

Fremont Bridge Approaches: Bicycling concerns

Contents of this .pdf file:

Seattle Bicycle Commuting (US Census 2000), p. 2

Seattle's Bicycle Interstates: The Big "H", p. 3

Fremont Bridge Approaches: Bicycling concerns, p. 4

Summary page

Photos: 1. Northbound conflicts

Photos: 2. Southbound conflicts

Photos: 3. Accommodating detoured trail users

Lane widths with bike lanes, p. 8

Bikes and Bridges: Solutions, p. 9

Broadway Bridge, Portland

Burrard Bridge, Vancouver

Blue bike lanes, Portland

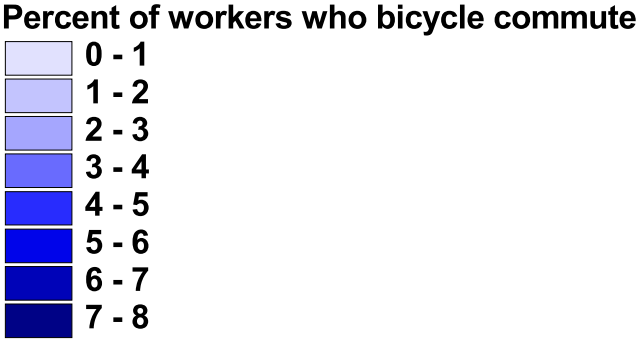
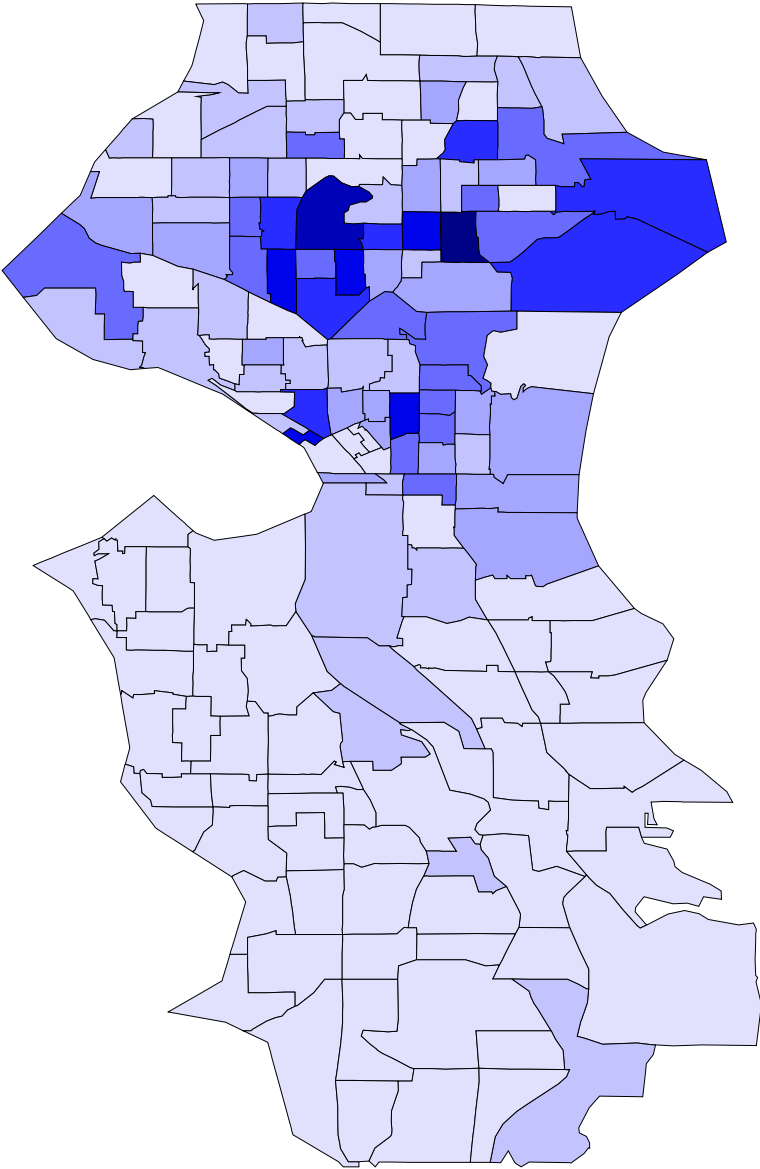
Other great bridges

