

Ruxton Avenue Use and Impact Study

Manitou Springs, CO November, 2015

> Friends of Ruxton Canyon

WWW.RUXTONCANYON.COM/IMPACT-STUDY











Exec	cutive Summary	3
I.	Purpose	4
II.	Data Collection Process	5
III.	Ruxton Canyon History	6
IV.	Current Conditions	7
	A. Ruxton Avenue	8
	B. Residential Use	9
	C. Business Use	10
	D. Ruxton Avenue Attractions	11
	E. Manitou Incline and Barr Trail	12
	F. Vehicular & Pedestrian Traffic	13
	G. Alternative Transportation	14
	H. Parking	15
	I. Trip Generation Estimates	16
	J. Projections and Trends	17
	K. Quality of Life	18
۷.	Next Steps	20
VI.	Potential Implementation Strategies	22
	A. Land Use	22
	B. Parking	23
	C. Street and Transportation	24
	D. Signage	25
	E. Management & Maintenance	26
	F. Revenue Generation Potential	27
VII.	Appendix	28
VIII.	Acknowledgement	52
IX.	References	53

This study was commissioned by Manitou Springs residents, businesses, the Cog Railway, and the City of Manitou Springs to study the use and impact of Ruxton Avenue.

For over a century, many of Manitou Springs attractions have been adjacent to Ruxton Avenue. The Corridor is accessed via a two lane dead-end road from the roundabout at Manitou Avenue to just beyond the Cog Railway Depot. It serves as the pedestrian and train access point to Pikes Peak and the surrounding mountain areas via the Cog Railway, Barr Trail, the Intemann Trail, Ute Pass Trail, and the Manitou Incline. It is also home to the Miramont Castle Museum, Iron Springs, the Iron Springs Chateau and other commercial businesses. Over 120 single- and multi-family homes line the corridor as well as many more in the adjacent neighborhood.

The corridor has always experienced times of vehicular congestion due to the Cog Railway and other amenities at the base of Mt. Manitou. However, prior to the influx of users of the Incline, the hours of operation generally did not begin before 8 a.m. After the legalized opening of the Incline in February 2013, with dawn to dusk hours, the area has experienced additional congestion, noise, and as reported by area residents, a general decline in the quality of life.

During the summer of 2015, Altitude Land Consultants documented and observed the uses and impacts on the area. Residential, business, visitor and user surveys were conducted along with collecting primary and secondary research data. It is estimated that over 500,000 people per year access the attractions along Ruxton Avenue by vehicle, on foot, and by bicycle. As expected, weekends, Friday afternoons and holidays are the busiest times, coinciding with the Cog Railway's peak season.

It was observed that the Ruxton Avenue streetscape is generally in poor condition which contributes to a negative impact on safety and poor impression of the City as a whole. In some areas, the roadway is too narrow for the significant number of pedestrians and vehicles, and the sidewalk is blocked by telephone poles, signs, and other obstructions.

This study also contains preliminary land use, parking, street, and transportation recommendations, however they should be studied in greater depth. Some will be easier to implement than others. The goal of this study is to identify current conditions of the Corridor so that the community can progress to address safety and quality of life issues while providing a unique and enjoyable user experience.



Ruxton Avenue Corridor—Use and Impact Study

I. PURPOSE



Limited sidewalk space inhibits safe pedestrian passage

We believe that the data collected can serve as an important tool in creating public/ private solutions to address the critical issues. The goal of this document is to evaluate the functionality of Ruxton Corridor, also known as Englemann Canyon, two years after the legalization of the Manitou Incline.

We have identified the following primary concerns for the Ruxton Avenue Corridor:

- Increased Traffic/Congestion
- Quality of Life
- Safety
- Ruxton Avenue User Experience
- Parking & Multi-modal Transportation Issues

This document is an assembly of data and observations that will lead to informed policy recommendations. It's purpose is to prepare for emerging trends and assist the City of Manitou Springs in the decision-making process and strategic planning.

This study differs from the typical Planning Study in that it focuses on a single thoroughfare rather than the macro-scale of the city as a whole. It is also focused on existing conditions and did not include the typical public stakeholder meetings necessary to formulate a community vision. We believe that the data collected can serve as an important tool in creating public/private solutions to address the critical issues.

Ideally, the Manitou Springs Master Plan/ Hazard Mitigation Plan, currently under way, can use the data compiled and provide a focus on Ruxton Avenue in their public process. Data collected for the study came from multiple sources and observations. Altitude Land Consultants (ALC) made direct observations, collected traffic and pedestrian counts, conducted interviews, and distributed business and residential surveys.

Data gathered was focused primarily on the vehicular and pedestrian circulation of the corridor. In collecting data, our intention was to assemble information on an average day along Ruxton Avenue. Data was gathered between the hours of 5:00 a.m. and 9:00 p.m. (Sunrise to Sunset) seven days of the week. Data was not collected during inclement weather or peak holidays with the exception of a traffic count on Labor Day Weekend. Data for Labor Day weekend was collected by LSC Transportation Consultants, Inc.

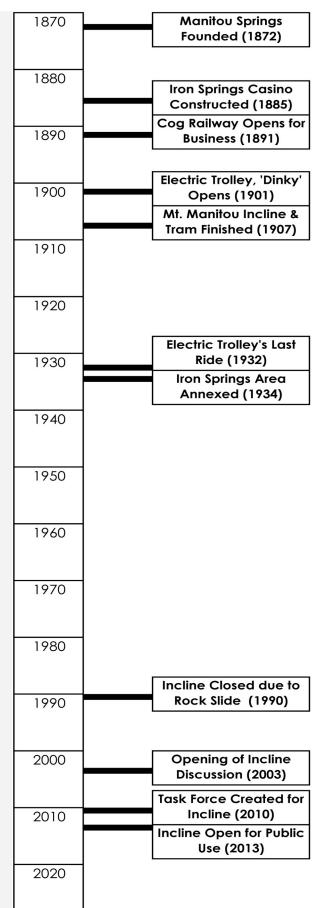
ALC collected pedestrian and vehicular data primarily at two locations with a manual counter to record entries in block time periods.

Secondary data was provided by:

- Metro Mountain Metropolitan Transit: Shuttle counts;
- Colorado Springs Parks & Recreation:
 Incline Usage;
- Manitou Springs Police Department: Ruxton Volume, Velocity and Parking Tickets; and
- Prior Studies and Documentation

Data Collected

- Vehicular Volume (Hourly)
- Vehicular Velocity
- Pedestrian Volume (Hourly)
- Pedestrian Behavior
 - Side of Thoroughfare
 - Fitness vs. Non-Fitness
 Apparel
- Pedestrian Verbal Survey
- Residential Online Survey
- Business Online Survey
- Shuttle Ridership
- Parking Violations
- Sidewalk and Street Cross-Section Data
- Emergency Call Trends



The City of Manitou Springs and surrounds has a long history of transportation, long before importance of motorized vehicles. An electric street trolley ran adjacent to Ruxton Avenue and once provided the main source of transportation in the corridor. Tourism became popular at the base of Mt. Manitou with the opening of the Cog Railway. In 1907, the Incline on Mt. Manitou was completed as a tram to support the construction of the waterline for a hydroelectric plant. Upon completion of the waterline construction, the tram became a tourist attraction boasting a 16-minute ride with approximately 10-miles of trails with scenic views of the region. The area even once included a casino with ancillary attractions.

Upper Ruxton Canyon continued its tourist allure when it was annexed by the City of Manitou Springs in 1934. In 1990, the Incline Tram closed due to a rock slide and the tram rails were removed. It was shortly after this that the Incline began being used illegally.

Neighborhood concerns over negative effects from the increasingly popular Incline resulted in a meeting of the Incline property owners in 2003 to discuss the potential opening of the Incline to the public. A task force was subsequently formed in 2010 and the Site Development and Management Plan was completed in 2011.

Inter-governmental agreements were signed between Colorado Springs and Manitou Springs in 2012 and the Incline was opened for use in February of 2013. Significant improvements were completed to approximately 1/3 of the Incline in 2014.

V. CURRENT CONDITION

Introduction

Ruxton Avenue is most profoundly known for being the connection between the downtown area of Manitou Springs and the popular attractions at the base Mt. Manitou including the Iron Springs Chateau, Cog Railway, the Incline, and the trailheads for the Barr Trail, the Ute Pass Regional Trail and the Intemann Trail. Ruxton is also home to the famous Miramont Castle. With so many tourist destinations, the corridor experiences a high volume of vehicle and pedestrians relative to its infrastructure through a primarily residential neighborhood.

Congestion becomes most prevalent at the intersection of Ruxton Avenue and Manitou Avenue (eastbound) and at the Cog Railway crosswalk (westbound).

A contract, signed in 2013 with Mountain Metropolitan Transit, provides a seasonal free shuttle to aid in alleviating the impact of the traffic volume. Ridership numbers have increased with the implementation of the free shuttle, yet over 80% of the residents of the Pikes Peak Region visiting the Ruxton Avenue attractions attempt to park at the base of Mt. Manitou or on Ruxton Avenue. (See Page 55 of the Appendix).

There is a concern for the safety of pedestrians between Manitou Ave. and the base of Mt. Manitou. Narrow, and obstructed pedestrian sidewalks result in individuals walking in the street, impeding and compromising safety.

In addition to pedestrian, bicycle and vehicular conflicts, there is a significant number of violations of the posted parking regulations, however the quantity has decreased since 2013 (See Page 40 of the Appendix). Over 80% of the residents of the Pikes Peak Region visiting Ruxton Avenue attractions attempt to park at the base of Mt. Manitou or Ruxton Avenue.



Vehicular congestion along Ruxton Ave.

Based upon data gathered, it is estimated that there are <u>5,280</u> trips per summer weekend day.

Ruxton Avenue Corridor—Use and Impact Study



Pedestrian use of roadway on Ruxton Ave.

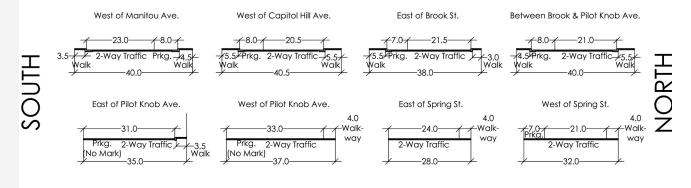
Narrow and obstructed sidewalks create dangerous conditions for pedestrians and vehicles.

A. Ruxton Avenue

Ruxton Avenue functions as a major connector between Historic Downtown Manitou Springs and the popular attractions at the base of Mt. Manitou. Although the road is steeply-sloped and narrow, it serves as the only way in and out for vehicles.

The thoroughfare includes two-way traffic and on-street parking on one or both sides. The road dimensions are very inconsistent. As can be seen by the diagram below, the width of the thoroughfare (including sidewalks) ranges from 28 to 40.5 feet. The pedestrian to vehicle interface varies from being vertically separated (east of Pilot Street) to a simple white painted line (west of Pilot Street).

Sidewalk obstructions, including power poles, signs, and overgrown vegetation result in pedestrians stepping into the street to walk or run side-by-side. This experience is not conducive to a safe transportation environment and can leave a poor impression for visitors.



The current width of the street and presence of parking and walkways vary.

IV. CURRENT CONDITIONS

B. Residential Use

Residences on Ruxton Avenue and adjacent neighborhoods which utilize Ruxton Avenue include the following:

- 190 Single-Family Housing Units*
- 12 Multi-Family Housing Units*

Ruxton Avenue, on its own, has **124 residential units which includes single-family homes, apartments, mobile homes and townhouses. Accompanying the 124 dwelling units are 122 off-street (driveway & garage) parking spaces.

Observation showed us that some of the single family housing units closer to Manitou Avenue also include a home occupation (artist studio or other) along Ruxton Avenue.

In the online residential survey, the biggest concern from residents was safety. Of the 44 responses obtained, 34% reported a safety level of 1 or 2 (scale of 1-5, 5 being the safest) when traveling as a pedestrian through Ruxton Avenue. Qualitative responses were received and can be viewed in the appendix. 77% of respondents mentioned parking, signage, and road improvements as the major challenges facing the Ruxton Corridor. Bike lanes, defined pedestrian spaces and better signage were also commonly mentioned. According to the ITE manuals 1899 trips per day could be accounted for by the existing residences.



Residential area assumed to utilize Ruxton Avenue. Larger Image can be found in the Appendix.

