

Joyride: Pedaling Toward a Healthier Planet



Mia Birk, President
Alta Planning + Design











Plan for a network of bike routes faces adamant resistance

- Residents love bicycles - until they're forced to give up parking in front of their houses

Commuting by bicycle remains stuck in low gear

Short-term bicycle parking examples: Poor Rack Placement



Long way to go...





OUR FIRST RECONNAISSANCE MISSION TO THE BLUE PLANET INDICATES THAT THE RECTANGULAR CREATURES IN PHOTO #1 ARE THE DOMINANT LIFE FORMS, AND FEED PRIMARILY ON THE CREATURES IN PHOTO #2.



FIRARO

©1991 CHRONICLE FEATURES

Enter the Bike Program



Portland Master Plan

- Master Plan Adopted 1996:
 - Policies
 - Benchmarks (semi-annual report to Council)
 - Bikeway network (Bridges, bike lanes, boulevards, paths)
 - Maintenance, intersections, and spot improvements
 - Bike parking
 - Bikes & transit integration
 - Education/encouragement
 - Bikeway standards

Development of Portland's Bikeway Network



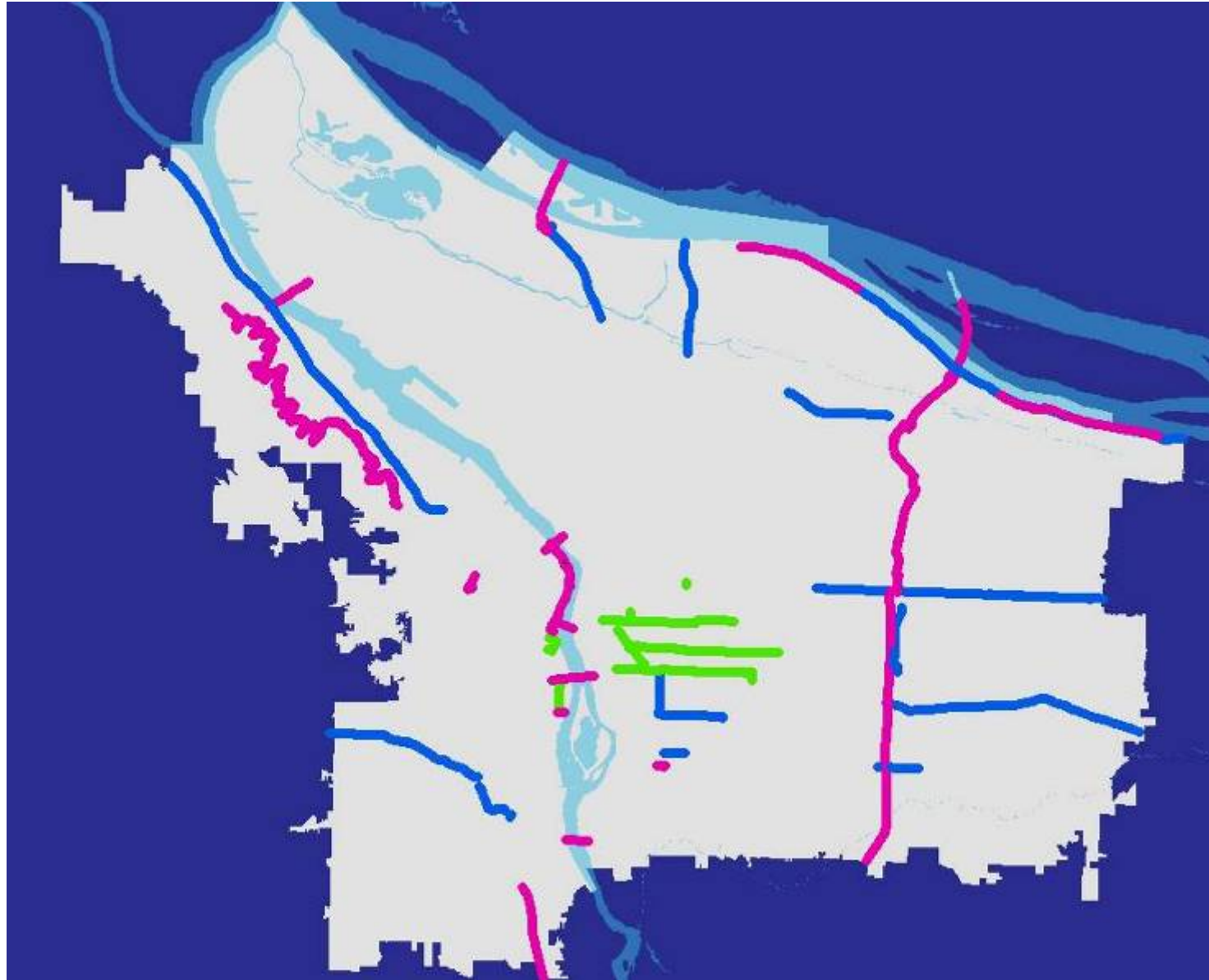
1980

Development of Portland's Bikeway Network

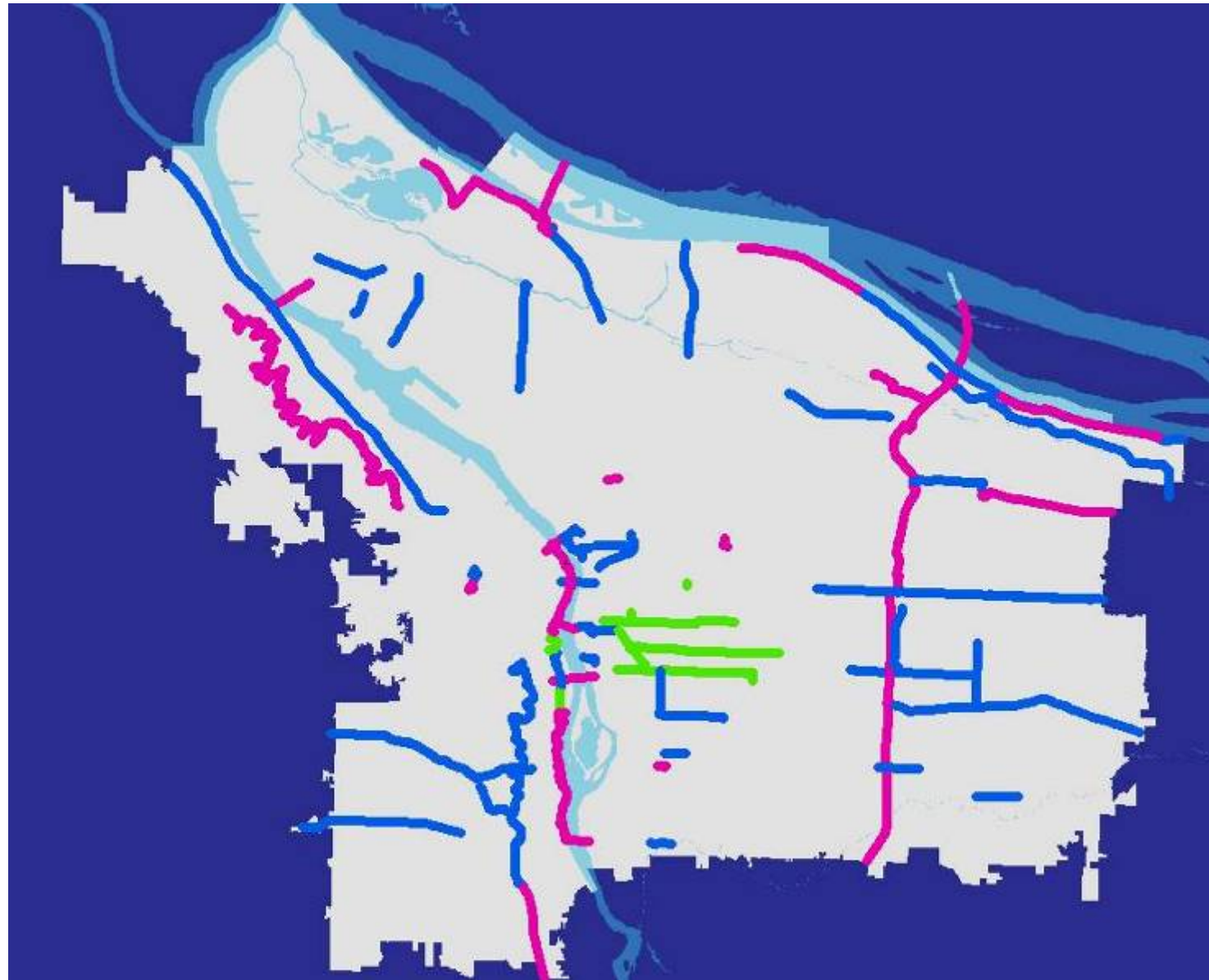


1985

Development of Portland's Bikeway Network



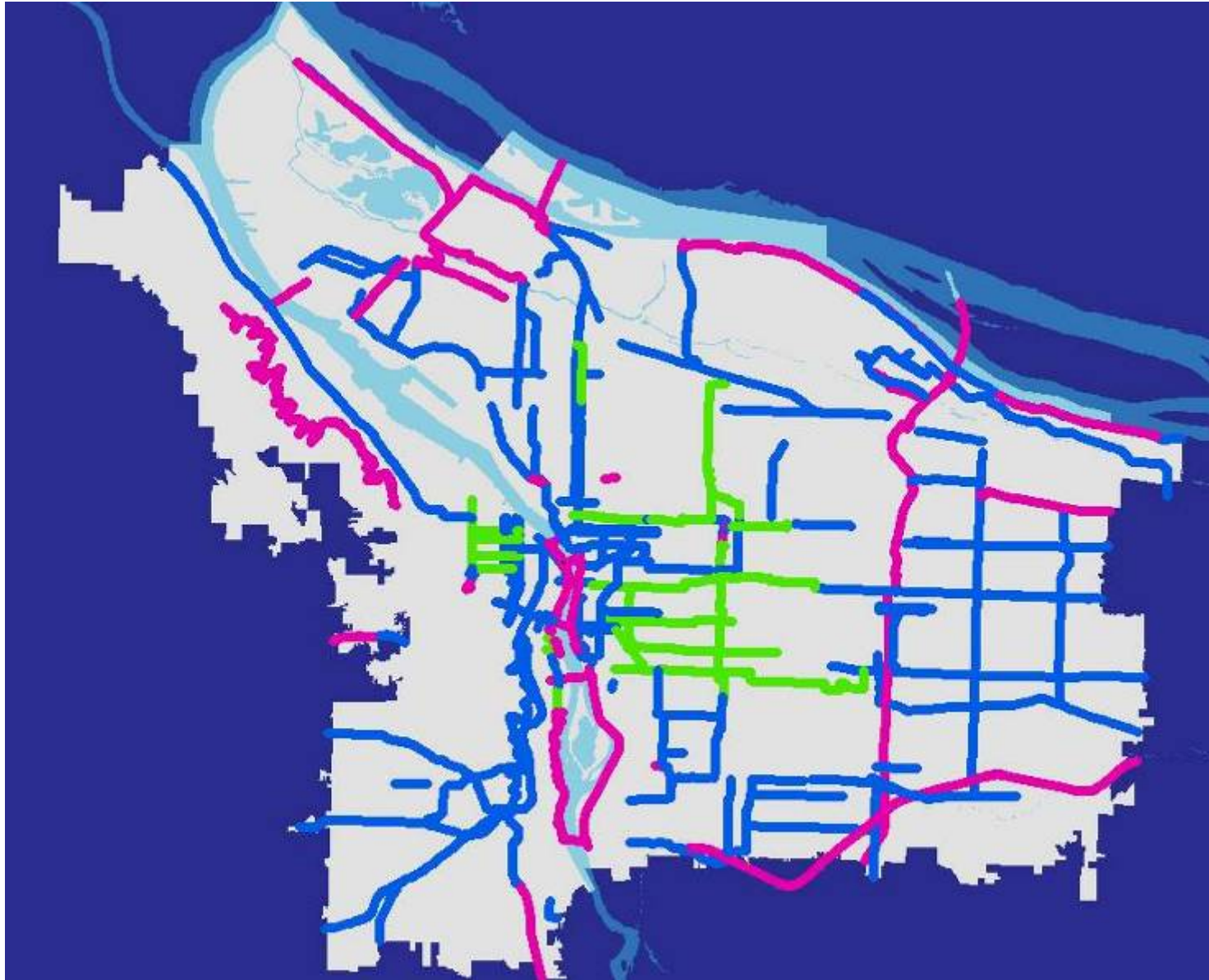
Development of Portland's Bikeway Network



