

TRANSPORTATION FORUM

Hosted by
Calvin Ball, Howard County Executive



Monday, December 2, 2019

7:00 - 8:30 P.M.

Elkridge Fire Station
5700 Rowanberry Drive
Elkridge, MD 21075
[Transit: RTA Route 409]

Joining Dr. Ball for this event will be:

Howard County Office of Transportation: *Bruce Gartner, Administrator*
Howard County Police Department: *Captain Chris Neubauer*
Howard County Department of Public Works: *James M. Irvin, P.E., Director*



Topics Include:

Transportation Safety, Complete Streets Implementation,
Bike and Pedestrian Master Plans, Highway Traffic and Maintenance,
RTA Service Improvements, Long Range Transportation Plans,
Transportation Priority Requests to MDOT



Jason Quan,
Transit Manager



Chris Eatough,
Bicycle and Pedestrian
Coordinator




Kris Jagarapu,
Chief, Bureau of
Highways



Cristin Tolen,
General Manager,
RTA



David Cookson,
Transportation
Planning Manager

Registration begins at 6:30 p.m. Presentations and question and answer session begin at 7:00 p.m.  Follow live on Facebook @HoCoGovExec
for more information contact the Howard County Office of Transportation at 410-313-4312 or transportation@howardcountymd.gov



TRANSPORTATION FORUM

Howard County Department of Public Works
Howard County Office of Transportation
Howard County Police Department

Executive and Legislative

County Executive

County Council
Budget Approval



Advisory Formal

Office of Transportation

Bicycle Advisory Group

Transit & Pedestrian Advisory Group

Multimodal Transportation Board



RTA Commission
Riders Advisory Council

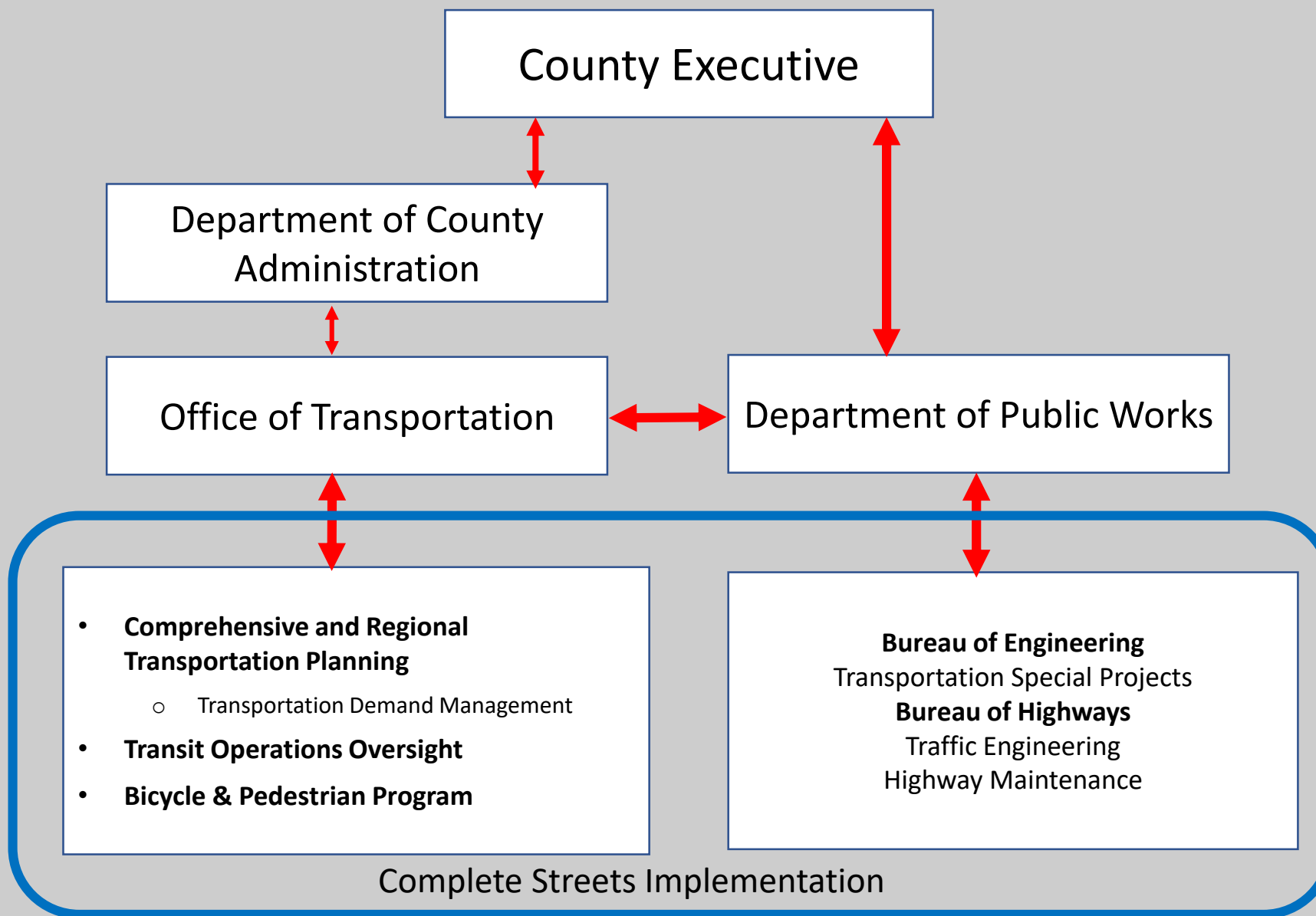
Stakeholder and Advocacy Groups

Bicycle Advocates of Howard County

Association of Community Services

Other Stakeholders

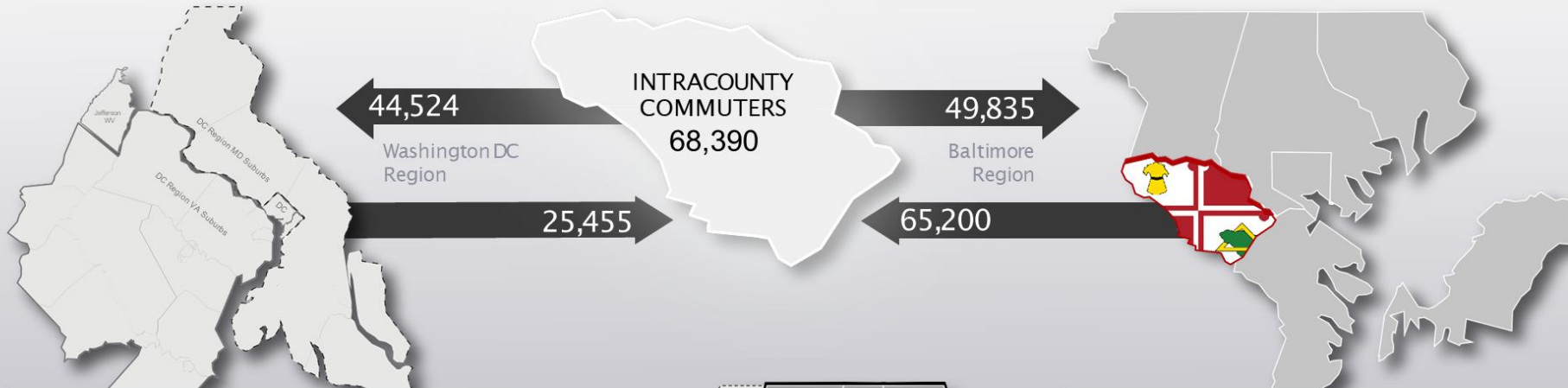
- Transportation Related/Interested
- Planning Board
 - Commission on Disabilities
 - Commission on Aging
 - Public Works Board
 - Environmental Sustainability Board
 - HCPSS Transportation



TRANSPORTATION FORUM

Howard County Department of Public Works
 Howard County Office of Transportation
 Howard County Police Department

Howard County Commuter Travel



DC Region	Out	In	Net Imp/Exp: (In - Out)
Alexandria city, Virginia	395	155	-240
Arlington County, Virginia	1,110	235	-875
Calvert County, Maryland	30	345	315
Charles County, Maryland	85	375	290
Culpeper County, Virginia	0	25	25
District of Columbia, District of Columbia	8,395	1,050	-7,345
Fairfax City, Virginia	50	0	-50
Fairfax County, Virginia	2,055	920	-1,135
Fauquier County, Virginia	0	10	10
Frederick County, Maryland	900	3,155	2,255
Jefferson County, West Virginia	15	85	70
Loudoun County, Virginia	185	245	60
Manassas City, Virginia	4	40	36
Montgomery County, Maryland	16,455	8,635	-7,820
Prince George's County, Maryland	14,765	9,870	-4,895
Prince William County, Virginia	80	200	120
Spotsylvania County, Virginia	0	75	75
Stafford County, Virginia	0	35	35
Subtotal - DCRegion	44,524	25,455	-19,069



Baltimore Region (Outside Howard)	Out	In	Net Imp/Exp (In - Out)
Anne Arundel County, Maryland	18,240	19,265	1,025
Baltimore City, Maryland	16,730	11,220	-5,510
Baltimore County, Maryland	13,025	23,540	10,515
Carroll County, Maryland	1,355	8,580	7,225
Harford County, Maryland	485	2,065	1,580
Queen Anne's County, Maryland	0	530	530
Subtotal - Baltimore Region (Outside Howard)	49,835	65,200	15,365
All Other Jurisdictions	1,409	3,980	2,571
Grand Total (Balt Reg, DC Reg, All Other)	95,768	94,635	-1,133

