WELCOME & OVERVIEW

Mike Kelly, Executive Director
Baltimore Metropolitan Council
COUNTY EXECUTIVE REMARKS

John “Johnny O” Olszewski, Jr.
County Executive
Baltimore County
Central Maryland Regional Transit Plan Commission Meeting

CCBC Owings Mills
Tuesday, October 29, 2019
Investing in Quality of Life

CENTRAL MARYLAND REGIONAL TRANSIT PLAN
By 2020, 25% of the County’s population will be 60 or older.

Currently, CountyRide does not meet the needs of the County’s senior population.

- Expanding to all residents
- Improving dispatch capabilities
- Expanding into fixed-route microtransit
- Exploring integration with shared ride services
Baltimore County has historically received less funding than other large jurisdictions.

<table>
<thead>
<tr>
<th>2019 State Funding Comparison</th>
<th>Operating</th>
<th>Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Montgomery County</td>
<td>$37 Million</td>
<td>$400,000</td>
</tr>
<tr>
<td>Prince George's County</td>
<td>$12.5 Million</td>
<td>$100,000</td>
</tr>
<tr>
<td>Anne Arundel County</td>
<td>$858,000</td>
<td>$39,500</td>
</tr>
<tr>
<td><strong>Baltimore County</strong></td>
<td><strong>$421,551</strong></td>
<td><strong>$0</strong></td>
</tr>
</tbody>
</table>
TRANSIT PRIORITIES

Grow the local transit system in order to connect East, West and Central portions of the county.

Provide “first and last mile” connectivity at existing and future employment and commuter hubs.

Provide additional opportunities for pedestrian and bike access.
Recent transportation survey received an overwhelming response

+ 1000 participants
GOALS

- Hired Lead Transportation Planner
- Funded Deputy Director for Transportation
- Included record funding in FY 20 budget for road resurfacing and traffic calming
- Created first ever line-item commitment for bike and pedestrian access
GOALS

Included planning funds in FY 20 budget for Towson Circulator Pilot

County will explore circulator routes in commercial corridors around the County.
County will study the possibility of introduction/expansion of e-bikes, charging stations for dockless vehicles, and bicycle parking at multiple locations.
REGIONALISM
MEETING AGENDA

- September Meeting Minutes Review
- Introduction and Set Up
- Public Involvement Update
- Exploring the Customer Journey
- Corridor Transit Readiness
- Public Comment
- Next Steps
SEPTEMBER MEETING MINUTES REVIEW

Elisabeth Sachs
Ex Officio RTP Commission Chair
INTRODUCTION & SET UP

Holly Arnold, Deputy Administrator
Maryland Department of Transportation
Maryland Transit Administration
Plan Development

ANALYZE
Review the current system; identify opportunities for improvement.

March 2019
Transit 101
Overview of Trends and
Benchmarks, Draft Goals
and Good Repair,
Review State of Funding, and New Mobility

April 2019
Address Service Gaps
and Corridors of Need

September 2019
October 2019
Understand the Rider
Perspective

PROPOSE
Review system performance
and propose improvements.

December 2019
Review Goals and
Prioritize Strategies

PUBLISH
Present findings
and recommendations.

April 2020
Review Draft Plan

June 2020
Update Draft Plan
Based on Feedback

September 2020
Review and Publish
Final Plan

Connecting Our Future
A Regional Transit Plan for Central Maryland

Current Task
Upcoming Task
Completed Task
Today’s Focus

- Update on public involvement
- Explore the complete customer journey and opportunities to improve the experience
- Discuss what makes a location “transit-ready,” and tools jurisdictions can apply to prepare for Regional Transit Corridors

This meeting focuses on strategies that complement and support Regional Transit Corridor investments.
PUBLIC INVOLVEMENT

Teddy Krolik, Chief of Engagement
Maryland Department of Transportation
Maryland Transit Administration
October Locations:

- **10/21** Howard County
  Elkridge Library
- **10/22** Baltimore County
  Towson Library
- **10/24** Baltimore City
  Mondawmin Mall
- **10/28** Harford County
  Edgewood Rec. & Community Center
- **10/29** Anne Arundel County
  Severna Park Community Center
Early Input from Open Houses

- People are excited about Regional Transit Corridors that create a more connected region
- Interest in Other Network Improvements that will address local circulation and connectivity
- Focus on access to transit with first/last mile connections and infrastructure
- Many targeted suggestions to improve existing transit service on each mode
Key Themes from All Public Engagement

