

***2022 Airport Master Plan Study
Tooele Valley Airport / TVY***

INVENTORY DRAFT Version 2.0 – March 2022



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CHAPTER 1

INVENTORY OF EXISTING CONDITIONS

1.1 INTRODUCTION

The Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5070-6B Change 2, *Airport Master Plans*, provides guidance for the development of an airport master plan. Identifying existing conditions at Tooele Valley Airport (TVY) is the initial step in the master planning process. This step involves collecting data pertinent to the airport and the region it serves. The objective of this task is to provide background information for subsequent phases of analysis.

Development of the TVY Master Plan requires collection and evaluation of data relating to the airport and the surrounding area. This information was obtained through onsite investigations, interviews with airport management and users/stakeholders, and collection and analysis of previous reports and studies.

1.1.1 Airport Setting and Location

Tooele Valley Airport is located in Tooele County, five miles northwest of the City of Tooele, within the municipal boundary of Erda¹, Utah. The airport is located approximately 25 miles southwest of Salt Lake City International Airport (SLCIA) and west of the Oquirrh Mountains which create a geographic barrier between TVY and the population hub of the Salt Lake City (SLC) metropolitan area. The primary transportation corridor connecting the Tooele Valley region to SLC is Interstate 80 (I-80). Utah State Route 36, which runs through both Tooele City and Erda, connects the area east of TVY to I-80. State Route 179 (Midvalley Highway) connects the area west of TVY to I-80. The airport is primarily surrounded by undeveloped agricultural zoned land and sporadic low density residential development, however, over the last decade the area has begun to experience commercial and industrial development as well as encroaching suburban residential development expanding west from Stansbury Park. **Figure 1-1** shows the location of TVY in the region relative to other Salt Lake City Department of Airports (SLCDA) airports.

FIGURE 1-1
VICINITY MAP



Source: Esri; Prepared by RS&H, 2021

¹ Erda incorporated in 2021. <https://tooeleco.org/government/elected-officials/tooele-county-clerk/erda-incorporation-information>, December 6, 2021

1.1.2 Airport Background

The history of TVY stretches back to 1969 when the FAA sponsored a site selection study, conducted by the Tooele County Commission, which identified a site near Erda to be the home for Utah's newest airport. Construction of the airport began in the early 1970s and FAA activation was granted in July 1977. In 1991, Tooele County transferred ownership of TVY to Salt Lake City Corporation. Shortly after the transfer, Runway 17-35 was reconstructed and numerous improvements to taxiways and aprons were completed.

Previous master plans for TVY have been completed to define the airport's future development path. The first two TVY Master Plan studies took place in 1984 and 1993 and identified the need for a runway extension as well as related land acquisition. The 2000 Master Plan set the stage for the development of the instrument landing system. Today, TVY facilities serve a variety of general aviation operations including flight training, skydiving, and aerial firefighting.

While the airport setting is still relatively rural when compared to its counterparts in northern Utah, the recent establishment of business distribution centers and the Utah Motorsports Campus in the vicinity of the airport continues to attract airport users and increase airport operations. This growth is anticipated to increase, and even accelerate, as economic forces take hold in the area² and spur growth. Additionally, new housing developments continue to expand within the Tooele Valley area. One recently approved 246-acre development known as "Skywalk" abuts the northwestern boundary of airport property. This planned development includes phases for 684 high-density units, 186 townhomes, and 116 detached homes. Residential development within such close proximity to airport facilities is commonly understood to be incompatible. In addition to the proposed residential development, a large area of land of approximately 1,300 acres to the south and west of the airport is being proposed for manufacturing and commercial development.

1.1.3 Sustainability

The Environmental Protection Agency (EPA) describes sustainability as the basis for one guiding principle: "Everything that we need for our survival and well-being depends, either directly or indirectly, on our natural environment. To pursue sustainability is to create and maintain the conditions under which humans and nature can [co]exist in productive harmony to support present and future generations." Unfortunately, sustainability is often misinterpreted and over-simplified as an inflexible protection of the natural environment at any cost. However, sustainable development under real-world conditions requires a comprehensive approach with consideration of many factors. The complex nature of securing a sustainable future is why government agencies across the globe, including the FAA, are supporting airport planning initiatives that incorporate sustainable approaches.

According to FAA guidance reported in the December 17, 2012, *Report on the Sustainable Master Plan Pilot Program and Lessons Learned*, "Small airports should prioritize the economic pillar of sustainability more than larger airports that have more resources to pursue sustainability initiatives." This is especially true of general aviation airports which receive limited federal funding for capital improvement projects and don't have access to all the same project funding opportunities as commercial service airports.

² Retrieved from <http://tooeleonline.com/countys-population-continues-to-grow>, December 6, 2021

Despite funding constraints, federally obligated airports are still required to meet FAA Grant Assurance 24 which mandates that an airport “maintain a fee and rental structure for the facilities and services at the airport which will make the airport as self-sustaining as possible.” For these reasons, economic viability will be of substantial consideration throughout the master planning process.

1.2 ECONOMIC VIABILITY

Airports are mandated under FAA Grant Assurances to be “as self-sustaining as possible under circumstances existing at the particular airport³.” Therefore, while providing services and facilities for the public, TVY must maintain an organizational structure and business practices which optimize revenue generation, decrease overall costs, and provides capital suitable to, at the very minimum, cover operating costs and federal grant matches. As a general aviation airport, TVY does not have access to the same levels of federal funding as an airport offering scheduled commercial airline service. Instead, self-sustaining finances at TVY are reliant on lease revenues and airport user fees, such as fuel flowage fees. The following sections develop a baseline inventory of the conditions and facilities which influence or impact the economic viability of TVY.

1.2.1 Airport Ownership and Control

TVY is owned by the Salt Lake City Corporation and managed by the Salt Lake City Department of Airports⁴ under the guidance of the mayor of Salt Lake City and the Salt Lake City Council. As an enterprise department of Salt Lake City Corporation, SLCDCA requires no funding from property taxes, local government funds, or special district taxes. An established Advisory Board includes nine citizen volunteers appointed by the mayor to serve a four-year term and make recommendations to the mayor regarding airport rules and regulations, airport staff, construction and expansion, airport policy, and airport financial matters. As of this Master Plan, the Advisory Board includes one member from the Tooele County Commission.

In addition to TVY, the SLCDCA manages and operates Salt Lake City International Airport and South Valley Regional Airport (U42). Staff members of the SLCDCA manage operations across TVY, SLCIA, and U42.

Though the airport is owned by the city, it must still adhere to federal standards, as set forth by the FAA, to maintain compliance with safe operating practices. By receiving federal funding for capital improvement projects, the Airport has an obligation to adhere to federal grant assurance requirements. These assurances obligate SLCDCA to comply with applicable federal law and guidance under Code of Federal Regulations (CFR) Title 14, FAA Advisory Circulars, FAA Orders, and FAA Memos. SLCDCA compliance with FAA regulations is predominantly overseen by the FAA Denver Airports District Office (ADO), though some matters may reach the Northwest Mountain Region Airports Division office or FAA Airport Planning and Environmental Division Headquarters (APP-400) office, as necessary. State grant assurances also apply to funding received by the State of Utah. These require SLCDCA to follow applicable laws and guidance set by the State of Utah and the Utah Division of Aeronautics, a division of the Utah Department of Transportation (UDOT).

