

# Pedestrian Master Plan Update

## Prioritization/Performance Measures



Seattle Pedestrian Advisory Board Meeting

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March 8, 2016

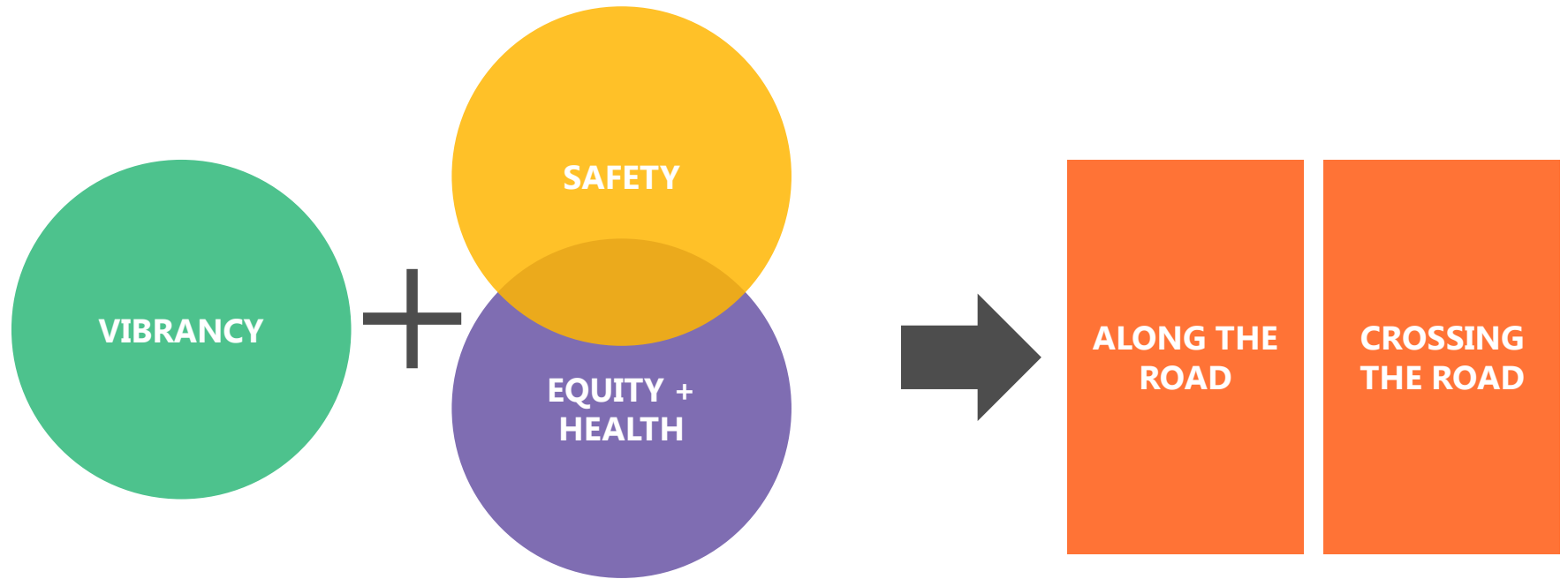
# Presentation overview

- Updates to draft prioritization (Michelle)
- Draft performance standards (Ian)





# Proposed prioritization structure



# Demand Analysis: “Priority Investment Network”

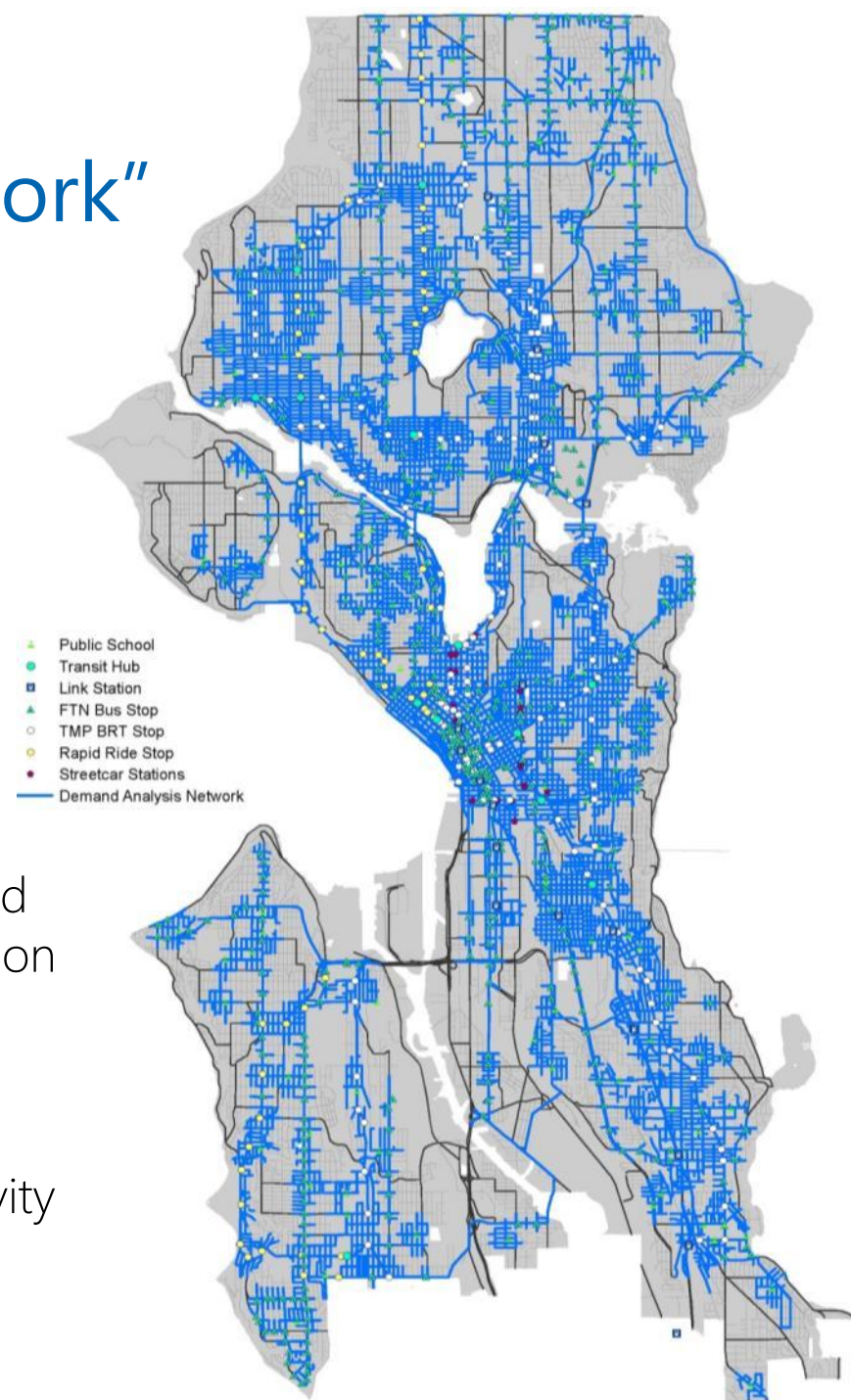
## Draft Updated Factors

Frequent Transit Network arterials

Walk sheds to Frequent Transit Network (FTN) stops  
(walkshed distance based on transit type)

Walk sheds to public schools (1/4 mile)

- Intent is that all improvements are directed to this network (though further prioritization is required)
- Responds to public survey feedback
- Helps address desire for system connectivity
- Does not include private schools



