Executive Summary

The Town of Mammoth Lakes (TOML) adopted a Trail System Plan in May of 1991. That Plan established the foundation for hard surface trail development (Main Path - paved paths) within the Urban Growth Boundary for the past 17 years. As with any plan, there comes a time for assessing, reviewing and updating. In the fall of 2006 a local non-profit organization, Mammoth Lakes Trails and Public Access Foundation (MLTPA) focused attention on the need to reevaluate and to engage the community in a Concept and Master Planning (CAMP) effort to address the need for a comprehensive trails and public access plan.

The 2007 General Plan established a Parks, Open Space and Recreation Goal that would "Create a Master Plan for an integrated trail system that will maintain and enhance convenient public access to public lands from town." A second Parks, Open Space and Recreation Goal stated the need to "Link parks and open space with a well-designed year-round network of public corridors and trails within and surrounding Mammoth Lakes."

In June of 2007 the Town Council allocated funding, in partnership with Mammoth Mountain Ski Area (MMSA) and MLTPA, for consultant services to aid in the preparation of a comprehensive trails planning effort. By October 2007 the scope of work was defined, the consultant qualifications evaluated and the contracts were executed to begin the planning process. A robust and aggressive public outreach effort, lead by MLTPA and conducted over a six-month period helped the consultant team develop the content of the plan.

An initial public draft of the TSMP was released in August 2008. Several hundred comments on the draft were submitted, which were incorporated into a February 2009 Draft TSMP. Work to complete the CEQA-required EIR on the TSMP was begun in mid-2010 and completed in September 2011. In the interim period, since release of the February 2009 Draft TSMP, progress has been made on a number of the items recommended in the Plan. Changes needed to the TSMP to reflect that progress were cataloged as a series of errata and update items which were brought before the Recreation Commission, Mobility Commission and Planning Commission for review prior to adoption of the TSMP.

The Mammoth Lakes Trail System Master Plan (TSMP) is now complete. The document you are receiving contains two distinct planning efforts. The first one focuses on the trail system plan within the Town's Urban Growth Boundary (UGB) and is a very mature and well-developed plan. It contains thorough analysis and evaluation of existing conditions, public input/surveys, gap analysis and potential recommendations for future implementation. Several maps are included within this portion of the draft that visually illustrates the recommendations made in the document. There is also a separate chapter within this document that provides signage and wayfinding concepts that can be used for implementation.

The second planning effort is found within Attachment A and is referred to as the Soft-Surface Trails Concept. The intent of this secondary effort was to help define the interface potential between the UGB and the public lands outside the boundary. The report found in the appendix is very young in its development. The potential concepts identified have not been publicly vetted and should be viewed as catalysts for beginning the necessary in-depth analysis and discussions needed to address the issues identified in this section. None of the

recommendations found within Attachment A should be considered ready for implementation.

The implementation of this plan will require a high level of interagency cooperation between the Town of Mammoth Lakes, the United States Forest Service (USFS), California Department of Transportation (Caltrans), and other entities. For example, some existing and future segments of the Town's paved multi-use paths (MUPs) require the issuance of a Special Use Permit from the U.S. Forest Service.

Setting

The Town of Mammoth Lakes, California is a unique destination-resort community located in the Eastern Sierra region of Central California. At 7,980 feet, it is the highest incorporated municipality in the State of California. The community has a tourism-based economy; with recreation, trails and public access playing an integral role in the Town's sustainable economy and quality of life. The existing trails in Mammoth have developed over many years and across multiple jurisdictions. There are gaps in the system, places where access is limited, and challenges in accommodating a wide range of trail uses. The purpose of the Town of Mammoth Lakes Trail System Master Plan is to update the 1991 Trail System Plan, in accordance with the 2007 General Plan.

Vision, Goals and Objectives

The vision of the Mammoth Lakes Trail System Master Plan makes it unique. It envisions an integrated system of infrastructure and programs that support recreation and mobility simultaneously, by seamlessly connecting homes, hotels, businesses, recreation nodes, and backcountry experiences. It is based on the notion that the recreational trail experience begins when you leave your home or hotel, not just when you park your car at the trailhead. For this reason, this plan includes a strong focus on providing facilities that will improve access to trails from all modes of transportation. In addition to new trails, paved pathways, signage and wayfinding and associated amenities—this plan includes suggestions for other improvements such as sidewalks, crosswalks, bus stops, bike lanes, bicycle parking, summer maintenance, and snow removal. The Trail System Master Plan replaces the existing Trail System Plan and is consistent with the Town's 2007 General Plan, the Physical Development and Mobility/Study and the Draft Parks and Recreation Master Plan (April, 2008).