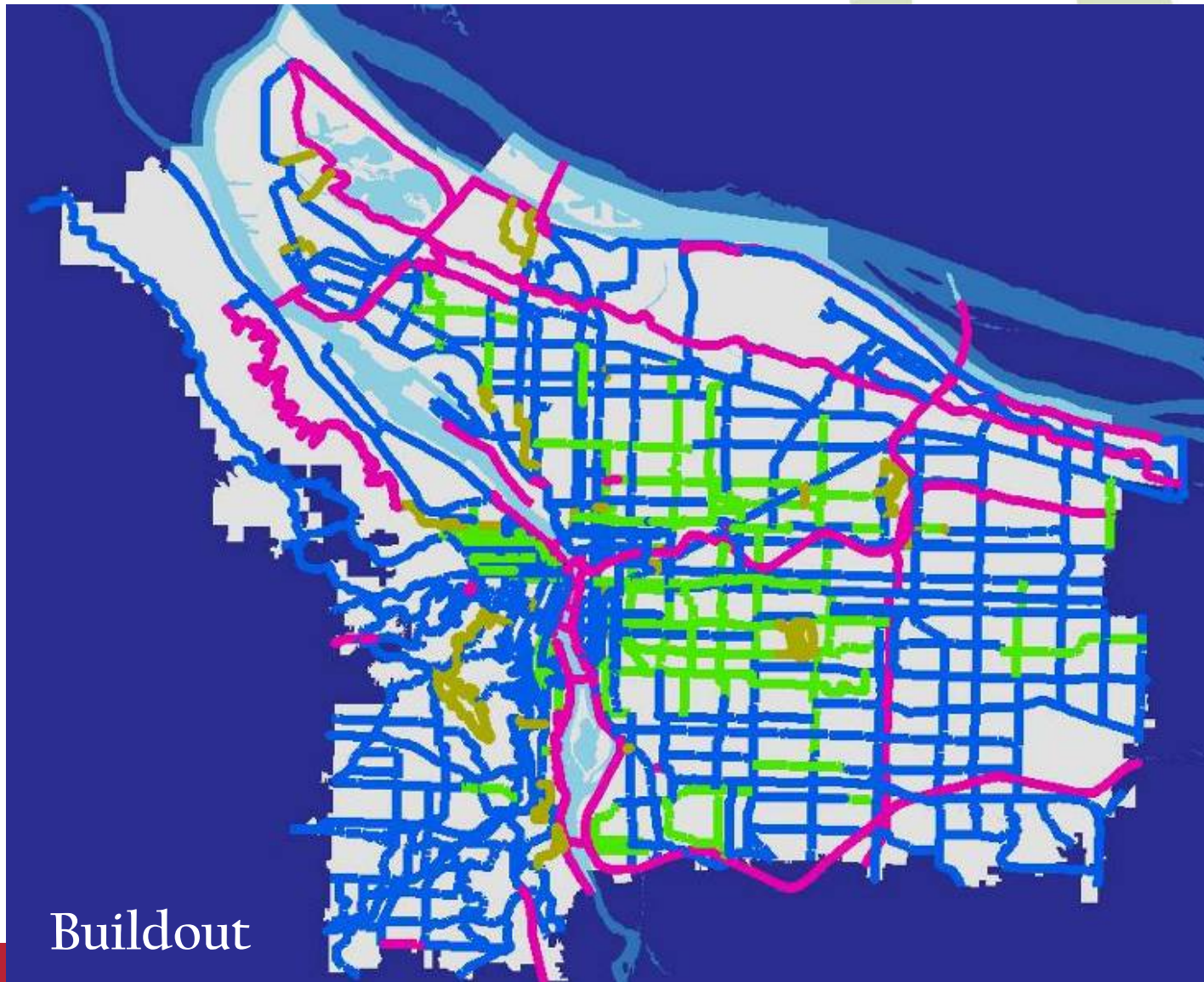
Development of Portland's Bikeway Network



Development of Portland's Bikeway Network



Portland Bike Plan Vision, adopted 1996: 630 mile network



Development of Portland's Bikeway Network

Existing Bikeways

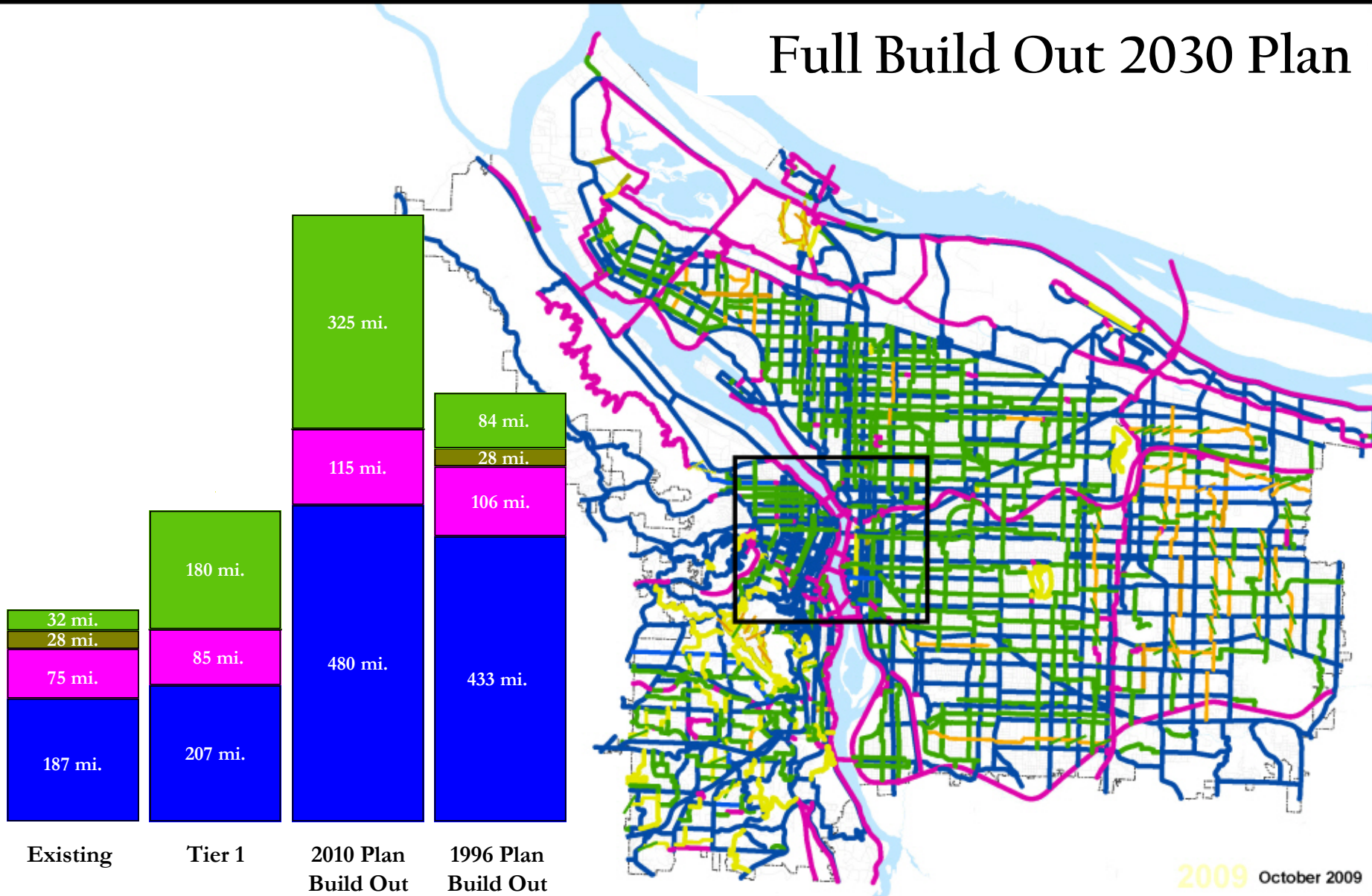


Existing

2009 October 2009

Expanding Portland's Network

Full Build Out 2030 Plan



Bicycle Lanes

- Arterial streets
 - > 3,000 vpd
- Allow bicyclists safe access to main streets
 - quick transport
 - commercial districts
 - safe crossings
- 187 street miles



Narrowing Lanes

Before



After



Narrowing Lanes



Removing a Lane – “Road Diet”



Restricting Parking



Before



After

Restricting Parking



Bicycle Boulevards

Developed on low traffic volume streets that already work well for bicycles

Priority for Bikes

Improvements:

- crossings
- continuous travel
- traffic diversion

- 29 miles



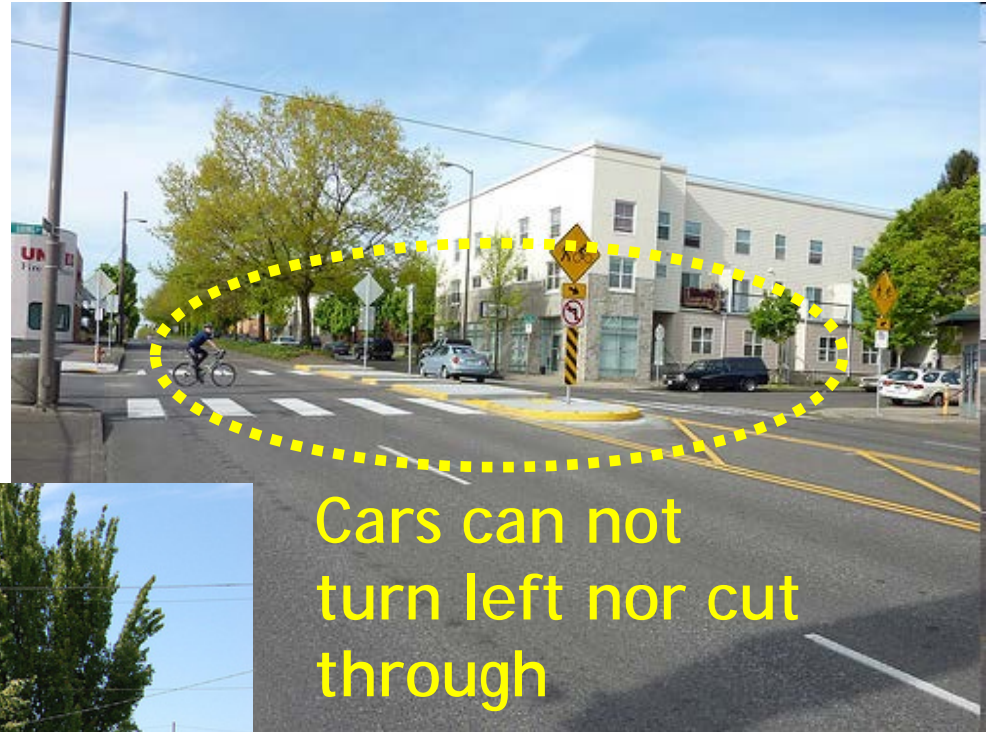
Bicycle Boulevards: Diversion



Bicycle Boulevards: Traffic Calming



Bicycle Boulevards: Crossing Enhancements



- Portland's Bicycle Boulevards Become Neighborhood Greenways:
www.streetsfilm.org

