



January 13, 2016 draft

Truckee Tahoe Airport District (TTAD) Trails Master Plan

The Truckee Tahoe Airport District (TTAD) covers an area of approximately 485 square miles in eastern Nevada and Placer counties. This area includes 1,600 acres of preserved open space set aside as a recreational benefit for the community. The airport sits on the relatively level floor of Martis Valley with the forested Tahoe National Forest to south and east and Town of Truckee to the north and west. The TTAD's location and acreage make it an ideal environment for walking and bicycling. As well, the airport's topography and open exposure enable a longer season for trail use for users of all abilities.

In 2014, after some years of discussion, TTAD embarked on a formal process to consider opportunities for non-motorized trails -- providing critical connectivity to existing and future local and regional trails along with a high quality recreational experience on airport property. The Truckee Tahoe Airport District Trails Master Plan ("Master Plan") emerged from this vision. This Master Plan is to be used as a long-term planning document and a framework that will guide the development of trails on and around TTAD property as financial resources become available.

Coordination With Other Trails Plans This trails Master Plan supports and fits within master plans of other local jurisdictions, including: the Town of Truckee Trails & Bikeways Master Plan (2015) which is a comprehensive framework for the creation of a town-wide trails and bikeways network designed for community and regional connectivity; the Martis Valley Community Plan (2003) which calls for the development of a system of interconnected hiking, riding, and bicycling trails and paths suitable for active recreation; the Placer County Regional Bikeways Plan (2002) which speaks to the need for a regional system of bikeways for transportation and recreation purposes; the Martis Creek Lake Master Plan (draft – 2015), the basic guidance document for the Army Corps of Engineers for Martis Valley land under its jurisdiction, including development and maintenance of trails; and the Truckee Donner Recreation and Parks District Strategic Plan (2014) which articulates support for trails and the Truckee Bike Park.

Waddle Ranch Preserve (TTAD property with a conservation easement owned by the Truckee Donner Land Trust) encompasses 1,462 acres with roughly 5-7 miles of trail. Trails and proposed trails within this area are referenced in the Waddle Ranch Preserve Trails Master Plan. These trails are in close proximity to the airport and connect to the Martis Peak trail network.

The Northstar Community Services District is the lead agency for the proposed Class 1 Martis Valley Regional Trail which begins at the intersection of Highway 267 and Airport Road, and will meander through Martis Valley to the Village at Northstar.

Trails Master Plan Guiding Principles

The development of this trails master plan is grounded in the following:

Community Benefit

- TTAD is committed to an airport trails system that is safely connected to the broader trail network in the Truckee community and surrounding unincorporated areas.
- TTAD envisions safe and convenient non-motorized recreational options for the local community and visiting public.
- TTAD is committed to providing recreational trail opportunities for users of all abilities, and will ensure trails are accessible to the physically challenged where feasible.
- TTAD believes trails on airport property, by linking to the broader community, will: help improve health through active living; generate economic activity; improve air quality; and enhance cultural awareness and community identity.

Visual Impacts/Aesthetics

- TTAD trails will be incorporated into the surrounding landscape to the fullest extent possible and with attention to aesthetic value.
- TTAD will strive to avoid undesirable visual impacts.

Natural Resources

- Protection of natural resources on airport property is a primary goal.
- Corridors with sensitive natural resources will be avoided wherever possible.

Trail Design

- Trails will be designed to be compliant with Americans with Disabilities Act (ADA) standards.
- Trails will be planned with the current, highest quality, and most cost-effective design possible.
- Surface material will reflect the type of user and volume of use.
- Trails will be developed at a rate which incorporates long term maintenance needs and construction costs.
- Trail-side interpretive signage will help educate trail users of the natural and cultural resources in Martis Valley and provide information about airport operations.

Types of trails

TTAD anticipates constructing its trails with one of two surfaces, depending on the location in the master plan.

