

**John Ellis**

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**From:** Kim Stravers [kimstravers@mltpa.org]  
**Sent:** Wednesday, April 28, 2010 10:46 AM  
**To:** John Ellis  
**Cc:** Danna Stroud; John Wentworth  
**Subject:** 2010 Spring Measure R Application  
**Attachments:** MRS2010\_MLTPA\_Application\_small.pdf; ATT12894827.htm; MLTPA Block 72ppi.jpg; ATT12894828.htm

Hi, John!

Here is our application, which has a total of 79 pages and is 3.9 MB in size. **Please confirm receipt!**

If I don't see confirmation from you by 11:15 a.m., I will bring you the application on a memory stick.

Thanks!





## 2010 Spring Measure R Application Submittal Instructions

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### Filing Deadline

Applications open **Wednesday, March 31, 2010** and close on **Wednesday, April 28, 2010**, at **12:00 p.m.** Late submittals will not be accepted.

**General Information** (Please read as updates have occurred from Fall 2009 Application)

The Spring Measure R Review is intended to cover unanticipated emergency or maintenance/administration costs of projects already awarded in the fall of 2009, but can also include funding for new awards. Preference will be given for previously awarded projects and once in a lifetime or time-limited opportunities. The Tourism and Recreation Commission will evaluate the urgent need of the application.

The Tourism and Recreation Commission "Principles and Priorities" document should clearly be addressed in your application. Please refer to [www.Visitmammoth.com/measurer](http://www.Visitmammoth.com/measurer) or [www.ci.mammoth-lakes.ca.us](http://www.ci.mammoth-lakes.ca.us) to review the document along with the Draft Parks and Recreation Master Plan or the Draft Trail System Master Plan.

For technical assistance on completing the application, please contact John Ellis at (760) 934-2712 ext. 1222.

### Downloading the Form

Save the Application Form in a word document on your server or hard drive before completing the form. The form contains drop downs so select an answer where you see "Choose One." If you need more space in the text fields, please include the question number at the top of a separate page and attach the complete question to the application form. Please reference the attachment in the appropriate text field.

### Submittal Instructions

Submit your application via email, hard copy, or on a USB memory stick prior to Wednesday, April 28, 2010 at 12:00 p.m. Applications can be in color or B/W, sized to, or folded to 8.5" x 11" (portrait). No faxes.

## **Email**

- Save in PDF (preferred) or word format
- Limit to 5mb (if larger, deliver on a memory stick)
- Identify in the email how many total pages are in the application
- Send to: [jellis@visitmammoth.com](mailto:jellis@visitmammoth.com)
- Subject Line: 2010 Spring Measure R Application
- Include contact name and phone number in content of email (signature)

## **Hard Copy**

- Deliver in a 8.5"x 11" folder/envelope or mail to the Tourism and Recreation Department Office at: 2520 Main Street/P.O. Box 48, Mammoth Lakes, CA 93546.
- Print in portrait format, single sided
- Applications (including attachments) can be in color or B/W, sized to, or folded to 8.5" x 11"

## **Memory Stick**

- Deliver to the Tourism and Recreation Department Office – 2520 Main Street, located adjacent to the Welcome Center
- Make an appointment with John Ellis (no drop-ins) by calling (760) 934-2712 ext. 1222
- The application should be complete, formatted correctly and print ready – Thank you!



## 2010 Spring Application

### APPLICANT INFORMATION

#### ORGANIZATION

**Name of Organization:** MLTPA Foundation  
**Type of Organization (non-profit, HOA, Govt.):** 501(c)(3) public-benefit corporation (nonprofit)  
**Contact Person:** John Wentworth, CEO/Board President  
**Organization's Address:** PO Box 100 PMB 432, Mammoth Lakes  
**State / Zip:** CA 93546-0100  
**Office Phone Number:** (760) 934-3154  
**Email Address:** johnwentworth@mltpa.org  
**Internet Address:** www.mltpa.org

#### PROJECT CONTACT PERSON

**Name:** John Wentworth, CEO/Board President  
**Mailing Address:** PO Box 100 PMB 432, Mammoth Lakes  
**State/Zip:** CA 93546-0100  
**Home Phone Number:** (760) 934-1279  
**Mobile Phone Number:** (213) 309-5637  
**Email Address:** johnwentworth@mltpa.org

### PROJECT SUMMARY

- 1. Name of Project:** Mammoth Lakes Trail System Wayfinding and Signage Standards Manual
- 2. Project Category:** Trails
- 3. Project Type:** Development/Design If **Other** please describe:
- 4. Measure R Funds Requested:** \$ 17,500\*  
\*This amount should be the same as requested in the application.

# PROJECT APPLICATION

## SECTION 1 - PRELIMINARY QUALIFICATIONS:

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1. **Why this project is considered urgent? Please describe in detail why this project was not submitted during the Fall 2009 application process?**

Measure R funds are urgently needed to engage opportunities resulting from projects awarded through the Measure R Fall 2009 awards, specifically "TOML: Trails Signage/Wayfinding Project." Wayfinding logic, naming conventions, mapping, a rescue-locator system, Web-based opportunities, graphic development, and project-management skills are required to ensure that the 160+ Mammoth Lakes Trail System signs currently out to bid through the USFS and the American Recovery and Reinvestment Act have coherent and consistent messaging based on multi-partnered consensus decision-making documented in a Standards Manual.

2. **Does the project live within the Draft Parks and Recreation Master Plan and/or the Draft Trail System Master Plan?**

YES

If YES, please cite (page # & Section #): While the whole of Chapter 5: Signage and Wayfinding of the Draft Trail System Master Plan speaks to this project, some sections are particularly relevant; see "Attachment H: Trail System Master Plan 2009 Chapter 5: Signage & Wayfinding," which has been highlighted.

3. **Does the project meet the "Principles and Priorities" established by the Tourism and Recreation Commission for the Spring 2010 Measure R funding cycle?**

YES

If YES, please cite: The project meets Principles 1 and 2 ("Emphasis on visitor-driving projects" and "Emphasis on cooperative efforts that significantly leverage Measure R funds") as well as Priorities D and E ("Enhancement of visitor experience" and "High priority placed on construction projects that complete segments of the current trail system master plan").

4. **Describe your project's/service conceptual plan including size, scope, context/type, design specifications, use, and budget, or budget document. (This should be an attachment to the application titled: "Project Concept Plan.")**

Please see "Attachment A: Project Concept Plan."

## SECTION 2 - PROJECT DESCRIPTION

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### 1. Project Location

**A. If your project is Development/Design, Implementation/Construction, or Maintenance/Operational, what is the location of your project?**

The Standards Manual will apply to the entire Mammoth Lakes Trail System, which includes all trails within the Mammoth Lakes Planning Area.

**B. If your project is Contractual Services where will your services be provided?**

N/A

### 2. Do you have approval to use the location identified in this application?

(Choose One)

If **YES**, Please provide documentation of approval N/A

If **NO**, describe how and when you will secure this approval? N/A

### 3. Provide the costs for each phase of your project or service. (Where applicable)

**A. Development/Design:** \$17,500. See "Attachment B: Project Budget."

**B. Implementation/Construction:** N/A

**C. Maintenance/Operation:** N/A  
(anticipated annual costs)

**D. Contractual Services:** N/A  
(define length of contract)

### 4. Provide the estimated timeline for each phase of your project or service. (Where applicable)

**A. Development/Design:** Message Schedule for ARRA signage: July 1, 2010. First draft of Standards Manual: October 1, 2010.

**B. Implementation/Construction:** N/A

**C. Maintenance/Operation:** N/A

**D. Contractual Services:** N/A  
(define length of contract)

### 5. Based upon your project type ("Project Summary" Question 3) who is/will be responsible for maintenance and operation upon completion of the project/service?

MLTPA will be primarily responsible for the maintenance and updating of the Standards Manual, with input and assistance from agency partners including the TOML and the Inyo National Forest.

**6. Will there be volunteer hours used for any phase of your project?**

NO

If YES, please identify which phase, how many hours and the value of those hours:

**7. Have any public funds (Town Funds) been previously committed to this project/service or project site?**

YES

If YES, please list: 1) TOML for Draft Trail System Master Plan; 2) SNC and Measure R to inventory all existing trail signage; 3) Measure R for MLTPA convening Mammoth Trails Map, Signage & Wayfinding Committee .

**8. Is Measure R your only funding source for this project/service?**

NO

If NO, provide amount and source of additional funds(You will be required to provide proof of this funding) MLTPA has raised one-to-one challenge funding of \$17,500 for this application. Additionally, MLTPA has committed \$18,500 to the Standards Manual that will be leveraged by funding this application.

**9. Is your project/service going to have an impact on existing use in the location you have identified?**

(Please Describe) The Standards Manual will have significant positive impacts on the Mammoth Lakes Trail System by delivering end-user satisfaction, but will not have a physical impact on the environment. User engagement with the Mammoth Lakes Trail System will be clear and informative, and guests will have the opportunity to discover additional recreation experiences through coherent trail-signage messaging identifying primary and alternative adventures.

**10. Who is the long term owner of the project/service?**

The Town of Mammoth Lakes, in cooperation with its agency partners, will be the long-term owner of the Standards Manual, with maintenance assistance provided by MLTPA.

**11. Describe your plan for how the Town of Mammoth Lakes will manage/maintain oversight of this project/service?**

Once completed, the MLTS Wayfinding and Signage Standards Manual should be adopted by the Town of Mammoth Lakes as part of the Trail System Master Plan 2009, whereby it will become a piece of the greater planning tool and serve as the first staff reference for future TOML/MLTS signage projects.

### **SECTION 3 - PROJECT BENEFITS**

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- 1. Describe how your project/service provides a community benefit to the residents and visitors of Mammoth Lakes?**

Please see "Attachment C: Community Benefits."

- 2. Describe the targeted users of your project/service? (Include numbers of participants)**

Town of Mammoth Lakes staff will be the actual users of the manual, but its effects will improve the recreation experiences of the more than 1.5 million annual visitors to the Mammoth Lakes region, in addition to those of the Town's 7,000-plus year-round residents.

- 3. Is it available for limited or year round use? (Please describe the use.)**

The manual will be applicable to all trail-sign types and all four seasons (year-round use).

- 4. Describe the economic benefits of your project/service.**

Please see "Attachment D: Economic Benefits."

- 5. Please provide any additional information you would like the Tourism and Recreation Commission to consider when reviewing your application.**

Coherent signage and wayfinding for trails in the Mammoth Lakes region has long been a desired goal. Public and philanthropic investments in this effort to date include: 1) the Draft Trail System Master Plan; 2) Measure R funding for "TOML: Trails Signage/Wayfinding Project"; 3) federal funding through ARRA (the American Recovery and Reinvestment Act); 4) Measure R for MLTPA, including the Mammoth Trails Map, Signage & Wayfinding Committee efforts; and 5) MLTPA funding committed to creation of a Standards Manual. Funds requested in this application are critical and urgent, as coherent messaging for ARRA signage must be developed by July 1, 2010. MLTPA has raised one-to-one match funds for this application.

**Submittal Deadline: Wednesday, April 28, 2010; 12 Noon**

**MLTPA Foundation Spring 2010 Measure R Grant Application  
Attachment A: Project Concept Plan**

## **MLTPA Foundation Measure R Spring 2010 Grant Application Attachment A: Project Concept Plan**

MLTPA seeks to address urgent needs and critical opportunities that have been generated by successfully awarded Measure R projects. Work identified in this application will address urgent needs and critical opportunities that will need to be completed by July 1, 2010. Specific project needs will require that MLTPA work collaboratively and by consensus with the jurisdictional stakeholders of the Mammoth Lakes Trail System (MLTS) to develop an MLTS Wayfinding and Signage Standards Manual that will provide common guidelines and best practices for the design, fabrication, installation, and maintenance of trail-system signage.

The MLTS is contained within the Mammoth Lakes Planning Area, which, at approximately 125 square miles, encompasses lands within three distinct jurisdictions—the Town of Mammoth Lakes (TOML), the Inyo National Forest (INF), and the National Park Service (NPS)—all of which possess their own unique signage and wayfinding systems and requirements. In order to develop and implement a truly unified MLTS, these agencies must be able to work from consensus-based decisions regarding shared facilities, as the trails within the MLTS often intersect on, or provide access to, lands under different jurisdictions. The optimal experience for outdoor recreationists in the Mammoth Lakes region includes a wayfinding system that is clear, informative, and, above all else, consistent in its presentation so that the user is reassured at appropriate intervals that he is on his desired path, no matter to whom the lands he is visiting belong. MLTPA has brought together these three agencies under the partnership commitment to a four-season, year-round system of trails and public access outlined in the Memorandum of Understanding (see “Attachment E: MLTPA MOU”) to which the TOML and the INF are signatories.

The urgent need and critical opportunity for this Standards Manual has developed from the awarding of \$300,000 in federal stimulus monies (American Recovery and Reinvestment Act, or ARRA) for a trail-system signage and wayfinding program through a financial-matching arrangement between the TOML and the INF, which was triggered with the award of \$80,000 in Measure R funds to the TOML in the Fall 2009 award cycle. With a short window within which the signage and its attendant messaging was to be developed, approved, bid, fabricated, and implemented (dictated by federal grant requirements), it quickly became evident that, without any adopted regulations for cross-jurisdictional signage, this initial phase could be host to mistakes and inconsistencies that would be extremely costly to repair or replace. Further, a signage program that was not vetted against partner-agency requirements or against its own real-world placement and interaction would set the precedent for opportunistic planning in terms of messaging and aesthetics, with no logic or rules to back up the final product and no set plan to follow for future implementation opportunities. The goal of officially forming the Mammoth Lakes Trail System is to present the trail network as a whole product that is branded consistently at every turn; incongruous signage and wayfinding, especially over

time, leads to a confusing amalgam of information that can misdirect a user or otherwise negatively impact his experience—and our tourism-based economy.

Realizing the positive opportunity that the ARRA signage program presented with regard to design guidelines, MLTPA committed \$18,500 of its own unrestricted funding to engage Corbin Design—author of Chapter 5 of the TSMP 2009, “Signage and Wayfinding,” and contractor to the TOML for initial messaging and design of the ARRA signage—to continue to deliver its expertise in devising consistent, reasoned, consensus-based and agency-sensitive wayfinding and signage systems to the MLTS. We convened the Mammoth Trails Map, Signage & Wayfinding Committee with agency partners to begin forming recommendations regarding messaging and design; having supplied the partners with the group’s consensus report (see “Attachment F: Mammoth Trails Map, Signage & Wayfinding Committee Recommendations”) as a baseline reference document, MLTPA continued to convene just the agency partners to further refine the look and feel of the ARRA signage. Details from this process, such as naming conventions for facility types, graphic palette and layout, map presentation, coding, and abbreviations, have been applied directly to the Wayfinding and Signage Standards Manual as a means of fleshing out its outline (see “Attachment G: MLTS Wayfinding and Signage Standards Manual TOC”) with on-the-ground examples and precedents. Having the opportunity to use a non-hypothetical signage project such as the implementation of the ARRA-funded signage program—itsself leveraged by Measure R—as the test for the ideas generated during these agency meetings has not only spurred the Standards Manual design process along at an appropriate pace, but has allowed all involved to stand behind their consensus decisions with conviction that they will play out as intended on the ground.

With a combination of Measure R funding from the Spring 2010 award cycle and private donations, MLTPA will continue to develop the Standards Manual by using the ARRA signage project as a vehicle for experimentation and by engaging Corbin Design as appropriate to assist with message schedules, design intent documents, and other materials relevant to, and meant for inclusion in, the final manual. Once the ARRA process is complete, MLTPA will move forward with gaining partner participation in, and consensus on, other portions of the manual not needed for this initial ARRA effort, such as the development of standards for and ownership of maintenance responsibilities; signage for soft-surface trails; a detailed breakdown of each sign type, its intended function, and its consistent messaging; agency sideboards and requirements; and administrative or back-end workflow as for the Rescue Locator system. The final product (which will be composed of text, photos, and graphic images) will also contain a history of the program’s development, acknowledgement of the formative partnerships, a complete listing of destinations and facility types, and implementation recommendations for future phases.

MLTPA has made it clear from the project’s conception that the final product is not meant to dictate or replace existing agency standards and requirements, but to serve as a guidebook containing information on how to develop future phases of the MLTS signage in accordance with partner consensus and agency mandates. Due to the multi-

jurisdictional nature of the MLTS and the desire for all trail facilities, including signage and wayfinding, to be sustainable over the long term, the Wayfinding and Signage Standards Manual will be invaluable in creating and maintaining a program that is easy to implement, highly functional for the end user, and supportive of the incredible outdoor recreation amenities to which it will point.

