

Planning for Light Rail- Bike Parking

Seattle Bicycle Advisory Board

November 19, 2024

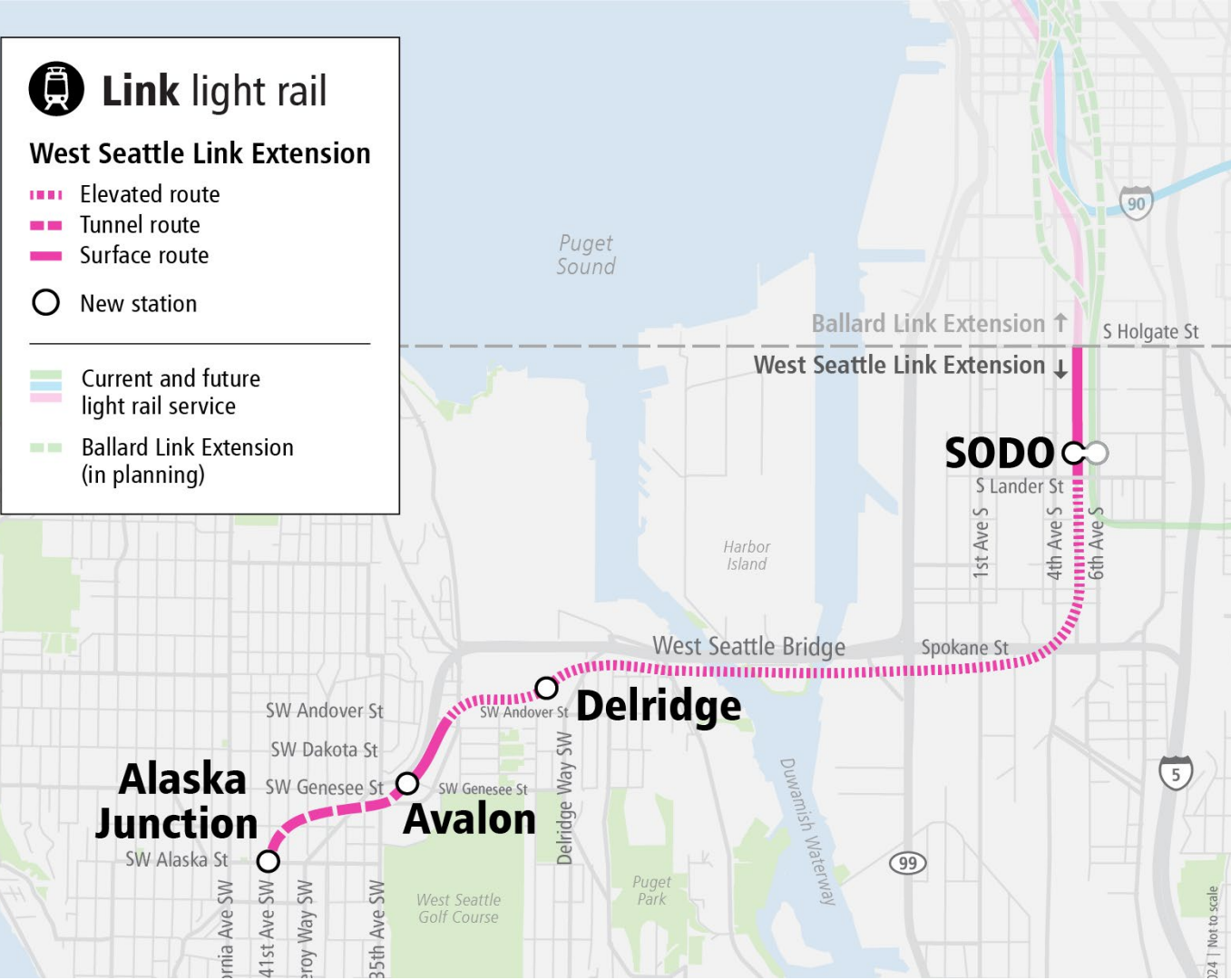


Goals of Presentation

- Introduce the West Seattle and Ballard Link Extension projects and timeline
- Daylight City and Sound Transit's work to revise bike parking requirements for light rail transit facilities
- Discuss the methodology and process used to craft new requirements
- Provide an opportunity for discussion



