CITY OF OAKLAND

DALZIEL BUILDING . 250 FRANK H. OGAWA PLAZA . SUITE 4344 . OAKLAND . CALIFORNIA . 94612

Public Works Agency
Transportation Services Division

TEL: (510) 238-3466
FAX: (510) 238-7415

Bicycle and Pedestrian Advisory Committee, Monthly Meeting
Thursday, September 16, 2010, 5:30-7:10 p.m. *(note shorter meeting duration)*
Oakland City Hall, Hearing Room 4, Second Floor

AGENDA

Time	Item #	Topic	Topic Type *
5:30	1	**Introductions, Appointment of Note Taker** (5 minutes)	Ad
5:35	2	**Approval of Meeting Minutes (consent item)** (5 minutes) Vote on motion to adopt July meeting minutes.	A
5:40	3	**Laurel Access to Mills, Maxwell Park & Seminary (LAMMPS) Community-Based Transportation Plan** *Link* (30 minutes)—City staff and members of the consulting team for the LAMMPS project will give an overview of the process to date, share the design alternatives under consideration for improving transportation conditions for all modes along MacArthur Boulevard between High Street and Seminary Avenue, and take input from the committee.	A
6:10	4	**Draft Bollard Detail** *Link* (15 minutes)—Jason Patton will describe a draft construction detail that describes how bollards should be placed when they are needed on mixed-use paths.	I
6:25	5	**On-Street Bay Trail Bicycle Wayfinding Alternatives Analysis** *Attachment* (20 minutes)—Jake Coolidge, Bicycle Planning Intern, will share the Bicycle & Pedestrian Facilities Program's alternatives analysis for bicycle wayfinding signs for named bikeways, using the on-street Bay Trail as a case study.	I
6:45	6	**Oakland's Existing and Planned Bicycle Infrastructure Google Application** (15 minutes)—Jennifer Stanley will demonstrate a new web page designed by summer volunteer Daniel Levy that shows existing bicycle parking, bikeways, and signs, and the design status of other bikeways and wayfinding signs on the City's Proposed Bikeway Network.	I
7:00	7	**Announcements, suggestions for next meeting topics** (10 minutes)	A

*** Topic Types:**
I=informational; A=action item; Ad=administrative

This meeting will follow Robert's Rules of Order (see http://www.robertsrules.org/rulesintro.htm).
For more information, please call (510) 238-3983 or email **bikeped@oaklandnet.com**.

Introduction

Oakland staff has explored the possibilities of including named bikeways (such as Bay Trail and East Bay Greenway) into the bicycle wayfinding signage system adopted by the City in July 2009. The alternatives shown here document staff's efforts and include the intent and problems of each approach. By sketching out a variety of alternatives and applying actual Oakland scenarios, staff has concluded that named bikeways are not compatible with the system adopted in 2009. In summary, the problems encountered are (1) insurmountable ambiguity; (2) necessarily cluttered and/or large signs that would be expensive to design and manufacture; and (3) the near-impossibility of supporting intersecting, named bikeways.

Overall approach of Oakland's Wayfinding Signage System (2009):

- Select standard signs, adopted in the federal and state MUTCDs, based on their:
  - legibility (white on green background, FHWA lettering style, 2 inch cap height)
  - durability (*maximum* width: 24 in).
- Modify these standard signs to include more information.

