

***WANTT***  
***WALKABILITY ASSESSMENT***  
***NORTH TAHOE-TRUCKEE***

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May 19, 2008**

**Completed in partial fulfillment of graduation requirements for the 2008 North  
Lake Tahoe-Truckee Leadership Program**

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## ABSTRACT

Walkability is a measure of the quality of the walking environment. Although modern transportation planning places more weight on motorized travel, as humans, walking will never be upgraded or replaced. Walking provides health, social and economic benefits, thereby improving the quality of life and has low impact on the environment.

Placer County, the Town of Truckee, and the North Lake Tahoe Resort Association have established goals to improve walkability in the region, but there are currently no tools specifically designed for mountain communities that measure walkability.

This report displays the value of walking and walkability and reports on information gathered at public workshops, local government and association master plans, and various websites that led to the development of the Walkability Assessment in North Tahoe Truckee (WANTT) tool. The purpose of the tool is to assist local governmental agencies efforts to enhance the walkability of neighborhood centers. Primarily the tool is designed to provide a quantitative measure of proposed development projects' effects on the walkability of those centers. WANTT is easy to use immediately and is tailored to address challenges specific to our mountain communities' commercial core areas.

In light of recent changes to global fuel and energy constructs, serious attention must be focused on identifying effective alternatives to increasing the motor vehicle capacity of local roads. Walkability within North Tahoe and Truckee communities will prove to be a highly sustainable option in consideration of environmental, safety, economic and aesthetic concerns.

By assisting local planning departments assess new development proposals, WANTT will help the community reach its walkability goals.

## Introduction

What exactly is Walkability? Walking is a mode of transportation, including the use of wheelchairs, and walkability is a term for the extent to which walking is readily available as a safe, connected, accessible, and pleasant mode of transport. Walkability is a measure of the quality of the walking environment.

Although modern transportation planning places more weight on motorized travel, as humans, walking will never be upgraded or replaced. As Todd Litman said in 2007, “What would you rather lose your ability to drive or your ability to walk?”

Walking provides health, social and economic benefits, thereby improving the quality of life and has low impact on the environment. North Tahoe-Truckee has already established goals through public policies, for walkability as reflected in CalTrans, the North Lake Tahoe Resort Association (NLTRA) and the Town of Truckee guidelines. Currently there are no tools specifically designed for mountain communities that measure walkability.

This report will display the value of walking and walkability and report on information gathered at public workshops, local government and master plan guidelines and various websites that led to our development of the Walkability Assessment in North Tahoe Truckee (WANTT) tool. Designed with our mountain community in mind, WANTT will aid in meeting established goals of improved walkability in the North Tahoe/Truckee area.

## BACKGROUND

Walkability has been the focus of many studies in community planning, design and re-designs in recent years. Many factors contribute to the overall walkability of an area including, but not limited to: pedestrian amenities, pedestrians' perception of safety, existence, and character of sidewalks, how interesting or engaging a route is and the

right business mix. Walking is gaining in importance and popularity as one of the most sustainable modes of transport.

Transportation in this country evolved quickly after the invention of the automobile to become a car-centric system. In the 1950's and 1960's, most transportation engineering work centered on completing the interstate system. Travel distance was less important than speed and movement of vehicles around congested population centers. The long-term effects of car-centric planning were not apparent until relatively recently. What was gained in vehicle travel time pales in comparison to what has been lost in downtowns, Main Streets, and commercial core communities across the land.

When cars are given too much of a neighborhoods travel space, drivers behave badly. 9-foot lanes calm vehicle traffic. 12-foot lanes cause aggressiveness on the road. It has become imperative that more space be designed for pedestrian use to keep a community vibrant and "alive," along with built environment factors such as pedestrian amenities, buildings that are human-scaled, sidewalks that are wide enough to accommodate all users, and effective safety measures.

Walkability in a downtown or commercial core community has become a cornerstone to the sustainability of that community. Environments designed with mainly vehicle travel as their focus are much more susceptible to the damaging effects of sprawl, which can easily drain population and commerce from the area. Higher travel speeds encourage vehicles to pass right through a commercial core without stopping. Lack of or insufficient sidewalks can discourage pedestrian travel in the area, and make it a less desirable location to live or do business.

In an effort to revitalize dead or blighted and dying downtowns, creating a walkable community has risen to the top of the list of sustainable options for achieving neighborhood vitality. Endangered and blighted as well as forward-thinking communities are essentially going back to the way vibrant neighborhoods used to be, and doing it better. The environment, quality-of-life, and benefits of community belonging and participation are at the forefront of community design again. The human

population, as a community stakeholder, has been brought to the table and its priorities and values are ultimately not cars, but other people.

The benefits of designing a community with the pedestrian in mind are numerous and important. Walking promotes health and can reduce health risks such as obesity, diabetes, and heart disease, as well as bolster mental health. Community members who interact through the simple act of walking may form more cohesive community groups and have a heightened sense of place. The “green” aspects of walkability are not to be overlooked. Short vehicle trips that cumulatively cause air and water quality impacts are reduced. More people choosing to walk rather than drive can also help reduce road congestion, which, paired with effective traffic calming, increases safety. Consumer cost savings are many, including reduction in: fuel and maintenance costs, mileage-related depreciation, mileage lease fees, user costs from tickets and accidents, parking-related costs, and possible reduction in fixed vehicle costs.

It has been shown that provided with a pedestrian environment, most people will walk  $\frac{1}{4}$  mile rather than drive. This is about a 5-minute walk at a leisurely pace. The pedestrian shed is a planning term and is a roughly circular area of  $\frac{1}{4}$ -mile radius centered around a common destination. The pedestrian shed may be longer, up to  $\frac{1}{2}$  mile, to follow a commercial corridor or accounting for available transit.