This plan has been developed based on a set of guiding principles to ensure that it is representative of the needs and desires of the Mammoth community. The relationship between the Town of Mammoth Lakes and the United States Forest Service is critical to the success of the Trails Master Plan, as are the various means used to coordinate their efforts, including special use permits and MOUs. These include accessibility, community character, community engagement, cooperation, environmental stewardship and sustainable economics.

This plan recognizes the important innovative public, private and non-profit partnerships to address these needs. Without a coordinated effort, critical points of public access could be at risk. With a broad range of support, and a well-organized program, the public lands surrounding the Town will benefit from the stewardship this community can provide.

Key goals of the plan include:

Goal 1: Develop a plan for an integrated year-round trail network that provides for a seamless transition between the Town of Mammoth Lakes, the Mammoth Mountain Ski Area Mountain Bike Park, and the surrounding federal lands overseen by the USFS.

Goal 2: Develop a plan that provides guidance for enhancing year-round mobility in a way that is consistent with the Town's "Feet First" strategy.

Goal 3: Create a plan that clearly identifies the projects and programs necessary for implementation.

The "integrated year-round trail network" described above shall be henceforth referred to as the Mammoth Lakes Trail System (MLTS).

It should be noted that this is only the first phase of what will be an ongoing, multi-phase planning effort for the Trails Master Plan. Chapter 1 provides a more detailed discussion of the vision, goals and objectives of this plan.

The Existing Trail System

The Town of Mammoth Lakes includes three defining land-use boundaries: the Urban Growth Boundary, the Town Boundary, and the Planning Area as represented in the 2007 General Plan. **Map 2-1** (Ch. 2) shows the relevant jurisdictional boundaries. The key element of the proposed trail system is the vision it creates for integrating the human and natural environments across these three land use boundaries. The idea of "trails and public access" as it applies to Mammoth Lakes is comprised of the following elements:

1. A system of sidewalks, on-street bicycle facilities, and paved trails within the Urban Growth Boundary (UGB)—a land area of approximately 4 square miles[1]—forms the nucleus of the trail system. The trails network also includes very limited soft-surface trails within the UGB, including a private foot trail through the Snowcreek Meadow. The recreational trails experience generally begins and ends within the UGB.
2. A system of soft-surface summer trails, winter trails and backcountry recreational opportunities outside the UGB, but within the Town Boundary. The Town Boundary extends beyond the UGB and covers an area of approximately 25 square miles. The area within the Town Boundary, but outside the UGB includes the once proposed Sherwin Ski Area, the Lakes Basin, Shady Rest Area and most of the Mammoth Mountain Ski Area. The majority of the land in this area is administered by the U.S. Forest Service. There is also a smaller non-contiguous area surrounding the Mammoth Lakes Airport that is also within the Town Boundary. The majority of recreational activity in the Mammoth Lakes area takes place within the Town Boundary.
3. Additional recreational opportunities exist beyond the Town Boundary. The Planning Area or "sphere of influence" covers an area of approximately 125 square miles and includes destinations such as Reds Meadow, Devils Postpile National

[1] The UGB is split into two non-contiguous areas. The main UGB surrounds the Town's residential and commercial development and has an area of 4.0 square miles. Another UGB surrounding the airport has an area of 0.3 square miles. Area for all boundaries was calculated using the Town's GIS database.

Monument, the John Muir Trail and the Pacific Crest Trail. The Town of Mammoth Lakes serves as a key point of access and egress for users of these amenities.

Recreation Nodes are a key element of the existing trails network. Recreation nodes are identified and categorized based on the level of amenities provided. The categories are portals, parks, trailheads and access/egress points. This plan provides recommendations for upgrading amenities at some existing recreation nodes as well as creating new recreation nodes.

