Puget Sound Regional Council
Bicycle and Pedestrian Advisory Committee

White Paper on Approaches to Regional Bicycle Guide Map Standards

The Bicycle/Pedestrian Advisory Committee (BPAC) was originally established in 2002 to provide recommendations and oversight for the development of the non-motorized components of the *Destination 2030*. The BPAC has recently provided ongoing feedback in the development of Transportation 2040. The Committee was formalized to play a longer-term role as an advisory committee to the Regional Council on a variety of bicycle and pedestrian-related issues.

The BPAC is currently hosting conversation related to the possibility of establishing regional bicycle guide mapping standards. The BPAC would like to solicit input from as many regional planning stakeholders as possible before issuing its final suggestions. This document provides a brief summary of recent conversation of the BPAC of the Puget Sound Regional Council and possible next steps. The potential outcome of the discussion included in this white paper is a set of standardized mapping conventions that can be used by local cities and counties in the Central Puget Sound region (and perhaps beyond). This mapping consistency could ultimately provide map users with the familiarity that would make multiple local, city and regional maps more accessible.

Three approaches have emerged in the handful of conversations since late 2009 in the central Puget Sound Region cities and counties. These approaches; (1) facility type, (2) condition-based and (3) hybrid or combination reflect the differing needs for a map. Indeed a community may be trying to address different audiences with its bicycle guide map.

(1) Summary of Recent BPAC Work on Regional Bike Map Standards

The BPAC created an Ad-Hoc committee to discuss possible regional conventions/standards for bicycle maps. While King County, City of Seattle and Bellevue are three jurisdictions (present) that are planning to do a bike map update soon.

Two potential approaches were discussed for developing bicycle facility maps. The first approach is focused on the type of facility. The second approach is focused on the conditions (traffic volume and/or speed) of the roadways. Each approach has strengths. Where the Facility Approach might be utilized at a larger geographic scale, the Roadway Condition Approach seemed to be utilized in areas with volume data, often in local jurisdictions, such as the City of Bainbridge.

Points to remember: The map's design must be user friendly. Simple is good.

Facility Approach

The group discussed five bicycle facility categories (classifications 1-4 are identified by AASHTO):

1. Shared Use Path
2. Bike Lanes

3. Signed Shared Roadway
4. Shared Roadway
5. Caution Areas

More detail on these categories, attached.

There was discussion about how "Signed Shared Roadway" and "Shared Roadway" might be shown as one facility type. With this approach, the "Signed Shared Roadway" facilities would be highlighted to indicate the presence of signage/routes/wayfinding.

Suggested colors were discussed. All seemed to agree with a general them of red = bad, cool colors (blue/green) = good. For each of the facility types proposed are as follows:

1. Shared Use Path (brown or green)
2. Bike Lanes (blue or purple)
3. Signed Shared Roadway (highlight/shading in light colors such as light yellow or grey)
4. Shared Roadway (orange)
5. Caution Areas (red)

Roadway Condition Approach

This approach focuses on the conditions (volumes) of the roadways.

There was also discussion about the graphic design of the map. An example was given that a University of Washington grad student, Erin Williams, recently revamped the City of Seattle map as part of her thesis (see link to draft map and book below). From more than one account, the final product was impressive, could help motivate bicycle riding, and should be considered for future mapping efforts. In fact, the City of Seattle is now planning to use the services of this student when they next revise their map.

A low-res version of the map is available for download here: http://www.erinwdesign.com/thesis/map_web.pdf

and the book here: http://www.erinwdesigncom/thesis/velocity_book.pdf

There was also some discussion about litigation issues.

Final Recommendations to BPAC

While there were at least two if not three individuals that preferred the Roadway Condition Approach, the majority of the meeting participants favored the Facility Approach to be used as a regional standard. The group agreed to move the Facility Approach forward to further discussion at the BPAC meeting on November 19th.

(2) Next Steps

King County has used these conversations as input to its soon to be published bicycle map. The most recent discussions have suggested that at least for the facility approach:

1. Shared Use Path (green)
2. Bike Lanes (blue)
3. Signed Bike Route (highlight/shading in light colors such as Grey **or Yellow**)
4. Shared Roadway (orange)
5. Caution Areas (red)"

ATTACHMENT A

The following is a summary report on Bicycling Facility Types and Color standards (developed for discussion). This information is excerpted from an *AASHTO Guide for the Development of Bicycle Facilities, 1999,* which can be found at:
http://www.sccrtc.org/bikes/AASHTO_1999_BikeBook.pdf.

Bicycle Facility Types

Shared Use Paths
A non-motorized facility, paved or unpaved, that is physically separated from motorized vehicular traffic by an open space or barrier. It is sometimes referred to as a Bicycle Path, Bike Trail, Non-motorized Trail, Multi-purpose Trail or some combination thereof. Following examples were found on different maps reviewed:

- Shared Use Trail
- Off Street Paths
- Paved Regional Trail
- Soft Surface Regional Trail
- Regional Trails
    - Paved
    - Soft surface
- Local Trails
    - Paved
    - Soft surface
- Primary Trails
    - Paved
    - Soft surface
- Secondary Trails
    - Paved
    - Soft surface

Bike Lanes
A portion of a roadway which has been designated by striping, signing, and pavement markings for preferential or exclusive use of bicyclists. Following examples were found on different maps reviewed:

- Marked Bike Lanes
- On Street Bike Lane
- Bicycle Lane

Signed Shared Roadways
Roadways that have been identified by signing as preferred bike routes. Following examples were found on different maps reviewed:

- Signed Shared Roadways
- Signed Bike Route

Shared Roadways
A roadway which is open to both bicycle and motor vehicle travel. This may be an existing roadway, street with wide curb lanes, or road with wide shoulders. Sharrows (not addressed by AASHTO document) and painted markings of a bicycle without a lane would be included in this class. Following examples were found on different maps reviewed:

- Shared Roadway
- Roadway Commonly Used by Bicyclists
- Sharrow

Or a combination of the following:

- Paved Shoulders
- Wide Curb Lanes
- Low Speed
- Moderate Speed
- Low Traffic Volume
- Moderate Traffic Volume

Cautionary Area (not addressed by referenced AASHTO document)
A roadway which is open to both bicycle and motor vehicle travel and is expected to have higher traffic volumes, higher speeds**,** no shoulders**,** or steeper Hills. Following example were found on different maps reviewed:

- Caution Area

Facility Type Colors

(not addressed by referenced AASHTO document)

Standard Colors

- Green
- Yellow
- Orange
- Red
- Brown (?)
- Other

Color Blind Related Solutions

(not addressed by referenced AASHTO document)

- Use both Color and Line Type together
- Other