Source: U.S. Census Bureau, American Community Survey 2012-2016 5-year estimates. Special Tabulation: Census Transportation Planning Products Program

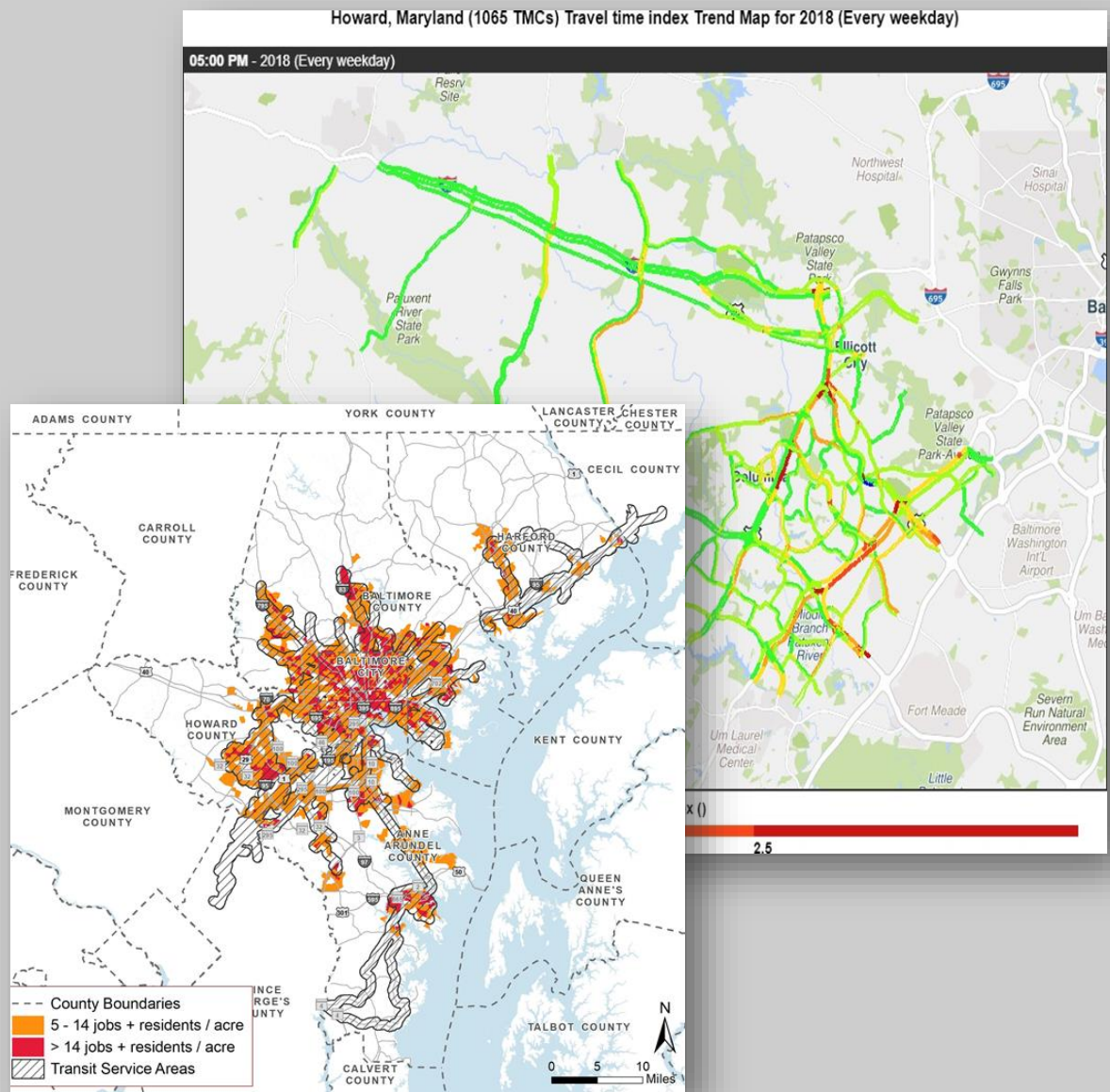
BALTIMORE METROPOLITAN COUNCIL
www.baltometro.org

November 2019/SKLB

COMPREHENSIVE TRANSPORTATION PLANNING: HOW WE PLAN

Demographic data and information that guide decision making:

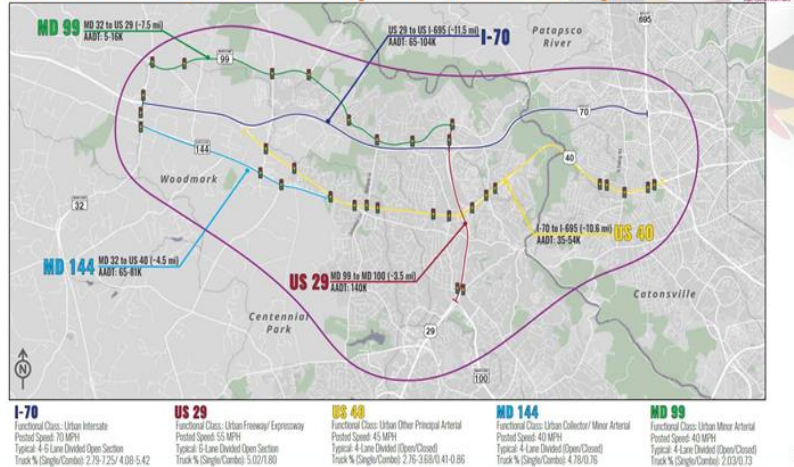
- Evaluate how and where people travel now
- Project how and where people will travel in the future
- Estimate impacts of crashes, congestion & freight movement
- Coordinate and partner with the State of Maryland, regional planning agencies, bordering counties and the private sector
- Reach out to residents, businesses and community groups for feedback and guidance
- Pursue policies and goals in PlanHoward 2030, local area plans, and those of County elected officials



COMPREHENSIVE - LONG RANGE TRANSPORTATION PLANNING

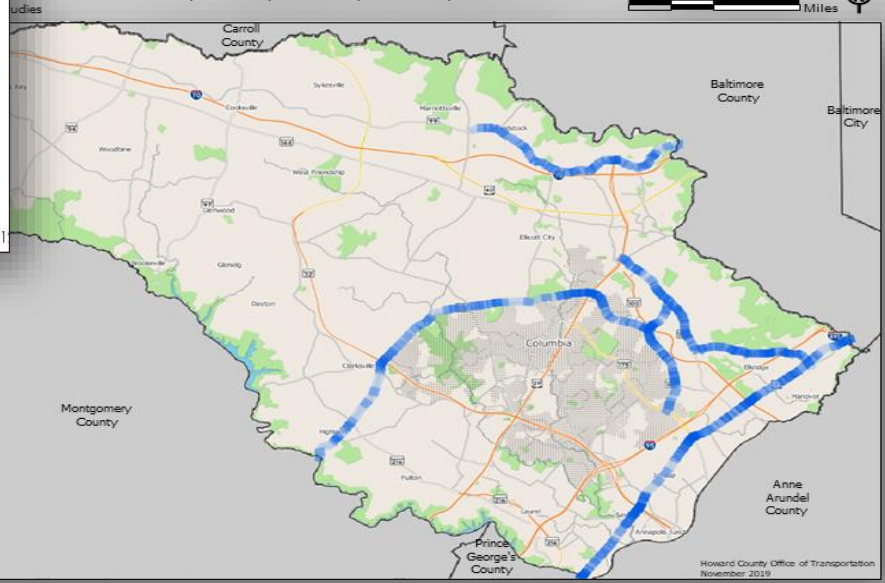
EXAMPLE PROJECTS

SYSTEM # 1 – OVERVIEW (AADT/TRUCKS%)



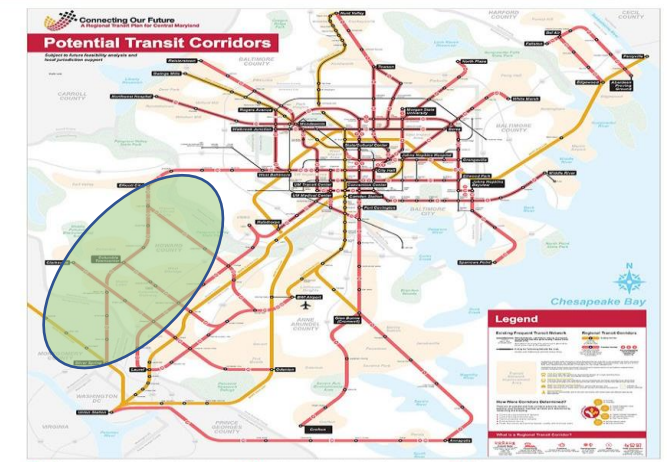
Howard County, in coordination with the Maryland Department of Transportation State Highway Administration (MDOT SHA), conducts corridor studies throughout the County to assess location-specific transportation challenges and opportunities.

Strategic Corridor Studies: US 1, MD 99, MD 103, MD 104, MD 108



Transportation System Management and Operations is an integrated approach to the planning, engineering, operations and maintenance of transportation systems.