# Identifying needs within the PIN: Sidewalks

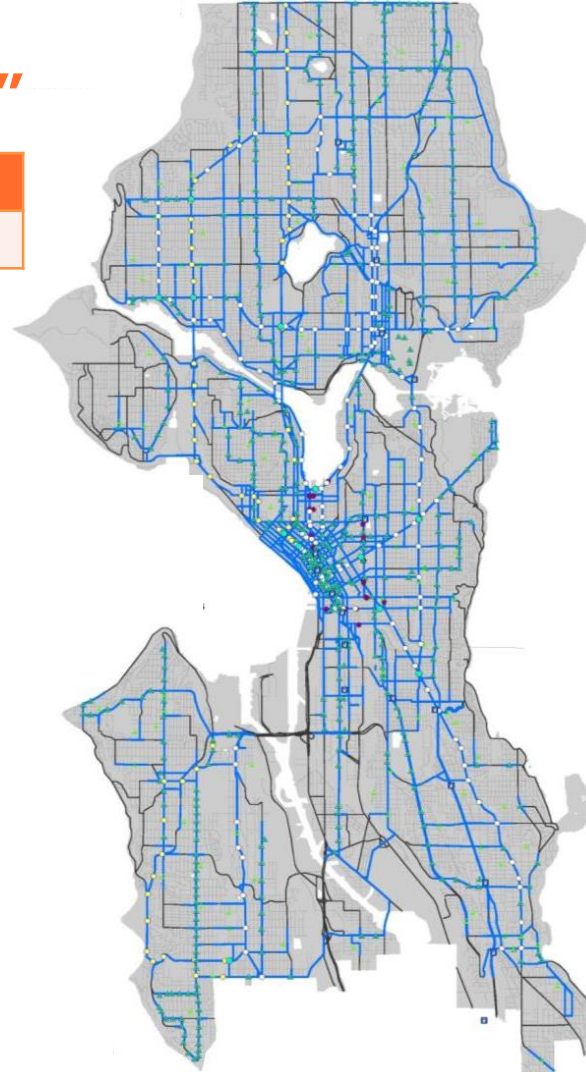
## “Along the Roadway”

### Draft Factors

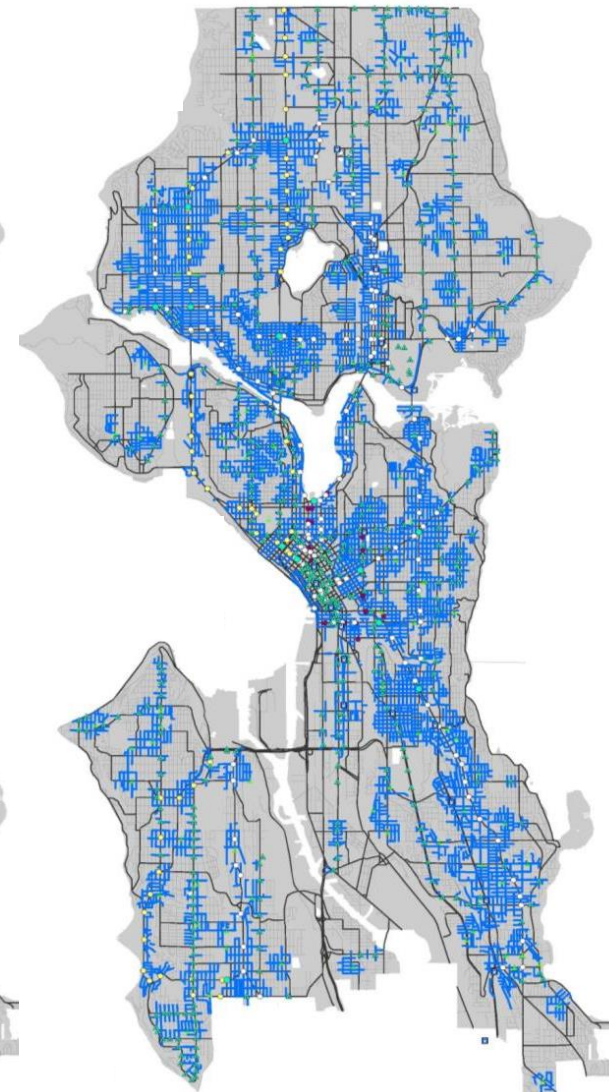
Sidewalk status	(Y/N)
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- Evaluation is binary
- Definition of sidewalk on arterials = includes curb
- Does not assess sidewalk condition

All PIN arterials



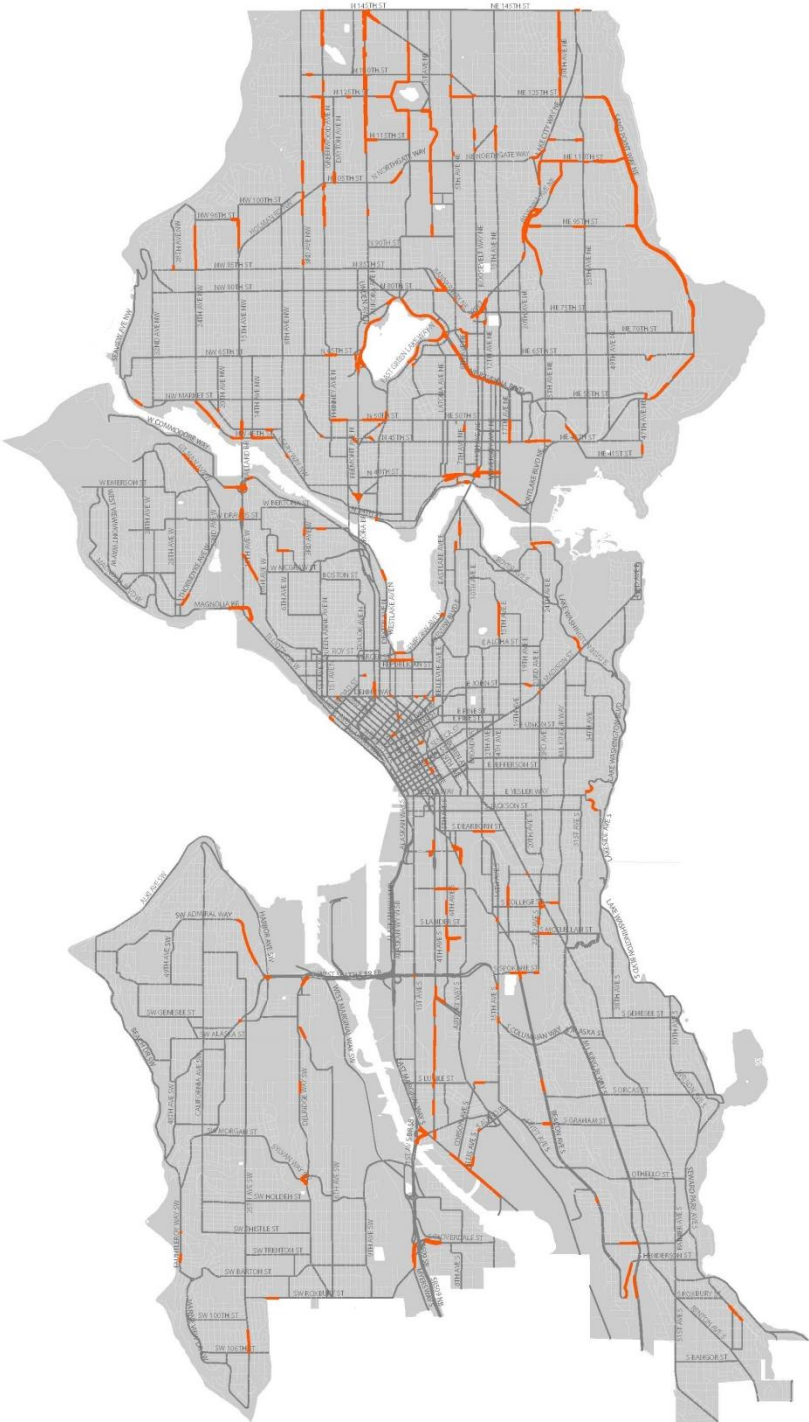
All PIN non-arterials



# PIN arterials missing sidewalks

	All arterials city-wide	All arterials within PIN
Total # blockfaces	12,791	9,158
Total blockfaces (or partial blockfaces) missing sidewalks	1,400	669*

\* Based on SDOT Asset Management database. Not all locations shown as missing sidewalks are necessarily feasible or desirable locations for new sidewalks.