Another key element of the existing trail system is the **Main Path** "loop" originally envisioned in the 1991 Trail System Plan. This paved multi-use path system is mostly complete and new segments are currently under construction. The key remaining gaps in the system are along Main Street and Old Mammoth Road. This plan provides recommendations to move the Town forward with closing these key gaps.

Issues surrounding existing conditions in the **Shady Rest** area were identified by the community as a key issue for recreational trail use outside of the UGB, especially in winter. This plan provides some options and opportunities for potential modifications at Shady Rest, as well as recommendations for creating recreational opportunities in other areas to alleviate congestion at Shady Rest.

Chapter 2 provides a more detailed discussion of existing conditions.

Analysis of Needs and Benefits

Residents, visitors, and businesses will benefit from a comprehensive trails system. A central issue is ensuring access to the public lands that are among the region's most significant assets. In many ways, the future of Mammoth Lakes depends on having a system of trails and public access that will connect the community and the surrounding natural environment. Local leaders have visited peer resort communities and have seen how trails can be a cornerstone for a destination resort.

Trails are an increasingly important local solution for global issues: fossil fuel costs are fluctuating, there is increased awareness of climate change, our nation is experiencing a physical inactivity epidemic, and there is a growing need for people to spend more time outdoors. Mammoth Lakes has a unique opportunity to turn these issues into an opportunity by becoming a community that represents real solutions. By implementing this plan, Mammoth Lakes will become a leader in creating a green, healthy and sustainable community.

This update of the Trail System Plan is the result of a Concept and Master Planning (CAMP) process, a multi partnered effort initiated by the Mammoth Lakes Trails and Public Access Foundation (MLTPA) in the early months of 2007. In order to better understand the needs and desires of the Mammoth Lakes community, two major outreach efforts were conducted. The efforts were called Concept and Master Planning or CAMP. CAMP: Summer (November 1-4, 2007) focused on summer recreational activities and CAMP: Winter (February 7-12, 2008) focused on winter recreational activities. These outreach efforts included tours, listening sessions with targeted user groups, and open workshops with multiple user groups. Informational displays were available to the general public at Canyon Lodge and the Main Lodge for the duration of each process. User surveys focusing on relevant seasonal activities were developed in advance of each CAMP process and were

made available on-site and through widespread internet distribution. Some of the major recurring themes throughout the summer and winter CAMP processes were pedestrian movement along **Main Street**, user opportunities at **Shady Rest** in winter, the need for a more bicycle-friendly environment in summer, and winter maintenance levels along paved paths and sidewalks.

Chapter 3 provides a more detailed discussion of the outreach efforts and the analysis of needs conducted as part of this plan.

Future Trail System

The Trail System Master Plan includes a variety of recommendations summarized below. Key infrastructure recommendations include (1) completing the Main Path "loop", (2) upgrading and adding new recreation nodes, (3) providing consistent signage and wayfinding throughout the trail system and (4) addressing opportunities at Shady Rest.

It must be emphasized that the development of a complete trail system can only be achieved through a multi-jurisdictional effort and will require a high level of interagency cooperation to succeed.

The following table provides a summary of recommendations that are presented in the plan; a more detailed listing is contained in the complete Trail System Master Plan. A more detailed discussion and maps of recommended projects is provided in Chapter 4.

General Recommendations

General trail system recommendations cover a variety of topics which are not location specific. The full text of each recommendation can be found in Chapter 4, Section 4.1.

Table E-1. Summary of General Recommendations

Recommendation	Description
G1: Consistent Naming Conventions	For recreation nodes, paved paths, on-street bikeways, and soft-surface trails.
G2: Updated Trail Maps	Provide updated trail maps for each season that cover the primary recreational opportunities available in the Mammoth Lakes area.
G3: Uniform Trail Signage	General consistency for signage along multi-use paths and soft-surface trails.
G4: Interpretive Signage	Identify opportunities for interpretive signage and work with local experts to develop content.
G5: Trail-Oriented Development	Make MUPs more viable for both recreation and utilitarian purposes by requiring new development to provide strong connections to adjacent paths.
G6: Pedestrian-Oriented Development	Create seamless transitions between recreational trails and in-town amenities through pedestrian-oriented development.
G7: Data Management	Maintain an up-to-date and accurate multi-jurisdictional trails database.
G8: Design Guidelines	Revise the Public Works Standard Plans as needed to ensure consistency with the design guidelines in this Trail System Master Plan.
G9: Trails and Mobility Needs	Consider mobility-related recommendations in this plan in all future mobility planning efforts.