With improved community design, a longer pedestrian shed should become one of the main objectives to address some of the need for more sustainable transportation options in our region. Walkability is becoming increasingly important in the equation. WANTT is a community design tool developed to assist local governmental agencies in their efforts to provide walkability in commercial core areas and neighborhood centers.

## METHODOLOGY

Work on this project began with our involvement in two Mobility 2030 Transportation Roundtable workshops held by the Tahoe Regional Planning Agency (TRPA) and

facilitated by Regional Planning Partners on March 11<sup>th</sup> and 12<sup>th</sup>, 2008. We worked closely with Darin Dinsmore, Darren Campbell, and Theresa May Duggan of Regional Planning Partners to build an interactive activity for the workshops, which focused on some aspects of walkability and mobility in the Lake Tahoe area. We used the information gained at these workshops to help inform our process as we developed WANTT.

Roundtable workshop participants provided their physical addresses, which were input into the website [www.walkscore.com](http://www.walkscore.com). The website gave each participant a score for the walkability of his/her home, based solely on proximity to services and amenities. Many other factors relevant to mobility in the Tahoe area are not considered by Walkscore.com. The first exercise was completed individually and asked participants to adjust their [walkscore.com](http://www.walkscore.com) score in consideration of other potential walkability factors most relevant to them. This introduced the participants to the concept of the Walkscore and prepared them for the group exercise, which came next.

The second exercise involved teams adjusting the [walkscore.com](http://www.walkscore.com) scores for commercial cores and neighborhood centers around Lake Tahoe. Each team suggested the top three improvements to transportation/ mobility needed for each commercial core and the routes to those core areas from residential neighborhoods. The North Shore workshop, which was held at the Kings Beach Community Conference Center on March 11, 2008, had group members evaluate west Incline Village, central Incline Village, Kings Beach, Tahoe Vista, Carnelian Bay, Tahoe City, Homewood, and Tahoma. The South Shore workshop was held at the Tahoe Regional Planning Agency Offices in Stateline, NV on March 12, 2008. While the South Shore of Lake Tahoe is often considered a different environment than the North Shore of the Lake by many residents and visitors, the overall concerns expressed at the South Shore workshops closely echoed those on the North Shore.

These workshops provided keen insight and data regarding walkability of communities in our region. The public is telling governmental agencies that they want walkable communities. Top areas for improvement identified in the workshop include: more

walking paths, connectivity of trails and paths, sidewalks, bus shelter improvements, snow removal, safety along roadways, sidewalk and trail maintenance, and additional transit routes and frequency, including water-borne transit.

Our group collectively researched livable, walkable communities, walkability as a community design element and related subjects through extensive literature review. Research findings on these and closely related topics is wide-ranging and continues to grow as communities adopt policies, practices, codes and decisions to make their towns pedestrian-friendly and pedestrian-oriented.

Some of the most significant influences to our project include works by the Voorhees Transportation Policy Institute, Dan Burden and Walkable Communities, Inc., and the June Lake Community Design Guideline Applications. Much of the pedestrian-oriented literature available was found to be useful in general terms but more applicable to larger towns and cities with higher densities and less relevant to our mountain town environment. Thus, we identified that more work had to be done to address needs and concerns specific to livable, walkable, and sustainable community design the North Tahoe Truckee area.

In our efforts to study walkability as a significant community design element, we found that although numerous assessments, scorecards, checklists, and guides to walkability exist, none were constructed that properly address the specific walkability concerns found in the North Tahoe Truckee area. Protection and appreciation of the environment, topographical and weather-related issues, and walkability as a component of a larger, integrated alternative transportation system specific to our area are some of the top local concerns.

We collected a large body of walkability questions from various sources such as Walkscore.com, Voorhees Transportation Policy Institute, Pedestrian and Bicycle Information Center and others. In order to identify other important questions relevant to walkability in North Tahoe and Truckee, we also reviewed data from the Mobility 2030 Transportation Roundtable workshops, information gleaned from local news sources

and reports, anecdotes from other area residents, and our own concerns as pedestrians in the Truckee-Tahoe area.

The task of streamlining the Walkability Assessment of North Tahoe Truckee was a group process that took much consideration and many hours of discussion. In the end, a solid list of walkability concerns was developed into the tool that exists today. Weighting and scoring were added to the questions to give the assessment tool a comparative aspect so new and existing developments can be assessed against a baseline that will be established through the continual use of the tool. The WANTT is open to future revision based on user experience and input.

## WANTT

The purpose of the tool is to assist local governmental agencies efforts to enhance the walkability of neighborhood centers. Primarily the tool is designed to provide a quantitative measure of proposed development projects' effects on the walkability of those centers. This helps to meet the Town of Truckee's policy to "develop a consistent methodology to determine the impacts of new development." (T.O.T. 2025 General Plan, Circulation Element, P8.2) It can also be used to educate planners and architects as to what elements should be considered when designing for walkability. Lastly, it can be used to assess existing situations in order to shape future development to meet walkability goals, such as the Town of Truckee 2025 General Plan, Goal Cir-10, "provide a safe, comprehensive, and integrated system of facilities for pedestrians..."

The tool works by measuring a number of elements that together, determine the walkability of a neighborhood/town center. These elements address convenience, attractiveness, safety, vitality, business mix, relationship to the natural environment, and connectivity with the rest of the community. A truly walkable community will incorporate elements in all of these areas.

For the purpose of scoring, the elements are broken down into the following groups: pedestrian amenities, safety, topography, and facilities/services. The questions posed in the first three groups should be answered on a scale of 1-5, depending upon how well the element is incorporated into the proposed design. For the facilities/services group, a point should be given for each of the listed services/amenities that are within the pedestrian shed ( $\frac{1}{4}$ -  $\frac{1}{2}$  mile) of the area being studied. For example, if there are two restaurants in the pedestrian shed, then that category should be given a rating of two.

The tool also includes an importance factor for each question. This factor weights each question relative to its importance to the overall walkability of the area being evaluated. This factor is set and has been determined based on researching walkability guidelines, other walkability evaluation tools, and consideration of local conditions.