Less than 35% of the surveyed residents felt safe as a pedestrian on Ruxton Avenue.

*Data was derived from Manitou Springs GIS data, 2015.

**Data was provided by the Manitou Springs Planning Department in 2015.

Ruxton Avenue Corridor—Use and Impact Study

48% of the business respondents reported that the Incline had a somewhat negative or very negative impact on businesses; 38% had a somewhat positive impact on business.

"Love that our charming little town attracts healthy-minded, active folks! With the Incline privilege comes responsibility."

"Parking is a big issue as we know. The folks that hike the Incline come to town, take up all the parking on Ruxton and on the west end of town, leaving no parking for customers to come in and shop."

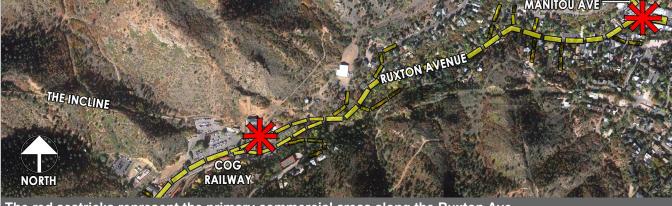
Manitou Springs Business Owners

C. Business Use

Of the 21 responses from an online Business Survey of the Chamber of Commerce membership, 38% reported that the legalization of the Incline had a somewhat positive impact on their business with 0% saying it had a very positive impact. 48% of the business respondents reported that the Incline had a somewhat negative or very negative impact on businesses.

Even though a large percentage feel a negative impact, some qualitative responses show the appreciation that business owners have for the Incline. One business owner describes the Incline as being positive, but refers to the systematic changes that need to be made to reach its full potential.

Manitou Springs is a tourist-based economy with a significant potential to develop an outdoor recreation emphasis. Ruxton Avenue is a primary corridor for that industry. Tourism brings in customers to all of the Manitou Springs shops and restaurants. Although, many business representatives addressed parking as a major concern, ALC believes that a lack of parking is an indicator of success. The management and enforcement of the parking is the critical element to maintain high turnover rates of the on-street parking.



The red aestricks represent the primary commercial areas along the Ruxton Ave.

Ruxton Avenue Corridor—Use and Impact Study

D. Ruxton Avenue Attractions

- Pikes Peak Cog Railway: The Cog has been a staple of Manitou Springs' tourism since 1891. Today, it operates year-round, weather-permitting, seven days per week. At the end of May, the Cog operates 6 trains with three cars each increasing to 8 trains at its peak at the end of June. Each train, with 3 cars per train totals 292 people per trip. The Cog serves approximately 275,000 visitors per year and generates 220,000 vehicle trips on Ruxton per year. The first departure of the day, at its peak, is at 8:00 a.m. and the last arrival time is at 8:30 p.m.
- <u>Miramont Castle</u>: Located just off Ruxton Avenue, this 1885 Castle attracts visitors to its exhibits and tea room. It includes its own parking lot in a residential area. The Castle averages between 100 and 120 visitors per month in the summer. In the summer months, the hours of operation are between 9:00 a.m. to 5:00 p.m.
- Iron Springs Chateau Melodrama: Located adjacent to the Cog Railway, it is a destination that provides dinner, a melodrama theatre and special events. In general, the dinner reservations begin at 6:00 p.m. with the theatre doors opening at 7:30 p.m. The owners of the Iron Springs Chateau also provide approximately 56 paid on-street parking spaces starting at 6:00 a.m.





Cog Railway Depot (Photo Credit: The Broadmoor Pikes Peak Cog Railway)



Miramont Castle (Photo Credit: ManitouSprings.org)



Page 11

"Many residents of Manitou who used to do the Incline no longer do since it became so crowded."

-Manitou Springs Resident



The Manitou Incline. Photo By: UltraRob.com

From 7/20/13 through 10/26/15, there have been approximately 688,071 Incline users.

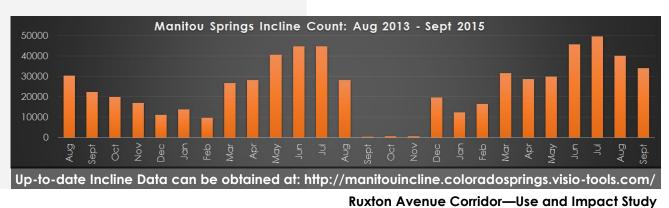
E. Manitou Incline and Trails

The Incline located on Mt. Manitou is a popular attraction for athletes, visitors, and locals alike. The Incline has been used for training by Olympians, the military, and others since 1990 and has been written about internationally by such outlets as ESPN, Sports Illustrated, and the New York Times.

According to the Colorado Springs' website, since records have been kept starting July 20, 2013, **the Incline has reached user counts of 2,966 in a single day** (July 3, 2015) and **12,551 user counts (June 29 – July 5) in just one week and 49,590 in July, 2015.** In 2014, the Incline averaged 708 people per day throughout the year. The Incline was legalized for patron use in February of 2013, but closed for repair for three months in August and reopened December 2014.

Located adjacent to the Incline, the Barr Trail is another popular and historic hiking destination. Rules dictate that Incline users descend down Mt. Manitou using Barr Trail. As a result, the lower 3-miles of Barr Trail is deteriorating more rapidly since the legalization of the Incline.

Additional regional trails include the Ute Pass Regional Trail and the Intemann Trails. Currently neither trail appears to have excessive volume.

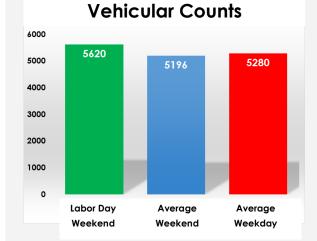


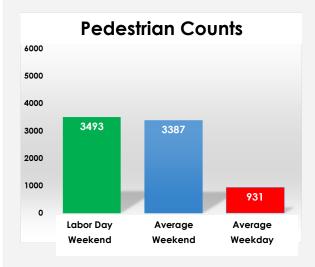
F. Vehicular & Pedestrian Traffic

Ruxton Avenue experiences a high volume of vehicles per day with both tourism-related destinations and residential traffic. The road ends in a box canyon 0.7 miles to the west of its intersection with Manitou Avenue. Over 200 residences utilize the corridor daily. Daily traffic counts show spikes in the weekend mornings and more level trends on the weekdays with both having spikes at 6 a.m. Data also indicates a significant increase of pedestrian traffic and public transit users on weekends. However, this trend does not translate to vehicle counts from weekday to weekend.

Generally, pedestrian counts are three times as high on weekend mornings. ALC found that 72% - 74% of pedestrians travel on the north sidewalk when measured west of the Miramont Castle.

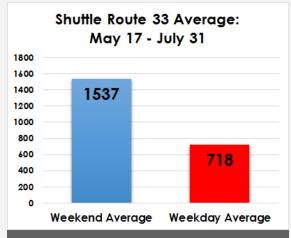
Traffic counts provided by Manitou Springs Police Department found that the average speed was 16.8 mph, which is less than the 20 mph posted speed limit. Decreased speed may be a result of users feeling lost, confused or driving in congested traffic. Slower speeds are preferable to pedestrian safety and business visibility. However, unsafe conditions occur when vehicles attempt to overcome heavy traffic by driving down the wrong side of the road, greatly endangering unsuspecting vehicles and pedestrians. Congestion is also a major concern for emergency vehicles and community response times.







Pedestrian Traffic in Roadway



Transit use is exponentially higher on the weekend than the weekday.

As a part of the data collection, ALC staff utilized the shuttle for site visits and noted the following concerns/ issues:

- A Fare Box for a free shuttle is confusing
- Intermediate stops are optional depending on shuttle capacity

G. Alternative Transportation

In 2013, a free seasonal shuttle system was implemented in Manitou Springs as a condition of Incline legalization. The system includes two free shuttles during the weekdays and three on the weekends. In 2015, patrons were able to use the free shuttles from May 17 to September 12. The shuttle route begins right next to the free parking lot located behind the Tajine Alami Restaurant and is the only public transportation that travels Manitou Avenue and Ruxton Avenue. The shuttle runs from 6 a.m. to 8:15 p.m. every day on 20-minute intervals with a second shuttle operating from 10 a.m. - 8:15 p.m. on Saturdays, Sundays, and holidays.

The shuttle system appears to be underutilized by pedestrians accessing Ruxton Avenue. In the Pedestrian Survey performed by ALC, 164 Non-Manitou patrons on Ruxton Avenue were surveyed. Only 4% used the free parking and shuttle while 87% said they did not know of these services. 80% surveyed said they would be somewhat likely or very likely to use the free shuttle in the future. Furthermore, the gap between shuttle use on the weekend compared to weekday is very large due parking capacity. On summer weekends, Incline patrons are turned away and informed about the shuttle and free parking.



Walking Distances to the base of Mt. Manitou.

Ruxton Avenue Corridor—Use and Impact Study

<u>H. Parking</u>

Parking demand is the highest at the two commercial-centric ends of Ruxton Avenue. With the increased use of the Manitou Incline, overflow parking occurs along Ruxton Avenue, often times in violation of posted restrictions.

Private parking is provided for a summer rate of \$5 per day in three lots near the Cog and Manitou Incline. The three parking lots, which account for just under 350 parking spaces, include the privately owned Cog Railway, Iron Springs Chateau, and publicly owned Barr Trail.

Non-Street Available Parking:

COG Railway - 250 parking spaces (depending on vehicle size), Iron Springs Chateau - 56 parking spaces Barr Trail – 34 parking spaces (All revenue is dedicated to Barr Trail Maintenance)

Much of Ruxton Avenue is open to the public for Pay-By-Plate parking on weekdays between the hours of 8 a.m. to 4 p.m. All other times are reserved for local residents by parking permit. Large sections of Ruxton Avenue are strictly reserved for residents. Given the demand for Incline Parking is generally before 8 a.m., illegal parking along Ruxton is often the result.

Parking has been identified by residents, City leaders and visitors as one of the top issues that needs to be continuously addressed. The City has implemented the free shuttle to combat the parking demands, however it has not solved the traffic issues on Ruxton Avenue. Based upon the Police ticket data, illegal parking within the Ruxton Corridor remains high and signage in the Ruxton Corridor under advertises the City's transit and parking services.

Parking Inventory from the Incline Development and Management Plan (2011):

Barr Trail Parking Lot:	34
Cog Railway Employee Lot:	56
Iron Springs Chateau:	46
Public: Cog to Winter:	25
Public: Fairview to Spring:	17
Public: Spring to Church:	47
Public: Church to Osage:	33
Public: Osage to Manitou:	<u>9</u>
Total:	267

"...374 vehicles [in a given day] did not find a parking space upon entering the [Barr Trail] 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."

-Manitou Incline Site Development and Management Plan, 2011

Traffic Analysis:

Land Use	Units	<u>Trips</u>
Single-family Res:	190	1,818
Multi-family Res:	12	81
	202	1.899

*Data based upon ITE (Institute of Transportation Engineers) data for Single-family Residential (ITE 210); Multi-family Residential (ITE 220). Calculator available at FehrandPeers.com/vmt

Destination-Generated Traffic (Per Summer Day):

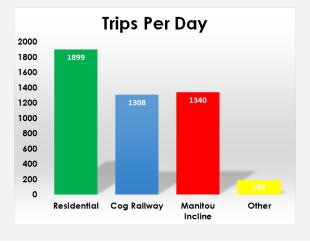
Destination Users	<u>s per Da</u>	y Trips**
Pikes Peak Cog	2,200	1,308
Manitou Incline	1,474	1,340
Miramont Castle	105	84
<u>Chateau</u>	***130	104
Subtotal:	3,859	2,836

Other destinations are along the corridor, such as the Ute and Barr Trail, however recent/relevant data was not readily available.

**Cog calculated a 3.365 people per vehicle. Other tourist-related vehicular trips assume a factor of 2.5 people per vehicle. Each vehicle accounts for two trips.

**The Incline utilizes a occupancy factor of 2.2 people per vehicle (Recreational Trip Purpose)

***The Iron Springs Chateau calculation for Visitors per day: (100 +160)/2



I. Trip Generation Estimates

Trip generation is a traffic planning methodology of estimating traffic volumes. For the purposes of this study, these figures are estimates only. A more detailed traffic analysis may be needed at some point.