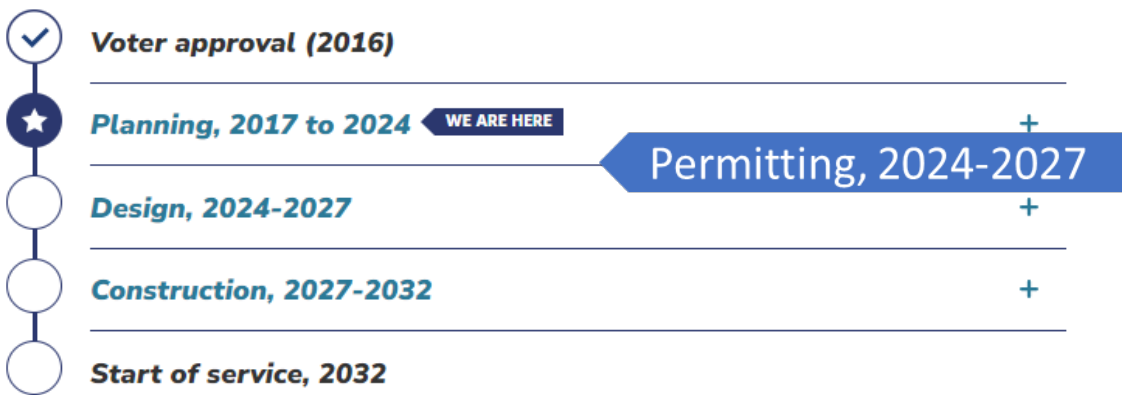
West Seattle Link and Ballard Link Extensions





West Seattle Link

Timeline and milestones



Ballard Link

Timeline and milestones



We need to plan for bikes

The City of Seattle and Sound Transit have a shared goal to provide accessible and safe bike parking at light rail stations

- Address station context
- Meet anticipated demand and provide space for future growth
- Accommodate a variety of different bike styles
- Include micromobility
- Streamline permitting



Why is this work important to Sound Transit?

Meet expected demand of our passengers who ride bikes or shared micromobility devices

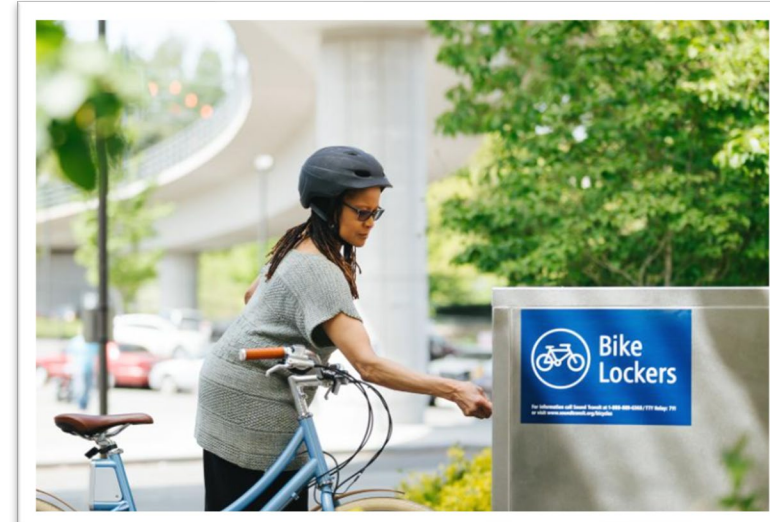
- Improve the passenger experience for all users, including those who bike to our stations, through improved bike rooms that are easily accessible, safe and secure
- Optimize operational footprint through data-driven demand forecasting
- Right-size requirements for day of opening and build in adaptability for future growth over the lifespan of the station
- Allow flexibility to accommodate emergent technologies over time including current and evolving shared micromobility options
- Partner with the City of Seattle on bike infrastructure investments to support accessing light rail stations via non-motorized modes

Opportunities for bike parking

Current requirements	Proposed requirements
One-size-fits-all	Base on station typology
Lacks key definitions and has never been applied to light rail facilities	Provide clear requirements- define AM Peak Period, remove train- to-train transfers, acknowledge that some bikes will be brought on trains
Requirements are not based in data	Utilize data to provide day-of-opening requirements based on projected need and define in-reserve requirements for future growth
Limited guidance on bike parking design	Define standards for future bike parking at stations
No mention of bike and scooter share (shared micromobility)	Create new shared micromobility space requirements

