

Shared Goals:

Ken Zatarain

*WSP, Senior Planning Manager
Portland, Oregon*

Shared Goals: Transit Agency - DOT Cooperation

Ken Zatarain

*WSP, Senior Planning Manager
Portland, Oregon*

Portland, Oregon

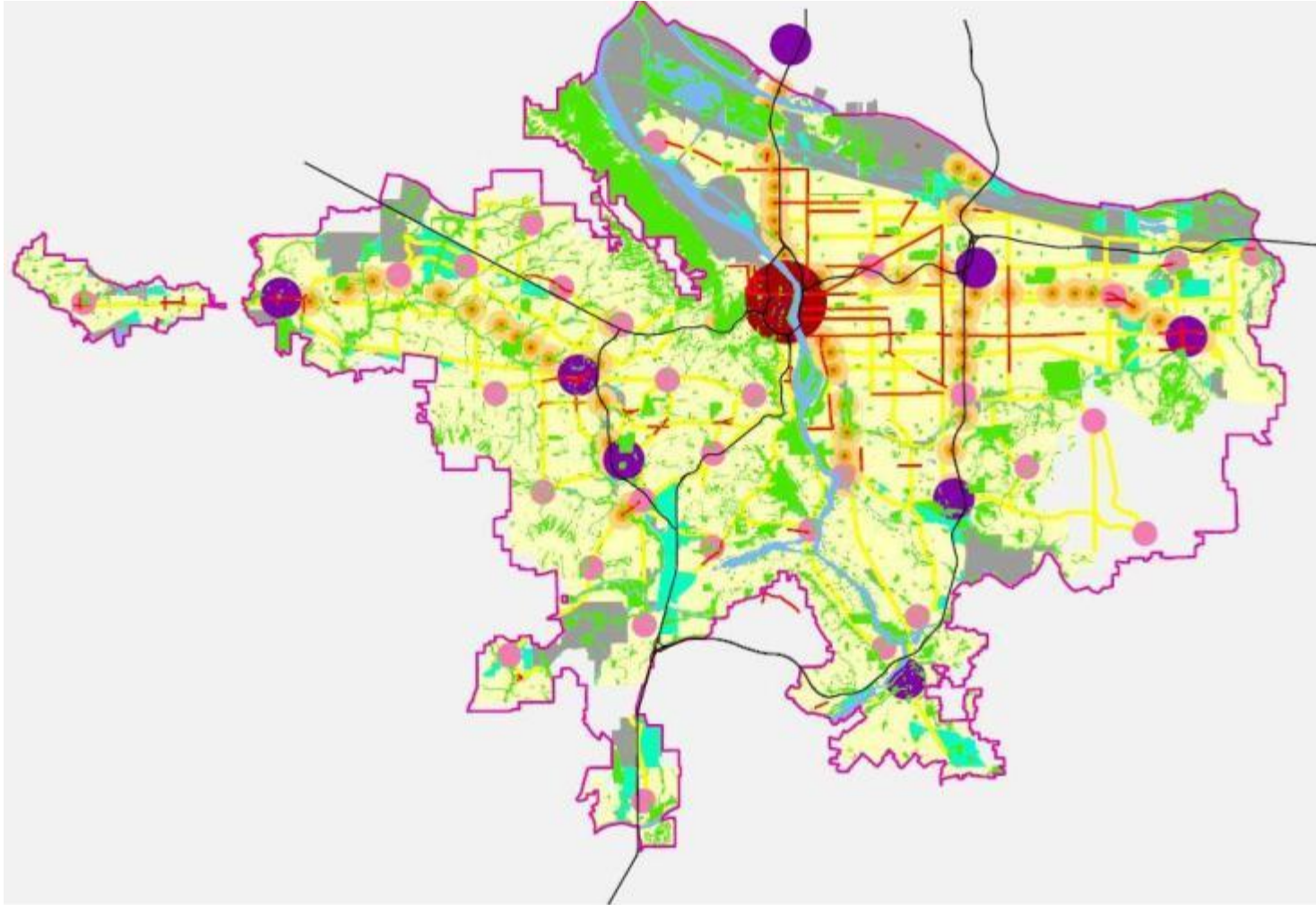


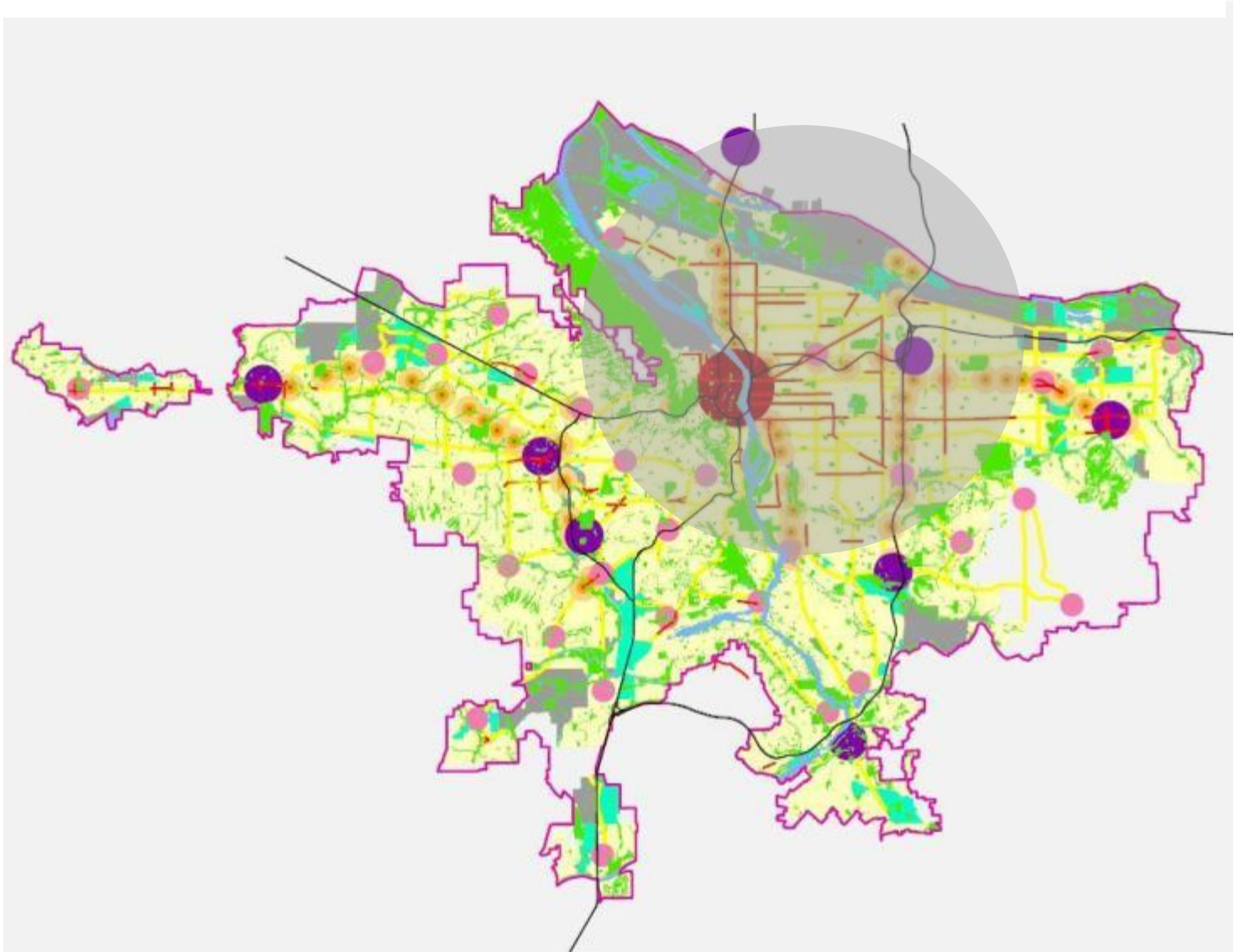
Portland, Oregon



Bus, rail, paratransit
533 square miles
1.5 million residents
100 million annual boardings