³ FAA Grant Assurance 24 – Fee and Rental Structure

⁴ Mentions of Salt Lake City Department of Airports, SLCDCA, or the Airport, in this document refer to ownership and management, while mentions of Tooele Valley Airport, TVY, or the airport, refer to infrastructure and facilities.

1.2.2 Airport Classification and Role

Several criteria have been established by various governing organizations to describe the role that an airport serves within the national, state, or local aviation system. The role of TVY can best be understood by how it is defined and designated by the FAA, UDOT, and the SLCDCA.

1.2.2.1 National Plan of Integrated Airports Systems

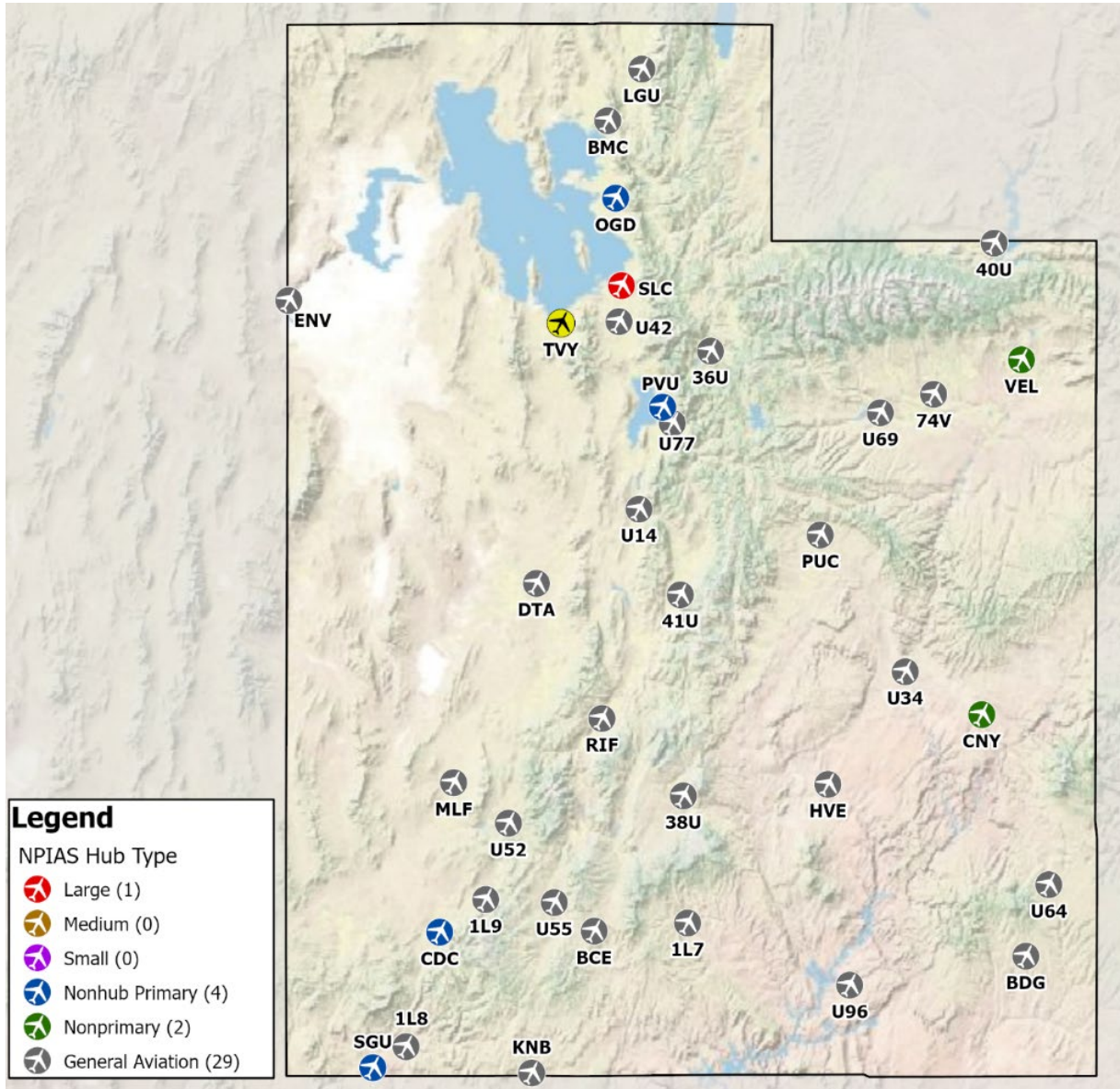
The FAA has identified in the National Plan of Integrated Airports Systems (NPIAS) approximately 3,400 airports in the United States that are significant to national air transportation and are eligible to receive federal grants under the Airport Improvement Program (AIP). The 2021-2025 NPIAS Report classifies airports as large-hub commercial service, medium-hub commercial service, small-hub commercial service, non-hub commercial service, nonprimary commercial service, reliever, or general aviation. With general aviation airports also classified as either national, regional, local, basic, or unclassified. Within this report, TVY is classified as a basic general aviation airport. As defined by the FAA, the role of a basic general aviation airport is the following:

“Links the community with the national airport system and supports general aviation activities, such as emergency response, air ambulance service, flight training, and personal flying. Most of the flying at basic airports is self-piloted for business and personal reasons using propeller-driven aircraft. They often fulfill their role with a single runway or helipad and minimal infrastructure.”

Other nearby airports within the immediate Salt Lake City metropolitan area include SLCIA (a large hub commercial service airport), South Valley Regional Airport (U42) (a general aviation reliever airport), and Wendover Airport (ENV) (a national general aviation airport). All Utah NPIAS airports are shown in

Figure 1-2.

FIGURE 1-2
UTAH NPIAS AIRPORTS



Source: Esri; Prepared by RS&H, 2021

1.2.2.2 Utah Department of Transportation

The UDOT prepares a Utah Continuous Airport System Plan, which classifies TVY as a general aviation regional airport. Within this plan, the role of a general aviation regional airport is defined as an airport that will:

“Serve primarily general aviation activity, including jet and multi-engine aircraft and provide access to major population centers.”

1.2.2.3 Salt Lake City Department of Airports

The role of TVY has been defined within the SLCDCA system based on the types of aviation services the airport is able to provide. The 2019 General Aviation Strategy outlined the following role for TVY:

“It is the role of Tooele Valley Airport to serve as a general aviation reliever airport primarily dedicated to the non-air carrier needs of recreational and business aviation. TVY will be developed and managed as a mixed-use facility that can accommodate a broad range of aircraft types and aviation uses including recreational, pilot instruction and training, sky diving, and public service flight activities.”

1.2.3 Airport Policies and Management

PLACEHOLDER

1.2.4 Financial Review

The following sections provide a brief review of basic financial information for TVY.

1.2.4.1 Revenues and Expenses

As part of the SLCDCA system of airports, TVY is financially supported by revenues at SLCIA. Since FY 2017, TVY has operated with an average net loss of approximately \$163,000 per year. This does not include estimated General and Administrative expenses which, when included, calculates to a greater net loss. Most of the Airport’s operating revenue has come from fuel sales and site leases, while the costliest expenses include salaries and benefits, fuel, supplies, and utility payments. **Table 1-1** shows the revenues and expenses of TVY between 2017-2021.

