



# Maryland Transportation Authority

CAPITAL COMMITTEE MEETING

THURSDAY, AUGUST 7, 2025

2310 BROENING HIGHWAY  
BALTIMORE, MARYLAND 21224

**CAPITAL COMMITTEE MONTHLY MEETING**  
**August 7, 2025 – 9:00 AM**

**This meeting will be livestreamed on the [MDTA Capital Committee Page](#)**

**NOTE:** This is an Open Meeting being conducted via livestreaming. The public is welcomed to watch the meeting at the link listed above. ***If you wish to comment on an agenda item please email your name, affiliation, and the agenda item to [gsteffe@mdta.state.md.us](mailto:gsteffe@mdta.state.md.us) no later than 3:00 p.m. on Monday, August 4, 2025. You MUST pre-register in order to comment.*** Once you have pre-registered you will receive an email with all pertinent information.

**AGENDA**

**OPEN SESSION – 9:00 a.m.**

Call Meeting to Order

- |  |                            |         |
|--|----------------------------|---------|
| 1. <b><u>Approval</u></b> - Open Session Meeting Minutes<br>of June 5, 2025                                | Chairman                   | 5 mins  |
| 2. <b><u>Update</u></b> - MDTA Asset Management Program Updates  | Evan Howard<br>Yousre Odeh | 20 mins |
| 3. <b><u>Update</u></b> – Understanding Stream Restoration:<br>Concepts, Successes, and Local Case Studies | Julie McCarthy             | 10 mins |

Vote to Adjourn Meeting

TAB 1

**MARYLAND TRANSPORTATION AUTHORITY  
CAPITAL COMMITTEE MEETING  
THURSDAY, JUNE 5, 2025  
OPEN MEETING VIA LIVESTREAMING**

**OPEN SESSION**

**MEMBERS ATTENDING:**

Mario J. Gangemi - Chairman  
Samuel D. Snead  
William H. Cox, Jr. - via Telephone  
Maricela Cordova

**STAFF ATTENDING:**

Bruce Gartner  
James Harkness  
Ishtiaque Tunio  
Tekeste Amare  
Moreshwar Kulkarni  
Richard Jaramillo  
Natalie Henson  
Kendra Joseph  
Mary O'Keeffe  
Kimberly Millender  
Jennifer Stump  
Patricia Tracey  
Jeffrey P. Davis  
Timothy Sheets  
Robert Michael  
Min Zheng  
Ganine Steffe  
Elizabeth Zito-Lynch

Member Gangemi called the meeting of the Maryland Transportation Authority (MDTA) Capital Committee to order at 9:00 a.m. The meeting was held via video conference and livestreamed on the MDTA Board Meeting web page.

**APPROVAL – OPEN SESSION MEETING MINUTES OF MAY 1, 2025**

Upon motion by Member Cordova and seconded by Member Cox, the Open Session meeting minutes of the Capital Committee's meeting held on May 1, 2025, were unanimously approved.

**APPROVAL – FY 2026-2031 DRAFT CONSOLIDATED TRANSPORTATION PROGRAM (CTP)**

Ms. Stump presented this request to seek a recommended approval from the Capital Committee to present Draft FY 2026-2031 CTP to the full MDTA Board for award at its next scheduled meeting.

Upon motion by Member Cox and seconded by Member Cordova, the Members unanimously recommended approval of Draft FY 2026-2031 CTP and present a recommendation for award to the full MDTA Board at its next scheduled meeting.



**APPROVAL – HT-3019-0000 BHT MAINTENANCE /AUTO BUILDING HVAC  
SYSTEM AND ROOF REPLACEMENT**

Ms. Zheng presented this request to seek a recommended contingent approval from the Capital Committee to present Contract No. HT-3019-0000 BHT Maintenance/Auto Building HVAC and Roof Replacement to the full MDTA Board for award at its next scheduled meeting.

This project includes the replacement of the HVAC system and Roof at the Maintenance/Auto Building at Baltimore Harbor Tunnel Facility. Project work includes but is not limited to: 1. Replacement of the HVAC system. 2. Upgrades of roofing systems: the existing membrane roof will be removed and replaced, and the existing metal roof will be repaired and refinished. 3. Upgrades of interior ceiling, lighting, fire alarm system, and other building elements that are impacted by the HVAC equipment replacement.

Upon motion by Member Cordova and seconded by Member Snead, the Members unanimously recommended contingent approval of Contract No. HT-3019-0000 BHT Maintenance/Auto Building HVAC and Roof Replacement to Fresh Air Concepts, LLC and present a contingent approval recommendation for award to the full MDTA Board at its next scheduled meeting.

There being no further business, the meeting of the MDTA Capital Committee was adjourned by consensus at 9:19 a.m. following a motion by Member Cordova and seconded by Member Cox.

The next meeting of the MDTA Capital Committee is scheduled for Thursday, July 3, 2025, at 9:00 am, this meeting will be virtual conducted via livestream.

