



Escalator & Canopy Program Update



**BART Board Standing Committee
October 17, 2017**



Recap of Equipment

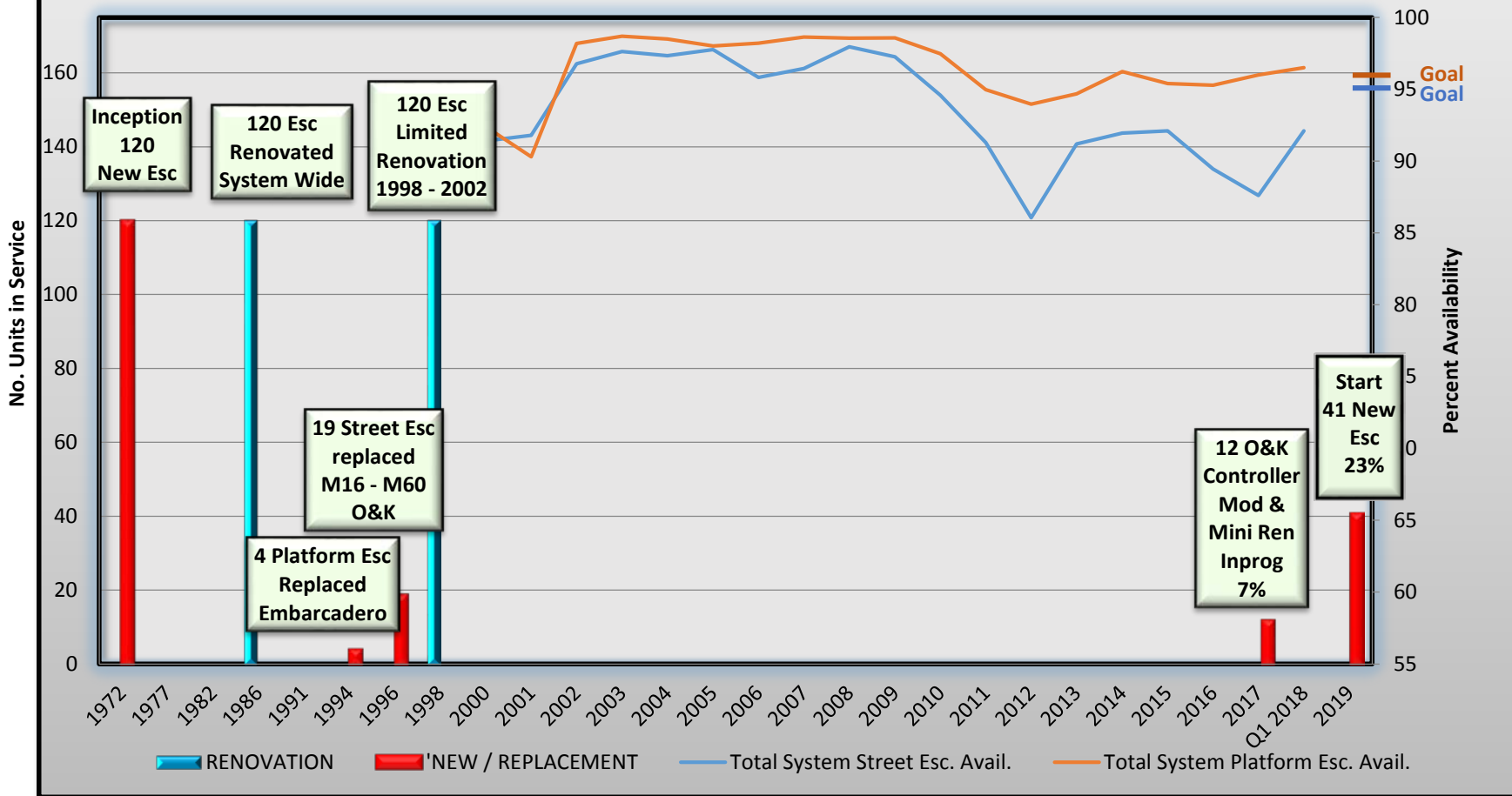


- 175 escalators
 - 54 street, 121 platform
 - 120 units installed prior to 1980
 - Expected life 30 Years (most actually 40+)
- Last “overhaul” was in 1998
 - Limited, not comprehensive