- **Class 1 Bike Path or Bike Trail:** These are paved trails designed for use by bicycles and pedestrians. Paths are typically 10-12 feet wide, with a minimum 2-foot wide graded area adjacent to the path to provide clearance from trees, poles, walls, guardrails, etc. These paths are typically constructed with adequate sub grade compaction to minimize cracking and sinking and to accommodate appropriate loadings (maintenance trucks, emergency vehicles, etc.). Shoulders on one or both sides of the path are recommended where feasible to accommodate

pedestrians and help reduce pathway conflicts. A 2% cross slope is preferable to ensure proper drainage.

- **Unpaved (dirt) multi-purpose paths.** These trails are popular with walkers and mountain bikers. Trails should be made as accessible as possible while maintaining the character of the resource and natural environment. The minimum trail width is 3 feet with a maximum cross slope of 5%. Trails may be surfaced with wood chips, crushed stone or shell, or may be made of compacted earth. Whatever is used, the surface should be firm and stable.

Proposed Trails and Bikeways

Attachment A provides a map trail corridors, including anticipated surfacing, for proposed trails in the Master Plan. TTAD anticipates building this system as financial resources arise in a phased approach.

Phase 1 (2.93 miles dirt trail, 2.5 miles paved trail): Phase 1 will include construction of the Regional Trailhead at the corner of Highway 267 and Truckee Tahoe Airport Road followed by both the dirt and Class 1 (paved) trail construction between the trailhead and the Waddle Ranch Preserve connection. This would include both paved and dirt construction as illustrated in the map, **Attachment A**.

Phase 2 (3.27 miles dirt trail, 1 mile paved trail): Phase 2 will pick up at the Waddle Ranch Preserve connection and end at River View Sports Park for connectivity to the Truckee River Legacy Trail and Truckee Bike Park. This phase will include both Class 1 and dirt trail construction.

Phase 3: Phase 3 will best commence when the PC-3 trails (noted in **Attachment A**) have been completed, which will then enable full completion of the main airport trail loop. Phase 3 will include a Class 1 connector between River View Sports Park and PC-3. A possible additional connection between PC-3 and the TTAD regional trailhead can also be considered for Phase 3. TTAD may consider discussions with PC-3 representatives regarding the timing of trail construction and possible funding scenarios.

Trail Construction Cost and Funding

The TTAD recognizes that construction of this proposed trails system will be costly. Precise estimates of dirt and paved trail planning and construction for this specific effort are not feasible at this time. However, rough estimates can be made based on similar trails projects locally.

Phase 1 Dirt: 2.93 mi x \$45,000 = **\$131,850**

Phase 1 Pavement: 3 miles x \$1,300,000 = **\$3,900,000**

Phase 2 Dirt: 3.27 mi x \$45,000 = **\$147,150**

Phase 2 Pavement: 1 mile x \$1,300,000 = **\$1,300,000**

Total rough estimate, Phases 1 and 2 = **\$5,479,000**

Potential sources of outside funding for trail planning and construction include:

- The California Recreational Trails Program (RTP);
- California Bicycle Transportation Account (BTA);
- CalTrans Bicycle Facilities Unit (BFU);
- Town of Truckee’s Measure R

The grant funding environment in California changes every year. Full research into appropriate funding mechanisms should be conducted further into the trails planning process.

Trail Maintenance

Routine trail maintenance for both paved (patch holes, slurry seal, sweep, trim vegetation, clear drains/culverts, etc.) and dirt trails (Repair tread, clear drains, trim vegetation, etc.) must also be taken into consideration. Future capital replacement cost (paved trails only) will also be an important annual reserve. Local estimates for maintenance are shown below.

Annual Trail Maintenance Costs Per Mile

	Routine/ Preventative	Capital Replacement	Total
Paved Trails (Town of Truckee estimates)	\$10,600	\$3,640	\$14,240
Dirt Trails (Truckee Trails Foundation estimates)	\$1,000	\$0	\$1,000