



A Plan to Connect Baltimore

A Presentation Prepared for the Technical Committee
8/2/2016



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What is BaltimoreLink?

- **Improve** service quality and reliability
- **Maximize** access to high-frequency transit
- **Strengthen** connections between the MTA's bus and rail routes
- **Align** the network with existing and emerging job centers
- **Involve** riders, employees, communities, and elected officials in the planning process

Linking
Modes
Places
People

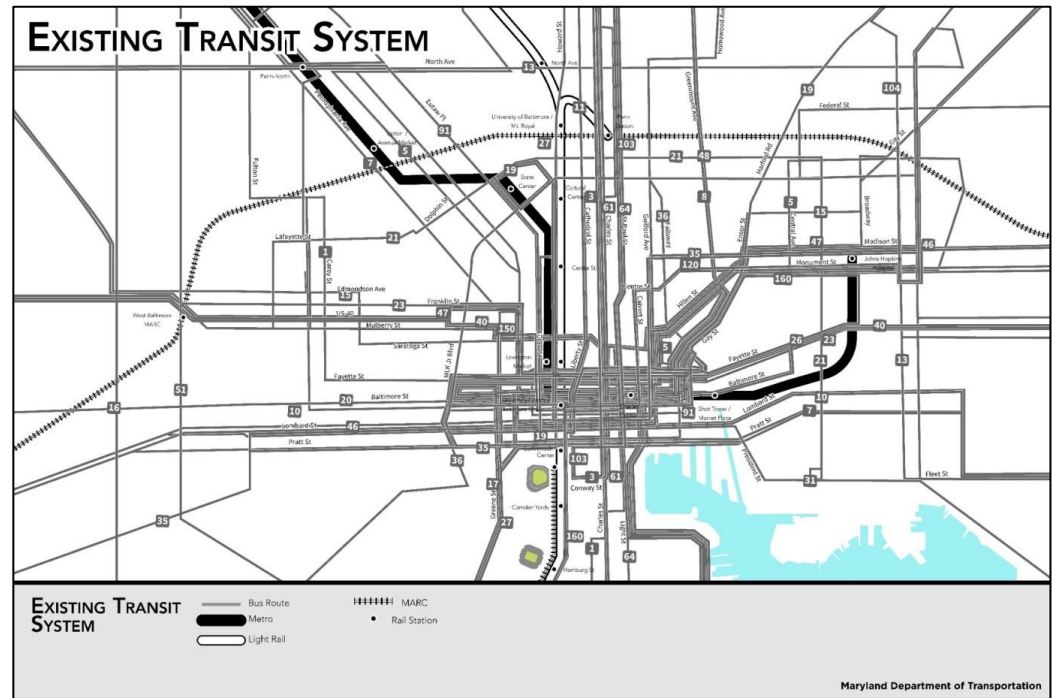
Improving
Safety
Efficiency
Reliability
Customer Service



Existing Service

We've heard the existing transit system is...

- Broken
- Disconnected
- Crowded
- Unclean
- Unreliable
- Not connected to jobs



Major Problems:

- **Lengthy Routes** – Long east-west and north-south routes
- **Highly Congested** – Buses bottleneck due to network design
- **Unreliable** – Network design hinders MTA's ability to provide reliable service

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The Solution - The BaltimoreLink Network



- **High-frequency** routes into and throughout urban core
 - Color-coded routes
 - All lines access Downtown
 - 24 hours of service per day
 - Designed to connect to all other CityLink routes and to Rail Stations



- **Local** Routes connecting to CityLink routes

- Neighborhood connectivity
- Suburb-to-urban core connectivity



- **Limited stop** routes into urban core and suburb-to-suburb
 - Connecting to Regional Job Centers and Downtown

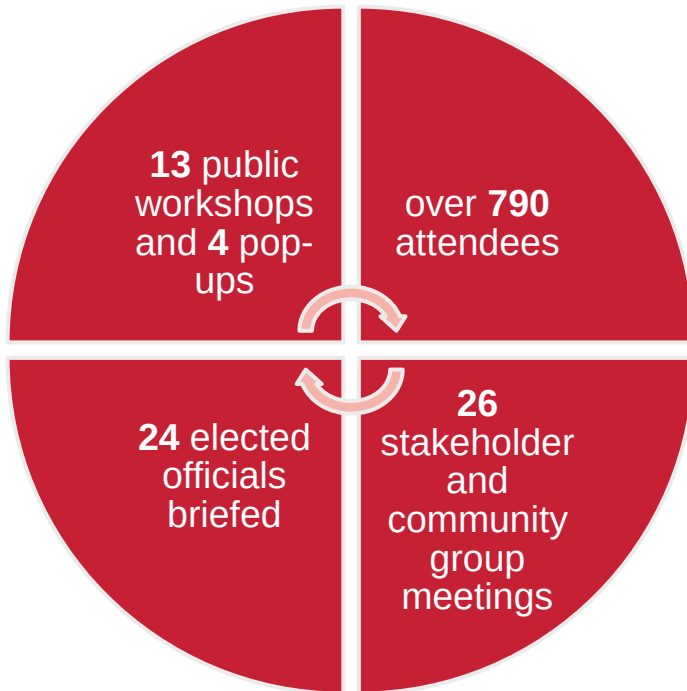
To be integrated seamlessly with:



1st Draft Outreach

October 2015 – February 2016

- BaltimoreLink Outreach built upon the effort accomplished as part of the 2013 Baltimore Network Improvement Project (BNIP)
- MTA gathered over 1,280 comments from 67 key events



1st Draft Outreach

Comment Submittal and Topic



61% submitted online
(mySideWalk or Survey Monkey)

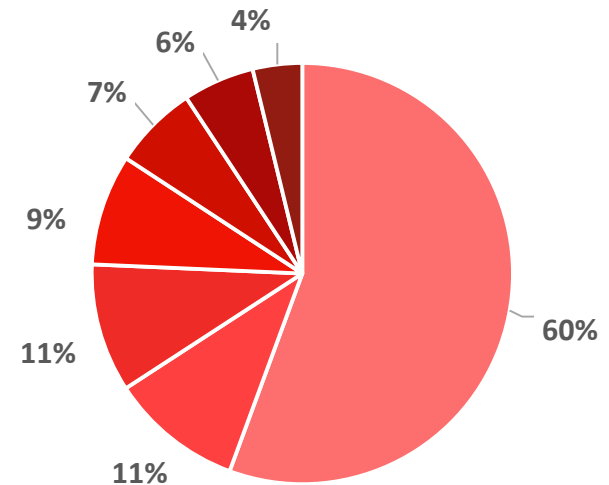


24% submitted comment form



15% submitted in other formats
(hotline, email, verbal, or other)

- The majority of comments were about specific routes, forced transfers, and safety/cleanliness of the proposal



- Specific BaltimoreLink Route Proposal
- Forced Transfer
- Safety/Cleanliness
- Information/ Resources
- New Service Area Request
- Schools/School Children
- Other



Public Impact on 2nd Draft

You spoke. We listened.

We adjusted **56 of the 65** first draft routes as a direct response to public feedback.

The **2nd Draft** BaltimoreLink network reflects some modifications that the public desires while maintaining the new hub and spoke, high-frequency core model



Public Impact on 2nd Draft – Significant Changes

- **Greenmount Ave.** (Current Route 8 and 48) – reintroducing CityLink Red to serve the entire corridor
- **Garrison Blvd. and Edmondson Ave.** (Current Routes 91 and 15) – reintroducing connection to downtown
- **Eastern Ave.** (Current Route 10) – reintroducing CityLink Navy to serve Eastern Ave. in Highlandtown
- **Express Services** Reintroducing current routes 103, 115, 119, 120 and 160
- **Falls Rd, Roland Ave., N. Charles St., and Philadelphia Rd.** (Current routes 27, 61, 11, 35) – reintroducing existing services
- **North Ave.** (Current Route 13) – Corridor-long CityLink Gold service
- **Harford Rd.** (Current Route 19) – reintroduced as LocalLink 19
- **Patapsco Station and Annapolis** (Current Route 14) – keeping a one seat ride
- **White Marsh Mall and Middle River** – (New LocalLink 61) New one-seat ride
- **Curtis Bay** (Current Route 64) – Improved transfers to Light Rail
- **Southwest and Northeast Baltimore** (Current Route 36) – Improved connections between CityLinks Yellow and Green



Measuring the New System

■ Partners:

- Baltimore Metropolitan Council (BMC)
 - Method: Regional travel demand model
 - Measured: Transfers, travel time and access to jobs
- Maryland Department of Planning (MDP)
 - Method: GIS mapping
 - Measured: Frequent Transit Network and population group access to human services



What Will Not Change

You spoke. We listened.



Minimal Change to Daily Transfer Rate

With the BaltimoreLink system, the average daily transfer rate in the region changes by less than 2%.



53% Of trips will require zero transfers.



35% Of trips will require one transfer.



12% Of trips will require two or more transfers.

The transfer rate measurement is based off of ridership patterns and is driven by a projected increase in mid-day trips.

Additionally, the transfer experience under BaltimoreLink will be eased with better frequencies on many routes, increased reliability, and improved wayfinding.



Average Transit Travel Time of 52 Minutes

On average, a transit trip will take 52 minutes under BaltimoreLink, including time to access the bus stop, waiting time, time on the vehicle, and any necessary transfers. This is the same average transit travel time as on the current MTA system.



What Will Improve

Change in Average Travel Time (minutes) -- Very Low Opportunity Neighborhoods

Neighborhood	Current	BALTIMORE LINK	Difference
Sandtown-Winchester/ Harlem Park	42.7	41.6	-1.1
Madison/ East End	39.3	39.4	+1
Oldtown/ Middle East	34.2	33.2	-1.0
Cherry Hill	60.0	56.9	-3.1
Greenmount East	40.6	39.0	-1.6

Most neighborhoods identified as very low opportunity by the Baltimore Neighborhood Indicators Alliance (BNIA) see modest but important improvements to average travel time under the proposed BaltimoreLink system



What Will Improve

Increasing Access to Transit



33,600 More People with Access to Transit

Under BaltimoreLink, an estimated 33,600 additional people – a 4% increase over the existing system – will be within 1/4 mile of transit.



60,700 More People with Access to Frequent Transit

Under BaltimoreLink, an estimated 60,700 additional people – a 15% increase over the existing system – will be within 1/4 mile of the frequent transit network. **The Frequent Transit Network is defined as any BaltimoreLink (CityLink and select LocalLink) route that operates every 15 minutes or less during peak and midday periods.**



What Will Improve

Increasing Access to Jobs



Households will have Better Access to Jobs

Within the MTA service area, the average number of jobs accessible within 30 minutes on transit increases by 20%. The average number of jobs accessible within 45 minutes increases by 12%, and the average number of jobs accessible within an hour increases by 8%.



