Lake Tahoe Sustainability Collaborative
Community Mobility Working Group
aka Bikeable-Walkable Working Group

Member Co-Chair: Kay Ogden
Partner Co-Chairs: Gavin Feiger and Steve Teshara
Participants:
Russ Dahler
Steve Hash
Tom Wendell
Brett Long
Coleen Shade
Marshall Dyer
Karen Fink

Purpose
This working group was organized as a grassroots effort to identify and advocate for improved community mobility and connectivity with a clear emphasis on walking and biking and other human-powered transportation and the infrastructure necessary to support these essential activities. We support the overall Transportation Vision Statement in Mobility 2035, the Lake Tahoe Regional Transportation Plan: An innovative multi-modal transportation system is in place that gives priority to viable alternatives to the private automobile, appeals to users and serves mobility needs, while improving the environmental and socioeconomic health of the Region.

Short, Mid and Long Term Goals
Draft: November 27, 2012
Short Term: 6 months to 1 year
Mid Term: 2 to 5 years
Long Term: 7 to 10 years
Note: Some activities may be on-going and continuous including those in the Short Term category

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<thead>
<tr>
<th>Need to (N2)</th>
<th>How to (H2)</th>
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<tbody>
<tr>
<td>Identify and address high priority gaps and maintenance needs in existing bike trail network</td>
<td>Advocate/work with City, counties and/or other responsible agencies to address</td>
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<tr>
<td>Make streets safer for bicycling</td>
<td>Work with City, counties Caltrans, NDOT to identify and advocate for immediate low cost solutions such as striping, adjustments in lane width</td>
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<tr>
<td>Connect existing on-street bike lanes</td>
<td>Make Biking/Walking easier in winter</td>
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many sidewalks and paths as possible are regularly cleared of snow. Keep them clear - don’t “berm in.”

Develop and expand better signage for pedestrian, biking, urban hiking trails

Coordinate signage plans at the community and regional level

Increase public awareness, participation and support for bikeable community goals through bikeable-focused local events

Activism, education, and advocacy - network with community groups and appropriate agencies

Integrate goals into Area Plans

- Update community design standards
- Where gaps, include pedestrian and bike connections
- Create “core” community centers connected by transportation

Improve the urban design of our communities consistent with Regional Plan Sustainable Communities Strategy (SCS)

Update the 2010 Lake Tahoe Region Bicycle and Pedestrian Plan

Participate in the update process conducted by TRPA/TMPO

Build community support for the delivery of “Complete Streets” projects in Tahoe’s community “Town Centers”

Activism, education and advocacy - network with community groups to build grass roots support; engage appropriate state, local, regional and other agencies

Mid Term

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<tr>
<th>Need to (N2)</th>
<th>How to (H2)</th>
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<tr>
<td>Accelerate pedestrian/bicycle project delivery</td>
<td>Help advocate and secure increased project funding - local, state, regional, and federal</td>
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<td>Increase funds available for maintenance</td>
<td>Advocate the further development and agency support for Best Practices designed to lower the cost of trail construction in SEZ and wetlands</td>
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<td>Reduce the cost of project construction, with an emphasis on reducing the high cost of trail construction</td>
<td>Continuously identify and support the priority for planning, development, funding, and delivery of projects that accomplish these connectivity goals</td>
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Focus on the importance of trails connecting neighborhoods and community “Town” centers; also connections to schools and other neighborhood/community facilities

Champion the further development and construction of projects that achieve multiple connectivity
<table>
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<th>Objectives</th>
<th>Long Term</th>
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<tr>
<td>Create additional community gathering areas</td>
<td>Ensure bike access to all neighborhoods</td>
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<tr>
<td>Increase the number of community trail locations equipped with bike racks, storage and related facilities</td>
<td>Increase pedestrian and bicycle network safety</td>
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<td>Improve the integration of pedestrian and bike/trail facilities with public transit</td>
<td>Add more streetscape amenities</td>
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<td>Continue to redevelop land use to further establish a walkable/bikeable community and region</td>
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<td>Continue to support the delivery of “Complete Streets” projects in Tahoe’s community “Town Centers”</td>
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<td>Provide active support for the expansion of integrated multi-modal alternative transportation options</td>
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<td>Support the role of alternative transportation to help reduce Greenhouse Gas Emissions (GHG) and achieve adopted GHG reduction targets</td>
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<td>Develop a safe bike path around the Lake</td>
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<td></td>
<td>All this goals is this category will have to be supported with active participation at multiple forums. A key to success will remain activism, community education, and building grass roots support for advocacy efforts</td>
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Advocate/advise for additional Class III bike route designation to streets in order to help connect neighborhoods and increase the visibility of Class III routes by having sharrows (re)painted on the streets and in a bright green color.