Potential Regional Transit Corridors



- Morgan State Univ. to Port Covington via John Hopkins Univ. and Penn Station
- Glen Burnie to Port Covington via Brooklyn Park and the Center at Glen Burnie
- Glen Burnie to Annapolis via Pasadena and Stevens Park
- Glen Burnie to Crofton via Millersville
- Convention Center to Middle River via Harbor East and Canton
- Towson to Hunt Valley via Beltsville Square and Waverly
- Towson to Lutherville via Lutherville-Timonahuta and Cockeyville
- Towson to Port Covington via Hunt Valley
- North Plaza to LUM Transit Center via Hamilton and Courthouse Square
- White Marsh to John Hopkins Hosp. via Center and Berea
- Fallston to Aberdeen Proving Ground via Belair, Chanticleer and Aberdeen
- Mondawmin to Port Covington via UM Medical City and Grayhound/Chesapeake
- Rogers Avenue to City Hall via Walkbrook Junction
- Mondawmin to Reisterstown via Lutherville and Pikesville
- Mondawmin to Northwest Hospital via Lutherville and Pikesville
- Ellicott City to Convention Center via Columbia and Washington Hill
- Sparrows Point to Hopkins Bayview via Park and Davidsonville
- State Center to Hopkins Bayview via John Hopkins Hospital and Greenbelt
- Wallbrook Junction to Berea via Cogen State University and Station North
- Laurel to Halethorpe via Elridge and the Maryland Food Center
- Mondawmin to Hopkins Bayview via John Hopkins University and Chesapeake
- Halethorpe to LUM Transit Center via UMBC and C&D/C&D
- BWI Airport to Laurel via Annapolis Mills and Annapolis Junction
- BWI Airport to Columbia Towncenter via Fort Meade, Savage and Broken Land
- Ellicott City to Silver Spring via Columbia Mall and Burkhardtville
- Annapolis to Union Station via Park and Davidsonville
- Bel Air to Edgewood via Greenbelt and Bow Tie
- Ellicott City to BWI Airport via Elridge and Dorsey

Connecting Our Future
A Regional Transit Plan for Central Maryland • rtp.mta.maryland.gov

You Tell Us! Use Your Comment Card

The Regional Transit Plan for Central Maryland is developing and guiding public transportation goals for the next 25 years, addressing traditional transit, and exploring new mobility options and technology to meet regional transit needs.

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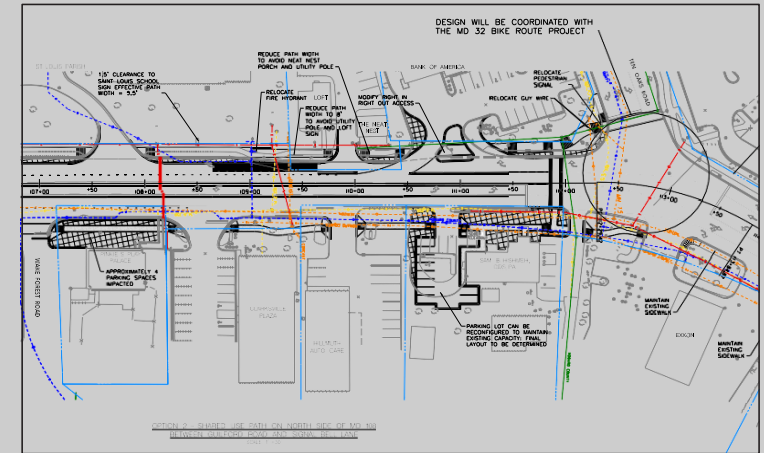
Examples of Local Transportation Capital Projects in Howard County



Oakland Mills Road



Foundry Street Pathway



Clarksville Pike Streetscape



HCC Connector



RTA Transit Bus



RTA Mobility Van



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Howard County Complete Streets Policy - Passed by Council Resolution 120-2019 on 10/7/19







What is a complete street?

Complete streets are safe streets for all. They vary in different places and contexts, but they often include some or all the elements below.



<p>Sidewalks</p> <p>Facilitate travel for all users, including people in wheelchairs, with level, unobstructed, and wide walkways</p>	<p>Curb ramps</p> <p>Accommodate wheelchairs, baby strollers, and bicycles with smooth transitions between sidewalks and roadways</p>	<p>Roadway</p> <p>Manage travel speed, enhance safety, and provide predictability</p>	<p>Crosswalks</p> <p>Direct pedestrians to preferred, clearly marked street crossing locations and increase driver awareness</p>	<p>Grass buffer</p> <p>Separate the street and sidewalk and provide space for trees, light posts, and signs</p>
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How does the Howard County Complete Streets Policy improve our streets?

<p>Safety</p>  <p>Ensures our streets are designed and maintained with safety for all as the top priority. Includes pedestrians, cyclists, transit riders and drivers.</p>	<p>Coordination</p>  <p>Brings all relevant agencies together, ensures they are all contributing and pulling in the same direction. Includes Howard County, State Highway Administration and developers.</p>	<p>Equity</p>  <p>Prioritizes transportation improvements in communities with vulnerable populations. Factors include poverty, racial minorities, limited English proficiency, disabled, elderly and carless.</p>	<p>Public Input</p>  <p>Gives the community a strong voice and provides transparency throughout the entire process, including the early concept stages.</p>
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- Existing Bike Facility
- Marc Station
- Existing Trails & Pathways (HC, CA, & Others)

- On Road Recommendations**
 Bike Lanes & Sharrows
- Short Term
 - Mid Term
 - Long Term

- Recommend Pathways or Protected Bike Lanes**
- Construct New

- Spot Recommendations**
- Short Term
 - Mid Term
 - Long Term



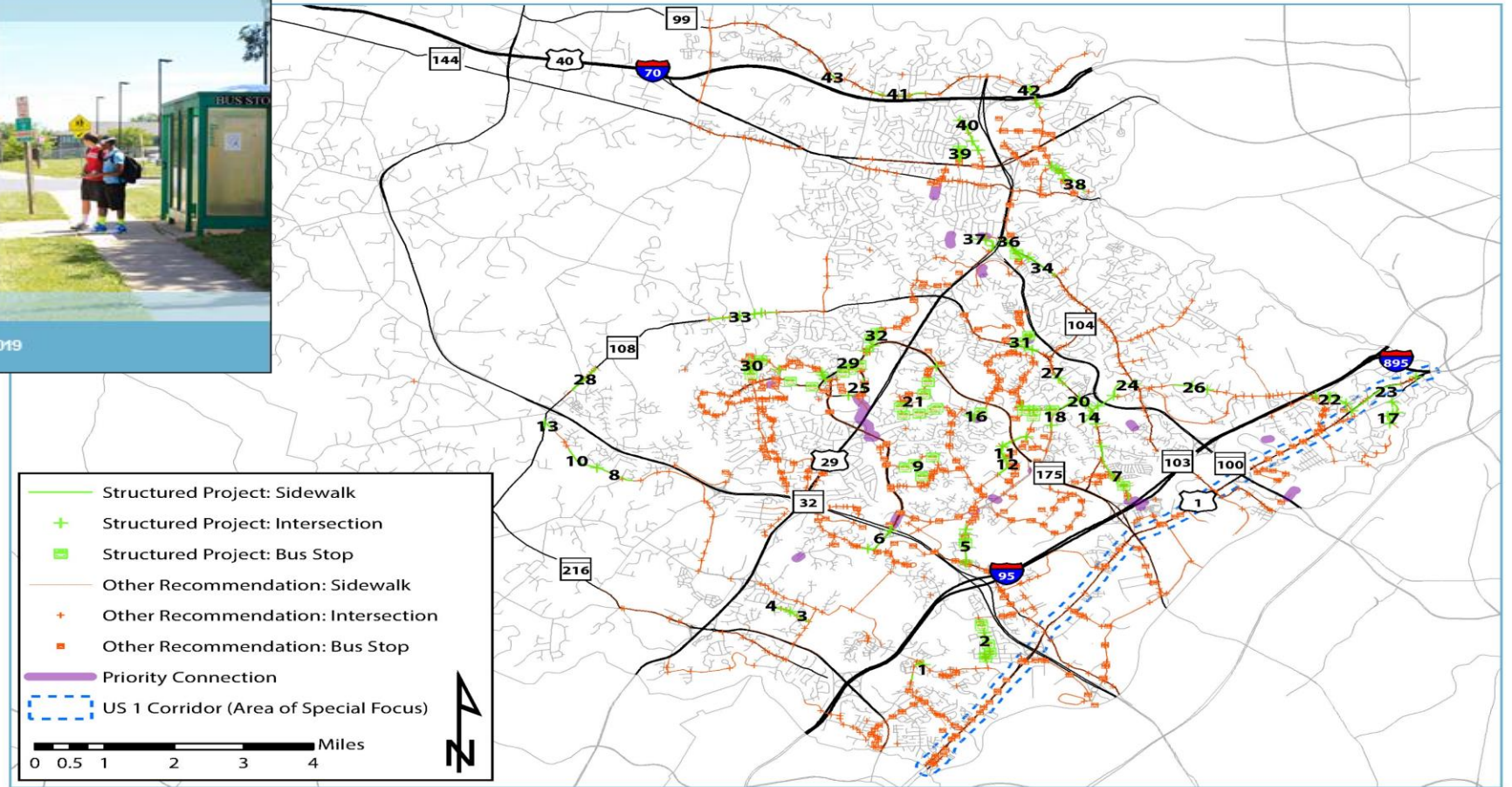
WALK HOWARD

— moving forward —



Howard County Pedestrian Master Plan | 2019

www.walkhoward.org



TRANSPORTATION FORUM

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Over 35 Active Bicycle and Pedestrian Projects – Estimated Construction Value > \$40 million