2040 Regional Plan





2035 COMPREHENSIVE PLAN



DECEMBER 2016
CITY OF PORTLAND, OREGON
ORDINANCE NO. 187832 AND 188177

to gaze upon Portland



TRANSPORTATION SYSTEM PLAN



DISCUSSION DRAFT

STAGE 3 UPDATE
19 MAY 2017



PBOT
PORTLAND BUREAU OF TRANSPORTATION

2035 Portland Comp Plan



2035 Portland Comp Plan

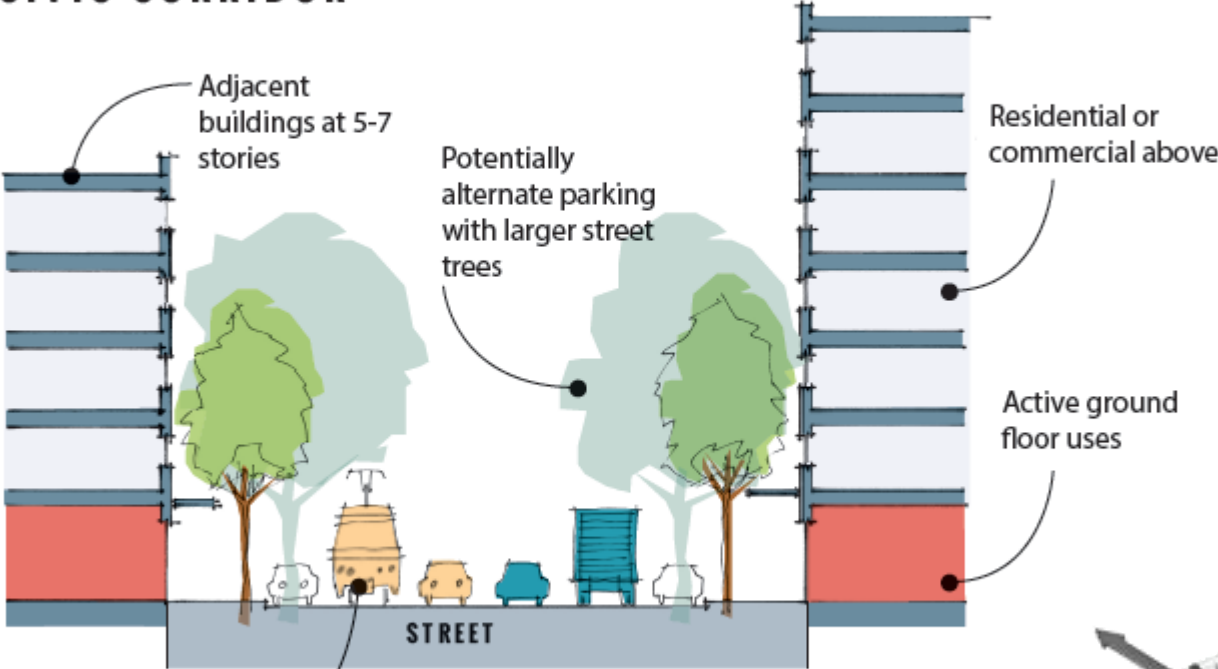




2035 Portland Comp Plan

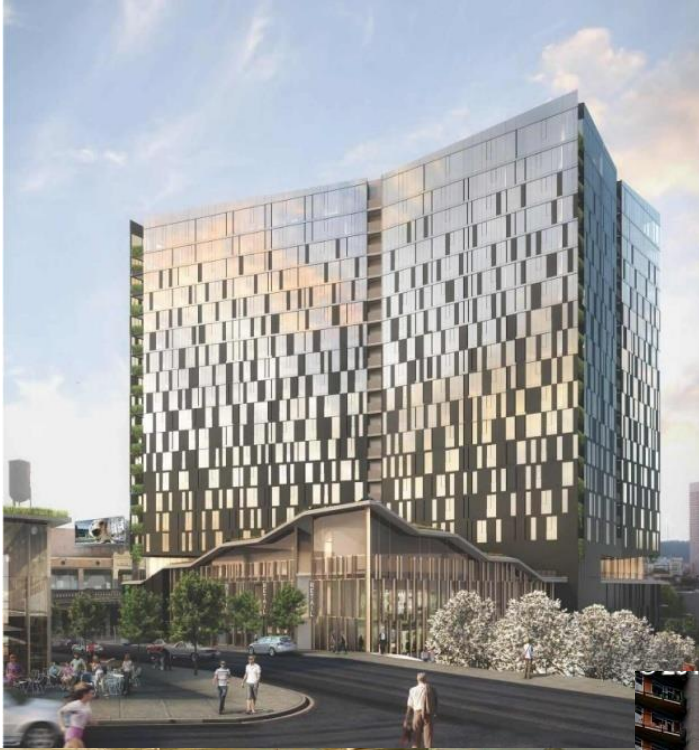


CIVIC CORRIDOR







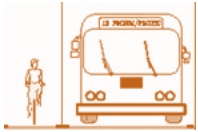


Making space...



