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

- Inception: 120 New Esc
- 120 Esc Renovated System Wide
- 120 Esc Limited Renovation 1998 - 2002
- 19 Street Esc replaced M16 - M60 O&K
- 4 Platform Esc Replaced Embarcadero
- 12 O&K Controller Mod & Mini Ren Inprog 7%
- Start 41 New Esc 23%

Goal

Start

41 New Esc 23%
• **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**

PHASE 1

41 Escalators (Downtown SF)

PHASE 2

38 Escalators (Downtown Oakland & Mission St.)

Future Phases

96 Remaining
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

- Install 2 canopies:
  - Powell
  - Civic Center

- Lessons learned will be incorporated into subsequent contracts

Contract AWARDED
Complete in 2018
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
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
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