	3%
Zone Total Acreage	1,064.6	100%	1,064.6	100%	1,064.6	100%	1,064.6	100%
Primitive and Transitional Zones								
<10% (less than 144 minutes)	5,315.6	30%	5,315.6	30%	1,531.5	9%	1,507.3	8%
10-15% (144 to 216 minutes)	10,386.2	58%	10,386.2	58%	9,097.9	51%	9,097.9	51%
15-20% (216 to 288 minutes)	1,403.3	8%	1,403.3	8%	5,881.5	33%	5,881.5	33%
20-25% (288 to 360 minutes)	733.8	4%	733.8	4%	553.6	3%	128.2	6%
25-30% (360 to 432 minutes)	-	0%	-	0%	765.3	4%	1,214.8	1%
30-35% (432 to 504 minutes)	-	0%	-	0%	9.1	0%	9.1	0%
Zone Total Acreage	17,838.8	100%	17,838.8	100%	17,838.8	100%	17,838.8	100%
Pristine Zone								
<10% (less than 144 minutes)	43,906.4	37%	43,175.7	36%	33,469.6	28%	35,203.5	29%
10-15% (144 to 216 minutes)	29,339.5	25%	30,070.2	25%	40,127.5	34%	40,127.5	34%
15-20% (216 to 288 minutes)	26,437.3	22%	26,437.3	22%	12,646.7	11%	12,646.7	11%
20-25% (288 to 360 minutes)	17,553.3	15%	17,553.3	15%	7,779.8	7%	5,437.4	5%
25-30% (360 to 432 minutes)	2,208.8	2%	2,208.8	2%	20,034.8	17%	20,643.3	17%
30-35% (432 to 504 minutes)	-	0%	-	0%	4,150.7	3%	4,150.7	3%
35-40% (504 to 600 minutes)	-	0%	-	0%	1,236.3	1%	1,236.3	1%
Zone Total Acreage	119,445.3	100%	119,445.3	100%	119,445.3	100%	119,445.3	100%
Natural Reaseach Area Zone								
<10% (less than 144 minutes)	1,047.2	12%	1,047.2	12%	643.4	7%	666.9	7%
10-15% (144 to 216 minutes)	1,435.9	16%	1,435.9	16%	1,431.3	16%	1,431.3	16%
15-20% (216 to 288 minutes)	1,260.5	14%	1,260.5	14%	2,190.4	24%	2,190.4	24%
20-25% (288 to 360 minutes)	4,632.0	51%	4,632.0	51%	381.3	4%	375.3	4%
25-30% (360 to 432 minutes)	655.1	7%	655.1	7%	2,532.7	28%	2,515.2	28%
30-35% (432 to 504 minutes)	-	0%	-	0%	1,459.6	16%	1,459.6	16%
35-40% (504 to 600 minutes)	-	0%	-	0%	392.0	4%	392.0	4%
Zone Total Acreage	9,030.7	100%	9,030.7	100%	9,030.7	100%	9,030.7	100%

Note: Based upon the computation process, the acreage within each range and management zone may carry a margin of error of 1 to 3%.

7.2.4 ANALYSIS OF CUMULATIVE NOISE EFFECTS IN OTHER 4(f)/303(c) LOCATIONS

The evaluations conducted to assess cumulative aviation noise at Zion National Park were also used to consider the effects of the proposed replacement airport on the noise levels forecast to be present at other noise-sensitive 4(f)/303(c) locations in the Initial Area of Investigation. **Appendix B** details the results of these analyses, including tables and maps of change between the cumulative noise levels with the existing airport and with the replacement airport. This section summarizes the findings.

7.2.4.1 Cumulative Summary Metrics

The DNL, $Leq_{(24)}$, and $Leq_{(day)}$ metrics were computed for more than 900 grid points located in other 4(f)/303(c) properties throughout the Initial Area of Investigation. Because it is the total noise effect that contributes to the potential effect on the property of interest, the cumulative total, and the degree of change in the cumulative total is reported for each site. These data are reported in **Appendix B**. Changes attributable to the airport alone for selected grid points were summarized for each property and presented in **Section 6.6 of Chapter Six**, but are only a subset of the cumulative noise effect.

While the summary metric tables for airport only effects (**Table 6.31 through Table 6.324**) in **Section 6.6 of Chapter Six** also presented the cumulative noise summary for selected grid points in each property, **Table 7.12, Table 7.13, and Table 7.14** present the summary statistics for the other 4(f)/303(c) properties evaluated.

As the summary statistics indicate, the change in noise levels between existing airport and proposed replacement airport for the future years indicated little or no increase to the summary metrics (DNL, $Leq_{(24)}$, or $Leq_{(day)}$) in excess of 5 dBA. At most properties there was either no increase or a slight reduction in noise resulting from the replacement airport.

7.2.4.2 Time Above Ambient

To compute the estimated time that each grid point in the other 4(f)/303(c) locations is exposed to aircraft noise above ambient levels, the $L50_{(existing)}$ average noise measured at sites in Zion National Park in 2000 was calculated and used as an estimated ambient level for the other 4(f)/303(c) sites in the initial Area of Investigation. The $L50_{(existing)}$ level was determined to be approximately 29 dBA and computations were made of the time aircraft would exceed that level at each analysis point.

Table 7.15 presents the summary statistics for the Time Above Ambient metric at the other 4(f)/303(c) properties evaluated. Time Above Tables (**Table 6.31 through Table 6.324**) in **Section 6.6 of Chapter Six** also present the TAA data for the cumulative noise for selected grid points within each property of interest.

As the statistics in **Table 7.15** indicate, there are several locations that would be exposed to average increases of one minute or more per day if the airport were relocated, and several other locations that would experience average reductions of one minute or more. One location that would experience an average increase of 4.9 minutes to the time of exposure resulting from the replacement airport is Quail Creek State Park, under the approach pattern from the north to the new airport. Locations that would experience reductions of five minutes or more per day of exposure to aircraft noise above 29 dBA include the southwestern portion of the Cottonwood Wilderness Study Area, under approaches from the north to the existing airport; Snow Canyon State Park, located about four miles to the northwest of the existing airport; and the eastern portion of Beaver Dam Mountains Wilderness, located about four miles to the southwest of the existing airport.

7.2.4.3 Number of Events Above Selected Noise Levels

The cumulative Numbers of Events Above selected noise levels were also computed for each of the grid points located in the other 4(f)/303c properties throughout the region along with L_Amax noise values. **Table 7.16 through Table 7.113** present the Number of Events Above selected noise levels data for the cumulative noise for selected grid points at each property for 2010 and 2020. Summary statistics of the results for each property are presented in **Tables 7.114 and Table 7.115** for 2010 and 2020 respectively.

As the summary statistics indicate, by 2020 no sites are exposed to more than one additional operation per day over 55 or 65 dBA due to the replacement airport. At 45 dBA, the sites exposed to increases of one or more operations per day expand to include a few grid points in the Canaan Mountain Wilderness Study Area, located south of Zion National Park. In contrast, the Quail Creek State Park will experience a decrease of some 1.9 events above 45 dBA resulting from the project in 2020. Above 35 dBA, some grid points at five properties are exposed to increases of one or more operations per day with the new airport in place, while points at six properties experience a decrease of one or more operations per day under new flight routes. When considering the average change in L_Amax values in 2020 resulting from the replacement airport, the vast majority of the properties will experience little or no change with the largest average change of 0.8 dBA occurring in the Cottonwood Point Wilderness area which is located some 30 miles to the southeast of the existing St. George Airport. In contrast, an average reduction of 0.9 dBA is evident over the Ashdown Gorge Wilderness property, located approximately 43 miles northeast of the existing St. George Airport. Extensive information regarding the numbers of events above each of the selected noise levels is provided in **Appendix B**.

7.2.4.4 Summary of Aircraft Noise Effects Over Other 4(f)/303(c) Properties

As was the case with the evaluation of noise levels over Zion National Park, the information provided in the preceding pages and made available in **Appendix B** demonstrates that the effects associated with the proposed project action at St. George to relocate the airport from its existing location to a new site will

have small effects on the aircraft noise levels over other 4(f)/303(c) properties in the initial area of investigation. The changes in the cumulative noise indicated by the summary metrics (DNL, $Leq_{(24)}$, and $Leq_{(day)}$) associated with the proposed project remain less than 5 dBA. The proportion of change in the detailed metrics (time above ambient and numbers of events above thresholds) resulting from the proposed project seldom vary by more than one to two percent of the total aircraft contribution of noise over the area evaluated.

7.2.5 ANALYSIS OF CUMULATIVE NOISE EFFECTS AT LITTLE BLACK MOUNTAIN

The Little Black Mountain Petroglyph site is located approximately eight miles to the southeast of the existing St. George Airport and approximately 1.5 miles south of the proposed replacement airport location, east of the extended centerline of the proposed runway. As described in **Chapter Six, Section 6.6**, the activity at the proposed replacement airport site is expected to have a greater effect on the noise levels at Little Black Mountain than those related to the existing airport. This analysis, however, focuses the evaluation on the effects related the cumulative noise exposure from all aircraft sources in the area.

7.2.5.1 Cumulative Summary Metrics

The DNL, $Leq_{(24)}$, and $Leq_{(day)}$ metrics were computed for the Little Black Mountain Petroglyph site. **Table 7.116, Table 7.117, and Table 7.118** present the summary statistics for each of the summary noise metrics at Little Black Mountain.

The summary metrics indicate an increase of approximately 2 dBA from the cumulative aircraft noise levels for the existing airport, as compared to the replacement airport. The cumulative noise level increases in each case from the low to the mid-30 dBA level. For $Leq_{(24)}$ the noise level changes from 34.2 to 34.3 dBA for the year 2010 with the replacement airport, and from 33.7 to 35.5 dBA for the 2020 case. During the measurement period at the Little Black Mountain site, the measured $Leq_{(24)}$ level for existing conditions ranged from 38.9 to 51.0 dBA, largely as a result of the combination of aircraft overflights and noise generated by recreational vehicles. The area is frequently used by all terrain vehicles and motocross bikes. If assumed to be representative of such activity for a full year, the $Leq_{(24)}$ measured levels, by exceeding the modeled cumulative aircraft noise levels by 3 to 13 dBA at the petroglyph measurement sites, would substantially mask the cumulative aircraft noise levels in DNL, $Leq_{(24)}$, and $Leq_{(day)}$ for the site, although aircraft single events from the airport would be noticeable (3 dBA or greater) to an observer at the site.

7.2.5.2 Time Above Ambient

Table 7.119 presents the summary statistics for the cumulative Time Above Ambient noise metric at Little Black Mountain. For evaluations of the amount of time above ambient levels, the approximate average measured $L50_{(existing)}$ level at Little Black Mountain (20 dBA) was used as the ambient threshold.

As the table indicates, the amount of time above the ambient level at Little Black Mountain will increase substantially with the relocation of the airport since the site is located just south of the proposed airport site. The data indicates an increase of approximately 2.9 hours per day of exposure at the site to noise above 20 dBA of ambient noise by the year 2020 with the replacement airport.

7.2.5.3 Number of Events Above Selected Noise Levels

At Little Black Mountain, the proximity of the property to the new airport will expose it to substantially more aircraft operations than are now experienced. **Table 7.120** presents the summary statistics for the numbers of events above selected noise levels along with L_{Amax} noise values for each of the future years at Little Black Mountain.

The results presented in the table indicate that while the total number of events above 20 dBA or above 65 dBA at the site will not increase by large percentages with the relocation of the airport, there will be a general shift to more mid-level events. For example, the number of events above 45 dBA will increase from 11 to 34, or by 209 percent in 2010, and in 2020, the shift at events above 45 dBA will be from 15 to 39, or by 157 percent. Although in 2010 the L_{Amax} level at Little Black Mountain is expected to decrease by some 4.7 dBA, by 2020 an 8.3 dBA increase of L_{Amax} is expected at Little Black Mountain due to the replacement airport.

7.2.5.4 Summary of Aircraft Noise Effects at Little Black Mountain

The Little Black Mountain Petroglyph Site will, with the relocation of the airport to the replacement site, experience increases of aircraft noise to varying degrees. While the average 24-hour aircraft noise levels will remain well below the average energy based DNL and Leq₍₂₄₎ levels measured at the site, the site will experience increases in the number of operations with noise levels above ambient 20 dBA levels. Also, the loudness of individual events will ultimately shift toward noise levels as much as 8 dBA greater than those levels experienced at the site with the existing airport, but will not noticeably increase in number above 65 dBA. The loudest events at the property will, if unabated, continue to be off-road vehicles and motorcycles that use the site as a recreational facility although single aircraft events will be noticeable above the L₅₀ ambient levels at the site.

Table 7.12
Noise Level Summary at Other 4f/303(c) Properties
Cumulative DNL - 2010/2020
St. George Municipal Airport EIS

PROPERTY	# of Pts	2010									2020								
		Existing			Replacement			Change			Existing			Replacement			Change		
		Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
Ashdown Gorge Wilderness	16	30.8	<A	28.1	30.8	29.1	30.0	0.0	0.0	0.0	32.3	30.6	31.5	32.3	30.6	31.4	0.0	-1.0	-0.1
Beartrap Canyon WSA	1	30.8	30.8	30.8	30.9	30.9	30.9	0.0	0.0	0.0	32.3	32.3	32.3	32.3	32.3	32.3	0.0	0.0	0.0
Beaver Dam Mountains Wilderness	21	36.1	33.3	35.0	35.8	32.0	34.6	0.0	-2.0	-0.4	37.3	34.4	36.2	37.1	33.4	35.9	0.0	-1.7	-0.3
Beaver Dam SP	5	<A	<A	<A	<A	<A	<A	0.0	0.0	0.0	<A	<A	<A	<A	<A	<A	0.0	0.0	0.0
Canaan Mountain WSA	41	35.1	32.2	33.6	34.9	32.3	33.6	0.9	-0.4	0.0	36.4	33.7	35.0	36.8	33.7	35.0	0.7	-0.7	0.0
Cedar Breaks National Monument	4	29.8	<A	22.1	29.8	29.1	29.4	0.0	0.0	0.0	31.8	30.6	31.1	31.2	30.6	30.9	0.0	-1.0	-0.2
Cedar City Paiute Indian Reservation	6	36.2	35.3	35.8	36.1	35.3	35.7	0.0	-0.2	-0.1	33.9	31.0	32.4	34.0	31.1	32.4	0.1	0.0	0.1
Clover Mountains WSA	31	<A	<A	<A	<A	<A	<A	0.0	0.0	0.0	<A	<A	<A	<A	<A	<A	0.0	0.0	0.0
Coral Pink Sand Dunes SP	2	33.0	32.8	32.9	33.1	32.7	32.9	0.0	-0.1	0.0	34.4	34.1	34.3	34.4	33.9	34.2	0.0	-0.2	-0.1
Cottonwood Point Wilderness	7	34.4	33.4	34.0	34.4	33.4	34.0	0.1	-0.1	0.0	35.9	34.8	35.4	36.0	34.7	35.4	0.5	-0.1	0.0
Cottonwood WSA	15	35.0	30.7	32.2	34.3	31.2	32.2	0.7	-1.0	-0.1	35.8	32.0	33.4	35.3	32.4	33.3	0.5	-0.8	-0.1
Cougar Canyon WSA	17	<A	<A	<A	<A	<A	<A	0.0	0.0	0.0	30.5	<A	10.6	30.5	<A	10.6	0.0	0.0	0.0
Deep Creek WSA	9	33.8	32.6	33.2	33.8	32.6	33.2	0.0	0.0	0.0	35.2	34.1	34.7	35.3	34.1	34.7	0.0	0.0	0.0
Gateway Corridor 22	14	36.0	31.2	33.7	36.0	31.2	33.7	0.0	0.0	0.0	37.4	32.6	35.2	37.4	32.6	35.2	0.0	0.0	0.0
Gateway Corridor 23	18	32.4	30.7	31.3	32.4	30.7	31.3	0.0	0.0	0.0	33.8	32.1	32.8	33.8	32.1	32.8	0.0	0.0	0.0
Gateway Corridor 24	22	33.9	30.5	31.9	33.9	30.5	31.9	0.0	0.0	0.0	35.4	32.0	33.4	35.4	32.0	33.4	0.0	0.0	0.0
Gateway Corridor 32	18	34.1	32.7	33.5	34.3	32.6	33.5	0.4	-0.4	0.0	35.5	33.9	34.8	35.6	33.9	34.9	0.3	-0.3	0.0
Gateway Corridor 33	16	33.8	32.0	32.9	33.8	32.0	32.9	0.3	0.0	0.0	35.2	33.5	34.3	35.2	33.3	34.3	0.2	-0.5	0.0
Goose Creek WSA	1	33.0	33.0	33.0	33.0	33.0	33.0	0.0	0.0	0.0	34.5	34.5	34.5	34.5	34.5	34.5	0.0	0.0	0.0
Grand Canyon-Parashant NM	18	36.0	30.7	32.6	36.1	30.7	32.6	0.0	0.0	0.0	37.5	32.1	34.1	37.5	32.1	34.1	0.0	0.0	0.0
Grand Canyon-Parashant NM (West)	184	38.1	33.6	36.1	38.1	33.6	36.1	0.1	0.0	0.0	39.6	35.1	37.5	39.6	35.1	37.5	0.0	0.0	0.0
Grand Wash Cliffs Wilderness	21	38.1	36.1	37.4	38.1	36.1	37.4	0.0	0.0	0.0	39.5	37.6	38.9	39.5	37.6	38.9	0.0	0.0	0.0
Gunlock SP	4	36.0	34.0	35.0	36.0	34.0	35.0	0.0	0.0	0.0	37.5	35.5	36.5	37.5	35.5	36.5	0.0	0.0	0.0
Iron Mission State Park Museum	1	29.7	29.7	29.7	29.7	29.7	29.7	0.0	0.0	0.0	31.1	31.1	31.1	31.2	31.2	31.2	0.1	0.1	0.1
Joshua Tree Instant Study Area	3	34.3	34.0	34.2	34.3	34.0	34.2	0.0	0.0	0.0	35.8	35.5	35.6	35.8	35.5	35.6	0.0	0.0	0.0
Kaibab Indian Reservation	72	34.9	31.6	32.7	34.8	31.6	32.7	0.2	-0.2	0.0	35.8	33.0	34.2	36.2	33.0	34.2	1.7	-0.4	0.0
Kaibab National Forest	9	33.9	31.8	33.1	33.9	31.8	33.1	0.0	0.0	0.0	35.4	33.3	34.5	35.4	33.3	34.5	0.0	0.0	0.0
Kanab Creek Wilderness	27	32.7	30.6	31.1	32.7	30.6	31.1	0.0	0.0	0.0	34.2	32.1	32.6	34.2	32.1	32.6	0.0	0.0	0.0
La Verkin Creek WSA	2	31.3	31.1	31.2	31.2	31.1	31.1	0.0	-0.1	0.0	32.7	32.6	32.7	32.7	32.6	32.6	0.0	-0.1	0.0
Lake Mead National Recreation Area	28	39.4	36.9	38.1	39.4	36.9	38.1	0.0	0.0	0.0	40.7	38.3	39.4	40.7	38.3	39.4	0.0	0.0	0.0
Lime Canyon WSA	5	37.0	36.7	36.9	37.1	36.7	36.9	0.0	0.0	0.0	38.4	38.1	38.3	38.4	38.1	38.3	0.0	0.0	0.0
Moquith Mountains WSA	17	33.8	31.1	32.2	33.5	31.1	32.2	0.0	-0.3	0.0	35.1	32.6	33.6	34.9	32.6	33.6	1.0	-0.2	0.0
Morman Mountains WSA	24	33.2	<A	20.6	33.2	<A	20.6	0.0	0.0	0.0	34.7	<A	29.0	34.7	<A	29.0	0.0	0.0	0.0
Mount Trumbull Wilderness	3	31.2	30.7	30.9	31.2	30.7	30.9	0.0	0.0	0.0	32.6	32.1	32.4	32.6	32.1	32.4	0.0	0.0	0.0
North Fork Virgin River	6	33.8	33.2	33.6	33.8	33.2	33.6	0.1	0.0	0.0	35.3	34.7	35.1	35.3	34.7	35.1	0.0	0.0	0.0
Orderville Canyon WSA	4	33.2	32.8	32.9	33.3	32.8	33.0	0.5	0.0	0.1	34.7	34.2	34.3	34.7	34.2	34.3	0.0	0.0	0.0
Paiute Wilderness	78	36.3	33.5	35.6	36.3	33.5	35.6	0.1	-0.3	0.0	37.7	35.0	37.1	37.7	35.0	37.0	0.1	-0.3	0.0
Parunuweap WSA	34	34.4	32.6	33.5	34.4	32.5	33.5	0.3	-0.2	0.0	35.8	33.9	34.8	35.8	33.9	34.9	0.2	0.0	0.0
Pine Valley Mountain Wilderness	54	31.8	30.2	30.7	31.5	30.2	30.8	0.6	-0.6	0.1	33.2	31.6	32.1	32.8	31.5	32.1	0.5	-0.7	0.1
Pipe Spring NM	4	33.2	32.5	32.8	33.2	32.5	32.8	0.0	0.0	0.0	34.6	34.0	34.3	34.6	34.0	34.3	0.0	0.0	0.0
Quail Creek SP	2	33.9	33.4	33.7	33.8	33.4	33.6	0.4	-0.5	-0.1	34.8	34.6	34.7	34.9	34.4	34.6	0.3	-0.4	-0.1
Red Butte WSA	1	32.1	32.1	32.1	32.1	32.1	32.1	0.0	0.0	0.0	33.4	33.4	33.4	33.5	33.5	33.5	0.0	0.0	0.0
Red Mountain WSA	27	36.0	30.9	32.5	36.0	30.9	32.5	0.0	-0.1	0.0	37.5	32.4	34.0	37.5	32.3	34.0	0.0	-0.1	0.0
Shivwits Paiute Indian Reservation	25	36.7	31.8	33.7	36.7	31.5	33.6	0.0	-1.1	-0.2	38.2	33.2	35.1	38.2	32.9	35.0	0.0	-0.8	-0.1
Snow Canyon SP	9	31.7	30.9	31.2	31.7	30.6	31.0	0.0	-0.5	-0.1	33.1	32.3	32.6	33.1	32.1	32.5	0.0	-0.4	-0.1
Spring Creek Canyon WSA	9	33.5	30.8	31.6	33.5	30.8	31.6	0.0	0.0	0.0	34.6	32.2	33.0	34.7	32.3	33.0	0.1	0.0	0.1
Taylor Creek WSA	1	31.8	31.8	31.8	31.8	31.8	31.8	0.0	0.0	0.0	33.3	33.3	33.3	33.3	33.3	33.3	0.0	0.0	0.0
The Watchman WSA	2	33.2	33.2	33.2	33.2	33.2	33.2	0.0	0.0	0.0	34.5	34.5	34.5	34.5	34.5	34.5	0.0	0.0	0.0
Tunnel Spring WSA	8	<A	<A	<A	<A	<A	<A	0.0	0.0	0.0	<A	<A	<A	<A	<A	<A	0.0	0.0	0.0

Table 7.13
Noise Level Summary at Other 4f/303(c) Properties
Cumulative Leq(24) - 2010/2020
St. George Municipal Airport EIS

PROPERTY	# of Pts	2010									2020								
		Existing			Replacement			Change			Existing			Replacement			Change		
		Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
Ashdown Gorge Wilderness	16	29.6	<A	3.7	29.6	<A	3.7	0.0	0.0	0.0	30.9	29.3	30.1	30.9	29.3	30.0	0.0	-1.3	-0.1
Beartrap Canyon WSA	1	29.6	29.6	29.6	29.6	29.6	29.6	0.0	0.0	0.0	31.0	31.0	31.0	31.0	31.0	31.0	0.0	0.0	0.0
Beaver Dam Mountains Wilderness	21	34.5	31.7	33.4	34.3	30.4	33.1	0.0	-2.0	-0.4	35.7	32.7	34.7	35.5	31.7	34.4	0.0	-1.7	-0.3
Beaver Dam SP	5	<A	<A	<A	<A	<A	<A	0.0	0.0	0.0	<A	<A	<A	<A	<A	<A	0.0	0.0	0.0
Canaan Mountain WSA	41	33.7	31.1	32.3	33.6	31.1	32.3	0.9	-0.4	0.0	35.1	32.6	33.7	35.5	32.6	33.7	0.7	-0.6	0.0
Cedar Breaks National Monument	4	<A	<A	<A	<A	<A	<A	0.0	0.0	0.0	30.7	29.3	29.8	29.7	29.3	29.4	0.0	-1.3	-0.3
Cedar City Paiute Indian Reservation	6	31.5	<A	15.3	31.5	<A	15.3	0.0	0.0	0.0	32.4	29.4	30.8	32.4	29.5	30.8	0.0	0.0	0.0
Clover Mountains WSA	31	<A	<A	<A	<A	<A	<A	0.0	0.0	0.0	<A	<A	<A	<A	<A	<A	0.0	0.0	0.0
Coral Pink Sand Dunes SP	2	31.8	31.6	31.7	31.8	31.5	31.6	0.0	-0.1	0.0	33.3	32.9	33.1	33.3	32.7	33.0	0.0	-0.2	-0.1
Cottonwood Point Wilderness	7	33.2	32.1	32.7	33.2	32.1	32.7	0.1	0.0	0.0	34.7	33.5	34.1	34.7	33.4	34.2	0.5	-0.1	0.0
Cottonwood WSA	15	33.3	<A	28.6	32.6	29.3	30.3	0.5	-1.3	-0.2	34.2	30.3	31.7	33.5	30.5	31.5	0.4	-1.1	-0.2
Cougar Canyon WSA	17	<A	<A	<A	<A	<A	<A	0.0	0.0	0.0	<A	<A	<A	<A	<A	<A	0.0	0.0	0.0
Deep Creek WSA	9	32.7	31.7	32.2	32.7	31.7	32.2	0.0	0.0	0.0	34.2	33.1	33.7	34.2	33.1	33.7	0.0	0.0	0.0
Gateway Corridor 22	14	34.4	29.5	32.2	34.4	29.5	32.2	0.0	0.0	0.0	35.8	30.9	33.6	35.8	30.9	33.6	0.0	0.0	0.0
Gateway Corridor 23	18	30.7	29.2	29.9	30.7	29.2	29.9	0.0	0.0	0.0	32.1	30.7	31.3	32.1	30.7	31.3	0.0	0.0	0.0
Gateway Corridor 24	22	32.8	29.2	30.7	32.8	29.2	30.7	0.0	0.0	0.0	34.2	30.7	32.2	34.2	30.7	32.2	0.0	0.0	0.0
Gateway Corridor 32	18	32.8	31.2	32.1	32.9	31.1	32.1	0.4	-0.3	0.0	34.3	32.5	33.5	34.3	32.5	33.5	0.3	-0.3	0.0
Gateway Corridor 33	16	32.7	30.4	31.5	32.7	30.4	31.6	0.5	0.0	0.1	34.2	31.9	33.0	34.2	31.8	33.0	0.3	-0.7	0.0
Goose Creek WSA	1	31.9	31.9	31.9	31.9	31.9	31.9	0.0	0.0	0.0	33.4	33.4	33.4	33.4	33.4	33.4	0.0	0.0	0.0
Grand Canyon-Parashant NM	18	34.4	29.2	31.1	34.4	29.2	31.1	0.0	0.0	0.0	35.8	30.7	32.6	35.9	30.7	32.6	0.0	0.0	0.0
Grand Canyon-Parashant NM (West)	184	36.8	32.2	34.6	36.8	32.2	34.6	0.1	0.0	0.0	38.3	33.7	36.0	38.3	33.7	36.0	0.0	0.0	0.0
Grand Wash Cliffs Wilderness	21	36.6	34.6	36.0	36.6	34.6	36.0	0.0	0.0	0.0	38.1	36.1	37.5	38.1	36.1	37.5	0.0	0.0	0.0
Gunlock SP	4	34.3	32.3	33.3	34.3	32.3	33.3	0.0	0.0	0.0	35.7	33.8	34.8	35.7	33.8	34.8	0.0	0.0	0.0
Iron Mission State Park Museum	1	<A	<A	<A	<A	<A	<A	0.0	0.0	0.0	29.3	29.3	29.3	29.4	29.4	29.4	0.0	0.0	0.0
Joshua Tree Instant Study Area	3	32.8	32.4	32.6	32.8	32.4	32.6	0.0	0.0	0.0	34.3	33.9	34.1	34.3	33.9	34.1	0.0	0.0	0.0
Kaibab Indian Reservation	72	33.6	30.4	31.6	33.4	30.4	31.6	0.2	-0.2	0.0	34.5	31.9	33.0	34.9	31.9	33.1	1.6	-0.4	0.0
Kaibab National Forest	9	32.8	30.7	31.9	32.8	30.7	31.9	0.0	0.0	0.0	34.2	32.2	33.4	34.2	32.2	33.4	0.0	0.0	0.0
Kanab Creek Wilderness	27	31.5	29.5	30.0	31.5	29.5	30.0	0.0	0.0	0.0	33.0	31.0	31.5	33.0	31.0	31.5	0.0	0.0	0.0
La Verkin Creek WSA	2	30.0	29.7	29.9	29.9	29.7	29.8	0.0	-0.1	-0.1	31.4	31.2	31.3	31.3	31.2	31.2	0.0	-0.1	-0.1
Lake Mead National Recreation Area	28	37.4	34.8	36.0	37.4	34.8	36.0	0.0	0.0	0.0	38.7	36.2	37.4	38.7	36.2	37.4	0.0	0.0	0.0
Lime Canyon WSA	5	34.9	34.6	34.8	34.9	34.6	34.8	0.0	0.0	0.0	36.3	36.1	36.2	36.3	36.1	36.2	0.0	0.0	0.0
Moquith Mountains WSA	17	32.5	30.0	31.0	32.2	30.0	31.0	0.0	-0.3	0.0	33.7	31.5	32.5	33.5	31.5	32.5	0.9	-0.2	0.0
Morman Mountains WSA	24	31.6	<A	10.1	31.6	<A	10.1	0.0	0.0	0.0	33.1	<A	18.0	33.1	<A	18.0	0.0	0.0	0.0
Mount Trumbull Wilderness	3	29.5	29.2	29.3	29.5	29.2	29.3	0.0	0.0	0.0	30.9	30.7	30.8	30.9	30.7	30.8	0.0	0.0	0.0
North Fork Virgin River	6	32.7	32.0	32.5	32.8	32.1	32.5	0.1	0.0	0.0	34.2	33.6	34.0	34.2	33.6	34.0	0.0	0.0	0.0
Orderville Canyon WSA	4	32.0	31.5	31.6	32.0	31.5	31.8	0.4	0.0	0.1	33.5	32.9	33.1	33.5	32.9	33.1	0.0	0.0	0.0
Paiute Wilderness	78	34.8	32.0	34.1	34.7	32.0	34.0	0.2	-0.3	0.0	36.1	33.3	35.5	36.1	33.4	35.5	0.1	-0.3	0.0
Parunuweap WSA	34	33.1	31.1	32.1	33.1	31.0	32.1	0.3	-0.3	0.0	34.6	32.5	33.5	34.6	32.5	33.5	0.2	0.0	0.0
Pine Valley Mountain Wilderness	54	30.3	<A	7.1	29.8	<A	7.6	0.1	-0.6	-0.1	31.6	29.6	30.3	31.2	29.6	30.2	0.1	-0.8	-0.1
Pipe Spring NM	4	32.0	31.4	31.7	32.0	31.4	31.7	0.0	0.0	0.0	33.5	32.9	33.2	33.5	32.9	33.2	0.0	0.0	0.0
Quail Creek SP	2	32.2	31.9	32.1	32.2	31.7	31.9	0.3	-0.5	-0.1	33.2	33.0	33.1	33.3	32.7	33.0	0.3	-0.4	-0.1
Red Butte WSA	1	30.8	30.8	30.8	30.8	30.8	30.8	0.0	0.0	0.0	32.3	32.3	32.3	32.3	32.3	32.3	0.0	0.0	0.0
Red Mountain WSA	27	34.3	29.2	30.9	34.3	29.1	30.9	0.0	-0.1	0.0	35.7	30.7	32.4	35.7	30.6	32.4	0.0	-0.1	0.0
Shivwits Paiute Indian Reservation	25	35.1	30.1	32.1	35.1	29.7	31.9	0.0	-1.1	-0.2	36.6	31.5	33.5	36.6	31.1	33.4	0.0	-0.8	-0.1
Snow Canyon SP	9	30.1	29.2	29.5	30.2	<A	23.0	0.0	-0.4	-0.1	31.6	30.6	31.0	31.6	30.5	30.9	0.0	-0.3	-0.1
Spring Creek Canyon WSA	9	32.1	29.2	30.1	32.1	29.2	30.1	0.0	0.0	0.0	33.3	30.7	31.5	33.3	30.7	31.5	0.0	0.0	0.0
Taylor Creek WSA	1	30.5	30.5	30.5	30.5	30.5	30.5	0.0	0.0	0.0	32.0	32.0	32.0	32.0	32.0	32.0	0.0	0.0	0.0
The Watchman WSA	2	31.5	31.4	31.4	31.5	31.4	31.4	0.0	0.0	0.0	32.8	32.8	32.8	32.9	32.8	32.8	0.0	0.0	0.0
Tunnel Spring WSA	8	<A	<A	<A	<A	<A	<A	0.0	0.0	0.0	<A	<A	<A	<A	<A	<A	0.0	0.0	0.0