...into *Place*





Fewer/Narrower lanes



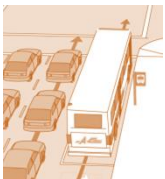
Lower speed limits



More bikes




More pedestrians



More activity



Street Design: Transit Operations

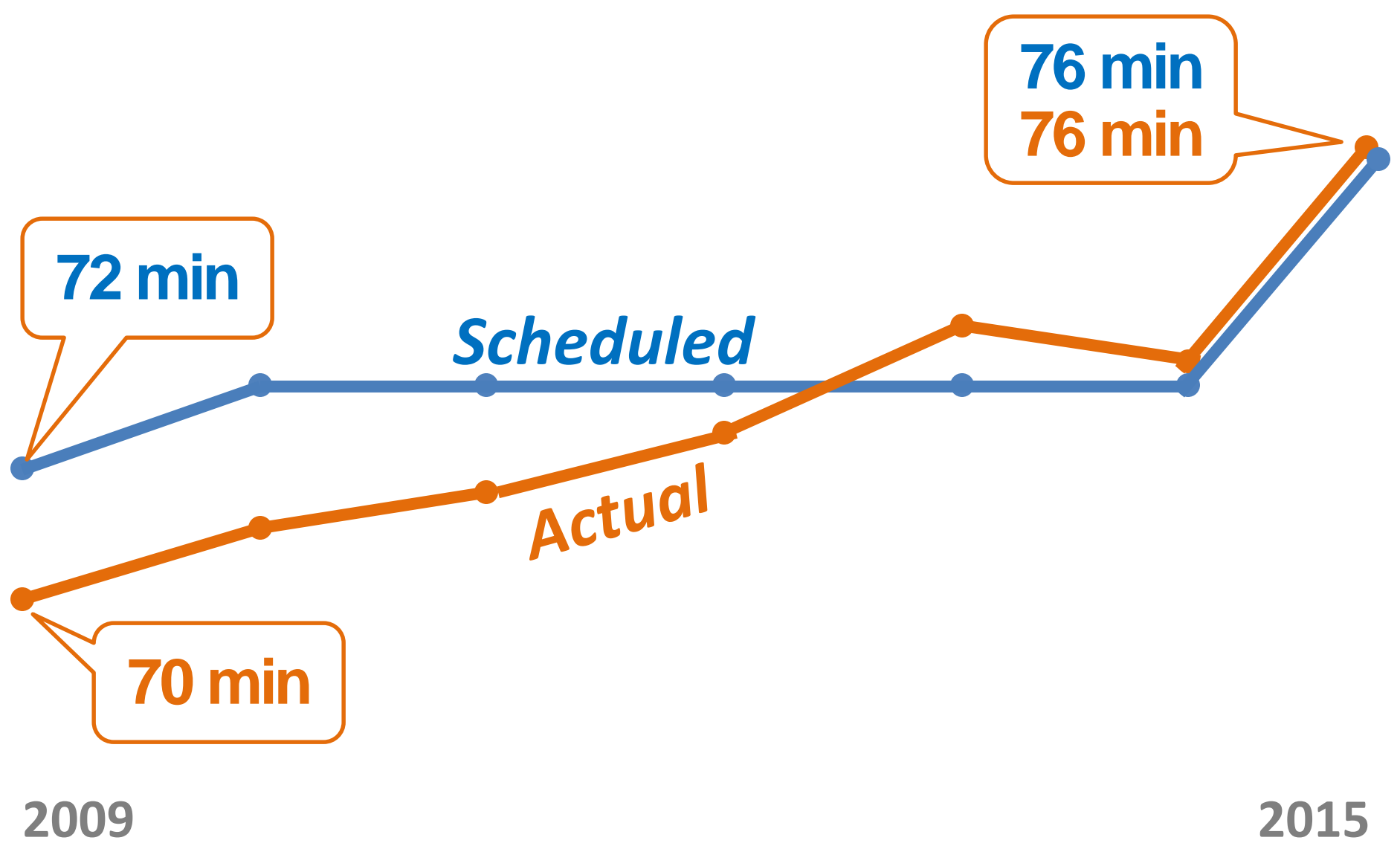


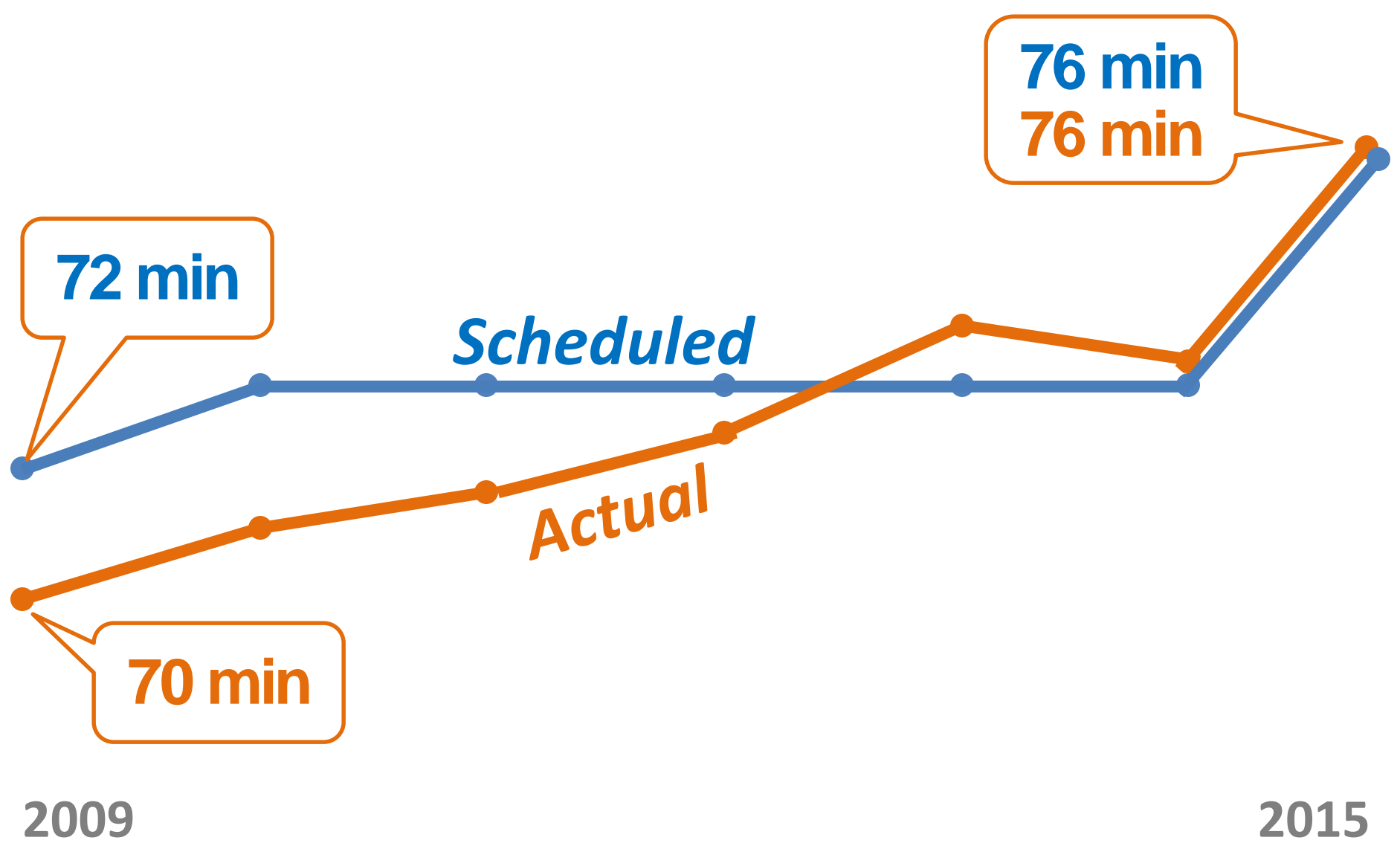
Street Design: Transit Operations