Project Name	Facility Type	Construction Cost	Capital Project	Planning	Design	Land Acquisition	Construction	Complete	Anticipated Construction Start
Complete: Final Report of the US 1 Safety Evaluation	Mixed	N/A	UPWP						FY2019
Complete: Accessible Connection between North Laurel Community Center and MultiService Center	Sidewalks	\$10K to \$250K	C0332						FY2019
Construction of North Laurel Connections	Mixed	\$1M to \$3M	K5066; J4248						FY2020
Design of Savage-Area Complete Streets	Mixed	\$10K to \$250K	J4248						FY2020
Construction of the Twin Rivers Pathway	Shared-Use Pathway	TBD	Developer						FY2020
Construction of Oakland Mills Rd in the Guilford Community (Phase 1, south of Guilford Elementary School)	Mixed	\$1M to \$3M	J4207						FY2020
Construction of the Stephens Road Bridge Replacement	Sidewalks, Bike Lanes	More than \$3M	J4202						FY2020
Construction of the Foundry Street Pathway	Sidewalks	\$10K to \$250K	J4248						FY2020
Construction of Whiteacre Road	Bike Lanes	\$250K to \$1M	C0287						FY2020
Construction of Merriweather District Pathways	Shared-Use Pathway	TBD	Developer						FY2020
Construction of the Vollmerhausen Road Pedestrian Refuge Island and Crosswalk at Castleford Drive	Crosswalk	\$10K to \$250K	T7088						FY2020
Complete: HCC Connector Pathway	Mixed	\$10K to \$250K	K5066						FY2020
Complete: Oakland Mills Road, Sybert, and Lynn Lane sidewalk gaps filled	Sidewalks	\$10K to \$250K	K5061						FY2020
Complete: Bike Lanes on Hickory Ridge Road, Summer Sunrise Drive, Ducketts Lane, and Levering Avenue Sharrows	Bike Lanes	\$10K to \$250K	K5066						FY2020
Complete: Columbia Road/Kingscup/Hemlock Cone roundabout with new crosswalks	Roundabout and Crosswalks	\$250K to \$1M	T7106						FY2020
Complete: Stevens Forest Road/Farewell Road/Night Street Hill roundabout with new crosswalks	Roundabout and Crosswalks	\$250K to \$1M	T7106						FY2020
Planning of Countywide Bike Wayfinding	Wayfinding	\$10K to \$250K	K5066						FY2021
Planning of US 1 at Brewers Ct and Doctor Patel Dr	Crosswalks	\$1M to \$3M	C0285						FY2021
Construction of Frederick Road Sidewalks	Sidewalks	\$250K to \$1M	K5061						FY2021
Construction of the Cedar Lane Pathway	Shared-Use Pathway	\$250K to \$1M	K5066						FY2021
Design of the Dobbin Rd Pathway Phases I, II, and III	Shared-Use Pathway	More than \$3M	K5066						FY2021
Design of Doncaster Road Sidewalks	Sidewalk	\$10K to \$250K	K5065						FY2021
Design of US 1 at Guilford and Rowanberry	Mixed	\$1M to \$3M	K5066; C0285						FY2021
Paving of the Patuxent Branch Trail	Shared-Use Pathway	\$1M to \$3M	N3963						FY2021
Construction of Rogers Avenue Sidewalks	Sidewalks	\$1M to \$3M	J4170						FY2021
Planning of the Stevens Forest Road/Broken Land Parkway Intersection	Bike Lanes and Sidewalks	TBD	T7107						FY2022
Design of the South Entrance Trail	Shared-Use Pathway	More than \$3M	T7107						FY2022
Design of Sanner Road	Bike Lanes	\$1M to \$3M	J4230						FY2022
Design of Montgomery Road Sidewalks	Sidewalks	\$250K to \$1M	K5061						FY2022
Design of the Clarksville/River Hill Streetscape Pathway	Mixed	More than \$3M	T7108						FY2023
Design of HS#13 access (Guilford Road/Mission Road sidewalks)	Sidewalk	\$250K to \$1M	Various						FY2023
Planning for Complete Streets on Columbia Road, Oakland Mills Road, and Tamar Drive	Mixed	\$1M to \$3M	K5066						TBD
Planning for the Hickory Ridge Bike Corridor	Mixed	TBD	K5066						TBD
Planning for the Robert Fulton Drive Pathway	Shared-Use Pathway	\$1M to \$3M	K5066						TBD
Design of the Broken Land Parkway/MD 32 Park & Ride Access Project	Shared-Use Pathway	\$250K to \$1M	K5066						TBD
Planning of School Route Pedestrian Improvements	Sidewalks and Crosswalks	TBD	K5035						TBD



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STRATEGIES FOR INCREASING TRANSITRIDERSHIP

REPLACE OLDER BUSES

Objective: Improve service reliability and on-time performance

Recent Investment			
Fiscal Year	Number	Type of Vehicle	Cost
2018	7	Transit Bus	\$2,600,000
2019	6	Transit Bus	\$2,200,000
2020	2	Transit Bus	\$745,00
2020	5	Transit Van	\$300,000
2021	3	Transit Bus	\$1,200,000
TOTAL			\$7,045,000

IMPROVE BUS STOPS

Objective: Improve condition, amenities and access at RTA transit stops

- Spent \$675,000 since 2017 improving + 80 bus stop locations
- Anticipate improving 50 locations in 2020
- Coordinate with complete streets effort

Bus Stop Example Projects:

US 1 at Port Capital

Before



After



- Relocated stop
- Installed ADA landing pad
- Installed sidewalk /curb ramp connection
- Installed passenger shelter

Guilford Road at US 1

Before



After



- Relocated stop
- Installed ADA landing pad
- Installed sidewalk with curb ramp connection

STRATEGIES FOR INCREASING TRANSIT RIDERSHIP

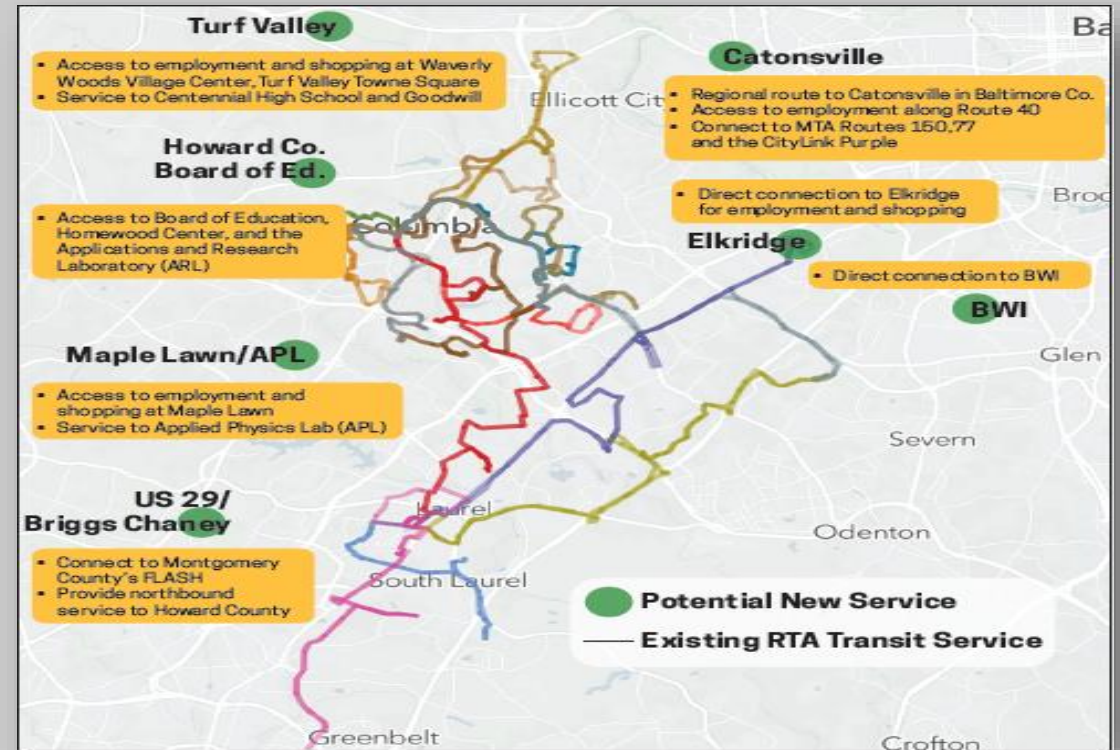
TRANSIT DEVELOPMENT PLAN SERVICE IMPROVEMENTS PHASE 1 (FY2019 - FY2020)

Objective: Increase transit usage by providing more frequent and weekend service

- Eliminated fixed route fares for seniors & individuals with disabilities
- Added over 5,600 service hours
- Improved connections to jobs
- Increased frequency of service to 30 minutes and 1 hour
- Added 3 new routes to provide more direct connections
- Implemented NEW or EXPANDED Sunday service on 6 routes
- Added new stops to provide more access
- Adjusted routes and schedules to improve on-time performance
- Established partnership with the Howard County Public School System

TRANSIT DEVELOPMENT PLAN SERVICE IMPROVEMENTS PHASE 2 (FY2021 - FY2024)

