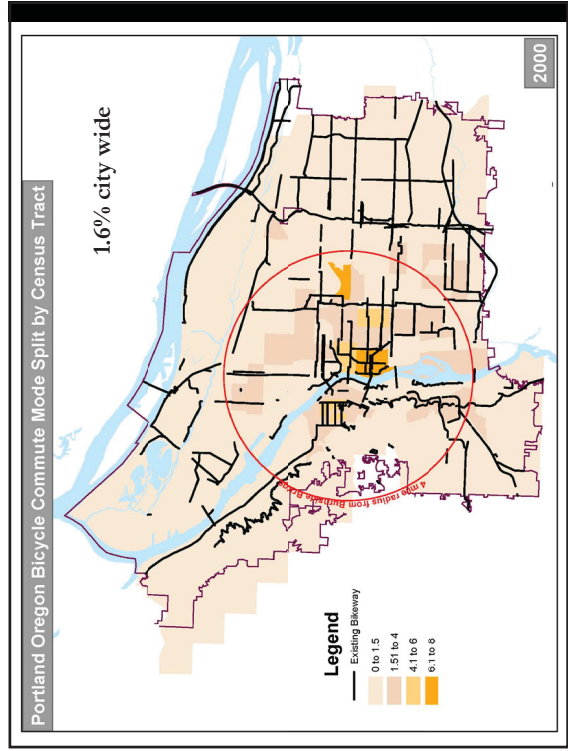
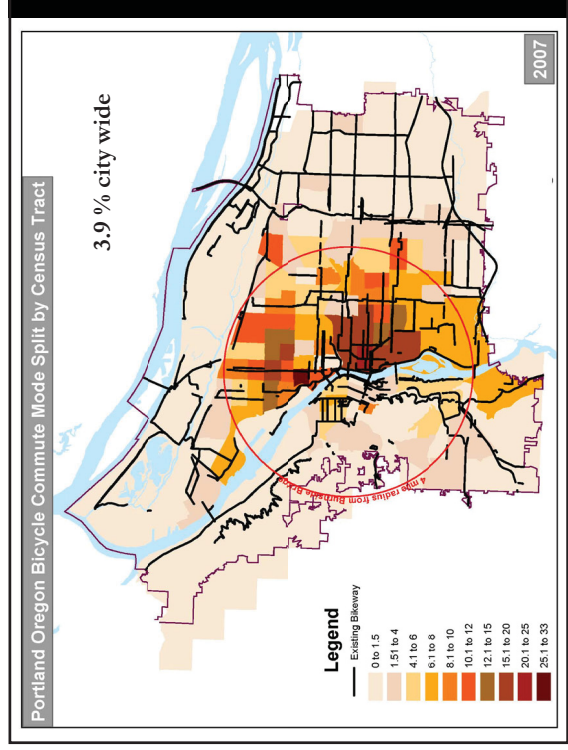
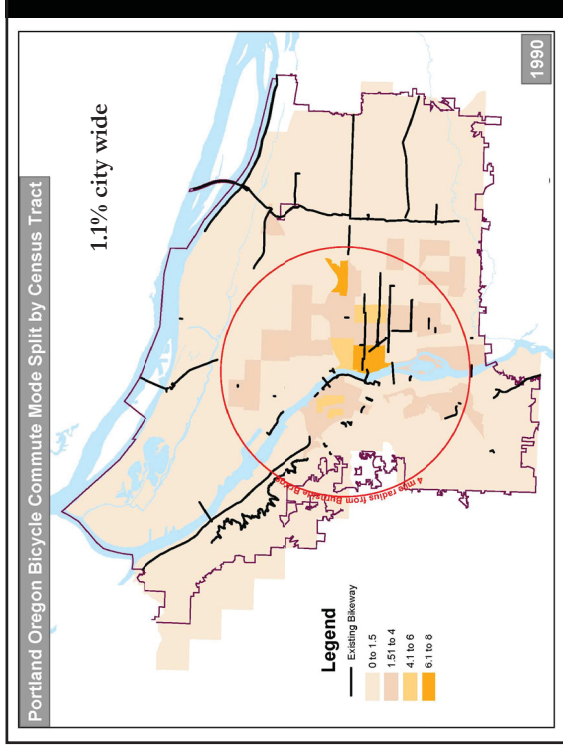


