

A photograph of two children riding bicycles on a paved street. The child in the foreground is wearing a bright yellow jacket and a blue helmet, riding a pink bicycle. The child in the background is wearing a purple jacket and a pink helmet, also riding a pink bicycle. The scene is captured from a rear perspective, showing the children moving away from the camera. The background includes a sidewalk, a tree, and parked cars. The entire image has a blue tint.

Program 5 - Bicycle Safety

Levy Oversight Committee
February 7, 2023

Hallie O'Brien (Bike)

Summer Jawson (NGW)

We are here today to:

Share a summary of two Levy to Move Seattle bicycle-focused programs:

- **Program 5 - Bike Safety**
- **Program 27 - Bike Parking and Bike Spot Improvements**



All Ages and Abilities Bicycle Facilities

Contextual Guidance for Selecting All Ages & Abilities Bikeways

Roadway Context				All Ages & Abilities Bicycle Facility
Target Motor Vehicle Speed*	Target Motor Vehicle Volume (ADT)	Motor Vehicle Lanes	Key Operational Considerations	
Any	Any	Any	<i>Any of the following:</i> high curbside activity, frequent buses, motor vehicle congestion, or turning conflicts [‡]	Protected Bicycle Lane
< 10 mph	Less relevant	No centerline, or single lane one-way	Pedestrians share the roadway	Shared Street
≤ 20 mph	≤ 1,000 – 2,000		< 50 motor vehicles per hour in the peak direction at peak hour	Bicycle Boulevard
≤ 25 mph	≤ 500 – 1,500	Single lane each direction, or single lane one-way	Low curbside activity, or low congestion pressure	Conventional or Buffered Bicycle Lane, or Protected Bicycle Lane
	≤ 1,500 – 3,000			Buffered or Protected Bicycle Lane
	≤ 3,000 – 6,000			Protected Bicycle Lane
	Greater than 6,000			Protected Bicycle Lane
Greater than 26 mph [†]	≤ 6,000	Single lane each direction	Low curbside activity, or low congestion pressure	Protected Bicycle Lane, or Reduce Speed
		Multiple lanes per direction		Protected Bicycle Lane, or Reduce to Single Lane & Reduce Speed
	Greater than 6,000	Any	Any	Protected Bicycle Lane
High-speed limited access roadways, natural corridors, or geographic edge conditions with limited conflicts	Any	Any	High pedestrian volume	Bike Path with Separate Walkway or Protected Bicycle Lane
			Low pedestrian volume	Shared-Use Path or Protected Bicycle Lane

Multi-Use Trails / Shared Use Paths

- Separate path
- Signs and wayfinding

Protected Bike Lanes

- Protected bike facility in the roadway
- Protected intersections and green paint markings

Conventional Bike Lanes/ In Street Minor Separation

- Striped lane or painted marking in the roadway

Neighborhood Greenways

- Improved crossing of busy streets
- Walk and bike priority through traffic calming and side street stop control
- Wayfinding