**MLTPA Foundation Spring 2010 Measure R Grant Application  
Attachment B: Project Budget**

**MLTPA Foundation Spring 2010 Measure R Grant Application  
Attachment B: Project Budget**

<b>Funds Requested from Measure R Spring 2010 Application</b>					
<b>MLTPA</b>					
Outreach and Facilitation *				(MLTPA staff time)	
Mammoth Trails *				(MLTPA staff time)	
Interagency Coordination *				(MLTPA staff time)	
<b>Total Request from Measure R Funds =</b>					<b>17,500.00</b>
* These are existing and approved project categories from MLTPA's current Fall 2009 Measure R Contract.					
<b>Funds Raised by MLTPA for Corbin Design Contractual Services</b>					
<i>NOTE: Should this MR application be awarded, MLTPA will engage Corbin Design for the following services, to be paid for by funds MLTPA has raised and are on hand.</i>					
<b>Corbin Design</b>					
Team meetings as requested		22		22	4,510.00
Stakeholder conference calls		12		4	1,700.00
Finalize terminology and destinations list		4		2	630.00
Revisions to final Design Intent package (depends on how extensive the changes are from 4/1)		38		2	4,370.00
Revise Sign Location Plan and Message Schedule as required (includes analysis of changes made by TOML and reconciling for wayfinding integrity)		34		2	3,930.00
Electronic file prep/posting; additional project management		10		10	2,050.00
<b>Total Hours</b>	0	120	0	42	162.00
<b>Professional Fees</b>					17,190.00
<b>General Expenses</b>					310.00
<b>Total Funds Raised for Corbin Contractual Services =</b>					<b>17,500.00</b>
<b>Additional Funds that Will Be Leveraged by Application Award</b>					
<b>MLTPA Foundation</b>					
MLTPA funding for SWF ARRA projects to date					3,261.25
MLTPA funding for Standards Manual to date					6,488.75
MLTPA funding raised and committed to Standards Manual					16,250.00
<b>Total Funds To Be Leveraged =</b>					<b>26,000.00</b>
<b>Measure R Funds =</b>					<b>17,500.00</b>
<b>Funds Raised by MLTPA =</b>					<b>17,500.00</b>
<b>Funds To Be Leveraged =</b>					<b>26,000.00</b>
<b>Total Project Value =</b>					<b>61,000.00</b>

**MLTPA Foundation Spring 2010 Measure R Grant Application  
Attachment C: Community Benefits**

**MLTPA Foundation Measure R Spring 2010 Grant Application**  
**Attachment C: Community Benefits**

The community benefits derived from the Mammoth Lakes Trail System (MLTS) Wayfinding and Signage Standards Manual, while not direct, are numerous. By providing a comprehensive resource for signage and wayfinding for the MLTS, the Standards Manual will enable Town staff and agency partners to expand upon the existing trail system in a manner that is consistent with previous phases and that follows logical, consensus-based messaging and design direction. The availability and application of a signage program that is congruent and unified impresses upon the user that the experiences he sets out to have are well-marked, known, and part of a larger, planned system—no matter where in the region he happens to be, no matter whose land the trail falls on or crosses. The user, whether a resident or a guest, will finally have a reliable expectation that, whichever path or trail he chooses to follow, he will not get lost, will be informed of options and connections at trail junctions, and will be able to select an experience that is appropriate for his desired activity, ability level, age, and the makeup of his party (i.e., a single user versus a family with small children). The Standards Manual will guarantee also that the MLTS will be a true destination for tourism, as it will direct that the signage consistently showcase the many recreation amenities to be found in the Mammoth Lakes region without relying solely on the agencies under whose aegises the facilities fall to successfully (and solely) market the experiences they offer. Positive user experiences directly increase repeat and return visitation, and creating a Standards Manual that will ensure that the signage system directing users to these experiences is helpful and clear will bring Mammoth Lakes closer to its goal of increased tourism.

**MLTPA Foundation Spring 2010 Measure R Grant Application  
Attachment D: Economic Benefits**

**MLTPA Foundation Measure R Spring 2010 Grant Application**  
**Attachment D: Economic Benefits**

The largest economic benefit of the creation and adoption of a Mammoth Lakes Trail System (MLTS) Wayfinding and Signage Standards Manual will be the upswing in tourism that results from users' enhanced recreation experiences. By developing guidelines that create consistent, informative, and aesthetically pleasing signage and logical, effective wayfinding systems, the project partners will ensure that visitors to the MLTS will not only enjoy the recreation experiences they have planned in advance, but that they will be exposed to and inspired by other adventures highlighted on the signage that they will return to engage in. A well-planned wayfinding and signage system reassures the user that he will remain on his chosen path and within his appropriate ability range so that he can pursue his desired activities with confidence.

In addition, the creation and adoption of the Standards Manual will result in cost savings to the Town of Mammoth Lakes during the design, fabrication, and installation of future signage and wayfinding phases. Standardized methodology and procedures for determining nomenclature, aesthetics, and presentation of specific information will assist staff in avoiding inconsistencies in language or design that would require the costly replacement or amendment of already fabricated and/or implemented signage.

**MLTPA Foundation Spring 2010 Measure R Grant Application  
Attachment E: MLTPA MOU**

**MEMORANDUM OF UNDERSTANDING BETWEEN**  
**United States Forest Service**  
**Town of Mammoth Lakes**  
**County of Mono**  
**Mammoth Community Water District**  
**Mammoth Lakes Fire Protection District**  
**Mammoth Mountain Ski Area**  
**National Park Service**  
**California Department of Transportation**  
**Friends of the Inyo**  
**California Lahontan Regional Water Quality Control Board**  
**Mammoth Lakes Trails and Public Access**

**I. PARTIES.**

The Parties to this MEMORANDUM OF UNDERSTANDING (MOU) are as set forth above. This MOU is a non-binding document which reflects the interest of each of the Parties in cooperatively pursuing the Purpose of this MOU as set forth in Section II. Each of the Parties has jurisdiction over or influence affecting the lands and waters in and surrounding the Town which may be accessible by members of the public for recreation and enjoyment.

When meeting or acting in their collective capacities, the Parties are referred to below and may be referred to publicly as the “Mammoth Lakes Trails and Public Access Commission.” [“Trails Commission” for purposes of this MOU].

This MOU is formally known as the “Mammoth Lakes Trails and Public Access Memorandum of Understanding”. [“Trails Commission MOU” for purposes of this MOU]. It may be referred to publicly as the “MLTPA MOU.”

**II. PURPOSE; AREA OF INFLUENCE.**

The Town contains and is surrounded by forests, meadows, lakes and waterways that constitute some of the most accessible, pristine public lands in the Sierra, and indeed in the country. All Parties to this MOU have an interest in preserving these lands on behalf of the public, and the public has a right to enjoy the experiences these lands can provide.

Therefore, the Purpose of this MOU is to establish and provide a working public/private cooperative framework, or *collaborative planning process*, directed toward the *establishment and maintenance of a system of public trails providing reasonable access to and enjoyment of public lands that are both within and surround the Town.*

The Town’s Area of Influence consists of approximately 125 square miles of land surrounding the Town. Subject to more precise planning or mapping, that shall become the Area of Influence for the application of this MOU and any agreements among the parties, or any of them, which may come about as a result of this MOU.

## **II. CONSISTENCY WITH APPLICABLE LAWS.**

Public lands are owned by the people and held in trust for them by various governmental agencies created by them. The people have a right to enjoy those lands consistent with applicable laws governing their use by and preservation for all the people. Unless otherwise agreed by an affected Party, this MOU is meant to be applied and interpreted in a manner consistent with all applicable laws, charters and ordinances, and by rules and regulations promulgated by any agency which is a Party to this MOU, and by the budget policies of any such agency. It is understood that no action by the Trails Commission shall be binding on any such agency without the consent of its governing body or relevant authorizing agent.

## **III. THE COLLABORATIVE PLANNING CONCEPT.**

The individual Parties to this MOU have various responsibilities with respect to the issue of access to public lands. Each Party recognizes, however, that in carrying out those responsibilities, its efforts may be enhanced by joint planning and general cooperation with the other entities which have jurisdiction over or influence on activities within the Area of Influence.

All Parties agree that collaborative planning in selected areas of emphasis may have a synergistic effect that enhances the efforts of any one Party. For example, in order to avoid confusion on the part of members of the public seeking access to public lands, it would be desirable to have a consistent, integrated system of trails, trail-marking and signage. This would in turn engender confidence in members of the public that their governmental agencies are working harmoniously in the public interest.

A collaborative planning process presupposes significant involvement of members of the public at every reasonable opportunity. Therefore, to the extent necessary to carry out the objectives of this MOU, the Parties agree to schedule and publicly notice meetings to discuss planning concepts as well as specific plans which may be recommended for implementation by agencies or entities which are party to this MOU. Members of the public will be urged to actively participate in the meetings.

The Parties to this MOU agree that their representatives participating in meetings and actions of the Trails Commission shall refer all matters requiring action by a Party to that Party's decision-making body or agent. For example, matters requiring action by the Town shall be referred to the Town Council; matters requiring action by the USFS shall be referred to the Forest Supervisor (or such other person whose approval is required). The Parties further agree that they will take reasonably expeditious action on any such matters.

## **IV. PROCEDURES.**

The Parties to this MOU may adopt Rules and Procedures for the conduct of the business and meetings of the Trails Commission. Otherwise actions shall be taken by a majority of those Parties present and voting at a meeting called for the purpose of taking action under or implementing any of the provisions of this MOU or any recommendations to the governing bodies or authorized agents of the parties to this MOU.

Since the purpose is so well defined and so obviously for the greater good of the public, the procedural goal of the Parties is to create a system which operates by consensus on the basis of open, intelligent discussion without the rancor and recrimination which often occurs in public debate. Meetings will be conducted and actions taken in that spirit.

**V. AREAS OF EMPHASIS.**

**A. Evolving Process.**

As the Trails Commission pursues its objectives under this MOU, it will develop various plans and implementation strategies for recommendation to the governing bodies or authorized agents of the Parties to this MOU. Its efforts will evolve in response to its deliberations and to information and ideas offered by members of the public and other interested entities and agencies.

**B. Initial Areas of Emphasis.**

A first task of the Trail Commission will be to develop, hold public hearings on as deemed by the Parties to be necessary, and adopt a list of initial areas of emphasis relevant to the Purpose of this MOU.

**VI. GENERAL MATTERS.**

**A. Freedom of Information Act (FOIA).**

Any information furnished to the United States Forest Service under this MOU is subject to the Freedom of Information Act (FOIA).

**B. Participation in Similar Activities.**

This MOU in no way restricts any Party hereto from participating in similar activities with other public or private agencies, organizations, and/or individuals.

**C. Commencement; Expiration; Termination.**

This MOU takes effect upon the date the last of the signatories hereto has executed this MOU and shall remain in effect for a period of five (5) years from such date unless extended. This MOU may be extended or amended upon request of any party hereto and the further written agreement of each Party. Any Party to this MOU may terminate its participation in this MOU, and remove itself as a Party hereto, by written notice the other Parties.

**D. Responsibilities of Parties.**

The Parties to this MOU and their respective agencies, officers, employees and/or agents will handle their own activities and utilize their own resources, including the expenditure of their own funds, in pursuing the purposes herein set forth. Each party will carry out its separate activities in a coordinated and mutually beneficial manner.

**E. Principal Contacts of Parties.**

The principal contacts of each Party to this MOU are set forth on Exhibit A attached hereto.

**F. Non-Fund Obligating Document.**

Nothing in this MOU shall obligate any Party hereto to obligate or transfer funds. Specific work projects or activities that involve the transfer of funds, services, or property between or among the Parties, or any of them, will require execution of separate agreements and be contingent upon the availability of appropriate funds, any must be independently authorized by the appropriate statutory authority, where applicable under the practices, rules or regulations of any Party.

**G. Establishment of Responsibility.**

This MOU is not intended to and does not create any right, benefit, or trust responsibility, substantive or procedural, enforceable at law or equity, by any Party against any other Party, or its agencies, officers, employees, or agents, or any individual.

**H. Authorized Representatives.**

By signature below, the each Party certifies that the individuals signing this document on behalf of such Party, or listed in this documents as a contact for such Party, are authorized to act in their respective areas for matters related to this MOU.

**WHEREFORE**, the Parties to this MOU execute the same as set forth hereinafter. This MOU may be executed in counter-parts, each of which shall be deemed an original and which shall be retained by the Trails Commission.

Exhibit A: Trails Commission Signatories

Inyo National Forest

  
Name: Tim Upchurch  
Position: Forest Supervisor

Town of Mammoth Lakes

  
Name: Robert Clark  
Position: Town Manager

County of Mono

  
Name: BYNG HUNT  
Position: SUPERVISOR - DISTRICT 5

Mammoth Community Water District

  
Name: GARY SISSON  
Position: GENERAL MANAGER

Mammoth Lakes Fire Protection District

  
Name: BRENT HARPER  
Position: FIRE CHIEF

Mammoth Mountain Ski Area

(P) [Signature]  
Name: \_\_\_\_\_

Position: \_\_\_\_\_

National Park Service

Name: \_\_\_\_\_

Position: \_\_\_\_\_

California Department of Transportation

[Signature]  
Name: \_\_\_\_\_

Position: Deputy District Director - Planning Dist. 9

City of Los Angeles

Name: \_\_\_\_\_

Position: \_\_\_\_\_

California Lahontan Regional Water Quality Control Board

Name: \_\_\_\_\_

Position: \_\_\_\_\_

Mammoth Lakes Trails and Public Access

Name: \_\_\_\_\_

Position: PROGRAMMATIC / EXHIBIT INFORMATION

Friends of the Inyo

*Paul McFarland*

Name: *Paul McFarland*

Position: *Executive Director*

\_\_\_\_\_  
Name: \_\_\_\_\_

Position: \_\_\_\_\_

**MLTPA Foundation Spring 2010 Measure R Grant Application  
Attachment F: Mammoth Trails Map, Signage & Wayfinding  
Committee Recommendations**



# Mammoth Trails

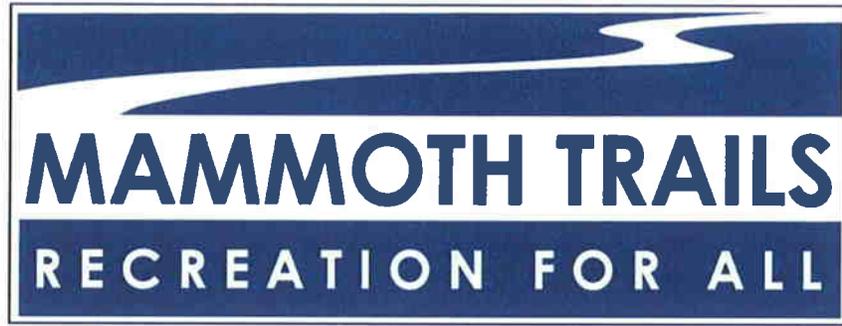
Map, Signage and Wayfinding Committee  
 Suggestions to TOML + USFS: "ARRA Signage and Wayfinding"

Naming Conventions Workshop (1/30/10): Statements and Rationales  
 Messaging Workshop (2/3/10): Statements and Rationales

**DRAFT - February 5, 2010**



PO Box 100 PMB# 432  
 Mammoth Lakes, CA 93546  
 760 934 3154  
 mltpa.org



**Mammoth Trails Map, Signage & Wayfinding Committee:  
Notes on the Mammoth Lakes Trail System  
Naming Conventions**

**as developed in the**

**Naming Conventions Workshop  
January 30, 2010**



## **Mammoth Trails Map, Signage & Wayfinding Committee: Notes on the Mammoth Lakes Trail System Naming Conventions**

### ***Region***

The group considered a name for the area defined by the Town of Mammoth Lakes Planning Area.

**SUGGESTION 1:** Mammoth Lakes

**RATIONALE:** This is the town's current name and is how most summer visitors refer to the town and its surrounding area.

**SUGGESTION 2:** Mammoth

**RATIONALE:** This is how most winter visitors refer to the town and ski area.

**SUGGESTION 3:** Mammoth Area

**RATIONALE:** This name is being considered by some in the TOML as a way to remain outside jurisdictional boundaries when referencing this region.

**SUGGESTION 4:** Mammoth Lakes Recreation Area

**RATIONALE:** This name presently appears on at least one Inyo National Forest sign.

**CONSENSUS:** Mammoth Lakes

**RATIONALE:** All of the land being considered for inclusion in the region and as the geographic footprint of the trail system is entirely within the identified Town of Mammoth Lakes Planning Area. Visitors and residents are already familiar with and use the name "Mammoth Lakes" when talking about this region, so the group agreed that it should be adopted as the region name going forward.

## ***Trail System***

The group considered what to name the complete trail system, which describes the routes within the region as a formal network.

**CONSENSUS:** Mammoth Lakes Trail System

**RATIONALE:** Having come to consensus on calling the region “Mammoth Lakes,” the group agreed that the proposed name, “Mammoth Lakes Trail System,” described the trail network comprehensively and simply, and that it should be adopted as the system name going forward.