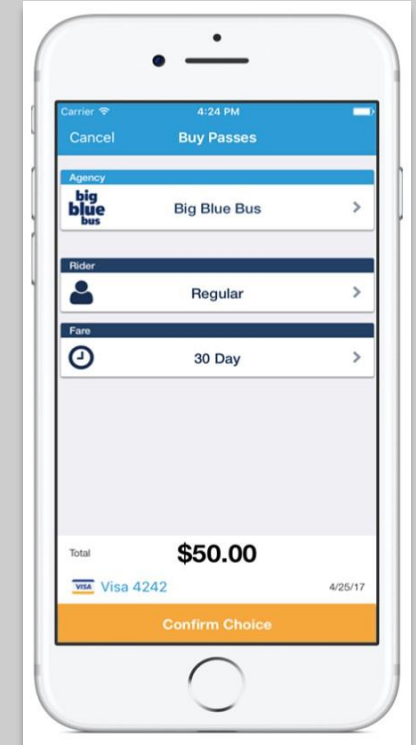
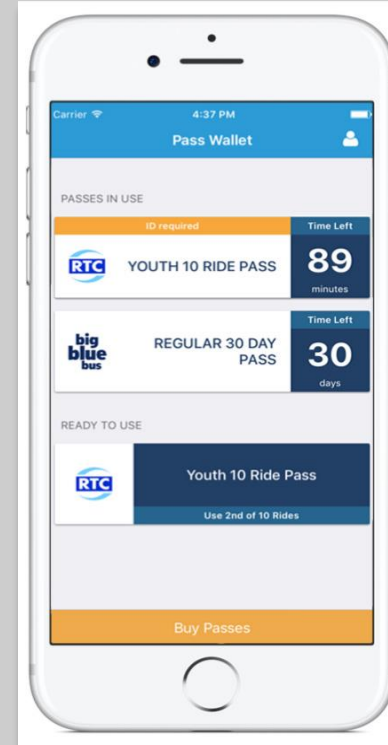
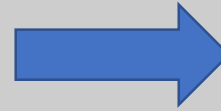
Objective: Increase transit usage by expanding service to unserved and under-served areas and connecting to MTA, Ride-On, and Metro services



MOBILE PAYMENT - Added Convenience (Spring 2020)

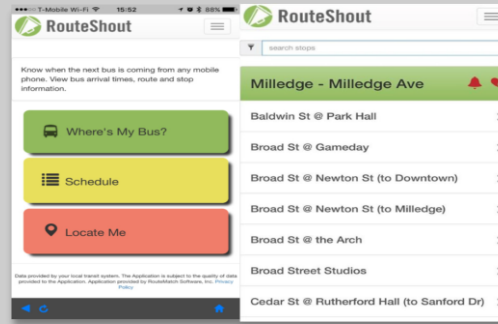
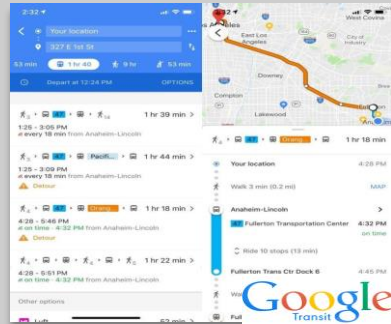
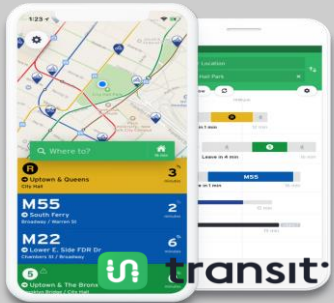
Objective: Improve the ease and convenience of purchasing and paying transit fare on RTA

- Removes the need for passengers to carry cash
- Keeps tickets organized and easily accessible
- Allows easy purchase of tickets online for others
- Increases speed of passenger boarding
- Reduces the cost of fare collection



BUS INFORMATION ON MOBILE APPS (Spring 2020)

Objective: Improve trip planning capabilities and customer experience



TRANSPORTATION FORUM

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Howard County Police Department

Transportation Demand Management

is moving people, not vehicles, creating a more efficient use of our roadways. This results in less traffic congestion, better air quality, and even happier, healthier communities.

That's a long way of saying it's about providing and encouraging **Transportation Options** for those who want them.



WHAT IS TRANSPORTATION DEMAND MANAGEMENT?



INCENTRIP:
Earn rewards for smart commuting

TRAVEL TRAINING:
Learn the skills to travel safely and independently on fixed-route public transportation

GUARANTEED RIDE HOME:
Get a free and reliable ride home when life's unexpected emergencies arise

BIKE TO WORK DAY:
Join us in Downtown Columbia for the largest pit stop in the Central Maryland region

RESOURCES & EVENTS



The Downtown Columbia Plan includes TDM as one element of the overall approach to managing growth. We've partnered with the Downtown Columbia Partnership to implement a TDM program in DTC.

DOWNTOWN COLUMBIA



TDM BUILDING BLOCKS



TRANSPORTATION FORUM

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Howard County Office of Transportation
Howard County Police Department


Department of Public
Works
James Irvin, Director

To advance the quality of life for our community by providing
exceptional level of public service





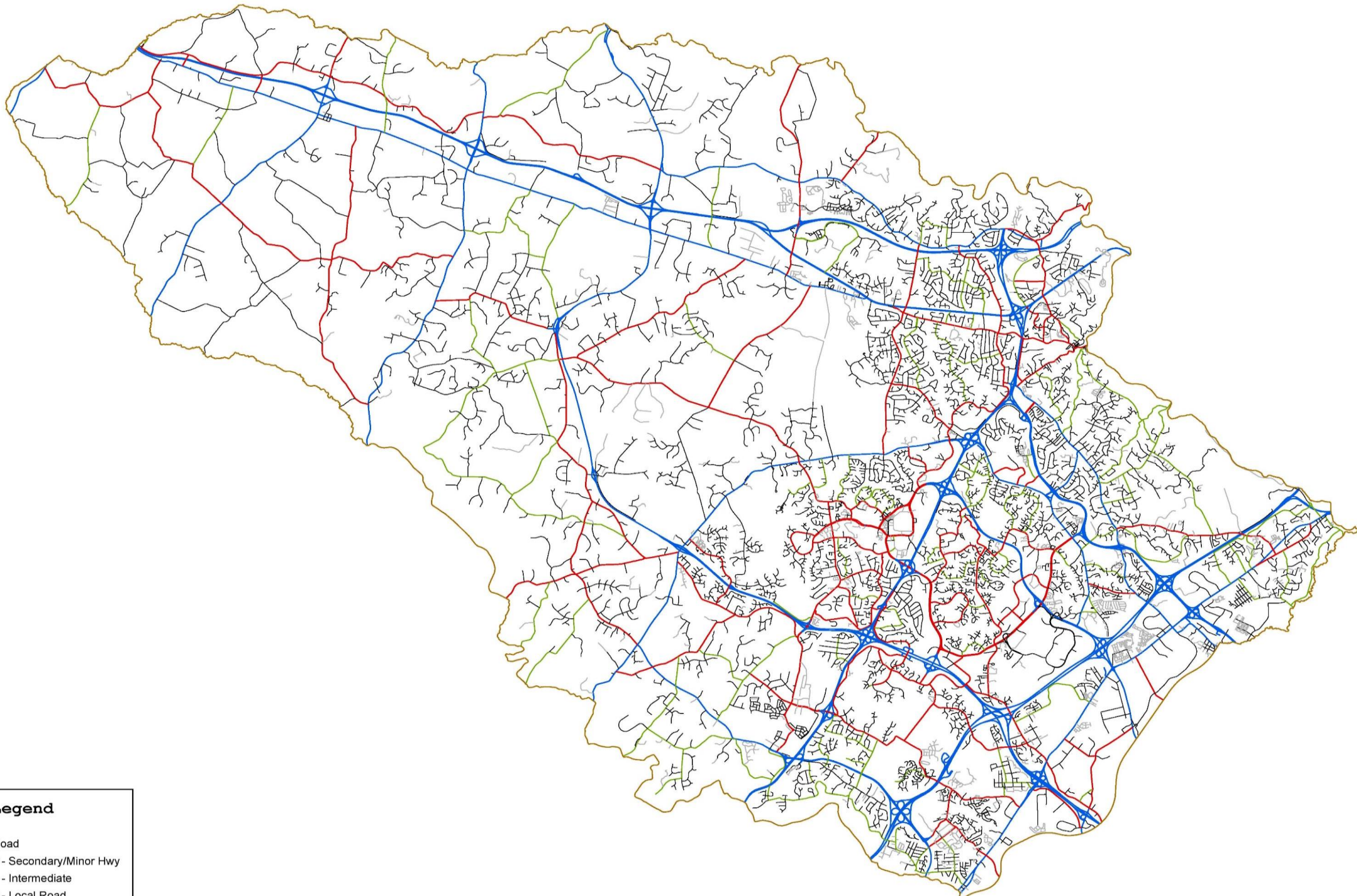
DPW – Bureaus

- ▶ Engineering
 - ▶ Environmental Services
 - ▶ Facilities
 - ▶ Highways
 - ▶ Utilities
- 

Roadway System

- ▶ 1,080 centerline miles of roadway
 - ▶ Arterial, Collector and Local Streets
- ▶ Approximately 3,600 County owned and maintained roadways
- ▶ Infrastructure in the Public Right of Way
 - ▶ 900 miles of sidewalk
 - ▶ 300,000 street trees
 - ▶ 31,000 street signs
 - ▶ 100 traffic signals
 - ▶ 7,950 street lights