+20%

More jobs, on average, are accessible within 30 minutes or less.



+12%

More jobs, on average, are accessible within 45 minutes.



+8%

More jobs, on average, are accessible within 60 minutes.



34,400 More Jobs will have Access to Frequent Transit

Under BaltimoreLink, an estimated 34,400 additional jobs – a 14% increase over the existing system – will be within 1/4 mile of the Frequent Transit Network.



What Will Improve

Increasing Access to Job Centers

- The Opportunity Collaborative identified 11 job centers in the Baltimore metropolitan area based on employment density
- BaltimoreLink improves service to most of these job centers

Amazon	Annapolis
Coca Cola Drive	Columbia
Downtown	Hunt Valley
MD 32 & US1	Nursery Rd
Riverside Business Park	Towson Circle
Woodlawn	



DOWNTOWN BALTIMORE

MARC TRAIN • METRO SUBWAYLINK • LIGHT RAILLINK
CITYLINKS BR • RD • PK • OR • GD • YW • LM • GR • BL • NV • PL • SV
LOCALLINKS 19 • 25 • 26 • 51 • 56 • 64 • 65 • 71 • 73 • 75 • 76 • 80 • 94 • 95
EXPRESS BUSLINKS 103 • 115 • 119 • 120 • 150 • 160
COMMUTER BUSES 210 • 215 • 310 • 320 • 410 • 411 • 420 • 425

HUNT VALLEY
LIGHT RAILLINK • LOCALLINK 93

RIVERSIDE BUSINESS PARK
MARC TRAIN (ABERDEEN)
COMMUTER BUSES 420 • 425

TOWSON
CITYLINKS RD • GR
LOCALLINKS 36 • 51 • 52 • 53 • 93
EXPRESSLINKS 102 • 106

WOODLAWN
CITYLINK BL
LOCALLINKS 31 • 34 • 35 • 37 • 78 • 79
EXPRESS BUSLINK 107

AMAZON
LOCALLINK 65

COLUMBIA
EXPRESS BUSLINK 150
COMMUTER BUSES 310 • 320

NURSERY ROAD
LIGHT RAILLINK • LOCALLINK 75

ANNAPOLIS JUNCTION
MARC TRAIN (SAVAGE)

HANOVER
LOCALLINK 75
COMMUTER BUS 320
MARC TRAIN (DORSEY AND JESSUP)

LOCALLINK 70
COMMUTER BUSES 210 • 215
ANNAPOLIS

Connections to
**Opportunity
Collaborative**
Job Centers



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What Will Improve

Increasing Access to Services



Better Access to Services in the Region

BaltimoreLink is designed to provide **more frequent transit** to those educational institutions and health services that people need the most.



+5
Hospitals



+56%



+7
Pharmacies



+6%



+12
Supermarkets



+24%



+15
Public Schools



+13%



+4
Libraries



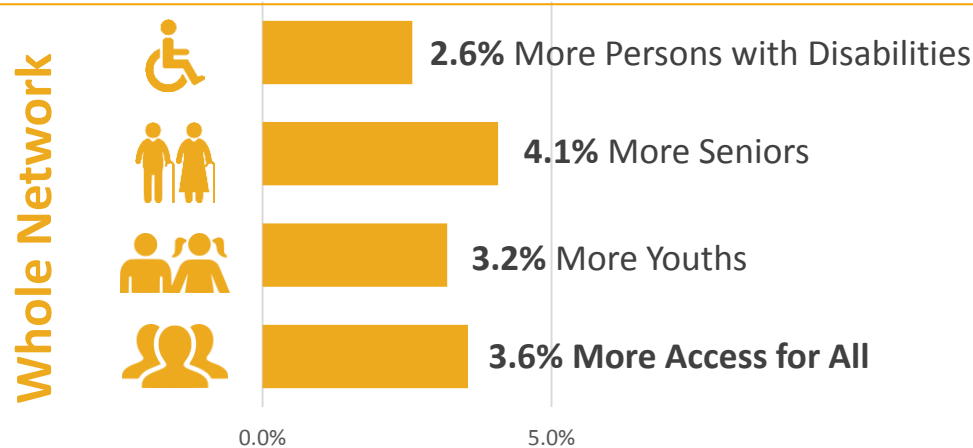
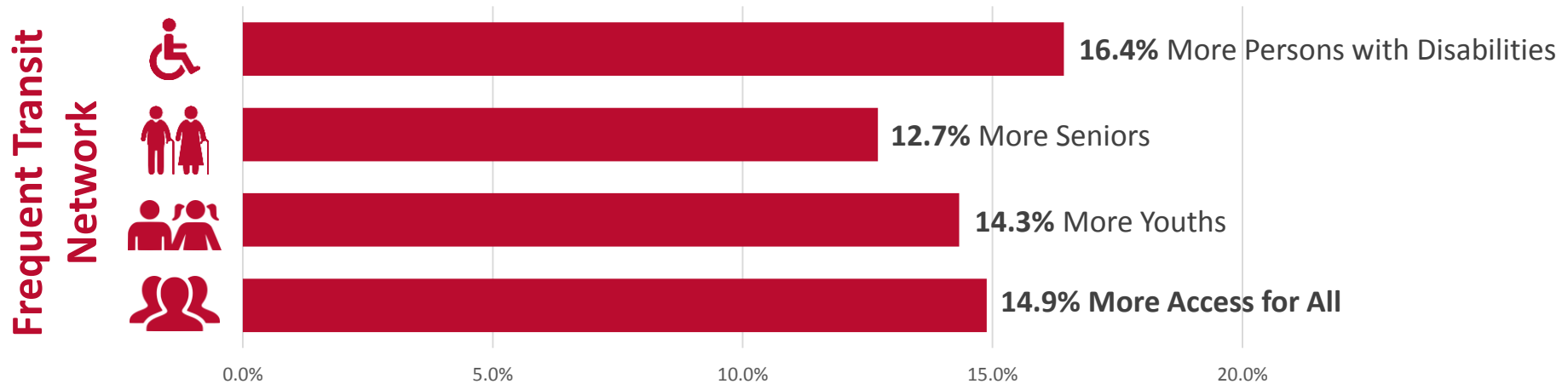
+22%



