

# Aeronautical Facilities Rate Analysis Study

## Introduction

Truckee Tahoe Airport (TRK) is owned and operated by the Truckee Tahoe Airport District (TTAD). The five board of director members of the TTAD are elected by constituents of Nevada and Placer Counties for four-year terms. Each year, the TTAD evaluates TRK's hangar rental rates with the intent of implementing market rents to maintain the airport as financially self-sufficient as possible. TRK's *General Aviation Leasing/Rents and Fees Policy* identifies several methods of determining market rent available to the TTAD. One such method is a rent study, which TTAD conducts every five years. Section 4.2 of the policy states:

*The objective of the Rent Study is to establish Market Rent for aeronautical land and Improvements at the Airport based on a comparative analysis of the rents being charged for similar properties at comparable airports.*

Airport Cooperative Research Program Report 213, *Estimating Market Value and Establishing Market Rent at Small Airports*, defines market rent as the most likely rent agreed upon in a free market for a property, based on the terms of the associated lease agreement. TTAD engaged Mead & Hunt to conduct an Aeronautical Facilities Rate Analysis Study as described in section 4.2. This study developed an independent opinion of market rent for aeronautical properties currently leased or available for lease at TRK, using a benchmarking analysis across airports selected for the similarities with TRK. Specifically, this study looked at lease rates for long-term aircraft hangar storage (as opposed to transient or overnight storage), and air ambulance facility lease rates.

The most common lease agreements for aircraft hangars take two basic forms – ground leases and building leases. A ground lease grants the tenant the right to build, maintain and use a hangar for a specified number of years. A building lease grants the tenant the right to use an airport-owned hangar for a specified number of years.

TRK's hangars are all leased under building lease agreements, so this study focuses on building leases at benchmark airports. The next section of this report outlines the benchmark airports, provides several metrics to illustrate similarities between the benchmark airports and TRK, and explains the methods and assumptions used to develop recommended facility market rates at TRK.

## Profiles of Benchmark Airports

For purposes of benchmarking facility lease rates against similar airports, TTAD selected and assessed more than a dozen airports. These airports were broken into two groups – a competitive group and a comparison group.

The competitive airports selected for this study are located within 30 miles of TRK. These airports provide comparable amenities and serve the Reno-Lake Tahoe area. Prospective TRK tenants may assess these competitive airports by considering factors such as location, available hangar types, and services provided. Because of their proximity to TRK and the surrounding region, these airports function as alternative options for itinerant operators. Airports may offer hangar space for itinerant aircraft when available. Accordingly, this study will analyze rates and services at these airports for both long-term and short-term hangar use. The competitive airports included in this study are as follows:

- Carson City Airport (CXP); Carson City County, NV
- Minden-Tahoe Airport (MEV); Douglas County, NV
- Reno-Tahoe International Airport (RNO); Washoe County, NV
- Reno/Stead Airport (RTS); Washoe County, NV
- Lake Tahoe Airport (TVL); El Dorado County, CA

The comparison airports do not serve the Reno-Lake Tahoe area. However, they share similar operations and based aircraft characteristics, and are situated in resort areas popular with visitors, making them suitable comparison airports for this study. These airports are as follows:

- Eagle County Regional Airport (EGE); Eagle County, CO
- Mammoth Yosemite Airport (MMH); Mono County, CA
- Monterey Regional Airport (MRY); Monterey County, CA
- Martha's Vineyard Airport (MVY), Dukes County, MA
- Palo Alto Airport (PAO); Santa Clara County, CA
- San Carlos Airport (SQL); San Mateo County, CA
- Friedman Memorial Airport (SUN); Blaine County, ID
- Telluride Regional Airport (TEX); San Miguel County, CO

**Figure 1** illustrates the locations of each benchmark airport in relation to TRK. Additionally, **Figure 1** indicates which airports have air traffic control towers (ATCT) and which are Part 139 airports. Part 139 airports are certified by the FAA to serve air carrier operations and must meet specific safety and operational standards. Both ATCT and Part 139 airports were analyzed in this study for any influence they have on hangar lease rates.

**Figure 1** BENCHMARK AIRPORT LOCATIONS



Source: Mead & Hunt and FAA.

The next sections describe demographic and airport characteristics of benchmark airports to illustrate the similarities and differences with TRK.

## DEMOGRAPHICS

A county demographic evaluation was performed for each benchmark airport, using Woods & Poole (W&P), federal, and state 2024 data on population, employment, and unemployment rate. W&P is a firm

that provides current and long-term economic and demographic data projections, which were used along with federal and state sources to help compare TRK with each benchmark airport.

**Table 1** presents the population total, employment total, and unemployment rate of each county where a benchmark airport is located.

**Table 1 DEMOGRAPHIC DATA OF BENCHMARK AIRPORTS**

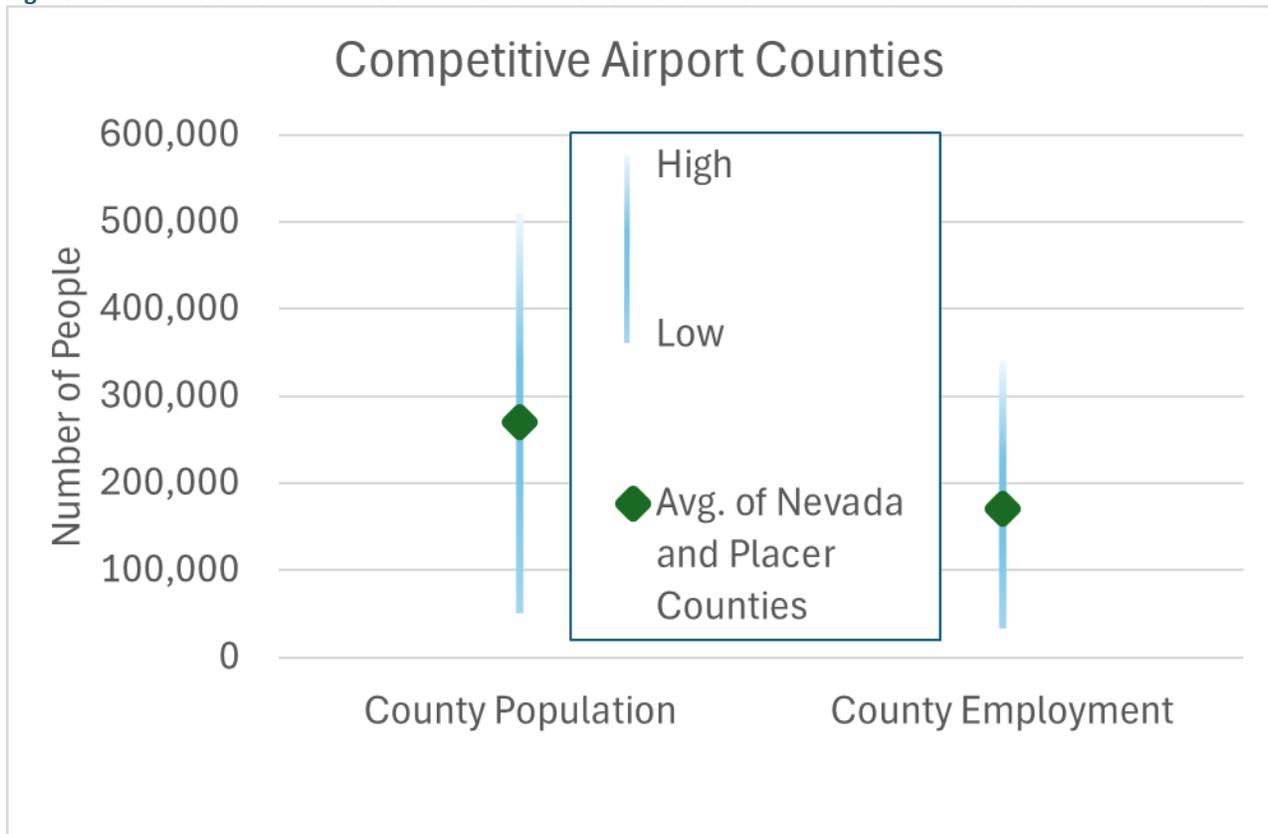
ID	Airport	County	Population	Employment	Unemployment Rate
TRK	Truckee Tahoe	Nevada	103,443	59,816	5.1%
		Placer	436,918	282,086	4.7%
		<b>Average</b>	<b>270,181</b>	<b>170,951</b>	<b>4.9%</b>
<b>Competitive Airports</b>					
CXP	Carson City	Carson City	58,983	42,198	4.9%
MEV	Minden-Tahoe	Douglas	50,405	32,813	4.9%
RNO	Reno-Tahoe International	Washoe	510,466	340,104	4.4%
RTS	Reno/Stead	Washoe	510,466	340,104	4.4%
TVL	Lake Tahoe	El Dorado	195,997	99,174	5.2%
<b>Comparison Airports</b>					
EGE	Eagle County Regional	Eagle	55,975	54,305	2.6%
MMH	Mammoth Yosemite	Mono	13,151	11,160	4.1%
MRY	Monterey Regional	Monterey	433,874	274,013	5.7%
MVY	Martha's Vineyard	Dukes	21,077	18,967	3.3%
PAO	Palo Alto	Santa Clara	1,908,189	1,583,079	4.6%
SQL	San Carlos	San Mateo	735,549	633,015	4.1%
SUN	Friedman Memorial	Blaine	25,441	24,039	3.1%
TEX	Telluride Regional	San Miguel	8,051	10,276	2.1%

Source: Mead & Hunt and Woods & Poole.

TRK straddles the border between Nevada and Placer Counties, with most of the airport in Nevada County. A small southern part of the airport is in Placer County. Therefore, **Table 1** shows the data for both counties and an average for both counties for use in the analysis. The average population and employment of Nevada and Placer Counties fell amongst the middle of the benchmark counties, while the unemployment rate trend toward the upper range of the benchmark airports. Further analysis compared Nevada and Placer County statistics with those of both competitive and comparison airports.

