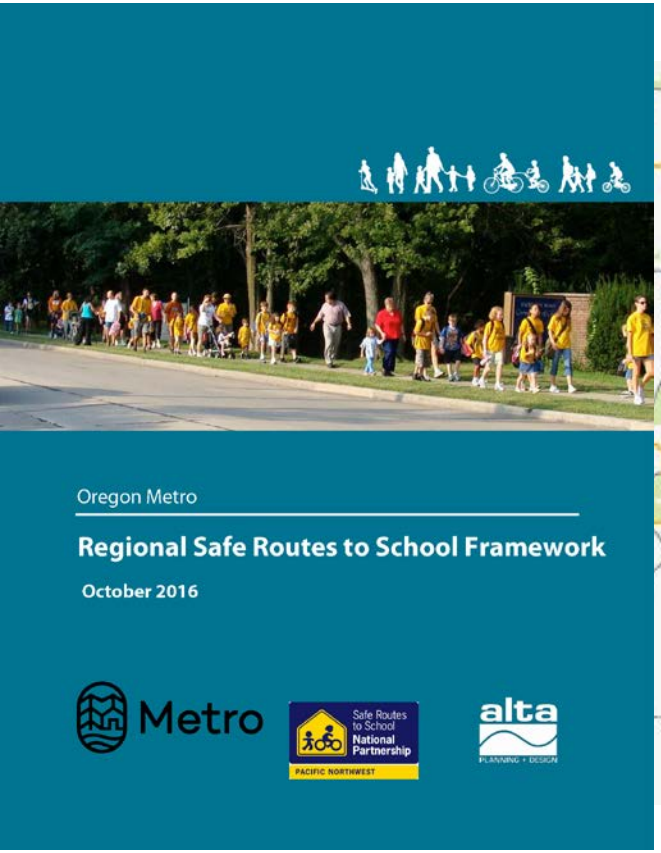
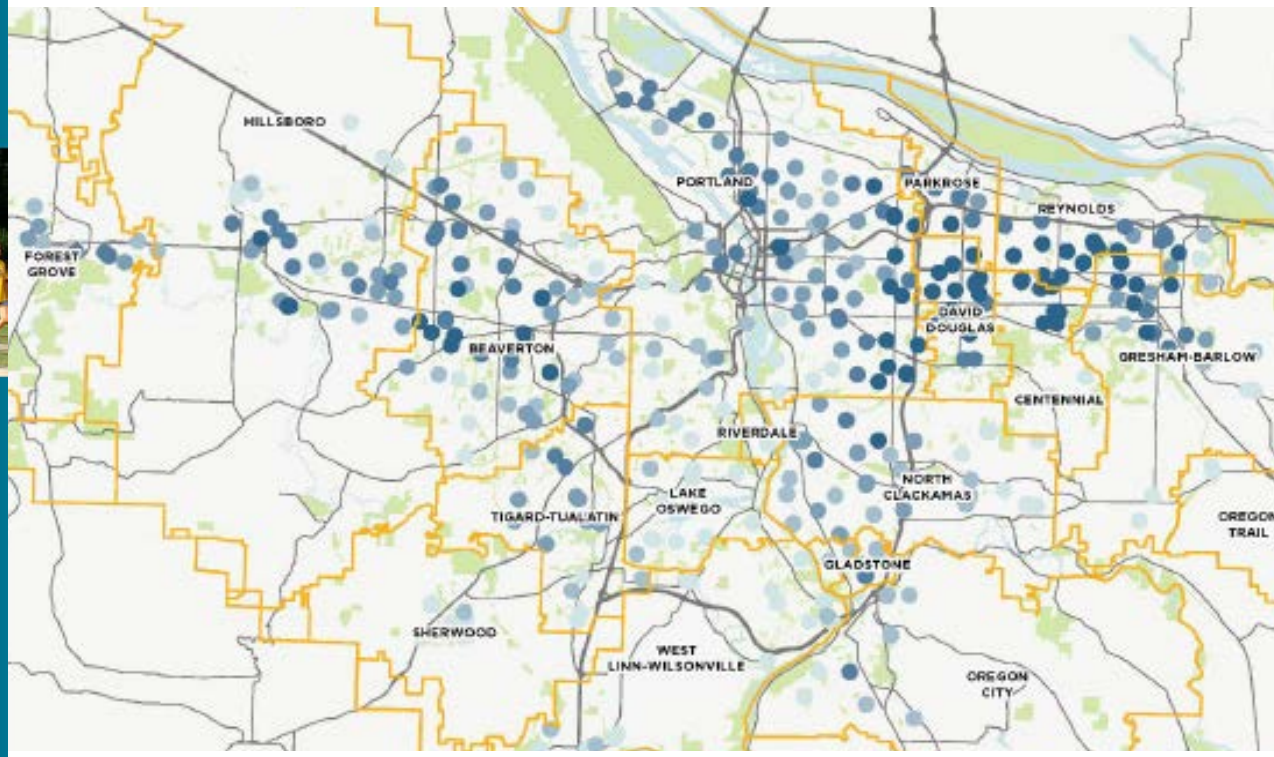
Regional School Walkshed Tool