Bicycle Mode Splits by Census Tract

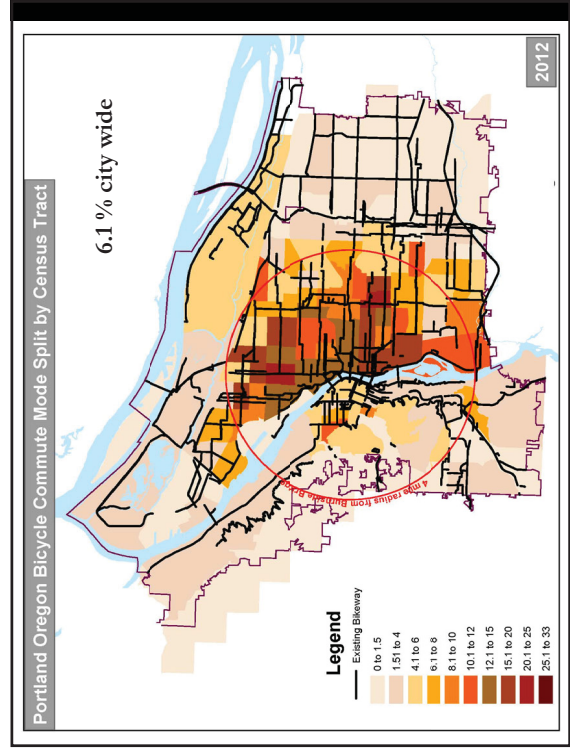
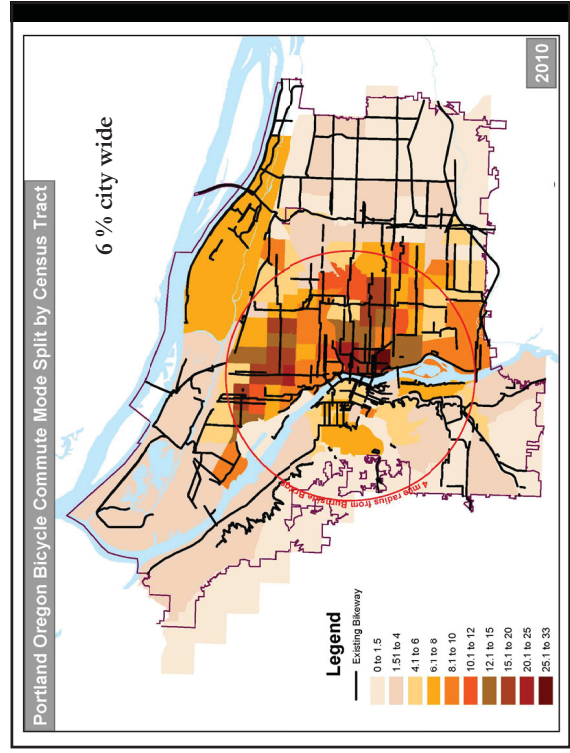
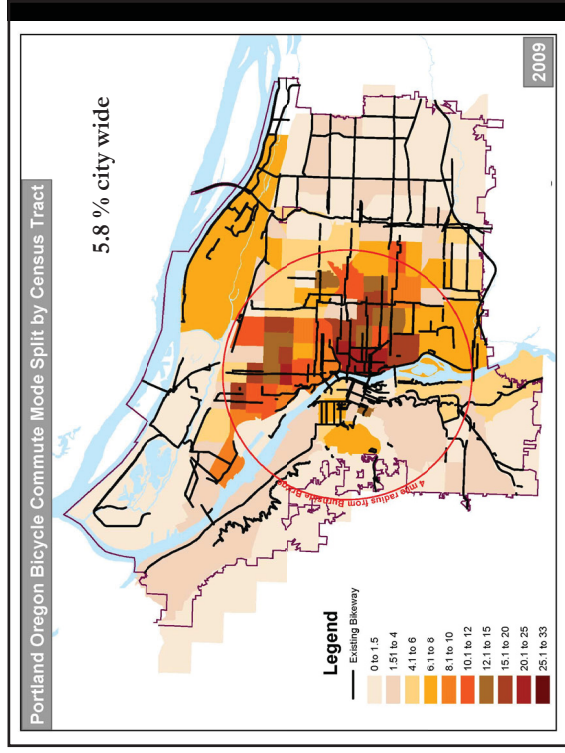
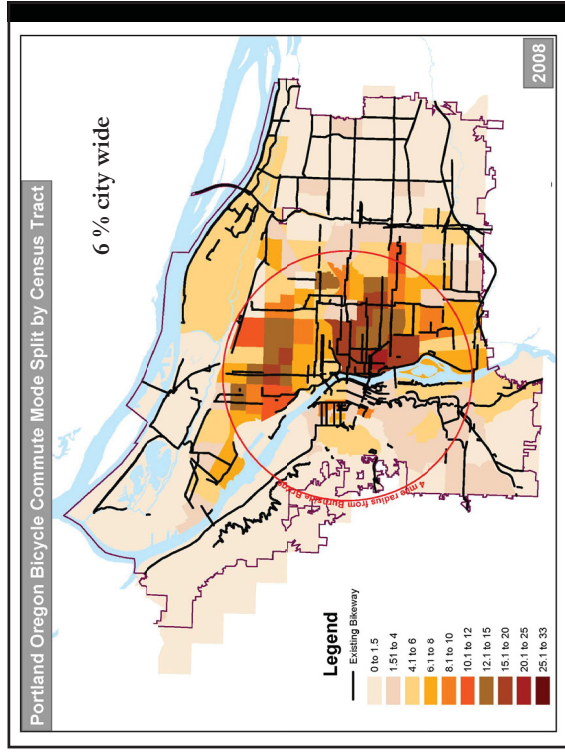
updated with new legend 10/18

