

Vertical Conveyance Program Update

9/14/2022



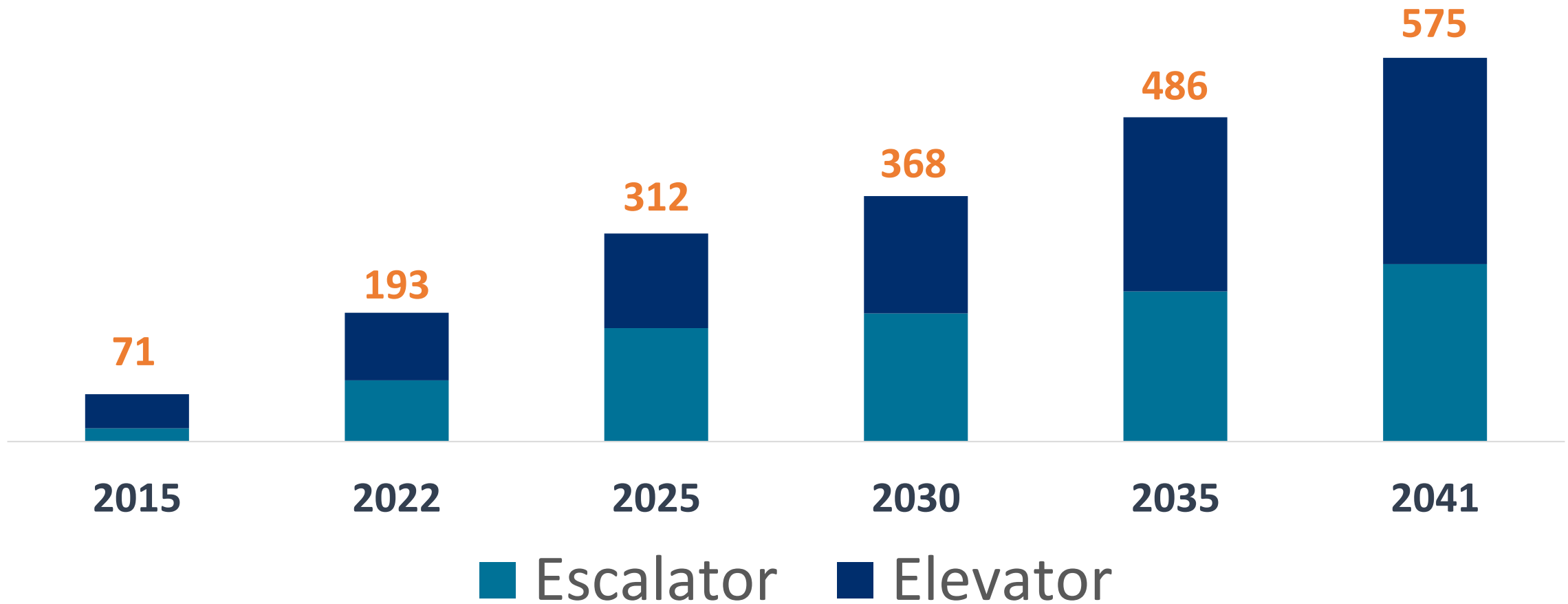
Why Are We Here

- *Vertical conveyance program overview*
- *Downtown tunnel asset performance optimization*
- *Vertical conveyance replacement program update*

Conveyance Team Vision Statement

Create a *passenger* focused vertical conveyance program centered on *safety* and *reliability* by leveraging maintenance, technology & data to optimize performance and keep all stakeholders better informed.

More assets to manage as system grows



- 62% growth in managed assets between 2022-2025
- Estimated fleet of 575 by 2041

Program Updates

- Continued Growth
- Optimizing Asset Performance
- Enhancing Passenger Communications
- Asset Replacement Program



Rider Alert



This unit is out of service due to power issues.

We apologize for the inconvenience.

To learn more about its anticipated return to service, please scan the QR code.



Interpreter 800-823-9230
7am-7pm, Monday-Friday
Equal, Tǎng, ǎng, ǎng, ǎng, ǎng
2025 2025 2025 2025 2025

