Manitou Incline
Site Development and Management Plan

a collaboration between the
Cities of Colorado Springs
and Manitou Springs

draft 06 January 2011
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**Manitou Incline Site Development and Management Plan**

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Not part of this report - Stand alone companion pieces written by:

1. Draft IGA between City of Colorado Springs and City of Manitou Springs  
   Sarah and Dan
2. Plan endorsement letter - CSU, Cog, USFS  
   Susan, Spencer, Frank
3. Citizens Advocacy and Fundraising Group Commitment
Concerned citizens and community leaders have worked tirelessly over the past 10 years to broker legal access for Incline users. Much was learned from those experiences. This Plan builds on these prior planning efforts. We acknowledge and are thankful for the effort and commitment of those visionary leaders.

This plan to legally open the Incline is only possible through the committed participation and engagement of the three landowners. They participated not only on the Task Force, but in many additional meetings and reviews with the consultant team and the cities' staffs.

**Landowner Representatives**
- United States Forest Service - Frank Landis
- Manitou and Pike's Peak Railway Company - Spencer Wren
- Colorado Springs Utilities - Susan Presti

Direction and input for the Manitou Incline Site Development and Management Plan was provided by the Manitou Incline Task Force. The Task Force members gave valuable input to the Cities' staffs and to the consultant team. Their thoughtful ideas are incorporated into the Plan.

**Task Force Members**
- Eric Billmeyer, Friends of the Peak
- Steve Bremner, Incline Club
- Tim Haas, Manitou Springs Economic Development Council
- Bill Koerner, Trails and Open Space Coalition
- Frank Landis, United States Forest Service - Pikes Peak Ranger District
- Kira Pasquesi, Colorado Springs Parks and Recreation Advisory Board
- Susan Presti, Colorado Springs Utilities
- Kim Reaves, US Forest Service - Pikes Peak Ranger District
- Val St. Cloud, Upper Ruxton Residents
- Marc Straub, Manitou Springs Open Space Advisory Committee
- Eric Swab, Friends of the Peak
- Sarah Tresouthick, Lower Ruxton Residents and Manitou Springs Fire Department
- Spencer Wren, Manitou and Pike's Peak Railway Company
- Neal Yowell, Manitou Springs Parking Authority Board
- Sandi Yukman, Colorado Springs Utilities

The Manitou Incline Site Development and Management Plan is a collaborative undertaking between the Cities of Colorado Springs and Manitou Springs. The Manitou Springs Parking Advisory Board reviewed the stages document and provided recommendations on the parking management component. The Plan was approved on February 2, 2011 by the Colorado Springs TOPS Working Committee; approved on February 10, 2011 by the Colorado Springs Parks, Recreation and Cultural Services Board; and approved on February 22, 2011 by the Colorado Springs City Council. The Conditional Use request was reviewed by the Manitou Springs Planning Commission for a recommendation to City Council on March 9, 2011. Manitou Springs City Council adopted the Management Plan through the Conditional Use process on March 15, 2011. We wish to acknowledge their attentive consideration, and support of the plan.
Acknowledgements - Manitou Incline Site Development and Management Plan

TOPS Working Committee
Scot Hume, Chair
Lee Milner, Vice-Chair
PJ Anderson
Linda Hodges
Ian Kalmanowitz
Getty Nuhn
Jim Rees
Rich Upton
Jeremy Wilson
Paul Franco, Alternate

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Carl Reinhardt, Vice-Chair
Rich Eastland
Andy Finn
Jackie Hilaire
Nancy Hobbs
Mary Mashburn
Kira Pasquesi
Richard Stettler
Charles Castle, Alternate

Colorado Springs City Council
Lionel Rivera, Mayor
Larry Small, Vice-Mayor
Tom Gallagher
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Scott Hente
Bernie Herpin
Jan Martin
Sean Paige
Randy Purvis

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Jay Roher, Vice-Chair
Michelle Anthony, City Planner, Staff Liaison
Lisa Quintana
Ingrid Richter, Council Liaison
Spencer Wren
Neal Yowell

Manitou Springs Planning Commission
Alan Delwiche, Chair
Mike Casey, Vice-Chair
Karen Huseman
Gil Price
Tip Ragan
Jeanne Vrobel
Julie Wolfe

Manitou Springs City Council
Marc A. Snyder, Mayor
Aimee Cox, Mayor Pro-Tem
Rick Barry
Matt Carpenter
Michael Gerbig
Ed Klingman
Ingrid Richter

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City of Colorado Springs and City of Manitou Springs staffs played a significant role in the development of the Manitou Incline Site Development and Management Plan. The following staff members are recognized for their contributions:

City of Colorado Springs
Sarah Bryarly, Incline Project Manager, Interim Manager Design, Development & TOPS
Scott Abbott, Regional Parks Supervisor
Ben Carlson, Intern, Design, Development & TOPS
Aimee Cox, Principal Analyst
Kimberly King, Manager of Administration
Alma Grandpre, Senior Analyst
Kurt Schroeder, Manager of Parks Maintenance, Trails & Open Space

City of Manitou Springs
Dan Folke, Planning Director
Michelle Anthony, City Planner
Matt French, Parking Enforcement Officer
Kari Kilroy, Planning Administrative Assistant
Mike Leslie, Acting City Administrator
Bruno Pothier, Public Services Director
Mary Jo Smith, Police Chief
Brad Walters, Streets Supervisor
The City was also fortunate to have a diverse professional Consultant Team led by Tapis Associates, Inc. We are very pleased with their public engagement efforts, research, professionalism and creativity in developing this plan.

Tapis Associates, Inc. - Priscilla J Marbaker, ASLA
KezziahWatkins - Tweed Kezziah, Susan Watkins
Wilson & Company - Stephen Pouliot, Troy Slocum
GreenPlay - Chris Dropinski
Loris and Associates, Inc. - Scott Belenger
ERO Resources Corporation - Bill Mangle

Finally, we wish to acknowledge all the citizens who committed time and effort to provide input in the public meetings and work sessions. Their feedback was extremely helpful in ensuring that we addressed the needs of the Incline users and surrounding neighborhood. The plan reflects their intentional deliberation and negotiated consensus.

Sincerely;

Sarah Bryarly,  
City of Colorado Springs  

Dan Folke, 
City of Manitou Springs

Incline Project Manager, Interim Manager 
Planning Director
Design, Development & TOPS
Executive Summary

to be written following the Task Force meeting on Jan 6th.
The Manitou Incline ...

It is commonly referred to as "doing" the Incline.

Apollo Ono made it national news when he extolled its training benefits in a *New York Times* interview.

It is "done" - walked up - somewhere between 350,000 and 500,000 times per year. The individuals "doing" these trips are made up of people as diverse as one-time curious tourists to intense athletes who "do" 3-5 repeats in one workout.

All this occurs as unauthorized trespass on public property and private property.

Concerned citizens and community leaders have tried several times over the past 10 years to broker legal access for Incline users. Much was learned from those experiences. These lessons have set this Site Development and Management Plan on a strong foundation.

**Background**

The Manitou Incline is a cable-car route turned trail located at the former site of the Mt. Manitou Scenic Railway in Manitou Springs, Colorado. The trail is a one-mile ascent with an elevation gain of 2,000 feet. The average grade is 41%, reaching 68% at the steepest point. The Incline is most frequently accessed from the Barr Trail trailhead parking lot near the intersection of Hydro Street and Ruxton Avenue.

Despite being substantially privately owned with public access prohibited, the Incline is one of the most popular hikes in the region attracting an estimated minimum 350,000 user trips annually. This popularity continues to grow. Nearly 20 years of unmanaged trespass and use of the Incline have resulted in significant erosion on the mountainside, dangerous trail conditions, traffic congestion and uncontrolled parking. In 2010, the City of Colorado Springs negotiated pursuing legal access to the Incline corridor, and both Colorado Springs and Manitou Springs entered into an Intergovernmental Agreement to plan for formally opening the Incline for public recreation.

The City of Colorado Springs Parks, Recreation and Cultural Services Department hired the Tapis Associates Team to prepare this Site Development and Management Plan for the Manitou Incline. This Plan is intended to guide cooperative efforts to open the Incline to public recreation by making consensus-directed recommendations to mitigate user impacts, assure user safety, protect adjacent natural resources, ease traffic and parking congestion and address landowner concerns.

The plan is funded by a grant from Great Outdoors Colorado with matching funds provided by the Margaret and Al Hill Family Foundation, without any funding from the cities of Colorado Springs or Manitou Springs.
Reason for the Study

The Manitou Incline Site Development and Management Plan addresses two main concerns.

1. The current situation is unsustainable. The existing vehicular and pedestrian infrastructure on Ruxton Avenue is not sufficient to accommodate all current users. Incline use contributes to traffic and parking problems the full length of Ruxton Avenue and into downtown Manitou Springs. In addition, despite being privately owned and posted NO TRESPASSING, an estimated 350,000 - 500,000 trips are made up the Manitou Incline annually. These thousands of people are illegally using the Incline property every day, creating serious safety and liability issues for the three landowners, including the Cog Railway, the US Forest Service, and Colorado Springs Utilities.

2. Nearly 20 years of unmanaged trespass and use have resulted in: significant erosion on the mountain side; dangerous trail conditions; user/neighborhood conflicts; traffic congestion; and uncontrolled parking.

The three landowners and the cities of Colorado Springs and Manitou Springs agreed that something had to be done to mitigate the growing concerns, while capitalizing on considerable benefits of the Incline.
Planning Group - Roles of the Task Force, Staff and Consultant Team

The planning group consisted of a stakeholder Task Force, Colorado Springs and Manitou Springs City Staff, and the Tapis Associates Team as retained consultants. The Manitou Incline Task Force was established to steer this development and management plan. The Task Force was charged with recommending preferred alternatives for site improvements, natural resource management, parking management, recreational uses, maintenance, and marketing at the Incline. The recommendations formed the basis of this plan presented to the Colorado Springs and Manitou Springs City Councils for final adoption. Each subgroup’s specific responsibilities during the planning process are outlined below.

Task Force Members
- Identify issues and stakeholders
- Review scope of services for planning
- Review public input
- Conduct independent research
- Evaluate alternatives
- Recommend preferred alternatives
- Represent, report progress and solicit input from groups

Staff
- Prepare materials
- Hire and manage consultants
- Schedule and facilitate Task Force meetings
- Communicate with elected officials and City advisory boards as required

Consultants
- Complete required studies and analyses
- Design and manage the public process and facilitate the public meetings
- Propose alternatives; recommend preferred alternatives
- Prepare a draft planning document including maps, graphics, supporting documents and data for review by Task Force and appropriate advisory groups
- Prepare a final planning document

Expectations
- Staff will provide Task Force members with meeting materials prior to the meetings
- Task Force members will strive to review meeting materials prior to the meeting and to come to each meeting prepared to discuss issues. The planning process is on a tight timeline, and Task Force members will respect deadlines for independent research and review.
- All voices are equal in this process. Individual Task Force members and the collective group will be fair and respectful of the public, staff, and each other. Members will avoid personal attacks or accusations and talking while others are speaking.
- Task Force members will respect the limitations of their individual and collective authority. The role of the committee is to advise City Councils and staff.
- Each member will participate in the group’s discussions and work assignments, without dominating the discussion or activity of the Task Force.
- Staff will ensure that all members have a fair, balanced, and respectful opportunity to share their knowledge and perspectives.
- The Task Force will attempt to reach consensus on issues. If consensus is not possible, strong differing opinions will be recorded and acknowledged in the final report to the City Councils.
Criteria for Success

At its first meeting, in February 2010, the Task Force established characteristics of a successful Incline planning process. These Criteria of Success guided the content focus and decision-making throughout the planning process.

Manitou Incline Planning

Criteria For Success

Incline open to the public

Planning Process
- Planning Team works cohesively with the landowners, residents, downtown business and Incline users
- Plan is based on extensive public outreach
- Property owners support the community-based Plan
- Plan preserves and enhances the “Incline Experience”
- Plan includes gains for each stakeholder

Management
- Managed by single entity
- Builds prestige for the community
- Draws local visitor and tourist revenue

Parking & Traffic
- Coordinates with city-wide planning and operations
- Solutions improve Parking & Traffic Circulation, particularly on Ruxton Avenue and Hydro Street

Trail and Trailheads
- Legal
- Safe
- Sustainable
- Ecologically sound
- Enjoyable
- Managed impact on Barr Trail and trail users
Background

Process goals

The planning process design for the Manitou Incline was based on the principle that the best plan would result from integrating technical solutions with the lived experience of those using and living near the Incline itself. With that principle in mind, five goals for the planning process were established:

1. To include everyone interested in having a say about the future of the Incline;
2. To conduct a process that would be open, transparent, inviting, and comfortable for all;
3. To surface and resolve issues and conflict;
4. To go beyond soliciting public opinion; to aim instead for the development of public judgment through information and deliberation so that process results would be responsive, responsible, and politically supportable; and
5. To strengthen collaboration and sense of shared purpose so that sustained commitment to the project would result.

The Site Development and Management Plan planning process began with the broad definition of issues and ultimately narrowed to a recommended Plan for addressing those issues. The strength of this Plan comes from the successful balancing of technical issues, landowner requirements, stakeholder interests, and public/user preferences. When combined, they create a realistic roadmap to legitimate and near-and long-term use of the Incline.

Process design

The decision process steps alternated between:

- public, external activities intended to gather the values, beliefs, and judgments of those who care about Incline solutions, and
- the technical analysis and application used by the Task Force and consultant/staff team.

The process steps are sequential, with each public step informing the following internal step, and each internal analytical step used as the basis for public judgment in the next public, external response. This integrated approach to process design ensures that, in so far as possible, solutions considered are aligned with the values expressed, are feasible, responsible, and supportable.

Roles

A Task Force was appointed to guide and oversee the process and to work with the staff/consultant team to clarify direction when there was no clear consensus. Comprised of 15 individuals representing the Incline’s landowners, user constituency groups, and representatives of the Manitou community and its neighborhoods, the Task Force began its work by defining the roles and expected responsibilities to be accomplished by the project staff, consultants, and the Task Force itself. In general, the members of the Task Force were charged with process oversight, communication with their constituencies, and evaluation of information both before and following public process steps.
The staff and consultant team were responsible for specific preparation for and follow-up after each process step, including the acquisition and analysis of all technical data. The summary of defining roles can be found in Section I. Introduction and Criteria for Success of this report.

Process Flexibility

The original process outline called for the development of alternative plan concepts prior to refinement into a recommended plan. This traditional process approach is customarily used to eliminate broad concepts found to be unacceptable either technically or by project constituencies. In this Incline planning process, however, the consistency of response from both the Task Force and from participants in public work sessions led the consultant team to propose, and the Task Force to endorse, a single preferred plan concept that outlined the Stages for Implementation leading to the opening of the Incline as a public amenity and to its eventual restoration. The overall direction indicated by responses throughout the process was clear enough to eliminate the need for alternative concept plans.
Description of Process Steps

Task Force Formation

The Task Force began its work in January 2010 with confirmation of its role in the planning process and the identification of Criteria for Success for the Plan that would ultimately be developed through the process. The full list of criteria can be found in Section I. Introduction and Criteria for Success of this report. Task Force members met monthly throughout the process to oversee the work of the staff/consultant team and to review and approve key Plan elements. Almost all members participated in multiple public meetings as well so that they could hear public comments, concerns, and ideas first-hand.