- **Expand transit service** throughout the Central Maryland Region
- Establish a **multi-modal approach** to mobility
- Prioritize **customer service** throughout the customer journey
- Improve **reliability, efficiency, and frequency** of existing transit service
- Assure **equitable** decision making in design
- Address **safety and security** concerns, both onboard and waiting for transit
- Maintain the **affordability** of transit
- Consider transit’s role in the region’s **environmental sustainability**
- Capitalize on opportunities for **Transit Oriented Development (TOD)**
- **Maintain** and **upgrade** facilities and transit vehicles
IMPROVING THE CUSTOMER JOURNEY

Phil LaCombe
RTP Project Staff
1. It takes me *where* I want to go.
2. It takes me *when* I want to go.
3. It’s a good use of my *time*.
4. It’s a good use of my *money*.
5. It *respects* me.
6. I can *trust* it.
7. It gives me *freedom* to change my plans.

Source: *Human Transit* by Jarrett Walker
The Transit Customer Journey

A Transit Trip

1. Planning a Transit Trip
2. Accessing a Transit Stop
3. Waiting for Transit
4. Paying Transit Fares
5. Riding Transit
6. Making Transfers
Planning a Transit Trip

Comprehensive information about transit and new mobility helps riders select the best route

- Trip Planners
- Incentive programs
- Printed timetables
- Real-time arrival information
- Service alerts
- Mobility-as-a-Service

Denver RTD has collaborated with TNC Uber to integrate transit trip planning and real-time information into the Uber mobile app.
Planning a Transit Trip: Mobility-as-a-Service

Mobility-as-a-service provides customers with ultimate freedom and flexibility in transportation

- Level 1 – information platform (Transit app, incenTrip)
- Level 2 – aggregation platform (Uber, Lyft)
- Level 3 – subscription platform (Citymapper, Whim)

**MOBILITY-AS-A-SERVICE**

The Whim app in Helsinki, Finland pioneered MaaS, a monthly subscription for public transit, bikeshare, taxi, and carshare

<table>
<thead>
<tr>
<th>Level</th>
<th>Plan</th>
<th>Price</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light</td>
<td></td>
<td>89€/month</td>
<td>Includes HSL Helsinki season ticket + 1,000 Whim points</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Use your Whim points as you like, for example:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 taxi trips (&lt;10 km/trip) daytime + unlimited local public transport</td>
</tr>
<tr>
<td>Medium</td>
<td></td>
<td>249€/month</td>
<td>Includes HSL Helsinki season ticket + 5,500 Whim points</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Use your Whim points as you like, for example:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8 taxi trips (&lt;10 km/trip) daytime + unlimited local public transport</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 days of car rental</td>
</tr>
<tr>
<td>Premium</td>
<td></td>
<td>317€/month</td>
<td>Includes HSL Helsinki season ticket + 8,000 Whim points</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Use your Whim points as you like, for example:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8 taxi trips (&lt;10 km/trip) daytime + unlimited local public transport</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 days of car rental</td>
</tr>
</tbody>
</table>
Transit requires accessible infrastructure to serve people of all ages and abilities

- Sidewalks and curb ramps
- Accessible boarding areas
- Safe and direct walking/biking paths
- Wireless accessibility beacons
- Bicycle racks
- Park and ride lots
- New Mobility first/last mile connections

SAFE AND ACCESSIBLE PATHS TO TRANSIT

Portland TriMet created a Pedestrian Network Analysis to highlight areas with the most need and opportunity for pedestrian improvements to improve access for people of all abilities.
Waiting for Transit

Amenities at transit stops and stations help make waiting safer and more comfortable

- Seating and shelters
- Lighting
- Signage
- Real-time information
- Public address announcements

EQUITABLE AMENITIES

MDOT MTA sites new bus shelters using a scoring system that considers:

- How many people wait at a stop?
- How long they are likely to wait?
- Who is likely to be waiting?
Waiting for Transit: Real-Time Information

ADOPITION IN CENTRAL MARYLAND

- Real-time information (RTI) is available for 4 of 7 public transit providers in the region
- MDOT MTA, Harford Transit LINK, and RTA have partnered with popular mobile apps to provide RTI
- Charm City Circulator has its own branded mobile app for RTI