Work Done To-Date

- Study the existing light rail system
- Review peer city codes and trends
- Collect data
- Sound Transit bike parking model
- Sound Transit summer 2024 data collection
- Public engagement
- Subject Matter Expert (SME) input



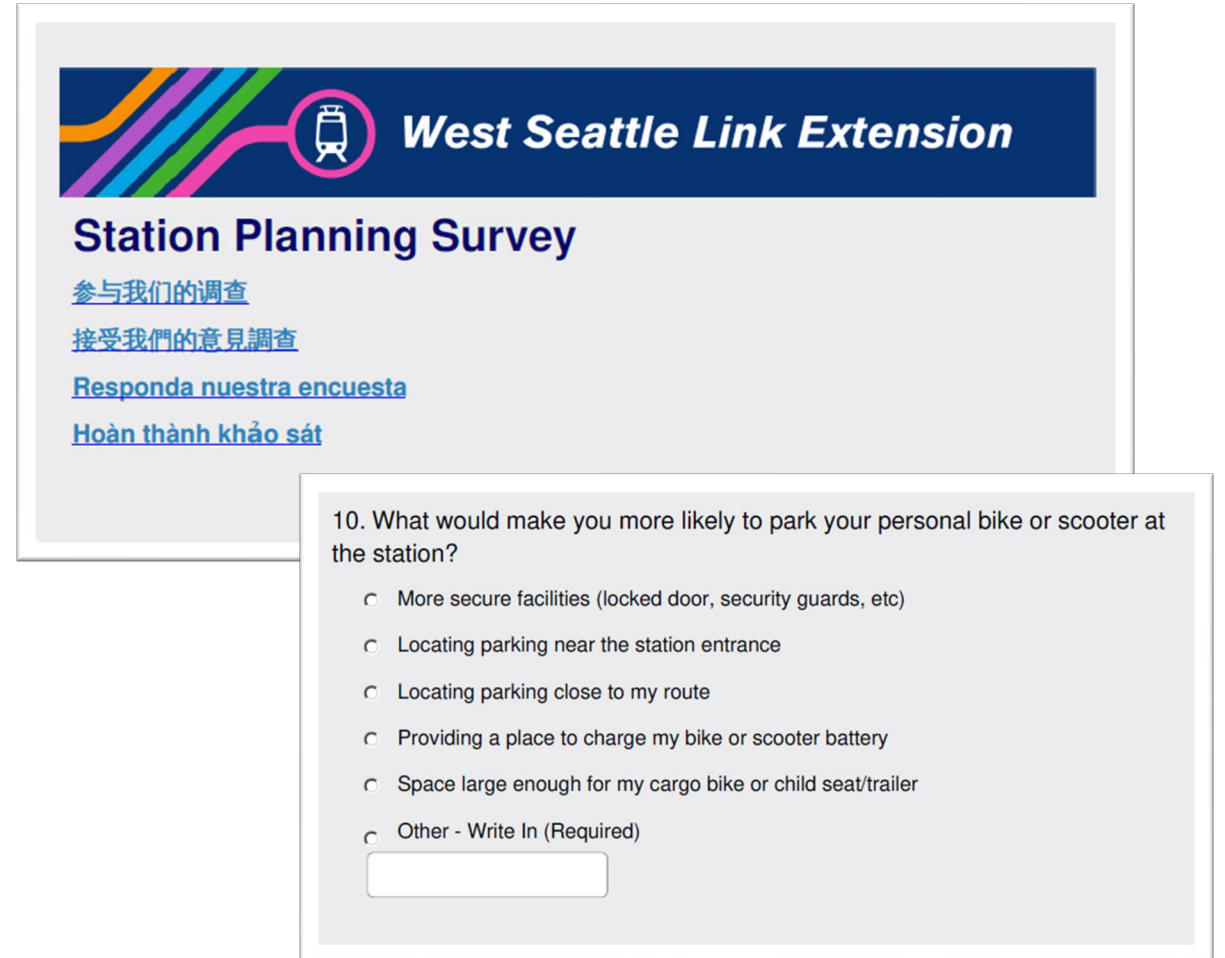
Data Collection to Understand Passenger Needs

Sound Transit & SDOT partnered to:

- Build a shared bike parking model
- Compare data with patterns seen by peer agencies
- Count number of riders bringing bicycles on board, parking at racks/lockers, or using shared micromobility
- Conduct an on-board survey of bicyclists to understand rationale
- Measure use of shared micromobility in designated parking areas at stations