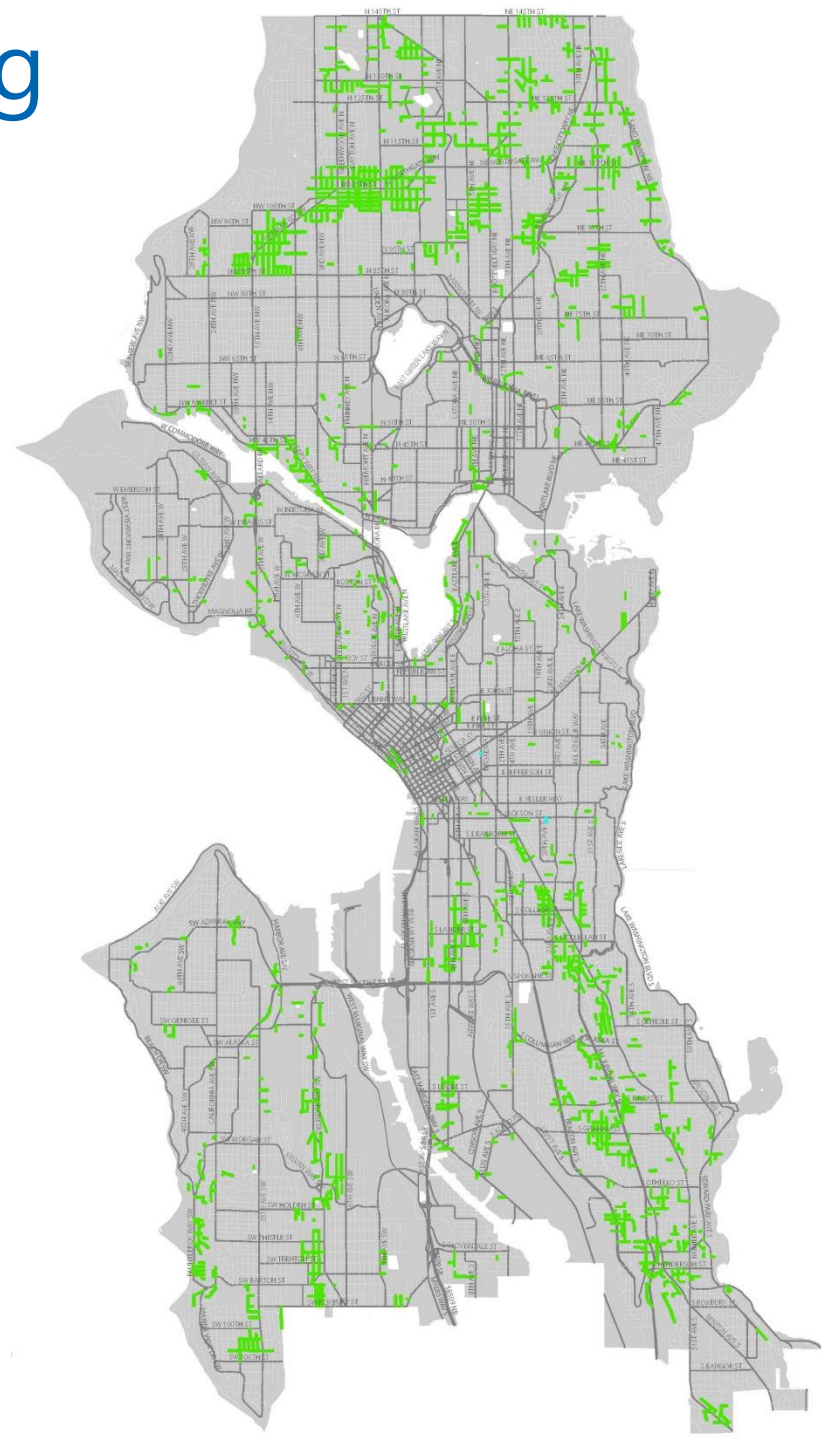




# PIN non-arterials missing sidewalks

	All non-arterials city-wide	All non-arterials within PIN
Total # blockfaces	32,511	14,770
Total blockfaces (or partial blockfaces) missing sidewalks	10,001	3,136*

\* Based on SDOT Asset Management database. Not all locations shown as missing sidewalks are necessarily feasible or desirable locations for new sidewalks.



# “Along the Roadway” opportunities within the PIN

Draft “Priority Investment Network” (20-year needs):

	Total blockfaces/partial blockfaces missing sidewalk	Total cost (assuming \$300k/blockface)
<b>All arterials within PIN</b>	669 (47.5 miles)*	\$200.7m**

	Total missing sidewalks on non-arterial streets		Total cost (assuming \$150k/blockface)	
	Total blockfaces/ partial blockfaces	Approx. number of street segments	Both sides of street	One side of street
<b>All non-arterial streets within PIN</b>	3,058 (202.5 miles)*	1,529	\$459m**	\$229m**

\* Based on SDOT Asset Management database. Not all may be suitable locations for new sidewalks.

\*\* Planning level cost estimates can vary widely, based on site conditions, delivery method, and other factors. Cost estimate is in 2015 dollars.

Move Seattle funding (9-year):

SDOT Program	Total Levy Amount	Levy Deliverable
PMP Implementation Program (sidewalks)	\$61m	Build 250 new blocks of sidewalk (traditional and “low cost” sidewalks), filling in 75% of the sidewalk gaps on priority transit corridors citywide.
Safe Routes to School	\$7m	Complete 9-12 Safe Routes to School projects each year.
Vision Zero	\$23m	Complete 12-15 corridor safety projects, improving safety for all travelers on high-crash streets



# Identifying needs within the PIN: Crossings

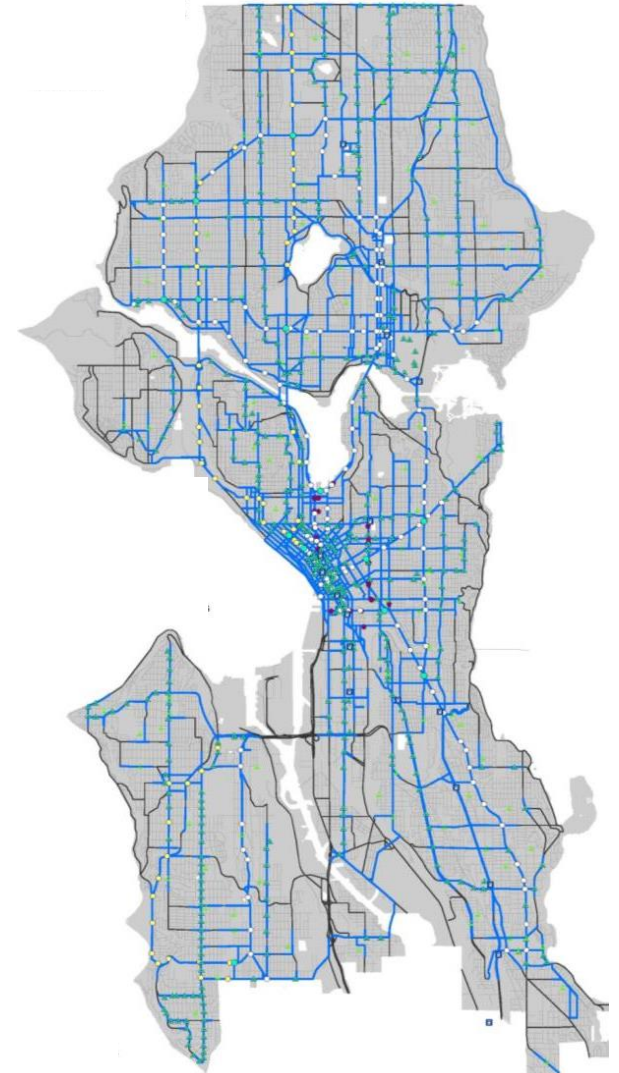
## “Crossing the Roadway”

### Draft Factors

Road width at crossing	Number of lanes at intersection
Distance to nearest controlled crossing opportunity	1/16, 1/8, and ¼ + mile
Curb ramp status	Uses existing data for now; update when curb ramp assessment is complete (after public review draft is released)

- Evaluates arterials only
- Identifies opportunities for further evaluation (not specific project recommendations)
- Other types of crossing improvements (signals, lighting, etc.) driven by other analyses/programs