Placer County is in the upper range of population and employment figures found in the competitive counties, as shown in **Figure 2**. Among the competitive airports, only Reno-Tahoe International and Reno/Stead, both located in Washoe County, had counties with more population and employment than TRK’s Placer County.

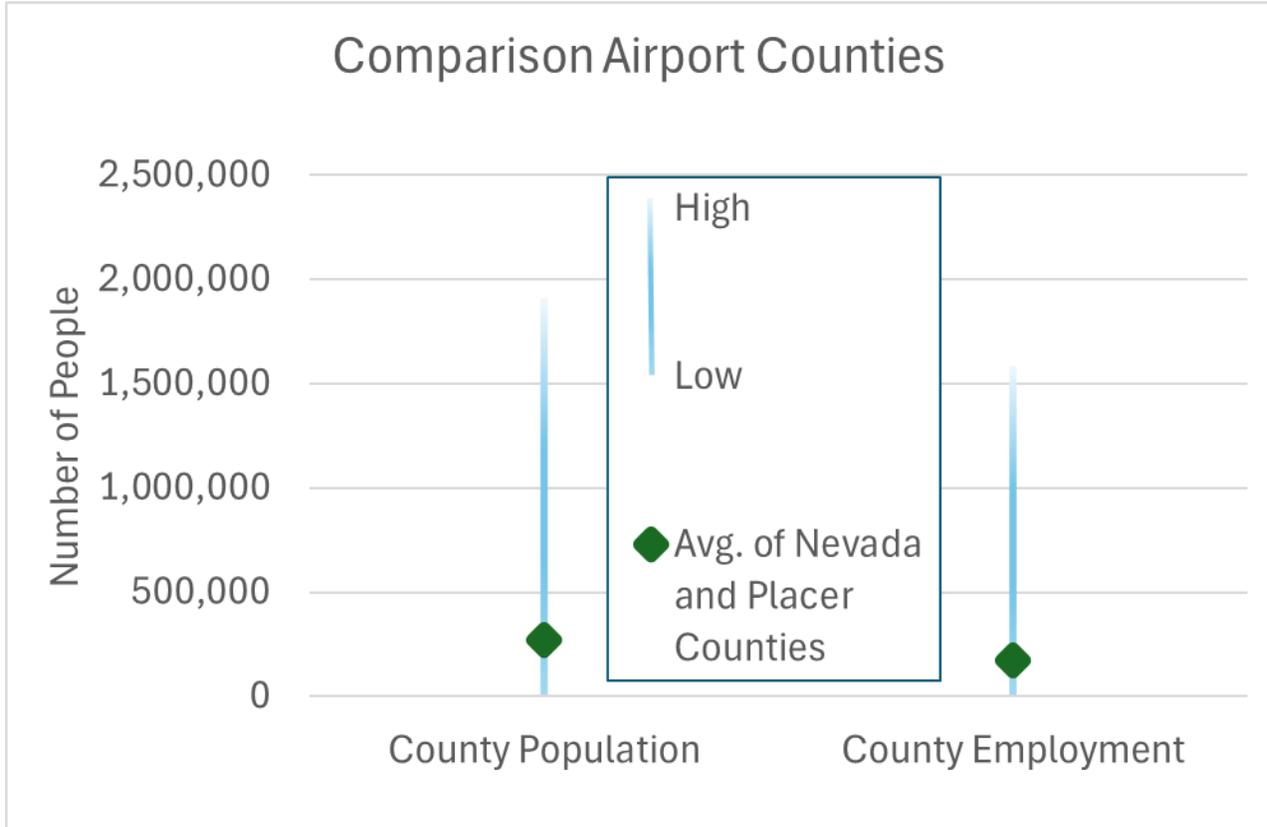
**Figure 2** COMPARISON OF TRK DEMOGRAPHICS TO RANGE OF POPULATION AND EMPLOYMENT AT COMPETITIVE AIRPORTS



Source: Mead & Hunt and Woods & Poole

When assessed against the comparison airports, Placer County fell into the lower half of the range of population and employment. **Figure 3** shows the highest and lowest population and employment figures for the comparison airports and where Placer County ranked in the range.

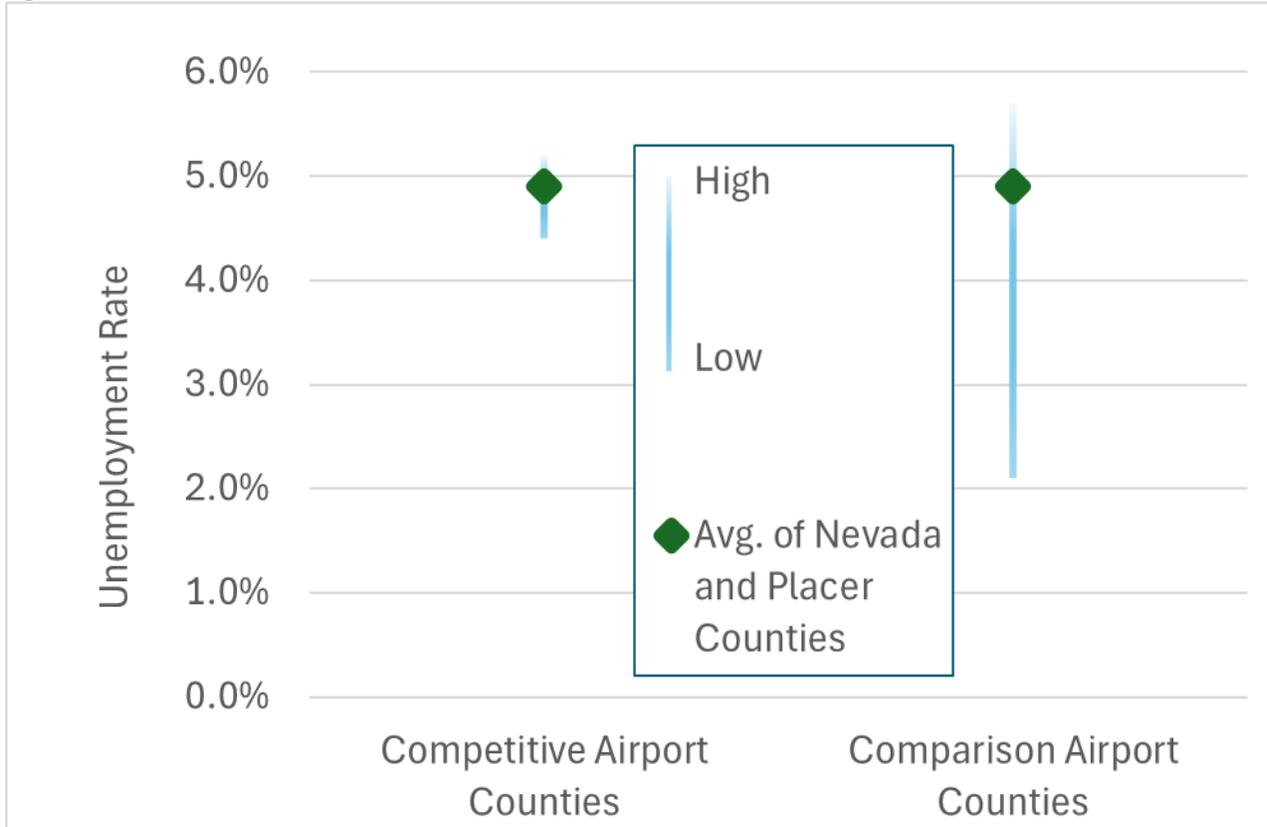
**Figure 3** COMPARISON OF TRK DEMOGRAPHICS TO RANGE OF POPULATION AND EMPLOYMENT AT COMPARISON AIRPORTS



Source: Mead & Hunt and Woods & Poole

Unemployment rates in Placer County were also evaluated and found to be higher than most among both groups of benchmark airports. Comparative data between Placer County and competitive or comparison benchmark airports are presented in **Figure 4**.

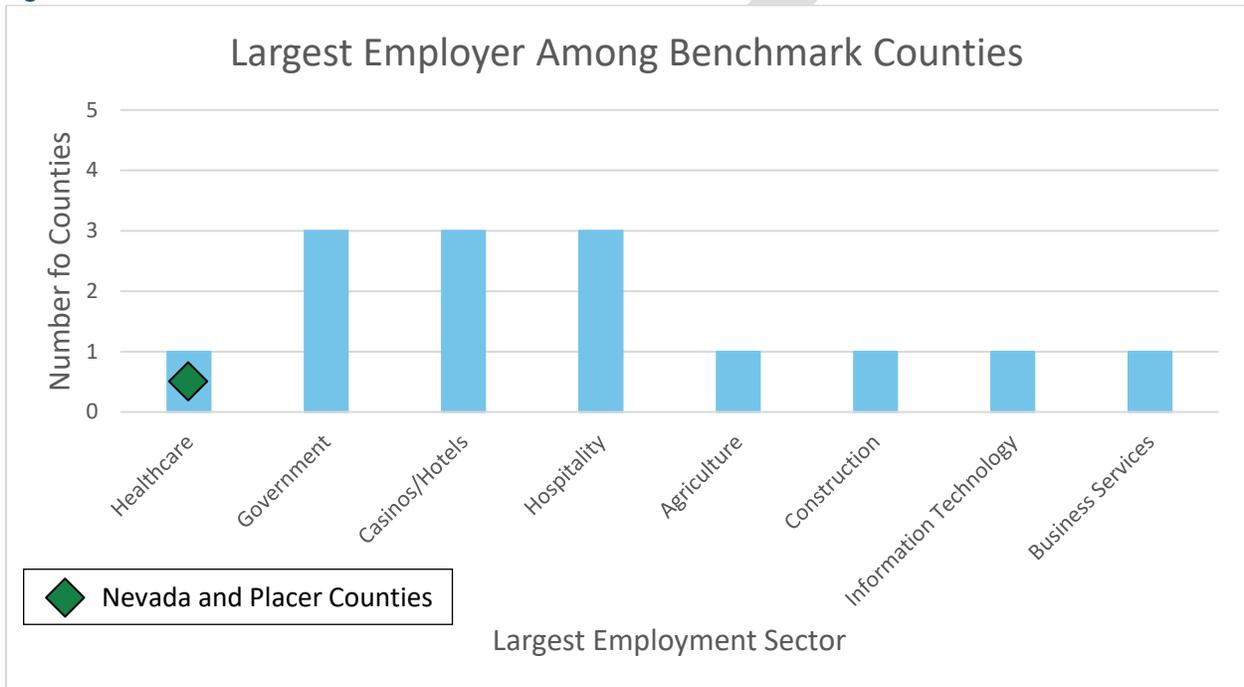
**Figure 4** COMPARISON OF TRK DEMOGRAPHICS TO RANGE OF UNEMPLOYMENT RATES AT BENCHMARK AIRPORTS



Source: Mead & Hunt and Woods & Poole

In addition to the analysis of population and employment data, an evaluation of the largest employers by sector in each county was conducted. Often, industry that thrives in its community drives airport activity. This can be seen in commercial service, cargo, and even general aviation which all can serve industries like tourism, business, agriculture, entertainment, healthcare, and law enforcement. In Placer County, the largest employment industry is healthcare which is serviced by TRK through air medivac operations. **Figure 5** compares the largest employee sectors and the number of benchmark counties in which they serve.