1990 – 2014*

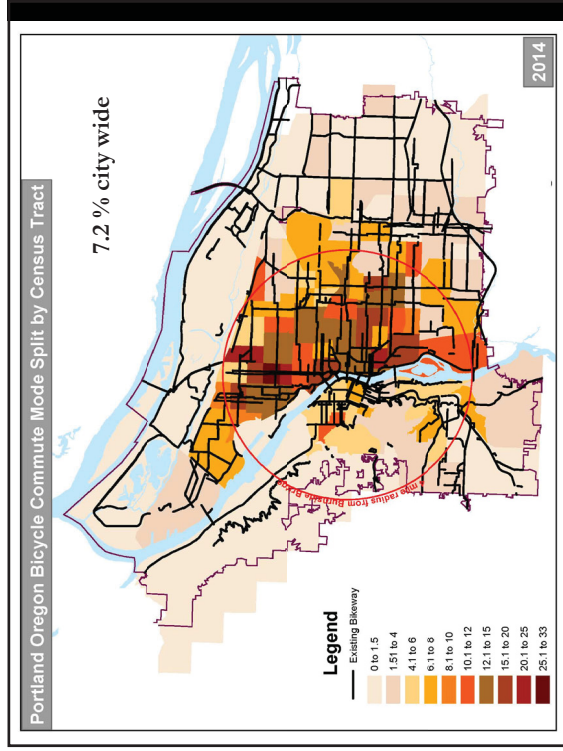
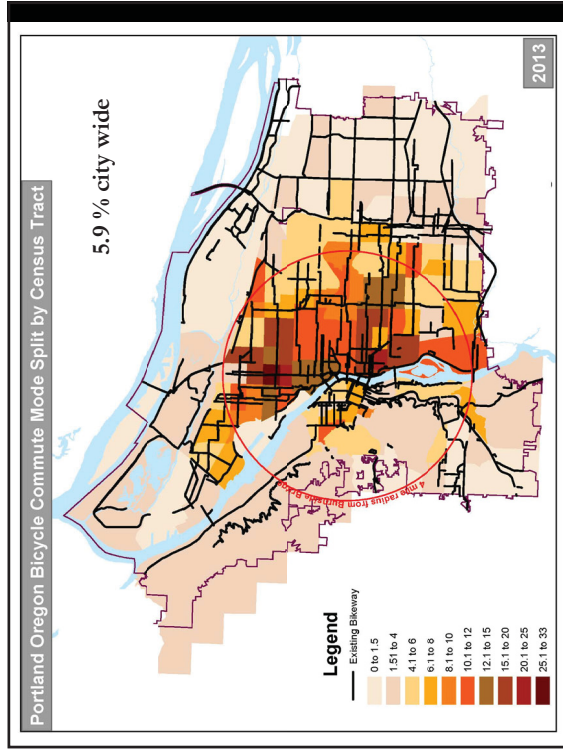
* 2007-2014 data is based on 5-year ACS with reported year as mid-point



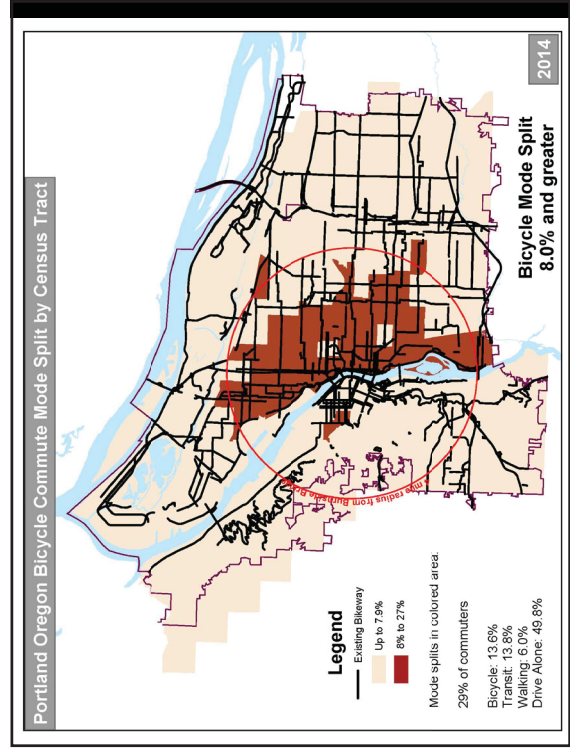
Attachment A: Bicycle Mode Splits By Census Tract



