

CHAPTER 1 FACILITY AND POLICY INVENTORY



INTRODUCTION

This paper summarizes a variety of background information about Truckee Tahoe Airport and its environs. This information provides much of the factual foundation for the airport master plan study. Included is data regarding the community in which the airport is located, the Truckee Tahoe Airport District and its policies, and the airport facilities and operations.

TRUCKEE AND NORTH LAKE TAHOE COMMUNITY PROFILE

Community Character

Truckee Tahoe Airport is a regional general aviation airport serving the town of Truckee, communities along the northern side of Lake Tahoe, and other nearby areas in the central Sierra Nevada mountain range of California.

The Town of Truckee, the only incorporated municipality in the region, lies directly to the northwest with the town boundary wrapping around the west and north sides of the airport property. The airport property straddles the county line between Nevada County on the north and Placer County to the south. Airport facilities are predominantly in Nevada County, but the southern ends of the runways and about a third of the contiguous airport property lies in Placer County. The Nevada state line lies 7 miles to the east.

The topography of the airport environs is mountainous. While the airport itself sits on the relatively level floor of the Martis Valley at an elevation of 5,900 feet, surrounding peaks reach elevations of 9,000 to nearly 11,000 feet. Donner Pass to the west has an elevation of 7,239 feet. Flowing from Lake Tahoe to Reno and ultimately discharging into Pyramid Lake, the Truckee River runs north of the airport through the center of Truckee.

The primary highway access to the Truckee area is provided by Interstate 80 (I-80). Running through Donner Pass, I-80 connects the local area with Sacramento, California, 90 miles to the southwest, Reno, Nevada, 24 miles northeast, and other points from coast to coast. State Highways 89 and 267 extend southward from Truckee to the shores of Lake Tahoe. Following the same east/west corridor as the Interstate is the Union Pacific Railroad main line, part of the transcontinental railroad system. Extensive freight traffic passes through Truckee and the town is served by Amtrak passenger service. Three agencies provide bus/shuttle transportation: Town of Truckee, Tahoe Area Regional Transit (TART), and Truckee North Tahoe Transportation Management Association (TMA). Combined, these services provide local transportation between the airport, downtown Truckee, the ski resorts, and Reno Tahoe International Airport.



CHAPTER 1

The economy of the Truckee and Lake Tahoe region is heavily recreation oriented. Numerous ski resorts are situated in the nearby mountains and hiking and other outdoor activities are popular during the summer. The recreational character of the region results in population that varies greatly from season to season. The year-round population of Truckee, as measured by the 2010 U.S. census, is 16,180. Approximately 10,000 full-time residents live in the communities of north Lake Tahoe and elsewhere nearby in Placer County¹. Additionally, with some 65% of the housing stock consisting of second homes,² a much larger population has a residential connection to the community. Additional information about the Truckee Tahoe Airport environs is summarized in **Exhibit 1**.

Airport Environs Land Uses and Planning

The environs of Truckee Tahoe Airport consist of a variety of uses common to small towns. Residential neighborhoods exist within a mile or two of the airport in most directions. Only to the east is there very little development. The major uses in that direction are the town's wastewater treatment plant and a quarry and gravel plant facility. Low-rise lodging and commercial uses are found along the airport's western side as well as in the Truckee town center a mile to the northwest.

The responsibility for land use planning in the airport area rests with the Town of Truckee and the two counties, Nevada and Placer. Completion of the Highway 267 bypass in 2004 has led to new construction along the western side of the airport and plans for future development. New development within the downtown area, particularly at the old railyard site, is planned. Lands along the airport's north side are designated for more industrial uses under the Town's *2025 General Plan*, adopted in 2006. The 1996 *Nevada County General Plan* calls for new planned-development residential uses east of the airport. The *Martis Valley Community Plan*, adopted by Placer County in 2003, anticipates further residential development south of the airport around the Lahontan and Northstar resorts and on the east side of Highway 267.

Also influencing land use planning in the airport environs is the *Truckee Tahoe Airport Land Use Compatibility Plan (ALUCP)*. The ALUCP was adopted in 2004 by the Foothill Airport Land Use Commission (ALUC) which at the time served as the ALUC for the airport. That function now resides with a new Truckee Tahoe ALUC staffed by the Nevada County Transportation Commission (NCTC). The ALUCP is based upon the 1998 *Truckee Tahoe Airport Master Plan* and provides criteria for evaluating whether new development in the airport vicinity will be compatible with the noise and safety impacts of the airport.



¹ Source: Placer County website

² Source: *Tahoe Daily Tribune*, July 4, 2010. The percentage cited is with reference to homes around Lake Tahoe and is presumed here to also be valid for second homes in the TTAD. Also, the Tahoe Regional Planning Agency *2011 Threshold Evaluation Report*, Appendix A, Socioeconomic Setting, lists the rate of secondary/seasonally used home ownership at 58% within the region.

