

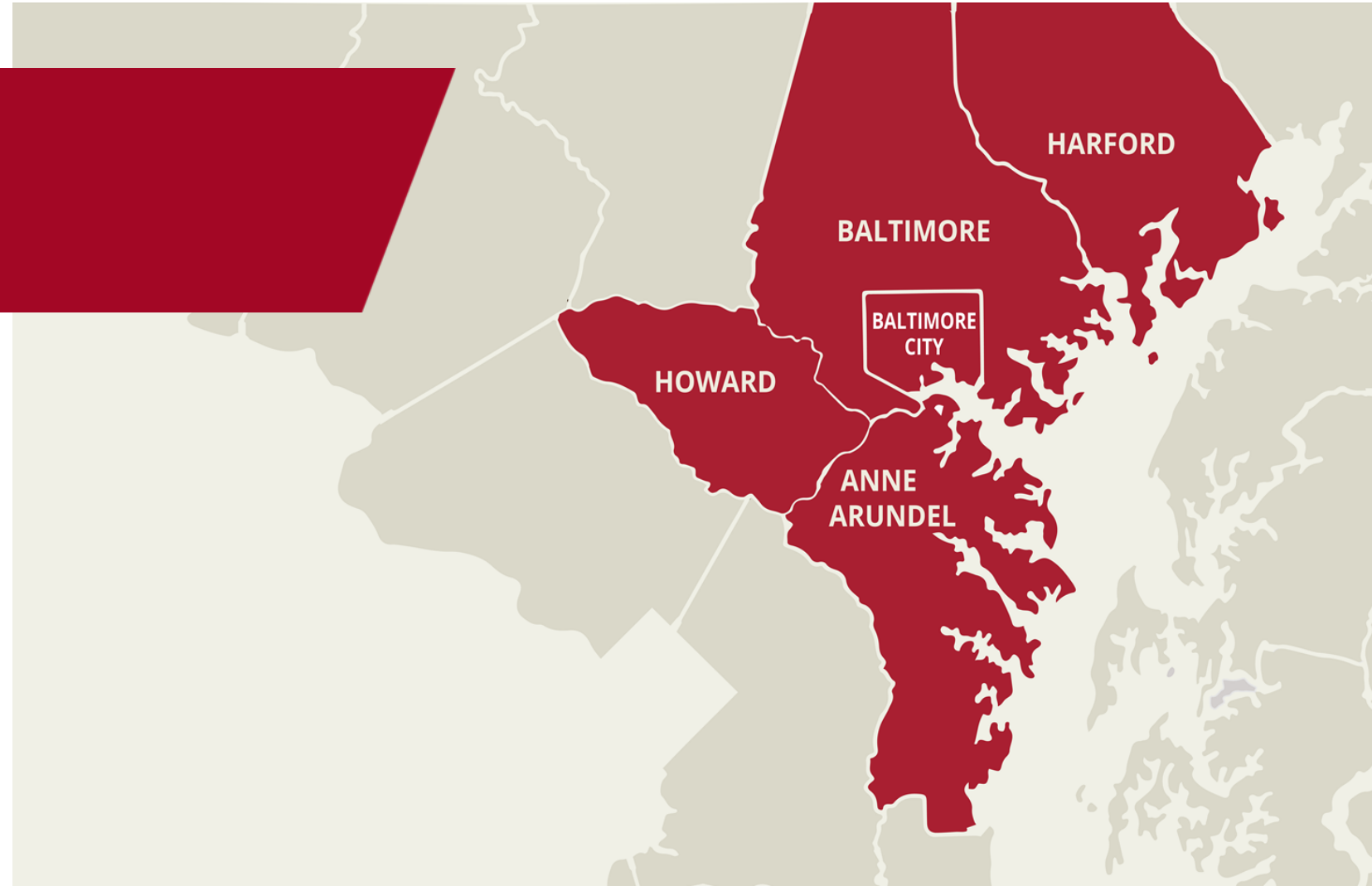


Connecting Our Future

A Regional Transit Plan for Central Maryland

COMMISSION MEETING #5

October 29, 2019
Baltimore County Community College
Owings Mills, MD





WELCOME & OVERVIEW

Mike Kelly, Executive Director
Baltimore Metropolitan Council



COUNTY EXECUTIVE REMARKS

John “Johnny O” Olszewski, Jr.
County Executive
Baltimore County

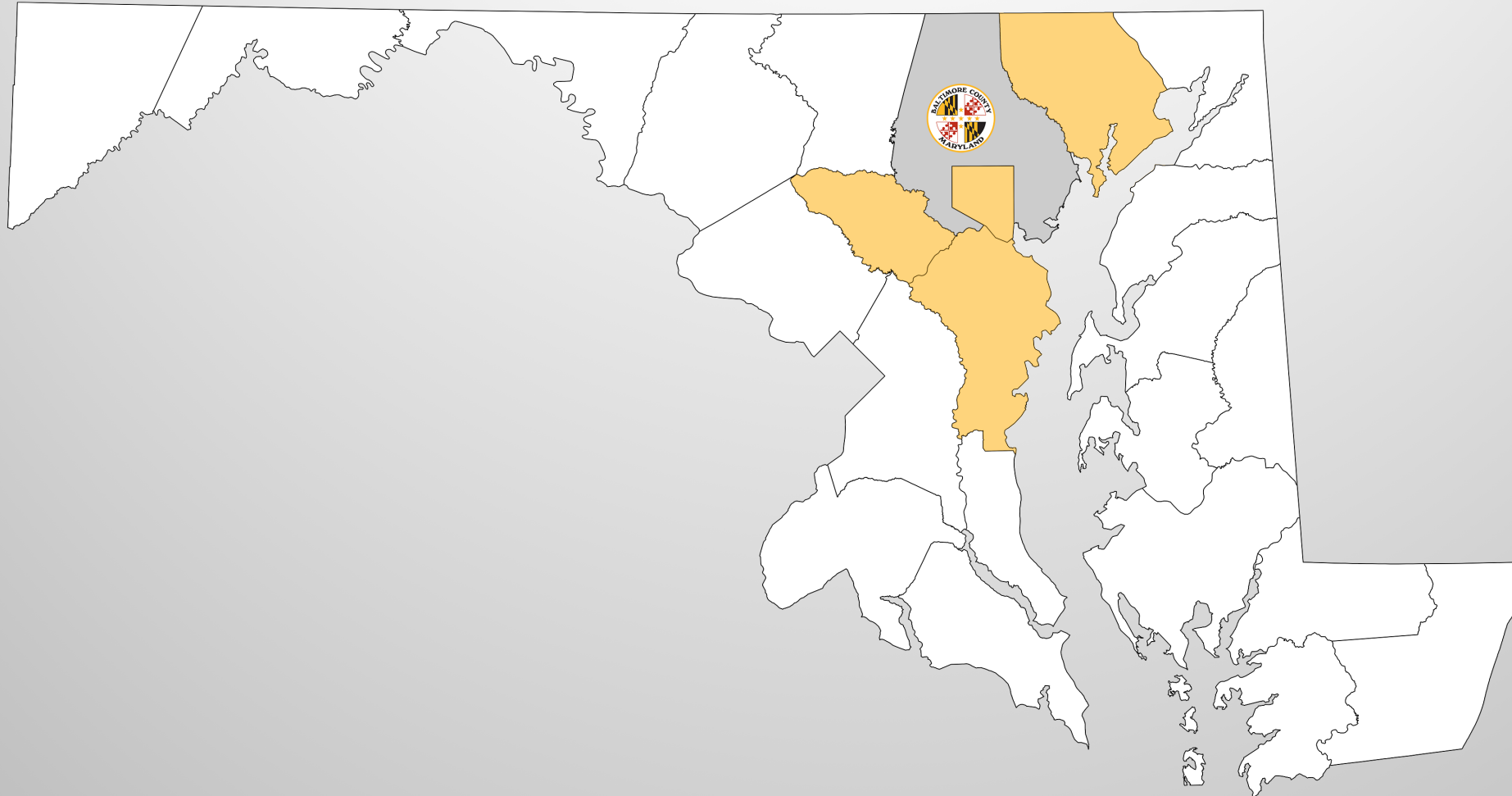


Central Maryland Regional Transit Plan Commission Meeting

CCBC Owings Mills
Tuesday, October 29, 2019

CENTRAL MARYLAND REGIONAL TRANSIT PLAN

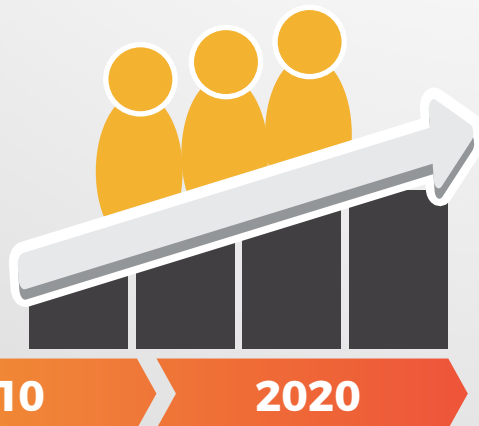
Investing in Quality of Life



Baltimore County Locally Operated Transit System

COUNTY RIDE

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



Locally Operated Transit System (LOTS) Funding

Baltimore County has historically received less funding than other large jurisdictions.

2019 State Funding Comparison

	Operating	Capital
Montgomery County	\$37 Million	\$400,000
Prince George's County	\$12.5 Million	\$100,000
Anne Arundel County	\$858,000	\$39,500
Baltimore County	\$421,551	\$0

TRANSIT PRIORITIES



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

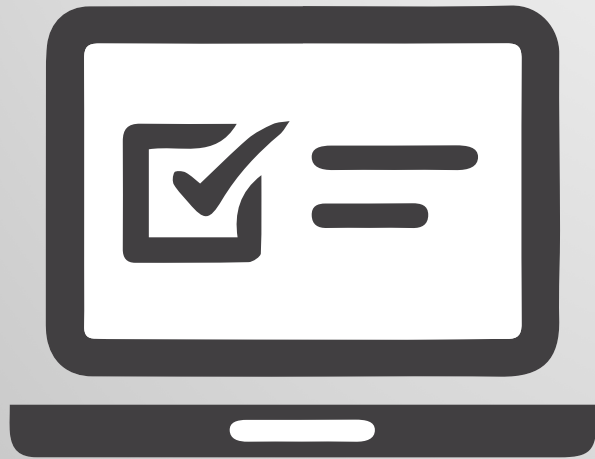


Provide *“first and last mile”* connectivity at existing and future employment and commuter hubs.



Provide additional opportunities for pedestrian and bike access.

TRANSPORTATION SURVEY



Recent transportation survey
received an overwhelming
response



+ 1000 participants



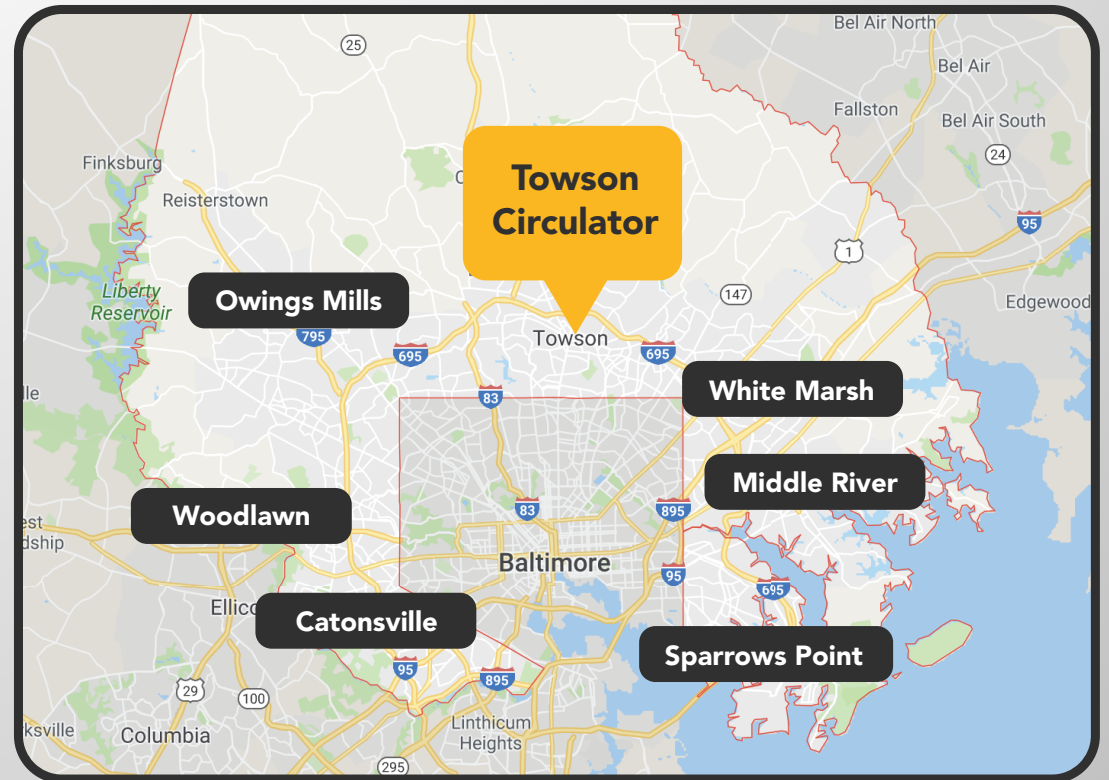
GOALS

- ✓ 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.