APPROVED AND CONCURRED IN:

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Mario J. Gangemi, Chairman

TAB 2



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# MDTA - CAPITAL COMMITTEE

Asset Management Update  
August 2025



# **AGENDA**

- ☐ What is the Asset Management?**
- ☐ How is Asset Management Achieved?**
- ☐ What is the MDOT Policy 605 for Asset Management?**
- ☐ Asset Portfolio**
- ☐ The Lifecycle of an Asset – Process and Roles**
- ☐ MDOT Strategic Asset Management Plan (SAMP)**
- ☐ MDTA Asset Management Strategy**
- ☐ Current MDTA Initiatives to enhance our Asset Management Program**
- ☐ Questions**



## **WHAT IS ASSET MANAGEMENT**

- ☐ **FHWA definition – “Asset management is a strategic and systematic process of operating, maintaining, and improving physical assets with a focus on engineering and economic analysis based upon quality information, to identify a structured sequence of maintenance, preservation, repair, rehabilitation, and replacement actions that will achieve and sustain a desired state of good repair (SOGR) over the lifecycle of the assets at minimum practicable cost.”**
- ☐ **Asset Management is about making data driven decision to do the right treatment at the right time, at the right cost, to deliver the right Level of Service.**



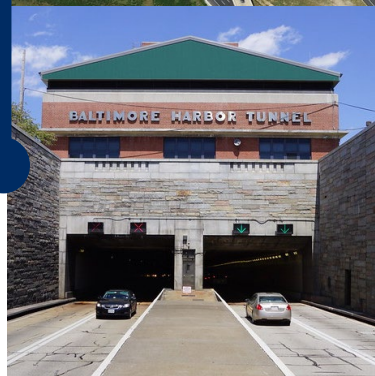
# HOW IS ASSET MANAGEMENT ACHIEVED?

□ Asset Management is achieved by developing a Program which:

- Manages and Prioritize Risk;
- Focuses on Critical Assets;
- Develop and Maintain Good Asset Data;
- Develop Lifecycle Management Practices;
- Focus on State of Good Repair;
- Develop Performance Measures;
- Promote Cost-Efficiency;
- Employ Data Drive Decision.



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# ASSET MANAGEMENT PROGRAM DEVELOPMENT



ASSET REGISTER/INVENTORY



CONDITION ASSESSMENT



LEVEL OF SERVICE GOALS



BUSINESS RISK EXPOSURE



CAPITAL PLANNING



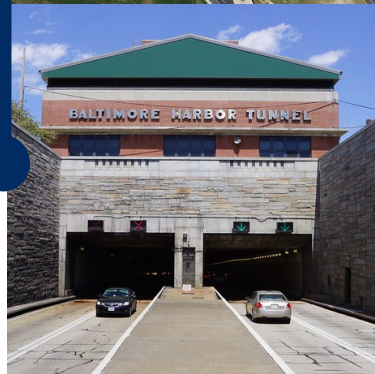
OPTIMIZED OPERATION  
& PLANNING



ROLES & RESPONSIBILITIES



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## MANAGING ASSETS



LIFECYCLE ACTIVITIES  
& ASSET CARE



FAULT &  
INCIDENT MANAGEMENT



ASSET INVENTORY &  
CONDITION ASSESSMENT



ACQUISITION COST



PEOPLE & TECHNICAL SKILLS

## ASSET MANAGEMENT



VALUE &  
LONG-TERM OUTCOMES



PERFORMANCE  
MANAGEMENT



CRITICALITY & RISK



TOTAL LIFECYCLE COST



COLLABORATION





# MDOT POLICY 605 FOR ASSET MANAGEMENT

**MDOT** MARYLAND DEPARTMENT OF TRANSPORTATION

Policy No.: MDOT 605  
Effective Date: July 15, 2019  
Original Date: July 15, 2019  
Revised: N/A

Approved by: [Signature]  
Secretary  
Date: 7-12-19

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**Asset Management**

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Purpose  
The purpose of this Policy is to:

1. Define an overarching asset management policy to guide consistent implementation efforts across all Transportation Business Units (TBU).
2. Coordinator to develop and improve the proper procedures as well as protocols to meet the policy.
3. Require each TBU to meet the reporting requirements related to the annual reporting of assets and the development of the TBU's Transportation Asset Management Plan (TAMP).
4. Promote the requirements and benefits of asset management and communicate the importance to Maryland Department of Transportation (MDOT) personnel, partners, and customers.

References  
N/A

Scope  
This Policy is applicable to all MDOT employees and supersedes any Transportation Business Unit (TBU) related procedures or processes.

Responsible Party  
Deputy Secretary of Policy, Planning, and Enterprise Services

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**POLICY**

I. Policy Statement

A. The MDOT is committed to an asset management program that embraces data driven decision making, enhances transparency, supports continuous improvement, and employs structured management and infrastructure decision making processes – resulting in cost-effective delivery of service level goals. MDOT requires the dedication of a resource at each TBU, functioning as the Asset Management Coordinator, to lead the development of proper protocols and plans to implement the policy.

B. The guiding principles by which MDOT will make decisions and effectively manage assets and deliver transportation services to the State of Maryland are:

1. **Manage Risk** Proactively understand, identify, prioritize, and manage asset-related risks including safety, reliability, financial, performance, and climate-related risks.

## Key Highlights:

- ☐ Promote the requirement and benefits of Asset Management to internal and external stakeholders;
- ☐ Embrace data driven decision making, enhance transparency, supports continuous improvements and employs structured management and infrastructure decision making processes;
- ☐ Ensure consistency across all Modals as it relates to Asset Management;
- ☐ Annual Reporting of Critical Assets and TAMP development.