GEOGRAPHY

Location

- On boundary between Nevada and Placer Counties
- Two miles southeast Truckee town center; 24 miles southwest of Reno, Nevada, 90 miles northeast of Sacramento

Land Use Jurisdictions

- County of Nevada:
 - Northern two-thirds of airport property within unincorporated Nevada County
- County of Placer:
 - Southern third of Airport property within County limits
- Town of Truckee:
 - Portion of building area on west airfield within Town limits

EXISTING AIRPORT AREA LAND USES

General Character

- Popular mountain/lake destination having significant seasonal fluctuations in population and employment
- Urban Truckee west and northwest of Airport; close-in residential areas to west, north, and south
- Open space/evergreen forest associated with Tahoe National Forest to south and east
- Rising terrain to the east, south, and west; surrounding peaks reach 9,000' to 11,000'; Donner Pass to west has elevation of 7,239'

Runway Approaches

- Northwest (Rwy 11): Residential areas to each side of runway centerline within 0.5 mile of runway end; Hwy 267 (0.4 mi.); Truckee wastewater treatment ponds, Union Pacific rail line (0.7 mi.); Interstate 80 (1.5 mi.); downtown Truckee (1.6 mi. WNW)
- Southeast (Rwy 29): Martis Creek Lake National Recreational Area borders airport; rising terrain beyond
- Southwest (Rwy 2): Rangelands, wetlands beyond runway end; Hwy 267 (0.2 mi.); Lahontan resort area 1.0 mile distant and 100 to 200 feet above runway end
- Northeast (Rwy 20): Largely open, undeveloped lands; Glenshire/Devonshire 2.0 miles distant

POPULATION AND ECONOMY

Current/Historical Population

	1990	2000	2010	2012
■ Nevada County	78,510	92,033	98,764	98,202
■ Placer County	172,796	248,399	348,432	360,680
■ Town of Truckee	11,000	13,864	16,180	15,918

(Source: California Department of Finance)

Projected Population

	2015	2020	2030
■ Nevada County	98,596	104,343	109,325
■ Placer County	371,536	391,682	415,027

(Source: California Department of Finance, Jan 2013)

Basis of Economy

- Economy historically based on tourism to the Lake Tahoe area and ski resorts in the winter months.
- Major employment by industry in two-county area:
 - Government 24%
 - Trade, Transportation, Utilities 19%
 - Education, Health Services 11%
 - Agriculture 11%
 - Leisure, Hospitality 8%
 - Manufacturing 8%

(Source: California Economic Development Department)

SURFACE TRANSPORTATION

Highways

- Two state highways serve the Truckee area:
 - Hwy 267: Adjacent to the south edge of Airport boundary; connects Lake Tahoe area near Kings Beach to Interstate 80
 - Hwy 89: North-south thoroughfare on the west side of Lake Tahoe, through Squaw Valley, intersecting Interstate 80 and continuing north into Sierra Co.
- Interstate highways:
 - I-80: 2 miles NW; connects local area with Sacramento to west and Reno to east

Railroad

- Union Pacific Railroad:
 - Part of the transcontinental system with freight and passenger Amtrak service

Bus/Shuttle Operators

- Transportation:
 - Town of Truckee
 - Tahoe Area Regional Transit (TART)
 - Truckee North Tahoe Transportation Management Association (TMA)

CLIMATE

Period of Record Monthly Climate Summary

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
Average Maximum Temperature (F)	39.2	41.9	46.7	53.7	63.0	72.9	82.3	81.2	74.4	63.4	49.5	40.8	59.1
Average Minimum Temperature (F)	14.6	16.7	21.0	26.2	32.3	37.4	41.7	40.3	35.8	29.0	22.3	16.1	27.8
Average Total Precipitation (in.)	5.79	5.02	4.28	1.96	1.31	0.59	0.35	0.35	0.63	1.52	3.25	5.11	30.15
Average Total Snow Fall (in.)	48.3	41.9	37.4	15.3	4.1	0.4	0.0	0.0	0.4	2.8	16.2	34.9	201.8
Average Snow Depth (in.)	21	28	22	9	1	0	0	0	0	0	2	11	8

(Source: Weather Regional Climate Center; Period of Record: 09/01/1904 – 12/08/2011)



TRUCKEE TAHOE AIRPORT

Truckee Tahoe Airport District

Truckee Tahoe Airport is rare among airports in California in that it is owned by a special district rather than by a county, city, or private enterprise. The Truckee Tahoe Airport District (TTAD or District) was created by vote of the District electorate in 1958 in accordance with the California Airport Districts Act.³ The District covers an area of approximately 485 square miles in eastern Nevada and Placer counties. It is governed by a five-member Board of Directors directly elected by residents of the District. Making recommendations to the Board is an Airport Community Advisory Team (ACAT) comprised of three pilots and three non-pilots from the community. The ACAT delves into a wide range of topics focused mainly on annoyance. The responsibility for carrying out Board directions and administering day-to-day operations of the airport rests with the General Manager and other staff.

Exhibit 2 depicts the Truckee Tahoe Airport District's boundary.

Exhibit 3 shows the overall existing land use pattern of the airport area. The locations of major local land use features and planned development are pointed out on the aerial photograph in this exhibit.

Exhibit 4 presents a table summary of policies and supporting information particularly relevant to the Airport Master Plan study.

Over the years, the District has adopted various policies to guide its operations and use of funds. Most fundamental among the internal guiding documents is the District's *Strategic Plan* completed in March 2011. The *Strategic Plan* "...is a blueprint for how the District will respond to future challenges and changing priorities and give direction on how to achieve future success." It addresses airport facilities and services, the airport's relationship to the community, finances, and governance.

Two other types of guiding documents serve as input to and output from the *Strategic Plan*. Feeding into and serving to set the *Strategic Plan* tone has been a series of public surveys that the District has authorized. Conducted by Godbe Research, these surveys have explored the awareness, use, and perceptions of the airport among local residents and pilots. The surveys were conducted in 2005, 2009, and 2013.