Healthy Streets

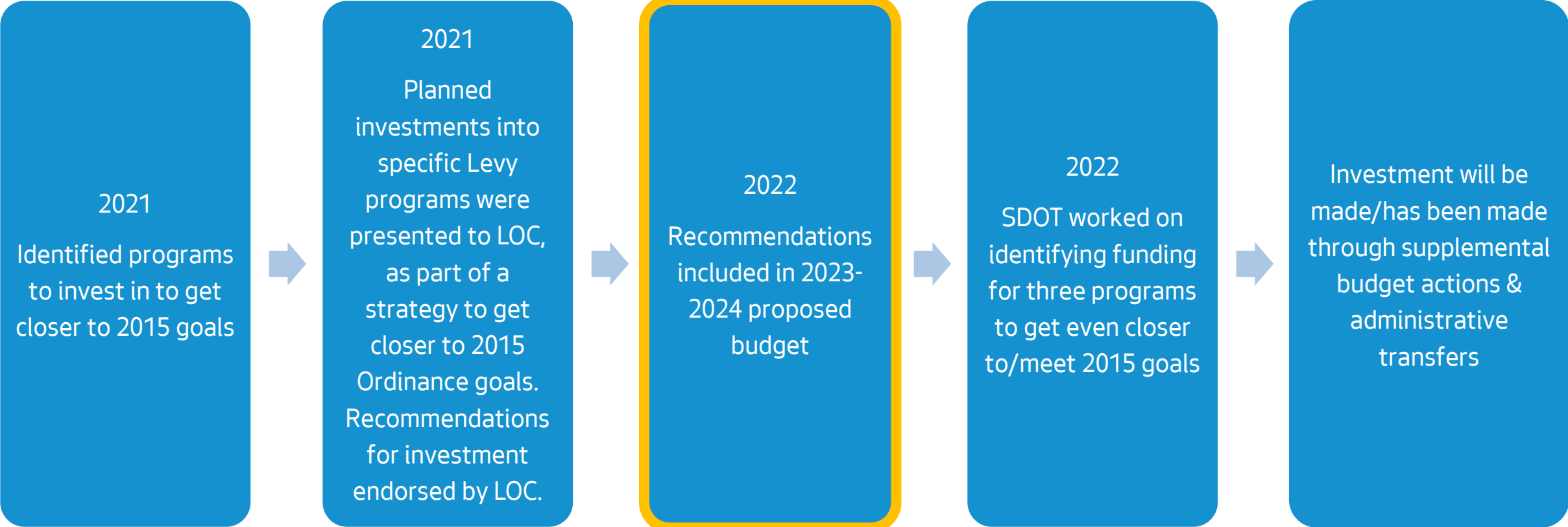
- Street Closed
- Entrance narrowing

Bicycle Safety Program - Levy Goals

- **Program 5 - Bicycle Safety**

- **2015 Levy Ordinance:** Build approximately 50 miles of new protected bike lanes and 60 miles of greenways, completing over half of the Bicycle Master Plan citywide network. Of the funds identified in this element, \$2M will be reserved for implementing bicycle improvements as part of the Accessible Mount Baker project.
- **2018 Workplan Update:** Project list for 2019-2024 being revised as part of the BMP Implementation Plan process; estimated bike facility (PBLs, NGWs, bike lanes) mileage of between 50 to 55 miles.

Reminder: Bicycle Safety Program as part of Levy Portfolio Status Update



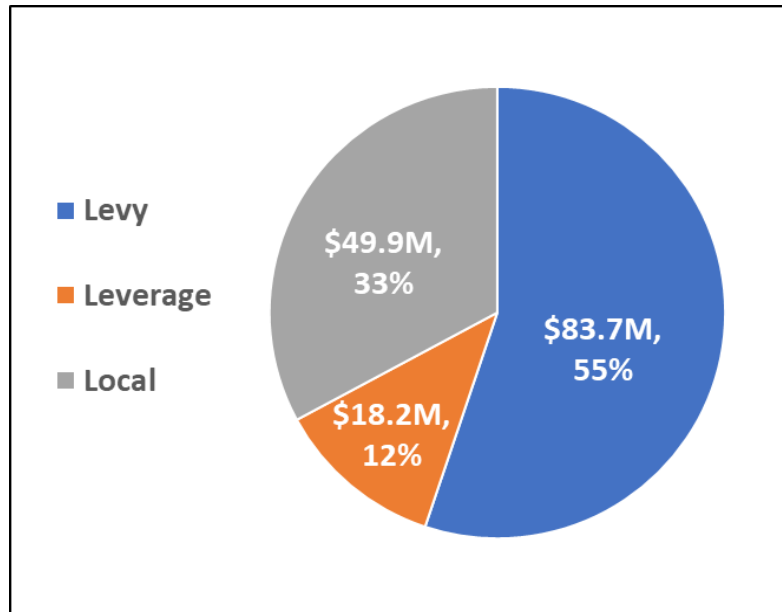
Bicycle Safety
Sidewalk Safety Repair
Arterial Roadway Maintenance
Paving Spot Improvements
New Sidewalks