# MDTA ASSET PORTFOLIO

Structures/  
Bridges



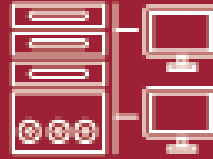
Fleet



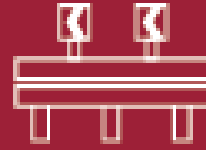
Pavement



IT Systems



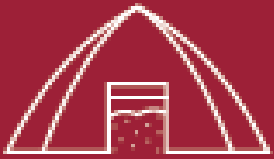
Traffic Barriers



Bicycle &  
Pedestrian



Facilities



Geotechnical



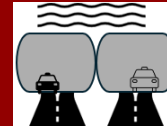
Traffic Control  
Devices



E-ZPass



Tunnels



Stormwater  
Systems



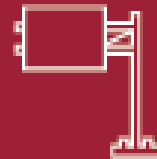
Lighting



ITS



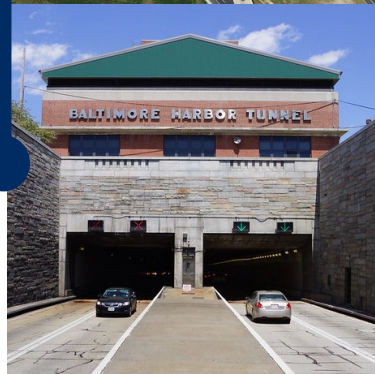
Structures/  
Signs



Structures/  
Noise Barriers



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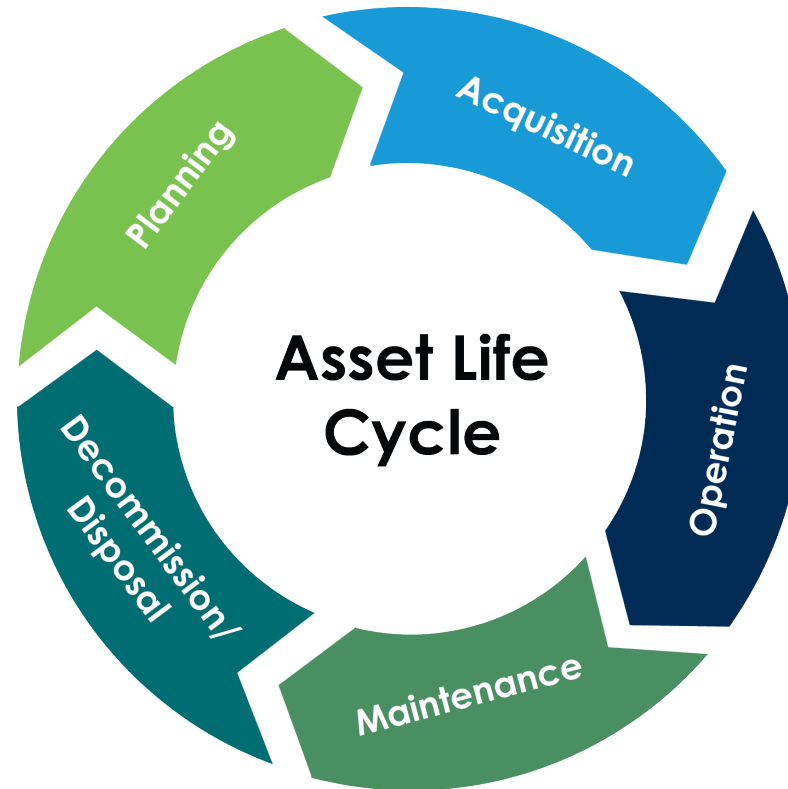


# THE LIFECYCLE OF AN ASSET

Planning & Program Management  
Procurement  
Engineering & Construction  
Finance

Planning & Program Management  
Environment Finance Asset  
Management & Support

Highways  
Campus Facilities  
Operations ITS  
Traffic  
ITS/Electrical  
Bridge & Tunnel Structures  
Finance  
Operations Facilities  
Fleet  
Asset Control & Damage Recovery



Highways  
Campus Facilities  
Operations ITS  
Traffic  
ITS/Electrical  
Bridge & Tunnel Structures  
Finance  
Operations Facilities  
Fleet  
Environmental  
Asset Management & Support

Highways  
Campus Facilities  
Operations ITS  
Traffic  
ITS/Electrical  
Bridge & Tunnel Structures  
Finance  
Operations Facilities  
Fleet  
Environmental  
Asset Management & Support

# MDOT-STRATEGIC ASSET MANAGEMENT PLAN (SAMP)



MARYLAND DEPARTMENT OF TRANSPORTATION

## Strategic Asset Management Plan






# MDOT-STRATEGIC ASSET MANAGEMENT PLAN (SAMP)





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## GOALS

MDOT's asset management goals are focused on applying best practices that deliver improvements to asset knowledge, enhance system reliability and service, and promote financial stewardship. We create aspirational goals that connect to day-to-day decisions from our workforce and encourage us to drive the program forward.

We have established seven core goals that are aligned with the guiding principles and will drive our program over the next five years. We will continue to advance the program, have meaningful impacts, and deliver outcomes that benefit our system users.

GOALS	SCOPE	IMPACT	OUTCOMES
 <b>Enhance Asset Knowledge and Understanding through data quality assurance and governance</b>	Enhance inventory and attribute scope and quality through continued improvements to hierarchy and data structures and strengthen data ownership and validation processes.	Improved understanding of systems and assets with timely and accurate information for field staff and analysts.	Enhanced staff productivity, greater asset understanding and knowledge, and the ability to record, track, and make real-time maintenance and lifecycle decisions.
 <b>Understand the Lifecycle Performance and Condition of our Assets including cross-modal interdependence</b>	Evaluate and document lifecycle strategies for key asset classes including robust methodologies for asset inspection, condition assessment, and renewal activities.	Improved and informed intervention decisions across a wide portfolio of assets to optimize both cost and performance.	Better investment decisions and resource allocations that consider cross-modal and multi-asset projects through cost-benefit analysis and quantified outcomes.
 <b>Prioritize and Plan for System Preservation Needs incorporating system, corridor, and neighborhood impacts</b>	Build a consistent understanding of cross-modal system preservation needs across all seven critical asset classes through risk-based prioritization methodologies.	Geographically visualize system preservation needs across asset classes and modalities to understand how they collectively impact target neighborhoods, corridors, and systems.	Enhanced understanding of how our statewide assets work together to deliver service and improved capability to efficiently bundle combined projects into the CTP. Strong stakeholder business case to support sustainable levels of funding.