Implementation of the *Strategic Plan* largely takes place via a set of detailed operating policies and the District's annual budget. The detailed Policy Instructions covering topics ranging from staff medical insurance to hot air balloon operations. Policies of particular relevance to the master planning process are noted in Exhibit 4. The District's budget spells out the anticipated sources of revenue and how the money will be spent each year. Property tax, at a rate of \$2.00 per \$1,000 of assessed value, is the major source of District revenue. For 2012-13, the District is expected to collect approximately \$4.15 million in property taxes, roughly half of the total operating and capital budget of just over \$8.0 million.⁴

Airport Facilities

With local financial support plus Federal Aviation Administration and California Department of Transportation grants, land was acquired for the airport in the early 1960s and construction began soon after. The airport opened in 1964 on 200 acres of land and having a single 5,000-foot runway oriented northwest/southeast.⁵ Since that time, extensive additional land acquisition has been accomplished, the primary runway has been extended and a crosswind runway constructed, and aprons, hangars, and a terminal building have been built.

³ Public Utilities Code Section 22000 *et seq.*

⁴ Source: Truckee Tahoe Airport website

⁵ Source: *Truckee Tahoe Airport Master Plan 1980/2000*

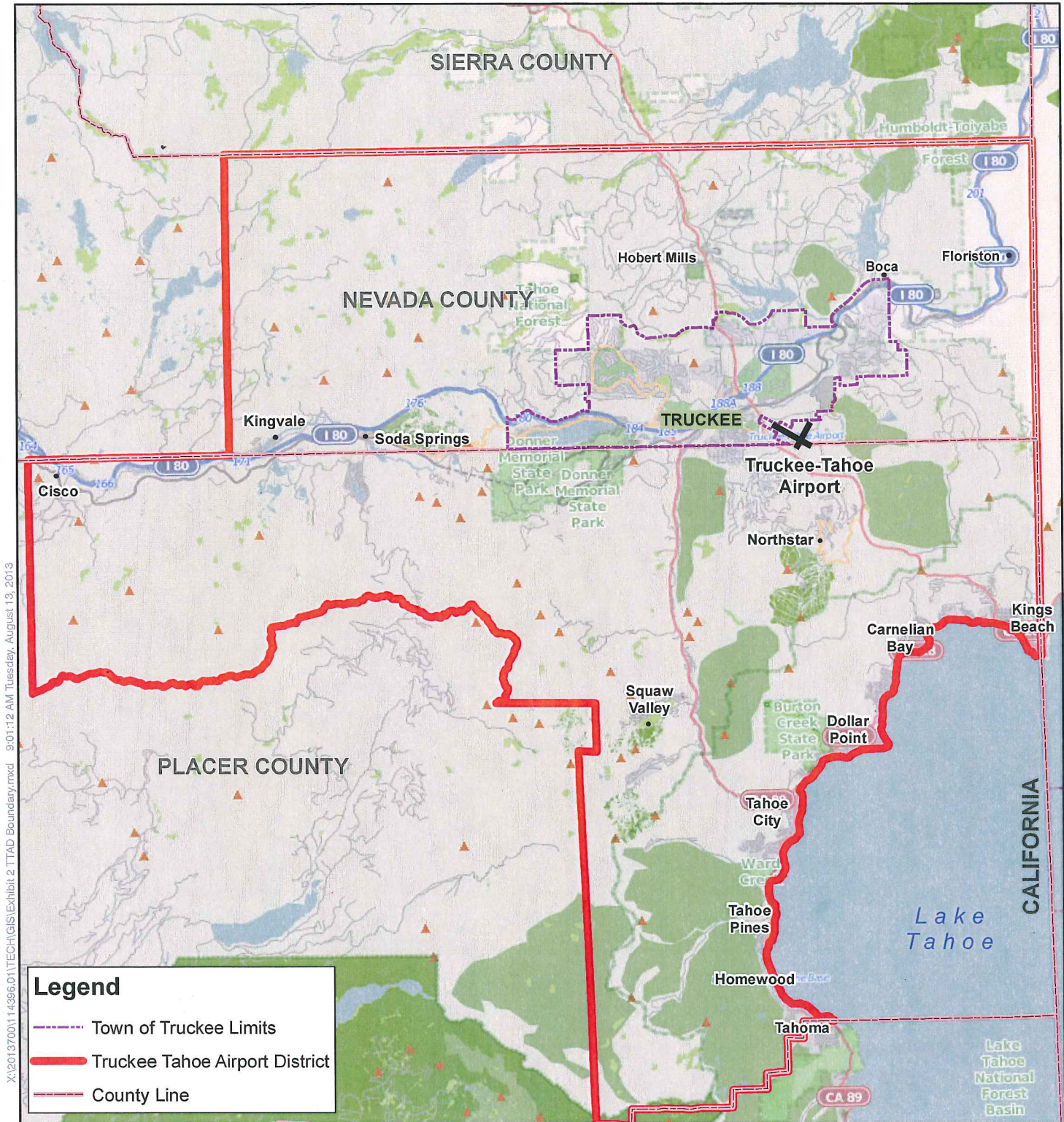
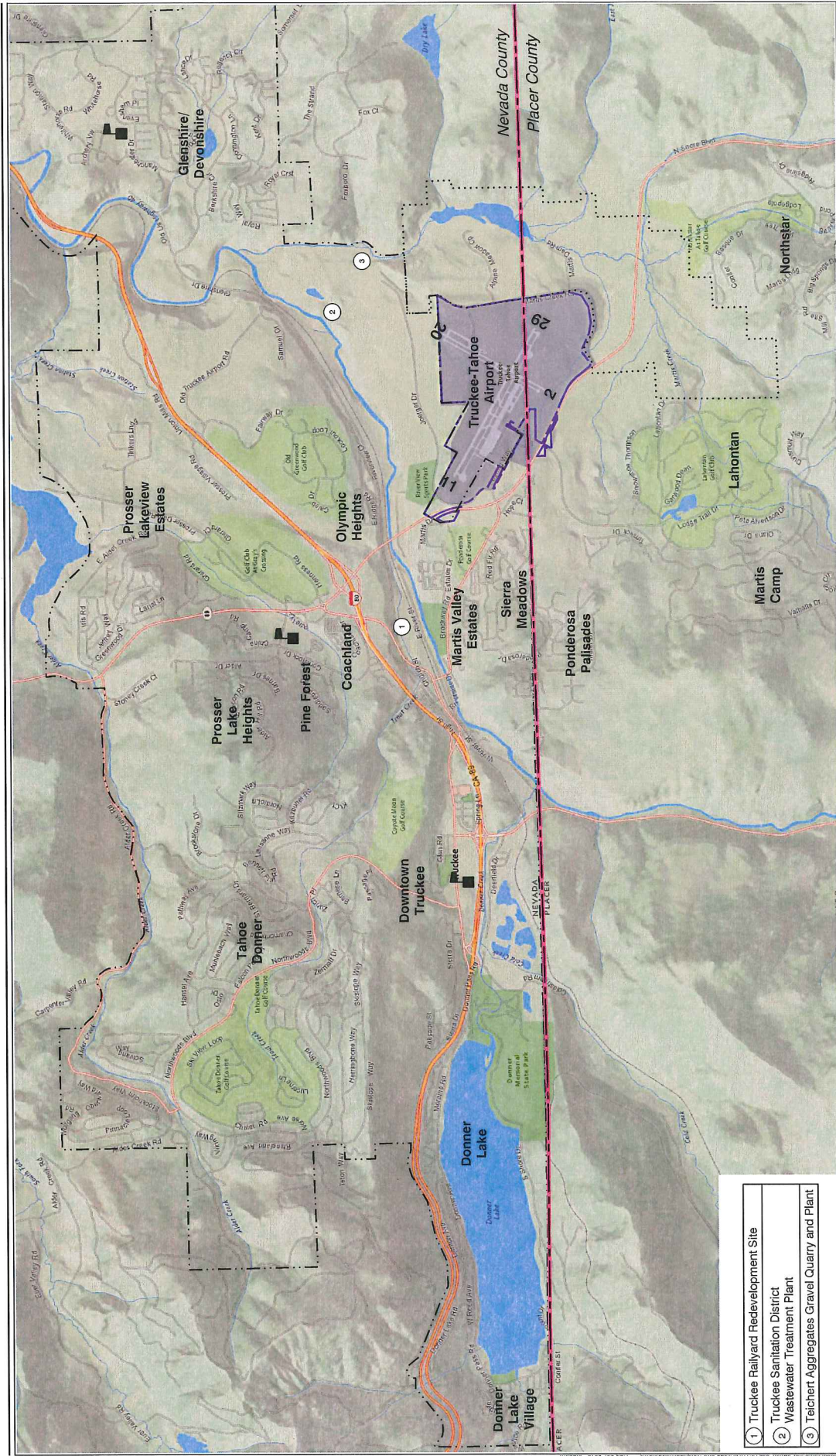
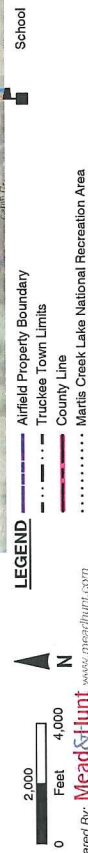