## ***Sub-Regions***

The group reviewed the sub-regions as described on the regional map provided by MLTPA, then considered both the proposed names and any suggestions group members provided.

**PROPOSED NAME:** Shady Rest

**SUGGESTIONS:** None

**CONSENSUS:** Shady Rest

**RATIONALE:** This sub-region contains Shady Rest Park, which is popular with residents and visitors year-round and whose name is already part of the local vernacular. The group agreed that “Shady Rest” should be adopted as the sub-region name going forward.

**PROPOSED NAME:** Eastern Lands

**SUGGESTIONS:** Sherwin Creek; Hot Creek; Laurel/Bloody; Laurel Meadows

**CONSENSUS:** None

**RATIONALE:** The group agreed that “Eastern Lands” is too general a name; concern was expressed that visitors would not be easily able to connect the name of the sub-region with a vision of what it looks like or contains, or with the experiences found there. The group developed suggestions by identifying iconic features of the landscape, but did not reach consensus on any one name. It was agreed that this sub-region name requires further discussion.

**PROPOSED NAME:** Town of Mammoth Lakes

**SUGGESTIONS:** Town

**CONSENSUS:** Town

**RATIONALE:** The group initially agreed with the proposed name, but came to consensus on calling the sub-region "Town." Group members preferred a short name for the sub-region and agreed that, with the larger region already being called "Mammoth Lakes," that level of detail did not need to be repeated in any sub-region names. As the sub-region contains only what is within the Urban Growth Boundary, it made sense to the group to name this sub-region "Town," as users will associate that name with developed facilities and amenities such as hotels, retail, and food and beverage operators. The group agreed that "Town" should be adopted as the sub-region name going forward.

**PROPOSED NAME:** Mammoth Mountain

**SUGGESTIONS:** None

**CONSENSUS:** Mammoth Mountain

**RATIONALE:** The group came to immediate consensus on calling this sub-region "Mammoth Mountain," as visitors, residents, and employees refer to the resort in this manner and this name is shorter than "Mammoth Mountain Ski Area." Leaving "Ski Area" off the name also removes any opportunity for confusion regarding whether or not the resort is open during the summer months. The group agreed that "Mammoth Mountain" should be adopted as the sub-region name going forward.

**PROPOSED NAME:** Lakes Basin

**SUGGESTIONS:** None

**CONSENSUS:** Lakes Basin

**RATIONALE:** The name describes the dominant features of the sub-region and is already widely used by residents, guests, and agencies when referring to this area. The group agreed that "Lakes Basin" should be adopted as the sub-region name going forward.

**PROPOSED NAME:** High Country

**SUGGESTIONS:** Mammoth Crest

**CONSENSUS:** Mammoth Crest

**RATIONALE:** The group agreed that the name "High Country" was neither descriptive enough nor tied directly to this specific region, as it could be used to describe a similar landscape in other states or areas. The group came to consensus on calling the sub-region "Mammoth Crest," as the name references a geographically defining and prominent feature of the area as well as ties it specifically to Mammoth Lakes. The group agreed that "Mammoth Crest" should be adopted as the sub-region name going forward.

**PROPOSED NAME:** Sherwins

**SUGGESTIONS:** Hidden Lake, Mammoth Meadow, Sherwins Area, Sherwins Recreation Area

**CONSENSUS:** None

**RATIONALE:** The group discussed this sub-region and its features, of which there are more than one that qualify as iconic (Sherwin Ridge, Mammoth Rock, etc.). They felt that "Sherwins" focused too much on the ridge itself and did not adequately capture the surrounding opportunities at the base of the range. The group did not reach consensus at their January 30 meeting but agreed that this sub-region name requires further discussion. At their February 3 meeting the group also failed to reach consensus, but came to a temporary agreement that "Sherwins Area" could be used as a placeholder, recognizing that if signage opportunities specific to this sub-region presented themselves, more work would be needed to formalize the name.

**PROPOSED NAME:** Western Lands

**SUGGESTIONS:** San Joaquin, Upper San Joaquin, Reds Meadow, Devils Postpile, Minaret Vista Recreation Area

**CONSENSUS:** None

**RATIONALE:** The group agreed that "Western Lands" was too general a name; concern was expressed that visitors would not be easily able to connect the name of the sub-region with a vision of what it looks like or contains, or with the recreation experiences available there. Maureen Finnerty of the National Park Service advised that as part of the Devils Postpile Management Plan work, a broader name for the area was being considered by NPS staff and others. She stated that she would keep the MLTS partner team informed of any developments. The group did not reach consensus on any one name and agreed that this sub-region name requires further discussion.

**PROPOSED NAME:** Inyo Craters

**SUGGESTIONS:** Owens River Headwaters; Obsidian Dome

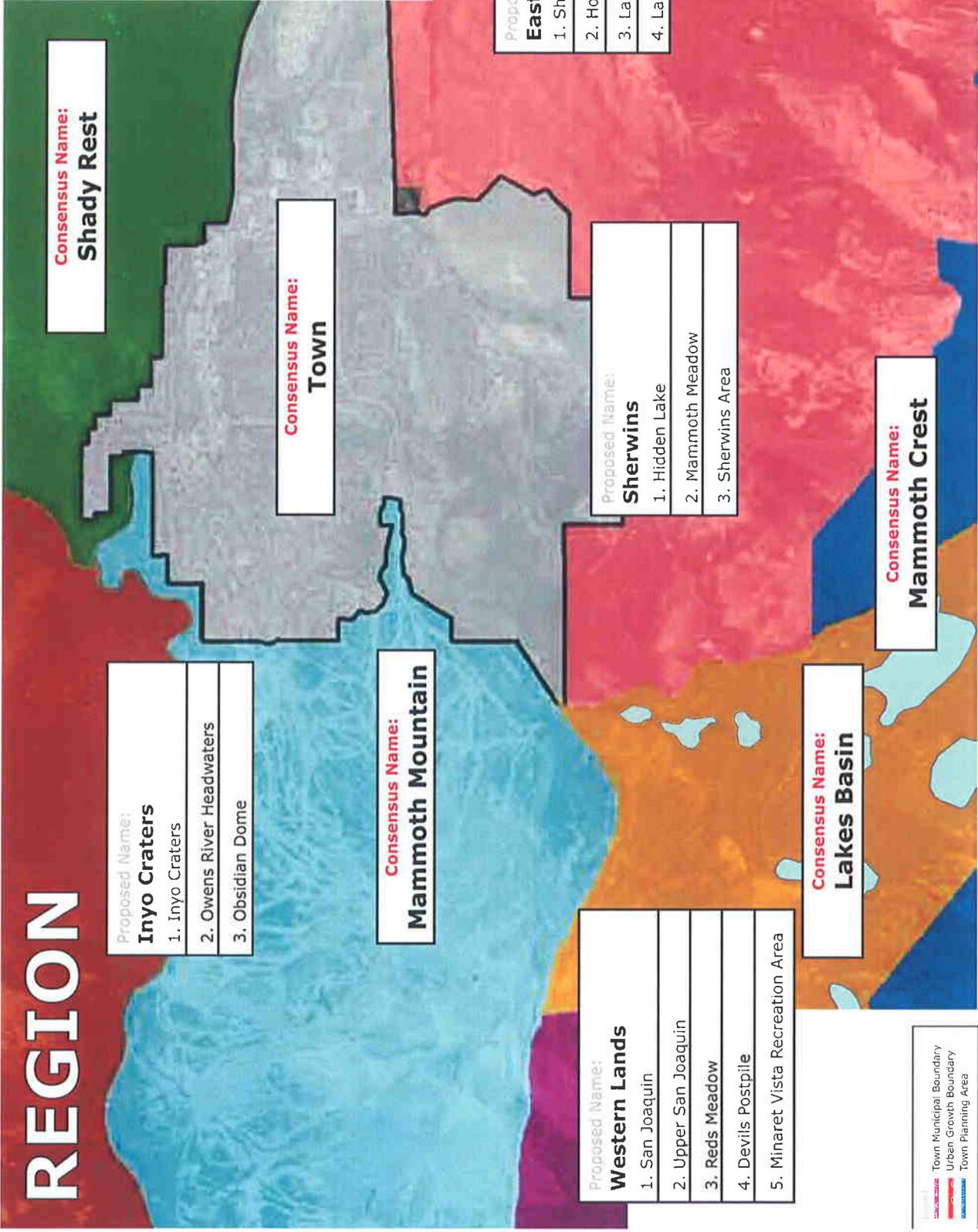
**CONSENSUS:** None

**RATIONALE:** The group agreed that this sub-region is very diverse, providing access not only to volcanic craters but also to wilderness areas, Jeffrey pine forests, and other experiences. Group members expressed a desire to find a name more encompassing of the area's landmarks and recreation opportunities than "Inyo Craters." The group did not reach consensus on any one name and agreed that this sub-region name requires further discussion.

# REGION

Consensus as of 01/30/10

## WAYFINDING RATIONALE



Legend

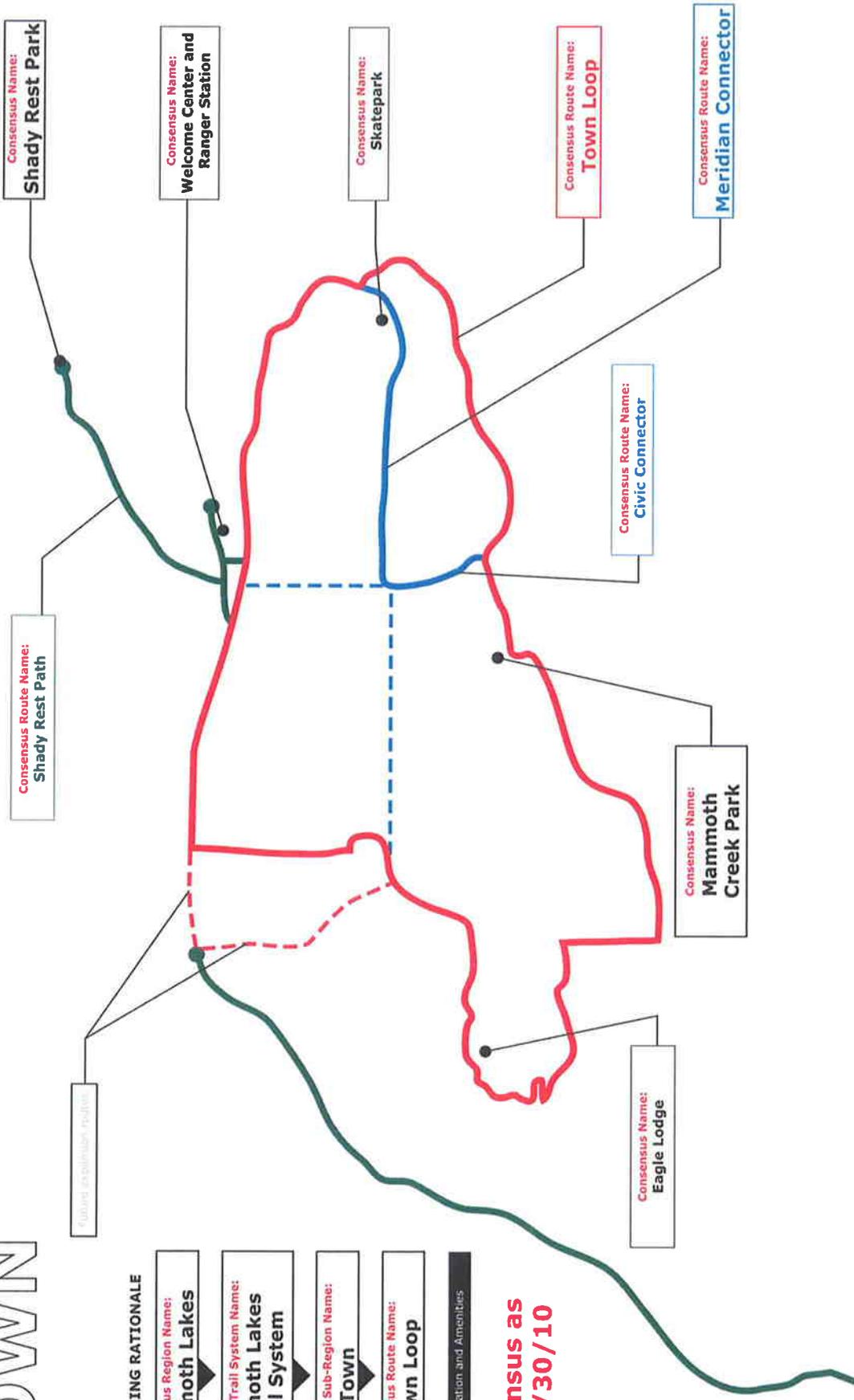
- Town Municipal Boundary
- Urban Growth Boundary
- Town Planning Area

# TOWN

## WAYFINDING RATIONALE

- Consensus Region Name:  
**Mammoth Lakes**
  - Consensus Trail System Name:  
**Mammoth Lakes Trail System**
  - Consensus Sub-Region Name:  
**Town**
  - Consensus Route Name:  
**Town Loop**
- Area Recreation and Amenities

**Consensus as of 01/30/10**



# LAKES BASIN

**WAYFINDING RATIONALE**

Consensus Region Name:  
**Mammoth Lakes**

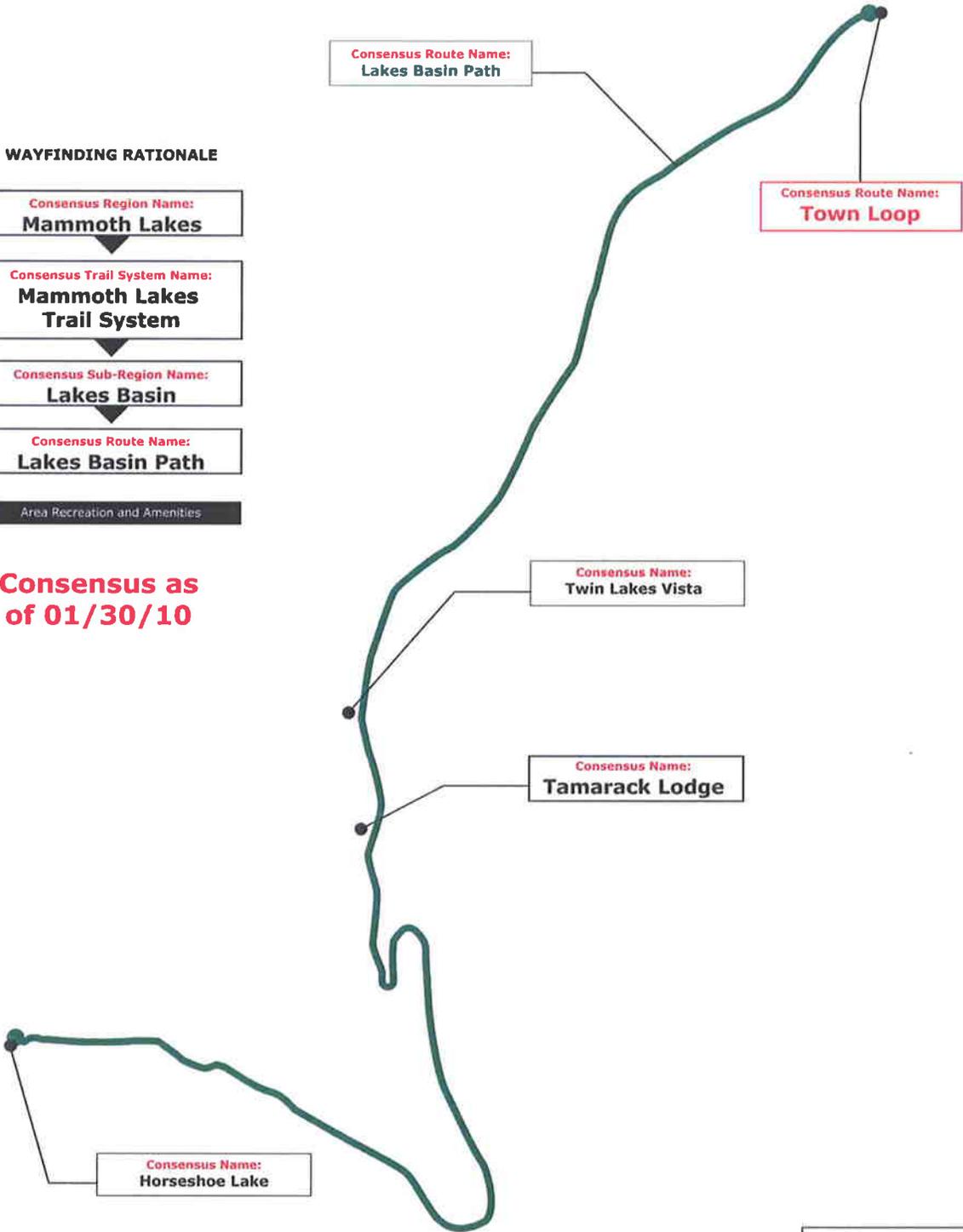
Consensus Trail System Name:  
**Mammoth Lakes Trail System**

Consensus Sub-Region Name:  
**Lakes Basin**

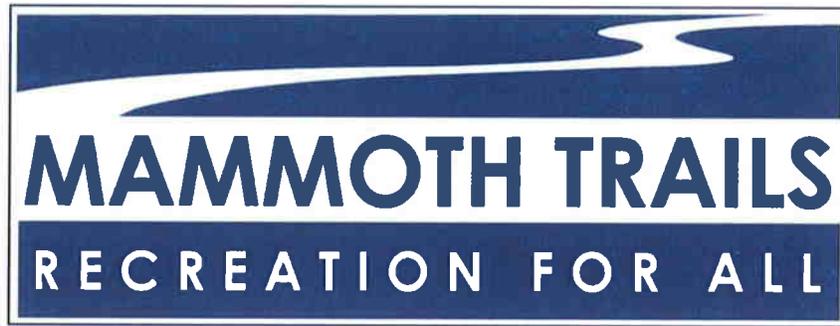
Consensus Route Name:  
**Lakes Basin Path**

Area Recreation and Amenities

**Consensus as of 01/30/10**



	Connecting Route
	Loop Route
	Linear Route
	Future Route



**Mammoth Trails Map, Signage & Wayfinding Committee:  
Notes on the Mammoth Lakes Trail System  
Messaging**

**as developed in the**

**Messaging Workshop  
February 3, 2010**



## **Mammoth Trails Map, Signage & Wayfinding Committee: Notes on the Mammoth Lakes Trail System Messaging**

### ***Design Intent, page 2***

#### **Color Palette**

**1. STATEMENT:** Color should not be used to identify jurisdictional ownership or maintenance of any particular sign.

**1. RATIONALE:** Many trails in the system cross over multiple jurisdictions more than once, and sometimes do so in short intervals. Seeing the sign color change this frequently may confuse users and lead them to question if they are on one continuous system. Also, the jurisdiction of the route he is traveling is unimportant to the user, who seeks a seamless experience.