Standard Sign Types

S17

D11-1

D1-1b

M7 series


M7-1


M7-2


M7-3


M7-4


M7-5


M7-6


M7-7

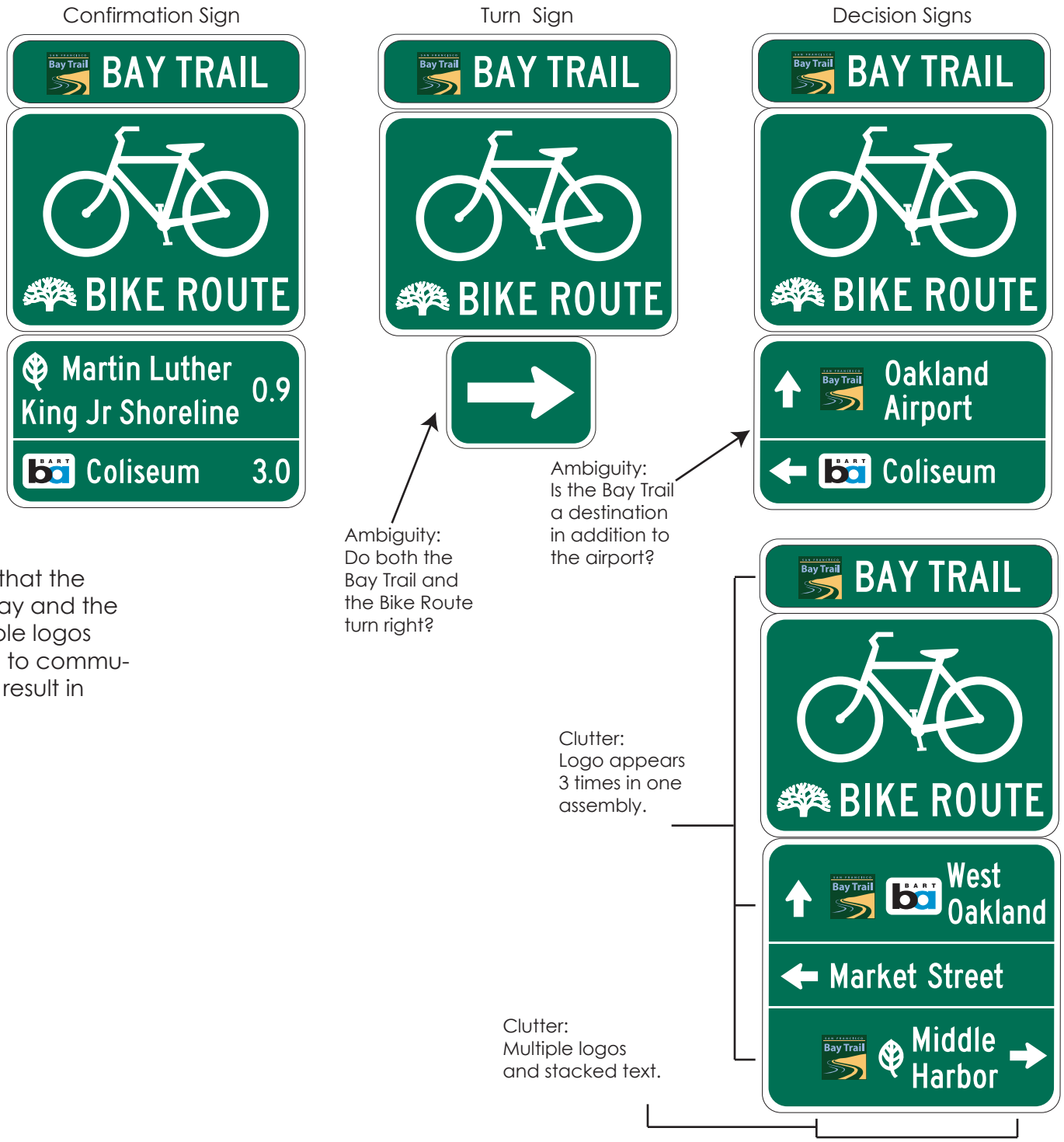
S17 with bikeway logo

Intent

An S17 indicates the bikeway name and can include a bikeway logo, if available. The logo on the D1-1b indicates the direction of the named bikeway at an intersection.