All PIN arterials



# Identifying needs within the PIN: Crossings

## Draft Factors

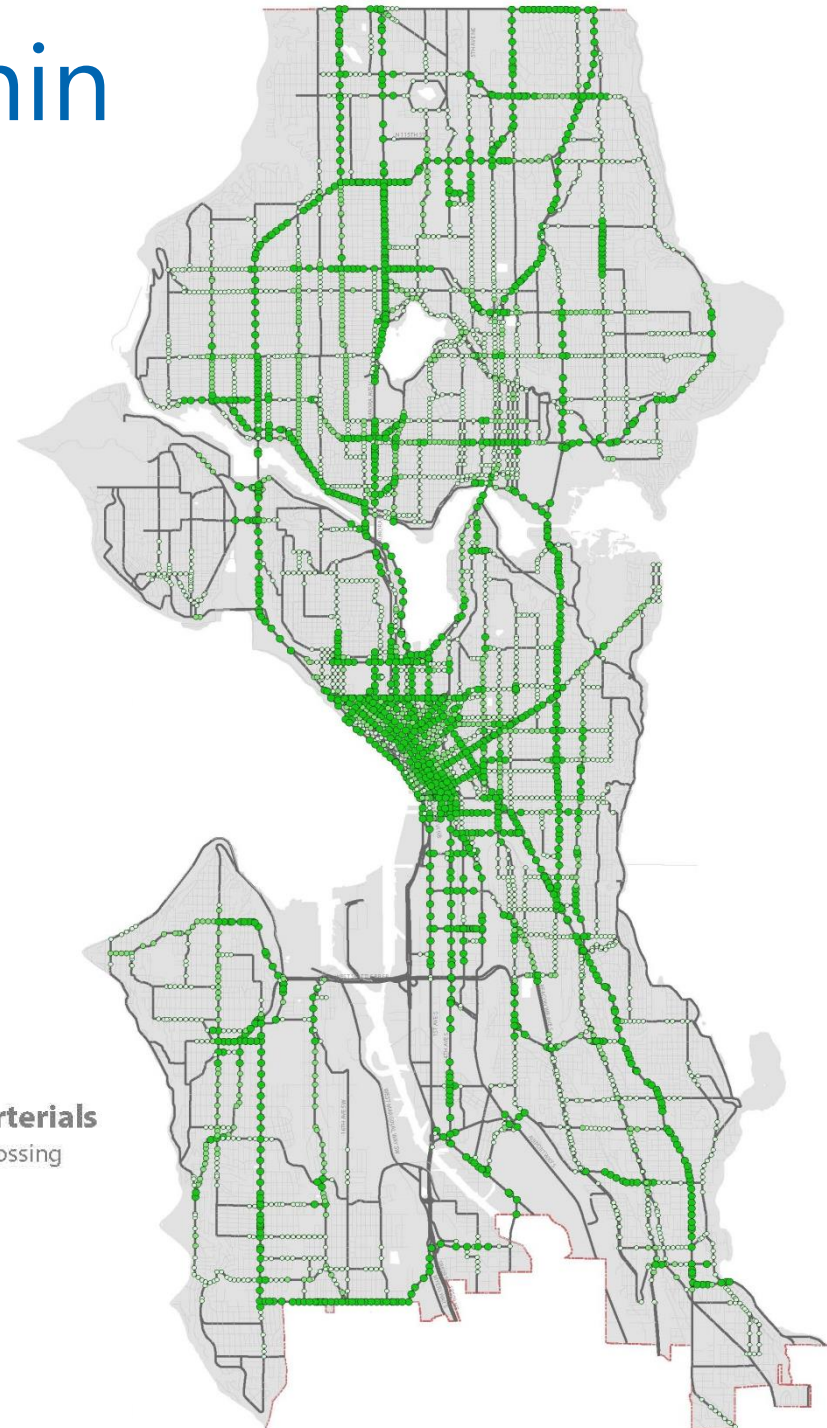
Road width at crossing

Number of lanes at intersection

## Crossing Width on PIN Arterials

Number of Vehicle Lanes at Crossing

- 4 or more
- 3
- 1-2



# Identifying needs within the PIN: Crossings

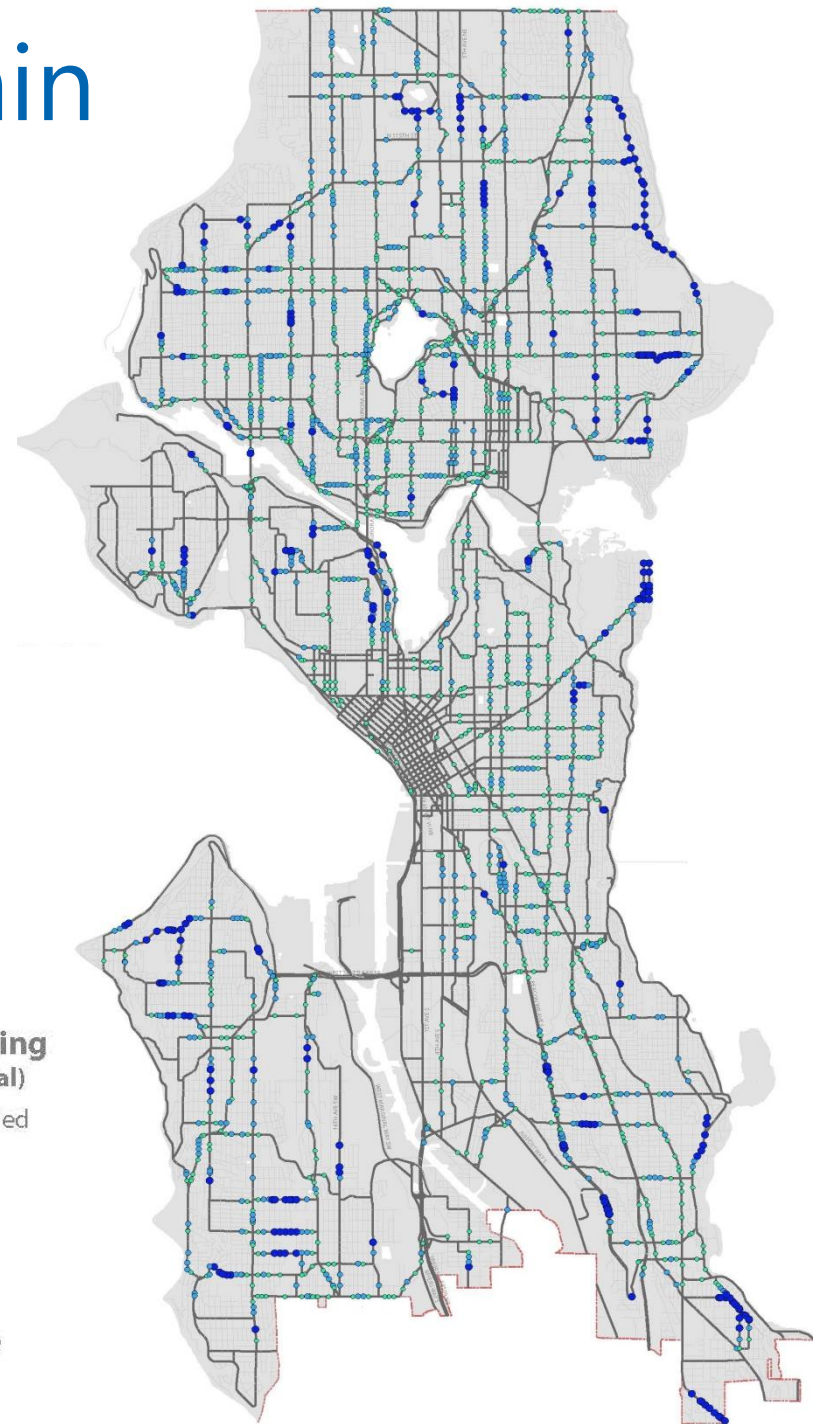
## Draft Factors

Distance to nearest controlled crossing opportunity      1/16, 1/8, and 1/4 + mile