**Figure 5** COMPARISON OF LARGEST EMPLOYERS AMONG BENCHMARK AIRPORT COUNTIES



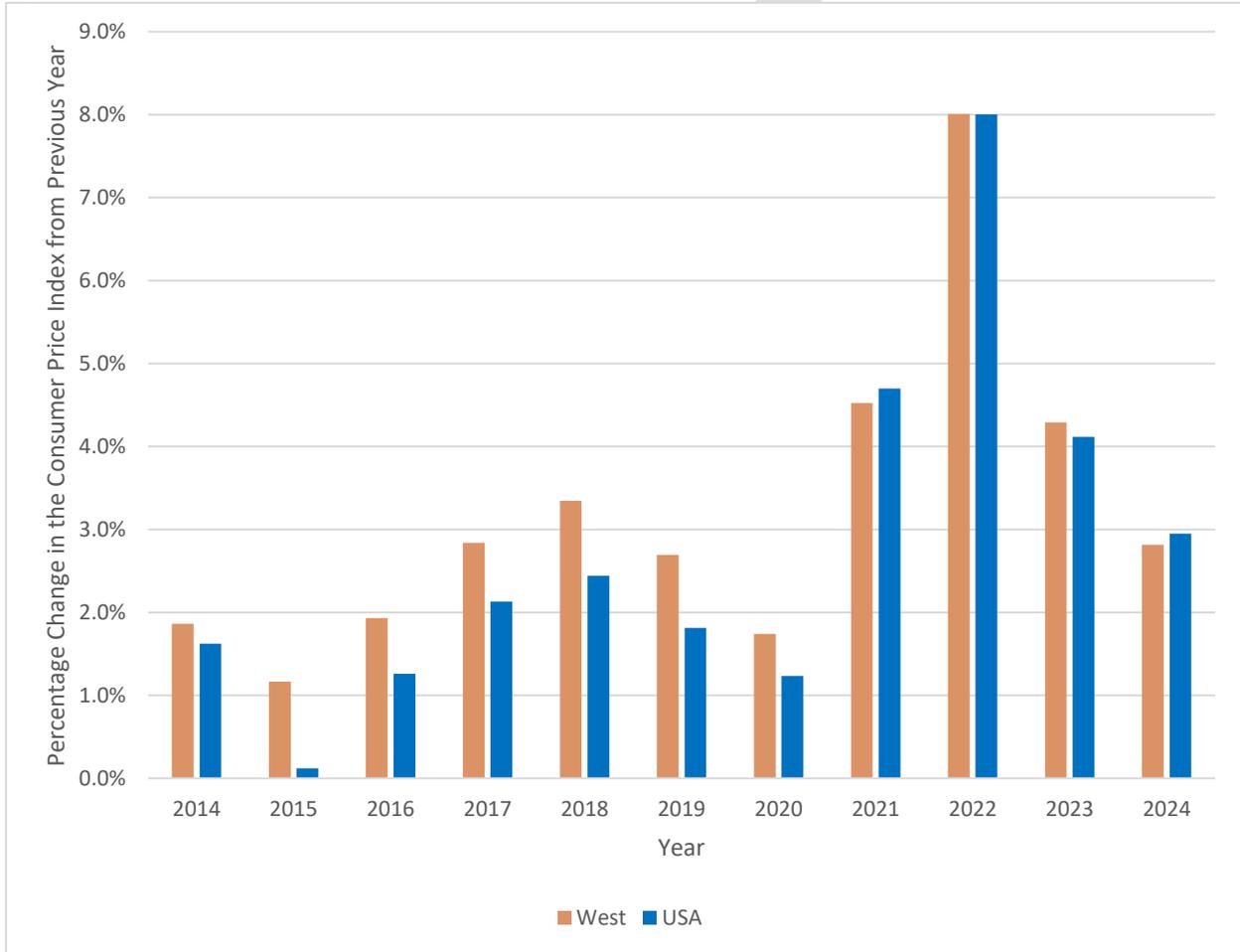
Source: Mead & Hunt and various websites.

To assess changes in costs over time, the study examined trends in the Consumer Price Index (CPI), All Urban Users for the West region<sup>1</sup> and the U.S. as a whole. The CPI is an index measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. It is generally regarded as a reliable measure of price inflation.

<sup>1</sup> The West region consists of Alaska, Arizona, California, Guam, Hawaii, Idaho, Nevada, Oregon, and Washington.

Looking at the past 10 years, it is apparent that prices in the West region have risen faster than prices in the U.S. overall. This is especially true from 2014 to 2020, as shown in **Figure 6**, where the West CPI outpaced the U.S. average consistently. It should be noted that past increases in CPI are magnified by future increases in CPI. For example, in 2020, both the West and the U.S. experienced an 8.0 percent increase in CPI. However, that 8.0 percent increase in the West was imposed on prices that were already higher than the U.S. average because of the history of higher inflation in the West.

**Figure 6** PERCENTAGE CHANGE IN WEST REGION CPI COMPARED TO US CPI CHANGE, 2014 TO 2024



Source: Bureau of Labor Statistics.

## AIRPORT CHARACTERISTICS

Airport characteristics—including role, infrastructure, and layout—differ significantly from one facility to another. To provide supplemental context for the aeronautical facilities rate analysis, this section

examines the distinct features of each benchmark airport. The attributes considered for this analysis are outlined below:

- *National Plan of Integrated Airport Systems (NPIAS)* classification and role
- Runways
- Airport acreage
- Airport operations and based aircraft
- Instrument approach procedures (IAP) minimums
- Fuel volumes sold in 2024

### **National Plan of Integrated Airport Systems (NPIAS) Service Levels and Roles**

The NPIAS is an inventory of approximately 3,300 public-use airports that are eligible for federal funding to support development and maintenance at U.S. airports. These airports are identified by service levels and roles that are determined by aviation activity, airport location, and the significance the airport has within its community, local economy, and national airspace system.

The NPIAS service level classification system categorizes airports based on the highest service level offered at the airport. The NPIAS classification for TRK is “general aviation (GA)” meaning the airport only services GA aircraft and is not equipped to manage commercial aircraft or operate as a reliever airport. Other classifications from the NPIAS for the benchmark airports consist of:

- Primary – A commercial service airport with 10,000 or more annual enplanements.
- Commercial Service (CS) – A commercial service airport with between 2,500 and 9,999 annual enplanements.
- Reliever – An airport equipped to relieve congestion at a commercial service airport and provide GA access to the community. It does not have scheduled airline service and primarily serves as a GA airport.

An airport role, as defined in the NPIAS, is indicative of the aviation activity, based aircraft, and community purpose the specific airport has. For commercial service airports, these roles are determined based on the share of annual enplanements in the United States that the respective airport manages. The following is how the roles are broken down:

- Large Hub – 1% or more of annual U.S. enplanements
- Medium Hub – 0.25% to 1% of annual U.S. enplanements
- Small hub – 0.05% to 0.25% of annual U.S. enplanements

- Nonhub – less than 0.05% of annual U.S. enplanements but more than 10,000 annual enplanements

For airports with little to no commercial service, the assigned NPIAS roles are dependent on aviation activity, essential air service (EAS), and special use cases. Since these criteria vary role to role, the roles, as organized in the NPIAS, are listed here from the most active airports to least active airports – National, Regional, Local, Basic, and Unclassified.

TRK is exclusively a GA airport and meets several criteria as a regional airport. Therefore, the airport’s NPIAS role is “Regional.” **Table 2** lists the NPIAS classifications and roles for all benchmark airports.

**Table 2 NPIAS CHARACTERIZATION OF STUDY AIRPORTS**

ID	Airport	NPIAS Classification	NPIAS Role
TRK	Truckee Tahoe	GA <sup>1</sup>	Regional
CXP	Carson City	Reliever	Regional
MEV	Minden-Tahoe	GA <sup>1</sup>	Regional
RNO	Reno-Tahoe International	Primary	Small hub
RTS	Reno/Stead	Reliever	Regional
TVL	Lake Tahoe	GA <sup>1</sup>	Basic
EGE	Eagle County Regional	Primary	Non-hub
MMH	Mammoth Yosemite	CS <sup>2</sup>	Local
MRY	Monterey Regional	Primary	Non-hub
MVY	Martha’s Vineyard	Primary	Non-hub
PAO	Palo Alto	Reliever	Regional
SQL	San Carlos	GA <sup>1</sup>	Regional
SUN	Friedman Memorial	Primary	Non-hub
TEX	Telluride Regional	Primary	Non-hub

Notes: <sup>1</sup>General Aviation

<sup>2</sup>Commercial Service

Source: FAA 2025-2029 NPIAS

Out of the 13 benchmark airports, five are designated as Regional Airports, the same role that TRK serves. Five benchmark airports are designated as Non-hub primary airports, indicating that their airline service enplaned more than 2,500 passengers, but less than 10,000. This level of airline service generally indicates that the airport serves a substantial number of GA users, providing a good basis of comparison with TRK.