<table>
<thead>
<tr>
<th>Agency</th>
<th>Mobile App</th>
<th>Text (SMS)</th>
<th>Open Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annapolis Transit</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Anne Arundel County OOT</td>
<td>partial</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Baltimore CountyRide</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Charm City Circulator</td>
<td>✓</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Harford Transit LINK</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>MDOT MTA</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>RTA of Central Maryland</td>
<td>✓</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
Waiting for Transit: Reliable Service

Asset management and operations staff and technologies make transit service more reliable

- Vehicles and infrastructure in a State of Good Repair
- Scheduling software
- Operator recruitment and retention
- Dispatch and supervisor staffing
- Automatic vehicle location systems

NEW BUSES

The RTA of Central Maryland has replaced more than half of its fleet in the last 2½ years
New technologies provide convenient and efficient methods to pay for transit and integrated New Mobility services

- Ticket vending machines
- Electronic fareboxes
- Mobile ticketing
- Accessible wearable payment
- Regional integration
- Mobility-as-a-Service
- Incentive programs

**REGIONAL RELOADABLE FARECARD**

In the Minneapolis-St. Paul region, Metro Transit and five connecting locally operated transit systems accept a single reloadable smart card on bus and rail
ADOPTION IN CENTRAL MARYLAND

- MDOT MTA and Annapolis Transit have adopted reloadable fare cards but use different systems.
- MDOT MTA and Harford Transit LINK offer mobile ticketing but use apps from different vendors.

<table>
<thead>
<tr>
<th>Agency</th>
<th>Smart Card</th>
<th>Mobile Ticketing</th>
<th>Open Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annapolis Transit</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Anne Arundel County OOT</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Baltimore CountyRide</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Charm City Circulator</td>
<td>free</td>
<td>free</td>
<td>free</td>
</tr>
<tr>
<td>Harford Transit LINK</td>
<td>x</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>MDOT MTA</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>RTA of Central Maryland</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>
Customers want their experience riding transit to be:

- Accessible
- Safe
- Reliable
- Clean
- Comfortable

**NEXT STOP DISPLAYS**

Minneapolis-St. Paul Metro Transit recently installed displays on some buses informing customers of the next few stops and connecting routes.
Empowering people to transfer between transit routes, modes, and providers maximizes individual freedom of mobility

- Wayfinding signage
- Timed transfers
- Coordinated signage
- Coordinated fares
- Mobility hubs

TRANSFER CENTERS

Houston METRO has 21 transit centers located throughout its service area to facilitate safe and comfortable bus-to-bus and bus-to-rail transfers.
Making Transfers: Coordinated Fares

Coordinated fares reduce or eliminate extra costs associated with using multiple transit modes or providers in a single trip

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Annapolis Transit</th>
<th>Anne Arundel County OOT</th>
<th>Harford Transit LINK</th>
<th>MDOT MTA</th>
<th>RTA of Central Maryland</th>
<th>WMATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annapolis Transit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anne Arundel County OOT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harford Transit LINK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MDOT MTA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RTA of Central Maryland</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WMATA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legend
- **Free**
- **Discounted**
- **Full fare each ride** (systems don’t connect)

**Connecting Our Future**
A Regional Transit Plan for Central Maryland

- **MDOT MTA transfers** are free between BaltimoreLink modes when using CharmPass. MDOT MTA does not offer free or discounted transfers for single trips using MARC Train or Commuter Bus.
- **WMATA bus-to-bus transfers** are free. WMATA discounts fares for bus-to-rail or rail-to-bus transfers.
Private shuttles can provide quick and easy connections for employees and students

- Operates on fixed routes with designated stops and schedules
- Typically available only to employees or affiliates
- May be funded by employers, business associations, or local governments
- Cost varies, but the cost of each ride decreases as ridership increases

EMPLOYER SHUTTLES
Shuttles sponsored by Amazon Fulfillment and the City of Baltimore and operated by a private company provide employees with another option for commuting to work
New Mobility services are helping bridge gaps between transit stops and stations and customers’ destinations

- Automated shuttles
- Microtransit
- TNCs (e.g. Lyft/Uber)
- Ridesplitting
- One-way carsharing
- Moped-sharing
- Scooter/bikesharing
Microtransit can help customers make first- and last-mile connections in suburban and exurban areas

