



## 2012 Spring Measure R Application Form

### APPLICANT INFORMATION

#### ORGANIZATION

<b>Name of Organization:</b>	Mammoth Lakes Trails & Public Access Foundation
<b>Type of Organization (non-profit, HOA, Govt.):</b>	Nonprofit
<b>Contact Person:</b>	John Wentworth
<b>Organization's Address:</b>	PO Box 100 PMB 432, Mammoth Lakes
<b>State / Zip:</b>	CA 93546-0100
<b>Office Phone Number:</b>	(760) 934-3154
<b>Email Address:</b>	<a href="mailto:johnwentworth@mltpa.org">johnwentworth@mltpa.org</a>
<b>Internet Address:</b>	<a href="http://www.mltpa.org">www.mltpa.org</a>

### PROJECT SUMMARY

- 1. Name of project:** Mammoth Lakes Trail System (MLTS) Website Enhanced Content Development
- 2. Project category:** Trails
- 3. Project type:** Implementation/Construction
- 4. Measure R funds requested:** \$25,000

# PROJECT APPLICATION

## SECTION 1 - PRELIMINARY QUALIFICATIONS:

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- 1. Describe why this project is considered urgent and was not submitted during the Fall 2011 application process?**

Measure R funding was awarded to MLTPA in support of the development and implementation of the MLTS website in fall 2010. Costs associated with design and construction of the “back end” (a content-management system, or CMS, as well as CSS/HTML design templates to display the content on a live website) as well as the final determination of the best data platform from which to present information to consumers (determined in the last six months) have left the current project budget shy of the necessary capacity to produce the required array of content needed for the site. The total costs associated with the full content-development effort were difficult to budget at the time of the original Measure R Fall 2010 application process and award.

- 2. Does the project reside within the Adopted: Town Council Parks and Recreation Master Plan and/or the Adopted: Trail System Master Plan or the RECSTRATS II – Implementation Strategy?**

Yes. See "Attachment A: Plan Citations."

- 3. Does the project meet the “Principles and Priorities” established by the Recreation Commission for the 2011 Fall Measure R funding cycle?**

Yes.

**If YES, please cite:**

This project supports priorities 1) Finish Parks, Trails and Recreation projects that remain incomplete, and 2) Plan for the future. It also supports principles 1) Emphasis on visitor-driving projects, 2) Emphasis on cooperative efforts that significantly leverage Measure R funds, and 3) Projects must cite recommendations from the draft Parks and Recreation Master Plan (PRMP), the draft Trail System Master Plan (TSMP), and the RecStrats Implementation 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.”)**

See "Attachment B: Project Concept Plan."

## SECTION 2 - PROJECT DESCRIPTION

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### Project Location

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

Mammoth Lakes Trail System

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

Mammoth Lakes Trail System

3. **Do you have approval to use the location identified in this application?**

Yes.

If YES, Please provide documentation of approval

This project's scope of work is an extension of the scope approved by Town Council for MLTPA's Measure R Fall 2010 grant award.

If NO, describe how and when you will secure this approval

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

A. Development/Design: N/A

B. Implementation/Construction: \$37,500

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

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

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

A. Development/Design: N/A

B. Implementation/Construction: Project will be completed and integrated into the MLTS website within three months of an executed agreement.

C. Maintenance/Operation: N/A

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

**6. Will any Development (design) funds be required for your project or service?**

No.

If YES, please describe what is required, when it's required, the timeline (schedule) and cost

**7. Will any Implementation (construction) funds be required for your project or service?**

Yes.

If YES, please describe what is required, when it's required, the timeline (schedule) and cost

Please see "Attachment B: Project Concept Plan (Budget)" for details.

**8. Will any Maintenance funds be required for your project or service?**

No.

If YES, please describe what is required, when it's required, the timeline (schedule) and cost

*NB: While maintenance costs for the deliverables associated with this application will be minimal to none at all, the MLTS website will require regular maintenance and operational funds to update content once the initial build is complete.*

**9. Will any Operational funds be required for your project or service?**

No.

If YES, please describe what is required, when it's required, the timeline (schedule) and cost

*NB: The deployment of the deliverables identified in this application will require that the MLTS website have access to regular maintenance and operational funds to update content once the initial build is complete.*

**10. Will any Replacement funds be required for your project or service?**

No.

If YES, please describe what is required, when it's required, the timeline (schedule) and cost

**11. Will there be Contractual Service hours used for any phase of your project?**

Yes.

If YES, please describe what is required, when it's required, the timeline (schedule) and cost

Please see "Attachment B: Project Concept Plan (Budget)" for details.

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

The Town of Mammoth Lakes

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

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

Volunteer hours will be accumulated during the experience-development process by user groups and local businesses contributing their time and expertise. Total volunteer hours will be documented as part of this grant's required final report, if this application is awarded.

**14. Have any public funds (Town Funds – includes Measure R) been previously committed to this project/service or project site?**

Yes.

If YES, please list:

Amendment 01 to the master agreement between the TOML and MLTPA committed \$127,500 in Measure R funding from MLTPA's Fall 2010 Measure R award to build [www.mammothtrails.org](http://www.mammothtrails.org).

Amendment 02 to the master agreement between the TOML and MLTPA committed \$20,018.05 in General Fund funding as requested in MLTPA's Fall 2010 Measure R application to build [www.mammothtrails.org](http://www.mammothtrails.org).