At the end, the tool provides a score. A scale is provided to evaluate the overall walkability associated with the given score. As this tool is newly developed, the scale should be considered preliminary. Over time, different scores can be recorded for both existing conditions and proposed new developments. These scores will establish a baseline from which to compare scores given to new designs. After a sufficient number of projects have been evaluated, the scale should be revised to reflect the experience of the users.

## WALKABILITY ASSESSMENT FOR NORTH TAHOE-TRUCKEE

PEDESTRIAN AMENITIES	rating	importance factor	score
Are there sidewalks present?	5	5	0
Are there places for pedestrians to rest with sun, shade and shelter?	3	3	0
Are transit stops incorporated into the design?	4	4	0
Are there transit stops provided with shade and shelter?	2	2	0
Are way finding signs present, obvious and of appropriate design?	1	1	0
Are there pedestrian accessible parks, plazas and gathering places?	3	3	0
Do pedestrian paths provide access to natural points of interest?	4	4	0
Do trails connect center to neighborhood?	4	4	0
Do trails connect with recreational activities?	3	3	0
Have views and vistas been optimized?	3	3	0
Have accommodations been made for snow storage?	4	4	0
Are there storage areas provided for pedestrians to store goods and equipment?	2	2	0
Is transit convenient enough to be used?	3	3	0

### SAFETY

Are pedestrian crossings adequate and appropriately placed?	5	5	0
Are pedestrian crossings clearly marked and visible with lights and signs?	4	4	0
Are pedestrian routes well lit?	3	3	0
Are vehicle speed limits set to protect pedestrians?	4	4	0
Are traffic calming methods used effectively?	3	3	0
Are sidewalks/ shoulders/ paths wide enough to accommodate all users?	4	4	0
Are sidewalks continuous, i.e. not cut by driveways, etc.	4	4	0
Are pedestrians buffered from vehicle traffic by parked cars or landscaping?	4	4	0
Are other forms of human powered transportation safely accommodated?	3	3	0

Are shelters and stops adequately marked?		2	0
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TOPOGRAPHY

Have natural obstructions of pedestrian routes been adequately accommodated for?		5	0
Are walkways and paths well linked?		4	0
Is topography a hindrance to walkability?		3	0

FACILITIES/SERVICES WITHIN 1/4 TO 1/2 MILE

Bank/Financial Services		1	0
Bar/Live Entertainment		1	0
Book Store/Music Store		1	0
Clothing/Boutique Stores		1	0
Coffee Shop		1	0
Day Care		1	0
Fitness		1	0
Grocery Store/Drug Store		1	0
Library		1	0
Movie Theater		1	0
Other Retail		1	0
Park/Beach		1	0
Pedestrian Storage		1	0
Post Office		1	0
Restaurants		1	0
Schools		1	0
Sports Shop		1	0

SCORE: 0

RATING KEY:

- 1 non-existent
- 2 inadequate
- 3 adequate
- 4 good
- 5 can't imagine better

EVALUATION SCALE:

- Does not promote walking: <200
- Somewhat walkable: 200-250
- Walkable: 250-330
- Very Walkable: >330

For facilities/services use 1 for each within pedestrian shed

## PROMOTION/ UTILITY

*Walking* is not easily quantified, therefore is often overlooked in the review and approval of proposed community development plans. Yet walkability is increasingly recognized by design professionals, community planners and the public-at-large as a critical component of a robust community. Both the Town of Truckee 2025 General Plan and Placer County General Plan include goals to “provide a safe, comprehensive, and integrated system of facilities for pedestrians and cyclists and other non-motorized modes of transportation.”

The Town of Truckee 2025 General Plan includes plans to “develop a consistent methodology to determine the impacts of new development” and has in its *policies*: a requirement for planning for land use and transportation systems in new growth areas that provides opportunities for residents, employees, and those without vehicles to accomplish many of their trips by walking, bicycling or using transit. It requires major development projects to include pedestrian facilities and bikeways. In addition to promoting walkability, the Placer County General Plan specifically includes requirements for developers to finance and install pedestrian walkways, equestrian trails, and multi-purpose paths in new developments.

WANTT is easy to use immediately and is tailored to address challenges specific to our mountain communities’ commercial core areas. WANTT was developed to provide a consistent methodology for planning agencies and local jurisdictions to assess proposed community development. WANTT would also be used in future review and evaluation of development proposals to quantify the importance of walking and to ensure that future basic mobility, consumer cost savings, efficient land use, community livability, improved fitness, public health and economic development are looked at from the pedestrian’s perspective.

## LIMITATIONS

WANTT is specifically designed for evaluation of projects and existing conditions in commercial core and neighborhood center areas of the North Tahoe – Truckee region. This tool is not necessarily appropriate to assess the walkability of primarily residential neighborhoods. Additionally, while the WANTT does address connectivity issues, it does not adequately consider the transit system and connecting links of the greater community. Existing paths and connections are dependent on the accessibility and quality of those connections to ensure their use.

WANTT remains untested until implemented. Continued use of WANTT will dictate what changes or improvements to this tool are needed.

## RECOMMENDATIONS

On a practical level, it is recommended that WANTT is periodically reevaluated and possibly revised to reflect usability and applicability. The weights and variables may change over time as walkability elements are integrated into planning and development in the Truckee-North Tahoe region.

Development of certain public walkability survey tools specific to North Lake Tahoe and Truckee is highly recommended. A survey tool or scorecard to aid in public assessment of the walking conditions in commercial core areas in North Lake Tahoe and Truckee would complement WANTT. Public and especially user input can aid in identifying what components of the walkability equation need attention at any given time. Engaging the public as a stakeholder in the design process and evaluation ensures greater end-user satisfaction.