Legend

- State Road
- County - Secondary/Minor Hwy
- County - Intermediate
- County - Local Road

Highway System Preservation Program

- All roads inspected every two years
- Assigned a rating based on their condition
- Programmed for resurfacing/maintenance
- Average life of 15 years before repairs are needed
- Currently averaging \$5M in funding



Capital Budget Program

- ▶ Over 90 approved Capital Projects
 - ▶ Roadway Projects
 - ▶ Intersection Improvements Program
 - ▶ Bridge Replacement Program
 - ▶ Drainage Projects
 - ▶ Sidewalk Projects
- ▶ Complete Streets Implementation
 - ▶ Resurfacing Program
 - ▶ Capital Budget



2019 Road Resurfacing Projects

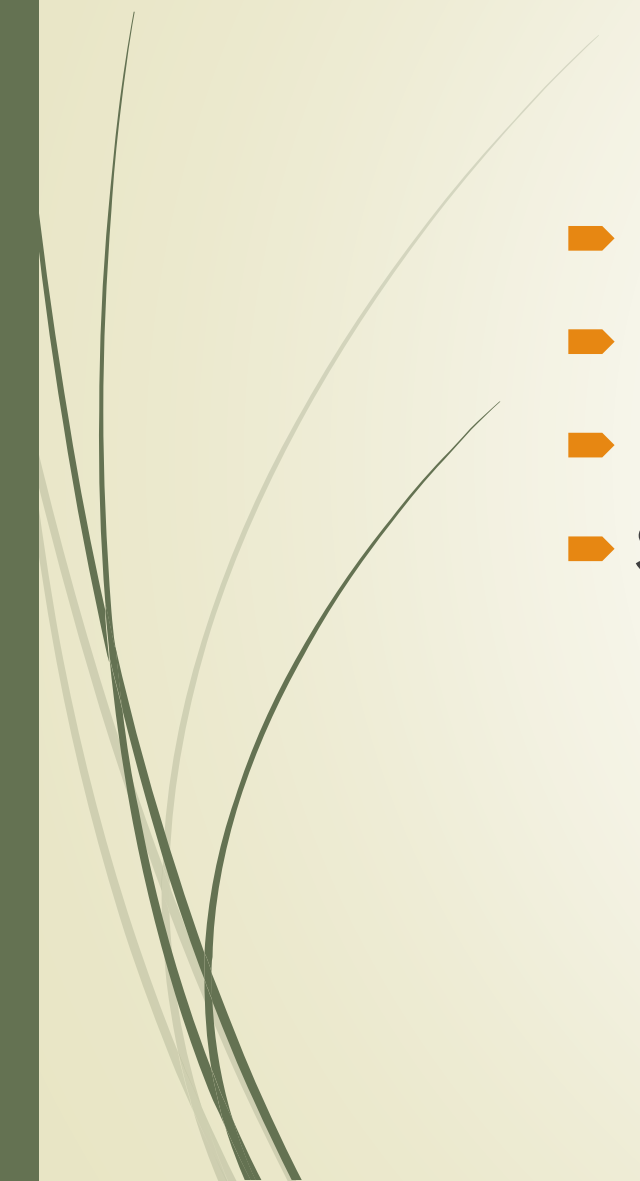
- ▶ 39.15 Lane miles of Resurfacing
- ▶ 12.52 Center line miles of Micro Surfacing
- ▶ 8773 tons of patching
- ▶ 43 ADA ramps upgraded