GOALS	SCOPE	IMPACT	OUTCOMES
 <b>Educate, Train, and Embed Asset Management Across the Organization to support staff development and enhance institutional knowledge</b>	Develop and facilitate training and communication sessions across a wide scope of MDOT employees and departments.	Greater awareness, understanding, and support of asset management and improved skillsets, knowledge, and career development opportunities among staff.	Enhanced employee satisfaction and engagement with positive impact on retention and recruitment.
 <b>Enhance and Integrate Information Systems and Data and embrace advanced technologies and innovation</b>	Strengthen the functionality, usability, and integration of enterprise asset management systems and mobile workforce tools and ensure appropriate training and staffing.	Enhanced usability of core systems to support work management and decision making with wider and more consistent ownership and greater technical and functional knowledge.	Improved staff productivity and information availability with consistent levels of training and support for core systems and tools and stronger workforce capabilities.
 <b>Apply Risk-Based and Data-Driven Decision-Making including lifecycle analysis and maintenance and staff optimization</b>	Continue to enhance approaches to condition, criticality, and risk to make better decisions, prioritize investments, manage largest risks, and improve system performance.	Information is more usable for maintenance and capital planning for both field staff and analysts and can be used for program optimization and resource allocation.	Targeting of funds to most critical needs, improved focus on preventive activities, and maintenance program sophistication including renewal and replacement decisions.
 <b>Communicate Funding Needs and Priorities to Stakeholders to tell the story of our assets and secure long-term financial commitments needed</b>	Develop enhanced data and visualization to communicate and promote realistic need and benefit of system preservation investments with long-term benefits and impacts.	Greater transparency and stakeholder understanding of ongoing needs and implications of funding decisions.	Significant public and stakeholder support and championing for infrastructure investment and funding mechanisms and long-term commitments.

Achieving these outcomes requires steadfast commitment and will take time and dedication from the MDOT leadership and workforce as well as support from public and elected officials. Long-term outcomes and benefits from continued investments in the asset management program are many and will have a substantial positive impact on Maryland's transportation infrastructure.

## EXPECTED BENEFITS

Greater visibility and forecasting of system preservation needs with formal SGR targets

Optimized investment allocation across modes and asset classes

Increased asset and system/service reliability/redundancy

Reduced (and better managed) risk

Improved cross-modal performance

Enhanced workforce and resource allocation

Improved information availability and data sharing

Sustainable levels of (additional) funding

# MDTA STRATEGIC PLAN

## GOALS AND OBJECTIVES



### Prioritize people in all we do

- Attract, develop, build and retain the best team.
- Seek customer feedback and continually build our reputation with our customers.
- Create an inclusive workforce that reflects our diversity.
- Communicate plainly and transparently.
- Strengthen and cultivate our culture.
- Build contractor relationships and provide opportunities for them to collaborate with us.
- Avoid, minimize and mitigate impacts to the natural and man-made environment.
- Strengthen and build partnerships with agencies and businesses.



### Expand our reputation as a national leader

- Transform how our customers engage with us.
- Implement innovative solutions for our business.
- Formalize pathways of collaboration.
- Evaluate and modernize MDTA's transportation network.
- Deliver projects on-time and on-budget.
- Support technology enhancements.



### Demonstrate financially sound and fiscally responsible decision making

- Maintain excellence in financial reporting.
- Practice transparency and standardization.
- Govern with accountability.
- Implement and standardize knowledge management.
- Commit to environmental, social impact and governance practices.



### Ensure the safety and security of our employees, customers and facilities

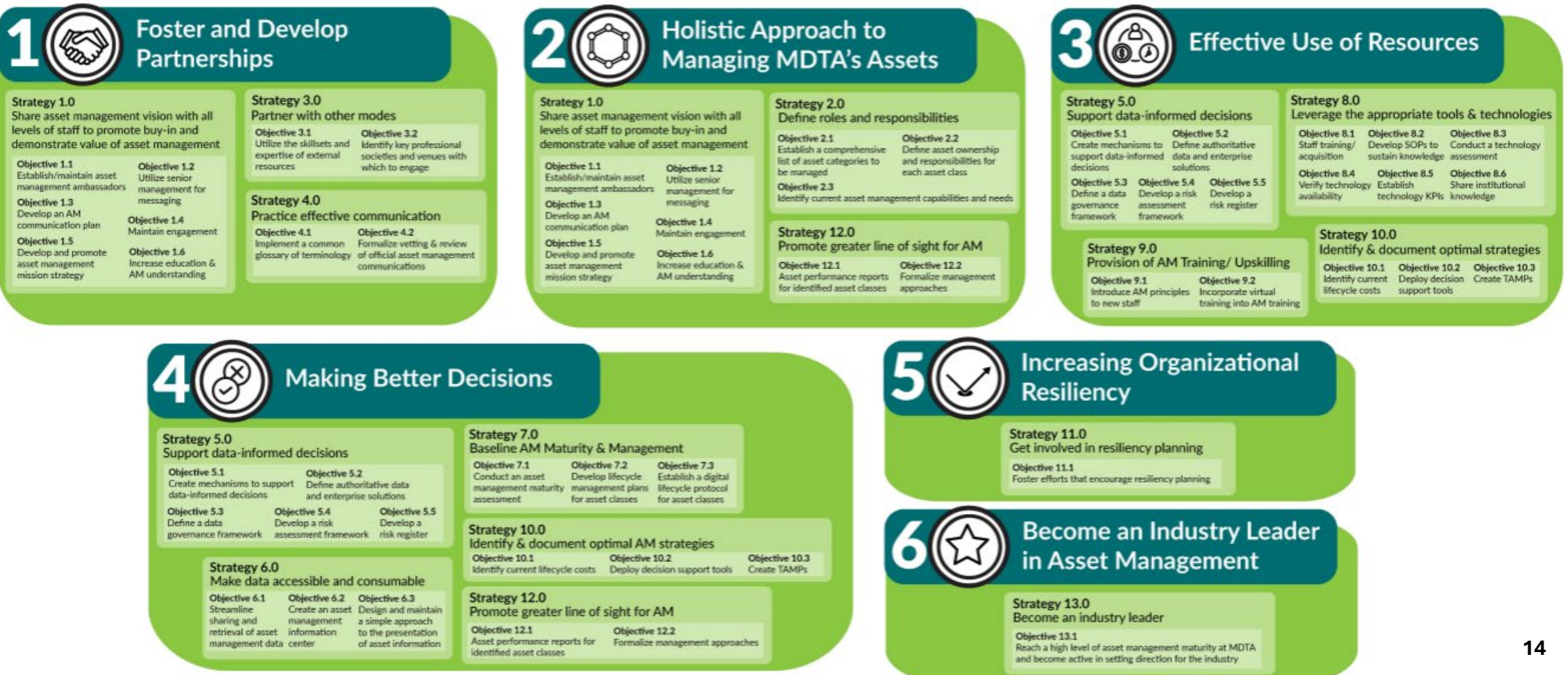
- Prepare and protect against natural and man-made disasters and climate change.
- Establish safety through preparation.
- Support Maryland's efforts on Highway safety.
- Ensure safety with vigilance and self-assessment.
- Accommodate the constantly changing needs for security.
- Evaluate opportunities for real-time information in our communication.