What Will Improve

Increasing Accessibility

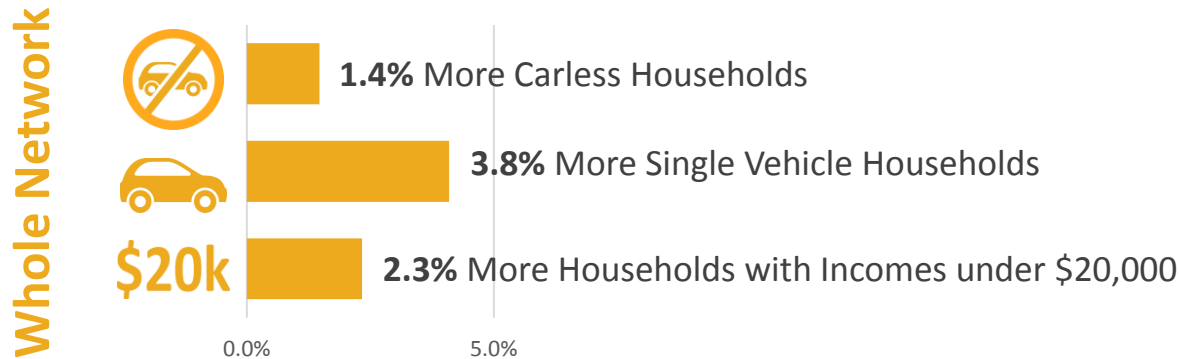
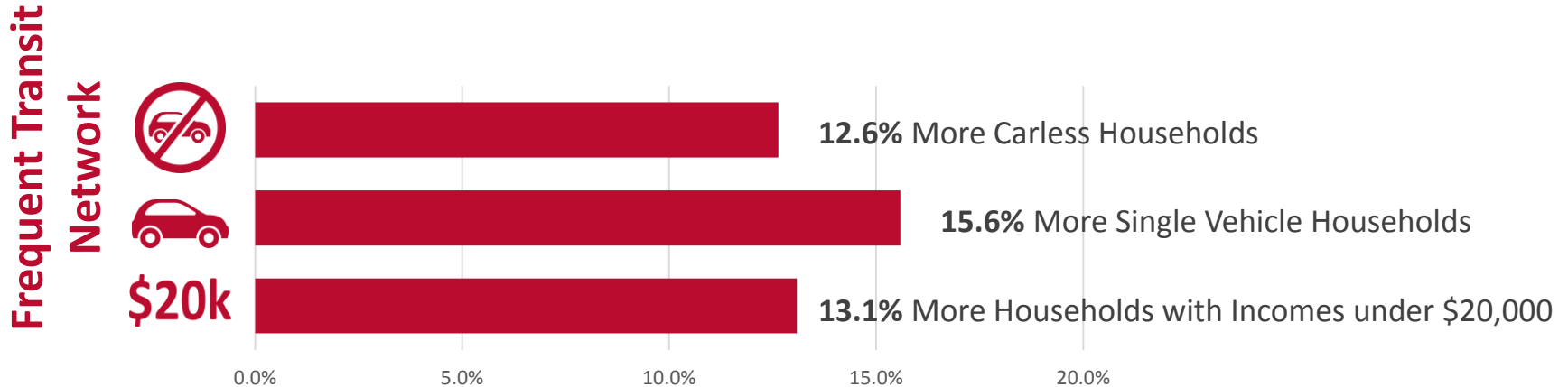
CHANGE IN PERCENT OF POPULATIONS
WITHIN ¼ MILE OF BALTIMORELINK



What Will Improve

Increasing Accessibility

CHANGE IN PERCENT OF HOUSEHOLDS
WITHIN ¼ MILE OF BALTIMORELINK



Measuring the System: Summary



Preserving Daily Transfer Rate and Travel Times



33,600 More People with Access to Transit



Households will have Better Access to Jobs

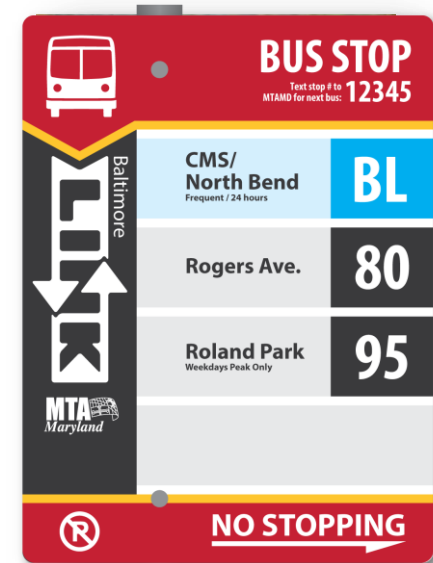


Better Access to Services in the Region



What Will Improve

- **Bus Stop Signage**
 - New signage will provide better destination information in a clear, easy-to-use fashion
- **Bus Vehicle Branding**
 - New buses with BaltimoreLink branding will make the system more uniform with cohesive design and color elements