Table 7.14
Noise Level Summary at Other 4f/303(c) Properties
Cumulative Leq(day) - 2010/2020
St. George Municipal Airport EIS

PROPERTY	# of Pts	2010									2020								
		Existing			Replacement			Change			Existing			Replacement			Change		
		Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
Ashdown Gorge Wilderness	16	31.3	29.7	30.4	31.3	29.7	30.4	0.1	0.0	0.0	32.8	31.1	31.9	32.8	31.2	31.9	0.0	-1.4	-0.1
Beartrap Canyon WSA	1	31.4	31.4	31.4	31.4	31.4	31.4	0.0	0.0	0.0	32.9	32.9	32.9	32.9	32.9	32.9	0.0	0.0	0.0
Beaver Dam Mountains Wilderness	21	36.4	33.5	35.3	36.2	32.2	34.9	0.0	-2.1	-0.4	37.6	34.6	36.5	37.4	33.6	36.2	0.0	-1.7	-0.3
Beaver Dam SP	5	<A	<A	<A	<A	<A	<A	0.0	0.0	0.0	<A	<A	<A	<A	<A	<A	0.0	0.0	0.0
Canaan Mountain WSA	41	35.6	33.1	34.2	35.5	33.1	34.2	0.9	-0.4	0.0	37.0	34.6	35.6	37.3	34.6	35.6	0.7	-0.6	0.0
Cedar Breaks National Monument	4	30.1	29.7	29.8	30.1	29.7	29.8	0.1	0.0	0.0	32.7	31.1	31.6	31.5	31.2	31.3	0.0	-1.4	-0.3
Cedar City Paiute Indian Reservation	6	33.3	29.8	31.4	33.3	29.8	31.3	0.0	0.0	0.0	34.2	31.2	32.6	34.2	31.2	32.6	0.0	0.0	0.0
Clover Mountains WSA	31	<A	<A	<A	<A	<A	<A	0.0	0.0	0.0	<A	<A	<A	<A	<A	<A	0.0	0.0	0.0
Coral Pink Sand Dunes SP	2	33.7	33.5	33.6	33.8	33.5	33.6	0.0	-0.1	0.0	35.2	34.8	35.0	35.2	34.6	34.9	0.0	-0.2	-0.1
Cottonwood Point Wilderness	7	35.1	34.0	34.6	35.1	34.0	34.6	0.1	0.0	0.0	36.6	35.4	36.0	36.6	35.3	36.1	0.5	-0.1	0.0
Cottonwood WSA	15	35.1	30.8	32.4	34.4	31.1	32.1	0.5	-1.4	-0.3	36.0	32.1	33.5	35.3	32.3	33.3	0.4	-1.2	-0.2
Cougar Canyon WSA	17	<A	<A	<A	<A	<A	<A	0.0	0.0	0.0	30.2	<A	8.7	30.2	<A	8.7	0.0	0.0	0.0
Deep Creek WSA	9	34.6	33.5	34.1	34.6	33.5	34.1	0.0	0.0	0.0	36.1	35.0	35.6	36.1	35.0	35.6	0.0	0.0	0.0
Gateway Corridor 22	14	36.3	31.3	34.0	36.3	31.3	34.0	0.0	0.0	0.0	37.7	32.8	35.5	37.7	32.8	35.5	0.0	0.0	0.0
Gateway Corridor 23	18	32.5	31.0	31.7	32.5	31.0	31.7	0.0	0.0	0.0	34.0	32.5	33.2	34.0	32.5	33.2	0.0	0.0	0.0
Gateway Corridor 24	22	34.7	31.1	32.6	34.7	31.1	32.6	0.0	0.0	0.0	36.1	32.6	34.1	36.1	32.6	34.1	0.0	0.0	0.0
Gateway Corridor 32	18	34.7	33.1	34.0	34.8	33.0	34.0	0.4	-0.3	0.0	36.1	34.4	35.4	36.1	34.4	35.4	0.3	-0.2	0.0
Gateway Corridor 33	16	34.6	32.2	33.4	34.6	32.3	33.4	0.5	0.0	0.1	36.1	33.7	34.9	36.1	33.7	34.9	0.3	-0.7	0.0
Goose Creek WSA	1	33.8	33.8	33.8	33.8	33.8	33.8	0.0	0.0	0.0	35.3	35.3	35.3	35.3	35.3	35.3	0.0	0.0	0.0
Grand Canyon-Parashant NM	18	36.3	31.0	33.0	36.3	31.0	33.0	0.0	0.0	0.0	37.7	32.5	34.5	37.7	32.5	34.5	0.0	0.0	0.0
Grand Canyon-Parashant NM (West)	184	38.7	34.0	36.4	38.7	34.0	36.4	0.1	0.0	0.0	40.1	35.5	37.9	40.1	35.5	37.9	0.0	0.0	0.0
Grand Wash Cliffs Wilderness	21	38.5	36.5	37.9	38.5	36.5	37.9	0.0	0.0	0.0	40.0	38.0	39.4	40.0	38.0	39.4	0.0	0.0	0.0
Gunlock SP	4	36.1	34.1	35.1	36.1	34.1	35.1	0.0	0.0	0.0	37.5	35.6	36.6	37.5	35.6	36.6	0.0	0.0	0.0
Iron Mission State Park Museum	1	29.8	29.8	29.8	29.8	29.8	29.8	0.0	0.0	0.0	31.2	31.2	31.2	31.2	31.2	31.2	0.0	0.0	0.0
Joshua Tree Instant Study Area	3	34.7	34.2	34.5	34.7	34.2	34.5	0.0	0.0	0.0	36.1	35.7	35.9	36.1	35.7	35.9	0.0	0.0	0.0
Kaibab Indian Reservation	72	35.5	32.4	33.5	35.4	32.4	33.5	0.2	-0.2	0.0	36.4	33.9	34.9	36.8	33.8	35.0	1.5	-0.4	0.0
Kaibab National Forest	9	34.7	32.6	33.9	34.7	32.6	33.9	0.0	0.0	0.0	36.1	34.1	35.4	36.1	34.1	35.4	0.0	0.0	0.0
Kanab Creek Wilderness	27	33.4	31.4	31.9	33.4	31.4	31.9	0.0	0.0	0.0	34.9	32.9	33.3	34.9	32.9	33.3	0.0	0.0	0.0
La Verkin Creek WSA	2	31.8	31.6	31.7	31.7	31.6	31.6	0.0	-0.1	-0.1	33.3	33.1	33.2	33.1	33.1	33.1	0.0	-0.1	-0.1
Lake Mead National Recreation Area	28	39.1	36.6	37.8	39.1	36.6	37.8	0.0	0.0	0.0	40.5	37.9	39.2	40.5	37.9	39.2	0.0	0.0	0.0
Lime Canyon WSA	5	36.7	36.4	36.6	36.7	36.4	36.6	0.0	0.0	0.0	38.1	37.9	38.0	38.1	37.9	38.0	0.0	0.0	0.0
Moquith Mountains WSA	17	34.3	32.0	32.9	34.0	32.0	32.9	0.0	-0.3	0.0	35.6	33.4	34.4	35.4	33.4	34.4	0.9	-0.2	0.0
Morman Mountains WSA	24	33.4	<A	20.7	33.4	<A	20.7	0.0	0.0	0.0	34.9	<A	29.2	34.9	<A	29.2	0.0	0.0	0.0
Mount Trumbull Wilderness	3	31.3	31.0	31.1	31.3	31.0	31.1	0.0	0.0	0.0	32.7	32.5	32.6	32.7	32.5	32.6	0.0	0.0	0.0
North Fork Virgin River	6	34.6	33.9	34.3	34.6	34.0	34.4	0.1	0.0	0.0	36.1	35.5	35.9	36.1	35.5	35.9	0.0	0.0	0.0
Orderville Canyon WSA	4	33.9	33.4	33.5	33.9	33.4	33.6	0.4	0.0	0.1	35.4	34.8	35.0	35.4	34.8	35.0	0.0	0.0	0.0
Paiute Wilderness	78	36.6	33.7	35.9	36.5	33.8	35.9	0.2	-0.3	0.0	38.0	35.2	37.3	38.0	35.2	37.3	0.1	-0.2	0.0
Parunuweap WSA	34	35.0	33.0	34.0	35.0	33.0	34.0	0.3	-0.3	0.0	36.5	34.4	35.4	36.5	34.4	35.4	0.2	0.0	0.0
Pine Valley Mountain Wilderness	54	32.2	30.0	30.7	31.6	30.0	30.6	0.2	-0.7	-0.1	33.5	31.4	32.1	33.1	31.3	32.0	0.1	-0.8	-0.1
Pipe Spring NM	4	33.9	33.3	33.6	33.9	33.3	33.6	0.0	0.0	0.0	35.3	34.8	35.0	35.3	34.8	35.0	0.0	0.0	0.0
Quail Creek SP	2	34.1	33.7	33.9	34.0	33.5	33.8	0.3	-0.5	-0.1	35.0	34.8	34.9	35.1	34.6	34.9	0.3	-0.4	-0.1
Red Butte WSA	1	32.8	32.8	32.8	32.8	32.8	32.8	0.0	0.0	0.0	34.2	34.2	34.2	34.2	34.2	34.2	0.0	0.0	0.0
Red Mountain WSA	27	36.1	31.0	32.7	36.1	30.9	32.7	0.0	-0.1	0.0	37.5	32.4	34.2	37.5	32.4	34.2	0.0	-0.1	0.0
Shivwits Paiute Indian Reservation	25	36.9	31.9	33.9	36.9	31.5	33.7	0.0	-1.1	-0.2	38.4	33.3	35.3	38.4	32.9	35.2	0.0	-0.8	-0.1
Snow Canyon SP	9	32.0	31.0	31.3	32.0	30.8	31.2	0.0	-0.4	-0.1	33.5	32.4	32.8	33.5	32.3	32.7	0.0	-0.3	-0.1
Spring Creek Canyon WSA	9	34.0	31.0	32.0	34.0	31.0	32.0	0.0	0.0	0.0	35.1	32.5	33.4	35.2	32.5	33.4	0.0	0.0	0.0
Taylor Creek WSA	1	32.4	32.4	32.4	32.4	32.4	32.4	0.0	0.0	0.0	33.9	33.9	33.9	33.9	33.9	33.9	0.0	0.0	0.0
The Watchman WSA	2	33.2	33.2	33.2	33.2	33.2	33.2	0.0	0.0	0.0	34.7	34.6	34.6	34.7	34.6	34.6	0.0	0.0	0.0
Tunnel Spring WSA	8	<A	<A	<A	<A	<A	<A	0.0	0.0	0.0	<A	<A	<A	<A	<A	<A	0.0	0.0	0.0

Table 7.15
Noise Level Summary at Other 4f/303(c) Properties
Cumulative Time Above Ambient - 2010/2020
St. George Municipal Airport EIS

PROPERTY	# of Pts	2010									2020								
		Existing			Replacement			Change			Existing			Replacement			Change		
		Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
Ashdown Gorge Wilderness	16	35.7	31.7	33.9	35.8	31.7	34.0	0.1	0.0	0.0	50.0	44.1	47.3	50.1	44.0	47.3	0.1	-0.1	0.0
Beartrap Canyon WSA	1	70.2	70.2	70.2	70.3	70.3	70.3	0.1	0.1	0.1	98.4	98.4	98.4	98.6	98.6	98.6	0.2	0.2	0.2
Beaver Dam Mountains Wilderness	21	178.7	119.9	149.4	174.3	107.4	145.4	0.2	-20.5	-4.0	240.6	157.6	201.1	236.1	144.3	196.9	0.2	-21.7	-4.2
Beaver Dam SP	5	14.2	11.2	12.3	14.2	11.2	12.3	0.0	0.0	0.0	20.0	15.8	17.3	20.0	15.8	17.3	0.0	0.0	0.0
Canaan Mountain WSA	41	165.9	138.3	153.4	166.0	138.0	153.3	0.9	-0.8	0.0	226.2	191.7	210.9	227.3	190.4	211.1	1.6	-1.4	0.2
Cedar Breaks National Monument	4	35.0	34.0	34.5	35.1	34.0	34.6	0.1	0.0	0.1	49.1	47.5	48.3	49.1	47.5	48.2	0.0	-0.1	0.0
Cedar City Paiute Indian Reservation	6	107.0	66.4	93.4	107.0	66.4	93.4	0.1	0.0	0.0	142.3	90.5	117.3	144.7	92.1	119.4	2.5	1.6	2.1
Clover Mountains WSA	31	19.3	10.9	15.0	19.2	10.9	14.9	0.0	-0.1	0.0	27.0	15.3	20.9	27.0	15.3	20.9	0.0	0.0	0.0
Coral Pink Sand Dunes SP	2	111.7	110.0	110.9	111.3	109.7	110.5	-0.3	-0.4	-0.4	154.7	152.7	153.7	153.3	151.3	152.3	-1.4	-1.4	-1.4
Cottonwood Point Wilderness	7	150.8	139.7	145.9	151.9	140.0	146.8	1.4	0.3	0.9	210.0	194.1	202.8	210.6	194.0	203.5	1.1	-0.1	0.6
Cottonwood WSA	15	90.1	66.8	77.7	93.2	66.3	74.7	3.1	-11.8	-3.0	115.7	89.0	101.8	120.8	88.9	99.3	5.1	-12.2	-2.5
Cougar Canyon WSA	17	28.8	12.7	18.9	28.8	12.7	18.9	0.0	0.0	0.0	40.3	17.8	26.5	40.3	17.8	26.5	0.0	0.0	0.0
Deep Creek WSA	9	74.8	58.8	67.3	75.5	58.7	67.7	0.8	-0.1	0.3	104.8	82.0	94.2	105.5	82.1	94.8	1.0	0.1	0.6
Gateway Corridor 22	14	135.3	60.1	91.2	135.3	60.1	91.3	0.1	-0.1	0.0	188.0	83.8	126.6	188.0	83.8	126.7	0.1	0.0	0.1
Gateway Corridor 23	18	64.5	54.6	59.6	64.6	54.6	59.6	0.1	0.0	0.0	90.1	76.4	83.1	90.1	76.4	83.1	0.1	0.0	0.0
Gateway Corridor 24	22	109.4	58.7	84.9	109.4	58.7	84.9	0.0	0.0	0.0	153.8	82.1	119.2	153.8	82.1	119.2	0.0	0.0	0.0
Gateway Corridor 32	18	120.8	108.1	115.7	120.3	107.2	115.6	0.9	-0.9	-0.1	164.9	149.2	158.4	164.9	148.9	158.8	1.4	-0.3	0.4
Gateway Corridor 33	16	105.2	57.3	79.9	105.9	57.3	80.3	0.9	0.0	0.4	143.4	80.1	110.1	143.6	80.1	110.4	0.6	0.0	0.3
Goose Creek WSA	1	74.6	74.6	74.6	74.9	74.9	74.9	0.3	0.3	0.3	104.4	104.4	104.4	105.2	105.2	105.2	0.8	0.8	0.8
Grand Canyon-Parashant NM	18	162.2	54.6	89.0	162.2	54.6	89.2	1.4	0.0	0.2	223.8	76.4	123.8	224.1	76.4	123.9	1.2	0.0	0.2
Grand Canyon-Parashant NM (West)	184	252.1	123.5	188.3	252.1	123.6	188.4	1.4	-0.4	0.1	352.8	172.6	262.7	352.8	172.6	262.8	0.9	-0.1	0.1
Grand Wash Cliffs Wilderness	21	257.5	196.6	230.7	257.5	196.6	230.7	0.0	-0.1	0.0	360.1	274.0	322.9	360.1	274.0	322.9	0.0	-0.1	0.0
Gunlock SP	4	152.6	128.3	138.9	152.4	128.4	138.8	0.1	-0.2	-0.1	211.3	177.7	192.4	211.2	177.8	192.4	0.1	-0.1	0.0
Iron Mission State Park Museum	1	73.9	73.9	73.9	73.9	73.9	73.9	0.0	0.0	0.0	98.2	98.2	98.2	100.2	100.2	100.2	2.0	2.0	2.0
Joshua Tree Instant Study Area	3	171.5	156.9	162.0	170.9	156.9	161.9	0.1	-0.6	-0.2	239.4	219.2	226.2	238.8	219.2	226.1	0.1	-0.6	-0.2
Kaibab Indian Reservation	72	131.9	96.4	115.0	132.0	96.0	115.0	0.4	-0.6	-0.1	183.2	133.4	159.4	183.3	132.6	158.9	0.3	-1.7	-0.4
Kaibab National Forest	9	109.4	93.3	103.0	109.4	93.3	103.0	0.0	0.0	0.0	153.8	131.2	144.8	153.8	131.2	144.8	0.0	0.0	0.0
Kanab Creek Wilderness	27	95.0	75.2	84.1	95.0	75.2	84.1	0.0	0.0	0.0	133.7	105.6	118.1	133.7	105.6	118.1	0.0	0.0	0.0
La Verkin Creek WSA	2	79.4	77.4	78.4	79.6	77.4	78.5	0.2	0.0	0.1	111.3	108.2	109.8	111.9	108.9	110.4	0.7	0.6	0.7
Lake Mead National Recreation Area	28	293.8	231.5	265.4	295.5	232.0	265.7	1.9	-0.5	0.3	408.8	317.9	364.4	408.9	318.0	364.5	0.2	-0.1	0.0
Lime Canyon WSA	5	241.4	223.1	232.4	242.0	223.4	232.9	0.7	0.3	0.5	330.7	309.0	319.9	330.8	309.0	319.9	0.1	-0.2	0.0
Moquith Mountains WSA	17	115.8	96.6	104.2	115.4	96.4	103.8	-0.1	-0.9	-0.3	160.3	134.3	144.5	158.8	133.2	143.6	0.1	-1.6	-0.9
Morman Mountains WSA	24	123.3	26.2	66.4	123.3	26.2	66.4	0.0	0.0	0.0	172.6	36.8	93.0	172.6	36.8	93.0	0.0	0.0	0.0
Mount Trumbull Wilderness	3	59.8	55.1	56.7	59.8	55.1	56.7	0.0	0.0	0.0	83.5	77.0	79.2	83.5	77.0	79.2	0.0	0.0	0.0
North Fork Virgin River	6	90.8	79.7	85.3	91.3	80.4	85.9	0.7	0.5	0.6	125.4	110.8	118.3	125.8	111.7	119.0	0.9	0.4	0.7
Orderville Canyon WSA	4	101.0	93.5	96.7	102.3	94.6	98.0	1.6	1.1	1.3	138.7	129.2	133.4	139.4	129.7	134.0	0.8	0.5	0.6
Paiute Wilderness	78	193.3	126.2	154.4	191.1	126.8	154.3	3.2	-4.4	-0.1	261.5	176.4	212.6	259.4	176.7	212.4	3.6	-4.5	-0.2
Parunuweap WSA	34	143.6	112.5	128.8	144.4	113.5	128.8	1.0	-1.2	0.0	196.3	154.9	175.5	197.7	156.3	176.2	1.4	0.1	0.7
Pine Valley Mountain Wilderness	54	97.2	59.8	73.1	100.0	63.0	74.7	3.2	-1.6	1.7	134.9	83.0	101.2	139.2	86.5	103.4	4.4	-1.0	2.2
Pipe Spring NM	4	125.3	121.7	123.6	125.4	121.9	123.8	0.2	0.1	0.2	173.8	168.8	171.5	173.8	168.9	171.6	0.1	0.0	0.1
Quail Creek SP	2	90.1	86.1	88.1	94.0	87.3	90.7	3.9	1.2	2.6	116.5	111.4	114.0	123.1	114.5	118.8	6.6	3.1	4.9
Red Butte WSA	1	89.4	89.4	89.4	89.6	89.6	89.6	0.2	0.2	0.2	125.5	125.5	125.5	126.4	126.4	126.4	0.9	0.9	0.9
Red Mountain WSA	27	152.6	81.7	105.9	152.4	76.8	105.0	0.1	-5.8	-0.9	211.3	112.9	146.6	211.2	106.8	145.7	0.2	-6.1	-0.9
Shiwits Paiute Indian Reservation	25	177.8	105.3	136.7	177.8	101.5	135.8	0.0	-3.8	-0.8	248.0	143.4	189.0	248.1	139.4	188.1	0.1	-4.0	-0.9
Snow Canyon SP	9	92.2	74.4	83.5	91.7	71.0	79.1	-0.5	-17.7	-4.3	127.7	102.7	114.4	127.2	98.3	109.8	-0.5	-19.1	-4.6
Spring Creek Canyon WSA	9	117.8	65.7	92.4	118.3	65.8	92.5	0.5	0.0	0.1	157.4	90.8	125.3	160.0	92.2	127.2	2.6	1.3	1.8
Taylor Creek WSA	1	86.0	86.0	86.0	86.0	86.0	86.0	0.0	0.0	0.0	119.9	119.9	119.9	121.0	121.0	121.0	1.1	1.1	1.1
The Watchman WSA	2	154.1	148.6	151.4	154.8	149.1	152.0	0.7	0.5	0.6	211.1	203.3	207.2	212.3	204.3	208.3	1.2	1.0	1.1
Tunnel Spring WSA	8	12.7	9.4	10.9	12.7	9.4	10.9	0.0	0.0	0.0	17.8	13.2	15.3	17.8	13.2	15.3	0.0	0.0	0.0

Table 7.16 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2010
Ashdown George Wilderness Area

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Ashdown Gorge Wilderness																														
15	ASHDWN15	2	2	72.2	164.2	109.5	29.3	7.2	1.3	0.3	72.2	164.1	109.5	29.3	7.2	1.3	0.3	0.0	0.0	0.0%	0.0	0.0%	0.0	-0.1%	0.0	-0.2%	0.0	0.0%	0.0	0.0%
15	ASHDWN15	3	1	74.1	162.7	104.8	31.9	7.4	1.3	0.2	74.1	162.7	104.8	31.9	7.5	1.3	0.2	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.1%	0.0	0.0%	0.0	0.0%
15	ASHDWN15	3	5	73.3	155.1	86.8	29.5	8.0	2.0	0.2	73.3	155.1	86.8	29.5	8.0	2.0	0.2	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	-0.1%	0.0	0.0%	0.0	0.0%
15	ASHDWN15	4	4	74.3	157.1	91.6	28.2	7.8	1.9	0.2	74.3	157.0	91.6	28.2	7.8	1.9	0.2	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.17 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2020
Ashdown George Wilderness Area

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2020 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2020						LA(max) 2020 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020						LA(max) 2020 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Ashdown Gorge Wilderness																														
15	ASHDWN15	2	2	72.2	227.5	151.9	40.8	10.0	1.8	0.4	72.2	228.5	152.0	40.8	10.0	1.8	0.4	0.0	1.1	0.5%	0.0	0.0%	0.0	-0.1%	0.0	-0.2%	0.0	0.0%	0.0	0.0%
15	ASHDWN15	3	1	74.1	225.1	145.0	44.6	10.4	1.8	0.3	74.1	225.3	145.0	44.6	10.4	1.8	0.3	0.0	0.1	0.1%	0.0	0.0%	0.0	-0.1%	0.0	0.1%	0.0	0.0%	0.0	0.0%
15	ASHDWN15	3	5	73.3	214.3	120.0	40.8	11.1	2.8	0.3	73.3	215.4	120.2	40.8	11.0	2.8	0.3	0.0	1.1	0.5%	0.2	0.1%	0.0	0.0%	0.0	-0.1%	0.0	0.0%	0.0	0.0%
15	ASHDWN15	4	4	74.3	217.4	127.2	39.2	10.8	2.6	0.3	74.3	217.6	127.2	39.2	10.8	2.6	0.3	0.0	0.2	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.18 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2010
Beartrap Canyon WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Beartrap Canyon WSA																														
19	ZION19	2	2	72.7	235.2	169.9	65.9	11.5	2.1	0.2	72.7	229.6	165.4	65.6	11.7	2.1	0.2	0.0	-5.6	-2.4%	-4.5	-2.6%	-0.3	-0.5%	0.2	17.9%	0.0	0.0%	0.0	0.0%

Table 7.19 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2020
Beartrap Canyon WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Beartrap Canyon WSA																														
19	ZION19	2	2	72.7	325.7	235.8	92.0	16.1	3.0	0.3	72.7	317.8	229.2	91.4	16.2	3.0	0.3	0.0	-8.0	-2.4%	-6.5	-2.8%	-0.5	-0.6%	0.2	1.1%	0.0	0.0%	0.0	0.0%

Table 7.20 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2010
Beaver Dam Mountain Wilderness

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Beaver Dam Mountains Wilderness																														
4	BEAVER4	2	6	71.6	402.9	302.5	130.4	23.5	3.5	1.0	71.6	393.3	297.6	129.5	22.2	3.4	1.0	0.0	-9.6	-2.4%	-5.0	-1.6%	-0.9	-0.7%	-1.3	-5.6%	-0.1	-2.7%	0.0	0.0%
4	BEAVER4	3	7	72.2	426.9	292.6	125.7	22.4	3.4	1.0	72.2	379.1	283.3	124.6	21.8	3.4	1.0	0.0	-47.7	-11.2%	-9.3	-3.2%	-1.1	-0.9%	-0.6	-2.9%	0.0	-0.1%	0.0	0.0%
4	BEAVER4	4	6	73.5	415.9	296.5	110.3	16.3	4.7	1.1	73.5	368.4	285.9	108.5	15.0	4.2	1.1	0.0	-47.5	-11.4%	-10.6	-3.6%	-1.8	-1.6%	-1.3	-8.1%	-0.5	-10.4%	0.0	0.0%
4	BEAVER4	6	4	73.1	414.6	280.9	120.2	25.5	5.9	1.8	73.1	404.8	272.6	117.3	25.4	6.5	1.8	0.0	-9.8	-2.4%	-8.4	-3.0%	-2.9	-2.4%	-0.1	-0.5%	0.6	10.5%	0.0	0.0%
4	BEAVER4	8	6	72.9	409.0	306.5	118.2	26.0	7.8	0.9	72.9	394.2	294.9	113.7	25.0	5.2	0.9	0.0	-14.8	-3.6%	-11.6	-3.8%	-4.5	-3.8%	-1.0	-3.8%	-2.6	-33.5%	0.0	-2.2%

Table 7.21 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2020
Beaver Dam Mountain Wilderness

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020											
					20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	%	25 dBA	%	35 dBA	%	45 dBA	%	55 dBA	%	65 dBA	%
					Beaver Dam Mountains Wilderness																									
4	BEAVER4	2	6	71.6	554.6	418.3	180.7	31.9	4.9	1.5	71.6	540.1	411.8	179.5	30.3	4.8	1.5	0.0	-14.5	-2.6%	-6.4	-1.5%	-1.2	-0.7%	-1.6	-4.9%	-0.1	-2.0%	0.0	0.0%
4	BEAVER4	3	7	72.2	575.8	404.4	174.2	30.8	4.8	1.4	72.2	522.8	391.3	172.9	30.1	4.8	1.4	0.0	-53.0	-9.2%	-13.1	-3.2%	-1.4	-0.8%	-0.8	-2.6%	0.0	-0.1%	0.0	0.0%
4	BEAVER4	4	6	73.5	558.3	400.3	156.4	19.2	4.8	1.4	73.5	507.6	391.6	149.0	19.5	5.9	1.5	0.0	-50.7	-9.1%	-14.4	-2.2%	-1.3	-4.7%	-1.1	1.9%	-0.2	21.7%	0.1	5.7%
4	BEAVER4	6	4	73.1	553.9	408.6	155.1	34.2	7.8	1.9	73.1	542.9	370.5	157.8	31.0	8.0	2.5	0.0	-11.1	-2.0%	-25.6	-9.3%	-3.2	1.8%	-2.5	-9.5%	-2.4	2.7%	0.5	27.6%
4	BEAVER4	8	6	72.9	544.5	410.9	166.8	27.2	7.1	0.7	72.9	529.5	391.8	151.7	30.2	6.5	1.2	0.0	-14.9	-2.7%	-17.8	-4.6%	-26.5	-9.0%	-7.0	11.2%	-2.6	-9.0%	0.5	62.7%

Table 7.22 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2010
Beaver Dam SP

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above Lamax Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above Lamax Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above Lamax Thresholds with Replacement Airport 2010												
					20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	%	25 dBA	%	35 dBA	%	45 dBA	%	55 dBA	%	65 dBA	%	
					Beaver Dam SP																										
42	COUGAR42	2	1	70.6	127.3	63.0	13.2	2.7	1.2	0.0	70.6	127.3	63.0	13.2	2.7	1.2	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
42	COUGAR42	2	2	70.2	125.6	54.5	12.7	2.7	0.3	0.0	70.2	125.6	54.5	12.7	2.7	0.3	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
42	COUGAR42	2	3	70.6	123.4	52.6	12.5	2.9	0.2	0.0	70.6	123.4	52.6	12.5	2.9	0.2	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
42	COUGAR42	3	1	72.4	134.0	72.2	13.3	2.9	1.3	0.1	72.4	134.0	72.2	13.3	2.9	1.3	0.1	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.23 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2020
Beaver Dam SP