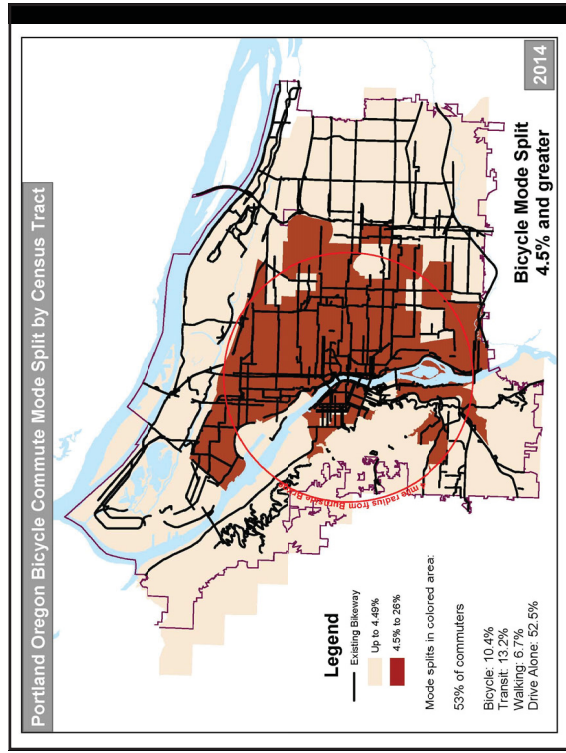
Attachment A: Bicycle Mode Splits By Census Tract



“Fifty percent of Portland commuters live in areas where the average bicycle mode split is ten percent.”