Identification of Key Issues

The planning process was initiated with the identification of key issues related to the Incline which should be considered and addressed as the Incline Plan was developed. Task Force members led off that effort with an Incline site visit to identify issues. The consultant team also conducted 15 one-on-one interviews with key stakeholders to learn about their perspectives on the Incline and its use. The issues identified through the site visit and the stakeholder interviews were compiled and organized into categories and shared with approximately 100 participants in a public workshop on June 24.

At this workshop, participants were presented information about problems at the Incline, the parameters for the planning process and details about steps in the process and what the process was intended to accomplish. Participants were also provided a detailed listing of all of the issues collected to-date. Much of the workshop was spent with participants identifying issues related to the Incline they believed to be missing from the initial list. Participants were also asked to state what they wanted to see the Incline Plan accomplish. Because the results from the Task Force site visit and stakeholder interviews had clearly identified parking and traffic, trails and trailheads, and operations and management as key issues critical to the success of the Plan, workshop participants were additionally asked to specifically address what they would most like to see related to those three areas.
The staff/consultant team were also key contributors to the issues identification process because of their technical expertise and experience. (A complete listing of issues identified may be found in Appendix A.)

**Exploration of Possibilities**

The next step in the process was designed to generate “what ifs” so that the generation of possible solutions could begin. Based on the results of the Task Force issue identification and site visit, the stakeholder interviews and the first public workshop, the staff/consultant team decided to focus on three key issues areas that would be analyzed separately and ultimately integrated to drive the Plan development: 1) traffic and parking; 2) trails and trailheads; and 3) management and operations.

In order to explore each of these areas fully, three public focus area sessions were held on three consecutive evenings in mid-July 2010: the session on July 13 dealt with traffic and parking; July 14’s session focused on trails and trailheads; and operations and management topics ended the series on July 15. At each session, the consultant team presented an overview of critical issues (See Appendix B) related to the focus area topic as well as possible approaches to addressing the issues and the implications of those approaches. Working in small groups, participants were asked to assess the possible approaches according to those they liked best, those they liked least, and to suggest additional approaches.

At the traffic and parking session, participants were asked to consider traffic and parking approaches contained in separate zones located along Ruxton Avenue. At the trails and trailheads session they were also asked to respond to multiple approaches and to designate on maps how the trailhead system, the Incline corridor system, the options down/trail connectivity system and the signage system could best work together. At the operations and management session possible approaches reviewed by participants were organized into the following areas: funding, rules of use, marketing, maintenance and management.

**Landowner Meetings**

Before the staff/consultant team developed draft recommendations for the Site Development and Management Plan, it was important to meet individually with the three landowners—the U.S. Forest Service, the Cog Railway, and Colorado Springs Utilities—to provide an update on the planning process to-date and to review and confirm landowner needs and non-negotiables related to potential public use of their properties.

In addition, meetings were held with staff of the City of Colorado Springs and the City of Manitou Springs as proposed co-operators of the Incline to discuss operational parameters, staffing needs and legal issues related to liability and governmental immunity.

Finally, in response to public mention of the possible use of property in the vicinity of the Incline owned by David Jenkins, the staff/consultant team met with Mr. Jenkins to determine if he was open to future consideration of the purchase of his property.
Manitou Incline History

Completed in 1907, the Manitou Incline was a 1-mile cable tram built to support the construction of a hydroelectric plant and its waterline. After performing this service the railway was then purchased by Dr. Brumbach and turned into a tourist attraction. The Incline boasted a 16-minute ride to "scenic splendors", 10 miles of hiking trails in Mount Manitou Park, and claimed to be the "longest and highest incline on the globe."
This photo shows the original summit house. The simple structure was leftover from the original pipeline construction.

The original station at the top of the Incline burned down in 1914 but was quickly rebuilt.
One of the original cars. (left)
The original cars that carried the passengers to the summit were little more than the original box cars used for hauling construction materials, but with wooden benches added.

As seen in this postcard (below) the 1914 replacement summit house was much more elaborate. This building was able to accommodate a store and also provide a more protected building in which riders could seek shelter in the event of a storm. Spencer Penrose bought the Incline in 1923 and made it part of his tourist attraction empire, which is now owned by the Oklahoma Publishing Co. During this time the cars were upgraded to allow for a retractable roof and more safety. The summit station was again rebuilt in 1958 and lasted until it was dismantled upon closure of the Incline in 1990.
1948 Summit photo (normally taken with the camera rotated to over emphasize the slope of the Incline).

A postcard of the lower station of the Incline.

The Manitou Incline became a prominent feature above Manitou Springs. It was a popular tourist attraction and remained busy for many years. However it was plagued with rockslides that made the maintenance costs very high.
At the base of the Incline several businesses flourished in their day. Joseph Hiestand owned a curio store named the Ute Iron Springs. The Manitou Casino was at the base for several years. There also was a Manitou Electric Railway known as the Dinky Trolley that ran from the Stratton Loop Station on Manitou Avenue up to the Casino and Cog Station over what is now the Intemann Trail.
Site Observations

Site Analysis - Environmental Resources

Environmental Setting

The Manitou Incline study area is located on the lower, east facing slope of Pikes Peak. Soils are dominated by decomposed Pikes Peak granite, which has rapid runoff and high erodibility. Vegetation in the study area is typical of the Pikes Peak region: mountain shrubland at lower elevations transitioning into coniferous forest in the upper reaches of the Incline and on north-facing slopes. Mountain shrubland communities are characterized by dense stands of gambel oak interspersed with ponderosa pine, and an understory of yucca and both native and introduced grasses. Coniferous forest communities are dominated by ponderosa pine interspersed with gambel oak, mountain mahogany, smaller shrubs, and native and introduced grasses.

The study area provides habitat for a variety of wildlife that is typical of the region. Common mammals include golden-mantled ground squirrel, mountain cottontail, mule deer, black bear, and mountain lion. Common birds include western scrub jay, mountain chickadee, Steller’s jay, magpie, and turkey vulture. The upper-elevation forests of the area may contain habitat for the Mexican spotted owl, which is listed as Threatened under the Endangered Species Act.

Environmental Issues Analysis

The existing Incline corridor and base area have been highly disturbed by past infrastructure development, and continue to be heavily used by recreationists. This has resulted in a variety of habitat and environmental impacts within the corridor. The key environmental issues are summarized as follows:

- Erosion - The greatest issue has historically been, and continues to be, erosion and sedimentation. Despite ongoing efforts to stabilize the drainageways and sideslopes within the Incline corridor, the combination of steep slopes, a vertical disturbance corridor, and highly erodible soils has resulted in years of significant erosion and sedimentation in the drainages below the Incline.

- Restoration and revegetation – Successful restoration and revegetation of disturbed areas is notoriously difficult in this area due to the dominance of gravely, erodible soils and steep slopes. Any disturbed areas may provide a foothold for noxious weeds, which underscores the importance of minimizing new soil disturbances and planning for revegetation.

- Social trails – Social trails are unplanned, user-created routes that often result in the loss or trampling of vegetation, erosion, and habitat fragmentation. The existing web of social trails between the Barr Trailhead, Cog parking lot, and the Incline corridor has resulted in extensive, localized impacts. While the newly-defined access trail helps mitigate those impacts, the impacts of the social trails persist. Along the central portions of the Incline, numerous social trails split off of the Incline corridor. These short routes, apparently made by users seeking shade or rest stops, restroom locations, an ad hoc switchback, or routes away from the Incline, have less of an impact. At the top of the Incline, several social trails extend in multiple directions toward rest areas, view points, and connecting trails. As this area was historically disturbed, these social trails are less of a habitat issue, but do impair the recovery of some areas.
• Overall habitat fragmentation – Fragmentation of wildlife habitat occurs as human disturbances dissect blocks of wildlife habitat into smaller pieces, diminishing its value to many wildlife species. While the lower portions of the Incline corridor are highly fragmented by social trails and other disturbances, most of the fragmentation is limited to the immediate Incline corridor. From a greater, landscape-scale perspective, most of the impacts have already occurred (defined by the Incline, Barr Trail, and Cog Railroad corridors) and are typical for an urban interface area that experiences heavy recreational use.

• Permitting issues - As discussed previously, most of the study area has been mapped as Critical Habitat for the Mexican spotted owl by the U.S. Fish and Wildlife Service (USFWS). The owl is federally listed as Threatened, and any adverse impacts to the species or its habitat may require consultation with the USFWS. Any new disturbances or activities on Forest Service land may require surveys and an extensive approval process.
Site Analysis - Incline Tie Inventory

In order to coordinate all the analysis, inventory and recommendation information, the existing Incline ties were counted and numbered with engraved nickel-plated fender washers nailed to ends when possible and the top when necessary. Every 25th tie was marked starting with 1 at the bottom, and 2,741 at the top; the Barr Trail cutoff is located at tie 1,800. Following the tie numbering, a Rocky Mountain Field Institute GPS class inventoried and recorded data at every marked tie. The following information and photographs were recorded via GPS on June 18, 2010 and delivered to Colorado Springs Parks, Recreation and Cultural Services staff.

1. **Every 25th Tie** (include broken or decayed ties, but not missing ties, GPS center of tie, label with Sharpie on right top and front of tie)
   - A. Shoulder condition
     - i. North side
       a. Flat
       b. Up slope
       c. Down slope
       d. Eroded Gully
         • Width
         • Depth
       e. Distance to Edge of stabilizing vegetation
     - ii. South side
       a. Flat
       b. Up slope
       c. Down slope
       d. Eroded Gully
         • Width
         • Depth
       e. Distance to Edge of stabilizing vegetation
   - B. Photo of Shoulder
     (include person for scale)
     - i. North
     - ii. South
   - C. Condition of Tie
     - i. In comment note if stable, broken, decayed, half tie, stacked, etc.

2. **Retaining Walls**
   - A. GPS point (center)
   - B. Length (tape measure)
   - C. Material
     i. Tie
     ii. Timber
     iii. Chain link
     iv. Boards
   - D. Height (in decimal feet)
   - E. Condition
     i. Vertical
     ii. Bowed
     iii. Failing
   - F. Comments

3. **Culverts**
   - A. GPS Point (center)
   - B. Length (tape measure)
   - C. Direction of Outfall
     i. North
     ii. South
   - D. Material
     i. Old Iron
     ii. Corrugated metal
     iii. Plastic
   - E. Condition
     i. Clogged
     ii. Open
   - F. Cut outs on top
   - G. Photo
     i. North
     ii. South
   - H. Comments

4. **Water Pipe**
   - A. GPS downhill exposure
   - B. Length (tape measure)
   - C. Level of exposure
     i. Top
     ii. Half of pipe exposed
     iii. Nearly all of pipe exposed

5. **Double Width Ties**
   - A. GPS First
   - B. GPS Last

6. **Incline Artifacts**
   - A. Unusual Hardware
     (not spikes or rebar)
   - B. Cable holders
     (wooden V's)
   - C. Signs
   - D. Foundations
   - E. Others
Site Analysis - Structural Analysis

The overall condition of the Incline tread falls short of typical standards and expectations regarding safety for a developed backcountry trail open to the public. Numerous hazards exist and include:

- Loose and unstable ties;
- Loose and unstable rocks and decomposed granite adjacent to the ties;
- Metal pins, posts, and stakes used haphazardly to stabilize the Incline and prevent erosion; and
- Open jagged holes in tops of steel culverts located within the tread width.

Although the severity of these hazards is significant, these hazards are primarily concentrated in limited sections of the Incline. Much of the total length of the Incline is in reasonable shape. The deterioration of the tread condition is caused by erosion of the base material that supports the ties. A direct relationship between the tread condition and the prevailing grade of the Incline was observed. The steepest sections of the Incline are in the worst condition and the flatter sections are in generally good condition.

Tie Condition Rating

Seven (7) condition categories have been established to quantify the overall condition of the Incline and formulate recommendations for improvements. These categories are described below. The overall percentage of the Incline which falls into each category is also provided. These percentages are based upon visual observations made during site visits in August of 2010. Locations were recorded based upon tie number, starting at #1 at the bottom of the Incline and ending at #2741 at the top of the Incline. (A discussion of possible maintenance and reconstruction activities are included in Appendix F.)

Condition 1 – No Problems: 17%

Ties are firm and stable. Tops of ties are parallel to grade. Less than half of the tie depth is exposed. No safety hazards exist. No repairs or maintenance are required.

Example of Condition 1
Condition 2 – Edge Erosion: 29%

Ties are firm and stable. Tops of ties are parallel to grade. Center of ties may be more than half exposed. Edges of ties may be completely undermined. No significant safety hazards exist. No immediate modifications are required. Maintenance and erosion prevention would be prudent.

Example of Condition 2

Condition 3 – Some Pinned: 25%

Ties are mostly firm and stable with up to a quarter of the ties in these sections either missing or stabilized with external pins (rebar or T bar stake on downhill side of tie as shown in photo of Condition 4 below). Tops of ties are parallel to grade. Center of ties may be more than half exposed. Edges of ties may be completely undermined. The external pins provide hazards. Improved stabilization and erosion protection would be prudent.

Example of Condition 3

Condition 4 – Many Pinned: 8%

Some of the ties are firm and stable but more than a quarter of the ties in these sections are either missing or stabilized with external pins. Tops of some ties are no longer parallel to grade. Center of ties may be more than half exposed. Edges of ties may be completely undermined. The external pins provide hazards. Improved stabilization and erosion protection would be prudent.

Example of Condition 4
Condition 5 – Fully Undermined: 3%

Most or all of the ties are stabilized with external pins. Tops of some ties are no longer parallel to grade. Entire ties are completely undermined. The external pins provide hazards. Stabilization will require significant modifications including rebuilding of the base material or an independent structure. Improved stabilization and erosion protection should be high priority.

Example of Condition 5

Condition 6 – Major Problems: 8%

All of the ties are stabilized with external pins and are no longer parallel to grade. Entire ties are completely undermined. The external pins provide significant hazards. Stabilization will require significant modifications including rebuilding of the base material or an independent structure. Improved stabilization and erosion protection should be high priority.

Example of Condition 6

Condition 7 – Complete Failure: 11%

The base material has completely eroded and the Incline tread has been rebuilt to a narrower width. Stabilization will require significant modifications including rebuilding of the base material or an independent structure. Improved stabilization and erosion protection should be high priority.

Example of Condition 7
To simplify consideration of the Incline, the following generations are made:

Conditions 1 and 2 (46%) are in generally good shape with few if any hazards. Improvements and preventative maintenance could be performed. These activities could be performed by volunteers and should not involve significant capital investments.

Conditions 3 and 4 (32%) require some modification to improve safety and long-term sustainability of the Incline. These activities would likely include improvements to the stability of the tread to reduce hazards and minor drainage/erosion protection improvements. These activities could also be performed by volunteers and would involve minor capital investment.

Conditions 5 through 7 (22%) require significant modifications to improve safety and long-term stability. This would require complete reconstruction of the tread, either by rebuilding the base and resetting the ties, or building a new independent structure. Major drainage and/or erosion protection improvements would be required to assure long-term sustainability of the tread. These activities could not be performed by volunteers and would require a general contractor and a significant capital investment.

REFER TO TEXT AND DIAGRAMS FOR CONDITION RATING SYSTEM AND MAPPED LOCATIONS ON PAGES IV-27 THRU 28
Parking and Traffic

The Manitou Incline team conducted a parking and traffic survey for the current Barr Trail parking lot and the Ruxton corridor from Hydro Street to Manitou Avenue. In addition, the team met with several user groups and neighborhood groups within the corridor. These meetings were designed to gather input on issues faced by the participants regarding the Incline and potential management of the parking and traffic.