Bicycle Safety
Arterial Roadway Maintenance
Bridge Seismic

Bicycle Safety Program - Current Funding Picture

Total of \$151.8M (2016-2024)

- Levy - \$83.7M
- Leverage - \$18.2M
- Local - \$49.9M

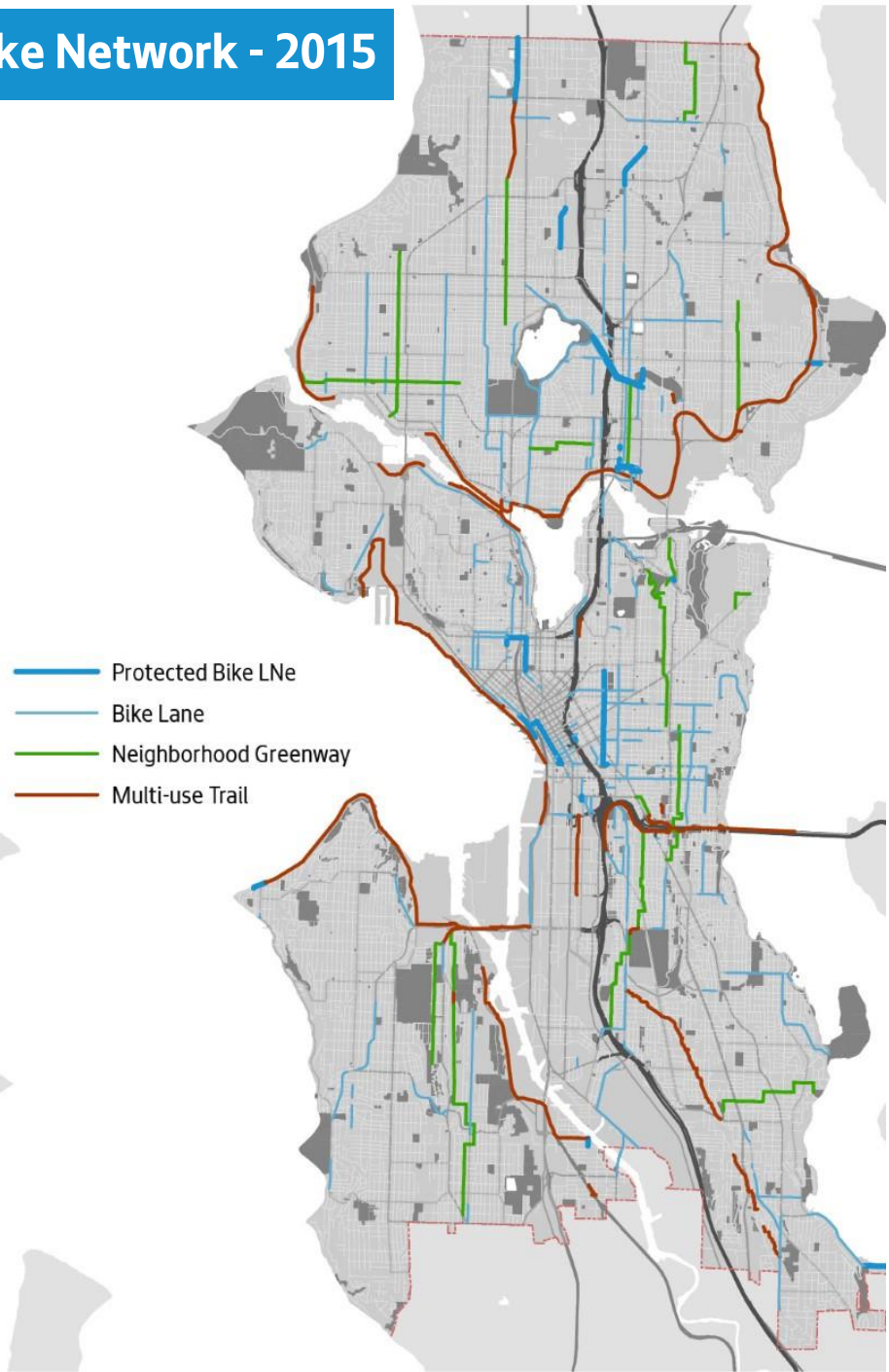


N 34th St

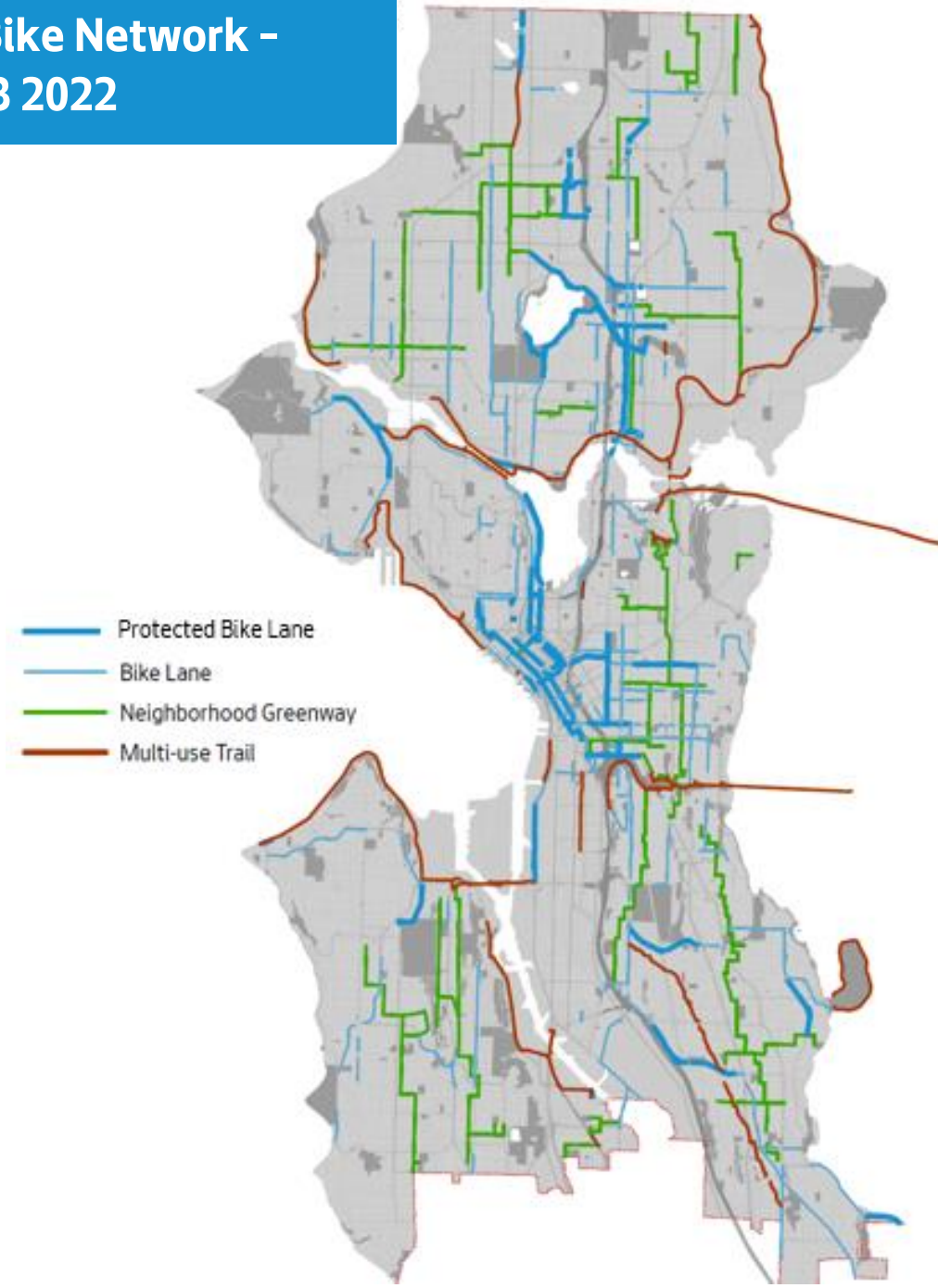
Bicycle Safety Program Deliverables to-date