Tourist-related Trips Per Day:

The tourist-related trips are based on the data provided (visitors per day). The Cog Railway provided information that suggested that their users/vehicle ratio is 1 vehicle per 3.365 people. We have used a factor of 2.2 occupancy per vehicle for the Incline, as it is considered as "Recreational Trip Purpose." We have used an estimated 2.5 visitors per vehicles and two trips per visitor for other destinations. The following is the formula utilized for the Tourist-related Trips per day:

Example: 105 visitors / 2.5 visitors per car) *2 trips = 84 trips per day (Miramont Castle)

Non-tourist-related Trips Per Day:

The trips per day for this area includes vehicles that use Ruxton Avenue to travel to and from their homes. Residential trip generation, similar to all trip generation, is a broad calculation and does not account for the walkability of a place or vehicle ownership per home.

Single-family Trip Generation: *9.57 trips Multi-family Trip Generation: *6.72 trips

Actual Observed Data Results:

5,196 trips per summer week day.

<u>5,280</u> trips per summer weekend day.

Ruxton Avenue Corridor—Use and Impact Study

IV. CURRENT CONDITION

J. Projections and Trends

With the popularity of the Manitou Incline and the upcoming renovations to the Pikes Peak Summit House, ALC forecasts an increase of usage to the Incline and Barr Trail. This increase will subsequently produce further demands on the corridor.

The projections to the right are based on data obtained from 2012 to 2015.

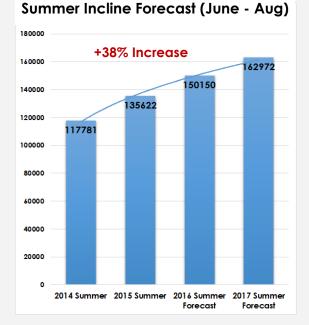
The Cog Railway has a capacity based on current technology, number of trains, tracks, ability to pay, and time in the day to mobilize cars up to the summit of Pikes Peak. Without adding cars to the train, the Cog can transport a maximum of **2,336 people** (292 seats * 8 trips) to the top of Pikes Peak. In the summer months, they are currently transporting an average of 2,200 people per day. Whereas the Cog has 2,200 riders per day and an average occupancy of 3.365 riders per vehicle, it is estimated that the Cog Railway contributes to the use of **654 parking spaces per day** with a turnover rate of 3.5 hours per parked vehicle.

The Manitou Incline averaged 1,474 users per day in the Summer of 2015. *If* parking were readily available at the base of the Incline and all users of the Incline were to access it via automobile, and an occupancy factor of 2.2. were applied, the Incline would contribute to <u>670 parking spaces per day</u> with an approximate turnover rate of 1 to 2 hours.

The Incline has a much higher capacity for growth than the Cog, because it is not constrained by seats. From the previous year's data, it is projected that by 2017, an average of **1,771 people** will use the Incline daily (162,972 users over 92 days from June through August).

Emergency Call Forecast (Annual)





Observed average trips per day was 5,196 trips per weekday and 5,280 trips per weekend day.

Noise Pollution (Ruxton Ave.)

Uphill High Traffic:	73 dB
Downhill High Traffic:	70 dB
Uphill Single Car:	58 dB
Downhill Single Car:	51 dB

*Decibel levels measured from the sidewalk of Ruxton Avenue with the Phone App: <u>Sound Meter</u>



"In recent years the fire department has had to learn to deploy resources on foot or on specialized vehicles, deep into the field to manage incidents. This has required the fire department to develop new and varying equipment packages to manage these incidents that present extreme environmental challenges. Additionally, because these incidents are manpower intensive and require a great deal of time to mitigate, local resources are sometimes greatly taxed."

- Manitou Springs Fire Department October 8, 2015

K. Quality of Life

Ruxton Avenue is a unique corridor for many reasons including:

- Single-point of vehicular access to major regional attractions (Cog, Manitou Incline, and the Barr Trail to Pikes Peak Summit)
- Narrow, rural character street anchored by high intensity uses on both ends
- Steep incline and slope of the street (averages slightly over 6% grade)
- Narrow to non-existent sidewalks
- Curvilinear street with several blind spots
- Heavy pedestrian traffic shared with vehicles, bicycles and buses

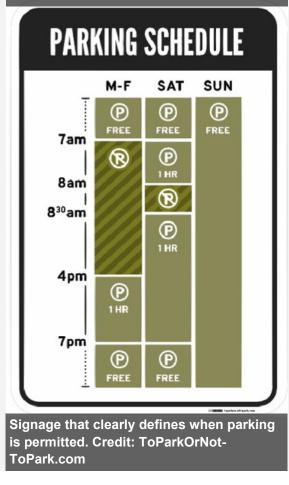
Given the unique characteristics of the Ruxton Corridor, the residents, visitors, and businesses that utilize the corridor experience less than desirable conditions. Heavy vehicular traffic provides the greatest impact for quality of life in the corridor. The following are concerns associated with the quantity of traffic and increased usage of the Incline:

- Emergency Vehicle Access
- Destruction of Vegetation
- Littering, Noise and Air Pollution

This page intentionally left blank.



Temporary Walkability signage in Colorado Springs. Credit: Colorado Springs Urban Intervention



Experiments, (aka Tactical Urbanism)

Many National and International cities have begun to use short-term experiments known as Tactical Urbanism. Often times, these urban experiments involve modifications to vehicular and pedestrian circulation patterns.

While traffic projections and models provide a general basis for how a thoroughfare will function, the one size fits all process cannot account for localized habits and variables.

We see opportunities for Ruxton Avenue to test and collect data for some Potential Implementation Strategies including:

- Provide information about parking availability on Ruxton Avenue via a mobile app or other manual means, including signs on Manitou Avenue.
- Create new, temporary walkability signs, that describe the walk-time, distance and level of difficulty between destinations.
 Often times, people don't realize how short the walks actually are and opt to drive between destinations.
- Create new signs to better describe where visitors can park rather than the confusing signs that exist today that only describe where they cannot park.
- Use of vertical separators, where space is available, to delineate travel lanes providing definable space for bikes and pedestrians.

V. NEXT STEI

Past, Current & Future Planning Studies

The following list are past and current planning studies applicable to this study:

- Manitou Springs Master Plan/Hazard Mitigation Plan (In Progress)
- Trails and Open Space Plan (In Progress) •
- El Paso County, Colorado: Economic **Development Assessment Team Reports** (October 2014)
- Final Residential Parking Program Recommendations (August 9, 2012)
- Red Mountain Open Space Land Stewardship Plan (March 9, 2011)
- Manitou Incline Site Development and • Management Plan (February 4, 2011)
- Historic Bridges and Walls Assessment Report (February 20, 2009)
- Carl Walker White Paper: On-Street Pay Parking (2008)
- Carl Walker White Paper: Parking In-Lieu Fees (2008)
- Carl Walker Parking Management Study (December 21, 2007)
- Manitou Avenue Master Plan (January 23, 1998)
- Manitou Springs Open Space Plan (April, 1997)

ALC recommends that additional studies be performed in the following areas:

- Ruxton Avenue Connectivity Plan and Design Study
- Ruxton Avenue Streetscape Plan
- Feasibility Study for Independent Incline Management



Manitou Incline Site Development and Management Plan

a collaboration between the Cities of Colorado Springs and Manitou Springs





City of Manitou Springs, CO Parking Management Study

Economic Development Council

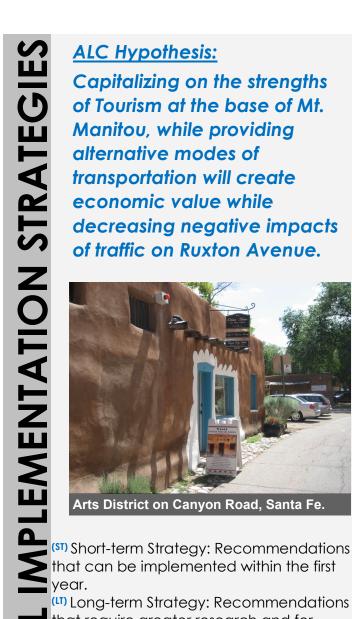
Presented to: Manitou Springs

Central Manitou Springs BID 606 Manitou Avenue Manitou Springs, CO 80829 719.685.9741 cell: 719.321.8561

Presented by:

Carl Walker, Inc. iot Road, Suite 107 Tempe, AZ 85284 Phone: 480.505.0088 Fax: 480.505.0090





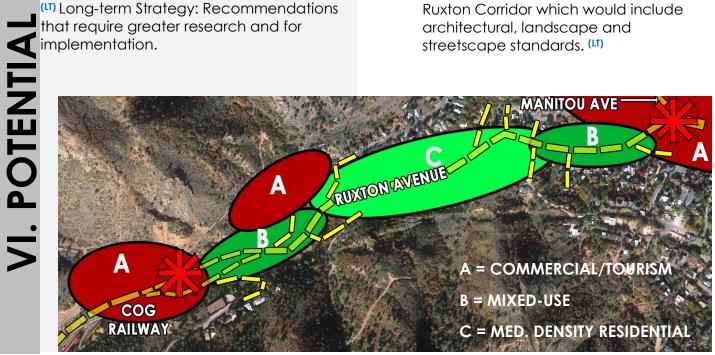
(ST) Short-term Strateay: Recommendations

(LT) Long-term Strategy: Recommendations

A. Land Use

Ruxton Avenue has always served as a connector between two primary commercial nodes, both serving as regional tourist destinations. In regard to the Land Use, Ruxton is unique in that the corridor is lined with predominantly residential uses. Given that background, ALC offers the following land use strategies:

- Encourage the transition of land use of the area at the base of Mt. Manitou toward more tourist-related uses. Currently, parking is the predominant land use which is counter-productive for decreasing traffic on Ruxton Avenue. Contrary to adding more parking, the City should commit to alternative modes of transportation and capitalize on the high potential for revenue aeneration from activities such shopping, leisure, lodging, and entertainment. (ST)
- Explore the creation and enhancement of a pedestrian Arts District along Ruxton Avenue, specifically adjacent to the commercial nodes. (ST)
- Create an Urban Design Plan that could guide modifications to the zoning code for the corridor. A form-based approach may be desirable for the Ruxton Corridor which would include architectural, landscape and streetscape standards. (LT)



<u>B. Parking</u>

The goal of the corridor should be to limit the quantity of parking at the west end of the corridor, as well as limit the demand for traveling the corridor for the inexpensive (sometimes free) parking space adjacent to the destination. The following are some strategies that could be further explored in conjunction with greater mobility options:

- Increase seasonal parking prices for private and public parking lots (Cog Railway, Barr Trail and the Iron Spring Chateau). ^(ST)
- Analyze eventual decrease of parking at the base of Mt. Manitou in conjunction with greater transit and mobility options from Downtown Manitou serving Mt. Manitou. ^(LT)
- Incorporate metered parking with higher frequency of parking turn-over (1 hr. Parking with first half hour free); with the exception of free parking for residents with a permit. ^(ST)
- Establish interactive signage that display when parking is unavailable ^(ST)
- Define on-street parking spaces with clear markings and use adjustable demand-based parking rates. ^(ST)
- Explore opportunities for a shared parking structure with the City of Colorado Springs between Manitou Springs and Colorado Springs. Such a structure could serve as a Park & Ride for Colorado Springs and Manitou Springs. ^(LT)
- Explore opportunities for a parking structure at Old Man's Trail that would incorporate a welcome center for tourist information. (LT)
- Explore opportunities to address congestion at the Iron Springs Chateau, the Cog, and at the intersection of Manitou Avenue. ^(ST)
- Explore a bicycle valet service for bicycle storage to enable people to travel to the Incline by bicycle. ^(ST)

ALC Hypothesis:

Demand-based parking rates are important for the functionality of the street, but must be in conjunction with safe alternatives to close parking such as safe sidewalks and transit opportunities.



Interactive Parking Signage

In an October 20 Public Hearing, Manitou Springs City Council increased the price of parking along Ruxton Avenue as follows:

- Barr Trail Lot: \$10 per day with a \$5 Refund Voucher from Barr Camp
- Ruxton Metered Parking
 increased to \$5 per hour

^(ST) Short-term Strategy ^(LT) Long-term Strategy ALC Hypothesis: To decrease vehicular traffic on Ruxton, safe methods of alternative modes of transportation are critical.