Traffic and Parking Existing Conditions

The traffic survey consisted of a traffic count on Hydro Street between Ruxton and the Barr Trail parking lot. The traffic count started on Friday evening, May 21, 2010 and continued throughout the weekend ending on Monday morning the May 24, 2010. The traffic counter distinguished between inbound and outbound traffic. The traffic counts indicate 516 and 570 vehicles per day entered AND then exited the parking lot on Saturday and Sunday, respectively. The traffic count on Saturday was interrupted by an emergency call at the trailhead and reduced the traffic count during a three-hour period from 10:30 a.m. to 1:30 p.m. when operations returned to normal.

The graph below in Figure 1 illustrates the traffic count data for the two-day count period.

Figure 1. Daily Traffic Counts for the Barr Trail Parking Lot
The parking survey was conducted on Saturday, May 22, 2010 from 6:00 am to 6:00 pm to coincide with peak day of the week and the peak usage of the day. The date was chosen as a result of scheduling constraints for the project. Although the date of the survey falls just before the peak season between Memorial Day and Labor Day, it was considered to be a fairly representative sample for the summer period because of the clear and hot weather forecast for the day.

The corridor was divided into 8 separate zones to identify parking turnover. The eight zones are shown in Ruston Corridor Parking Zones (page IV-26). The parking survey identified a total of 211 spaces available in the corridor including the Barr Trail parking lot. The breakdown of where the spaces are located is described below.

A. Barr Trail Parking Lot ........................................................................................................34 spaces
B. Cog Railway Parking Areas................................................................................................56 spaces
C. Iron Springs Chateau........................................................................................................46 spaces
D. Public Spaces between Cog entrance and the south end of Winter Street ..................25 spaces
E. Public Spaces between Fairview Avenue and Spring Street ..................................17 spaces
F. Public Spaces between Spring Street and Church Street ...........................................47 spaces
G. Public Spaces between Church Street and Osage Avenue .......................................33 spaces
H. Public Spaces between Osage Avenue and Manitou Avenue ................................9 spaces
The purpose of the survey was to record the location and duration of parked vehicles in the study corridor. The survey was conducted every 30 minutes throughout the corridor to identify empty spaces, new parked vehicles, and parked vehicles that had not moved. Using the data collected, the study team was able to determine where and how long vehicles were parked. The results of the survey are shown below in Table 1. Column 2 shows the total number of spaces in each zone and Column 3 shows the total number of parked cars in that zone during the course of the day. Column 4 is the average turnover rate and is equal to the total number of parked cars divided by the number of spaces. The average dwell time in Column 5 is the average amount of time a car remained parked before leaving the space. It is calculated based on the 12-hour study period divided by the average turnover rate. The average occupancy in Column 6 is the average percentage of spaces in the zone with parked cars during the course of the study period.

Table 1. Parking Survey Results

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>Number of Spaces</th>
<th>Total Number of Parked Cars</th>
<th>Average Turnover Rate</th>
<th>Average Dwell Time</th>
<th>Average Occupancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Barr Trail Parking Lot</td>
<td>34</td>
<td>142</td>
<td>4.2</td>
<td>2:50</td>
<td>93%</td>
</tr>
<tr>
<td>2. Cog Train Employee Parking Areas</td>
<td>56 * Not Counted</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Iron Springs Chateau</td>
<td>46</td>
<td>157</td>
<td>3.4</td>
<td>3:30</td>
<td>72%</td>
</tr>
<tr>
<td>4. Public Spaces between Cog entrance and the south end of Winter Street</td>
<td>24</td>
<td>98</td>
<td>4.7</td>
<td>2:30</td>
<td>92%</td>
</tr>
<tr>
<td>5. Public Spaces between Fairview Avenue and Spring Street</td>
<td>17</td>
<td>71</td>
<td>4.2</td>
<td>2:50</td>
<td>82%</td>
</tr>
<tr>
<td>6. Public Spaces between Spring Street and Church Street</td>
<td>47</td>
<td>166</td>
<td>3.5</td>
<td>3:20</td>
<td>87%</td>
</tr>
<tr>
<td>7. Public Spaces between Church Street and Osage Avenue</td>
<td>33</td>
<td>123</td>
<td>3.7</td>
<td>3:10</td>
<td>88%</td>
</tr>
<tr>
<td>8. Public Spaces between Osage Avenue and Manitou Avenue</td>
<td>9</td>
<td>54</td>
<td>6.0</td>
<td>2:00</td>
<td>90%</td>
</tr>
<tr>
<td>ENTIRE CORRIDOR</td>
<td>211</td>
<td>811</td>
<td>3.9</td>
<td>3:00</td>
<td>85%</td>
</tr>
</tbody>
</table>


From the traffic count data above, it is noted that the number of cars that actually parked at the Barr Trail Parking lot (142) is much less than the number of vehicles that entered the lot (516) looking for a parking space. This means that 374 vehicles did not find a parking space upon entering the lot and subsequently exited the lot to look elsewhere. This circulation of traffic through the lot accounts for approximately 72% of the traffic on Hydro Street.
Figure 2 shows the fluctuation of parked vehicles throughout the course of the study period. The graph shows how the zones closest to the Incline trailhead are essentially parked full by 6:00 a.m. when the parking study began. The traffic data in Figure 2 suggests that the parking activity begins as early as 5:00 a.m. The activity in the corridor near the trailhead begins to decline around 3:00 p.m. as air temperatures peaked (85 degrees) during the hottest part of the study period. The parking activity at the Iron Springs spaces did not pick up until 8:00 a.m. These spaces were available starting at 7:00 a.m. for $5/day. The timing of the activity at Iron Springs also coincides with the eventual lack of other parking in the corridor – specifically as the spaces farthest from the corridor between Church Street and Osage Avenue were taken up.

Figure 2. Number of Parked Vehicles by Zone During the Study Period

Parking and Traffic Meetings
The project team facilitated a number of meetings with project stakeholders to identify issues related to the parking and traffic in the area. These meetings included:

- Upper Ruxton residents
- Lower Ruxton residents including the Our Lady of Perpetual Help Catholic Church
- The Manitou Incline Task Force
- COG Railway Director and parking staff
- Manitou Springs parking consultant
- Manitou Springs Public Works staff
- Manitou Parking Board representatives
The meetings yielded several key issues for consideration in the development of the parking and traffic management plan for the project. A summary of some of the key issues are discussed below.

1. The peak season for the Incline is Memorial Day to Labor Day. The peak days at the trailhead include Memorial Day, July 4th, and Labor Day weekends. However, the peaks are not necessarily big seasonal fluctuations, but generally busier May through September and from Thursday through Sunday. The peak use days are more weather-related.

2. The Cog lot is managed with on-site personnel to provide parking for Cog patrons only. The parking personnel stop each vehicle entering the lot to direct them to parking – trail users are turned away and sent to the Barr Trail Lot. Despite best efforts to eliminate “space poaching” for the Cog lot, the Cog routinely find that trail users will access the Cog lot through the exit (out of sight from the Cog personnel) and park illegally.

3. Winter Street has a substantial no-parking zone because of pavement width constraints, but is routinely parked illegally and requires daily enforcement. The illegal parking has in the past proved to be very problematic for tour buses and school buses trying to make their way to the Cog lot. Illegally parked cars will not block Winters Street for typical vehicles, but the width of the buses makes it impossible to pass.

4. The Cog operates an employee shuttle from the Manitou Springs High School lot during its peak season from June 15 to August 15. The Cog lease allows up to 65 spaces to be parked at the high school. In the off-season for the Cog there are available spaces that could be used by the trailhead users.

5. During the peak season, the Barr Trail Lot is constantly “stalked” for parking spaces. Drivers will drive the lot unable to find a space, exit and return to try again.

6. The Manitou Springs Police Department does not provide police officers to enforce parking regulations, but provides one year-round full-time parking enforcer, with another seasonal full-time enforcer added from May to September. In addition, the Police Department will add one or two part-time enforcers during the peak season. All parking enforcement is under the supervision of the Police Department. The fine for a fire hydrant violation (yellow zone) is $55 and the fine for a fire lane violation (red zone) is $150.

7. Some of the traffic congestion on Ruxton is the result of the Cog train departure and arrival schedule. The resulting pulse of traffic to and from the Cog parking lot can create congestion on Ruxton for up to 30 minutes prior to departures and after arrivals up to 8 times a day. Residents of the Ruxton corridor sometimes plan their day around the train schedule.

8. Pedestrian movements along Ruxton are generally unmanaged. The majority of the corridor consists of sidewalks on both sides of the roadway, but the sidewalks are typically undersized for the pedestrian volume. There are no sidewalks or dedicated pedestrian spaces west of Pilot Knob Avenue. Pedestrians will generally walk in the road with little regard for passing vehicles. Pedestrian movement across Ruxton between the parking lot and the train station is managed by the Cog to minimize conflicts.

9. Emergency access to the Barr Trail parking lot is problematic and exacerbated by the parking violations at the trailhead. There are signed no parking zones and parallel parking only restrictions in the parking lot. Parkers will routinely ignore the no-parking zones and park head-in at parallel parking-only zones.

10. Ruxton used to have angle parking on both sides on the upper end, but having the drivers park correctly was an ongoing problem – drivers would not pull far enough forward and would partially block the travelled way. Manitou implemented the “park inside of the line” with little success and went to parallel parking instead.
11. The military often uses the Incline unofficially for training exercises. Commanders from the military won’t allow official, marked vehicles to be used for the unofficial training activities – but personnel often use private vehicles to get to the trailhead. During these exercises, the parking lot can be overwhelmed quickly leading to an increase in illegal parking.

12. Iron Springs charges $5/day for 46 spaces. There is a perception that the spaces do not fill up and that the rate may be too much (subsequent parking study proved otherwise for the peak season). Because the Iron Springs is the only pay-for-parking area in the corridor, there will need to be a comprehensive plan for Ruxton and the trailhead regarding parking fees.

13. There may be some concern about paid parking on Ruxton. The majority of the parking is in a residential area, although all of it is open to the public for parking. There are no reserved residential spaces. There is, however, a need to give residents due consideration for parking on Ruxton that may include dedicated spaces or parking meters with residential permitting tags. Parking management will need to consider the residents and keep them from being shut out of parking during peak congestion periods.

14. Parking congestion is not a big issue on the side streets such as Spring and Pilot Knob. Driver’s perception of these streets may be that they are too narrow, or that there is no parking available, or drivers just don’t know where the streets lead. People prefer to stay on the main street.

15. The trail users require varied parking situations – Barr Camp users need a long-term parking facility (multiple days) versus Barr Trail day hikers (4-6 hours) versus Incline users (1-3 hours).

16. The church regularly needs around 35-50 spaces for parishioners on Sunday morning. Services for the church begin at 10:15a.m. and attendees typically struggle to find parking. Space considerations are also a problem during the peak season for special events such as weddings, funerals and festival days. The lack of parking is especially hard on the elderly and physically-challenged individuals.

**Manitou Springs Parking Management Study**

The project team reviewed the *Parking Management Study & Strategic Plan* prepared by Carl Walker Inc., a traffic/parking consultant retained by the City of Manitou Springs. The report focuses on parking program organization, on-street parking management, surface lot management, residential overflow, parking enforcement practices, and parking system planning in the City of Manitou Springs. These initiatives would optimize parking spaces, plan for future parking needs, and create a sustainable parking infrastructure. The study incorporated interviewing people affected by the parking, a parking survey, and utilized Carl Walker’s exclusive “20 Characteristics of Best-in-Class Parking Systems”.

The Manitou Incline Site Development and Management Plan does not conflict with the Carl Walker, Inc study. The two plans reflect similar conclusions and direction in how to proceed in addressing the parking situation in Manitou Springs. These two plans could be implemented at the same time and may have some overlap in their implementation with respect to the surface lots within the city.
Incline User Counts

The number of people using the Incline has been an imprecise estimate. The trip counts collected represent a small window that cannot be statistically extrapolated throughout the year. Accurate counts differentiating time of year, trips and numbers of users will require interviews and observers as well as trail counters. Although this study could not include interview-supported counts throughout the seasons, one period was recorded with a trail trip counter located at the "No Trespassing" sign.

How the counts were obtained

• Colorado Department of Transportation (CDOT) provided, installed and extracted the information from the counter.
• The counter records trips – not number of Incline users.
• Counter was recording from Friday September 10, 2010 at 9:00 a.m. thru Monday September 27, 2010 at 9:00 a.m. — so the data spans three full weekends and two sets of weekdays.
• Because it records visually, the counter distinguishes direction, so we can see number of trips up and number of trips down.
• The counter divides the data in 15-minute increments.

What the data DOESN'T tell us

For these two weeks in September 2010...

• There is not enough data to mathematically translate number of trips in two weeks in September to number of unique users.
• Data does not empirically inform the anecdotal information. Examples: people do multiple trips; tourist and first-time users have been observed getting to the 'No Trespassing' sign, taking a picture and turning around; and many of the public meeting attendees indicated they do the Incline once per week.
• Data is not conclusive on the lowest trip day.
• The number of dogs counted is not known.

What the data tells us

For these two weeks in September 2010...

• The highest number of trips occurred on Friday, Saturday and Sunday 10 a.m.-12 p.m. the next concentration of trips occurred from 1-2 p.m.
• Saturday and Sunday experienced the highest number of trips overall.
• The lowest trip days have the highest percentage of down trips at 30-40%
• The Incline user estimates projected based on the 12-hour Parking Inventory in May 2010 align with this trip count data.
• The data also validates the assessment that not all Incline users park in the Ruxton corridor.

How the counts will be utilized

• Care must be taken in making reasonable assumptions – this means distinguishing between the limitations of this two-week data and the opportunities the data provides.
• The data provides baseline counts and some protocol parameters for future counts, i.e. counter location, benefits of interview/use patterns data in conjunction with numerical data.
• Since the data does not show a consistent pattern of peak morning use between 6-7 a.m., further counts and use information is needed to determine if the higher conflicts with residents during this time period correlate to peak residential trips or some other condition.
• Daily peak use is around 11:00 a.m. with the other, only a bit lower, peak at 7-8 a.m. With the assumption that the second and third weeks in September are average (higher in summer and lower in deep winter) the data suggests 351,000-530,400 trips per year.
• The number of Incline users is estimated in order to estimate revenue potential and costs. Based on sampling, a conservative number of 250,000 trips per year was used. The estimate of users was further divided into categories of heavy, average and light users. The Task Force discussed and concurred with these assumptions.

Trip Counts by DAY
The graph below illustrates the total number of trips each day in blue, trips up in orange and trips down in fuchsia. The data clearly illustrates that many users are finding an alternate route down from the top, presumably Barr Trail. Weekend days are boxed in green.
Trip Counts by HOUR
The graph below illustrates the total number of trips each hour in purple, trips up in orange and trips down in fuchsia. The data is arranged so that Friday counts align vertically on the left and are repeated again on the right. Weekend days are boxed in green. The highest peak hours in these two weeks in September are indicated by the orange numbers.

Recommendations for Future Accurate Counts
Accurate counts differentiating trips and numbers of users will require interviews and observers as well as trail counters. Interviews could also provide valuable information to target economic development opportunities. *(A sample survey can be found in Appendix D.)*

Every five years the US Forest Service places counters and records trips on Barr Trail; coordinating these counts could lead to use pattern insights and alternative trail access evaluation.
Landowners' and Cities' Requirements

Before the staff/consultant team developed draft recommendations for the Site Development and Management Plan, meetings were held with the three landowners—the U.S. Forest Service, the Cog Railway, and Colorado Springs Utilities—to provide an update on the planning process to-date and to review and confirm landowner needs/non-negotiables related to potential public use of their properties. Meeting were also held with the staff of the City of Manitou Springs and the City of Colorado Springs as proposed co-operators of the Incline to discuss operational parameters, staffing needs and legal issues related to liability and governmental immunity. Below is a summary of the key points of discussion.