Recommendation	Description
G10: Future Access Easements	Study the potential to acquire additional easements to improve recreational access to public lands.
G11: Trails Coordinator	Consider creation of a Trails Coordinator position for implementation of the TSMP.
G12: Coordination with Local Non-Governmental Organizations	Seek opportunities to form partnerships with local organizations to assist in trails planning, development and/or maintenance.
G13: Summit Process	Key issues not addressed in the TSMP will be resolved through a collaborative Summit Process, led by the TOML with assistance provided by MLTPA.
G14: Action Plan	Develop a detailed action plan for the implementation of the Mammoth Lakes Trail System.
G15: Trail System Management MOU	Develop a management partnership clearly identifying roles and responsibilities of participating agencies.
G16: Mammoth Lakes Trail System (MLTS)	Recognize and support the development of an integrated regional Mammoth Lakes Trail System that incorporates the components identified in this Trails System Master Plan.

Activity Centers and Recreation Nodes

The recommendations below are intended to address issues specific to activity centers and recreation nodes. The full text of each recommendation can be found in Chapter 4, Section 4.2. **Maps 4-1** and **4-2** indicate the location and recommended type for each recreation node. **Figure 4-1** describes the minimum level of infrastructure provided for each node type.

Table E-2. Summary of Activity Center and Recreation Node Recommendations

Recommendation	Description
N1: Nodal Typing	Formally adopt the following recommended nodal types and their associated definitions: portals, parks, trailheads, and access/egress points.
N2: Naming of Recreation Nodes	Adopt official names for each recreation node.
N3: Uniform Nodal Signage	Install uniform signage at recreation nodes.
N4: Public Transit Access to Recreation Nodes	Provide bus stops near active recreation nodes wherever feasible.
N5: Summer Recreation Nodes	Establish and improve summer recreation nodes as described in Table 4-2.
N6: Winter Recreation Nodes	Establish and improve winter recreation nodes as described in Table 4-3.
N7: Future Nodal Designations	Establish a process for the adoption of new recreation nodes.
N8: Updates to the GIC Database	Regularly update the GIC database to reflect the latest inventory of activity centers and recreation nodes.

Paved Multi-Use Paths

Recommendations for the development of new paved multi-use paths, or infrastructure improvements to existing paths are summarized below. Recommendations relating to crossings and intersection improvements can be found in the following section. The full text of each recommendation described below can be found in Chapter 4, Section 4.3. Existing and recommended MUPs are shown on all Chapter 4 maps.

Table E-3. Summary of Paved Multi-Use Path Recommendations

Recommendation	Description
MUP1: Near-Term Multi-Use Path Projects	Continue with the rapid implementation of near-term MUP projects.
MUP2: Complete the Main Path Loop	In addition to the projects in recommendation MUP1, construct the MUP segments necessary to complete the Main Path loop.
MUP3: In-Town Multi-Use Path Connectors	Develop MUP segments that connect major path segments to key destinations.
MUP4: Multi-Use Paths Outside the UGB	Work with the Forest Service to construct recommended MUP segments outside the UGB.
MUP5: Lighting on Multi-Use Paths	Lighting should be considered for MUP segments based on demand for nighttime use.

Crossing Improvements

Recommendations for crossings and intersection improvements are summarized below. The full text of each recommendation described below can be found in Chapter 4, Section 4.4. Recommended grade-separated crossings (tunnels) are shown on all Chapter 4 maps. Recommended at-grade crossing improvements are shown on **Map 4-5**.

Table E-4. Summary of On-Street Bikeway Recommendations

Recommendation	Description
X1: Design of At-Grade MUP Crossings	The basic design elements of at-grade MUP crossings should be uniform. Additional safety measures should be implemented as needed.
X2: Specific Intersection and Mid-Block Crossing Improvements	Consider at-grade crossing improvements at key locations to improve trail access (listed in Table 4-8).
X3: Grade-Separated MUP Crossings	Use grade-separation for all MUP crossings of arterial streets.

On-Street Bikeways

Recommendations for on-street bikeway infrastructure are provided in Chapter 4, Section 4.5. **Maps 4-3** and **4-4** show on-street bikeways in their summer and winter contexts. Recommendations for maintenance of on-street bikeways can be found in Chapter 7.