Exhibit 2
**Truckee-Tahoe Airport
District Boundary**
Truckee-Tahoe Airport



- ① Truckee Railroad Redevelopment Site
- ② Truckee Sanitation District Wastewater Treatment Plant
- ③ Teichert Aggregates Gravel Quarry and Plant



Prepared By: **Mead&Hunt** www.meadandhunt.com

Exhibit 3

Area Features and Neighborhoods

Truckee-Tahoe Airport

STRATEGIC PLAN

Approved by the TTAD Board July 28, 2011

"... is a blueprint for how the District will respond to future challenges and changing priorities and give direction on how to achieve future success."

Mission: "The Truckee Tahoe Airport is a community airport that provides high-quality aviation facilities and services to meet local needs. We strive for low impact on our neighbors while enhancing the benefit to the community-at-large."

Outlines TTAD objectives within each of six strategy areas:

- 1. Site and Facilities
- 2. Standards of Service
- 3. Community Benefit
- 4. Communication and Community Outreach
- 5. District Finances
- 6. Board Governance

Among objectives of particular relevance to Airport Master Plan are:

- 1.1.2: If necessary, aggressively seek and utilize State and Federal funding to facilitate appropriate airport improvements. Improvements will be based on capital project programming and District needs rather than solely on FAA or other public funding availability.
- 1.1.3: Constituent airport users and community members shall create the demand for new facility and airfield improvements within the capacities and mission of the District.
- 1.1.5: The District will consider and anticipate community and stakeholder concerns, workforce and technology trends, and current trends in general aviation as part of the planning and improvement programming process.
- 1.2.1: Keep all pavement in appropriate condition for the specific use of each pavement section.