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020												
					20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	%	25 dBA	%	35 dBA	%	45 dBA	%	55 dBA	%	65 dBA	%	
					Beaver Dam SP																										
42	COUGAR42	2	1	70.6	176.0	87.9	18.5	3.8	1.7	0.0	70.6	176.0	87.9	18.5	3.8	1.7	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
42	COUGAR42	2	2	70.2	173.8	75.8	17.7	3.8	0.4	0.0	70.2	173.8	75.8	17.7	3.8	0.4	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
42	COUGAR42	2	3	70.6	170.7	73.3	17.6	4.1	0.3	0.0	70.6	170.7	73.3	17.6	4.1	0.3	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
42	COUGAR42	3	1	72.4	185.5	100.6	18.6	4.1	1.8	0.1	72.4	185.4	100.6	18.6	4.1	1.8	0.1	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.24 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2010
Canaan Mountain WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2010											
					20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	%	25 dBA	%	35 dBA	%	45 dBA	%	55 dBA	%	65 dBA	%
					Canaan Mountain WSA																									
30	CANAAN30	2	4	70.0	336.2	262.7	147.7	28.8	4.4	0.3	70.0	336.7	263.7	148.1	29.3	4.3	0.3	0.0	0.5	0.2%	1.0	0.4%	0.5	0.3%	0.5	1.6%	0.0	-0.3%	0.0	0.0%
30	CANAAN30	3	3	73.3	342.5	263.3	151.5	18.9	3.9	0.5	73.3	343.4	263.9	151.3	19.1	3.9	0.5	0.0	0.8	0.2%	0.6	0.2%	-0.1	-0.1%	0.1	0.8%	0.0	0.0%	0.0	0.0%
30	CANAAN30	4	2	74.0	345.0	262.9	145.5	27.4	4.3	0.7	74.0	345.4	262.8	145.8	27.5	4.3	0.7	0.0	0.4	0.1%	-0.1	-0.1%	0.3	0.2%	0.1	0.3%	0.0	0.0%	0.0	0.0%
30	CANAAN30	4	6	69.5	331.1	267.0	139.8	34.5	2.2	0.2	69.5	330.4	267.6	140.2	34.4	2.2	0.2	0.0	-0.7	-0.2%	0.5	0.2%	0.4	0.3%	-0.1	-0.2%	0.0	0.1%	0.0	0.0%
30	CANAAN30	5	4	74.3	339.8	267.6	153.9	29.3	4.0	0.7	74.3	340.6	268.4	154.3	29.8	3.7	0.6	0.0	0.8	0.2%	0.8	0.3%	0.4	0.3%	0.5	1.6%	-0.3	-7.1%	0.0	-3.2%
30	CANAAN30	6	2	72.4	328.2	268.1	144.7	25.9	2.2	0.7	72.4	328.6	267.9	145.0	25.9	2.2	0.7	0.0	0.4	0.1%	-0.2	-0.1%	0.2	0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%
30	CANAAN30	6	6	72.2	335.7	270.5	136.8	25.6	2.4	0.1	72.2	335.8	271.4	137.4	25.6	2.4	0.1	0.0	0.0	0.0%	0.9	0.3%	0.5	0.4%	0.0	-0.1%	0.0	0.0%	0.0	0.0%
30	CANAAN30	7	4	74.4	326.9	270.3	129.2	29.3	3.6	0.6	74.4	327.8	271.2	129.6	29.4	3.6	0.6	0.0	0.8	0.3%	0.8	0.3%	0.4	0.3%	0.1	0.5%	0.0	-0.4%	0.0	0.0%
30	CANAAN30	8	2	70.8	319.1	266.7	121.2	23.7	1.9	0.7	70.8	319.5	266.5	121.1	23.7	1.9	0.7	0.0	0.4	0.1%	-0.2	-0.1%	-0.1	-0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%
30	CANAAN30	9	2	70.8	318.2	261.1	117.6	22.9	1.7	0.7	70.8	318.4	261.0	117.5	22.8	1.7	0.7	0.0	0.2	0.1%	-0.1	-0.1%	-0.1	-0.1%	0.0	-0.1%	0.0	0.0%	0.0	0.0%

Table 7.29 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2020
Cedar City Paiute Indian Reservation

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Cedar City Paiute Indian Reservation																														
14 PAIUTE14			1	70.6	335.0	263.9	110.9	30.6	2.9	0.3	70.6	327.7	248.7	118.0	24.8	6.6	0.3	0.0	-7.4	-2.2%	-3.6	-5.8%	0.8	6.4%	0.0	-19.0%	0.0	###	0.0	13.2%
14 PAIUTE14			2	72.0	334.0	252.2	117.2	24.8	6.6	0.3	72.0	326.9	247.6	91.6	15.6	1.7	0.3	0.0	-7.1	-2.1%	-3.5	-1.8%	0.4	-21.8%	0.1	-37.0%	0.0	-73.9%	0.0	-17.5%
14 PAIUTE14			2	69.2	321.1	251.1	91.2	15.5	1.7	0.3	69.2	314.1	239.7	91.7	22.6	1.9	0.3	0.0	-7.1	-2.2%	-1.9	-4.5%	0.6	0.5%	0.1	45.8%	0.0	13.0%	0.0	0.0%
14 PAIUTE14			2	70.3	322.8	241.7	91.1	22.6	1.9	0.3	70.3	314.3	240.5	67.1	12.2	1.6	0.3	0.0	-8.5	-2.6%	-2.1	-0.5%	0.6	-26.4%	0.0	-45.9%	0.0	-18.9%	0.0	9.6%
14 PAIUTE14			3	70.1	318.8	242.6	66.4	12.2	1.6	0.3	70.1	310.5	235.0	81.5	11.7	1.1	0.3	0.0	-8.3	-2.6%	-1.8	-3.1%	0.0	22.8%	0.1	-4.2%	0.0	-29.6%	0.0	-1.4%
14 PAIUTE14			3	70.1	318.0	236.8	81.5	11.6	1.1	0.3	70.1	309.4	432.5	175.5	33.5	6.9	1.6	0.0	-8.6	-2.7%	-2.2	82.6%	-3.2	###	-0.4	###	-0.5	###	0.0	467.4%

Table 7.30 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2010
Clower Mountain WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010												
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%	
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA		
44 CLOVER44			1	71.4	85.9	35.5	12.8	2.2	0.4	0.2	71.4	85.9	35.5	12.8	2.2	0.4	0.2	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	
44 CLOVER44			2	74.7	107.9	41.7	16.0	3.2	0.4	0.2	74.7	107.9	41.7	16.0	3.2	0.4	0.2	0.0	0.0	0.0%	0.0	-0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	
44 CLOVER44			2	72.4	75.7	31.7	11.9	2.7	0.4	0.0	72.4	75.7	31.7	11.9	2.7	0.4	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
44 CLOVER44			3	75.5	105.8	41.1	14.3	3.1	0.4	0.2	75.5	105.8	41.1	14.3	3.1	0.4	0.2	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	
44 CLOVER44			4	74.9	127.5	61.2	15.8	3.0	0.4	0.0	74.9	127.5	61.2	15.8	3.0	0.4	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
44 CLOVER44			4	73.5	92.9	37.9	13.7	2.7	0.4	0.0	73.5	92.9	37.9	13.7	2.7	0.4	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
44 CLOVER44			5	75.9	105.1	46.0	14.1	3.2	0.5	0.0	75.9	105.0	46.0	14.1	3.2	0.5	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.31 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2020
Clower Mountain WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020												
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%	
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA		
44 CLOVER44			1	71.4	118.5	49.3	18.1	3.0	0.6	0.2	71.4	118.5	49.3	18.1	3.0	0.6	0.2	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	
44 CLOVER44			2	74.7	149.4	57.8	22.2	4.4	0.6	0.2	74.7	149.4	57.8	22.2	4.4	0.6	0.2	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	
44 CLOVER44			2	72.4	104.6	44.2	16.8	3.9	0.6	0.0	72.4	104.6	44.2	16.8	3.9	0.6	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
44 CLOVER44			3	75.5	146.4	57.1	20.1	4.3	0.6	0.2	75.5	146.4	57.1	20.1	4.3	0.6	0.2	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	
44 CLOVER44			4	74.9	176.6	85.3	22.2	4.3	0.6	0.0	74.9	176.6	85.3	22.2	4.3	0.6	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
44 CLOVER44			4	73.5	128.5	52.8	19.2	3.8	0.5	0.0	73.5	128.5	52.8	19.2	3.8	0.5	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
44 CLOVER44			5	75.9	145.6	64.2	19.9	4.6	0.7	0.1	75.9	145.6	64.2	19.9	4.6	0.7	0.1	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	

Table 7.32 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2010
Coral Pink Sand Dunes SP

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Coral Pink Sand Dunes SP																														
29 MOQMTN29			1	74.5	284.4	215.3	100.8	14.0	2.9	0.5	74.5	284.6	215.1	100.5	13.7	2.6	0.5	0.0	0.2	0.1%	-0.2	-0.1%	-0.3	-0.3%	-0.3	-2.0%	-0.3	-9.5%	0.0	0.0%
29 MOQMTN29			1	74.5	297.0	216.7	97.4	17.6	2.1	0.6	74.5	297.4	217.0	97.3	17.6	2.1	0.6	0.0	0.4	0.1%	0.3	0.1%	-0.1	-0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.33 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2020
Coral Pink Sand Dunes SP

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Coral Pink Sand Dunes SP																														
29 MOQMTN29			1	74.5	391.5	297.9	139.8	18.9	3.7	0.7	74.5	392.2	298.2	139.5	18.6	3.5	0.7	0.0	0.8	0.2%	0.9	0.1%	0.0	-0.2%	0.0	-1.5%	0.0	-7.4%	0.0	0.0%
29 MOQMTN29			1	74.5	407.9	299.3	135.1	24.6	3.0	0.9	74.5	409.2	300.2	135.1	24.6	3.0	0.9	0.0	1.4	0.3%	0.7	0.3%	0.2	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.39 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2020
Cougar Canyon WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Cougar Canyon WSA																														
41	COUGAR41	3	1	72.4	216.2	140.1	24.2	5.5	1.8	0.1	72.4	216.1	140.1	24.2	5.5	1.8	0.1	0.0	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
41	COUGAR41	4	1	70.6	231.0	150.2	25.3	6.1	2.3	0.1	70.6	230.9	150.2	25.3	6.1	2.3	0.1	0.0	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
41	COUGAR41	5	2	70.7	228.5	150.1	27.0	6.2	2.3	0.1	70.7	228.2	150.0	27.0	6.2	2.3	0.1	0.0	-0.3	-0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
42	COUGAR42	3	3	70.7	174.0	77.3	17.0	4.1	0.4	0.0	70.7	174.0	77.3	17.0	4.1	0.4	0.0	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
42	COUGAR42	5	1	73.0	198.8	128.6	22.8	5.8	1.8	0.1	73.0	198.7	128.6	22.8	5.8	1.8	0.1	0.0	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.40 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2010
Deep Creek WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2010											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Deep Creek WSA																														
35	DEEPC35	2	1	72.7	251.4	167.7	71.8	9.1	1.7	0.7	72.7	248.9	167.0	72.6	9.1	1.7	0.7	0.0	-2.4	-1.0%	-0.7	-0.4%	0.8	1.1%	0.0	0.3%	0.0	0.0%	0.0	0.0%
35	DEEPC35	3	1	72.2	233.1	164.9	62.4	9.8	1.5	0.8	72.2	231.3	166.2	63.2	9.8	1.5	0.8	0.0	-1.9	-0.8%	1.3	0.8%	0.8	1.3%	0.0	0.2%	0.0	0.0%	0.0	0.0%
36	DEEPC6	2	1	74.5	233.9	155.3	62.9	9.2	1.6	0.7	74.5	231.4	155.5	63.2	9.2	1.6	0.7	0.0	-2.5	-1.1%	0.2	0.2%	0.3	0.5%	0.0	0.0%	0.0	0.0%	0.0	0.0%
36	DEEPC6	3	1	74.0	233.3	151.2	54.0	9.1	1.4	0.7	74.0	231.4	152.3	54.3	9.1	1.4	0.7	0.0	-1.9	-0.8%	1.1	0.7%	0.3	0.5%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.41 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2020
Deep Creek WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Deep Creek WSA																														
35	DEEPC35	2	1	72.7	347.0	231.1	99.8	12.8	2.4	1.1	72.7	343.5	230.6	101.2	12.8	2.4	1.1	0.0	-3.5	-1.0%	-0.5	-0.2%	1.4	1.4%	0.0	0.2%	0.0	0.0%	0.0	0.0%
35	DEEPC35	3	1	72.2	321.3	227.1	86.3	13.8	2.1	1.1	72.2	318.6	229.3	87.8	13.8	2.1	1.1	0.0	-2.7	-0.8%	2.3	1.0%	1.5	1.8%	0.0	0.2%	0.0	0.0%	0.0	0.0%
36	DEEPC6	2	1	74.5	322.5	215.8	88.0	12.9	2.3	1.0	74.5	318.7	216.5	88.5	12.9	2.3	1.0	0.0	-3.8	-1.2%	0.7	0.3%	0.5	0.6%	0.0	0.0%	0.0	0.0%	0.0	0.0%
36	DEEPC6	3	1	74.0	321.5	208.1	75.4	12.7	2.0	1.0	74.0	318.6	210.0	76.0	12.7	2.0	1.0	0.0	-2.9	-0.9%	1.9	0.9%	0.5	0.7%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.42 (From Table B.25)
Noise Level Changes - Number of Events Above Lamax Thresholds 2010
Gateway Corridor 22

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2010											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Gateway Corridor 22																														
22	SOUTH22	1	2	72.5	406.7	322.7	120.0	14.6	5.7	0.7	72.5	406.5	322.5	120.0	14.6	5.7	0.7	0.0	-0.3	-0.1%	-0.2	-0.1%	-0.1	-0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%
22	SOUTH22	2	2	71.9	400.5	296.7	121.0	16.7	5.5	1.5	71.9	400.3	296.5	121.0	16.6	5.5	1.5	0.0	-0.3	-0.1%	-0.2	-0.1%	-0.1	-0.1%	0.0	-0.2%	0.0	0.0%	0.0	0.0%
22	SOUTH22	3	2	72.8	393.6	287.7	118.1	15.3	5.3	1.5	72.8	393.4	287.5	118.1	15.4	5.3	1.5	0.0	-0.3	-0.1%	-0.2	-0.1%	0.0	0.0%	0.1	0.5%	0.0	0.0%	0.0	0.0%
22	SOUTH22	4	2	71.2	391.5	272.6	112.0	13.1	5.2	1.5	71.2	391.2	272.5	111.9	13.1	5.2	1.5	0.0	-0.2	-0.1%	-0.1	0.0%	0.0	0.0%	0.1	0.6%	0.0	0.0%	0.0	0.0%
22	SOUTH22	5	2	70.1	369.3	267.0	100.4	13.2	5.0	1.5	70.1	369.1	267.0	100.5	13.2	5.0	1.5	0.0	-0.2	-0.1%	0.0	0.0%	0.1	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%
22	SOUTH22	6	2	70.9	365.2	256.1	90.8	13.0	3.1	1.5	70.9	365.0	256.1	90.8	13.0	3.1	1.5	0.0	-0.2	-0.1%	0.0	0.0%	0.0	0.0%	0.0	0.2%	0.0	0.0%	0.0	0.0%
22	SOUTH22	7	2	72.2	351.1	246.6	80.7	12.8	3.3	0.6	72.2	350.9	246.7	80.8	12.8	3.3	0.6	0.0	-0.2	-0.1%	0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.43 (From Table B.26)
Noise Level Changes - Number of Events Above Lamax Thresholds 2020
Gateway Corridor 22

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Gateway Corridor 22																														
22	SOUTH22	1	2	72.5	564.3	447.6	166.9	20.2	8.1	1.0	72.5	564.0	447.4	166.9	20.3	8.1	1.0	0.0	-0.2	0.0%	-0.2	0.0%	0.0	0.0%	0.0	0.1%	0.0	0.0%	0.0	0.0%
22	SOUTH22	2	2	71.9	555.7	410.9	168.4	22.5	7.6	2.1	71.9	555.4	410.7	168.4	22.5	7.6	2.1	0.0	-0.2	0.0%	-0.2	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
22	SOUTH22	3	2	72.8	546.1	398.2	164.2	20.6	7.4	2.1	72.8	545.9	398.0	164.2	20.7	7.4	2.1	0.0	-0.2	0.0%	-0.2	0.0%	0.0	0.0%	0.1	0.6%	0.0	0.0%	0.0	0.0%
22	SOUTH22	4	2	71.2	543.1	378.5	155.9	18.3	7.3	2.2	71.2	542.9	378.5	155.9	18.4	7.3	2.2	0.0	-0.2	0.0%	0.0	0.0%	0.0	0.0%	0.1	0.4%	0.0	0.0%	0.0	0.0%
22	SOUTH22	5	2	70.1	511.8	371.3	140.2	18.5	6.9	2.1	70.1	511.6	371.3	140.3	18.5	6.9	2.1	0.0	-0.2	0.0%	0.0	0.0%	0.1	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%
22	SOUTH22	6	2	70.9	505.9	356.8	127.2	18.3	4.4	2.1	70.9	505.7	356.8	127.2	18.3	4.4	2.1	0.0	-0.2	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.1%	0.0	0.0%	0.0	0.0%
22	SOUTH22	7	2	72.2	488.5	343.4	113.0	17.9	4.7	0.8	72.2	488.3	343.5	113.1	17.9	4.7	0.8	0.0	-0.2	0.0%	0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.48 (From Table B.25)
Noise Level Changes - Number of Events Above L_{max} Thresholds 2010
Gateway Corridor 32

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above L _{max} Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2010												
					20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	%	25 dBA	%	35 dBA	%	45 dBA	%	55 dBA	%	65 dBA	%	
Gateway Corridor 32																															
32	EAST32		1	4	71.2	287.5	212.4	85.7	18.2	2.4	0.6	71.2	288.0	212.5	85.7	18.2	2.4	0.6	0.0	0.5	0.2%	0.1	0.0%	0.0	0.0%	0.0	-0.1%	0.0	-0.4%	0.0	0.0%
32	EAST32		1	8	74.2	277.3	216.4	98.2	20.2	2.3	0.5	74.2	277.3	216.3	98.2	20.3	2.3	0.5	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.1	0.3%	0.0	0.0%	0.0	0.0%
32	EAST32		2	3	71.8	281.0	207.9	85.6	17.0	1.5	0.7	71.8	281.5	208.3	85.6	17.0	1.5	0.7	0.0	0.5	0.2%	0.4	0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
32	EAST32		2	7	74.2	280.3	213.3	99.7	13.6	1.9	0.6	74.2	280.2	213.3	99.7	13.6	1.9	0.6	0.0	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.49 (From Table B.26)
Noise Level Changes - Number of Events Above L_{max} Thresholds 2020
Gateway Corridor 32

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above L _{max} Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2020												
					20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	%	25 dBA	%	35 dBA	%	45 dBA	%	55 dBA	%	65 dBA	%	
Gateway Corridor 32																															
32	EAST32		1	4	71.2	393.9	292.2	118.0	24.7	3.1	0.9	71.2	394.8	292.6	118.0	24.7	3.1	0.9	0.0	0.9	0.2%	0.5	0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
32	EAST32		1	8	74.2	378.7	296.0	133.9	27.8	3.1	0.7	74.2	378.7	295.9	133.9	27.8	3.1	0.7	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.1	0.3%	0.0	0.0%	0.0	0.0%
32	EAST32		2	3	71.8	386.3	285.5	118.4	23.5	2.1	1.0	71.8	387.7	286.3	118.5	23.5	2.1	1.0	0.0	1.4	0.4%	0.8	0.3%	0.1	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%
32	EAST32		2	7	74.2	383.3	292.2	136.2	18.6	2.7	0.9	74.2	383.3	292.2	136.2	18.6	2.7	0.9	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.50 (From Table B.25)
Noise Level Changes - Number of Events Above L_{max} Thresholds 2010
Gateway Corridor 33

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above L _{max} Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2010												
					20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	%	25 dBA	%	35 dBA	%	45 dBA	%	55 dBA	%	65 dBA	%	
Gateway Corridor 33																															
33	EAST33		1	4	75.5	218.1	160.6	56.9	12.4	1.5	0.7	75.5	219.0	161.3	56.8	12.5	1.5	0.7	0.0	0.9	0.4%	0.7	0.4%	-0.1	-0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%
33	EAST33		1	8	71.6	184.6	121.9	40.1	9.6	1.4	0.6	71.6	184.9	122.1	40.1	9.6	1.4	0.6	0.0	0.3	0.2%	0.3	0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
33	EAST33		2	4	75.5	230.5	167.8	70.7	12.4	1.9	0.6	75.5	231.1	168.5	70.6	12.4	1.9	0.6	0.0	0.7	0.3%	0.7	0.4%	-0.2	-0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%
33	EAST33		2	8	72.6	193.5	128.8	42.8	8.8	1.5	0.7	72.6	194.2	129.0	42.8	8.8	1.5	0.7	0.0	0.7	0.4%	0.3	0.2%	0.0	0.0%	0.0	0.0%	0.0	-0.1%	0.0	0.0%

Table 7.51 (From Table B.26)
Noise Level Changes - Number of Events Above L_{max} Thresholds 2020
Gateway Corridor 33

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above L _{max} Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2020												
					20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	%	25 dBA	%	35 dBA	%	45 dBA	%	55 dBA	%	65 dBA	%	
Gateway Corridor 33																															
33	EAST33		1	4	75.5	298.4	220.1	78.6	17.1	2.1	0.9	75.5	300.1	221.7	78.8	17.1	2.1	0.9	0.0	1.8	0.6%	1.5	0.7%	0.2	0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%
33	EAST33		1	8	71.6	254.4	169.1	55.9	13.4	1.9	0.9	71.6	255.3	169.5	55.9	13.4	1.9	0.9	0.0	0.9	0.3%	0.5	0.3%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
33	EAST33		2	4	75.5	315.3	230.0	96.0	17.1	2.6	0.9	75.5	316.8	231.3	95.8	17.1	2.6	0.9	0.0	1.5	0.5%	1.3	0.6%	-0.2	-0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%
33	EAST33		2	8	72.6	266.8	177.5	59.5	12.3	2.0	1.0	72.6	268.0	178.4	59.5	12.3	2.0	1.0	0.0	1.3	0.5%	0.9	0.5%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.52 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above L_{max} Thresholds 2010
Goose Creek WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above L _{max} Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2010												
					20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	%	25 dBA	%	35 dBA	%	45 dBA	%	55 dBA	%	65 dBA	%	
Goose Creek WSA																															
12	ZION12		5	9	73.3	256.7	170.6	64.8	10.2	1.7	0.6	73.3	253.7	169.6	65.1	10.2	1.7	0.6	0.0	-2.9	-1.1%	-1.1	-0.6%	0.3	0.4%	0.0	-3.9%	0.0	0.0%	0.0	0.0%

Table 7.53 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above L_{max} Thresholds 2020
Goose Creek WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above L _{max} Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2020												
					20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	%	25 dBA	%	35 dBA	%	45 dBA	%	55 dBA	%	65 dBA	%	
Goose Creek WSA																															
12	ZION12		5	9	73.3	354.5	235.9	90.5	14.2	2.4	0.8	73.3	349.9	234.5	91.1	14.2	2.4	0.8	0.0	-4.6	-1.3%	-1.4	-0.6%	0.5	0.6%	0.0	-0.1%	0.0	0.0%	0.0	0.0%

Table 7.54 (From Table B.25)
 Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2010
 Grand Canyon-Parashant NM (west)

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2010													
					20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	%	25 dBA	%	35 dBA	%	45 dBA	%	55 dBA	%	65 dBA	%		
					Grand Canyon-Parashant NM (West)																											
21 PARASH21		1	2	73.1	535.7	421.0	158.0	23.5	6.2	1.3	73.1	535.7	421.0	158.0	23.5	6.2	1.3	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21 PARASH21		2	2	73.0	527.8	432.2	159.3	28.7	6.0	0.9	73.0	527.8	432.2	159.3	28.7	6.0	0.9	0.0	0.0	0.0%	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21 PARASH21		3	2	72.6	522.7	415.1	156.9	27.8	5.8	1.0	72.6	522.7	415.1	156.8	27.8	5.8	1.0	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21 PARASH21		4	2	72.0	524.5	408.3	156.2	27.9	6.3	3.3	72.0	524.4	408.3	156.1	27.9	6.3	3.3	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21 PARASH21		5	2	71.0	534.0	403.7	170.0	28.1	6.5	3.3	71.0	533.9	403.7	170.0	28.1	6.5	3.3	0.0	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21 PARASH21		6	2	69.9	536.8	388.3	167.4	28.2	6.1	3.2	69.9	536.8	388.3	167.4	28.2	6.1	3.2	0.0	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21 PARASH21		7	2	70.7	528.2	376.7	170.5	27.1	6.0	3.0	70.7	528.1	376.7	170.5	27.1	6.0	3.0	0.0	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21 PARASH21		8	2	71.2	510.1	385.2	171.8	27.1	5.8	3.0	71.2	510.0	385.2	171.8	27.1	5.8	3.0	0.0	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21 PARASH21		9	4	70.0	496.6	370.9	161.7	24.3	5.8	3.0	70.0	496.5	370.9	161.7	24.3	5.8	3.0	0.0	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21 PARASH21		12	4	73.0	497.4	374.6	168.4	24.5	5.7	3.1	73.0	497.2	374.6	168.4	24.5	5.7	3.1	0.0	-0.2	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21 PARASH21		13	4	74.2	486.7	368.4	176.3	25.9	6.7	3.1	74.2	486.5	368.4	176.3	25.9	6.7	3.1	0.0	-0.2	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21 PARASH21		14	4	74.3	477.0	375.1	182.7	26.9	6.5	3.0	74.3	476.8	375.1	182.7	26.9	6.5	3.0	0.0	-0.2	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21 PARASH21		15	4	74.1	479.0	364.8	188.5	27.4	6.5	3.1	74.1	478.8	364.7	188.5	27.4	6.5	3.1	0.0	-0.2	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		1	1	71.4	539.4	384.1	159.7	28.3	7.1	1.1	71.4	539.2	384.1	159.7	28.3	7.1	1.1	0.0	-0.3	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		1	5	74.0	493.2	359.4	142.0	27.4	5.4	1.3	74.0	492.0	359.1	142.0	27.4	5.4	1.3	0.0	-1.3	-0.3%	-0.3	-0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		2	3	72.6	513.4	347.8	122.0	25.6	7.1	1.1	72.6	511.3	347.7	122.1	25.6	7.1	1.1	0.0	-2.1	-0.4%	-0.1	0.0%	0.1	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		2	9	73.3	474.6	347.6	145.1	27.3	5.2	1.0	73.3	473.2	346.1	144.7	26.9	5.2	1.0	0.0	-1.4	-0.3%	-1.5	-0.4%	-0.4	-0.3%	-0.4	-1.6%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		3	4	73.5	508.8	337.7	118.0	25.6	6.1	1.2	73.5	507.5	337.2	118.1	25.6	6.1	1.2	0.0	-1.3	-0.3%	-0.5	-0.1%	0.1	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		3	8	75.0	455.6	325.5	136.9	23.0	6.0	1.1	75.0	454.3	324.2	136.5	23.5	6.0	1.1	0.0	-1.4	-0.3%	-1.3	-0.4%	-0.4	-0.3%	0.6	2.6%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		4	4	73.4	502.4	334.4	116.4	25.3	5.8	1.0	73.4	501.1	333.9	116.5	25.3	5.8	1.0	0.0	-1.3	-0.3%	-0.5	-0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		4	8	74.5	451.0	328.7	135.9	22.4	5.2	1.1	74.5	449.8	327.5	135.9	22.4	5.2	1.1	0.0	-1.1	-0.3%	-1.3	-0.4%	-0.1	-0.1%	0.1	0.4%	0.0	-0.2%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		5	3	72.6	500.2	359.4	152.3	25.8	5.9	0.9	72.6	498.3	359.3	152.3	25.8	5.9	0.9	0.0	-1.9	-0.4%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		5	7	72.5	462.7	325.8	130.5	24.7	3.3	0.9	72.5	461.5	323.9	130.4	24.7	3.4	0.9	0.0	-1.1	-0.2%	-2.0	-0.6%	0.0	0.0%	0.0	-0.2%	0.0	0.8%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		6	2	73.3	502.8	359.5	154.0	27.4	5.9	0.9	73.3	502.4	359.4	154.0	27.4	5.9	0.9	0.0	-0.4	-0.1%	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		6	6	72.3	483.4	320.4	102.2	25.2	3.5	0.9	72.3	482.1	320.6	102.3	25.2	3.5	0.9	0.0	-1.3	-0.3%	0.1	0.0%	0.1	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		7	1	71.1	508.5	382.5	141.3	25.6	5.8	1.0	71.1	508.3	382.5	141.3	25.6	5.8	1.0	0.0	-0.2	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		7	5	73.7	461.7	327.7	113.6	25.8	5.6	1.0	73.7	461.0	327.6	113.6	25.8	5.6	1.0	0.0	-0.7	-0.1%	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		7	9	73.4	427.3	300.9	124.2	23.6	3.0	1.1	73.4	426.1	299.6	124.7	23.6	3.0	1.1	0.0	-1.2	-0.3%	-1.3	-0.4%	0.5	0.4%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		8	4	73.6	478.2	352.9	151.0	24.5	5.7	0.9	73.6	476.8	352.9	151.0	24.5	5.7	0.9	0.0	-1.4	-0.3%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		8	9	72.5	424.2	286.7	119.6	24.0	3.1	1.1	72.5	423.0	286.1	119.6	24.0	3.2	1.1	0.0	-1.2	-0.3%	-0.6	-0.2%	0.0	0.0%	0.0	0.0%	0.0	0.6%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		9	4	73.5	476.3	341.9	145.0	27.9	5.0	0.9	73.5	475.9	341.8	145.0	27.9	5.0	0.9	0.0	-0.4	-0.1%	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		9	8	72.8	445.9	289.9	104.4	23.7	3.3	1.0	72.8	444.9	290.2	104.4	23.7	3.3	1.0	0.0	-1.0	-0.2%	0.2	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		10	6	73.5	455.6	334.3	122.1	24.6	5.4	0.9	73.5	454.4	334.3	122.2	24.6	5.4	0.9	0.0	-1.2	-0.3%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		11	3	71.7	473.1	370.2	146.2	22.6	5.5	0.9	71.7	472.7	370.2	146.2	22.6	5.5	0.9	0.0	-0.4	-0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		11	7	73.2	455.3	304.5	114.5	22.2	5.3	0.5	73.2	454.5	304.5	114.5	22.2	5.3	0.5	0.0	-0.8	-0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		12	2	71.6	483.8	364.0	150.6	24.3	5.9	3.0	71.6	483.5	364.0	150.6	24.2	5.9	3.0	0.0	-0.3	-0.1%	0.0	0.0%	0.0	0.0%	0.0	-0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		12	6	74.1	451.5	311.9	134.1	25.9	5.1	0.8	74.1	451.2	311.9	134.1	25.9	5.1	0.8	0.0	-0.3	-0.1%	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1 PARSHAN1		13	1	74.2	486.4	368.0	176.3	25.9	6.7	3.1	74.2	486.2	368.0	176.3	25																	

Table 7.55 (From Table B.26)
 Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2020
 Grand Canyon-Parashant NM (west)