For more information, please call
525-525-5255 / TTY: 711

Reporting Updates

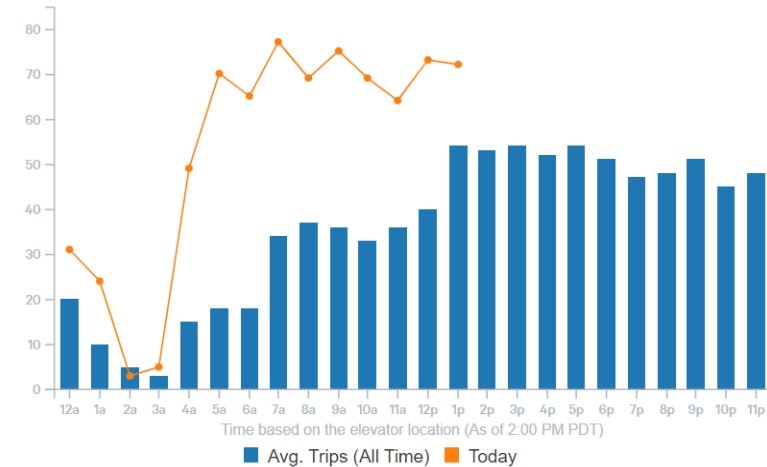
Elevators Outages

Service	Station	Location	Reason	Estimated Return
Link	Westlake Station	#307 - Station Access	Mechanical	TBD
Link	University Street Station	#501 - Station Access	Vandalism	7/15
Link	University Street Station	#506 - Station Access	Mechanical	6/21
Link	Pioneer Square Station	#705 - Station Access	Mechanical	TBD
Link	Int'l District/Chinatown Station	#904 - Station Access	Vandalism	6/23

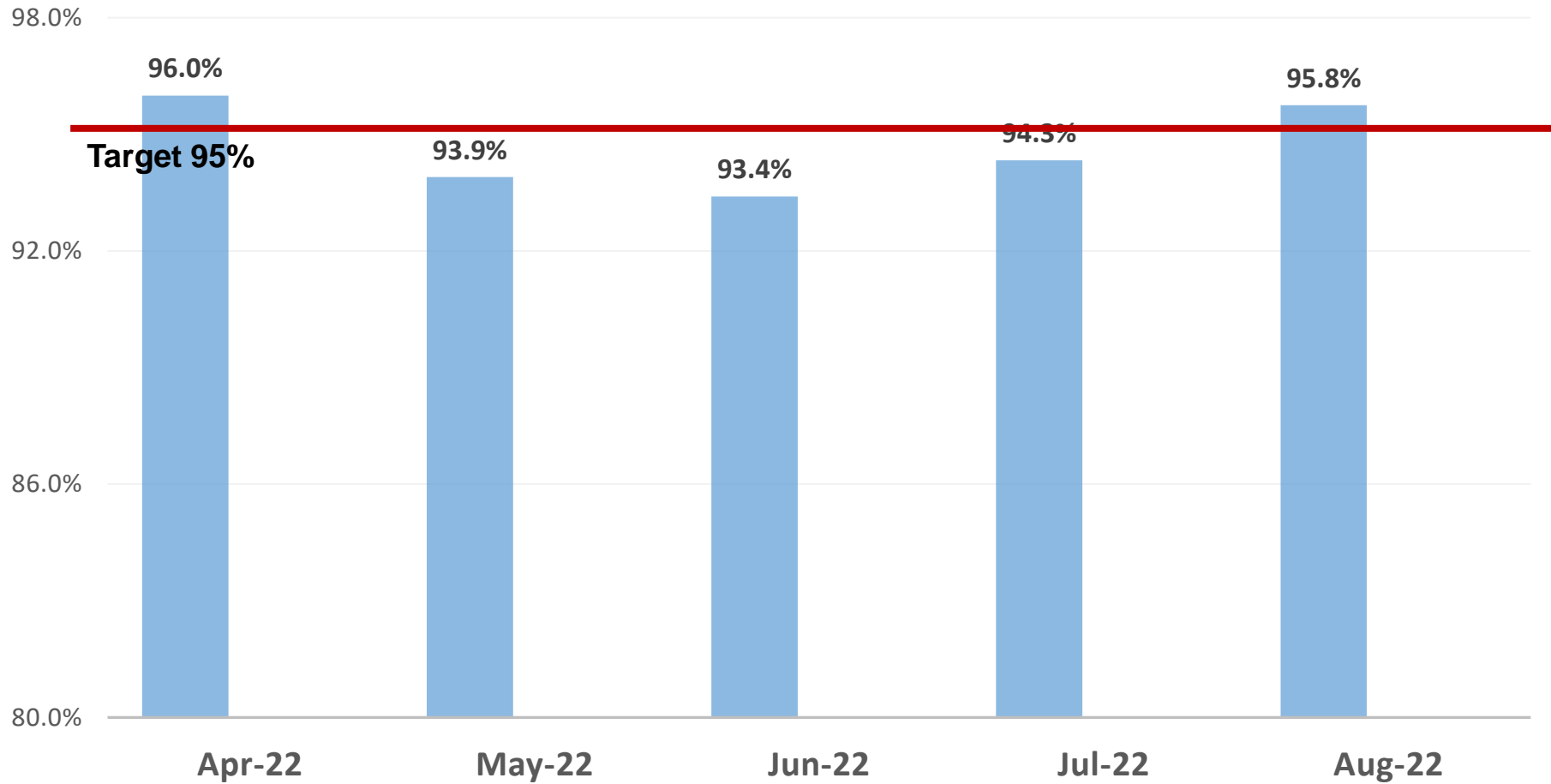
- ST Service Alert Updates
- Continued Enhancements to Passenger Facing Data and Reporting
- Internal Data Analytics Enhancements
- Notification Challenges of Inoperable Assets