Escalator Performance & Renovations

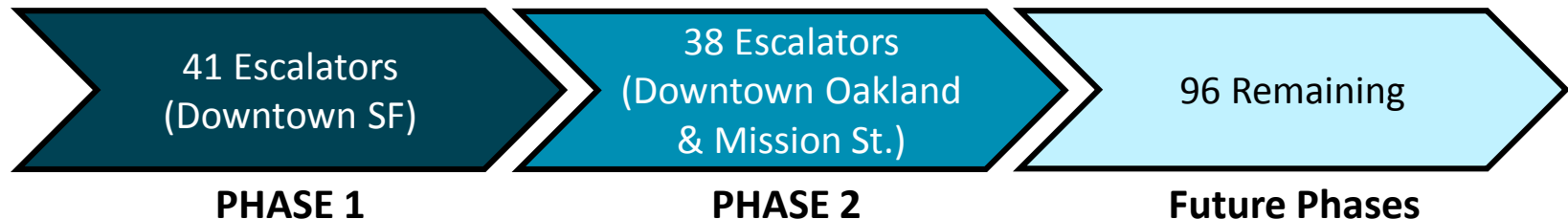
Escalator Life Cycle Program





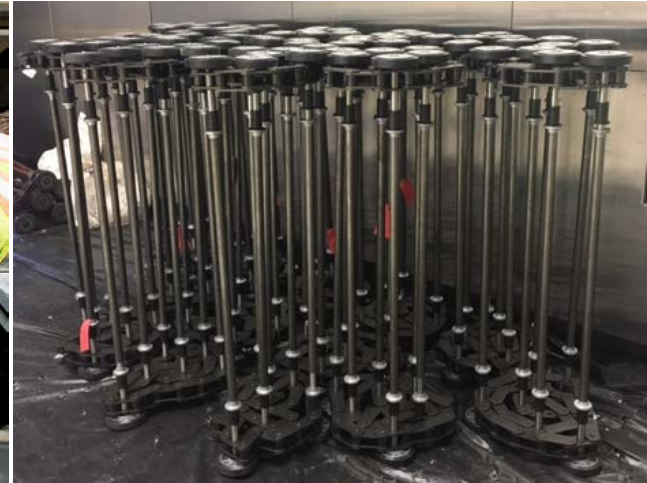
Escalator Prioritization

- **Criteria used to prioritize escalator selection:**
 - Asset Management / Reliability
 - Number of riders
 - Vertical rise
 - Redundancy within the station
- **Results:** **Downtown San Francisco** is highest priority
- Contribution from local jurisdictions





Strategic Maintenance Initiatives



KEEPING ESCALATORS RUNNING

- Increased staffing levels
 - 25 Certified Competent Conveyance Mechanics & 13 Non-Licensed Mechanics
 - Civic Center Maintenance Annex
- Increased material availability
- Expanded number of suppliers to address obsolete components