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020													
					20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	%	25 dBA	%	35 dBA	%	45 dBA	%	55 dBA	%	65 dBA	%		
					Grand Canyon-Parashant NM (West)																											
21	PARASH21	1	2	73.1	742.4	582.0	219.1	32.5	8.7	1.8	73.1	742.3	582.0	219.1	32.5	8.7	1.8	0.0	-0.1	0.0%	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21	PARASH21	2	2	73.0	731.3	599.4	221.1	39.9	8.4	1.3	73.0	731.2	599.3	221.1	39.9	8.4	1.3	0.0	0.0	0.0%	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21	PARASH21	3	2	72.6	724.3	575.4	217.8	38.6	8.1	1.4	72.6	724.2	575.4	217.7	38.6	8.1	1.4	0.0	-0.1	0.0%	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21	PARASH21	4	2	72.0	726.9	565.4	216.8	38.9	8.9	4.6	72.0	726.8	565.3	216.8	38.9	8.9	4.6	0.0	-0.1	0.0%	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21	PARASH21	5	2	71.0	740.3	559.4	236.5	39.1	9.1	4.6	71.0	740.2	559.3	236.4	39.1	9.1	4.6	0.0	-0.1	0.0%	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21	PARASH21	6	2	69.9	743.9	538.9	232.9	39.3	8.6	4.5	69.9	743.8	538.9	232.9	39.3	8.6	4.5	0.0	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21	PARASH21	7	2	70.7	732.5	522.8	237.2	37.7	8.4	4.2	70.7	732.4	522.8	237.2	37.7	8.4	4.2	0.0	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21	PARASH21	8	2	71.2	707.4	534.9	239.0	37.7	8.2	4.2	71.2	707.4	534.9	239.0	37.7	8.2	4.2	0.0	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21	PARASH21	9	4	70.0	688.2	514.8	224.8	34.0	8.2	4.3	70.0	688.1	514.8	224.8	34.0	8.2	4.3	0.0	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21	PARASH21	12	4	73.0	690.2	519.9	234.4	34.2	8.0	4.3	73.0	689.9	519.9	234.4	34.2	8.0	4.3	0.0	-0.3	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21	PARASH21	13	4	74.2	675.2	511.9	245.6	36.2	9.4	4.3	74.2	675.0	511.9	245.6	36.2	9.4	4.3	0.0	-0.2	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21	PARASH21	14	4	74.3	661.4	521.8	254.6	37.6	9.2	4.3	74.3	661.2	521.8	254.6	37.6	9.2	4.3	0.0	-0.2	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21	PARASH21	15	4	74.1	664.6	507.4	262.8	38.4	9.1	4.3	74.1	664.4	507.4	262.8	38.4	9.1	4.3	0.0	-0.2	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	1	1	71.4	746.1	530.8	220.3	39.3	9.9	1.6	71.4	745.8	530.8	220.3	39.3	9.9	1.6	0.0	-0.3	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	1	5	74.0	679.6	495.2	196.5	38.1	7.5	1.9	74.0	678.1	494.9	196.5	38.1	7.5	1.9	0.0	-1.5	-0.2%	-0.3	-0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	2	3	72.6	708.9	479.7	168.4	35.5	9.9	1.6	72.6	706.5	479.6	168.5	35.5	9.9	1.6	0.0	-2.4	-0.3%	-0.1	0.0%	0.1	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	2	9	73.3	654.5	478.5	200.2	36.8	7.2	1.3	73.3	652.8	476.8	199.8	36.4	7.2	1.3	0.0	-1.7	-0.3%	-1.7	-0.4%	-0.5	-0.2%	-0.4	-1.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	3	4	73.5	702.3	465.4	163.5	35.6	8.6	1.6	73.5	700.7	464.9	163.6	35.6	8.6	1.6	0.0	-1.6	-0.2%	-0.5	-0.1%	0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	3	8	75.0	628.1	448.7	188.8	31.6	8.3	1.6	75.0	626.6	447.2	188.4	32.2	8.3	1.6	0.0	-1.6	-0.3%	-1.5	-0.3%	-0.4	-0.2%	0.6	1.9%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	4	4	73.4	693.7	461.3	161.4	35.1	8.1	1.4	73.4	692.1	460.8	161.5	35.1	8.1	1.4	0.0	-1.6	-0.2%	-0.5	-0.1%	0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	4	8	74.5	622.2	453.9	187.9	30.7	7.4	1.6	74.5	620.7	452.3	187.8	30.8	7.3	1.6	0.0	-1.5	-0.2%	-1.5	-0.3%	-0.1	0.0%	0.1	0.3%	0.0	-0.2%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	5	3	72.6	692.6	497.2	210.2	35.9	8.2	1.3	72.6	690.3	497.1	210.2	35.9	8.2	1.3	0.0	-2.2	-0.3%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	5	7	72.5	637.7	449.7	180.4	34.3	4.7	1.3	72.5	636.3	447.4	180.4	34.3	4.7	1.3	0.0	-1.4	-0.2%	-2.2	-0.5%	-0.1	0.0%	0.0	-0.1%	0.0	0.3%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	6	2	73.3	696.1	498.1	213.3	38.3	8.3	1.2	73.3	695.6	498.0	213.3	38.3	8.3	1.2	0.0	-0.5	-0.1%	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	6	6	72.3	667.8	441.5	141.6	34.9	4.8	1.3	72.3	666.2	441.6	141.7	34.9	4.8	1.3	0.0	-1.6	-0.2%	0.1	0.0%	0.1	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	7	1	71.1	704.1	530.7	197.1	35.6	8.1	1.4	71.1	703.9	530.7	197.1	35.6	8.1	1.4	0.0	-0.2	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	7	5	73.7	638.6	452.2	157.2	35.8	7.8	1.4	73.7	637.6	452.0	157.2	35.8	7.8	1.4	0.0	-0.9	-0.1%	-0.2	-0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	7	9	73.4	589.4	415.3	172.0	32.8	4.2	1.6	73.4	587.9	413.7	172.6	32.8	4.2	1.6	0.0	-1.5	-0.2%	-1.6	-0.4%	0.6	0.3%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	8	4	73.6	662.5	488.9	208.7	34.1	8.1	1.3	73.6	660.9	488.9	208.6	34.1	8.1	1.3	0.0	-1.6	-0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	8	9	72.5	585.3	395.6	165.8	33.3	4.4	1.5	72.5	583.8	394.7	165.8	33.3	4.4	1.5	0.0	-1.5	-0.3%	-0.9	-0.2%	0.0	0.0%	0.0	0.0%	0.1	1.1%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	9	4	73.5	660.5	473.7	200.4	39.0	7.0	1.2	73.5	659.9	473.6	200.4	39.0	7.0	1.2	0.0	-0.5	-0.1%	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	9	8	72.8	615.1	400.3	144.7	32.9	4.6	1.4	72.8	613.9	400.5	144.7	32.9	4.6	1.4	0.0	-1.3	-0.2%	0.2	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	10	6	73.5	629.9	462.3	168.7	34.4	7.6	1.3	73.5	628.3	462.2	168.7	34.4	7.6	1.3	0.0	-1.6	-0.3%	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	11	3	71.7	655.9	513.7	202.8	31.7	7.7	1.2	71.7	655.4	513.7	202.8	31.7	7.7	1.2	0.0	-0.5	-0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	11	7	73.2	629.1	420.2	158.8	31.0	7.4	0.7	73.2	628.1	420.2	158.8	31.0	7.4	0.7	0.0	-1.0	-0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	12	2	71.6	670.4	505.4	210.7	33.9	8.3	4.3	71.6	670.1	505.4	210.7	33.9	8.3	4.3	0.0	-0.3	0.0%	0.0	0.0%	0.0	0.0%	0.0	-0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	12	6	74.1	625.0	431.4	185.8	36.2	7.2	1.1	74.1	624.5	431.3	185.8	36.2	7.2	1.1	0.0	-0.4	-0.1%	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	13	1	74.2	674.8	511.4	245.6	36.3	9.4	4.3	74.2																					

Table 7.56 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2010
Grand Canyon-Parashant NM

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Grand Canyon-Parashant NM																														
2	PAIUTEW2	3	3	75.6	415.5	282.0	118.1	21.2	3.9	1.1	75.6	413.9	280.8	118.4	21.7	3.9	1.1	0.0	-1.6	-0.4%	-1.2	-0.4%	0.3	0.2%	0.5	2.6%	0.0	0.0%	0.0	0.0%
23	SOUTH23	2	2	71.3	332.7	231.3	61.5	12.7	3.3	0.3	71.3	332.7	231.3	61.6	12.7	3.3	0.3	0.0	-0.1	0.0%	0.0	0.0%	0.0	0.1%	0.0	0.1%	0.0	0.0%	0.0	0.0%
23	SOUTH23	4	1	73.5	325.7	202.0	53.5	13.0	3.5	0.2	73.5	325.7	202.0	53.5	13.0	3.5	0.2	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
23	SOUTH23	5	2	73.1	312.4	201.2	56.1	13.6	3.3	0.3	73.1	312.3	201.2	56.1	13.6	3.3	0.3	0.0	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.57 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2020
Grand Canyon-Parashant NM

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Grand Canyon-Parashant NM																														
2	PAIUTEW2	3	3	75.6	572.8	389.1	163.6	29.1	5.5	1.5	75.6	570.9	387.7	163.8	29.6	5.5	1.5	0.0	-1.8	-0.3%	-1.4	-0.4%	0.2	0.2%	0.6	1.9%	0.0	0.0%	0.0	0.0%
23	SOUTH23	2	2	71.3	463.2	321.8	86.0	17.8	4.7	0.4	71.3	463.2	321.9	86.1	17.8	4.7	0.4	0.0	-0.1	0.0%	0.0	0.0%	0.0	0.1%	0.0	0.1%	0.0	0.0%	0.0	0.0%
23	SOUTH23	4	1	73.5	453.6	282.0	74.8	18.2	4.9	0.3	73.5	453.6	282.0	74.9	18.2	4.9	0.3	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
23	SOUTH23	5	2	73.1	434.7	280.8	78.5	19.1	4.6	0.4	73.1	434.6	280.8	78.5	19.1	4.6	0.4	0.0	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.58 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2010
Grand Wash Cliffs Wilderness

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Grand Wash Cliffs Wilderness																														
21	PARASH21	9	3	71.1	506.1	377.1	169.1	25.8	5.8	3.0	71.1	506.0	377.1	169.1	25.8	5.8	3.0	0.0	-0.1	0.0%	0.0	0.0%	0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21	PARASH21	10	1	73.9	507.1	395.8	195.4	32.6	7.3	3.1	73.9	507.1	395.8	195.4	32.6	7.3	3.1	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21	PARASH21	11	1	73.5	495.6	379.4	196.5	30.2	7.4	3.1	73.5	495.6	379.4	196.5	30.2	7.4	3.1	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	9	1	70.0	496.5	370.9	161.7	24.3	5.8	3.0	70.0	496.5	370.8	161.7	24.3	5.8	3.0	0.0	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	11	1	71.9	498.4	363.2	165.2	26.2	5.8	3.0	71.9	498.2	363.2	165.2	26.2	5.8	3.0	0.0	-0.2	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.59 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2020
Grand Wash Cliffs Wilderness

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Grand Wash Cliffs Wilderness																														
21	PARASH21	9	3	71.1	701.8	523.3	235.3	36.0	8.2	4.2	71.1	701.7	523.3	235.4	36.0	8.2	4.2	0.0	-0.1	0.0%	0.0	0.0%	0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21	PARASH21	10	1	73.9	702.7	550.6	272.2	45.3	10.3	4.3	73.9	702.7	550.6	272.2	45.3	10.3	4.3	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
21	PARASH21	11	1	73.5	687.2	527.6	273.8	41.9	10.4	4.4	73.5	687.2	527.6	273.8	41.9	10.4	4.4	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	9	1	70.0	688.1	514.8	224.8	34.0	8.2	4.3	70.0	688.0	514.8	224.8	34.0	8.2	4.3	0.0	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
1	PARSHAN1	11	1	71.9	691.1	504.7	230.0	36.6	8.2	4.3	71.9	690.9	504.7	230.0	36.6	8.2	4.3	0.0	-0.2	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.60 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2010
Gunlock SP

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Gunlock SP																														
40	REDMTN40	1	2	70.8	373.5	313.4	147.9	23.4	3.5	1.3	70.8	365.0	306.1	147.8	23.3	3.4	1.3	0.0	-8.5	-2.3%	-7.3	-2.3%	-0.1	0.0%	0.0	-0.1%	-0.1	-1.9%	0.0	0.0%
40	REDMTN40	1	3	71.8	365.7	288.1	143.3	18.4	3.3	1.3	71.8	357.2	280.7	143.3	18.4	3.3	1.3	0.0	-8.5	-2.3%	-7.5	-2.6%	0.0	0.0%	0.0	-0.2%	0.0	0.0%	0.0	0.0%
40	REDMTN40	2	2	69.0	392.5	310.0	128.3	21.0	2.4	1.2	69.0	360.6	302.9	128.3	20.9	2.4	1.2	0.0	-31.9	-8.1%	-7.1	-2.3%	0.0	0.0%	-0.1	-0.3%	0.0	0.0%	0.0	0.0%
40	REDMTN40	2	3	70.1	364.0	295.0	122.8	20.6	3.5	1.3	70.1	355.0	287.8	122.8	20.6	3.5	1.3	0.0	-8.9	-2.5%	-7.2	-2.5%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.61 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2020
Gunlock SP

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020												
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%	
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA		
Gunlock SP																															
40	REDMTN40		1	2	70.8	516.6	433.7	206.3	32.0	4.9	1.9	70.8	503.8	424.3	206.2	32.0	4.8	1.9	0.0	-12.8	-2.5%	-9.4	-2.2%	0.0	0.0%	0.0	0.0%	-0.1	-1.4%	0.0	0.0%
40	REDMTN40		1	3	71.8	505.7	398.8	200.1	25.1	4.6	1.8	71.8	493.0	389.1	200.1	25.1	4.6	1.8	0.0	-12.7	-2.5%	-9.7	-2.4%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
40	REDMTN40		2	2	69.0	534.5	428.9	178.7	29.5	3.4	1.7	69.0	497.1	419.6	178.7	29.4	3.4	1.7	0.0	-37.4	-7.0%	-9.4	-2.2%	0.0	0.0%	-0.1	-0.2%	0.0	0.0%	0.0	0.0%
40	REDMTN40		2	3	70.1	503.1	408.4	171.6	29.0	4.9	1.8	70.1	489.9	398.9	171.6	29.0	4.9	1.8	0.0	-13.2	-2.6%	-9.5	-2.3%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.62 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2010
Iron Mission State Park Museum

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2010												
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%	
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA		
Iron Mission State Park Museum																															
14	PAIUTE14		3	3	70.8	229.2	160.2	64.5	10.5	0.8	0.2	70.8	222.2	158.9	63.5	10.5	0.8	0.2	0.0	-7.1	-3.1%	-1.3	-0.8%	-1.0	-1.6%	0.1	0.5%	0.0	0.0%	0.0	0.0%

Table 7.63 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2020
Iron Mission State Park Museum

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020												
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%	
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA		
Iron Mission State Park Museum																															
14	PAIUTE14		3	3	70.8	313.8	218.8	86.6	14.2	1.1	0.3	70.8	305.7	219.1	86.7	14.2	1.1	0.3	0.0	-8.1	-2.6%	0.4	0.2%	0.0	0.0%	0.1	0.4%	0.0	0.0%	0.0	0.0%

Table 7.64 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2010
The Joshua Tree Instant Study Area

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2010												
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%	
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA		
Joshua Tree Instant Study Area																															
4	BEAVER4		1	7	73.7	428.0	317.7	145.9	19.8	3.8	0.3	73.7	417.7	313.0	145.4	19.7	3.8	0.3	0.0	-10.3	-2.4%	-4.7	-1.5%	-0.5	-0.4%	-0.1	-0.5%	0.0	0.0%	0.0	0.0%
4	BEAVER4		2	7	72.7	394.6	303.3	138.2	21.1	3.9	0.2	72.7	384.8	298.5	137.1	20.6	3.9	0.2	0.0	-9.7	-2.5%	-4.7	-1.6%	-1.1	-0.8%	-0.6	-2.6%	0.0	0.0%	0.0	0.0%
4	BEAVER4		2	8	74.1	412.8	303.4	134.3	19.0	3.8	0.1	74.1	403.4	300.1	133.9	18.9	3.8	0.1	0.0	-9.4	-2.3%	-3.3	-1.1%	-0.4	-0.3%	-0.1	-0.3%	0.0	0.0%	0.0	0.0%

Table 7.65 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2020
The Joshua Tree Instant Study Area

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020												
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%	
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA		
Joshua Tree Instant Study Area																															
4	BEAVER4		1	7	73.7	592.2	439.9	202.9	27.6	5.4	0.4	73.7	577.1	433.9	202.1	27.5	5.4	0.4	0.0	-15.1	-2.6%	-6.1	-1.4%	-0.7	-0.4%	-0.1	-0.4%	0.0	0.0%	0.0	0.0%
4	BEAVER4		2	7	72.7	545.5	419.5	192.0	29.1	5.5	0.3	72.7	530.9	413.4	190.7	28.4	5.5	0.3	0.0	-14.6	-2.7%	-6.1	-1.5%	-1.4	-0.7%	-0.7	-2.4%	0.0	0.0%	0.0	0.0%
4	BEAVER4		2	8	74.1	570.7	420.3	186.9	26.5	5.4	0.1	74.1	556.5	415.7	186.4	26.4	5.4	0.1	0.0	-14.1	-2.5%	-4.6	-1.1%	-0.5	-0.3%	-0.1	-0.2%	0.0	0.0%	0.0	0.0%

Table 7.66 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above L_{max} Thresholds 2010
Kaibab Indian Reservation

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above L _{max} Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2010											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Kaibab Indian Reservation																														
17	KAIBAB17	1	4	71.2	302.3	248.4	106.1	20.6	1.8	0.3	71.2	302.6	248.7	106.3	20.6	1.8	0.3	0.0	0.3	0.1%	0.3	0.1%	0.2	0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%
17	KAIBAB17	1	8	73.4	318.1	252.1	115.9	17.6	2.2	0.7	73.4	317.9	251.8	115.9	17.6	2.2	0.7	0.0	-0.2	-0.1%	-0.2	-0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
17	KAIBAB17	2	4	71.4	295.2	249.3	103.9	17.8	2.1	0.3	71.4	295.5	249.6	104.1	18.0	2.1	0.3	0.0	0.3	0.1%	0.3	0.1%	0.2	0.2%	0.2	1.1%	0.0	0.0%	0.0	0.0%
17	KAIBAB17	2	8	74.3	306.2	230.7	121.9	16.6	2.3	0.7	74.3	306.1	230.4	121.6	16.6	2.3	0.7	0.0	-0.1	0.0%	-0.2	-0.1%	-0.3	-0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%
17	KAIBAB17	3	4	71.6	290.7	238.5	108.9	20.2	2.3	0.3	71.6	291.1	238.8	109.2	20.4	2.5	0.3	0.0	0.4	0.1%	0.3	0.1%	0.3	0.2%	0.2	0.9%	0.2	8.4%	0.0	0.0%
17	KAIBAB17	3	8	74.5	295.2	223.8	108.5	17.1	2.3	0.5	74.5	295.0	223.5	108.2	17.1	2.3	0.5	0.0	-0.1	0.0%	-0.3	-0.2%	-0.3	-0.3%	0.0	0.0%	0.0	0.0%	0.0	0.0%
17	KAIBAB17	4	4	70.9	297.9	228.3	104.8	18.8	2.2	0.2	70.9	298.2	228.3	105.0	19.0	2.4	0.2	0.0	0.3	0.1%	0.0	0.0%	0.2	0.2%	0.2	1.0%	0.2	8.8%	0.0	0.0%
17	KAIBAB17	4	8	74.0	288.0	213.5	103.6	17.2	2.0	0.5	74.0	287.7	213.1	103.3	17.2	2.0	0.5	0.0	-0.3	-0.1%	-0.5	-0.2%	-0.3	-0.3%	0.0	-0.1%	0.0	0.0%	0.0	0.0%
17	KAIBAB17	5	4	72.3	293.9	214.9	106.5	16.8	2.2	0.6	72.3	294.2	214.9	106.7	17.0	2.4	0.6	0.0	0.3	0.1%	0.0	0.0%	0.2	0.2%	0.2	1.1%	0.2	8.9%	0.0	0.0%
17	KAIBAB17	5	8	73.4	283.3	205.9	98.7	15.6	2.1	0.3	73.4	282.8	205.5	98.4	15.6	2.1	0.3	0.0	-0.5	-0.2%	-0.5	-0.2%	-0.3	-0.3%	0.0	-0.2%	0.0	0.0%	0.0	0.0%
17	KAIBAB17	6	4	73.4	282.5	214.4	108.7	14.6	2.0	0.6	73.4	282.5	214.4	108.9	14.8	2.0	0.6	0.0	0.0	0.0%	0.0	0.0%	0.2	0.2%	0.2	1.3%	0.0	0.0%	0.0	0.0%
17	KAIBAB17	6	8	71.9	278.9	214.5	90.5	16.4	2.7	0.3	71.9	278.4	214.0	90.2	16.1	2.5	0.3	0.0	-0.5	-0.2%	-0.5	-0.2%	-0.3	-0.3%	-0.3	-1.7%	-0.3	-10.0%	0.0	0.0%
28	KAIBAB28	1	4	73.4	282.8	214.5	108.7	14.5	2.0	0.6	73.4	282.8	214.5	108.9	14.7	2.0	0.6	0.0	0.0	0.0%	0.0	0.0%	0.2	0.2%	0.2	1.3%	0.0	0.0%	0.0	0.0%
28	KAIBAB28	1	8	71.9	282.8	214.8	89.9	16.5	2.7	0.3	71.9	282.3	214.3	89.7	16.2	2.4	0.3	0.0	-0.5	-0.2%	-0.5	-0.2%	-0.3	-0.3%	-0.3	-1.7%	-0.3	-10.2%	0.0	0.0%
28	KAIBAB28	2	4	74.0	273.6	215.3	96.4	11.3	2.1	0.6	74.0	273.6	215.3	96.5	11.3	2.1	0.6	0.0	0.0	0.0%	0.0	0.0%	0.2	0.2%	0.0	0.2%	0.0	0.0%	0.0	0.0%
28	KAIBAB28	2	8	70.9	277.5	220.4	77.9	15.7	3.3	0.2	70.9	277.0	219.8	77.6	15.4	3.0	0.2	0.0	-0.5	-0.2%	-0.5	-0.2%	-0.3	-0.4%	-0.3	-1.8%	-0.3	-8.6%	0.0	0.0%
28	KAIBAB28	3	4	73.9	278.9	211.4	79.8	11.4	1.9	0.7	73.9	278.6	211.4	79.7	11.4	1.9	0.7	0.0	-0.3	-0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
28	KAIBAB28	3	8	69.5	279.2	218.4	71.6	15.5	2.5	0.2	69.5	278.7	217.9	71.3	15.2	2.2	0.2	0.0	-0.6	-0.2%	-0.5	-0.2%	-0.3	-0.4%	-0.3	-1.8%	-0.3	-11.0%	0.0	0.0%

Table 7.67 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above L_{max} Thresholds 2020
Kaibab Indian Reservation

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above L _{max} Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2020											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Kaibab Indian Reservation																														
17	KAIBAB17	1	4	71.2	416.7	343.6	148.1	28.9	2.5	0.4	71.2	417.3	344.2	148.3	28.9	2.5	0.4	0.0	0.6	0.2%	0.6	0.2%	0.2	0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%
17	KAIBAB17	1	8	73.4	436.6	348.5	161.0	24.4	3.1	1.0	73.4	437.2	348.5	161.1	24.4	3.1	1.0	0.0	0.6	0.1%	0.0	0.0%	0.1	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%
17	KAIBAB17	2	4	71.4	406.8	344.4	145.0	24.9	2.9	0.4	71.4	407.4	345.0	145.2	25.1	2.9	0.4	0.0	0.6	0.1%	0.6	0.2%	0.2	0.1%	0.2	0.8%	0.0	0.0%	0.0	0.0%
17	KAIBAB17	2	8	74.3	420.8	318.9	169.0	23.1	3.2	0.9	74.3	421.5	318.8	168.8	23.1	3.2	0.9	0.0	0.7	0.2%	-0.1	0.0%	-0.2	-0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%
17	KAIBAB17	3	4	71.6	400.9	329.2	151.8	28.4	3.2	0.5	71.6	401.5	329.5	152.0	28.6	3.4	0.5	0.0	0.6	0.2%	0.3	0.1%	0.3	0.2%	0.2	0.7%	0.2	6.3%	0.0	0.0%
17	KAIBAB17	3	8	74.5	405.4	309.4	150.4	23.9	3.2	0.7	74.5	406.0	309.2	150.1	23.9	3.2	0.7	0.0	0.6	0.1%	-0.2	-0.1%	-0.3	-0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%
17	KAIBAB17	4	4	70.9	410.8	315.1	145.8	26.4	3.1	0.3	70.9	411.3	315.2	146.0	26.6	3.3	0.3	5.3	0.6	0.1%	0.0	0.0%	0.2	0.2%	0.2	0.8%	0.2	6.6%	0.0	0.0%
17	KAIBAB17	4	8	74.0	396.6	295.0	143.7	24.1	2.9	0.7	74.0	396.9	294.7	143.5	24.1	2.9	0.7	0.0	0.3	0.1%	-0.4	-0.1%	-0.3	-0.2%	0.0	-0.1%	0.0	0.0%	0.0	0.0%
17	KAIBAB17	5	4	72.3	405.4	296.6	148.2	23.6	3.1	0.8	72.3	405.8	296.6	148.4	23.8	3.3	0.8	0.0	0.4	0.1%	0.0	0.0%	0.2	0.2%	0.2	0.9%	0.2	6.6%	0.0	0.0%
17	KAIBAB17	5	8	73.4	390.4	284.6	137.4	21.6	3.0	0.4	73.4	390.5	284.1	137.1	21.6	3.0	0.4	0.0	0.1	0.0%	-0.4	-0.2%	-0.3	-0.2%	0.0	-0.1%	0.0	0.0%	0.0	0.0%
17	KAIBAB17	6	4	73.4	389.4	296.5	151.1	20.5	2.8	0.8	73.4	389.3	296.5	151.3	20.7	2.8	0.8	0.0	0.0	0.0%	0.0	0.0%	0.2	0.1%	0.2	1.0%	0.0	0.0%	0.0	0.0%
17	KAIBAB17	6	8	71.9	384.3	296.8	126.2	22.3	3.5	0.4	71.9	384.4	296.3	125.9	22.1	3.3	0.4	0.0	0.1	0.0%	-0.5	-0.2%	-0.3	-0.2%	-0.3	-1.2%	-0.3	-7.7%	0.0	0.0%
28	KAIBAB28	1	4	73.4	389.7	296.6	151.1	20.3	2.8	0.8	73.4	389.7	296.6	151.3	20.5	2.8	0.8	0.0	0.0	0.0%	0.0	0.0%	0.2	0.1%	0.2	1.0%	0.0	0.0%	0.0	0.0%
28	KAIBAB28	1	8	71.9	389.8	297.2	125.6	22.5	3.4	0.4	71.9	389.9	296.7	125.3	22.2	3.2	0.4	0.0	0.1	0.0%	-0.5	-0.2%	-0.3	-0.2%	-0.3	-1.2%	-0.3	-8.0%	0.0	0.0%
28	KAIBAB28	2	4	74.0	376.8	297.9	133.7	15.7	2.9	0.8	74.0	376.8	297.8	133.8	15.7	2.9	0.8	0.0	0.0	0.0%	0.0	0.0%	0.2	0.1%	0.0	0.2%	0.0	0.0%	0.0	0.0%
28	KAIBAB28	2	8	70.9	381.8	304.7	108.3	21.5	4.1	0.3	70.9	381.9	304.2	108.0	21.3	3.8	0.3	6.4	0.0	0.0%	-0.5	-0.2%	-0.3	-0.3%	-0.3	-1.3%	-0.3	-6.7%	0.0	0.0%
28	KAIBAB28	3	4	73.9	384.1	292.5	110.0	15.8	2.6	0.9	73.9	383.8	292.5	110.0	15.8	2.6	0.9	0.0	-0.3	-0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
28	KAIBAB28	3	8	69.5	384.2	302.0	99.2	21.1	3.2	0.2	69.5	384.2	301.4	98.9	20.9	2.9	0.2	0.0	0.0	0.0%	-0.5	-0.2%	-0.3	-0.3%	-0.3	-1.3%	-0.3	-8.6%	0.0	0.0%

Table 7.68 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above L_{max} Thresholds 2010
Kaibab National Forest

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above L _{max} Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2010											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Kaibab National Forest																														
25	KAIFST25	1	3	71.6	251.9	182.6	92.5	15.1	2.6	0.5	71.6	251.9	182.6	92.5	15.1	2.6	0.5	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
24	SOUTH24	9	1	70.7	251.3	185.7	93.5	20.1	3.6	1.0	70.7	251.3	185.7	93.5	20.1	3.6	1.0	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
24	SOUTH24	10	1	70.9	252.5																									

Table 7.70 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2010
Kanab Creek Wilderness

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010												
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%	
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA	%	dBA	%	dBA	%	dBA	%	dBA	%	dBA	%	
Kanab Creek Wilderness																															
25 KAIFST25			2	3	70.3	265.9	195.3	86.1	14.2	1.9	0.8	70.3	265.9	195.3	86.1	14.2	1.9	0.8	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
25 KAIFST25			3	3	70.4	260.8	195.0	75.1	11.3	2.0	0.4	70.4	260.8	195.0	75.1	11.3	2.0	0.4	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
26 KANCRK26			2	1	73.2	256.8	180.7	86.8	15.2	2.1	0.3	73.2	256.8	180.7	86.8	15.2	2.1	0.3	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
26 KANCRK26			4	1	70.3	260.8	195.4	75.2	11.2	2.0	0.4	70.3	260.8	195.4	75.2	11.2	2.0	0.4	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
27 KANCRK27			1	1	71.4	260.2	190.1	75.3	10.3	2.1	0.2	71.4	260.2	190.1	75.3	10.3	2.1	0.2	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
27 KANCRK27			2	1	71.3	260.1	183.3	79.5	10.2	2.2	0.4	71.3	260.1	183.3	79.5	10.2	2.2	0.4	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.71 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2020
Kanab Creek Wilderness

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020												
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%	
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA	%	dBA	%	dBA	%	dBA	%	dBA	%	dBA	%	
Kanab Creek Wilderness																															
25 KAIFST25			2	3	70.3	364.3	266.7	108.7	23.3	2.8	0.5	70.3	364.3	266.7	108.7	23.3	2.8	0.5	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
25 KAIFST25			3	3	70.4	362.4	274.5	111.5	20.9	2.5	0.5	70.4	362.4	274.5	111.5	20.9	2.5	0.5	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
26 KANCRK26			2	1	73.2	358.5	252.9	121.9	21.4	3.0	0.4	73.2	358.5	252.9	121.9	21.4	3.0	0.4	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
26 KANCRK26			4	1	70.3	364.4	273.7	105.5	15.8	2.9	0.5	70.3	364.4	273.7	105.5	15.8	2.9	0.5	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
27 KANCRK27			1	1	71.4	363.3	266.3	105.7	14.4	2.9	0.2	71.4	363.3	266.3	105.7	14.4	2.9	0.2	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
27 KANCRK27			2	1	71.3	363.3	256.9	111.7	14.4	3.1	0.5	71.3	363.3	256.9	111.7	14.4	3.1	0.5	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.72 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2010
Lake Mead National Recreation Area