Sidewalk obstructions along Ruxton Ave

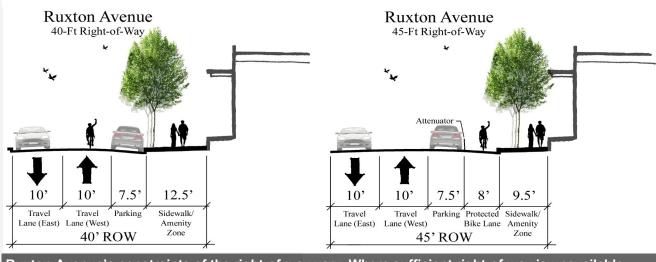
C. Street and Transportation

Ruxton Avenue serves the following modes of transportation on a daily basis: vehicles, buses, shuttles, bicycles, runners and walkers.

ALC suggests the following strategies for Ruxton Avenue:

STREET DESIGN

- Create an autonomous verticallyseparated sidewalk, decreasing pedestrian-vehicular conflicts. (ST)
- Provide protected bike lanes with parking, separating vehicular and pedestrian traffic. Sharrows should be considered where adequate width is unavailable. ^(ST)
- Condense vehicular travel lanes less than 10-feet in width, allowing defined space for on-street parking and other modes of transportation. ^(ST)
- Combine the two currently dysfunctional narrow sidewalks with the installation of a single, larger sidewalk.^(LT)
- Bury power lines and other overhead utility services. (LT)



PROPOSED RUXTON AVENUE CROSS-SECTIONS

ALTERNATIVE TRANSPORTATION

- Explore opportunities to provide transit via Chair Lift, Gondola, or other overhead transit opportunities, capitalizing the tourist-environment. (LT)
- Expand the shuttle service based upon ridership demand. (ST)
- Provide a dedicated trolley to the base of Mt. Manitou. (LT)
- Enhance, update, and better promote the shuttle system. Removal of the fare box is essential and shuttle stops on the route need to be better delineated with signs. (ST)

D. Signage

Signage along the Ruxton Corridor should be improved in the areas of usability, visual appearance, and location of informative signage. The strategic location of promotional city signs could be better located and designed for effectiveness of the message.

- Implement interactive signs for vehicular wayfinding:
 - Coordinate a sign located east and west of Downtown Manitou Springs indicating Mt. Manitou parking availability allowing visitors to weigh their transportation options. (ST)
 - Implement additional interactive signage located at the intersection of Ruxton and Manitou Avenues indicating the same message as east and west of downtown Manitou Springs. (ST)
- Incorporate a poster sign at the Incline and each public parking lot in Manitou Springs informing of the free shuttle parking, location, and schedule (ST)
- Update parking signs. Cities such as Los Angeles and Brisbane have employed a pattern-based sign with simplified rules (see http:// toparkornottopark.com/principles). This sort of system would allow explicit rules

instead of vague writing. (ST)

ALC Hypothesis:

Signage for the pedestrians and the automobiles is important to reduce confusion and frustration and provide a better user experience for all.



The chair lift at the Cheyenne Mountain Zoo is a tourist amenity.

(ST) Short-term Strategy (LT) Long-term Strategy

<u>ALC Hypothesis:</u> Maintenance is necessary for the user-experience of the public gem that is the Manitou Incline, as well as the pedestrian and vehicular routes to get to and from it.

E. Management & Maintenance of Incline

Management and Maintenance are necessary for most capital improvements. The Manitou Incline does not have a funding source dedicated for its maintenance. Revenue from Barr Trail parking lot is currently used for Incline maintenance. The increased deterioration found on the lower sections of Barr Trail is due to dramatically increased Incline usage.

- Manage the corridor improvements through the use of an existing agency, such as the Manitou Springs Urban Renewal Authority, or a new board or metropolitan district, could be formed to oversee management. ^(LT)
- Retain a paid director to oversee ongoing maintenance at the Incline and Barr Trail. ^(LT)
- Utilize the Friends of the Incline, or establish a board to manage potential cost and align with a 501(c)3 for potential tax breaks. ^(LT)
- Increase Tourism tax for the maintenance of tourist-related amenities. ^(LT)

^(ST) Short-term Strategy ^(LT) Long-term Strategy

F. Revenue Generation Potential

Funding is a necessary component to provide management and maintenance. Potential funding sources, which would vary for the wide array of implementation strategies, could include the following:

- Secure financial contributions from US Forest Service, Manitou Springs and, Colorado Springs Utilities, City of Colorado Springs and City of Manitou Springs, for funding sources as suggested in the Manitou Incline Site Development & Management Plan.^(LT)
- Explore partnership between Public agencies, Property Owners and/or Interested Developers (LT)
- Encourage Intergovernmental partnerships with the City of Colorado Springs. ^(LT)
- Create an Urban Renewal District for potential benefit from Tax-Increment Financing. ^(LT)
- Utilize PPRTA Funding (Ruxton Avenue is currently on the PPRTA list). (17)
- Impose a tourism tax on parking-related activities at the Incline. ^(LT)
- Explore tourist-based trolley's or a Gondola for a fee in conjunction with the City to decrease traffic concerns on Ruxton Avenue.
- Explore possibility of charging a fee for the use of the Incline or a toll to access Ruxton by vehicle beyond Capitol Hill (Residents & Employees exempt) ^(LT)
- Pursue sponsorships and non-intrusive retail marketing. ^(LT)
- Pursue Grants such as Colorado Community Development Block Grant Program; HUD grants - Transportation Investment Generating Economic Recovery (TIGER), Clean Fuels Grant Program; Charles Stewart Mott Grants; Greater Outdoors Colorado. (IT)

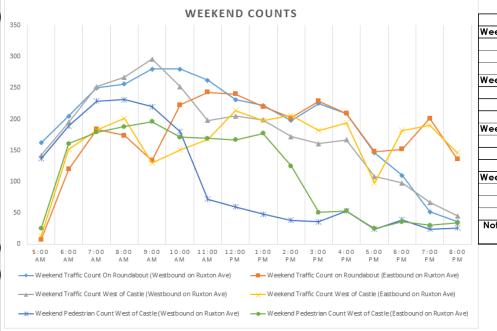
ALC Hypothesis:

Public/Private Partnerships are a valuable way to generate revenue for necessary maintenance. Profit-generation for private entities should be balanced with decreased demands on City Infrastructure.

A local example would be for a tourist-based entity providing Gondola rides for a fee would decrease the number of automobiles traveling Ruxton Avenue.

In 2014, the Incline averaged 708 patrons per day. \$1 per Incline user would theoretically generate \$258,420 per year.

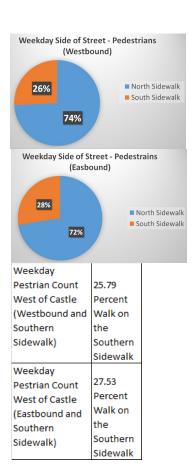
VII. APPENDIX: VEHICULAR TRAFFIC



Key: Dat	es of Counts Take
Weekend	Roundabout Counts
20-Jun	5am-10am
27-Jun	10am-5pm
28-Jun	5pm-9pm
Weekday	Roundabout Counts
23-Jun	5am-1pm
24-Jun	1pm-4pm
25-Jun	4pm-9pm
Weekend	West of Miramont Counts
11-Jul	5am-12pm
25-Jul	12pm-6pm
26-Jul	6pm-9pm
Weekday	West of Miramont Counts
30-Jun	5am-12pm
1-Jul	12pm-6pm
7-Jul	6pm-9pm
Note: Pedestrian	counts were not taken on
Ro	oundabout

Week- ends		5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	Weekend	Side of Street- Ped	estrians
	Weekend Traffic Count On Rounda- bout (Westbound on Ruxton Ave)	162	205	250	256	280	280	262	231	222	198	225	209	146	110	52	36	28%		I North Sidewalk
Traffic Count	Weekend Traffic Count on Rounda- bout (Eastbound on Ruxton Ave)	7	120		174	134	223	243	240	220		229	209					Weekend	Side of Street - Ped	
	Weekend Traffic Count West of Cas- tle (Westbound on Ruxton Ave)	142	195	252	267	296	252	198	205	199	172	161	167	108	98	67	45	27%	(Eastbound)	North Sidewalk
	Weekend Traffic Count West of Cas- tle (Eastbound on Ruxton Ave)	142	152	183	207	130	151	158		198			194						73%	South Sidewalk
L	,																		Weekend	
Week-		5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00		Pedestrian	27.65
ends		AM	AM	AM	AM	AM	AM	AM	PM	PM	PM	PM	PM	PM	PM	PM	PM		Count West of	Percent
	Weekend Pe-																		Castle	walk on
	destrian Count																		(Westbound and	the
	West of Castle (Westbound																		Southern	Southern
	on Ruxton																		Sidewalk)	Sidewalk
	Ave)																		Weekend	Slactraik
Pedestri- an Count		137	189	229	231	220	180	72	60	48	38	36	53	24	39	24	26		Pedestrian	26.52
	Weekend Pe-																		Count West of	Percent
	destrian Count																		Castle	walk on
	West of Castle (Eastbound on																		(Eastbound and	the
	Ruxton Ave)																		•	
		25	161	179	188	196	171	169	167	177	125	51	53	25	36	30	34		Southern	soutern
L		23	101	1/9	100	190	1/1	109	10/	1//	125	51	33	25	1 30	50	54		Sidewalk)	Sidewalk

		WEEKDAY COUNTS
,	es of Counts Take	350
	Roundabout Counts	
20-Jun	5am-10am	
27-Jun	10am-5pm	300
28-Jun	5pm-9pm	
Weekday	Roundabout Counts	250
23-Jun	5am-1pm	
24-Jun	1pm-4pm	
25-Jun	4pm-9pm	
Weekend	West of Miramont Counts	
11-Jul	5am-12pm	150
25-Jul	12pm-6pm	
26-Jul	6pm-9pm	
Weekday	West of Miramont Counts	
30-Jun	5am-12pm	
1-Jul	12pm-6pm	50
	6pm-9pm	
Note: Pedestrian	counts were not taken on	
Ro	oundabout	0 5:00 AM5:00 AM7:00 AM8:00 AM9:00 AM 10:00 11:00 12:00 1:00 PM2:00 PM3:00 PM4:00 PM5:00 PM6:00 PM7:00 PM8:00 PM
		S.00 AW 5.00 AW 5.00 AW 5.00 AW 5.00 AW 10.00 12:00 12:00 100 FM2.00 FM2.00 FM3.00 FW5.00 FW7.00 FW3.00 FW
		Weekday Traffic Count on Roundabout (West bound on Ruxton Ave)

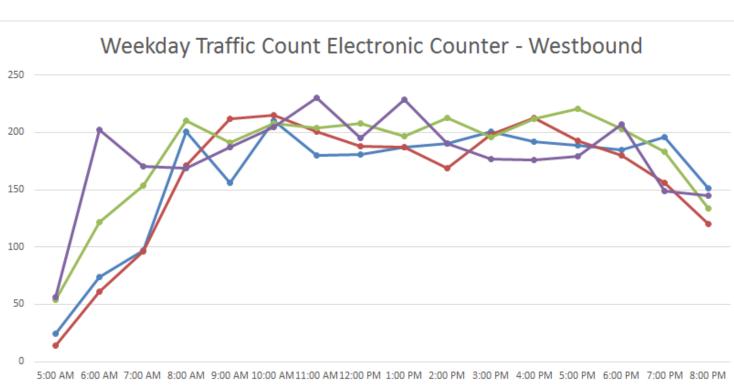


		5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	1:00	2:0			4:00	5:00	6:00	7:00	8:00
Weekday	5	AM	AM	AM	AM	AM	AM	AM	PM	PM	PI	VI P	M	PM	PM	PM	PM	PM
	Weekday Traffi Count on Roundabout (Westbound or Ruxton Ave)	71	120	149	144	203	219	225	214	210	18	37 1	73	201	182	152	121	103
Traffic Count		15	64	152	138	140	149	208	163	195	21	.3 2	25	158	202	170	211	165
	Weekday Traffi Count West of Castle (Westbound or Ruxton Ave)	40	69	122	136	206	199	141	136	193	16	54 1	86	169	172	124	104	105
	Weekday Traffi Count West of Castle (Eastbound on Ruxton Ave)	8	71	141	120	123	118	151	162	182	16	57 2	01	142	182	171	162	141
	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM		::00 PM	3:00 PM	4:00 PM		5:00 PM	6:00 PM	7:00 PM	8:00 PM
Weekda Pedestrian C West of Ca (Westboun Ruxton A	count stle d on	70	52	65	28	45	5 3:		29	33	19	3:	5	15	42	23	23	21
Weekda Pedestrian C West of Ca (Eastbound Ruxton Av	y count stle I on	9	60	27	31	18			37	21	24	2	7	18	19	26	35	21