**2. STATEMENT:** Develop a rationale for the use of color system-wide.

**2. RATIONALE:** Lack of consistency is confusing for the user, who should be able to easily associate a color change with a specific information set/direction.

**2. IDEAS:** Associate colors with facilities (accent color), associate colors with facilities (type color); associate colors with sub-regions.

**3. STATEMENT:** Put the visitor experience first.

**3. RATIONALE:** Ensure that the use of color is understood best from the user perspective and aids him in obtaining and integrating the system information most useful to his experience.

**4. STATEMENT:** Ensure that the palette/use of color is legible.

**4. RATIONALE:** The assembled palette contrasts lighter accent colors against a dark, neutral background and, within that, dark type against a light background. This ensures that type and symbology are crisp and legible to the user.

**5. STATEMENT:** The palette should be simple and its colors "speakable."

**5. RATIONALE:** A palette with a few basic colors is easier for users to understand and remember than one featuring shades or non-primary colors. Simple colors such as red and blue are easy to communicate vocally, as opposed to more complicated choices such as "magenta" or "burnt sienna."

**6. STATEMENT:** Consider using color to identify seasons.

**6. RATIONALE:** Color may be an easy way to distinguish winter and summer route options and recreation areas, whether the two are shown together, as on a year-round map, or separately, as in season-specific maps.

**7. STATEMENT:** Core-Ten steel will be used as the sign structure material.

**7. IDEA:** The palette should complement the natural patina that will evolve on this material.

### **Typography (Editable)**

**1. STATEMENT:** Proceed with suggested typefaces.

**1. RATIONALE:** Century Gothic is a neutral font that will not compete with other fonts (such as those found in logos), yet still retains its own character. It is a widely used font that is unlikely to seem dated in the near future and is highly legible to the user. The third font in the set (Clearview Highway 1B) is part of Caltrans's standards and will appear on signs when required.

### **Symbols**

**1. STATEMENT:** Proceed with suggested set (National Park Service UniGuide).

**1. RATIONALE:** This symbology contains enough icons to cover the recreation activities that take place on the Mammoth Lakes Trail System (MLTS) and are unambiguous to the user. This set is the National Park Service's signage and wayfinding symbology, which is used nationally and is therefore potentially already familiar to the user. The Mammoth Lakes region is proximate to Death Valley National Park, Yosemite National Park, and others, so using this set will provide regional continuity.

### **Logos**

**1. STATEMENT:** Flexibility of installation is important.

**1. RATIONALE:** Many logos do not have a "forever" shelf life and are updated every few years. It would be very expensive to replace entire signs to accommodate a change in a represented logo, so finding modular options is desirable. Representation on the modular map inserts is an option to explore.

**2. STATEMENT:** Use logos as an expression of partnership.

**2. RATIONALE:** The selection of logos that appear on the signage should reflect the diverse cooperative partnership that has brought the signage and wayfinding system to fruition, including agencies, NGOs, and possibly others. This expression is not only a branding opportunity, but also a confidence-builder for the user, who will feel reassured by the "teamwork" element of the system.

**3. STATEMENT:** Use logos to give credit to funding sources.

**3. RATIONALE:** Recognition of funding contributed is important to the funders in a branding sense, especially when it is felt that a significant amount has been contributed. Agency logos would fit this designation, as would special sources such as Measure R.

**4. STATEMENT:** Use logos to indicate who is responsible for the maintenance of the system.

**4. RATIONALE:** In the event that a user wishes to report a conflict on the trail, or damage to/obstruction of the trail or its signage, he should be able to easily locate the party to whom he should report this information. Logos can assist with quick visual identification.

**4. IDEAS:** There may be other opportunities to present and explain the partnership, such as on the map insert. Consider which real estate opportunity best suits this element.

**5. STATEMENT:** Consider first what the visitor needs.

**5. RATIONALE:** Though logo placement may be desirable to agencies and others involved on the "back end" of the system, such information may not be of critical importance to the user and his immediate experience. Filter logo placement through the user's perspective to evaluate what information he may be seeking on trail signage.

**6. STATEMENT:** Absence of logos can be confusing to the user and lessen his confidence in the viability/sustainability of the system.

**6. RATIONALE:** Trail users are accustomed to seeing at least one logo on trail signage that indicates who is responsible for the system they are using. Lack of logos may confuse the user as to who maintains the system (and thus whom to contact to report problems) and give him the impression that the system is not well-managed.

**7. STATEMENT:** Logos offer brand confidence.

**7. RATIONALE:** When a user encounters a familiar logo on trail signage, such as that of the USFS or National Park Service (NPS), he feels assured that the experience he is about to have will be of the same quality as on other systems managed by the same agency. Certain expectations (of trail condition, safety, usability, etc.) are associated with each land manager, and seeing a particular logo can inspire confidence in the user that he will enjoy his adventure.

**8. STATEMENT:** Develop a distinct logo for the system itself.

**8. RATIONALE:** As the partners are many in the MLTS signage and wayfinding system, it may be difficult to accommodate all partner logos on all trail signage. Additionally, the name of the system is long, which limits its full use on smaller signs. Designing a logo specifically for the MLTS will allow for its placement on signs of any size, which will reassure the user that he is on the same system throughout his experience while providing branding for the partners' joint product.

**9. STATEMENT:** Consider agency requirements for logo placement.

**9. RATIONALE:** Certain agencies and other organizations may have internal requirements regarding the use of their logos as related to project funding. Each partner in the MLTS should identify such requirements at the outset of the project so that such placement is accounted for.

### Messaging Opportunities by Sign Type

		SIGN TYPE							
		2	4	6	4/6	Reassurance Marker	6a	Bollard (existing)	Mileage Marker
<b>MESSAGING OPPORTUNITY</b>	Primary ID	✓	✓	✓	✓	<i>The group tabled this sign type, as it is not needed to complete the first phase of the signage and wayfinding system.</i>			
	Primary ID Clarifier/Node	✓	✓						
	Trail Usage & Symbology	✓	✓		✓				
	Rescue Locator	✓	✓	✓	✓		x		✓
	Rescue Information	✓	✓	✓	✓		x		✓
	Map Insert	✓	✓		✓				
	Trail System Identifier	✓	✓	✓	✓		x		
	Ethics Message	✓							
	Back of Sign								
	Lower Cross-Member	✓							
	Service Symbology			✓	✓		x		
	Guide/Directional			✓	✓		x		
	Distances				✓				
	Single Destination						x		
	Route ID							✓	
Mileage								✓	

### Messaging Specifics by Sign Type

#### Type 2

##### *Primary ID*

**1. STATEMENT:** Consider using icons to identify trails, whether instead of or in addition to using colors.

**1. RATIONALE:** Users who are colorblind or similarly challenged may find a symbol easier to understand than a color.

## *Map Insert*

**1. STATEMENT:** Orient the map so north is up.

**1. RATIONALE:** Maps used by agencies whose lands may intersect or abut the MLTS, such as the NPS, USFS, and TOML, are oriented in this manner, so using this configuration will provide continuity for the user region-wide. Additionally, a north-oriented map is very common, so a user should have little trouble understanding how to read it.

**2. STATEMENT:** Include a "You are here" indicator on the map.

**2. RATIONALE:** With a consistent north orientation, the map will not always match the user's own orientation on the trail. Using a "You are here" indicator will assist the user in orienting himself no matter which direction he is facing; it is particularly helpful with fixed maps that the user cannot rotate to reflect his own orientation.

**3. STATEMENT:** The map's scope should show the entire system being used.

**3. RATIONALE:** At a trailhead, it is important for the user to be able to pinpoint his location in the context of the larger system so that he can be aware of terrain changes, trail intersections, and other elements that may affect his overall experience.

**4. STATEMENT:** The map should be changed on a seasonal basis.

**4. RATIONALE:** Seeing both the summer and winter facilities on the same map may overwhelm the user and make it challenging for him to identify which system is open to him at the moment. Changing the map seasonally will make route finding and selection easier on the user, as he will be shown only the facilities available at that time, and will allow for more season-specific messaging to be presented on the map itself, as there won't be overlap issues as when winter and summer are shown together.

**5. STATEMENT:** Present text on the map that describes the partnership/cooperative effort of the MLTS, regulatory information, contact information (including Web sites and phone numbers), route difficulty level, closures and other special notifications, where to download the map into one's GPS unit, and other information as appropriate.

**5. RATIONALE:** As the map insert will be modular and should be changed seasonally, this is the best place to present information that may differ by season or change over time.

**6. STATEMENT:** Create a foam-core mockup of the map insert.

**6. RATIONALE:** To ensure that enough room will be available on the map insert to legibly present the information described above, and to ensure that the space is large enough to accommodate the desired scope, an inexpensive mockup should be produced to test the current specs.

### *Trail System Identifier*

**1. STATEMENT:** Introduce the MLTS logo on this sign type.

**1. RATIONALE:** In order to provide continuity throughout the system, the logo developed specifically for the MLTS should be presented on this sign type where the system name is spelled out completely.

### *Trail Usage & Symbolology*

**1. STATEMENT:** Use only positive messaging to describe allowed usage.

**1. RATIONALE:** It is important to emphasize to the user the experiences that are available to him at each trailhead (what he *can* do) as opposed to highlighting the experiences that are prohibited (what he *can't* do).

**1. IDEAS:** In areas where user conflict and policy violations are high, separate signage may be installed to more clearly identify prohibited activities.

### *Ethics Message*

**1. STATEMENT:** Consider placing the ethics message on the map insert.

**1. RATIONALE:** Ethics messages may be many and/or require more type space than the suggested field allows. Placing it on the map insert will allow more space for this messaging and also directly link it to the routes the user is considering.

### *Rescue Locator*

**1. STATEMENT:** The locator will be comprised of a three-letter route-name abbreviation followed by a mileage indicator, which will be developed by Mono County, the Town of Mammoth Lakes, the emergency-services sector, and any other relevant agencies.

**1. RATIONALE:** To maximize emergency responders' time spent locating a user who is hurt, lost, or otherwise in trouble, a rescue locator system should be developed that will be utilized and understood by all emergency-service providers. Any agency or organization that has jurisdictional authority or other involvement in the MLTS should work together to devise a universal system and the procedures necessary to fulfill a rescue request. Each sign in the system will be assigned a unique rescue locator code.

### *Rescue Instructions*

**1. STATEMENT:** Develop a separate messaging field in which to present static "how to" information regarding the rescue locator system.

**1. RATIONALE:** Users will be instructed to dial 911 in case of emergency while on the trail system. This field will house this information as well as the first-aid symbol from the UniGuide set, which users will see on other sign types along their route. As space is limited on progressively smaller system signage, presenting this information at the outset of a user's adventure is critical.

### *Back of Sign*

**1. STATEMENT:** Do not pursue messaging opportunities on the back of this sign type.

**1. RATIONALE:** Corkboard-style messaging opportunities are often taken advantage of by users and others to post lost-and-found information, personal messages, event flyers, and other materials. These paper postings are easily damaged or destroyed by inclement weather and/or become detached from the corkboard surface, creating a litter problem at the trailhead, or are not removed by the user once the message is no longer applicable. Currently there is not enough capacity to police these areas for trash pickup and/or removal of inappropriate (non-mandated, unofficial) messaging. Though a “close and lock” cover for the back of the sign would alleviate the aforementioned problems, that construction is too expensive to pursue at this time and would also carry with it maintenance responsibilities that may not be able to be fulfilled in the near future.

### *Lower Cross-Member*

**1. STATEMENT:** Drill holes for future use of this messaging space.

**1. RATIONALE:** Though currently there is no consensus on the type of messaging to be placed in this field, the group agreed that it is best to have the fabricator drill holes for future modular additions rather than lose this opportunity completely, as doing this type of drilling on already-installed signage would be inefficient and costly at best.

### **Type 4**

#### *Map Insert*

**1. STATEMENT:** Orient the map so north is up.

**1. RATIONALE:** Maps used by agencies whose lands may intersect or abut the MLTS, such as the NPS, USFS, and TOML, are oriented in this manner, as are the maps used in the Type 2 trailhead signs, so using this configuration will provide continuity for the user region- and system-wide. Additionally, a north-oriented map is very common, so a user should have little trouble understanding how to read it.

**2. STATEMENT:** Include a “You are here” indicator on the map.

**2. RATIONALE:** With a consistent north orientation, the map will not always match the user’s own orientation on the trail. Using a “You are here” indicator will assist the user in orienting himself no matter which direction he is facing; it is particularly helpful with fixed maps that the user cannot rotate to reflect his own orientation.

**3. STATEMENT:** The map’s scope should show the experience immediately ahead of the user.

**3. RATIONALE:** Once on the trail, the user does not need an overview of the entire system as he makes his way along his chosen route. Scaling down the scope of the area shown on this map will allow more detail to be provided about the area immediately surrounding the user, such as the location of the next sign type or a feature

of interest or consequence. It should be noted, however, that the map's smaller size will limit the number of messaging opportunities found on the Type 2 trailhead sign map.

**4. STATEMENT:** The map should be changed on a seasonal basis.

**4. RATIONALE:** Seeing both the summer and winter facilities on the same map may overwhelm the user and make it challenging for him to identify which system is open to him at the moment. Changing the map seasonally will make route finding and selection easier on the user, as he will be shown only the facilities available at that time, and will allow for more season-specific messaging to be presented on the map itself, as there won't be overlap issues as when winter and summer are shown together.

**5. STATEMENT:** Create a foam-core mockup of the map insert.

**5. RATIONALE:** To ensure that enough room will be available on the map insert to legibly present the information described above, and to ensure that the space is large enough to accommodate the desired scope, an inexpensive mockup should be produced to test the current specs.

#### *Rescue Locator*

**1. STATEMENT:** The locator will be comprised of a three-letter route-name abbreviation followed by a mileage indicator, which will be developed by Mono County, the Town of Mammoth Lakes, the emergency-services sector, and any other relevant agencies.

**1. RATIONALE:** To maximize emergency responders' time spent locating a user who is hurt, lost, or otherwise in trouble, a rescue locator system should be developed that will be utilized and understood by all emergency-service providers. Any agency or organization that has jurisdictional authority or other involvement in the MLTS should work together to devise a universal system and the procedures necessary to fulfill a rescue request. Each sign in the system will be assigned a unique rescue locator code.

#### *Rescue Instructions*

**1. STATEMENT:** Develop a separate messaging field in which to present static "how to" information regarding the rescue locator system.

**1. RATIONALE:** Users will be instructed to dial 911 in case of emergency while on the trail system. This field will house this information as well as the first-aid symbol from the UniGuide set.