TABLE 1-1
REVENUES AND EXPENSES

Revenues and Expenses	Fiscal Year				
	2017	2018	2019	2020	2021
Operating Revenues					
Extraordinary Service Change	\$0	\$436	\$546	\$294	\$490
General Aviation Hangars	\$964	\$1,223	\$1,080	\$1,530	\$1,758
Leased Sites	\$41,685	\$34,145	\$33,555	\$27,938	\$42,017
Other	\$355	\$0	\$0	\$0	\$0
Fuel Sales	\$43,595	\$46,115	\$55,380	\$39,875	\$6,740
Total Operating Revenues	\$86,599	\$81,919	\$90,561	\$69,637	\$51,005
Operating Expenses					
Salaries	\$86,482	\$166,790	\$32,803	\$28,435	\$28,221
Benefits	\$42,711	\$79,309	\$18,479	\$12,242	\$12,207
Fuel	\$35,115	\$34,285	\$44,380	\$31,759	\$5,403
Airport Operations Supplies	\$85	\$0	\$0	\$0	\$0
Communication Equipment & Supplies	\$0	\$1,549	\$0	\$606	\$0
Paint & Painting Supplies	\$481	\$0	\$0	\$0	\$0
Carpentry Supplies	\$0	\$0	\$0	\$2,362	\$0
Other Construction M & S	\$0	\$1,365	\$1,265	\$51,507	\$0
Plumbing Supplies	\$0	\$0	\$0	\$15	\$358
Electrical Supplies	\$43,842	\$4,329	\$0	\$1,321	\$106
Electrical Supplies - Grounds	\$0	\$0	\$0	\$0	\$88
Road and Runway Supplies	\$189	\$163	\$0	\$0	\$0
Field Lighting Supplies	\$261	\$1,630	\$28,395	\$7,094	\$0
Janitorial Supplies	\$0	\$25	\$0	\$0	\$0
Mechanical Systems Supplies	\$0	\$0	\$0	\$2,540	\$116
Mechanical HVAC Supplies	\$0	\$3	\$1,172	\$290	\$0
License & Tags / Certificates	\$102	\$0	\$0	\$0	\$0
Small Tools & Equipment	\$506	\$130	\$0	\$0	\$0
Other Materials & Supplies	\$0	\$5	\$0	\$0	\$0
Other Professional & Tech Services	\$17,900	\$0	\$6,388	\$179,136	\$27,709
Electrical Power	\$17,629	\$18,596	\$17,467	\$23,353	\$27,162
Natural Gas	\$4,932	\$6,159	\$4,806	\$4,631	\$2,286
Building Maintenance Contracts	\$1,897	\$1,893	\$1,736	\$1,736	\$1,752
Other Maintenance Contracts	\$1,595	\$1,595	\$0	\$1,000	\$2,794
Waste Disposal	\$720	\$660	\$660	\$661	\$540
Other Contractual Payments	\$1,710	\$0	\$0	\$0	\$0
Professional Licensing Fees	\$0	\$0	\$0	\$0	\$30
Privilege Taxes	\$1,673	\$3,901	\$0	\$0	\$0
Total Expenses	\$257,830	\$322,387	\$157,551	\$348,688	\$108,772
Net Operating Gain (Loss)	(\$171,231)	(\$240,468)	(\$66,990)	(\$279,051)	(\$57,767)

Source: SLCD Records, 2021

Note: Estimated General & Administration expenses not included in table.

1.2.4.2 FAA Grant History

The Airport received two AIP Grants in 2009 to acquire land for instrument approaches totaling \$2,500,000. **Table 1-2** summarizes the federal grant history at TVY from 2005-2019.

**TABLE 1-2
FAA GRANT HISTORY**

Year	Total AIP	City Description of Work
2009	\$247,386	Acquire Land for Approaches
2009	\$2,252,614	Acquire Land for Approaches

Source: Federal Aviation Administration, 2021

1.2.4.3 Capital Improvement Plan

SLCDA maintains an existing Capital Improvement Program (CIP) that identifies projects expected to be implemented in the coming years. In the next 10 years, TVY is expected to receive over \$4 million through the means of federal AIP and state grants. However, future projects are not assured until the actual grants are issued. **Table 1-3** shows the three-year CIP for TVY. The existing CIP will be updated as part of this Master Plan.

**TABLE 1-3
CAPITAL IMPROVEMENT PLAN**

Year	Description	Total
2022	Pavement Preservation	\$166,667
2022	Airport Access Road Improvements	\$1,760,000
2022	Rehabilitate RWY 17/35	\$3,370,000
2024	Land Acquisition	\$500,000

Source: SLCDA Records, 2021

1.2.4.4 Rates and Charges

Based aircraft at TVY are stored in small box hangars or uncovered tie-downs on the apron. Lease rates for these options range from \$15 to \$30 per month per tie-down and from \$85 to \$150 per month for the small box hangars. **Table 1-4** shows the lease rates (monthly) for both options.

**TABLE 1-4
RATES AND CHARGES**

Storage	Per Month Fee
Tie-Downs	\$15-\$30
Box Hangars	\$85-\$150

Source: Airport Records, 2021

1.3 OPERATIONAL EFFICIENCY

Operational efficiency and maximizing resource utility are vital to the success of TVY as a public service airport. However, operational safety should not be compromised in favor of development which prioritizes efficiency. FAA offers recommendations and guidance to airports for geometric layout and engineering design of airfield facilities through Advisory Circulars including AC 150/5300-13A, *Airport Design*.

The following sections develop a baseline inventory of the conditions and facilities which influence or impact the operational efficiency of TVY.

1.3.1 Meteorological Conditions

Predominant weather conditions at the airport influence the ability for operations to take place effectively and consistently. Temperature, precipitation, winds, visibility, and cloud ceiling heights are elements used to understand the annual weather patterns for airport operations. TVY is located south of the Great Salt Lake, west of the Wasatch and Oquirrh mountain ranges, and east of the nearby Stansbury mountains, resulting in a semi-arid climate. The following is a summary of historical weather conditions in Tooele County as obtained from the National Oceanic and Atmospheric Administration (NOAA) station in Tooele, Utah.