Problems

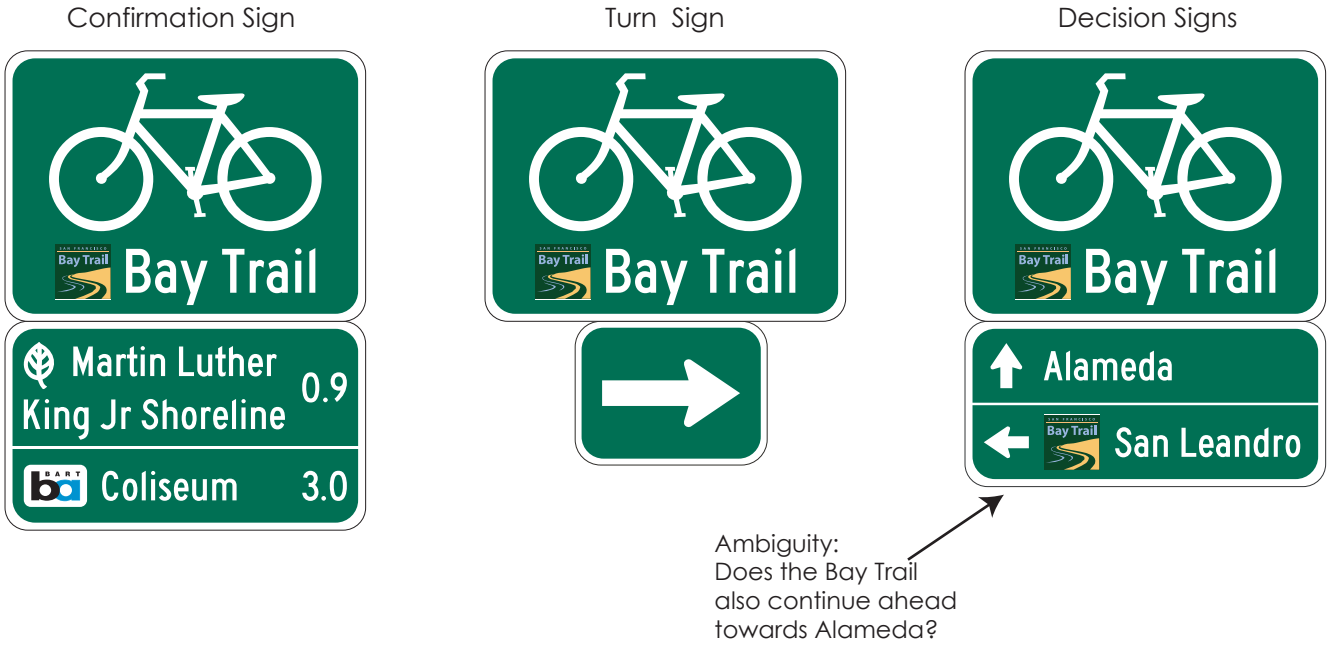
Turn signs are ambiguous. It is not clear that the arrow applies to both the named bikeway and the bike route sign. On decision signs, multiple logos and lines of text are required to attempt to communicate the direction of the bikeway, but result in ambiguity nevertheless.



Modified D11-1

Intent

The standard "BIKE ROUTE" lettering on the D11-1 is replaced with the bikeway name and logo, if available. The logo is also included on the D1-1b at decision points to indicate the continuing direction of the named bikeway.