**Brief Description:**
While many streets connect Class I (dedicated multi-use path) and Class II (bike lane painted on a roadway) bicycle routes, there are a few small gaps that would greatly improve connectivity. Additionally, many Class III (shared roadway) routes only have small sign marking them as there never were sharrows or they have worn off or the street has been resurfaced and the sharrows not repainted. We would like to talk and write letters to CalTrans and the relevant city/counties asking that they incorporate bike facility (lane/route) upkeep into their already-scheduled roadway improvements. We will also pursue adding Class III designations to some streets that would improve connectivity. We will also ask that (bright) green markings are used on the pavement. This is allowed per California and Federal (Nevada) standards (Appendix 1, pasted below).

**Why Is This Important?**
Building on the great work that has already been done in South Lake and around the Basin, small changes such as these can make a big difference in bikability. Small sections of roadway can connect large areas together. Improved marking helps cyclists find routes, advises motorists to be extra aware for cyclists, and makes cyclists feel safer and more welcome. CalTrans and the various jurisdictions already have roadway improvements planned and are constantly planning more. Working with these players will allow us to encourage adding, improving, and maintaining bicycle facilities with a minimal cost to the agencies and jurisdictions.

**What Partners and/or Resources will be Required?**
We will need to work closely with CalTrans, the City of South Lake Tahoe, El Dorado County, Placer County, the Town of Truckee, TRPA, NDOT, Washoe County and Douglas County. Minimal resources should be required: our time, some paint, and maybe a little extra asphalt. The whole point of this project is to add/improve/maintain cycling Routes of all classes as already-scheduled roadwork is conducted. Alternatively, as our example project shows, we could ask for permission from the local jurisdiction and raise money for paint, a sprayer, and stencils and do it ourselves.
Appendix 1 – justification for colored markings to improve bicycle routes and bicyclist safety.

Taken from the “California Manual on Uniform Traffic Devices” (Accessed at http://www.dot.ca.gov/hq/traffops/signtech/mutcdsupp/)

From Karen Fink: “This manual shows every kind of traffic device (including a variety of striping) that is allowed in California. If a traffic treatment (like colored bike lanes) isn’t included in this manual, it doesn’t mean that a city can’t use it, but it may be harder to convince the city to try it because they may feel like there are liability issues since it’s not approved at the state level. If it is in the manual, it should be easier to convince the city to try it. There is also a federal manual which tends to adopt new treatments slightly ahead of California, and Nevada follows the Federal MUTCD.”

Summary: We can definitely ask CalTrans and local jurisdictions in CA and NV to use green or bright green pavement markings for Class III bicycle routes. This means (fluorescent) green sharrows!

I copied and pasted some relevant sections regarding markings for Class III bicycle routes.

Black is Federal (and Nevada?) and blue is California-specific.

**Bold is a Standard**, Options are regular font, and **Guidance is italic**. See the bottom of this document for descriptions of these headings and descriptions of bike route classifications.

The **highlighting** is my doing and indicates specifically relevant information.

**Designated colors (MUTCD, pp.76)**

**Standard:**

03 The general meaning of the 13 colors shall be as follows:

A. Black—regulation
B. Blue—road user services guidance, tourist information, and evacuation route
C. Brown—recreational and cultural interest area guidance
D. Coral—unassigned
E. Fluorescent Pink—incident management
F. Fluorescent Yellow-Green—pedestrian warning, bicycle warning, playground warning, school bus and school warning
G. Green—indicated movements permitted, direction guidance
H. Light Blue—unassigned
I. Orange—temporary traffic control
J. Purple—lanes restricted to use only by vehicles with registered electronic toll collection (ETC) accounts
K. Red—stop or prohibition
L. White—regulation
M. Yellow—warning

These are STANDARDS (ibid, pp.76)

(MUTCD, pg. 112) **The fluorescent version of red, yellow, green or orange colors provide higher conspicuity than the standard colors, especially during twilight.**

**Option:**

06 **The approved fluorescent version of the standard red, yellow, green**, or orange color may be used as an alternative to the corresponding standard color.
Shared Lane Marking shown in Figure 9C-9 may be used to:

A. Assist bicyclists with lateral positioning in a shared lane with on-street parallel parking in order to reduce the chance of a bicyclist’s impacting the open door of a parked vehicle,
B. Assist bicyclists with lateral positioning in lanes that are too narrow for a motor vehicle and a bicycle to travel side by side within the same traffic lane,
C. Alert road users of the lateral location bicyclists are likely to occupy within the traveled way,
D. Encourage safe passing of bicyclists by motorists, and
E. Reduce the incidence of wrong-way bicycling.