**15. 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 will commit \$12,500 to this project. The amount of Measure R funding requested in this application, \$25,000, constitutes a 2:1 match to MLTPA's commitment; these two sources together will fully fund the project.

In-kind staff time from the Inyo National Forest as well as from the Eastern Sierra Interpretive Association will be accumulated during the development of interpretive media for the QR-code program.

**16. Is your project/service going to have an impact (positive or negative) on existing use in the location you have identified?**

This project will positively impact the Mammoth Lakes Trail System and the community of Mammoth Lakes. Please see Section 3, Questions 1 and 4, for details.

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

The TOML will manage/maintain oversight of this project via the Mammoth Lakes Trail System Coordinating Committee and its annual recommendations for budget allocations, programming, and scopes of work.

## SECTION 3 - PROJECT BENEFITS

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**1. Describe how your project/service provides a measurable community benefit (incremental visits, revenue, etc.) to the residents and visitors of Mammoth Lakes?**

Investment in the expansion and improvement of the MLTS website is an investment in the Mammoth Lakes Trail System and the Mammoth Lakes community. Beyond the many economic advantages a site such as this brings to town (see Section 3, Question 4, below), which can substantially increase revenue earned for local businesses, its enhanced features as described in this application are equally useful to residents.

The launch of the MLTS website, mammothtrails.org, will mark the first time this community has had a single comprehensive resource for outdoor recreation in the Mammoth Lakes area. While many locals are well versed in the MLTS and navigate it with ease and pleasure, the seasonal nature of employment in town means that hundreds, perhaps thousands, of temporary residents come here annually to enjoy the boundless recreation opportunities of the Eastern Sierra—people whose knowledge of the MLTS is often limited both in scope and season. The addition of rich photography and “MLTS Experiences” to the site will make it simple for our part-time residents to make the most of their stay in Mammoth Lakes and to have plenty of reasons to return year after year. Year-round residents also will benefit from this enhanced content; as it will be produced in large part through the input of local clubs and businesses, the experiences offered may encompass a variety of excursions that a local may not yet have explored. This “local knowledge” approach ties our Mammoth-area recreation user groups and businesses directly into a product that drives visitation, improves local quality of life, and encourages more participation in the clubs themselves, strengthening the local recreation network and bolstering Mammoth’s reputation for delivering one-of-a-kind experiences to both residents and guests.

Creation of digital interpretive media that complements the standard MLTS site offers educational opportunities not only for visitors, but for residents as well. As this content may be updated or changed at will, depending on the resources of the managing agency, it can host different types of information at chosen times, which allows for season-specific learning opportunities. This dynamic content can keep trail users engaged repeatedly, whereas a simple static panel loses novelty after only one view. This quality can be especially useful to educators and community groups who lead learning tours, since the content is not only active (and potentially interactive), but also accessible from a smartphone, tablet, or home computer long after the user has left the site of the sign. Additionally, the partnership between MLTPA and the Eastern Sierra Interpretive Association (ESIA) to develop and implement this content speaks to a strong commitment to “neighborhood collaboration”; with the award of this application and a contractual relationship with the TOML, it also will demonstrate the power of a public-private partnership to improve our quality of life and combine resources to complete projects that benefit the whole community.

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

Targeted users of the MLTS website include the approximately 8,500 year-round residents of Mammoth Lakes and the town’s approximately 2.75 million to 3 million annual visitors.

**3. Is it available for limited or year round use?**

Content will be available year-round on the MLTS website. Information about activities for all seasons will always be accessible regardless of time of year so that users may plan in advance to visit Mammoth Lakes.

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

Production and incorporation of enhanced content for the MLTS website delivers a direct benefit to the tourism-based economy of Mammoth Lakes. Whether lifelong visitors or first-time guests, the vast majority of tourists who come to Mammoth Lakes plan their trips around outdoor recreation. Currently, information resources about the area in general and the Mammoth Lakes Trail System as a whole are limited and are scattered throughout a variety of sources ranging from individual recreation-user-group websites to agency-produced pamphlets. While these sources often offer excellent suggestions for specific activities or trails, they are sometimes difficult to unearth by someone unfamiliar with the local recreation community and can

become out of date without the resources necessary to make timely revisions. The key to earning return visitors and extended stays in our community—and thus increasing tourism-based revenue for the local economy—is to make vacation planning as quick, clear, and effortless as possible. With the launch of the MLTS website in the summer of 2012, our guests will finally have at their disposal a comprehensive recreation directory that details, among other things, trail surfaces and lengths, popular destinations/points of interest, and where particular activities are permitted within the system. This data is incredibly useful to outdoor enthusiasts comfortable with data-based trip planning, but may seem intimidating to a casual user. The delivery, then, of predefined “MLTS Experiences” take the guesswork out of mapping out a vacation itinerary for a significant percentage of Mammoth Lakes’ guests, such as families with children, first-time visitors, and those who may be experienced in a particular sport, but are not familiar with the MLTS.