***Transit Agency - DOT
conversations...***

Higher Operating & Capital Costs



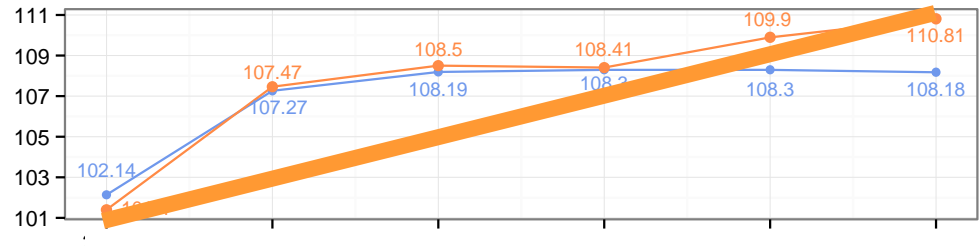




12 minutes more per round trip

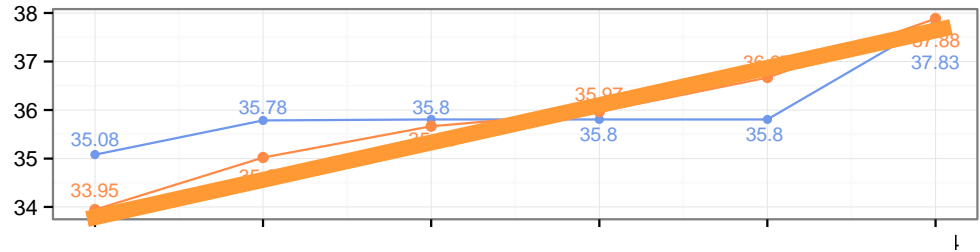
Line

4



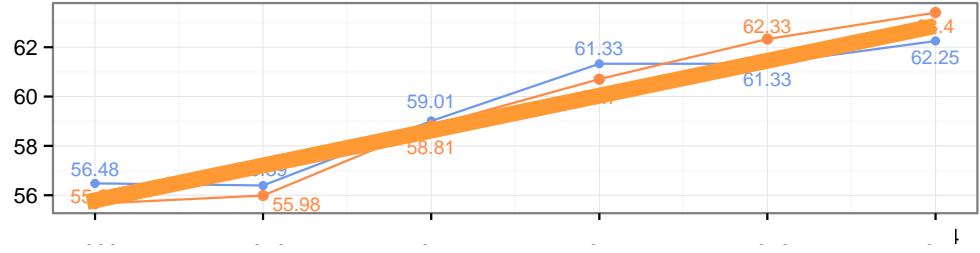
+6.04 Scheduled Min
 +9.41 Actual Min

14