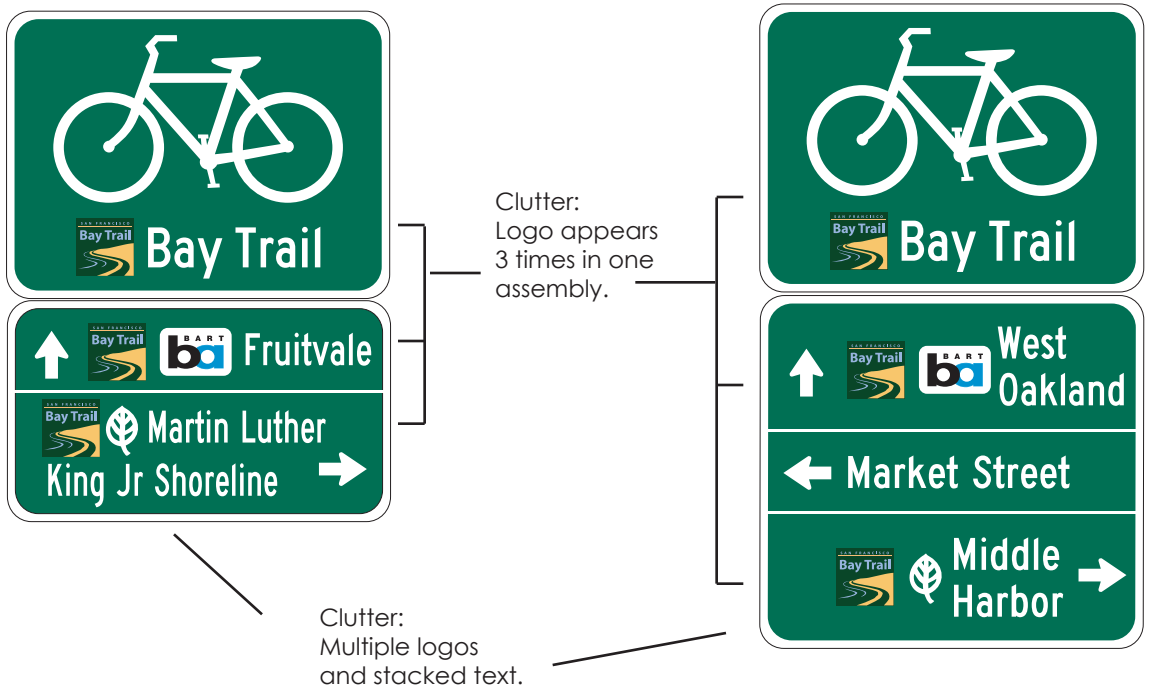
Problems

Decision sign assemblies cannot clearly and effectively communicate both wayfinding destinations and a named bikeway due to ambiguity and the need to include multiple logos and multiple lines of text.

The direction of the named bikeway, in relation to the wayfinding destinations, is ambiguous. The decision sign at the upper right provides an example: continuing on the Bay Trail requires a left turn, towards San Leandro, but it is unclear whether the Bay Trail continues in the straight-ahead direction as well.

As in the S17 alternative, assemblies have redundant bikeway logos and clutter resulting from multiple logos and stacked text.

Other bikeway names, like "East Bay Greenway," would require a taller D11-1.



Modified M7

Intent

Indicates the named bikeway using a logo, if available, with a sign placed below the main assembly. The direction of the named bikeway at turns and intersections is indicated by adding the bikeway logo to a modified M7.

Extricates the Bay Trail logo from the wayfinding assembly, retaining space on the D1-1bs for wayfinding information.

Confirmation Sign

Turn Sign

Ambiguity:
Do both the Bay Trail and the bike route turn right?

Decision Sign

Problems

Named bikeway information is read after the destination information, which is not entirely intuitive.

The resulting assemblies are taller and potentially confusing.

Turn signs are ambiguous: does the regular Bike Route continue ahead while the Bay Trail turns?

The decision sign presents two sets of decisions in one assembly.

When no logo is available and a name is used instead, the result is an excessively tall and difficult-to-read sign, particularly when named bikeways intersect (see M7 series alternative on pg 6).