## Runways

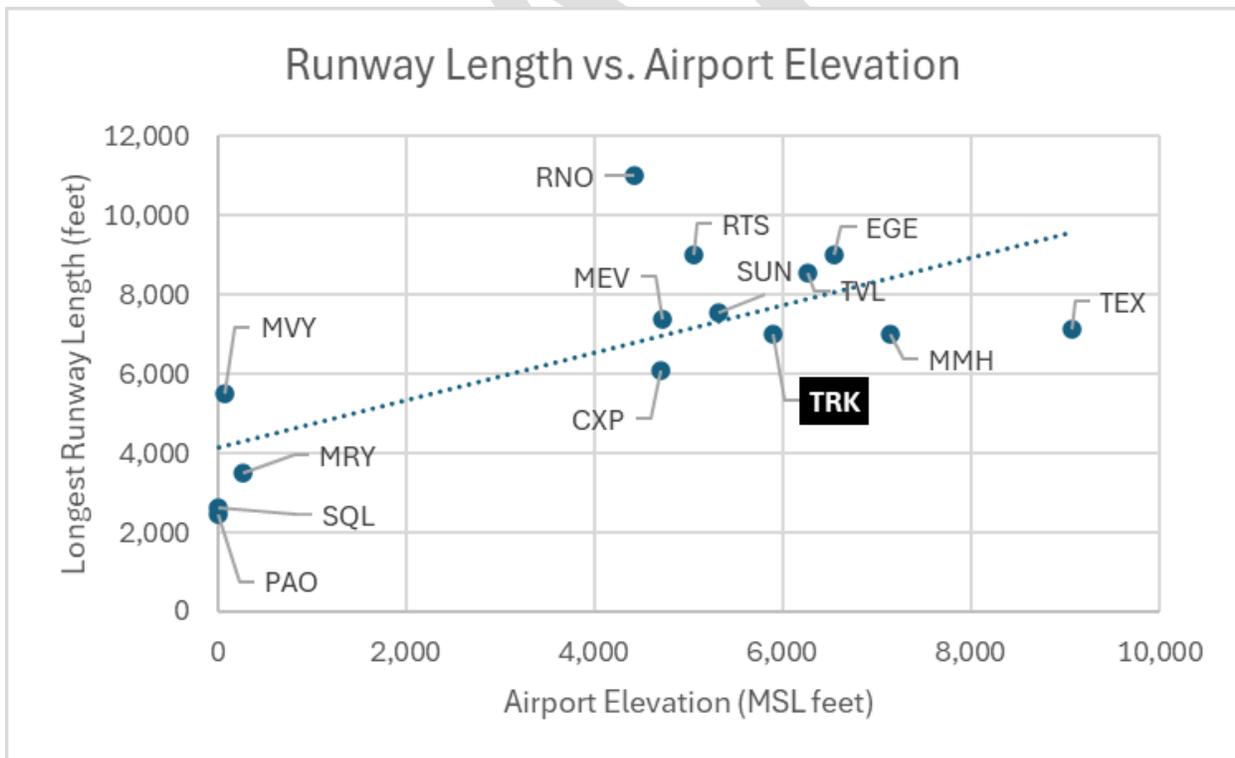
Runway design often drives the type of aircraft using the airport and the resulting demand for hangars. The length, width, and IAP all influence the types of aircraft capable of operating in and out of the airport

under various weather conditions while the number of runways can increase capacity and provide additional wind coverage for safe operations.

While longer runways generally can accommodate larger aircraft, airport elevation also influences runway length. At higher altitudes, the less dense air results in lower engine performance and produces less lift compared to lower altitudes. With TRK situated in the heart of the Sierra Nevada Mountains, its elevation of 5,904 feet above mean sea level (MSL) puts the airport in an environment of reduced air density. At this elevation, the thinner air diminishes aircraft performance. As a result, airports at higher elevations, such as TRK, require more runway length than lower elevation airports so that aircraft can achieve the same lift and engine performance. The current primary runway length at TRK is 7,001 feet, which is similar to other high elevation benchmark airports.

**Figure 7** plots each study airport’s runway length versus its elevation. A best-fit trend line shows the linear relationship between runway length and airport elevation. Reno International Airport (RNO) sits well above the trend line because it serves larger commercial airliners that need longer runways than most general aviation aircraft.

**Figure 7** COMPARISON OF PRIMARY RUNWAY LENGTH AND AIRPORT ELEVATION AT STUDY AIRPORTS

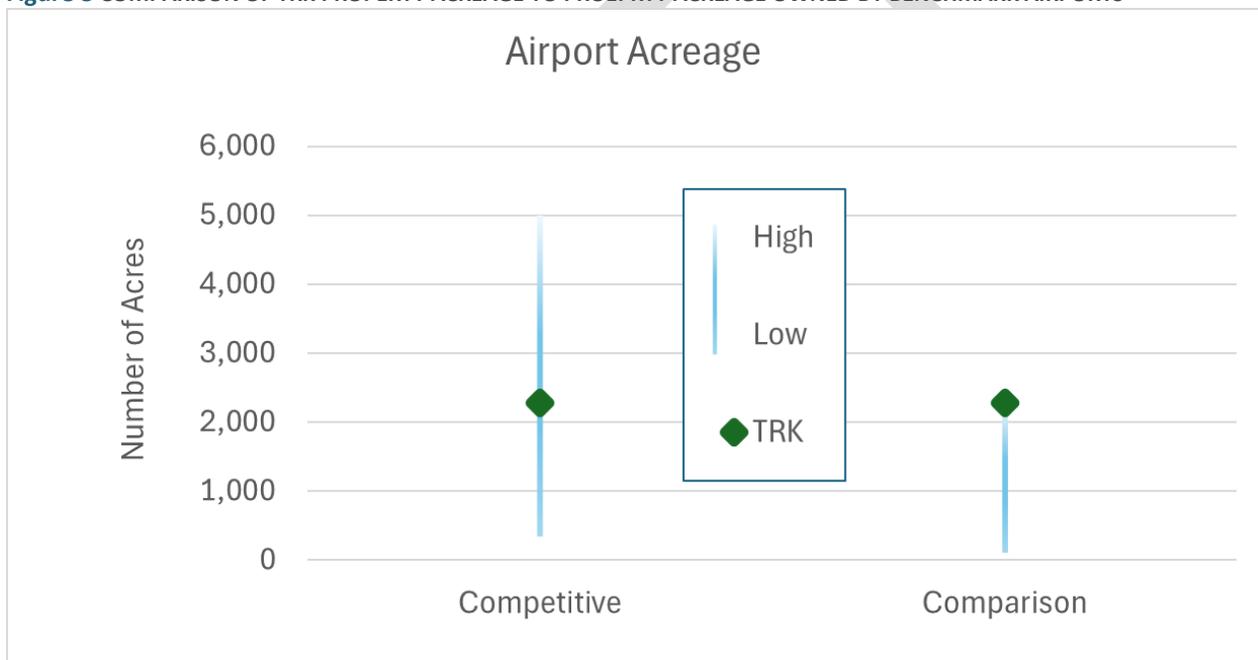


Source: Mead & Hunt and FAA.

## Airport Acreage

Aeronautical development offers a significant source of revenue for airports, though its potential may be restricted by land availability. Such limitations often stem from physical factors like mountainous terrain, urban expansion, or existing landside infrastructure. Additionally, the configuration and extent of airport-owned property can further complicate development efforts. Since airport revenue can be constrained by the amount of developable land that the airport owns, this evaluation compares the total acreage of TRK property to the acreage of the benchmark airports to supplement the hangar rate analysis study. The total acreage of TRK property is 2,280 acres. **Figure 8** presents the comparison of airport property acreage to TRK and is broken down between competitive and comparison benchmark airports. TRK is at the top of the range of the comparison airports and approximately the middle of the competitive airports.

**Figure 8** COMPARISON OF TRK PROPERTY ACREAGE TO PROEPRTY ACREAGE OWNED BY BENCHMARK AIRPORTS



Source: Mead & Hunt and FAA.

## Total Operations and Based Aircraft

All airport infrastructure is designed to accommodate the aircraft fleet mix operating and based at an airport. This includes runways, taxiways, aprons, and aircraft parking and storage facilities. Annual operations and based aircraft at TRK, as well as at selected competitive and comparison benchmark airports, were evaluated to provide additional data for the aeronautical facility rate study included in this report.

Annual operation totals were pulled from the FAA Terminal Area Forecast (TAF) database. The TAF takes historical operation data reported by the airport and develops a forecast that will be used to supplement budgetary and planning efforts for future developments. The last reported year of operational data is 2023. According to the TAF, TRK had a total of 35,000 operations in 2023. **Figure 9** presents a comparison of the total number of TRK operations to the competitive and comparison benchmark airports.

**Figure 9** COMPARISON OF TRK TOTAL OPERATIONS TO TOTAL OPERATIONS AT BENCHMARK AIRPORTS



Source: Mead & Hunt and FAA.

An evaluation of total based aircraft broken down by aircraft types at TRK and each benchmark airport was also conducted. Based aircraft information was taken from the airport master record (AMR) of the respective airport, a document with information inventoried by the airport and published in the FAA’s Airport Data and Information Portal (ADIP). TRK has a 158 total based aircraft and are broken down as follows:

- Single engine aircraft – 138
- Multi-engine aircraft – 10
- Jet aircraft – 8
- Helicopter – 2

**Figure 10** presents a comparison of total based aircraft at TRK and the benchmark airports.

**Figure 10** COMPARISON OF TRK TOTAL BASED AIRCRAFT TO TOTAL BASED AIRCRAFT AT BENCHMARK AIRPORTS



Source: Mead & Hunt and FAA.