Innovations in Design

- Colored Lanes
- Bike Boxes
- Buffered Bike Lanes
- Lanes
- Signing & Marking
- Scramble Signal
- HAWK Signal
- Cycle track



Shared Use Paths

- Multiple non-motorized users
- Completely off-road
 - except crossing
- Primarily developed by Parks Bureau, ODOT, Metro
 - I-205
 - Springwater
 - Waterfront
 - Eastside Esplanade
- 55 miles



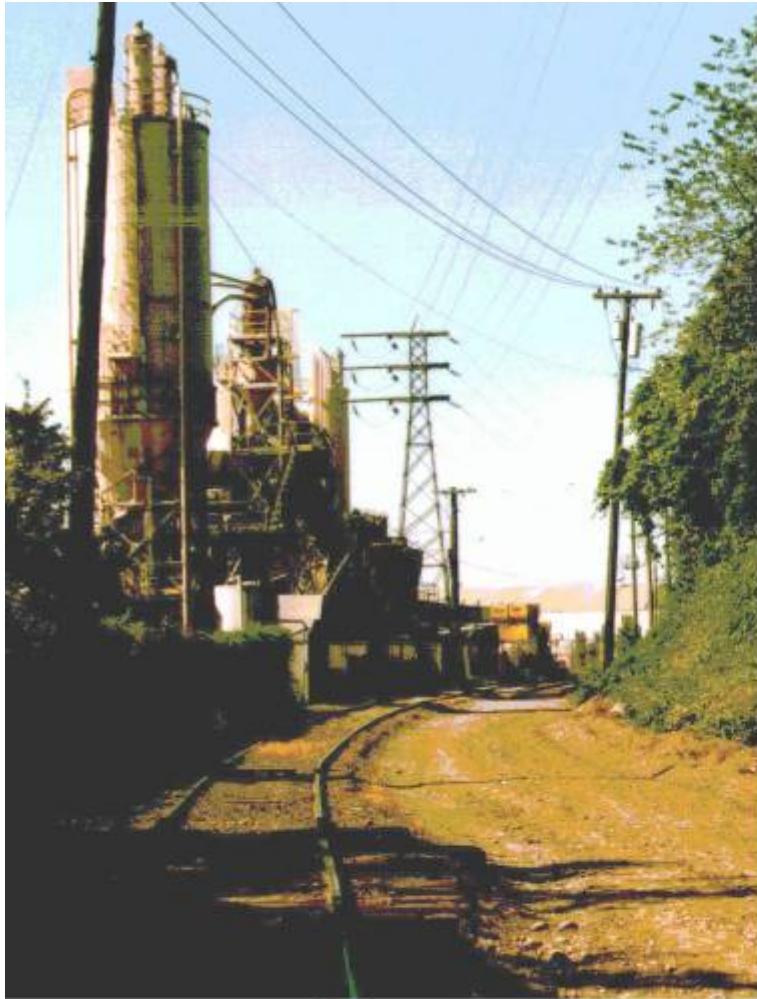
Springwater Corridor



Eastbank Esplanade



SW - OMSI



Before



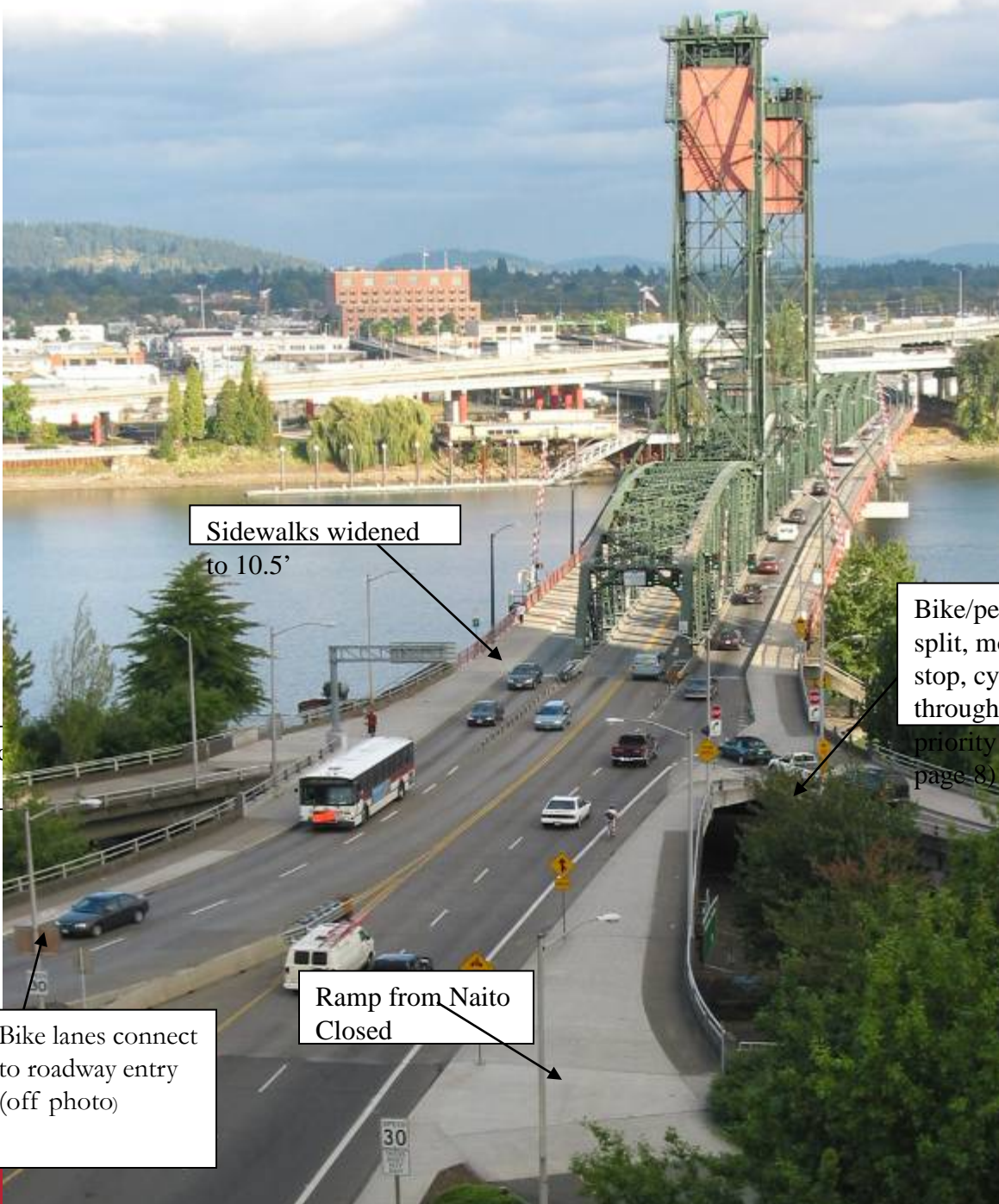
After

Springwater-OMSI Rail-With-Trail : Portland, Oregon : Opened November 2002

Focus on Bridges



Hawthorne



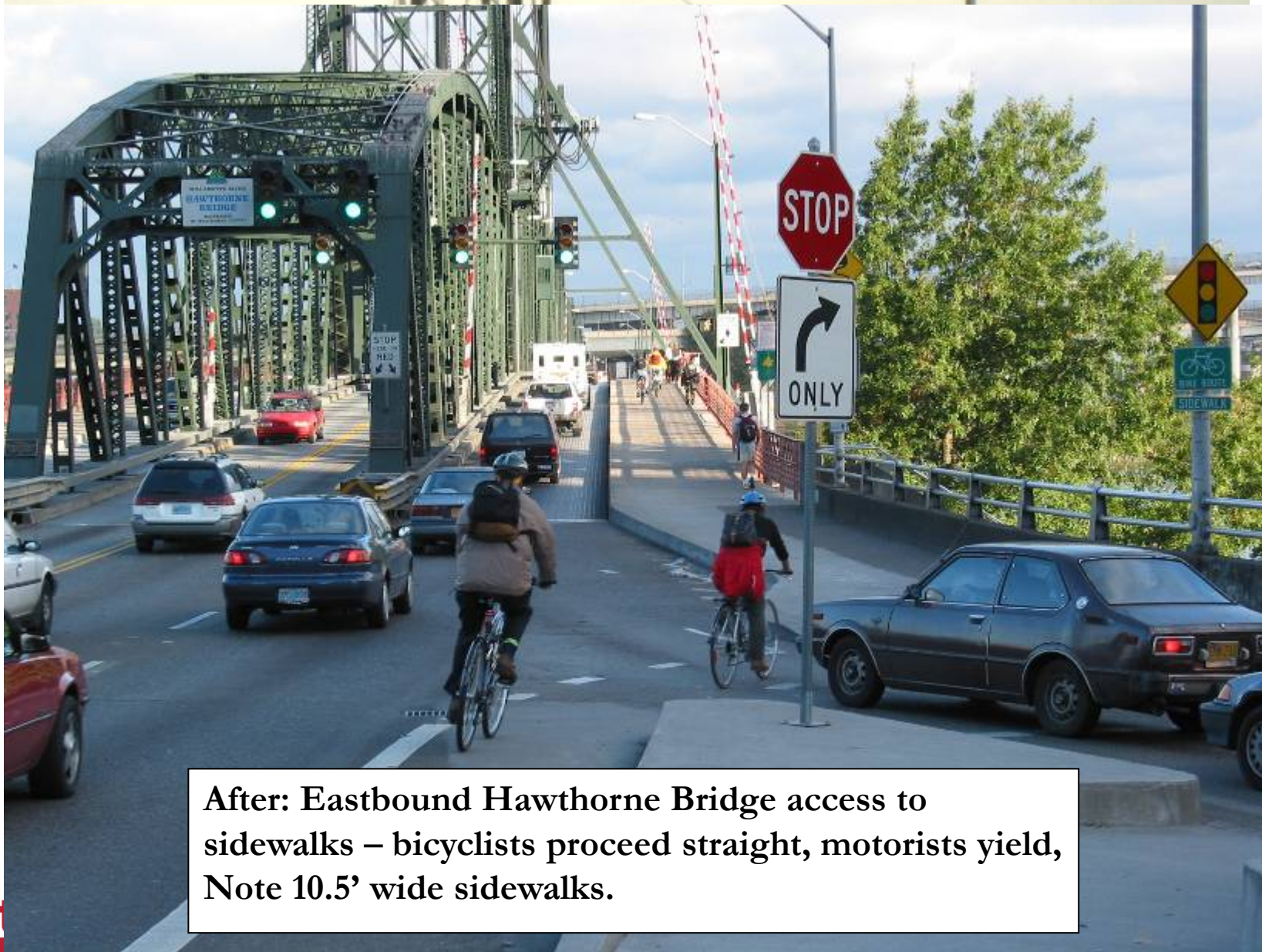
Sidewalks widened to 10.5'

No bike lanes connected to roadway entry

Bike/ped movement split, motorists stop, cyclist have through movement priority (see photo page 8)

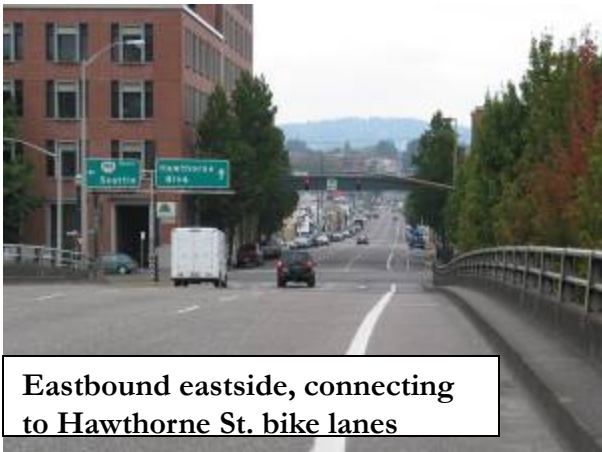
Bike lanes connect to roadway entry (off photo)

Ramp from Naito Closed



After: Eastbound Hawthorne Bridge access to sidewalks – bicyclists proceed straight, motorists yield, Note 10.5' wide sidewalks.