- 1.3.1: Education and technology shall be areas of dual focus. The District is open to exploring and considering the latest technology from the FAA and aircraft instrumentation vendors to broaden the set of technologies which can assist pilots with safe takeoffs and landings at the airport. We will educate pilots on these technologies, as well as local flying conditions.
- 1.3.2: While safety improvements are encouraged and welcomed, the District will be sensitive to the effects of new aviation enhancement technologies and their impact on the community...
- 2.3.1: Board of Directors, staff, and airport users will work together to define appropriate and necessary aviation services.
- 3.1.1: If not required for maintenance of District assets, a portion of tax revenue will be budgeted each year for possible open space acquisition participation...
- 3.3.1: Work closely with the airport users, pilot community, and the residents of the District to improve on Fly Quiet program. Use specified programs and non-traditional approaches to encourage observance of annoyance mitigation programs...
- 3.4.3: Property acquisitions will consider community enhancement benefits and value to District constituents as opportunities are reviewed.
- 4.1.2: Inform users on airport issues to improve understanding of issues and decisions...

Each year property tax revenues are allocated to various targets in conjunction with the annual budget process. The 2010 targets are listed as follows:

■ Operations	20%
■ TTAD Portion of Grants	10%
■ Annoyance Reduction and Community Outreach Projects	25%
■ Other Capital Projects	15%
■ Land Purchase and Management	30%

COMMUNITY SURVEY

Conducted by Godbe Research in 2005, 2009, and 2013

500 local residents and 65 local pilots surveyed by telephone in 2013. Highlights of the 2013 survey include:

"As in 2009 and 2005, residents and pilots largely have a common opinion and vision of the airport. At the same time, these two groups differ in their attitudes toward airport regulations and limitations, particularly concerning an imposed curfew. As such, communication on these issues should carefully consider their divergent perspectives and opinions."

- Residents have a high awareness of the airport
- Residents opinions of the airport are significantly more positive than in 2009 or 2005
- Positive opinions are particularly high among pilots
- Residents and pilots consider different airport services and capabilities to be a priority
- Resident and pilot perceptions of the airport are positive with respect to area's economy

Although residents and pilots support a strategic vision of managed growth, residents support regulation and limitations, including a voluntary curfew, whereas pilots tend to be less supportive or oppose these.

Among other findings of the survey:

- Residents identify jet planes as a prime factor contributing to overall dissatisfaction
- Residents would like to see mandatory 2200-0700 curfew; most not aware of current voluntary curfew
- 6AM - Noon flights are the most disruptive
- Emergency services most important service
- Majority of residents visit the airport for non-aviation reasons
- Residents mostly learn about the airport through Sierra Sun
- Preservation of open space also highly rated capability
- Hangar improvements - new/upgraded - most important need identified by pilots

Exhibit 4

Guiding Documents and Policies

Truckee Tahoe Airport District



CHAPTER 1

Today, the airport proper occupies approximately 926 acres of land. Additionally, Truckee Tahoe Airport District owns another 1,538 acres acquired to help preserve compatible land uses and enable aviation-related services in other parts of the district. **Exhibit 5** shows the locations of property owned by the District. The primary runway, recently renumbered as Runway 11-29, is 7,000 feet long and the secondary runway (2-20) has a length of 4,650 feet. Apron space is available for parking approximately 191 aircraft and hangar storage accommodates another 210 aircraft.⁶

Exhibit 6 illustrates the locations of major facilities on the airport while **Exhibit 7** lists key data about these facilities. The facilities are in overall good to excellent condition. Only approximately 34% (316 acres) of the contiguous airport property is presently occupied by aviation facilities, non-aviation facilities, or is required to remain open for aeronautical purposes. To the extent determined to be needed, expansion of aviation facilities has top priority for future use of airport property. The remaining land is potentially available for non-aviation development.

Previous studies included master plans completed in 1980 and 1998. The 1998 *Airport Master Plan* included proposals for construction of two additional runways. One would be parallel to the primary runway and intended for flight training and to enable better separation between business jets and propeller aircraft. The second would be a turf runway parallel to the crosswind runway. Its use would be to facilitate sailplane activity. Enhanced instrument approach capabilities and land acquisition for additional hangar facilities were also proposed in the 1998 plan. All of the proposals in the prior plan are being reevaluated as part of the present study.

Airport Activity

The principle measure of airport activity at general aviation airports is the number of aircraft operations (take-offs and landings) that take place annually. The airport staff counts most of the operations and estimates the remainder. In 2012, the total count was approximately 24,000 operations. As with most general aviation airports nationally, the current activity at Truckee Tahoe Airport is down considerably over the past decade as a result of the nationwide economic slowdown. Although historical counts of operational activity do not exist, average activity likely exceeded 30,000 annual operations twenty years ago. A summary of data regarding airport operations, based aircraft, and other aspects of airport activity is provided in **Exhibit 8**.

Physical and meteorological conditions also affect activity levels at the airport. Being situated in a recreational destination, Truckee Tahoe Airport is greatly affected by recreational travel peaks. Truckee Tahoe Airport captures most of the general aviation activity for the region. Reno Tahoe Airport, 40 minutes' drive northeast in good weather, is the major alternative airport as well as the nearest airport offering airline service.

Terrain and weather are other factors affecting activity at Truckee Tahoe Airport. The high airport elevation and surrounding mountains make flying more challenging than at flatland airports. The paths aircraft may take to and from the airport are affected by the mountain terrain. Aircraft will make use of the valleys and passes around the airport. Pilots must take extra precautions because of the high altitude and low air density, which increases runway length and reduces climb performance, especially in warm weather.

Because mountain weather can change rapidly, weather monitoring, reporting, and aircraft surveillance are very important. During winter weather, snow and ice on the runway plus ice buildup on aircraft also increase landing length required. Nighttime activity is relatively limited. Mountainous terrain and weather are the primary influences restricting night activity. Average monthly weather conditions for the area are shown in **Exhibit 1**.