### Instrument Approach Procedure Minimums

Instrument approach procedures (IAP) establish pre-determined approach routes and weather minimums to allow aircraft to land at an airport when weather conditions prevent a visual approach under visual flight rules (VFR). To use these approaches, the pilot of the aircraft must be rated to fly under instrument flight rules (IFR), and the aircraft must be properly equipped to operate under IFR.

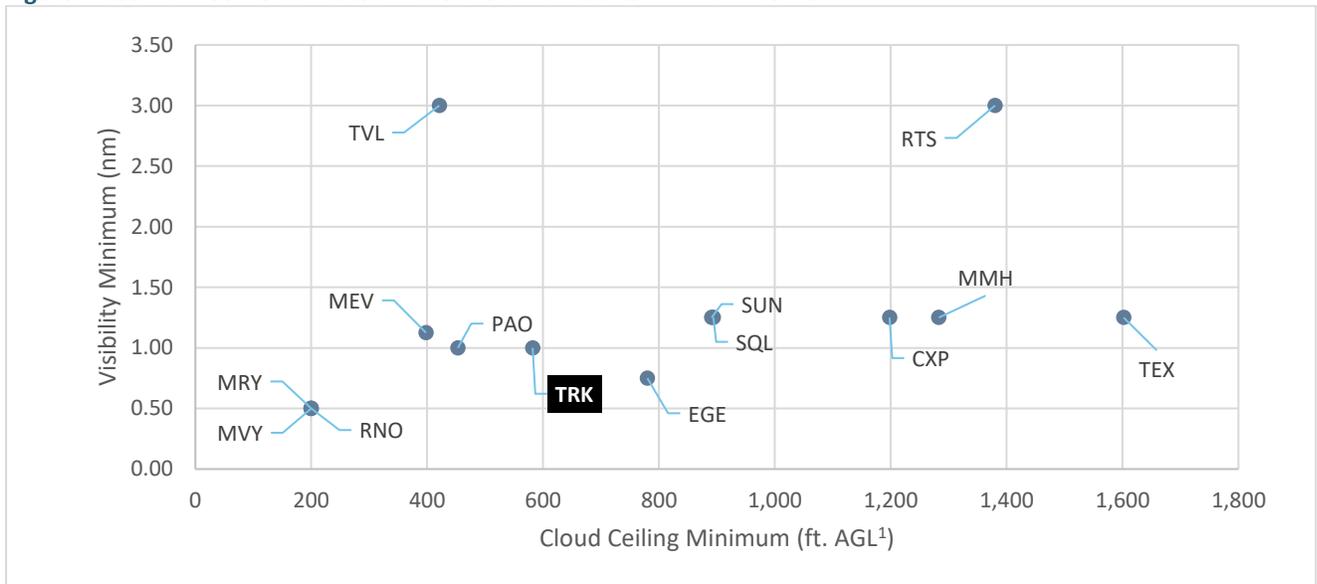
This guidance is provided through ground and satellite-based tools that place the aircraft in a position for the flight crew to visually identify the runway up to specified cloud ceiling and visibility minimums. These minimums vary by approach.

At airports such as TRK situated among mountainous terrain, cloud ceiling and visibility minimums are higher than at airports without terrain obstacles. This can affect the total number of daily operations as airports with lower minimums tend to have better utility.

For this study, IAPs with the lowest cloud ceiling and visibility minimums were evaluated. At TRK, the IAP with the lowest minimums is published for Runway 20, with a cloud ceiling of 582 feet and a visibility minimum of 1.0 miles. However, this approach is to Runway 20, which has a length of 4,654 feet. The IAP minimums to Runway 11, which is 7,001 feet long, are higher. Generally, if conditions require IFR flight, aircraft will fly the Runway 20 approach and circle to land on Runway 11 if they need the longer runway.

Minimums necessary to execute the circling approach are a 1,216 foot cloud ceiling and 1.25 miles of visibility. **Figure 11** presents a comparison of the best IAPs at each study airport. TRK’s minimums fall in the middle of the benchmark airports. They are better than many of the minimums at mountainous airports, but, as previously described, come with some additional operating limitations.

**Figure 11** COMPARISON OF TRK BEST IAP TO BEST IAP AT BENCHMARK AIRPORTS

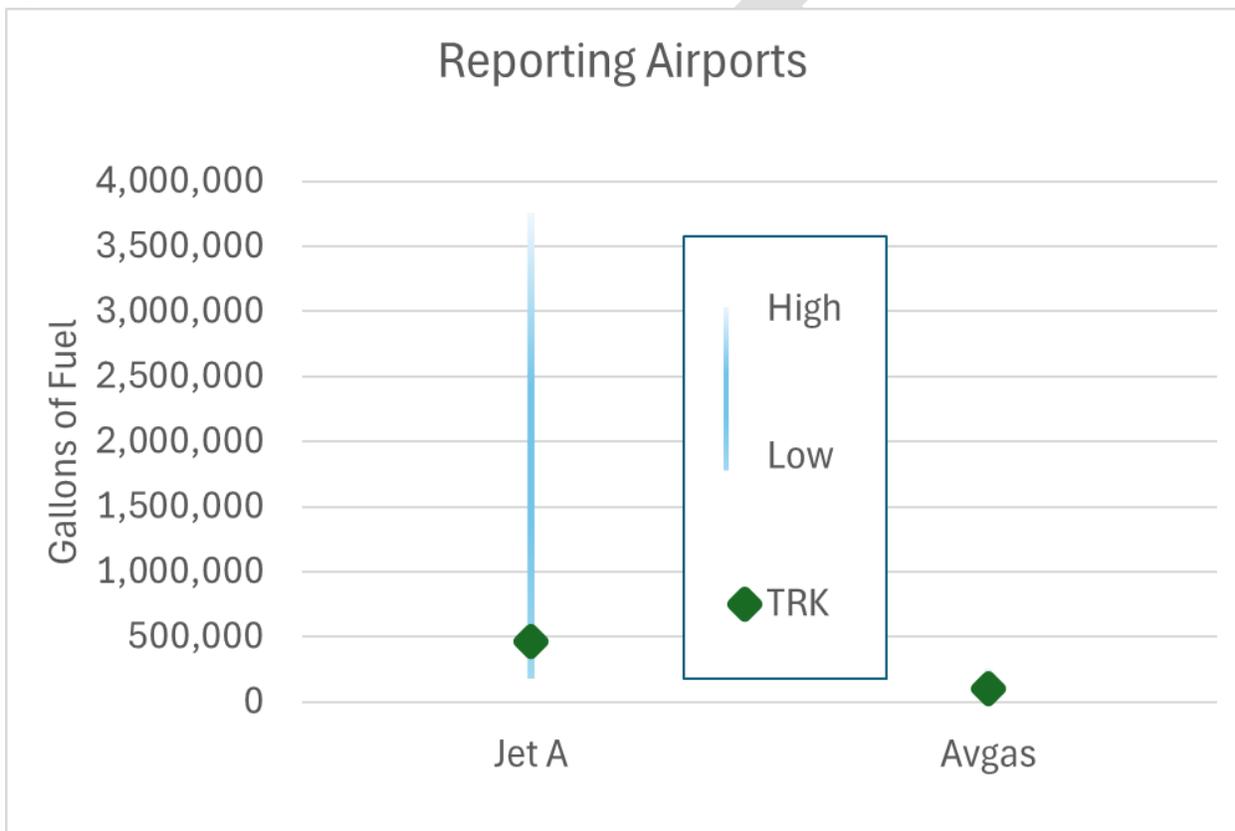


**Note:** <sup>1</sup>Above ground level  
**Source:** FAA ADIP

### Fuel Volumes Sold

The volume of fuel sold at an airport is often used as a point of comparison. **Figure 12** shows how TRK’s fuel volumes sold during 2024 compared to the benchmark airports that reported their data. The chart illustrates how airports tend to sell substantially more jet fuel than avgas. It also shows that the high volume of jet fuel sold is due to scheduled commercial airline operations at Reno-Tahoe International and Friedman Memorial Airports.

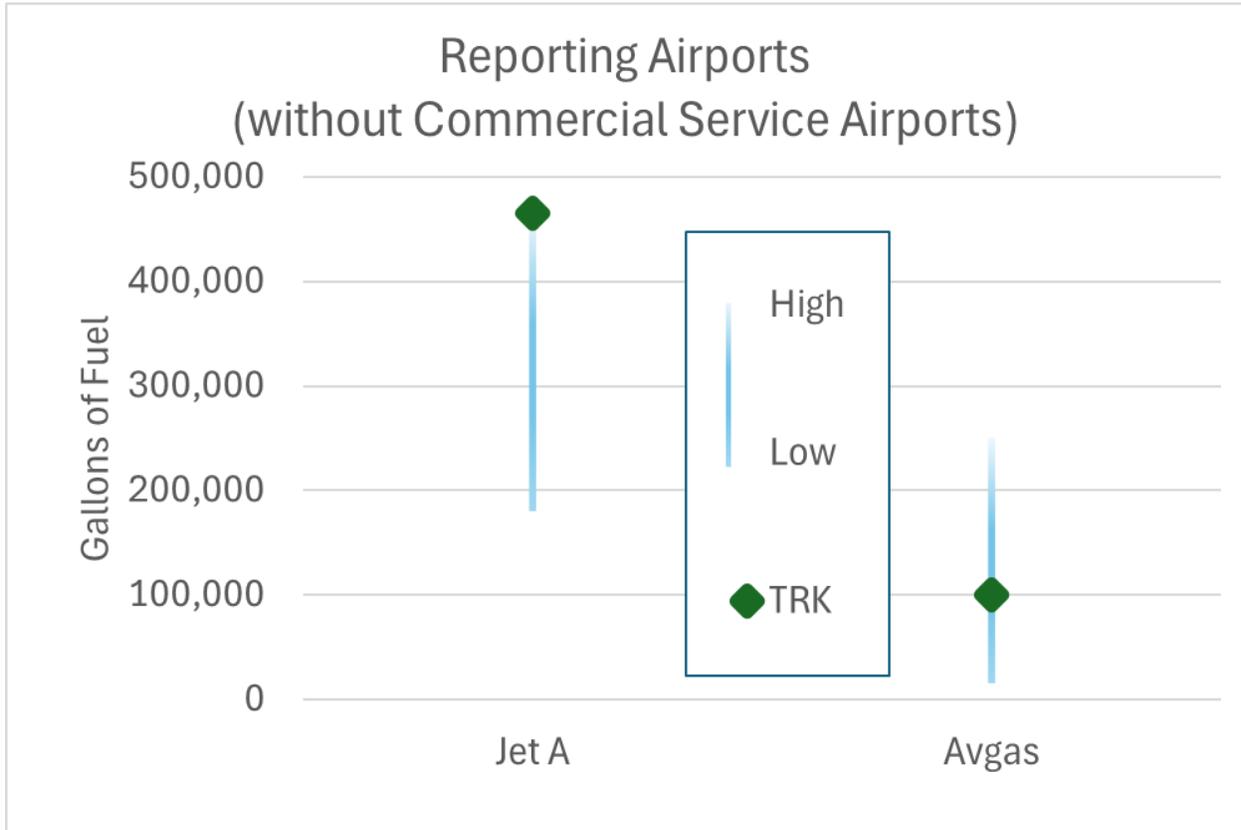
**Figure 12** COMPARISON OF TRK FUEL VOLUME SOLD TO FUEL VOLUME SOLD AT BENCHMARK AIRPORTS