Advancing Technology Update

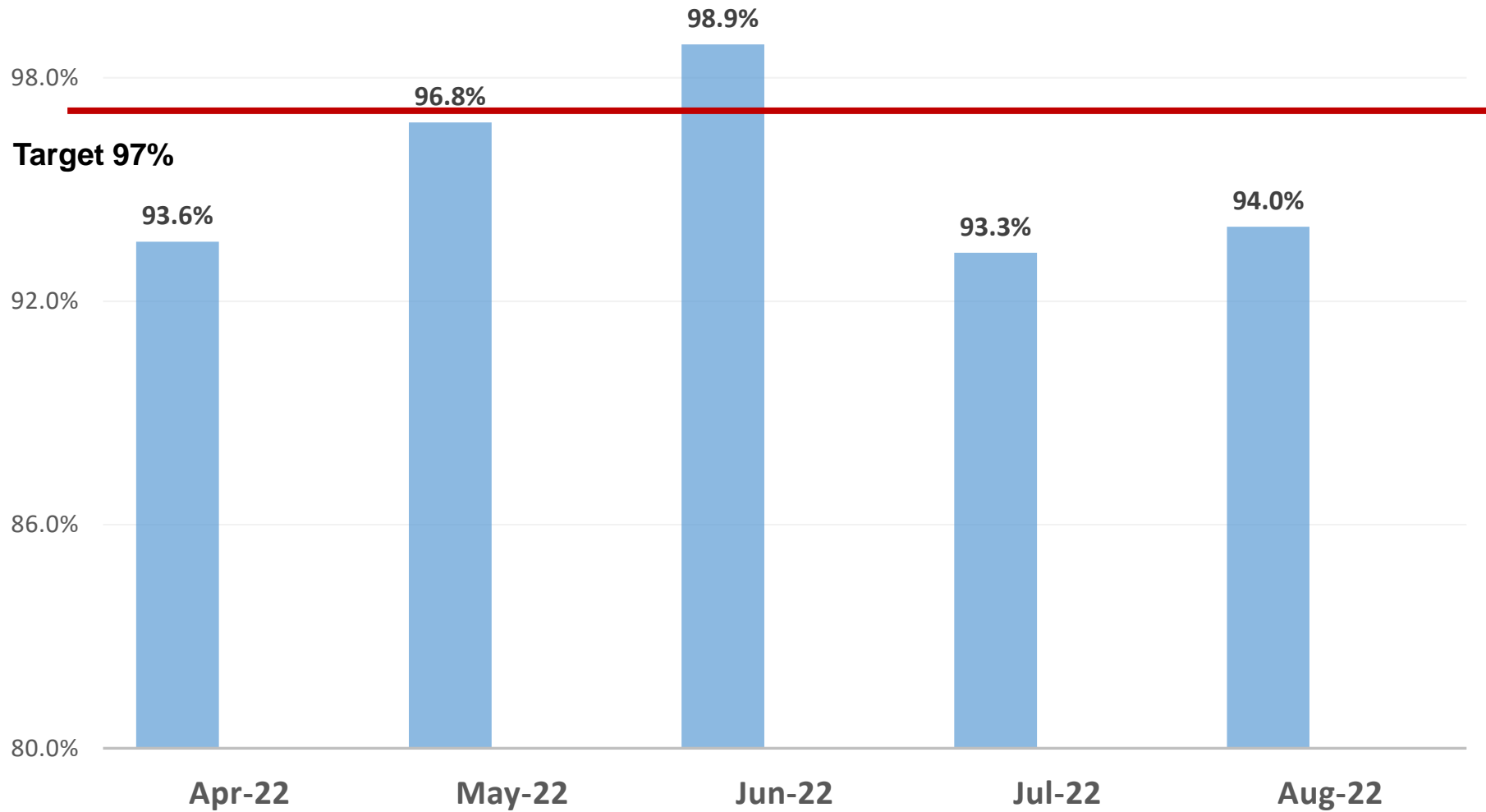
- Internet of Things Sensor Pilot
- Real Time Monitoring and Outage Alerts
- Performance Data and Trends
- Traffic Analysis