Attachment A: Bicycle Mode Splits By Census Tract



| Annual Bikeway Miles Developed | | | | | | | | | | Cumulative Total of Bikeway Miles by Facility Type | | | | | | |
|--------------------------------|------------------------|------------------|-------------------|------|------|-------------------------------|-----------------|-----------------------------|-------|--|------------------|-------------------|-------|------|-------------------------------|-------|
| Year | Facility Type | | | | | | | | | Facility Type | | | | | | |
| | Boulevard/ Greenway | Buffered Lane | Protected Lane | Lane | Path | Enhanced Shared Roadway | Retired Lane | Retired Buffered Lane | Total | Boulevard/ Greenway | Buffered Lane | Protected Lane | Lane | Path | Enhanced Shared Roadway | Total |
| <1980 | 0.0 | | | 0.1 | 8.3 | | | | 8.4 | 0.0 | 0.0 | 0.0 | 0.1 | 8.3 | 0.0 | 8.4 |
| 1980 | 3.0 | | | 5.3 | 15.0 | | | | 23.2 | 3.0 | 0.0 | 0.0 | 5.3 | 23.3 | 0.0 | 31.6 |
| 1981 | | | | 10.0 | | | | | 10.0 | 3.0 | 0.0 | 0.0 | 15.3 | 23.3 | 0.0 | 41.6 |
| 1982 | | | | 6.4 | | | | | 6.4 | 3.0 | 0.0 | 0.0 | 21.6 | 23.3 | 0.0 | 47.9 |
| 1983 | | | | 0.0 | 9.9 | | | | 9.9 | 3.0 | 0.0 | 0.0 | 21.6 | 33.2 | 0.0 | 57.9 |
| 1984 | | | | 4.1 | | | | | 4.1 | 3.0 | 0.0 | 0.0 | 25.8 | 33.2 | 0.0 | 62.0 |
| 1985 | | | | 1.7 | | | | | 1.7 | 3.0 | 0.0 | 0.0 | 27.5 | 33.2 | 0.0 | 63.7 |
| 1986 | 2.6 | | | 0 | | | | | 2.6 | 5.6 | 0.0 | 0.0 | 27.5 | 33.2 | 0.0 | 66.2 |
| 1987 | 0.7 | | | 4.3 | | | | | 5.0 | 6.3 | 0.0 | 0.0 | 31.8 | 33.2 | 0.0 | 71.3 |
| 1988 | 2.3 | | | 0.9 | | | | | 3.2 | 8.6 | 0.0 | 0.0 | 32.7 | 33.2 | 0.0 | 74.5 |
| 1989 | | | | 0.6 | | | | | 0.6 | 8.6 | 0.0 | 0.0 | 33.3 | 33.2 | 0.0 | 75.1 |
| 1990 | | 0.1 | | 1.1 | | | | | 1.2 | 8.6 | 0.1 | 0.0 | 34.4 | 33.2 | 0.0 | 76.4 |
| 1991 | | | | | | | | | 0.0 | 8.6 | 0.1 | 0.0 | 34.4 | 33.2 | 0.0 | 76.4 |
| 1992 | | | | 5.0 | | | | | 5.0 | 8.6 | 0.1 | 0.0 | 39.4 | 33.2 | 0.0 | 81.4 |
| 1993 | | | | 3.1 | | | | | 3.1 | 8.6 | 0.1 | 0.0 | 42.5 | 33.2 | 0.0 | 84.4 |
| 1994 | 0.1 | | | 8.3 | 8.4 | | | | 16.9 | 8.8 | 0.1 | 0.0 | 50.8 | 41.6 | 0.0 | 101.3 |
| 1995 | | | | 9.8 | 1.0 | | | | 10.8 | 8.8 | 0.1 | 0.0 | 60.6 | 42.6 | 0.0 | 112.1 |
| 1996 | 1.5 | 0.1 | 0.1 | 21.1 | 9.0 | | | | 31.7 | 10.2 | 0.2 | 0.1 | 81.7 | 51.6 | 0.0 | 143.8 |
| 1997 | 1.6 | 0.2 | | 19.8 | 1.3 | | | | 23.0 | 11.9 | 0.5 | 0.1 | 101.5 | 52.9 | 0.0 | 166.8 |
| 1998 | | | | 16.2 | | | | | 16.2 | 11.9 | 0.5 | 0.1 | 117.8 | 52.9 | 0.0 | 183.1 |
| 1999 | 12.9 | | | 15.2 | 4.9 | | | | 33.0 | 24.7 | 0.5 | 0.1 | 133.0 | 57.8 | 0.0 | 216.1 |
| 2000 | 2.4 | | | 6.7 | 0.6 | | | | 9.7 | 27.1 | 0.5 | 0.1 | 139.7 | 58.5 | 0.0 | 225.8 |
| 2001 | | 0.1 | | 7.2 | 5.4 | | | | 12.7 | 27.1 | 0.6 | 0.1 | 146.9 | 63.9 | 0.0 | 238.5 |
| 2002 | 2.2 | | | 7.8 | 3.6 | | | | 13.5 | 29.3 | 0.6 | 0.1 | 154.7 | 67.4 | 0.0 | 252.0 |
| 2003 | 0.8 | | | 2.3 | 0.2 | | | | 3.2 | 30.0 | 0.6 | 0.1 | 157.0 | 67.6 | 0.0 | 255.3 |
| 2004 | | 0.2 | | 4.2 | 1.1 | | | | 5.5 | 30.0 | 0.8 | 0.1 | 161.1 | 68.8 | 0.0 | 260.8 |
| 2005 | | | | 2.0 | 4.6 | | | | 6.6 | 30.0 | 0.8 | 0.1 | 163.2 | 73.3 | 0.0 | 267.4 |
| 2006 | | | | 2.8 | 1.2 | 0.5 | | | 4.0 | 30.0 | 0.8 | 0.1 | 166.0 | 74.6 | 0.5 | 272.0 |
| 2007 | | | | 3.3 | 0.8 | | | | 4.1 | 30.0 | 0.8 | 0.1 | 169.3 | 75.4 | 0.5 | 276.1 |
| 2008 | | 0.1 | | 2.9 | | | | | 3.0 | 30.0 | 0.9 | 0.1 | 172.2 | 75.4 | 0.5 | 279.1 |
| 2009 | 0.9 | 2.6 | 0.3 | 1.0 | 1.8 | | 0.3 | | 6.4 | 30.9 | 3.5 | 0.4 | 172.9 | 77.2 | 0.5 | 285.5 |
| 2010 | 19.5 | 0.1 | 0.0 | 3.3 | 0.6 | 0.6 | 0.2 | | 23.2 | 50.4 | 3.6 | 0.5 | 175.9 | 77.8 | 1.2 | 309.4 |
| 2011 | 8.5 | 0.3 | 0.5 | 1.0 | 0.2 | 0.3 | | | 10.5 | 58.9 | 3.9 | 1.0 | 176.8 | 78.0 | 1.4 | 320.1 |
| 2012 | 14.1 | 0.4 | 0.5 | 0.0 | 1.1 | | 0.8 | | 15.3 | 73.0 | 4.3 | 1.4 | 176.1 | 79.1 | 1.4 | 335.4 |
| 2013 | 2.3 | 1.7 | 0.6 | 2.2 | 1.4 | 0.0 | 2.1 | | 6.1 | 75.3 | 6.0 | 2.1 | 176.2 | 80.6 | 1.5 | 341.6 |
| 2014 | 2.6 | 6.1 | 0.4 | 5.8 | 2.0 | 0.6 | 5.4 | 0.1 | 11.4 | 77.9 | 12.0 | 2.4 | 176.6 | 82.6 | 2.1 | 353.6 |
| 2015 | 5.1 | 2.3 | 0.1 | 0.5 | 1.1 | 0.9 | 2.3 | | 6.9 | 83.0 | 14.4 | 2.6 | 174.8 | 83.7 | 3.0 | 361.4 |
| 2016 | 1.0 | 6.3 | 0.9 | 0.4 | 1.0 | 1.2 | 5.5 | | 4.1 | 84.0 | 20.7 | 3.5 | 169.7 | 84.6 | 4.3 | 366.8 |
| 2017 | 7.7 | 4.4 | 1.8 | 0.3 | 0.0 | 1.0 | 5.3 | 0.4 | 8.6 | 91.7 | 24.7 | 5.3 | 164.7 | 84.7 | 5.3 | 376.3 |
| 2018 | 2.1 | 3.2 | 0.0 | 0.5 | 0.5 | 3.8 | 2.8 | | 3.5 | 93.8 | 27.9 | 5.3 | 162.4 | 85.1 | 9.1 | 383.7 |
| Funded | 29.8 | 14.3 | 29.0 | 11.2 | 5.4 | 0.0 | 17.1 | 1.9 | 89.6 | 123.6 | 42.2 | 34.3 | 156.5 | 90.5 | 9.1 | 456.1 |

From: [Chris Smith](#)
To: [Jeff Bachrach](#); [Ocken, Julie](#)
Cc: [Figliozi, Sarah](#); [Hormann, Liz](#); [Wright, Sara](#); [Schultz, Katherine](#); [Eli Spevak](#)
Subject: Thoughts on bike mode split
Date: Wednesday, January 23, 2019 9:43:48 AM

Jeff,

I'm sure staff will have more info on this, but as a close observer of the development of our cycling system, I wanted to share my thoughts on mode split with you. I'm copying Julie so she can share this with the rest of the Commission as well.