⁶ Source: *Truckee Tahoe Airport Land Use Compatibility Plan* (2004)

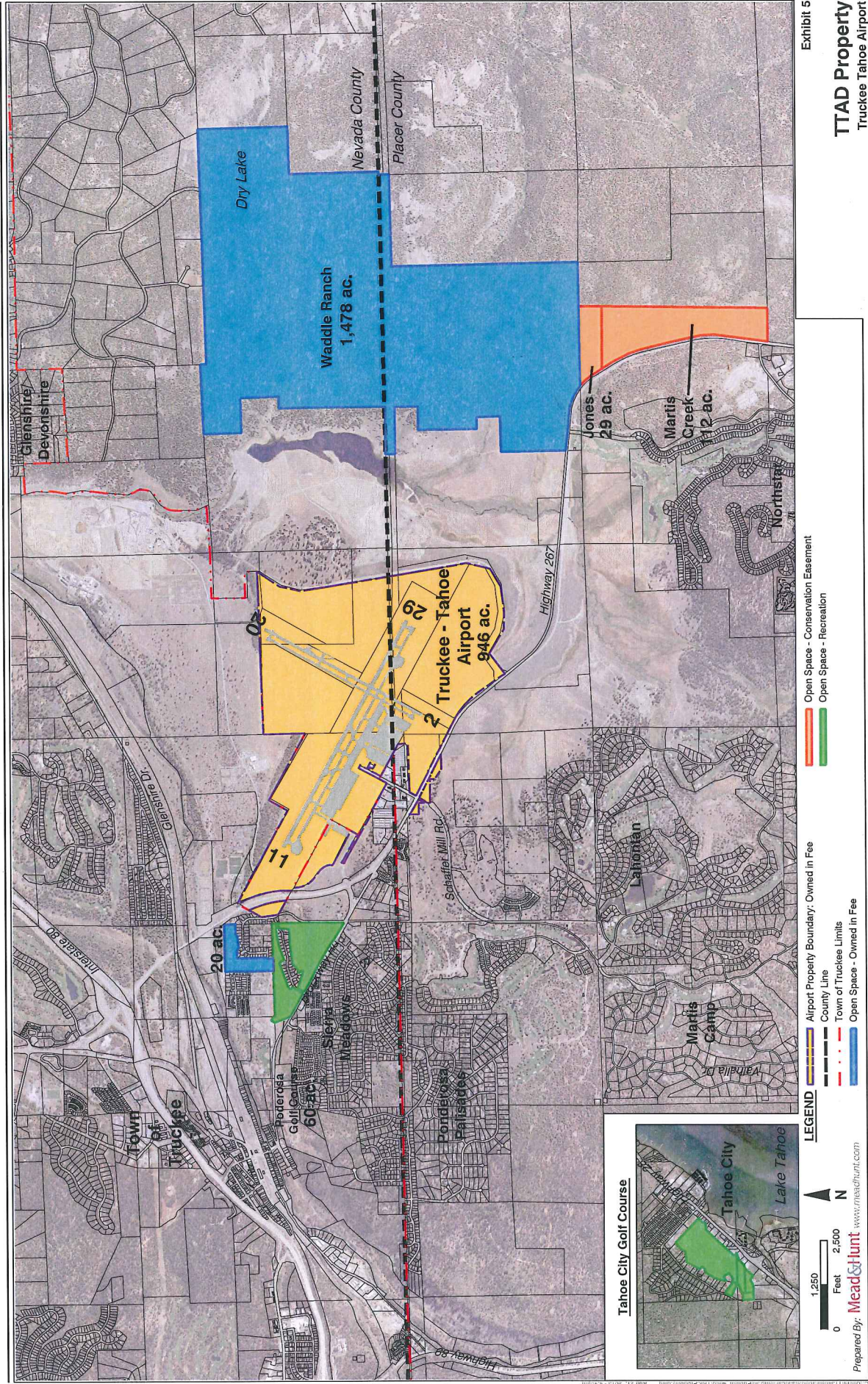


Exhibit 5

TTAD Property
Truckee Tahoe Airport

Prepared By: **Meachum** www.meachum.com



GENERAL INFORMATION

- Airport Ownership: Truckee Tahoe Airport District
- Year Opened: 1964
- Airport Property: 926 acres (contiguous airfield)
 - Open Space Land: owned in fee, 1,538 acres; majority east of Airport
 - Conservation Easements: 187 acres; majority east of Airport
 - Avigation Easements: 814 acres; majority east of Airport
- Airport Classification: Regional General Aviation
- Airport Elevation: 5,901.0 ft. MSL

RUNWAY/TAXIWAY DESIGN**Runway 11-29**

- Dimensions: 7,000 ft. long, 100 ft. wide
- Pavement Strength (main landing gear configuration)
 - 50,000 lbs (single wheel)
 - 80,000 lbs (dual wheel)
- Average Gradient: 0.1% (rising to northwest)
- Runway Lighting: Medium-intensity edge lights
- Primary Taxiways: Full-length parallel on southwest

Runway 2-20

- Dimensions: 4,650 ft. long, 75 ft. wide
 - Runway 19 threshold displaced 115 ft.
- Pavement Strength (main landing gear configuration)
 - 35,000 lbs (single wheel)
 - 50,000 lbs (dual wheel)
- Average Gradient: 0.0%
- Runway Lighting: Medium-intensity edge lights
- Primary Taxiways: Full-length parallel on northwest

BUILDING AREA

- Location: West quadrant of airport
- Aircraft Parking Capacity
 - 217 hangar spaces
 - 210± tiedowns
- Other Major Facilities
 - Terminal/Administration Building
 - Car rental
- Services
 - Fuel: Jet-A, 100LL (from truck; 6 a.m. to 11 p.m.)
 - Aircraft rental and charter; flight instruction; air-frame and avionics repair
 - Sailplane rides