Table E-5. Summary of On-Street Bikeway Recommendations

Recommendation	Description
B1: Near-Term Bike Lanes	Continue with rapid implementation of near-term bike lane projects on Main Street, Forest Trail and Meridian Blvd.
B2: Bike Lanes on Major Streets	Implement recommended bike lanes on major arterials.
B3: Bike Lanes on Collector Streets	Implement bike lanes on collector streets as space allows.
B4: Bike Routes	Implement recommended bike routes on local streets. Coordinate with Caltrans on installing or improving bike routes on rural highways.

Interface between Soft-Surface MTB Trails and Paved Facilities

The following table summarizes recommendations relating to the interface between soft-surface mountain bike trails and paved facilities. The full text of these recommendations can be found in Chapter 4, Section 4.6.

Table E-6. Summary of Recommendations on the Interface between Soft-Surface MTB Trails and Paved Facilities

Recommendation	Description
INT1: General Interface Considerations	Develop partnership with TOML, USFS and MMSA to analyze and address all interface areas, including a combination of rerouting, signage, education, alternative facilities and other methods as necessary.
INT2: North Village	Address specific summertime interface issues between Uptown/Downtown mountain bike (MTB) trail and the North Village.
INT3: Canyon Lodge	Address specific summertime interface issues in the Canyon Lodge area, especially with respect to bicyclists descending near Austria Hof and riding down Canyon Blvd.
INT4: Eagle Lodge	Address specific summertime interface issues in the Eagle Lodge area, primarily improvements to signage and wayfinding allowing users to navigate between the Juniper Trial and the Main Path.

Pedestrian Facilities

The following table summarizes recommendations for improvements to pedestrian facilities. Future pedestrian improvements will ultimately be determined through future mobility planning efforts and subsequent updates to the Sidewalk Master Plan. However, public input and analysis have indicated a need for pedestrian facility improvements in order to improve recreational opportunities and access to the trail system. The full text of these recommendations can be found in Chapter 4, Section 4.7. **Maps 4-5** and **4-6** show existing and recommended pedestrian facilities in their summer and winter contexts.

Table E-7. Summary of Pedestrian Facility Recommendations

Recommendation	Description
P1: Sidewalk to Major Roadway Ratio	Achieve a minimum Sidewalk to Major Roadway Ratio of at least 1.6 to 1 over the next five years. This minimum ratio can be achieved by including sidewalks on both sides of all arterial streets and at least on one side of all collector streets.
P2: Sidewalks along Major Roads	Install sidewalks along both sides of all major roadways (Main St, Old Mammoth Rd, Meridian Blvd, Minaret Rd).
P3: Sidewalks along Collector or Local Streets	Install sidewalks along at least one side of all collector streets.
P4: Mid-Block Pedestrian Connectors	As opportunities arise (i.e. new developments and redevelopments), create pedestrian-only shortcuts in strategic locations that shorten the walking distance between residential areas and recreation nodes.

Bicycle Parking

The following table provides a summary of recommended bicycle parking improvements. The full text of these recommendations can be found in Chapter 4, Section 4.8.

Table E-8. Summary Bicycle Parking Recommendations

Recommendation	Description
BP1: Bicycle Parking Requirements	Develop clear guidelines for the design, quantity and location of bicycle facilities on public and private property.
BP2: Bicycle Parking Designed by Local Artists	Implement a program under which local artists design functional bicycle racks or combo bicycle/ski racks that also serve as public art.
BP3: Subsidized Bicycle Parking Program	In order to improve the quality and uniformity of bicycle parking, purchase preferred bicycle racks in bulk and provide to business owners at a subsidized rate.

Soft-Surface Trails

Soft-surface trail recommendations are summarized in the following table. The full text of these recommendations can be found in Chapter 4, Section 4.9. **Map 4-7** shows potential soft-surface trial alignments to the north of the UGB. The development of any trails outside the UGB would require coordination between the Town of Mammoth Lakes and the United States Forest Service. Additional discussion and maps of potential soft-surface trail alignments can be found in Attachments A and B.