## Controlled Stop Spacing (Principal & Minor Arterial)

Distance to nearest controlled crossing opportunity

- 1/4 Mile or greater
- 1/8 Mile
- 1/16 Mile
- no score    Less than 1/16 Mile



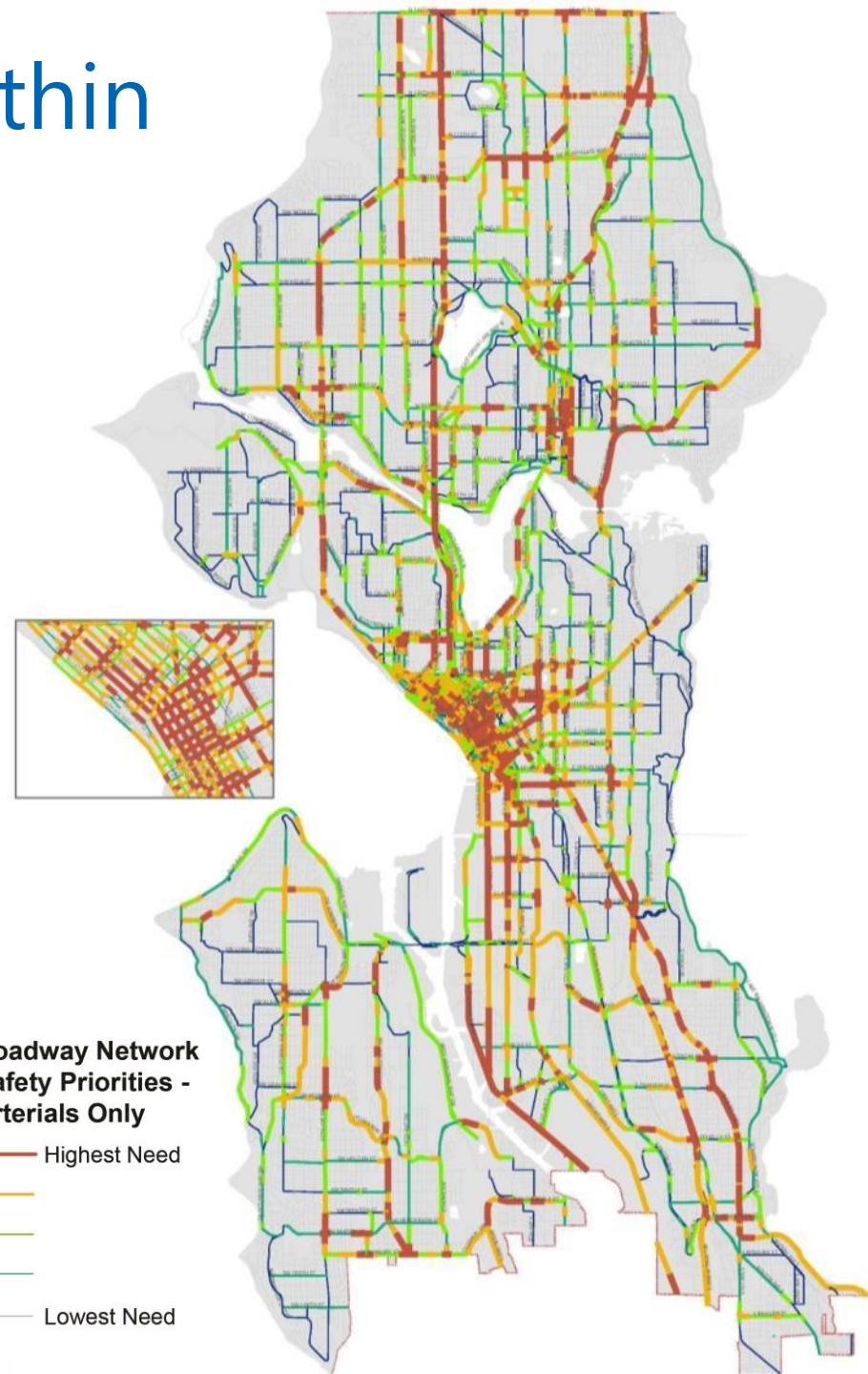


# Prioritizing arterials within the "PIN"

## Safety Factors (based on SDOT Pedestrian Safety Analysis and Vision Zero objectives)

Pedestrian collisions	Serious injuries and fatalities more highly weighted. Data from the last 5 years.
Arterial classifications	Proxy for volume; Majority of severe injuries occur on principal and major arterials
Roadway width	Curb to curb width
Speed	85 <sup>th</sup> percentile speeds where available, and posted speed limit where actual speed is not available.
Controlled crossing spacing	On principal and major arterials

- Removed State routes



# Prioritizing arterials within the "PIN"

## Health and Equity Factors

Communities of color (new)