# THE ASSET MANAGEMENT STRATEGY



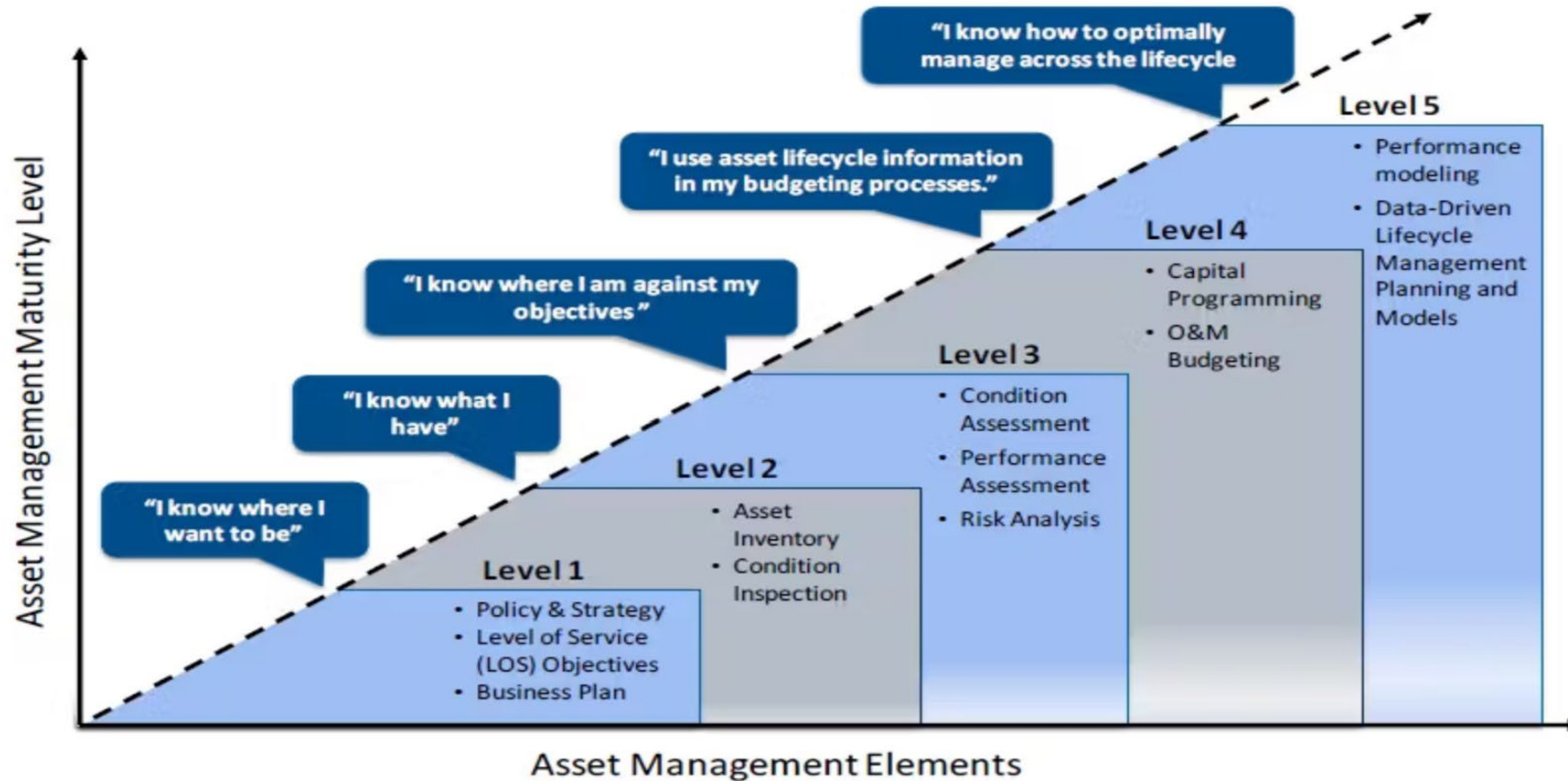


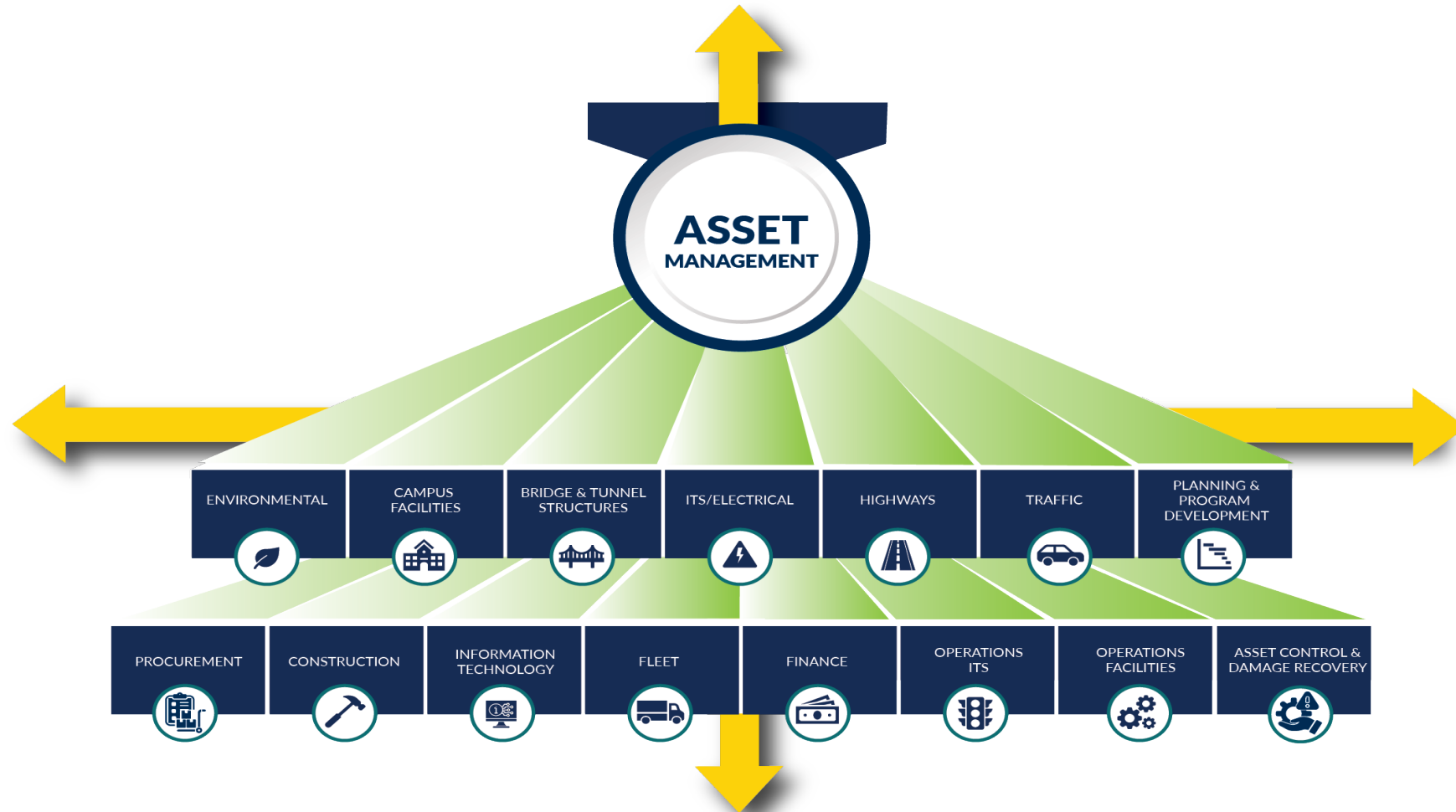
# THE ASSET MANAGEMENT STRATEGY





# THE ASSET MANAGEMENT MATURITY







## **AMBASSADOR GROUP**

- ☐ **Serve as primary liaison to the Asset Management Division;**
- ☐ **Educate colleagues on asset management;**
- ☐ **Ensure office's fulfillment of asset management responsibilities;**
- ☐ **Provide quality assurance/quality control on asset management data;**
- ☐ **Review and shape development of asset management policies, projects, and procedures;**
- ☐ **Recommend actions to improve the asset management program;**
- ☐ **Continually identify ways for office to further engage in asset management.**