Data update & new interactive map tool - February 2023

2016 Regional SRTS School Site Analysis





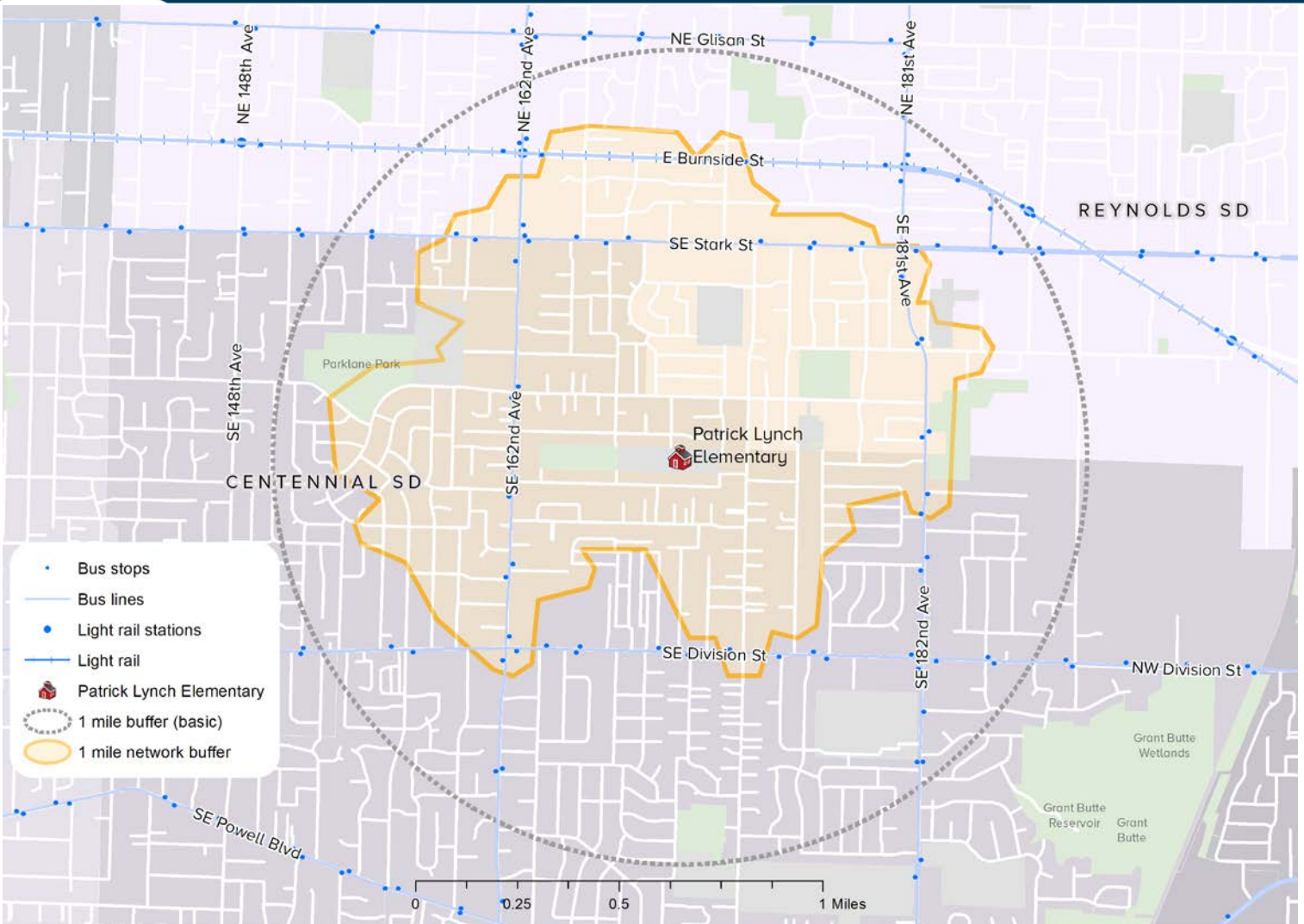
2023 Update: Purpose

- Provide partners with up-to-date school demographic data and traffic safety data to inform local Safe Routes to School programming
- Support partners in grant applications for both programmatic and infrastructure funding.
- Develop a walkshed model that can be applied locally and incorporate additional data analysis based on program or jurisdiction needs