WANTT is only a first step. A community must start somewhere to address this increasingly important subject. Many local agencies have adopted the concept of livable, walkable communities into overall goals and plans; however, the next step is to

implement a process to take action toward meeting those goals. To actively include walkability as a community design guideline is essential. The importance of walkable and livable communities is gaining momentum across the country and the world, and for many good reasons. It is strongly recommended that stakeholders and decision-makers in the North Tahoe Truckee area make it a priority to support walkable communities, and the methods for planning, building, preserving and monitoring them.

It is also recommended that all involved local agencies review the current state of transportation planning in the North Tahoe-Truckee area and ensure that the community's desires are a top priority. Local citizens and visitors alike have expressed a desire for more options in transportation, which include bicycle paths and trails, improved walking paths, enhanced public transit, a waterborne system, and most importantly the integration of these systems. A survey tool that engages the community to aid in the assessment of the quality and usability of these systems would prove useful.

Local traffic issues are growing each year, and general transportation concerns are increasing in light of recent changes to global fuel and energy constructs. Serious attention must focus on identifying effective alternatives to increasing the motor vehicle capacity of local roads. Walkability within Truckee – Tahoe communities will prove to be a highly sustainable option in consideration of environmental, safety, economic and aesthetic concerns.

## SUMMARY

The benefits of designing a community with the pedestrian in mind are numerous and important. Engaging the public as a stakeholder in the design process and evaluation ensures greater end-user satisfaction. Walkability within North Tahoe-Truckee communities will prove to be a highly sustainable option in consideration of environmental, safety, economic and aesthetic concerns. The proposed tool, WANTT,

provides a consistent, straightforward, and usable framework for assessing the walkability of the commercial core areas on the North Lake/Truckee region.

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# **Appendix A:**

## **Mobility 2030 Regional Transportation Master Plan**

### **Transportation Roundtable Workshop**

#### **Walkability Exercise**

<input type="checkbox"/>	Resident
<input type="checkbox"/>	Part-time Resident
<input type="checkbox"/>	Visitor

**Community Workshop - Walkability Exercise**  
**Regional Transportation Plan**  
 March 11 & 12, 2008

**Purpose:** To evaluate walkability for Tahoe neighborhoods and understand where biggest improvements should be made.



**Original Walkscore**

	<b>Factors of Walkability</b>	<b>Score Weighting</b>	<b>Comments/Suggestions for Improvement</b>
1	<b>Street width and block length:</b> Narrow streets slow down traffic and are easier to cross. Short blocks make it easier to navigate the grid.		
2	<b>Street Connectivity and Curvilinear Streets:</b> Are streets direct and is it convenient to get to downtown areas?		
3	<b>Safety:</b> How safe is it to move around? How many traffic accidents are there? Are crosswalks well marked and streets well lit?		
4	<b>Pedestrian-Friendly Design:</b> Are there continuous sidewalks or trail connections? Are buildings close to the sidewalk with parking in back?		
5	<b>Topography:</b> Hills can make walking difficult, especially if you're carrying groceries!		
6	<b>Public Transit - Access:</b> Is public transit accessible and are transit stops easily recognizable?		
7	<b>Public Transit, Service Reliability &amp; Frequency:</b> Is public transit convenient?		
8	<b>Barriers, Streams, Bodies of Water, Private Property:</b> Does something prevent you from walking more direct routes to your destination or make the route unwalkable?		
9	<b>Weather/seasonality, Winter Maintenance:</b> Does the weather make walking more difficult? Are sidewalks and transit stops maintained (snow removal) in winter?		
10	<b>Bicycle Facilities &amp; Connectivity:</b> Are there bike trail connections to neighborhood or downtown areas? Are there facilities to lock up bikes?		
11	<b>Other:</b>		
12	<b>Other:</b>		

**Adjusted score**

**Instructions:** Develop a weighting system of up to 20 points to subtract from the original walkability number from walkscore.com. Decide what factors affect your walkability the most and assign a score weighting value to them from 0 to 5 points with a total of 20 points for all factors together (5 is most impact, 0 is no impact).