**Source:** Truckee Tahoe, Minden-Tahoe, Reno-Tahoe International, Reno/Stead, South Lake Tahoe, Martha’s Vineyard, San Carlos, and Friedman Memorial Airports.

If the data from Reno-Tahoe International and Friedman Memorial Airports are removed, as depicted in Figure 13, TRK compares more favorably. TRK’s jet fuel sales are at the high end of the jet fuel range and solidly in the middle of the avgas fuel range.

**Figure 13** COMPARISON OF TRK FUEL VOLUME SOLD TO FUEL VOLUME SOLD AT GENERAL AVIATION BENCHMARK AIRPORTS



Source: Truckee Tahoe, Minden-Tahoe, Reno/Stead, South Lake Tahoe, Martha’s Vineyard, and San Carlos Airports.

## Data Collection and Analysis

To estimate market rents, obtaining current hangar lease rates and hangar parameters from the benchmark airports was necessary. To allow for consistent comparisons, all lease rates are expressed in units of per square foot per month. Unless otherwise noted, financial results are reported in 2025 dollars.

As described previously, 13 benchmark airports were selected for comparison to TRK. These airports were contacted and asked to provide data needed for the comparative analysis. Out of the 13 benchmark airports, nine were able to provide hangar data by the study deadline. Four of the five competitive airports responded, and five of the eight comparison airports submitted data.

**Table 3** shows the breakout of hangar datapoints from the responding airports, where each datapoint corresponds to a hangar unit with lease rate and other data. The data is categorized into hangars reported under a building lease and hangars under a ground lease. The data is further split between T-hangars and box hangars. Most noticeable is that, at the competitive airports, most T-hangars are leased under a building agreement, while box hangars make greater use of ground leases. In contrast, the comparison airports showed that both T-hangars and box hangars made more use of ground leases than building leases. Anecdotal evidence indicates this is driven in part by T-hangar condominium associations, which tend to be popular at resort airports. T-hangar condominium associations are groups of aircraft owners that band together to secure a ground lease and then collectively construct a T-hangar facility where each aircraft owner has their own T-hangar unit.

Since TRK relies on building leases, only the data pertaining to building leases was used for the analysis.

**Table 3** NUMBER OF HANGAR DATAPPOINTS AT BENCHMARK AIRPORTS

Lease Type	Competitive Airports		Comparison Airports		Total
	T-Hangars	Box Hangars	T-Hangars	Box Hangars	
<b>Building Leases</b>	171	11	28	8	218
<b>Ground Leases</b>	27	153	86	21	287
<b>Total</b>	198	164	114	29	505

Source: Mead & Hunt.

The analysis of hangar lease rates is based on five categories of hangars used by TRK. To compare these categories to similar benchmark airport hangars, the study team to defined each category as follows:

- Small T-hangars – a T-hangar under 1,200 square feet in size. These hangars typically have hangar doors less than 44 feet in width and accommodate smaller piston aircraft.

- Medium T-hangars – a T-hangar between 1,200 and 1,600 square feet in size. These hangars typically have hangar doors between 44 and 48 feet in width and can accommodate larger piston aircraft and some smaller turbine aircraft.
- Large T-hangars – a T-hangar of 1,600 square feet in size or larger. These hangars typically have hangar doors wider than 48 feet in width and can accommodate most turbine aircraft and even small jets, such as the Cirrus Vision SF50 Jet.
- Executive hangars – a box hangar under 4,100 square feet in size. These hangars typically have hangar doors up to 60 feet in width.
- Super Executive hangars – a box hangar of 4,100 square feet or larger in size. These hangars typically have hangar doors wider than 60 feet.

There is no industry standard definition for these categories. The square footage numbers shown were selected to obtain a distribution of hangars among the benchmark airports that was similar to the distribution of hangars at TRK.

### MEASURES OF CENTRAL TENDENCY

One way to characterize a set of data is to describe it using measures of central tendency. Measures of central tendency are statistical values that show how a dataset is distributed. For this analysis, the measures used to describe central tendency are the mean, median, standard deviation, low, high, and range. Each is explained below.

**Mean.** The arithmetic average of a set of data.

**Median.** The middle value of a dataset when the data is listed from low to high. Differences between the mean and the median indicate whether a dataset is skewed or normally distributed.

**Standard Deviation.** A measure of how much individual data points in a set differ from the mean of that set.

**Low.** The lowest value in the dataset.

**High.** The highest value in the dataset.

**Range.** The difference between the high and low values.

The measures of central tendency for TRK's hangars, as classified by TRK, are shown in **Table 4**.

**Table 4 MEASURES OF CENTRAL TENDENCY FOR TRK HANGAR LEASE RATES (Monthly per sq. ft.)**

Hangar Type	Mean	Median	Std. Dev.	Low	High	Range
Small T	\$0.43	\$0.43	\$0.0012	\$0.42	\$0.43	\$0.01
Medium T	\$0.43	\$0.43	\$0.0027	\$0.42	\$0.44	\$0.02
Large T	\$0.44	\$0.43	\$0.0026	\$0.43	\$0.44	\$0.01
Executive	\$0.56	\$0.56	\$0.0027	\$0.55	\$0.56	\$0.01
Super Executive	\$0.80	\$0.81	\$0.0179	\$0.76	\$0.80	\$0.04

Source: Truckee Tahoe Airport.

The values shown in **Table 4** consider applicable utility charges and a safety discount available to hangar tenants. Among the T-hangars at TRK, there is very little variation in these measures. TRK sets the lease rate for T-hangars at \$0.475 per square foot per month and charges a flat \$25 monthly utility fee. The monthly safety discount is \$75. Variations in T-hangar size account for the slight differences in these measures.

Executive hangars at TRK have a monthly per square foot lease rate of \$0.5724 with a \$35 monthly utility fee and the same \$75 safety discount that is available to the T-hangar tenants. The Super Executive hangars all have a fixed monthly lease fee of \$3,408, regardless of hangar size. Super Executive hangars have no utility fee but are eligible for the monthly \$75 safety discount.

The next two tables show the measures of central tendency for the competitive (**Table 5**) and comparison airports (**Table 6**), respectively. For both of these tables, only data from hangars leased under a building agreement is shown, since TRK relies exclusively on building leases.

No data is shown for the Super Executive classification of hangars in the competitive airport table (**Table 5**) since no hangars under a building lease met the definition of a Super Executive hangar. Hangars as large as Super Executive hangars tend to be developed under ground lease agreements. **Table 5** shows the measures for the four competitive airports that provided data.

**Table 5 MEASURES OF CENTRAL TENDENCY FOR COMPETITIVE AIRPORT HANGAR LEASE RATES (Monthly per sq. ft.)**

Hangar Type	Mean	Median	Std. Dev.	Low	High	Range
Small T	\$0.57	\$0.45	\$0.24	\$0.41	\$0.96	\$0.55
Medium T	\$0.50	\$0.38	\$0.25	\$0.35	\$0.96	\$0.61
Large T	\$0.37	\$0.38	\$0.03	\$0.32	\$0.54	\$0.22
Executive	\$0.96	\$0.96	\$0.00	\$0.96	\$0.96	\$0.00
Super Executive	No Data					

Source: Minden-Tahoe, Reno-Tahoe International, Reno/Stead, and South Lake Tahoe Airports.

**Table 6** shows the measures for the five comparison airports that provided data.

**Table 6 MEASURES OF CENTRAL TENDENCY FOR COMPARISON AIRPORT HANGAR LEASE RATES (Monthly per sq. ft.)**

Hangar Type	Mean	Median	Std. Dev.	Low	High	Range
Small T	\$0.76	\$0.72	\$0.10	\$0.70	\$0.94	\$0.24
Medium T	\$0.88	\$0.82	\$0.08	\$0.79	\$1.00	\$0.22
Large T	\$0.87	\$0.85	\$0.05	\$0.85	\$0.96	\$0.12
Executive	\$0.86	\$0.90	\$0.18	\$0.60	\$1.04	\$0.44
Super Executive	\$0.98	\$0.96	\$0.12	\$0.88	\$1.14	\$0.26

Source: Mammoth Yosemite, Martha’s Vineyard, Palo Alto, San Carlos, and Friedman Memorial Airports.

To illustrate the variation in lease rates at the airports that reported data, the mean monthly per square foot lease rate for T-hangars and box hangars is shown in **Table 7**. This table also demonstrates the degree to which airports use ground leases for hangar development, especially for box hangars.