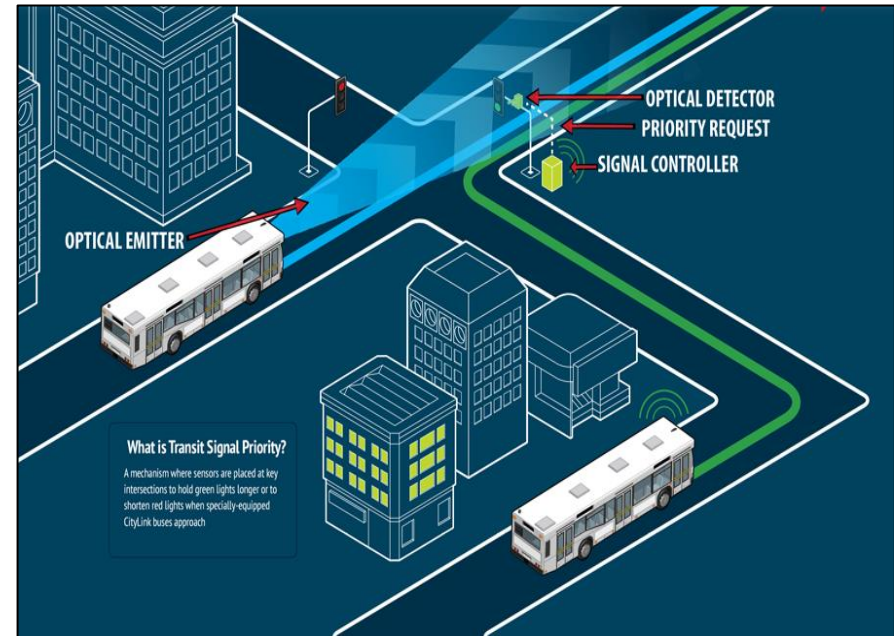
Note: Draft Image



What Will Improve

Transit Signal Priority

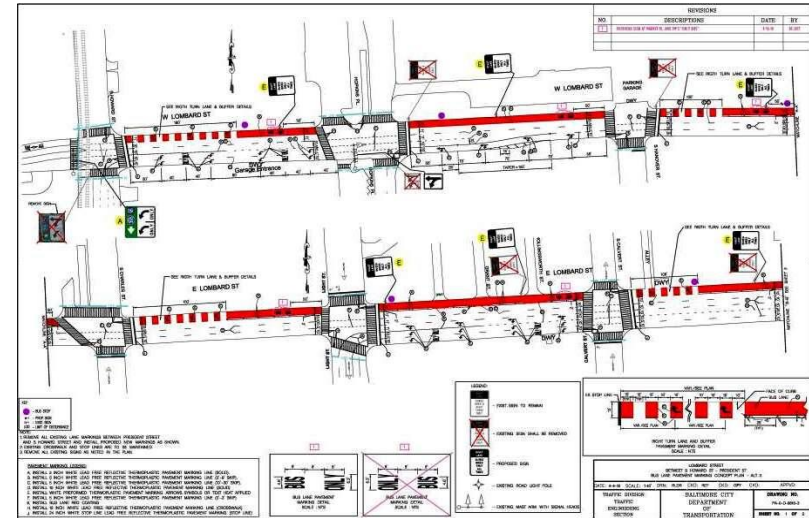
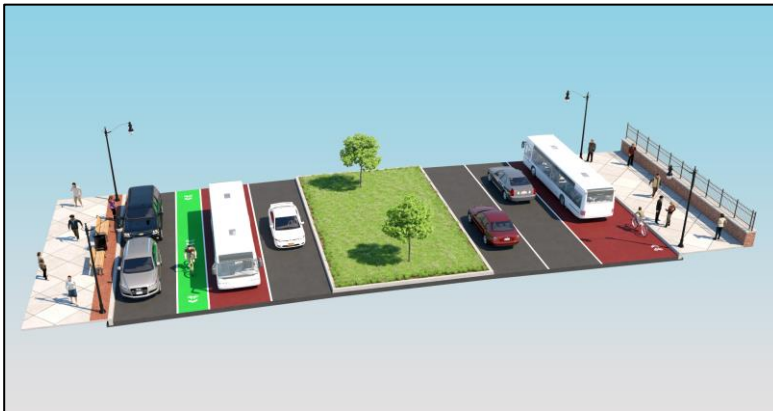
- Hardware and software to enable active priority for buses
- Approaching buses can trigger a shorter red light or longer green light
- Focusing on CityLink corridors and major pinch points
- Baltimore City DOT has agreed to enable Active TSP



What Will Improve

Dedicated Bus Lanes

- Red painted lanes and “BUS LANE” striping
- Focusing on corridors with multiple CityLink routes to keep people moving