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010												
					20	25	35	45	55	60		20	25	35	45	55	60		20	%	25	%	35	%	45	%	55	%	60	%	
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA	%	dBA	%	dBA	%	dBA	%	dBA	%	dBA	%	
Lake Mead National Recreation Area																															
46 LKMEAD46			2	2	73.6	565.7	440.5	208.0	35.4	8.3	4.5	73.6	565.1	439.9	208.0	35.4	8.3	4.5	0.0	-0.6	-0.1%	-0.6	-0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
46 LKMEAD46			3	2	73.2	569.0	438.9	202.7	35.4	7.7	4.1	73.2	568.6	438.7	202.6	35.3	7.7	4.1	0.0	-0.4	-0.1%	-0.3	-0.1%	-0.1	0.0%	-0.1	-0.3%	0.0	0.0%	0.0	0.0%
47 LKMEAD47			1	1	71.9	592.6	461.5	191.7	36.7	9.8	3.1	71.9	592.5	461.4	191.6	36.7	9.8	3.1	0.0	-0.1	0.0%	-0.1	0.0%	-0.2	-0.1%	0.0	-0.1%	0.0	0.0%	0.0	0.0%
47 LKMEAD47			2	1	73.0	589.3	444.8	190.4	37.6	9.3	3.2	73.0	589.2	444.8	190.3	37.5	9.3	3.2	0.0	-0.1	0.0%	0.0	0.0%	-0.1	-0.1%	-0.1	-0.3%	0.0	0.0%	0.0	0.0%
47 LKMEAD47			3	1	73.6	573.3	429.5	172.2	34.7	8.4	3.3	73.6	573.2	429.4	172.1	34.6	8.4	3.3	0.0	-0.2	0.0%	0.0	0.0%	-0.1	-0.1%	-0.1	-0.2%	0.0	0.0%	0.0	0.0%
47 LKMEAD47			4	1	73.5	575.3	443.1	168.8	29.8	7.8	3.5	73.5	575.3	443.1	168.7	29.8	7.8	3.5	0.0	-0.1	0.0%	0.0	0.0%	-0.1	-0.1%	0.0	0.1%	0.0	0.0%	0.0	0.0%
47 LKMEAD47			5	3	73.9	590.0	434.0	177.4	29.1	8.2	3.5	73.9	589.8	433.9	177.3	29.1	8.2	3.5	0.0	-0.2	0.0%	-0.1	0.0%	-0.1	-0.1%	0.0	0.0%	0.0	-0.1%	0.0	0.0%

Table 7.73 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2020
Lake Mead National Recreation Area

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020												
					20	25	35	45	55	60		20	25	35	45	55	60		20	%	25	%	35	%	45	%	55	%	60	%	
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA	%	dBA	%	dBA	%	dBA	%	dBA	%	dBA	%	
Lake Mead National Recreation Area																															
46 LKMEAD46			2	2	73.6	783.4	609.4	288.0	48.9	11.5	6.3	73.6	782.8	608.8	288.0	48.9	11.5	6.3	0.0	-0.6	-0.1%	-0.5	-0.1%	0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
46 LKMEAD46			3	2	73.2	788.0	607.1	279.4	49.2	10.8	5.7	73.2	787.5	606.9	279.3	49.1	10.8	5.7	0.0	-0.4	-0.1%	-0.5	0.0%	-0.1	0.0%	0.0	-0.3%	0.0	0.0%	0.0	0.0%
47 LKMEAD47			1	1	71.9	820.3	637.4	263.6	50.3	13.6	4.4	71.9	820.3	637.4	263.6	50.3	13.6	4.4	0.0	0.0	0.0%	-0.1	0.0%	0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
47 LKMEAD47			2	1	73.0	815.8	614.8	262.0	50.2	13.1	4.5	73.0	815.8	614.8	262.1	50.2	13.1	4.5	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
47 LKMEAD47			3	1	73.6	793.6	593.1	237.2	46.2	11.8	4.6	73.6	793.5	593.2	237.1	46.2	11.8	4.6	0.0	-0.1	0.0%	-0.1	0.0%	0.1	0.0%	-0.1	0.0%	0.0	0.0%	0.0	0.0%
47 LKMEAD47			4	1	73.5	796.2	611.3	232.5	41.4	10.9	4.9	73.5	796.2	611.4	232.5	41.4	10.9	4.9	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	-0.1	0.0%	0.0	0.0%	0.0	0.0%
47 LKMEAD47			5	3	73.9	814.1	598.2	244.2	40.0	11.4	5.0	73.9	814.1	598.2	244.2	40.0	11.4	5.0	0.0	0.0	0.0%	0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	-0.1%	0.0	0.0%

Table 7.74 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2010
La Verkin Creek WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010												
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%	
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA	%	dBA	%	dBA	%	dBA	%	dBA	%	dBA	%	
La Verkin Creek WSA																															
19 ZION19			1	2	71.3	251.9	181.5	74.9	14.8	1.8	0.2	71.3	245.8	176.0	73.6	14.9	1.7	0.2	0.0	-6.1	-2.4%	-5.5	-3.0%	-1.3	-1.7%	0.1	8.8%	-0.1	-3.2%	0.0	-7.7%
19 ZION19			1	3	69.9	249.4	174.5	63.4	14.7	1.8	0.2	69.9	243.4	168.7	62.9	14.7	1.8	0.2	0.0	-6.1	-2.4%	-5.9	-3.4%	-0.6	-0.9%	-0.1	-5.6%	0.0	0.0%	0.0	0.0%

Table 7.75 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2020
La Verkin Creek WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020											
					20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	%	25 dBA	%	35 dBA	%	45 dBA	%	55 dBA	%	65 dBA	%
					La Verkin Creek WSA																									
19 ZION19		1	2	71.3	347.0	251.7	104.6	20.8	2.5	0.3	71.3	338.6	244.0	102.9	20.8	2.4	0.3	0.0	-8.4	-2.4%	-7.7	-3.1%	-1.7	-1.6%	0.1	0.3%	-0.1	-3.0%	0.0	-7.5%
19 ZION19		1	3	69.9	343.2	242.0	88.6	20.6	2.5	0.3	69.9	334.7	233.8	87.7	20.5	2.5	0.3	0.0	-8.5	-2.5%	-8.2	-3.4%	-0.8	-1.0%	-0.1	-0.4%	0.0	0.0%	0.0	0.0%

Table 7.76
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2010
Lime Canyon WSA
From Table B.25

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010											
					20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	%	25 dBA	%	35 dBA	%	45 dBA	%	55 dBA	%	65 dBA	%
					Lime Canyon WSA																									
47 LKMEAD47		4	1	73.5	575.3	443.1	168.8	29.8	7.8	1.3	73.5	575.3	443.1	168.7	29.8	7.8	1.3	0.0	-0.1	0.0%	0.0	0.0%	-0.1	-0.1%	0.0	0.1%	0.0	0.0%	0.0	0.0%
47 LKMEAD47		4	2	73.7	581.2	425.1	177.4	31.5	7.8	1.2	73.7	581.1	425.0	177.3	31.4	7.8	1.2	0.0	-0.2	0.0%	-0.1	0.0%	-0.1	-0.1%	-0.1	-0.3%	0.0	0.0%	0.0	0.0%
47 LKMEAD47		5	1	72.8	586.9	432.2	180.7	30.4	7.2	1.1	72.8	586.9	432.1	180.7	30.5	7.2	1.1	0.0	0.0	0.0%	-0.1	0.0%	0.0	0.0%	0.1	0.2%	0.0	0.0%	0.0	0.0%
47 LKMEAD47		5	2	73.4	581.3	404.8	168.8	28.3	7.8	1.0	73.4	581.2	404.8	168.8	28.3	7.8	1.0	0.0	-0.1	0.0%	0.1	0.0%	-0.1	-0.1%	0.0	0.0%	0.0	0.1%	0.0	0.0%
47 LKMEAD47		6	1	71.7	625.8	443.7	183.7	30.1	7.1	1.2	71.7	625.7	443.6	183.7	30.1	7.1	1.2	0.0	-0.1	0.0%	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.77 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2020
Lime Canyon WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020											
					20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	%	25 dBA	%	35 dBA	%	45 dBA	%	55 dBA	%	65 dBA	%
					Lime Canyon WSA																									
47 LKMEAD47		4	1	73.5	796.2	611.3	232.5	41.4	10.9	1.8	73.5	796.2	611.4	232.5	41.4	10.9	1.8	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	-0.1	0.0%	0.0	0.0%	0.0	0.0%
47 LKMEAD47		4	2	73.7	803.1	587.0	244.1	42.5	10.9	1.7	73.7	803.0	587.0	244.1	42.5	10.9	1.7	0.0	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.1	-0.1%	0.0	0.0%	0.0	0.0%
47 LKMEAD47		5	1	72.8	808.7	597.1	250.9	42.2	10.1	1.5	72.8	808.9	597.1	250.9	42.3	10.1	1.5	0.0	0.1	0.0%	0.2	0.0%	0.0	0.0%	0.0	0.2%	0.0	0.0%	0.0	0.0%
47 LKMEAD47		5	2	73.4	802.2	558.2	232.5	39.3	10.9	1.4	73.4	802.2	558.5	232.5	39.3	10.9	1.4	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.1%	0.0	0.0%
47 LKMEAD47		6	1	71.7	861.4	612.0	255.0	41.8	10.0	1.7	71.7	861.4	612.0	255.0	41.8	10.0	1.7	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.78 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2010
Moquith Mountains WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010											
					20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	%	25 dBA	%	35 dBA	%	45 dBA	%	55 dBA	%	65 dBA	%
					Moquith Mountains WSA																									
29 MOQMTN29		1	2	74.5	284.4	215.3	100.8	14.0	2.9	0.5	74.5	284.6	215.1	100.5	13.7	2.6	0.5	0.0	0.2	0.1%	-0.2	-0.1%	-0.3	-0.3%	-0.3	-2.0%	-0.3	-9.5%	0.0	0.0%
29 MOQMTN29		2	1	72.5	284.4	204.6	89.1	16.4	1.9	0.3	72.5	283.9	204.4	88.8	16.1	1.9	0.3	0.0	-0.5	-0.2%	-0.3	-0.1%	-0.3	-0.3%	-0.3	-1.7%	0.0	0.0%	0.0	0.0%
29 MOQMTN29		2	4	74.4	293.7	216.5	92.8	19.4	1.9	0.6	74.4	294.4	217.1	93.3	19.4	1.9	0.6	0.0	0.8	0.3%	0.6	0.3%	0.5	0.6%	0.0	0.0%	0.0	0.0%	0.0	0.0%
29 MOQMTN29		3	3	74.3	274.0	220.9	81.8	12.1	2.0	0.5	74.3	274.4	221.2	81.7	12.1	2.0	0.5	0.0	0.4	0.1%	0.3	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
29 MOQMTN29		4	1	70.3	280.4	219.0	73.2	15.6	3.2	0.2	70.3	279.8	218.4	72.9	15.4	2.9	0.2	0.0	-0.5	-0.2%	-0.5	-0.2%	-0.3	-0.4%	-0.3	-1.8%	-0.3	-8.8%	0.0	0.0%

Table 7.79 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2020
Moquith Mountains WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020											
					20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	%	25 dBA	%	35 dBA	%	45 dBA	%	55 dBA	%	65 dBA	%
					Moquith Mountains WSA																									
29 MOQMTN29		1	2	74.5	391.5	297.9	139.8	18.9	3.7	0.7	74.5	392.2	298.2	139.5	18.6	3.5	0.7	0.0	0.8	0.2%	0.9	0.1%	0.0	-0.2%	0.0	-1.5%	0.0	-7.4%	0.0	0.0%
29 MOQMTN29		2	1	72.5	391.9	283.4	124.3	22.4	2.7	0.4	72.5	392.0	283.1	124.0	22.2	2.7	0.4	0.0	0.1	0.0%	0.2	-0.1%	-0.3	-0.2%	-0.3	-1.2%	0.0	0.0%	0.0	0.0%
29 MOQMTN29		2	4	74.4	403.1	299.8	128.3	26.9	2.6	0.8	74.4	404.8	301.2	129.3	26.9	2.6	0.8	0.0	1.7	0.4%	-0.5	0.5%	-0.3	0.8%	-0.3	0.0%	-0.3	0.0%	0.0	0.0%
29 MOQMTN29		3	3	74.3	377.6	305.7	113.5	16.9	2.8	0.7	74.3	378.9	306.5	113.5	16.9	2.8	0.7	0.0	1.3	0.3%	1.6	0.3%	1.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
29 MOQMTN29		4	1	70.3	385.8	302.7	101.5	21.4	4.0	0.3	73.8	385.8	302.2	101.2	21.1	3.7	0.3	3.5	0.0	0.0%	0.2	-0.2%	-0.3	-0.3%	0.0	-1.3%	0.0	-6.9%	0.0	0.0%

Table 7.80 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above L_{max} Thresholds 2010
Morman Mountains WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above L _{max} Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2010													
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%		
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA			
Morman Mountains WSA																																
45 WEST45		1	4	73.3	256.7	167.3	46.9	8.3	2.2	0.2	73.3	254.9	167.1	46.9	8.3	2.2	0.2	0.0	-1.8	-0.7%	-0.2	-0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
45 WEST45		1	8	74.4	186.5	127.1	26.9	5.0	1.5	0.1	74.4	185.9	127.1	26.9	5.0	1.5	0.1	0.0	-0.6	-0.3%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
45 WEST45		2	2	71.8	330.8	236.9	89.4	11.4	3.7	0.1	71.8	329.5	235.7	89.4	11.4	3.7	0.1	0.0	-1.3	-0.4%	-1.2	-0.5%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
45 WEST45		2	6	73.6	250.3	156.1	46.2	8.4	1.9	0.2	73.6	249.1	155.8	46.2	8.4	1.9	0.2	0.0	-1.2	-0.5%	-0.3	-0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
45 WEST45		2	10	73.2	177.0	124.3	22.6	4.7	1.5	0.1	73.2	175.3	124.3	22.6	4.7	1.5	0.1	0.0	-1.7	-1.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
45 WEST45		3	9	74.4	206.4	139.4	37.0	6.6	1.9	0.1	74.4	205.3	139.4	37.0	6.6	1.9	0.1	0.0	-1.1	-0.5%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.81 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above L_{max} Thresholds 2020
Morman Mountains WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above L _{max} Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2020													
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%		
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA			
Morman Mountains WSA																																
45 WEST45		1	4	73.3	357.0	232.8	65.5	11.6	3.1	0.2	73.3	354.9	232.6	65.5	11.6	3.1	0.2	0.0	-2.1	-0.6%	0.0	-0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
45 WEST45		1	8	74.4	259.3	176.9	37.4	7.1	2.2	0.2	74.4	258.6	176.9	37.4	7.1	2.2	0.2	0.0	-0.7	-0.3%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
45 WEST45		2	2	71.8	459.9	330.0	125.1	16.0	5.2	0.2	71.8	458.4	328.6	125.1	16.0	5.2	0.2	0.0	-1.6	-0.3%	-1.3	-0.4%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
45 WEST45		2	6	73.6	348.0	217.4	64.5	11.7	2.7	0.2	73.6	346.5	217.1	64.5	11.7	2.7	0.2	0.0	-1.5	-0.4%	0.0	-0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
45 WEST45		2	10	73.2	245.6	172.9	31.6	6.6	2.1	0.2	73.2	243.7	172.9	31.6	6.6	2.1	0.2	0.0	-2.0	-0.8%	-1.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
45 WEST45		3	9	74.4	286.7	193.9	51.8	9.3	2.6	0.2	74.4	285.4	193.9	51.8	9.3	2.6	0.2	0.0	-1.4	-0.5%	2.4	0.0%	0.9	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.82 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above L_{max} Thresholds 2010
Mount Trumbull Wilderness

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above L _{max} Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2010													
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%		
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA			
Mount Trumbull Wilderness																																
23 SOUTH23		1	1	71.9	347.6	225.6	83.4	12.7	3.2	0.2	71.9	347.5	225.7	83.4	12.7	3.2	0.2	0.0	-0.1	0.0%	0.1	0.1%	0.1	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
23 SOUTH23		2	1	72.0	325.1	223.0	60.9	13.1	3.5	0.1	72.0	325.1	223.0	61.0	13.1	3.5	0.1	0.0	0.0	0.0%	0.0	0.0%	0.0	0.1%	0.0	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%
23 SOUTH23		3	1	72.5	324.4	217.6	57.3	13.4	3.4	0.1	72.5	324.4	217.6	57.4	13.4	3.4	0.1	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.83 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above L_{max} Thresholds 2020
Mount Trumbull Wilderness

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above L _{max} Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2020													
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%		
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA			
Mount Trumbull Wilderness																																
23 SOUTH23		1	1	71.9	482.3	314.0	117.0	17.8	4.5	0.3	71.9	482.2	314.2	117.0	17.8	4.5	0.3	0.0	-0.1	0.0%	0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
23 SOUTH23		2	1	72.0	452.7	310.4	85.3	18.4	4.9	0.2	72.0	452.7	310.4	85.4	18.4	4.9	0.2	0.0	0.0	0.0%	0.0	0.0%	0.0	0.1%	0.0	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%
23 SOUTH23		3	1	72.5	451.8	302.6	80.4	18.8	4.8	0.2	72.5	451.8	302.6	80.4	18.8	4.8	0.2	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.84 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above L_{max} Thresholds 2010
North Fork Virgin River WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above L _{max} Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2010													
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%		
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA			
North Fork Virgin River																																
35 DEEPC35		4	1	73.0	242.4	157.8	63.1	10.4	1.8	0.8	73.0	241.8	159.2	63.6	10.4	1.8	0.8	0.0	-0.6	-0.2%	1.4	0.9%	0.5	0.8%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
35 DEEPC35		5	1	71.8	243.4	156.3	64.3	12.6	1.8	0.7	71.8	243.3	157.9	64.8	12.7	1.8	0.7	0.0	-0.1	0.0%	1.7	1.1%	0.5	0.7%	0.0	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%
34 ORDERV34		1	4	72.7	264.4	163.6	63.3	13.0	2.0	0.7	72.7	263.8	165.3	63.4	13.0	2.0	0.7	0.0	-0.6	-0.2%	1.8	1.1%	0.1	0.2%	0.1	0.4%	0.0	0.0%	0.0	0.0%	0.0	0.0%
34 ORDERV34		1	5	73.0	242.3	157.8	63.2	10.4	1.8	0.8	73.0	241.6	159.2	63.7	10.4	1.8	0.8	0.0	-0.7	-0.3%	1.4	0.9%	0.5	0.8%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
34 ORDERV34		2	4	73.6	264.5	173.9	64.7	13.5	2.2	0.7	73.6	264.1	175.7	64.8	13.5	2.2	0.7	0.0	-0.4	-0.2%	1.8	1.0%	0.1	0.2%	0.0	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%
34 ORDERV34		2	5	71.8	243.1	156.3	64.3	12.6	1.8	0.7	71.8	242.9	157.9	64.8	12.6	1.8	0.7	0.0	-0.2	-0.1%	1.6	1.0%	0.5	0.7%	0.0	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.85 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above L_{max} Thresholds 2020
North Fork Virgin River WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above L _{max} Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2020												
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%	
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA		
North Fork Virgin River																															
35 DEEPC35			4	1	73.0	333.2	217.2	87.3	14.7	2.5	1.1	73.0	332.4	219.6	88.2	14.7	2.5	1.1	0.0	-0.8	-0.2%	2.7	1.1%	0.9	1.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
35 DEEPC35			5	1	71.8	334.5	215.0	89.1	17.4	2.5	1.0	71.8	334.5	217.6	89.9	17.4	2.5	1.0	0.0	0.0	0.0%	2.9	1.3%	0.6	1.0%	0.1	0.1%	0.0	0.0%	0.0	0.0%
34 ORDERV34			1	4	72.7	362.7	225.2	87.5	17.9	2.8	1.0	72.7	362.1	228.1	88.1	17.9	2.8	1.0	0.0	-0.7	-0.2%	2.4	1.3%	0.9	0.7%	0.0	0.3%	0.0	0.0%	0.0	0.0%
34 ORDERV34			1	5	73.0	333.0	217.1	87.4	14.7	2.5	1.1	73.0	332.2	219.6	88.3	14.7	2.5	1.1	0.0	-0.8	-0.3%	2.7	1.1%	0.2	1.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
34 ORDERV34			2	4	73.6	362.9	238.5	89.4	18.6	3.2	1.0	73.6	362.7	241.2	89.6	18.6	3.2	1.0	0.0	-0.2	-0.1%	2.7	1.1%	0.9	0.3%	0.0	0.0%	0.0	0.0%	0.0	0.0%
34 ORDERV34			2	5	71.8	334.0	214.9	89.1	17.4	2.5	1.0	71.8	334.0	217.6	89.9	17.4	2.5	1.0	0.0	0.0	0.0%	2.3	1.2%	1.7	1.0%	0.3	0.1%	0.0	0.0%	0.0	0.0%

Table 7.86 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above L_{max} Thresholds 2010
Orderville Canyon WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above L _{max} Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2010												
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%	
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA		
Orderville Canyon WSA																															
34 ORDERV34			1	2	74.4	286.9	209.0	81.8	12.8	2.2	0.7	74.4	285.5	210.2	83.1	13.2	2.2	0.7	0.0	-1.4	-0.5%	1.3	0.6%	1.3	1.5%	0.4	3.1%	0.0	0.0%	0.0	0.0%
34 ORDERV34			1	3	73.9	271.3	186.9	75.1	13.6	2.1	0.7	73.9	270.5	188.2	76.1	13.7	2.1	0.7	0.0	-0.8	-0.3%	1.3	0.7%	0.9	1.2%	0.0	0.2%	0.0	0.0%	0.0	0.0%
34 ORDERV34			2	2	74.7	284.1	205.6	84.4	17.4	2.2	0.7	74.7	283.3	207.0	85.1	17.8	2.4	1.0	0.0	-0.8	-0.3%	1.3	0.6%	0.7	0.9%	0.4	2.6%	0.2	7.3%	0.3	36.6%
34 ORDERV34			2	3	74.4	279.1	191.5	79.9	12.5	2.1	0.7	74.4	278.7	192.8	80.6	12.5	2.1	0.7	0.0	-0.4	-0.1%	1.3	0.7%	0.7	0.9%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.87 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above L_{max} Thresholds 2020
Orderville Canyon WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above L _{max} Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2020												
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%	
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA		
Orderville Canyon WSA																															
34 ORDERV34			1	2	74.4	393.2	287.4	111.5	17.5	3.1	1.0	74.4	391.5	289.7	113.2	17.8	3.1	1.0	0.0	-1.7	-0.4%	2.7	0.8%	1.3	1.5%	0.0	1.7%	0.0	0.0%	0.0	0.0%
34 ORDERV34			1	3	73.9	372.2	256.8	102.4	18.7	2.9	1.0	73.9	371.4	259.5	103.8	18.8	2.9	1.0	0.0	-0.9	-0.2%	2.1	1.0%	1.1	1.3%	0.4	0.2%	0.2	0.0%	0.3	0.0%
34 ORDERV34			2	2	74.7	389.3	281.6	115.1	23.8	3.0	1.0	74.7	388.4	283.7	116.2	24.2	3.2	1.3	0.0	-0.9	-0.2%	2.2	0.7%	1.0	1.0%	0.0	1.8%	0.0	5.3%	0.0	27.4%
34 ORDERV34			2	3	74.4	382.5	263.0	108.8	17.1	2.9	1.0	74.4	382.1	265.2	109.9	17.1	2.9	1.0	0.0	-0.3	-0.1%	-9.1	0.8%	0.3	1.0%	0.1	-0.3%	0.0	0.0%	0.0	0.0%

Table 7.88 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above L_{max} Thresholds 2010
Paiute Wilderness

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above L _{max} Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above L _{max} Thresholds with Replacement Airport 2010												
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%	
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA		
Paiute Wilderness																															
4 BEAVER4			2	2	74.6	402.8	304.2	127.3	31.0	6.3	1.3	74.6	392.1	301.7	125.0	29.0	5.7	1.3	0.0	-10.7	-2.7%	-2.4	-0.8%	-2.3	-1.8%	-2.0	-6.5%	-0.6	-9.7%	0.0	0.0%
4 BEAVER4			3	8	73.2	425.1	289.9	126.4	19.7	3.5	0.2	73.2	376.0	280.5	126.0	19.7	3.5	0.2	0.0	-49.1	-11.6%	-9.5	-3.3%	-0.5	-0.4%	0.0	-0.2%	0.0	0.0%	0.0	0.0%
4 BEAVER4			5	1	73.2	414.3	272.9	109.0	21.7	4.1	1.2	73.2	405.7	269.7	109.3	22.1	4.1	1.2	0.0	-8.6	-2.1%	-3.3	-1.2%	0.4	0.3%	0.4	1.9%	0.0	-0.5%	0.0	0.0%
4 BEAVER4			6	3	71.9	425.0	282.1	118.6	17.7	3.7	0.9	71.9	391.4	273.5	119.5	17.1	3.5	0.9	0.0	-33.6	-7.9%	-8.6	-3.1%	0.9	0.8%	-0.6	-3.3%	-0.2	-6.4%	0.0	0.0%
2 PAIUTEW2			2	4	74.3	438.6	294.7	121.8	24.4	5.0	1.2	74.3	436.8	293.1	120.5	24.4	5.1	1.2	0.0	-1.8	-0.4%	-1.5	-0.5%	-1.3	-1.1%	0.0	0.0%	0.0	1.0%	0.0	0.0%
2 PAIUTEW2			3	4	76.0	406.7	277.8	116.8	22.5	4.0	1.1	76.0	405.3	276.4	116.7	23.1	4.2	1.1	0.0	-1.3	-0.3%	-1.4	-0.5%	-0.1	-0.1%	0.6	2.7%	0.1	3.6%	0.0	0.0%
2 PAIUTEW2			4	4	76.2	404.4	269.0	109.1	21.3	3.5	1.1	76.2	403.1	267.4	109.7	21.9	3.6	1.1	0.0	-1.3	-0.3%	-1.6	-0.6%	0.6	0.6%	0.6	2.7%	0.1	2.3%	0.0	0.0%
2 PAIUTEW2			5	4	76.0	399.8	261.4	118.2	25.2	4.2	1.1	76.0	396.3	260.2	118.7	25.8	4.2	1.1	0.0	-3.6	-0.9%	-1.1	-0.4%	0.5	0.4%	0.6	2.2%	0.1	1.4%	0.0	0.0%
2 PAIUTEW2			6	4	74.6	401.5	246.3	112.0	23.0	4.0	1.0	74.6	397.8	245.2	112.6	23.0	3.9	1.0	0.0	-3.6	-0.9%	-1.1	-0.4%	0.6	0.5%	0.1	0.2%	-0.1	-3.1%	0.0	0.0%
2 PAIUTEW2			8	2	72.2	428.7	270.5	104.6	24.0	3.4	0.8	72.2	427.9	271.2	104.6	24.0	3.4	0.8	0.0	-0.8	-0.2%	0.7	0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
3 PAIUTEW3			1	1	72.4	438.1	321.2	127.5	24.9	5.0	1.3	72.4	436.1	319.6	126.2	24.2	5.0	1.3	0.0	-2.0	-0.5%	-1.6	-0.5%	-1.2	-1.0%	-0.7	-2.8%	0.0	-0.1%	0.0	0.0%
3 PAIUTEW3			2	3	72.7	440.3	310.0	129.3	28.7	4.7	1.0	72.7	436.1	308.2	127.3	28.3	4.6	1.0	0.0	-4.2	-1.0%	-1.8	-0.6%	-2.1	-1.6%	-0.5	-1.6%	-0.1	-1.8%	0.0	0.0%
3 PAIUTEW3			3	2	73.7	425.7	298.9	118.2	22.9	4.7	1.3	73.7	422.0	297.4	117.7	22.9	4.7	1.3	0.0	-3.7	-0.9%	-1.6	-0.5%	-0.5	-0.4%	0.0	0.1%	0.0	0.0%	0.0	0.0%
3 PAIUTEW3			4	1	76.2	404.1	268.7	109.1	21.3	3.5	1.1	76.2	402.8	267.3	109.5	21.9	3.6	1.1	0.0	-1.3	-0.3%	-1.4	-0.5%	0.4	0.4%	0.6	2.7%	0.1	2.3%	0.0	0.0%
3 PAIUTEW3			4	5	73.7	400.0	297.5	122.0	27.3	5.6	1.0	73.7	390.3	295.7	119.9	26.4	5.0	1.0	0.0	-9.7	-2.4%	-1.8	-0.6%	-2.0	-1.6%	-0.9	-3.3%	-0.6	-10.4%	0.0	0.0%
3 PAIUTEW3			5	4	72.4	418.8	285.8	115.0	22.5	3.8	1.2	72.4	409.5	284.5	115.4	21.8	3.8	1.2	0.0	-9.3	-2.2%	-1.3	-0.4%	0.3	0.3%	-0.8	-3.3%	0.0	-0.8%	0.0	0.0%
3 PAIUTEW3			6	3	75.7	416.3	265.6	109.0	20.3	4.1	1.1	75.7	413.0	264.9	108.7	20.8	4.2	1.1	0.0	-3.3	-0.8%	-0.7	-0.3%	-0.3	-0.3%	0.5	2.5%	0.1	2.2%	0.0	0.0%
3 PAIUTEW3			7	2	75.4	423.3	245.0	108.0	23.1	4.0	1.0	75.4	419.9	244.4	108.5	23.6	4.0	1.0	0.0	-3.4	-0.8%	-0.6	-0.3%	0.5	0.4%	0.5	2.2%	0.0	0.0%	0.0	0.0%
1 PARSHAN1			8	8	72.6	429.3	292.6	108.1	24.4	3.4	0.8	72.6	428.0	291.7	108.1	24.4	3.4	0.8	0.0	-1.3	-0.3%	-0.9	-0.3%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.89(From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2020
Paiute Wilderness