Selected figures from MUTCD 2003, p. 13

Examples of signs, p. 14

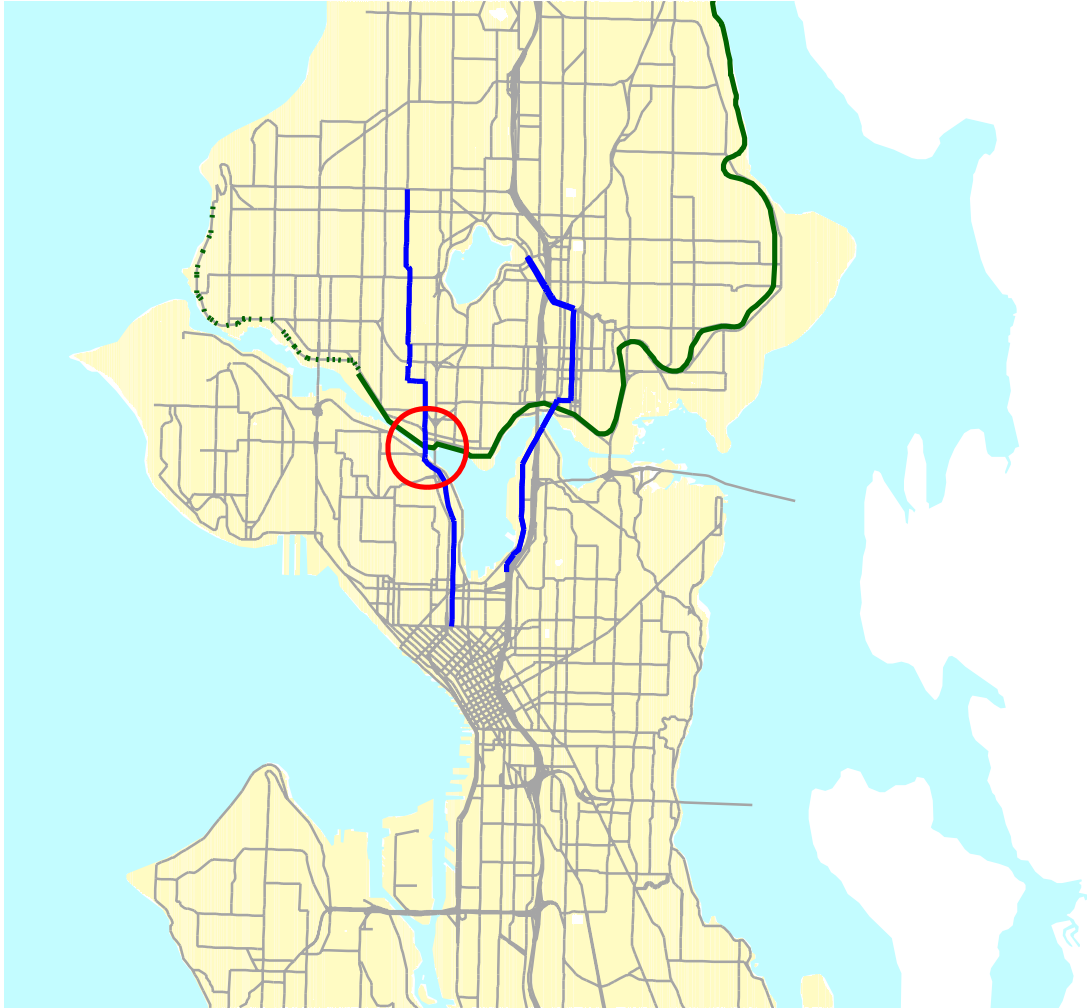
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Prepared for field meeting, Dec. 29, 2003

Seattle Bicycle Commuting US Census 2000



Seattle's Bicycle Interstates

The Big "H"



Just like car routes I-5, SR-99, I-90, and SR-520, the bicycle routes above form the major skeletal infrastructure of Seattle bicycle travel:

- Greenwood-Phinney-Fremont-Dexter
- Ravenna-Brooklyn-Eastlake
- and the Burke-Gilman Trail.