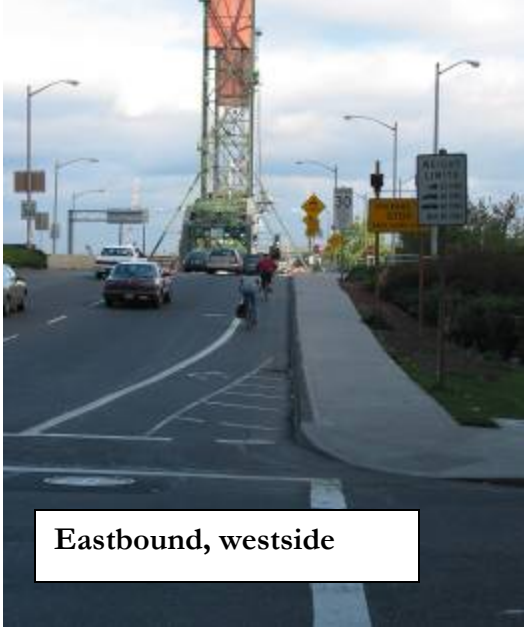
Hawthorne



Eastbound eastside, connecting to Hawthorne St. bike lanes



Blue area on eastbound viaduct at off-ramp



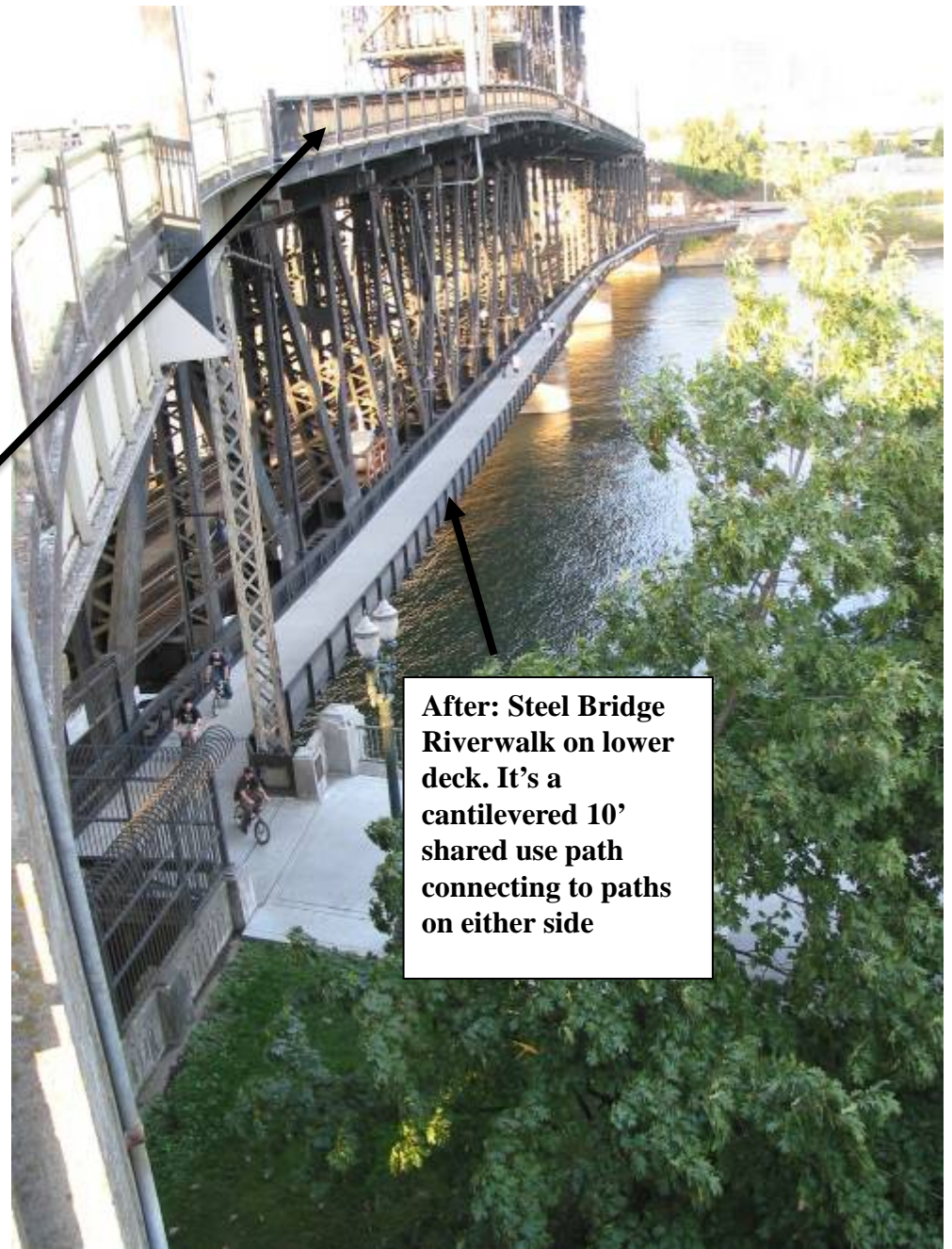
Eastbound, westside



Westbound, eastside

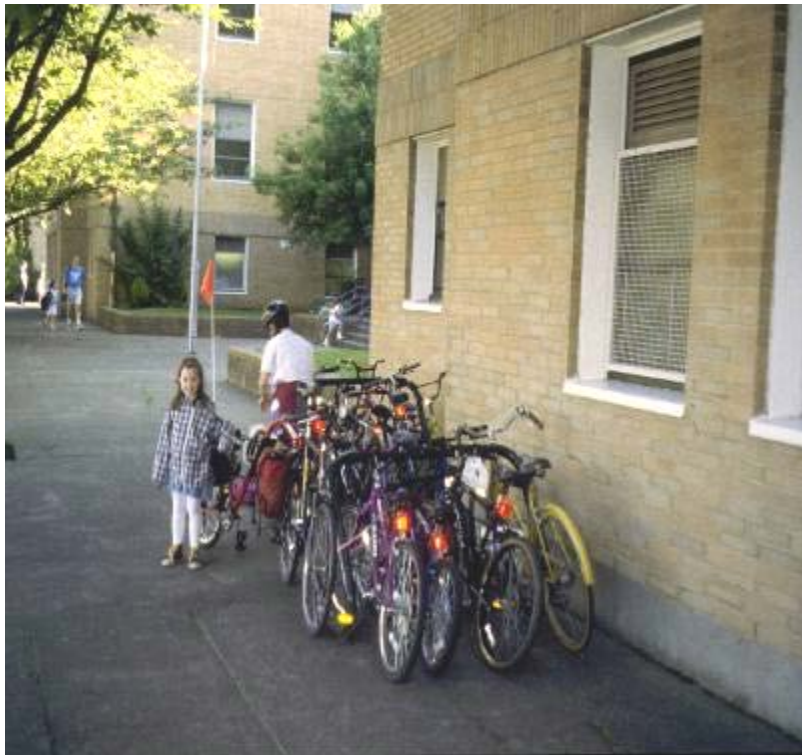
Steel Bridge

Before: Steel Bridge, upper deck.
Bicyclists and pedestrians sharing
one 5' sidewalk with guardrail.



After: Steel Bridge
Riverwalk on lower
deck. It's a
cantilevered 10'
shared use path
connecting to paths
on either side

Bicycle Parking



At schools



On-street & in garages



Signage

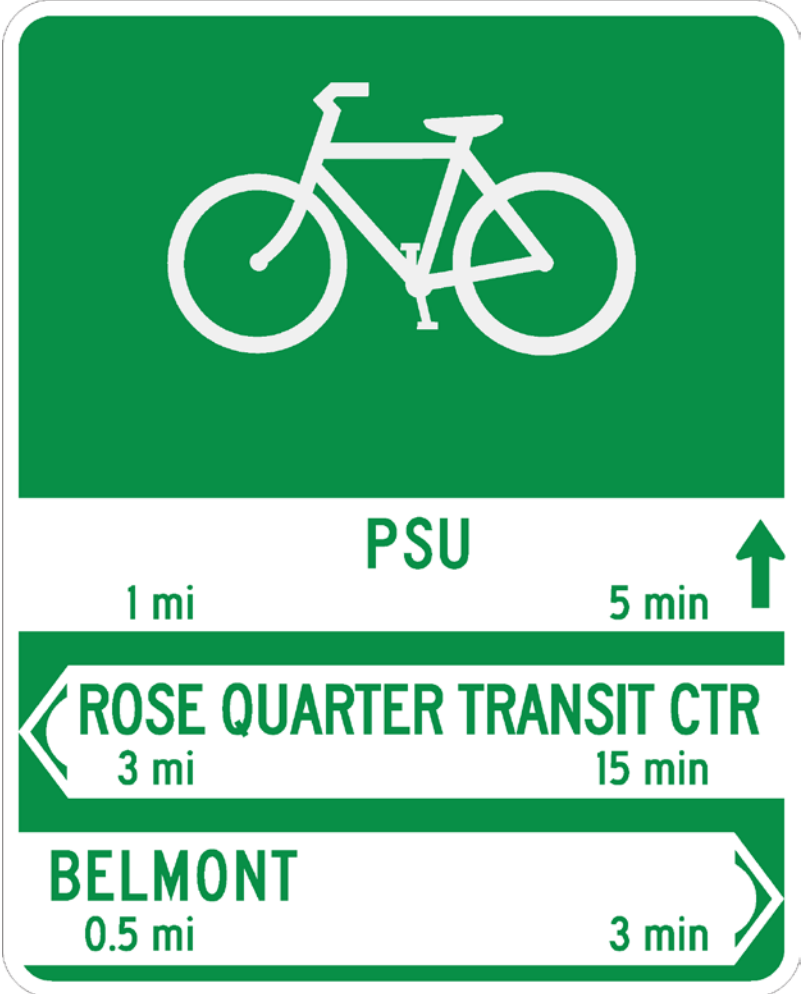


Photo credit: Jonathan Maus, bikeportland.org

Encouragement



Community-Run Events



Bike Fest







Bike to the Future









Look Both Ways
at the end of
your driveway

Be Seen
Dress Bright

Use →
← Hand Signals
Ride With
Traffic

Wear
a
Helmet

Check Your
ABC's
Check C

Stop at
Red Lights



Institutionalization

Encouragement Programs

Travel Smart
www.GettingAroundPortland.org



Institutionalization

Institutionalization

Transit improvements

- Bike racks
- Bikes on MAX w/permits & restrictions
- Elimination of permits
- Elimination of MAX restrictions
- Hanging racks on MAX