Public Feedback

- Provide bike parking that accommodates a variety of bike sizes
- Locate bike parking near station entry
- Ensure bike parking is secure
- Support access to bike parking with safe bike routes



The image shows a screenshot of a survey titled "West Seattle Link Extension Station Planning Survey". The header features a blue banner with a colorful graphic of a train and the text "West Seattle Link Extension". Below the banner, the title "Station Planning Survey" is displayed in bold. There are four links for participating in the survey: "参与我们的调查" (Chinese), "接受我們的意見調查" (Traditional Chinese), "Responda nuestra encuesta" (Spanish), and "Hoàn thành khảo sát" (Vietnamese). The survey question 10 asks: "What would make you more likely to park your personal bike or scooter at the station?". The options are: "More secure facilities (locked door, security guards, etc)", "Locating parking near the station entrance", "Locating parking close to my route", "Providing a place to charge my bike or scooter battery", "Space large enough for my cargo bike or child seat/trailer", and "Other - Write In (Required)". A text input field is provided for the "Other" option.

West Seattle Link Extension

Station Planning Survey

[参与我们的调查](#)
[接受我們的意見調查](#)
[Responda nuestra encuesta](#)
[Hoàn thành khảo sát](#)

10. What would make you more likely to park your personal bike or scooter at the station?

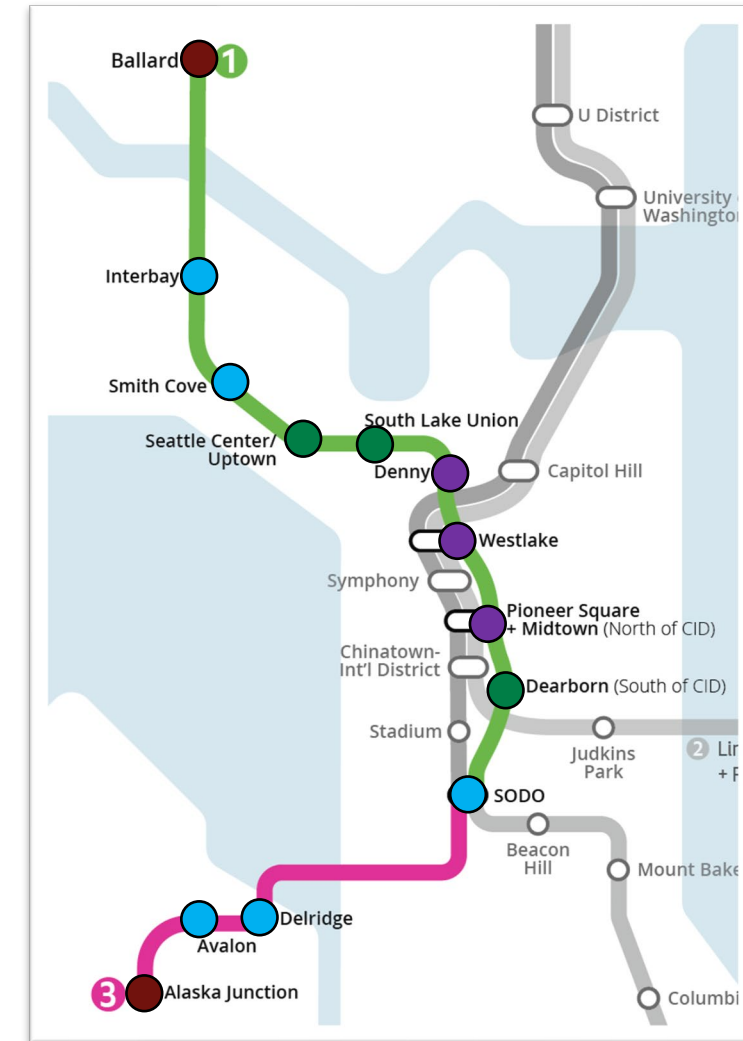
- ☐ More secure facilities (locked door, security guards, etc)
- ☐ Locating parking near the station entrance
- ☐ Locating parking close to my route
- ☐ Providing a place to charge my bike or scooter battery
- ☐ Space large enough for my cargo bike or child seat/trailer
- ☐ Other - Write In (Required)