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Paiute Wilderness																														
4	BEAVER4		2	74.6	552.2	417.2	171.7	38.5	7.9	1.8	74.6	537.5	414.3	169.0	36.2	7.3	1.8	0.0	-14.7	-2.7%	-1.7	-0.7%	-0.8	-1.6%	-1.6	-5.9%	-0.7	-7.7%	0.0	0.0%
4	BEAVER4		3	73.2	573.4	400.6	175.9	27.5	4.9	0.3	73.2	519.1	387.4	175.3	27.4	4.9	0.3	0.0	-54.2	-9.5%	-14.2	-3.3%	-3.4	-0.3%	-3.4	-0.1%	0.0	0.0%	0.0	0.0%
4	BEAVER4		5	73.2	564.6	376.0	150.2	29.3	5.6	1.7	73.2	552.3	371.0	150.6	29.8	5.6	1.7	0.0	-12.2	-2.2%	-5.1	-1.3%	0.4	0.2%	0.4	1.5%	0.0	-0.3%	0.0	0.0%
4	BEAVER4		6	71.9	567.2	386.2	161.2	23.4	5.0	1.3	71.9	531.1	373.7	162.1	22.8	4.8	1.3	0.0	-36.1	-6.4%	-12.5	-3.2%	0.8	0.5%	-0.6	-2.7%	-0.3	-5.0%	0.0	0.0%
2	PAIUTEW2		2	74.3	604.1	405.7	167.8	32.9	7.0	1.7	74.3	602.1	404.0	166.4	32.9	7.1	1.7	0.0	-2.0	-0.3%	-1.8	-0.4%	-1.5	-0.9%	0.0	0.0%	0.1	1.0%	0.0	0.0%
2	PAIUTEW2		3	76.0	560.6	382.9	161.8	30.7	5.6	1.6	76.0	559.0	381.2	161.6	31.4	5.7	1.6	0.0	-1.6	-0.3%	-1.6	-0.4%	-0.2	-0.1%	0.6	2.1%	0.2	2.8%	0.0	0.0%
2	PAIUTEW2		4	76.2	557.6	370.9	151.4	29.2	4.9	1.5	76.2	556.1	369.0	152.0	29.8	5.0	1.5	0.0	-1.5	-0.3%	-1.9	-0.5%	0.6	0.4%	0.6	2.1%	0.1	1.6%	0.0	0.0%
2	PAIUTEW2		5	76.0	551.0	361.0	164.1	34.8	5.9	1.5	76.0	545.7	359.6	164.6	35.4	5.9	1.5	0.0	-5.4	-1.0%	-1.4	-0.4%	0.5	0.3%	0.6	1.6%	0.1	1.0%	0.0	0.0%
2	PAIUTEW2		6	74.6	553.1	339.8	155.3	31.9	5.6	1.4	74.6	547.7	338.4	155.9	32.0	5.4	1.4	0.0	-5.4	-1.0%	-1.4	-0.4%	0.6	0.4%	0.0	0.2%	-0.2	-2.8%	0.0	0.0%
2	PAIUTEW2		8	72.2	588.6	373.7	145.2	33.4	4.8	1.2	72.2	587.0	374.4	145.2	33.4	4.8	1.2	0.0	-1.6	-0.3%	0.7	0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
3	PAIUTEW3		1	72.4	602.9	442.2	174.6	33.4	7.0	1.8	72.4	600.6	440.3	173.2	32.6	7.0	1.8	0.0	-2.3	-0.4%	-1.9	-0.4%	-1.5	-0.8%	-0.7	-2.2%	0.0	0.0%	0.0	0.0%
3	PAIUTEW3		2	72.7	605.5	426.3	176.2	38.3	6.5	1.4	72.7	599.3	424.2	173.8	37.8	6.4	1.4	0.0	-6.2	-1.0%	-2.0	-0.5%	-2.4	-1.3%	-0.5	-1.2%	-0.1	-1.3%	0.0	0.0%
3	PAIUTEW3		3	73.7	585.9	411.1	162.9	31.2	6.5	1.8	73.7	580.4	409.3	162.2	31.2	6.5	1.8	0.0	-5.5	-0.9%	-1.8	-0.4%	-0.6	-0.4%	0.0	0.1%	0.0	0.0%	0.0	0.0%
3	PAIUTEW3		4	76.2	557.1	370.5	151.4	29.2	4.9	1.5	76.2	555.6	368.8	151.8	29.8	5.0	1.5	0.0	-1.5	-0.3%	-1.7	-0.5%	0.4	0.3%	0.6	2.1%	0.1	1.6%	0.0	0.0%
3	PAIUTEW3		4	73.7	548.7	408.7	165.5	36.0	7.5	1.4	73.7	535.1	406.6	163.2	35.0	6.9	1.4	0.0	-13.6	-2.5%	-2.1	-0.5%	-2.3	-1.4%	-1.0	-2.8%	-0.6	-8.1%	0.0	0.0%
3	PAIUTEW3		5	72.4	574.9	393.0	158.4	30.3	5.3	1.8	72.4	561.8	391.4	158.7	29.5	5.2	1.8	0.0	-13.1	-2.3%	-1.6	-0.4%	0.3	0.2%	-0.8	-2.6%	0.0	-0.6%	0.0	0.0%
3	PAIUTEW3		6	75.7	571.5	366.4	151.1	27.7	5.7	1.6	75.7	566.4	365.4	150.7	28.3	5.8	1.6	0.0	-5.1	-0.9%	-1.0	-0.3%	-0.4	-0.2%	0.5	2.0%	0.1	1.6%	0.0	0.0%
3	PAIUTEW3		7	75.4	578.8	337.7	150.0	32.2	5.6	1.4	75.4	573.7	336.9	150.5	32.7	5.6	1.4	0.0	-5.1	-0.9%	-0.8	-0.2%	0.5	0.3%	0.5	1.6%	0.0	0.0%	0.0	0.0%
1	PARSHAN1		8	72.6	591.6	404.0	150.3	33.9	4.7	1.2	72.6	590.0	402.9	150.2	33.9	4.7	1.2	0.0	-1.6	-0.3%	-1.1	-0.3%	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.90 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2010
Parunuweap WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2010											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Parunuweap WSA																														
31	PARUNW31		1	71.1	310.8	241.4	114.9	26.9	2.0	0.2	71.1	311.9	242.0	115.0	26.9	2.0	0.2	0.0	1.1	0.3%	0.6	0.3%	0.1	0.1%	0.0	0.1%	0.0	0.0%	0.0	0.0%
31	PARUNW31		2	73.5	302.0	238.6	116.6	18.2	2.1	0.6	73.5	303.1	238.9	116.6	18.2	2.1	0.6	0.0	1.0	0.3%	0.3	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
31	PARUNW31		3	72.9	303.7	229.8	114.0	18.0	2.0	0.7	72.9	304.9	230.3	114.5	18.0	2.0	0.7	0.0	1.2	0.4%	0.5	0.2%	0.5	0.4%	0.0	0.0%	0.0	0.0%	0.0	0.0%
31	PARUNW31		3	72.4	287.1	231.0	105.2	27.1	2.1	0.2	72.4	288.1	231.2	105.2	27.2	2.1	0.2	0.0	1.0	0.3%	0.3	0.1%	0.1	0.0%	0.1	0.3%	0.0	0.0%	0.0	0.0%
31	PARUNW31		4	73.3	293.1	233.5	105.1	19.6	2.1	0.6	73.3	293.8	234.0	105.1	19.6	2.1	0.6	0.0	0.7	0.2%	0.5	0.2%	0.0	0.0%	0.0	-0.1%	0.0	0.0%	0.0	0.0%
31	PARUNW31		4	72.0	280.0	225.9	99.2	27.6	2.0	0.1	72.0	280.9	226.1	99.2	27.7	2.1	0.1	0.0	0.9	0.3%	0.2	0.1%	0.0	0.0%	0.1	0.2%	0.1	3.3%	0.0	0.0%
31	PARUNW31		5	73.4	297.5	233.2	93.9	18.0	2.0	0.6	73.4	297.9	233.3	93.9	18.0	2.0	0.6	0.0	0.5	0.2%	0.1	0.1%	0.0	0.0%	0.0	-0.1%	0.0	0.0%	0.0	0.0%
31	PARUNW31		6	71.1	296.9	229.7	95.5	18.1	1.8	0.7	71.1	297.4	230.1	95.5	18.1	1.8	0.7	0.0	0.5	0.2%	0.4	0.2%	0.0	0.0%	0.0	-0.1%	0.0	0.0%	0.0	0.0%

Table 7.91 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2020
Parunuweap WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Parunuweap WSA																														
31	PARUNW31		1	71.1	425.8	330.6	158.0	36.1	2.8	0.3	71.1	427.7	332.0	158.2	36.1	2.8	0.3	0.0	2.0	0.5%	1.3	0.4%	0.2	0.1%	0.0	0.1%	0.0	0.0%	0.0	0.0%
31	PARUNW31		2	73.5	412.9	326.9	159.8	25.0	2.9	0.8	73.5	415.1	327.3	159.9	25.0	2.9	0.8	0.0	2.2	0.5%	0.4	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
31	PARUNW31		3	72.9	415.3	315.5	157.5	24.8	2.8	0.9	72.9	417.6	317.0	158.5	24.8	2.8	0.9	0.0	2.3	0.6%	1.5	0.5%	0.9	0.6%	0.0	0.0%	0.0	0.0%	0.0	0.0%
31	PARUNW31		3	72.4	392.5	315.8	144.2	36.3	2.9	0.3	72.4	393.9	316.3	144.3	36.4	2.9	0.3	0.0	1.4	0.4%	0.5	0.2%	0.1	0.0%	0.1	0.2%	0.0	0.0%	0.0	0.0%
31	PARUNW31		4	73.3	400.4	320.2	145.0	26.7	2.9	0.8	73.3	402.1	321.2	145.0	26.7	2.9	0.8	0.0	1.7	0.4%	1.0	0.3%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
31	PARUNW31		4	72.0	382.5	309.3	135.6	36.9	2.8	0.2	72.0	383.6	309.5	135.6	37.0	2.9	0.2	0.0	1.1	0.3%	0.2	0.1%	0.0	0.0%	0.1	0.2%	0.1	2.9%	0.0	0.0%
31	PARUNW31		5	73.4	406.6	320.0	129.3	24.4	2.7	0.8	73.4	407.6	320.6	129.3	24.4	2.7	0.8	0.0	1.0	0.2%	0.5	0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
31	PARUNW31		6	71.1	407.1	315.4	131.7	24.6	2.4	0.9	71.1	408.5	316.2	131.7	24.6	2.4	0.9	0.0	1.4	0.4%	0.8	0.3%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.92 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2010
Pine Valley Mountain Wilderness

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2010											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Pine Valley Mountain Wilderness																														
10	PINEV10		2	72.8	284.0	190.9	84.3	14.3	2.0	0.1	72.8	280.3	187.3	80.5	12.0	2.0	0.1	0.0	-3.7	-1.3%	-3.6	-1.9%	-3.7	-4.4%	-2.4	-16.5%	0.0	-1.6%	0.0	0.0%
10	PINEV10		3																											

Table 7.93 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2020
Pine Valley Mountain Wilderness

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Pine Valley Mountain Wilderness																														
10	PINEV10		2	72.8	390.4	262.9	116.7	19.5	2.8	0.1	72.8	383.7	255.5	110.6	15.1	2.8	0.1	0.0	-6.7	-1.7%	-7.3	-2.8%	-6.1	-5.3%	-4.4	-22.3%	0.0	-1.2%	0.0	0.0%
10	PINEV10		3	74.0	366.0	266.2	110.7	22.5	3.4	0.1	74.0	358.9	258.9	106.4	18.2	3.4	0.1	0.0	-7.1	-1.9%	-7.3	-2.7%	-4.3	-3.9%	-4.3	-19.0%	0.0	1.0%	0.0	0.0%
10	PINEV10		4	73.9	371.4	274.6	125.8	24.0	4.3	0.2	73.9	365.1	268.4	123.6	19.3	4.3	0.2	0.0	-6.3	-1.7%	-6.2	-2.3%	-2.2	-1.7%	-4.7	-19.5%	0.0	0.2%	0.0	0.0%
10	PINEV10		5	73.8	372.7	274.5	125.9	26.9	3.0	0.1	73.8	367.1	269.1	121.6	26.0	3.0	0.1	0.0	-5.6	-1.5%	-5.4	-2.0%	-4.3	-3.4%	-0.9	-3.2%	0.0	0.0%	0.0	0.0%
7	PINEV7		4	72.8	414.4	235.7	77.9	16.9	2.8	0.4	72.8	406.0	227.1	74.4	14.0	2.1	0.4	0.0	-8.4	-2.0%	-8.6	-3.6%	-3.5	-4.5%	-2.9	-17.0%	-0.7	-26.1%	0.0	0.0%
8	PINEV8		2	73.5	410.3	265.5	98.7	16.7	4.4	0.2	73.5	398.5	252.2	95.6	15.0	2.9	0.1	0.0	-11.8	-2.9%	-13.3	-5.0%	-3.1	-3.1%	-1.6	-9.6%	-1.5	-33.3%	-0.1	-34.6%
8	PINEV8		3	74.9	384.8	239.4	90.1	16.5	4.6	0.5	74.9	374.6	231.2	86.3	15.6	4.0	0.2	0.0	-10.2	-2.6%	-8.2	-3.4%	-3.8	-4.3%	-0.9	-5.7%	-0.5	-11.8%	-0.3	-54.6%
8	PINEV8		4	74.4	371.5	249.8	94.4	18.1	3.9	0.2	74.4	363.0	241.8	89.5	15.2	3.1	0.2	0.0	-8.5	-2.3%	-8.0	-3.2%	-4.9	-5.2%	-2.9	-16.1%	-0.8	-21.7%	0.0	-2.3%
8	PINEV8		6	71.3	345.0	225.5	88.5	16.4	2.7	0.3	71.3	337.1	219.8	84.7	15.1	2.0	0.3	0.0	-7.9	-2.3%	-5.8	-2.6%	-3.8	-4.3%	-1.3	-8.0%	-0.7	-25.4%	0.0	0.0%
8	PINEV8		8	71.2	368.8	263.5	85.9	18.8	2.5	0.3	71.2	363.1	256.7	79.7	15.7	2.5	0.3	0.0	-5.6	-1.5%	-6.8	-2.6%	-6.2	-7.2%	-3.1	-16.4%	0.0	-0.1%	0.0	0.0%
9	PINEV9		4	74.4	371.5	249.8	94.3	18.1	3.9	0.2	74.4	363.0	241.8	89.4	15.2	3.1	0.2	0.0	-8.5	-2.3%	-8.0	-3.2%	-4.9	-5.2%	-2.9	-16.1%	-0.8	-21.7%	0.0	-2.3%
9	PINEV9		5	74.4	369.4	253.0	106.3	17.5	2.7	0.2	74.4	360.7	244.5	101.0	13.9	2.6	0.2	0.0	-8.7	-2.3%	-8.5	-3.4%	-5.3	-4.9%	-3.6	-20.5%	-0.1	-3.1%	0.0	-1.0%
9	PINEV9		7	70.7	353.6	227.1	93.9	18.1	3.2	0.3	70.7	347.8	221.3	88.3	15.0	3.2	0.3	0.0	-5.8	-1.7%	-5.8	-2.6%	-5.6	-6.0%	-3.1	-17.2%	0.0	0.7%	0.0	0.0%

Table 7.94 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2010
Pipe Spring National Monument

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2010											
					20	25	35	45	55	60		20	25	35	45	55	60		20	%	25	%	35	%	45	%	55	%	60	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Pipe Spring NM																														
17	KAIBAB17		3	73.0	295.5	239.0	105.3	14.1	2.3	1.0	73.0	296.0	239.4	105.4	14.1	2.3	1.0	0.0	0.5	0.2%	0.5	0.2%	0.1	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%
17	KAIBAB17		3	71.4	296.8	239.0	113.0	17.7	2.3	1.1	71.4	297.1	239.5	113.2	17.7	2.3	1.1	0.0	0.3	0.1%	0.5	0.2%	0.2	0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%
17	KAIBAB17		4	73.8	296.5	223.7	109.1	15.9	2.3	1.0	73.8	296.8	224.1	109.1	15.9	2.3	1.2	0.0	0.3	0.1%	0.5	0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.2	19.0%
17	KAIBAB17		4	72.7	299.4	223.1	115.8	18.0	2.2	1.1	72.7	299.7	223.6	116.0	18.0	2.2	1.0	0.0	0.3	0.1%	0.5	0.2%	0.2	0.2%	0.0	0.0%	0.0	0.0%	-0.1	-8.4%

Table 7.95 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2020
Pipe Spring National Monument

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020											
					20	25	35	45	55	60		20	25	35	45	55	60		20	%	25	%	35	%	45	%	55	%	60	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Pipe Spring NM																														
17	KAIBAB17		3	73.0	408.2	331.3	146.3	19.7	3.3	1.4	73.0	409.0	332.0	146.4	19.7	3.3	1.4	0.0	0.7	0.2%	0.7	0.2%	0.1	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%
17	KAIBAB17		3	71.4	409.3	330.7	157.2	24.9	3.3	1.5	71.4	409.8	331.4	157.4	24.9	3.3	1.5	0.0	0.5	0.1%	0.7	0.2%	0.2	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%
17	KAIBAB17		4	73.8	409.6	309.7	151.7	22.2	3.2	1.7	73.8	410.1	310.2	151.7	22.2	3.2	1.7	0.0	0.5	0.1%	0.5	0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
17	KAIBAB17		4	72.7	413.2	309.1	161.1	25.3	3.0	1.4	72.7	413.7	309.6	161.4	25.3	3.0	1.4	0.0	0.5	0.1%	0.5	0.2%	0.2	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.96 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2010
Quail Creek State Park

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2010											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Quail Creek SP																														
38	COTTON38		6	73.1	335.5	206.7	69.6	20.8	2.6	0.7	73.1	332.9	205.7	67.4	20.4	2.9	0.7	0.0	-2.7	-0.8%	-1.0	-0.5%	-2.2	-3.1%	-0.4	-1.7%	0.3	12.1%	0.0	0.0%
38	COTTON38		6	73.1	328.6	204.2	71.5	23.6	4.0	0.3	73.1	325.2	200.4	67.8	18.8	3.1	0.3	0.0	-3.4	-1.0%	-3.7	-1.8%	-3.7	-5.2%	-4.8	-20.2%	-0.9	-23.2%	0.0	0.0%

Table 7.97 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2020
Quail Creek State Park

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Quail Creek SP																														
38	COTTON38		6	73.1	444.8	279.3	92.9	26.8	3.2	1.0	73.1	443.3	278.0	89.5	24.9	3.6	1.0	0.0	-1.6	-0.4%	-1.3	-0.5%	-3.3	-3.6%	-1.9	-6.9%	0.3	9.9%	0.0	0.0%
38	COTTON38		6	73.1	435.3	276.3	95.5	29.7	4.6	0.4	73.1	432.6	271.9	90.5	22.3	3.7	0.4	0.0	-2.6	-0.6%	-4.4	-1.6%	-5.0	-5.3%	-7.5	-25.1%	-1.0	-21.1%	0.0	0.0%

Table 7.98 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2010
Red Butte WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2010												
					20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	%	25 dBA	%	35 dBA	%	45 dBA	%	55 dBA	%	65 dBA	%	
Red Butte WSA																															
13	ZION13		3	1	74.3	261.3	192.1	88.3	13.9	3.7	0.4	74.3	255.2	186.6	85.9	13.8	3.7	0.4	0.0	-6.1	-2.3%	-5.5	-2.8%	-2.5	-2.8%	-0.1	-10.9%	0.0	0.0%	0.0	0.0%

Table 7.99 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2020
Red Butte WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020												
					20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	%	25 dBA	%	35 dBA	%	45 dBA	%	55 dBA	%	65 dBA	%	
Red Butte WSA																															
13	ZION13		3	1	74.3	359.4	265.7	123.3	19.4	5.2	0.5	74.3	351.4	257.7	119.3	19.3	5.2	0.5	0.0	-8.0	-2.2%	-8.0	-3.0%	-3.9	-3.2%	-0.1	-0.6%	0.0	0.0%	0.0	0.0%

Table 7.100 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2010
Red Mountain WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2010												
					20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	%	25 dBA	%	35 dBA	%	45 dBA	%	55 dBA	%	65 dBA	%	
Red Mountain WSA																															
39	REDMTN39		2	2	71.0	402.6	306.2	87.9	16.6	2.2	0.1	71.0	351.5	254.7	87.8	16.6	2.2	0.1	0.0	-51.1	-12.7%	-51.6	-16.8%	-0.2	-0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%
40	REDMTN40		1	1	69.7	400.4	311.3	145.6	23.8	3.8	1.2	69.7	367.3	304.3	145.5	23.7	3.8	1.2	0.0	-33.0	-8.3%	-7.0	-2.3%	0.0	0.0%	0.0	-0.2%	-0.1	-1.8%	0.0	0.0%
40	REDMTN40		3	1	69.9	415.3	282.8	113.2	17.1	2.2	0.1	69.9	364.4	271.9	112.7	17.1	2.2	0.1	0.0	-50.9	-12.3%	-10.9	-3.8%	-0.5	-0.5%	0.0	0.0%	0.0	0.0%	0.0	0.0%
40	REDMTN40		4	2	71.3	403.5	268.0	94.0	16.8	2.2	0.1	71.3	352.5	255.6	93.7	16.8	2.2	0.1	0.0	-51.0	-12.6%	-12.5	-4.6%	-0.3	-0.4%	0.0	0.1%	0.0	0.0%	0.0	0.0%
6	SNOWCAN6		1	4	70.9	383.0	264.3	88.6	16.6	2.2	0.1	70.9	331.9	254.7	88.0	16.6	2.2	0.1	0.0	-51.1	-13.3%	-9.6	-3.6%	-0.5	-0.6%	0.0	0.0%	0.0	0.0%	0.0	0.0%
6	SNOWCAN6		2	3	71.9	387.6	290.2	77.4	12.6	2.2	0.1	71.9	356.9	236.2	76.1	11.9	2.2	0.1	0.0	-30.7	-7.9%	-54.0	-18.6%	-1.3	-1.7%	-0.7	-5.7%	0.0	1.1%	0.0	0.0%

Table 7.101 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LAmx Thresholds 2020
Red Mountain WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LAmx Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LAmx Thresholds with Replacement Airport 2020												
					20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	25 dBA	35 dBA	45 dBA	55 dBA	65 dBA		20 dBA	%	25 dBA	%	35 dBA	%	45 dBA	%	55 dBA	%	65 dBA	%	
Red Mountain WSA																															
39	REDMTN39		2	2	71.0	540.5	407.3	123.0	23.3	3.1	0.2	71.0	486.5	349.7	122.8	23.3	3.1	0.2	0.0	-54.0	-10.0%	-57.6	-14.1%	-0.2	-0.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%
40	REDMTN40		1	1	69.7	545.2	431.0	202.9	32.5	5.3	1.7	69.7	506.5	421.9	202.9	32.5	5.2	1.7	0.0	-38.7	-7.1%	-9.2	-2.1%	0.0	0.0%	0.0	0.0%	-0.1	-1.3%	0.0	0.0%
40	REDMTN40		3	1	69.9	559.3	390.3	158.0	24.0	3.1	0.2	69.9	504.1	376.0	157.4	24.0	3.1	0.2	0.0	-55.3	-9.9%	-14.3	-3.7%	-0.6	-0.4%	0.0	0.0%	0.0	0.0%	0.0	0.0%
40	REDMTN40		4	2	71.3	542.8	369.6	130.9	23.6	3.1	0.1	71.3	487.9	353.4	130.4	23.6	3.1	0.1	0.0	-54.9	-10.1%	-16.3	-4.4%	-0.5	-0.4%	0.0	0.1%	0.0	0.0%	0.0	0.0%
6	SNOWCAN6		1	4	70.9	513.7	364.4	123.6	23.3	3.1	0.1	70.9	458.6	350.3	122.7	23.3	3.1	0.1	0.0	-55.1	-10.7%	-14.1	-3.9%	-0.9	-0.7%	0.0	0.0%	0.0	0.0%	0.0	0.0%
6	SNOWCAN6		2	3	71.9	519.3	384.9	108.0	17.7	3.1	0.2	71.9	485.8	324.6	106.3	16.6	3.1	0.2	0.0	-33.5	-6.4%	-60.3	-15.7%	-1.7	-1.6%	-1.1	-6.1%	0.0	0.7%	0.0	0.0%

Table 7.102 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2010
Shivwits Paiute Indian Reservation

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Shivwits Paiute Indian Reservation																														
5 PAIUTEW5		1	4	72.5	374.5	319.7	161.7	24.3	3.8	1.3	72.5	366.0	312.3	161.3	24.3	3.7	1.3	0.0	-8.5	-2.3%	-7.3	-2.3%	-0.4	-0.2%	-0.1	-0.2%	0.0	-1.2%	0.0	0.0%
5 PAIUTEW5		2	3	73.0	427.4	325.7	153.8	21.8	3.4	1.2	73.0	378.4	315.1	154.1	21.2	3.4	1.2	0.0	-49.0	-11.5%	-10.6	-3.2%	0.3	0.2%	-0.6	-2.5%	0.0	-1.3%	0.0	0.0%
5 PAIUTEW5		3	2	74.2	432.2	305.4	126.6	19.3	3.3	0.1	74.2	381.3	296.9	126.6	19.3	3.3	0.1	0.0	-50.8	-11.8%	-8.5	-2.8%	0.0	0.0%	0.0	0.3%	0.0	-0.3%	0.0	0.0%
5 PAIUTEW5		4	1	73.5	423.3	327.7	114.5	19.9	3.6	0.1	73.5	374.0	274.7	114.3	19.8	3.6	0.1	0.0	-49.3	-11.6%	-53.0	-16.2%	-0.2	-0.2%	-0.1	-0.4%	0.0	0.0%	0.0	0.0%
5 PAIUTEW5		4	5	69.0	418.7	284.2	129.2	19.0	2.5	0.2	69.0	367.8	273.5	129.3	19.0	2.5	0.2	0.0	-50.9	-12.2%	-10.8	-3.8%	0.1	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%
5 PAIUTEW5		5	4	70.2	397.9	298.6	102.7	16.7	3.1	0.1	70.2	347.0	265.7	102.7	16.7	3.1	0.1	0.0	-50.9	-12.8%	-32.9	-11.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.103 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2020
Shivwits Paiute Indian Reservation

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Shivwits Paiute Indian Reservation																														
5 PAIUTEW5		1	4	72.5	518.3	443.3	226.5	34.2	5.3	1.9	72.5	505.6	433.8	226.1	34.2	5.3	1.9	0.0	-12.6	-2.4%	-9.4	-2.1%	0.0	-0.2%	-0.1	-0.2%	0.0	-0.9%	0.0	0.0%
5 PAIUTEW5		2	3	73.0	577.2	450.8	214.4	30.4	4.8	1.7	73.0	521.9	437.0	214.8	29.9	4.8	1.7	0.0	-55.3	-9.6%	-9.4	-3.1%	0.0	0.2%	-0.3	-1.9%	0.0	-1.0%	0.0	0.0%
5 PAIUTEW5		3	2	74.2	582.7	421.5	176.1	26.4	4.6	0.2	74.2	527.6	408.8	176.1	26.5	4.6	0.2	0.0	-55.1	-9.5%	-13.9	-3.0%	0.0	0.0%	0.0	0.3%	-0.6	-0.2%	0.0	0.0%
5 PAIUTEW5		4	1	73.5	570.0	437.0	159.2	27.2	5.1	0.1	73.5	517.5	379.2	159.1	27.1	5.1	0.1	0.0	-52.4	-9.2%	-52.7	-13.2%	0.0	-0.1%	-0.2	-0.3%	-1.0	0.0%	-0.1	0.0%
5 PAIUTEW5		4	5	69.0	564.1	392.6	179.8	26.7	3.6	0.2	69.0	507.2	378.6	180.0	26.7	3.6	0.2	0.0	-56.9	-10.1%	-62.2	-3.6%	-9.4	0.1%	-0.1	0.0%	-1.1	0.0%	0.0	0.0%
5 PAIUTEW5		5	4	70.2	534.5	403.5	143.2	23.5	4.4	0.1	70.2	480.3	365.3	143.3	23.5	4.4	0.1	0.0	-54.2	-10.1%	-14.3	-9.5%	-0.3	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.104 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2010
Snow Canyon State Park

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Snow Canyon SP																														
6 SNOWCAN6		2	3	71.9	387.6	290.2	77.4	12.6	2.2	0.1	71.9	356.9	236.2	76.1	11.9	2.2	0.1	0.0	-30.7	-7.9%	-54.0	-18.6%	-1.3	-1.7%	-0.7	-5.7%	0.0	1.1%	0.0	0.0%
6 SNOWCAN6		2	5	72.2	379.9	236.7	76.3	17.1	2.6	0.1	72.2	327.3	225.5	75.3	16.5	2.2	0.1	0.0	-52.5	-13.8%	-11.2	-4.7%	-0.9	-1.2%	-0.6	-3.7%	-0.4	-15.9%	0.0	0.0%
6 SNOWCAN6		3	2	73.4	384.1	275.8	76.9	9.4	2.5	0.1	73.4	360.5	218.7	63.7	7.9	2.3	0.1	0.0	-23.6	-6.2%	-57.1	-20.7%	-13.2	-17.1%	-1.4	-15.4%	-0.2	-9.7%	0.0	0.0%
6 SNOWCAN6		3	4	71.6	372.6	257.2	72.1	13.0	2.2	0.1	71.6	319.2	220.4	68.8	12.1	2.1	0.1	0.0	-53.5	-14.4%	-36.8	-14.3%	-3.3	-4.6%	-0.9	-6.7%	-0.1	-4.9%	0.0	-13.3%

Table 7.105 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2020
Snow Canyon State Park

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Snow Canyon SP																														
6 SNOWCAN6		2	3	71.9	519.3	384.9	108.0	17.7	3.1	0.2	71.9	485.8	324.6	106.3	16.6	3.1	0.2	0.0	-33.5	-6.4%	-60.3	-15.7%	-1.7	-1.6%	-1.1	-6.1%	0.0	0.7%	0.0	0.0%
6 SNOWCAN6		2	5	72.2	509.1	326.4	106.2	24.0	3.7	0.2	72.2	452.1	310.3	105.0	23.1	3.0	0.2	0.0	-57.0	-11.2%	-16.1	-4.9%	-1.2	-1.2%	-0.9	-3.9%	-0.7	-17.9%	0.0	0.0%
6 SNOWCAN6		3	2	73.4	510.8	364.5	105.6	13.0	3.6	0.2	73.4	484.3	299.6	88.6	11.1	3.2	0.2	0.0	-26.5	-5.2%	-64.9	-17.8%	-17.0	-16.1%	-1.9	-14.6%	-0.4	-11.0%	0.0	0.0%
6 SNOWCAN6		3	4	71.6	498.7	345.7	100.2	18.1	3.1	0.2	71.6	440.8	302.6	95.3	16.9	2.9	0.2	0.0	-57.9	-11.6%	-43.1	-12.5%	-4.9	-4.9%	-1.2	-6.7%	-0.1	-4.2%	0.0	-10.4%

Table 7.106 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2010
Spring Creek Canyon WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010											
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA	
Spring Creek Canyon WSA																														
37 SORING37		2	1	70.2	244.3	192.5	91.3	15.3	1.6	0.3	70.2	239.5	187.4	89.1	15.2	1.6	0.3	0.0	-4.8	-2.0%	-5.2	-2.7%	-2.3	-2.5%	-0.2	-1.2%	0.0	0.0%	0.0	0.0%
37 SORING37		2	3	69.3	247.6	194.0	90.6	22.8	1.2	0.3	69.3	242.3	188.5	89.7	22.8	1.2	0.3	0.0	-5.3	-2.1%	-5.5	-2.8%	-0.9	-1.0%	0.0	-0.1%	0.0	0.0%	0.0	0.0%
37 SORING37		3	2	70.4	236.8	181.7	65.4	14.5	1.5	0.2	70.4	231.6	175.1	64.5	14.5	1.5	0.2	0.0	-5.1	-2.2%	-6.5	-3.6%	-0.8	-1.3%	0.0	0.3%	0.0	0.0%	0.0	0.0%
37 SORING37		4	2	71.0	233.2	173.6	50.1	9.5	1.7	0.2	71.0	227.1	168.0	50.1	9.5	1.7	0.2	0.0	-6.1	-2.6%	-5.6	-3.2%	0.0	0.0%	0.0	0.1%	0.0	0.0%	0.0	0.0%