A number of folks have observed that after steady growth in the 90's and 00's, we have plateaued a bit. I think there are two basic explanations for this:

- 1) The growth is non-linear, there is a definite theory for why there would be an inflection point, and what it takes to move past it
- 2) There have been some definite headwinds

Inflection Point

There is a model for the types of cyclists developed by Portland's bike coordinator, Roger Geller, and picked up and validated nationally. You can read about it here: <https://blog.altaplanning.com/understanding-the-four-types-of-cyclists-112e1d2e9a1b>

It posits four types of cyclists (or non-cyclists)

Strong and Fearless (about 1%) - will ride whether we provide facilities or not
Enthusied and Confident (about 7% - I put myself in this group) - OK with basic facilities, will ride in a bike lane with nothing more than a white strip separating arterial traffic
Interested but Concerned (60%) - interested in cycling but want to feel safer and more comfortable
No-way, no-how (33%) - never going to cycle, we don't spend energy trying to persuade them :-)

My operating theory is that we have basically picked up the first two groups already - they constitute the 7-9% mode share we see today (much higher in some neighborhoods). Our next challenge is to make headway in the Interested but Concerned group, which represents a huge opportunity. If we activate a third of this group, we get to our 25% mode split goal! We're going to need more investment to make them comfortable. A network of protected lanes, which we're starting to build, is a key part. But so are good end of trip facilities that will make it easy to access destinations and home storage. So the code we're working on is necessary condition, but of course is in no way sufficient by itself.

Headwinds

In the last decade we've had two countervailing forces working against us:

- Until recently PBOT has been very budget constrained and construction of new facilities had come almost to a halt. Happily, since voter approval of a local gas tax, that has turned around and PBOT is now beginning to build the kind of protected facilities that are going to attract the

Interested but Concerned. The recently approved Central City in Motion plan is a great example of this.

- Traffic congestion. As we know, more trip growth has gone to SOVs in recent years, and that makes conditions out on the streets much less friendly. People who have cycled in the past stopped because they felt unsafe in the new conditions, and we've seen the Neighborhood Greenways (low traffic, low speed streets used as bikeways) flooded with cut through traffic. PBOT has begun putting physical diverters in place (based in part on encouragement from Comp Plan/TSP policies we adopted) to deal with this. Protected lanes are a big part of the way we offset the effects of congestion.

I hope this helps your thought process.

Thanks.