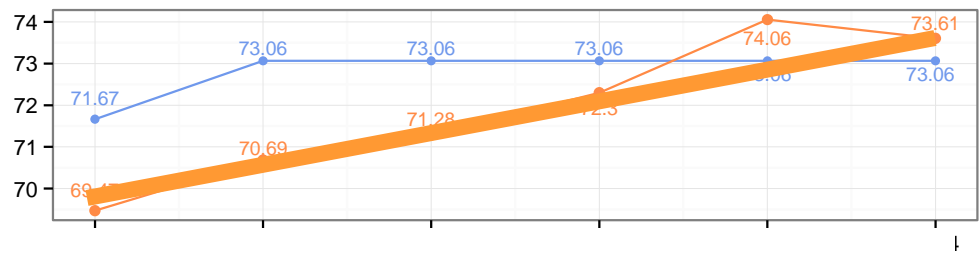
+2.75 Scheduled Min
 +3.94 Actual Min

15



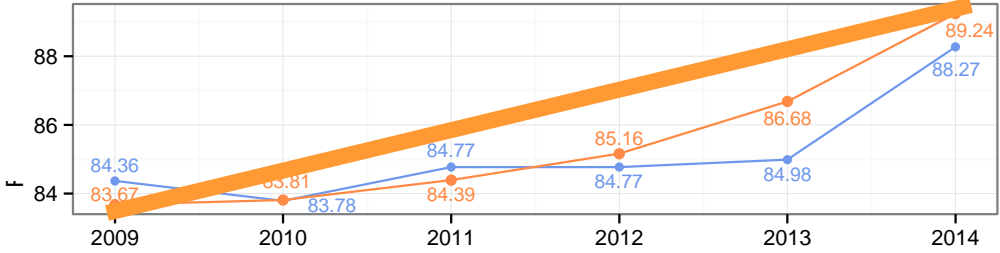
+5.78 Scheduled Min
 +7.75 Actual Min

72



+1.40 Scheduled Min
 +4.14 Actual Min

75

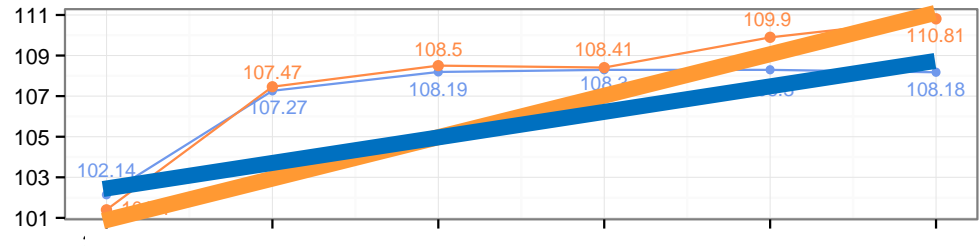


+3.91 Scheduled Min
 +5.57 Actual Min

Year (Fall Signup)

