Station Design with Community and Mobility in Mind

Part 1 – Stations as Places for People
Part 2 – From TOD to Mobility Hubs
# MDOT MTA Service

<table>
<thead>
<tr>
<th>Service</th>
<th>Avg. Wkd. Riders</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BaltimoreLink Bus</td>
<td>210,000</td>
<td>65 routes</td>
</tr>
<tr>
<td>LocalLink, CityLink, and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Express BusLink</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light RailLink</td>
<td>23,000</td>
<td>33 stations</td>
</tr>
<tr>
<td>Metro SubwayLink</td>
<td>28,000</td>
<td>14 stations</td>
</tr>
<tr>
<td>MARC Train</td>
<td>35,000</td>
<td>44 stations</td>
</tr>
<tr>
<td>Commuter Bus</td>
<td>15,000</td>
<td>37 routes</td>
</tr>
<tr>
<td>Baltimore and DC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MobilityLink</td>
<td>7,100</td>
<td>3/4 mile of core service</td>
</tr>
<tr>
<td>Call-a-Ride</td>
<td>2,700</td>
<td>--</td>
</tr>
</tbody>
</table>
What are transit stations?

Places where people...

- Take Transit
- Take Cover from Rain
- Gather with Friends
- Find History & Culture
- Connect by Bikes and Scooters
- Entertain & Busk
- Take a Break
- Find Info
- Access Food & Resources
- Create Art
- Build Community
Make Stations Fun

Charles Center Station

- Maryland State Arts Council donated 5 pianos
- Unused mezzanine space
  - #MusicInTransit

“So many people need an outlet and maybe don’t have the funds or the resources or time”…
“having somewhere like this, [it’s amazing].” – Darius Isaiah
Make Stations Pretty

Artist Selected for Penn-North Station

• Baltimore Office of Promotion & Arts
• Review Panel
  • Community members
  • Artists
  • Project staff
• Call for Artists
  • 45 applied, 9 finalists
  • Megan Lewis selected
• TIGER funded project
  • Construction begins summer 2019
Make Stations Pretty

Recover from Highway to Nowhere

- Replaced surface parking with bus hub.
- Moved unsafe, on-street stops into off-street transfer center.

- **Bus operators are people too!**
  - Artwork hides new restrooms for operators.
  - New, safer hub activated the former parking lot into community space for...
Make Stations Vital

• ‘Produce in a Snap’
  • One year later, food market pop-up
  • Select Wednesdays in 2018
  • Variety bags for $7
  • Produce from Hungry Harvest

• Coordination with City
  • Food Policy Initiative

• Integration into bus stop guide
  • Stops near groceries are prioritized for shelters and other amenities

West Baltimore, completed June 2017
Make Stations Vital

Oldest, continuously operated public market

Farmers Market at Edgewood MARC TOD

Owings Mills Metro Center TOD
Make Stations Inclusive

Partnership with MD Depts. of Health and Aging

Walk audits with riders of all abilities, experience, ages in 2018...

...piloting suggested improvements at Charles Center in 2019/2020.
Make Stations Informative

Ease the Wait

• Information is Comfort
  • Static wayfinding and signage
  • Systems maps and schedules
  • Station attendants and announcements

• And then things got real-time
  • Seating and shelters
  • Fare media options
  • Visitor Kiosks Downtown
At Our Stations

When people come to our stations, we want them to feel welcome.

When scooters started coming around…

WELCOME TO OUR HOME.

You’re welcome to stay, but you haven’t been invited.
Transit as the Foundation

2015
- BaltimoreLink Announced:
  - Network Redesign
  - Bus Lanes
  - Signal Priority
  - Stop Optimization
  - Transfer Hubs

2016
- BaltimoreLink Launched:
  - New buses
  - Audio/visual safety signage

2017
- BaltimoreLink 2.0
  - New Network
  - Bus Lanes
  - Signal Priority
  - Stop Optimization
  - Transfer Hubs

2018
- 90-minute Transfer window
- Real-time Tracking for Bus
- Mobile Ticketing
- Fleet overhaul

2019 and beyond
- outcomes-based implementation evaluation expansion

Core Transit Service

Shared Mobility
- Bikeshare
- Carsharing
- “Pop-up Transit” (microtransit)
- Microtransit RFI
- Bikeshare at MTA stations
- Carsharing launched at rail stations
- Bikeshare terminated
- Carsharing renewed
- Dockless mobility launched in city

Mobile Ticketing & Benefits

Mobility Hubs & TOD

CAV Parking & Shuttle Pilots

Transit Priority Toolkit

Regional/Statewide MaaS

Regional Transit Plan

Microtransit Pilot

Dockless Mobility Corrals

On-demand Paratransit Pilot

Real-time Tracking for Rail

Transit Priority

Regional Transit Plan

Transit as the Foundation
Pilot, Evaluate, Replicate & Scale
BaltimoreLink Pilots by 2017

- +30% frequent service
  - Core and suburbs
- Stops and transfer hubs
  - Core and suburbs
- +5.5 miles of bus lanes
  - Central/downtown core
- +36 TSP intersections
  - North/northeast corridors

At 8 rail or bus hubs
- Central/downtown core
- Outer core and suburbs

RFI Released, Postponed until after BaltimoreLink

Part 2 – From TOD to Mobility Hubs
Pilot, Evaluate, Replicate & Scale
Lexington Market in 2017

Bikeshare Pilot (terminated)
- Partnered with City.
- Docks at 8 stations.
- Replaced with Dockless Mobility Pilot (scooters).