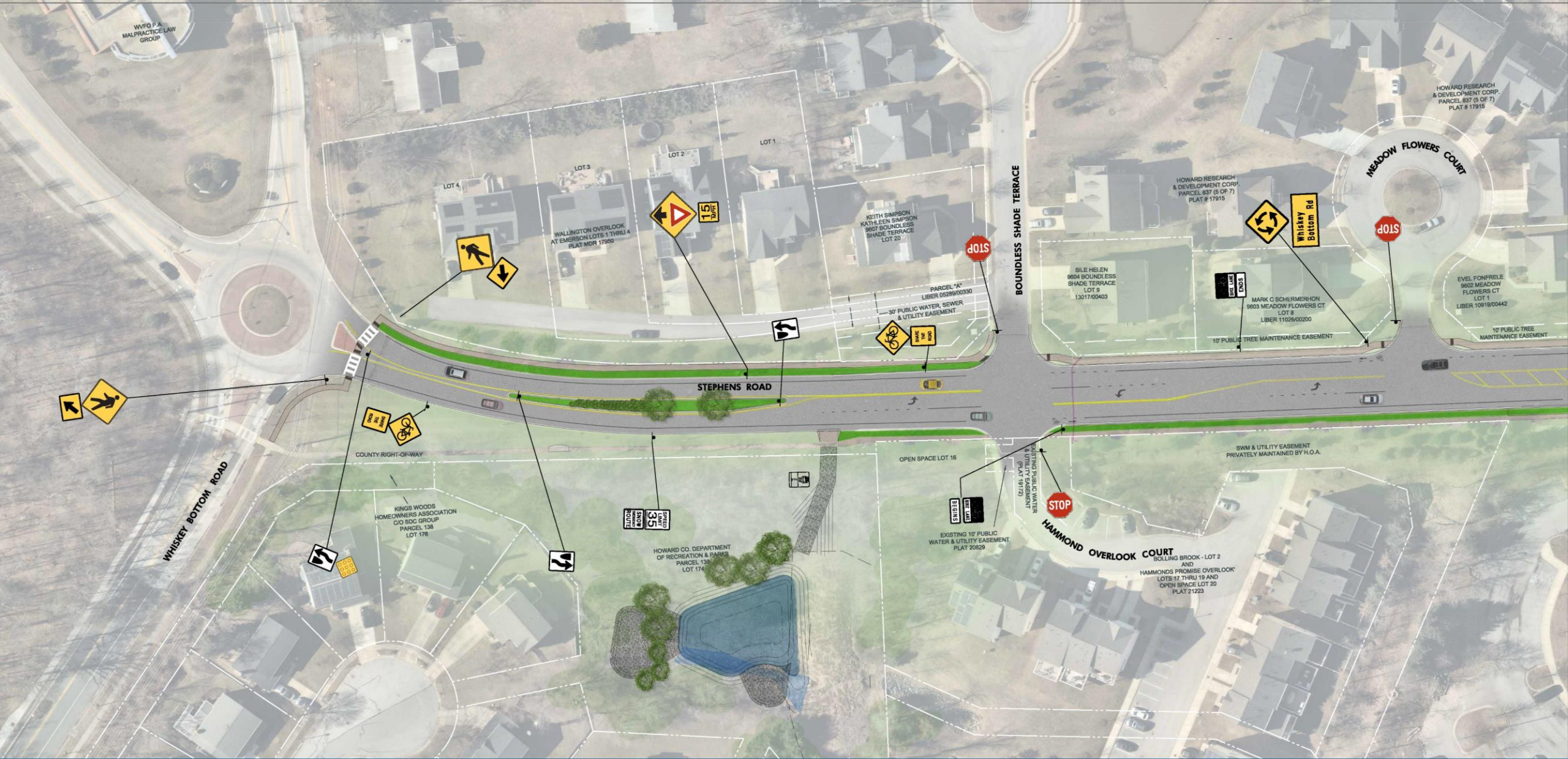
Implementation Challenges

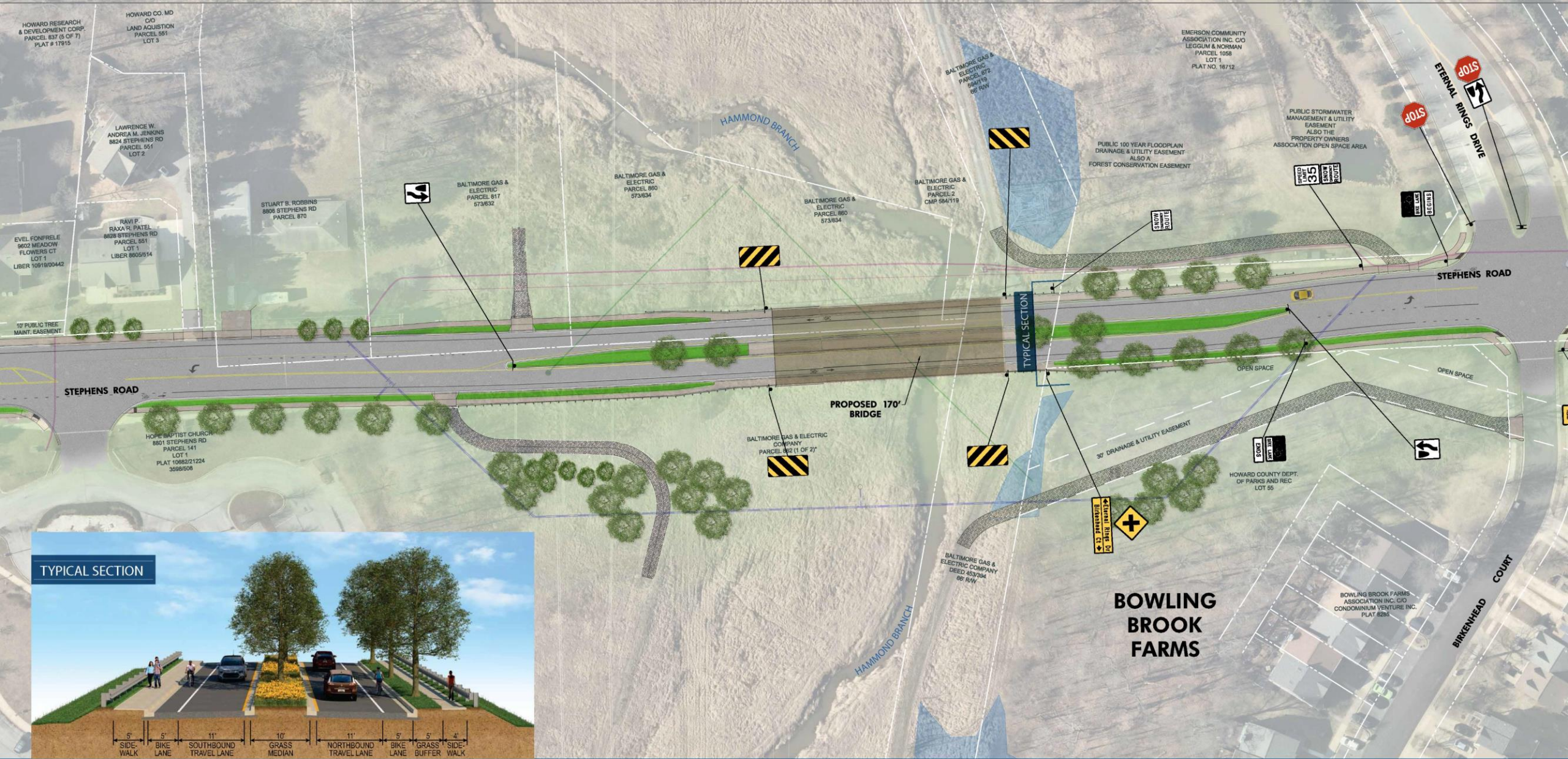
- ▶ Funding
 - ▶ Land acquisition
 - ▶ Utility relocation
 - ▶ Storm water management
- 

Stephens Road Bridge Replacement Project

- Bridge in the flood plain
- Missing sidewalks
- No shoulders

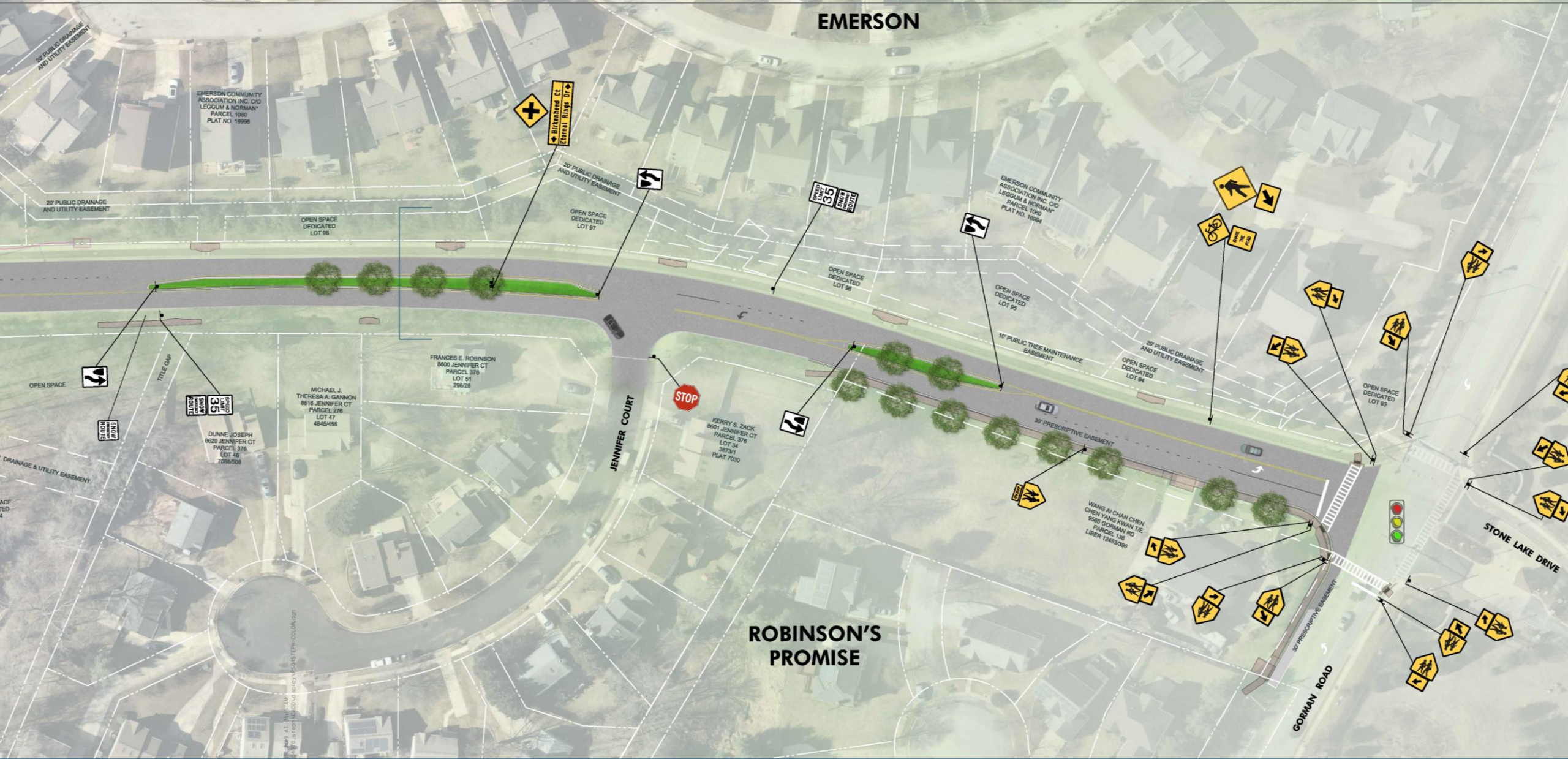






EMERSON

ROBINSON'S PROMISE



Foundry Street Project







SAVAGE MILL
ESTABLISHED 1832

ROAD WORK



SAVAGE MILL
ESTABLISHED 1872

FIRST
BAPTIST
CHURCH
←

Ave of Mhair
The Mhair
Lillian Mhair

ROAD WORK AHEAD



NO PARKING
ANY TIME
→

LAUNDRY ST

WTA



BOUNDARY



STOP

PARTIAL
PARKING

GENERAL
PAVING &
CONCRETE



Foundry St

ONE WAY

ROAD WORK
1500 FT

Hampshire
Art Gallery



503 LAUREL MALL





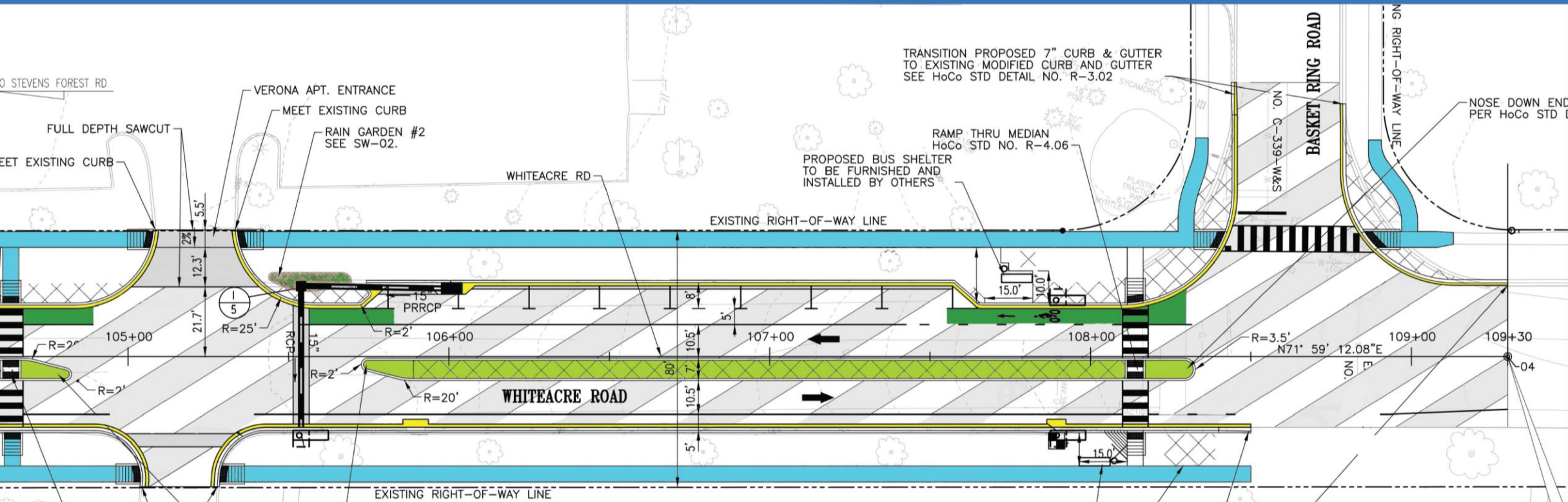
RTA
 **BUS STOP**

503 LAUREL MALL



Complete Streets Improvements





TRANSITION PROPOSED 7" CURB & GUTTER
 TO EXISTING MODIFIED CURB AND GUTTER
 SEE HoCo STD DETAIL NO. R-3.02

RELOCATE EXISTING
 BUS SHELTER
 TRANSITION PROPOSED 7" CURB & GUTTER
 TO EXISTING MODIFIED CURB AND GUTTER
 SEE HoCo STD DETAIL NO. R-3.02