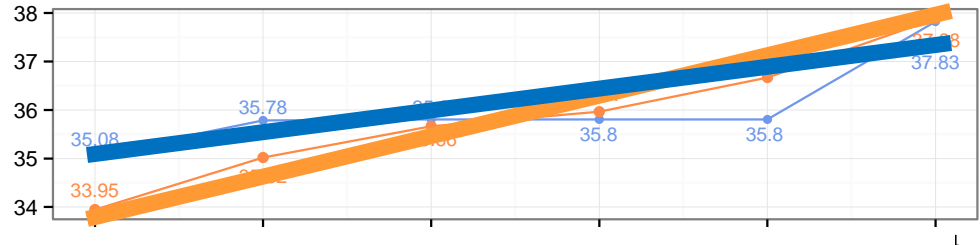
Line

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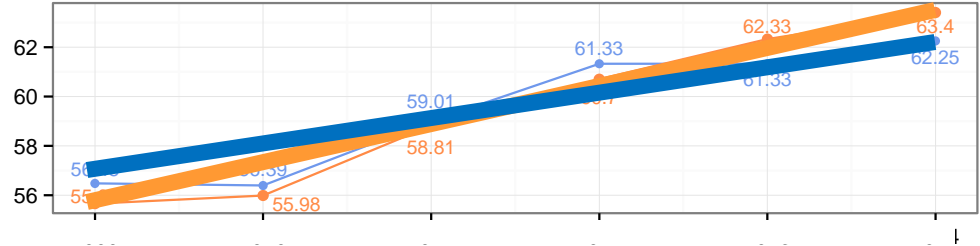
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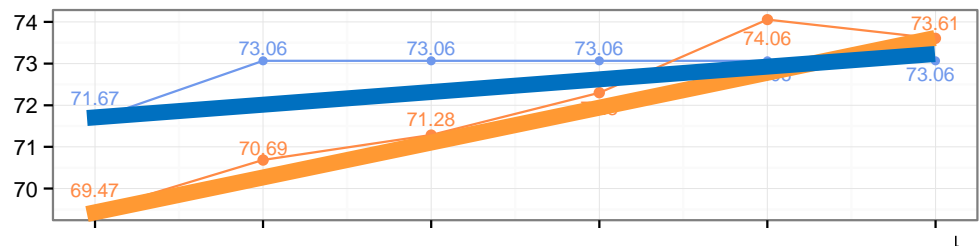
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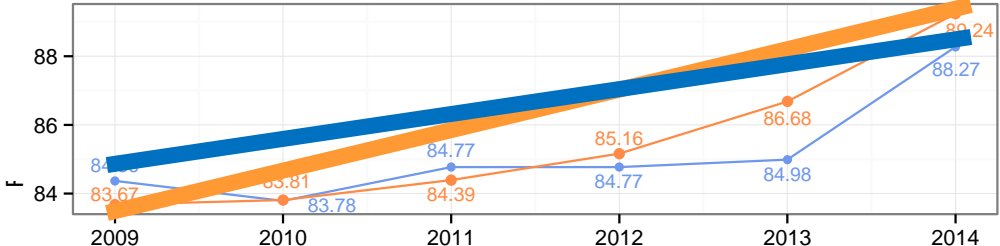
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 +5.57 Actual Min

Year (Fall Signup)

Vehicle Scheduling 101





CONIC PERIAT SIS

$$Z^2 = Z^2 + (0.02)$$

$$\left[\frac{(1.172)}{2.382} + \sin\left(\frac{\pi}{5}\right) \sqrt{(0.1)(1)} \right]$$



OVERSHOOT

UNDERSHOOT

$$\phi^{2+1} = \phi^2 + \frac{(0.001)(2.872)\cos(\pi/4)}{(1.155) \cdot \sin(\pi/4)}$$

Vehicle Scheduling 101

It's not rocket science!

$$V = \frac{RT + LO}{H}$$

$$11 = \frac{140 + 25}{15}$$

12 minutes more per round trip

$$12 = \frac{152 + 28}{15}$$

Capital cost of one bus

\$500K

Annual operating cost

\$300K



Annual operating cost
\$300K

Annual budget average
\$1.2M



After five years...

Ongoing operating cost

\$6M

Cumulative capital

\$10M



Essential for High Ridership





FREQUENT

ARRELOQUABINET

RELIABLE



Tweet



TriMet
@trimet



Due to extremely heavy traffic, some bus lines* may experience significant delays during evening commute.

trimet.org/alerts

6/30/17, 3:13 PM

23 RETWEETS **15** LIKES





TriMet
@trimet



Due to extremely heavy traffic, some bus lines* may experience significant delays during evening commute.