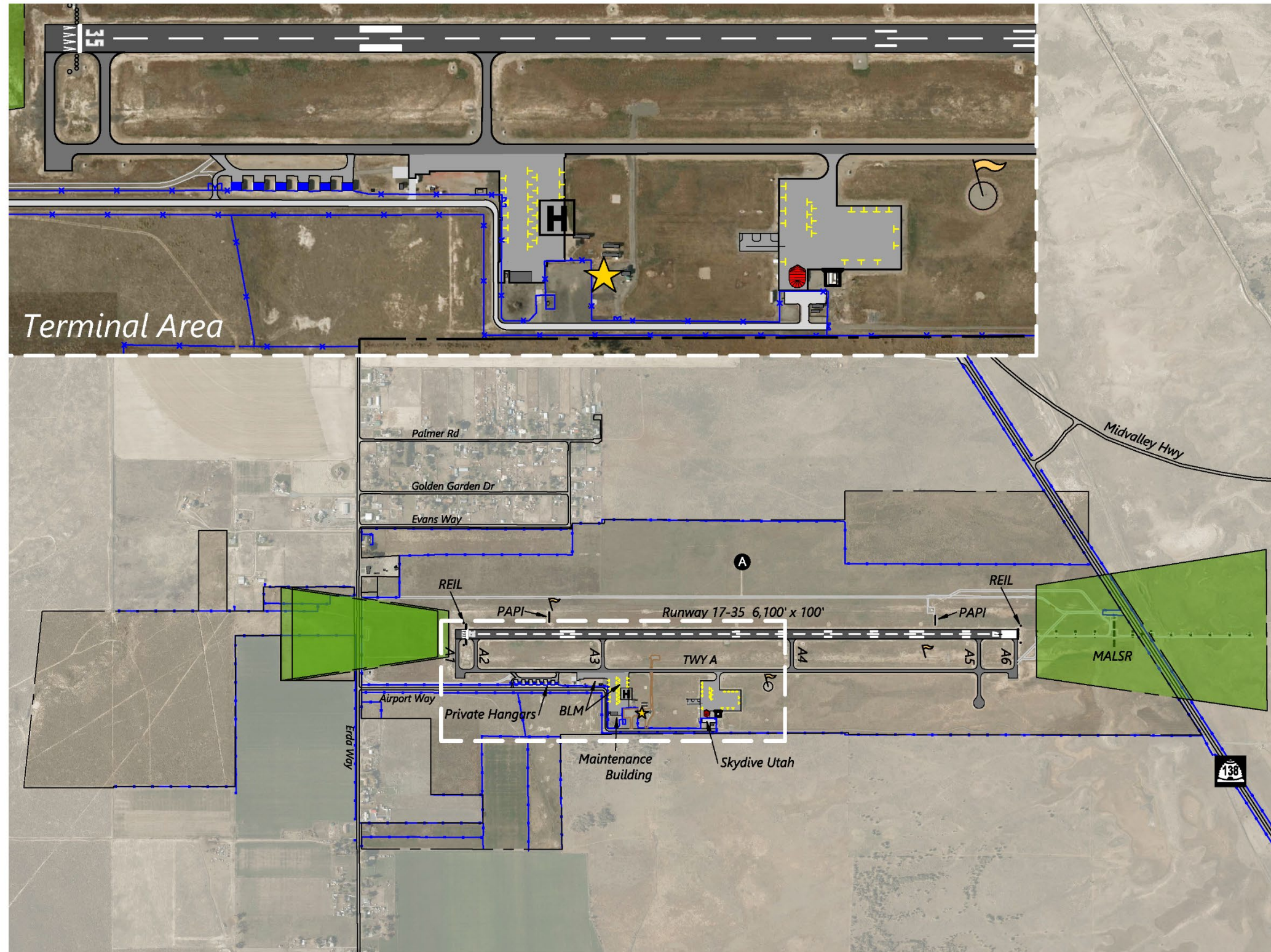
Between 1991 and 2020, the warmest month on average recorded by the weather station was July with an average high temperature of 91.4 degrees Fahrenheit and an average low temperature of 64.1 degrees Fahrenheit. The coldest month on average was December with an average high temperature of 38.5 degrees Fahrenheit and the average low temperature reaching 20.6 degrees Fahrenheit. On average, 4.4 days per year typically exceed 100 degrees Fahrenheit and 15.8 days have a high temperature that does not exceed 32 degrees Fahrenheit.

Within the same time frame, the month with the most precipitation was May, which averaged 2.35 inches. Total annual average precipitation for this period was 18.44 inches. In comparison, NOAA reported that the average annual precipitation for the contiguous U.S in 2020 was 30.28 inches. The month of lowest average precipitation has been August with 0.68 inches. On average, the month with the most snowfall was December, averaging 17.2 inches, with January and February close behind averaging 14.0 inches and 14.6 inches respectively. In total, 75.3 inches of snow per year were experienced between 1991 and 2020.

1.3.2 Airfield Facilities

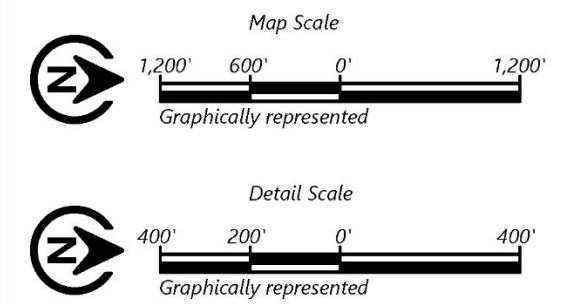
This section provides an inventory of airfield facilities, which includes the runway, taxiway, and apron systems as well as the condition of each. Additionally, this section will discuss navigational aids, lighting, and the airspace surrounding the airport. **Figure 1-3** provides an overview of the airfield at TVY.

FIGURE 1-3
AIRPORT OVERVIEW



TOOELE VALLEY AIRPORT OVERVIEW

- H** Helipad
- Property Boundary
- Private Hangars
- Skydive Utah
- Runway Protection Zone (RPZ)
- 🚩 Windcone
- 🕒 Windcone w/Segmented Circle
- Ⓐ AWOS
- ★ Beacon



Source: RS&H, 2021

1.3.2.1 Runway

TVY has a single runway, Runway 17-35, constructed of asphalt with a length of 6,100 feet and a width of 100 feet. The asphalt construction of the runway is designed to support a single wheel weight capacity of 30,000 pounds and a dual weight capacity of 43,000 pounds. The existing aircraft approach category (AAC) for the runways is C (between 121 and 140 knots), and the existing design group is II (wingspan 49 feet to below 79 feet and tail height 20 feet to below 30 feet). A summary of the physical characteristics of Runway 17-35 is shown in **Table 1-5**.

**TABLE 1-5
RUNWAY CHARACTERISTICS**

Runway Characteristics	17	35
True Heading	179°	359°
TORA/TODA/ASDA	6,100'	6,100'
LDA	6,100'	5,980'
Width	100'	100'
Aircraft Approach Category (AAC)	C	C
Design Group	II	II
Pavement Surface	Asphalt	Asphalt
Single Wheel Weight Capacity	30,000 lbs.	30,000 lbs.
Dual Wheel Weight Capacity	43,000 lbs.	43,000 lbs.
Runway Markings	Precision	Visual
Approach Type	ILS	Visual
Visibility Minimums	<3/4 Mile	>1 Mile

Note: TORA=Takeoff Distance Available, TODA=Takeoff Run Available, ASDA=Accelerate Stop Distance, LDA=Landing Distance Available, ILS=Instrument Landing System
Source: SLCDA Records; FAA ADIP, 2021

1.3.2.2 Taxiway

The taxiway system at TVY consists of one parallel taxiway, six connector taxiways, and aircraft parking aprons. Taxiway A is a parallel taxiway to Runway 17-35 and serves as the main circulation route for the airport. Taxiways A1, A2, A4, and A5 serve as connections between Runway 17-35 and Taxiway A, while Taxiway A3 serves as a connection to a midfield apron area. **Table 1-6** shows a summary of characteristics for each taxiway at the airport.