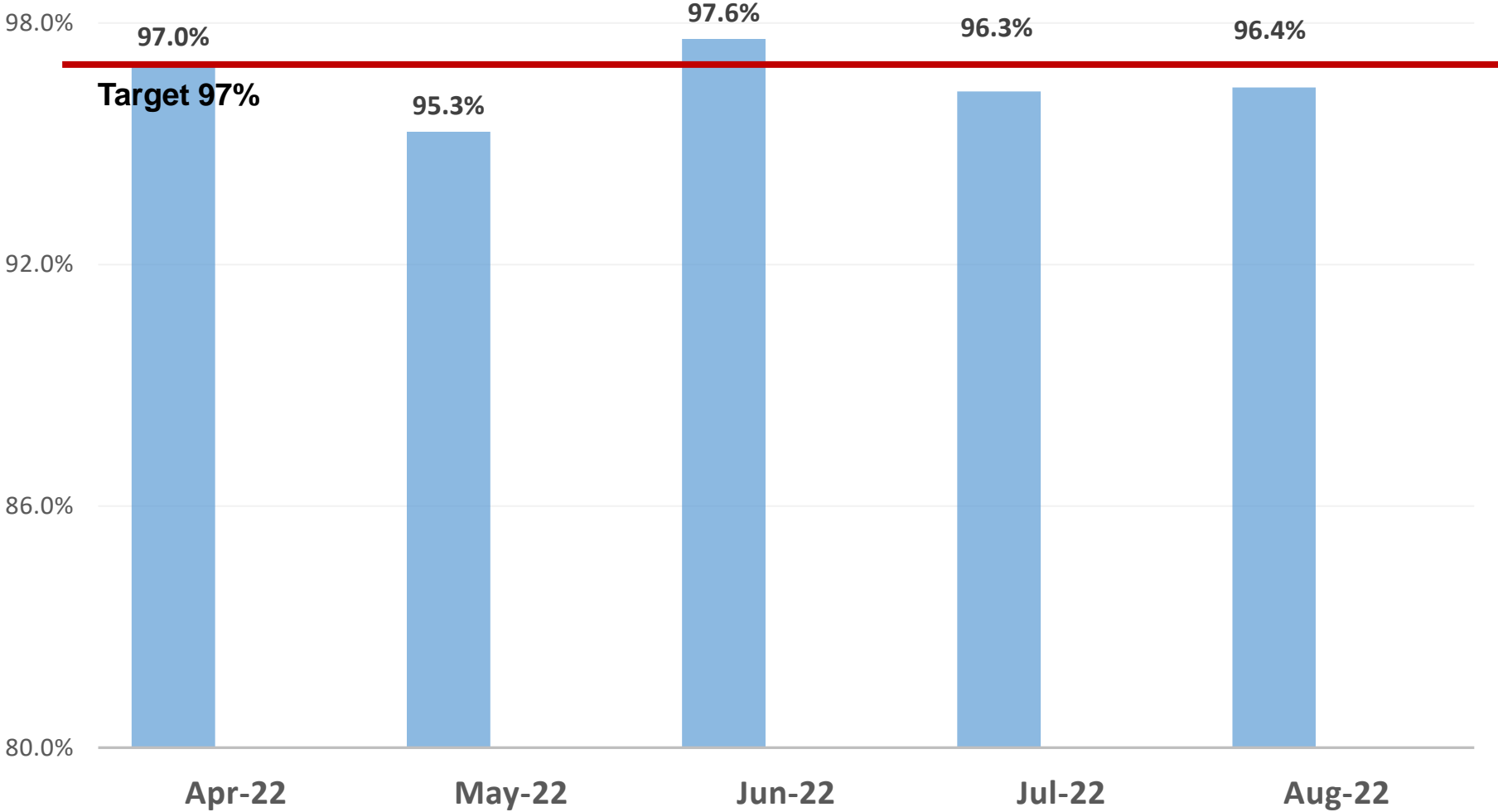
Link escalator availability excluding downtown tunnel stations