Development of a full range of experiences for all activities on the MLTS is critical to Mammoth Lakes’ ability to attract and retain guests. Rather than leaving it to the visitor to deduce how, when, and where to go during their stay, Mammoth Lakes can simply offer them a menu of experiences, complete with professional photographs, that cater to a variety of interests, ability levels, and seasons, from a simple day hike or bike ride to a multi-day backcountry ski tour. As these individual Web pages will be printable in a single-page, easy-to-read format—as well as easily accessible from a smartphone—guests need only choose an experience, print or bookmark it, and take it with them on their excursion, ensuring that the information provided is reliable and accurate. The easier it is for a guest to explore the MLTS, the likelier it is that he will book more frequent travel, add a day or two to his stay, and experience more of Mammoth Lakes while in town. The addition of professional-quality imagery will let potential visitors “see for themselves” when researching experiences on the MLTS and can help to further “sell” a recreation vacation.

Local retailers agree that their employees are asked by customers every day for recommendations for outdoor experiences, from sledding to climbing and more. Development of enhanced experience content for the MLTS website will adopt this local knowledge from individuals and businesses and make it available to anyone, right from her home computer, tablet, or smartphone. This same information, through the MLTS Partner Program (currently in development), can be delivered directly from such retailers to their customers as either signature experiences tailored to begin at or near a business or as business-approved suggestions for other content already living on the MLTS website. This forms a stronger bond between customer and retailer while fostering increased traffic on both the MLTS as a physical system and on its namesake website.

Once on the MLTS, visitors will be seeking added benefits to keep their interest piqued as they encounter the Eastern Sierra’s wide variety of natural attractions. Interpretive signage is a tried-and-true method of engaging a trail user. Colorful photos and illustrations coupled with “Did You Know?”—style text draw users in and hold their interest long enough to impart some topic-specific education, but a major drawback is the content’s static nature. The addition of QR codes, which may be scanned with an application downloaded to any smartphone, enables the content to become dynamic. A QR-code scan on any of the eight interpretive panels planned for installation on the MLTS in the summer of 2012 will take users to a unique page on mammothtrails.org that offers enhanced digital content such as photo galleries, audio tours/clips, and video. Building from the information presented on the sign, the Web-based content makes a deeper connection between user and environment by engaging a fuller range of senses and allows him to leave the physical sign location while still learning more about the topic. More-interactive learning opportunities are more attractive to the modern trail user, and the fact that the digital content may be refreshed at any time is a draw for our visitors. The award of this application will fund the development of these interpretive Web pages, providing an enhanced MLTS experience users will return to time and again.

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

- a. Since the initial award of Measure R and General Fund monies to its current contract as initiated by its fall 2010 Measure R application, MLTPA has raised and committed \$25,000 in additional funds exclusively to the MLTS website program (CMS and CSS development).
- b. Through this application MLTPA is committing an additional \$12,500, bringing its total commitment to the MLTS website and digital interpretive program to \$37,500.

## SECTION 4 – PROJECT FEASIBILITY

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For any new project request not previously funded by Measure R, please complete the feasibility portion of your application that includes the demand, cost and feasibility analysis. The Recreation Commission may ask for a professional feasibility study conducted by a consultant depending on the cost and scale of your project.

**\*\*All of Section 4 is N/A, as this project has been previously funded by Measure R in the Fall 2010 award cycle.\*\***

### DEMAND ANALYSIS

#### 1. Competitive Supply Analysis

Provide a review of both direct and indirect competition and the strengths and weaknesses of the competition (SWOT) – identification of where the proposed project fits within the marketplace.

N/A

#### 2. Identification of Market Opportunity

Identify the long term opportunity that the project presents.

N/A

#### 3. Describe the targeted users of your project/service. (Include numbers of participants)

N/A

#### 4. Projected Multi-Year Demand Analysis

Provide the projected demand with assumptions.

N/A

#### 5. Projected Multi-Year Revenue Projections

Projected revenue with pricing assumptions.

N/A

### COST ANALYSIS

#### 1. Provide the estimated one-time or annual costs for each phase of your project or service. (Where applicable)

A. Land acquisition costs: N/A
B. Equipment acquisition: N/A
C. Site preparation/demolition and site prep costs: N/A
D. Entitlement costs: N/A
E. Architect and planning costs: N/A

<b>F. Construction costs:</b> N/A
<b>G. Operational costs:</b> N/A
<b>H. Maintenance costs:</b> N/A
<b>I. Programming costs:</b> N/A
<b>J. Other:</b> N/A

## FEASIBILITY ANALYSIS

### 1. Project and Financial Assumption

Please state assumptions which are the basis of the pro forma development

N/A

### 2. Multi-Scenario Pro Forma's

Provide a number of pro forma scenarios to understand financial projects feasibility. Within this element it is recommended that a 5 year operating budget be developed.

N/A

### 3. Risk Analysis

Identify project risks

N/A

### 4. Project Schedule

Identify the necessary implementation tasks required for your project or service

N/A

### 5. Quality of Life Analysis

Identify positive and negative project effects on the quality of life for the community of Mammoth Lakes.