US Forest Service (USFS)
- Requires a viable, stable applicant for the Special Use Permit to 1) ensure safe activity, 2) protect the resource and 3) USFS named on insurance.
- Requires Operational Plan as part of Special Use Permit application.
- Requires all planning and physical improvements to be bound by the National Environmental Policy Act (NEPA) process.
- Requires detailed engineering and hydrology plans for Incline safety improvements.
- Allows phased implementation of safety improvements.

Manitou and Pike's Peak Railway Company
- Requires protection from liability for public recreational use.
- Requires maintaining current parking agreement for the dirt lot with Colorado Springs Utilities.
- Requires maintaining current parking space count for customers.
- Requires no additional trails on Cog Railway property.
- Open to discuss use of Cog surface lot for paid Incline user parking.
- Open to discuss solutions that do not result in loss of customer parking spaces.

Colorado Springs Utilities (CSU)
- Requires maintenance access to infrastructure including hydroelectric plant, electric substation and high pressure water line.
- Requires that CSU not be viewed as compromising something of value to utility customers.
- Requires agreement with managing entity to allow recreational use of the Incline.
- Requires detailed engineering and point loading calculations on the pipeline for Incline safety improvements.
- Prefers recreational agreement with Colorado Springs Parks, Recreation and Cultural Services.
- Would like to see more coverage over the high pressure water line to provide protection and stability.

City of Colorado Springs
- Requires no expenditure of General Funds.
- Requires an Intergovernmental Agreement (IGA) with City of Manitou Springs.

City of Manitou Springs
- Requires no expenditure of General Funds.
- Requires IGA with City of Colorado Springs.

In order to implement legal recreational access to the Incline, agreements must be in place with each of the landowners and between the two cities. During the planning process, some issues to be addressed in the agreements have surfaced; a list of issues, not intended to be all-inclusive, can be found in Appendix E. The recommended timing and responsibility for these agreements is outlined in Section IV. Stages Implementation.
Initially, the complex issues surrounding the Incline were considered individually with informative and analytical precision. The three Public Focus Area Sessions (Traffic and Parking, Trails and Trailheads, and Operations and Management) in July 2010 and the landowner meetings in August 2010 were very informative, attendees were focused and committed and all provided very clear direction. The staged implementation strategy integrates all the pieces; weaving them together so that each supports and works with the other. A good example is the Incline trailhead location. Based on technical, environmental and public input there is great support for the Incline Trailhead being at the base of the Incline. In order for this location to work, parking controls and parking redistribution at Barr Trailhead and upper Ruxton, negotiations with the private landowner, as well as pedestrian safety considerations along Ruxton Avenue must all be compatible with the Trailhead location and are integral to supporting the Trailhead location at the base of the Incline.

The integrated implementation strategy described in the following pages is organized in three Stages. The Stages build upon each other and continue to suggest options for consideration as time, experience with the legally open Incline, and experience with user behaviors change the impacts and influences of the Incline. It is a flexible document structured to provide guidance for a dynamic facility.

- Stage A is limited to the management requirements for legally opening the Incline and critical structural improvements.
- Stage B builds upon Stage A and includes additional features and safety/environmental improvements as well as several operational options for consideration.
- Stage C builds upon Stage B in the same manner.

The ‘Stages’ approach that follows corresponds closely with minimizing costs to legally open the Incline. Graphics and illustrations that inform all the Stages are attached at the back of this section.

Cost estimates and timeline estimates are found in the following section of this report. Currently there are no City of Colorado Springs, City of Manitou Springs, or private capital or operating funds allocated for the Incline.

**STAGE A**

**STAGE A.1 ESTABLISH A SINGLE ENTITY TO ASSUME MANAGEMENT RESPONSIBILITY**

**WHAT:** Establish a single entity to take on management responsibility.

**WHY:** Multiple ownership provides for confusing and disjointed accountability. A single entity is necessary for a viable submittal for the Special Use Permit required by the US Forest Service for use of the Forest Service property. A single responsible entity will be very helpful in applying for funding. Only the Cities of Colorado Springs and Manitou Springs have expressed interest in a partnership of this nature based on their capabilities. No other management options have surfaced at this time. Management of Colorado Springs Utilities (CSU) infrastructure poses challenges for non-governmental management options.
HOW: Create an Intergovernmental Agreement (IGA) between the Cities of Colorado Springs and Manitou Springs establishing the City of Colorado Springs as the responsible entity in partnership with the City of Manitou Springs.

Colorado Springs: Lead responsibility in partnership with Manitou Springs:

- Execute IGA with Manitou Springs
- Colorado Springs Incline management oversight including:
  - Coordination with Manitou Springs
  - Special Use Permit application and coordination with the United States Forest Service (USFS)
  - Implement legal agreements with the Manitou and Pike's Peak Railway Company
  - Implement legal agreements with Colorado Springs Utilities
  - Apply for grants and funding in partnership with the City of Manitou Springs
  - Coordinate with Trails and Open Space Coalition (TOSC) regarding Citizen Advocacy and Fundraising Group
    - Coordinate ongoing maintenance needs
    - Coordinate volunteer Incline specific crew leader training with Citizen Group
    - Coordinate “dog day” assessment with Citizen Group
    - Coordinate avenue for input from the public
    - Coordinate periodic tracking of Incline use to determine appropriate capacity
  - Coordinate ongoing public input with Citizen Group, City of Manitou Springs staff, police, and first responders
  - Manage and execute construction projects
- Design, create and install signage including: safety, rules of use and wayfinding at new trailhead and Barr Trailhead. Staff time only - materials costs are Incline costs
- Colorado Springs Incline operations oversight including:
  - Colorado Springs Incline corridor annual review and maintenance
  - Coordinate and execute USFS Special Use Permit Operational Plan requirements
  - Colorado Springs added to current contract - temporary Port-a-lets
  - Colorado Springs oversight for Citizen Advocacy and Fundraising Group-organized Volunteer Trail Work Day. Staff time only - food and materials costs are Incline costs

Manitou Springs: partnership with Colorado Springs to pursue items above and

- Execute IGA with Colorado Springs
- Coordinate with Colorado Springs
- Apply for grants and funding in partnership with Colorado Springs
- Enforce Incline Rules - police respond to complaints
- Base of Incline Trailhead - dedicate 10-15 on-street public parking spaces to Cog Railway in exchange for trailhead space
  a. Negotiate and execute agreement with Cog Railway for trailhead/on-street parking exchange.
- Implement Incline Parking Recommendations in coordination with overall City of Manitou Springs parking capital infrastructure costs. Parking fee revenue sharing with the Incline is not anticipated except at the Barr Trailhead Parking Lot as per the Manitou Springs/Colorado Springs Utilities agreement. Supply parking enforcement services;
- Implement Incline Parking Recommendations in coordination with overall City of Manitou Springs parking program operational costs;
- Trailhead maintenance

STAGE A.2 FORMALIZE CITIZEN SUPPORT

WHAT: Formalize citizen support.

WHY: Volunteer support is critical to the feasibility of legitimizing use of the Incline. Citizens and user groups have indicated their strong interest and intention for supporting the renovation and operation of the Incline by seeking funding and providing voluntary service. Formalized citizen involvement is an advantage for securing grants.

HOW: Establish a non-profit Citizen Advocacy and Fundraising Group/Foundation and other volunteer opportunities.

Citizen Advocacy and Fundraising Group/Foundation:
- Pursue both capital and operational funding through partnership with Colorado Springs and/or Manitou Springs by using grants, capital campaign, voluntary user donations for individuals and groups;
- Secure sponsors for non-intrusive advertising, sponsorship and partnerships in character with the Incline;
- Promote appropriate use of the Incline; assist with development of informational materials about the Incline addressing rules of use, parking options, courtesies, being good neighbors, how keeping the Incline open and is made possible through donation opportunities; promote volunteer efforts and seeks volunteers.

Volunteer Opportunities:
- General Leadership - Coordination with the City of Colorado Springs contact person
  - Acquire 501(c)3 status with the Internal Revenue Service or align with an existing 501(c)3 entity such as TOSC
- Fundraising for capital and operational needs
  - Pursue both capital and operational funding through partnership with Colorado Springs and/or Manitou Springs by using grants, capital campaigns, voluntary user donations for individuals and groups
- Communication, Education and Community Outreach
  - Promote appropriate use of the Incline
o Assist with development of informational materials about the Incline including information about how keeping the Incline open, renovation, and use is possible through donation opportunities
o Promote volunteer efforts and seek volunteers to support funding efforts

▪ Marketing
  ○ Economic Development and Tourism
  ○ Partnerships
  ○ Sponsorships - Secure sponsors for non-intrusive advertising sponsorship in character with the Incline
▪ Volunteer Labor for maintenance and construction - on-site volunteer work.

STAGE A.3 TRAILHEAD AT BASE OF INCLINE IN THE COG RAILWAY PARKING LOT

WHAT:
▪ Locate the Incline Trailhead at the base of the Incline near the Colorado Springs Utilities (CSU) access gate, displacing 10-15 parking spaces in the privately-owned Cog Railway parking lot. (see Appendix F page 4 for site plan).
▪ Designate existing parking spaces along Ruxton in exchange for displaced Cog lot spaces.
▪ Design and complete safety improvements along Barr Trail to base of Incline trail
▪ Implement striping and signage of pedestrian zone along Cog Railway parking lot Exit drive.
▪ Trailhead facilities: Temporary restroom facilities, Rules of Use sign, bike racks, emergency response staging area.
▪ Implement Barr Trail Parking Management – refer to details in Parking and Traffic below.
▪ Complete restoration of and install barrier fencing to prohibit access to social trail network at Barr Trailhead parking.

WHY:
▪ Minimizes traffic/pedestrian conflicts at the Cog Railway entrance street crossing.
▪ Minimizes unnecessary vehicular trips to Barr Trailhead Parking Lot and along Hydro Street.
▪ Minimizes social trails and environmental damage by individuals accessing the Incline mid-point from Barr Trailhead Parking Lot.
▪ Reserves Barr Trailhead Parking for long-term users of Barr Trail and Barr Camp.
▪ Fulfills public’s desire to locate trailhead at base of Incline.

HOW:
▪ Continue the current agreements including: revocable license for Barr Trailhead parking lot issued by CSU to Manitou Springs dated April 29, 2009, and the revocable license for the dirt parking lot granted by CSU to the Cog Railway, April 9, 2010.
▪ Develop agreement between CSU and the Cog Railway for a park/trail license for the Incline corridor.
▪ Implement legal agreement between City of Manitou Springs or Incline management entity and the Cog Railway for Incline Trailhead / designated replacement parking spaces exchange.
▪ Implement trailhead and striping via contracted or in-house crews.
STAGE A.4  TRAFFIC AND PARKING FOR STAGE A INCLUDE A GENERAL DISCUSSION OF NEEDS FOLLOWED BY DETAILED MANAGEMENT APPROACHES FOR SPECIFIC ZONES IN THE RUXTON AVENUE CORRIDOR.

GENERAL DISCUSSION:

- The Stage A parking and traffic management plan must balance the needs of multiple users in the Ruxton corridor from Manitou Avenue to Hydro Street and includes the Barr Trail and Barr Camp users, the Cog Railway employees and patrons, the Incline users, the residents, employees, shoppers in Manitou Springs, hikers, bikers, and drivers. As a result, several strategies must be implemented to provide parking opportunities in a balanced manner. The success of these strategies will depend on the ability of the City of Manitou Springs to provide support outside of the Ruxton corridor. The Plan assumes that this support will include residential parking programs in surrounding neighborhoods and access to additional parking areas.

- From current data, it is estimated that the Incline by itself would require between 150 and 250 parking spaces (assumes 1200 users per day in the peak season). There are currently 200 spaces in the Ruxton corridor available to the Incline user. The Stage A recommendation results in a net loss of approximately 100 spaces for Incline use (34 Barr Trail-only, 59 residential-only, 8 pedestrian safety), leaving 100 spaces available. It is assumed that additional spaces needed for the Incline can be absorbed by parking availability at locations such as the Prospect Lot, the Schmishny Lot, and on-street parking along east Manitou Avenue or at other potential future lot locations. A residential parking program outside of the Ruxton corridor will help to control adjacent neighborhood parking and direct the demand to the downtown core.

- General management strategies for the Plan include signing and striping improvements to Ruxton Avenue and Winters Street to address pedestrian movement conflicts with traffic.
  - Edge line striping above Pilot Knob Avenue to provide a minimum eleven-foot travel lane or a four-foot shoulder will help to delineate the travel way for motorists. Pedestrians are more likely to walk within the confines of the shoulder.
  - Provide crosswalks across Ruxton Avenue at strategic locations (east of Pilot Knob Avenue, Capitol Hill Avenue, etc.) to reduce mid-block crossing activity and walking in the street. “Pedestrian Crossing” signs should also be posted to warn motorists and guide pedestrians to appropriate crossing locations.
  - Other corridor striping strategies would be to clearly identify “No Parking” zones with hatched on-street markings.
  - Signing strategies for the corridor include giving direction to public parking areas and static signs on Manitou Avenue indicating the cost of parking at the Barr Trailhead with comparative costs to other downtown lots.

FOR THE FOLLOWING DETAILED RECOMMENDATIONS IN THE RUXTON CORRIDOR REFER TO MAP AT THE END OF THIS SECTION FOR ZONE LOCATIONS.
• **Zone A - Barr Trail Parking Lot - 34 SPACES**

  **WHAT:** The parking lot will be managed to promote longer-term use.
  
  **WHY:** The lot will be used primarily by Barr Camp and Barr Trail users, who typically have a longer stay at the trailhead. The parking lot is generally intended for use by Barr Trail users and this action will honor the intent of the trailhead parking area while still allowing short-term use. In addition, traffic counts indicate that 75% of the daily traffic into the Barr Trail parking lot does not find a space and returns to Ruxton Avenue to find parking. This action aims to reduce the amount of unnecessary traffic (800-1000 vehicles per day) above Winter Street.

  **HOW:** Access to the parking area will be free-flowing with a credit card-activated graduated fee system for parking. Upon parking, the credit card is inserted into a parking kiosk to reserve the corresponding numbered parking space. The credit card is inserted again at the time of exit. The parking kiosk will calculate the length of stay and charge the appropriate fee. To promote longer-term stays, the fee structure may be based on a graduated term such as 0-3 hours, 3-10 hours, and longer than 10 hours, with fees decreasing the longer the stay.

• **Zone B - Cog Railway Parking Areas - 40 SPACES**

  **WHAT:** The Cog Railway will provide 40 time-restricted spaces year-round.
  
  **WHY:** The Cog Railway has 40 spaces available on a year-round basis before 9 a.m. These spaces can provide convenient parking for Incline users who arrive in the early morning.

  **HOW:** The Cog Railway reserves the right to manage these space as it sees fit. However, it is expected that the spaces will be managed in a manner consistent with the rest of the corridor; free or paid parking with a fee structure that complements other paid parking areas. Because the Cog Railway will continue to own the spaces, the Cog Railway will be responsible for enforcement of the “Out By 9 a.m.” time-restriction.