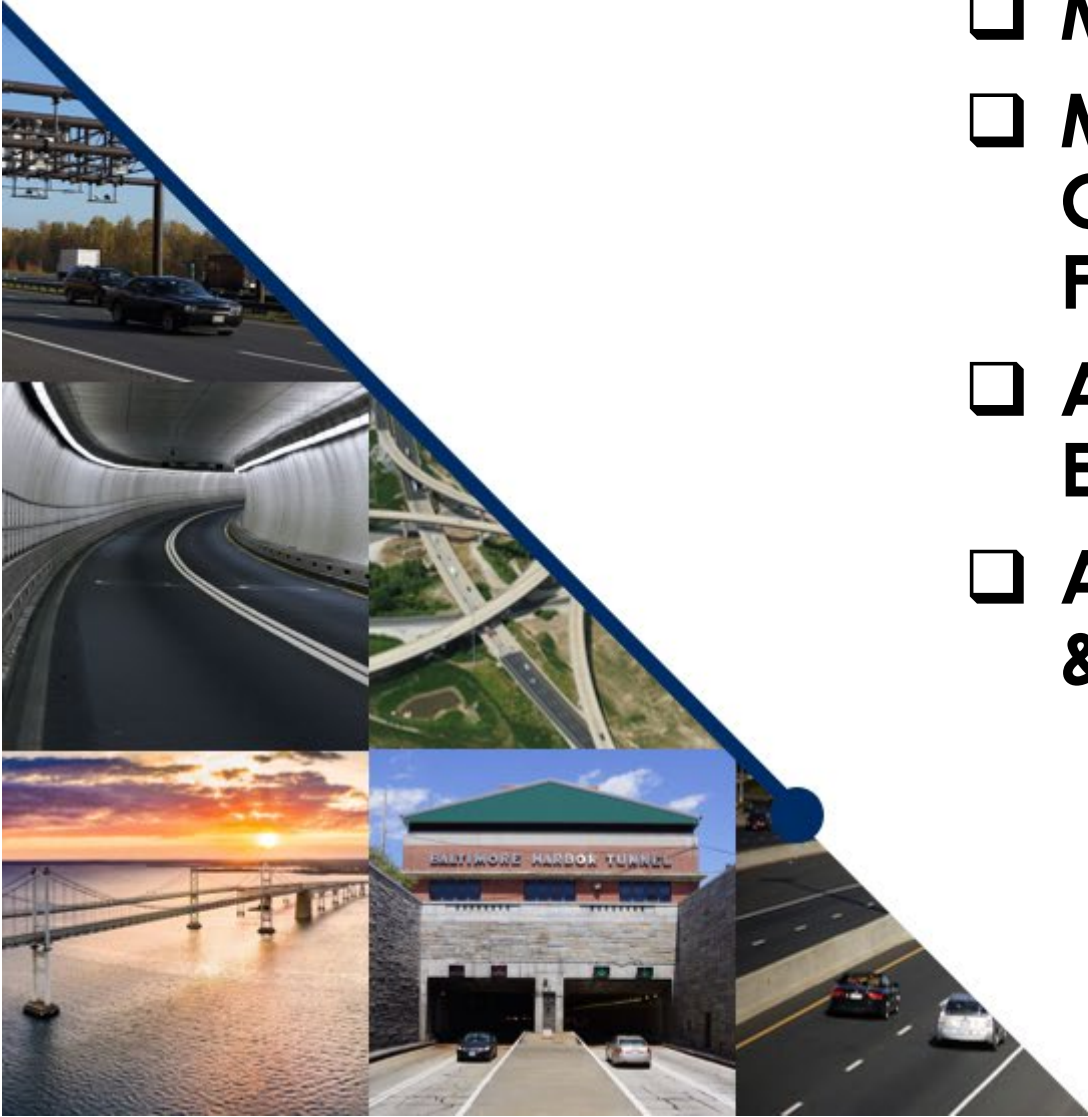
# **ASSET MANAGEMENT INITIATIVES - COMPLETED**

- ☐ **MDTA Asset Management Strategy;**
- ☐ **MDTA's Asset Management "AMBassador" Steering Committee and Charter;**
- ☐ **Procured MDTA's 1<sup>st</sup> A/E Contact to support Asset Management and Operation Initiatives;**
- ☐ **Completion of Asset Management video to promote Asset Management Strategy and show Senior Leadership Buy-in.**



# **ASSET MANAGEMENT INITIATIVES - CURRENT**

- ☐ **Maximo Enhancement Project;**
- ☐ **Maturity Assessment/Gap Analysis for Critical Assets such as ITS, FLEET, Facilities and Tunnels/Tunnel Systems;**
- ☐ **Asset Management Workshops & New Employee Orientation Training;**
- ☐ **Annual State of Good Repair Analysis & Critical Asset Inventory Reporting.**



# **ASSET MANAGEMENT INITIATIVES -** **CURRENT**

- ☐ Development of Elevator Assessment Guidebook;
- ☐ Maximo Support and documentation of Business Processes
- ☐ Sign Management Program pilot;
- ☐ Pavement Marking data collection of retro-reflectivity;
- ☐ TSO – Asset Management Data Governance Document;







## **ASSET MANAGEMENT INITIATIVES** **- CURRENT**

- ☐ **GIS – ASIR Integration;**
- ☐ **Development of Data – Driven Frameworks for critical assets;**
- ☐ **Right-of-Way Inventory Maintenance;**
- ☐ **Bridge Asset Management;**
- ☐ **ITS Data Maintenance and Verification.**

# **ASSET MANAGEMENT INITIATIVES – FUTURE**

- ☐ Development of Transportation Asset Management Plan (TAMP) and Lifecycle Management Plans (LMPs);
- ☐ Analysis of agency resources for Asset Management;
- ☐ Development of Comprehensive Asset Management Portfolio/Asset Register;
- ☐ Resiliency/Risk Assessment Strategic Planning;
- ☐ Utilization of Mobile Devices/Tablets for Maximo;
- ☐ Lever AI technologies to enhance operations efficiencies, safety and customer experience in the Tolling industry;
- ☐ Data Auditing Analysis.





# QUESTIONS



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TAB 3

# Understanding Stream Restoration: Concepts, Successes, and Local Case Studies

Presented by:

Julie McCarthy, Natural Resources Lead



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# What is Stream Restoration?