Custom D1-1b, "Highway Diagram" style

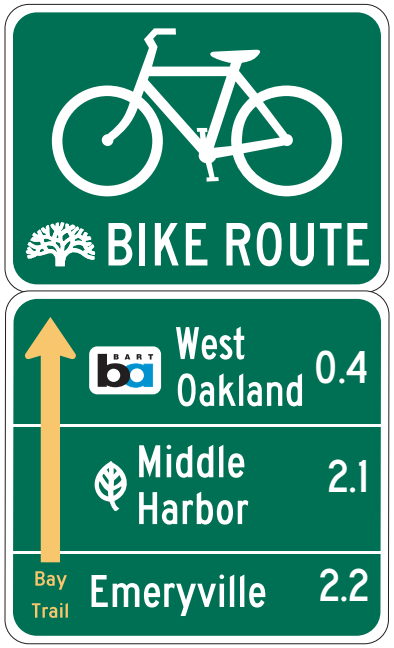
Intent

Expresses the directions of named bikeways diagrammatically, somewhat like highway signs expressing complex highway junctions.

The direction of the named bikeway is indicated with arrows; the color of the arrows differentiates the named bikeway from unnamed city bike routes.

In addition, the arrow is labeled with with the bikeway name in small text with the same color.

Confirmation Sign



Turn Sign

Decision Sign

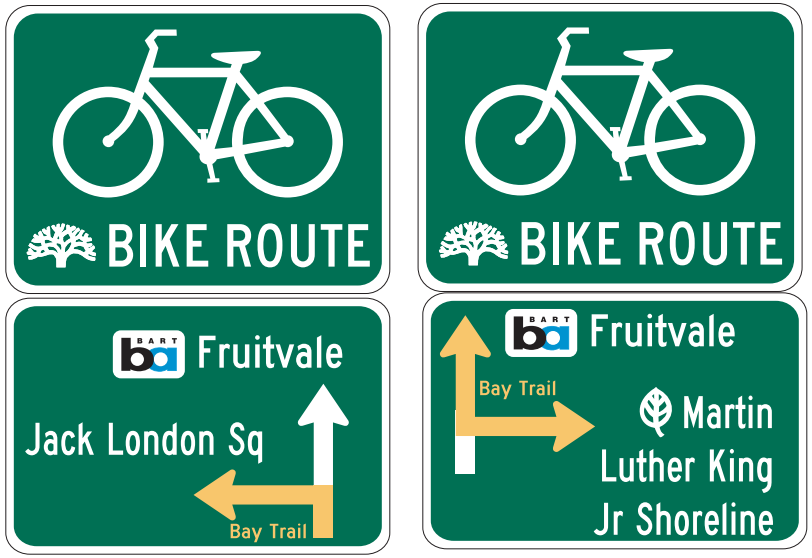
Problems

Diagrams are difficult for moving cyclists to read. Turn signs are ambiguous; does the Bike Route continue straight while the Bay Trail continues to the right?

Each D1-1b would be complicated both to design and manufacture. Costs per sign would be significantly higher.

An additional color or line symbol would be needed for other named bikeways, but would not improve comprehension.

The small text used to label named bikeways diverges from layout criteria and is too small to be visible to moving bicyclists; the destinations on the decision signs also depart from layout criteria.



Additional Decision Sign Examples

Intersecting Named Bikeways

S17 alternative

"To Grizzly Peak" indicates that a cyclist should turn left onto the Grizzly Peak Bikeway to access the destination, Berkeley, while the Skyline Bikeway continues straight to EBRP Sibley. The resulting assembly is extremely tall, and difficult to interpret.

Modified D11-1 alternative

The bike symbol is used as a bikeway logo. The bike symbol does not effectively convey that the Skyline Bikeway continues straight to Redwood Rd and an unnamed bikeway can be taken to reach Canyon. Were another logo to be added, it would be ambiguous as to which direction the Skyline Bikeway continues.

M7 series alternative

Multiple M7 blades are used to indicate the names and direction of two named bikeways. The result is an excessively tall and difficult to read sign.

Highway Diagram-style alternative

Without exception, the problems incurred when incorporating one named bikeway into a wayfinding assembly are compounded when signing the intersection of two named bikeways, as these examples demonstrate.