Table E-9. Summary Soft Surface Trail Recommendations

Recommendation	Description
SS1: Snowcreek Meadow Trail	Consider a low-impact boardwalk along the TOML drainage easement to ensure sustainable public access to the Snowcreek Meadow area.
SS2: Summer Soft-Surface Trails outside the UGB	Develop new soft-surface trails outside the UGB in the Shady Rest, Knolls and Sherwin areas.
SS3: Shady Rest Winter Trails	Explore options to improve winter trail and trailhead conditions at Shady Rest.

Education, Encouragement and Enforcement Programs

A summary of education, encouragement and enforcement programs is provided in the Table below. The full text of these recommendations can be found in Chapter 4, Section 4.10.

Table E-10. Summary Education, Encouragement and Enforcement Program Recommendations

Recommendation	Description
E1: Publish a Trail Guide for Mammoth Lakes	Create a trail guide that will serve as a single source of information for all trail-related information and resources in the Mammoth Lakes area.
E2: Annual Events / Coordinated Activity Calendar	Host and promote special events, tours and club functions related to the trail system and advertise these events through a paper and web-based calendar.
E3: Safe Routes to School	Work with local schools to develop Safe Routes to School infrastructure and programs.
E4: Trails-Related Education Programs	Work with relevant organizations and individuals to develop trails-related education programs for adults and children.
E5: Trips for Kids	Work with local organizations to develop programs to provide children with moral and material support they need to confidently engage in outdoor recreational activities.
E6: Establish a Trail Patrol	Work with local organizations to establish a volunteer trail patrol to supplement official enforcement and maintenance efforts.
E7: NGO's / Mammoth Trails	Support the development of non-governmental group to serve as a resource providing localized technical knowledge fostering trail-related stewardship.

Accessibility

Recommendations for improving the accessibility of the trail system are summarized in the following table. The full text of these recommendations can be found in Chapter 4, Section 4.11.

Table E-11. Summary of Accessibility Recommendations

Recommendation	Description
A1: Multi-Use Path and Trails Assessment	Perform a full assessment of all access routes, multi-use paths and trails using the Universal Trail Assessment Process (UTAP) to identify potential accessibility improvements.
A2: Pedestrian Assessment	Perform a full assessment of all pedestrian routes and elements in the town using the Sidewalk Assessment Process to identify potential accessibility improvements.
A3: Signage and Information	Include grade and other accessibility information on trailhead signage and user maps.
A4: Pathway Surface Materials	Consider accessibility in the selection of surface materials for MUPs and pedestrian facilities.

Signage and Wayfinding

A report developed by Corbin Design includes a discussion of signage, development of wayfinding logic, and initial design concepts for future signage planning. This report has been inserted as a separate chapter (Ch. 5) in this Trail System Master Plan. It should be noted that trail system signage and wayfinding implementation will need to occur with recognition of a variety of jurisdictions and of other signage systems already in place, including MMSA, USFS, and TOML.

Design Guidelines

Design Guidelines are discussed in Chapter 6 and have been provided to offer potential solutions to specific situations that will be encountered during implementation of the Trail System Master Plan. The design treatments offered include the following:

Table E-12. Summary of Design Guidelines

MULTI-USE PATHS (MUP)
■ Paved Median Paths
■ Typical At-Grade MUP Crossings
■ Signalized At-Grade Crossings of Major Streets (Toucan or HAWK)
■ Signalized At-Grade Crossings of Minor Streets (Cross Alert)
■ At-Grade Cross Country Ski Crossings
■ Grade-Separated Crossings
■ Bicycle 'Scramble' Signals
BIKE LANES
■ Uphill Climbing Lanes
■ Bike Lanes Adjacent to Right-Turn-Only Lanes
■ Bike Boxes
BIKE ROUTES
■ Bike Routes with Wide Outside Lanes
■ Bike Routes with Shoulders
■ Bike Routes with Wide Shoulders and Rumble Strips
■ Bike Routes on Narrow Roadways
■ Shared-Lane Markings
■ Bicycle Detection at Signalized Intersections
BICYCLE PARKING
PEDESTRIAN FACILITIES
■ Promenades
■ Curb Extensions
■ Refuge Islands
■ Pedestrian 'Scramble' Signal
SOFT-SURFACE TRAILS
■ Summer Trails
■ Winter Trails
EASEMENTS

Operations and Maintenance

The Trail System Master Plan (Chapter 7) identifies existing maintenance responsibilities and provides recommendations for future maintenance as well as discussion of how to determine the appropriate level of winter maintenance for facilities maintained by the Town of Mammoth Lakes.