VII. APPENDIX: VEHICULAR TRAFFIC

Weekdays

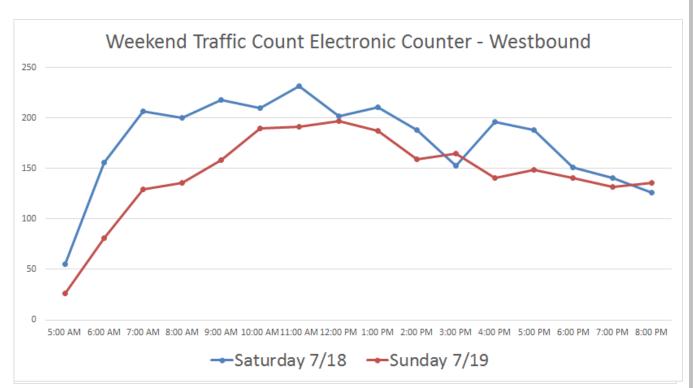
Pedestria



--Monday 7/20 --Tuesday 7/21 --Thursday 7/16 --Friday 7/17

Overall Average Speed for both Weekend and =16.8 Weekday Westbound Traffic

Weekday	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM
Monday 7/20	24	74	97	201	156	210	180	181	187	190	201	192	189	185	196	151
Tuesday 7/21	14	61	96	171	212	215	201	188	187	169	198	213	193	180	156	120
Thursday 7/10	5 54	122	154	210	191	208	204	208	197	213	196	212	221	203	183	134
Friday 7/17	56	202	170	169	187	205	230	195	229	190	177	176	179	207	149	145



Overall Average Speed for both Weekend and Weekday =16.8 Westbound Traffic

Weekend	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM
Saturday 7/18	55	156	207	200	218	210	232	202	211	188	153	196	188	151	141	126
Sunday 7/19	26	81	129	136	158	190	191	197	187	159	165	141	149	141	132	136

Wednesday June 25th Morning 9 am

Over 60% of the comments were concerned about confusion and location of attractions on Ruxton. 20% of the comments had to do with parking technology and clear information. 20% of the comments mentioned change but didn't have any applicable suggestions

- 1. Poor Signs are keeping high congestion and narrow streets are dangerous
- 2. Don't know where to park even in the morning when there should be less people
- 3. Need to get more people riding the bus
- 4. Keep buses going for free all year long
- 5. Put signs at the bottom of the incline to remind people as they go up
- Even though I know there is free parking, it is easier, more convenient, and affordable to park by the incline
- 7. We are from out of state and we just used our GPS to get here so we have no suggestions for further improvement
- 8. We are from out of state and had to come the day before going on the COG Railway just to know where we were going to go the today
- 9. I am from Woodland Park and one thing I would improve is the Kiosk, I have no clue how to operate them
- 10. We couldn't find much information on the website, there needs to be better advertising of the free parking and shuttle

Monday July 13th Afternoon 12 pm

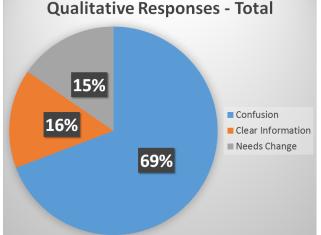
75% of the comments were concerned about confusion and location of attractions on Ruxton. 12.5% of the comments suggested parking improvements. 12.5% of the comments mentioned change but didn't have any applicable suggestions

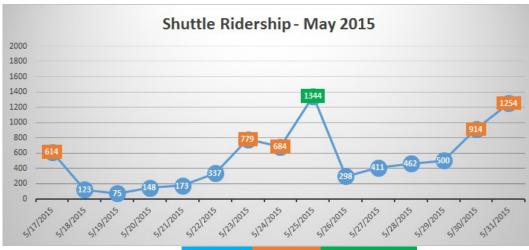
- 1. I heard about free shuttle, but didn't know where it was
- 2. How much does the shuttle cost?
- 3. There should be parking ramps
- 4. Need bigger signs
- 5. I saw the shuttle after I got here and wondered where it started
- 6. Make the parking free for the public
- 7. Needs to be better advertising of where the incline is
- 8. I couldn't really read any of the smaller signs when coming up that road (Ruxton)

Wednesday July 22nd Evening 5pm

87.5% of the comments were concerned about confusion and location of attractions on Ruxton. 12.5% of the comments suggested parking improvements.

- 1. Couldn't find any bus signs to get on the shuttle
- 2. There needs to be bigger signs to be more clear
- 3. Make signs right at the incline
- 4. There needs to be parking incentives on the Westside of town, just past the roundabout on business 24, perhaps a parking ramp (Manitou Resident)
- 5. Put up ""Big Sign"" for the incline like you do for the COG, we couldn't find it when we first got here
- 6. The more parking the better, we got turned around several times because there is not enough parking
- 7. I got turned around because I could not find the incline
- 8. First time here and I had no clue where to go to get to the incline

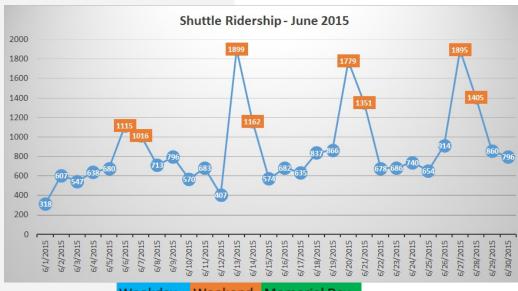




Weekday Weekend Memorial Day

					Total	Average/Day			
		33	Manitou I/C	M-F	1621	180	Total fo	or May 2015	5 = 8868
		33	Manitou I/C	SAT	1531	766			
		33	Manitou I/C	SUN	2293	764			
		33	Manitou I/C	Memorial	1146	1146			
	# of Days	333	Manitou Ave	M-F	906	101	Driver	Count not	in GFI
WKDY	9	333	Manitou Ave	SAT	386	193			
SAT	2	333	Manitou Ave	SUN	259	86	GFI C	ount	8116
SUN	3	333	Manitou Ave	Memorial	198	198	To be a	Added	752
Memorial	1				8142		То	tal	8868

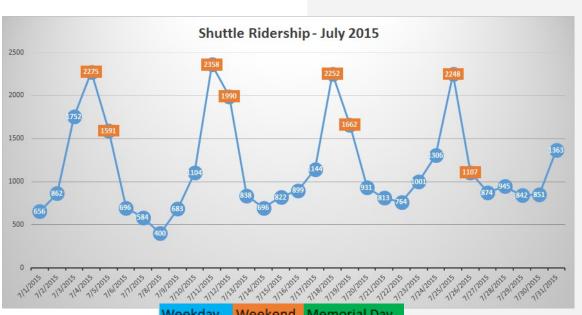
Data provided directly from Mountain Metropolitan Transit. GFI refers to equipment utilized for the counts by Mountain Metropolitan Transit.



Weekday Weekend Memorial Day

					Total	Average/Day	Total for June 2015 = 26503	
23.1% increase in		33	Manitou I/C	M-F	9841	447	Total for June 2014 = 21525	
2015 over 2014		33	Manitou I/C	SAT	5525	1381	6/22/2015	
		33	Manitou I/C	SUN	4055	1014	Run 3351 has 161 added	
	# of Days	333	Manitou Ave	M-F	5040	229	GFI over 250 events	
WKDY	22	333	Manitou Ave	SAT	1163	291	GFI Count	26342
SAT	4	333	Manitou Ave	SUN	879	220	To be Added	161
SUN	4				26503		Total	26503

Data provided directly from Mountain Metropolitan Transit. GFI refers to equipment utilized for the counts by Mountain Metropolitan Transit.



Weekday	Weekend	Memorial	Day
---------	---------	----------	-----

					Total	Average/Day	Total for June 2015 = 36309	
22.1% increase in		33	Manitou I/C	M-F	13881	604	Total for June 2014 = 29733	
2015 over 2014		33	Manitou I/C	SAT	7311	1828	6/22/2015	
		33	Manitou I/C	SUN	4967	1242	Run 3351 has 161 added	
	# of Days	333	Manitou Ave	M-F	6945	302	GFI over 250 events	
WKDY	23	333	Manitou Ave	SAT	1822	456	GFI Count	36177
SAT	4	333	Manitou Ave	SUN	1383	346	To be Added	132
SUN	4				36309		Total	36309

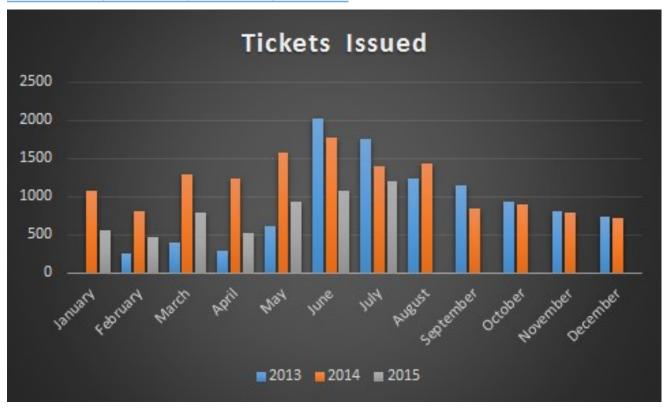
Data provided directly from Mountain Metropolitan Transit. GFI refers to equipment utilized for the counts by Mountain Metropolitan Transit.



Residential Properties Assumed to utilize Ruxton Avenue.

^(ST) Short-term Strategy ^(LT) Long-term Strategy

	2013	2014	2015
Month	Tickets	Tickets	Tickets
	Issued	Issued	Issued
January	NA	1072	558
February	253	807	464
March	392	1290	785
April	294	1243	528
May	617	1571	942
June	2018	1777	1083
July	1754	1390	1203
August	1241	1424	
September	1145	836	
October	939	906	
November	806	792	
December	745	726	
Total	10204	13834	5563



Business Responses

- 1. Love that our charming little town attracts healthy minded active folks! With the incline privilege comes responsibility....for instance, respect pedestrians on the sidewalk without barreling down & charging through tourists or locals. PLEASE do not park all day on Ruxton Ave. In 8 years I have sold two paintings to incliners. Not complaining, better than nothing at all, but incliners are here to work out...not shop. Is it possible to use pot revenue to contribute to the building of a parking lot...maybe a large structure that compliments the area. Does not have to look like a parking lot but possibly appearing Victorian in exterior appearance? Come on people, this is 2015! Seems like our little town does not want to grow & improve. I hear constantly that "Manitou needs to stay small..." Well... without growth, our businesses would not produce revenue. And I can tell you with absolute positivity...very few locals are supporting my gallery. I have always intended to be a destination location (not depending on tourism)...but the parking situation hinders that greatly. I teach art as well & my students are contributing to the commerce of our town. They shop & dine while here. Let's reach out to a higher level of demographics...folks that don't mind paying for parking & in turn, let's provide parking for them, as well as the incliners. I would much rather see healthy incliners, cyclists & hikers than folks sitting on the bench outside of my beautiful gallery smoking & eating fudge. (I love fudge...don't misunderstand) How about the city government spending a weekend day observing the happenings on Ruxton Ave? And maybe stopping in & introducing themselves. In 8 years I can say that two people that I know of actually entered my gallery. Shame on you! (We have requested permission for a sign that informs folks of shopping, dining & art on Ruxton...apparently it is not possible). And every now & then...power wash our sidewalks!
- 2. `Would like to see the incliners park at Tajine Alami, where they would receive a ticket to enter the incline. A Gate could be installed at the incline and the only way to enter is with the ticket. You can hire a retired person or persons who need extra income to collect the tickets. Can do the same with the upper parking lot too. In the future Manitou could purchase the Alami lot and construct a two or three level parking structure that would blend in with the landscape. As we all know the incliners don't stay and shop. Most don't even have pockets on what they wear. I know this from trying to sell them Protein drinks at the cafe`. Something must be done ! I have incliners parked in front of my store roe 3 to 5 hours every day. (no parking for my customers or artists to drop off artwork ! I feel the TICKET is the best and cheapest for the town for now. Thank you
- 3. We desperately need Free parking lots available to the employees and visitors of downtown. We have a flood of people coming. This is a great problem to have! In order to pull the business that has to drive through downtown headed to the incline. I am deeply concerned with how the city is happily collecting all this new parking revenue however the city is not offering any new free parking solutions for the businesses, employees and visitors. Offer it to the visitors that are willing to walk a little bit. I would love to see the city construct a free multi-level parking garage in the Omaha lot and see the impact that would make. Not only would it give the business and employees somewhere to park to help the city but it would cause much of the congestion created on main street to diminish. Visitors would pick that solution and walk in to downtown. The parking problem of Manitou is now turning into a crisis. The city leaders must move quickly to solve this problem. I would be happy to offer my services to help solve this problem. Jeff Kiepke Owner, Mona Lisa Fondue Restaurant.