• **Zone C - Iron Springs Chateau Parking Area - 46 SPACES**

  **WHAT:** Better use of the existing spaces - potentially a three-hour time limit.
  
  **WHY:** The current spaces are underutilized by paid parking management in a free parking area. The parking spaces should be managed in a manner consistent with the rest of the corridor.

  **HOW:** The City of Manitou Springs Parking Authority Board and planning staff will provide direction for the management of the spaces to better utilize the availability and fee structure as part of a renegotiation of existing agreements with the Iron Springs Chateau, as necessary.

• **Zone D - Public Spaces between Cog Railway entrance and Winter Street - 25 SPACES**

  **WHAT:** Eliminate eight (8) public parking spaces on Winter Street between Ruxton Avenue and the Triangle. The City of Manitou Springs will trade additional parking spaces in-kind to the Cog for the trailhead property at the base of the Incline.

  **WHY:** The new trailhead at the base of the Incline will continue to draw pedestrians from lower Ruxton Avenue To alleviate the pedestrian/vehicle conflict, eight parking spaces
will be removed to allow a wider corridor for pedestrians and vehicles to coexist - each in a dedicated space. The remaining public spaces will be traded to the Cog Railway in-kind (1 for 1) for parking spaces lost by the Cog Railway as a result of the new Incline trailhead in the upper Cog Railway parking lot.

HOW: The eight (8) parking spaces will be removed and the roadway will be marked to delineate a one-way vehicle corridor westbound and a two-way pedestrian corridor on the north side. The pedestrian corridor will be maintained to Pilot Knob Avenue to connect to existing pedestrian facilities. Ruxton Avenue between Winter Street and Pilot Knob will require additional striping modifications. The Cog Railway may lose approximately 10-15 parking spaces as a result of the new trailhead at the base of the Incline. The City of Manitou Springs will reimburse the Cog Railway by providing parking spaces on Ruxton and Winters Street for employees and Cog patrons. Zones will be established for “No Parking” that will be enforced by the City and “Cog Employee Parking Only”. The Cog Railway reserves the right to manage these spaces as it sees fit, however, preference would be given to the Cog Railway employees and patrons. Because the Cog Railway will own the spaces, the Cog will be responsible for enforcement of the user restriction.

- Zone E - Public Spaces between Fairview Avenue and the Creek Bridge East of Pilot Knob - 37 SPACES

WHAT: The public parking spaces between Fairview Avenue and the Creek Bridge east of Pilot Knob Avenue will be managed with a three-hour time limit. Implement paid parking and introduce a fee structure.

WHY: The public spaces in this zone should be open and not restricted to any single user. The time restriction will promote a higher turnover rate and be most attractive to the short-term Incline trail user due to the proximity to the trailhead. South of Fairview Avenue, use of the spaces by both Incline users and the Iron Springs Chateau should not be in conflict given the different time of day use by each group; Incline users are more likely to use the spaces during daylight hours and Iron Springs Chateau users are more likely to use the spaces at night. Implementing paid parking and introducing a fee structure may be needed to balance increased demand on trail use and fulfill Manitou Springs Parking program.

HOW: The Ruxton Avenue corridor between Fairview Avenue and Spring Street will be established as a three-hour parking corridor. Signs will be posted to advise of the three-hour limit that will be enforced by the City. Fee additions and adjustments should be considered jointly by the Incline management entity and Manitou Springs.

- Zone F - Public Spaces between the Creek Bridge East of Pilot Knob Avenue and Osage Avenue - 59 SPACES

WHAT: The public parking spaces between Capitol Hill Avenue and Osage Avenue will be restricted to residential only parking. Manitou Springs and the Incline Management entity will monitor parking space usage to evaluate residential only usage and adjust the balance between residential only and fee-based 3-hour public parking in this zone. If deemed appropriate, implement paid parking and introduce a fee structure.
WHY: The public spaces in this zone should be reserved for residents only. Without a user restriction, the spaces become unavailable to the residents during peak season use (May through September). Implementing paid parking and introducing a fee structure may be needed to balance increased demand on trail use and balance residential parking needs with Incline user parking needs.

HOW: The Ruxton Avenue corridor between the creek bridge and Osage Avenue will be established as a residential only parking corridor. Signs will be posted to advise of the user restriction that will be enforced by the City of Manitou Springs. The parking plan will consider the special circumstances related to Our Lady of Perpetual Help Catholic Church. The church is located on Ruxton Avenue and is within the proposed residential parking zone (Zone F) for all three stages. A potential solution is to provide 35-50 temporary, Sunday-only parking permits for parishioner use only. Special masses or events (weddings, funerals, Holy Days, etc.) could be considered as an allowable use of the temporary permit. Special parking solutions for elderly and handicapped persons will need to be coordinated between the Church and the City of Manitou Springs. If deemed appropriate, fee additions and adjustments should be considered jointly by the Incline management entity and the City of Manitou Springs.

- Zone G - Public Spaces between Osage Avenue and Manitou Avenue - 9 SPACES

WHAT: The public parking spaces between Osage Avenue and Manitou Avenue will continue to be managed with a three-hour time limit. Manitou Springs may implement paid parking and introduce a fee structure.

WHY: The public spaces in this zone should be open and not restricted to any single user. The time restriction will promote a higher turnover rate and be most attractive to users accessing shops and restaurants along Ruxton and Manitou Avenues. Implementing paid parking and introducing a fee structure may be needed to balance increased demand on trail use and retail patrons.

HOW: The Ruxton Avenue corridor between Osage Avenue and Manitou Avenue will continue to be managed as three-hour parking. Fee additions and adjustments should be considered jointly by the Incline management entity and Manitou Springs.

STAGE A.5 INCLINE CORRIDOR IMPROVEMENTS – THE MOST DETERIORATED SECTIONS POSING THE GREATEST SAFETY RISKS AND ENVIRONMENTAL DEGRADATION. (APPROXIMATELY 23%).

WHAT:
- Develop site-specific structural and drainage construction drawings for the 23% of the Incline designated Condition 5-7. These areas pose the most concerns both for safety risks and environmental degradation. Final design will be based on the Incline Design Recommendations set forth in this Manitou Incline Site Development and Management Plan.
- Develop Implementation Schedule based on current costs, community participation (helicopter and or vehicular materials transportation) and construction components
identified as volunteer-appropriate. It is anticipated that a phased construction approach will be utilized. The Stage A corridor improvements will be implemented over a few years and the Incline may be temporarily closed during these times. The schedule will require close coordination with the landowners.

- Participate and support the National Environmental Policy Act (NEPA) Process in order to designate the Incline corridor as a USFS ‘Special Use’ in Pike National Forest.

WHY:
- Construction will focus on the Incline conditions posing the greatest safety risks and environmental degradation. Construction will address safety and environmental concerns with the purpose of establishing and maintaining tie alignment and stability.
- USFS Special Use Permit is the mechanism for authorizing a non-Forest Service entity to manage and maintain the Incline within Pike National Forest.
- USFS requires ‘Special Use’ designation to permit non-Forest Service entity improvements or allocate Forest Service resources to the Incline.
- USFS requires design and maintenance standards and active, intentional, systematic physical improvements to the Incline. These shall address safety and environmental concerns along the Incline Corridor. The plans for improvements and proposed methods for funding and management must be in place in order for the USFS to issue the Special Use Permit.
- USFS requires protocol for maintenance and safety review on the Incline Corridor.

HOW:
- Apply for USFS Special Use Permit and support process by City of Colorado Springs or Incline management entity. The USFS requires a viable and sustainable entity to apply for the Special Use Permit. The Special Use Permit application will initiate the NEPA process that will analyze the proposal for a Special Use Permit and the Incline Design Recommendations in this plan.
- Obtain site-specific trail design approval from landowners and Colorado Springs Utilities for consideration of the high pressure transmission lines
- Initiate access agreements with landowners for trail construction.
- Consider prohibiting access to the Incline for user safety during construction.
- Contract phased safety and drainage work.
- Initiate appropriate volunteer construction projects built to Incline Design Recommendations. \(\text{See Appendix F}\)

REFER TO ATTACHED MAP AND TEXT FOR CONDITION RATING SYSTEM AND MAPPED LOCATIONS.

STAGE A.6 TRAIL CONNECTIVITY AND ALTERNATIVE TRAIL OPTIONS DOWN TO INCLUDE EXISTING SOCIAL TRAILS IN INITIAL SPECIAL USE PERMIT APPLICATION TO THE USFS. THIS WILL EXPEDITE AND MINIMIZE THE REQUIREMENTS OF THE REQUIRED NEPA PROCESS. STAGE A INCLUDES CONSTRUCTING THE REROUTE OF THE EXISTING SOCIAL TRAIL CONNECTION TO BARR TRAIL AND THE 2/3 CONNECTION TO BARR TRAIL.
WHAT:
- Maintain Barr Trail connection at a point two-thirds of the way to the top of the Incline (Tie #1800).
- Reroute existing social trail that connects top of Incline to Barr Trail. Close and rehabilitate closed and abandoned sections.
- Participate and support NEPA process in order to designate proposed connecting trails as Pike National Forest System trails. Proposed trails are the existing Barr Trail social trail connection realignment and the two-thirds of the way to the top connection.

WHY:
- USFS Special Use Permit is the mechanism for authorizing a non-Forest Service entity to manage and maintain the Incline and connectivity trails within Pike National Forest.
- USFS requires ‘System Trail’ designation to permit trail improvements, new trails or allocation of USFS resources to the Incline and Incline trail connectivity system.
- USFS Special Use Permit and annual Operating Plan will outline requirements and maintenance responsibility for the supporting trail system on USFS property. Connecting trail system maintenance may be made part of the USFS system responsibilities.

HOW:
- Apply for USFS Special Use Permit and support process by City of Colorado Springs or Incline management entity. The USFS requires a viable and sustainable entity to apply for the Special Use Permit.
- NEPA initiated by the Special Use Permit application will analyze resource impacts of new trail connectors to the Incline, improvements to the Incline and historical resources evaluation.
- Obtain site-specific trail design approval from effected landowners.
- Initiate access agreements with landowners for trail construction.
- Initiate volunteer trail construction projects built to USFS Trail Design Standards.

STAGE A.7 MITIGATE LONG-TERM ENVIRONMENTAL ISSUES

WHAT: Consider implementing the following guidelines and principles during implementation:

- Erosion Control – Any structural and drainage improvements to the Incline should include engineered measures to stabilize the slope, minimize additional soil erosion, and effectively convey runoff away from the corridor (See Incline Design Recommendations in Appendix F). While the size and type of improvements will vary by location, condition, and implementation phase, the overall erosion control system must function in an integrated fashion over the long term.
- Incline slope restoration – Revegetation of disturbed slopes should be a key element of any structural or drainage improvements. Stabilized slopes are necessary for any revegetation to succeed, while successful revegetation will help reduce surface flows and mitigate erosive forces. Besides slope stabilization, a combination of tools including erosion control matting, strategic topsoil placement, appropriate native seed mix
application, and potentially supplemental irrigation may be necessary for successful revegetation. Project planning and oversight by individuals familiar with the unique challenges of revegetation in the Pikes Peak region is also important, along with follow-up monitoring and control of noxious weeds.

- Social trail restoration – Problematic social trails, particularly near the bottom of the Incline, should be aggressively closed and restored. The existing trail tread should be obliterated and revegetated with native species. The placement of logs, rocks, or brush will discourage continued use of the corridor, while in some cases signs and/or fences are necessary. It is also important to consider why and how those trails are used. If appropriate, the integration of user attractions (e.g. viewpoints) or connections into the formalized trail system will improve the chances of successful social trail restoration.

- New trail corridor revegetation – The construction of new trail connections and routes should integrate accepted standards for sustainable construction, and minimize impacts to both large- and small-scale habitat areas. The new trail corridor may require active revegetation and should be monitored and controlled for noxious weeds.

WHY:

- The Manitou Incline study area has a long history of human use and disturbance. Implementation of the visitor and structural enhancements also provides the opportunity to mitigate long-term environmental issues, and reduce future impacts.
- USFS Special Use Permit is the mechanism for authorizing a non-Forest Service entity to manage and maintain the Incline and Incline connectivity trails and restore the adjacent vegetation within Pike National Forest.
- Implementation of the portions of this plan on Forest Service lands will require additional approvals, including National Environmental Policy Act (NEPA) and Endangered Species Act (ESA) compliance. The implementation partners will need to work closely with Forest Services staff on these issues.
- Due to the potential existence of the Mexican spotted owl (a federally-listed Threatened species) in the project area, any new disturbances or activities will likely require consultation with the US Fish and Wildlife Service under the ESA. Depending on the nature of the impacts, the existence or quality of owl habitat in the project area, and other factors, the process for ESA clearances can vary widely from a project clearance based on a habitat evaluation, to a more extensive process involving multiple years of owl surveys.

HOW:

- Apply for USFS Special Use Permit and support process by City of Colorado Springs or Incline management entity. The USFS requires a viable and sustainable entity to apply for the Special Use Permit.
- NEPA initiated by the Special Use Permit application will analyze resource impacts of new trail connectors to the Incline, improvements to the Incline, US Fish and Wildlife coordination and historical resources evaluation.
STAGE A.8  ESTABLISH THE FOLLOWING RULES OF USE FOR THE INCLINE

WHAT: Establish the following Rules of Use for the Incline:

- Hours: Dawn to dusk
- “Use at your own risk” philosophy
- Modified “Leave No Trace” use ethic (trash cans provided at trailheads and on Ruxton)
- No pets allowed
- Full or partial closures when necessary to perform renovation, construction or maintenance operations.
- Recommend “Uphill use”

WHY: Current experience on the Incline has raised issues including disturbance to neighbors, liability, human waste sanitation, user conflict, and pet conflict and sanitation. These minimal rules have been vetted in public meetings. With the exception of the dawn to dusk recommendation, citizen input, landowners and professional management support the implementation of these minimal rules providing a least expensive management and enforcement approach.

HOW: The City of Colorado Springs in partnership with Manitou Springs will use its rule-making authority to establish these rules. Educating users regarding the rules of use should take place on the web site, through all promotional materials, through the Citizen Advocacy and Fundraising Group, and through on-site signage. Rules of Use on the USFS property will be established in the annual Operating Plan. Rule enforcement will be on a complaint basis by the City of Manitou Springs Police Department. On-site police monitoring is not anticipated. Citizen peer pressure support for education about the rules and rule compliance will be promoted through the Citizen Group.

STAGE A.9  REVENUE GENERATION

WHAT: Generate revenue for both capital and ongoing operations in an amount to support Stage A.

WHY: Citizen input supported economic sustainability. Because local tax revenues are very limited, resources devoted to the Incline will need to be supplemented with alternative sources of funding including grants, user donations, general donations, sponsorships, partnerships and others.

HOW: Pursue a comprehensive funding strategy as follows:

- Capital Funding
  - Existing tax sources for which the Incline may be eligible; use for matching funds when appropriate.
  - Citizen Advocacy and Fundraising Group capital campaign.
Operational Funding

- Voluntary use donations.
- Non-intrusive advertising sponsorship in character with the Incline.
- Shared revenue from Barr Trailhead parking fees for parking enforcement and maintenance if possible.

STAGE A.10 SIGNAGE IN THIS INITIAL STAGE A WILL BE MINIMAL, MEETING THE MOST BASIC NEEDS OF SAFETY AND ENFORCEMENT. SIGN MESSAGES MAY BE GROUPED OR CLUSTERED OR APPLIED TO TIE SURFACE.