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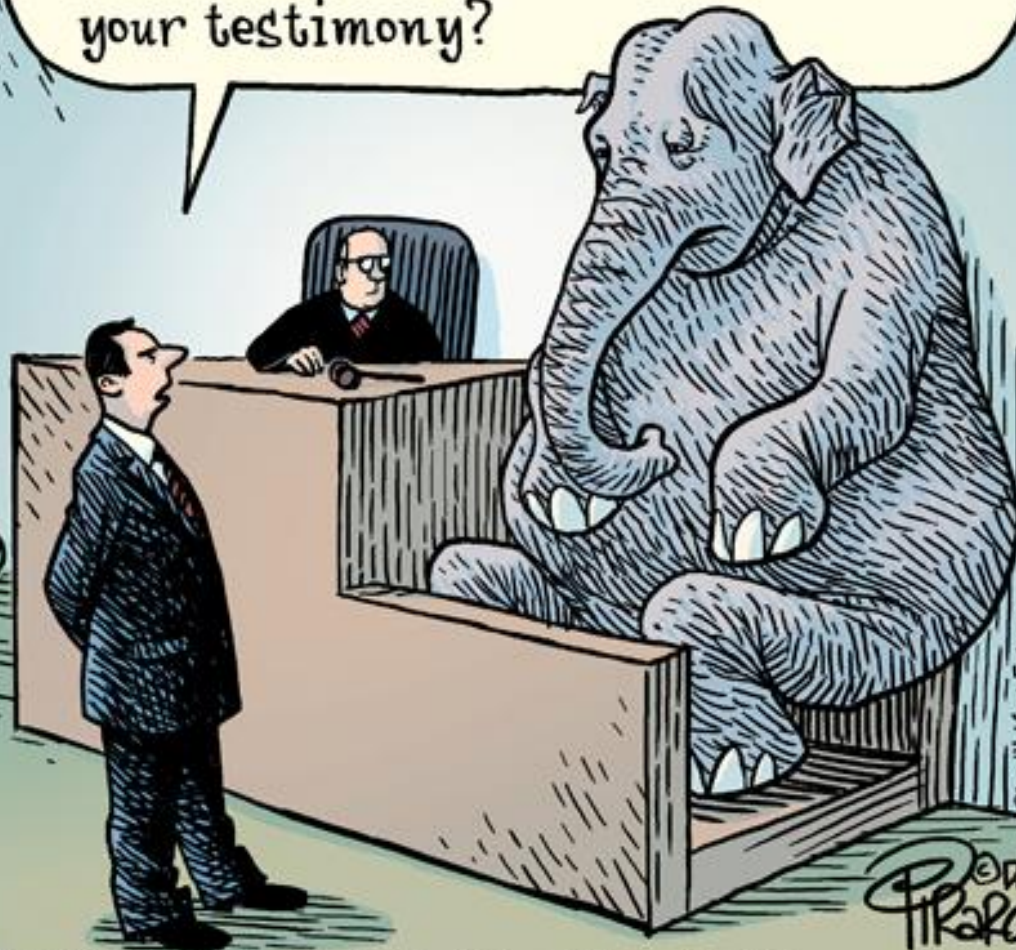
TriMet @trimet · 6/30/17



Replying to [@trimet](#)

*Bus lines 1, 4, 6, 8, 9, 10, 12, 14-20, 30, 32, 35, 36, 38, 43, 44, 45, 54/56, 55, 58, 61, 63, 64, 65, 66, 68, 77, 85, 92, 94, 96 & 99.

If you were in the middle of the room the whole time, why can we not find a single witness to corroborate your testimony?



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P. DON
TIRAZO.

LA buses have gotten slower and increasingly off-schedule

by [Meghan McCarty Carino](#)

July 28 2017



FILE: Woman boards a Metro bus near UCLA. A new report says on-time performance has deteriorated in recent years.

[UCLA TRANSPORTATION/FLICKR](#)

As the Los Angeles Metropolitan Transportation Authority struggles with falling bus ridership, a new [report](#) from the transit agency examines the faltering on-time performance of its fleet and ways to improve reliability.

Traffic has grown worse in Los Angeles County over recent years as the improving economy and low gas prices have led to more people driving more often. Those conditions have impacted L.A. buses, which have gotten progressively slower every year since 2003.

The Only Thing Slower Than NYC Buses Is The MTA's Efforts To Fix Them

by MAX RIVLIN-NADLER

MARCH 29, 2017



Select Bus Service.

MARD A. HERMANN / MTA NEW YORK CITY TRANSIT

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Traffic jams undermining 'vital' bus services, report warns

By Arwyn Jones
BBC Wales political correspondent

🕒 28 July 2017 | [Wales politics](#)



Bus services are a "vital lifeline" suffering from traffic congestion, a report by assembly members has warned.

They called on ministers to show more "political will" to tackle the issue.



TransitCenter

July 13, 2017

Portland City Council

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chloe@portlandoregon.gov
amanda@portlandoregon.gov

Re: Enhanced Transit Corridors Project

Dear Mayor and Commissioners:

We at the Portland Bus Lane Project appreciate the opportunity to share our testimony regarding the Enhanced Transit Corridors (ETC) project. Thank you for taking the time to consider the proposed Resolution. This project is an important recognition of the role of the City's streets in the efficient and effective functioning of the region's buses.

Over the past several years, TriMet has experienced a decrease in bus ridership. This decline is the result of delays and unreliability due to increased congestion in Portland, which has significantly impacted travel times. When riding the bus is slower and less reliable than driving, people who can do so often make the decision to drive rather than ride.

All Portlanders are affected by this increased congestion. For transit-dependent residents, increased travel times and reduced reliability are significant. The transit-dependent often have jobs in which casually flexing a schedule is not possible. Transit availability and reliability have impacts on our ability to transport children to and from school; go to work; look for work; find or take advantage of affordable housing; and pursue educational opportunities.