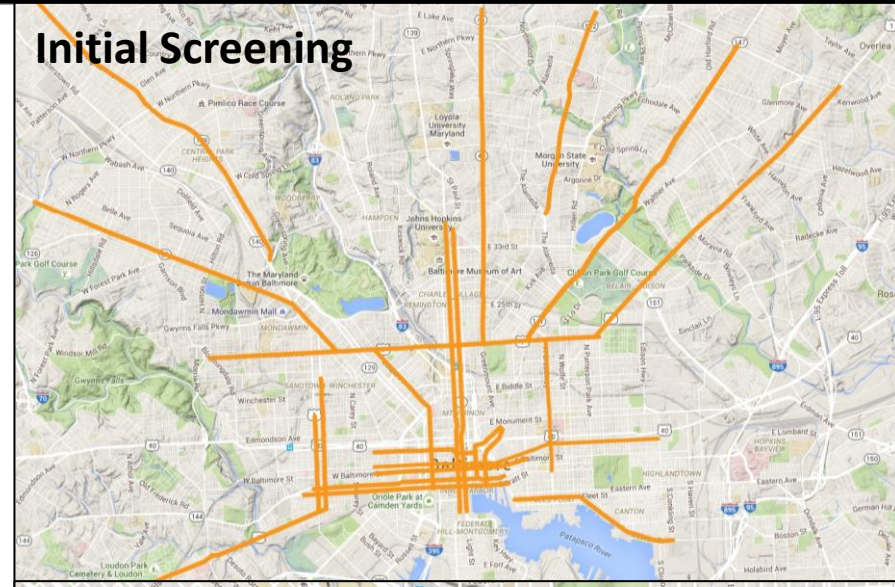


What Will Improve

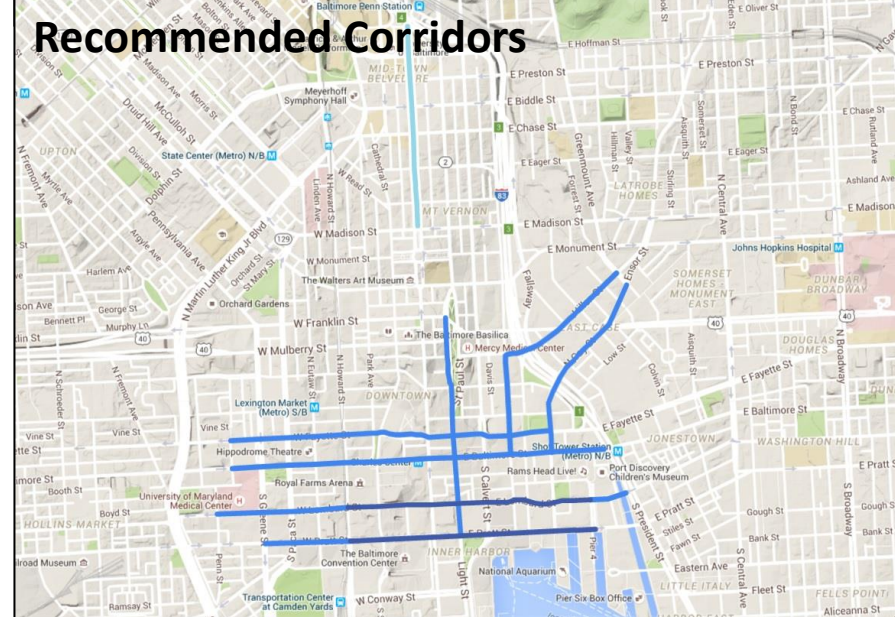
Dedicated Bus Lanes

- Screened 25 streets
 - Buses / Peak Hour
 - Bus Passengers : Total Person Throughput
- Recommending roughly 5 ½ miles of dedicated bus lanes
 - Pratt (Greene to Market Place)
 - Lombard (Penn to Market Place)
 - Baltimore (Arch to President)
 - Fayette (Arch to Gay)
 - Charles (Madison to Oliver – PM Peak Only)
 - St. Paul (Franklin to Pratt)
 - Gay (Baltimore to Forrest)
 - Hillen (Forrest to Guilford)
 - Guilford (Pleasant to Baltimore)

Initial Screening



Recommended Corridors



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What Will Improve

Dedicated Bus Lanes

East Baltimore Street



North Gay Street



West Lombard Street



What Will Improve

Dedicated Bus Lanes

- Conceptual Design – June & July 2016
- Initial Public Meetings – Early July 2016
 - Tuesday, July 5, 4-6 p.m. – Charles Center Metro Mezzanine
 - Wednesday, July 6, 11 a.m.-3 p.m. – War Memorial (lower level)
 - Thursday, July 7, 4-6 p.m. – UMB SMC Campus Center, Elm Rooms
 - Additional Pop-Up events around downtown
- Final Design – August & September 2016
- Construction – Spring to Summer 2017



What Will Improve

Transfer Facilities

- Transit facilities, transfer areas, layovers, and optimized bus stops
- Improved or new signs, schedules, trash bins, benches, shelters, canopies, TVMs, and other amenities