Table 7.107 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2020
Spring Creek Canyon WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020												
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%	
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA		
Spring Creek Canyon WSA																															
37	SORING37		2	1	70.2	334.5	264.1	124.4	21.4	2.2	0.5	70.2	327.8	256.5	122.5	21.2	2.2	0.5	0.0	-6.8	-2.0%	-7.5	-2.9%	-1.9	-1.6%	-0.1	-0.7%	0.0	0.0%	0.0	0.0%
37	SORING37		2	3	69.3	338.6	265.8	122.8	29.0	1.6	0.4	69.3	331.6	258.6	123.2	29.0	1.6	0.4	0.0	-7.0	-2.1%	-7.3	-2.7%	0.4	0.3%	0.1	0.3%	0.0	0.0%	0.0	0.0%
37	SORING37		3	2	70.4	324.3	249.5	90.0	20.2	2.2	0.3	70.4	317.3	240.9	90.1	20.2	2.2	0.3	0.0	-7.0	-2.2%	-8.6	-3.4%	0.1	0.1%	0.1	0.3%	0.0	0.0%	0.0	0.0%
37	SORING37		4	2	71.0	320.0	239.5	69.2	13.2	2.4	0.3	71.0	311.8	232.4	70.1	13.2	2.4	0.3	0.0	-8.2	-2.6%	-7.1	-3.0%	0.9	1.3%	0.0	0.2%	0.0	0.0%	0.0	0.0%

Table 7.108 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2010
Taylor Creek WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010												
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%	
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA		
Taylor Creek WSA																															
13	ZION13		3	4	71.6	247.0	183.6	81.2	15.1	1.8	0.3	71.6	241.3	177.3	79.6	15.1	1.8	0.3	0.0	-5.7	-2.3%	-6.2	-3.4%	-1.6	-2.0%	0.0	0.5%	0.0	0.0%	0.0	0.0%

Table 7.109 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2020
Taylor Creek WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020												
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%	
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA		
Taylor Creek WSA																															
13	ZION13		3	4	71.6	338.8	252.5	113.6	21.0	2.5	0.4	71.6	330.8	243.9	112.1	21.0	2.5	0.4	0.0	-8.0	-2.4%	-8.6	-3.4%	-1.5	-1.3%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.110 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2010
Tunnel Spring WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010												
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%	
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA		
Tunnel Spring WSA																															
43	TUNEL43		1	2	70.5	101.5	38.6	11.8	2.7	0.1	0.0	70.5	101.5	38.6	11.8	2.7	0.1	0.0	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
43	TUNEL43		2	2	70.7	112.1	51.0	11.7	2.9	0.3	0.0	70.7	112.1	51.0	11.7	2.9	0.3	0.0	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
43	TUNEL43		3	1	70.7	125.8	55.6	12.1	2.9	0.2	0.0	70.7	125.7	55.6	12.1	2.9	0.2	0.0	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
43	TUNEL43		3	3	70.7	114.4	50.1	11.1	2.5	0.2	0.0	70.7	114.4	50.1	11.1	2.5	0.2	0.0	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.111 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2020
Tunnel Spring WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020												
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%	
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA		
Tunnel Spring WSA																															
43	TUNEL43		1	2	70.5	140.5	53.7	16.6	3.8	0.2	0.0	70.5	140.5	53.7	16.6	3.8	0.2	0.0	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
43	TUNEL43		2	2	70.7	155.5	70.7	16.4	4.1	0.4	0.0	70.7	155.5	70.7	16.4	4.1	0.4	0.0	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
43	TUNEL43		3	1	70.7	174.0	77.3	17.0	4.1	0.3	0.0	70.7	174.0	77.3	17.0	4.1	0.3	0.0	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
43	TUNEL43		3	3	70.7	158.7	69.4	15.4	3.6	0.3	0.0	70.7	158.7	69.4	15.4	3.6	0.3	0.0	0.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

Table 7.112 (From Table B.25)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2010
The Watchman WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2010						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2010												
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%	
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA		
The Watchman WSA																															
11	ZION11		1	2	68.5	333.15	263.81	135.5	33.8	2.0	0.2	68.5	332.0	264.9	135.6	33.7	2.0	0.2	0.0	-1.2	-0.4%	1.1	0.4%	0.0	0.0%	0.0	-0.1%	0.0	0.0%	0.0	0.0%
11	ZION11		1	3	70.8	321.95	256.16	130.6	32.9	2.3	0.1	70.8	320.0	256.8	130.7	33.1	2.3	0.1	0.0	-2.0	-0.6%	0.7	0.3%	0.1	0.1%	0.1	0.4%	0.0	0.8%	0.0	0.0%

Table 7.113 (From Table B.26)
Noise Level Changes - Cumulative Number of Aircraft Events Above LMax Thresholds 2020
The Watchman WSA

Grid Group #	Grid Group Name	Column in Grid Group	Row in Grid Group	LA(max) 2010 w/ Existing Airport	Number of Events Per Average Day Above LMax Thresholds with Existing Airport 2020						LA(max) 2010 w/ Repl. Airport	Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020						LA(max) 2010 Net Change	Change in Number of Events Per Average Day Above LMax Thresholds with Replacement Airport 2020												
					20	25	35	45	55	65		20	25	35	45	55	65		20	%	25	%	35	%	45	%	55	%	65	%	
					dBA	dBA	dBA	dBA	dBA	dBA		dBA	dBA	dBA	dBA	dBA	dBA		dBA		dBA		dBA		dBA		dBA		dBA		
The Watchman WSA																															
11	ZION11		1	2	68.5	455.2	361.0	186.8	45.3	2.8	0.2	68.5	454.1	363.3	186.9	45.3	2.8	0.2	0.0	-1.1	-0.2%	2.3	0.6%	0.1	0.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%
11	ZION11		1	3	70.8	440.7	351.3	179.8	44.7	3.3	0.2	70.8	438.0	352.8	180.0	44.8	3.3	0.2	0.0	-2.7	-0.6%	1.6	0.4%	0.3	0.1%	0.1	0.3%	0.0	1.3%	0.0	0.0%

Table 7.114
Noise Level Summary at Other 4f/303(c) Properties
Cumulative L(max) & Number of Events Above LAmx Thresholds - 2010
St. George Municipal Airport EIS

* Data for Pipe Spring National Monument, Lake Mead National Recreation Area and Cedar Breaks National Monument represents cumulative number of events above 60 dBA.

PROPERTY	LA(max)									MAX NUMBER OF EVENTS ABOVE																	
	Existing			Replacement			Change			Existing						Replacement						Change					
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	20	25	35	45	55	65	20	25	35	45	55	65	20	25	35	45	55	65
Ashdown Gorge Wilderness	75.7	70.5	72.8	75.7	70.5	72.8	0.0	-0.2	0.0	176.2	115.3	32.7	8.4	2.0	0.3	176.2	115.2	32.6	8.4	2.1	0.3	0.1	0.0	0.0	0.0	0.1	0.0
Beartrap Canyon WSA	72.7	72.7	72.7	72.7	72.7	72.7	0.0	0.0	0.0	235.2	169.9	65.9	11.5	2.1	0.2	229.6	165.4	65.6	11.7	2.1	0.2	-5.6	-4.5	-0.3	0.2	0.0	0.0
Beaver Dam Mountains Wilderness	74.7	71.6	73.4	74.7	71.6	73.4	0.0	0.0	0.0	436.1	321.7	135.8	30.0	7.8	1.8	417.8	309.1	133.6	27.4	6.5	1.8	-9.0	-2.8	-0.9	-0.1	0.6	0.0
Beaver Dam SP	72.4	70.2	70.9	72.4	70.2	70.9	0.0	0.0	0.0	134.0	72.2	13.3	2.9	1.3	0.1	134.0	72.2	13.3	2.9	1.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Canaan Mountain WSA	75.1	69.2	72.2	75.1	69.2	72.2	0.0	0.0	0.0	345.3	271.6	163.0	34.5	6.4	1.3	346.5	272.6	162.9	34.4	6.1	1.0	2.4	1.5	1.1	0.5	0.1	0.0
Cedar Breaks National Monument	73.6	70.5	72.1	73.6	70.5	72.1	0.0	0.0	0.0	162.1	105.4	30.7	8.4	2.0	0.7	162.0	105.4	30.7	8.4	2.1	0.7	0.0	0.0	0.0	0.0	0.1	0.0
Cedar City Paiute Indian Reservation	72.0	69.2	70.4	72.0	69.2	70.4	0.0	0.0	0.0	245.0	192.6	86.7	24.3	6.0	0.2	239.4	186.4	86.0	24.3	5.9	0.2	-5.2	-2.5	-0.4	0.1	0.0	0.0
Clover Mountains WSA	76.1	70.9	74.0	76.1	70.9	74.0	0.0	0.0	0.0	134.8	65.5	17.1	4.1	1.5	0.2	134.8	65.4	17.1	4.0	1.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Coral Pink Sand Dunes SP	74.5	74.5	74.5	74.5	74.5	74.5	0.0	0.0	0.0	297.0	216.7	100.8	17.6	2.9	0.6	297.4	217.0	100.5	17.6	2.6	0.6	0.4	0.3	-0.1	0.0	0.0	0.0
Cottonwood Point Wilderness	73.9	70.6	71.9	73.9	70.6	71.9	0.0	0.0	0.0	330.2	267.9	143.0	24.6	3.4	0.7	330.6	268.1	143.0	24.5	3.4	0.7	1.0	0.9	0.7	0.5	0.2	0.0
Cottonwood WSA	73.9	71.7	72.9	73.9	71.7	72.9	0.0	0.0	0.0	379.2	258.4	73.6	24.6	6.0	0.3	357.6	241.9	70.5	21.4	3.3	0.4	-1.4	-2.2	-1.1	1.5	0.6	0.0
Cougar Canyon WSA	73.6	70.6	72.3	73.6	70.6	72.3	0.0	0.0	0.0	166.7	107.7	19.4	4.9	1.6	0.1	166.6	107.7	19.4	4.9	1.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Deep Creek WSA	75.2	72.2	73.9	75.2	72.2	73.9	0.0	0.0	0.0	256.4	170.1	71.8	10.2	1.7	0.8	253.5	169.0	72.6	10.2	1.7	0.8	-1.9	1.3	0.8	0.0	0.0	0.0
Gateway Corridor 22	72.8	70.1	71.5	72.8	70.1	71.5	0.0	0.0	0.0	406.7	322.7	124.0	21.2	6.0	1.6	406.5	322.5	123.9	21.2	6.0	1.6	-0.1	0.1	0.1	0.1	0.0	0.0
Gateway Corridor 23	74.6	70.4	72.2	74.6	70.4	72.2	0.0	0.0	0.0	352.5	250.0	83.4	14.9	3.7	0.7	352.3	250.0	83.4	14.9	3.7	0.7	0.0	0.1	0.1	0.0	0.0	0.0
Gateway Corridor 24	74.6	69.4	71.9	74.6	69.4	71.9	0.0	0.0	0.0	321.9	193.3	102.5	20.4	3.9	1.0	321.8	193.2	102.5	20.4	3.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Gateway Corridor 32	74.6	71.2	73.0	74.6	71.2	73.0	0.0	0.0	0.0	290.8	216.6	99.7	23.2	3.9	0.7	291.8	217.0	99.7	23.3	3.8	0.7	1.0	1.0	0.4	0.1	0.1	0.0
Gateway Corridor 33	75.8	70.9	74.3	75.8	70.9	74.3	0.0	0.0	0.0	260.2	199.6	77.5	25.8	2.1	0.8	260.7	200.1	77.8	26.1	2.2	0.8	0.9	0.7	0.3	0.3	0.1	0.1
Goose Creek WSA	73.3	73.3	73.3	73.3	73.3	73.3	0.0	0.0	0.0	256.7	170.6	64.8	10.2	1.7	0.6	253.7	169.6	65.1	10.2	1.7	0.6	-2.9	-1.1	0.3	0.0	0.0	0.0
Grand Canyon-Parashant NM	75.6	70.6	72.8	75.6	70.6	72.7	0.0	-0.5	0.0	428.9	295.7	131.2	25.3	5.0	1.2	427.9	294.4	131.6	25.3	5.0	1.2	0.0	0.9	0.5	0.7	0.0	0.0
Grand Canyon-Parashant NM (West)	75.5	69.1	72.7	75.5	69.1	72.7	0.0	0.0	0.0	564.7	439.7	203.1	32.5	7.9	3.3	564.8	439.7	203.1	32.5	7.9	3.3	1.1	0.8	0.6	0.6	0.1	0.0
Grand Wash Cliffs Wilderness	74.1	70.0	71.9	74.1	70.0	71.9	0.0	0.0	0.0	526.1	398.8	200.5	32.6	7.9	3.1	526.0	398.8	200.5	32.6	7.9	3.1	0.0	0.0	0.1	0.0	0.0	0.0
Gunlock SP	71.8	69.0	70.4	71.8	69.0	70.4	0.0	0.0	0.0	392.5	313.4	147.9	23.4	3.5	1.3	365.0	306.1	147.8	23.3	3.5	1.3	-8.5	-7.1	0.0	0.0	0.0	0.0
Iron Mission State Park Museum	70.8	70.8	70.8	70.8	70.8	70.8	0.0	0.0	0.0	229.2	160.2	64.5	10.5	0.8	0.2	222.2	158.9	63.5	10.5	0.8	0.2	-7.1	-1.3	-1.0	0.1	0.0	0.0
Joshua Tree Instant Study Area	74.1	72.7	73.5	74.1	72.7	73.5	0.0	0.0	0.0	428.0	317.7	145.9	21.1	3.9	0.3	417.7	313.0	145.4	20.6	3.9	0.3	-9.4	-3.3	-0.4	-0.1	0.0	0.0
Kaibab Indian Reservation	78.2	69.5	72.6	78.2	69.5	72.6	0.0	0.0	0.0	318.1	252.5	121.9	22.9	3.5	1.5	317.9	253.0	121.6	22.7	3.3	1.3	0.5	0.5	0.3	0.2	0.2	0.0
Kaibab National Forest	71.8	70.3	71.1	71.8	70.3	71.1	0.0	0.0	0.0	260.6	190.2	102.5	20.4	3.6	1.0	260.6	190.2	102.5	20.4	3.6	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Kanab Creek Wilderness	74.2	69.1	71.7	74.2	69.1	71.7	0.0	0.0	0.0	268.6	195.4	92.5	16.7	2.6	0.8	268.6	195.4	92.5	16.7	2.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0
La Verkin Creek WSA	71.3	69.9	70.6	71.3	69.9	70.6	0.0	0.0	0.0	251.9	181.5	74.9	14.8	1.8	0.2	245.8	176.0	73.6	14.9	1.8	0.2	-6.1	-5.5	-0.6	0.1	0.0	0.0
Lake Mead National Recreation Area	73.9	71.9	73.1	73.9	71.9	73.1	0.0	0.0	0.0	602.6	461.5	220.3	39.8	10.6	5.3	602.4	461.4	220.4	39.8	10.6	5.3	-0.1	0.0	0.1	0.1	0.0	0.0
Lime Canyon WSA	73.7	71.7	73.0	73.7	71.7	73.0	0.0	0.0	0.0	625.8	443.7	183.7	31.5	7.8	1.3	625.7	443.6	183.7	31.4	7.8	1.3	0.0	0.1	0.0	0.1	0.0	0.0
Mogwih Mountains WSA	74.9	70.3	73.2	74.9	70.3	73.2	0.0	0.0	0.0	297.0	221.8	102.4	21.3	3.9	0.6	297.4	222.4	102.2	21.2	3.8	0.6	1.0	1.0	0.5	0.0	0.0	0.0
Morman Mountains WSA	74.8	70.6	73.3	74.8	70.6	73.3	0.0	0.0	0.0	331.7	236.9	89.4	11.7	3.7	0.2	329.8	235.7	89.4	11.7	3.7	0.2	-0.3	0.0	0.0	0.0	0.0	0.0
Mount Trumbull Wilderness	72.5	71.9	72.1	72.5	71.9	72.1	0.0	0.0	0.0	347.6	225.6	83.4	13.4	3.5	0.2	347.5	225.7	83.4	13.4	3.5	0.2	0.0	0.1	0.1	0.0	0.0	0.0
North Fork Virgin River	73.6	71.8	72.7	73.6	71.8	72.7	0.0	0.0	0.0	264.5	173.9	64.7	13.5	2.2	0.8	264.1	175.7	64.8	13.5	2.2	0.8	-0.1	1.8	0.5	0.1	0.0	0.0
Orderville Canyon WSA	74.7	73.9	74.4	74.7	73.9	74.4	0.0	0.0	0.0	286.9	209.0	84.4	17.4	2.2	0.7	285.5	210.2	85.1	17.8	2.4	1.0	-0.4	1.3	1.3	0.4	0.2	0.3
Paiute Wilderness	76.2	71.1	73.6	76.2	71.1	73.6	0.0	0.0	0.0	485.4	363.1	148.9	31.1	9.1	1.8	484.9	363.0	148.8	31.4	7.8	1.8	-0.4	0.9	0.9	0.7	0.3	0.0
Parunuweap WSA	74.4	70.6	72.8	74.4	70.6	72.8	0.0	0.0	0.0	327.3	250.2	137.7	27.6	3.0	0.8	327.9	250.8	138.3	27.7	3.0	0.8	1.2	1.1	0.6	0.1	0.1	0.0
Pine Valley Mountain Wilderness	78.1	70.7	73.4	75.9	70.7	73.4	0.0	-2.2	0.0	311.0	202.3	91.2	20.2	3.6	0.7	301.8	198.0	90.9	19.6	3.3	0.3	-3.1	-2.2	0.0	0.1	0.2	0.0
Pipe Spring NM	73.8	71.4	72.7	73.8	71.4	72.7	0.0	0.0	0.0	299.4	239.0	115.8	18.0	2.3	1.2	299.7	239.5	116.0	18.0	2.3	1.2	0.5	0.5	0.2	0.0	0.0	0.0
Quail Creek SP	73.1	73.1	73.1	73.1	73.1	73.1	0.0	0.0	0.0	335.5	206.7	71.5	23.6	4.0	0.7	332.9	205.7	67.8	20.4	3.1	0.7	-2.7	-1.0	-2.2	-0.4	0.3	0.0
Red Butte WSA	74.3	74.3	74.3	74.3	74.3	74.3	0.0	0.0	0.0	261.3	192.1	88.3	13.9	3.7	0.4	255.2	186.6	85.9	13.8	3.7	0.4	-6.1	-5.5	-2.5	-0.1	0.0	0.0
Red Mountain WSA	73.0	68.9	70.9	73.0	68.9	70.9	0.0	0.0	0.0	417.6	313.4	147.9	23.8	3.8	1.3	390.1	306.1	147.8	23.7	3.8	1.3	-8.3	-7.0	0.1	0.0	0.1	0.0
Shivwits Paiute Indian Reservation	74.9	69.0	72.2	74.9	69.0	72.2	0.0	0.0	0.0	444.0	328.9	169.0	25.2	4.9	1.3	401.0	315.9	168.4	25.1	4.6	1.3	-7.5	-6.9	0.4	0.3	0.1	0.0
Snow Canyon SP	73.4	71.0	72.2	73.4	71.0	72.2	0.0	0.0	0.0	405.8	294.5	123.4	17.5	3.1	0.3	379.9	245.1	83.7	17.0	3.1	0.3	-14.2	-11.2	-0.9	-0.5	0.0	0.0
Spring Creek Canyon WSA	71.0	69.2	70.1	71.0	69.2	70.1	0.0	0.0	0.0	252.1	201.6	101.5	22.8	4.6	0.4	247.4	196.3	99.1	22.8	4.6	0.4	-4.7	-4.6	0.0	0.1	0.0	0.0
Taylor Creek WSA	71.6	71.6	71.6	71.6	71.6	71.6	0.0	0.0	0.0	247.0	183.6	81.2	15.1	1.8	0.3	241.3	177.3	79.6	15.1	1.8	0.3	-5.7	-6.2	-1.6	0.0	0.0	0.0
The Watchman WSA	70.8	68.5	69.7	70.8	68.5	69.7	0.0	0.0	0.0	333																	

Table 7.115
Noise Level Summary at Other 4f/303(c) Properties
Cumulative L(max) & Number of Events Above LAmaz Thresholds - 2020
St. George Municipal Airport EIS

* Data for Pipe Spring National Monument, Lake Mead National Recreation Area and Cedar Breaks National Monument represents cumulative number of events above 60 dBA.

PROPERTY	LA(max)									MAX NUMBER OF EVENTS ABOVE																	
	Existing			Replacement			Change			Existing						Replacement						Change					
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	20	25	35	45	55	65	20	25	35	45	55	65	20	25	35	45	55	65
Ashdown Gorge Wilderness	86.0	70.5	73.8	75.7	70.5	72.8	0.0	-14.7	-0.9	243.9	159.8	45.7	11.7	2.9	0.5	245.5	160.4	45.6	11.7	2.9	0.5	1.6	0.5	0.0	0.0	0.1	0.0
Beartrap Canyon WSA	72.7	72.7	72.7	72.7	72.7	72.7	0.0	0.0	0.0	325.7	235.8	92.0	16.1	3.0	0.3	317.8	229.2	91.4	16.2	3.0	0.3	-8.0	-6.5	-0.5	0.2	0.0	0.0
Beaver Dam Mountains Wilderness	74.7	71.6	73.4	74.7	71.6	73.4	0.0	0.0	0.0	586.4	428.1	183.6	37.1	9.3	2.5	572.5	424.8	181.2	33.8	8.0	2.5	-11.1	0.0	0.0	0.0	0.7	0.6
Beaver Dam SP	72.4	70.2	70.9	72.4	70.2	70.9	0.0	0.0	0.0	185.5	100.6	18.6	4.1	1.8	0.1	185.4	100.6	18.6	4.1	1.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Canaan Mountain WSA	75.1	69.2	72.2	75.1	69.2	72.3	3.6	0.0	0.1	471.0	371.6	223.5	46.1	8.1	1.6	472.5	374.0	223.6	46.1	7.8	1.3	2.9	3.2	2.2	1.1	0.1	0.0
Cedar Breaks National Monument	86.0	70.5	75.8	73.6	70.5	72.1	0.0	-14.7	-3.7	224.5	145.9	42.9	11.7	2.9	1.0	225.3	145.9	42.9	11.7	2.9	0.9	0.8	0.0	0.0	0.0	0.1	0.1
Cedar City Paiute Indian Reservation	72.0	69.2	70.4	72.0	69.2	70.4	0.0	0.0	0.0	335.0	263.9	117.2	30.6	6.6	0.3	327.7	432.5	175.5	33.5	6.9	1.6	-7.1	-1.8	0.8	0.1	0.0	0.0
Clover Mountains WSA	76.1	70.9	74.0	76.1	70.9	74.0	0.0	0.0	0.0	186.9	91.3	23.6	5.4	2.1	0.2	186.9	91.3	23.6	5.4	2.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Coral Pink Sand Dunes SP	74.5	74.5	74.5	74.5	74.5	74.5	0.0	0.0	0.0	407.9	299.3	139.8	24.6	3.7	0.9	409.2	300.2	139.5	24.6	3.5	0.9	1.4	0.9	0.2	0.0	0.0	0.0
Cottonwood Point Wilderness	73.9	70.6	71.9	77.2	70.6	72.7	5.7	0.0	0.8	453.9	368.1	197.8	33.5	4.7	1.0	454.8	368.8	198.0	33.5	4.7	1.0	1.5	1.3	0.8	0.6	0.2	0.0
Cottonwood WSA	73.9	71.7	72.9	73.9	71.7	72.9	0.0	0.0	0.0	502.5	338.1	98.4	30.9	6.9	0.5	478.9	320.3	93.6	25.2	3.9	0.5	-0.6	-2.2	-2.4	0.6	0.6	0.0
Cougar Canyon WSA	73.6	70.6	72.3	73.6	70.6	72.3	0.0	0.0	0.0	231.0	150.2	27.0	7.0	2.3	0.1	230.9	150.2	27.0	7.0	2.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Deep Creek WSA	75.2	72.2	73.9	75.2	72.2	73.9	0.0	0.0	0.0	354.1	235.1	99.8	14.3	2.4	1.1	349.5	233.7	101.2	14.2	2.4	1.1	-2.7	2.3	1.5	0.0	0.0	0.0
Gateway Corridor 22	72.8	70.1	71.5	72.8	70.1	71.5	0.0	0.0	0.0	564.3	447.6	172.4	29.8	8.4	2.3	564.0	447.4	172.3	29.8	8.4	2.3	-0.1	0.1	0.1	0.1	0.0	0.0
Gateway Corridor 23	74.6	70.4	72.2	74.6	70.4	72.2	0.0	0.0	0.0	490.7	348.1	117.0	20.8	5.1	1.0	490.5	348.1	117.0	20.8	5.1	1.0	0.0	0.1	0.1	0.1	0.0	0.0
Gateway Corridor 24	74.6	69.4	71.9	74.6	69.4	71.9	0.0	0.0	0.0	448.3	269.8	144.2	28.5	5.6	1.4	448.2	269.7	144.2	28.5	5.6	1.4	0.0	0.0	0.0	0.0	0.0	0.0
Gateway Corridor 32	74.6	71.2	73.0	74.6	71.2	73.0	0.0	0.0	0.0	399.7	298.4	136.2	31.1	4.7	1.0	401.6	300.2	136.2	31.1	4.7	1.0	1.9	1.9	0.8	0.1	0.1	0.0
Gateway Corridor 33	76.8	70.9	74.4	75.8	70.9	74.3	0.0	-2.0	-0.1	356.2	273.0	105.5	34.6	2.9	1.1	357.0	273.7	105.8	34.9	3.0	1.1	1.8	1.5	0.7	0.3	0.1	0.1
Goose Creek WSA	73.3	73.3	73.3	73.3	73.3	73.3	0.0	0.0	0.0	354.5	235.9	90.5	14.2	2.4	0.8	349.9	234.5	91.1	14.2	2.4	0.8	-4.6	-1.4	0.5	0.0	0.0	0.0
Grand Canyon-Parashant NM	75.6	70.6	72.8	75.6	70.6	72.7	0.0	-0.5	0.0	590.7	407.3	181.6	34.8	6.9	1.6	588.9	405.7	182.0	34.8	6.9	1.6	0.0	0.8	0.6	0.7	0.0	0.0
Grand Canyon-Parashant NM (West)	75.5	69.1	72.7	75.5	69.1	72.7	0.0	0.0	0.0	780.2	608.5	283.2	44.8	11.2	4.6	780.2	608.5	283.2	44.8	11.2	4.6	0.8	0.8	0.6	0.6	0.1	0.0
Grand Wash Cliffs Wilderness	74.1	70.0	71.9	74.1	70.0	71.9	0.0	0.0	0.0	729.9	554.9	279.5	45.3	11.2	4.4	729.8	554.9	279.5	45.3	11.2	4.4	0.0	0.0	0.1	0.0	0.0	0.0
Gunlock SP	71.8	69.0	70.4	71.8	69.0	70.4	0.0	0.0	0.0	534.5	433.7	206.3	32.0	4.9	1.9	503.8	424.3	206.2	32.0	4.9	1.9	-12.7	-9.4	0.0	0.0	0.0	0.0
Iron Mission State Park Museum	70.8	70.8	70.8	70.8	70.8	70.8	0.0	0.0	0.0	313.8	218.8	86.6	14.2	1.1	0.3	305.7	219.1	86.7	14.2	1.1	0.3	-8.1	0.4	0.0	0.1	0.0	0.0
Joshua Tree Instant Study Area	74.1	72.7	73.5	74.1	72.7	73.5	0.0	0.0	0.0	592.2	439.9	202.9	29.1	5.5	0.4	577.1	433.9	202.1	28.4	5.5	0.4	-14.1	-4.6	-0.5	-0.1	0.0	0.0
Kaibab Indian Reservation	78.2	69.5	72.6	79.4	69.5	72.8	6.4	0.0	0.2	436.6	349.5	169.0	31.4	4.5	1.7	437.2	350.2	168.8	31.5	4.3	1.5	0.8	0.7	0.4	0.2	0.2	0.0
Kaibab National Forest	71.8	70.3	71.1	71.8	70.3	71.1	0.0	0.0	0.0	364.3	266.7	144.2	28.5	5.1	1.4	364.3	266.7	144.2	28.5	5.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0
Kanab Creek Wilderness	74.2	69.1	71.7	74.2	69.1	71.7	0.0	0.0	0.0	375.0	274.5	130.0	23.3	3.7	0.7	375.0	274.5	130.0	23.3	3.7	0.7	0.0	0.0	0.1	0.0	0.0	0.0
La Verkin Creek WSA	71.3	69.9	70.6	71.3	69.9	70.6	0.0	0.0	0.0	347.0	251.7	104.6	20.8	2.5	0.3	338.6	244.0	102.9	20.8	2.5	0.3	-8.4	-7.7	-0.8	0.1	0.0	0.0
Lake Mead National Recreation Area	73.9	71.9	73.1	73.9	71.9	73.1	0.0	0.0	0.0	832.3	638.8	305.6	53.4	14.8	7.4	832.3	638.3	305.7	53.5	14.8	7.4	0.0	0.1	0.1	0.1	0.0	0.0
Lime Canyon WSA	73.7	71.7	73.0	73.7	71.7	73.0	0.0	0.0	0.0	861.4	612.0	255.0	42.5	10.9	1.8	861.4	612.0	255.0	42.5	10.9	1.8	0.1	0.2	0.0	0.1	0.0	0.0
Moquith Mountains WSA	74.9	70.3	73.2	74.9	70.3	73.4	3.5	0.0	0.2	407.9	307.2	142.6	28.9	4.7	0.9	409.2	308.7	142.4	28.9	4.7	0.9	1.9	1.9	1.0	0.0	0.0	0.0
Morman Mountains WSA	74.8	70.6	73.3	74.8	70.6	73.3	0.0	0.0	0.0	460.9	330.0	125.1	16.3	5.2	0.2	458.7	328.6	125.1	16.3	5.2	0.2	-0.3	2.4	0.9	0.0	0.0	0.0
Mount Trumbull Wilderness	72.5	71.9	72.1	72.5	71.9	72.1	0.0	0.0	0.0	482.3	314.0	117.0	18.8	4.9	0.3	482.2	314.2	117.0	18.8	4.9	0.3	0.0	0.1	0.0	0.0	0.0	0.0
North Fork Virgin River	73.6	71.8	72.7	73.6	71.8	72.7	0.0	0.0	0.0	362.9	238.5	89.4	18.6	3.2	1.1	362.7	241.2	89.9	18.6	3.2	1.1	0.0	2.9	1.7	0.3	0.0	0.0
Orderville Canyon WSA	74.7	73.9	74.4	74.7	73.9	74.4	0.0	0.0	0.0	393.2	287.4	115.1	23.8	3.1	1.0	391.5	289.7	116.2	24.2	3.2	1.3	-0.3	2.7	1.3	0.4	0.2	0.3
Paiute Wilderness	76.2	71.1	73.6	76.2	71.1	73.6	0.0	0.0	0.0	672.7	503.6	206.5	40.7	10.9	2.5	672.2	503.5	206.5	41.1	9.6	2.5	-0.5	0.8	0.9	0.7	0.4	0.0
Parunuweap WSA	74.4	70.6	72.8	74.4	70.6	72.8	0.0	0.0	0.0	448.0	343.1	189.1	36.9	3.9	1.1	449.8	344.8	190.2	37.0	3.9	1.1	2.8	2.1	1.5	0.1	0.1	0.0
Pine Valley Mountain Wilderness	78.1	70.7	73.4	75.9	70.7	73.4	0.0	0.0	0.0	428.0	278.7	125.9	28.1	4.8	0.9	414.0	271.3	123.6	26.0	4.3	0.4	-4.6	-5.4	-2.2	-0.9	0.0	0.0
Pipe Spring NM	73.8	71.4	72.7	73.8	71.4	72.7	0.0	0.0	0.0	413.2	331.3	161.1	25.3	3.3	1.7	413.7	332.0	161.4	25.3	3.3	1.7	0.7	0.7	0.2	0.0	0.0	0.0
Quail Creek SP	73.1	73.1	73.1	73.1	73.1	73.1	0.0	0.0	0.0	444.8	279.3	95.5	29.7	4.6	1.0	443.3	278.0	90.5	24.9	3.7	1.0	-1.6	-1.3	-3.3	-1.9	0.3	0.0
Red Butte WSA	74.3	74.3	74.3	74.3	74.3	74.3	0.0	0.0	0.0	359.4	265.7	123.3	19.4	5.2	0.5	351.4	257.7	119.3	19.3	5.2	0.5	-8.0	-8.0	-3.9	-0.1	0.0	0.0
Red Mountain WSA	73.0	68.9	70.9	73.0	68.9	70.9	0.0	0.0	0.0	562.5	433.7	206.3	32.5	5.3	1.9	530.7	424.3	206.2	32.5	5.2	1.9	-12.7	-9.2	0.1	0.0	0.0	0.0
Shivwits Paiute Indian Reservation	74.9	69.0	72.2	74.9	69.0	72.2	0.0	0.0	0.0	599.2	450.8	236.2	35.4	6.5	1.9	549.3	438.7	235.7	35.4	6.4	1.9	-12.1	-6.8	0.4	0.4	0.1	0.0
Snow Canyon SP	73.4	71.0	72.2	73.4	71.0	72.2	0.0	0.0	0.0	537.9	386.5	154.3	24.4	4.4	0.4	511.6	331.2	116.9	23.6	4.4	0.4	-16.4	-16.1	-1.2	-0.7	0.0	0.0
Spring Creek Canyon WSA	71.0	69.2	70.1	71.0	69.2	70.1	0.0	0.0	0.0	344.9	276.5	138.1	29.0	5.9	0.6	338.4	269.1	136.1	29.0	5.9	0.6	-6.5	-5.0	0.9	0.1	0.0	0.0
Taylor Creek WSA	71.6	71.6	71.6	71.6	71.6	71.6	0.0	0.0	0.0	338.8	252.5	113.6	21.0	2.5	0.4	330.8	243.9	112.1	21.0	2.5	0.4	-8.0	-8.6	-1.5	0.0	0.0	0.0
The Watchman WSA	70.8	68.5	69.7	70.8	68.5	69.7	0																				