- 4. The incline has been positive, but resources should be placed in other places. Paid parking has cost my business a lot in lost revenue due to people from Colorado Springs refusing to come to Manitou. Local people don't want to pay for parking, while its a non issue / positive for tourism. The people panhandling has cost me business.
- 5. close down Manitou Ave between the clock tower and the roundabout.. for pedestrian traffic only and then build a trolley or cable car! this would give make Manitou healthier because there will be less air pollution and Manitou would gain revenue from trolley rides
- 6. I believe that the incline has not been marketed in the correct way. Currently, we are losing money by having the incline, but there is clearly a way to turn the around? We need to get the cars off Ruxton--aside from Residents and make it 100% shuttle transport. We need to keep the parking for the hikers outside of the downtown corridor and we need to remind/support/ encourage its users to spend time in our community. Just because it is a disaster now, does not mean that it will always be this way.
- 7. Manitou Springs needs better and more public restrooms. Restrooms on Ruxton Avenue where all the use is. For tourists, we have to send them through all of the homeless, hobos and bums hanging out next to the Mate Factor which is the original enabling entity of the people with no visible goals. We need 800 more parking places right now. Last February 2600 people climbed the incline on one Saturday as reported by print media. So we probably need 1500 more parking places. The Cliff House has never developed the Wheeler House property. It is another gathering place for the un-engaged. This would be an excellent location for a huge parking structure and perhaps the offices of the police department. The first need is a place to park. And the second need is where to go to the bathroom. Where we stand now we need much more parking and several more bathrooms. Where does government think people go when they cannot find a bathroom?
- 8. I think the signage around the Iron Springs Chateau is an opportunity. The cones, ropes and sheer volume of signs all equate to an eye soar. The shuttle is a huge success. Catering to bicycles and scooters would be wise. Traffic control (even volunteers) on summer weekends would help. Traffic is backed up sometimes to the Chamber and no one is assisting. Here's an idea: hire the homeless to direct traffic! Thank you, Mike Casey
- 9. Additional parking is necessary to help eliminate the congestion for residents and businesses. Ruxton Ave is a disaster and during the summer season, all of the Manitou Ave parking is taken by Incline Hikers in the morning. It is having a serious impact on our business. I think the city should consider additional parking options like the Jenkins property unless we are going to close the Incline down.
- 10. Free parking for employers and employees and the option to park in neighborhoods for employers and/or employees
- 11. Definitely parking.
- 12. Parking is a problem, the Incline users take so many parking spots. We hear over and over people saying they tried to come to our gallery but could not find a place to park.

- 13. Of the up most importance is controlling the aggressive pan handling and loitering. I have had several tourist say they wont return because of being accosted ei: yelled at, food taken away etc... Parking...we are just going to have to bite the bullet and cap off one of the parking lots. I would also like to suggest locals get some complimentary passes. Especially during off season when we rely on their business.
- 14. Parking.force them to use the shuttle...
- 15. Tough one as it has been studied many times in our 30+ years in town. Acquiring the Horse Property from Jenkins would help with incline parking, per se, but still cause the traffic problems up the Ruxton corridor. A parking/trail use fee would need to be charged. Or limit incliners to walking up Ruxton or mandating they take the shuttle much like the Marroon Bells area in Aspen: if you arrive after 7am, you park at the bottom and get shuttled up free during the busy season. Only residents would be allowed to drive up during the day. This would have to include Train riders too-another glitch, as well as, hiring a "gate" person and necessitate huge neon signs to direct the traffic flow. A Hail Mary idea would be to see if a road to the horse property could be constructed west of town beyond Ruxton using existing streets and augmenting for incline access. A 2-Hail Mary idea would be to get Kat Tudor to buy the Horse property with the city and construct an incliner's spa with showers and shamanistic healing of weary bones and muscles so they can then return to downtown refreshed and ready to rock. Make the whole incline thing a dues paying "club" of sorts. While some incliners may stay for ice cream or a beer, most are too sweaty and tired to do much shopping. But if the parking/traffic issue can be addressed, my incline impact assessment would be positive as it does put Manitou on the extreme fitness map and incliners will return with family and friends later(after a shower) to shop/drink/dine/ sleep.
- 16. Parking is a big issue as we know. The folks that hike the incline come to town, take up all the parking on Ruxton and on the west end of town, leaving no parking for customers to come and shop. It would be one thing if the hikers stayed around and shopped or ate at some of the local restaurants, but that rarely happens if at all.
- 17. Safer for bicycles, more bicycle racks. Possibly look at the 16th street mall in Denver. All pedestrian traffic with a tram for transportation on Manitou Ave from Stagecoach to the Ruxton roundabout. There would still be plenty of room for emergency vehicles and merchant loadunloading. We do need better/more visible signage about the free parking & shuttle. Many customers don't see anything about it when they drive into town. The current sign isn't at eye level.
- 18. For sure HUGE PARKING SPACE!!
- 19. I like the idea of the parking lot with additional spaces at the top of Ruxton.Please approve that! We need signage! There are too many of these incliners running down the sidewalk. They are endangering us, our customers and themselves. They need to walk when they get into town where there are more people. They park for hours on end right in front of our stores. They do not stay, shop, buy things here. The only positive is we can only hope they're exposure to Manitou and our shops and restaurants may mean they will come back another time to do other things here. The sidewalks on Ruxton are way too narrow, I realize there may be no room to widen anywhere. Can't another road be built to take people to the incline? Keep the shuttle going through October.

- **II. APPENDIX: Business Surve**
- 20. Restructuring the COG area. Not stopping cars on Ruxton. Partnering with the city on parking at the Iron Springs Defined pedestrian lanes and enforced Enforcement of Incline rules (Dawn to Dusk, no pets, noise ordinances enforced with heavy penalties) Purchasing the Jenkins property and making it the parking lot/bathroom/staging center. Purchasing the Tajine Alami and provide continued shuttle service Decking the Wichita lot Charge to do the Incline Raise the parking prices at the Barr lot

Answer Options	Response	Response	•
0.01/	Percent	Count	
0-2 Years	9.5%	2	
3-5 Years	23.8%	5	
6-10 Years	28.6%	6	
11-20 Years	19.0%	4	
21-40 Years	4.8%	1	
40+ Years	14.3%	3	_
а	nswered question	2	21
	skipped question		0
What is the nature of your business?	Deepenee	Deeperer	
Answer Options	Response Percent	Response Count	;
Food/Drink	23.8%	5	
Tourist Items	14.3%	3	
Jewelry	0.0%	0	
Art	23.8%	5	
Health	9.5%	2	
Other (please specify)	28.6%	6	
	nswered question	2	21
	skipped question		0
Legalizing the Incline has had the following	impact on my bus	iness	
Answer Options	Response	Response	è
	Percent	Count	
Very Positive	0.0%	0	
Somewhat Positive	38.1%	8	
No Impact	14.3%	3	
Somewhat Unpositive	23.8%	5	
Very Unpositive	23.8%	5	_
a	nswered question	2	21
<u> </u>			
	skipped question		0
What economic impact do you feel that Incl	ine users have on		
What economic impact do you feel that Incl	ine users have on Response	Response	
What economic impact do you feel that Incl Answer Options	ine users have on Response Percent	Response Count	
What economic impact do you feel that Incl Answer Options Very positive	ine users have on Response Percent 0.0%	Response Count 0	
What economic impact do you feel that Incl Answer Options Very positive Somewhat positive	ine users have on Response Percent 0.0% 33.3%	Response Count 0 7	
What economic impact do you feel that Incl Answer Options Very positive Somewhat positive No impact	ine users have on Response Percent 0.0% 33.3% 19.0%	Response Count 0 7 4	
What economic impact do you feel that Incl Answer Options Very positive Somewhat positive No impact Somewhat negative	ine users have on Response Percent 0.0% 33.3% 19.0% 33.3%	Response Count 0 7 4 7	
What economic impact do you feel that Incl Answer Options Very positive Somewhat positive No impact Somewhat negative Very negative	ine users have on Response Percent 0.0% 33.3% 19.0% 33.3% 14.3%	Response 0 7 4 7 3	;
What economic impact do you feel that Incl Answer Options Very positive Somewhat positive No impact Somewhat negative Very negative	Ine users have on Response Percent 0.0% 33.3% 19.0% 33.3% 14.3% Inswered question	Response 0 7 4 7 3	21
What economic impact do you feel that Incl Answer Options Very positive Somewhat positive No impact Somewhat negative Very negative a	ine users have on Response Percent 0.0% 33.3% 19.0% 33.3% 14.3% Inswered question skipped question	Response Count 0 7 4 7 3 3	21
What economic impact do you feel that Incl Answer Options Very positive Somewhat positive No impact Somewhat negative Very negative	ine users have on Response Percent 0.0% 33.3% 19.0% 33.3% 14.3% nswered question skipped question about the overall	Response Count 0 7 4 7 3 3 impact of the	21 0 e
What economic impact do you feel that Incl Answer Options Very positive Somewhat positive No impact Somewhat negative Very negative a	ine users have on Response Percent 0.0% 33.3% 19.0% 33.3% 14.3% nswered question skipped question about the overall Response	Response Count 0 7 4 7 3 3 impact of the Response	21 0 e
What economic impact do you feel that Incl Answer Options Very positive Somewhat positive No impact Somewhat negative Very negative With all things considered, how do you feel Answer Options	ine users have on Response Percent 0.0% 33.3% 19.0% 33.3% 14.3% Inswered question skipped question about the overall Response Percent	Response Count 0 7 4 7 3 3 impact of the Response Count	21 0 e
What economic impact do you feel that Incl Answer Options Very positive Somewhat positive No impact Somewhat negative Very negative a With all things considered, how do you feel Answer Options Very positive	ine users have on Response Percent 0.0% 33.3% 19.0% 33.3% 14.3% nswered question skipped question about the overall Response Percent 9.5%	Response Count 0 7 4 7 3 3 2 impact of the Response Count 2	21 0 e
What economic impact do you feel that Incl Answer Options Very positive Somewhat positive No impact Somewhat negative Very negative a With all things considered, how do you feel Answer Options Very positive Somewhat positive	ine users have on Response Percent 0.0% 33.3% 19.0% 33.3% 14.3% nswered question skipped question about the overall Response Percent 9.5% 28.6%	Response Count 0 7 4 7 3 3 impact of the Response Count 2 6	21 0 e
What economic impact do you feel that Incl Answer Options Very positive Somewhat positive No impact Somewhat negative Very negative a With all things considered, how do you feel Answer Options Very positive Somewhat positive No impact	ine users have on Response Percent 0.0% 33.3% 19.0% 33.3% 14.3% nswered question skipped question about the overall Response Percent 9.5% 28.6% 14.3%	Response Count 0 7 4 7 3 3 2 impact of the Response Count 2 6 3	21 0 e
What economic impact do you feel that Incl Answer Options Very positive Somewhat positive No impact Somewhat negative Very negative a With all things considered, how do you feel Answer Options Very positive Somewhat positive No impact Somewhat negative	ine users have on Response Percent 0.0% 33.3% 19.0% 33.3% 14.3% nswered question skipped question about the overall Response Percent 9.5% 28.6% 14.3% 19.0%	Response Count 0 7 4 7 3 3 2 impact of the Response Count 2 6 3 4	21 0 e
What economic impact do you feel that Incl Answer Options Very positive Somewhat positive No impact Somewhat negative Very negative a With all things considered, how do you feel Answer Options Very positive Somewhat positive No impact Somewhat negative Very negative	ine users have on Response Percent 0.0% 33.3% 19.0% 33.3% 14.3% nswered question skipped question about the overall Response Percent 9.5% 28.6% 14.3%	Response 0 7 4 7 3 2 6 3 4	21 0 e

Service Charge

- Charge a fee to use the incline or limit the hours of use and no incline parking on Ruxton or Manifou Ave. Outdoor companies apply for permits (bikes, tours etc...) and pay taxes to Manifou.
- 2. A way to deal with tourists in both cars and on foot- and the impact of both of these on those who live on/near Ruxton as well as above Ruxton (I live on Pine Ridge) need to be addressed in a way that meets tourism needs and also sustains a high-quality of life for residents. Parking is obviously an issue- and most tourists that I see don't want to pay or wait for the free shuttle. This summer we have had many tourists find their way up into Pine Ridge, Mesa, and Duncan and realize that they can get over to the Incline from here since there is no residential permit required in this part of Manitou. At times, I've seen a car of tourists park, the people look for a neighborhood permit requirement- and when they don't see one call another call full of people who are circling downtown Manitou to let them know to come up and park there. These cars are often drive at high speeds and also get lost and have to stop and ask residents for directions. Further, the impact on the Incline and trails from tourists who don't pay to use any of them has increased. This summer there have been people camping on the side of the Ute Pass Trail and have left doas zipped into their tents/at campsites while they are off hiking for the day. Tourists walk down Ruxton in the middle of the road, multiple people across lane, don't move for cars, and are often rude/aggressive. I'm just not sure how the city cultivates and advocates for a community of respect from tourists visiting the area- that include the willingness to pay to park, perhaps a fee for non-residents to use the Incline, etc. In saying this, I am absolutely against the building of a parking structure where the stables are. Rather, the city should identify possible locations where a structure/system for increased parking wouldn't obstruct views of natures or create a greater problem for those of us that live in this part of Manitou.