**Table 7 AVERAGE HANGAR LEASE RATES UNDER BUILDING LEASES BY AIRPORT (Monthly per sq. ft.)**

ID	Airport	Average Monthly per Sq. Ft. Lease Rate	
		T-Hangar	Box Hangar
<b>TRK</b>	<b>Truckee-Tahoe</b>	<b>\$0.43</b>	<b>\$0.64</b>
<b>Competitive Airports</b>			
MEV	Minden-Tahoe	\$0.39	No Building Leases
RNO	Reno-Tahoe International	\$0.41	No Building Leases
RTS	Reno/Stead	No T-Hangars	No Building Leases
TVL	South Lake Tahoe	\$0.93	\$0.96
<b>Comparison Airports</b>			
MMH	Mammoth Yosemite	No Building Leases	No Building Leases
MVY	Martha’s Vineyard	No Building Leases	No Building Leases
PAO	Palo Alto	\$0.96	\$0.98
SQL	San Carlos	\$0.84	No Box Hangars
SUN	Friedman Memorial	No Building Leases	\$0.75

Source: Truckee Tahoe, Minden-Tahoe, Reno-Tahoe International, Reno/Stead, and South Lake Tahoe, Mammoth Yosemite, Martha’s Vineyard, Palo Alto, San Carlos, and Friedman Memorial Airports.

To evaluate how TRK’s lease rates compare to the sample of building leases in the database, TRK’s average T-hangar lease rate was compared to the mean and median lease rates of all benchmark airport T-hangars, as shown in **Table 8**. TRK’s mean lease rate is below the benchmark airport’s mean, but above the median value, resulting in an ambiguous comparison. To arrive at a more certain comparison, the midpoint between the mean and the median of the benchmark airports was compared to the TRK mean and median, which were the same. **Table 8** shows that this midpoint measurement is 11.6 percent above the TRK lease rate.

**Table 8** COMPARISON BETWEEN ALL BENCHMARK AIRPORT T-HANGAR LEASE RATES AND TRK T-HANGARS  
(Monthly per sq. ft.)

Hangar Type	Mean	Median	Midpoint between Mean and Median
Benchmark Airport T-Hangars	\$0.56	\$0.41	\$0.48
TRK T-Hangars	\$0.43	\$0.43	\$0.43
Percent Change	29.2%	-6.1%	11.6%

Source: Mead & Hunt.

**Table 9** illustrates how TRK’s Executive hangar lease rate compares with the mean and median of the benchmark airports. Again, to reconcile differences between the mean and median lease rates of the benchmark airports, the midpoint between the two was used to show that it is 68.5 percent above TRK’s Executive hangar lease rate.

**Table 9** COMPARISON BETWEEN ALL BENCHMARK AIRPORT BOX HANGAR LEASE RATES AND TRK EXECUTIVE HANGARS  
(Monthly per sq. ft.)

Hangar Type	Mean	Median	Midpoint between Mean and Median
Benchmark Airport Executive Hangars	\$0.93	\$0.96	\$0.95
TRK Executive Hangars	\$0.56	\$0.56	\$0.56
Percent Change	66.3%	70.7%	68.5%

Source: Mead & Hunt.

This analysis was repeated for the Super Executive hangars at TRK, and as shown in **Table 10**, the benchmark airports have a midpoint lease rate that is 21.0 percent higher than the TRK Super Executive hangar lease rate.

**Table 10** COMPARISON BETWEEN ALL BENCHMARK AIRPORT BOX HANGAR LEASE RATES AND TRK SUPER EXECUTIVE HANGARS (Monthly per sq. ft.)

Hangar Type	Mean	Median	Midpoint between Mean and Median
Benchmark Airport Super Executive Hangars	\$0.98	\$0.96	\$0.97
TRK Super Executive Hangars	\$0.80	\$0.81	\$0.80
Percent Change	23.4%	18.7%	21.0%

Source: Mead & Hunt.

## LEASE RATE ADJUSTMENTS

This section analyzes lease rates at benchmark airports for links with various hangar characteristics to develop reasonable adjustments to base lease rates.

For most characteristics, the average lease rate of hangars under building leases was compared to the average lease rate of hangars without the characteristic.

A good number of these characteristics lacked sufficient data to analyze. For example, none of the T-hangars under a building lease reported having heating or air conditioning, so it was not possible to compare the average lease rate at a T-hangar with these features. Similarly, every T-hangar reported having electrical service, so it was not possible to compare lease rates with a sample of T-hangars that lacked electric service. Even when hangars reported having and not having the characteristic, if the sample size was insufficient to establish a reliable average, the analysis was evaluated as inadequate. In some cases, benchmark airports were unable to provide the requested data by the study deadline.

**Table 11** lists the hangar characteristics analyzed with this method, denotes which characteristics lacked sufficient data, and indicates the difference in lease rates between hangars with and without the characteristic.

As the table shows, the analysis indicated that hangars with water/sewer service called for a much higher T-hangar lease rate, and a marginally higher box hangar lease rate. The data for T-hangars reflects a lease rate that includes water/sewer charges, which partially accounts for the higher lease rate. In contrast, the box hangar data included only leases where the lease rate did not include charges for water/sewer service (the tenant paid for it outside of the hangar lease rate), so the marginal increase reflects the incremental value tenants place on a box hangar with water/sewer service over a box hangar without the service.

The other hangar characteristics that generated a higher lease rate consisted of internet service and T-hangars at airports with air traffic control towers (ATCT).

**Table 11** DIFFERENCE IN LEASE RATES BASED ON HANGAR CHARACTERISTICS

Hangar Characteristic	T-Hangars	Box Hangars
Water/Sewer	79.3%	5.5%
Internet Service	Insufficient data	4.1%
Airport with ATCT	5.6%	Insufficient data
Part 139 Airport	Insufficient data	
Door Style	Insufficient data	
Wing Box	Insufficient data	
Floor Type	Insufficient data	
Heating (1)	Insufficient data	
Air Conditioning (1)	Insufficient data	
Electric Service (2)	Insufficient data	
Hangar Insulation (3)	Insufficient data	
Hangar Materials (4)	Insufficient data	

**Notes:**

- (1) The only hangars with heating or air conditioning were on ground leases.
- (2) Only one hangar reported no electric service.
- (3) Only two hangars under a building lease reported having insulation, while most did not provide any data.
- (4) Of the hangars reporting construction materials, only seven indicated a material other than steel/metal.

**Source:** Mead & Hunt.

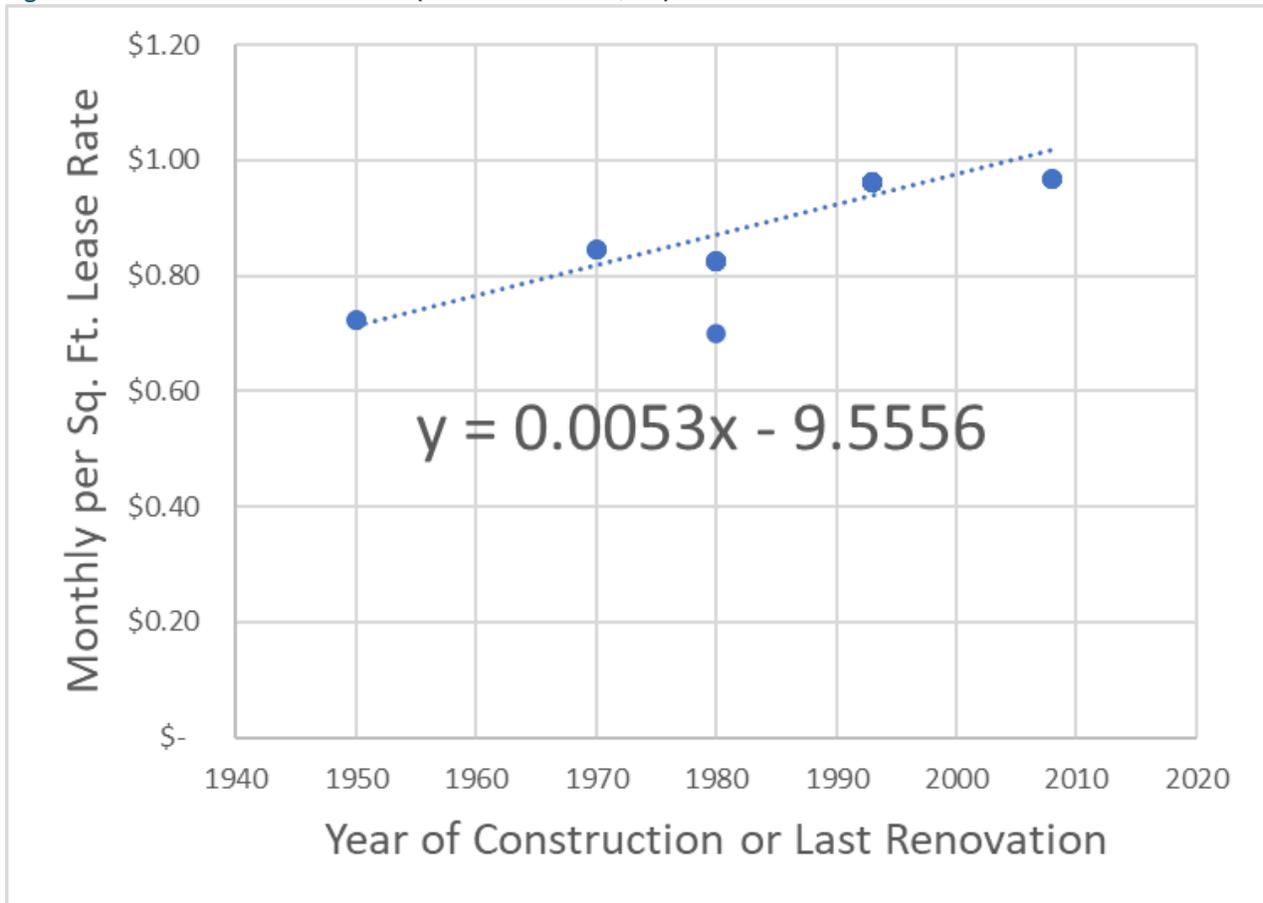
In addition to these hangar characteristics, this study assessed the impact of two other factors on lease rates – the age of the hangar since it was constructed or renovated, and door width.