#### *Trail System Identifier*

**1. STATEMENT:** Present only the MLTS logo, as opposed to the logo and full name of the system.

**1. RATIONALE:** As the size of this field has diminished dramatically from the Type 2 sign, using just the system logo (as previously presented with its full name on the trailhead sign) will provide users assurance that they are on the same continuous system while making the best use of limited space.

## Type 6

### *Service Symbology*

**1. STATEMENT:** Develop a formal list of approved destinations and amenities to be presented on this sign type.

**1. RATIONALE:** Designating an approved set of options the user may encounter at a decision point will ensure consistency of messaging. This will avoid the use of conflicting or confusing messaging where more than one name may be used locally to describe a destination or amenity (i.e., Welcome Center or Visitors Center) as well as set the standard for which facilities and destinations may be advertised on a sign.

**2. STATEMENT:** Include in the MLTS symbology an approved subset of icons that describe facilities and amenities available to the trail user, such as hospitals, libraries, food, and restrooms. (These options do not include recreation opportunities.)

**2. RATIONALE:** Designating an approved set of symbols to indicate the options the user may encounter at a decision point will ensure consistency of messaging.

### *Guide/Directional*

**1. STATEMENT:** When multiple options exist, list the destination closest to the user first.

**1. RATIONALE:** Arranging options by distance will allow the user to make informed choices about his route and will give him a better idea of his position relative to the larger setting. Also, the NPS and USFS present their options in this manner, so using a distance-based ordering system will ensure consistency across the region.

**2. STATEMENT:** Indicate relative distance of destinations from user in mileage increments.

**2. RATIONALE:** Providing mileage indicators makes the casual user feel more confident in his route choice and position in the overall system. Mileage is a familiar measurement with which most users will identify. More athletic/competitive users, such as trail runners, also appreciate mileage information, as it helps to inform their progress while training.

## Type 4/6

**1. STATEMENT:** Add a sign type to the design array that is a hybrid of types 4 and 6.

**1. RATIONALE:** The group agreed that this hybrid could be suitable for certain locations and recommended that it be added to the array. The group also agreed that all fields from Type 4 and Type 6 that appear on this sign type should carry forward as they originally appeared.

## **Reassurance Marker**

The group engaged in a somewhat lengthy discussion about this sign type but ultimately tabled it, as it is not scheduled for use in this first-phase project. It was suggested that this type could be useful on soft-surface trails, especially to denote changes in trail usage, but not so useful on in-town multi-use paths. The group agreed that it should be considered for inclusion in the complete sign array and upcoming standards manual.

## **Bollard (existing)**

### *Route ID*

**1. STATEMENT:** Replace Main Path signs found on existing bollards with a simple plaque that identifies the new route name.

**1. RATIONALE:** Though it would be extremely cost-prohibitive to demolish and replace all existing bollards on the MLTS, it is affordable to simply modify them to include the new messaging schedule. Removing the existing Main Path signs will allow for renaming of each route with its agreed-upon moniker, ensuring consistency within the MLTS and along each route.

### *Rescue Locator*

There was some discussion regarding the placement of a rescue locator on an existing bollard, including an indication that they may be required at intersections where no other signage is present. The group reached no consensus, however, and placement requirements must be confirmed with the TOML.

### *Regulatory 1–3*

The group engaged in some discussion regarding the placement of regulatory signage, such as stop signs, on existing bollards. Further exploration of MUTCD standards and their application to trail systems is needed.

## **Mileage Marker**

**1. STATEMENT:** Add a mileage marker sign type to the design array.

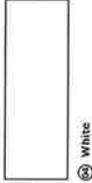
**1. RATIONALE:** As mileage markers are included as part of the plans for the completion of the Lakes Basin Path, it is desirable to add them to the complete signage and wayfinding system and to ensure that they fit within the overall design scheme. Placement of these markers will be based on opportunity, beginning with the Lakes Basin Path, where they are planned for installation every quarter-mile.

**2. STATEMENT:** Present mileage information as primary messaging and rescue locator information as secondary messaging.

**2. RATIONALE:** As these signs are meant primarily as measures of distance, and as distance will not be indicated on every sign type in the array, mileage should be the first

piece of information presented to the user. While the rescue locator information also is important, it is secondary to the distance messaging because rescue locators will be present on every other sign type in the system.

**COLOR PALETTE**  
Fabricator is responsible for supplying samples for all colors within the palette.

				
④ Town of Mammoth Lakes *** Pantone Matching System: Matthews Paint: MP06916 Exterior grade opaque vinyl: ***	⑥ US Forest Service *** MP00811	② Mammoth Resort *** MP07455	③ White *** MP11477 White 7125-10	⑤ Brown *** MP00857

	<b>Steel Type:</b> Structural Steel <b>Surface Treatment:</b> Lightly wire brush to remove scale. Clean with acetone to remove construction markings <b>Finish:</b> Natural, wiped with light coat of oil <b>Fasteners:</b> Steel with blackened finish	<b>Steel Supplier:</b> IMS Industrial Metal Supply Company 8300 San Fernando Rd. Sun Valley, CA 91352 Phone: 818-729-3333 Fax: 818-729-3334 Email: www.imsmetals.com Contact: Neil Sherman
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**TYPOGRAPHY (Editable)**  
Fabricator is responsible for acquiring project related fonts.

<b>Century Gothic Bold</b> Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz 1 2 3 4 5 6 7 8 9 0	<b>Century Gothic Regular</b> Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz 1 2 3 4 5 6 7 8 9 0	<b>Clearview Highway 1B</b> Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz 1 2 3 4 5 6 7 8 9 0
---	--	--

**SYMBOLS**  
Designer will provide scalable electronic artwork for all symbols in a vector art (outlined) format. All symbols used in this program have been approved by the National Park Service and can be downloaded from their website [www.nps.gov/nrc/castor/map-symbols.htm](http://www.nps.gov/nrc/castor/map-symbols.htm) (except "information" symbol).

											
Miking	Dogs on Leash	Cross-Country Ski Trail	Snow Shoe	Restrooms	Picnic Area	Cycling	Public Parking	Do Not Enter	Arrow	Information*	Accessible Symbol

**LOGOS**  
Designer will provide scalable electronic artwork for all logos in a vector art (outlined) format.



Fabricator is responsible for matching all colors and materials as specified and are required to provide color and material samples to Corbin for approval.  
**CAUTION: CONSISTENT AND ACCURATE COLOR REPRODUCTION IN THIS DOCUMENT CANNOT BE ASSURED DUE TO THE LIMITATIONS OF COLOR COPYING TECHNOLOGY.**  
The Casted Pantone Matching System® Matthews and/or Alko Nobel Paint. Signage paints produced by MPC Matthews Paint and Alko Nobel Paint Company are to be the standard reference. Vinyl Films from 3M and Avery Graphics are to be the standard. Color application varies per sign type. Refer to drawings for appropriate application.

**Suggestions**

- Color should not be used identify jurisdictional ownership or maintenance of any particular sign.
- Develop a rationale for the use of color system-wide.
- Put the visitor experience first.
- Ensure that palette/use of color is legible.
- The palette should be simple and its colors "speakable."
- Consider using color to ID seasons.
- Core-Ten Steel will be the sign structure material.

**Type Suggestions**

- Proceed with suggested typefaces.

**Symbols Suggestions**

- Proceed with suggested set (National Park Service UniGuide)

**Logos Suggestions**

- Flexibility of installation is important.
- Use logos as an expression of partnership.
- Use logos to give credit to funding sources.
- Use logos to indicate who is responsible for the maintenance of the system.
- Consider first what the visitor needs.
- Absence of logos can be confusing to the user and lessen his confidence in the viability/sustainability of the system.
- Logos offer brand confidence.
- Develop a distinct logo for the system itself.
- Consider agency requirements for logo placement.

# TYPE 2 message field review #8

**Primary ID Suggestions**  
 1. Consider using icons to identify trails, whether instead of or in addition to using colors.

**Lower Cross-Member Suggestions**  
 1. Drill holes for future use of this messaging space.

**Primary ID Clarifier / Node**

**Trail Usage & Symbology Suggestions**  
 1. Use positive messaging only  
 2. Use separate signs identifying specific prohibitions in contentious area if necessary.

**Rescue Instructions Suggestions**  
 1. Develop a separate messaging field in which to present static "how to" information regarding the Rescue Locator system.



**Map Insert Suggestions**  
 1. Orient the map so north is up.  
 2. Include a "You are here" indicator on the map.  
 3. The map's scope should show the entire system being used.  
 4. The map should be changed on a seasonal basis.  
 5. Present text on the map that describes the partnership/cooperative effort of the MLTS, regulatory information, contact information (including Web sites and phone numbers), route difficulty level, closures and other special notifications, where to download the map into one's GPS unit, and other information as appropriate.  
 6. Create a foam-core mockup of the map insert.

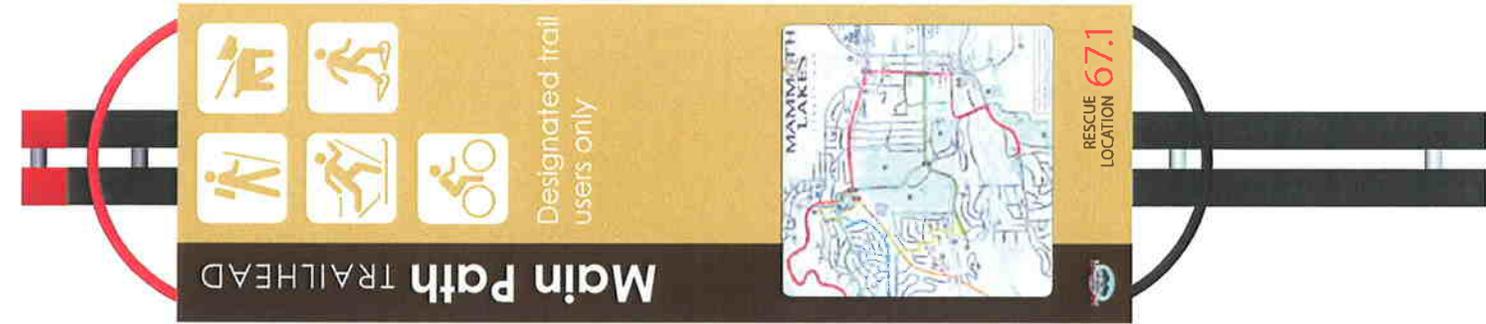
**Primary Trail System Identifier Suggestions**  
 1. Introduce the MLTS logo on this sign type.

**Ethics Message Suggestions**  
 1. Consider placing the ethics message on the map insert.

**Back of Sign Suggestions**  
 1. Do not pursue messaging opportunities on the back of this sign type.

**Rescue Locator Suggestions**  
 1. The locator will be comprised of a three-letter route-name abbreviation followed by a mileage indicator, which will be developed by Mono County, the Town of Mammoth Lakes, the emergency services sector, and any other relevant agencies.

# TYPE 4



**Primary ID**  
Carry Forward

**Trail Usage & Symbology**  
Carry Forward



**Trail System Identifier**

*Suggestions*

1. Present only the MLTS logo, as opposed to the logo and full name of the system.

**Map Insert**

*Suggestions*

1. Orient the map so north is up.
2. Include a "You are here" indicator on the map.
3. The map's scope should show the experience immediately ahead of the user.
4. The map should be changed on a seasonal basis
5. Create a foam-core mockup of the map insert.

**Rescue Instructions**

*Suggestions*

1. Develop a separate messaging field in which to present static "how to" information regarding the rescue locator system.

**Rescue Locator**

*Suggestions*

1. The locator will be comprised of a three-letter route name abbreviation followed by a mileage indicator, which will be developed by Mono County, the Town of Mammoth Lakes, the emergency services sector, and any other relevant agencies.

# TYPE 6



## Service Symbology (new)

### Suggestions

1. Develop a formal list of approved destinations and amenities to be presented on this sign type.
2. Include in the MLTS symbology an approved subset of icons that describe facilities and amenities available to the trail user, such as hospitals, libraries, food, and restrooms. (These options do not include recreation opportunities.)

## Guide/Directional (new)

### Suggestions

1. When multiple options exist, list the destination closest to the user first.
2. Indicate relative distance of destinations from user in mileage increments.

## Rescue Locator

Carry Forward

## Rescue Instructions

Carry Forward

## Trail System Identifier

Carry Forward

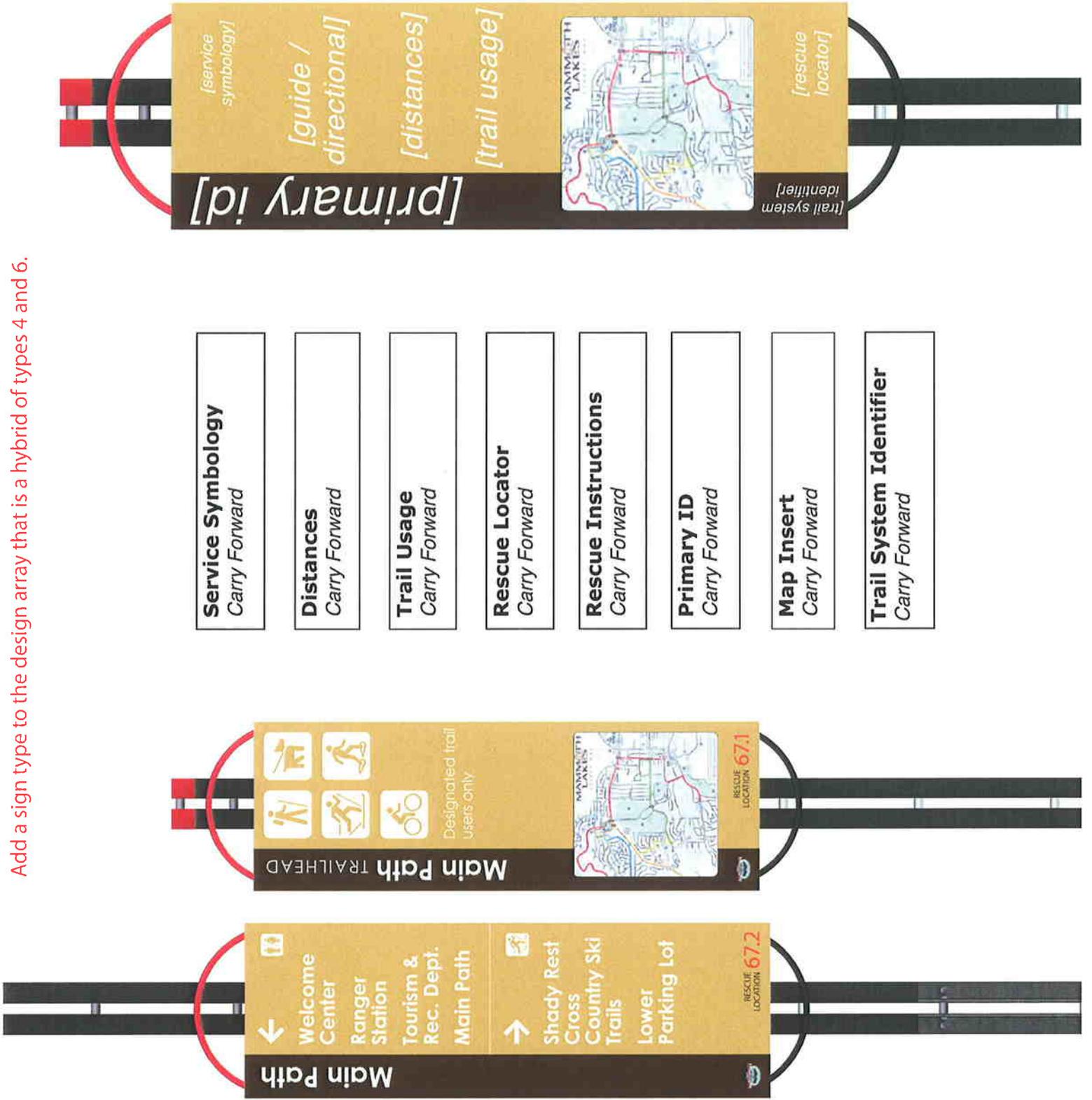
## Primary ID

Carry Forward

RESCUE  
LOCATION 67.2

# TYPE 4-6

Add a sign type to the design array that is a hybrid of types 4 and 6.



# TYPE Bollard (existing)



## Route ID (existing only)

### Suggestions

1. Replace Main Path signs found on existing bollards with a simple plaque that identifies the route name.



# TYPE Mileage Marker

Add a mileage marker sign type to the design array.