Off-Street Concept

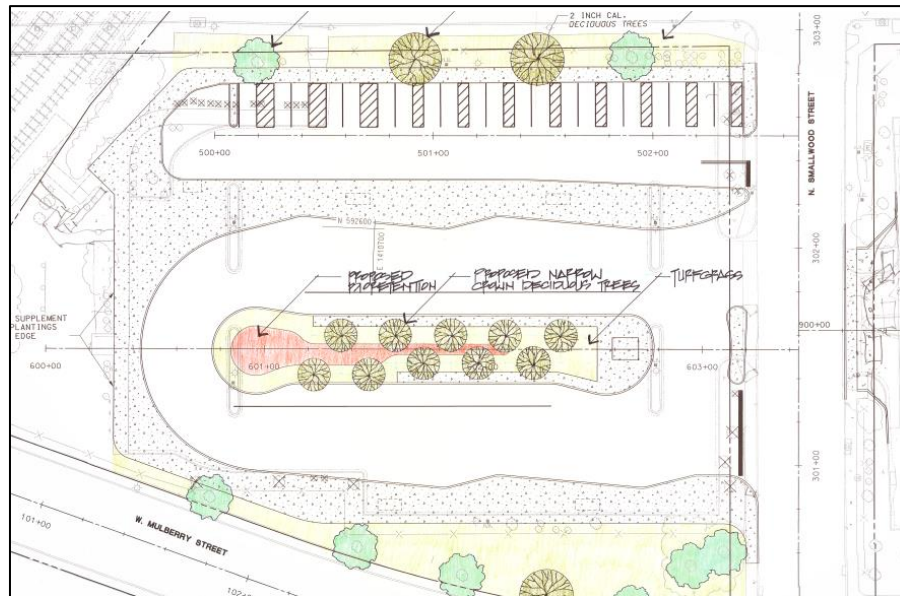
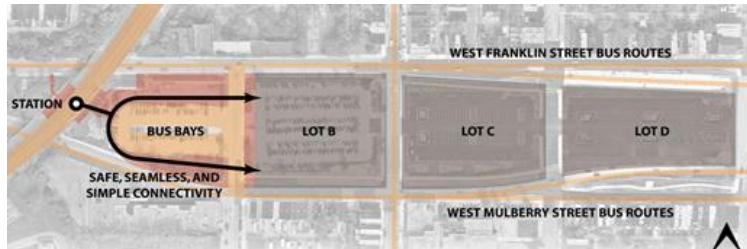
Major infrastructure modifications that maximizes safety, ease of transfer, and connections

On-Street Concept

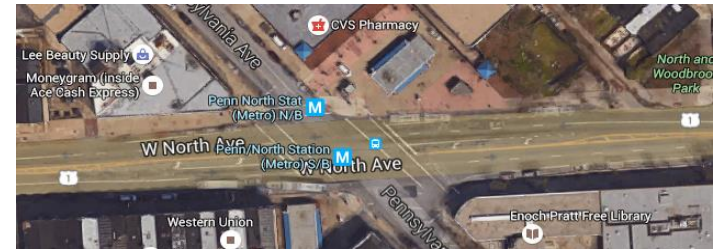
Moderate infrastructure modifications which will foster an improved transfer experience



Off-Street Concept: West Baltimore MARC Station



On-Street Concept: Penn-North Metro Station

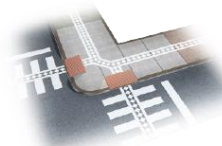


What Will Improve Transfer Facilities

Transfer Facility Locations

- West Baltimore MARC station
- North Ave between Charles and St. Paul
- Penn-North Metro Station
- Courthouse (Broadway/Harford)
- Bayview Hospital
- Charles Center Metro Station
- Lexington Market (Eutaw St)
- Penn Station
- State Center
- North Ave Light Rail Station

Possible Amenities



Streetscape improvements for pedestrian safety



Improved signage to facilitate wayfinding and ease transfers



Real Time Information Signage so riders know when buses will arrive



Sheltered waiting areas to protect riders from the elements



Ticket vending machines to allow riders to pre-purchase fare cards



Improved bicycle storage



Enhanced lighting and ornamental fencing to increase safety and security



Closed-circuit television cameras to increase rider safety



Trash receptacles

Note that photos are for illustrative purposes only and do not necessarily represent actual transfer facilities.



What Will Improve

Transfer Facilities

- All sites are now in Final Design
 - Design will be completed by Aug/Sept 2016
- Construction work will begin late Fall 2016 and continue through June 2017



What Will Improve

Increasing Transportation Options



Bike Share – Baltimore City’s Bike Share provider, Bewegen, will be rolling out Bike Share as early as September 2016 with locations at or adjacent to about 10 MTA rail facilities. Additionally, MTA is improving bike parking at all rail stations.



Car Share – To be added to more than 20 MARC Train, Light RailLink, and Metro SubwayLink parking facilities

Commuter Bus – 3 new routes that connect Baltimore City residents to regional employers

- New service between Baltimore and Aberdeen Proving Ground
- New service between Baltimore and Annapolis/Kent Island
- New service between Baltimore and Columbia/Howard County



Locally Operated Transit Support – Increasing funding where improved, local connections are needed.

- **Charm City Circulator** – Increased funding for three years
- **Fort Meade Shuttle** – Additional funding for the Regional Transit Authority (RTA) to operate a shuttle connecting the Savage and Odenton MARC Stations.



Microtransit – A pilot program of this emerging, scaled down version of mass transit that provides a shared, on-demand, and tech-enabled ride.