Institutionalization

Parking Code: Bike parking as part of new and existing building construction



Institutionalization

Working closely with the maintenance bureau



Bike lanes during
routine resurfacing



Institutionalization

Encouragement Programs

Travel Smart
www.GettingAroundPortland.org



Institutionalization

Coordination with Other Jurisdictions:
ODOT, Counties, Metro



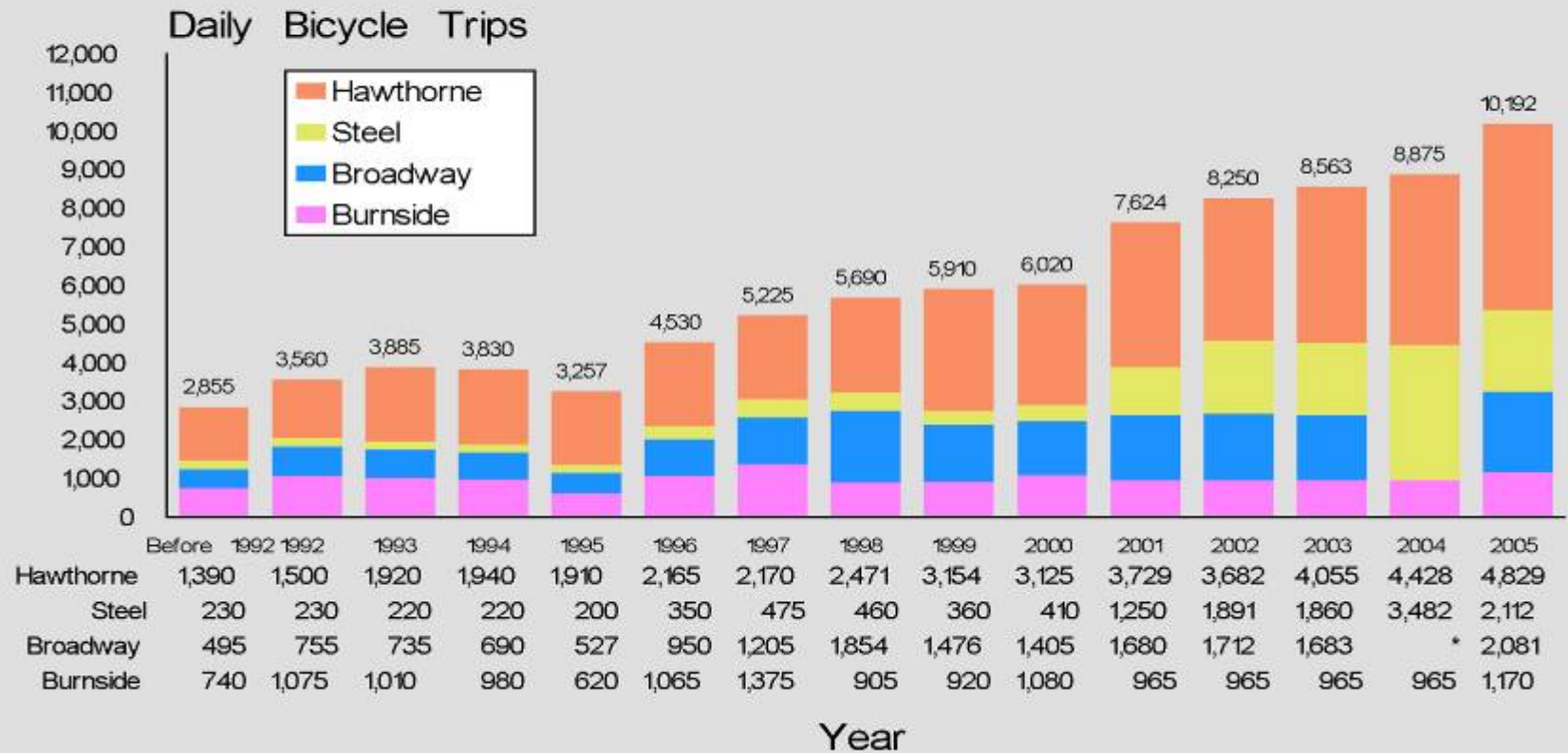
Institutionalization

Internal Programs/Support



Average Daily Bicycle Traffic

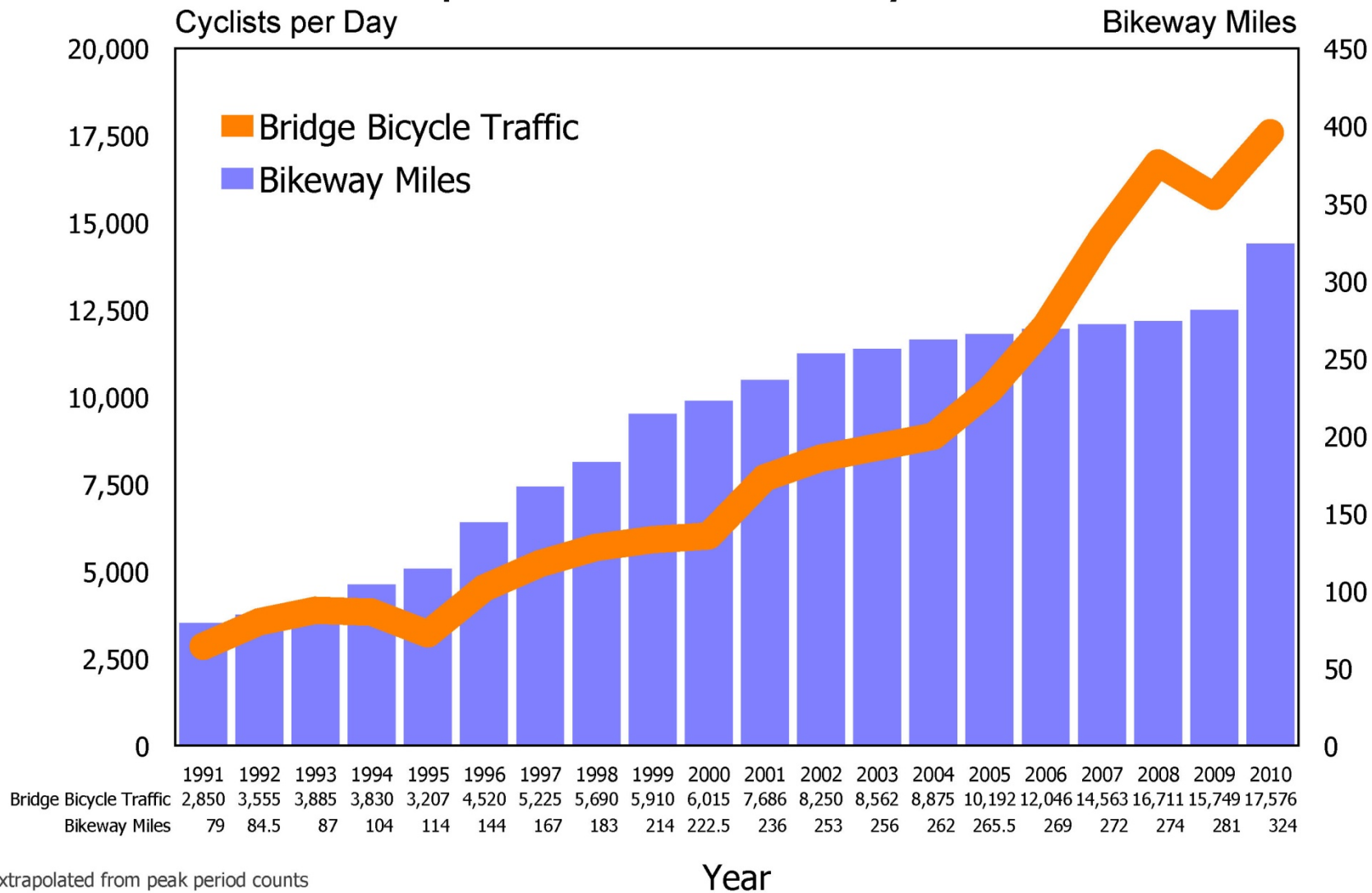
4 Main Willamette River Bicycle Bridges



Based on either 24-hour hose counts or extrapolated from 4-6 pm counts

* Broadway Bridge closed for construction during time of count.

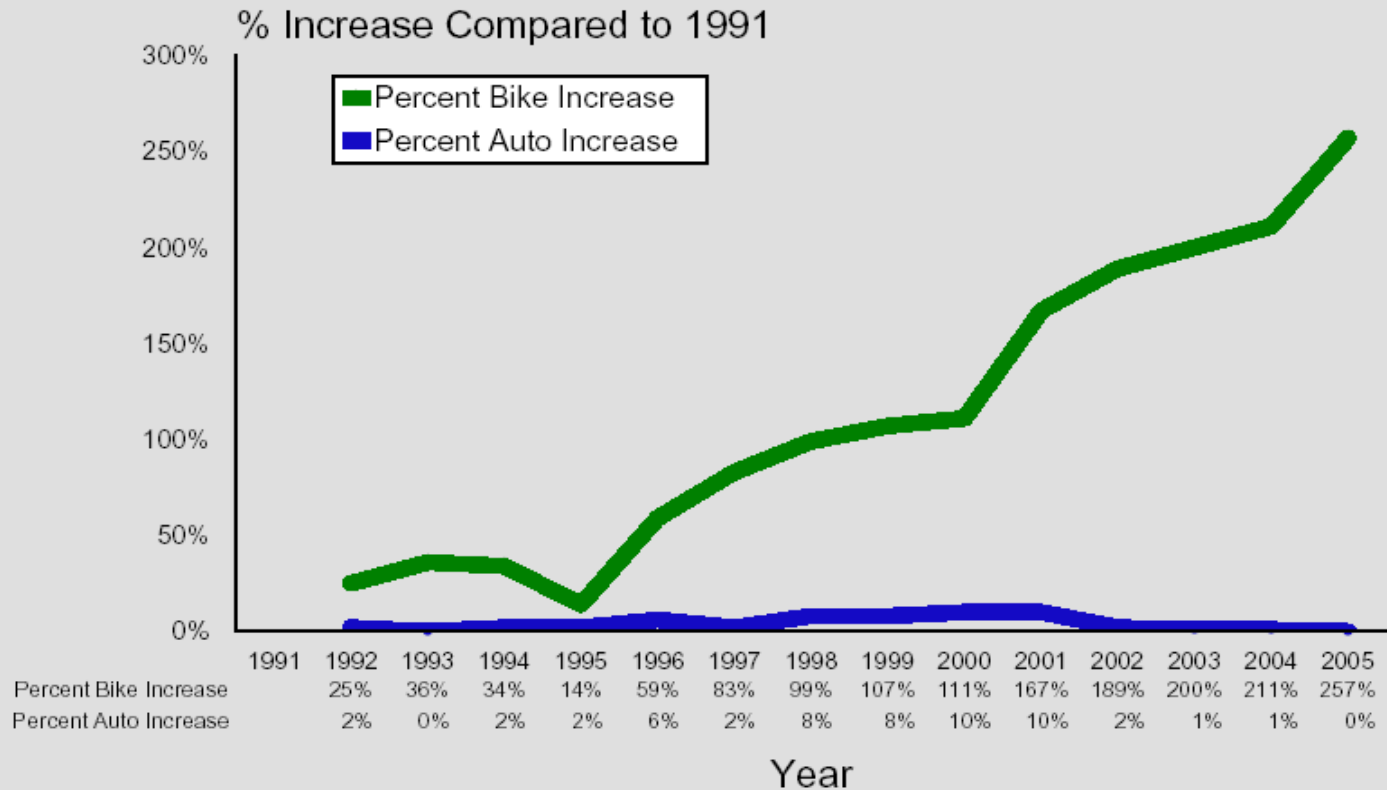
Bicycle Traffic across Four Main Portland Bicycle Bridges Juxtaposed with Bikeway Miles