LIMIT OF WORK
 STA. 109+30
 WHITEACRE RD



Complete in 2019



White Acres Connectivity to Bus Shelter

Rain Garden for SWM





ADA Ramps Cross walks and
Medians

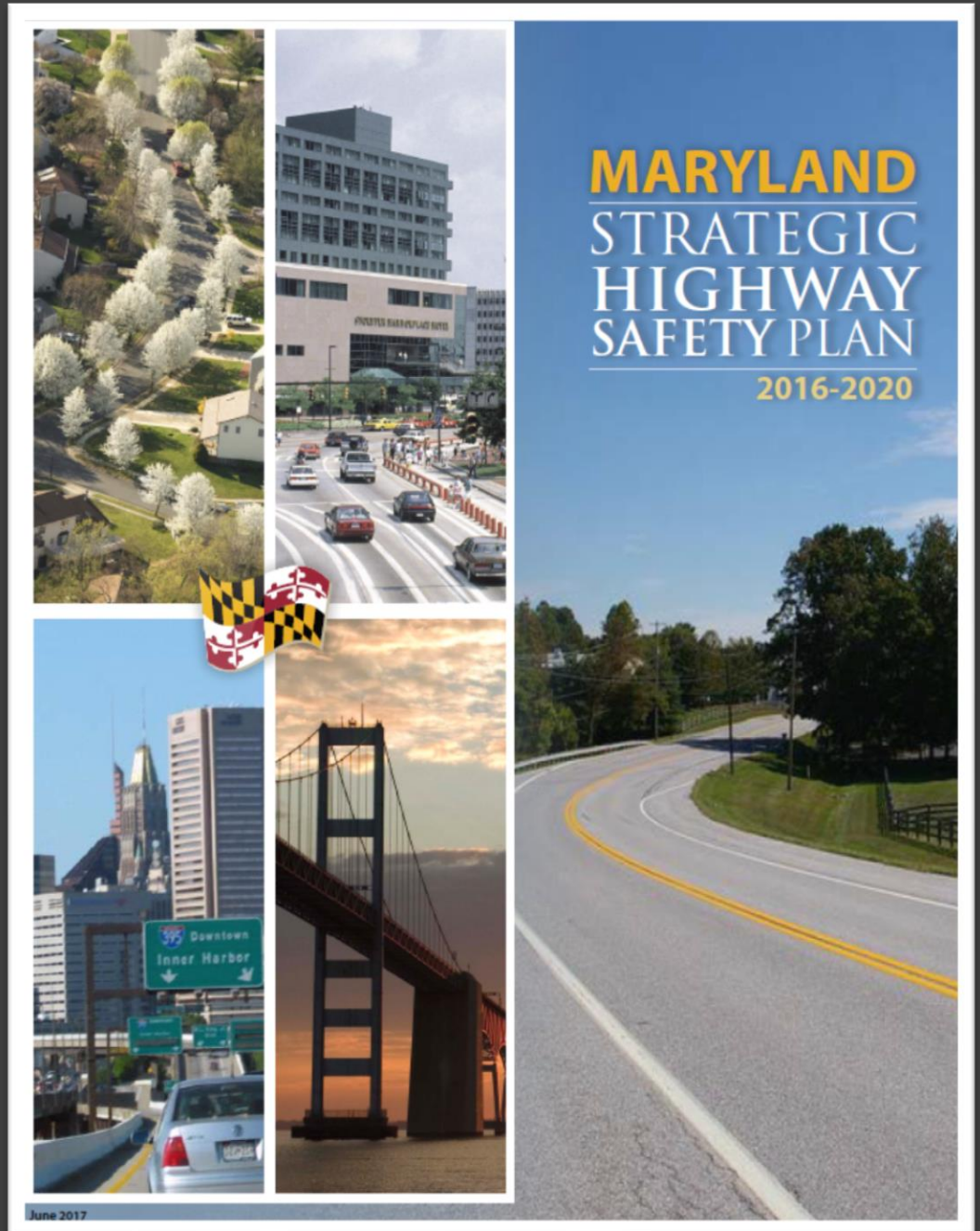


Thank You



Highway Safety

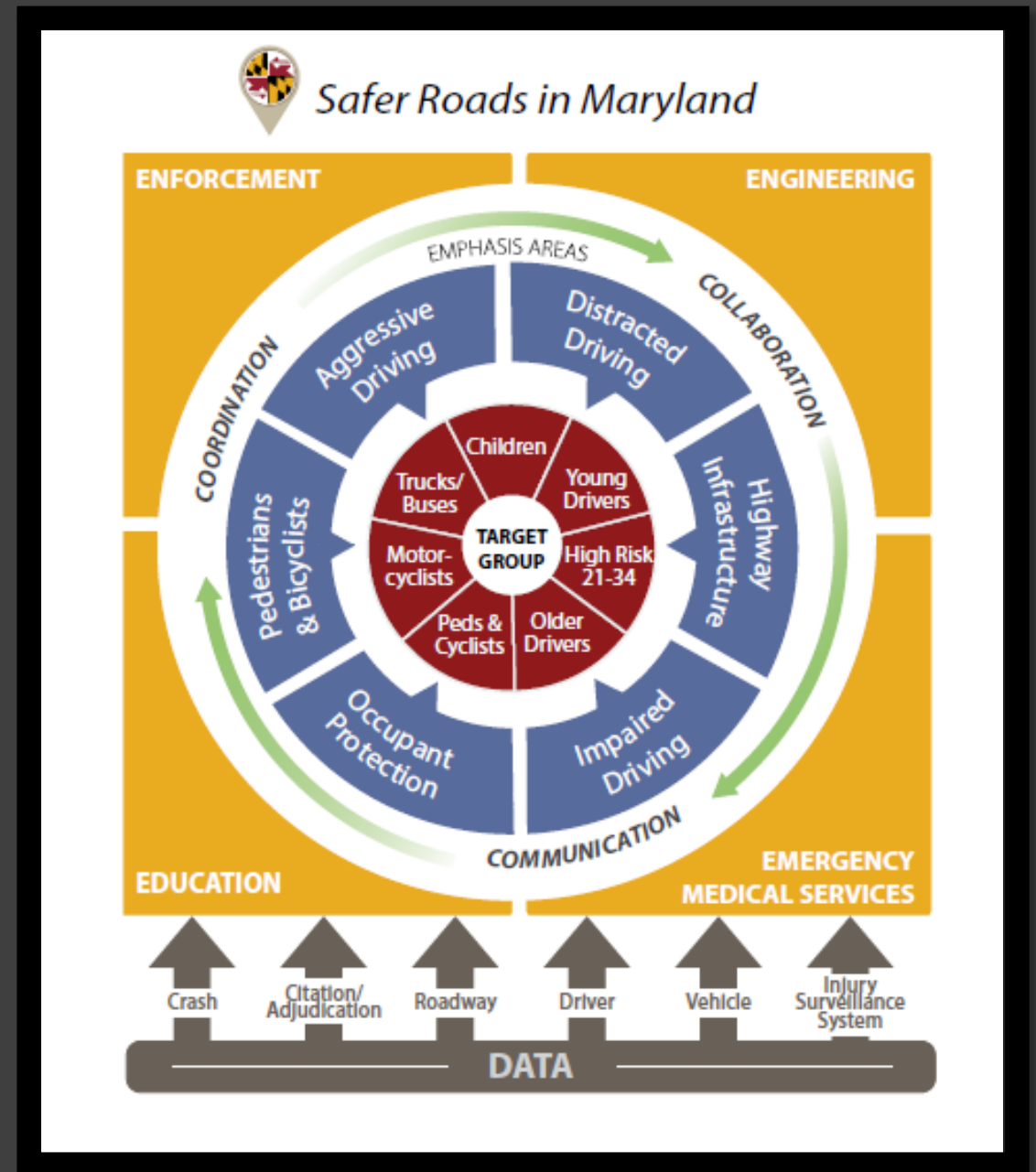
- Maryland Strategic Highway Safety Plan
- 6 Emphasis Areas (EAs)
 - ✓ Aggressive Driving
 - ✓ Distracted Driving
 - ✓ Highway Infrastructure
 - ✓ Impaired Driving
 - ✓ Occupant Protection
 - ✓ Pedestrian and Bike Safety
- Grant-funded traffic safety campaigns





Highway Safety

- Coordination, Collaboration, Communication
- Four E's of Traffic Safety
 - ✓ Enforcement
 - ✓ Engineering
 - ✓ Education
 - ✓ Emergency Medical Services
- **New:** Howard County Strategic Road Safety Plan for 2020-2024





Highway Safety

Automated Enforcement

- Red-Light Camera Enforcement
 - ✓ 26 cameras monitoring 18 intersections
- School Zone Speed Camera Enforcement
 - ✓ 6 cameras rotating 194 enforcement locations
- **New:** School Bus Stop-Arm Camera Enforcement
 - ✓ June 2019: CB18-2019 was passed
 - ✓ 100% of fleet by 2020-2021 school-year



Questions?



TRANSPORTATION FORUM

Howard County Department of Public Works
Howard County Office of Transportation
Howard County Police Department