

# CHAPTER 9. BENCHMARKING AND EVALUATION

Measurable benchmarks will help the implementation process for the trail system. Physical implementation, user safety, and quality of service benchmarks can become part of the infrastructure management systems utilized by the Town and its partners. These benchmarks are based on the proposed projects presented in the plan, and include the following performance measures. The existing conditions (miles of multi-use paths, bikeways, trails, etc.) reported in this plan should be used as a baseline measure for the ongoing implementation of this plan. Progress should be compared against existing conditions and compared against the progress of previous years as implementation continues. For areas where no data currently exists, data collection should occur as soon as possible to be used as baseline data upon which future data will be compared.

## ***9.1. Benefits of Trail System***

### **9.1.1. Economic Benefits**

In order to quantify the economic benefits of the trail system, it will be necessary to find ways to estimate annual revenue generated from trail-related equipment sales, rentals and repairs, along with lodging, retail, and related business activity.

- Number of unique hotel visits per year or season (compared to previous years or seasons).
- Number of hotel nights stayed per year or season (compared to previous years or seasons).
- Sales tax revenue from retail sales related to trail equipment.
- Revenue or number of lift tickets sold by MMSA (summer and winter).

### **9.1.2. Environmental Benefits**

Calculate the reductions in and greenhouse gases and other vehicle-related emissions based on the number of vehicle trips shifted to bicycling, walking and transit.

### **9.1.3. Health Benefits**

Calculate the number of calories burned through trail use by linking user counts to average trip lengths and average calories burned per mile. Work with health professionals to calculate the associated health cost savings of a healthy community.

## 9.2. Recreational Trails Environment

The following benchmarks can be used to provide an ongoing evaluation of the recreational trails environment. Many of the indicators used to measure recreational activity are also proxies for economic activity generated through improvements to the recreational trails environment.

### 9.2.1. Implementation

All of the following infrastructure benchmarks should be reported annually and compared to existing (current) conditions and the progress achieved during the previous year.

- Number of recreation nodes that have been upgraded to provide the amenities recommended in this plan.
- Miles of new soft-surface trails and multi-use path programmed into the Capital Improvements Program.
- Miles of new soft-surface trails and multi-use path programmed for implementation by the USFS.
- Miles of new soft-surface trails and multi-use path constructed through the CIP and new development.
- Miles soft-surface trail and multi-use path available (cleared or groomed) for winter use each year.
- Number of volunteer hours dedicated to trail maintenance, educational programs and other stewardship efforts, as reported by local organizations .

### 9.2.2. Trail User Needs and Safety Assessment

TOML should secure funding and begin a community-based process to identify user needs and safety concerns along the Town’s system of paved paths as the network expands. The assessment should address user conflict, the effectiveness of signage, maintenance, and other safety issues. The process should also seek to identify the most appropriate winter use for each paved path segment under the operation and maintenance of the Town of Mammoth Lakes (i.e. groomed for cross-country, cleared for walking & bicycling, etc). This project should take place after all (or most) of the paved path segments as “near-term” projects have been built. A potential funding source is the Caltrans Community-Based Transportation Planning Grant Program, described in Chapter 8.

### 9.2.3. Recreational Activity

- User counts at strategic locations (recreation nodes)
- Surveys of schoolchildren about their recreational behaviors

### 9.2.4. Trail Safety

- Comparison of trail-related injuries and fatalities based on local hospital data
- Periodic survey of community perceptions on bicycle/pedestrian access and safety
- Develop a system for reporting trail-related hazards and user conflicts and track how many hazards have been reported and subsequently mitigated each year

### 9.2.5. Trail User Experience

- Periodic surveys on trail-user satisfaction compared to previous surveys by TOML and USFS

### 9.2.6. Accessibility

- Present results of accessibility assessments for multi-use paths, trails and pedestrian facilities to the public once completed
- Provide updated accessibility information for recreation nodes, MUPs and trails on trail maps and other information sources, such as the Internet

## 9.3. *Bicycling Environment*

The following benchmarks can be used to provide an ongoing evaluation of the bicycling environment.

### 9.3.1. Implementation

All of the following infrastructure benchmarks should be reported annually and compared to existing (current) conditions and the progress achieved during the previous year.

- Number of miles of new bike lanes and multi-use path programmed into the Capital Improvements Program
- Number of miles of new bike lanes and multi-use path constructed through the CIP and new development
- Number of miles bike lanes and multi-use path available (cleared) for winter use each year

### 9.3.2. Bicycling Activity

- Annual bicycle counts at strategic locations
- Periodic counts of bicycle parked in bicycle racks around town
- Comparison 2000, 2010 and 2020 Census Journey to Work Data to track the number of people bicycling to work
- Conduct personal travel surveys similar to the National Household Transportation Survey (NHTS) in order to track bicycle use for all trips (not just the journey to work)
- School-based counts and surveys of bicycling activity
- Participate in the League of American Bicyclists Bicycle Friendly Cities Program with a goal of achieving the Gold or Platinum rating.

### 9.3.3. Bicycling Safety

- Comparison of annual bicycling injuries and fatalities based on California Highway Patrol (SWITRS) data
- Comparison of annual bicycling injuries and fatalities based on local hospital data
- Periodic survey of community perceptions on bicycle/pedestrian access and safety

- Develop a system for reporting bicycling hazards and track how many hazards have been reported and subsequently mitigated each year.

## **9.4. Pedestrian Environment**

The following benchmarks can be used to provide an ongoing evaluation of the pedestrian environment.

### **9.4.1. Implementation**

- Number of miles of new multi-use path programmed into the Capital Improvements Program
- Number of miles of new multi-use path constructed through the CIP and new development

### **9.4.2. Pedestrian Activity**

- Annual pedestrian counts at strategic locations
- Comparison 2000, 2010 and 2020 Census Journey to Work Data to track the number of people walking to work
- School-based counts and surveys of pedestrian activity
- Conduct personal travel surveys similar to the National Household Transportation Survey (NHTS) in order to track pedestrian activity for all trips (not just the journey to work)<sup>10</sup>

### **9.4.3. Pedestrian Safety**

- Comparison of annual pedestrian injuries and fatalities based on California Highway Patrol (SWITRS) data
- Comparison of annual pedestrian injuries and fatalities based on local hospital data
- Periodic survey of community perceptions on pedestrian access and safety
- Develop a system for reporting pedestrian hazards and track how many hazards have been reported and subsequently mitigated each year.

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<sup>10</sup> The U.S Census only tracks the commute (or journey to work). NHTS and other journal-based personal travel surveys track all trips by mode of travel and thus provide a clearer picture of transportation mode choice. Sample surveys can be obtained by the Federal Highway Administration (FHWA) or regional planning agencies such as the Southern California Association of Governments (SCAG).