Bike Parking Assumptions

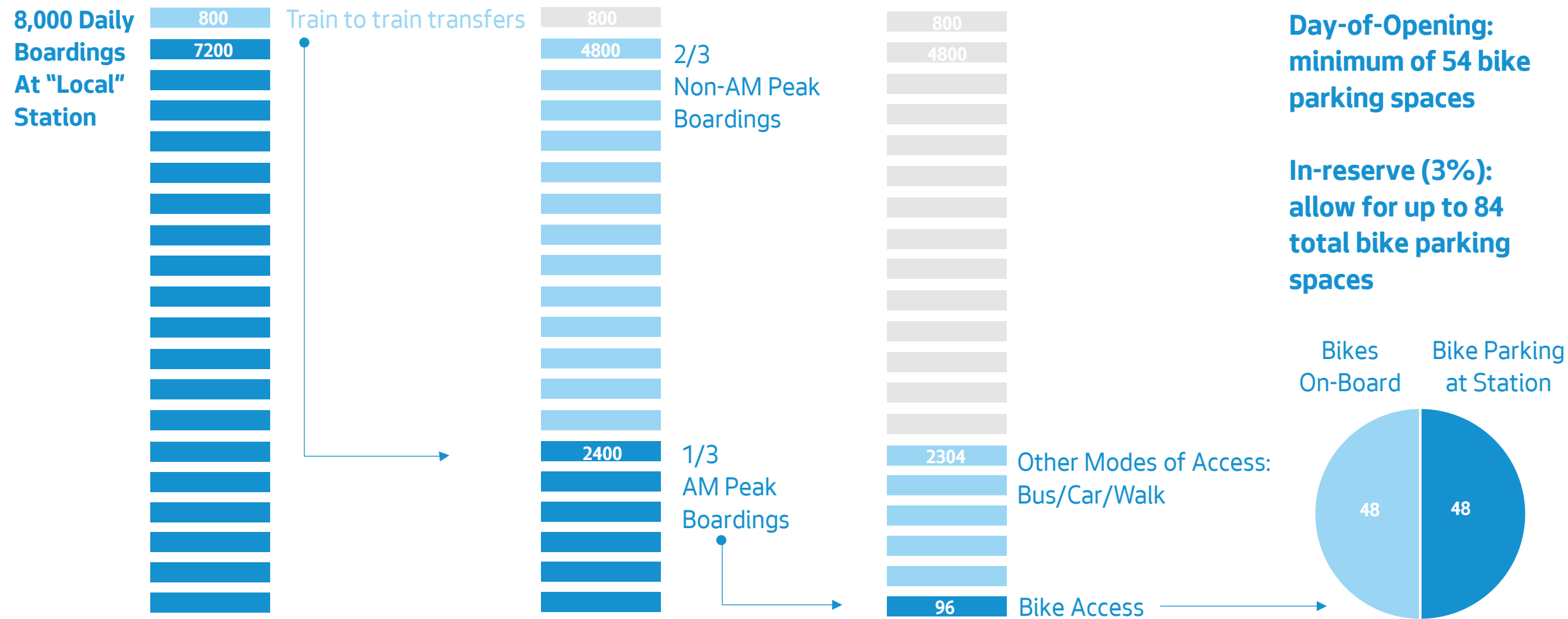
- Station typology will inform bike parking demand
- Train-to-train passenger transfers will be excluded from daily ridership
- AM Peak period is calculated as 1/3 of daily ridership (less train-to-train transfers)
- 1/2 of bike riders will take their bike onboard the train
- 1/3 of bike parking will be short term, 2/3 will be long-term
- Require a minimum of 54 bike parking stalls per station

Draft Bike Parking Station Typologies

Station Typology	Definition	Percentage (factor)	Stations
Terminus Stations	Stations located at the end of a light rail system route in the City of Seattle.	5.5% Day of Opening 1.5% In reserve	Alaska Junction Ballard
Local Stations	Stations located in intermediate vicinities that are not served by Central, Mid-Center, or Terminus stations.	4% Day of Opening 3% In reserve	Avalon Delridge SODO* Smith Cove Interbay
Mid-Center	Stations that are within ½ mile outside of the Downtown Urban Center boundary > 6000 daily ridership	2% Day of Opening 2% In reserve	Dearborn (CID South) South Lake Union Seattle Center
Central Stations	Stations located in the Downtown Urban Center.	1% Day of Opening 1% In reserve	Midtown (CID North)* Westlake* Denny