N/A

**Submission Deadline: Wednesday, May 2, 2012 at 5:00p.m.**

# **Attachment A: Plan Citations**

## Trail System Master Plan (Adopted 2011) Citations

pp. 16–17, Section 1.2

### **1.2.2. Mobility**

**Objective 2.4:** Provide the information necessary for residents and visitors to navigate around town on foot, bicycle and transit.

p. 114, Recommendation G4

### **Recommendation G4: Interpretive Signage**

In addition to the uniform trail signage designed to provide wayfinding and trail-specific information, more customized interpretive signage should also be developed for the trail system. The first step in this process should be the identification of locations along trails within the UGB which provide the best opportunities for interpretive signage. Some examples include the bridge in Mammoth Creek Park west, the Main Path at Snowcreek Meadow, and the northeast terminus of Lake Mary Path. Once the sites and general subject matter of the interpretive installations are identified, the process of designing the interpretive signage installations should begin. The design process should involve the community at large and professionals with expertise in the selected subject matter. The information provided at each interpretive installation should be based on the experiences, knowledge and interests of its expected audience.

p. 154, Recommendation E1

### **Recommendation E1: Publish a Trail Guide for Mammoth Lakes**

An 'early win' for Mammoth Lakes would be to provide literature, web sources and trail maps for public use. Opportunities for the web-based articulation of the Mammoth Lakes Trail System are numerous and quickly evolving. A strategic effort to integrate resources such as GIS data, web-based mapping platforms such as Google Earth, the VisitMammoth web site, user group sites maintained by members of Mammoth Trails, the MLTPA GIC data set, and user data being generated by existing out of area user group sites will need to be undertaken. This effort will ensure that the web-based definition of trails and recreation amenities in Mammoth Lakes is available to the Mammoth Lakes community. This effort will add to the quality of analogue deliverables as well. A trail guide would provide information on access points, existing trails, rental equipment locations, and other information for residents and visitors. The data being collected and managed could be provided in electronic format online, or could be published and made available in hard copy form as well.

p. 154, Recommendation E2

### **Recommendation E2: Annual Events / Coordinated Activity Calendar**

There are numerous opportunities for Mammoth Lakes to promote special events, tours and club functions related to the trail system through a paper and web-based event calendar. This can include ongoing local events such as the Century Bike Ride, guided hiking tours, Marathon/Triathlon events and trail clean-up days as part of the National Trails Day celebration. These types of

## Measure R Spring 2012 Application: MLTPA Foundation Attachment A: Plan Citations

events can provide public awareness, visibility for sponsors and fundraising opportunities for the trail system.

*p. 168, Section 5.1*

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.

*p. 173, Section 5.2.*

### **5.2.5. Information Categories**

#### **Category 5: Interpretive or Desired**

##### **Category 5: Interpretive**

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

*p. 180, Section 5.5*

### **5.5. Signage Vocabulary**

#### **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.

## **RecStrats II Citations**

*p. 26, B. Consolidated Project List*

5. Low-cost and/free awareness, education, and interpretive programs.
8. Coordination of operations, management & marketing of recreation and arts experiences to provide information, maps, assistance with permitting events, access to resources, central spot for disseminating information, etc.
9. More wayfinding, signage, maps, and information systems utilizing emerging technology-based resources around town.

**Attachment B:  
Project Concept Plan**

## Measure R Spring 2012 Application: MLTPA Foundation Attachment B: Project Concept Plan (Narrative)

This application seeks to fund the development of enhanced content for the Mammoth Lakes Trail System website, [www.mammothtrails.org](http://www.mammothtrails.org). This content will complement content already created with funds allocated from Amendment 01 (Fall 2010 Measure R award) and Amendment 02 (Fall 2010 General Fund award) of MLTPA's master agreement with the TOML and will significantly improve and expand the wealth of trails and outdoor-recreation information made available to the site visitor.

### **Experiences\***

Experiences are defined as the marriage of an activity (e.g., mountain biking) with a destination or facility (e.g., Mammoth Rock Trail). They are what MLTS users primarily seek, as experiences provide predefined, expert-recommended recreation opportunities a visitor may easily add to his itinerary. Using the examples given above, a typical experience would be titled "Mountain Biking the Mammoth Rock Trail." Its unique Web page would offer rich detail about this experience, from hard data such as an elevation profile, route length, route surfaces, and duration to subjective information such as a narrative-style description of what it's like to have this experience, the best time of year to go, which type of user the experience is appropriate for, and what gear/equipment one should bring to properly prepare for (and fully enjoy) this experience. Experiences are culled from the collective local knowledge of MLTS recreation experts—Mammoth Trails Charter Member groups, book and blog authors, and individuals who are known for their "insider information" about what the MLTS offers. To date, baseline experience information has been collected from the Sierra Club, the High Sierra Striders, the High Sierra Triathlon Club, Eastside Velo, and Mammoth Motorcycle Club, as well as from *Road Biking California's Sierra Nevada* co-author Jim Barnes. This data will be revised and fitted into predesigned experience templates within the site's CMS by MLTPA staff to ensure reliable, consistent presentation to the end user.

A second major source for experience information is local businesses. As part of a larger MLTS Partnership Program, currently in its development stage, local businesses would have the opportunity to customize experiences that begin and end at or near their location. For example, Footloose Sports has approached MLTPA with a desire to formalize cycling experiences they often give anecdotally, using hand-drawn maps, to customers asking for bike-ride suggestions. As with the user groups/clubs and individuals described above, MLTPA staff has received a number of basic routes from Footloose staff that will need to be matched up with the correct template for a unique experience Web page. Once completed, these experiences will be available to those users who navigate to the MLTS website through a special QR code created for a particular partner's page.

