Electric Bus Update
Project Schedule

- 2017: Design
- 2018: Design, FTA Funding, Local Funding
- 2019: NEPA, Small Starts Grant Agreement
- 2020: Construction
- 2021: Service Planning, Training and Startup
Current Milestones

• **30% Design**
  • Significant FTA milestone

• **FTA Rating and Financing Approach**
  • Establishes ranking for funding recommendation

• **NEPA Work**
  • Evaluates broad spectrum project impacts

• **Policy and Budget Committee Direction**
  • Providing input/insight/and direction as project progresses towards 60% Design
Upcoming Milestones

• Advertise RFP for Pre-Construction Services - CM/GC (January 2018)

• Advertise RFP for Amenity Pre-Fabrication Design Services (January 2018)

• President’s Budget / Rating (February 2018)

• Advertise RFP for Bus Procurement (February 2018)

• NEPA Concurrence (March 2018)
Advancing from 15% to 30% Design

- Federal Transit Administration (FTA) Submittals
- Budget Balancing
- Station Design Refinements
- Performance Improvements
- Outreach
FTA Submittals

• FTA Project Rating
  • Submitted for rating in September
  • Change in financing structure
  • 50/50 local / federal match for a more competitive rating
  • Rating expected to be medium-high

• NEPA - Documented Categorical Exclusion (DCE)
  • Utilizes 30% documents as basis of design
  • Represents resolve in placement and scope related to major project elements
  • Analysis completed in December and submitted in January
Budget Balancing- 15% - 30% Design

• **15% Design Cost Overage** - at $10M

• **Concern over Performance Cuts** - Needed at 15% to help reduce costs, but believe the cuts were too deep

• **Reducing Costs Through Design Solutions** - In lieu of line-item cuts

• **30% Design** - Focus on:
  - Station amenity costs
  - Impacts to utility poles
  - Property impacts that drive ROW costs
  - Bring back removed performance elements
  - Community feedback
Balanced Budget Breakdown

- Escalation: $13,400,000
- Vehicles: $35,150,000
- Powell Garage: $19,600,000
- Project Delivery/Financing/Start Up: $21,650,000
- IGAs and Permits: $1,200,000
- Design: $11,900,000
- Construction: $56,000,000
- Real Property: $15,800,000

TOTAL: $174,700,000
**Project Scope**

- **14 miles** of enhanced service from Downtown Portland to Gresham Central
- **42 Stations** with **83 Platforms** – 1/3 mile approximate station spacing
- **15% - 20% average improvement** in travel times over existing service
- Utilization of existing bus stop infrastructure at OMSI, SWF, SW Lincoln Street and the Transit Mall
Design Refinements - Stations

- **Reduce station platform lengths** – Pursue ramping in bike lanes and sidewalks were possible

- **Fine-tune platform placement** – Utilize flexibility in refined platform design

- **Reduce property acquisition** – Use station design to address ROW impacts

- **Reduce utility pole impacts** – Utilize platform design and placement

- **Station Addition** – Added Station at 116th to address DMA and EPAP input.
Typical Station Types (Integrated)
Typical Station Types (Integrated)
INTEGRATED TYPE STATION
Integrated 3 - Rear Access

SHELTER
- Multi-level shelter for flexibility
- Protection from the elements
- Shower station
- Bicycle parking
- Trees for shade
- Bike rack

WALKING PATH
- Bike path

AMENITIES ZONE
- Loading dock
- Acoustic barriers
- Bike rack
- Bike parking
- Trash collection

PLAT FORM
- Loading for rear loading
- Island platform
- Open handrails and clear vertical space
-全套手扶
- Full-length Platform Edge Protection

DETECTABLE WARNING EDGE
- Type 3 - 2/3
- Contrast of colors and texture

RAMP
- Wheelchair accessible
- Handrail for assistance

POTENTIAL STORMWATER BOX N

BACK DOOR
- Access to rear of bus

ACCESSIBLE WAITING AREA
- Wheelchair accessible

MIDDLE DOOR
- Access to center of bus

FRONT DOOR
- Front entry area
Typical Station Types (Island)
Typical Station Types (Island)
Typical Station Types (Island)
Island Station (SE 148th & SE Division – Eastbound)
Design Refinements - Performance

• Increased Investment in Signal Upgrades

• Additional Refinements to Traffic Signal Priority (TSP)

• Extended Business Access and Transit (BAT) Lanes

• Traffic Models & Projections
  • Used to Validate Design Decisions
  • Consistent with 2021 Opening Day
  • Current Performance around 18% improvement over existing service

• Continue to Pursue TSP Advancements
  • Technology
  • Policy
Performance – Signals – TSP – BAT Lanes
Design Refinements - Outreach

• Monthly Community Advisory Committee (CAC) meetings

• Community and CAC Workshops

• One-On-One Business Outreach at Station Areas

• Open Houses – Community & Operator

• CAT Subcommittee

• Bicycle Advisory Committee/Pedestrian Advisory Comment

• Outreach Staff Informing Design Approach