LEVY DELIVERABLE	2016	2017	2018	2019	2020	2021	2022	TOTAL TO-DATE
Protected bike lane (miles)	2.40	4.17	2.34	5.82	2.16	9	3.12	29.01
Neighborhood Greenway (miles)	1.82	2.19	7.92	5.96	1.08	7.73	2.57	29.27
Bike lane (miles)	3.17	0	0	0.63	0.05	0.27	0.25	4.37

Seattle's Bike Network - 2015



Seattle's Bike Network - through Q3 2022



Bicycle Safety Program - Some completed projects



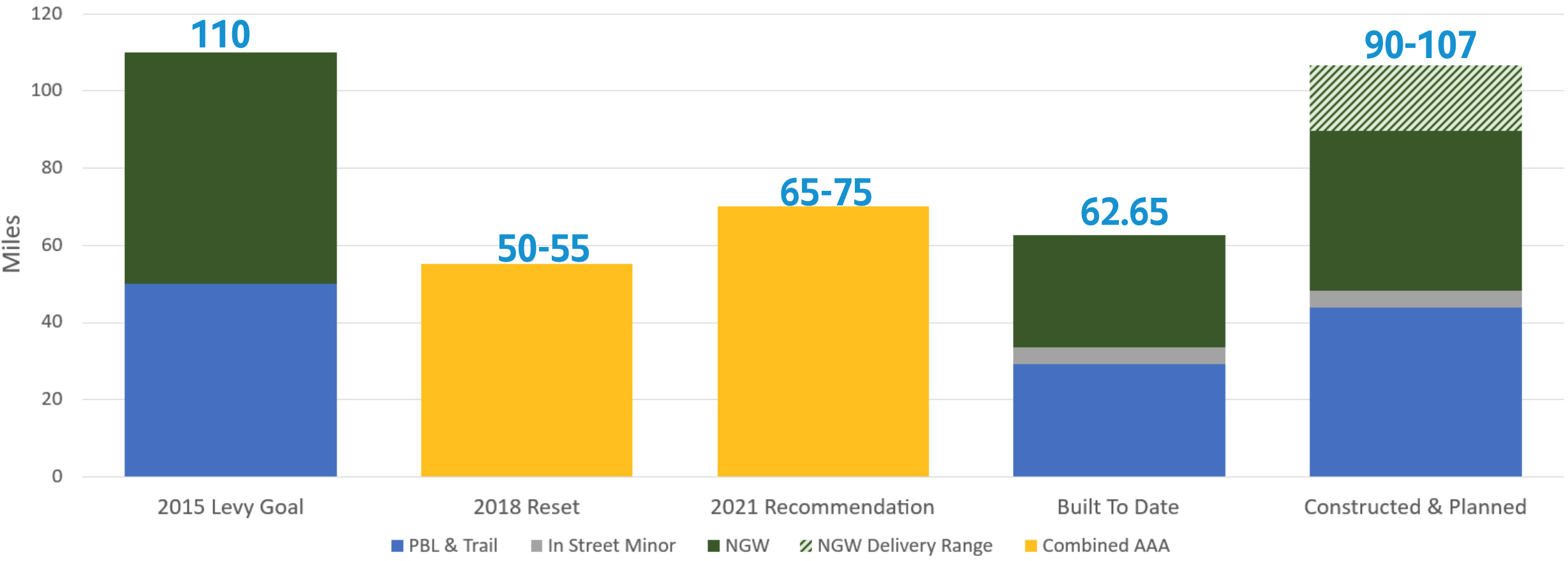
Clockwise from top left: 1st Ave and Broad St, 4th Ave, and 12th Ave S