**Mileage Marker Information**  
*Suggestions*  
1. Present mileage information as primary messaging.

**Rescue Locator**  
*Suggestions*  
1. Present Rescue Locator information as secondary messaging.

**Rescue Instructions**  
*Carry Forward*



**MLTPA Foundation Spring 2010 Measure R Grant Application  
Attachment G: MLTS Wayfinding and Signage Standards  
TOC**

## Table of Contents

1. Acknowledgements section to highlight partnerships
2. Current Mammoth map or aerial photo
3. Wayfinding Logic
  - 3.1. History/Introduction: This section will succinctly describe how this Standards Manual and the process behind its creation have evolved: Corbin and CAMP, the Trail System Master Plan Update, the Mammoth Trails Map, Signage & Wayfinding Committee (MSWC), etc.
  - 3.2. Goals and Objectives: This section will present the purpose of the Standards Manual as an efficiency rather than a mandate—that the standards were “collected from all for the benefit of all.” One way to gain support for the partnered document is to link it to the existing Trails Plan MOU. Explain the key elements of a wayfinding system and how it will work for/benefit the users in all seasons.
  - 3.3. Region: This section will tie directly into the work that’s already been done by the MSWC. Corbin will document the consensus reached thus far, while MLTPA achieves consensus on the remaining areas.
  - 3.4. Sub-region: Same procedure as for 3.3: Region.
  - 3.5. Preferred Routing: This presents the results of a circulation analysis undertaken to determine visitor traffic levels and sources, with a focus on parking, transit, and their connections to the trail system and user experience. Municipal wayfinding will benefit from this effort, but it is not the primary concern. A basic structure will be suggested, but will avoid detail to facilitate integration of a signage and wayfinding system with an evolving trails plan. There is a seasonal component to this recommendation.
  - 3.6. Facility Categories: This section will provide a definition of terms as they relate to routes and other facility types. It will have to coincide with the facility types described in the TSMP and be vetted against different agencies’ rating systems, design guidelines, etc. Cite examples to support definitions. Distinguish between facilities (a Type 1 multi-use path) and experiences (a loop), and between rating systems.
    - Path
    - Trail
    - Loop
    - Connector
  - 3.7. Sequence of Encounter: This section will lay out how wayfinding logic and facilities converge to create points of decision, which inform sign locations and destination naming. This is experience-based and goes all the way out to a user planning her trip on the Internet.

- 3.8. Primary Destinations: This section will describe the places a visitor will most likely be seeking for recreation (i.e., the region’s biggest draws) and explain how these destinations are classified as “primary.”
- 3.9. Secondary Destinations: This section will describe the places a visitor will most likely be seeking for secondary or optional recreation experiences (i.e., places farther out geographically or accessible only through visitation to a primary destination) and explain how these destinations are classified as “secondary.”
- 4. Standards
  - 4.1. Summer/Winter Conditions: This section will provide an overview of seasonal impacts and constraints on the trail system’s signage and wayfinding program, including recommendations on maintenance issues and signage removal/replacement as well as rationales for fabrication specs unique to summer and winter signage.
  - 4.2. Graphic Standards: This section will be an extension of the Master Design Intent and will include recommendations generated by the MSWC as well as rationales for the elements identified in the list below. Agency standards may be inserted here, as well as pertinent graphics such as partner logos. The aim is to highlight consistencies between all partners’ unique standards and generate consensus on items where they differ.
    - Fonts
    - Colors
    - Layouts
    - Symbols
    - Partnership Logos
  - 4.3. Sign Family: This section will break the larger signage and wayfinding system down into component categories, providing examples of each.
    - Wayfinding (array, descriptions)
    - Regulatory (array, descriptions)
    - Interpretive (array, descriptions)
    - Temporary (array, descriptions)
  - 4.4. Annotated Depictions of Each Sign Type: This section will be an expansion of the Master Design Intent and will describe fully (i.e., with both text and illustrations) each sign in the trail-system signage and wayfinding program array. There is a desire to get the partners to provide this sort of information for their own signage systems—to describe how they last and live in their environments.
    - Design Intent
    - Layout Templates
    - Shop Drawings
  - 4.5. Sign and Infrastructure Location Guidelines: This section will be based on already completed systems in GIS and will fold in recommendations for locating facilities such as recycling bins, benches, monofilament collectors, dog-waste bag dispensers, and other supporting infrastructure. The actual GIS file identifying the locations will live outside this Standards Manual, but will inform it. Supporting infrastructure will not always be located at intersections, and this section will illustrate typical scenarios.

Typical Locations  
GIC Coordinates

- 4.6. Map Standards: This section will describe the size, construction, and graphic process of maps placed on signage. Guidelines and standards from other agencies, such as the National Park Service, can be added here.
- 4.7. Rescue Locator: This section will explain how the Rescue Locator system works, what the coding indicates, how it will be treated graphically, and who will be responsible for responding to it. Emergency-services response guidelines should be included here, from the responsible agency or organization.
- 4.8. Implementation Plan: This section will present recommendations on how to best expand the trail-system signage and wayfinding program on the ground to enhance the visitor experience and will document the first stage of implementation (ARRA-funded).
- 4.9. Maintenance: This section will lay out the maintenance standards for the signage and wayfinding program, including seasonal transitions, and identify partners and responsibilities. NB: This conversation has yet to take place meaningfully with the partners; once it occurs, the results will inform this section.
- 4.10. Cost Estimate (2010): This section will project costs for implementing each component of the signage and wayfinding program, from design through fabrication, installation, and maintenance. This is a useful tool in applying for grant monies to complete the system, both in terms of dollar amounts and in showing preparedness to implement.

**MLTPA Foundation Spring 2010 Measure R Grant Application  
Attachment H: Trail System Master Plan 2009 Chapter 5:  
Signage & Wayfinding**

# CHAPTER 5. SIGNAGE & WAYFINDING

The following chapter details Corbin Design’s analysis of the existing conditions, challenges and requirements of the Town of Mammoth Lakes trail system signage. As the Town of Mammoth Lakes undergoes substantial development, use of the extensive trail system is growing, and the Town has made a significant commitment to work to connect its visitors and residents with nature through signage and wayfinding. 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 Municipal.

## 5.1. Signage

The Town of Mammoth Lakes, in partnership with Mammoth Lakes Trails and Public Access (MLTPA), Alta Planning + Design and Trail Solutions, has asked Corbin Design to analyze trail wayfinding and make recommendations for an attractive, consistent and expandable wayfinding and signage system. Our analysis is the result of our participation in CAMP: Winter, site tours, and discussions with various stakeholders. Our recommendations consider the development of design standards that address all types of users, as well as the objectives of the various jurisdictional entities.

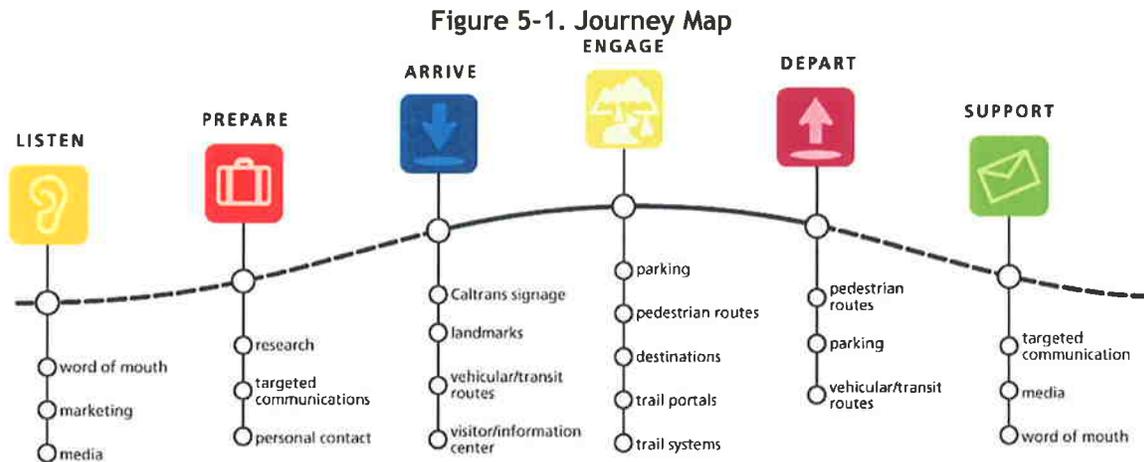
The majority of Mammoth Lakes residents and visitors are outdoor enthusiasts with a range of interests and needs. The area boasts beautiful scenery in wooded and mountainous settings, combined with challenging venues for skiing, mountain biking and other sports. The Town of Mammoth Lakes competes with other resort towns for tourism dollars, and so desires to set itself apart from the rest, just as its geographical features distinguish it from other areas. A priority is making the connection between people and the environment a simple one.

Signage and Wayfinding is identified as a key component in the Trail system Master Plan. Visitors who feel comfortable and empowered will keep coming back to an area, and an effective wayfinding system is key to creating that comfort level. Wayfinding also plays an important role in trail use safety, connecting users with emergency services.

The challenge is to create a system that is consistent at every point in the user’s experience. It is our recommendation that signage and wayfinding for the trail system, the Town of Mammoth Lakes, and Mammoth Mountain Ski Area (MMSA) all be considered elements of an overall wayfinding system, so that users will have a consistent experience as they move between the venues. Consistency facilitates a system with anticipatory value, which breeds comfort, which enhances the visitor experience. This will require a careful blending of the objectives of all of the jurisdictional partners.

A comprehensive system should consider every point along a visitor’s journey where they will connect with the Mammoth “brand”—whether through the Town, the Mountain, or the trails. The following page illustrates our vision of the “Journey Map,” and describes those touchpoints. As part of a larger scope of work, we recommend analyzing each of these points in detail with respect to an overall wayfinding system for the trails, the Town, and the Mountain.

The current scope includes analysis and recommendations for the trail system, including an initial design concept. The term “trail system” refers to all types of trails including Sustainable Trails, Natural-Surface Trails, Multi-Use or Shared-Use Trails, Bike Paths and all winter trail types as defined in the Terms and Definitions document. As part of our future work, and as a result of an analysis of an overall wayfinding system, we recommend revisiting the concept as an element of an overall system, and undertaking a thorough review and approval process involving the various jurisdictional partners to arrive at an approved comprehensive design standard adaptable to various Mammoth venues.



This map depicts each potential point of contact with a given visitor. We believe that in order for a wayfinding system to be most effective, visitors must create a picture of the physical environment “in their mind’s eye” prior to arrival. In this way, the signs in the environment reinforce what they already know about the area.

Communication across this continuum must be consistent. We know that a diverse audience uses many different resources to navigate an environment, so the verbal and visual landmarks expressed must be consistent across media. Web, broadcast, print and signage elements will speak in the same voice as the visitor learns about the environment.

Educated, empowered visitors feel confident and capable as they move toward their destinations, and are more likely to return.

## 5.2. Analysis

The following section details Corbin Design’s analysis of the existing conditions, challenges and requirements of the Town of Mammoth Lakes trail system, specifically the Main Path. The Main Path is a Class 1, paved and non-motorized trail system that loops around the urban growth boundary of Mammoth Lakes. The alpine views from the southern section of this path earned the trail the highest rating possible from the California Inline Skating tour website. As the Town of Mammoth Lakes undergoes substantial development, use of this extensive trail system is growing, and the Town has made a significant commitment to work to connect its visitors and residents with nature.

## 5.2.1. Audiences

The trail system serves activities in all seasons for a variety of users, both non-motorized and motorized. These users—hikers, runners, snowshoers, bikers, cross-country skiers, motorbikers, snowmobilers, etc.—approach the trails with a multitude of different needs and equipment. The users bring with them many different levels of experience and physical ability, together with different wayfinding needs and expectations.

### First-time Users

First-time visitors have unique requirements when it comes to trail system wayfinding: their perceived safety and comfort while venturing onto the trail system will impact their impression of the experience and their desire to return. The first-time visitor experience must be a positive one to keep them coming back. Likewise, frequent trail users may at some time become first-time visitors to trail sections in the system that they have not visited before; consistent wayfinding standards will make the experience more understandable, comfortable and enjoyable. It should be easy for users to match the trail with their experience level and ability, as well as their desired experience relative to other trail users.

### Casual Users

Many people use the Main Path for walking, dog-walking and other casual activities. Casual visitors are likely repeat users who encounter a trail close to their home, school or workplace. While these visitors are generally comfortable with the trails, effective wayfinding signage can encourage them to explore further along their familiar trail or venture to new ones. Signage can identify destinations near or along the trail that they may not have otherwise encountered. It can also help them identify amenities they may access from time to time, such as parks with picnic tables, skating parks and the like.



Figure 5-2. Snow Blocking Signage

### Athletes

Runners, joggers, bikers, inline skaters and cross-country skiers are specialized trail users who demand more from the trails than casual users. Due to the competitive nature of their activities, details such as distance tracking are important to them. Consistently communicated guidelines for trail use will help athletes understand their rights and obligations when sharing the trail with other users, and will help them feel comfortable in doing so.

### Commuters

Commuters typically cover only a certain section of the trail that will allow safe passage between their home and work. They may require information regarding distance, amenities along the way, and guide information. Seasonal conditions and ease of accessibility play a large part in whether the Main Path will become a commuter route for these users.

## Special Users

The trail system presents special challenges to older adults, children and users of varied physical abilities. Highly readable, visible and simple messages will allow for easier, quicker comprehension. Clear safety, accessibility and regulatory information help special users to avoid hazards, and help all users avoid collisions and injury. Consideration should be given to the use of Trail Access Information labels on signage, to help users understand the types of terrain and obstacles they will encounter along the way.



Figure 5-3. Potential for Consolidation of Signage

### 5.2.2. Subject Area

The Town of Mammoth Lakes Trail System consists of a series of paved and unpaved trails, pathways, staging areas, and trailheads currently in place, as well as projects that are planned for implementation in the near future, including the Lake Mary Road Bike Path. The system provides the users with several miles of trails that support easy access to town while providing connections to other local, state and federal properties.

Due to the undeveloped soft-surface trails that pass through private lands to connect with public trails, intersections through roadways and connections with developments and destinations can be difficult to recognize. It may be difficult for users to understand their location within the larger trail system. Winter snow depth creates many access issues. Accessibility and wayfinding is also affected by jurisdictional concerns, particularly over the issue of snow removal; Caltrans has jurisdiction on the right-of-way off Main Street and prohibits snow removal on sidewalks located within the right-of-way to avoid potential conflicts between pedestrians and snow removal equipment. Many of these sidewalks are dedicated to or connect with Main Path trails.

Signage on the trails is minimal and inconsistent. Critical information at intersections and roadway crossings is not present. Trailhead signage varies in style, size and function. Sometimes trail access falls within a park, but there is no indication on the park signage that a trail is accessible there.

Signage is inconsistent at both trail entrances and exits. Some signage includes incorrect or outdated information, and may incorrectly promote an activity that is not supported on the trail, e.g., a sign denoting a groomed cross-country trail that is no longer maintained.

Existing signage materials are not designed to withstand the abuse of harsh winters, deep snow, and snow removal equipment. Many signs are severely damaged, or are missing altogether. Others are buried in snow, and so are ineffectual for winter users.

On some trailheads, trail maps have been posted to give users “You Are Here” information. These are generally not constructed from materials that hold up to the elements and are in disrepair. They are also not oriented relative to the viewer’s position (i.e., with the top of the map showing the direction that the viewer is facing), and are difficult to interpret.

The trail system does not clearly support tracking distances with mile markers to help users gauge how far they have traveled.

Vehicular regulatory signage on roadways that intersect with trails is not standardized, or is not present at all. Drivers are not provided with sufficient warning, and may not always stop for crossing trail users. This can create a dangerous situation along particularly busy roadways with higher rates of speed.

Regulatory signage appears to be posted randomly. Signs appear in many sizes, colors and formats, and the font size is often too small to be read from a distance. For these reasons, regulatory messages lack authority and are often ignored.

### **5.2.3. Wayfinding Logic**

After considering the wayfinding challenges for the trails, the following section details Corbin Design’s recommended wayfinding logic. These cover information organization, physical signage, presentation and suggestions to make trail system wayfinding more effective.

#### **Essential Steps for Effective Wayfinding**

##### **Design for the First-Time Visitor**

It is important to welcome the visitor, clearly define trail networks and accessibility, and provide understandable guide information. It should be easy for visitors to understand their position within the trail system, to give them a sense of safety and comfort.

##### **Philosophy of Positive Signing**

There is a fine balance between establishing rules and regulations and setting a negative signage tone. Signs should first focus on establishing the correct behaviors before correcting a negative one. Always show approved users on a trail and approved behaviors. When working with Jurisdiction partners, encourage them to do the same. This creates the “language” of the signage system that visitors and residence will learn to understand.

##### **Ensure User Participation**

Accurate information is key to the program’s success. The use of Geographic Information Systems (GIS) to generate accurate maps and data is essential. Encourage participation of key representatives from the various jurisdictional entities to ensure that appropriate objectives are agreed upon and met.

##### **Structure Information**

Develop an information hierarchy to organize the messages that will be imparted by the wayfinding system. The hierarchy should establish a layered system of disseminating information, so that users are getting only the information they need at any given point, rather than becoming overwhelmed by too much information too soon. An effective wayfinding system leads rather than points the way. Certain sign elements will display maps, jurisdictional information, and trail identification; others will display mile marking and guide information.