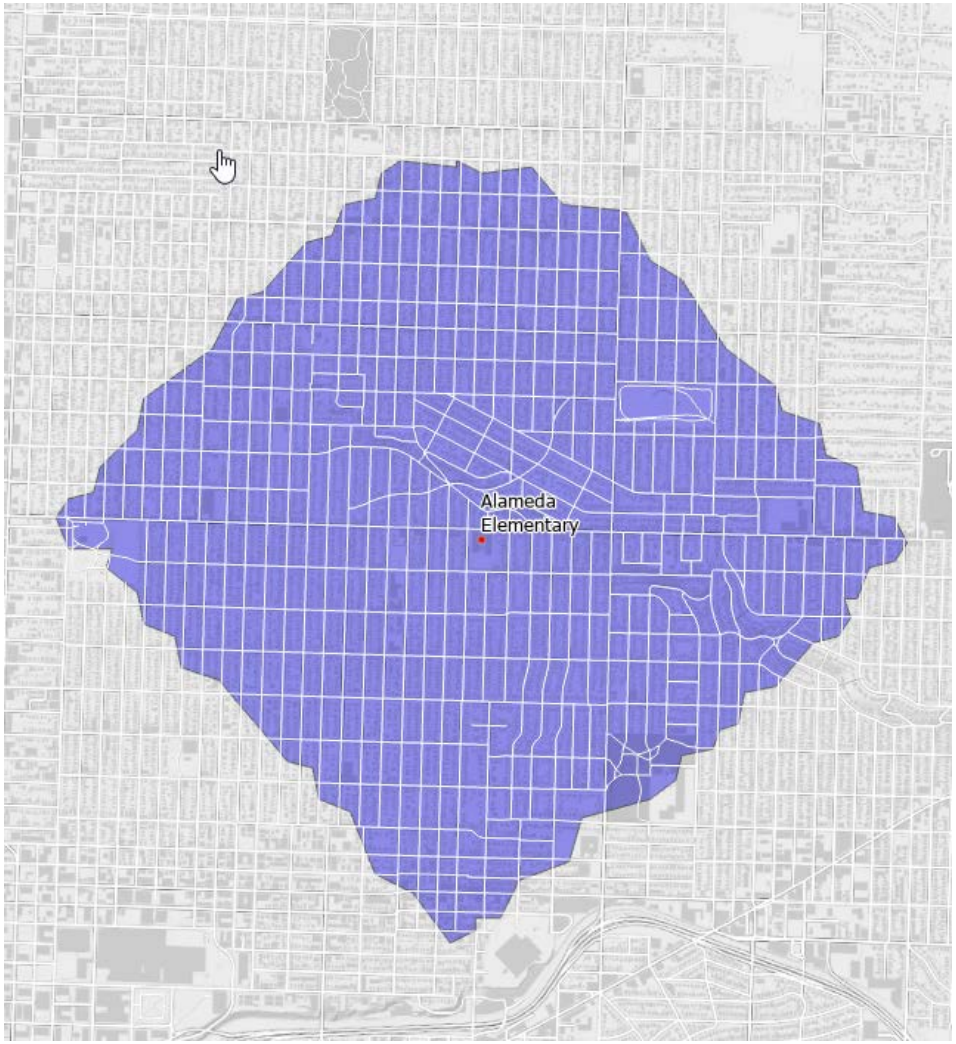
2023 School Walkshed Development

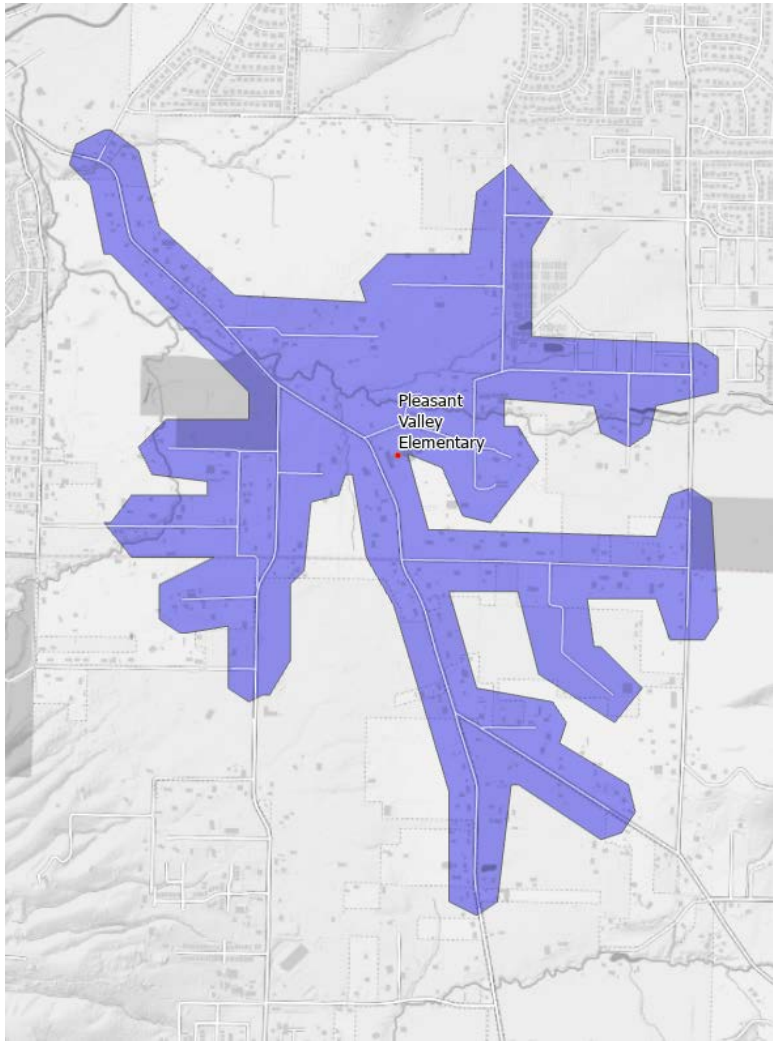
- Development of network dataset walksheds
- Updated data analysis
  - Input of new data & variables
  - Updated methodology
  - Radar chart development
- Creating an interactive map tool for partners to easily view individual school and district data

Introduction of walksheds



Refinement from Network Analysis approach





Updated methodology & new variables

	Variable	Description	Data Source
Equity	1.) Absenteeism (new)	Percent of students chronically absent (students missing 10% or more school days)	ODE – ODOT SRTS (2020-2021)
	2.) BIPOC students	Percent students of color	ODE – ODOT SRTS (2020-2021)
	3.) Disability (new)	Percent of students with a disability	ODE – ODOT SRTS (2020-2021)