TABLE 1-6
TAXIWAY CHARACTERISTICS

Taxiway Designator	Width	Type
A	35'	Parallel Taxiway for RWY 17-35
A1	35'	Connection Taxiway for RWY 17-35
A2	35'	Connection Taxiway for RWY 17-35
A3	35'	Connection Taxiway for Northern Apron Area
A4	35'	Connection Taxiway for RWY 17-35
A5	35'	Connection Taxiway for RWY 17-35

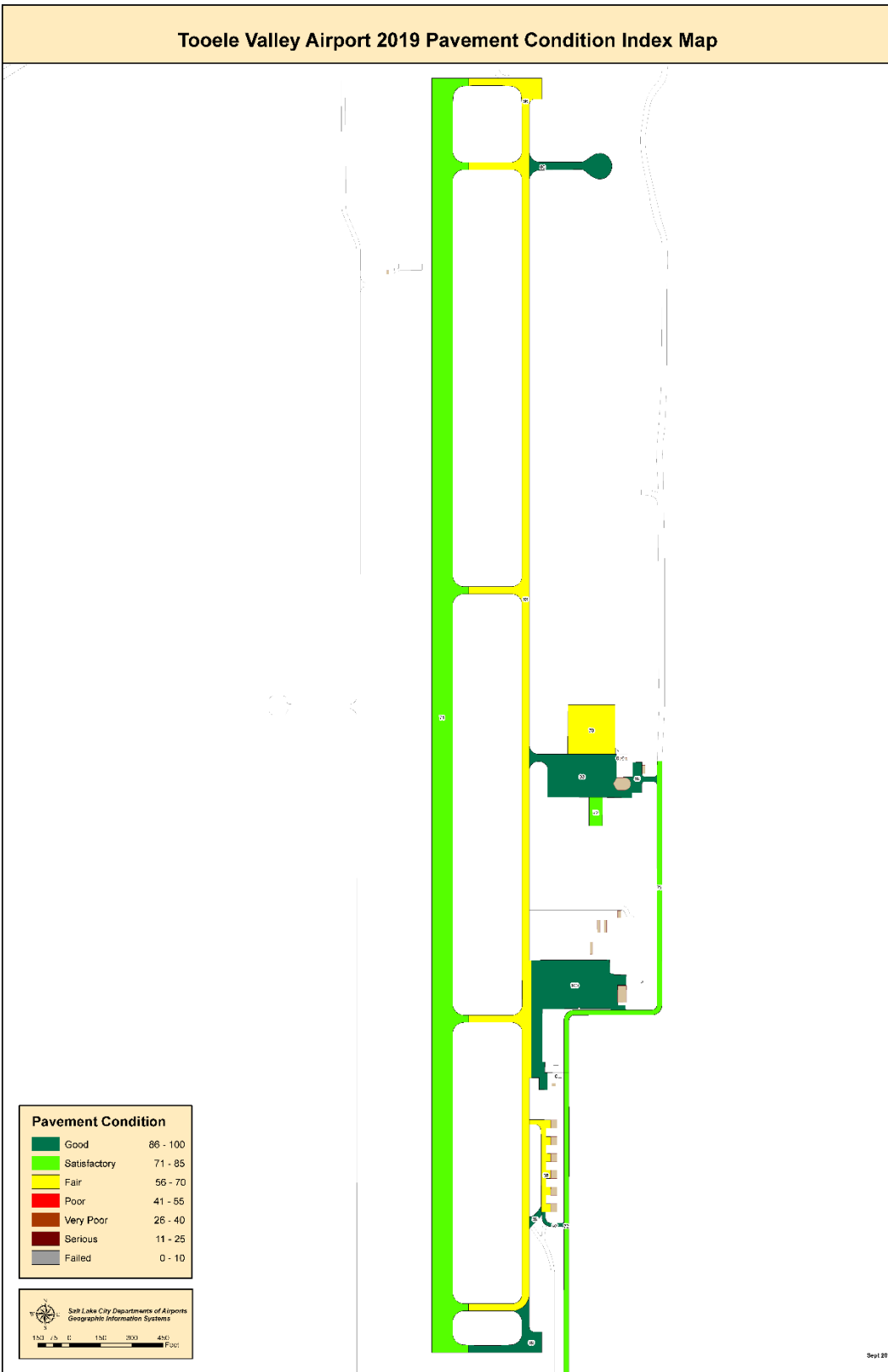
Source: SLCD, 2021

1.3.2.3 Pavement

SLCDA conducts pavement condition index (PCI) surveys at TVY every few years with the most recent survey performed in 2019. The PCI is a visual analysis of the existing pavement surface conditions and serves as the baseline for progressive five-year PCI projections. PCI values range from 0, representing pavement that has failed and is no longer usable, to 100, which represents new pavement in pristine condition. The PCI values are further broken-down into a numeric index indicating the type of pavement repair anticipated, including reconstruction (0 to 25), major rehabilitation (25 to 55), or preventative maintenance (55 to 100).

The airport's paved airfield surfaces include pavement conditions ranging from good to fair. Runway 17-35 is asphalt in satisfactory condition. The majority of Taxiway A is in fair condition, excluding the southern end of the taxiway which is in good condition. The apron is comprised of pavement in good, satisfactory, and fair condition because of a pavement rehabilitation completed in 2019. The runway, taxiway, and apron pavement conditions resulting from the PCI inspection are illustrated in **Figure 1-4**.

**FIGURE 1-4
PAVEMENT CONDITION**



Source: SLCD, 2021

1.3.2.4 Navigational Aids and Lighting

Navigational aids (commonly referred to as NAVAIDs) and lighting available at the airport include visual aids, electronic aids, and meteorological aids. Runway 17 is equipped with an instrument landing system (ILS), which was partially funded through an FAA grant in 2007. The ILS is beneficial to aircraft landing at the airport during periods of limited visibility as well as those conducting flight training operations, allowing pilots to become more familiar with this system. The instrument approaches available at TVY are shown in **Table 1-7**.

**TABLE 1-7
INSTRUMENT APPROACHES**

Instrument Approaches	Minimum Visibility	Decision Altitude (AGL)
Runway 17		
ILS or LOC RWY 17	1/2 SM	200'
RNAV (GPS) RWY 17	1/2 SM	200'
Runway 35		
No published instrument approaches		

Source: Published TVY instrument approach procedures effective 02 DEC 2021 to 30 DEC 2021;
Prepared by RS&H, 2021

TVY is also equipped with a remote transmitter/receiver (RTR) that enables air-to-ground communications allowing pilots to speak with SLC Air Traffic Control (ATC) while on the ground at TVY. Before 2019, radar coverage from SLC only extended approximately one mile north of the airport. However, a new radar system was installed in Tooele County in 2019 that effectively extended radar coverage to the airport.

Table 1-8 depicts the navigational aids available to pilots at TVY.

TABLE 1-8
NAVIGATIONAL AIDS

Navigational Aids	Runway	
	17	35
Visual Aids		
Lighting System	MIRL	MIRL
Approach Lighting	MALSR	REIL
Touchdown Zone Lighting	No	No
Visual Slope Indicator	PAPI	PAPI
Runway Markings	Precision	Visual
Runway Centerline Lights	No	No
Electronic Aids (Approaches)		
ILS or LOC	Yes	No
ILS CAT II-III	No	No
RNAV (RNP)	No	No
RNAV (GPS)	Yes	No
VOR/DME	No	No
Other Airport Aids		
AWOS	Yes	Yes
Rotating Beacon	Yes	Yes
RTR	Yes	Yes
Segmented Circle with Windcone	Yes	Yes

Notes: AWOS = Automated Weather Observation System, MIRL = Medium Intensity Runway Lighting, PAPI = Precision Approach Path Indicator, REIL = Runway End Identifier Lights, RNAV = Area Navigation, RTR = Remote Transmitter/Receiver.

