Downtown – Uptown – Oakland – East End
Bus Rapid Transit (BRT) Project
Final Design Review Meeting
Project Stakeholders
How does a Microsoft Teams Live Event Work?

• We cannot hear or see you; Q&A will occur via the Q&A box on the right of your screen →
• First, please click the purple “Ask a question” button
• Then, you will see a person and white box appear
  • Next to the person, please write your name and organization (unless you wish to remain anonymous)
  • Then, please write any questions in the white box below that and click the arrow in the bottom right corner to send us the question
• Please add your questions to the chat box as you think of them so that we can sort and prioritize them for our Q&A session following this presentation
Tell us You’re Here!

- Please test out your ability to ask a question by retyping your name and organization to the Q&A box and sending it so that we have a record of who has joined us today.
- If you have technical difficulties, email: brt@portauthority.org
Agenda

Presentation
- Project Partners
- Goals and Overview of BRT
- Transit Service Changes
- Station Design and Locations
- Bicycle Infrastructure
- Drop off / Loading / Parking

- Fare Collection
- Sustainability
- Project Costs
- Project Timeline

Question and Answer Session
Project Partners

Port Authority of Allegheny County

City of Pittsburgh

Allegheny County

Urban Redevelopment Authority
Project Goals

ACCESS
Improve accessibility for persons of all ages and abilities

COMFORT AND EASE OF USE
Improve access to shelter and amenities for waiting passengers

EFFICIENCY
Improve transit reliability and speed

EQUITY
Ensure that communities of greatest need benefit from these investments via direct transit connections

SAFETY
Improve conditions for pedestrians and riders, and develop a safe bicycle network

SUSTAINABILITY
Encourage mode shift out of SOVs

Encourage air quality through BEBs
Connecting the 2\textsuperscript{nd} and 3\textsuperscript{rd} largest employment centers in Pennsylvania

- Inconsistent Traffic Patterns
- Larger gaps in service and more bunching of buses
- Gaps in service and bunching of Buses
- Overcrowded buses followed by empty buses
- Late buses

Average Oakland peak bus speeds: 9mph or less

Data Visualization: Mark Egge, http://bunching.github.io
What is Bus Rapid Transit (BRT)?

- Upgraded stations with real-time arrival info and fare payment
- Transit signal priority
- Upgraded pedestrian amenities
- Changes to street parking
- Specially branded (electric) buses
- Dedicated travel lane
- Economic development opportunities
Where will the BRT go?

Area with bus only lanes and protected bicycle facilities

Bus Routes becoming BRT:
P3, 61A, 61B, 61C, 71B

Local Routes Terminating in Oakland: 61D, 71A, 71C, 71D

Other Route Changes:
- P3 – shortened at outer end to Wilkinsburg
- 67, 69 – Use Blvd of Allies inbound through Uptown
- Downtown Minor Routing Changes – discussion in 2021
- Oakland Minor Routing Changes – discussion in 2021
Downtown Overview
Uptown Overview
Station at Duquesne University
Uptown - Forbes Ave Typical Plan
Oakland Overview
Oakland - Fifth Ave Typical Plan
Station at University of Pittsburgh
Oakland - Forbes Ave Typical Plan Example
Squirrel Hill Branch Overview

Starting at Craig Street in Oakland:

- 12 station pairs
- No bus lanes
- Select upgraded signals
- Small stations, many on bumpouts to extend sidewalk
- Last station pair at Greenfield Giant Eagle (Loretta St)
- 61C route continues on normal routing
Highland Park Branch Overview

- 13 station pairs
- End of line bus rerouting, 71A and 71B BRT (Bryant → Negley → Mellon Terrace)
Station Walksheds

- Stations are farther apart than existing bus stops
- Almost no one is more than a 5 minute walk from a station who's within a 5 minute walk of the 61s, 71s bus stops today (purple areas at edges of orange)
- Station spacing average: ¼ mile
  - Rapid guideline: ½ mile
  - Local guideline: 1/6 mile
Station Design & Amenities

Stations will be in 15, 30 or 60-foot-long sections depending on location (60 ft shown here)

*Select locations. TVMs will be at least at every other station in low volume areas.
Proposed Fare Payment and Structure*

FARE PAYMENT PROPOSAL

Fares within the infrastructure improvement area (areas with new stations) are proposed to be paid **OFF BOARD** with validators and/or ticket vending machines which will be installed inside stations