Table E-13. Summary of Maintenance Recommendations

Recommendation	Description
M1: Development of Coordinated Year-Round Maintenance Plan	The Department of Tourism and Recreation and the Department of Public Works should work together to develop a year-round maintenance plan.
M2: Snow Removal and Grooming on Paved Paths (MUPs) and Sidewalks	All segments of paved pathway within the Town of Mammoth Lakes—or under its control through the Special Use Permit with the Forest Service—should be either cleared or groomed for year-round use.
M3: Prioritization of Snow Removal along Individual Paved Path (MUP) Segments	Clear snow from MUP segments preferred for snow removal, as budget allows. Table 7-5 list the segments preferred for snow removal. Segments providing school access would continue to receive priority.
M4: Prioritization of Winter Grooming along Individual Paved Path (MUP) Segments	Groom snow along MUP segments preferred for winter grooming, as budget allows. Table 7-6 list the segments preferred for grooming. TOML should coordinate with local organizations who may be able to provide grooming services.
M5: Preservation of Pavement Markings	Recessed thermoplastic is recommended for pavement markings as surface paint wears quickly and can fade or disappear in a matter of 1-3 years.
M6: Use of Salt, Sand or De-Icing Solution	Sand or de-icing solution should only be used if special circumstances warrant, such as severe ice buildup or freeze thaw cycles on the path surface. Salt should not be used as a de-icing agent.
M7: Clearing of Sidewalks for Winter Use	Ensure that all existing and future sidewalks are cleared within a maximum of 24 hours from end of snowfall. This should be achieved through ordinance or expanded use of assessment districts.
M8: Prioritization of Sidewalk versus Roadway Snow Removal	Sidewalk clearing operations should be increased in priority from 7th to 3rd on the Town of Mammoth Lakes' snow removal priority list.
M9: Prioritization of Snow Removal along Individual Sidewalk Segments	Priority for snow removal along individual sidewalk segments should be determined to make best use of TOML resources and should consider school zones, areas surrounding schools, residential and industrial areas in that order.
M10: Coordination between Roadway and Sidewalk Snow Removal	During plowing operations, a sidewalk snow removal crew should follow roadway plowing to remove snow from designated walkways.

Costs and Funding

Planning level cost estimates and the identification of potential funding sources, including Measure R, a local 0.5% sales tax passed in June of 2008 for the specific benefit of parks, recreation and trails have been provided to assist the Town of Mammoth Lakes in programming funding for future trail system improvements. These costs will vary as detailed design is completed for each project. Cost estimates include improvements at recreation nodes as well as multi-use paths, bikeways, crossing improvements and trail projects.

Benchmarking and Evaluation

Benchmarks and methods of evaluation are provided to monitor the progress of implementation and the benefits provided by an expanding trails network. The following table lists the areas covered by the recommended benchmarking and evaluation measures.

Table E-14. Summary of Benchmarking and Evaluation Measures

BENEFITS OF THE TRAIL SYSTEM
Economic Benefits
Health Benefits
RECREATIONAL TRAILS ENVIRONMENT
Implementation
Trail User Needs and Safety Assessment
Recreational Activity
Trail Safety
Trail User Experience
Accessibility
BICYCLING ENVIRONMENT
Implementation
Bicycling Activity
Bicycling Safety
PEDESTRIAN ENVIRONMENT
Implementation
Pedestrian Activity
Pedestrian Safety

Chapter 9 provides a more detailed discussion of recommended benchmarking and evaluation techniques.

Conclusions

This Trail System Master Plan provides sufficient guidance for the Town of Mammoth Lakes to continue moving forward with the development of a high-quality trail system. It does not, however, provide clear solutions for addressing every issue arising from the complex interactions between humans, trails and the surrounding physical environment. In some cases, further study and outreach will be required before responsible, well-informed decisions can be made on trail-related policies and infrastructure. By providing a combination of a vision for trails and public access as well as methods to guide and evaluate the system's growth, the Town of Mammoth Lakes Trail System Master Plan is the "trail map" for the future.