Link elevator availability excluding downtown tunnel stations



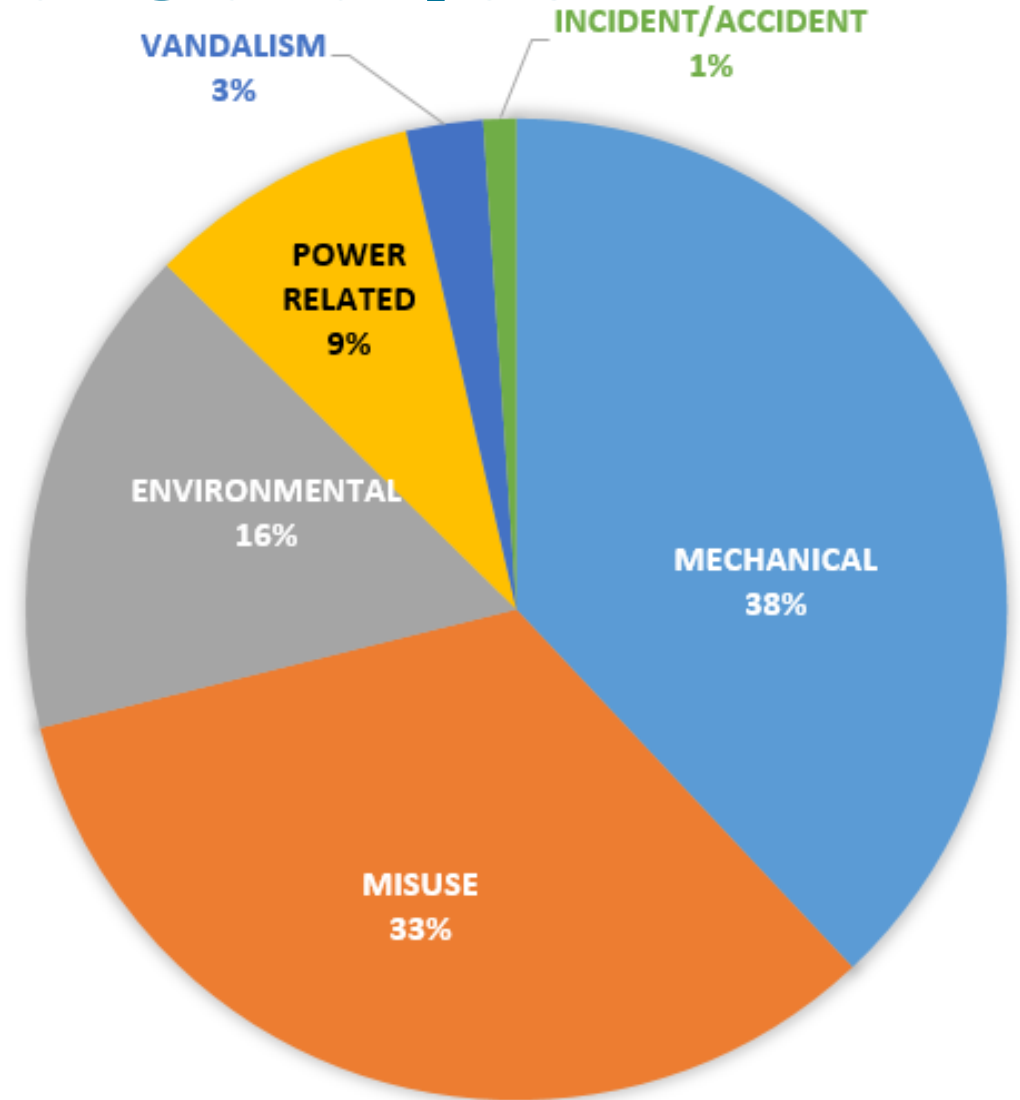
Sounder/ST Express elevator availability



Asset Unplanned Outages

Jan 1st – Aug 31st 2022
Total Unplanned Outages

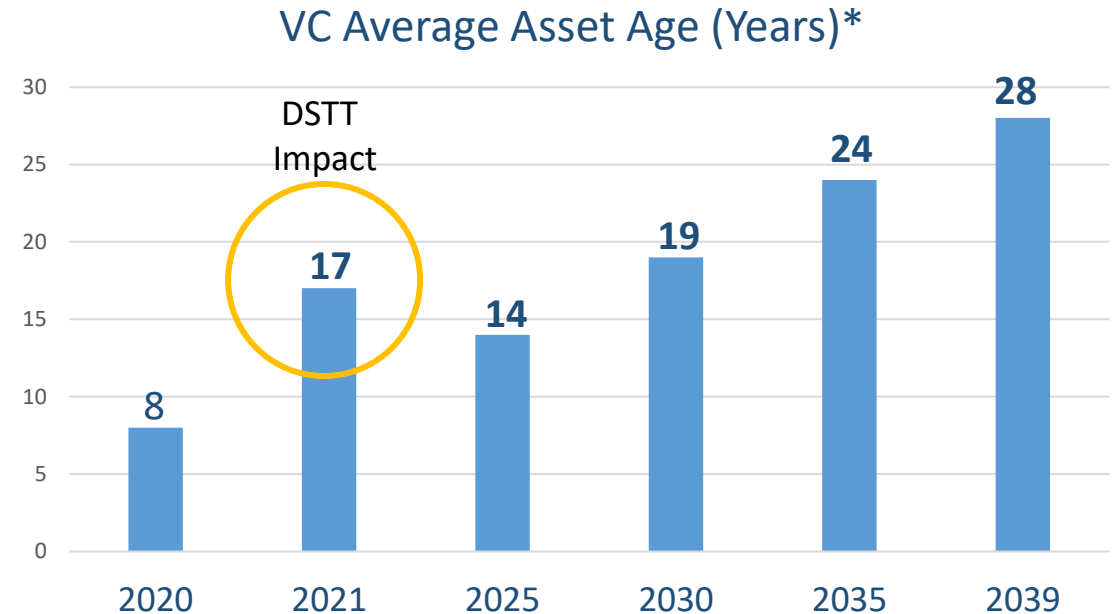
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Downtown Seattle Asset Updates