Source: FAA Chart Supplements; FAA.gov, 2021

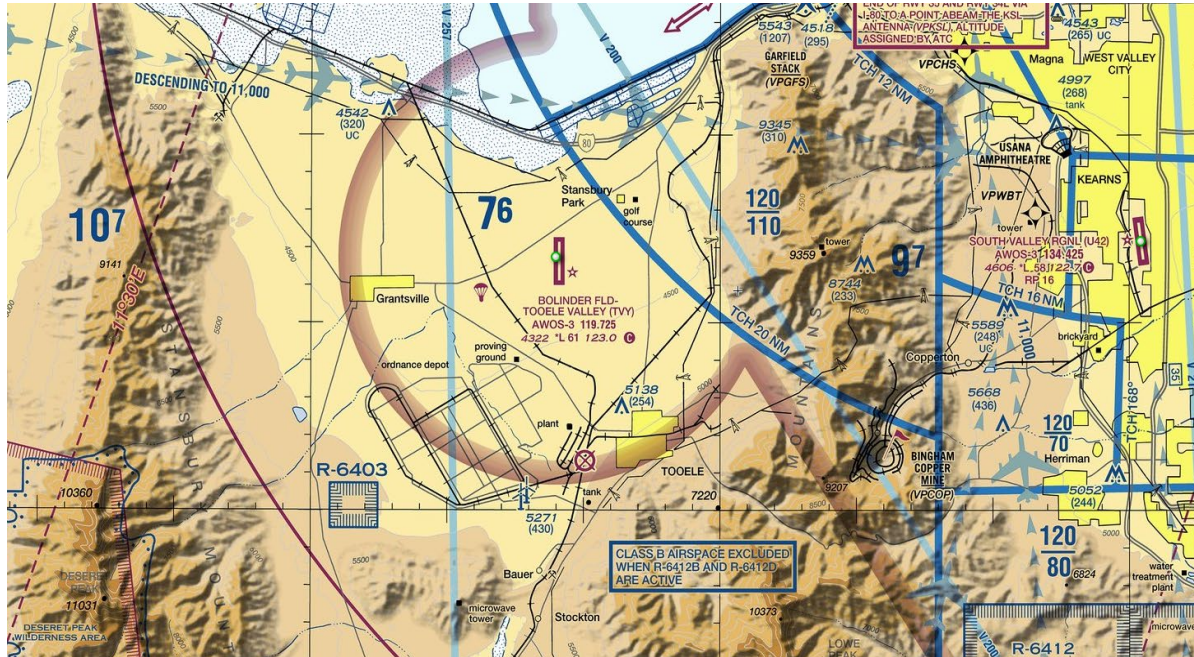
1.3.2.5 Airspace

TVY is a non-towered airport outside of the Class B airspace serving SLCIA. As such, VFR pilots operating at TVY are not controlled by FAA ATC personnel and are not required to establish radio communications with air traffic controllers as long as they remain outside of the Class B airspace. Although TVY is outside of the Class B airspace, it is within the SLC Terminal Area which is controlled by the FAA’s SLC Terminal Radar Approach Control (TRACON), and IFR traffic must communicate with SLC TRACON. Aircraft operating within the SLC Terminal Area are required to be equipped with ADS-B Out⁵ to provide ATC with the aircraft identification and flight information. The configuration of TVY’s airspace makes it beneficial to student pilots because they are not required to enter more complex Class B airspace and are therefore less likely to share airspace with larger, faster aircraft like many of the other airports in the region. However, the proximity of TVY to other airports in the metropolitan area does allow for training experience within Class B airspace if desired. Aircraft leaving TVY and travelling east bound do quickly encounter Class B airspace restrictions. Restricted areas R-6403 and SEVIER B & D Military Operations

⁵ ADS-B Out (Automatic Dependent Surveillance – Broadcast) is an aircraft transponder that works by broadcasting information about an aircraft’s GPS location, altitude, ground speed and other data to ground stations and other aircraft, once per second.

Areas (MOAs) to the southwest of the field and restricted areas R-6412 A, B, C, and D to the southeast require pilots to remain vigilant of their location. TVY's surrounding airspace is depicted in **Figure 1-5**.

FIGURE 1-5
TVY AIRSPACE



Source: skyvector.com, 2021

1.3.3 General Aviation Facilities

This section describes the location and condition of various general aviation and airport support facilities important to the overall operation of the airport. These facilities include hangars, aircraft tie-downs, vehicle and aircraft parking areas, fuel facilities, and airport maintenance.

1.3.3.1 Based Aircraft Storage

Covered based aircraft storage at TVY is provided by six privately-owned hangars which are located on property leased from the SLCD. The hangars range in size from 1,203 to 1,226 square feet and each accommodates a single aircraft. As shown on the latest Airport Layout Plan (ALP), the location and height of these hangars penetrate the 14 CFR Part 77 transitional surface. The leases for these hangars are month to month and the hangar owner is responsible for the removal of the hangar at the termination of the lease.

Presently, there are no hangars owned by SLCD at the airport. A total of 24 tie-down locations are managed by SLCD on the airfield, with 13 of those spaces currently leased. A number of the additional tie-downs on the apron are currently not being leased to reserve space for future building expansion.

1.3.3.2 Transient Aircraft Parking and Fuel Services

There are no FBO services provided at TVY. SLCD offers self-service 100LL fuel, which can be accessed 24-hours a day on the north apron area. In 2017, 7,382 gallons of 100LL fuel were purchased at TVY. One tenant, Skydive Utah, stores personal-use Jet A fuel on the airfield at the same location. Jet A fuel is not

available for purchase at TVY. Transient aircraft parking is available on apron tiedowns. There is no dedicated apron for jets or other large aircraft. Airport staff noted during visioning sessions that events held at the nearby Utah Motorsports Campus bring in business jets that lack facilities to remain at TVY and must instead be shuttled to other nearby airports for fuel and storage.

1.3.3.3 General Aviation Tenants

Operations at TVY include a significant amount of flight training activities. While no flight schools are based at the airport, the ILS infrastructure and less challenging airspace attracts many student pilots from flight schools all around the area, including those based at the other SLCDA airports. There are two tenants who have seasonal operations based at TVY: Skydive Utah and Bureau of Land Management (BLM).

The BLM Fire Heli-base conducts various operations, including helicopter and air tactical group supervisor operations, from June through November and is based out of trailers located at the airport. BLM leases 73,019 total sq ft, divided between two areas near the exit of taxiway A2, which contain 8 tiedowns and a helipad. BLM has several buildings and temporary trailer structures used for offices and restrooms. At the time of this study, BLM is actively pursuing plans to relocate and expand their operation at the north end of the airfield.

Skydive Utah performs skydive operations between April and November out of a series of buildings including a 4,098 square foot industrial grade tent structure located on the east side of the airfield. The tenant uses Cessna Grand Caravans to take up to 20 skydivers at a time as high as 13,000 ft AGL to perform jumps. In 2021, Skydive Utah conducted over 23,000 jumps.

1.3.3.4 Airport Maintenance

The Airport’s maintenance equipment is stored either inside, or adjacent to, the airport maintenance building on the south apron. A list of owned equipment and their condition is shown in **Table 1-9**.