Except as provided in Paragraph 02a, The Shared Lane Marking should not be placed on roadways that have a speed limit above 35 mph.

The Shared Lane Marking may be placed on roadways that have a speed limit above 35 mph, where there is bicycle travel and there is no marked bicycle lane or shared-use path and the right-hand traffic lane is too narrow to allow automobiles to safely pass bicyclists.

Shared Lane Markings shall not be used on shoulders or in designated bicycle lanes.

If used in a shared lane with on-street parallel parking, Shared Lane Markings should be placed so that the centers of the markings are at least 11 feet from the face of the curb, or from the edge of the pavement where there is no curb.

If used on a street without on-street parking that has an outside travel lane that is less than 14 feet wide, the centers of the Shared Lane Markings should be at least 4 feet from the face of the curb, or from the edge of the pavement where there is no curb.

If used, the Shared Lane Marking should be placed immediately after an intersection and spaced at intervals not greater than 250 feet thereafter.

Section 9B.06 describes a Bicycles May Use Full Lane sign that may be used in addition to or instead of the Shared Lane Marking to inform road users that bicyclists might occupy the travel lane.

When used in this Manual, the text headings of Standard, Guidance, Option, and Support shall be defined as follows:

A. Standard—a statement of required, mandatory, or specifically prohibitive practice regarding a traffic control device. All Standard statements are labeled, and the text appears in bold type. The verb “shall” is typically used. The verbs “should” and “may” are not used in Standard statements. Standard statements are sometimes modified by Options. Standard statements shall not be modified or compromised based on engineering judgment or engineering study.
B. Guidance—a statement of recommended, but not mandatory, practice in typical situations, with deviations allowed if engineering judgment or engineering study indicates the deviation to be appropriate. All Guidance statements are labeled, and the text appears in unbold type. The verb “should” is typically used. The verbs “shall” and “may” are not used in Guidance statements. Guidance statements are sometimes modified by Options.

C. Option—a statement of practice that is a permissive condition and carries no requirement or recommendation. Option statements sometime contain allowable modifications to a Standard or Guidance statement. All Option statements are labeled, and the text appears in unbold type. The verb “may” is typically used. The verbs “shall” and “should” are not used in Option statements.

D. Support—an informational statement that does not convey any degree of mandate, recommendation, authorization, prohibition, or enforceable condition. Support statements are labeled, and the text appears in unbold type. The verbs “shall,” “should,” and “may” are not used in Support statements. Other Definitions, starting on page 76:

22. Bicycle Facilities—a general term denoting improvements and provisions that accommodate or encourage bicycling, including parking and storage facilities, and shared roadways not specifically defined for bicycle use.

23. Bicycle Lane—a portion of a roadway that has been designated for preferential or exclusive use by bicyclists by pavement markings and, if used, signs. See Class II Bikeway.
   23a. Bicycle Path – A “bicycle path” or “bike path” is a Class I bikeway, as defined in subdivision (a) of Section 890.4 of the Streets and Highways Code. Refer to CVC 231.5. See Class I Bikeway.
   23b. Bicycle Path Crossing - That portion of a roadway included within the prolongation or connection of the boundary lines of a bike path at intersections where the intersecting roadways meet at approximately right angles or any portion of a roadway distinctly indicated for bicycle crossing by lines or other markings on the surface. Refer to CVC 231.6.

24. Bikeway—a generic term for any road, street, path, or way that in some manner is specifically designated for bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes. Bikeway – All facilities that provide primarily for bicycle travel. Refer California Streets and Highways Code Section 890.4.

25. Buffer-Separated Lane—a preferential lane or other special purpose lane that is separated from the adjacent general-purpose lane(s) by a pattern of standard longitudinal pavement markings that is wider than a normal or wide lane line marking. The buffer area might include rumble strips, textured pavement, or channelizing devices such as tubular markers or traversable curbs, but does not include a physical barrier.