Another example of partner-specific experience development is the Westin Monache Resort, which has chosen MLTPA and the MLTS as their nonprofit

**Measure R Spring 2012 Application: MLTPA Foundation**  
**Attachment B: Project Concept Plan (Narrative)**

beneficiary for 2011/2012. An existing corporate partnership between the Westin and *Runner's* magazine has already produced two "Westin Workouts"—three-mile and five-mile road-running options—that the Westin Monache would like to convert from their current iteration as pocket-sized laminated cards to a Web-ready version available through the MLTS website. Recent meetings with the Westin to discuss this opportunity have shown that hotel guests are increasingly seeking experience information that may be accessed digitally through a smartphone rather than through a hard-copy handout that must be carried throughout a workout. As with the two previously cited examples above, MLTPA staff will work with Westin staff to complete all fields in the CMS experience template for eventual publication on the MLTS website.

In addition to retrofitting existing data into the MLTS website's CMS, the Westin also is interested in creating and disseminating signature "Westin experiences" to their guests. Meetings with Westin staff have brought to light a need to provide reliable information on activities most asked-about by their customers, such as snow play and dog walking. To satisfy these inquiries, the Westin and MLTPA will work together to develop unique experiences guests may have right from the Westin—an easy-to-access activity for the user and a unique service for the hotel. This effort will produce a prototype program that can be used by other local businesses to connect their guests with all of the unique trail-based recreation experiences in Mammoth Lakes.

Experience development is done through an "Experience Interview Worksheet" already created by MLTPA through our current contract with the TOML (see "Attachment C: Experiences Interview Worksheet.") The document is meant for use as a data-capturing tool whereby an MLTPA staff member may sit down in person with an individual ready to provide an experience and gather all of the information needed to populate all fields in the CMS. Post-interview, MLTPA staff will revise or compose narrative entries (as needed), plot route information in GIS to produce map detail and elevation profiles, source photos and/or video, and enter information into the site CMS, where it can then be "published" to a live page.

In order to convey to the end user the great potential and utility of the MLTS website, MLTPA will work with Mammoth Trails Charter Members, expert local individuals, and other resources, such as guidebooks and agency-approved or -distributed pamphlets, to produce many new experiences for inclusion in the site in the late summer or early fall of 2012. These enhanced experiences will include both non-motorized and motorized activities, diversity in trail surfaces, a spectrum of user types/difficulties, and multi-seasonal applications.

*\* MLTPA hopes to present the Recreation Commission with a sample "MLTS Experience" Web page during the Measure R application review process.*

**Measure R Spring 2012 Application: MLTPA Foundation  
Attachment B: Project Concept Plan (Narrative)**

**QR-Code-Accessed Interpretive Content**

Since 2010 and the award of an American Recovery and Reinvestment Act (ARRA) grant to the Inyo National Forest (INF), MLTPA has been working in partnership with the INF and the TOML on a comprehensive signage-and-wayfinding system for the MLTS. Part of this project includes the manufacture and installation of eight interpretive panels that will feature unique QR (quick response) codes. Scanning the QR codes with an application downloaded to a smartphone will take the user to unique MLTS website pages that will offer opportunities to learn more about his surroundings. In partnership with the Eastern Sierra Interpretive Association (ESIA)—a signatory to the MLTPA Memorandum of Understanding and a partner in this grant request (see “Attachment E: Letter of Support”)—MLTPA aims to develop content for each of these panels to enhance the user experience on the MLTS.

Text and images for the physical panels are in their final development stages by ARRA contractors, with each sign focusing on a different aspect of each unique location, such as geology, flora, and fauna. Web-based content accessible through each sign’s QR code will complement and expand upon what the user has already learned through the sign panel, through a multimedia experience offering audio files, video, and/or photos. This modern-technology-based form of interpretation was explored as part of MLTPA’s “MLTS Interpretive Services Planning” report in “Chapter 6: Opportunities for Interpretive Media Along the MLTS,” pages 47–48, which shows the many positive benefits of engaging visitors through handheld Web-based devices, and in “Chapter 8: Recommendations,” pages 93–94. (Author: David Scott, park ranger, Devils Postpile National Monument. Report available for download at [http://www.mltpa.org/projects/current/MLTS\\_ISP/](http://www.mltpa.org/projects/current/MLTS_ISP/); see “Attachment D: MLTS Interpretive Services Planning Report Excerpts” for specific citations.)

**Photos**

The final component of this project is the shooting and editing of a collection of original photographs depicting the activities, experiences, trails, and destinations of the MLTS. These photos will supplement the TOML-owned set of images currently being developed through MLTPA’s master agreement. As there are hundreds of images needed to illustrate each facet of the MLTS (indeed, each page), it will be necessary to allocate additional Measure R funding to cover the costs of acquisition. Development of a comprehensive intellectual-property agreement that would cover the legal use of such photos, as included in MLTPA’s current scope of work with the MLTS website project, has yet to be fully engaged by the MLTS partners; short of this agreement, the TOML will remain unable to accept third-party images for shared, temporary, or otherwise restricted use, which prompts the need for creation of additional images owned solely by the TOML.