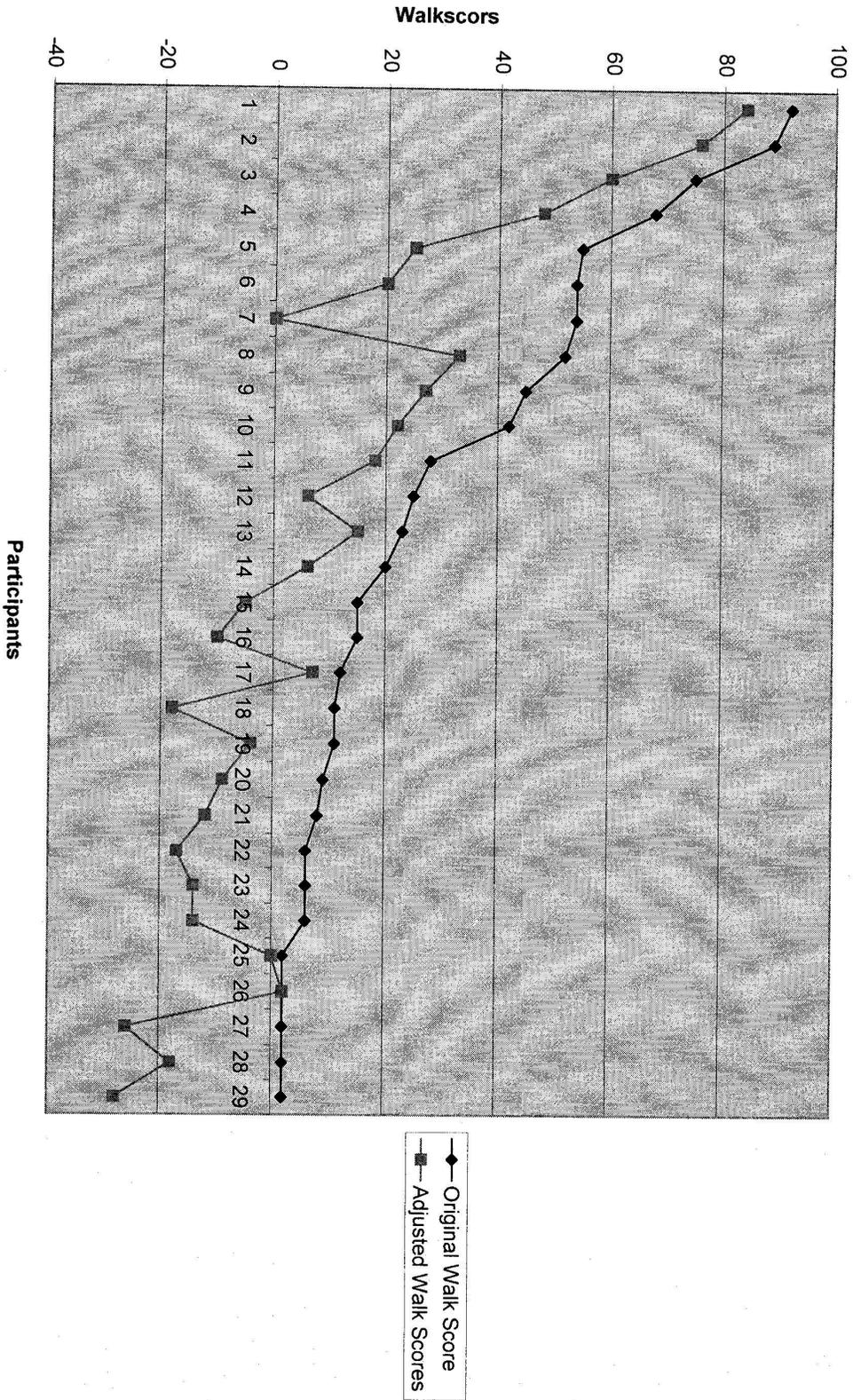
# **Appendix B:**

## **Mobility 2030 Regional Transportation Master Plan**

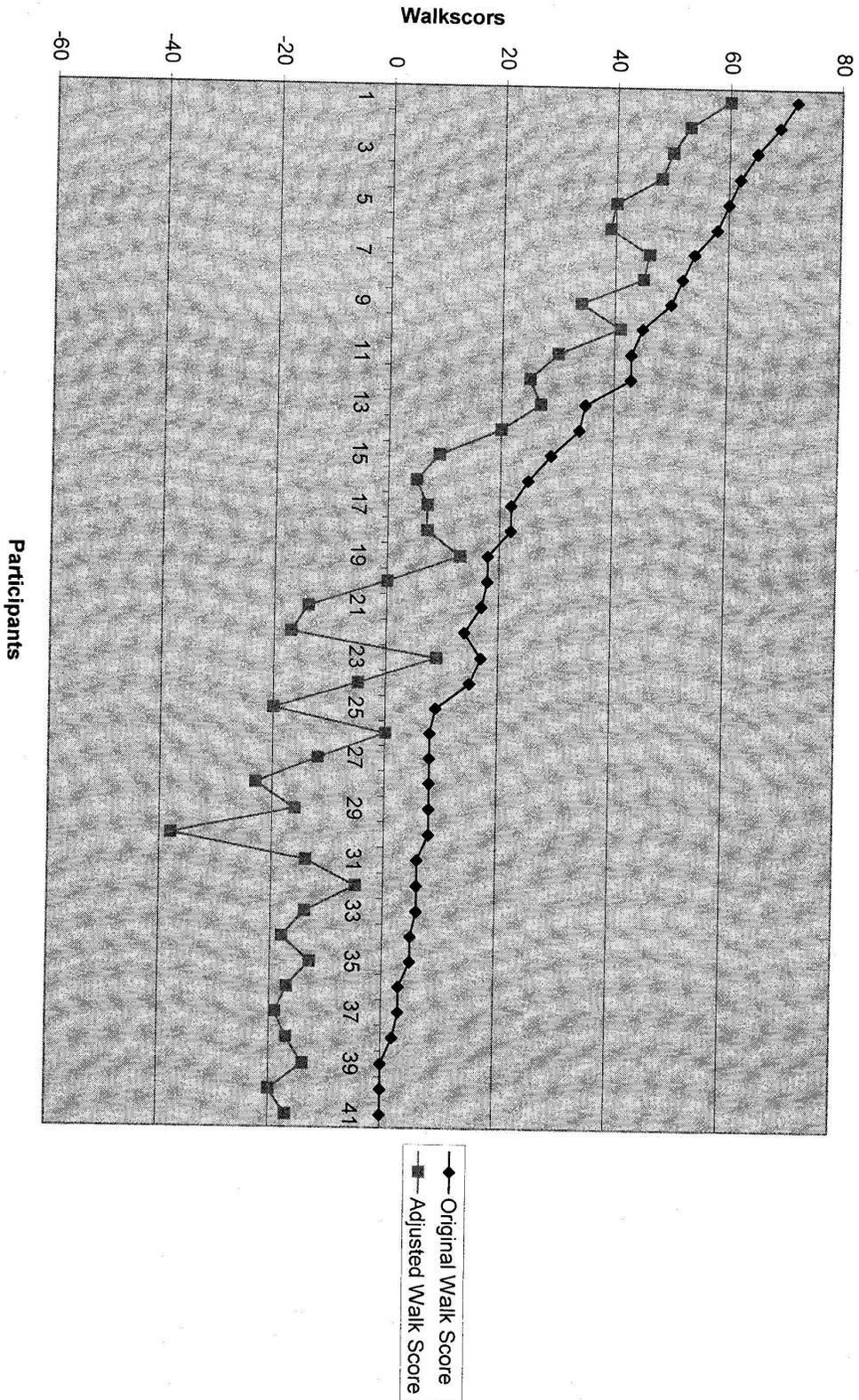
### **Transportation Roundtable Workshop**

#### **Walkability Exercise Results**

# Walkscore N. Lake



# Walkscore S. Lake



# **Appendix C:**

## **Mobility 2030 Regional Transportation Master Plan**

### **Roundtable Summary**

**March 11, 2008**

**North Tahoe Community Conference Center, Kings Beach, CA**



# Regional Transportation Master Plan Roundtable Summary

Prepared by Regional Planning Partners

March 11, 2008

North Tahoe Conference Center, Kings Beach, CA



On Tuesday, March 11, over 40 people attended a Transportation Roundtable discussion and community workshop to hear about the Regional Transportation Plan Update and provide input into enhancing mobility for the Lake Tahoe Basin. The workshop was held at the North Tahoe Community Conference Center.