Bicycle Safety Program - Some completed projects



Left to right: Green Lake, Avalon Way, Crown Hill to Northgate NGW

Looking Ahead: Projected Bike Facilities Constructed with Levy Dollars



AAA= All ages and abilities
*Projects completed through Q4 2022

Finishing Strong - Delivery

- To achieve these targets we will need to increase our rate of delivery via both crew and contractor built projects
- Finishing the Levy is a top priority for SDOT
- Some projects that you will see movement on in the coming year:
 - Build new protected bike lanes & trails (~15.25 miles)
 - Build new neighborhood greenways partnering with Safe Routes to School (~14.59 - 18.09 miles)
 - Build permanent Healthy Streets on existing neighborhood greenways built under the Bridging the Gap Levy (~2.7 - 9.5 miles)
 - Building neighborhood greenways and permanent Healthy Streets at the same time at locations that were prioritized during the pandemic (~3.1 miles)

Equity considerations

- BMP prioritization framework includes equity as criteria:
 - Populations of focus: Those without a car, BIPOC population, percentage of households below 200% of the poverty level, population under the age of 18, and populations over the age of 64.
- Ongoing SDOT priorities for continuous equitable improvement
 - Address disinvestment in south end of Seattle.
 - Fund and prioritize bicycle projects in southeast Seattle and other areas of the city that have been underinvested in (Lake City, Highland Park, South Park, etc.).
 - Use meaningful project engagement for bicycle projects to help support long-lasting relationships with BIPOC communities

Challenges and opportunities

- **We are driven to produce equitable, co-created, impactful projects**
- **Capacity:** Planning, design and crew delivery capacity to deliver an increased number of projects, remaining responsive to emerging issues
- **Public engagement:** Moving at the speed of trust and doing meaningful engagement with community means that we may take more time to build bike projects
- **Partnerships:** Several deliverables rely on other agencies like WSDOT or Railroad partners (Rainier Valley Greenway, MLK PBL); or larger SDOT projects (Burke-Gilman Missing Link, Rapid Ride J, etc.) to build the mileage



Thank you!

Questions?





Program 27 – Bike Parking and Bike Spot Improvements

Levy Oversight Committee

February 7, 2023

Christiana Farrell

Levy Goals

- **Program 27 - Bike Parking and Bike Spot Improvements**

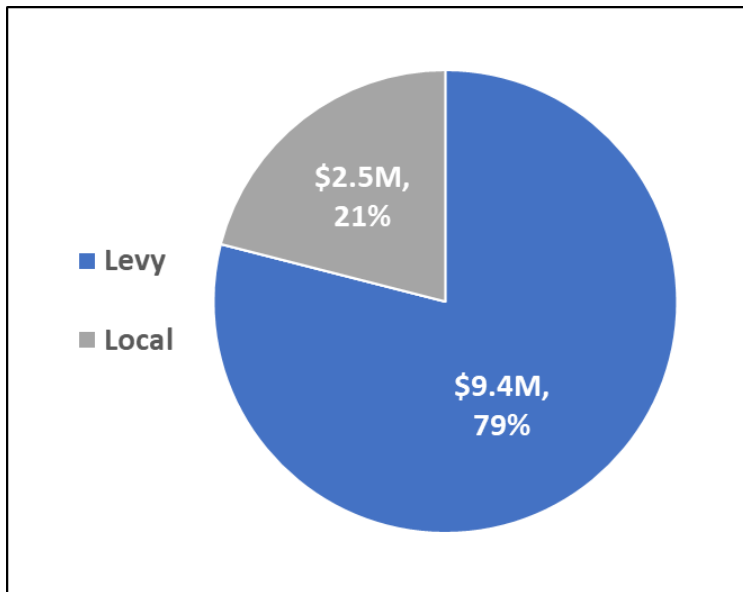
- **2015 Levy Ordinance:** Install 1,500 new bicycle parking spots citywide and maintain existing bike facilities. Install other biking and walking investments.
- **2018 Workplan Update Report:** Noted anticipated completion of 1,500 new bike parking spaces by the end of 2019; outlined annual target of 10 bike spot safety improvements.