Strategic Maintenance Initiatives

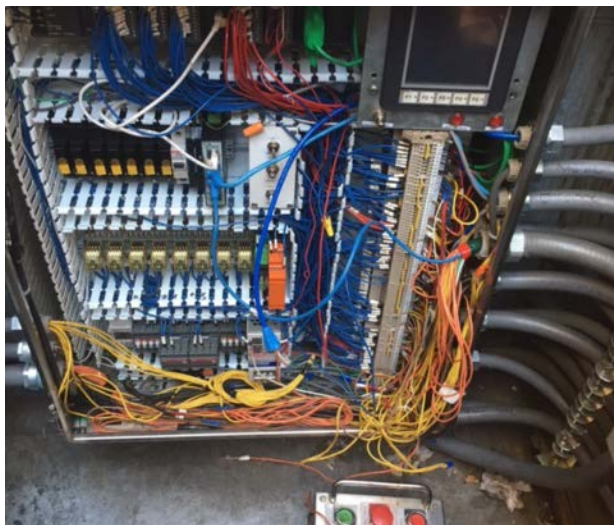


KEEPING ESCALATORS RUNNING

- Mitigate water intrusion efforts
 - Piloted fitpit
 - Replaced sump pumps
 - Cleaned, sanitized & sealed escalator pits
 - Cleaned drains
- Partnered with SF to address social elements around escalators
 - Installed trespasser gates
 - Increased police presence
 - Homeless Outreach Team
 - Pit Stop (street level staff restrooms)



O&K Controller Renovation Program



- *Replace 12 O&K escalator controllers in SF*
- *Upgrade electrical & electronic components*
- *Rewire & replace conduit*
- Improves escalator reliability

Contract **AWARDED**
Complete in **2018**



Pilot Canopy Project



Partnered with SF on Design & Funding:

- Public Works
- SFMTA
- Planning
- Mayor's Office
- Public Outreach on Design
- Incorporated Security Measures
- 50% Cost Sharing



Pilot Canopy Project

Powell Station Entrances



- *Install 2 canopies:*
 - *Powell*
 - *Civic Center*

- Lessons learned will be incorporated into subsequent contracts

Civic Center Station Entrances



Contract **AWARDED**
Complete in **2018**



Pilot Canopy Project



Mock-Up Under Construction



Measure RR Escalator Replacement Program

1. Prior Escalator Renovation Contract - Jan 2017

- 8 base (6 platform, 2 street) with options

REVISED APPROACH:

2. Obtained a Subject Matter Expert in vertical circulation

- Performed inspection & analysis of Downtown SF escalators
- Prioritized escalator condition
- Identified which escalators could be replaced vs. truss-up
- Assisted with industry outreach
- Assist in developing specifications to encourage more bidders



Measure RR

Escalator Replacement Program

- 3. Held an industry review to understand factors that affect price**
 - Number of escalators
 - Specification requirements
 - Warranty/maintenance durations
 - Competition from other Bay Area projects (commercial)
 - Crew availability (2-3 crews)
 - OCR outreach to MBE/WBE/SBE

- 4. Measure RR passed**
 - Expanded Escalator Renovation Program scope

- 5. CEQA process must be completed before advertising Escalator & Canopy contracts**
 - Draft CEQA document planned for public circulation Jan 2018



Measure RR Escalator Replacement Program



ESCALATOR RENOVATION CONTRACT

Embarcadero through Civic Center Stations

*Replace or truss up 41 escalators
(23 street, 18 platform)*

- Advertise: **Spring 2018**
- Factors Impacting Construction:
 - Extensive Outreach
 - Station Egress
 - Crew Availability
 - 4 Months per Installation
- Production: **6 Escalators per Year**
- Est. Project Cost: **\$164M**



Measure RR Escalator Replacement Program



CANOPY CONTRACT

Embarcadero through Civic Center Stations

*Install 22 canopies
(incl. 4 stairs, 1 canopy w/ 2 escalators)*

- Advertise: **Summer 2018**
- Factors Impacting Construction:
 - Extensive Outreach
 - Station Egress - 1 street entrance per station
 - 5-6 Months per Installation
- Production: **6 Canopies per Year**
- Est. Project Cost: **\$66M**



Next Phases



PHASE 2

- Began comprehensive inspection & analysis
 - Downtown Oakland Stations (12th & 19th)
 - Mission Street Stations (16th & 24th)
- Begin community outreach for canopies

FUTURE PHASES

- Inspection & analysis
- Community outreach