WHAT:
- Rules of Use.
- Wayfinding Map at trailhead to locate trail routes down.
- ‘Stay on the Trail’ respect for property signage on all properties.
- Health/Activity Level Warning Signage.
- Locational identification on ties for emergency response indicating appropriate jurisdiction.
- Parking regulations and striping. Refer to Parking and Traffic above for details.
- Pedestrian Zone striping at Winter Street and Cog Parking Exit Drive to Trailhead. (Refer to Parking and Traffic above for details).
- Environmental closure signs at closed former social trail access between Barr Trailhead parking and the mid-Incline.

WHY:
- Designation of Pedestrian Zones (painted sidewalks) in constricted roadway areas improves vehicular and pedestrian safety.
- Signage is needed to communicate Rules of Use and User Behavior guidelines.
- Signage is needed to communicate parking regulations.
- Locational information is requested by first responders for user safety.
- Fulfills public’s desire for improved communication regarding health and exertion at altitude.
- Communication of Rules and Regulations allows enforcement implementation.

HOW:
- Design cohesive Incline Signage design standards and initial package including the ‘flavor’ or tone of the messages.
- Design cohesive parking and pedestrian safety striping and signage package.
- Install Incline signs by City of Colorado Springs or Incline management entity.
- Install parking signage and striping jointly by Colorado Springs and the City of Manitou Springs or Incline management entity.
STAGE B

STAGE B.1 CONSIDER MANAGEMENT OPTIONS

WHAT: If desired, consider a public/private partnership for management of the Incline. Considering an alternative management entity is an option, not a recommendation. It requires a viable opportunity coming forth.

WHY: The public supports the potential of involvement from a private, profit or non-profit entity, to provide management/maintenance services for the Incline. A private approach could bring flexibility and swiftness to addressing issues. A non-profit entity may be able to attract additional funding from those unwilling or unable to give directly to a governmental entity.

HOW: Need a viable private or non-profit entity – none have surfaced thus far in the process.

STAGE B.2 CONSIDER A FORMALIZED ADVISORY BOARD OR COMMITTEE

WHAT: If desired, consider establishing a formalized advisory board or committee. Considering an advisory board or committee is an option, not a recommendation.

WHY: Encouraging formalized input into the operations of the Incline will engender support. The public supports the concept of an advisory group. This is generally individuals with a different focus from organizers of the ‘Citizen Advocacy and Fundraising,’ although with shared interest in the Incline. Individuals could participate in both.

HOW: The advisory board/committee could be made up of appointees by the managing entity and/or ex-officio representatives of key stakeholder groups including the landowners. A clear “charge” and operating procedures will need to be developed. There will be some cost to the management entity associated with staffing an advisory group.

STAGE B.3 TRAILHEAD AT BASE OF INCLINE IN COG RAILWAY PARKING LOT AND A REGIONAL MANITOU TRAIL SYSTEM TRAILHEAD

WHAT:
- Install permanent restroom facilities at the Incline Trailhead at the base of the Incline.
- Review functionality of the emergency response staging area and adjust as needed.
- Create a Manitou Springs Trail System-wide Trailhead. Based on public input there is strong support for a comprehensive Manitou Springs Trail Master Plan. If the Trail master plan is undertaken, this process recommends two possible locations for a system-wide trailhead that have surfaced as part of this study; they include the Jenkins Stable property and the Walton property. These sites offer the opportunity for public/private
developments. The Jenkins Stable property presents advantages to Incline users as well as providing adjacent connectivity to Barr Trail, access roads on Colorado Springs Utilities property, Ute Indian Trail and the Intemann Trail. Evaluating a System-wide Trailhead is recommended as part of a public process supported Manitou Springs Trail Master Plan that includes considerations of these and additional potential system trailhead locations.

WHY:
- Permanent public restrooms provide the best sanitation level.
- Fulfills public’s desire for improved connectivity throughout the Manitou Springs Trail System.

HOW:
- Initiate and complete Manitou Springs Trail System Master Plan. The City of Manitou Springs will determine appropriate timing.
- Identify opportunities for collaboration and mutual benefits between the Incline management entity and Manitou Springs Trail System.
- Identify potential public/private development partnerships.

STAGE B.4 TRAFFIC AND PARKING FOR STAGE B INCLUDE A GENERAL DISCUSSION OF NEEDS FOLLOWED BY DETAILED MANAGEMENT APPROACHES FOR SPECIFIC ZONES IN THE RUXTON AVENUE CORRIDOR

GENERAL DISCUSSION:
- The Manitou Springs System–wide Trailhead at the Jenkins Stable property may be developed for parking (paid-parking or free) with access from Ruxton Avenue. This property could potentially accommodate the necessary 150-250 parking spaces (1.5 to 2.5 acres) on site. As the popularity of the new regional trailhead increases, so will the pressure on the surrounding parking and traffic network. The established parking facilities in the corridor, including the Jenkin’s Stable Property, will need to be reviewed and fee structures adjusted or implemented to encourage use of designated lot(s).
- Signing strategies for the corridor include giving direction to public parking at the trailhead and static signs on Manitou Avenue indicating the cost of parking at the Barr Trailhead and the stable property with comparative costs to other downtown lots.
- Review all parking strategies for feasibility of seasonal adaptations.

FOR THE FOLLOWING DETAILED RECOMMENDATIONS IN THE RUXTON CORRIDOR REFER TO MAP AT THE END OF THIS SECTION FOR ZONE LOCATIONS.

- **Zone A - Barr Trail Parking Lot**
  WHAT: No change to infrastructure; may need to adjust fee structure.
  WHY: Fee structure may need to be adjusted to balance increased demand on Barr Trail use from Manitou Springs System-wide Trailhead.
  HOW: Fee adjustments should be considered jointly by the Incline management entity and Manitou Springs.
• **Zone B - Cog Railway Parking Areas**

WHAT: Pikes Peak Cog Railway will retain control of spaces. The Incline management entity and City of Manitou Springs’s preference may be to return the spaces to Cog Railway employees and patrons only and to discontinue Incline patron parking to encourage use of Manitou Springs System-wide Trailhead parking.

WHY: To optimize usage of the Manitou Springs System-wide Trailhead parking.

HOW: Communication with the Cog Railway management.

• **Zone C - Iron Springs Chateau Parking Area**

WHAT: Implement paid parking and introduce a fee structure.

WHY: Implementing paid parking and introducing a fee structure may be needed to balance increased demand on trail use from Manitou Springs System-wide Trailhead and encourage use of System-wide Trailhead parking.

HOW: Fee additions and adjustments should be considered jointly by the Incline management entity and Manitou Springs.

• **Zone D - Public Spaces between Cog Railway entrance and Winter Street**

WHAT: No change. Cog Railway would retain control of spaces for employees and patrons.

• **Zone E - Public Spaces between Fairview Avenue and the Creek Bridge East of Pilot Knob**

WHAT: No change to infrastructure. May need to adjust fee structure.

WHY: Adjustment of a fee structure may be needed to balance increased demand on trail use from Manitou Springs System-wide Trailhead and encourage use of System-wide Trailhead parking.

HOW: Fee adjustments should be considered jointly by the Incline management entity and Manitou Springs.

• **Zone F - Public Spaces between the Creek Bridge East of Pilot Knob Avenue and Osage Avenue**

WHAT: No change

• **Zone G - Public Spaces between Osage Avenue and Manitou Avenue**

WHAT: No change

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**STAGE B.5 INCLINE CORRIDOR IMPROVEMENTS TO THE INCLINE – THE MID-RANGE DETERIORATED SECTIONS POSING THE NEXT GREATEST SAFETY RISKS AND ENVIRONMENTAL DEGRADATION (APPROXIMATELY 31%).**

WHAT:

- Develop site-specific structural and drainage construction drawings for 31% of the Incline designated Condition 3-4. These areas pose the mid-range concerns both for safety risks and environmental degradation. Final design will be based on the Incline Design
Recommendations set forth in this Manitou Incline Site Development and Management Plan.  (See Appendix F)

Develop Implementation Schedule based on current costs, community participation (helicopter and or vehicular materials transportation).  At this time, all construction components are anticipated as volunteer-appropriate.  It is anticipated that a phased construction approach will be utilized.  The Stage B corridor improvements will be implemented over a few years and the Incline may be temporarily closed during these times.  The implementation schedule will require close coordination with the landowners.

WHY:

Construction will focus on the Incline conditions posing the greatest remaining safety risks and environmental degradation.  Construction will address safety and environmental concerns with the purpose of establishing and maintaining tie alignment and stability.

HOW:

- Obtain site-specific trail design approval from landowner and Colorado Springs Utilities for consideration of the high pressure transmission lines.
- Initiate access agreements with landowners for trail construction.
- Consider prohibiting access to the Incline for user and volunteer safety.
- Contract phased safety and drainage work, if necessary.
- Initiate appropriate volunteer construction projects built to Incline Design Recommendations.

REFER TO ATTACHED MAP AND TEXT FOR CONDITION RATING SYSTEM AND LOCATIONS.

STAGE B.6  TRAIL CONNECTIVITY AND ALTERNATIVE OPTIONS DOWN TO INCLUDE NEW TRAIL ON NORTH SIDE OF INCLINE IN A NEW OR REVISED SPECIAL USE PERMIT APPLICATION TO THE USFS.  STAGE B RECOMMENDS CONTAINING USER ACCESS AT THE TOP OF THE INCLINE AND THE CONNECTION BETWEEN THE TOP OF THE INCLINE TO BASE OF THE INCLINE ON THE NORTH SIDE.

WHAT:

- Contain user access area at top of Incline to minimize erosion, disturbance of vegetation and to allow for natural revegetation.
- Construct trail connecting top of Incline to base of Incline on the north side, when deemed necessary by the annual Incline use and Special Permit Operation Plan reviews.
- Participate and support NEPA process in order to designate proposed connecting trails as Pike National Forest System trails.  Proposed trail is a connecting the top of the Incline to the base of the Incline on the north side of the Incline.

WHY:

- Containing Incline users “wandering” at the top will improve the environmental and visual condition of the area.  Through site design and signage, users’ options for descending routes can be made clear.
USFS Special Use Permit is the mechanism for authorizing a non-Forest Service entity to manage and maintain the Incline and Incline connectivity trails within Pike National Forest.

USFS requires ‘System Trail’ designation to permit trail improvements, new trails or allocation of USFS resources to the Incline and Incline trail connectivity system.

USFS Special Use Permit and annual Operating Plan will outline requirements and maintenance responsibility for the supporting trail system on USFS property. Connecting trail system maintenance may be made part of the USFS system responsibilities.

USFS requests alternative routes for Incline users to relieve congestion and trail user trips on Barr Trail.

HOW:
- Obtain Top of Incline site design approval from USFS.
- Obtain connecting trail on north side of Incline design approval from USFS.
- Initiate access agreements with landowners for construction.
- Initiate volunteer construction projects built to Pike National Forest Trail Design Standards.

STAGE B.7 MITIGATE LONG-TERM ENVIRONMENTAL ISSUES

No Change from Stage A.

STAGE B.8 MODIFY THE RULES OF USE

WHAT: Adjust the Rules of Use established in Stage A as user experience and monitoring indicates or as funding allows to manage these rules.

WHY: Public input based on current use patterns offered some alternative rules with the intent of a “less conflicting” user experience. Use of these rules will require additional monitoring and management services and will likely have some additional cost for that effort. Guidelines for groups are meant to be used on a voluntary basis.

HOW: Establish the following Rules of Use:
- Special guidelines and permitting opportunity for large groups in order to provide helpful information about best times to use and to minimize conflicts with other large groups.

STAGE B.9 REVENUE GENERATION

WHAT: Generate revenue for both capital and ongoing operations in an amount to support Stage B
WHY: Citizen input supported economic sustainability. Limited tax resources will need to be supplemented with alternative sources of funding including grants, user donations, general donations, sponsorships, partnerships and others.

HOW: Pursue a comprehensive funding strategy as follows generating revenue in an amount to support Stage B:

Capital Funding - No change from Stage A.

Operational Funding (will need to cover expenses related to a fee-based parking plan and maintenance labor).

- Includes options from Stage A.
- Includes fees generated through parking program managed by City of Manitou Springs Parking Authority to cover cost of collecting parking fees and provide additional revenue to go toward operations and maintenance of the Incline.
- Includes Citizen Advocacy and Fundraising Group/Foundation: promotion of carefully managed number of special events; merchandise for resale through local retailers and/or on-line.

STAGE B.10 SIGNAGE FOR THIS NEXT STAGE WILL PROVIDE ADDITIONAL WAYFINDING, AND SAFETY SIGNAGE. SIGNAGE PERTAINING TO TRAIL ETIQUETTE AND ENVIRONMENTAL EDUCATION MAY ALSO BE ADDED. SIGN MESSAGES MAY BE GROUPED, CLUSTERED OR APPLIED TO TIE SURFACE.

WHAT:
- Wayfinding Map at Top of Incline to identify trail routes down.
- Sign at bailout locations to locate trail routes down.
- Trail Etiquette signage.
- ‘Stay on the Trail’ with environmental message.
- Parking regulations and striping, if necessitated by changes of alternatives.
- Environmental closure signs at closed area at top of Incline.
- ‘How to get Involved’ with Citizen’s Group Contact information.

WHY:
- Signage is needed to communicate Rules of Use and User Behavior guidelines.
- Signage is needed to communicate any changed or alternative parking regulations.
- Communication of Rules and Regulations allows enforcement implementation.

HOW:
- Design desired signs in compliance with Signage Standards set in Stage A.
- Adapt cohesive parking and pedestrian safety striping and signage package.
- Install Incline signs by City of Colorado Springs or Incline management entity.
- Install necessary parking signage and striping jointly by Manitou Springs and the City of Colorado Springs or Incline management entity.
STAGE C

STAGE C.1 TRAILHEAD AT BASE OF INCLINE IN COG RAILWAY PARKING LOT AND TRANSIT STATION

WHAT:
- Create a Manitou Springs Transit Station. A possible location that has surfaced as part of this study is the Iron Spring Chateau property. This site offers the opportunity for a public/private development. The Iron Springs Chateau property presents advantages to Incline users as well as providing adjacent connectivity to Pikes Peak Cog Railway patrons and staff, Barr Trail, Barr Camp, Manitou Springs Trail System, and Ruxton Avenue residents and businesses. Evaluating a Manitou Springs Transit Station is recommended as part of a public process supported Manitou Springs Transit System Plan that includes considerations of potential system hubs, stops and service for residents, tourists and businesses. If the Manitou Springs System-Wide Trailhead is located in the Ruxton Avenue corridor, the Transit Station in the same corridor will open up redevelopment opportunities at the System-wide Trailhead site.
- Review functionality of the emergency response staging area and adjust as needed.

WHY:
- Transit station has the potential to greatly reduce vehicle trips on Ruxton Avenue.
- Fulfills public’s desire for a shuttle option for Incline users.

HOW:
- Initiate and complete Manitou Springs Transit System Plan. City of Manitou Springs will determine appropriate timing.
- Identify opportunities for collaboration and mutual benefit between the Incline management entity and Manitou Springs Transit System.
- Identify potential public/private development partnerships.

STAGE C.2 TRAFFIC AND PARKING FOR STAGE C INCLUDE A GENERAL DISCUSSION OF NEEDS FOLLOWED BY DETAILED MANAGEMENT APPROACHES FOR SPECIFIC ZONES IN THE RUXTON CORRIDOR.