	4.) English Learners (new)	Percent of students speaking English as a second language	ODE – ODOT SRTS (2020-2021)
	5.) Income	Percent of low-income students	ODE – ODOT SRTS (2020-2021)
Safety	6.) Barrier Streets	Miles of streets within school walkshed considered a barrier (>2 lanes OR > 35 mph, OR >2,500 peak PM traffic volume)	Metro (2015)
	7.) Crashes	Crashes within school walkshed calculated using Metro High Crash Corridor methodology: (All fatal and serious injuries within school walkshed x 10 + all bike/ped collisions x 3) (new methodology)	Metro/ODOT (2016-2020)
	8.) Missing Sidewalks	Percent of non-freeway streets with sidewalks (one or both sides) within school walkshed*	Metro (2022)

Methodology: Quintile Scores

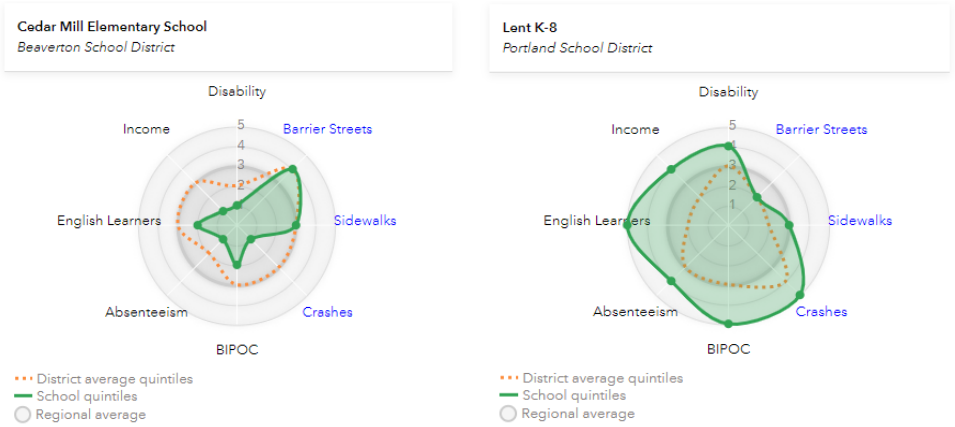
- Each school received a quintile score for each variable
  - A quintile places the data into 5 equal groups based on percentile, for example:

1	2	3	4	5
0% - 20%	20% - 40%	40% - 60%	60-80%	80%- 100%

- An ‘overall score’ was calculated for each school, which is a sum of each quintile for all 8 variables
- An average ‘overall score’ was calculated for each district to compare schools within their district

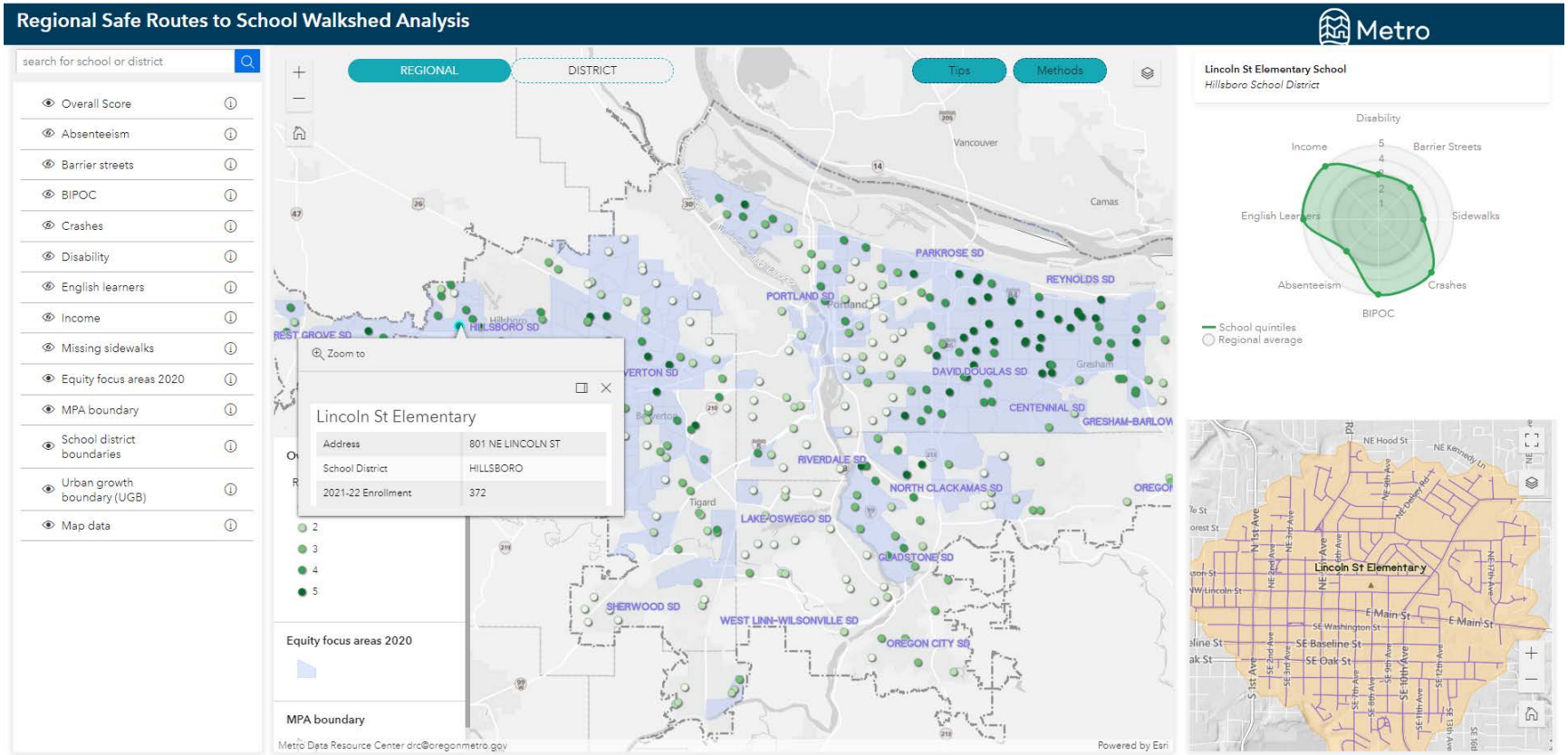
Visualizing Quintiles with Radar Charts

Radar/spider charts are good at showing outliers and commonality across a set of dimensions.



In the web application, they allow users to quickly interpret and compare quintile scores among schools and districts.

New interactive map



https://gis.oregonmetro.gov/schoolwalksheds/

oregonmetro.gov