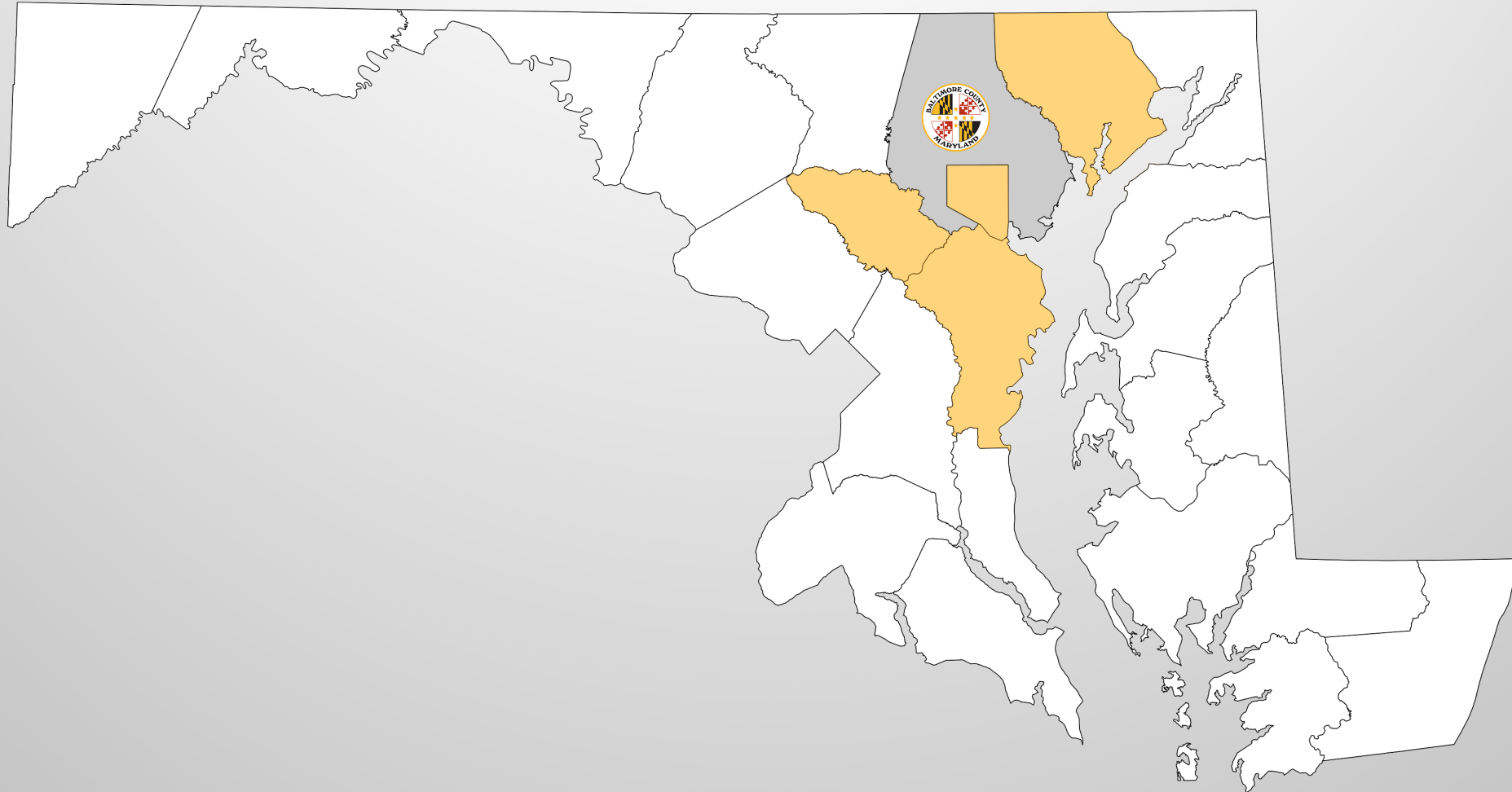


GOALS



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

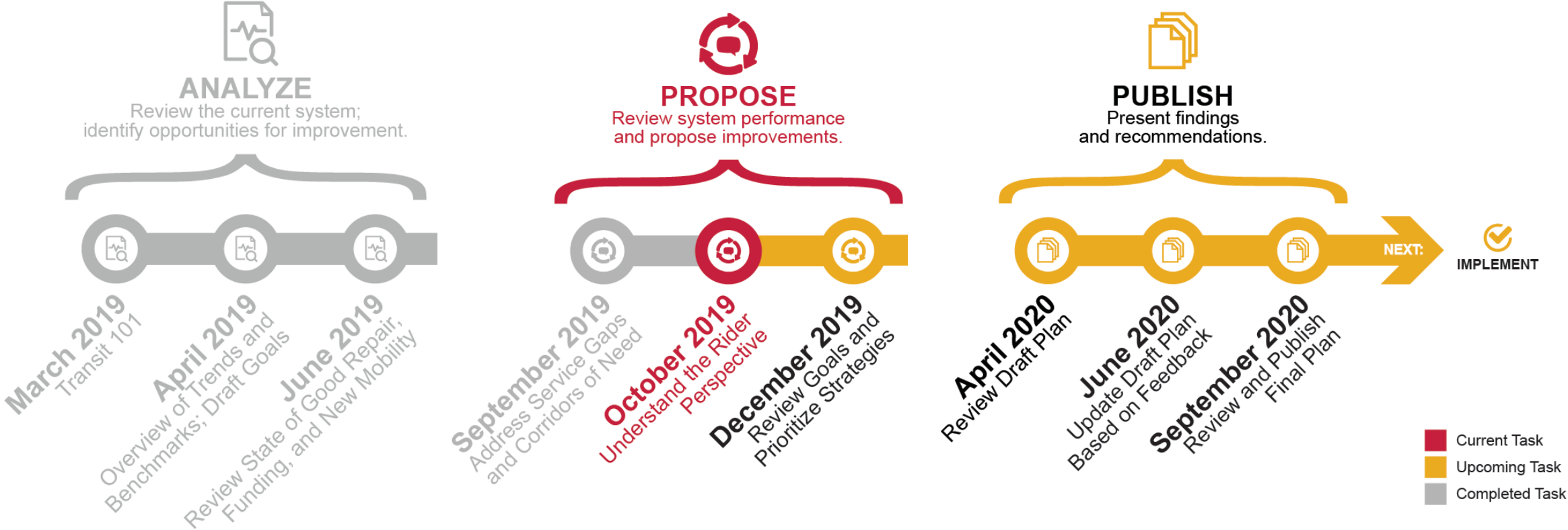
Elisabeth Sachs
Ex Officio RTP Commission Chair



INTRODUCTION & SET UP

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

Plan Development



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.



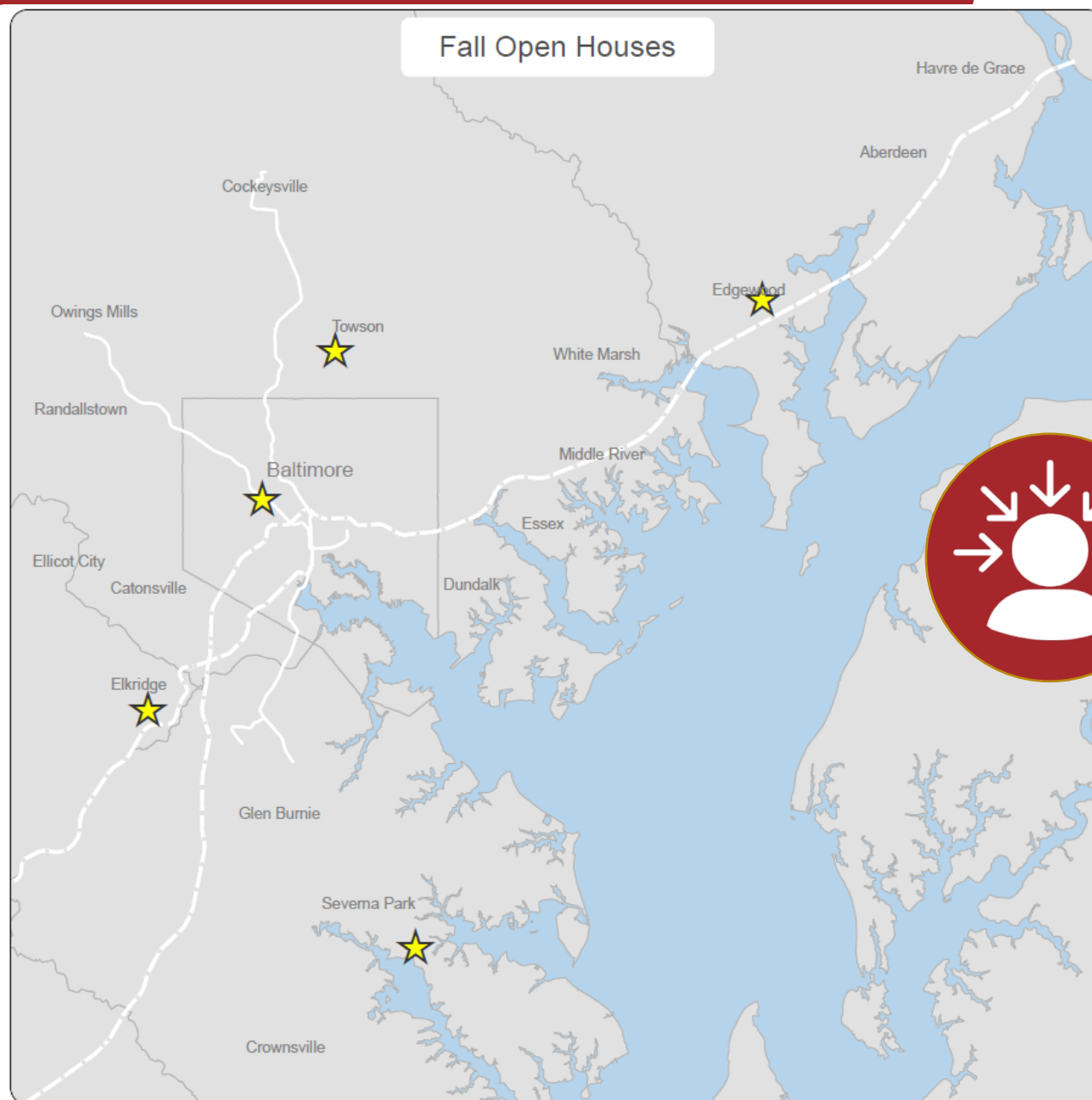
PUBLIC INVOLVEMENT

Teddy Krolik, Chief of Engagement
Maryland Department of Transportation
Maryland Transit Administration