Low income population

Disability population

Diabetes rates

Physical activity rates

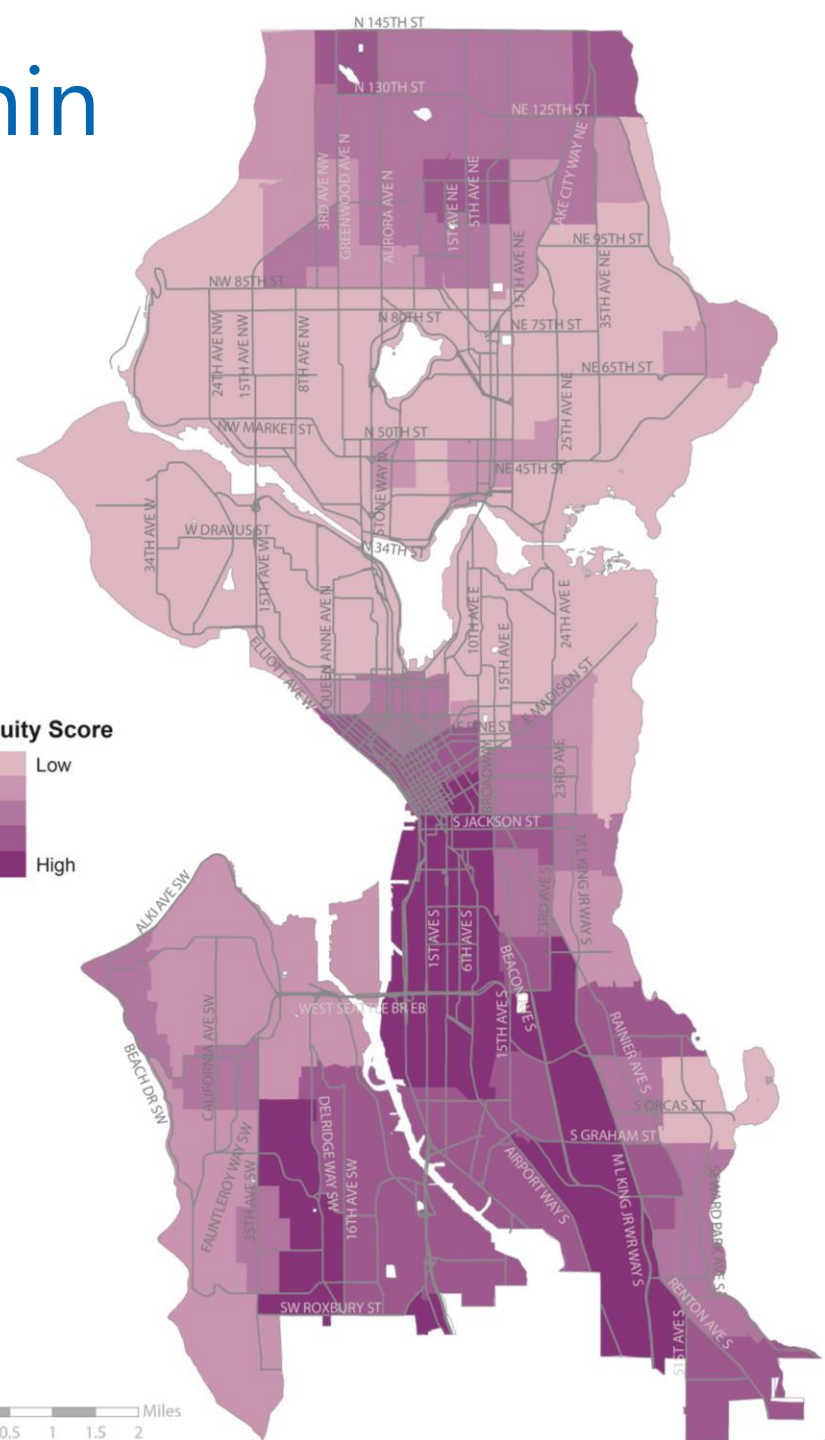
Obesity rates

## Equity Score

Low

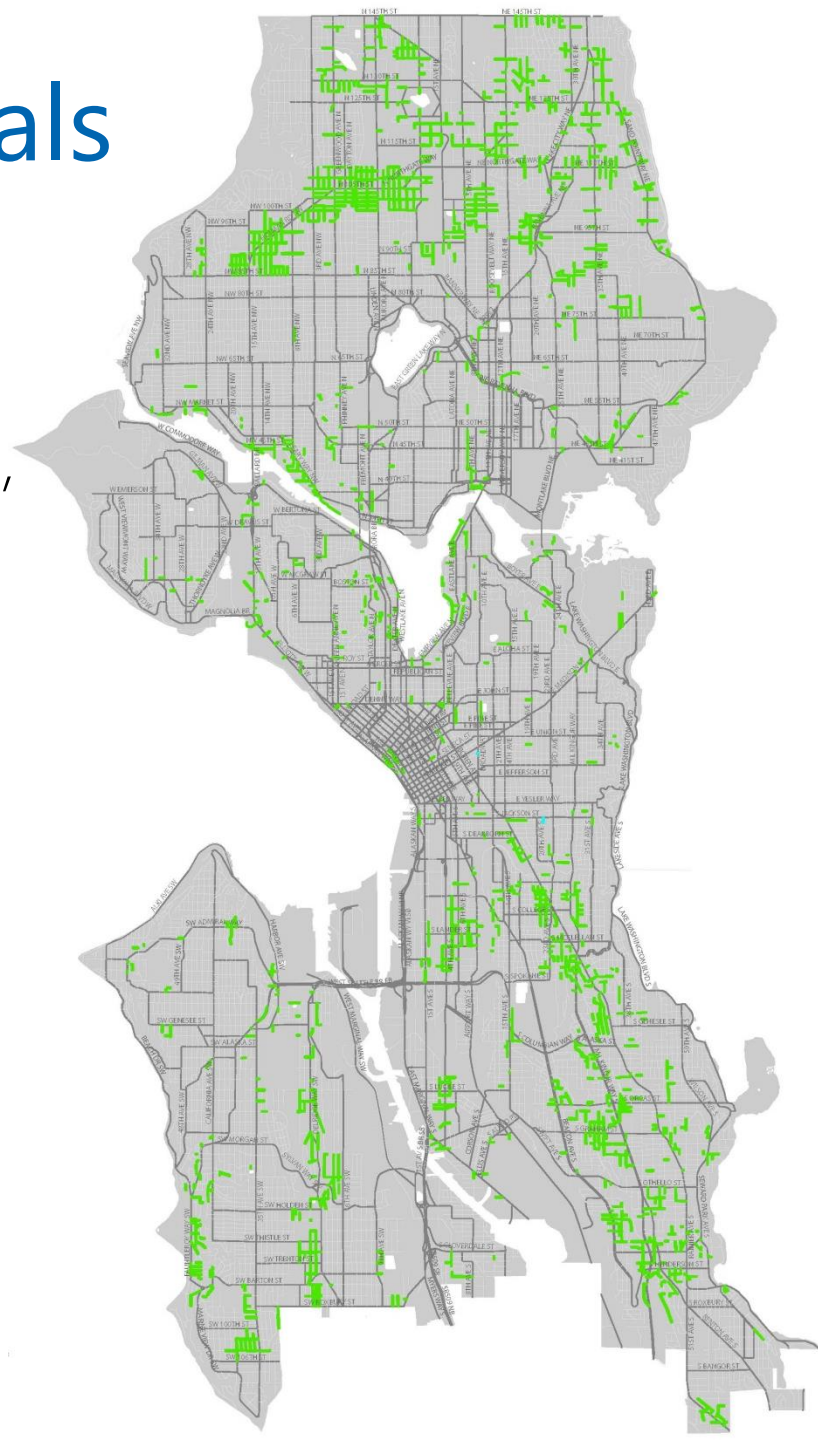
High

0 0.5 1 1.5 2 Miles



# Prioritizing non-arterials

- Prioritize using equity data
- Implementation Plan will identify opportunities for project leveraging, packaging for efficient delivery, matching prioritization to annual funding availability, etc.





# Role of PMP Implementation Plan

- Will identify street segments within the PIN for near-term implementation, based on:
  - Safety/Equity analysis (as guided by the Plan)
  - Matching implementation priorities to annual funding streams, grant opportunities, and other resources.
  - Identifying program/project leveraging opportunities and delivery methods for maximum efficiency
  - Other balancing factors
- Implementation Plan will be updated regularly
  - To reflect changing funding/leveraging opportunities
  - Allows for safety/equity data to be updated regularly, making for a more dynamic Plan.



# Performance measures

- Reviewed 2009 measures to determine 2016 measures
  - 1 new
  - 5 revised
  - 7 removed
- Align with SDOT initiatives and provide more focus
  - Vision Zero
  - Network
  - Mode share
  - Pedestrian activity
  - Safe Routes to School
- Targets and trends
- Available and reliable data



# 1. Number of pedestrian fatalities and serious injury collisions

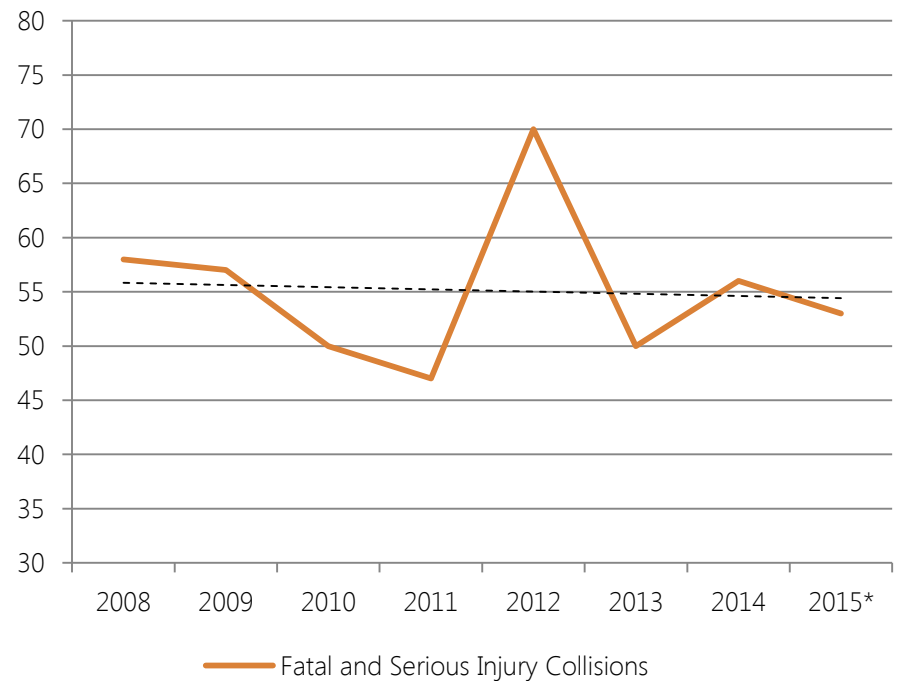
## 2016 Measure

Number of pedestrian fatalities and serious injury collisions

## Target

Pedestrian fatalities and serious injury collisions reach zero by 2030.