Road Variation

- 1. Remove the traffic circle at serpentine.
- 2. Fewer street solicitors. bike lane. Parking garage?
- 3. Improve sidewalks on Ruxton, replace and widen, make them user friendly.
- 4. Discourage runners from running in the street. This is a hazard for drivers and pedestrians.
- 5. Remove Crosswalks in round-a-bout at Manitou Avenue and Ruxton
- 6. Free parking and MUCH less signage.
- 7. parking garage/lot
- 8. more shuttles shuttle service for cog there are far more traffic problems when a train unloads bicycle lanes and signs would be great
- 9. bridges should be fixed
- 10. Limiting the number of people going on the Incline each day and a bike lane. Remove Ruxton Avenue sidewalk telephone poles; pedestrians often step into street without looking. Signage to accommodate Ruxton foot traffic; Accommodate runners to pass on your left as in marathon, sidewalk uphill/downhill traffic to mirror street traffic to minimize two way passing foot traffic on sidewalk clustering and spilling into street traffic, NO tour busses stopping on Ruxton Ave to offload at Castle. Incline parking lot on site, or possible shuttled incliners need to be better informed. Can the Cog RR build a parking platform over much of their train yard, sheds, switching areas etc. this deck would most likely be at or near street level. They need to be made accountable for most of the long term parking problems in this area; the incline has merely added to the existing problem. PLEASE NOTE: question 5 does not match choices,
- 11. We need to get people out of the road. The average "encroach" thinks the road is just an extension of the trail.

VII. APPENDIX: Residential Survey II - Response

<u>Parking</u>

- 1. Additional parking on east end of Manitou. Increased use of shuttle. Signage to let Incline users know if parking is/is not available near Incline. Limit users of Incline. Increased parking enforcement on RPP streets. City staff or police(?) walking Ruxton, talking to walkers about availability of shuttle, where parking can be found, walking on sidewalks not street, etc. In other words hands on education of pedestrian and vehicle traffic.
- 2. Some way to decrease the number of vehicles traveling up and down Ruxton Avenue
- 3. Parking garage downtown; significantly reduce parking on Ruxton and limit to residents; widen Ruxton sidewalks and create small pocket lots for residents only; eliminate incline parking at Iron Springs Chateau, COG Railway and Barr Lot. Eliminate bus travel up canyon.
- 4. Better management of parking for Barr trail/Incline. The problem hasn't been fixed and is getting worse. Reduce the number of cross-walks at the roundabout to 2.
- 5. Parking is horrible
- 6. People are still parking on Ruxton in the residential area. I don't know how to stop that except to post the amount of the ticket that will be given. I think the fine for tickets on Ruxton should be much larger than \$35. Bikes do not have the room to ride 2 and 3 abreast yet they continue to do that. Can we discourage that in some way?
- 7. Bike safety and parking.
- 8. Parking out of downtown that would be free with a shuttle like now. I do not see a solution to the narrow Ruston Ave.
- 9. Increased parking downtown to keep traffic off of Ruxton.
- 10. More parking would be nice.

Needs Change

- 1. Provide off-site parking for the incline. Limit the number of users, charge admission, provide shuttles to and from the incline.
- 2. Better traffic flow to reduce grid lock.
- 3. Less Traffic. Limit the traffic up there.
- 4. You need to unmake the incline the big popular place for gorilla athletes and fools from all over the city/state/nation. When it was Manitou folks, it was already crowded and yet it was still sane. Stop publicizing and promoting it. Manitou makes no money from it. All our infrastructure is equal to the Manitou-only crowd. And stop ticketing every single person who ever thought of parking in Manitou. And stop making money off parking! Decommercialize, Manitou, or your soul is at stake.
- 5. Close the incline permanently to hikers which would negate Most of the need to make any infrastructure improvements.
- 6. No big buses up Ruxton,

APPENDIX: Residential Survey II - Response

<u>Signage</u>

- 1. Bike lane, signage about available parking
- 2. Signage for taking the shuttle before entering Manitou.
- 3. Would love to see signage directed to those planning on using the incline to include elevation gain, important drop out points on the trail, degree of difficulty (extremely rigorous), heat precautions, suggested water intake, number of steps and gradient of incline, user responsibility (That is: trail etiquette, emergency procedures such as how to respond to heat stroke, heart attack, etc.). Many, many individuals find themselves on this rigorous climb with no previous experience in the mountains or with strenuous mountain travel. Precautions and clear definitions of potential hazards and workout feedback outlined for hikers to see before they begin their hike (and as they are on the Incline) might deter those who should not be hiking and encourage those who are.
- 4. Enforce the 20 mph speed limit. Signage informing of hidden driveways at blind curve across from Osage. A gentle speed bump just after Osage and maybe one up farther.
- 5. First shuttle stop going up causes massive traffic back ups daily. signage for parking on Ruxton, speed enforcement on Ruxton, multi level parking structure (Behind Stage Coach) fill the damn potholes on Manitou Ave. sidewalks and curbs or Eastern Manitou Ave.
- 6. Roundabout monitoring and control. Signage to control traffic entering neighborhood
- 7. We would like "residential area" signage posted frequently to try to keep pedestrian noise and shouting down at night.
- 8. limit use of the incline, require incline users to use the shuttle, signs that state local roads are not for through-traffic (drivers trying to avoid downtown are traveling through our neighborhoods thinking it will get them out of town faster- which it does not)
- 9. A visual reminder "people live here"

<u>Traffic</u>

1. We have to find a way to address the extreme traffic congestion in Manitou Springs, particularly in the Historic District and throughout the Ruxton Canyon neighborhood. It is often impossible for residents who live on the West side of town to get on/off the streets that they live on and/or find parking near their homes. Enforcing existing traffic/parking codes, limiting use on the Incline, enforcing the conditional permit requirements of the Incline, requiring visitors to shuttle into town from designated parking areas outside of the Historic District, are all suggestions that quickly come to mind to help address the HUGE problem we have in Manitou right now. The unchecked traffic and congestion absolutely create safety issues for those of us who only have one way on/off our residential streets and the environmental impact to our community is also extreme, not to mention the negative impacts to quality of life and infrastructure strain that has been placed upon our police, fire and other city agencies due to the overwhelming number of people who clog our city with their presence. We need some relief and a better plan. What is happening now is not sustainable...environmentally, economically or from an overall holistic, longer term vision of what we want for our community.

How long have you resided at your prop	Response	Response
Answer Options	Percent	Count
0-2 Years	15.9%	7
3-5 Years	18.2%	8
6-10 Years	9.1%	4
11-20 Years	18.2%	8
21-40 years	31.8%	14
40+ years	6.8%	3
	answered question	4
	skipped question	
Are you a current permit holder of resid		
	Response	Response
Answer Options	Percent	Count
Yes	29.5%	13
No	70.5%	31
	answered question	4
	skipped question	
Where do you normally park?		
	Response	Response
Answer Options	Percent	Count
Ruxton Ave Parking	9.1%	4
COG Parking	0.0%	0
Free Shuttle Parking	2.3%	1
Downtown Parking	4.5%	2
Did Not Park	11.4%	5
Other (please specify)	72.7%	32
	answered question	4
	skipped question	
How safe do you feel as a pedestrian tr		
	Response	Response
Answer Options	Percent	Count
5	9.1%	4
5 4 3 2	20.5%	9
3	36.4%	16
2	25.0%	11
1	9.1%	4
	answered question	4
	skipped question	
How safe do you feel in your vehicle tra		(5 being the
	Response	Response
Answer Options	Percent	Count
5	17.5%	7
4	25.0%	10
2	37.5%	15
5		
2	20.0%	8
2	20.0%	8
5 4 3 2 1	20.0% 0.0% answered question	0 4

Total Outside of Pikes Peak Region			
X=Residency	Frequency		% of N
Outside of Pikes Peak Region		93	53.14
X-Parking Location	Frequency		% of n
Ruxton Ave Parking		20	21.51
COG Parking		70	75.27
Free Shuttle Parking		1	1.08
Downtown Parking		2	2.15
Did Not Park		0	0
X= Number of Visits	Frequency		% of n
Once of more a week		0	0
2-3 times a month		0	0
Once a month		0	0
Once every 2-3 months		4	4.3
Less often than once every 3 months		89	95.7
Never		0	0
X=Period of Day	Frequency		% of n
Morning		15	16.13
Afternoon		54	58.06
Evening		24	25.81
X=Parking Knowledge	Frequency		% of n
Yes		11	11.83
No		82	88.17
X= Ridership Likelyhood	Frequency		% of n
Very Likely		50	53.77
Somewhat Likely		27	29.03
Somewhat Unlikely		12	12.9
Very Unlikely		4	4.3



Wednesday June 25th Morning 9 am			Monday July 13th Afternoon 12 pm		
X=Residency	Frequency	% of N	X=Residency	Frequency	% of N
Outside of Pikes Peak Region	21	33.33	Outside of Pikes Peak Region	40	80
X-Parking Location	Frequency	% of n	X-Parking Location	Frequency	% of n
Ruxton Ave Parking	4	19.05	Ruxton Ave Parking	14	35
COG Parking	14	66.67	COG Parking	26	65
Free Shuttle Parking	1	4.76	Free Shuttle Parking	0	0
Downtown Parking	2	9.52	Downtown Parking	0	0
Did Not Park	0	0	Did Not Park	0	0
X= Number of Visits	Frequency	% of n	X= Number of Visits	Frequency	% of n
Once of more a week	0	0	Once of more a week	0	0
2-3 times a month	0	0	2-3 times a month	0	0
Once a month	0	0	Once a month	0	0
Once every 2-3 months	2	9.52	Once every 2-3 months	2	5
Less often than once every 3 months	19	90.48	Less often than once every 3 months	38	95
Never	0	0	Never	0	0
X=Period of Day	Frequency	% of n	X=Period of Day	Frequency	% of n
Morning	15	71.14	Morning	0	0
Afternoon	6	28.57	Afternoon	38	95
Evening	0	0	Evening	2	5
X=Parking Knowledge	Frequency	% of n	X=Parking Knowledge	Frequency	% of n
Yes	3	14.29	Yes	4	10
No	18	85.71	No	36	90
X= Ridership Likelihood	Frequency	% of n	X= Ridership Likelihood	Frequency	% of n
Very Likely	2	9.52	Very Likely	32	80
Somewhat Likely	7	33.33	Somewhat Likely	8	20
Somewhat Unlikely	8	38.1	Somewhat Unlikely	0	0
Very Unlikely	4	19.05	Very Unlikely	0	0