**TABLE 1-9
EQUIPMENT LIST**

Equipment	Condition
Stewart & Stevenson runway snow blower	Fair
John Deere field tractor mower with mow deck	Fair
Kubota side-by-side ATV	Excellent

Source: SLCDA, 2021

There is no snow removal equipment (SRE) or on-site support staff at TVY to clear the airfield during winter weather. When winter precipitation events occur, SLCDA maintenance must drive road-capable SRE over to TVY once it is certain the equipment is no longer needed at SLCIA. While Tooele Valley typically receives less snow accumulation than the Salt Lake Valley, there are times when the TVY runway is closed during winter weather, sometimes for multiple days at a time.

1.3.4 Landside and Access Roadways

Airport landside facilities provide intermodal connections between the airport and a variety of ground transportation modes. These facilities include regional access connections, on-airport circulation roadways, and parking facilities. These facilities are described briefly in the following sections.

1.3.4.1 Roadways

Airport users traveling from the Salt Lake Valley to the airport must loop around the northern tip of the Oquirrh Mountains via I-80. Currently, the only vehicle access to the airport is provided to the south via the local arterial road, Erda Way, which connects into the airport's single access road, N Airport Rd. Airport access to TVY is limited since N Airport Rd is not a through road and ends halfway down the airfield at the Skydive Utah Center. Landside users must exit south along N Airport Rd back out to Erda Way. Access to Erda Way is provided from either SR-36 on the east, which connects to an interchange at I-80, or Sheep Lane on the west, which connects to SR-138. SR-138 borders the airport on the north, however, there is no airport access point on the north or west sides of the airfield. The recently completed Midvalley Highway (State Route 179) connects I-80 to SR-138 on the northeast side of TVY which allows for more direct access to the I-80 from the north. The airport is a 10–15-minute drive from the city of Tooele (southeast of TVY) and 35–40 minutes from downtown Salt Lake City (northeast of TVY).

1.3.4.2 Parking

Parking at TVY is available on the east side of the airport and can be accessed via N Airport Rd. Skydive Utah has 7 dedicated paved parking spots, a 5,000 sq ft unmarked dirt parking lot capable of fitting approximately 12 vehicles, and during typically busy days vehicles are required to park on the shoulder of N Airport Rd for overflow parking. South of Skydive Utah, BLM has a single 33,000 sq ft dirt parking lot that provides convenient access to BLM-leased areas through an access gate. A well and several fire hydrants are positioned near the lot to support fire suppression operations.

1.3.4.3 Utilities

Limited utility infrastructure is available at the airport. Electricity is available but other services, including municipal water, sewer, and internet, are not. On-site water is provided from well infrastructure that meets potable water standards based on standards of survey for Salt Lake City Public Utilities, but it has not been certified as potable by the Tooele County Health Department. Water used for fire suppression is pumped from these wells on airport property. Existing restroom facilities at the airport are portable units serviced on an as-needed basis. These available restrooms are not connected to municipal water or sewer systems. The infrastructure for a water utility is located south of the airport along Erda Way and a sewer utility is being constructed to the north of the airport along State Route 138. TVY would need to extend these lines to be able to connect to airport facilities. Although not included in the most recent capital improvement budget for TVY, funds for both water and sewer infrastructure improvements are included in the SLCDCA capital improvement budget for Fiscal Year 2022 at an estimated cost of \$2.15 million.

1.4 NATURAL RESOURCE CONSERVATION

When not managed and maintained responsibly, natural resources can be exhausted. As an owner of a public service facility, SLCDCA recognizes the importance of promoting policies which seek to protect and conserve natural resources. Acting on this duty occurs through policies and development which limit/reduce greenhouse gas emissions and discharge into water systems, provide opportunities for development of energy efficient facilities, promote environmental stewardship practices, protect wildlife

by humanely discouraging its presence on the airfield and supporting industry transitions to renewable energy sources. The following sections develop a baseline inventory of the conditions and facilities which influence or impact the natural resource conservation efforts by SLCDCA at TVY.

1.4.1 Stormwater Management

PLACEHOLDER - [PENDING STORMWATER INVENTORY/ANALYSIS]

1.4.2 Environmental Data

Environmental conditions at the airport were identified in order to help the Airport Sponsor thoroughly evaluate airport development alternatives and to provide information that will help expedite subsequent environmental processing. For a comprehensive description of the existing environmental conditions at the airport, environmental resource categories described FAA Order 1050.1F, Environmental Impacts: Policies and Procedures, were used to identify and describe potential environmental effects. Not all environmental resource categories listed in FAA Order 1050.1F are present or would be affected by airport activities. Regarding air quality, the Airport is in "attainment" for Lead (Pb), Nitrogen Dioxide (NO₂), Carbon Monoxide (CO) and Particulate Matter-10 (PM₁₀) and is in a "nonattainment area" for 8-Hour Ozone (O₃), and Particulate Matter-2.5 (PM_{2.5}). There are 20 state- threatened and -endangered species, as well as one migratory bird that have the potential to occur on Airport property; however, there are no federally threatened and endangered species with the potential to occur or critical habitat present. The Benson Grist Mill Loop trail, a Department of Transportation Act, Section 4(f) resource, runs along the northern and southern borders of Airport property. There are farmlands of statewide importance on Airport property. There are no National Register of Historic Places (NRHP) resources located within Airport property. Existing land use around the airport includes agricultural and residential areas on all sides. Regarding noise, noise contours were developed as part of this master plan, and noise sensitive land uses are not present with the 65 DNL contour. [TO BE VERIFIED IN PENDING UPDATED NOISE CONTOUR ANALYSIS] Water resources include wetlands, floodplains, surface waters, ground water, and wild and scenic rivers. The National Wetlands Inventory shows wetlands on Airport property and surface waters are present on the airport. There are no floodplains or wild and scenic rivers located on Airport property. Please see **Appendix X** for more details on these environmental resource categories.

PLACEHOLDER - [TO BE VERIFIED IN PENDING UPDATED NOISE CONTOUR ANALYSIS]

Given the nature of operations at TVY, and the proximity of the residential developments to the airport, it is important to understand the potential impacts the airport might have on the community, the potential for land use incompatibility, and the need to protect the airport to ensure long-term sustainability. The most recently completed noise study determined the 60 DNL contour exists entirely within airport property, below the 65 DNL level that has been determined as the federal significance threshold for community compatibility and aircraft noise exposure. Although aircraft noise impacts are minimal today, changes to airport usage and the land use surrounding the airport may occur significantly. This may result in an increased number of operations by louder aircraft and encroachment by residential developments to Airport property.

1.5 SOCIAL RESPONSIBILITY

As a public facility in the SLC metropolitan area, SLCDCA recognizes it has an obligation to the communities around TVY to act in a socially responsible manner. In action, this translates into the following:

- » Abide by all federal, state, and local regulations and meet contractual FAA grant assurances
- » Maintain competitive rate and fee structure to support operating and capital expenses
- » Act ethically in all business and development decisions
- » Remain transparent with community stakeholders about airport related decisions
- » Make efforts to provide business and employment opportunities to the region
- » Ensure equal treatment of all persons and remain intolerant of discrimination in any form
- » Use the Airport's standing within the community to support and advance positive community goals and values

The following sections develop a baseline inventory of the conditions and facilities which influence or impact the social responsibility held by SLCDCA with regard to operating TVY.