Bike Parking and Bike Spot Improvements - Funding

Total: \$11.9M (2016-2024)

- Levy - \$9.4M
- Local - \$2.5M



Bike Parking and Bike Spot Improvements Deliverables to-date

LEVY DELIVERABLE	2016	2017	2018	2019	2020	2021	2022	TOTAL TO-DATE
Bike parking spaces added	622	466	306	116*	20	68	14	1,612
Urban trail and bikeway spot imp.	10	12	12	15	6	10	10	75

*Met our goal of 1,500 bike parking spaces by end of 2019!

Bike Parking Spaces



- Building bike parking on the street frees up sidewalk space for all ages & abilities to get around
- Installing bike parking in the curb space adjacent to crosswalks has practical use and public safety benefit; makes people driving, walking, and biking more visible
- Supports safer, easier, more comfortable mobility options

Bike Parking Spaces



E Olive Way



Harbor Ave SW

Bike Spot Improvements

- Improve bicyclist safety & mobility
- *Examples in 2022 include:*
 - Duwamish River Trail vegetation trimming and surface clearing
 - Mountains to Sound Trail signage upgrades
 - Queen Anne Ave N and W Republican St protected bike lane post upgrade for safety near a driveway
 - Chief Sealth Trail sign upgrade at a crossing to enhance trail wayfinding and limit vehicular confusion
 - Repaving Beacon Ave S Path
 - Signs and log barrier on Chief Sealth Trail to prevent vehicle traffic on trail

Bike Spot Improvements



Beacon Ave S path



N 40th St

Bike Spot Improvements



Queen Anne Ave N and W Republican St



Chief Sealth Trail

Evolution of Best Practices

- Currently, plastic posts are the PBL standard in Seattle & have been national industry standard for 10+ years
- Flexibility of plastic posts allowed us to install PBLs in areas that may require access for emergency vehicles, but require continued maintenance and replacement
- SDOT is pilot testing new materials to better separate people rolling, scooting, and biking from traffic; Council proviso to invest in better barriers
- Evaluating based on delivery success, material durability, and resolving supply-chain issues



N 40th St

Even Better Bike Lanes - New Materials

- Four materials to pilot
 - Concrete
 - 1x Precast Parking Stop
 - 1x Precast Barrier
 - 1x Extruded Curb
 - Manufactured Polymer barriers
 - 1x Plastic Delineators
- Locations
 - NE 40th St - Parking Stops
 - N 9th St - Armadillo
 - S Columbian Way - Toronto Barrier
 - S Dearborn St - Extruded Curb




Equity Considerations

- Urban Trails and Bikeways prioritization framework includes equity as criteria
- Focus on maintenance of South Seattle Trails in 2022 with repaving, signage upgrades, and vegetation trimming

Challenges and Opportunities

- **Maintenance:** Limited funding for trail maintenance, so program seeks ways to combine bike spot safety projects with maintenance needs to achieve additional needed trail maintenance.
- **Data-Driven Prioritization:** Program targets bike spot safety improvements using collision frequency and historic use data. Program funds the [Bike and Pedestrian Safety Analysis \(BPSA\)](#).
- **Bike Parking:** Reliant on partnership with other programs to fulfill ongoing community requests, such as partnerships at schools for bigger bike corrals for kids will deliver more spaces in 2023.



Thank you!
Questions?

Contact

Hallie.O'Brien@seattle.gov

Summer.Jawson@seattle.gov

Christiana.Farrell@seattle.gov

<https://www.seattle.gov/transportation/BMP>