Table 7.116
Noise Level Summary at Little Black Mountain
Cumulative DNL - 2010/2020

# of Pts	2010									2020								
	Existing			Replacement			Change			Existing			Replacement			Change		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
1	33.7	33.7	33.7	36.0	36.0	36.0	2.3	2.3	2.3	35.0	35.0	35.0	37.0	37.0	37.0	2.0	2.0	2.0

Table 7.117
Noise Level Summary at Little Black Mountain
Cumulative Leq(24) - 2010/2020

# of Pts	2010									2020								
	Existing			Replacement			Change			Existing			Replacement			Change		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
1	34.2	34.2	34.2	34.3	34.3	34.3	0.1	0.1	0.1	33.7	33.7	33.7	35.5	35.5	35.5	1.7	1.7	1.7

Table 7.118
Noise Level Summary at Little Black Mountain
Cumulative Leq(day) - 2010/2020

# of Pts	2010									2020								
	Existing			Replacement			Change			Existing			Replacement			Change		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
1	34.2	34.2	34.2	36.1	36.1	36.1	1.9	1.9	1.9	35.6	35.6	35.6	37.0	37.0	37.0	1.4	1.4	1.4

Table 7.119
Noise Level Summary at Little Black Mountain
Cumulative Time Above Ambient (20 dBA) - 2010/2020

# of Pts	2010									2020								
	Existing			Replacement			Change			Existing			Replacement			Change		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
1	354.1	354.1	354.1	507.2	507.2	507.2	153.1	153.1	153.1	473.5	473.5	473.5	647.9	647.9	647.9	174.4	174.4	174.4

Table 7.120
Noise Level Summary at Little Black Mountain
Cumulative L(max) & Number of Events Above Lmax Thresholds - 2010/2020

Year	LA(max)									MAX NUMBER OF EVENTS ABOVE																	
	Existing			Replacement			Change			Existing						Replacement						Change					
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	20	25	35	45	55	65	20	25	35	45	55	65	20	25	35	45	55	65
2010	77.0	77.0	77.0	72.3	72.3	72.3	-4.7	-4.7	-4.7	425.4	290.4	73.8	11.1	2.7	0.7	441.4	309.7	133.7	34.4	4.2	0.7	16.0	19.3	59.9	23.3	1.6	0.0
2020	64.0	64.0	64.0	72.3	72.3	72.3	8.3	8.3	8.3	564.4	381.3	102.2	15.3	3.7	1.0	583.5	403.1	168.7	41.0	7.6	1.5	19.0	21.8	66.5	25.6	3.9	0.4

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7.3 CUMULATIVE IMPACTS OF ROADWAY NOISE

Over recent years, the area surrounding the proposed replacement airport site has been changing from a rural desert environment to a more urban setting. Noise levels in the developed areas of St. George, Washington City, and Hurricane have steadily increased to typical noise levels for cities. Potential increases in cumulative noise exposure would occur as airport-related roadway noise combines with noise from the Southern Corridor and anticipated residential, commercial, and industrial development.

The geographical boundary for this analysis includes the undeveloped and developed parts of the Washington County urbanized area. Current noise levels within undeveloped areas along the proposed route of the Southern Corridor range from 34 dBA (undeveloped desert) to 67 dBA (next to State Route 9).

Based on the findings included in the Southern Corridor DEIS, the noise levels in southern Washington County have steadily increased from those of a rural area to a suburban residential area as the land uses have changed from undeveloped desert to residential and commercial uses. According to the Southern Corridor EIS, by 2020, southern Washington County would likely be developed to include more residential, commercial, and industrial land uses. Background noise levels in this area would gradually increase as roadways, residences, and commercial and municipal support systems are developed. These land use changes would result in an increase in cumulative noise levels of as low as 34 dBA⁶ to levels of perhaps 50 to 60 dBA.⁷ Cumulative noise impact in which noise levels would change from rural and suburban residential levels (34 to 57 dBA) to urban residential and noisy urban residential levels (58 to 75 dBA) would occur in areas closer to the Southern Corridor than in more remote locations.

Cumulative traffic noise impacts could occur if residences or other sensitive receptors such as schools are developed next to the Southern Corridor and in close proximity to the Airport Access Road. It is expected that once these are developed, they could experience cumulative noise levels between 63 and 75 dBA—those of a busy urban environment. Responsible land-use planning by the cities and developers in the area surrounding the replacement airport and the Southern Corridor, such as planning nonresidential land uses near these improvements, could alleviate this level of increase.

Noise generated by surface traffic when coupled with noise generated by aircraft could conceivably have a cumulative impact on noise-sensitive land uses within this portion of southern Washington County. A sensitivity analysis was undertaken to determine the potential for cumulative airport and roadway noise impacts in the vicinity of the Southern Corridor. Before presenting the analysis, an understanding of the basics of noise summation is needed.

⁶ *Final Environmental Assessment for the Proposed Replacement Airport at St. George, Utah.* Prepared by Creamer & Noble, Engineers and Barnard Dunkelberg & Company. January 30, 2001.

⁷ Estimate developed by Landrum & Brown using the ambient noise estimation methodology of the U.S. Department of Housing and Urban Development [additional source detail in process]

Noise is described using the logarithmic decibel scale. The logarithmic scale is used to make the description and mathematical computation of noise levels much easier than with a linear sound pressure scale. **Table 7.121** describes a shorthand method of logarithmically summing two different noise levels. Note that if two equal noise levels are added, the sum is 3 dBA higher than either level alone. In fact, a 3 dBA increase in noise represents a doubling of acoustic energy. This is a level of increase that most people will be able to notice in their everyday settings, but a 10 dBA increase in sound energy is required for a person to perceive a doubling of "loudness." Note that when two noise levels differ by more than 6 dBA, the addition of the quieter to the louder level barely affects the sum. This is because the quieter event is almost completely masked by the louder event. While this example involves the summation of noise levels from two events, the same principles apply whenever noise from two or more different sources is added, so long as the noise is described using the same metrics.

Table 7.121
ADDITIVE FACTORS FOR SUMMATION OF TWO SOUND LEVELS

Difference In Sound Level	Add To Larger Level (dB)
0	3.0
1	2.5
2	2.1
3	1.8
4	1.5
5	1.2
6	1.0
7	0.8
8	0.6
9	0.5
10	0.4
12	0.3
14	0.2
16	0.1
Greater than 16	0

Source: U.S. Department of Housing and Urban Development (HUD). The Noise Guidebook, HUD-953-CPD. Prepared by the Environmental Planning Division, Office of Environment and Energy, March 1985, p. 51.

Based on the aircraft noise analysis conducted for the proposed replacement airport (see **Chapter Six, Section 6.2**), neither the 60 DNL nor the 65 DNL contours for the proposed replacement airport extend beyond the airport property boundary in 2003, 2010, or 2020. In addition, the noise analysis for the Southern Corridor indicated that the 65 dBA contour for the highway would be located approximately ± 350 feet from the centerline of the roadway. The closest point of the proposed centerline of the Southern Corridor alignment to the replacement airport site lies approximately 3,500 feet east of the eastern

airport boundary. Based on the information presented in **Chapter Six, Section 6.2** of this Draft EIS and the Southern Corridor Draft EIS and the distance between the two facilities, the noise contours prepared for the replacement airport and the Southern Corridor would not overlap.

While the aircraft noise will continue at lower noise levels further from the replacement airport, aircraft noise will not be loud enough to combine with the anticipated ambient noise to raise noise levels in areas designated for future residential development to constitute an adverse impact based on any FAA noise impact criteria. As an example, aircraft noise in residential areas planned in southern Washington County near the replacement airport may be as high as 50 DNL, based on 2020 forecasts. (See the exhibits showing the results of the grid analysis in **Chapter Six, Section 6.2**.) Ambient noise levels in a residential area developed to a density typical of the St. George area would be approximately 55 DNL.⁸ Roadway noise associated with the Southern Corridor in 2020, at a distance of 1,000 feet from the roadway centerline would be approximately 57 dBA. The level of noise from the proposed replacement airport would approximate 40 DNL in this vicinity, so the sum of the noise from both sources approximately 1,000 feet from the Southern Corridor centerline would be 57 dBA (i.e., 50 dBA from the Southern Corridor and 40 DNL from the replacement airport), based on the HUD guidelines described previously in **Table 7.121**.

⁸ This estimate was developed based on the following "indigenous noise" estimation formula: $Ldn = 10 * \text{Log}P + 22$, where P is the population density in people per square mile. Using recent aerial photography and 2000 Census data, Landrum & Brown computed population densities typical of new subdivisions in the St. George/Washington City area as approximately 2,000 to 2,400 people per square mile. The source of the estimation formula is: Galloway, W.S., et al. *Population Distribution in the United States as a Function of Outdoor Noise Levels*. EPA-550-9-74-009, June 1974.

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7.4 CUMULATIVE IMPACTS ON LAND USE

As described in **Section 7.3**, the development of the proposed replacement airport at St. George will have some cumulative effect on overall land use development trends within southern Washington County. Washington County, Utah and Mohave County, Arizona, as well as the cities of St. George and Washington City have developed General Plans that have effectively guided planning and development activities within the areas surrounding the replacement airport and those plans will continue to serve the same purpose into the future. As described in **Chapter Five, Section 5.6.1**, the City of St. George is conducting an airport vicinity land use planning process concurrently with this EIS.

The intent of the planning effort is to develop a land use plan and regulations that promote compatible land uses in the proposed replacement airport environs while also establishing a planning framework that would enable local governments to capitalize on potential economic development opportunities. The Airport Vicinity Land Use Plan is considering the effects of aircraft noise, potential safety issues, and airspace protection in determining the best locations for various land uses. This plan will work in combination with the existing General Plans applicable to the area to guide future land use decisions.

Similar planning has been occurring as part of the Southern Corridor development process. The U.S. Environmental Protection Agency (USEPA), Federal Highway Administration (FHWA), and the Utah Department of Transportation (UDOT) have been working with the City of St. George, Washington City, and Hurricane to address potential cumulative impacts that could occur from growth and land use changes associated with the Southern Corridor.

The City of St. George is committed to the re-zoning and redevelopment of the existing airport site as a mixed-use area for residential, commercial, administrative and professional, light industry, and/or campus land uses. This new 240-acre development is intended be a balanced community providing services and employment opportunities that are centrally located for the convenience of potential adjacent residents, while taking advantage of the picturesque panoramic views of downtown St. George and the surrounding vicinity. Located within one of the most rapidly growing areas in St. George, this proposed development of single-family homes and multi-family residences, such as town-homes, condominiums, and apartments, would expand and diversify the use of the area with the inclusion of new commercial, retail, and business enterprises.

Changes in land use can affect how environmental resources, particularly threatened and endangered species and wildlife habitats, would be affected as an area changes from undeveloped to developed. The cumulative impacts in these specific categories are discussed in subsequent sections of the chapter.

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7.5 CUMULATIVE IMPACTS ON AIR QUALITY

Growth within the initial area of investigation has had little effect on Washington County and southern Utah's air quality as demonstrated by the area's attainment status for all NAAQS pollutants (see **Chapter Six, Section 6.4.1.2**). However, with construction and operation of the proposed replacement airport in combination with construction of the Southern Corridor, and other planned development within the county, overall air emissions would increase. Washington County is expected to grow from 91,104 in 2000 to 251,896 in 2020⁹; thus increasing the need for new residential, commercial, and industrial development and the associated support infrastructure (i.e., roads, sewers, transmission lines, etc.). This growth is expected to occur with or without the replacement airport or the Southern Corridor, although the proposed Southern Corridor could affect the type and timing of land use at the proposed interchange locations, including the interchange with the Airport Access Roadway.

The growth in the county would occur regardless of whether the airport is relocated or the Southern Corridor is constructed; however, as stated in the Southern Corridor EIS, the use of the Southern Corridor would reduce the total number of vehicle hours traveled within the area by eight percent, thus reducing vehicle emission of Carbon Monoxide (CO) and volatile organic compounds (VOCs). The emission of Particulate matter less than 10 microns in size (PM₁₀), Nitrogen Oxides (NO_x), and Sulfur Dioxide (SO₂) would increase only very slightly with the use of the Southern Corridor over no-build conditions. In summary, the implementation of the Southern Corridor project is not expected to exceed the NAAQS.¹⁰ Under Transportation conformity, construction emissions are not evaluated, so no information is presented with respect to the emissions associated with construction of the Southern Corridor or related highway/roadway improvements. As with construction of the proposed replacement airport, construction emissions would be temporary and distributed over a multi-year period.

As described in **Chapter Six, Section 6.4**, the proposed construction and operation of the replacement airport would increase the annual rate of emissions of CO, VOC, NO_x, SO_x, and PM₁₀; however, the projected increase in emission due to construction of the replacement airport would be temporary and would be distributed over a three-year period. The combination of emissions resulting from the construction of the replacement airport and the Southern Corridor are not anticipated to have an adverse effect on air quality.

⁹ http://www.stgeorgechamber.com/EcDev/demographics_population.htm

¹⁰ *Final Environmental Assessment for the Proposed Replacement Airport at St. George, Utah*. Prepared by Creamer & Noble, Engineers and Barnard Dunkelberg & Company. January 30, 2001

Fugitive Dust – During construction of both projects, fugitive dust control measures would be needed in certain areas to protect the disturbed desert soil from wind erosion until permanent, stabilized vegetative cover is established or pavement is in place.

Visibility – As with many national parks in the U.S., cumulative air emissions could affect the visibility at Zion National Park. Long-range transport of air pollutants from industrial sources and large urbanized areas, increased numbers of visitors, and increased development in the region and near the Zion boundary could adversely affect Zion's air quality. Although Zion doesn't monitor air quality, park staff and scientists have begun visibility monitoring to develop a baseline and to measure any significant changes. Visibility monitoring has been performed at Zion and Bryce Canyon during the last 10 years.¹¹ The NPS continues to work with appropriate land owners, industries, and communities; local, state, and other Federal agencies as well as the Southwest Utah Planning Authorities Council and the Western Region Air Partnership to maintain the air quality of Zion National Park, as well as regional air quality, as part of the overall management of Zion. In addition, the Utah Division of Environmental Quality (UDEQ), Division of Air Quality, is a member of the Western Air Partnership and is currently working with the USEPA to propose revisions to the State Implementation Plan (SIP) to comply with USEPA's Regional Haze Rule (64 Federal Register 35714), which is intended to protect and improve visibility at national parks and wilderness areas.

The redevelopment of the existing airport property would introduce additional vehicle traffic onto local and arterial roadways, including Bluff Street, St. George Boulevard, and Utah Route 18, potentially contributing to increased congestion resulting in an increase in vehicle emissions. Additionally, emissions from construction vehicles and fugitive dust generated during construction of the development would cause temporary, short-term impacts to air quality within St. George.

¹¹ *Final Environmental Assessment for the Proposed Replacement Airport at St. George, Utah.* Prepared by Creamer & Noble, Engineers and Barnard Dunkelberg & Company. January 30, 2001.

7.6 CUMULATIVE IMPACTS ON HISTORIC, ARCHITECTURAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

Continued growth and development in Washington County could result in cumulative impacts to cultural resources. As disclosed in **Chapter Six, Section 6.5**, the construction and implementation of the proposed replacement airport will have no direct effects on historic or cultural resources eligible for or listed on the National Register of Historic Places. However, other proposed development projects within Washington County, including the Southern Corridor, the Interstate 15/Milepost 13 Interchange, and the Sand Hollow Reservoir would have direct impacts on cultural resources.¹² Management of cultural resources under these projects would follow the appropriate federal and state regulations.

Modern development in Washington County and southeastern Utah, starting with the Mormon settlers, has resulted in impacts to cultural resources as the area's land uses have changed from undeveloped to developed. It is estimated that since the early 1900's, more than 10,000 Anasazi and prehistoric sites could occur on public lands in Washington County.¹³ Although many of these sites are protected by a variety of state and Federal laws, the condition of many are considered as fair due to historic looting and vandalism. A 1987 report by the General Accounting Office (GAO) indicated that two-thirds of the sites in the region have been disturbed. Local observers have also noted that all of the known large sites on public lands have also been vandalized.¹⁴

Land development and an increase in recreational activities could result in the cumulative loss of cultural resources. Because the number and location of possible sites within this large area of land are unknown, it is difficult to anticipate how these sites may be affected by future development. For projects involving Federal funding or Federal agency approvals, impacts to these sites and resources would be minimized through coordination with the Utah State Historic Preservation Office (SHPO); however, some sites would be lost through data recovery. Other sites affected by private development, may be lost without the benefit of coordination with the Utah SHPO or other regulatory agencies. Future planned development on state and Federal lands would be required to follow cultural resource regulations for minimizing the potential for cumulative impacts to cultural resources. The Bureau of Land Management (BLM) is currently collaborating with local communities, local and state agencies, Native

¹² *Final Environmental Assessment for the Proposed Replacement Airport at St. George, Utah.* Prepared by Creamer & Noble, Engineers and Barnard Dunkelberg & Company. January 30, 2001.

¹³ *Dixie Resource Area Proposed Resource Management Plan and Final Environmental Impact Statement;* U.S. Department of the Interior, Bureau of Land Management. September 1998.

¹⁴ *Dixie Resource Area Proposed Resource Management Plan and Final Environmental Impact Statement;* U.S. Department of the Interior, Bureau of Land Management. September 1998

American tribes, and other interested parties in the region to develop and implement plans for restoration, stabilization, protection, and/or interpretation of cultural resources in the area.¹⁵

With the development of the proposed replacement airport, overflights of the City of St. George would be reduced; therefore, reducing impacts on those sites within the City of St. George listed on the National Register of Historic Properties (NRHP) or considered NRHP-eligible that are affected by current use of the existing airport. Based on the research conducted as part of the 2000 Airport Redevelopment Plan conducted by the City of St. George, no structures or improvements associated with the existing airport facility are considered NRHP-eligible. Combined with the minimal impacts to other historic, archaeological, and cultural properties reviewed in this document (see **Section 7.1** for the cumulative impacts on Section 4(f)/303(c) properties); relocation of the airport and its associated actions would have minimal impacts on historic, architectural, archaeological, and cultural properties.

¹⁵ Dixie Resource Area Proposed Resource Management Plan and Final Environmental Impact Statement; U.S. Department of the Interior, Bureau of Land Management. September 1998.

7.7 CUMULATIVE IMPACTS ON WATER QUALITY

Although the development and operation of the proposed replacement airport is not expected to degrade surface and ground water quality, indirect impacts from the development of other improvement projects and the general growth anticipated to occur within Washington County by 2020 could adversely affect water quality. The anticipated growth in Washington County would require development of additional high quality water resources for public use. Continued development would direct pressure at the ability of currently used groundwater supplies to meet future demands. New sources for drinking water, irrigation, and stock watering may need to be identified. The increase in impervious surface areas associated with the development of roads, neighborhoods, and commercial establishments will increase the amount of stormwater distributed to surface water channels and may increase the amount and number of high flow events. The increased impervious area will also contribute to the degradation of water quality through the increase in the quantity of pollutants contributed to runoff.

As with current developments, the City of St. George, Washington City, and Washington County will need to continue to work with developers to develop, implement, and maintain drainage and stormwater control plans as part of the development plan review process. Included in this process would be the proposed redevelopment of the existing airport site and development of the State Institutional Lands Administration (SITLA) "South Block" parcel near the proposed replacement airport. Both projects would require the City to extend existing water and wastewater lines to serve the new developments. Local and state permits (i.e., Utah Pollutant Discharge Elimination System (UPDES)) would be required for construction of the improvements including the development of a Storm Water Pollution Prevention Plan (SWPPP) that includes best management practices and site-specific measures to minimize erosion and prevent eroded sediment from leaving project work zones.

Water quality can also be affected by hazardous material spills. As the number of roadway travel lanes and the density of development increase within the county, the incidence of spills may also increase. An accidental spill of a large quantity of a hazardous material could affect surface waters if it is not immediately contained and cleaned up. Immediate appropriate action by the persons responsible for the spill minimizes its impact on water quality. Contact and close coordination with the Utah State Highway Patrol and the UDEQ will need to be continued by all land owners, residents, and public officials to minimize the impacts of hazardous materials spills.

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7.8 CUMULATIVE IMPACTS ON WATER RESOURCES AND FLOODPLAINS

Future development within Washington County will continue to have a cumulative effect on surface water features and floodplains. The increase in impervious area created by developments (i.e., South Block and existing airport redevelopment proposal) will contribute to the flashiness and volume of surface-flows following storm events that will need to be managed within local stream channels and floodplains.

Fort Pearce Wash and its associated floodplain provide flood storage for more than 1,000,000 acres in southern Washington County. Although storage is temporary immediately following storm events, the duration and volumes of storm flows will most likely increase with an increase in impervious area as the county develops. The Virgin River, at the lower end of the drainage system within Washington County, serves as the primary receiving water from the Fort Pearce Wash and Atkinville Wash. As development continues, the character and ability of the these washes to store and convey stormwater while continuing to provide habitat for local wildlife may be diminished if alternate methods for the management of stormwater are not developed.

Due to the arid character of the region, there are very few wetlands present within the county. Because of the absence of such features in the landscape, the continued development of Washington County should not have a cumulative effect on wetlands.

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7.9 CUMULATIVE IMPACTS ON BIOLOGICAL RESOURCES AND THREATENED AND ENDANGERED SPECIES

Growth in Washington County is likely to occur with or without development of the replacement airport or the Southern Corridor. The constant struggle to balance development and transportation needs will most likely cause long-term cumulative impacts on natural habitats and the species they support. Other planned projects such as the Interstate 15/Milepost 13 interchange, the Sand Hollow Reservoir, and other developments are reducing the amount of habitat available for wildlife. Washington County contains approximately 1,556,000 acres, of which 27,700 acres have been developed and 1,219,000 acres are undevelopable or constrained (i.e., lands under Federal ownership (BLM, U.S. Forest Service (USFS), Bureau of Indian Affairs (BIA), NPS), and lands physically constrained such as floodplains and steep slopes).¹⁶

Many past construction projects have contributed to an incremental and a cumulative loss, degradation, and fragmentation of wildlife habitats within the initial area of investigation. Past and present actions within and adjacent to the proposed replacement airport site include the construction and more recent destruction of an aircraft runway, livestock grazing, agriculture, recreational activities (remote control airplane use, motor-cross racing, other off-road vehicle use, hiking, and biking), and growth and development associated with the City of St. George. Reasonably foreseeable future actions in the vicinity of the proposed replacement airport include numerous planned residential and commercial construction projects and the planned construction of the Southern Corridor.

Within the county, approximately 225,300 acres or 15 percent of the land area is available for development. The habitat within this developable portion of the counties is predominantly desert scrub and salt bush, some of which has been disturbed by recreational activities and grazing. Construction of the replacement airport and the Southern Corridor would contribute less than one percent to the loss of total habitat, and therefore, would not be major contributors to cumulative impacts. However, the total loss of habitat due to development would be compounded by habitat fragmentation, interruption of migratory corridors, and direct mortality to wildlife.

Continued development pressure, particularly within corporate boundaries, has resulted in the rapid loss of habitat. Such a reduction in habitat, both in quantity and quality, has resulted in the listing of several species (both plant and wildlife) as threatened or endangered by the State of Utah and the U.S. Fish and Wildlife Service. Environmental pressures caused by increased human populations and development often result in direct and indirect impacts to wildlife species as well as the cumulative loss of wildlife habitat. Expanding

¹⁶ *Final Environmental Assessment for the Proposed Replacement Airport at St. George, Utah.* Prepared by Creamer & Noble, Engineers and Barnard Dunkelberg & Company. January 30, 2001.

residential and commercial developments in St. George, including the redevelopment of the existing airport parcel, and surrounding areas have contributed to local, site-specific impacts, as well as broader impacts to wildlife and habitat across the landscape (e.g., spread of exotic vegetation, change in predator populations). Also, in many locations throughout the county, uncontrolled or unrestricted activities in desert areas, such as off-road vehicle use, contribute to further degradation of native vegetation and adverse impacts to wildlife. Although it is not anticipated that these projects individually would result in substantial impacts to habitat or individual species, the combined effect of development projects on habitat loss could result in significant impacts to listed species and species of concern.

Potential cumulative impacts in the area surrounding the proposed replacement airport would be associated primarily with continued growth in the region and changes in land use from open land to developed areas. Although construction of the proposed replacement airport would affect the types of land uses in the surrounding area, the expansion of development into open areas would occur regardless of whether the proposed replacement airport is developed. Although this growth into currently undeveloped areas could result in cumulative impacts to wildlife, habitats, and threatened and endangered species, construction of the proposed replacement airport is anticipated to contribute only negligibly to the incremental and cumulative loss of wildlife habitat in the St. George area as a whole.

7.10 CUMULATIVE IMPACTS TO FARMLANDS

Continued development within Washington County will involve the conversion of farmland to non-agricultural uses. Future development may affect unique farmlands, farmlands of statewide importance and grazing allotments within the county. Developers and local governments should continue coordination with the U.S. Department of Agriculture Natural Resource Conservation Service (NRCS) and the BLM to address issues concerning the conversion of farmlands and the loss or transfer of grazing rights.

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7.11 CUMULATIVE SOCIAL AND SOCIOECONOMIC IMPACTS

The cumulative impacts of past, present, and reasonably foreseeable projects in the initial area of investigation should be minimal and positive. Measures being taken at local, state, and Federal levels to develop long-range development plans, as well as to address project specific issues and impacts as they arise, have benefited the residents within the initial area of investigation and will continue to do so in the future. Washington and Mohave Counties are anticipated to continue growth along historic trends. The appeal of this area to seasonal as well as year round inhabitants will continue as long as services and infrastructure are provided. The attraction of people to the area supports the regional economy in terms of tax base, jobs, and wages. The replacement of the SGU airport in tandem with construction of the Southern Corridor will improve access within Washington County, including access to educational, health, social, recreational, and employment centers. Improved access will also facilitate more rapid response of emergency equipment and support the expansion of local infrastructure, including water and other utilities into developing areas.

The proposed South Block development, located immediately west of the proposed replacement airport, would provide a substantial social and economic boost to Washington County and the City of St. George. The potential addition of approximately 25,000 people to the area, nearly half of the current population of the City of St. George, along with housing, employment, and retail developments to support them, would create a large impact on the infrastructure and transportation needs of the area. Local roadways serving the South Block would be provided as part of its development while the development would rely on Interstate 15 and the Southern Corridor for access to the airport, St. George, Washington City, and other locations within the county.

As envisioned, the South Block development would be nearly self-supporting in terms of schools, emergency services, social and recreational facilities, and employment. The majority of the retail needs of South Block residents would also be met within the community, but some commercial services would continue to be patronized within St. George.

As described previously, redevelopment of the existing airport property would introduce additional vehicle traffic onto local and arterial roadways, including Bluff Street, St. George Boulevard, and Utah Route 18. In addition, new roadways are proposed to access the site from the west, from Indian Hills Drive, and from the southeast, from Main Street/Hilton Drive.

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7.12 CUMULATIVE VISUAL IMPACTS

In the coming years, with increased development pressure exerted on the remaining viable open space within Washington County, the visual character of the area will change from rural and undeveloped to suburban and developed. These trends towards increasing development would occur regardless of whether or not the SGU airport is relocated or the Southern Corridor is constructed. Both transportation facilities will provide access for local and regional travelers to more scenic destination such as Zion, Bryce Canyon, and Grand Canyon National Parks. Due to the physical limitations of building structures or other improvement on steep slopes, portions of Washington County will continue to remain undeveloped, particularly areas adjacent to Warner Ridge, White Dome, Washington Dome, and Little Black Mountain (see **Exhibit 5.3**). Large expanses of land within the initial area of investigation are protected from development as federal lands, managed and protected for their value as natural areas. These areas, including Zion National Park and Dixie National Forest, provide visual diversity and will continue to do so as the surrounding county develops.

Within the City of St. George, the visual character of the cityscape will continue to change as infill development and new perimeter developments are completed. The redevelopment of the existing airport would contribute to visual changes in the community with the addition of single and multi-level structures to the plateau once occupied by the airfield. This position in the landscape would provide residents of this area with spectacular views of the St. George valley and surrounding areas, but would also alter the visual backdrop of the southwestern portion of the community.

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