- On-demand shared ride to or from a transit station or stop
- Available to anyone traveling within a designated service area
- May be funded by transit agencies, local governments, or business associations
- Cost per passenger trip ranges between $10 and $70, with an average of $22
TNC Partnerships

Some transit agencies, local governments, and other sponsors are partnering with TNCs to bridge gaps

- On-demand ride between points inside a defined area or select destinations
- Available to anyone traveling within a designated service area
- Sponsors provide a subsidy (discount/voucher) toward each ride
- The cost of each ride is unaffected by the number of people who use the service and may require limits to control costs
Paratransit should be safe, efficient, comfortable, respectful, and reliable for its customers

- Efficient certification and assessment
- Booking online and by phone
- Arrival notifications
- Electronic fare collection
- Clean and comfortable vehicles
- Consistency across contractors and coordination across providers

PRE-ARRIVAL CALLS
Salt Lake City UTA offers a free call-ahead service that notifies paratransit passengers when their paratransit vehicle is 5 minutes away from their pick-up location
Where is the transit customer experience in Central Maryland most in need of improvement?

Which innovations, partnerships, or initiatives are most interesting to you?
BREAK
CORRIDOR TRANSIT READINESS

David Miller
RTP Project Staff
Why Does Transit Readiness Matter?

• Because the transit experience is door to door, rider experience beyond the vehicle matters, and that impacts the choice to use transit.
Transit Readiness is a major element of Corridor Feasibility Studies.
Transit Ready Places Require Partnerships

Business Owners/Residents
Developers & Land Owners
Utilities
Public Works
Transit Agency
Economic Development
Business Improvement District
DOT
Historic Preservation
Local Jurisdiction

Credit: Steve Price, Urban Advantage
Regional Partners are Working on Transit Readiness

**What we heard:** Jurisdictions want examples of ways to support transit’s success.

**Strategies include:**

- Improving first/last mile access
- Working with developers and employers to support transit use
- Managing parking and supply policies
- Connecting more residents to growing job centers via transit
How Transit Ready is Our Region?

• Think about places you spend time in our region:
  – How comfortable is it to travel between a transit stop and the front door?
  – What makes places you’ve visited “transit friendly”?
  – How does this vary in different settings?

Connecting Our Future
A Regional Transit Plan for Central Maryland

Credit: FDOT Context Classification Guide
Transit-Supportive Densities

- The type and amount of land use in a given area directly impacts transit use
- As development increases and diversifies, more transit and more types of transit can be justified
- Many agencies produce guidelines that align transit to land use for planning purposes
Transit-Supportive Densities

Job + Population Densities:
- < 1 jobs + residents / acre: not supportive of transit
Transit-Supportive Densities

Job + Population Densities:

• 1-5 jobs + residents / acre: may justify alternative / new mobility solutions
Transit-Supportive Densities

Job + Population Densities:

• 5-14 jobs + residents / acre: justifies headways of 60 minutes or less
Transit-Supportive Densities

Job + Population Densities:

• 14+ jobs + residents / acre: justifies frequent and high-capacity transit
Transit-Supportive Densities:

Job + Population Densities:
- Most areas of moderate and high density are served by transit today
Transit Readiness is about Place-Based Solutions

Transit Ready Places have:

1. Destinations along the Path of Travel
2. Dense, mixed land uses
3. Connected streets & paths
4. Comfortable, inviting environment
5. Transit Priority on the route’s Street/Guideway
6. Programs and Incentives to promote transit
Transit Readiness Strategies Support Regional Corridors

Transit Readiness strategy examples:

- Design pedestrian-friendly streets
- Ensure safe, convenient access for scooters, bikes, and pedestrians
- Consider parking maximums instead of minimums and strategically locate parking
- Engage employers and developers to support employee/resident transit use
- Work with businesses and developers to promote transit-available/transit-friendly site selection
Transit Efficiently Connects Riders to Destinations

- Transit stops/stations should reach the front doors of dense activity centers
- Destinations should be located “on the way”
  - Efficiently connect activity centers along transit routes
  - Includes park and ride, layover and transfer facilities

Aberdeen Station Plan proposes more efficient access for all modes, stronger connections to downtown with civic multi-use plaza and new office/residential