Extrapolated from peak period counts

Annual Increase in Bicycle and Automobile Traffic Compared to 1991 Volumes

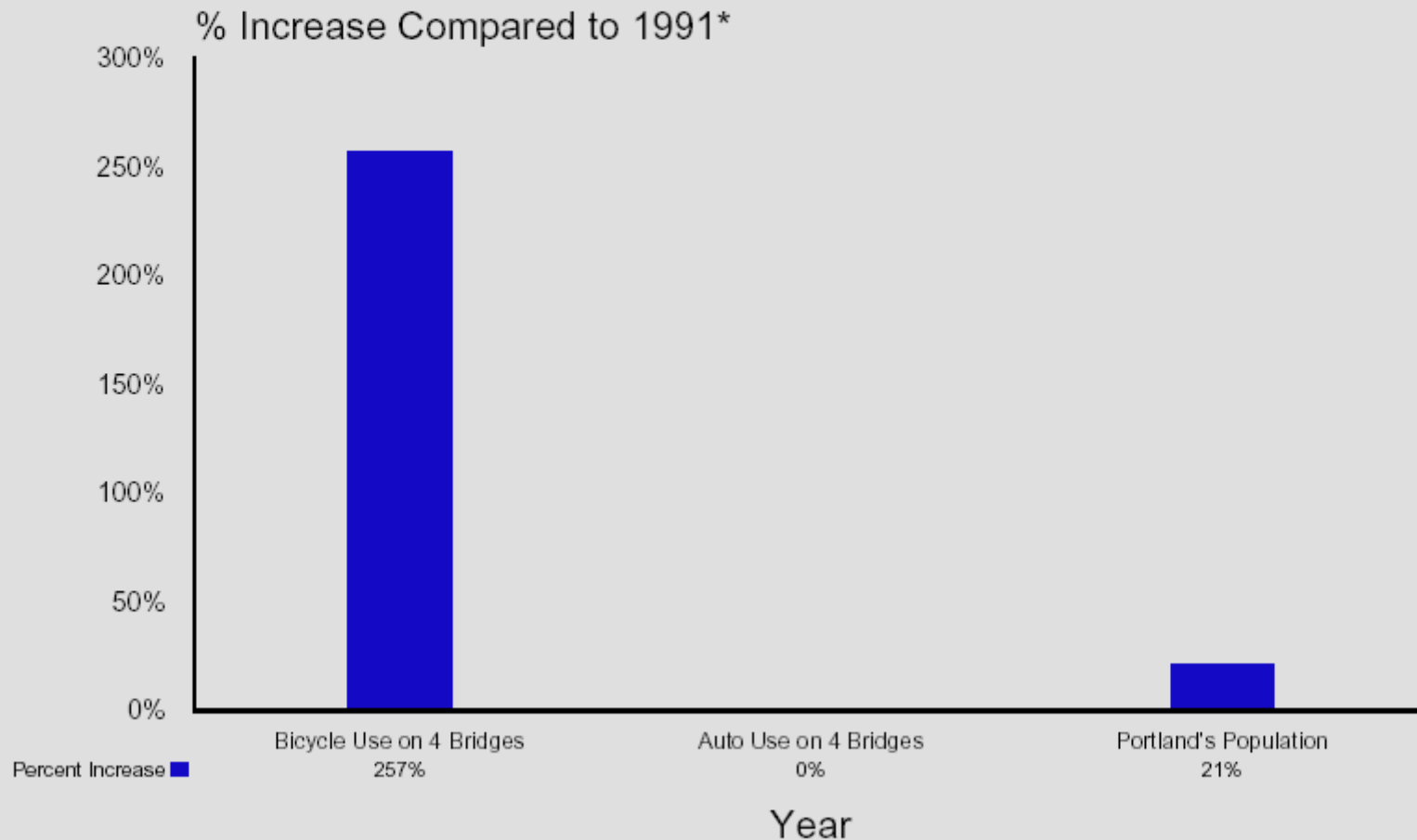
4 Main Willamette River Bicycle Bridges



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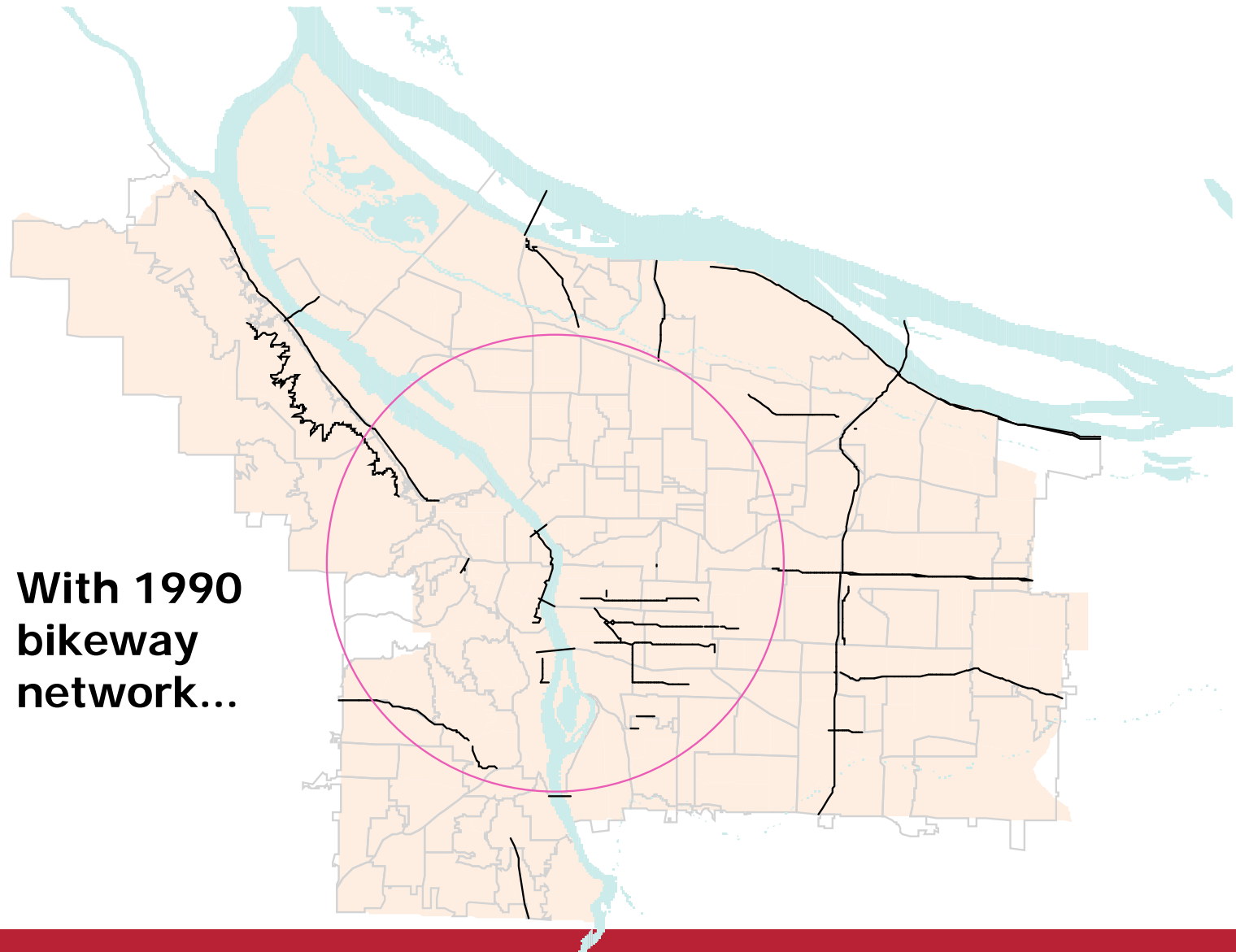
Increase in Bicycle and Automobile Traffic and Population 1991-2000*

On the Broadway, Steel, Burnside and Hawthorne Bridges



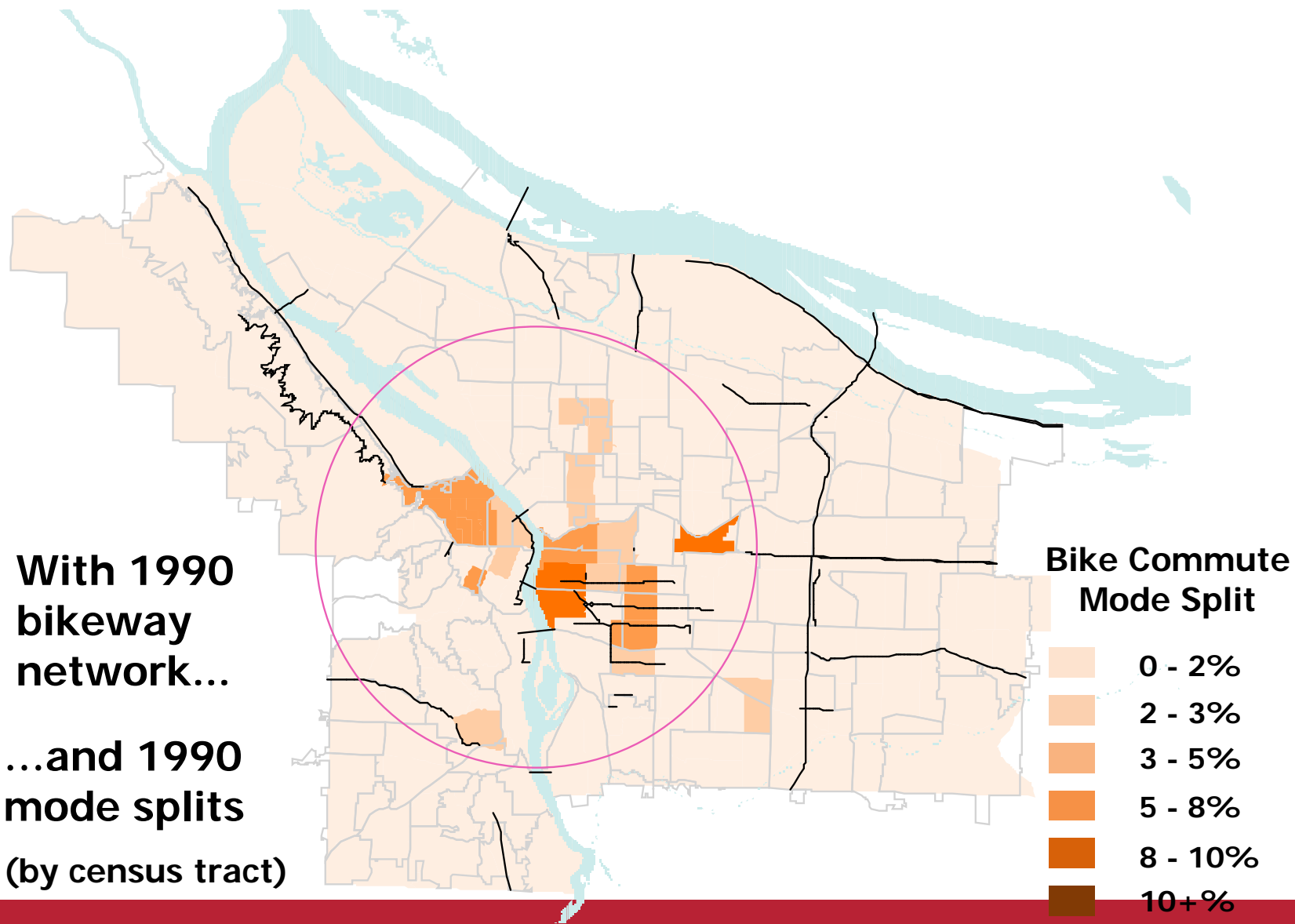
*Population increase based on values from 1990 and 2000 US Census.