Fatal and Serious Injury Pedestrian Collisions, 2008 – 2015\*



# 2. Rate of crashes involving pedestrians

## 2016 Measure

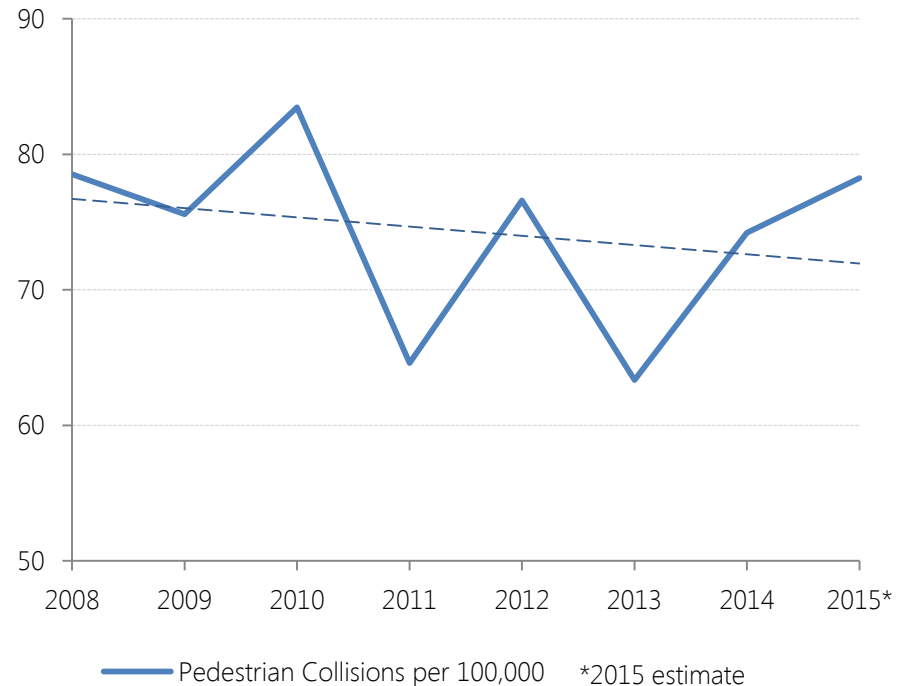
Rate of crashes involving pedestrians

Reported both by pedestrian crashes per 100,000 residents, and pedestrian crashes per pedestrian trips

## Trend

Decreasing rate of pedestrian crashes per 100,000 residents

Pedestrian Collisions per 100,000 Residents, 2008 – 2015\*



# 3. Percent of Priority Investment Network completed

## 2016 Measure

Percent of sidewalks in Priority Investment Network completed.

## Target

% of priority investment network sidewalks are complete by 2035.



# 4. Mode share

## 2016 Measure

Mode share (percentage of trips made on foot as measured in the PSRC Household Travel Survey)

- 2006: 18.1%
- 2014: 24.5%

## Trend

Increasing percentage of trips

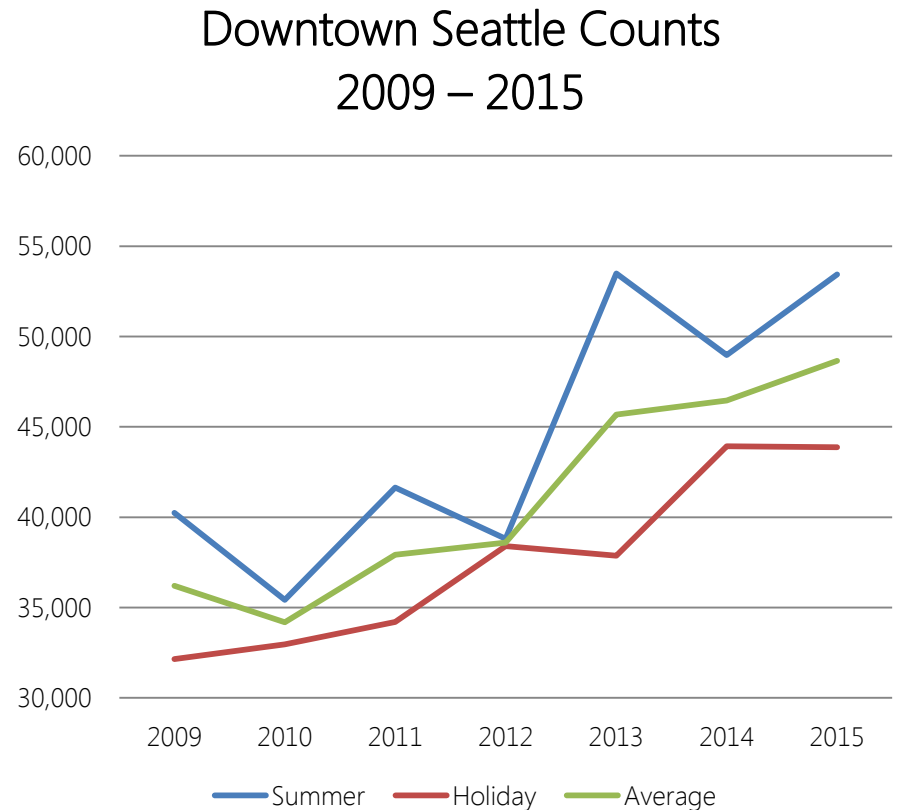
# 5. Pedestrian activity

## 2016 Measure

Pedestrian activity  
(number of pedestrians in  
selected count locations)

