



Escalators and stairs
Where we go from here

Sound Transit Citizen Oversight Panel
December 6, 2018

Why we're here

- Escalator performance at UW Station has not met customer or agency expectations
- Customers have repeatedly experienced major disruptions
- We have a plan to fix the problem



Why we're here

Frequency of outages

Maintenance cost per unit



Capitol Hill

UW

Capitol Hill

UW

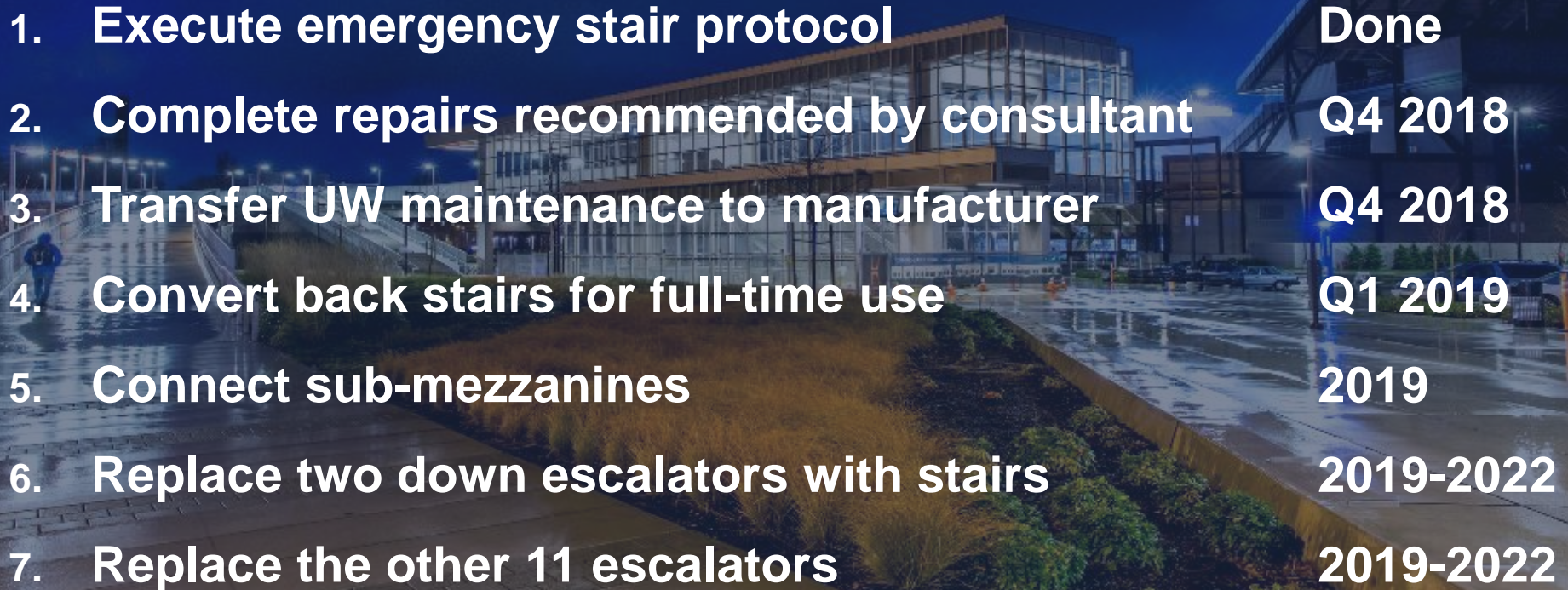
What we've done

- Studied options for maintaining or modernizing current escalators vs. replacing all units
- Conducted Total Cost of Ownership (TCO) analysis
- Developed preliminary replacement timelines

Why replacement?

- **Less expensive to replace now than maintain current units through expected end of useful life (2025)**
- **Better reliability for customers years sooner**

What we're doing

- 
- | | |
|---|-----------|
| 1. Execute emergency stair protocol | Complete |
| 2. Complete repairs recommended by consultant | Done |
| 3. Transfer UW maintenance to manufacturer | Q4 2018 |
| 4. Convert back stairs for full-time use | Q4 2018 |
| 5. Connect sub-mezzanines | Q1 2019 |
| 6. Replace two down escalators with stairs | 2019 |
| 7. Replace the other 11 escalators | 2019-2022 |

Public stair location



Submezzanine connection



Capitol Hill Station

Seattle & Angle Lake

↑ EXIT / Broadway E & E John St

🚌 Bus Bays

Univ. of Washington 🚆

Problem:

- Public stairs available from mezzanines to surface, but platform access depends on escalators/elevators

Solution:

- Convert stairs to all levels for permanent public use (2019)

↑ EXIT / E Denny Way & Nagle Pl
Cal Anderson Park

Public stair location



STAIR 2
M
CONTINUE UP TO EXIT
ACCESS TO
S M B P

NOT AN EXIT
ALARM WILL
SOUND



Authorized Personnel
Only Beyond This Point



U District Station

Solution:

- **Public stairs when station opens in 2021**
- **Contractor change order underway**



Public stair location



NEXT LINK TRAIN
TO AIRPORT STATION
NEXT LINK TRAIN IN 5 MIN
TO ROOSEVELT STATION

U District Station

Downtown Seattle transit tunnel

- Taking ownership from King County Metro in 2020
- Unknown scope of maintenance needs
- Inheriting 36 escalators and 22 elevators



Bottom line

- **UW & Capitol Hill will have public stairs by early 2019.**
- **U District Station will have public stairs upon opening.**
- **We will replace all UW Station escalators.**
- **Staff will return to the Board to authorize funds in 2019.**
- **UW replacement begins in 2019, complete in 2022**

Message to our riders

- We apologize.
- We have learned valuable design & procurement lessons.
- We have a plan.
- Any station with escalators will also include stairs.
- We will only install heavy duty escalators.
- Future elevated or tunnel stations will have redundant access.



Questions?