Fall Open Houses

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

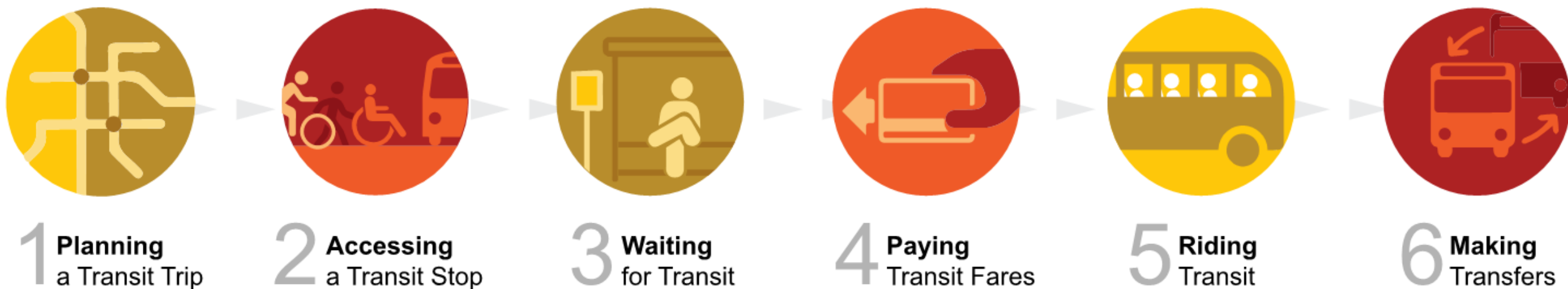
Phil LaCombe
RTP Project Staff

Characteristics of Useful Transportation

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

A Transit Trip

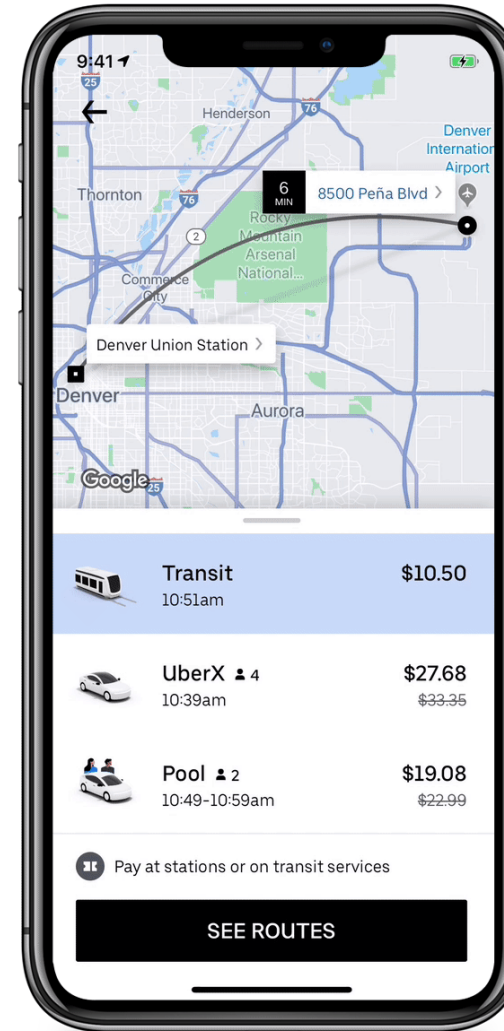




Planning a Transit Trip

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



TRANSIT + TNC TRIP PLANNING INTEGRATION

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

Light	Medium	Premium
89€ /month	249€ /month	317€ /month
includes HSL Helsinki season ticket	includes HSL Helsinki season ticket	includes HSL Helsinki season ticket
+ 1.000 Whim points	+ 5.500 Whim points	+ 8.000 Whim points
Use your Whim points as you like, for example:	Use your Whim points as you like, for example:	Use your Whim points as you like, for example:
 + 	 +  + 	 +  + 
2	8	8
taxi trips (~10 km/trip) daytime	taxi trips (~10 km/trip) daytime	taxi trips (~10 km/trip) daytime
		
unlimited local public transport	unlimited local public transport	unlimited local public transport
	2	5
	days of car rental	days of car rental

Accessing a Transit Stop

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

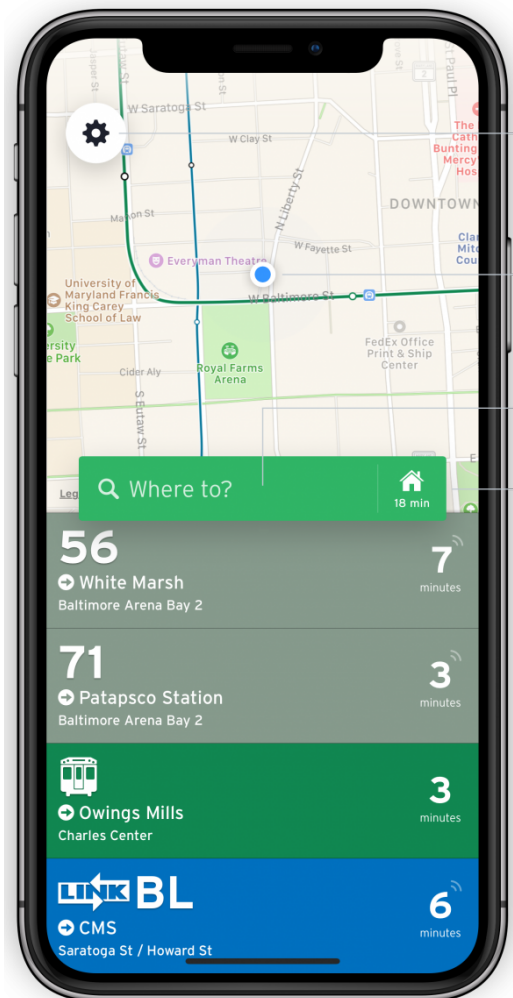
EQUITABLE AMENITIES

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



ADOPTION 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

Agency	Mobile App	Text (SMS)	Open Data
Annapolis Transit	X	X	X
Anne Arundel County OOT	partial	X	X
Baltimore CountyRide	X	X	X
Charm City Circulator	✓	X	X
Harford Transit LINK	✓	X	✓
MDOT MTA	✓	✓	✓
RTA of Central Maryland	✓	X	X



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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



Paying Transit Fares

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

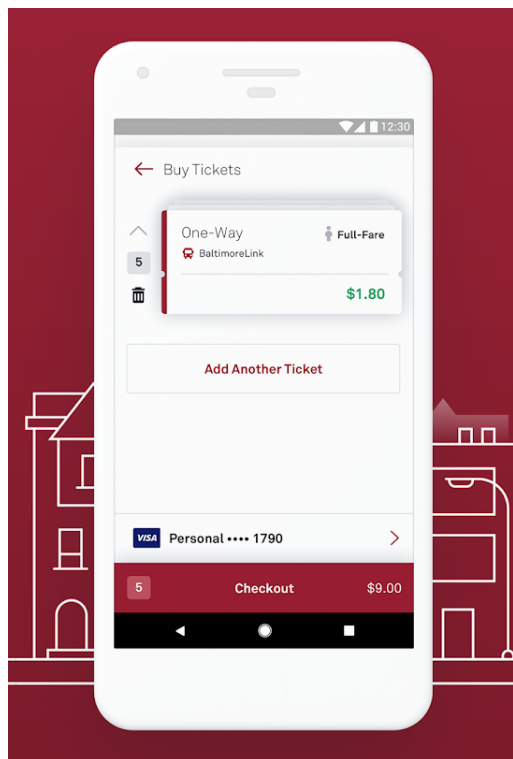
REGIONAL RELOADABLE FARECARD

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



Paying Transit Fares: Electronic Fare Collection

CharmPass



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

Agency	Smart Card	Mobile Ticketing	Open Payment
Annapolis Transit	✓	✗	✗
Anne Arundel County OOT	✗	✗	✗
Baltimore CountyRide	✗	✗	✗
Charm City Circulator	free	free	free
Harford Transit LINK	✗	✓	✗
MDOT MTA	✓	✓	✗
RTA of Central Maryland	✗	✗	✗



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Riding Transit

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



Making Transfers

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

Legend	To From	Annapolis Transit	Anne Arundel County OOT	Harford Transit LINK	MDOT MTA	RTA of Central Maryland	WMATA
		Free	Discounted	Full fare each ride	Not applicable (systems don't connect)		
	Annapolis Transit	Free	Discounted	Full fare each ride	Full fare each ride	Full fare each ride	Full fare each ride
	Anne Arundel County OOT	Full fare each ride	Discounted	Full fare each ride	Full fare each ride	Discounted	Full fare each ride
	Harford Transit LINK	Full fare each ride	Full fare each ride	Discounted	Full fare each ride	Full fare each ride	Full fare each ride
	MDOT MTA	Full fare each ride	Discounted	Full fare each ride	Free	Discounted	Full fare each ride
	RTA of Central Maryland	Full fare each ride	Discounted	Full fare each ride	Full fare each ride	Discounted	Full fare each ride
	WMATA	Full fare each ride	Discounted	Full fare each ride	Full fare each ride	Discounted	Free



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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

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

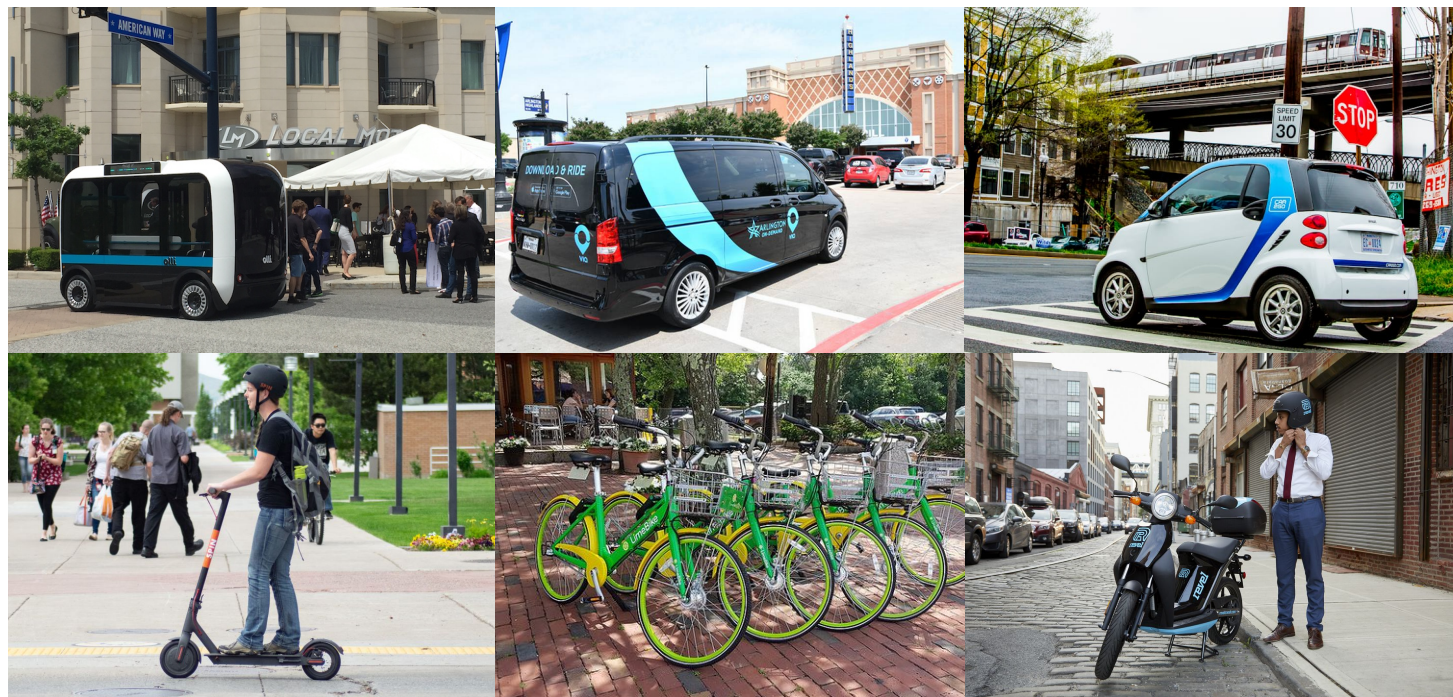
Shuttles sponsored by Amazon Fulfillment and the City of Baltimore and operated by a private company provide employees with another option for commuting to work



New Mobility First/Last-Mile Solutions

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 Partnerships

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

MICROTRANSIT

Via to Transit is a microtransit service that connects customers with five Sound Transit Link light rail stations in the Seattle region