Draft Bike Parking Code Example



Design Standards

Standards for bike parking

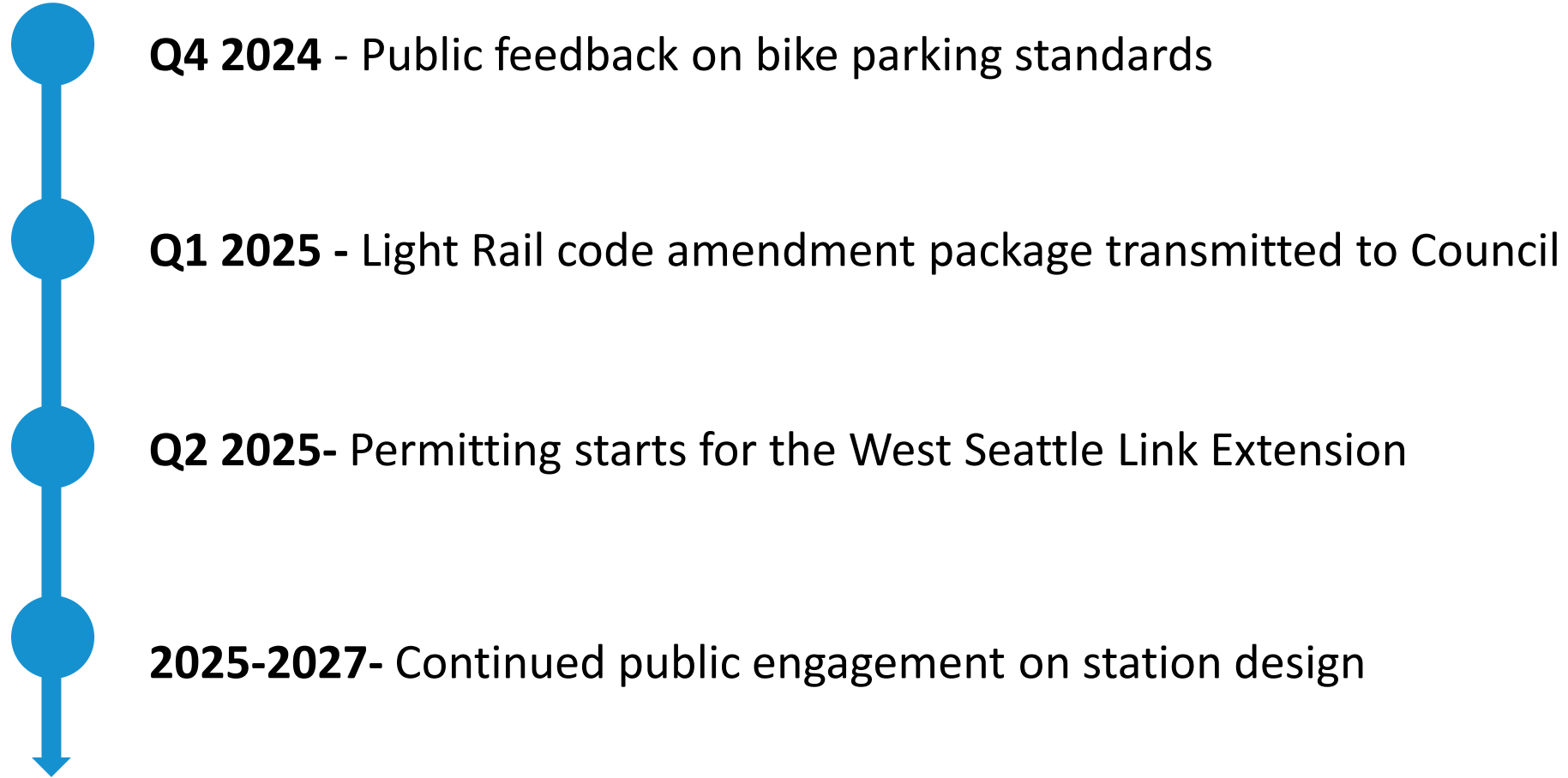
- Accessible and located near the station entry
- Include wayfinding
- Secure
- Accommodates a variety of bike types (electric, cargo, etc.)

Standards for shared bikes and scooters (shared micromobility)

- Dedicated space near the station entry



Next Steps



What We Want to Hear From You!

- Do you have questions or comments about the approach we are using to define a new bike parking requirement?
- What are your concerns with bike parking at light rail stations?



Additional Questions & Comments?

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From the entire ST3 City Team:
Thank you!