Total		
X=Residency	Frequency	% of N
Manitou Springs Residence	11	6.29
X=Parking Location	Frequency	% of n
Ruxton Ave Parking	6	54.55
COG/Incline Parking	0	0
Free Shuttle Parking	0	0
Downtown Parking	0	0
Did Not Park	5	45.45
X= Number of Visits to Ruxton Corridor	Frequency	% of n
Once of more a week	11	100
2-3 times a month	0	0
Once a month	0	0
Once every 2-3 months	0	0
Less often than once every 3 months	0	0
Never	0	0
X=Period of Day	Frequency	% of n
Morning	8	72.73
Afternoon	2	18.18
Evening	1	9.09
X=Parking Knowledge	Frequency	% of n
Yes	8	72.73
No	3	27.27
X= Ridership Likelihood	Frequency	% of n
Very Likely	8	72.73
Somewhat Likely	2	18.18
Somewhat Unlikely	0	0
Very Unlikely	1	9.09



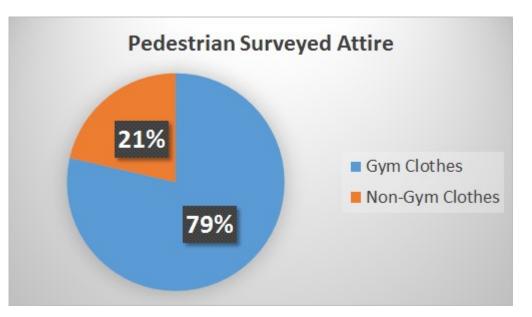
Wednesday June 25th Morning 9 am		Monday July 13th Afternoon 12 pm			Wednesday July 22nd Evening 5pm		
X=Residency	Frequency	X=Residency	Frequency	% of N	X=Residency	Frequency	% of N
Manitou Springs Residence	9	Manitou Springs Residence	0	N/A	Manitou Springs Residence	2	3.23
X=Parking Location	Frequency	X=Parking Location	Frequency	% of n	X=Parking Location	Frequency	% of n
Ruxton Ave Parking	6	Ruxton Ave Parking	N/A	0	Ruxton Ave Parking	0	0
COG Parking	0	COG Parking	N/A	0	COG Parking	0	0
Free Shuttle Parking	0	Free Shuttle Parking	N/A	0	Free Shuttle Parking	0	0
Downtown Parking	0	Downtown Parking	N/A	0	Downtown Parking	0	0
Did Not Park	3	Did Not Park	N/A	0	Did Not Park	2	100
X= Number of Visits to Ruxton Corridor	Frequency	X= Number of Visits to Ruxton Corridor	Frequency	% of n	X= Number of Visits to Ruxton Corrido	Frequency	% of n
Once of more a week	9	Once of more a week	N/A	0	Once of more a week	2	100
2-3 times a month	0	2-3 times a month	N/A	0	2-3 times a month	0	0
Once a month	0	Once a month	N/A	0	Once a month	0	0
Once every 2-3 months	0	Once every 2-3 months	N/A	0	Once every 2-3 months	0	0
Less often than once every 3 months	0	Less often than once every 3 months	N/A	0	Less often than once every 3 months	0	0
Never	0	Never	N/A	0	Never	0	0
X=Period of Day	Frequency	X=Period of Day	Frequency	% of n	X=Period of Day	Frequency	% of n
Morning	7	Morning	N/A	0	Morning	1	. 50
Afternoon	2	Afternoon	N/A	0	Afternoon	0	0
Evening	0	Evening	N/A	0	Evening	1	. 50
X=Parking Knowledge	Frequency	X=Parking Knowledge	Frequency	% of n	X=Parking Knowledge	Frequency	% of n
Yes	6	Yes	N/A	0	Yes	2	100
No	3	No	N/A	0	No	0	0
X= Ridership Likelihood	Frequency	X= Ridership Likelihood	Frequency	% of n	X= Ridership Likelihood	Frequency	% of n
Very Likely	7	Very Likely	N/A	0	Very Likely	1	50
Somewhat Likely	2	Somewhat Likely	N/A	0	Somewhat Likely	0	0
Somewhat Unlikely	0	Somewhat Unlikely	N/A	0	Somewhat Unlikely	0	0
Very Unlikely	0	Very Unlikely	N/A	0	Very Unlikely	1	. 50

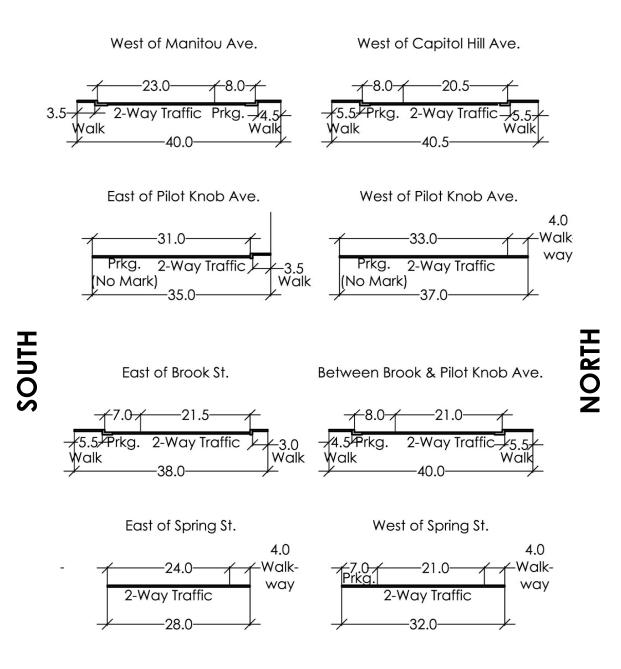
Total		
X=Residency	Frequency	% of N
Pikes Peak Region Residence	71	40.57
X-Parking Location	Frequency	% of n
Ruxton Ave Parking	24	33.8
COG Parking	33	46.48
Free Shuttle Parking	6	8.45
Downtown Parking	8	11.27
Did Not Park	0	
X= Number of Visits	Frequency	% of n
Once of more a week	35	49.3
2-3 times a month	4	5.63
Once a month	8	11.27
Once every 2-3 months	6	8.45
Less often than once every 3 months	18	25.35
Never	0	0
X=Period of Day	Frequency	% of n
Morning	27	38.03
Afternoon	24	33.8
Evening	20	28.17
X=Parking Knowledge	Frequency	% of n
Yes	11	15.5
No	60	84.51
X= Ridership Likelihood	Frequency	% of n
Very Likely	39	54.93
Somewhat Likely	16	22.54
Somewhat Unlikely	6	8.45
Very Unlikely	10	14.08



Wednesday June 25th Morning 9 am			Monday July 13th Afternoon 12 pm		1	Wednesday July 22nd Evening 5pm		
X=Residency	Frequency		X=Residency	Frequency	% of N	X=Residency	Frequency	% of N
Pikes Peak Region Residence	33	52.38	Pikes Peak Region Residence	10		Pikes Peak Region Residence	28	45.16
X-Parking Location	Frequency	% of n	X-Parking Location	Frequency	% of n	X-Parking Location	Frequency	% of n
Ruxton Ave Parking	16	48.48	Ruxton Ave Parking	0		Ruxton Ave Parking	8	28.57
COG Parking	11	33.33	COG Parking	10	100	COG Parking	12	42.86
Free Shuttle Parking	4	12.12	Free Shuttle Parking	0	0	Free Shuttle Parking	2	7.14
Downtown Parking	2	6.06	Downtown Parking	0	0	Downtown Parking	6	21.43
Did Not Park	0	0	Did Not Park	0	0	Did Not Park	0	0
X= Number of Visits	Frequency	% of n	X= Number of Visits	Frequency	% of n	X= Number of Visits	Frequency	% of n
Once of more a week	13	39.39	Once of more a week	8	80	Once of more a week	14	50
2-3 times a month	4	12.12	2-3 times a month	0	0	2-3 times a month	0	0
Once a month	8	24.24	Once a month	0	0	Once a month	0	0
Once every 2-3 months	2	6.06	Once every 2-3 months	0	0	Once every 2-3 months	4	14.29
Less often than once every 3 months	6	18.18	Less often than once every 3 months	2	20	Less often than once every 3 months	10	35.71
Never	0	0	Never	0	0	Never	0	0
X=Period of Day	Frequency	% of n	X=Period of Day	Frequency	% of n	X=Period of Day	Frequency	% of n
Morning	21	63.63	Morning	2	20	Morning	4	14.29
Afternoon	12	36.36	Afternoon	8	80	Afternoon	4	14.29
Evening	0	0	Evening	0	0	Evening	20	71.43
X=Parking Knowledge	Frequency	% of n	X=Parking Knowledge	Frequency	% of n	X=Parking Knowledge	Frequency	% of n
Yes	9	27.27	Yes	0	0	Yes	2	7.14
No	24	72.72	No	10	100	No	26	92.86
X= Ridership Likelihood	Frequency	% of n	X= Ridership Likelihood	Frequency	% of n	X= Ridership Likelihood	Frequency	% of n
Very Likely	15	45.45	Very Likely	4	40	Very Likely	20	71.43
Somewhat Likely	12	36.36	Somewhat Likely	0	0	Somewhat Likely	4	14.29
Somewhat Unlikely	2	6.06	Somewhat Unlikely	0	0	Somewhat Unlikely	4	14.29
Very Unlikely	4	12.12	Very Unlikely	6	60	Very Unlikely	0	0

Monday July 13th Afternoon 12 pm			Wednesday July 22nd Evening 5pm			Total		
X=Attire	Frequency	% of N	X=Attire	Frequency	% of N	X=Attire	Frequency	% of N
Gym Clothes	41	82	Gym Clothes	47	75.81	Gym Clothes	88	78.57
Non-Gym Clothes	9	18	Non-Gym Clothes	15	24.19	Non-Gym Clothes	24	21.43





Altitude Land Consultants would like to thank all that participated; called, emailed, or visited with suggestions and ideas; provided insight, thoughts, and guidance; and assisted through the course of this process of forming this document. If your name has inadvertently been omitted, we apologize and we thank you for your contribution.

Altitude Land Consultants, Inc.

John Olson, Director of Urban Design and Landscape

Jonathan F Chavez, Land Planner and Analyst

Jared Gorby, Land Planner

Friends of Ruxton Canyon

Ken and Sandy Jaray Kevin Maddox & Red Crags Bed & Breakfast Hoff & Leigh Bill Dittenhofer Marion Yacko Nancy Wilson Jeff Stachel Special thanks to the following for their participation:

Jay Beeton, Manitou Parking Authority Board Sarah Bryarly, Colorado Springs Parks Jeff Hodsdon, LSC Traffic Consultants, Inc. Donna Kast, City of Manitou Springs Erin McCauley, Mountain Metro Transit Captain Randy Perkins, MSFD Brian Ratterree, Iron Springs Chateau Chief Joe Ribeiro, MSPD Jay Rohrer, Manitou Parking Authority Board Neal Yowell, Manitou Springs Parking

Planning Department

Michelle Anthony Karen Berchtold Wade F. Burkholder

Incline Review Committee

Nancy Fortuin

The Broadmoor Pikes Peak Cog Railway

Spencer Wren

Nor'Wood Development Group

Traffic Count data provided by LSC

ABOUT THE TRAIN. (2015). Retrieved August 14, 2015, from http:// www.cograilway.com/about-the-train.asp

Anthony, M. (2015, August 19). Shuttle Data [E-mail interview].

- Cog Railway Digital image. Travel Channel, Web. 29 Sept. 2015. http://travelchannel.sndimg.com/content/dam/images/travel/fullset/2013/06/28/14/ Pikes-Peak-Cog-Railway.rend.tccom.966.544.jpeg>.
- Colorado Springs Manitou Incline. Retrieved July 27, 2015, from http:// manitouincline.coloradosprings.visio-tools.com/
- Friesema, J. The Manitou Incline. Retrieved August 17, 2015, from http:// www.manitouincline.net/history.htm
- History. Retrieved August 28, 2015, from http://www.miramontcastle.org/index.php/ history
- Manitou Springs Free Summer Shuttle. Retrieved August 20, 2015, from http:// manitousprings.org/manitou-springs-free-summer-shuttle/
- Manitou Incline Site Development and Management Plan. (2011, February 4). Retrieved October 23, 2015, from http://www.manitouspringsgov.com/library/ documents/general/incline/MI_Site_Devel_Plan_with_cover.pdf

Perkins, R. (2015, September 29). [E-mail interview].

Ribeiro, J. (2015, July 9). Vehicular Impact on Ruxton [Company interview].

- Swen, S. (2015, January 1). COG Railway Impact [Company interview].
- Sylianteng, N. (n.d.). To Park or Not to Park. Retrieved September 10, 2015, from http:// toparkornottopark.com/about