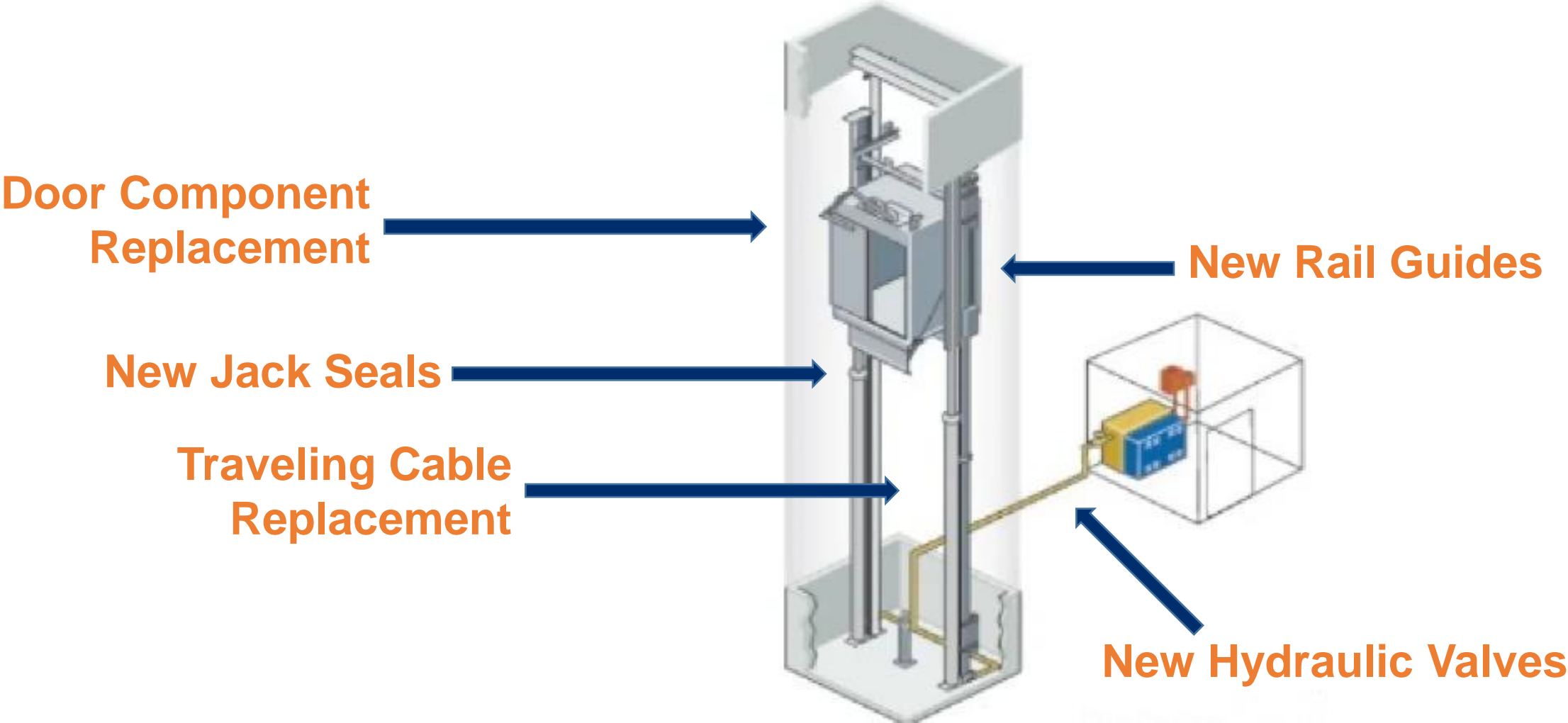
Tunnel ownership transition

- Jan 1st 2021 Sound Transit assumed management
- \$8.7 million Board-approved funding
- \$3.6 million* spent in 2021
- Estimated \$2.2 million in 2022