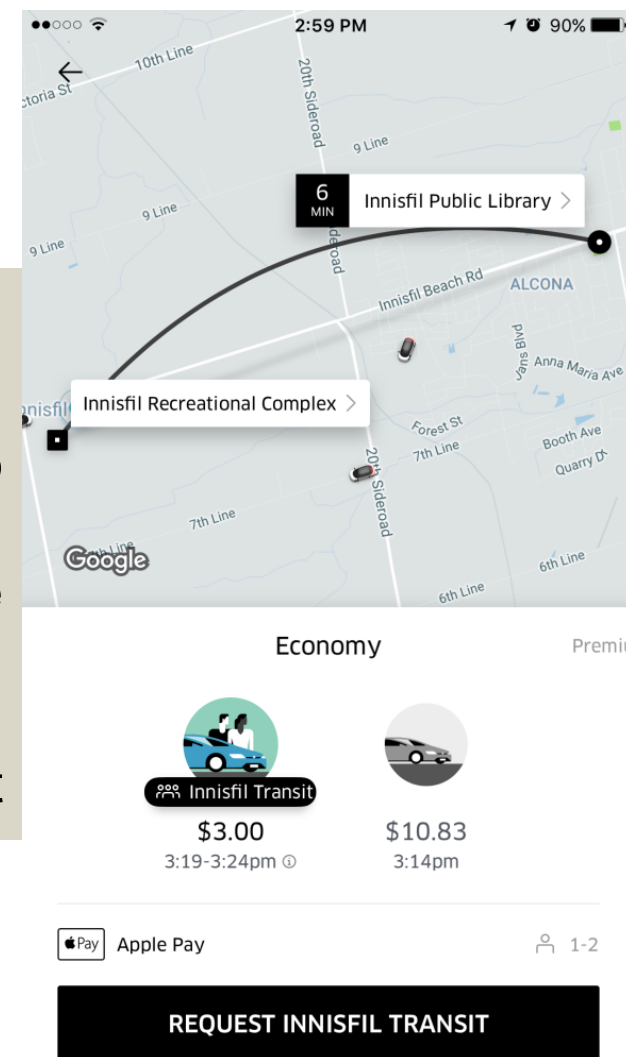


TNC Partnerships

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

TNC PARTNERSHIP
Innisfil, Ontario partnered with Uber to provide 30-50 subsidized rides per month to each resident



Paratransit Customer Experience

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



Wrap-Up & Discussion

- 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**



Getting to the Stop



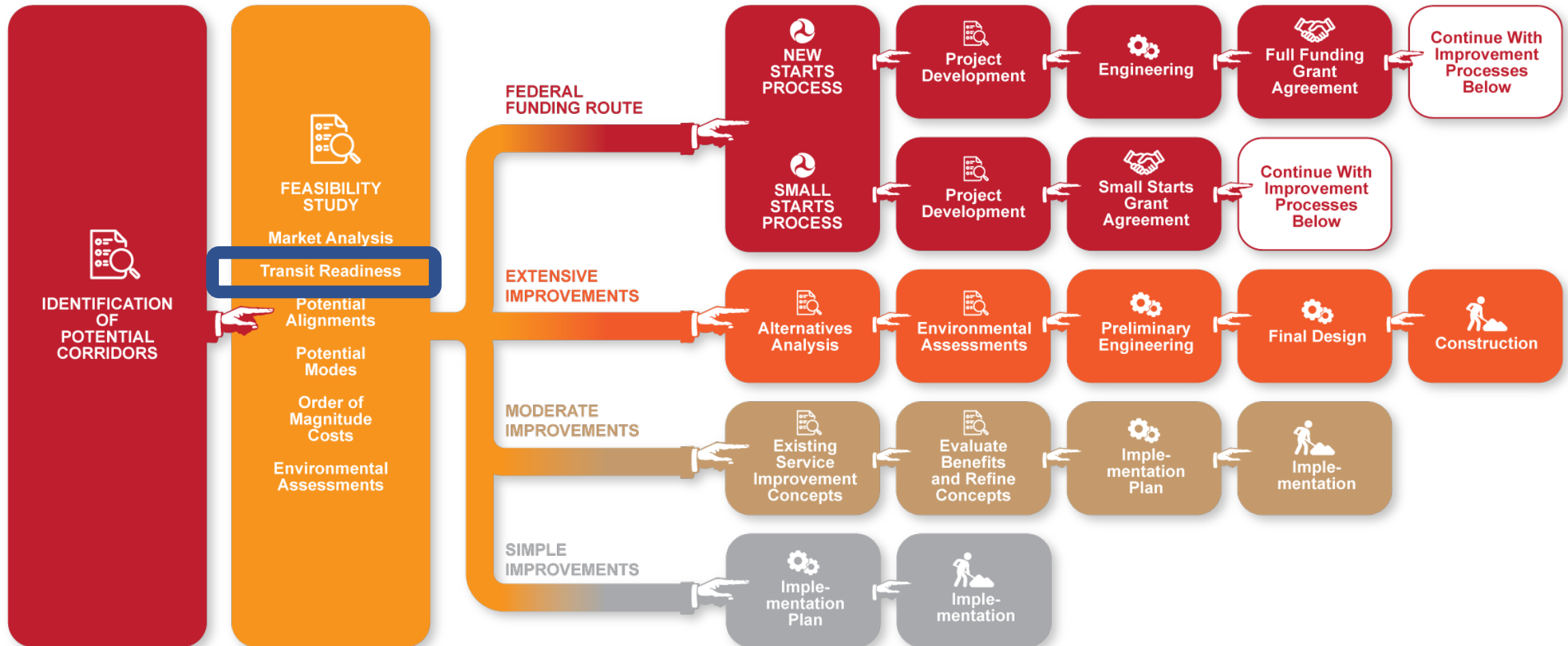
Waiting at the Stop



On the Vehicle

Why does Transit Readiness Matter?

- Transit Readiness is a major element of Corridor Feasibility Studies



Transit Ready Places Require Partnerships



Credit: Steve Price, Urban Advantage

Business
Owners/
Residents

Developers
& Land
Owners

Utilities

Public
Works

Economic
Development

Transit
Agency

Business
Improvement
District

DOT

Historic
Preservation

Local Jurisdiction



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Regional Partners are Working on Transit Readiness

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

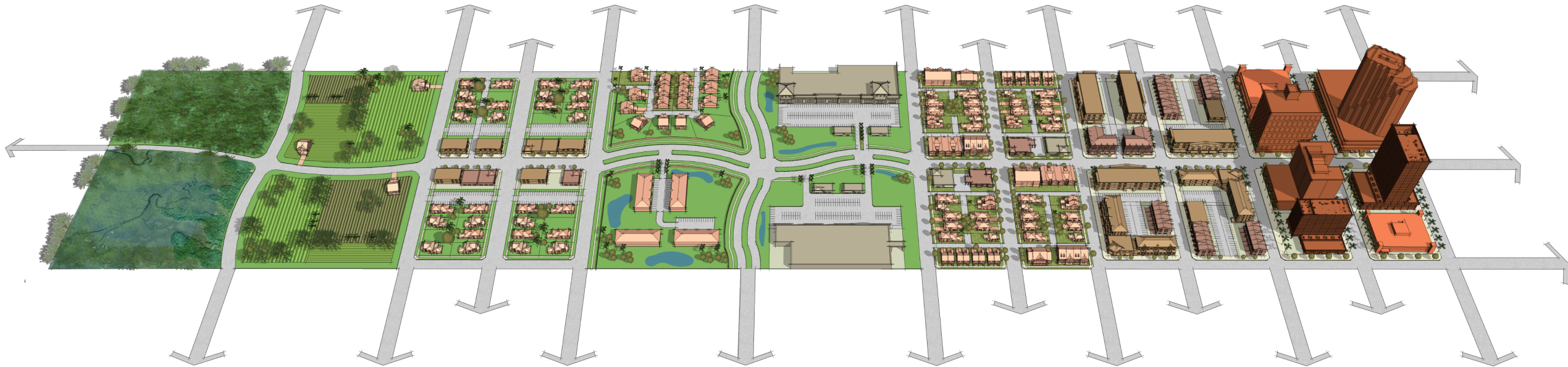
Strategies include:

- 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?



Credit: FDOT Context Classification Guide



Transit-Supportive Densities

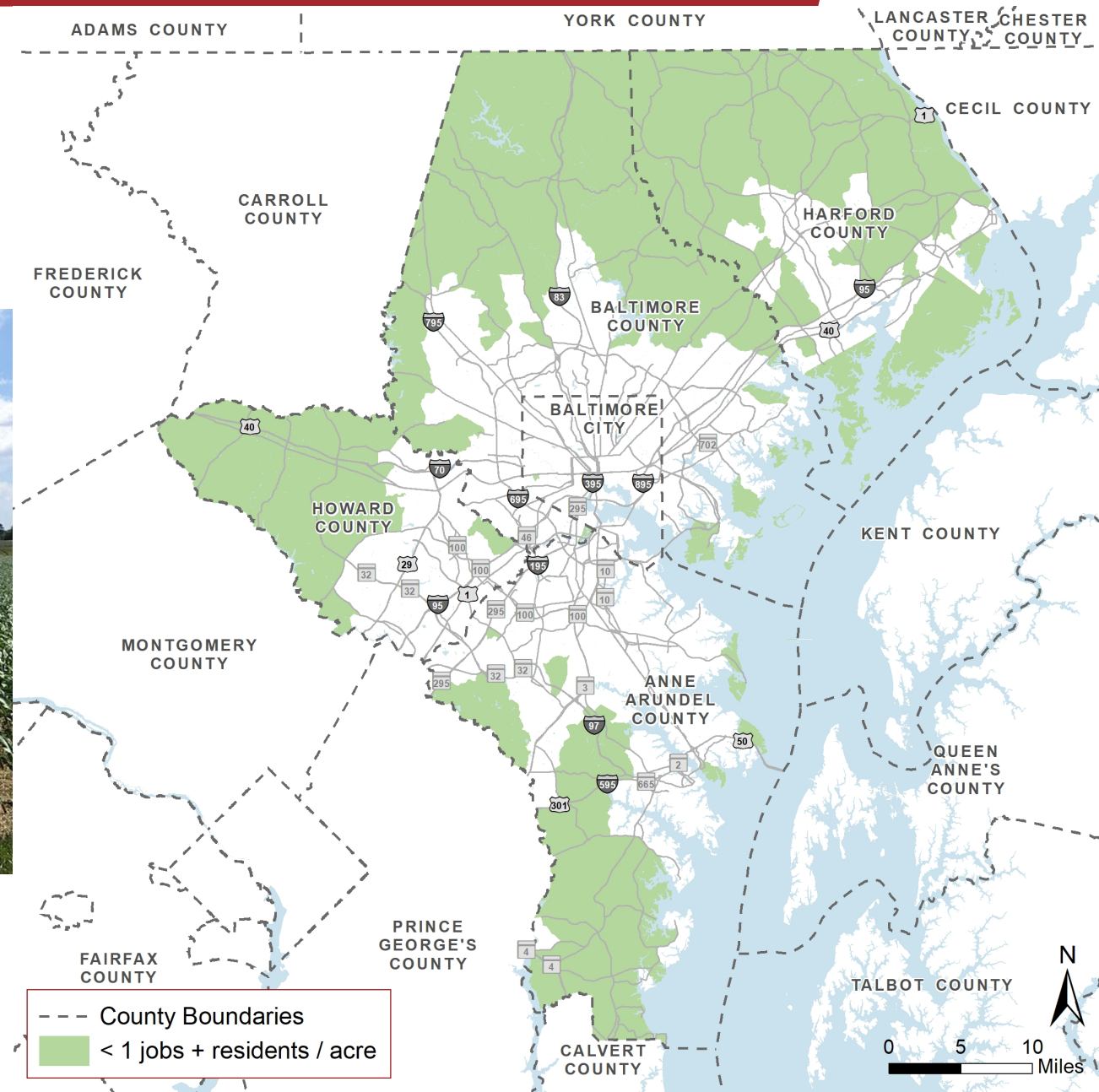
- The type and amount of land use in a given area directly impacts transit use
- As development increases and diversifies, more transit and more types of transit can be justified
- Many agencies produce guidelines that align transit to land use for planning purposes



Transit-Supportive Densities

Job + Population Densities:

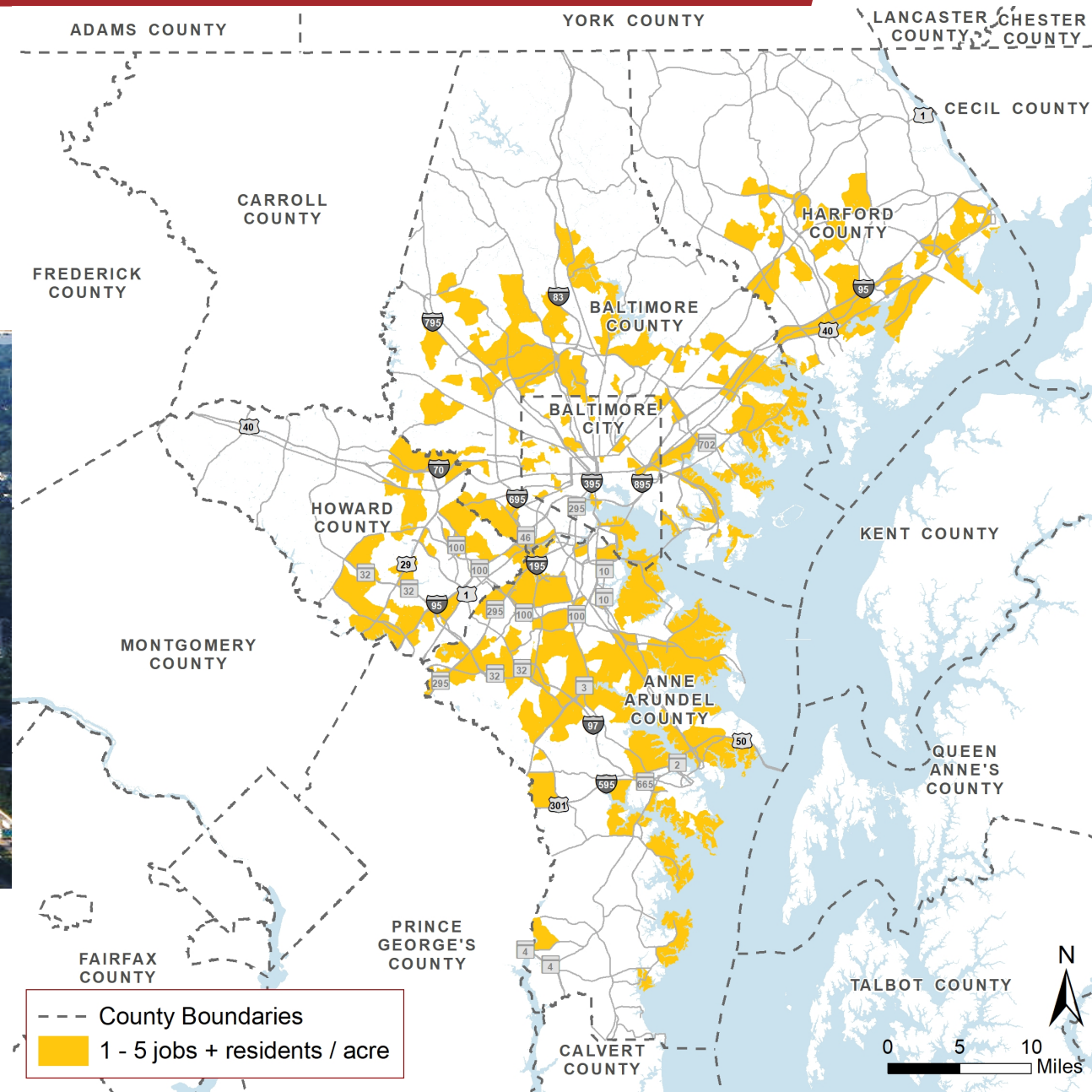
- **< 1 jobs + residents / acre**: not supportive of transit



Transit-Supportive Densities

Job + Population Densities:

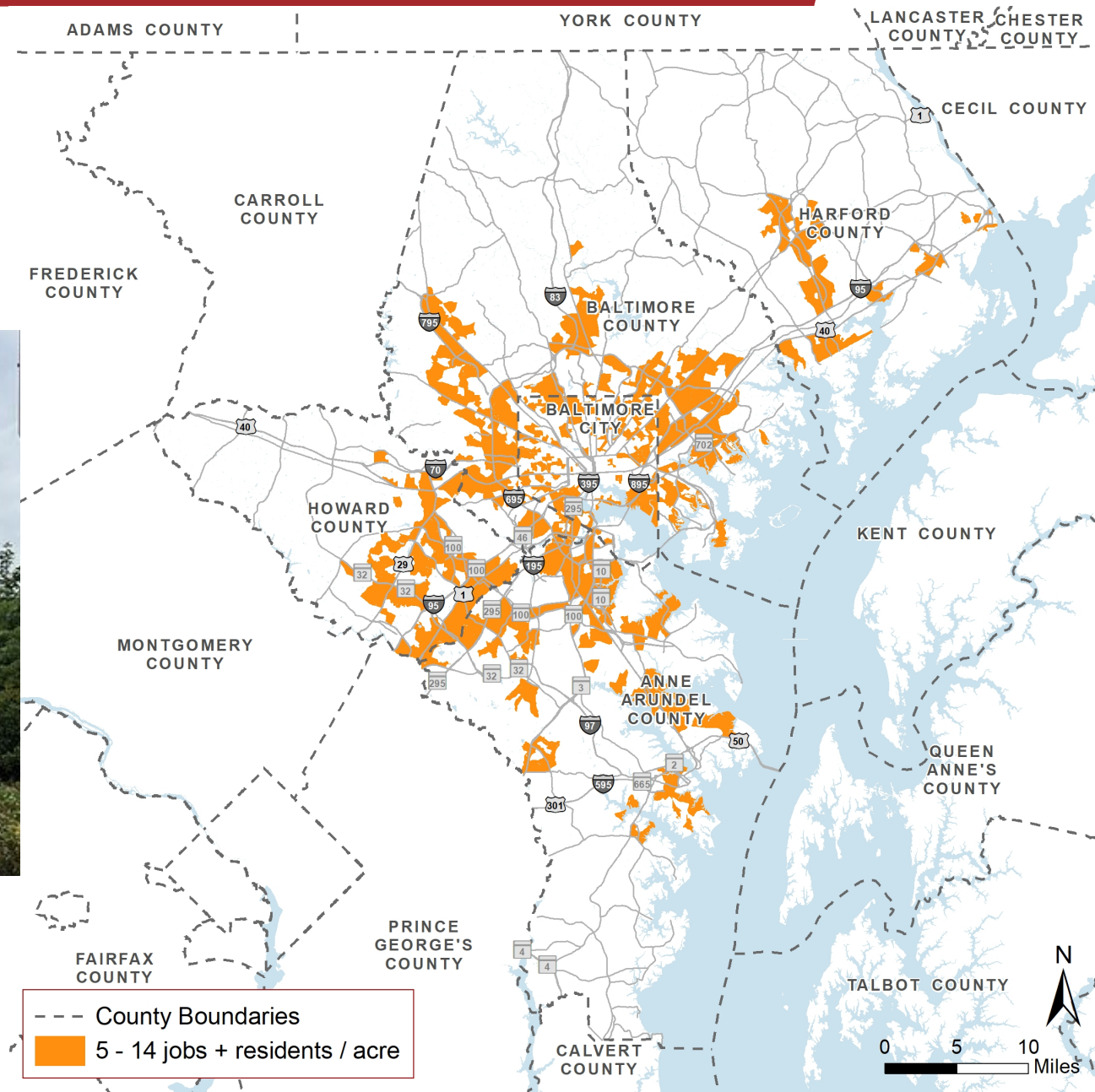
- 1-5 jobs + residents / acre: may justify alternative / new mobility solutions



Transit-Supportive Densities

Job + Population Densities:

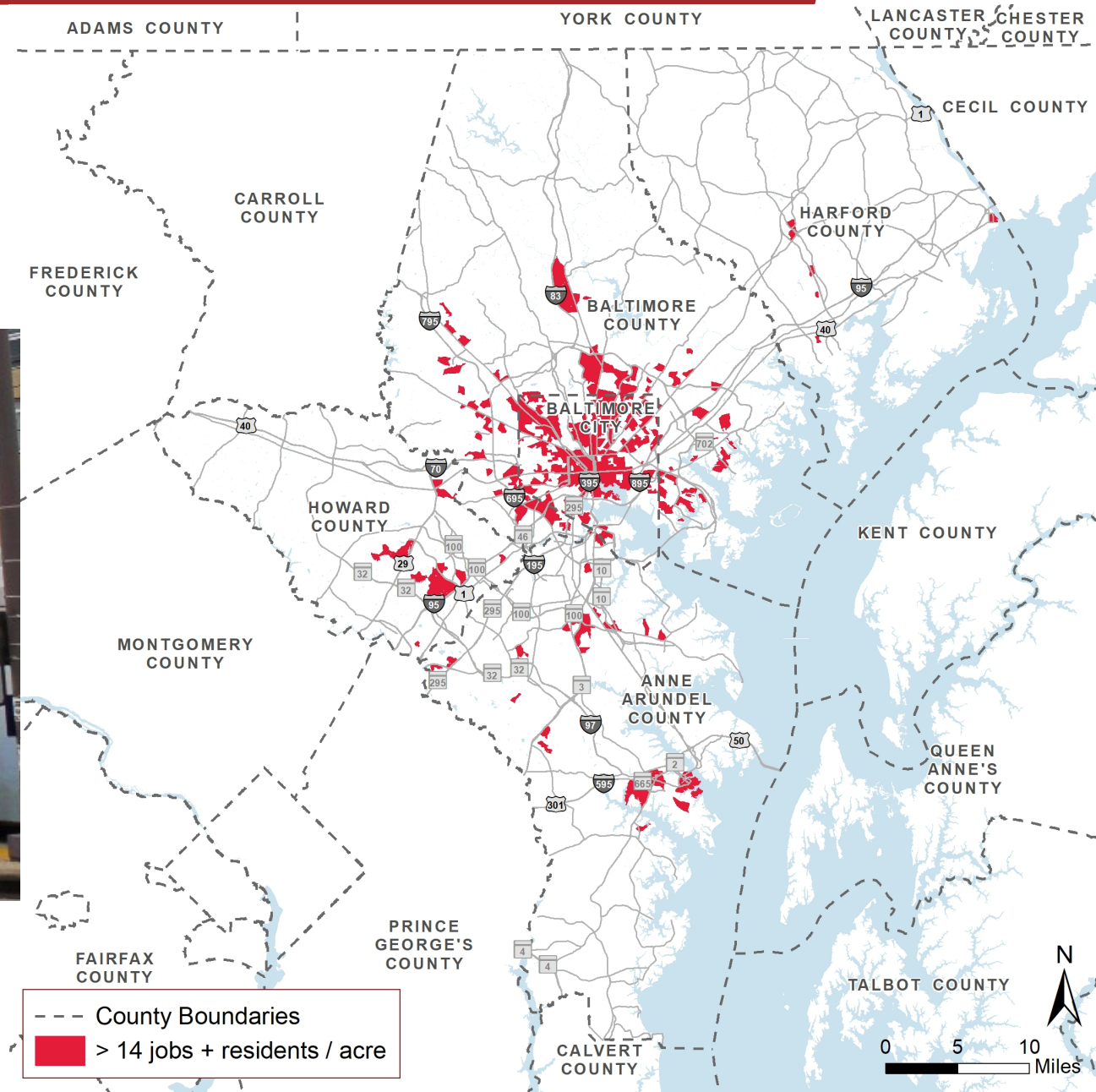
- 5-14 jobs + residents / acre: justifies headways of 60 minutes or less



Transit-Supportive Densities

Job + Population Densities:

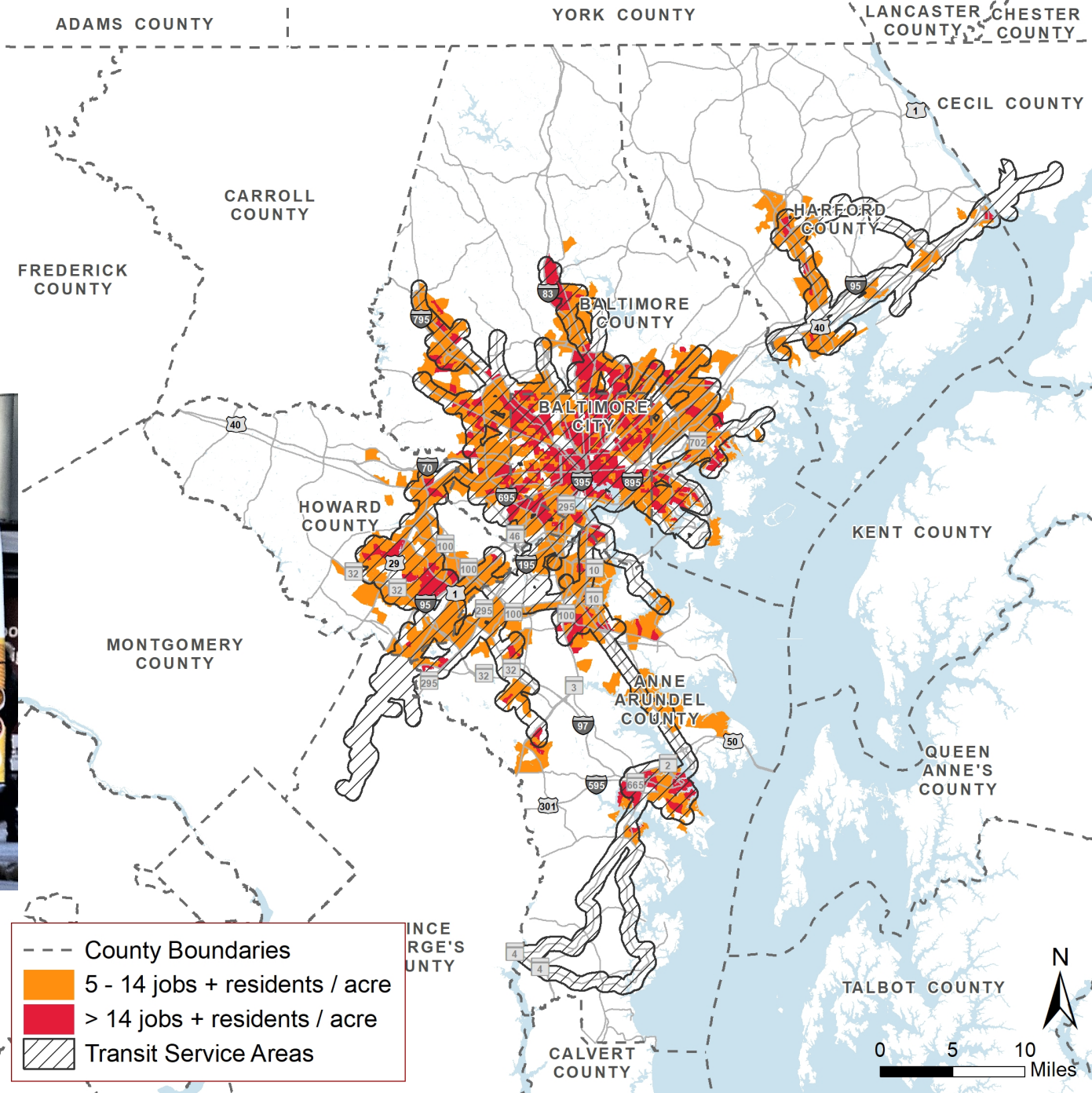
- **14+ jobs + residents / acre**: justifies frequent and high-capacity transit



Transit-Supportive Densities

Job + Population Densities:

- Most areas of moderate and high density are served by transit today



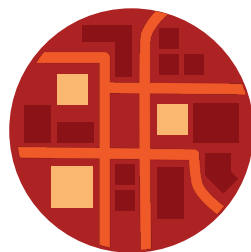
Transit Ready Places have:



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

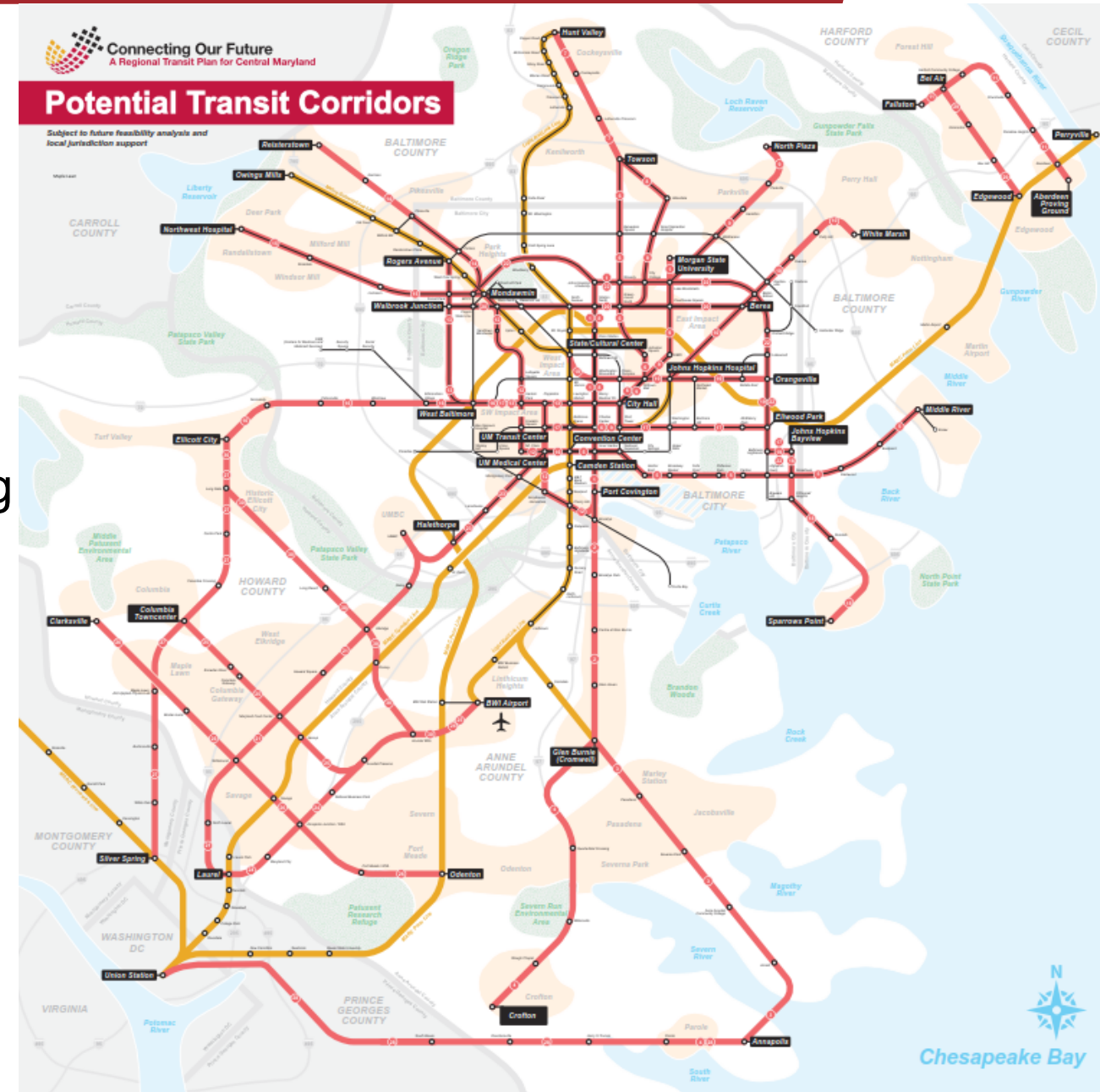


6 Programs and
Incentives
to promote
transit

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

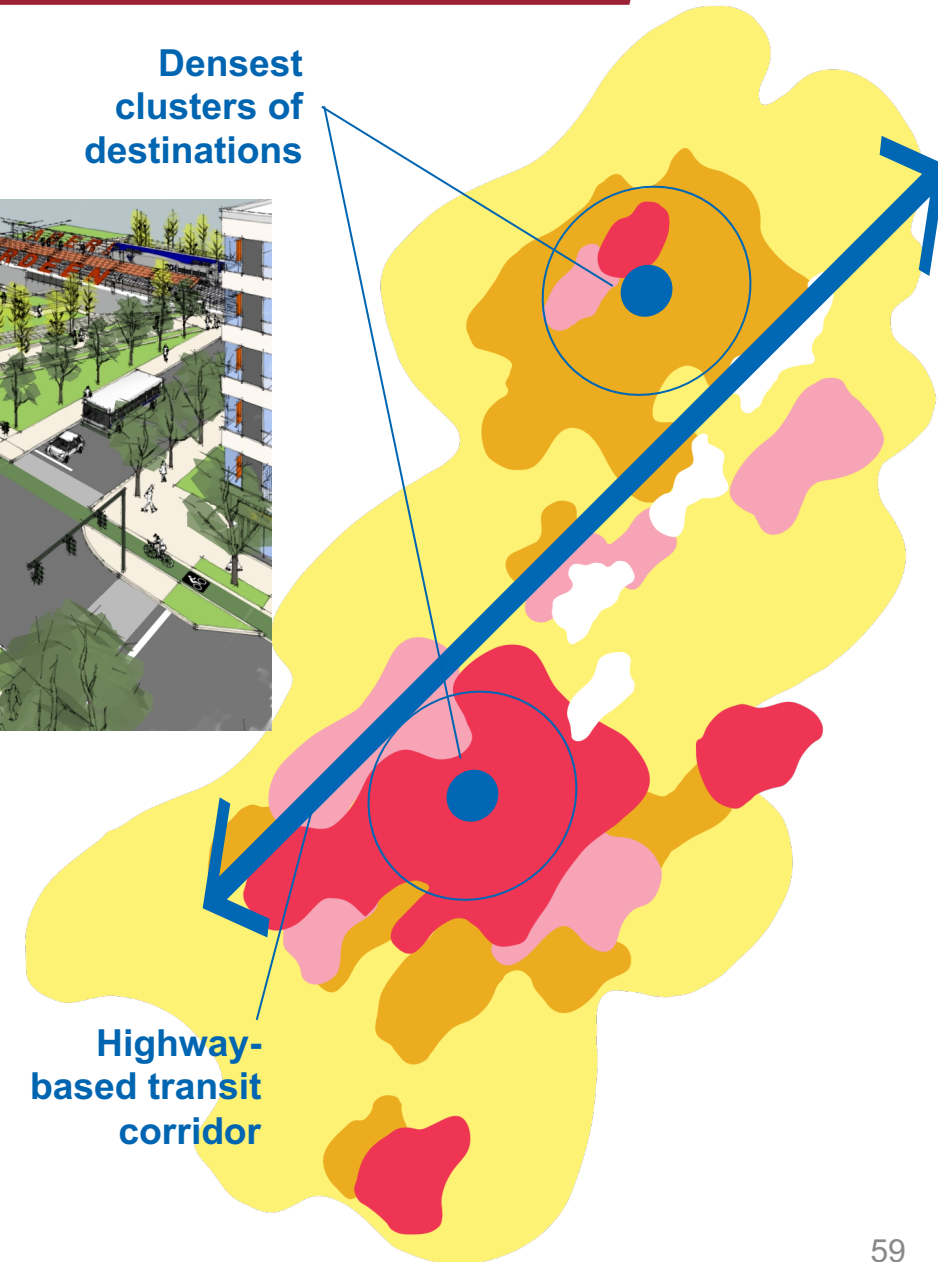


Transit Efficiently Connects Riders to Destinations

- 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



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

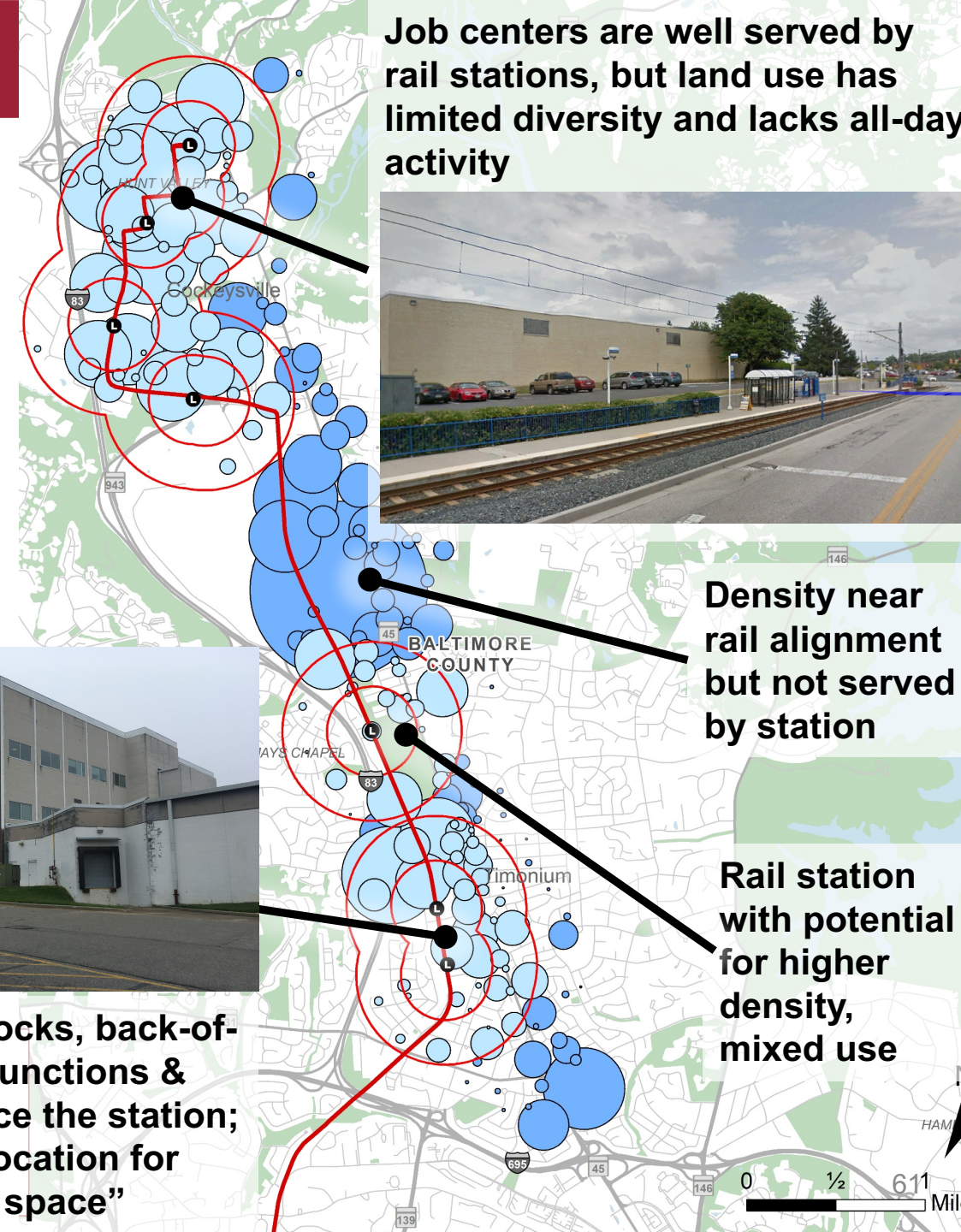
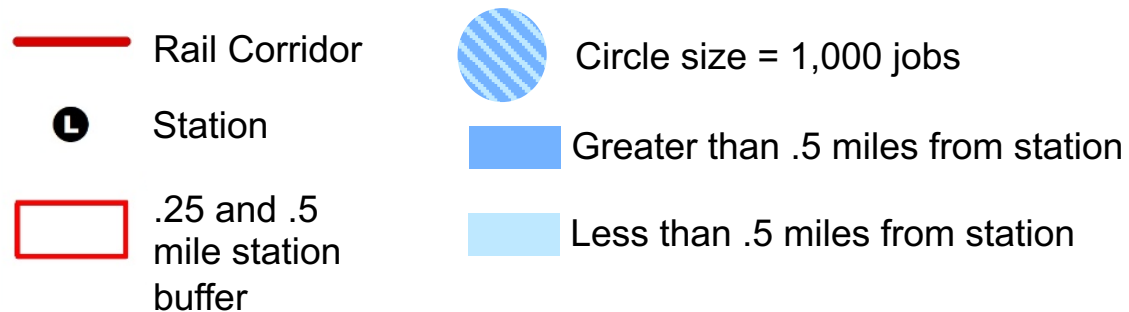


Development oriented to the pedestrian and transit user experience reinforces transit and business's economic goals

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



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

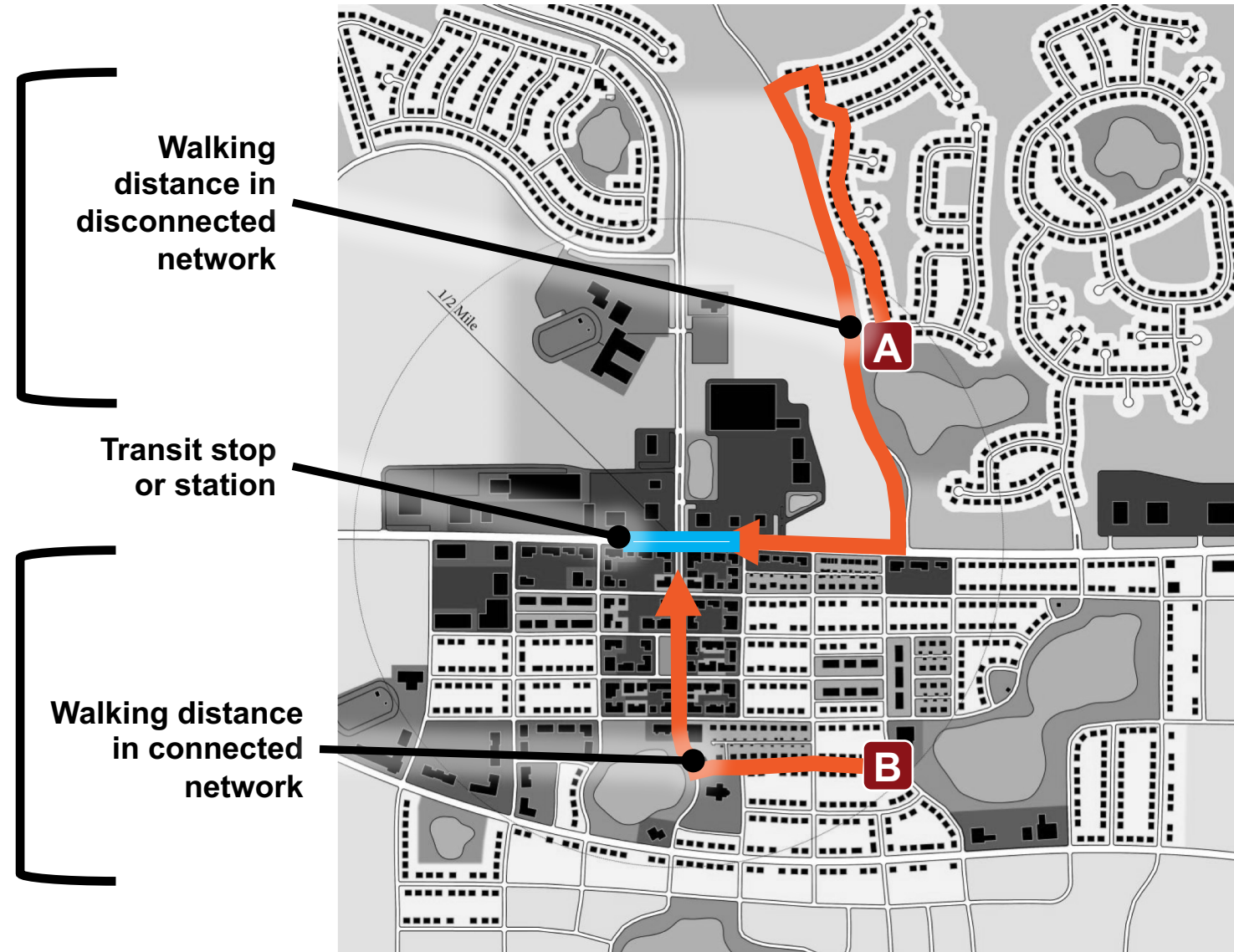
Rail station with potential for higher density, mixed use



Loading docks, back-of-business functions & parking face the station; potential location for "activated space"

Connected Street Network

- 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



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Arundel Mills

Major bus stop

Walking path via sidewalk: .7 Miles

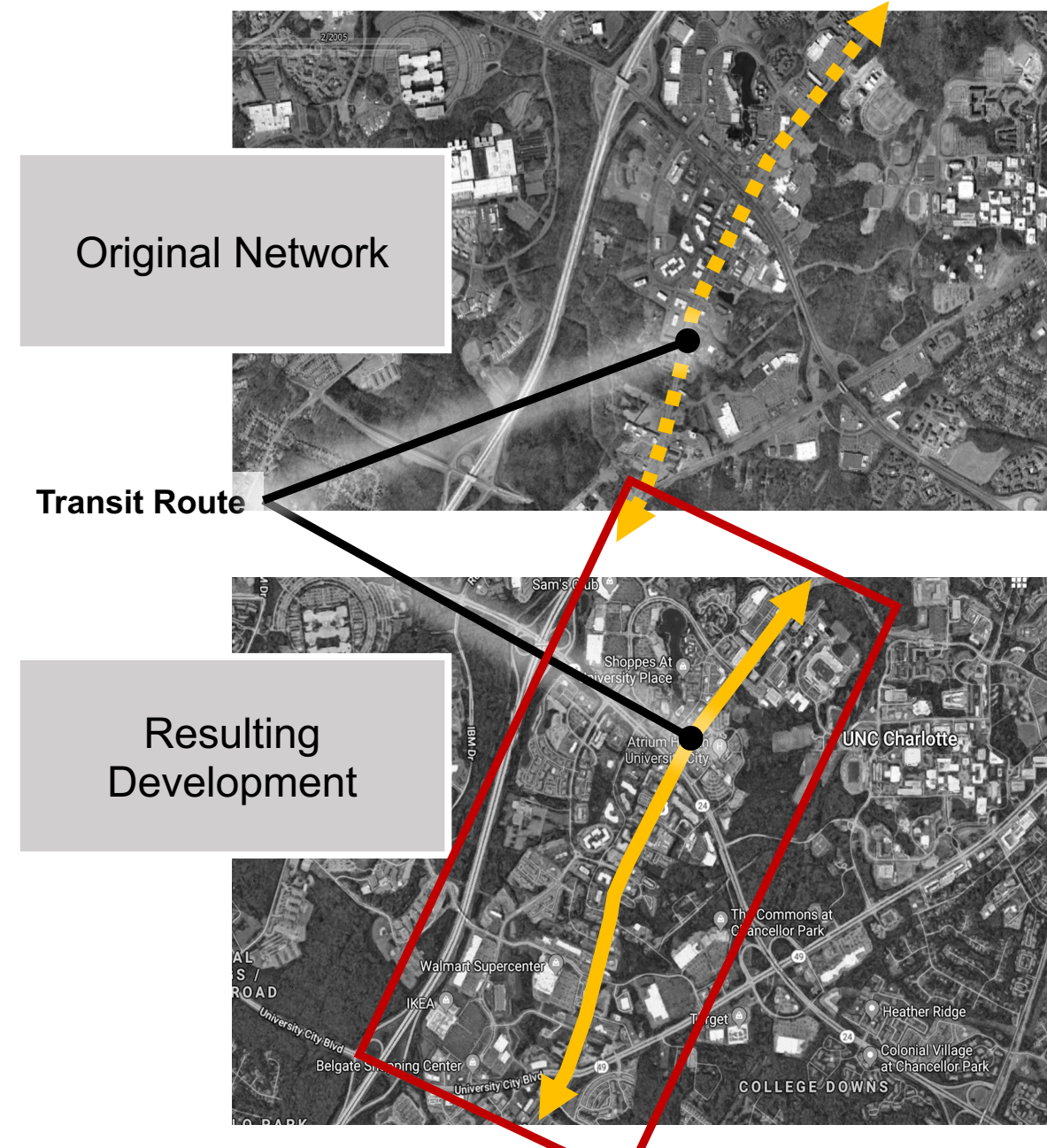
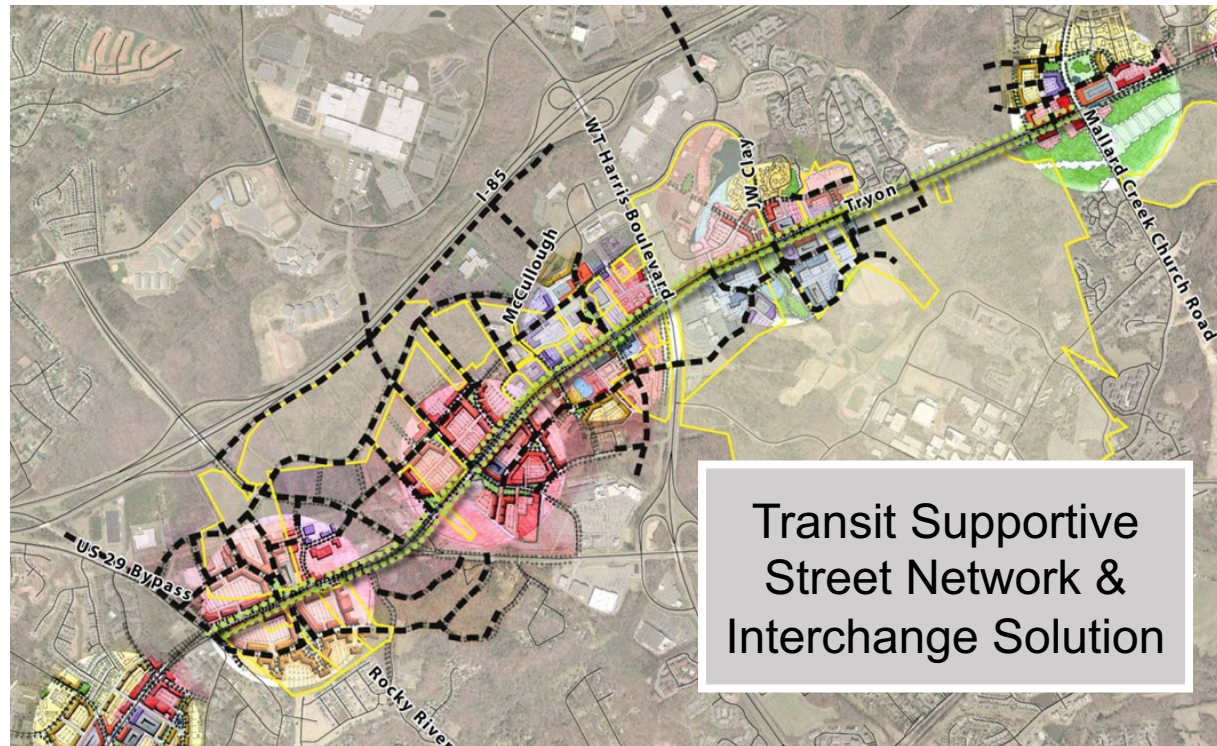
Walking path crossing parking lots and major roadways without formal accommodations: .3 miles