◦ Passengers will be able to board or alight at any door within this area
◦ Fare receipts or validated cards need to be held by passengers while riding
◦ Staff will assist passengers with fare payment

FARE STRUCTURE

◦ The fare for BRT is expected to be the same as existing Port Authority fares
  ◦ Note that PAAC is undergoing a separate fare study in 2020-2021; recommendations from this study may be put in place in the future

*All changes to Port Authority’s fare structures or payment methods must be reviewed and voted upon by the Authority’s Board
Bicycle Infrastructure & ADA

**Uptown**
Mainly a single direction, sidewalk-level bicycle path (outbound Forbes, inbound Fifth)

**Birmingham Bridge (Uptown) to Bellefield (Oakland)**
Contraflow bus lane on Fifth becomes a 14-foot shared use path (bikes + pedestrians) at sidewalk level
Right Turns Across BRT Lanes

Where right turns are allowed, the bus lane will be shown as striped or hashed red pavement/signs.
Parking and Curb Use Changes

- Uptown – on-street parking on the right side of each street in the direction of travel will be eliminated.

- Oakland – Forbes Ave parking is unchanged; Fifth Avenue gains some parking between Bigelow and Bellefield on the south side (left side in direction of travel) of the street.

- In some cases, parking on Fifth Avenue will take place across the BRT lane; in these instances, vehicles are allowed to enter the BRT lane to parallel park.
Bigelow Blvd Station Area Operation - Fifth Ave Inbound
Pickup / Dropoff / Loading

General pickup, drop-off, and loading activities
◦ General traffic will not be allowed to conduct pickup/drop-off activity in the BRT lanes
◦ City will update signage to allow for pickup/drop-off/loading activity

Paratransit pickup / drop-off
ACCESS paratransit will be allowed to pick up or drop off in the BRT lanes when an alternative location is unavailable (3% expected); buses will go around parked ACCESS vehicles if needed

Sustainability

Battery-Electric Buses
- Planned: 15 articulated (60 foot) battery-electric buses to be run on the P3 or other East Liberty Bus Garage based BRT routes

Trees
- Tree replacement where necessary – limited except example to the right

Stormwater
- PWSA designed 20 GI systems, mainly in Uptown, in conjunction with the BRT project
  - These projects will manage approximately 6 acres of stormwater runoff and reduce overflows by 2 million gallons annually

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Project Costs

Total Budget: $230 million
Sources of Funding

Total Budget: $230 million
## Project Timeline

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<th>Event</th>
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| 2019 | 60% design complete  
Shelter design public input  
Design team begins 90% designs |
| 2020 | 90% design complete  
Stakeholder engagement to review 90% designs |
| 2021 | Early: Public engagement to review final designs  
Bid and let project; begin construction (fall/winter)  
Right of way acquisition |
| 2022 | Construction |
| 2023 | Construction  
Late 2023: Revenue Service |
Questions and Discussion

If you do not wish to ask your question now, or we run short on time, please email your question/concern to BRT@PORTAUTHORITY.ORG.

For more project information, including the interactive map, roll plot sheets, and design documents, go to www.portauthority.org/BRT.
## Design Characteristics by Section

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<th>Section</th>
<th>Details</th>
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| **Downtown**                         | • Reversal of bus loop (inbound/westbound Fifth, northeast bound Liberty, outbound/eastbound Sixth), red BRT lanes  
• Traffic Signals, Bump Outs, Stations and Lane Markings |
| **Uptown**                           | • Mill & Overlay Street Reconstruction, red BRT lanes, Bump Outs, New sidewalks, Bike Lanes on Sidewalks, Traffic Signals |
| **Oakland**                          | • Traffic Signals, Stations, Bump Outs and Lane Markings, red BRT lanes (inbound Fifth, outbound Forbes), all bus traffic outbound moves to Forbes  
• Fifth Ave contra-flow Bus Lane becomes 2-way Cycle Track  
• West Oakland Bus Layover |
| **Branches (Squirrel Hill, Highland Park)** | • Isolated Traffic Signals, Stations and Bump Outs, no BRT lanes  
• Mellon Terrace Bus Layover (HP) |
| **Wilkinsburg**                      | • Electrical Bus Charging Systems adjacent to station |
| **Further East and South - Mon Valley (Routes 61ABC)** | • No infrastructure improvements as part of this project (future projects as aligned with long-range planning)  
• Branded BRT buses |