AIRPORT PLANNING DOCUMENTS

- Airport Master Plan
 - Adopted by TTAD Board of Directors, Oct. 2000
 - Amended December 2001
- Airport Layout Plan Drawing
 - Approved by FAA, March 2007

TRAFFIC PATTERNS AND APPROACH PROCEDURES

- Airplane Traffic Patterns
 - Runway 20: Right traffic; sailplanes, left traffic
 - Runways 2, 11, 29: Left traffic
 - Pattern altitude: 1,100 ft. AGL (7,000 ft. MSL) light aircraft; 1,600 ft. AGL (7,500 ft. MSL) heavy aircraft
- Instrument Approach Procedures (lowest minimums)
 - Runway 20 GPS
 - Straight-in: 1¼ mile vis., 1,446 ft. AGL descent ht.
 - Circling: 1¼ mile vis., 1,440 ft. AGL descent ht.
 - VOR / DME RNAV or GPS-A (circling only)
- Standard Inst. Departure Procedures (initial course)
 - Rwy 2: Right turn to 320° heading
 - Rwy 29: Left turn to 275° heading
- Visual Approach Aids
 - Airport: Rotating beacon, sgmnt. circle, wind cone
 - Runway 11: REIL
 - Runway 20: VASI 2-L (3.5°)
- Operational Restrictions / Noise Abatement Procedures
 - Rwy 29 departures: "Bypass departure" Turn right to 300° to Highway 267 bypass then turn over I-80 corridor. No turns before RR tracks.
 - Rwy 20 departures: All low powered aircraft requested to turn left to 300° then join 'bypass departure'
 - Rwy 2 departures: Fly direct to I-80 scales then follow I-80 corridor
 - Rwy 20 and 29 arrivals: From Gateway checkpoint join Hwy 267 for left downwind for Rwy 29 or enter Rwy 20 right downwind.
 - Avoid arrivals and departures 11 p.m. to 6 a.m.

APPROACH PROTECTION

- Runway Protection Zones (RPZs)
 - Rws 11 & 29: 1,000-ft. long; all on airport property
 - Runway 2: 1,000-ft. long; 76% on airport property
 - Runway 20: 1,000-ft. long; 13% on airport property

Exhibit 7

Airport Features Summary

Truckee Tahoe Airport



BASED AIRCRAFT

Aircraft Type	Current ^a 2012 data
Piston, Single-Engine	170
Piston, Twin-Engine	22
Turboprop Twin-Engine	4
Business Jets	9
Helicopters	6
Total Aircraft	220

AIRCRAFT OPERATIONS

	Current ^a 2012
Total	
Annual	24,000
Average Day, Annual	66
Average Day, Peak Season	112
Distribution by Aircraft Type	
Single-Engine Piston	60%
Twin-Engine Piston	4%
Turboprop	12%
Jet	
<12,499 lbs.	2%
12,499 – 19,999 lbs.	2%
>20,000 lbs.	2%
Helicopter	7%
Glider	11%
Distribution by Type of Operation	
Local (incl. touch-and-goes)	32%
Itinerant	68%

TIME OF DAY DISTRIBUTION

	Current ^a
Piston Airplanes – Takeoff & Landing	
Day (7:00 a.m. – 7:00 p.m.)	95%
Evening (7:00 – 10:00 p.m.)	4%
Night (10:00 p.m. – 7:00 a.m.)	1%
Turbo Props – Takeoff & Landing	
Day	92%
Evening	7%
Night	1%
Other Jets – Takeoff & Landing	
Day	95%
Evening	4%
Night	1%

RUNWAY USE DISTRIBUTION

Piston Aircraft – Day/Evening/Night

Takeoffs & Landings	
Runway 11	4%
Runway 29	77%
Runway 2	8%
Runway 20	11%

Turboprops

Takeoffs & Landings	
Runway 11	4%
Runway 29	88%
Runway 2	2%
Runway 20	6%

Business Jets – Day/Evening/Night

Takeoffs & Landings	
Runway 11	3%
Runway 29	96%
Runway 2 & 20	<1%

FLIGHT TRACK USAGE ^a

(Current and Future)

Takeoffs, Runway 29 – Propeller Aircraft	
80%–90% to Donner Pass	
5%–20% to TRUCK Intersection	
2%–3% to Tahoe	
Takeoffs, Runway 29 – Business Jets	
15% to Donner Pass	
85% to TRUCK Intersection	
Takeoffs, Runway 20 – Light Aircraft (excluding touch-and-go operations)	
100% 225° left turn	
Landings, Runway 29 – All Aircraft	
100% left traffic pattern	
Landings, Runway 20 – All Aircraft	
100% right traffic pattern	