## 5.2.4. Signage for the Trail System

The challenge of a comprehensive trails signage system is to represent a wide variety of information clearly, consistently and attractively. Identification information, orientation devices, safety and regulatory messages and a unifying identity element or elements (to serve as a visual “brand”) will all be part of the system.

Further, it is important to respect the natural environment by avoiding sign clutter and unnecessary messages. A wayfinding system should be apparent when you need it and transparent when you don’t. The system must be designed to work year-round to support four-season public access. Signage elements must be designed to remain effective through winter conditions and significant snowfall.

Finally, the system should be adaptable to all trail projects within the Town of Mammoth Lakes, including private developments, United States Forest Service (USFS) projects, and other local, state and federal projects.

## 5.2.5. Information Categories

The wayfinding system needs to convey five categories of information:

- Category 1: Identification
- Category 2: Orientation
- Category 3: Safety and Regulatory
- Category 4: Brand Identity
- Category 5: Interpretive or Desired

Each wayfinding element will serve a specific function, but they should all be visually integrated to present a seamless system to users.

### Category 1: Identification

- Portal and trailhead entrances
- Parks that include trail access
- Neighborhood and resort exits/entrances
- Indication of transitions between Town and/or private, state or federal land ownership
- Underpasses and cross streets
- Seasonal trail types
- Landmarks, historical sites or other points of interest along the trail



Figure 5-4. Identification Sign

### Category 2: Orientation

- “You are Here” maps placed at trailheads and major entrances to the trail
- Maps placed along the path to help users gauge their progress along the trails
- Signs pointing to major destinations
- “Distance to…” and length of trail information
- Mile and/or Kilometer markers
- Cardinal directions and GPS coordinates



Figure 5-5. Orientation Sign

### Category 3: Safety and Regulations

- Stated rules and regulations
- Trail Access Information label
- Signage on trails warning users of upcoming roadway crossings
- Roadway signage to inform drivers of an upcoming trail crossing (handled through the Town and Caltrans)
- Signage to inform users when the trail ends, possibly also indicating distance
- Vehicular guides on surrounding roadways directing to parking areas (handled through the Town and Caltrans)
- All regulatory signs shall conform to the Manual on Uniform Traffic Control Devices (MUTCD).



Figure 5-6. Safety and Regulation Sign

### Category 4: Brand Identity

- Unifying identity element or elements serve as the “brand”
- Consistent aesthetic standard communicates brand
- Private or organizational sponsorship information where needed

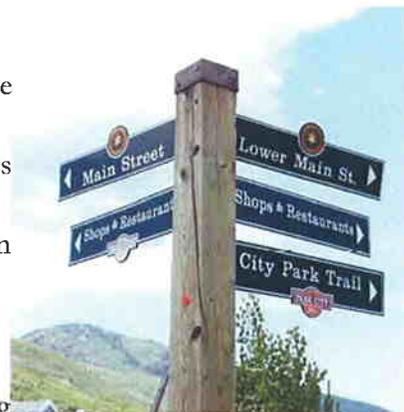


Figure 5-7. Wayfinding Sign with Sponsorship Opportunities

### Category 5: Interpretive

- Provide visitors with historic, scenic or interesting information along the trail
- Design should coordinate visually with the wayfinding signage

### 5.2.6. Sign Placement and Hierarchy

As previously stated, wayfinding signage should be apparent when you need it and transparent when you don't. In an effort to keep the trail as natural and uncluttered as possible, we propose locating signage in clusters at intersections, rather than placing sign elements randomly along the trail. This would concentrate signage locations at portal and trailhead entrances/exits and intersections (decision points).

Exceptions to this rule include mile/kilometer markers and accompanying regulatory information. As these will occur every quarter mile or kilometer, they should be designed at a small scale to avoid disrupting the trail experience.

### 5.2.7. The Sequence of Encounter

The diagram to the right lays out a simplified version of the order that a typical trail user will encounter the various sign types in the system. This sequence plays a large role in determining the type and amount of information that will be included on each sign type.

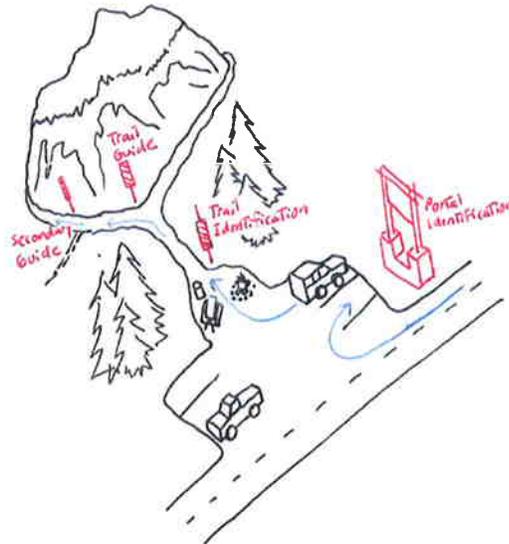


Figure 5-8. Sequence of Encounter

### 5.2.8. Use of Symbols

Throughout the system, many recreational opportunities, amenities, regulatory messages and safety warnings must be conveyed. A comprehensive vocabulary of symbols will allow much of this information to be conveyed through the use of single images as needed. Symbols offer quick recognition, are cross-cultural and, when used throughout the system, will offer character and consistency. Symbols should be consistent with MUTCD standards.

### 5.2.9. Recreation Amenities

Standard recreation symbols typically used by federal agencies identifying the variety of trail activities and other resources would be displayed on main identification signage at trailhead entry points. This will inform visitors that, although they are entering a trail system, recreation opportunities like parks, soccer fields or picnic areas can be found along the way. These symbols may also be used on maps and guide signs.



Figure 5-9. Recreation Symbols

## 5.2.10. Regulatory and Safety Symbols

Abstract concepts such as rules and regulations can be difficult to convey in the form of a symbol and may ultimately confuse rather than inform. Short, easily remembered messages combined with simple symbols will more clearly convey this type of information. These messages could accompany the mile marker signs along the trail as a repeated reminder. Similar messages conveying safety and warning information should be placed along the trail where necessary. The combination of symbols and short messages will allow users to quickly interpret and comprehend the information, including those who are not proficient in English.

Reducing the number of messages that must be repeated will allow signs, symbols and messages to be used sparingly. Regulatory messages that do not have safety implications should be posted at relevant entrances only, rather than being repeated along the trails.

## 5.2.11. Distance Markers

Mile markers are important to visitors who use the trails for athletic and therapeutic purposes; they also have important safety purposes, and need to be placed regularly and accurately. We recommend placing the zero point (labeled ‘zero’) at the main portal or trailhead of each existing trail, counting upward along the trail; it may be advisable to always number trails up heading in a north or east direction, so users understand that if the numbers are going down, they are generally headed south or west. Any trails that branch off of the main trail can be numbered starting at zero as well and working upward as they progress away from the parent trail, or according to the cardinal direction. For example, trails that are located within a parent trail such as the Meridian Loop connecting with the Main Path need to be identified by name and be marked with a zero point at the intersection connecting the trails. The mile marker system on the connecting loop should count upward along the trail. A Trail Guide sign would be positioned at the intersection to identify the loop and provide directions together with total miles of the loop and other primary destinations from that point.

When new sections of trails are added, mile marking will continue up the trail in this fashion, or they may need to be readjusted if existing sections of trail are newly connected. The challenge will be determining where they begin, how to handle intersections and breaks in the system, and how the system can accommodate organic trail growth.

## 5.2.12. Americans with Disabilities Act (ADA)

Our strategic approach for marking accessibility will be to label those areas that are not accessible. This will be particularly important where there may be steep slopes at sections of the trail, or terrain that may be impassable for users of limited physical ability. Warning signage should be placed so that users do not start down a steep slope and find themselves in a compromised position. Trail Access Information symbols posted at trailheads will help match users with trail sections that suit their experience and ability.

Where trails intersect roadways, Caltrans signage should warn drivers to yield to users in crosswalks. Crosswalks should be accentuated for driver visibility with pavement markings, yellow yield signs (which may also incorporate flashing lights), and possibly rumble strips as well; the signage will be most important for winter users. From the user’s perspective,

roadway crossings should be highlighted with yellow striping on school routes and white striping on non-school routes, and warning signage that is visible in all seasons.

As part of our future scope of work, we can provide recommendations for roadway signage (designs, messaging and locations) following MUTCD standards that can be presented to Caltrans, along with an executive summary supporting implementation.

### 5.2.13. GIS/GPS

Geographic Information Systems (GIS) and Global Positioning Systems (GPS) play a central role in the trails planning process; the possibility of delivering wayfinding system information to handheld device users on the trail system should be explored.

These systems offer a number of advantages, the foremost being safety. In the event of an accident or injury, stated GPS coordinates can allow users to call for help and provide their exact location to emergency responders.

### 5.2.14. Trail Naming

Trails are easier to find if the name of the trail is carefully defined. Aligning trail names with an existing vernacular that is comfortably used for either a nearby road that supports primary access to the trail or a famous landmark in or near the trail will help users develop a mental map that locates the position of the trail within the environment. Also see **Recommendation G1: Naming Conventions.**

### 5.2.15. Strategic Implementation Plan

To successfully implement the new wayfinding system along a section of trail, the following schedule of activities/tasks should be completed:

- Inventory of existing and legacy signage systems(s) and analysis as to their desirability for potential inclusion in a new system or removal from field.
- Confirmation of circulation patterns and access points
- Development of a destination list with nomenclature recommendations
- Approval of all information aspects of the program
- Development and review of initial design concepts
- Design direction selection and further development
- Development and refinement of a Sign Message Schedule and Sign Location Plans
- Complete inventory of existing signage
- Discussion with all participating jurisdictions and agencies concerning the implementation of the plan

Once approvals have been given on the above, the following activities are required to complete the implementation of the complete wayfinding system:

- Documentation of the signage system for pricing and fabrication
- Bidding
- Fabrication period
- Installation period

- Preparation of the final signage reference document

Exact timing would be determined by the progress and complexity of the project as it develops along with scheduled reviews by the project team. Typically, the bidding, fabrication and installation activities take thirteen to fifteen weeks.

### 5.3. Wayfinding

The wayfinding system's intent is to provide necessary information to users without disrupting the natural experience that the trails provide. For this reason, the design should avoid bright colors and decorative elements. The signs should appear utilitarian but friendly, in keeping with the overall physical environment. Using different shades of the same or similar colors to create a visual hierarchy among different sign categories, rather than a selection of brighter colors, can achieve this goal. Certain safety and hazard messages should employ bright colors to create contrast and command attention.

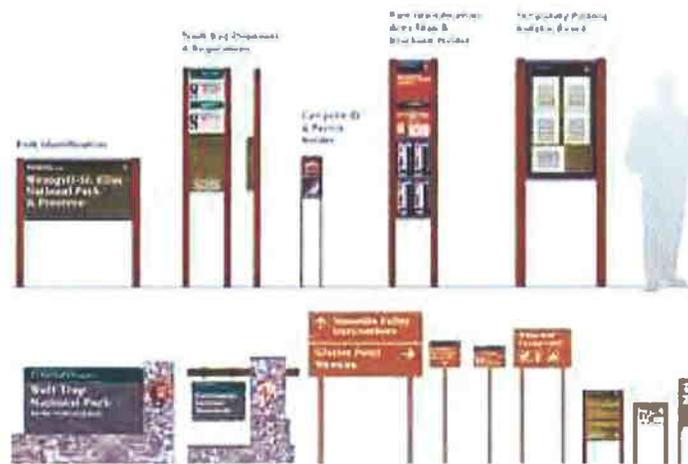


Figure 5-10. UniGuide Sign Program

The system should be unique, both in function and in design, and reflect the character of the area. Select native and natural materials should be applied as both aesthetic and functional elements. The National Park Service's UniGuide Sign & Information System sets standards to which the USFS seeks to adhere; we will use these standards as the benchmark for our design standards, either equaling or surpassing the standards.

The system should be designed so that all components are equally appropriate and effective on all trail sections, as well as on future trails. The system would not be tailored to fit particular conditions on a specific section of trail, but instead would be a "kit of parts" that could be reconfigured depending on specific trail conditions. These standards should address the majority of conditions experienced on the trails; given exceptions, certain special conditions may require the design of custom elements.

Flexibility is to be built into the system. It is important that the post and panel system be able to accommodate various panel sizes that will be appropriate to certain applications.

Performance requirements are multi-dimensional. The signs must be simply constructed, easy to install and update, yet extremely durable and resistant to vandalism. They must also be designed to be adaptable to changing environmental conditions, most notably snow

depth. Consideration must also be given to snow removal equipment that will operate in close proximity to signs. Another consideration is the environmental impact of the materials and construction methods. “Green” materials will be used whenever practical, keeping in mind that the longevity and durability of a sign is often as important as its material construction. Posts and sign panels should be made of recycled materials (not wood) where practical.

Various design considerations, including jurisdictional indicators, may affect the design direction dramatically. Following is a brief exploration of those effects.

## ***5.4. Pros and Cons of Design Considerations***

### **5.4.1. Design all wayfinding elements for the trails to reflect USFS or National Park Service system standards.**

#### **a. Pros**

- i. The Town of Mammoth Lakes trail system connects to the USFS trail system
- ii. The USFS visual style is “established” and contributes to a sense of familiarity and anticipation for users
- iii. Fabrication is simple, and can be handled by most sign fabricators
- iv. Management and replacement of damaged parts is inexpensive

#### **b. Cons**

- i. Would give the impression to the public that non-USFS trails are controlled by the Forest Service
- ii. Requires the addition of site-specific branding elements for trails outside the USFS system
- iii. The future development of a Town of Mammoth Lakes wayfinding system could result in an aesthetic disconnect, making it difficult to build a consistent experience and anticipatory value between the two systems
- iv. Would not provide the dynamic look and feel of a more unique system that could help separate the Town of Mammoth Lakes from its peers in the outdoor recreation field

### **5.4.2. Design a completely new and original wayfinding system that incorporates historic elements and local materials, for a system specific to the Town of Mammoth Lakes.**

#### **a. Pros**

- i. Could include a single, well-designed icon that would “brand” the partnership of the jurisdictional entities and be used throughout the trail system

- ii. Could eliminate the visual disconnect from the future Town of Mammoth Lakes wayfinding system, if the future system incorporates elements from the standard
- iii. Choosing the right natural materials will allow the system to fit better within its surroundings, and to better reflect the character of the area
- iv. A custom system will allow for built-in functional adjustments that overcome the challenges of sign visibility and maintenance caused by winter conditions

**b. Cons**

- i. The initial investment could be higher than a system modeled after the USFS system
- ii. Development of a system that incorporates the interests of the various stakeholders is a longer process, and will not result in an immediate design

Rather than limiting the wayfinding and signage system to one approach or the other, we propose a hybrid system based on the positive aspects of both—using aspects of the established USFS visual style and simple fabrication methods, and incorporating them within a unique framework that better fits with the surroundings and responds to the changing seasons.

## 5.5. Signage Vocabulary

### Trail Identification Markers

These signs identify the trail. They should be large enough to be visible and readable for drivers, with appropriately sized typography. Information to be displayed could include the name of the portal, a jurisdictional branding element, parking information and whether the trail is accessible for motorized and/or non-motorized users.

### Trail Information Kiosks

These provide the universe of information including a trail map, distances to destinations, trail conditions, trail experiences, connection with area amenities, and regulatory and safety information (hours of operation, rules, etc.). The size of these directories (small or large) will depend on the type and popularity of the particular trail.

### Secondary Trail Identification Markers

These are placed at regular intervals along the trails to assure users that they are on the correct trail. International activity symbols would be posted here together with trail access information.



**Figure 5-11. Typical Trail Marker on Public Land**

### Directional Signs

These are typically placed at road and trail junctions (decision points) to guide trail users toward a destination or experience.

### Assurance Markers

These are typically placed along a road or trail corridor to assure the trail user they are still traveling in the correct direction. Assurance markers are typically a single symbol, or trail name, with no other information. They should be placed at regular intervals between junctions.

### Distance Markers

These function as smaller versions of the Secondary Trail Identification Markers. They provide distance traveled, symbols of allowable activity and GPS coordinates.

### Interpretive Signs

These provide educational information to trail users to help establish not only knowledge of the area, but a relationship with the trail experience. The ultimate goal is to convey stewardship in the minds of the users.