Measure R Spring 2012 Application:  
MLTPA Foundation

Attachment B:  
Project Concept Plan (Budget)

<b>Project Title:</b>	MLTS Website Enhanced Content Development					
<b>Project Description:</b>	Development of enhanced content for mammothtrails.org					
<b>Funding Source Ref. Code:</b>	Measure R Spring 2012					
<b>MLTPA Server Code:</b>	077_MR_S12					
<b>Timeframe:</b>	Summer/Fall 2012					
<b>Deliverables Schedule:</b>	1	Project Management				
	2	Experience Development and Posting to MLTS Website				
	2a	Project Identification and Inventory				
	2b	Interviews with User Groups and Businesses				
	2c	Data Collection and Follow-Up				
	2d	Route Development: GIS and Mapping				
	2e	Photography				
	2f	Content Creation				
	2g	Review and Approvals				
	2h	Posting to MLTS Website				
	3	QR-Code-Accessed Interpretive Content				
	3a	Partner Meetings				
	3b	Project Identification and Inventory				
	3c	Content Drafts and Partner Approvals				
	3d	Content Creation (Audio, Video, Photo)				
	4	Photography				
	4a	Image Acquisition				
	4b	Image Processing (Naming, Keywording, Metadata)				
	4c	Image Editing (Color Correction, Cleanup)				
	4d	Album Creation and Posting				
	5	Final Reporting				
	6	Final Deliverable(s) Preparation and Delivery				
<b>Fee Schedule:</b>	<b>MLTPA Staff Position</b>	<b>Rate</b>	<b>Hrs.</b>	<b>Cost</b>		
	CEO	73.46	42	\$	3,085.32	
	Community Engagement Director	57.00	30	\$	1,710.00	
	GIS Coordinator	31.63	60	\$	1,897.80	
	Graphics Coordinator	42.93	30	\$	1,287.90	
	Natural Resources Director	57.00	20	\$	1,140.00	
	Operations Director	57.00	25	\$	1,425.00	
	Paid Intern	28.82	120	\$	3,458.40	
	Media Project Manager	37.29	95	\$	3,542.55	
	Media Content Editor	64.31	120	\$	7,717.20	
	Photographer	42.93	120	\$	5,151.60	
	Photo Librarian	31.63	200	\$	6,326.00	
		<b>Subtotal Staff Cost =</b>			<b>\$</b>	<b>36,741.77</b>
		<b>Hard Costs =</b>			<b>\$</b>	<b>750.00</b>
		<b>Total Project Costs (Staff Hrs. + Hard Costs) =</b>			<b>\$</b>	<b>37,491.77</b>
		<b>Total Hrs. for Project =</b>				<b>862</b>
		<b>Total Measure R Contribution =</b>				<b>25,000</b>
		<b>Total MLTPA Contribution =</b>				<b>12,500</b>
		<b>Total Project Cost =</b>				<b>37,500</b>

**Attachment C:  
Experiences Interview  
Worksheet**



## MammothTrails.Org Experience Interview Worksheet

Last updated: April 26, 2012

### GUIDELINES

- The experience must take place on existing facilities of the Mammoth Lakes Trail System (multi-use paths, soft-surface trails, INF roads, bike lanes, etc.).
- The experience must originate from the Town of Mammoth Lakes, but may terminate outside of the MLTS. However, experiences contained wholly within the MLTS are preferable.

### SOURCE:

**What or who is the source of this experience (e.g., Sierra Club, *Mammoth Mountain Biking Guidebook*, INF Winter Use Map, etc.)?**

### NAME:

**What is the name of this experience?** (*Incorporate the activity name into the experience name, e.g. "Hiking the Mammoth Rock Trail" or "Road Bike Climbing Tour of Mammoth Lakes."*)

### SEASON:

**What time of year can a user have this experience?** (*Check all that apply.*)

- Summer
- Winter
- Spring
- Fall
- Other (*explain*)

### USER INFO:

**Which type of user would you recommend to do this experience?** (*Check only one.*)

- Beginner
- Intermediate
- Advanced
- Families with small children
- Families with teenagers

**DURATION:**

How long should it take the recommended user to complete this experience? (Check only one.)

- Less than 4 hours
- Half day
- Full day
- Overnight
- Multiple days

**WILDERNESS:**

Does this experience involve a U.S. Forest Service–designated wilderness area at any point, even if it just briefly passes through?

- Yes
- No

**SURFACE:**

Which surface type(s) make up this experience?

- Dirt trail
- Paved multi-use path
- Dirt road
- Paved road
- On-street bike lane
- Snow
- Mixed

**ROUTE:**

What route does this experience take? Please describe in a point-to-point manner so that this route may be mapped in GIS; locate the start point at an established node, trailhead, or facility if at all possible. Use cardinal directions (N/S/E/W) whenever possible and be specific when describing the facilities on which this experience takes place (e.g., proper road names, trailhead names, etc.).