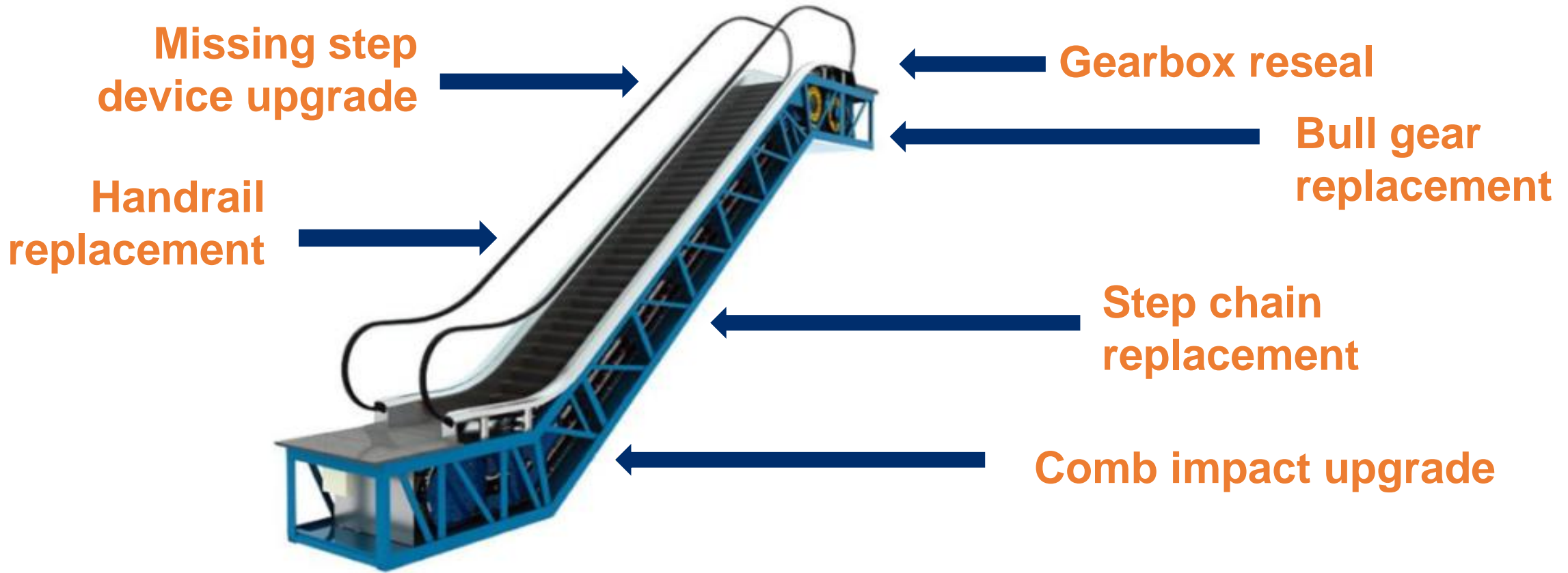


*Includes new expansion assets. Excludes replacement/refurb program.

Critical component replacement



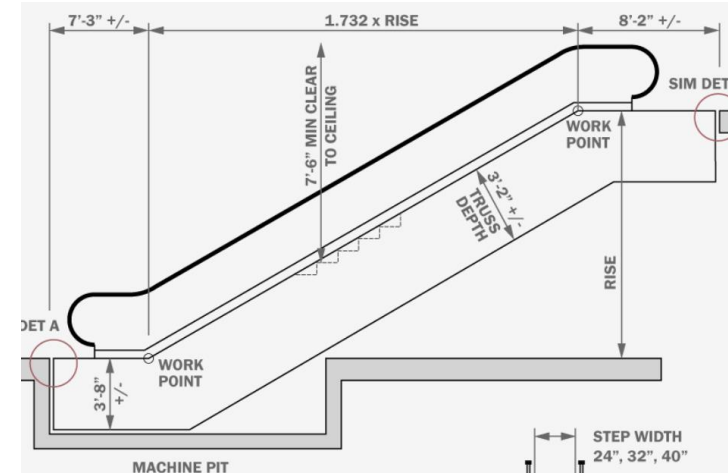
Critical component replacement with safety upgrades



***Vertical Conveyance
Replacement Program***

Replacement Design Strategy

- Using our latest new expansion design criteria
- New Programmable Logic Controllers
- Building standardization
- Replacement design includes structural, mechanical, HVAC elements