Chris

Attachment D - Portland bike facility map - current network and future funded

Portland's existing and funded bikeways

Creating a low-stress* network

Legend

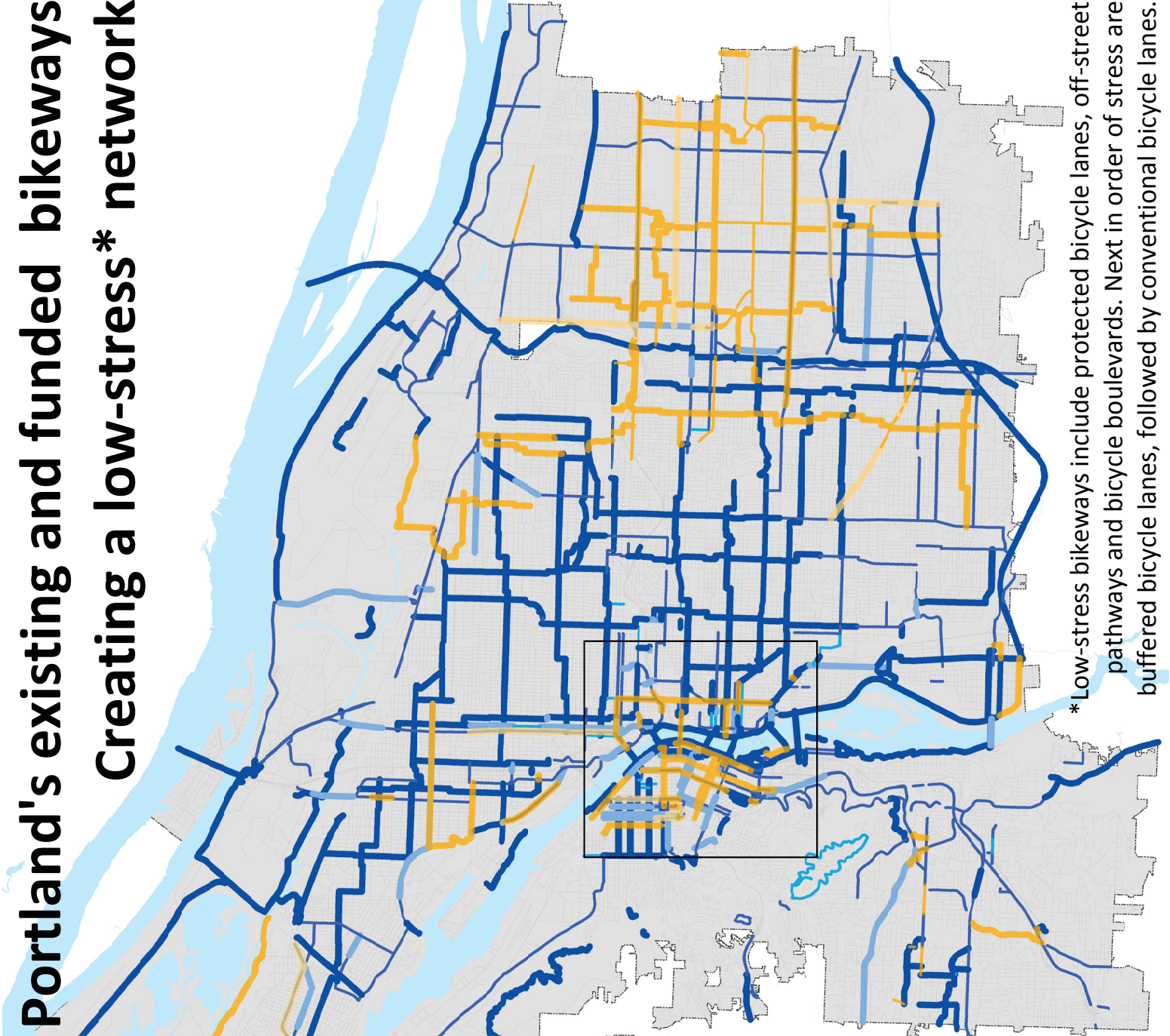
Funded bikeways

- Buffered Bike Lane
- Low Stress Bikeway
- Enhanced Shared Roadway
- Bike lane

Existing Bikeways

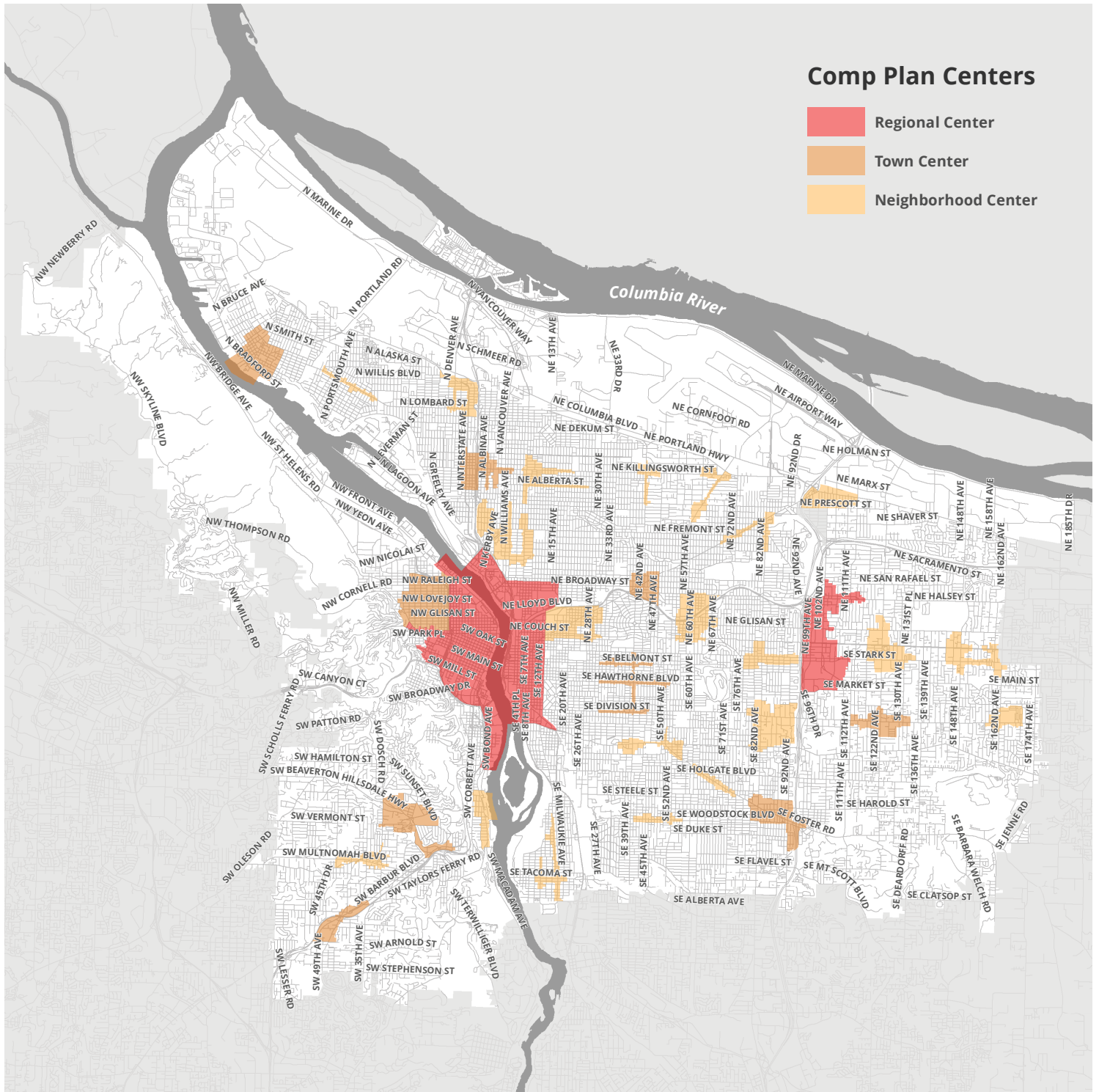
- Low Stress Bikeway
- Buffered Bike Lane
- Enhanced Shared Roadway
- Bike Lane