GENERAL DISCUSSION:
- A transit station at the Iron Springs Chateau property will require a shuttle system with convenient access and an efficient schedule to and from the downtown core and the station. The established parking facilities in the corridor will need to be reviewed and fee structures adjusted or implemented to encourage use of designated lots and the transit system. The roadway system and parking facilities surrounding the property would be redeveloped to provide the most efficient system to Upper Ruxton Avenue. The parking area at the stable property will be removed and redeveloped to encourage use of the transit station. Other parking areas in the corridor may also be removed or additional restrictions applied to encourage use of the transit station. With the transit
station option and the loss of parking in the Ruxton Avenue corridor, additional parking opportunities in the downtown core are necessary and should be pursued.

- Signing strategies for the corridor include giving direction to public parking areas in the downtown area and static signs on Manitou Avenue indicating the cost of parking at the Barr Trailhead with comparative costs to other downtown lots.

FOR THE FOLLOWING DETAILED RECOMMENDATIONS IN THE RUXTON CORRIDOR REFER TO MAP AT THE END OF THIS SECTION FOR ZONE LOCATIONS.

- **Zone A - Barr Trail Parking Lot**
  WHAT: No change to infrastructure. May need to adjust fee structure.
  WHY: Fee structure may need to be adjusted to balance increased demand on Barr Trailhead use from Manitou Springs System-wide Trailhead and Transit Station.
  HOW: Fee adjustments should be considered jointly by the Incline management entity and the City of Manitou Springs.

- **Zone B - Cog Railway Parking Areas**
  WHAT: No change.

- **Zone C - Iron Springs Chateau Parking Area**
  WHAT: Provide limited paid parking around the transit station and implement a fee structure to offset the demand for access from multiple uses including trails, Cog Railway, and shopping.
  WHY: Adjustment of parking fees are intended to encourage use of the transit station.
  HOW: Fee additions and adjustments should be considered jointly by the Incline management entity and the City of Manitou Springs.

- **Zone D - Public Spaces between Cog Railway entrance and Winter Street**
  WHAT: With additional access to Upper Ruxton through the transit station at the Iron Spring Chateau, these spaces would be unnecessary public parking. The spaces would be reclaimed to allow a redevelopment of the roadway network and the transit station with enhanced pedestrian spaces. The street spaces allocated to the Cog Railway in trade for the trailhead at the base of the Incline in Stage A will remain in the Cog Railway’s control.
  WHY: Constrictions in this area continue to necessitate shared space for vehicles and pedestrians. Reconfiguration will provide enhanced safety and aesthetic conditions.
  HOW: Planning and design of this areas is recommended as part of the Manitou Springs Transit System Plan.

- **Zone E - Public Spaces between Fairview Avenue and the Creek Bridge East of Pilot Knob**
  WHAT: The City may need to reclaim spaces for development of the transit station. Adjust the fee structure on remaining spaces to offset the demand for access from multiple uses including trails, Cog Railway, and shopping.
  WHY: Adjustment of parking fees are intended to encourage use of the transit station.
HOW: Fee additions and adjustments should be considered jointly by the Incline management entity and the City of Manitou Springs.

- **Zone F** - Public Spaces between the Creek Bridge East of Pilot Knob Avenue and Osage Avenue
  WHAT: No change.

- **Zone G** - Public Spaces between Osage Avenue and Manitou Avenue
  WHAT: No change.

### STAGE C.3 INCLINE CORRIDOR IMPROVEMENTS TO THE INCLINE – THE MINIMALLY DETERIORATED SECTIONS POSING THE LOWEST SAFETY RISKS AND ENVIRONMENTAL DEGRADATION (APPROXIMATELY 46%). CONSIDER A PHASED APPROACH TO THESE IMPROVEMENTS.

WHAT:
- Develop site-specific structural and drainage construction drawings for the 46% of the Incline designated Condition 1-2. These areas pose the least concern both for safety risks and environmental degradation. Final design will be based on the Incline Design Recommendations set forth in this Manitou Incline Site Development and Management Plan. *(See Appendix F)*
- Develop Implementation Schedule based on current costs and community participation (helicopter and or vehicular materials transportation). All construction components are anticipated to be volunteer-appropriate. It is anticipated that a phased construction approach will be utilized. The Stage C corridor improvements will be implemented over a few years and the Incline may be temporarily closed during these times. The implementation schedule will require close coordination with the landowners.

WHY:
- Construction will focus on the Incline conditions posing safety risks and environmental degradation. Construction will address safety and environmental concerns with the purpose of establishing and maintaining tie alignment and stability.

HOW:
- Obtain site-specific trail design approval from landowners and Colorado Springs Utilities for consideration of the high pressure transmission lines.
- Initiate access agreements with landowners for trail construction.
- Consider prohibiting access to the Incline for user and volunteers safety.
- Contract phased safety and drainage work, if necessary.
- Initiate appropriate volunteer construction projects built to Incline Design Recommendations.

### STAGE C.4 MITIGATE LONG-TERM ENVIRONMENTAL ISSUES

No Change from Stages A and B.
STAGE C.5   REVENUE GENERATION

WHAT: Generate revenue for both capital and ongoing operations in an amount to support Stage C.

WHY: Citizen input supported economic sustainability. Limited tax resources will need to be supplemented with alternative sources of funding including grants, user donations, general donations, sponsorships, partnerships and others.

HOW: Pursue a comprehensive funding strategy as follows generating revenue in an amount to support Stage C:

- Capital Funding - No change from Stage A.

- Operational Funding (will need to cover expenses related to a fee-based parking plan and maintenance labor)
  - Includes options from Stages A and B.
  - Includes rental of Incline for special events by entity.
  - Includes consideration of user fees for groups and individuals.
  - Includes “Official” Incline event fees; consideration of reduced fees for Manitou Springs residents, school groups (promote high school use).

STAGE C.6   SIGNAGE IN STAGE C PERTAINING TO HISTORICAL AND ENVIRONMENTAL INTERPRETATION MAY BE ADDED. SIGN MESSAGES MAY BE GROUPED, CLUSTERED OR APPLIED TO TIE SURFACE.

WHAT:
- Historical Interpretive signage.
- Environmental Interpretive Signage.
- Parking regulations and striping, if necessitated by changes of alternatives.

WHY:
- Signage is needed to communicate Rules of Use and User Behavior guidelines.
- Interpretive signage expands the Incline user experience.
- Communication of Rules and Regulations allows enforcement implementation.
- Fulfills public’s desire for improved communication regarding interpretation.

HOW:
- Design desired signs in compliance with Signage Standards set in Stage A.
- Adapt cohesive parking and pedestrian safety striping and signage package.
- Install Incline signs by City of Colorado Springs or Incline management entity.
- Install necessary parking signage and striping jointly by the Cities of Manitou Springs and Colorado Springs or Incline management entity.
Manitou Incline Site Map

- US Forest Service Property
- Top of Incline
- Reroute of social trail connection to Barr Trail - conceptual alignment
- Trail connecting top of Incline to base of Incline - conceptual alignment
- Barr Trail Connection existing - tie 1800
- Cog Railway Property
- Barr Trail
- Colorado Springs Utilities Property
- Barr Trail Parking Lot
- Base of Incline
  - Cog Railway Station
  - Iron Springs Chateau Property
- Jenkins Stable Property
- Walton Property - off map on west Manitou Ave
Ruxton Corridor Parking Zones

Zone A
Barr Trailhead Parking Lot

Zone B
Cog Railway Parking Areas

Zone C
Iron Springs Chateau Parking Area

Zone D
Public Spaces between Cog Railway entrance and Winter Street

Zone E
Public Spaces between Fairview Avenue and the Creek Bridge East of Pilot Knob

Zone F
Public Spaces between the Creek Bridge East of Pilot Knob and Osage Avenue

Zone G
Public Spaces between Osage Avenue and Manitou Avenue
Incline Corridor Condition Ratings

Below is a brief description of the condition ratings, descriptions of each condition. The table on the next page indicates the location - in 12 tie segments - of the various conditions.

All Incline corridor improvements are to meet the following requirements:

- Maintain character;
- Use natural materials
  - Similar timber material
  - Native rock;
- Must consider available site materials and material delivery.

CONDITION DESCRIPTIONS

CONDITION 1 – NO PROBLEMS  17%
- Ties are parallel to grade
- Less than 50% exposure

CONDITION 2 – EDGE EROSION   29%
- Ties are parallel to grade
- Greater than 50% exposure at mid
- Edges may be undermined

CONDITION 3 – SOME PINNED   25%
- Ties are parallel to grade
- Greater than 50% exposure at mid
- Edges may be undermined
- Up to 25% of ties are external pinned

CONDITION 4 – MORE PINNED   6%
- Ties not parallel to grade
- Full tie exposure
- Greater than 25% external pinned

CONDITION 5 – FULLY UNDERMINED  3%
- Ties not parallel to grade
- Fully undermined
- Most or all are external pinned

CONDITION 6 – MAJOR PROBLEMS  8%
- Ties not parallel to grade
- Ties fully undermined and shimmed
- All are external pinned

CONDITION 7 – COMPLETE FAILURE  11%
- Ties not parallel to grade
- Reconstructed tread

CONDITION SUMMARY

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Stages Implementation (contd.)
Citizen input indicated strong support for minimal reliance on tax revenues and high dependence on alternative sources of funding for an economically-sustainable operation. In today's economic climate, cities are struggling to maintain current operations, much less consider support for new operations. A specialty facility such as the Manitou Incline is not a core recreational public service. As a result, it warrants strong financial support from users and other alternative sources of funding. Currently there are no capital or operational funds allocated for the Manitou Incline.

The Manitou Incline Site Development and Management Plan required a multi-faceted budget estimating approach. The capital and operational cost estimates were generated in collaboration with City staffs. Where possible, quantities were measured and calculated from site analysis data. Unit costs reflect current direct bid values from the Cities, informal quotes from manufacturers, discussions with contractors, discussion with both City staffs and planning team experience.

In order to apply timelines and implementation scenarios to the cost/revenue estimates, the landowners and cities - US Forest Service, Manitou and Pike's Peak Railway Company, Colorado Springs Utilities, City of Manitou Springs and City of Colorado Springs - discussed and determined what resources they could individually contribute to the Incline implementation. With the contributions information, two revenue scenarios were studied: one mandating user access fees at the time of legal opening and one opening with voluntary user donations.

Due to the high cost of implementation for a user fee system, issues of increased liability, and other logistical concerns, this study recommends a voluntary user donations approach with consideration given to a fee system in the future as needs dictate.

**Contributions of Landowners and Cities**

The lists below outline the contributions determined by the landowners and the Cities' staffs. The revenue strategy and implementation strategy were determined with these contributions as a basis.

1. **US Forest Service**
   a. Stage A NEPA (waiver of Cost Recovery) $ 40,000
   b. Stage B NEPA (waiver of Cost Recovery) $ 150,000
   c. Waiver of Special Use Permit annual fee approximately $ 250/year
   d. Stage A Waiver of Special Use Permit revenue sharing -
   e. Stage B and C Special Use Permit revenue sharing -
   f. Operational Plan safety inspections and reviews Staff

2. **Manitou and Pike's Peak Railway Company**
   a. Incline Corridor Access Agreement -
   b. Base of Incline Trailhead on Cog Railway Property - parking space trade -
   c. Incline User Parking Program on private Cog RR parking lot -
   d. Consideration of participation with Transit service and stop -
3. **Colorado Springs Utilities**
   a. Incline Corridor Executive Agreement for Access
   b. **Colorado Springs Utilities (CSU) High Pressure Line maintenance budget sharing 2012-2016 - budgeted only, requires approval by Utilities Board each year.** $300,000

4. **City of Colorado Springs Parks, Recreation and Cultural Services**
   a. Execute IGA with Manitou Springs Staff and legal
   b. Coloradore Springs Incline management oversight including:
      i. Coordination with Manitou Springs; Staff and legal
      ii. Special Use Permit application and coordination with USFS; Staff and legal
      iii. Implement legal agreements with Cog Railway; Staff and legal
      iv. Implement legal agreements with CSU; Staff and legal
      v. Apply for grants and funding in partnership with Manitou Springs; Staff
      vi. Coordinate with TOSC regarding Citizens Advocacy and Fundraising Group; Staff
      1. Coordinate on-going maintenance needs Staff
      2. Coordinate volunteer Incline specific crew leader training with Citizens Group; Staff
      3. Coordinate “dog day” assessment with Citizens Group; Staff
      vii. Coordinate ongoing public input with Citizens Group, City of Manitou Springs staff, police, and first responders; Staff
      viii. Coordinate allocation of Barr Trailhead parking fees and any future users fees ensuring accountability, revenue use restrictions and possible Advisory Group oversight; Staff
      ix. Manage and execute construction projects. Staff
   c. **Design, create and install signage including: Safety, Rules of Use and Wayfinding at new trailhead and Barr Parking. Staff time only - materials and installation costs are Incline costs** Staff
   d. **Colorado Springs Incline operations oversight including:**
      i. Colorado Springs Incline corridor annual review and maintenance; Staff
      ii. Coordinate and execute USFS Special Use Permit Operational Plan requirements; Staff
      iii. Colorado Springs added to current contract - Temporary Port-a-lets $7,128/year
      iv. Colorado Springs oversight for Citizens Advocacy and Fundraising Group organized Volunteer Trail Work Day - Staff time only-food and materials costs are Incline costs Staff

5. **City of Manitou Springs**
   a. Execute IGA with Colorado Springs Staff and legal
   b. Coordinate with Colorado Springs Staff
c. Apply for grants and funding in partnership with Colorado Springs; Staff

d. Enforce Incline Rules - Police respond to complaints; Police Staff

e. Base of Incline Trailhead - dedicate 10-15 on-street public parking spaces to Cog RR in exchange for trailhead space; Staff and legal

i. Negotiate and execute agreement with Cog Railway for trailhead/on-street parking exchange. Staff and legal

f. Implement Incline Parking Recommendations in coordination with overall City of Manitou Springs parking capital infrastructure costs. Revenue sharing with the Incline is not anticipated except at the Barr Trailhead Parking Lot as per the Manitou Springs/CSU agreement;

i. Stage A $110,000

ii. Stage B not able to estimate

iii. Stage C not able to estimate

g. Implement Incline Parking Recommendations in coordination with overall City of Manitou Springs parking program operational costs - 1.5 full time parking staff;

i. Stage A-B per year $40,000

ii. Stage C not able to estimate

h. Trailhead Maintenance.

i. Stage A - trash only Staff

ii. Stages B and C - trash and restroom maintenance $3,000/year

Revenue Forecasts

The following potential revenue opportunities have been identified through research and personal contact as a starting point for funding improvements and operations of the Manitou Incline. Other opportunities may also be available and should be pursued. Revenue sources and potential grant values reflect research about, and in some cases direct consultations with, the granting agencies at the time of this writing.

Citizen Advocacy and Fundraising Group/Foundation

Critical to the financial sustainability of the Manitou Incline is the establishment of a non-profit Citizen Advocacy and Fundraising Group and/or Foundation to provide leadership, manpower and a mechanism to attract and pursue funding. The group will be tasked with the following for fundraising, along with its other advocacy objectives:

- Acquiring 501(c)3 status with the Internal Revenue Service or align with an existing 501(c)3 entity such as Trails and Open Space Coalition (TOSC).
- Pursuing both capital and operational funding through partnership with Colorado Springs and/or Manitou Springs by using grants, capital campaign, voluntary user donations for individuals and groups.
- Marketing to promote economic development and tourism.
- Pursuing partnerships and sponsorships.
Municipal Support
Includes existing tax and other sources for which the Incline may be eligible; use for matching funds when appropriate.