Dense housing



Transit-Ready Corridor: Charlotte Integrated Planning

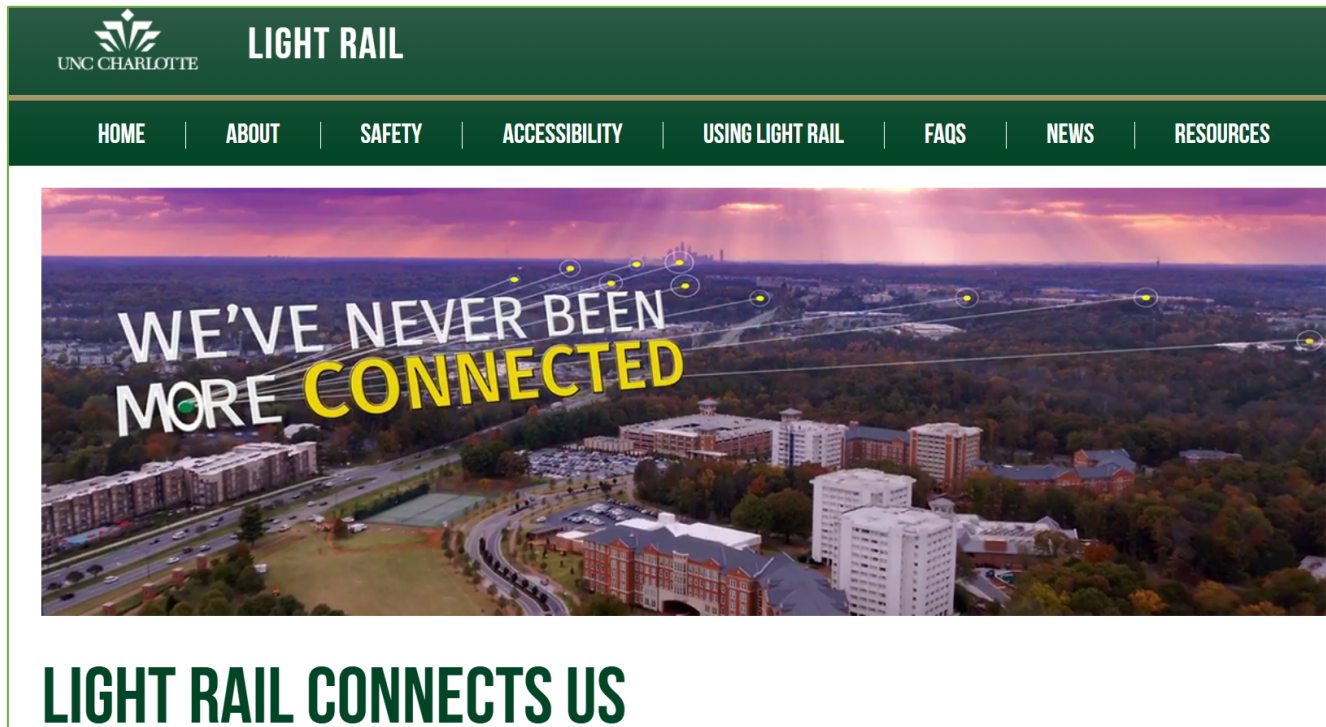
- Established Development Response Team (City, CATS, NCDOT, developers) to collaboratively create action plan, street network, address issues



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



Leveraging Transit Investment: Denver TOD partnership

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



West 10th Avenue & Osage Street in Denver



Pathways through Lincoln Homes 2006

Credit: Kittelson & Associates, Inc.



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

Leveraging Transit Investment: Denver TOD partnership

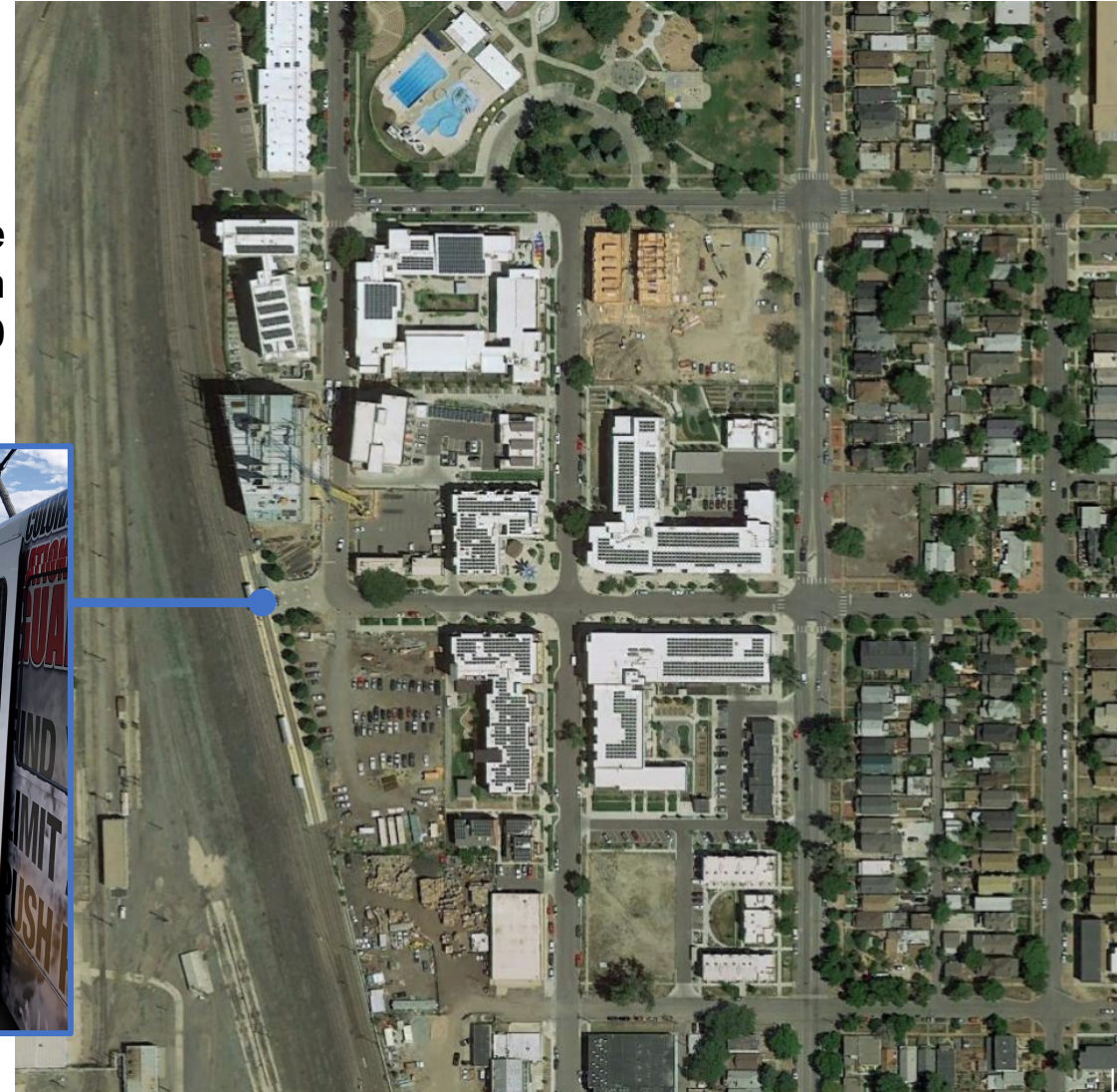
- Station area transformed through collaborative investments:

- ✓ 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)

10th & Osage
Station in
Mariposa 2019



Credit: Kittelson & Associates, Inc.



Credit: Google Earth

Leveraging Transit Investment: Denver TOD partnership

Development built:

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



Leveraging Transit Investment: Denver TOD partnership

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?



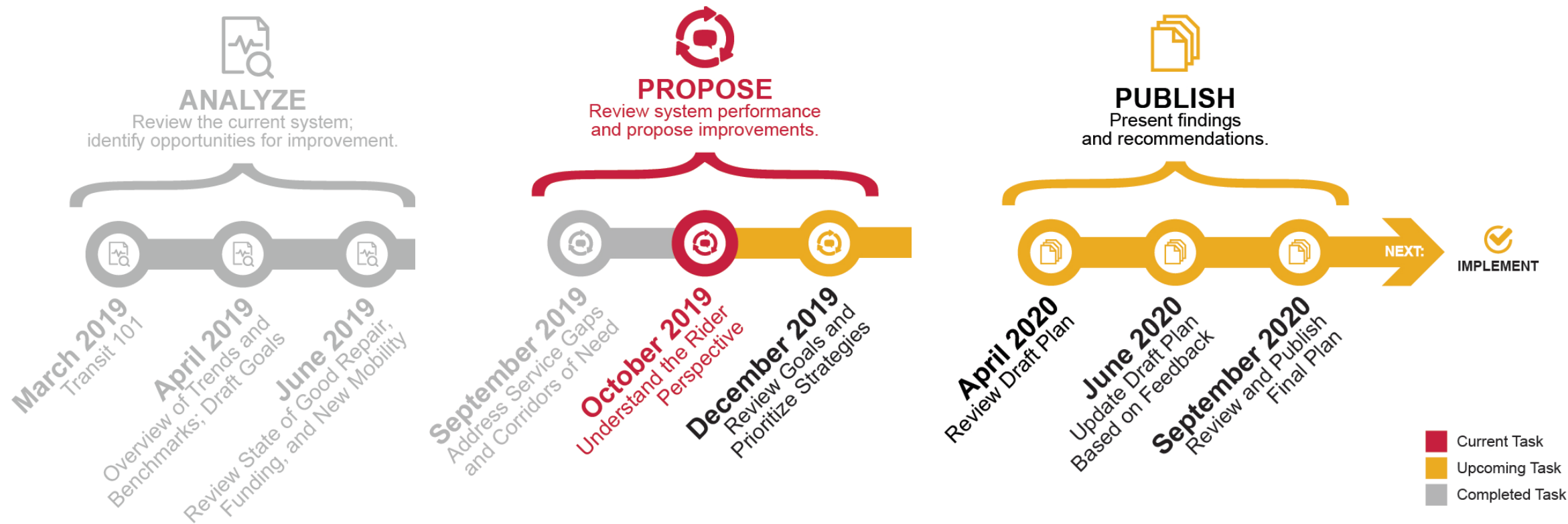
PUBLIC COMMENT



NEXT STEPS

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

Schedule Look-Ahead



Next Commission Meeting

December 13, 2019

9 AM – 12 PM

Charles L. Benton Building

417 E. Fayette St.

8th Floor

Phoebe B. Stanton Board Room

Baltimore, Maryland





CLOSE

Mike Kelly, Executive Director
Baltimore Metropolitan Council