Example: Lexington Market
- Smaller MTA-owned footprint.
- Car & Bike sharing on City ROW.
- Crowded, high traffic area.
- New development presents opportunity for mobility hub.
Carsharing program (ongoing)
- Agreement with Zipcar.
- Sought to grow carsharing footprint into areas that otherwise didn’t have it.
- From pilot to program, allowed more stations and increased limit on number of spaces per station.

Example: Mondawmin Loop
- MTA owns parking and transfer facility.
North Avenue is where we’re bringing it all together.

- Dedicated bus lanes
- Transit signal priority
- Bus stop improvements
- Protected, 2-way bike lanes
- On/Off-street carsharing
- Bikeshare docks
North Avenue is where we’re bringing it all together.

- Dedicated bus lanes
- Transit Signal Priority
- Bus stop improvements
- Protected, 2-way bike lanes
- On/Off-street carsharing
- Bikeshare docks

Dockless mobility corrals in equity zones
Bus Stop Design Guidelines
- Signage placement
- Shelter specs and criteria
- ADA and safety
- Bus pad length
- Near side, Far side, mid-block
- Curb improvements
- Rider amenities

TOD Design Guidelines
- Core and commuter rail stations
- Development concepts
- Service, land use mix and layout
- Station area
- Access for short vs. long trips

Transit Priority Toolkit
- Frequent transit corridors
- Dedicated bus lanes
- Transit signal priority
- Stop distribution, placement
- Queue jump, curb extension
- Better service from the smallest bus stop to major transfer center to full TOD
Transit Agency, Shared Mobility?

Bus Stop Design Guidelines
- Signage integration
- Shelter specs and criteria
- ADA and Safety
- Bus pad length
- Near side, Far side, mid-block
- Curb improvements
- Stop amenities
- Docks and corrals
- On-street carshare
- On-street ride hail PU/DO

TOD Design Guidelines
- Core and commuter rail stations
- Development concepts
- Service, land use mix and layout
- Station area/mobility hub
  Access for short vs. long trips
- Station amenities
- Docks and corrals
- On-/off-street carshare
- On-/off-street ride hail PU/DO
- Wi-fi, EV Charging, Solar Power

Transit Priority Toolkit
- Frequent transit corridors
- Dedicated bus lanes
- Transit signal priority
- Stop distribution, placement
- Queue jump, curb extension
- Better service and overall mobility from the smallest bus stop to major transfer center to full TOD

Part 2 – From TOD to Mobility Hubs
Transit Agency, Shared Mobility?

To Achieve MDOT MTA’s Vision of **Safe, Reliable, Efficient Service with World Class Customer Service**

<table>
<thead>
<tr>
<th>Within our immediate control</th>
<th>Requires partnerships, collaboration, or agreements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operate and contract service</td>
<td>Curb and Lane Management</td>
</tr>
<tr>
<td>Own and lease property/assets</td>
<td>Housing and Workforce Policy</td>
</tr>
<tr>
<td>Collect and set fares</td>
<td>Traffic Control and Enforcement</td>
</tr>
<tr>
<td></td>
<td>Land Use and Built Environment</td>
</tr>
</tbody>
</table>

Part 2 – From TOD to Mobility Hubs
Transit Agency, Shared Mobility?

Shared Mobility Work Plan
- **Increase** agency and public knowledge
- **Expand** existing initiatives (carshare, micromobility).
- **Test and evaluate** new initiatives (microtransit, on-demand paratransit, CAV shuttles).
- **Incorporate** into existing procedures, guidelines, plans, and projects.

CAV Transit Strategy
- **Test and evaluate** CAV technology (automated parking, automated shuttles).
- **Develop transit-specific strategy** under statewide CAV working group guidance.

Fare Collections Strategy
- Evaluate fare policy.
- Integrate growing list of fare media (cash, paper, tap card, mobile).
- Integrate with other services (local transit, private shuttles, shared mobility providers).
- **Mobility-as-a-Service?**
What We Hope You Take Away

For all of this to work, we…

• Design stations with people and communities in mind, using data and frequent, meaningful public engagement.

• Prioritize and invest in transit, the O.G. Shared Mobility.

• Know that some modes may replace transit trips, but they can also create transit riders.

• Have leadership encouraging agency wide innovation, knowledge sharing, and collaboration.
Thank You

Holly Arnold
Deputy Administrator and Chief Planning, Programming, and Engineering Officer
Offices of Planning, Programming, and Engineering
HArnold@mta.maryland.gov

Jade Clayton
Senior Planner and Project Manager
Office of Planning and Capital Programming, Project Development Division
jclayton@mta.Maryland.gov