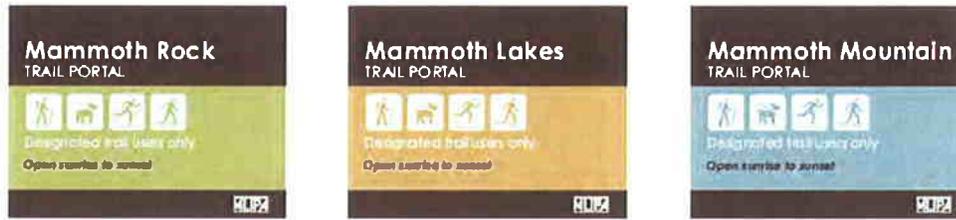
Figure 5-12. Trail Signage Concept Array

**COLOR CODING SYSTEM**

Different background colors for each of the three primary entities to identify their associated trails and destinations

**COLOR PALETTE**

Earthy tones/soft natural colors to compliment the environment and mitigate natural effects of weathering



US Forest Service

Town of Mammoth Lakes

Mammoth Mountain Resort

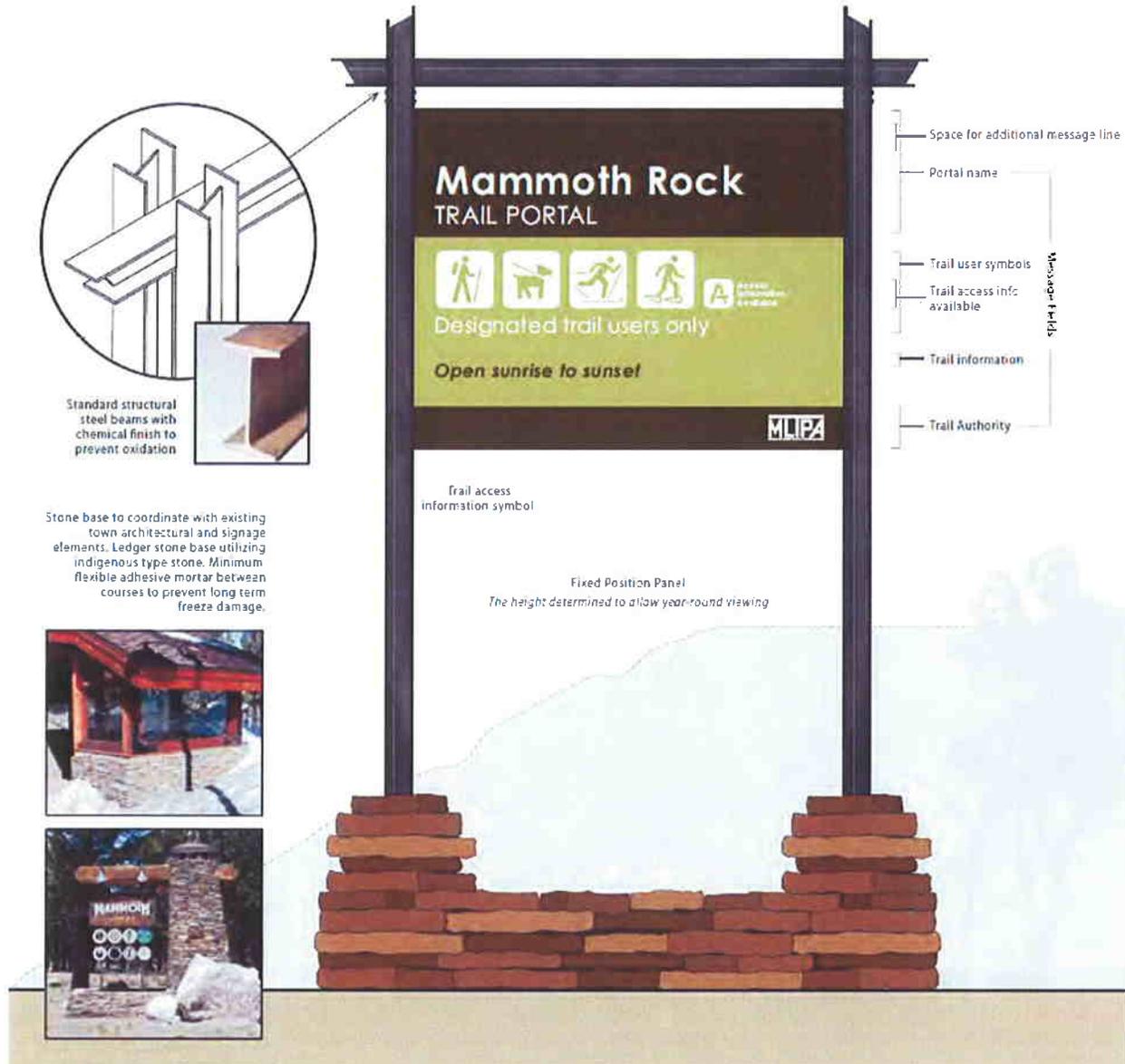


Figure 5-13. Portal Identification Marker

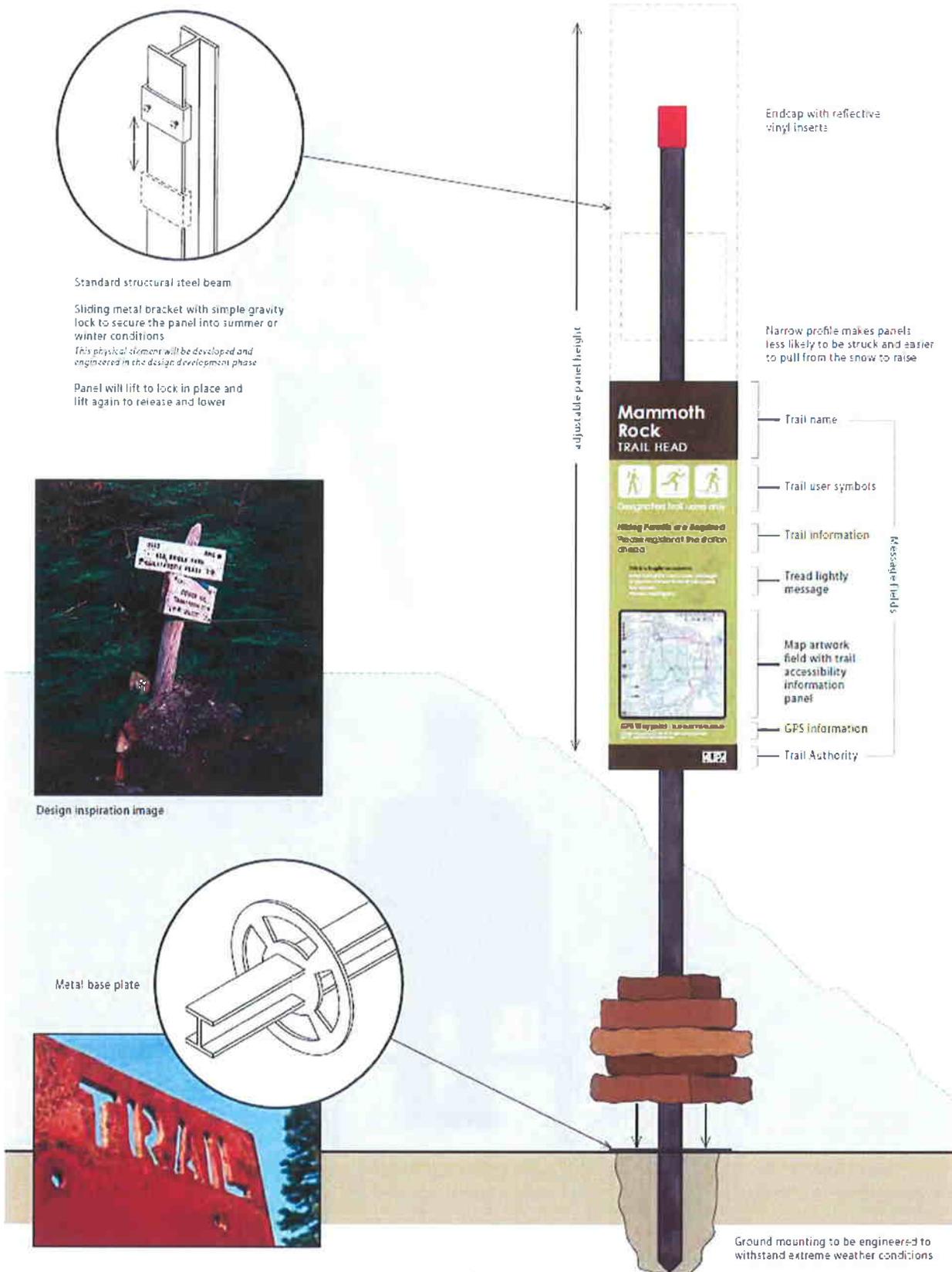


Figure 5-14. Trail Information Kiosk

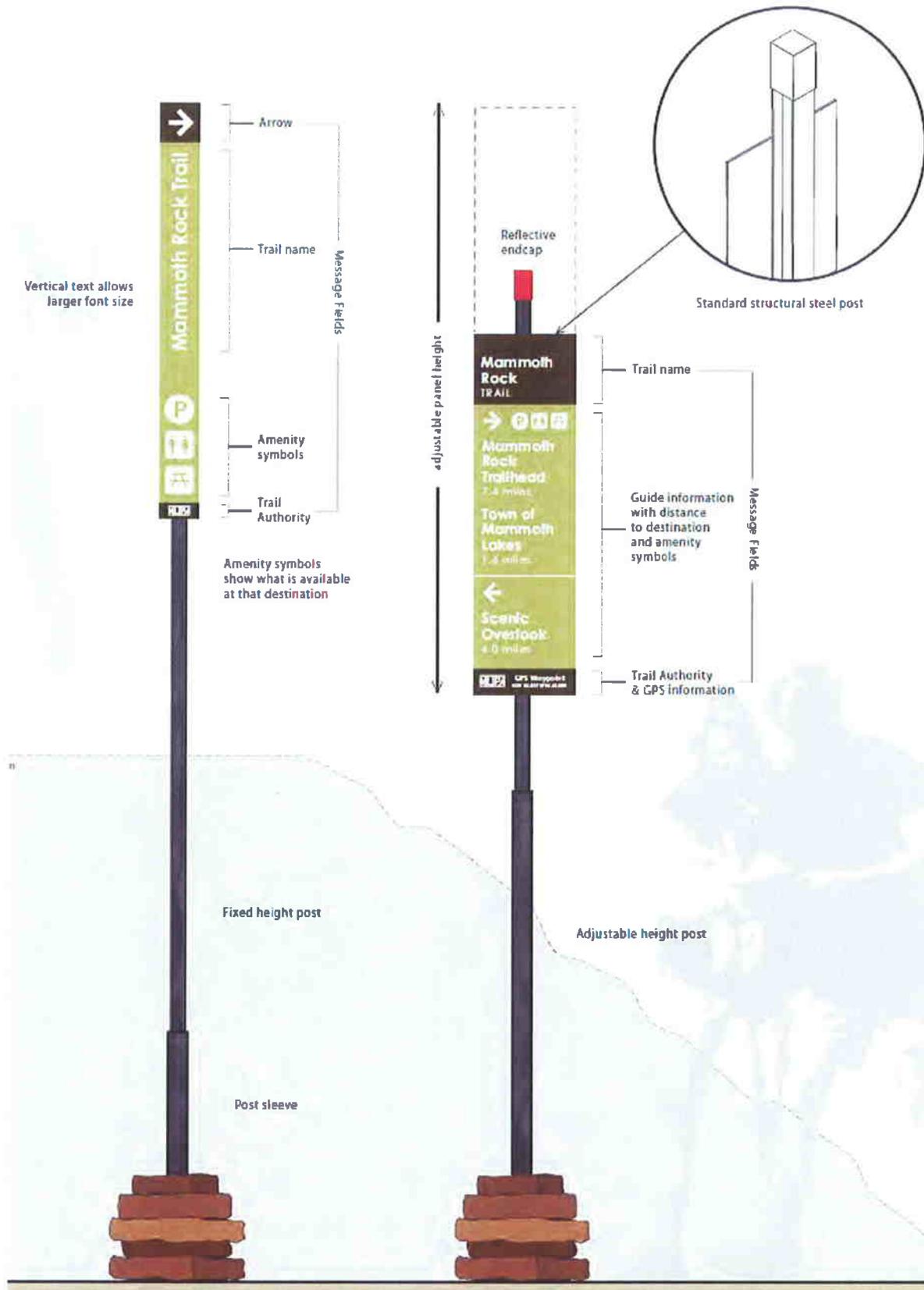


Figure 5-15. Trail Guide Signs

## 5.6. Conclusion

The challenge is to create a comprehensive system that will convey a wide range of information clearly, consistently, and attractively at all points along a visitor's journey. Further, it is important to respect the natural environment by avoiding sign clutter, unnecessary messages, and design elements that may disrupt the natural experience. Finally, we understand that the objectives and interests of multiple jurisdictional partners must be considered throughout the process. In order to fully realize these goals, we recommend that a full process of design development be undertaken.

This involves creation of a Core Working Team, made up of representatives from all appropriate partners, who will review and respond to design concepts, working toward development of a full system of sign types. It is most important to consider the creation of a single, comprehensive system with elements that are adaptable to the various experiences, rather than to view each jurisdictional partner as having its own unique signage system. Corbin Design is prepared to bring the various interests together to achieve this unified system.

## 5.7. Updated Framework

Corbin Design has been retained by the Town of Mammoth Lakes (TOML) to continue the development of a wayfinding program for the Town and the Mammoth area. The focus of this effort will result in the incorporation of additional site analysis and design recommendations into the Trail System Master Plan document. To help encourage adoption of the trails wayfinding and signage system by local stakeholders, the Town will implement a demonstration project at the Welcome Center and along a segment of the Main Path. Corbin Design will incorporate additional system refinements into the final Trail System Master Plan as needed based on inspection, review and comments of the demonstration project prototypes.

### 5.7.1. Winter 2008/2009 Phase

- Representatives from the TOML, MLTPA and Corbin Design performed a site inspection Nov. 8-9. Various trail system nodes were surveyed to determine their wayfinding needs. Five types of nodes were surveyed: Parks, Recreation and Activity Centers, Portals, Trailheads, and Access and Egress points.
- The goal of the site inspection was to establish a pattern for applying the various wayfinding elements at each site. The inspection also provided more details about the information needed to inform the users at each particular site.
- It was determined that the various destinations listed as GIC points should not be labeled as official node types until further discussions are held with the jurisdictional partners for each GIC point. It was agreed that the node designations would be treated as future projects for wayfinding application once the jurisdictional partners agree and grant permission.
- The Welcome Center will be used as a demonstration site for testing full-size prototype signs for the trails wayfinding and signage system. A comprehensive system will be planned for the Welcome Center site together with select section of the Main Path. The myriad of existing signs on the Welcome Center grounds will be evaluated and some will

be replaced with the new wayfinding system while all unnecessary signage will be removed.

- The implementation and manufacturing cost estimates for the prototype signs will be pursued through a qualified fabricator.

### **5.7.2. November 8<sup>th</sup> & 9<sup>th</sup> Site Inspection Results**

- Corbin Design will add four new sign type designs to the system array. The full sign type family includes the following:
  - ◆ Type 1 - Portal Identification Markers
  - ◆ Type 2 - Trail Information Kiosks
  - ◆ Type 3 - Parks Identification Markers
  - ◆ Type 4 - Access/Egress Information Signs
  - ◆ Type 5 – Vehicular Guide Signs
  - ◆ Type 6 - Trail Guide Signs
  - ◆ Type 7 – Interpretive Kiosk (sample only)
- The system will be value engineered so that the final products will be affordable and changeable, and can be adjusted as needed to respond to seasonal conditions.
- A project goal is to have the demonstration signs be built by a local fabricator. Local fabricators will be researched and contacted for qualifications and pricing.

### **5.7.3. Other Important Issues**

#### **Rescue Indicator**

Corbin recommends that a locator ID number designed to provide trail users with reliable locating information be applied to all trail-related signs. User safety is critical, and a rescue indicator number that is unique to each sign will become the reference point for any needed rescues. The system numbering will need to be discussed with emergency services personnel throughout the Mammoth area, and approved locator numbers need to be recorded in the TOML trail system database.

#### **GPS Reference Point**

Update the GIS program with the GPS position for each sign location. MLTPA has expressed the capacity to perform the task of collecting and documenting the GPS position of each wayfinding signage element as the system is installed.

#### **Topography Mapping**

As a design element for the interpretive sign background, a topographic pattern of the area could be used as the standard. TOML GIS Coordinator would be the contact person for accessing the topographic artwork.

#### **Interpretive Story**

The information for the prototype interpretive sign will focus on the trails wayfinding and signage system. The story will explain the system’s purpose, function, highlights, and act as the system “owner’s manual” for trail users. This unit will be placed adjacent to the Tourism and Recreation building near the trailhead of the Main Path.

### **Solar Lighting**

The possibility of using solar power to provide limited external illumination for Trail Information Kiosk signs (type 2 above) will be explored. This would make the kiosks more visible at night and improve safety.