**Colorado Springs**
- In-kind capital and operational value that can be used as match for other grant funding
- TOPS (Trails, Open Space and Parks Sales Tax) - Colorado Springs voter approved 0.1% sales tax
- Conservation Trust Funds (Lottery)
- Other capital funding when available in the future

**Manitou Springs**
- In-kind capital and operational value that can be used as match for other grant funding
- Shared revenue from Barr Trailhead parking fees for parking enforcement and maintenance, if possible. All parking-related expenses, including an allocation for capital expense and annual operating expenses, must be covered first.
- Conservation Trust Funds (Lottery)
- Other capital funding when available in the future

Private Parking Revenue Sharing
- Shared revenue from parking lots that support both the Incline use and other private activity.

Donations
- Outright contributions for support of Incline renovations and operations.
- Matching funds program.

Donations for Use
- Voluntary use donations – suggested donation for one time and frequent user.

Fees for Use
- A fee structure has been explored and assumptions made about the amount of revenue that can be generated. The fees generated must first be adequate to cover any expenses associated with the logistics of the collection of a fee, which will be significant in a somewhat remote location. A determination will be necessary on the feasibility of a fee system to support Incline use.
- The USFS is researching the impact of users fees/club membership fees on its Special Use Permit authority to understand if the collection of any fees/membership (anything other than parking fees and donations) may transfer the Incline Special Use Permit out of local authority and bump it up to regional and national oversight.
- Colorado Springs is pursuing clarification on the Incline IGA, governmental immunity, user fee and landowner liability implications.
Potential Sponsorship and Retail Sales/Marketing

- Non-intrusive advertising sponsorship in character with the Incline.
- Generation of revenue from complementary services.
- Commission from Incline logo t-shirts, socks or other items.
- The Incline listed as a “must do” Colorado activity.
- Water, sunscreen, lip balm sales at base of Incline.
- Personal Trainer contracting.
- Fundraising events or activities.

Potential Grant Opportunities for Manitou Incline

These potential state, private, corporate, and federal grant opportunities provide a foundation for compiling a comprehensive list of relevant grants for the Manitou Incline.

1. State Opportunities
   a. Great Outdoors Colorado
      Contact: (303) 863-7522; www.goco.org

Dates and deadlines for the Spring 2011 grant cycle were decided at the December 2010 GOCO Board Meeting. Exact dates for every GOCO grant cycle are set by the GOCO Board. However, GOCO generally offers two grant cycles annually—in the spring and fall—for the Local Parks and Outdoor Recreation, Mini, Open Space, Planning and Conservation Excellence programs. Applications for the spring grant cycle are typically due in March with grant decisions made by the GOCO Board in June. Applications for the fall grant cycle are typically due in August with decisions made by the GOCO Board in December.

- **GOCO LOCAL GOVERNMENT GRANTS**
  The maximum grant request for LPOR grants is $200,000. There is no maximum limit for the total project cost. Applications seeking grants for more than $200,000 should apply for a Special Opportunity LPOR Development Grant. Municipalities, counties, and parks and recreation special districts are the only entities eligible to apply for LPOR grants. GOCO will not fund more than 70% of the proposed project’s eligible costs up to $200,000. A minimum of 10% of the total project costs must be a cash match from the applicant and/or partners. Can apply simultaneously for State Trails Grants as long as scope is different. Can apply every cycle for phased work.

- **GOCO LOCAL GOVERNMENT MINI GRANTS**
  The maximum grant request for Mini Grants is $45,000. The total project cost of a Mini Grant project cannot exceed $60,000.

- **GOCO SPECIAL OPPORTUNITY TRAIL GRANTS**
  The maximum grant request for Special Opportunity Trail Grants can exceed $500,000 for exceptional projects that demonstrate a need for higher levels of funding. GOCO just completed a cycle for this new grant category known as Special Opportunity Grants and will probably have another cycle in 2012. The category will probably have a different name in the future.
b. **Colorado State Parks Trails Grants**

Projects that build, enhance, maintain, or expand trails around the state receive GOCO funding through the Colorado State Trails Program, a partnership between GOCO and Colorado State Parks. However this is a separate funding source from GOCO and can be applied for at the same time as long as the scope of the project is different. Maximum grant amount is $200,000, awards must be used within 2.5 years. Cycle is annual and you may apply every cycle. Lots of resource information is available on the State Trails web site. All grant Match Forms require 30% matching funds – no more, no less – of cash or inkind and/or any combination of both. This 30% is 30% of the grant request only, not 30% of the total project cost. Eligible match items are what the agency is “bringing to the table”; the contributions of the agency and its partners. The more partners, the better. The State Trails Committee is looking for a quality project with broad community support. Volunteer labor is NOT an eligible Match Form item.

El Paso County has indicated it will be applying for a State Trails Grant in 2012 for the Ute Indian Trail Lower half - the trail that connects to the base of the Incline. It will be beneficial to highlight this connectivity. There is a limitation on the grant requests of $200,000, so a joint application does not appear to be advantageous.

2. **Private Foundation Opportunities**

a. **El Pomar Foundation**

   *Contact: [www.elpomar.org](http://www.elpomar.org)*

   Grantmaking is at the core of what El Pomar Foundation does. Since 1937, trustees of the Foundation have approved more than 10,000 grants totaling more than $400 million to benefit the state of Colorado. Currently, El Pomar contributes more than $17 million annually through grants to nonprofit organizations and government equivalents across Colorado. El Pomar is a general purpose foundation, which means the trustees approve grants across a broad spectrum of focus areas, including: arts and culture, civic and community initiatives, education, health, and human services. Typically, nonprofit organizations send in an application to the Foundation. The trustees evaluate it to determine their ability to support the proposal based on the mission and purposes established by Julie and Spencer Penrose.

b. **Gates Family Foundation**

   *Contact: [www.gatesfamilyfoundation.org](http://www.gatesfamilyfoundation.org)*

   The Gates Family Foundation invests in Colorado-based projects and organizations primarily through capital grants which have meaningful impact and enhance the quality of life for those visiting, working and living in the state. The Foundation seeks to promote self-sufficiency, excellence and innovation in education, healthy lifestyles, community enrichment, connection to nature and stewardship of the state's natural inheritance. The Foundation's actions will remain consistent with the founders' intentions and the principles of citizenship, entrepreneurship and free enterprise. The Foundation does not establish a dollar limit. Applicants must be classified as a 501(c)(3), or equivalent, by the Internal Revenue Service, and be able to provide proper tax-exempt documentation issued within the last five years.
c. **Boettcher Foundation Grants**  
*Contact: www.boettcherfoundation.org*

The Foundation has announced that in 2011 it will be reviewing its grantmaking guidelines in an effort to more strategically serve the capital needs of Colorado nonprofits and communities. While it is taking formal applications at this time, it is interested in learning about capital projects. Provide information by clicking on the button (on the website) for information about revised grantmaking guidelines when they become available.

d. **Other Local Foundations**  
Other local foundation support should be sought and researched.

3. **Corporate Opportunities**

a. **Banks**  
The Community Reinvestment Act requires banks to invest in the communities in which they collect deposits. Because of this, most large banks have a centrally-administered community grants program that agencies or citizen groups can apply to for small grants, usually at the beginning of the year. The branch managers of these banks also have money that they can give to neighborhood community groups at their discretion. To get a larger grant, the program should probably include some kind of economic development, like employing local youth.

b. **Recreational Equipment, Inc. (REI)**  
*Contact: www.rei.com/aboutrei/stewardship_community.html*

REI's giving and outreach efforts are centered on developing and supporting strong community relationships. The co-op’s success is shared by awarding grants to employee-nominated nonprofits that focus on caring for recreation areas or increasing participation in outdoor activities - especially among youth. REI actively partners with leading outdoor groups and nonprofits that share its stewardship commitment. Its employees also volunteer thousands of hours each year in service projects to make public lands, parks, trails and waterways more inviting and accessible.

**Capital and Operational Cost Estimates**

Detailed cost estimates were calculated by directly measuring and estimating quantities from the proposed plans. Unit costs reflect direct costs from the two Cities, manufacturers' quotes and discussions with contractors. Both Cities' staffs have reviewed, discussed and refined the estimates. The capital and operational costs correspond to the Stages Implementation. Values are divided into Stages A, B and C. Each Stage is further categorized into: Capital Costs, Annual Operational Costs, In-Kind Service Values and Cost with Multiple Benefactors. In-Kind Service Values are the values of landowners' and Cities' contributions to the Incline, without anticipated reimbursement from the Incline management entity and with sole and direct benefit to the Incline users; these values can be leveraged as matching funds for larger grant applications. Costs with Multiple Benefactors are the values of landowners' and Cities' contributions, without anticipated reimbursement from the Incline management entity, where Incline
users are only one of several benefactors; these values are recorded as recognition of the contribution, but are not eligible for use as matching funds. Below is a summary of the projected costs. *(The detailed cost estimate can be found in Appendix G)*

### STAGE A

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### Initial Opening

Both users and stakeholders expressed strong sentiment that the economic sustainability of the Manitou Incline not be reliant on tax support. This study outlines an approach to implementation that requires a complement of revenue sources in the early years in order to complete substantial renovations. During and beyond that timeframe, alternative sources of revenue, highly dependent on users and advocates of the Incline, are determined to be adequate to cover the ongoing cost of operations and “give back” for that early support. In recognition of the potential for voluntary financial support, this plan recommends an approach that does not include mandatory fees for use.

Costs of implementation, designating a five-year approach to renovations, provides for minimal renovation in year one addressing issues of safety and security, with the bulk of renovations occurring in year four after adequate funds are generated to complete the work. This approach allows continuing use of the Incline with closures only when necessary for construction purposes.

For the complement of revenue sources necessary to generate approximately $120,000 in year one and $762,000 in year four, in year one we are recommending a GOCO planning grant for design work, use of TOPS funds, and revenue sharing with Manitou Springs of net proceeds from Barr Trail lot parking fees. This will be supplemented by donations for individual use of the Incline, outright donations from other sources, and sponsorships, all activities that will require substantial effort by the citizen advocacy and fundraising group. In addition, year four costs are suggested to be offset by substantial and repeated
Potential for Voluntary Fees

Initial anecdotal information suggested very high and continuous use of the Incline in its present state of approximately 75,000 to 100,000 “trips” annually. An actual count, using a CDOT counter, was taken over an 18-day period in September 2010, allowing an extrapolation of data, which provided evidence of actual use ranging as high as 350,000 to 500,000 “trips” annually.

Taking a very conservative approach toward voluntary revenue generation from users, our analysis uses an estimate of 250,000 annual trips. Assumptions are made about the numbers of frequent, moderate and one-time users, resulting in a determination of approximately 39,500 “unique” users with the potential to support the Incline through a voluntary donation for their use. Assuming just 10% of those unique users would donate between $0.89 and $2.00 per use, $26,500 in revenue would be generated. It is reasonable to believe that an additional allowance to pay for Incline advocates to be on-site during high use times promoting the concept of voluntary donations (as opposed to mandatory fees) as the means to assure that the Incline remains a feasible operation, could result in a much higher figure.

An example of actual voluntary donation experience on the nearby Barr Trailhead has yielded a dismal result reported as low as $600 annually. There are significant differences in use and approach that hold promise for the Incline. The Manitou Incline is a unique facility and sheer numbers of current users far out-number trail users other regional trails. The Incline provides an incredible and nationally touted “fitness tourism” experience, one for which out-of-town users would expect to pay a fee for use, and for which many local users have indicated their willingness to contribute. The donation collection strategy is expected to be assertive, using web site access as well as collection on-site through very a visible and enticing station. The Citizen Advocacy and Fundraising Group is expected to play a major role in promoting the concept of voluntary donation.

A Mandatory Fee Concept

The consultant team also explored a mandatory fee concept which results in a much higher revenue generation. However, it also requires significant logistical effort and associated operational costs. Much of the Stage A renovations recommended in this study would need to take place before the Incline is legally opened with the users fee in order to provide the level of service that is tantamount to the fee assessed and in order to meet the higher safety standards implied by the users fee. In addition, the collection of user fees impacts the Cities’ governmental immunity for liability and will mandate the purchase of an Incline-specific insurance rider. This substantially changes the mix and timing of various potential revenue sources, possibly making it much more difficult to achieve.

A mandatory fee concept could be considered again in the future should the voluntary support for the Incline not prove adequate.
In any complex integrated planning strategy, recommendations and strategies overlap with related planning documents and processes. This is true of the Manitou Incline Site Development and Management Plan.

The recommendations and options presented in this plan interface with four existing planning efforts. They include:

- Manitou Springs Open Space Plan;
- Colorado Spring Utilities South Slope Watershed Plan - Ute Pass Trail;
- Manitou Springs Parking Authority Board; and
- Transit Options Regional and/or Manitou Springs.

A brief discussion of each study's relationship with this Manitou Incline Site Development and Management Plan follows.

**Manitou Springs Open Space Plan - 1997**
Based on consistent public input during the Incline planning, there is strong public desire for a comprehensive trails master plan as part of the Manitou Springs Open Space Plan. Citizens desire that this plan create a vision for an interconnected system and regional trailheads providing access to that system. The Stage B implementation recommendations of this plan refer to the Manitou Springs Open Space Plan and recommend considering regional trailhead locations that can serve both Manitou Springs trail system users and Incline users.

**Colorado Spring Utilities South Slope Watershed Plan - Ute Pass Trail Improvements - Design and Construction Notes Draft - October 18, 2010**
The Colorado Spring Utilities South Slope Watershed Plan adopted in 2010 includes recommendations for rerouting the Ute Trail. In the Ute Pass Trail Improvements - Design and Construction Notes Draft dated October 18, 2010 the reroute recommendations are consistent with the recommendations of this study. It will link Ute Trail users to the Barr Trail trailhead via improvements to the the contour social trail currently connecting the base of the Incline to the Barr Trailhead parking lot. According the El Paso County Park Planning staff, El Paso County will pursue GOCO funding in 2012 to construct the lower portion of the Ute Trail reroute. Given the GOCO selection criteria, this provides an excellent opportunity for demonstrating regional coordination and project interconnectivity in grant submissions.

**Manitou Springs Parking Authority Board - 2009-present**
Based on consistent public, neighborhood and staff input, parking throughout Manitou Springs is a concern. Parking solutions along Ruxton Avenue are the focus of this Manitou Incline Site Development and Management Plan. All recommendations within this plan were discussed and coordinated with the Parking Authority Board (an advisory committee appointed by City Council), Manitou Springs parking consultants, residents, and Manitou Springs staff. The City of Manitou Springs is responsible for implementation of the parking recommendations in this plan. It is anticipated that the Staged implementation will allow Manitou Springs flexibility with how it implements the parking recommendations in conjunction with its Parking Management Study Completed by Carl Walker and its other City-wide commercial and residential programs.
Transit Options - Regional and/or Manitou Springs
The public voiced a desire for transit-based access to the Incline, recognizing both the environmental and community benefits of transit. The public also recognizes the need for clean, reliable service that corresponds to the times of peak Incline use and the need to adjust parking opportunities in order to encourage ridership. This plan recommends Manitou Springs consider undertaking a Transit Plan in Stage C that includes ridership by Incline users. Manitou Springs is currently participating in a Regional Transit Task Force which is looking at the regional transit issues; because of this, the City staff and Parking Authority Board are exploring ways to get a circulator up and running.