The evening commenced with Darin Dinsmore, Regional Planning Partners, providing a brief review of “what we heard” from Place-Based Planning and Regional Visioning related to transportation. Keith Norberg, of TRPA, then presented on Transportation trends, current transportation related projects in the pipeline and revenue projections for the next twenty years. Following the presentation, the group broke into six (6) teams for an interactive exercise to evaluate the walkability and mobility of North Tahoe communities.



## Workshop Summary

The following summary is based on input from the group during the initial discussions and the Team’s presentations and written comments from the interactive exercise.

Participants were asked how they would like to be contacted and if they had additional suggestions on ways to inform the public about events and other important items related to transportation planning in Lake Tahoe. The group’s responses were:

1. Post in Post Offices, local coffee shops, schools and bus shelters/transit stops
2. Advertise more in papers, free event listings
3. Outreach to ski area employees
4. Non-profit newsletters, i.e. Parasol Foundation
5. Use email list serves, local non-profits and associations

### **What We Learned**

Overall on the North Shore we learned that most roundtable attendees' homes are not walkable for services. Some opportunities to overcome topographical challenges may exist with sidewalk improvements, better trail connections, winter maintenance of streets/sidewalks/trails, the location of transit facilities close to where residents live and overall enhancements to the transit system (i.e. increase frequency and extend routes).

While many neighborhoods scored poorly, based on distance from services, they are walkable for recreation and exercise within the neighborhoods with low traffic volumes, narrow streets and pleasant settings.

Some participants indicated that higher gas prices are encouraging them to consider other transportation options.



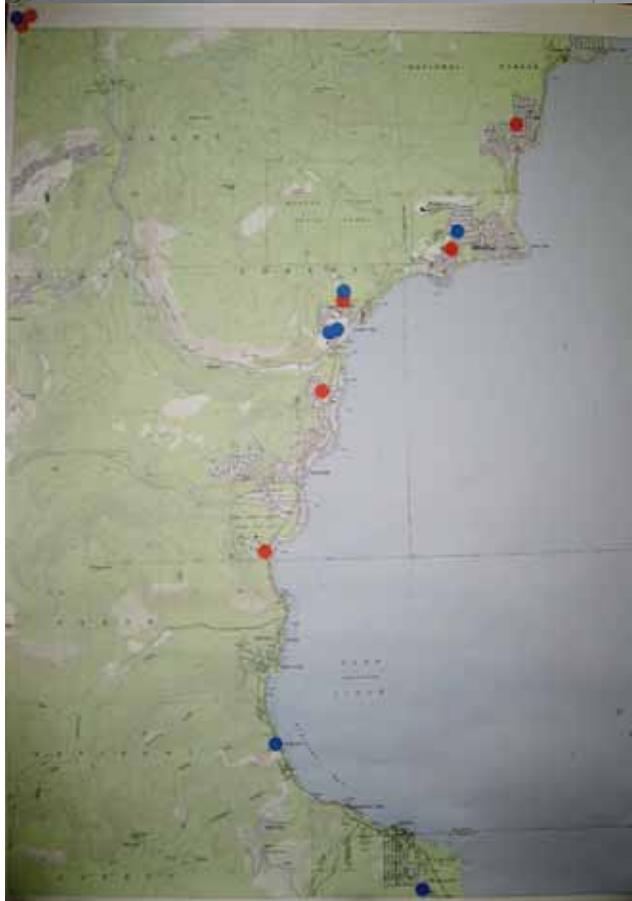
The participants recognized that our community plan areas serve different purposes and basically fall into three categories 1) Main Streets, 2) Mixed- use centers and, 3) smaller neighborhood centers. The level of pedestrian and transit improvements would likely vary across these areas.

Participants were asked to adjust their walkability score down when street designs were conducive to walking and the mix of services don't meet the needs of walkers.

In order to increase mobility options around the Basin, we need to have the maximum choice of sustainable transportation options. All trips start and end as a pedestrian.

### **Evaluating Walkability**

When attendees registered for the workshop, they were asked to give their physical address, which was entered into the website [www.walkscore.com](http://www.walkscore.com) to give a score based on the walkability of their home. The Walkscore.com score is based only on the proximity to services and amenities and does not take many other factors into consideration (some of which are very relevant to the Tahoe area).



### Contributions from the Community

A group from the North Tahoe Leadership Program assisted RPP and TRPA with gathering people's walkability scores, formulating the interactive exercise as well as helping to explain it and answer questions. Deb Ryan, Jamie Corkery, Mandy Lua and Maria Kiss are conducting an analysis of walkability for communities in the Tahoe Basin for their Leadership Program work. They will be using the data collected in this workshop to inform their study and recommendations.

**Exercise #1**

The first exercise was individual and designed as a warm-up and an introduction for the team exercise. The individual exercise began by asking individuals to evaluate their walkscore.com score in light of other potential factors that may hinder their ability or desire to walk. These factors include but are not limited to: safety, topography, the presence of barriers (highways, bodies of water), transit service (accessibility, frequency, convenience), weather or lack of seasonal maintenance (i.e. clearing sidewalks of winter snow or grooming for skiing), sidewalks, pedestrian friendly design, etc. Participants were asked to adjust their original score based on the factors most relevant to them.