Jan 2019



*Low-stress bikeways include protected bicycle lanes, off-street pathways and bicycle boulevards. Next in order of stress are buffered bicycle lanes, followed by conventional bicycle lanes.

Attachment E - Centers and Corridors Map





Comp Plan Corridors

- Civic Corridor
- Neighborhood Corridor

N NEWBERRY RD
N MARINE DR
N BRUCE AVE
N BRADFORD ST
N ALASKA ST
N WILLIS BLVD
N PORTLAND RD
N VANCOUVER WAY
N DENVER AVE
N SCHMEER RD
N VANCOUVER AVE
N LOMBARD ST
N INTERSTATE AVE
N ALBINA AVE
N VANCOUVER AVE
NE 13TH AVE
NE 33RD DR
NE COLUMBIA BLVD
NE CORNFOOT RD
NE AIRPORT WAY
NE MARINE DR
NW STYLINE BLVD
NW BRIDGE AVE
NW ST HELENS RD
NW FRONT AVE
NW YEON AVE
NW THOMPSON RD
NW NICOLAI ST
NW CORNELL RD
NW RALEIGH ST
NW LOVEJOY ST
NW GLISAN ST
NW PARK PL
SW OAK ST
SW MAIN ST
SW BOND AVE
SE 8TH AVE
SE 7TH AVE
SE 6TH AVE
SE 5TH AVE
SE 4TH AVE
SE 3RD AVE
SE 2ND AVE
SE 1ST AVE
NE 92ND DR
NE HOLMAN ST
NE MARX ST
NE SHAVERT ST
NE 148TH AVE
NE 158TH AVE
NE 162ND AVE
NE 185TH DR
NE ALBERTA ST
NE KILLINGSWORTH ST
NE FREMONT ST
NE 30TH AVE
NE 33RD AVE
NE 42ND AVE
NE 47TH AVE
NE 57TH AVE
NE 60TH AVE
NE 67TH AVE
NE 82ND AVE
NE 99TH AVE
NE 102ND AVE
NE 111TH AVE
NE 113TH AVE
NE 122ND AVE
NE 131ST PL
NE HALSEY ST
NE SACRAMENTO ST
NE SAN RAFAEL ST
SE STARK ST
SE BELMONT ST
SE HAWTHORNE BLVD
SE DIVISION ST
SE 20TH AVE
SE 26TH AVE
SE 50TH AVE
SE 52ND AVE
SE 55TH AVE
SE 60TH AVE
SE 71ST AVE
SE 76TH AVE
SE 82ND AVE
SE 92ND AVE
SE 111TH AVE
SE 112TH AVE
SE 122ND AVE
SE 130TH AVE
SE 136TH AVE
SE 148TH AVE
SE 162ND AVE
SE 174TH AVE
SE MAIN ST
SE MARKET ST
SE HAROLD ST
SE HOLLADAY BLVD
SE FOSTER RD
SE DUKES ST
SE WOODSTOCK BLVD
SE FLAVEL ST
SE MT SCOTT BLVD
SE ALBERTA AVE
SE TACOMA ST
SE WILL WALKIE AVE
SE 27TH AVE
SE 39TH AVE
SE 45TH AVE
SE 52ND AVE
SE 62ND AVE
SE 72ND AVE
SE 82ND AVE
SE 92ND AVE
SE 102ND AVE
SE 112TH AVE
SE 122ND AVE
SE 132ND AVE
SE 142ND AVE
SE 152ND AVE
SE 162ND AVE
SE 174TH AVE
SW CANYON CT
SW PATTON RD
SW HAMILTON ST
SW DOSCH RD
SW SUNSET BLVD
SW BEAVERTON HILLSDALE HWY
SW VERMONT ST
SW OLSON RD
SW MULTNOMAH BLVD
SW BARBUR BLVD
SW TAYLORS FERRY RD
SW CORBETT AVE
SW BOND AVE
SW WALKER AVE
SW TACOMA ST
SW ARNOLD ST
SW STEPHENSON ST
SW TERWILLIGER BLVD
SW LESSEY RD
SW 49TH AVE
SW 45TH DR
SW 35TH AVE
SW 31ST AVE