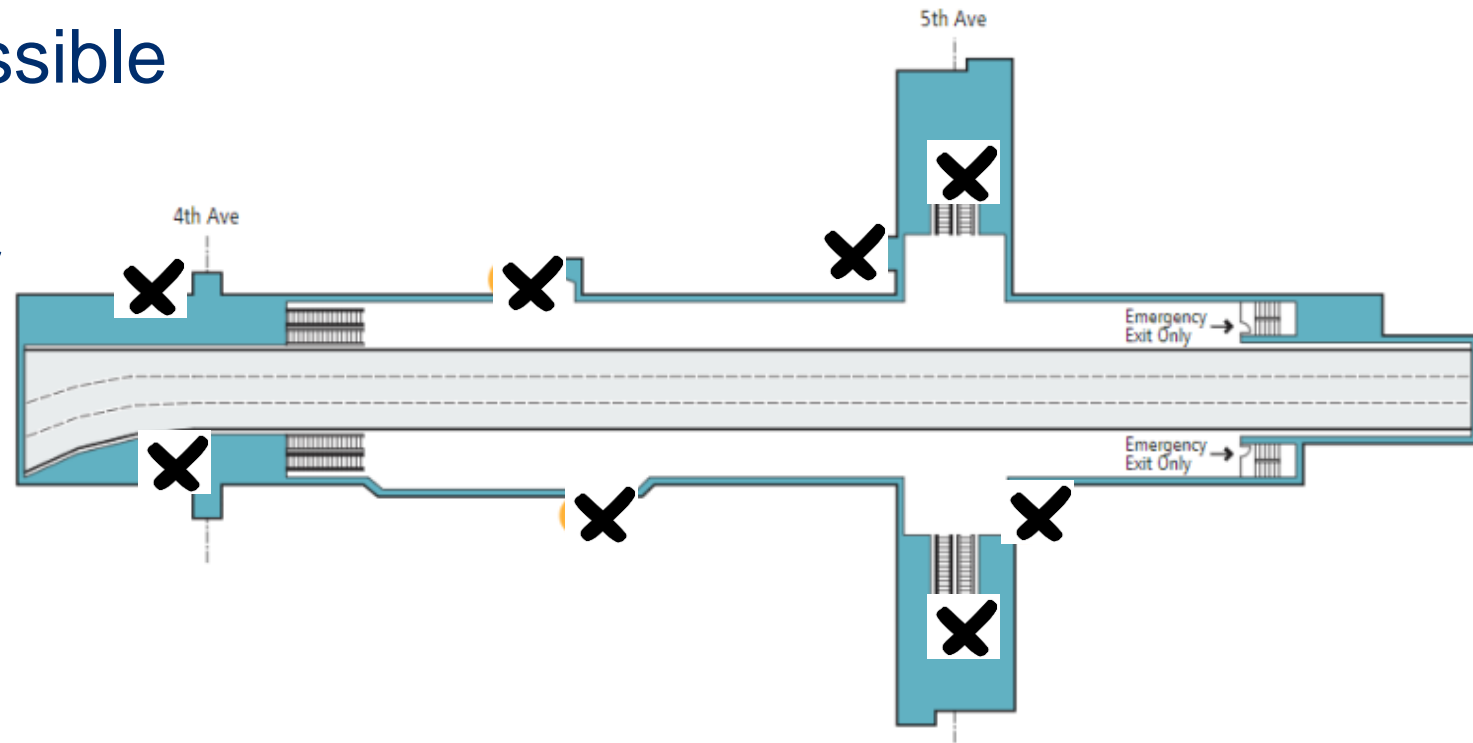
Replacement Constraints

- Limited qualified industry vendors/contractors
- Time needed for updated permitting, design, vendor procurement
- Long manufacturing lead times (42-52 weeks)
- Project management and Consultant resources
- Long installation times (several months, depending on site)
- Service planning remains the single largest constraint

Replacement Constraints

Service impacts

- Need to stagger installations in order to keep stations ADA-accessible
- Limits contractors to one or two assets at a time
- Potential single tracking



Current progress

International District

- Assessment/design completed
- Procurement scheduled for October 2022
- Replacement of four escalators and four elevators
- Construction scheduled to begin Q4 2023 – Q1 2024
- Work underway for interim restoration of two escalators with severe water damage



Current Progress

Pioneer Square



- Assessment completed
- 1st Final design package begins September 2022
- 2nd Final design package begins Q2 2023
- 2 Procurements scheduled for 2023 (Q2,Q4)
- Construction timeline TBD

Current Progress

University Street

- Assessment completed
- 1st Final design package begins September 2022
- 2nd Final design package begins Q2 2023
- 2 Procurements scheduled for 2023 (Q2,Q4)
- Construction timeline TBD



Current Progress

Westlake



- Assessment scheduled to be completed in 2022
- Final design packages will be completed through 2023
- 2 Procurements scheduled for 2024 (Q1,Q4)
- Construction timeline TBD

Thank you.



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