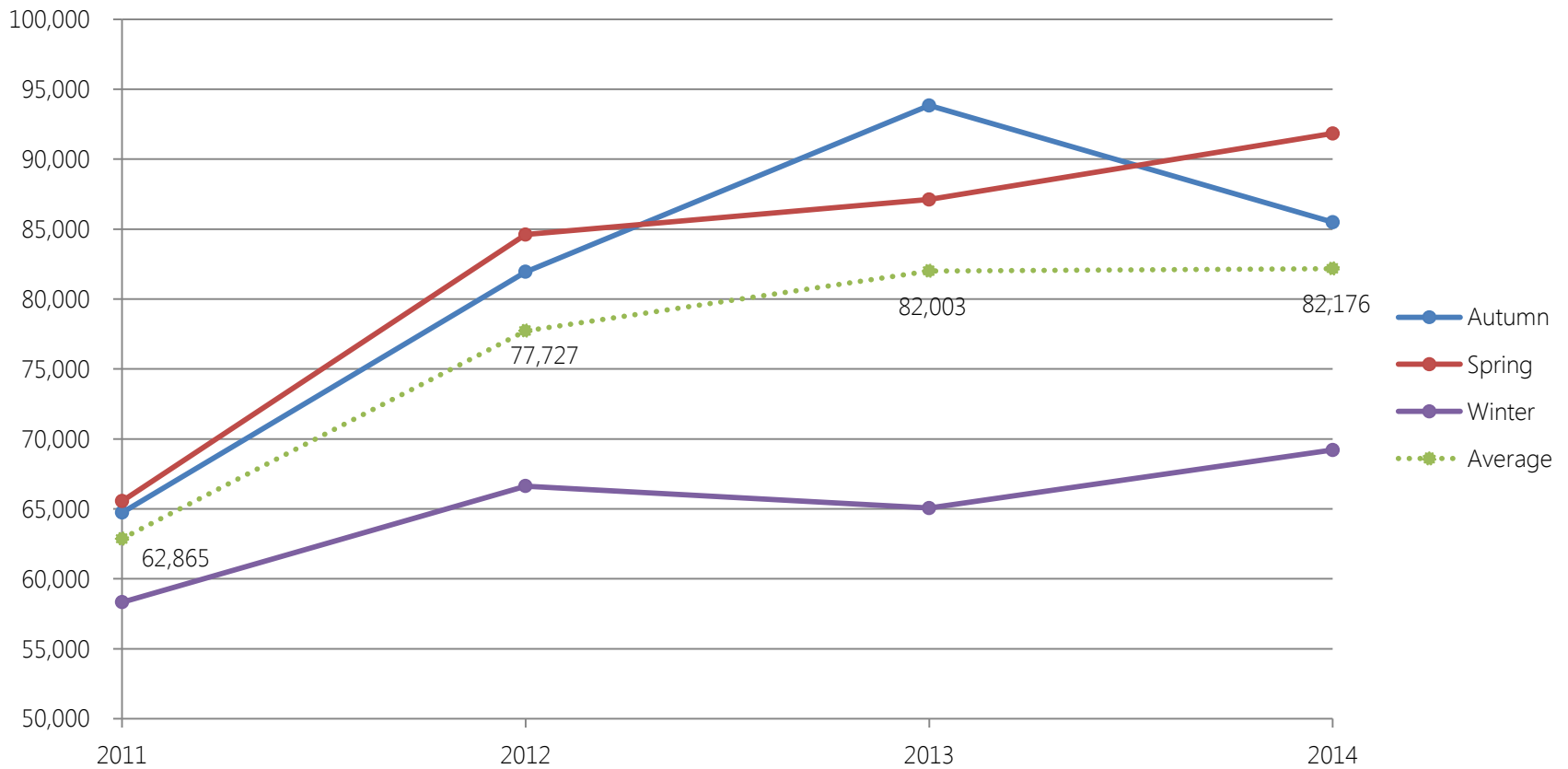
## Trend

Increasing number of  
pedestrians at count  
locations over time



# 5. Pedestrian activity

Citywide Pedestrian Count Annual Trend, 2011 – 2014\*



\*2015 data coming soon



# 6. Safe Routes to School

## 2009 Measure

Children walking or biking to or from school

## Rationale

The SRTS program is exploring improved methods to track mode choice to school.

To date, we have data for a limited number of schools, which we will continue to report. We will use an updated data source when it becomes available.

## Trend

Increasing number of trips by children

For select schools, the percent of children walking to school:

- 2007: 14% (pre-SRTS)
- 2011: 18.3%
- 2013: 22.7%.

# Safe Routes to School

## 2009 Measure

School participation in pedestrian safety, education, and encouragement programs

## Rationale to delete

Move to an outcome based SRTS measure. Count will be continue to be collected by the SRTS program.

Number of public schools that participated

- 2008/2009: 4
- 2010/2011: 4
- 2014: 29

# Vehicle speeds along identified corridors

	Speed Limit	Direction	85th Percentile Speeds					Overall trend
			2011	2012	2013	2014	2015	
Aurora Ave N, south of N 112th St	35	NB	42.8	44.1	42.7	25.5	42.9	Above
Aurora Ave N, south of N 112th St	35	SB	42.5	41.7	42.2	42.1	43.5	Above
Stone Way N, south of N 45th St	30	NB	25.2	25.1	25.1	23.6	25.2	Below
Stone Way N, south of N 45th St	30	SB	27.1	26.7	27.1	26.7	26.9	Below
24th Ave NW, south of NW 80th St	30	NB	31.6	32.3	31.8	31.8	31	Above
24th Ave NW, south of NW 80th St	30	SB	31.5	32.2	31.6	31.6	31.1	Above
Rainier Ave S, northwest of S Holly St	30	NWB	37.5	38.5	39.1	39.9	38.8	Above
Rainier Ave S, northwest of S Holly St	30	SEB	36.3	37.2	37.1	37.5	37	Above
Fauntleroy Way SW, south of SW Alaska St	35	NB	35.2	34	35.2	35.2	29.1	Below
Fauntleroy Way SW, south of SW Alaska St	35	SB	34.2	33.6	33.1	20.9	28.6	Below
Percentage of corridors with 85 <sup>th</sup> percentile at or below the posted speed limit			30%	40%	30%	40%	40%	

## 2009 Measure

Change in vehicle speeds on identified corridors

## Rationale to delete

Continuous data collection started in 2011 for the identified corridors (and others), and will continue to be collected. Data can be found in the annual SDOT Traffic Report.



# Transit ridership

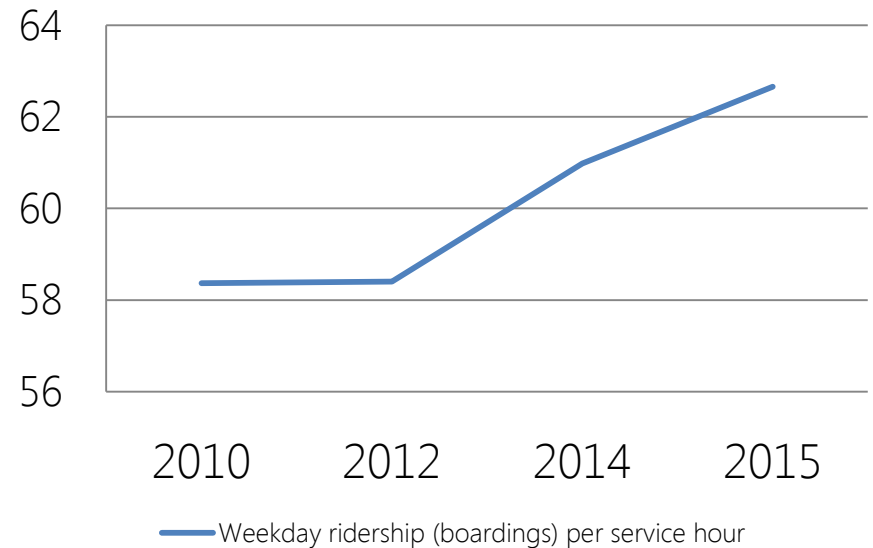
## 2009 Measure

Transit ridership: boardings and alightings per service hour

## Rationale to delete

The measure was created before SDOT had a Transit Master Plan, and the transit ridership data is included on the Performance Seattle Dashboard.

Weekday boardings per service hour



Service Change	Year	Weekday boardings on Seattle Routes	Service Hours	Weekday boardings per service hour
Fall	2010	218,677	3,746	58.37
Fall	2012	215,582	3,691	58.40
Spring	2014	224,042	3,674	60.98
Spring	2015	224,056	3,575	62.66

# Self reported physical activity

## 2009 Measure

Self reported physical activity (percentage of respondents reporting little or no physical activity in King County health surveys)

## Rationale to delete

Data has not been available at reliable frequencies, and is collected/tracked by outside agencies.

## Seattle

- 2006 and 2014: 11%

## King County

- 2006: 14.5% to
- 2014: 15%

# Streetscape vibrancy

## 2009 Measure

Streetscape vibrancy  
(number of annual street  
use permits that include  
streetscape elements)

## Rationale to delete

The 2009 PMP indicated  
the need to evaluate this  
measure. It is not a strong  
indicator of PMP  
implementation.

Year Issued	2008	2009	2010	2011	2012	2013	2014	2015	Total per permit type
Block Party & Play Streets				1		77	307	433	818
Farmers Market				8	10	9	11	6	44
Festival Street				1	4	2	2	1	10
ID Pole Banners	8	7	3	1	8	2	3	7	39
Sidewalk Café	8	26	26	28	33	35	40	34	230
Street Vending		1		46	135	174	214	230	800
Tables & Chairs	8	7	18	18	14	9	7	11	92
Total per year	24	41	47	103	204	308	584	722	2,033

# Driver and pedestrian behaviors and awareness

## 2009 Measure

Driver and pedestrian behaviors and awareness of pedestrian laws

## Rationale to delete

Measure relies on the KAB survey results, and there is no identified funding to continue the KAB survey every five years.

Percentage of drivers who say they already do enough to stop for pedestrians

- 2008: 69%
- 2014: 68%

Percentage of pedestrians that say they already do enough to be safe and pay attention to vehicles

- 2008: 77%
- 2014: 79%

Percentage of survey respondents who reported they are aware of each of the four vehicle/pedestrian regulations noted in survey.

- 2008: 71%
- 2014: 68%

# Public communication about pedestrian issues

## 2009 Measure

Increase public engagement about pedestrian issues (number of website hits)

## Rationale to delete

The PMP is moving away from an "online only" document, and the measure is not a strong indicator of PMP implementation.

Website hits:

- 2013: 25,000
- 2014: 29,200
- 2015: over 31 000



# Questions?

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[www.seattle.gov/transportation/bike.htm](http://www.seattle.gov/transportation/bike.htm)

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