The following table summarizes the range of original scores and the range of adjusted scores for South Tahoe communities, based on factors not accounted for in the walkscore.com formula (not all worksheets with adjusted scores were turned in). Some adjusted their scores below zero, resulting in negative numbers.

Attendee Walkscore results		Adjusted for Tahoe factors	
Score	# of results	Score	# of results
90-100	2	90-100	0
70-90	5	70-90	2
50-70	5	50-70	1
25-50	8	25-50	4
0-25	22	0-25	9
		0 > (negative)	13
total	42	total	29

**How Walkscore Works**

Walk Score helps people find walkable places to live. Walk Score calculates the walkability of an address by locating nearby stores, restaurants, schools, parks, etc. Check out how Walk Score doesn't work.

What does my score mean?

Your Walk Score is a number between 0 and 100. The walkability of an address depends on how far you are comfortable walking—after all, everything is within walking distance if you have the time. Here are general guidelines for interpreting your score:

- \* 90 - 100 = **Walkers' Paradise**: Most errands can be accomplished on foot and many people get by without owning a car.
- \* 70 - 90 = **Very Walkable**: It's possible to get by without owning a car.
- \* 50 - 70 = **Some Walkable Locations**: Some stores and amenities are within walking distance, but many everyday trips still require a bike, public transportation, or car.

\* 25 - 50 = **Not Walkable**: Only a few destinations are within easy walking range. For most errands, driving or public transportation is a must.

\* 0 - 25 = **Driving Only**: Virtually no neighborhood destinations within walking range. You can walk from your house to your car!

## How it Works

Walk Score™ uses system to calculate the walkability of an address based on:

- \* The distance to walkable locations near an address.
- \* Calculating a score for each of these locations.
- \* Combining these scores into one easy to read Walk Score.



### **Exercise #2**

The team exercise consisted of two (2) posters (shown below) where teams were prompted to evaluate the walkscore.com scores for North Shore community plan areas (urban and neighborhood centers), and then provide the three biggest areas for improvement within the community plan areas and with getting to and from the community plan areas from their home. The exercise was designed to evaluate the level of overall mobility and where the biggest priorities lie for enhancing mobility for North Shore communities.

**Enhancing Mobility in Lake Tahoe Communities Through Pedestrian and Transit Improvements**

	Walkscore.com Results	PedShed & CP Boundary	Walkscore Score	Other Pedestrian-Related Factors	Effect on Score	Weighted Score	3 Areas for Biggest Improvement in Community Plan Areas	3 Areas for Biggest Improvement to get to the Community Plan Area
<b>Tahoe City</b>			<b>97</b>					
<b>Carnelian Bay</b>			<b>38</b>					
<b>Tahoe Vista</b>			<b>32</b>					
<b>Kings Beach</b>			<b>92</b>					

**Enhancing Mobility in Lake Tahoe Communities Through Pedestrian and Transit Improvements**

	Walkscore.com Results	PedShed & CP Boundary	Walkscore Score	Other Pedestrian-Related Factors	Effect on Score	Weighted Score	3 Areas for Biggest Improvement in Community Plan Areas	3 Areas for Biggest Improvement to get to the Community Plan Area
<b>Incline Village (west)</b>			<b>77</b>					
<b>Incline Village (Center)</b>			<b>85</b>					
<b>Homewood</b>			<b>15</b>					
<b>Tahona</b>			<b>6</b>					

The following section includes all written comments from each team related to each community plan area. The original walkscore is included at the top of each area summary with the adjusted (weighted) score tallied below listed factors (when provided by team).

## Team 1

### Tahoe City – good, no changes

#### Carnelian Bay

- Need Appropriate lighting (-3)
- Crosswalks (-4)
- Shelter enhancement (-2)
- Transit frequency (-4)

Areas for biggest improvements (in)

1. Bus shelter improvements

Areas for biggest improvements (to)

1. Connecting trails and paths

#### Tahoe Vista - 32

- Lighting (-5)
- Frequency of transit (-4)
- Speed Enforcement (-2)
- Need for bus shelter (-4)
- Bus to the park connections (-2)
- Walkways/crosswalk
- Connect bike trail – west and east

#### **Weighted score - 12**

Areas for biggest improvements (in)

1. Lighting
2. Speed enforcement
3. Bus shelters w/ markings

Areas for biggest improvements (to)

1. lighting
2. marked bus shelters
3. bus route extended to regional park

#### **Kings Beach – 92**

- Traffic signals (-2)
- Ped cross signal (-5)
- Sidewalks (-4)



- Bus shelter (-3)
- Bike routes (-4)
- Speed enforcement (-3)
- Residential roadways and cut through traffic (-3)

Weighted score - 78

Areas for biggest improvements (in)

1. Gateway design
2. Extra traffic signal
3. sidewalks

Areas for biggest improvements (to)

1. connected bike routes
2. frequent transit
3. a road w/ proper capacity

#### **Incline (Central and West) - 85**

- Local transportation
- Winter maintenance
- Crosswalks, mid-blocks
- Walking paths
- Safe bike paths/facilities
- TRPA approved & enforced lighting (dark sky friendly)

Areas for biggest improvements (in)

1. Transportation (local), multi-modal

2. Walking paths
3. Winter maintenance

Areas for biggest improvements (to)

1. Coordination with inter and intra-transport buses and facilities, local shuttle to center
2. Year-round maintenance for multi-modal transport/sidewalks
3. Safety enforcement

**Tahoma – 6**

- Safety

- Winter maintenance
- Street connectivity
- Bike facilities
- Street lights, bus stop facilities

Areas for biggest improvements (in)

1. safety along highway
2. bus stop facilities
3. street connectivity

Areas for biggest improvements (to)