A positive, direct relationship between hangar age (in terms of when the hangar was constructed or last renovated) and lease rate is evident in the **Figure 14** scatter plot. A correlation coefficient of 0.87 was calculated for the plotted data, confirming the linear relationship between the data sets. The best fit linear regression line is plotted among the data points, along with the formula for the line. To quantify the average change in lease rate based on the last year of renovation or construction of the hangar, the following formula is used:

$$[\text{slope of trend line (\$ per month per sq. ft.)}] \div [\text{average lease rate (per month per sq. ft.)}] \times [\text{ratio of covariance (correlation coefficient)}] = \text{percentage change per year since construction or last renovation}$$

$$[\$0.0053 \text{ per month per sq. ft.}] \div [\$0.43 \text{ per month per sq. ft.}] \times [0.87] = 1.1\% \text{ per year}$$

**Figure 14** SCATTER PLOT OF LEASE RATE (PER MONTH PER SQ. FT.) VERSUS YEAR OF CONSTRUCTION OR LAST RENOVATION



Source: Mead & Hunt.

The analysis of door width considered T-hangar doors in two categories – those with doors less than 44 feet wide, and those with doors from 44 to 48 feet wide. Insufficient data prevented an analysis of T-hangar doors greater than 48 feet, and box hangar door size. T-hangars with doors wider than 44 feet are capable of housing larger aircraft, such as small twin-engine aircraft.

**Table 12** COMPARISON BETWEEN T-HANGAR DOOR WIDTHS (Monthly per sq. ft.)

Hangar Door Width	Mean	Median	Midpoint between Mean and Median
Less than 44 feet	\$0.55	\$0.41	\$0.48
44 feet to 48 feet	\$0.67	\$0.82	\$0.75
Percent Change	22.6%	103.0%	56.9%

Source: Mead & Hunt.

As shown in **Table 12**, T-hangars with the wider door have lease rates that are 56.9 percent higher than T-hangars with smaller doors.

### AIR AMBULANCE EVALUATION

Data with which to evaluate air ambulance leases was not nearly as plentiful as hangar data. Out of the nine airports that responded with hangar data, only two were able to provide data on air ambulance commercial leases. Because of the limited information available, a quantitative evaluation is not possible. Instead, a qualitative evaluation details how each airport handles their respective air ambulance lease compared to the Care Flight air ambulance operation at TRK.

The two airports that provided data on their air ambulance lease were Friedman Memorial (SUN) and South Lake Tahoe (TVL).

The air ambulance service at SUN, Life Flight Network, operates under a ground lease, upon which is a 5,600 square foot box hangar for Life Flight Network's exclusive use. Life Flight Network also has exclusive use of ramp space for tying down its helicopter to permit more timely operations. The annual cost for this privilege is \$720. There are no charges for crew vehicle parking. Life Flight Network operates 24 hours a day, seven days a week from SUN.

CALSTAR Air Medical Services has a building lease with TVL for a 1,920-square-foot box hangar for storing its helicopter. It has exclusive use to this hangar, along with exclusive use of ramp space. There are no charges for crew vehicle parking. CALSTAR Air Medical Services operates 24 hours a day, seven days a week from TVL. CALSTAR Air Medical Services has self-fueling rights from a fuel truck.

The following section compares specific aspects of the air ambulance operations surveyed with TRK's air ambulance operation.

**Lease Rates** – TRK's air ambulance service pays a lease rate of approximately \$0.57 per month per square foot for hangar space, ramp space, vehicle parking, and office space. This is the same rate paid by other Executive hangar tenants. The air ambulance operator at SUN has a ground lease, so its lease rate isn't comparable. At TVL, the air ambulance operator pays a hangar lease rate of \$0.96. In all cases, the air ambulance operator has exclusive rights to the hangar.

**Lease Term** – TRK's air ambulance operator has a three-year lease with options to extend beyond the lease termination date. TVL's air ambulance operator works under a month-to-month lease.

**Office space/Crew quarters** – Both air ambulance operators at TRK and TVL have leased office/crew quarters space.

**Fueling Rights** – TRK’s air ambulance operator does not have any self-fueling rights listed in its lease, while TVL’s air ambulance operator does have self-fueling rights.

**Maintenance** – At both TRK and TVL, the airport is responsible for maintenance on the hangar. However, at TRK, the tenant is responsible for utilities and snow clearance, whereas at TVL the airport handles those responsibilities.

**Other Facilities** – Under the TRK lease, Care Flight has exclusive rights to ramp space for parking and flight operations. However, this space is not a certified final approach and take-off area for helicopters, as defined by the FAA. TVL’s air ambulance operator does have exclusive use of ramp space, including a dedicated helipad. The air ambulance service at SUN also has access to exclusive ramp space, for which it pays \$720 annually, but there is no dedicated helipad.

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## Recommended Market Rates

Using the analysis previously described, the study team developed the following recommended base market rates and lease rate adjustments for hangars. As explained previously, no recommendations were provided for air ambulance operations. The limited data did not allow reliable quantitative assessment.

### HANGAR MARKET RATES

**Table 13** lists the hangar categories at TRK, their current mean lease rate, recommended increase, and recommended 2025 market rate. The last column is the recommended lease rate for 2026, which takes into account a 3.4 percent increase based on forecast inflation. All of the T-hangars are recommended for an 11.6 percent increase to bring them up to a recommended 2025 market rate of \$0.53 per month per square foot. The adjustment to 2026 dollars makes the recommended 2026 market rate \$0.548.

**Table 13** RECOMMENDED BASE MARKET RATES (Monthly per sq. ft.)

Hangar Type	Current Actual Lease Rate	Recommended Percent Change	Recommended 2025 Market Rate	Recommended 2026 Market Rate
Small T	\$0.475	11.6%	\$0.530	\$0.548
Medium T	\$0.475	11.6%	\$0.530	\$0.548
Large T	\$0.475	11.6%	\$0.530	\$0.548
Executive	\$0.572	68.5%	\$0.964	\$0.997
Super Executive	\$0.800	21.0%	\$0.970	\$1.001

**Note:** 2026 market rate uses the change in the All Items West Urban-A CPI from December 2024 to September 2025 to estimate the adjustment to 2026 dollars.

**Source:** Mead & Hunt.

The Executive and Super Executive hangars have recommended increases that bring their 2026 monthly lease rates to \$0.997 and \$1.001 per square foot, respectively.

In addition to changes to the base lease rate, this study showed that certain hangar characteristics and environments command a premium on the lease rate. **Table 14** lists the hangar criteria that this study found to have a material change on the lease rate and are in addition to the recommended changes to the base rate. The table shows the percentage change (taken from the previous analysis and rounded to the nearest 5 percentage points) applied to the 2026 base rate. For example, since TRK has an ATCT, the table recommends that the base lease rate for T-hangars increase by 5 percent.

**Table 14 RECOMMENDED ADJUSTMENTS TO BASE MARKET RATES (Monthly per sq. ft.)**

Hangar Characteristic	T-Hangar	Box Hangar
Water/Sewer	80%	5%
Internet Service	No adjustment	5%
Airport with ATCT	5%	No adjustment
Door Width > 44 feet	55%	No adjustment
<b>For All Hangars</b>		
<b>Renovated Hangar</b>	1.1%	per year since last renovation or construction

Source: Mead & Hunt.

Table 15 illustrates how these recommended adjustments increase the 2026 base leasing rate for the five categories of hangars at TRK. The ATCT Adjustment column shows the recommended 5 percent increase for T-hangars. The remaining columns show the adjusted leasing rate, in 2026 dollars, and take into account the ATCT adjustment. For example, a T-hangar with a door wider than 44 feet has a 60 percent (5 percent for the ATCT and 55 percent for the wider door) adjustment to the 2026 base rate.

**Table 15 RECOMMENDED 2026 MARKET RATES WITH SPECIFIED ADJUSTMENTS (Monthly per sq. ft., in 2026 dollars)**

Hangar Type	2026 Base Rate	ATCT Adjustment	T-Hangars with Door Width > 44 Feet	Hangars with Water/Sewer Service	Hangars with Internet Service
Small T	\$0.548	\$0.575	\$0.877	\$1.014	\$0.575
Medium T	\$0.548	\$0.575	\$0.877	\$1.014	\$0.575
Large T	\$0.548	\$0.575	\$0.877	\$1.014	\$0.575
Executive	\$0.997	\$0.997	\$0.997	\$1.047	\$1.047
Super Executive	\$1.001	\$1.001	\$1.001	\$1.051	\$1.051

Source: Mead & Hunt.

It is recommended that TRK maintain its other charges and credits, namely the charge for electric service and the credit for the Fly Safe program.

The renovated hangar adjustment is a recommended increase applied after the hangar is renovated. For every year that has passed since the previous renovation, or since construction if this is the first renovation for the hangar, the base rate should increase by 1.1 percent.

## Summary

This study intended to assist TRK with determining market lease rates for its airport-owned hangar facilities. TRK wanted to examine a number of benchmark airports, split into two groups. The first group consisted of competitor airports that could possibly offer alternative locations for TRK aircraft owners to

base their aircraft. The second group consisted of comparison airports, selected by TRK on the basis of sharing similar properties with TRK.

The 13 benchmark airports were asked to provide hangar data, including lease rates and hangar characteristics, for analysis in this study. Nine airports were able to provide the requested data prior to the study deadline, and this information served as the database for the lease rate analysis portion of the study.

The lease rate analysis looked at both T-hangars and box hangars to determine where TRK's lease rates fell in comparison to the two groups of benchmark airports. Additional analysis evaluated different hangar characteristics to determine if any of them had a material impact on the lease rate.

Based on this analysis, the study recommended 2026 base market rates for each type of hangar at TRK. Additional adjustments to the base market rates were recommended for hangars that possessed certain characteristics, such as water/sewer service, or wider T-hangar doors.