*EXAMPLE: "Begin your ride at the Mammoth Lakes Welcome Center. Head west on Main Street to its intersection with Forest Trail; you'll see Fire Station #1 on the corner. Turn right and ride 300 feet until you see a soft-surface trail on your right; this is your entrance into Shady Rest..."*

**EXPERIENCE DESCRIPTION:**

*Visualize and take us through what it's like to have this experience, from the moment a user arrives at the start point to when he reaches his ultimate destination. Rather than focusing solely on the route itself, share your local, personal knowledge about what makes this experience unique or*

***otherwise worth having. The description should wind up sounding much like an interpretive audio tour you'd find at a national park or in a museum: leading you on the right path while pointing out interesting features or facts along the way. Descriptions should include, as applicable:***

- Why this experience is great for the user type identified earlier in this interview
- Distinctive/technical terrain features (rock stair work, log water crossings, overlooks/scenic vistas, etc.)
- Environmental features (foliage, wildlife, geological formations, etc.)
- Areas of caution (potential conflict with other user types, unusual trail conditions such as sharp drop-offs, important landmarks that indicate critical turns in the route, unpredictable weather changes, etc.)
- “Fun facts,” history, or local legend about points of interest (natural, cultural, historical, etc.), whether they are along the way or the endpoint of the experience

*EXAMPLE: “Mountain biking on the Mammoth Rock Trail is a great way to get an overview of Mammoth Lakes—literally! If you begin from the trailhead on the west end, you’ll pedal for only a few minutes before being treated to a panoramic view of town to the north and the White Mountains to the east. Some baby-head rock sections crop up along the trail, and be prepared to ride through Mammoth’s famous volcanic pumice (much like sand) for the last 15% of the trail before it intersects with Sherwin Creek Road. Mammoth Rock Trail is also a favorite of equestrians, dog walkers, hikers, and trail runners, so be alert and courteous to other users.”*

**What should be on a user's gear checklist for this experience (e.g., windbreaker, hiking boots, water purification system, binoculars, avalanche beacon, etc.)?**

- Backpacking pack
- Bicycle tools
- Biking gloves
- Biking helmet
- Binoculars
- Bug spray
- Camera
- Cell phone
- Compass
- Daypack
- Electrolyte replacement/energy bars
- First-aid kit
- GPS device
- Headlamp
- Hiking boots
- Hiking poles
- Map
- Motorcycle tools
- Mountain bike
- Plant-identification guide
- Road bike
- Sleeping bag
- Sleeping pad
- Sun hat
- Sunglasses
- Sunscreen/lip protector
- Tent
- Tire repair kit (tire irons, inner tube, patch kit, pump/CO<sub>2</sub> cartridge)
- Trail-running shoes
- Water
- Wildlife-identification guide
- Windbreaker
- Other: \_\_\_\_\_

**Attachment D: MLTS  
Interpretive Services  
Planning Report  
Excerpts**

- Ability to deliver content to hearing and visually impaired visitors through audio and captioned video

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- Reliant on coverage
- Not everyone has a smartphone
- High start-up costs for planning and producing a comprehensive tour
- Older, more-traditional public may not be the right audience
- International visitors may not be able to access tours

### ***MLTS Results***

Suitability is constrained primarily by cell-phone coverage. See Map 4, above.

### ***Recommendations***

1. Smartphone tours should be used to offer content not possible on a wayside, such as video, audio, interactive lessons, and augmented reality.
2. If audio is used, noisy areas should be avoided.
3. If video or images are used, locations without shade should be avoided. Screen glare due to Mammoth's intense high-altitude light is a serious concern for the use of this media in certain locations.
4. Explore the feasibility of creating treasure-hunt/geocache programs along the MLTS that use GPS-enabled devices (which includes most smartphones). This kind of program would be particularly useful for reaching kids.

### ***Content linked by QR code***

A QR code, short for *quick response code*, is a two dimensional “barcode” containing Web-address information that can link a smartphone to content on the Internet. Smartphone users can “scan” the code using the phone’s camera and a scanning application and be directed to a specific website or application hosted online. QR codes eliminate having to type in long URLs or search on a small screen.

This media is similar to a smartphone tour and is often used as a component of a smartphone tour. QR-linked content has certain advantages over a full smartphone tour since it can be used to simply link a user to content hosted online without the need for a comprehensive “tour.” The use of QR-code technology is incredibly versatile. Codes can be imbedded in a wayside, on a signpost, in a publication, etc., and they can link to a video hosted on free services such as YouTube, a private or third-party server, or to social-media platforms.

From an interpretive standpoint, QR codes should be used to link visitors to *expanded* content and should not be central to the desired interpretive experience. Building an interpretive program around QR codes has the potential to isolate visitors who don’t own a smartphone.

### **Strengths and Weaknesses**

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- Allows visitors to select experiences
- Interpretive media not limited to text and images; can include audio and video
- Can deliver up-to-date trail, weather, and avalanche conditions as needed
- Can deliver calendar events that would automatically populate a visitor's calendar

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- Reliant on coverage
- Not everyone has a smartphone
- Requires a mobile-device-specific wireframe
- Older, more-traditional public may not be the right audience
- Application issues: not everyone has the same QR code reader application

### **MLTS Results**

QR codes could be used anywhere there is cell-phone coverage. See Map 4 for coverage information.

### **Recommendations**

1. QR codes should be used in printed materials (publications, waysides) to link visitors to video, interactive content, and social-media platforms.
2. QR codes should complement waysides and traditional content, not replace them.
3. Provide enough interpretive content on waysides for people without smartphones.