Increasing Bicycle Commute Mode Split

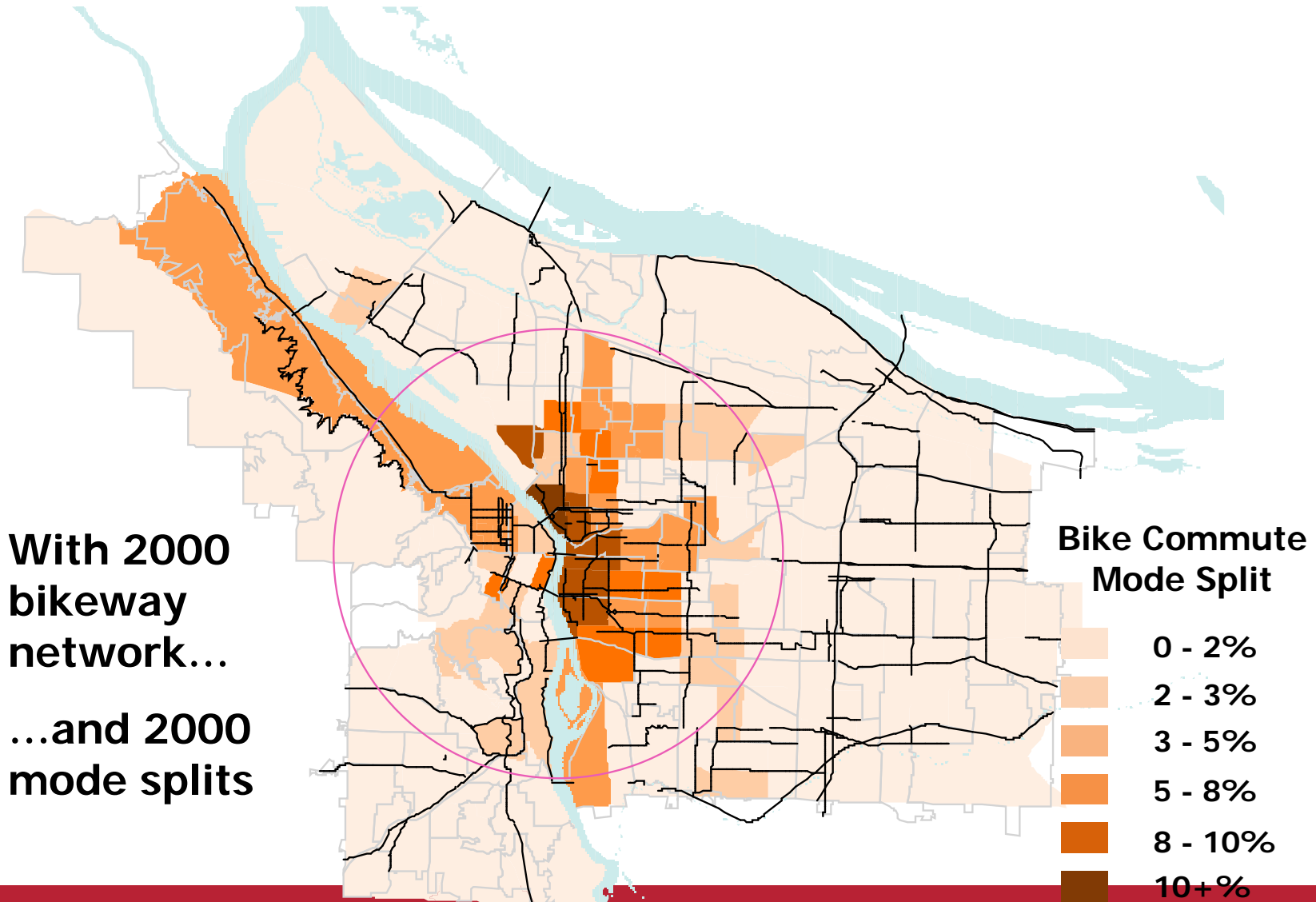


**With 1990
bikeway
network...**

Bicycle Commute Mode Split 1990

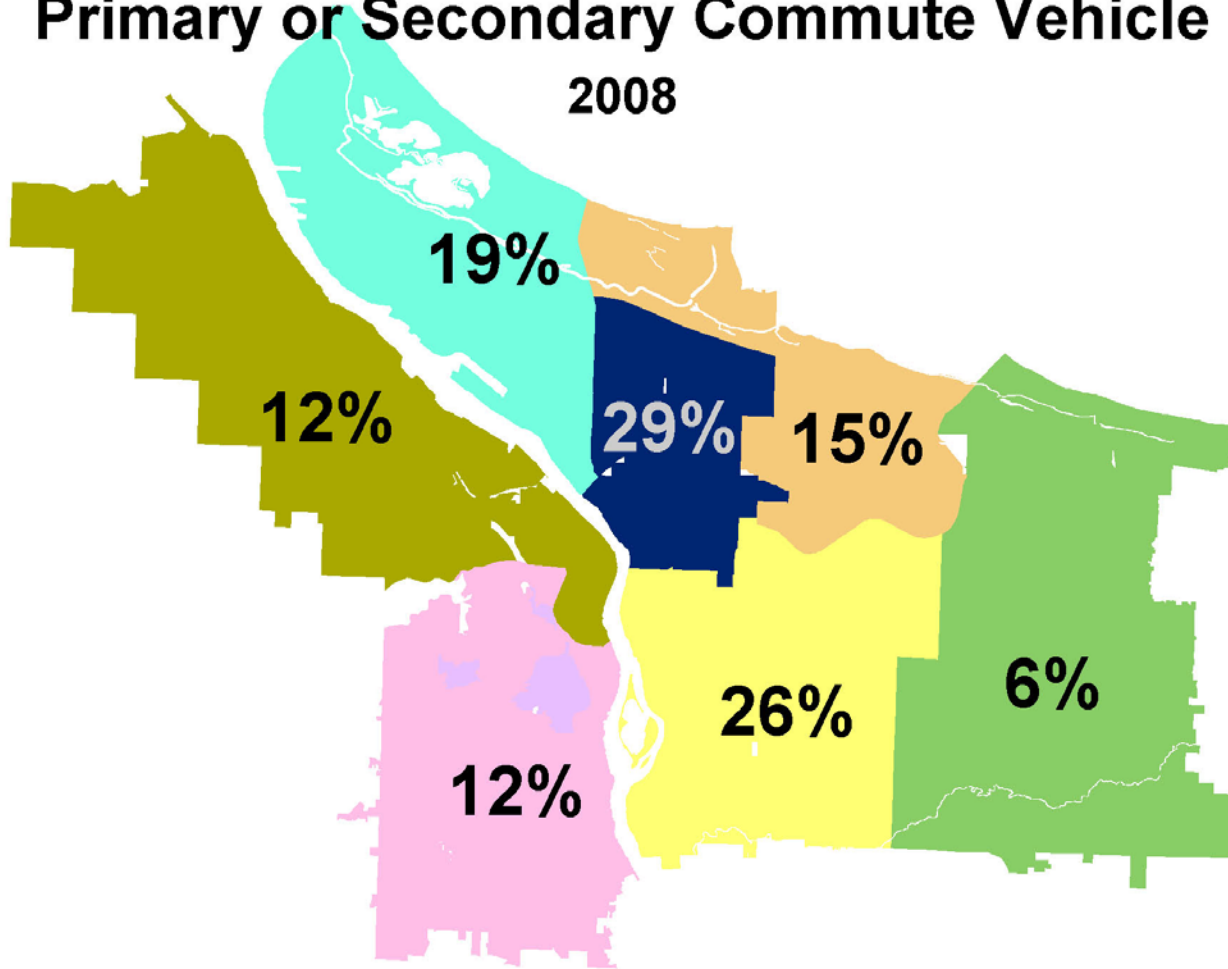


Bicycle Commute Mode Split 2000



Bicycle Commuting in Portland

People Reporting the Bicycle as Their
Primary or Secondary Commute Vehicle
2008

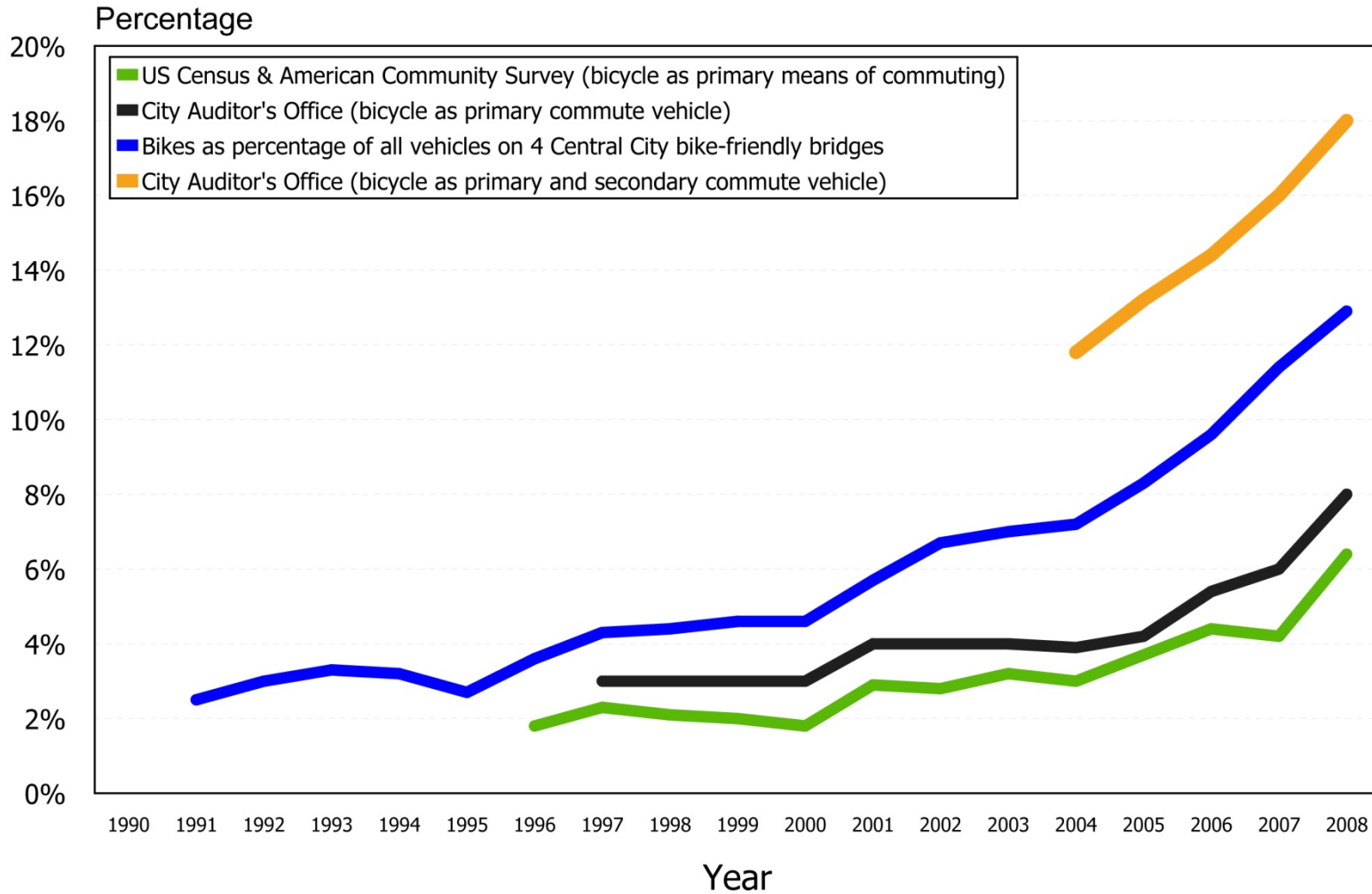


Citywide: 18%

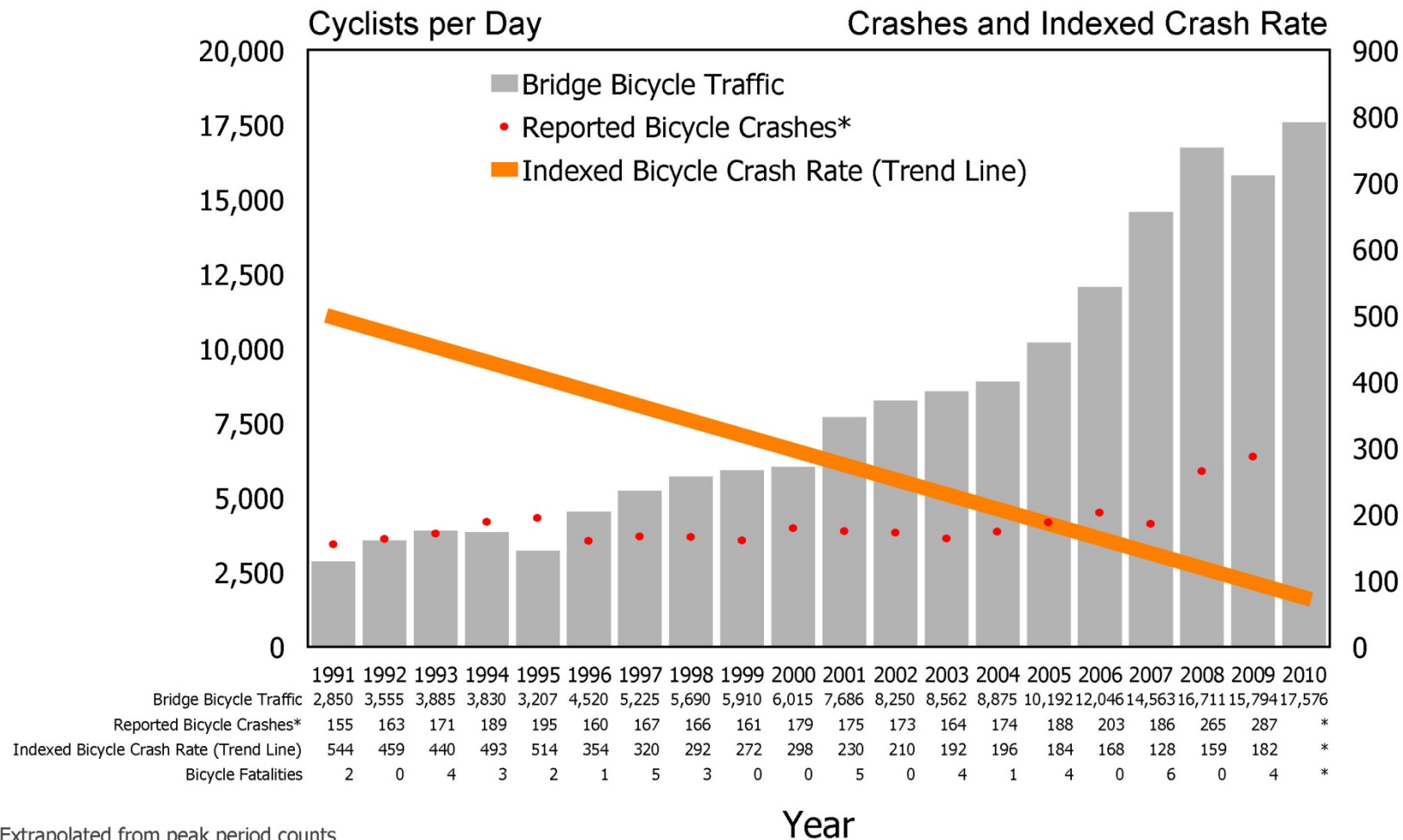
Source: City of Portland Office of the Auditor:
Service Efforts & Accomplishments Report 2007-08

Rising Bicycle Use in Portland

Bridge Counts, US Census, City Auditor's Reports



Combined Bicycle Traffic over Four Main Portland Bicycle Bridges Juxtaposed with Bicycle Crashes



Extrapolated from peak period counts

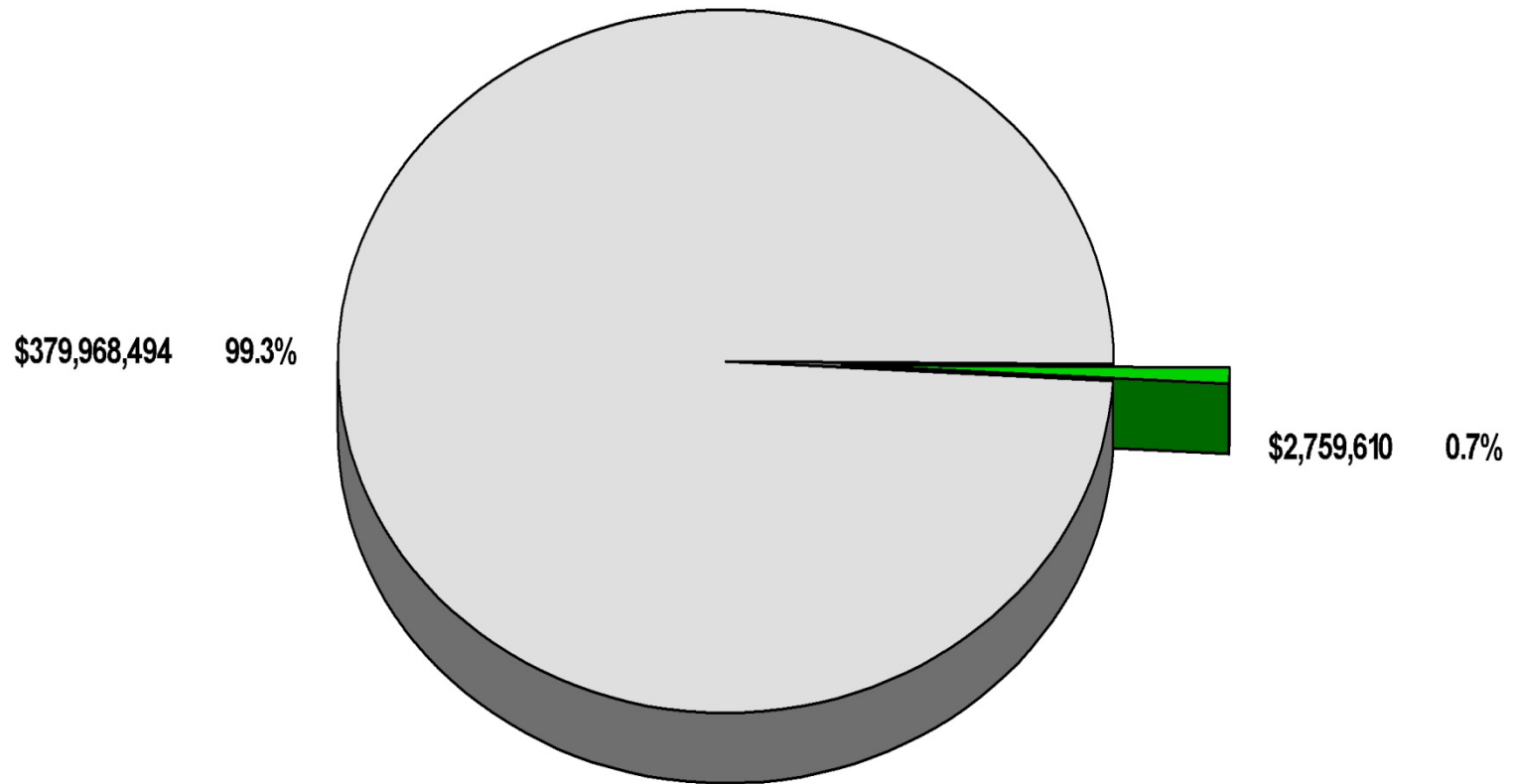
"Crash Rate" represents an indexing of annual reported crashes to daily bicycle trips across the four main bicycle bridges.

*2008, 2009 Reported Bicycle Crashes data reflects increased crash reporting requirements.

PDOT's Bicycle Capital Funding 2000-2007

Total Actual
Expenditures: \$383 million

0.7% of PDOT's capital budget!



\$100 million bike industry