**PORTLAND
BUS
LANE
PROJECT**

Portland Bus Lane Project is a group of citizens working to improve transit in the

Transit - DOT Partnership



Frequent Bus Service



Enhanced Transit Corridors



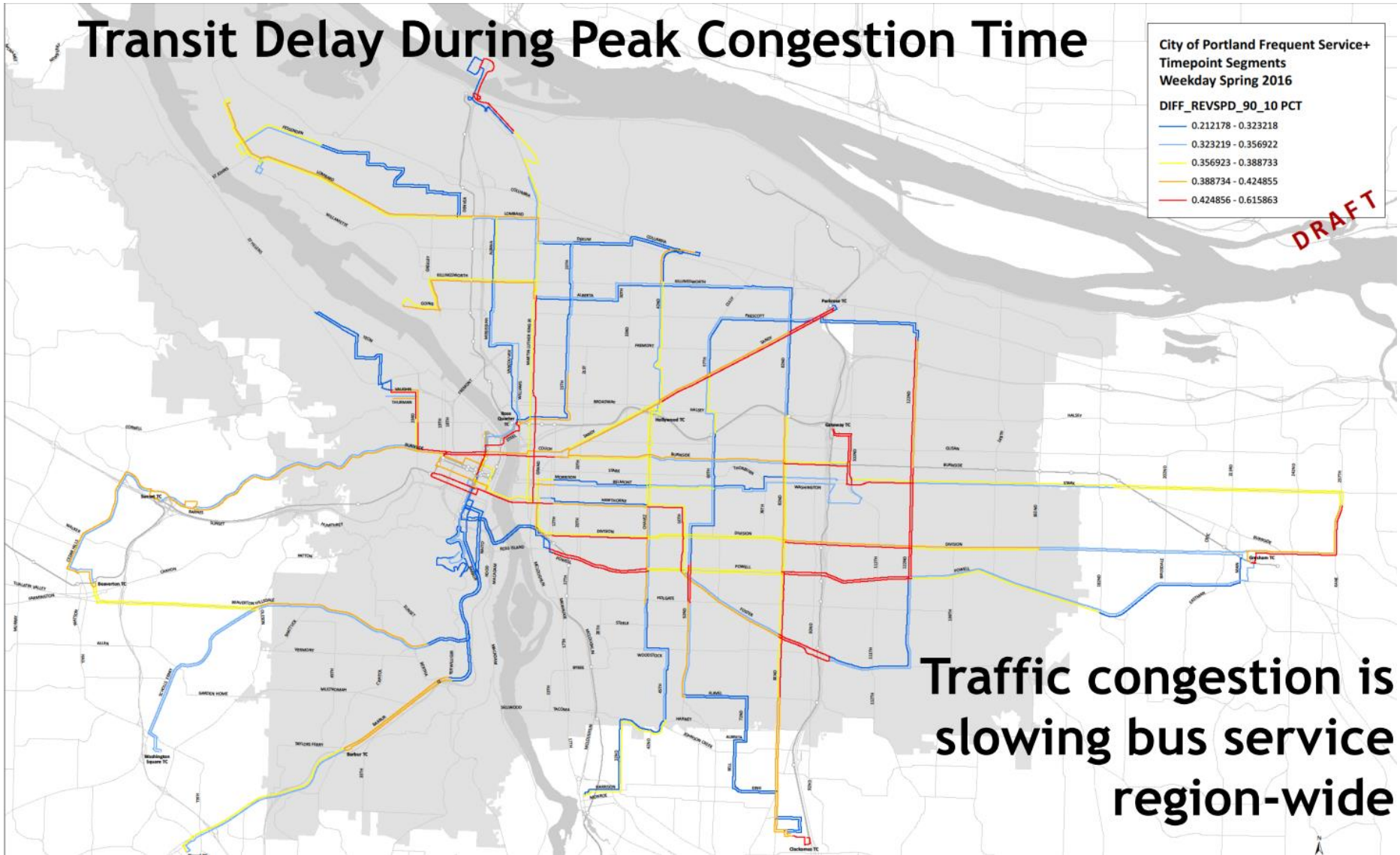
Transit Delay During Peak Congestion Time

City of Portland Frequent Service+
Timepoint Segments
Weekday Spring 2016

DIFF_REVSPD_90_10 PCT

- 0.212178 - 0.323218
- 0.323219 - 0.356922
- 0.356923 - 0.388733
- 0.388734 - 0.424855
- 0.424856 - 0.615863

DRAFT



**Traffic congestion is
slowing bus service
region-wide**

Working with DOT's:

- **Foster** and grow partnership
- **Clarify** service planning
- **Demonstrate** tradeoffs
- **Negotiate** MOU's
- **Put \$** on the table

Strategy & Tactics:

- **Ally** with active transport



Strategy & Tactics:

- **Ally** with active transport
- **Build** community support



Strategy & Tactics:

- **Ally** with active transport
- **Build** community support
- **Support** tactical urbanism



Strategy & Tactics:

- **Ally** with active transport
- **Build** community support
- **Support** tactical urbanism
- **Install** lanes before needed



Strategy & Tactics:

- **Ally** with active transport
- **Build** community support
- **Support** tactical urbanism
- **Install** lanes before needed
- **Leverage** road projects