*For more information* about using high-tech media in interpretation, see the following:

- Falk, J., & Dierking, L. (1992). *The Museum Experience*. Washington, D.C.: Whalesback Books.
- Johnson, L., Witche, H., Smith, R., Levine, A., and Haywood, K., (2010). *The 2010 Horizon Report: Museum Edition*. Austin, TX: The New Media Consortium.
- Tallon, Loïc, and Walker, Kevin. (2008). *Digital Technologies and the Museum Experience: Handheld Guides and Other Experiences*. Lanham, MD: AltaMira Press.

## 8 Recommendations

Several of the chapters above contain specific recommendations. Here we make recommendations for the development of a small but comprehensive interpretive program that can grow over time. The seed for this program is the installation of a few (three to five) waysides at various locations around the trail system. The waysides are meant to interpret, but also to present visitors and trail users with QR codes and/or phone numbers for accessing high-tech content.

While the goal is to create exciting high-tech interpretive content, we believe that this content must be introduced using more traditional trailside forms.

1. Form a cooperative multi-agency panel to ***create or agree upon existing themes*** that will be targeted along the MLTS. This panel should contain members knowledgeable about the area and experienced in field-based interpretation.
2. ***Hire a project manager*** to coordinate the development of the program.
3. To start, ***plan several small interpretation projects*** devoted to *one* of the themes identified. Do not leave out any of the agreed-upon themes. Each theme should be represented by one project (e.g., a wayside).
4. ***Create one interdisciplinary program*** that incorporates and utilizes all of the theme-specific projects (above). This is a program, not a project. It will use and link all of the panel content.
5. ***Identify high-use locations*** where these projects could be implemented. Try to identify locations where the high-ranking features and stories overlap with high visitor use.
6. ***Select suitable low-tech media***, probably a type of wayside, that can be built. This should be a physical, tangible object that trail users will see along the trail or at the start of the trail.
7. ***Decide what kind(s) of high-tech media can be used*** to enhance the content of that low-tech media. Can QR codes and/or a cell-phone tour be implemented there? If not, what are the other options for signage location in order to utilize enhanced high-tech media?
8. After themes, locations, and media (in that order) have been agreed upon, ***select the most compelling or important features and stories*** that should be interpreted there. High-ranking features should probably be prioritized and interpreted on low-tech signage. High-tech media can be used to interpret all the other features and stories.
9. ***Identify local experts for the subject matter***. Identify all of the compelling and interesting stories for individual features and stories.
10. ***Identify local experts in interpretation***. Allow them to use the art of interpretation to tie local expert knowledge to interpretive concepts that help visitors make *emotional*, as well as intellectual, connections using tangible, intangible, and universal concepts.
11. ***Identify local artists*** who can create graphics that are attractive and effective in communicating the facts and feel supporting the theme.
12. ***Fabricate physical signage*** in a way that complements (not dominates) the landscape and scene.

13. ***Tie signage to high-tech media*** that enhances content and interacts with the user.
14. ***Build off of the physical signage infrastructure*** by adding additional high-tech, low-cost opportunities interpreting related topics and features nearby. Let the signage be the physical nexus to ever-expanding opportunities (cell-phone tours, smartphone tours, guided walks, roves).
15. ***Advertise, advertise, advertise.*** The public won't use it if they don't know it is there.

Many great interpretive opportunities exist along the MLTS. For the benefit of the local community, the visiting public, and the managers who seek to meet the needs of everyone, the MLTS should seek to provide a healthy balance of high-tech, low-tech, cultural, natural, and recreational interpretation.

When talking about interpretation, we often refer to *the* visitor or *the* user. The benefits of interpretation, however, go beyond that of the individual. Well-rounded interpretation teaches us to understand each other and the world that surrounds us. Through better understanding we often avoid conflict and find better ways to live—be it with bears, forest fires, or neighbors.

**Attachment E:  
Letter of Support**



May 2, 2012

Town of Mammoth Lakes – Recreation Commission  
P.O. Box 1609  
Mammoth Lakes, CA 93546

Re: MLTPA Foundation Measure R Spring 2012 Application

Dear Commissioners:

Please accept this letter of support for the MLTPA Foundation Measure R Spring 2012 application. As a signatory to the MLTPA MOU, the Eastern Sierra Interpretive Association (ESIA) is actively involved in the development of interpretive and educational opportunities for trails and recreation projects in the Mammoth Lakes region. We strongly believe in the value a comprehensive signage, wayfinding and interpretive system can bring to the users of the Mammoth Lakes Trail System and look forward to working with the experienced interpretive staffs of the Inyo National Forest and MLTPA to develop the content for the website pages that will be featured from the QR code links on the interpretive panels.

As the interpretive association serving the Eastern Sierra, we are constantly searching for innovative projects that can be modeled for use throughout the region. We support the integration of technology into interpretive projects and will continue to explore additional opportunities to deliver significant experiences for our visitors through the use of emerging technology-based tools. We strongly believe interactive and compelling interpretive projects can enhance our visitor's recreation experiences in Mammoth Lakes and the surrounding region, which is why we are working collaboratively with MLTPA and others to plan, design and implement these projects.

Thank you for your consideration of the MLTPA Foundation Measure R Spring 2012 application. We also thank you for your continued support for enhancing the Mammoth Lakes Trail System and look forward to leveraging all of our resources to implement the comprehensive interpretive plan.

Respectfully,

Debbe Eilts

Executive Director

Eastern Sierra Interpretive Association