Notes

^a Source: Truckee Tahoe Airport records

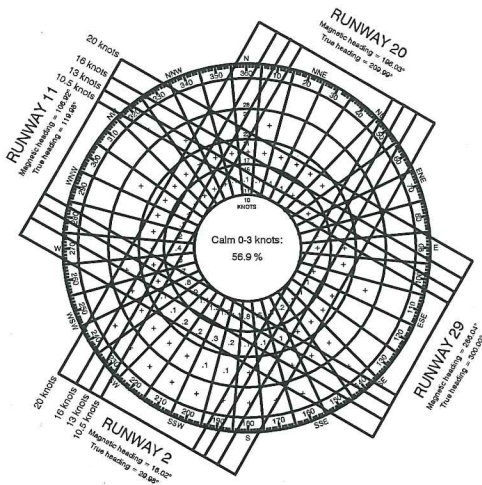
Exhibit 8

Airport Activity Data Summary

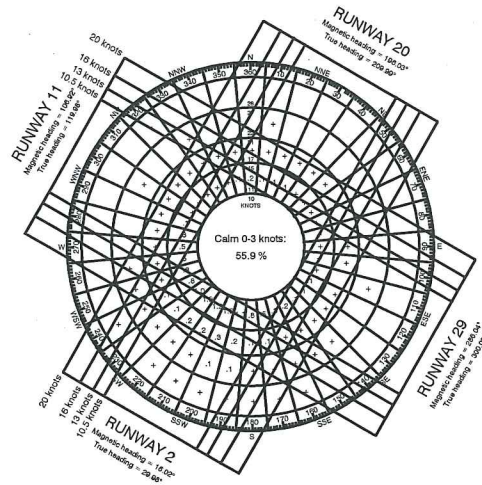
Truckee Tahoe Airport

Surface winds vary significantly which is common in mountain areas where the surrounding terrain channels the wind. Truckee Tahoe Airport has two runways to help minimize the effect of crosswinds so aircraft may have a higher opportunity to arrive and depart into a headwind. Runway 2-20 has better overall wind coverage, but its shorter length is a constraint for many turbine-powered aircraft. Wind coverage data is illustrated on **Exhibit 9**.

One other factor significantly affecting flight routes to and from the airport is the nearby residential areas. Safety permitting, pilots are asked to fly noise-abatement flight routes that minimize overflight of homes. **Exhibit 10** depicts the preferred arrival and departure flight routes.

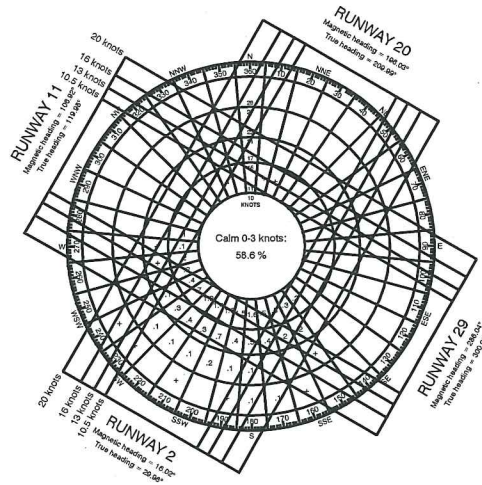


ALL WEATHER WIND COVERAGE				
RUNWAY	10.5 KNOTS (12 M.P.H.)	13 KNOTS (15 M.P.H.)	16 KNOTS (18.5 M.P.H.)	20 KNOTS (23 M.P.H.)
2-20	97.88 %	99.07 %	99.83 %	99.97 %
11-29	90.22 %	94.21 %	98.16 %	99.45 %
Combined	99.38 %	99.65 %	99.99 %	99.99 %
Number of Observations:		74,107		

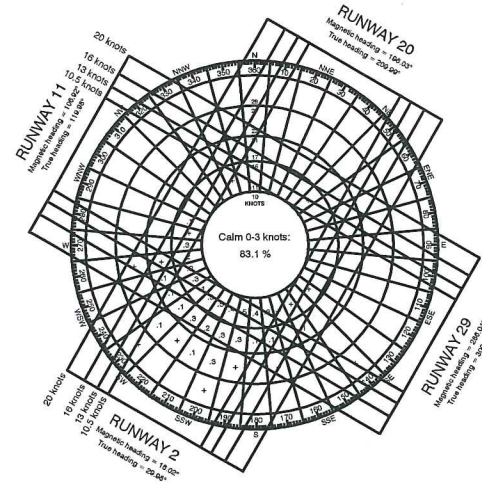


VFR WIND COVERAGE				
RUNWAY	10.5 KNOTS (12 M.P.H.)	13 KNOTS (15 M.P.H.)	16 KNOTS (18.5 M.P.H.)	20 KNOTS (23 M.P.H.)
2-20	97.64 %	99.07 %	99.84 %	99.97 %
11-29	90.20 %	94.27 %	98.27 %	99.50 %
Combined	99.41 %	99.86 %	99.97 %	100.0 %
Number of Observations:		68,631		

Wind Data Source: NOAA Weather Station 72584, Truckee, California
 Period of Time: Jan. 1, 2000 - Dec. 31, 2009
 Note: Windrose compass headings are true north.



IFR WIND COVERAGE				
RUNWAY	10.5 KNOTS (12 M.P.H.)	13 KNOTS (15 M.P.H.)	16 KNOTS (18.5 M.P.H.)	20 KNOTS (23 M.P.H.)
2-20	97.60 %	98.89 %	99.83 %	99.91 %
11-29	87.21 %	91.42 %	98.14 %	98.55 %
Combined	98.65 %	99.59 %	99.88 %	99.96 %
Number of Observations:		2,913		



CLOSED WIND COVERAGE				
RUNWAY	10.5 KNOTS (12 M.P.H.)	13 KNOTS (15 M.P.H.)	16 KNOTS (18.5 M.P.H.)	20 KNOTS (23 M.P.H.)
2-20	98.71 %	99.48 %	99.83 %	99.95 %
11-29	94.94 %	96.36 %	97.83 %	99.08 %
Combined	99.45 %	99.63 %	99.98 %	100.0 %
Number of Observations:		2,272		

Prepared By: **Mead & Hunt** www.meadhunt.com

Exhibit 9

Runway Wind Coverage

Truckee Tahoe Airport