The Fremont Bridge Approaches Project affects one of the two critical junctions (circled here in red) in the Big "H". That's why it's so important!

Fremont Bridge Approaches: Bicycling concerns

Major bicycling concerns:

1. Correcting bicycle/right-turner conflicts northbound (Fremont Ave N/N 34th St)
2. Correcting bicycle/right-turner conflicts southbound (Florentia St)
3. Improving N 34th St to accommodate detoured Burke-Gilman Trail users

1. Northbound conflicts

Problems:

- Bikes emerge from bridge deck in a double-blind merge/weave
- Cars move unpredictably and at high speeds
- Inadequate double-wide lane for cars leaves no room for bikes
- Bikes have no clear, workable route; bicyclists must improvise, with varying results

Solutions:

- Formalize bike lane; use an approach like that of Broadway Bridge in Portland
- Stripe a single, normal-width lane for through and right-turning cars
- Establish clear, workable route for both through bikes and right-turning bikes
- Paint dashed lines and blue bike lane where right-turning cars and through bikes cross

2. Southbound conflicts

Problems:

- Major stream (~60% of all SB traffic) of fast right-turning cars at Florentia St cross bicycle flow
- Cars unaware of bikes and don't stop or yield
- Bikes must weave awkwardly from Florentia St to continue southbound

Solutions:

- Formalize bike lane; use an approach like that of Broadway Bridge in Portland
- Eliminate right turning option for cars at Nickerson St, currently used very little

3. Accommodating detoured Burke-Gilman Trail users

Problems:

- Trail experience is truly irreplaceable: as park, water's edge promenade, and gentle place for all
- Closure of Burke-Gilman Trail for full duration of project; was closed as recently as 1999-2000
- N 34th St is fast; needs improved bicycle and pedestrian accommodation

Solutions:

- Stripe a bike lane on westbound N 34th St, Stone Way N to Fremont Ave N; remove added car lane
- Widen the narrow sidewalk on south side of N 34th St, Fremont Ave to Stone Way
- Where eastbound bikes cross right-turning cars east of Fremont Ave, stripe dashed or blue lane
- Address conflicts between bike lane and blind driveway at Aurora Ave N/Adobe
- Improve trail crossing at 34th/Stone Way; alert drivers to trail; modify signal to better favor trail xing

For field meeting Dec. 29, 2003

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Chair, Seattle Bicycle Advisory Board

Fremont Bridge Approaches: Bicycling concerns

1. Northbound conflicts



2. Southbound conflicts



3. Accommodating detoured trail users



Fremont Bridge Approaches

(lane widths in feet)

North Approach

Existing

10	19	11	11	14	10	75
sidewalk	NB/EB	NB	SB	SB	sidewalk	Total

With bike lanes

8	6	12	11	11	12	6	8	74
sidewalk	NB bike	NB/EB	NB	SB	SB	SB bike	sidewalk	Total

South Approach

Proposed in TSL study

10	14	11	11	11	11	12	10	90
sidewalk	NB	NB	WLk	WLk	Dexter	Dex/Nick	sidewalk	Total

With bike lanes

8	6	12	11	11	11	12	6	8	85
sidewalk	NB bike	NB	NB	WLk	WLk	Dexter	SB bike	sidewalk	Total

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Seattle Bicycle Advisory Board