The process of **returning a degraded or altered stream to a more natural and stable condition.**

It may involve:

- Restoring the riparian buffer with native vegetation
- Stabilizing streambanks
- Repairing in-stream structures
- Reconnecting floodplains
- Improving in-stream habitat



# Common features to look for in stream restoration

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**Stable channel** that balances sediment transport

**Proper floodplain connectivity** that allows energy dissipation

**Diverse habitat** like riffles, pools, and vegetation

**Native plant establishment** to help stabilize soils, and improve biodiversity





# Why It Matters?

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Regulatory Compliance

Equity and Resilience

Cost Effective  
Infrastructure Protection

Environmental

Public Health and Safety



# Challenges

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1. **Design is complex and ever evolving**
2. **Time between initial survey and construction can cause variability and changes to the stream**
3. **Funding post-construction to maintain compliance**



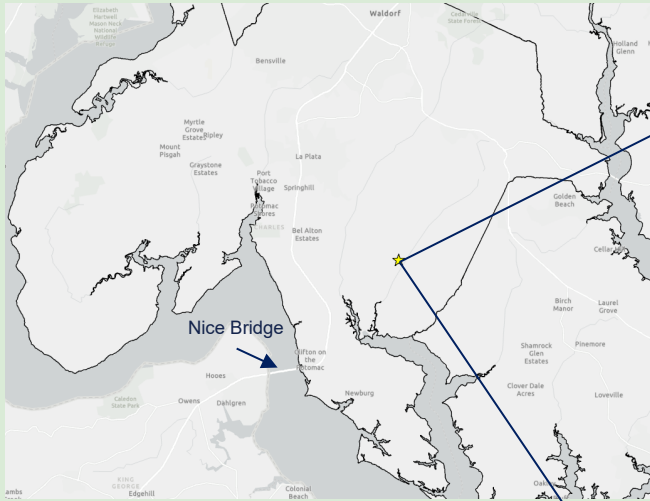
# MDTA Stream Projects

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1. **Restoration of Tributary to Gilbert Swamp Run for Nice Bridge Replacement Project**
2. **I-895 Stream Restoration Project**
3. **Stream Restoration WUS18A for I-95 ETL NB Extension From MD 43 To South Of MD 152**



# Restoration of Tributary to Gilbert Swamp Run for Nice Bridge Replacement Project



*Post-construction aerial*



## Restoration of Tributary to Gilbert Swamp Run for Nice Bridge Replacement Project



**1 Year Post Planting**



## Restoration of Tributary to Gilbert Swamp Run for Nice Bridge Replacement Project

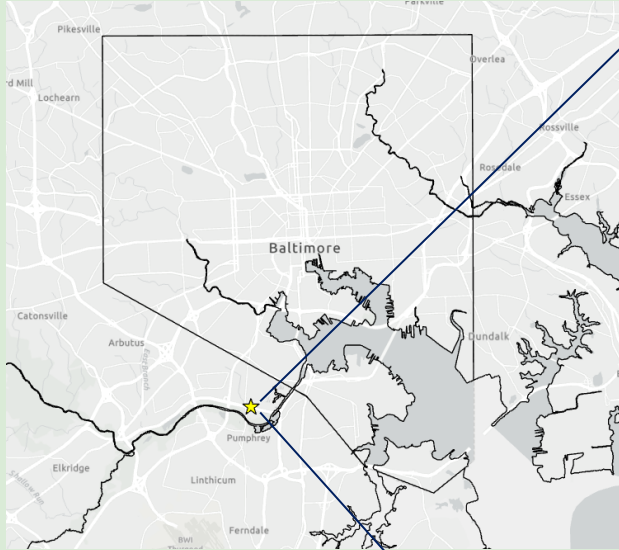


**1 Year Post Planting**





# I-895 Stream Restoration Project





## I-895 Stream Restoration Project



**Conditions Before  
Construction**



**Drone Footage Post  
Construction**



## I-895 Stream Restoration Project



**5 Years Post Construction**





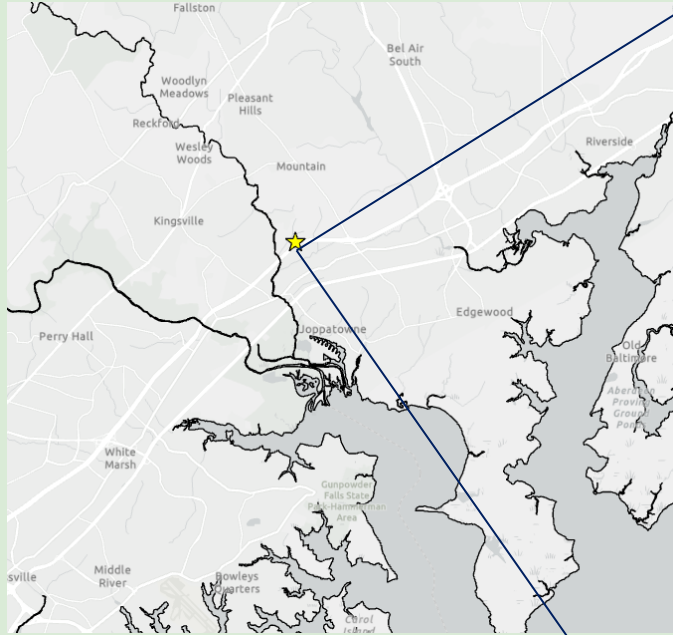
## I-895 Stream Restoration Project



**5 Years Post Construction**



# Stream Restoration WUS18A for I-95 ETL NB Extension From MD 43 To South Of MD 152





## **Stream Restoration WUS18A for I-95 ETL NB Extension From MD 43 To South Of MD 152**



**During Construction**



**Site Pre-Planting**



## **Stream Restoration WUS18A for I-95 ETL NB Extension From MD 43 To South Of MD 152**



**Post Planting 1 Year**



**Stream Restoration WUS18A for  
I-95 ETL NB Extension From MD  
43 To South Of MD 152**



**Drone Footage Post 1 Year**



**Post 2 Years**



# Questions?







# Thank you!

Julie McCarthy, Natural Resources Lead  
OEC  
[jmccarthy@mdta.state.md.us](mailto:jmccarthy@mdta.state.md.us)