1. walks/edges
2. centralized

**Team 2**

**Tahoe City**

- Parking and Signage
- Missing bike trail connection
- Public transit frequency and connections
- Pedestrian crossings
- Winter maintenance of bike trails
- Retail service mix
- Mixed-use infill – bed base

Areas for biggest improvements (to)

1. Continuous bike trail around north shore
2. Increased transit headways
3. Waterborne

**Carnelian Bay**

- Bikability
- Pedestrian connection to neighborhood
- Parking (peak)
- Crosswalks
- Lights
- Neighborhood transit/shuttles

**Tahoe Vista**

- Crosswalks
- Sidewalks



- Bike lane and class 1
- Transit headways and National Ave
- Recreation accessibility (Lake)
- Parking for cars and boats

**Kings Beach**

- Pedestrian connections to neighborhood
- Crosswalks
- Lights for routes into neighborhood (safety)
- Increased transit headways
- Safety
- Parking
- Bike – connections downtown to neighborhood)
- Residential retail services

### Team 3

#### Tahoe City

- Bike trails, path through downtown core

#### Tahoe Vista

- Bike path to National Ave
- Bike path to Tahoe City
- East bound transit stop with shelter needed
- West bound transit stop needs shelter
- Decrease headway of transit headways
- Sidewalks on National Ave

Areas for biggest improvements (in)

1. Transit stop shelters
2. Sidewalks on National Ave

Areas for biggest improvements (to)

1. Bike path

#### Kings Beach

- Sidewalks on main grid streets accessing school
- Sidewalks on the highway
- Decrease vehicular speed on Hwy w/ curb cutouts and more signals



- Off-street centralized parking areas
- Bike lanes through grid and to beach
- Bike parking

Areas for biggest improvements (in)

1. Bike paths
2. Traffic calming (signals, roundabouts, curb extensions)
3. Sidewalks on Hwy and key grid streets that access school

Areas for biggest improvements (to)

1. Bike Paths

### Team 4

#### Incline (West) (77)

- Convenient transportation options (-1)
- Safety
- Winter maintenance (-1)
- Pedestrian walkways (-1)
- Street lighting (dark-sky friendly)
- Bike trails

**Weighted Score - 74**

Areas for biggest improvements (to)

1. Bike trails
2. Increase/Improve TART service

#### Incline (Center)



- Safety (-2)
- Pedestrian walkways (-2)

- Winter maintenance (-2)
- Bike trails

Weighted Score - 79

Areas for biggest improvements (to)

1. Bike trails
2. Increase/Improve TART service

### **Homewood (15)**

- Mix of retail services
- Spread out population
- Good bike trail (+5)

- Lake and marina access (+5)
- Ski Area – recreation (+5)
- Crosswalks (+5)
- Tourist accommodations (+5)

**Weighted Score - 35**

Areas for biggest improvements (to)

1. Boat taxi
2. Increase services – need to go there

## **Team 5**

### **Kings Beach**

- Slower traffic, 25 MPH
- Well maintained 5-13' sidewalks

### **Incline (West and Central)**

- Sidewalks/walking trail
- Winter maintenance
- Continued traffic enforcement
- Lighting
- Streetscape (trash receptacles, benches, etc)
- Map signage
- Visible parking – gateway parking

Areas for biggest improvements (in):

1. Sidewalks/walking trail
2. Winter maintenance
3. Streetscape (trash receptacles, benches, etc)

Areas for biggest improvements (to):

2. Tahoe Lake Lapper with extended hours
3. Water transit
4. Better communication TART/Transit hours

### **Homewood**

- Winter maintained trails



- Complete trail system
- Signal PED crossings
- Map and Signage

Areas for biggest improvements (in):

1. Winter maintained trails
2. Complete trail system
3. Signal PED crossings

Areas for biggest improvements (to):

Same as Incline

### **Tahoma**

- Pass through walking trails
- Winter maintained trails
- Complete trail system

## **Conclusion – Mobility 2030 – North Shore**

The team presentations re-emphasized the need for pedestrian improvements in community plan areas and for connections into neighborhoods. Much emphasis was put on completion of bike paths and bike and pedestrian connections into downtown areas and neighborhoods. Many people mentioned the importance of making biking safer and more convenient as a way to reduce automobile traffic in the summer months. Some preferred to route new bike paths off the main street when possible to minimize conflicts with automobile traffic. Biking was identified as a possible way to reduce automobile traffic in the summer months. Most agreed that there is a significant need for more bike facilities, more involvement from local jurisdictions and business owners.

A big piece of overall mobility is the effectiveness and efficiency of the regional and local public transit system. Over 80% of local survey respondents said they drive alone to work. Transit options are often limited and provide little flexibility, connections are not coordinated and long waits are common. Making the transit network more convenient and viable would be a significant incentive to increasing ridership, another potential solution to keep more cars off the road.

A major hurdle to year-round walkability in the Sierra is weather and the abundance of snow in the winter season. Team's expressed a lot of interest in winter maintenance where and when feasible for sidewalks and bike paths, even possibly grooming them for X-country ski routes. Weather can be very hospitable to walking, even in winter months, but navigating roadside snow piles is a major deterrent.

The desire for improved transit shelters and dark sky friendly lighting (lighting facing down) were common suggestions to increase safety and nighttime mobility. Water-borne transit was seen as a critical piece of the overall regional transportation system both for visitors and residents. Enforcement was also seen as an important need for both traffic speed through community plan areas and for other issues such as nuisance complaints (i.e. poorly designed street lighting) and maintenance of pedestrian and bike areas. There was not much mention of parking except that it is difficult to find parking during pea hours.

### **Common Priorities Areas include:**

1. Bike trails and facilities
2. Water-borne transit
3. Pedestrian improvements - sidewalks, lighting, winter maintenance
4. Transit improvements – service frequency, convenience (route and schedule extensions), shelter improvements
5. Slowing down traffic in downtown areas, more crosswalks or pedestrian signals, more walkable downtowns