Bikes and Bridges: Solutions

Broadway Bridge, Portland



Burrard Bridge, Vancouver



Blue bike lanes, Portland



Other great bridges



George Washington Bridge, NYC



Hawthorne Bridge, Portland



Ben Franklin Bridge, Philadelphia



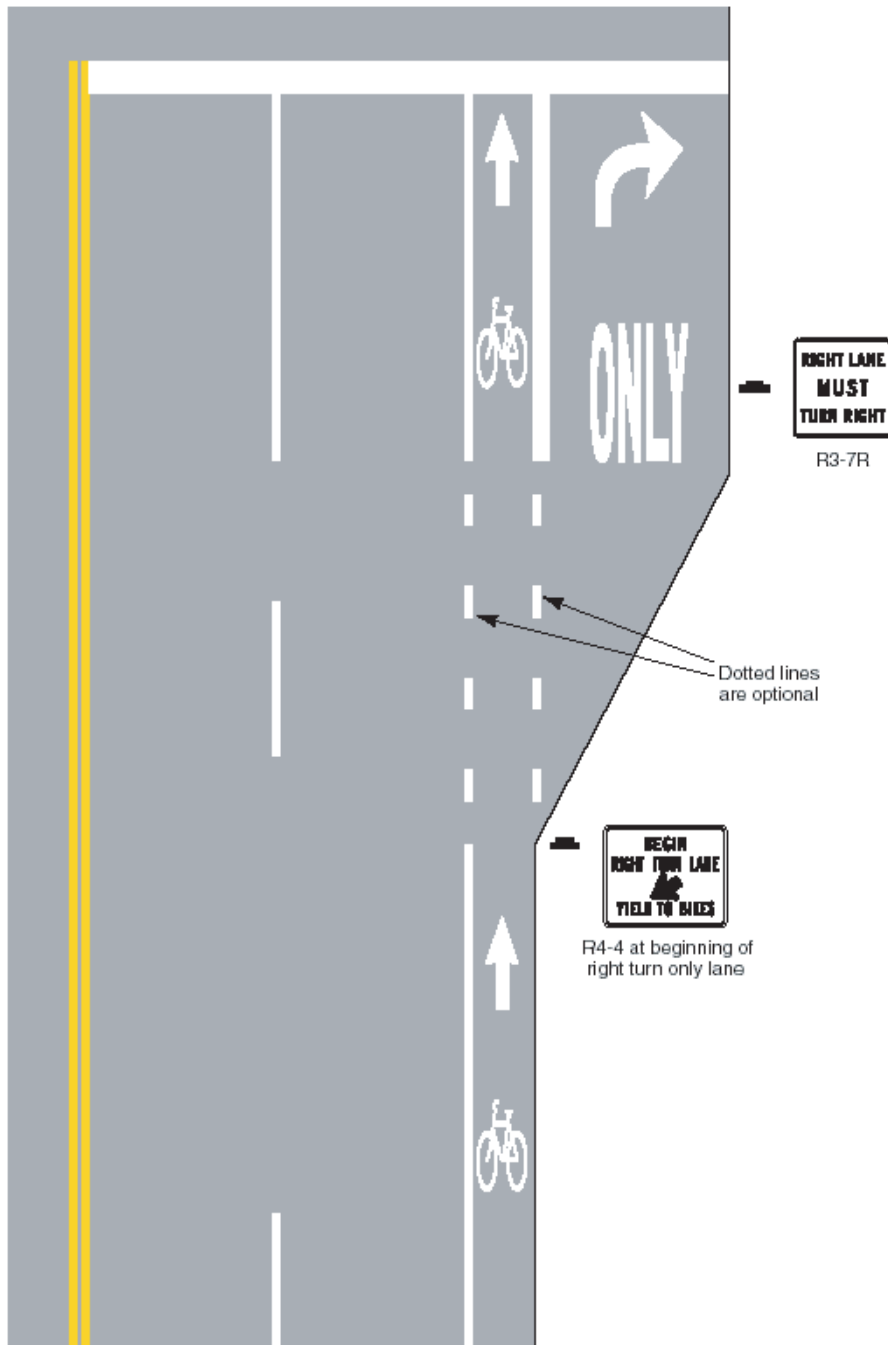
Brooklyn Bridge, NYC



Tower Bridge, London

Selected figures from MUTCD 2003

Figure 9C-3. Example of Bicycle Lane Treatment at a Right Turn Only Lane



R4-4



D11-1



W11-1



W16-7p



R9-6

Source: Manual on Uniform Traffic Control Devices for Streets and Highways, 2003 Edition, Part 9: Traffic Controls for Bicycle Facilities
<http://mutcd.fhwa.dot.gov/pdfs/2003/Ch9.pdf>

Bike lane design guide: http://www.bicyclinginfo.org/pdf/bike_lane.pdf

Examples of signs



Source: <http://www.trans.ci.portland.or.us/bicycles/Bluelane.pdf>

See also: Bike lane design guide: http://www.bicyclinginfo.org/pdf/bike_lane.pdf