 **IRA RYAN** *cycles*

Bike Industry Growth



Bicycling: Cost-Effective, Win-Win Solution



Portland's success reflects a community commitment to making bicycling an integral part of daily life!



Increase professional capacity

Initiative for Bicycle & Pedestrian Innovation:

www.ibpi.usp.pdx.edu/



Public Bike Sharing



Washington, D.C.



Portland



Minneapolis

Vancouver BC

Key: More low stress,
generation

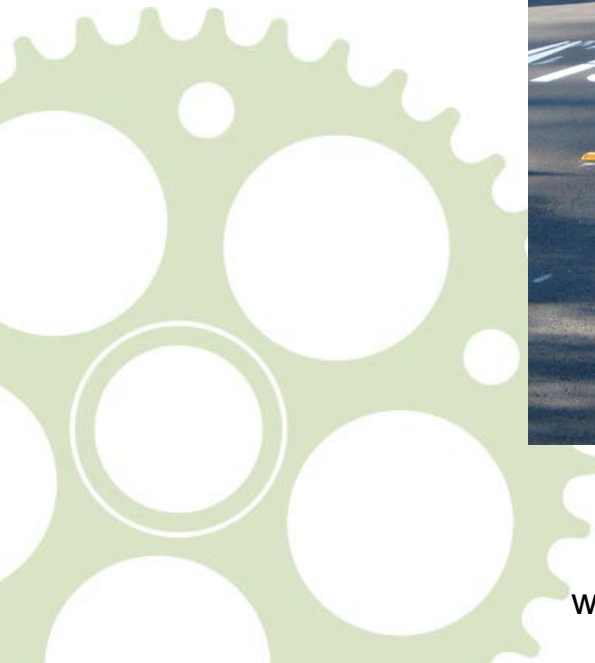


Washington DC



Pennsylvania Ave, Washington
DC

Berkeley, CA



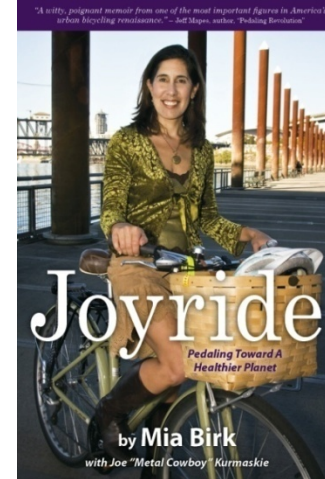
NACTO Urban Bikeway Design Guide

www.CitiesforCycling.org



Free APBP Webinar 5/25

www.apbp.org



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Proud Supporter of:



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Hosford Middle School

Home of the Huskies



Alliance
for
Biking & Walking



BICYCLE TRANSPORTATION ALLIANCE
OPENING MINDS AND ROADS TO BICYCLING



Here for Oregon. Here for Good.



alta



The Dougy Center

The National Center for Grieving Children & Families



Community Cycling Center

The bicycle is a tool for empowerment and a vehicle for change