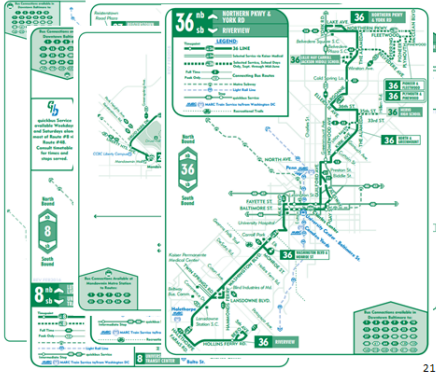


Summer Public Outreach

- 20 Public Workshops from July – September
- Communities will receive local analysis of their service
- Also collecting feedback via new website, Hotline, and mtamaryland.mysidewalk.com

Local Analysis – Current Services

- MTA 3 – Towson to Downtown via Loch Raven & Alameda & 33rd St
- MTA 8/48/12 – Towson to Downtown via York Rd & Greenmount Ave
- MTA 27 – Reisterstown to Downtown/Port Covington via Howard St
- MTA 22 – Mondawmin to Highlandtown via 33rd St
- MTA 36 – Belvedere Square to Downtown to Halethorpe via Kirk & Alameda
- MTA 11 – Towson to Downtown via Charles St
- MTA 61 – Roland Park to Downtown

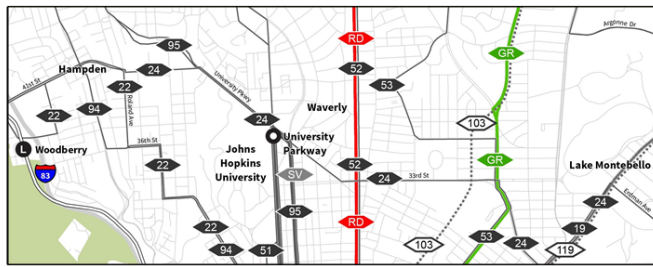


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Local Analysis – Proposed Services



Reintroduced Service

- MTA 3 replaced with CL Green to Downtown via Kirk Ave
- MTA 8/48 replaced with CL Red to Downtown via Greenmount
- MTA 27 replaced with LL 94 to Downtown (Inner Harbor) via Howard
- Extended LL 53 to North Ave Light Rail for additional Connections

Additional Improvements

- Maintained current MTA19 to downtown with renamed LL 19
- Reinstated versions of the MTA 11, 12, 61 – LL 51, 52, 95 respectively
- Silver extended to cover Charles/St Paul to Downtown
- LL 22 and LL 24 remain for crosstown connections

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EXAMPLE: Local Analysis – New Broadway East

Current Service

- **MTA 15** (Woodlawn or Walbrook Junction to Overlea)
- **MTA 47** (Walbrook Junction to Overlea)
- **MTA 115** (Downtown to Perry Hall)

Proposed Service

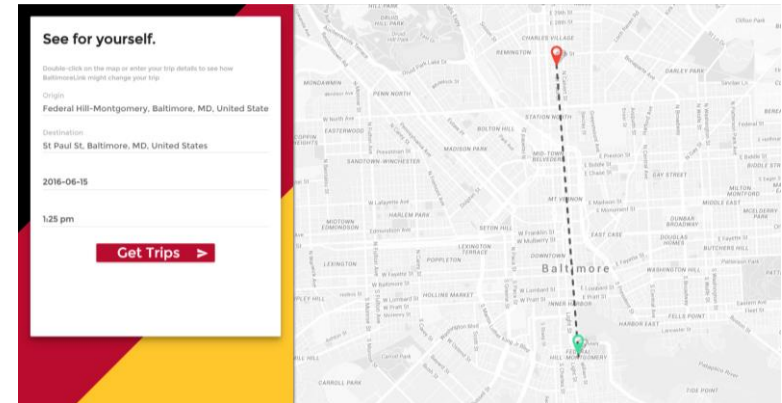
- **MTA 15 ➔ CL Brown**
(UM Transit Center to Overlea or White Marsh)
- **MTA 47 ➔ CL Brown**
(UM Transit Center to Overlea or White Marsh)
- **MTA 115 = EL 115**
(Downtown to Perry Hall)



New Tools

Trip Planner

- Compare existing street routing for a given route side-by-side with its BaltimoreLink replacement. Double-click on the map for origins and destinations, or type these in manually



Google Map

- Interactive Google system map allows you to zoom in on the updated network and view various routes and their frequencies

New Website

- Access BaltimoreLink information easier by reading project updates, finding events in your area and downloading presentations and reports



BaltimoreLink Project Timeline

IMPLEMENTATION

QB 40 Enhancements
Additional MARC Bike Cars

New Express BusLink Routes
(102, 106, 107, 150) Launch

BaltimoreLink Service and
Infrastructure Implemented

New & Enhanced Commuter Bus Launch

Fort Meade Shuttle Launch

BaltimoreLink Draft
#2 Released
Public Outreach
Begins (Draft #2)

BaltimoreLink Public Hearings
Public Education and
Training Begins

New Website Launches

Public Outreach Ends (Draft #2)

BaltimoreLink Announced to Public (Draft #1)

Public Outreach Begins (Draft #1)

Public Outreach Ends (Draft #1)

Express BusLink Public Hearings

June

July

June

Mar.

Jan.

Nov.

OCT.
2015

2016

FALL
2016

WINTER
2016

SPRING
2017

SUMMER
2017

OUTREACH



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Thank You!