1.5.1 Land Use

At TVY, approximately 667 total acres are owned by SLCDCA. This land is somewhat impacted in its developmental abilities by jurisdictional wetlands existing on the north end of the airport property. One potential development area is a large portion of vacant airport property to the west of the runway. Development in that area would not be without challenges because no taxiway or other infrastructure exists on that side and some areas of the property are designated as seasonal wetlands.

Unlike both U42 and SLC, a land use compatibility plan with appropriate land use restrictions does not exist for the area surrounding TVY. Consequently, there are no requirements for compatible land use development or limitations regarding the height of buildings that would restrict development of obstructions that prohibit safe air navigation. This poses a serious threat to the long-term viability of the airport, as it is vulnerable to encroachment from potential surrounding residential development. The 2016 Tooele County General Plan recommends that the TVY Master Plan is reviewed when considering new development near the airport, but it does not create official airport compatible land use zones or regulations. SLCDCA is federally obligated under AIP Grant Assurance 21 to encourage Erda and Tooele County to adopt zoning ordinances that would prevent incompatible land uses.

1.5.2 Zoning

PLACEHOLDER - [PENDING COMPLETION OF AIRPORT OVERLAY ZONE STUDY]

FIGURE 1-6
AIRPORT OVERLAY ZONES

Airport Overlay Zone graphic – (pending AOZ project completion)

1.5.3 Compliance With FAA Grant Assurances

The FAA-administered financial assistance that TVY receives has specific obligations, or grant assurances, that the Airport is required to adhere to. There are 39 grant assurances, each specific to items that the airport owner must comply with. These are outlined within FAA Order 5190.6B, *Airport Compliance Manual*. **Table 1-10** details the 39 grant assurances and notes what general category each is typically associated with. As part of this master plan, specific items will be addressed in relation to these FAA grant assurances, such as examining protections in place to protect the airport’s airspace, planning for compatible land use, updating the airport layout plan, and making recommendations to help TVY ensure compliance.

TABLE 1-10
AIP GRANT ASSURANCES

Assurance Number	Title/Description	General / Miscellaneous	Airport Management	Airport Operations	Planning	Construction
1	General Federal Requirements	✓				
2	Responsibility and Authority of the Sponsor		✓			
3	Fund Availability	✓				
4	Good Title	✓				
5	Preserving Rights and Powers		✓			
6	Consistency with Local Plans				✓	✓
7	Consideration of Local Interest				✓	✓
8	Consultation with Users				✓	✓
9	Public Hearings				✓	✓
10	Metropolitan Planning Organization				✓	✓
11	Pavement Preventive Maintenance			✓		
12	Terminal Development Prerequisites	✓				
13	Accounting System, Audit, and Record				✓	✓
14	Minimum Wage Rates					✓
15	Veteran's Preference					✓
16	Conformity to Plans and Specifications					✓
17	Construction Inspection and Approval					✓
18	Planning Projects				✓	
19	Operation and Maintenance			✓		
20	Hazard Removal and Mitigation			✓		
21	Compatible Land Use		✓			
22	Economic Nondiscrimination		✓			
23	Exclusive Rights		✓			
24	Fee and Rental Structure		✓			
25	Airport Revenues		✓			
26	Reports and Inspections		✓			
27	Use by Government Aircraft			✓		
28	Land for Federal Facilities	✓				
29	Airport Layout Plan				✓	✓
30	Civil Rights				✓	✓
31	Disposal of Land	✓				
32	Engineering and Design Services				✓	
33	Foreign Market Restrictions				✓	
34	Policies, Standards, and Specifications		✓	✓	✓	✓
35	Relocation and Real Property Acquisition	✓				
36	Access by Intercity Buses	✓				
37	Disadvantaged Business Enterprises	✓			✓	✓
38	Hangar Construction		✓			
39	Competitive Access		✓			

Source: Federal Aviation Administration, 2021

1.5.4 Socioeconomic

Studying socioeconomic and demographic data of the communities around TVY provides insight into how the airport can best serve the communities. US Census Bureau and the American Community Survey provide practical data sets in which to establish regional trends as they relate to the area's people, housing, and economy. The population of Tooele County is growing at a much faster rate than the United States as a whole. Population growth from 2010 to 2019 in Tooele County is 24.1 percent compared to overall growth in the nation of 6.3 percent. As of 2020, Utah has the highest population growth rate in the country. The location of the Tooele Valley area in relation to Salt Lake City and the ease of accessibility to SLC amenities are two likely drivers for the growth of the Tooele Valley area. **Table 1-11** shows socioeconomic information from select communities influenced by the airport as well as how the data compares to the nation overall.

TABLE 1-11
SOCIOECONOMIC CHARACTERISTICS

Socioeconomic Characteristics	United States	Utah	Tooele County	Grantsville	Tooele
Population					
Population estimates	328,239,523	3,205,958	72,259	12,064	36,015
Population change (4/2010 – 7/2019)	6.3%	16.0%	24.1%	35.2%	14.0%
Age and Dependency					
Persons under 18 years	22.3%	29.0%	32.2%	38.8%	31.0%
Persons 65 years and over	16.5%	11.4%	9.0%	7.9%	9.2%
Race and Hispanic Origin					
White alone	76.3%	90.6%	94.1%	92.8%	88.3%
Black or African American alone	13.4%	1.5%	0.9%	0.5%	0.5%
American Indian and Alaska Native	1.3%	1.6%	1.3%	0.6%	0.7%
Asian alone	5.9%	2.7%	0.8%	1.8%	0.3%
Native Hawaiian and Other Pacific Islander alone	0.2%	1.1%	0.7%	1.4%	0.4%
Two or More Races	2.8%	2.6%	2.2%	2.4%	4.3%
Hispanic or Latino (of any race)	18.5%	14.4%	12.9%	6.3%	14.8%
White alone, not Hispanic or Latino	60.1%	77.8%	82.5%	88.4%	80.9%
Population Characteristics					
Veterans	5.6%	3.8%	4.9%	3.0%	5.0%
Foreign born persons	13.6%	8.5%	4.4%	2.1%	4.1%
Housing					
Housing units	139,684,244	1,133,521	23,163	N/A	N/A
Owner-occupied housing units	64.0%	70.2%	80.9%	79.9%	80.2%
Median value of owner-occupied housing units	\$217,500	\$279,100	\$223,400	\$254,700	\$195,300
Median gross rent	\$1,062	\$1,037	\$966	\$862	\$1,031
Education					
High school graduate or higher	88.0%	92.3%	91.3%	93.0%	90.5%
Bachelor's degree or higher	32.1%	34.0%	24.2%	27.0%	18.3%
Economy					
Total employer establishments	7,959,103	83,924	936	N/A	N/A
Transportation					
Mean travel time to work (minutes), workers age 16 years+ (from 2015-2019)	26.9	21.9	28.8	31.2	29.1
Income and Poverty					
Median household income	\$62,843	\$71,621	\$74,562	\$72,378	\$63,851
Individuals below poverty level	10.5%	8.9%	5.3%	5.3%	7.7%

Note: N/A when data not available.

Source: US Census Bureau, American Community Survey (2019), Prepared by RS&H, 2021