Densest clusters of destinations

Highway-based transit corridor
Dense Mixed Land Use

- Areas are active all day and throughout the week, supporting all day transit service
- Residents, jobs, and services are close to stops and stations
  - Putting “eyes on the street”
  - More destinations are walkable
  - More types of destinations are walkable

Development oriented to the pedestrian and transit user experience reinforces transit and business’s economic goals
Dense Mixed Land Use

- Density alone is not enough
  - Many job centers are inactive outside of commuting hours
  - There may be opportunities to infill with activity that helps support transit use

Light RailLink Corridor’s Job Concentrations

- Rail Corridor
- Station
- .25 and .5 mile station buffer
- Circle size = 1,000 jobs
- Greater than .5 miles from station
- Less than .5 miles from station

- Job centers are well served by rail stations, but land use has limited diversity and lacks all-day activity
- Density near rail alignment but not served by station
- Rail station with potential for higher density, mixed use
- Loading docks, back-of-business functions & parking face the station; potential location for “activated space”
• Circuitous streets and physical barriers reduce access to transit
  • Increase walk time, distance, and stress of getting to the stop

• Connected places encourage walking
  • Walking is the most efficient, least expensive way to access transit
Connected Street Network

Street networks that prioritize pedestrian travel are safer and more convenient for all users

- Existing transit can be better connected to rider destinations
  - Paved access to nearby apartments is indirect
  - Parking and busy streets create barriers

Walking path via sidewalk: .7 Miles
Walking path crossing parking lots and major roadways without formal accommodations: .3 miles

Arundel Mills
Major bus stop
Walking path via sidewalk: .7 Miles

Dense housing
Established Development Response Team (City, CATS, NCDOT, developers) to collaboratively create action plan, street network, address issues.

Transit-Ready Corridor: Charlotte Integrated Planning

- Original Network
- Transit Route
- Resulting Development
- Transit Supportive Street Network & Interchange Solution
Transit-Ready Corridor: Charlotte Integrated Planning

New development is transit-supportive

- Windows and doors face the station
- Sidewalks and street grid connect pedestrians and bicyclists
- Housing is integrated into a commercial zone
- Transit connection has market appeal
In 2006, RTD (Denver) identified a TOD opportunity

Planning with public housing residents, a new vision emerged for

- Aging industrial area on the outer edge of downtown
- 278-unit low-density, single-use residential neighborhood

Source: https://ecodistricts.org/2016/08/01/innovative-design-offers-roots-and-community-for-denver-s-most-vulnerable/

Credit: Kittelson & Associates, Inc.

Credit: Google Earth
• Station area transformed through collaborative investments:
  ✓ New dense mixed-income housing with retail, civic space, and public gardens (Housing Authority)
  ✓ Streetscaping, bike-share, community, and elem. school (City of Denver)
  ✓ Value-added programming (City of Denver)

Credit: Kittelson & Associates, Inc.

10th & Osage Station in Mariposa 2019

Credit: Google Earth
Development built:

- New paths
- Gathering spaces
- Community gardens
- Buffered, off-street parking
Partnerships created:

- Jobs and mentors for residents
- Workforce training
- Healthy food and new services
Wrap-Up & Discussion

• Have we covered types of strategies and characteristics that you think are important to being transit friendly and transit ready?
• What is missing?
• Which are most important for our region to be more transit friendly?
PUBLIC COMMENT
NEXT STEPS

Holly Arnold, Deputy Administrator
Maryland Department of Transportation
Maryland Transit Administration
Schedule Look-Ahead

**ANALYZE**
Review the current system; identify opportunities for improvement.

March 2019
Transit 101
Overview of Trends and Benchmarks; Draft Goals
April 2019
Overview of Good Repair, Funding, and New Mobility
June 2019
Review State of Good Repair; Address Service Gaps and Corridors of Need

**PROPOSE**
Review system performance and propose improvements.

October 2019
Understand the Rider Perspective
December 2019
Review Goals and Prioritize Strategies

**PUBLISH**
Present findings and recommendations.

April 2020
Review Draft Plan
June 2020
Update Draft Plan Based on Feedback
September 2020
Review and Publish Final Plan

Connecting Our Future
A Regional Transit Plan for Central Maryland

Current Task
Upcoming Task
Completed Task
December 13, 2019
9 AM – 12 PM
Charles L. Benton Building
417 E. Fayette St.
8th Floor
Phoebe B. Stanton Board Room
Baltimore, Maryland