ANNE ARUNDEL COUNTY
MARYLAND

Transportation Facility Planning

Conway Road from MD 3 to the Western Terminus

Project No.: H539600

Contract No.: H539620

FINAL Technical Memorandum Compilation

Existing Conditions

Purpose & Need Statement

Future Conditions

Recommendations

August 2022

ANNE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS

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Executive Summary

This Transportation Facility Planning Study conducted by the Anne Arundel County Department of Public Works focused on Conway Road from MD 3 to its western terminus. This study also considered the surrounding areas that Conway Road, MD 3, Patuxent Road, and Meyers Station Road serve; land uses characterized by a mixture of residential, light industrial, and commercial activity and highly sensitive natural environmental and cultural resources.

Background

Due to the substantial increase in traffic in the area primarily generated from growth associated with the Two Rivers residential development, a number of issues have been identified and/or magnified, including the impact of road closures resulting from flooding and emergency incidents, limited access points, roadway geometry, drainage, and crash risk. Two additional planned residential developments, Two Rivers Dawn and Estuary will bring additional traffic to the area.

Conway Road, Patuxent Road, and Meyers Station Road connect the primarily residential in-land peninsula study area with the MD 3 (Crain Highway) corridor. Population and traffic growth spurred by Two Rivers residential development, the construction of West County Elementary School, and increases in use of the WB&A Trail (once connected across the Patuxent River) prompted the need to identify safe and efficient accommodations for all travelers, including for pedestrians and bicyclists, throughout the corridor. Concerns raised through public comment have included the limited extent of infrastructure improvements and the impacts of increased traffic congestion and crash risk. Regular closures of low-lying Patuxent Road due to flooding is an on-going issue the County is working to address as it creates significant access and congestion issues for the area. Adequate alternate routes currently do not exist in the event of partial or complete road closures. This impacts emergency response and access, as well as the ability of residents to access/exit the area.

Study Purpose and Need Overview

The **purpose** of the Conway Road Facility Planning Study is to: provide accessible pedestrian and bicycle facilities along Conway Road necessary to enhance Pedestrian Level of Comfort (PLOC) and bicyclist Level of Traffic Stress (LTS) and enhance connective facilities; reduce conflicts between vehicles and pedestrians/bicyclists; address vehicular accessibility issues related to roadway flooding and closures; enhance traffic operations within the study area along Conway Road; and reduce conflicts between fixed objects and vehicles within the study area.

The **need** for the project is driven by several factors including: current and projected vehicular usage of Conway Road exceeding current capacity at some locations; sub-standard pedestrian and bicycle accommodations; and flooding and other blockage hazards resulting in closure of the road that create safety and accessibility issues for residents who can be cut off from vehicular ingress/egress and emergency response services.

Improvement Assessment Process

This project is in the initial stages of planning and overall development. The Anne Arundel County Transportation Facility Planning Process for this study has been segmented into three phases. Phase 1 focused on data collection and documentation of existing conditions – these will be the baseline functions against which all proposed improvements will be comparatively assessed. Phase 2 included developing the project Purpose and Need, evaluating traffic operations under future no-build conditions, conducting initial public outreach, and the assessment of preliminary conceptual solutions to address study area needs. Phase 3 involves the completion of the study with a Final Report that provides recommended improvements and documents additional community input on the recommendations. Once Phase 3 of this study is completed, the County will determine if funding can be allocated towards the design and implementation of recommended improvements. There are currently no funding provisions nor set timeline for subsequent design and implementation phases.

The detailed analysis for this project is provided in the following documents:

- Phase 1: Existing Conditions
  - Appendix A: Existing Typical Section Details
  - Appendix B: U.S. Fish and Wildlife IPAC Resource List
  - Appendix C: Crash Data
  - Appendix D: Mead & Hunt Data Collection for H539620 Conway Road Corridor Study
  - Appendix E: Existing Traffic Data
  - Appendix F: Existing Level of Service Analysis
  - Appendix G: Speed Data
- Phase 2: Purpose and Need Statement
  - Appendix A: Existing 2021 Peak Hour Traffic Volumes
  - Appendix B: Forecasted 2045 Peak Hour Traffic Volumes
- Phase 3: Future Conditions
  - Appendix A: Public Comments Matrix
  - Appendix B: Public Meeting Transcript
  - Appendix C: Public Meeting Chat
  - Appendix D: Turning Movement Figures
  - Appendix E: Access Route Assessment Map
- Phase 3: Preliminary Recommendations

The study investigated several conceptual improvement options to address the study area's needs as well as in response to public input received. The following is a general overview of the conceptual improvements considered. Additional details on the improvements are provided in the subsequent documents:

1. Conceptual improvements along Conway Road, including:
   - Pedestrian and bicycle Shared Use Path, sidewalks, and on-road bicycle shoulder lanes along Conway Road to address PLOC and LTS and reduce conflicts between pedestrians/bicyclists and motor vehicles.
   - Conceptual traffic operational improvements (traffic warning signs, traffic controls, new intersection designs) at key locations along Conway Road.

- Conceptual enhancement and/or introduction of shoulders along Conway Road to add on-road bicycle facilities, and potentially address conflicts between motor vehicles and fixed objects.

2. Conceptual new access road alternatives to provide redundant accessibility during flooding and closures on Conway Road. the study team initially investigated 20 potential new access route alignments that were spread all throughout the study area. The alternatives considered are detailed in the Phase 3 Future Conditions Technical Memorandum. These 20 alternative alignments were evaluated and screened to help determine a potential recommendation to carry forward for future phases of design.
3. A potential bus turnaround area near the western terminus of Conway Road.

Preliminary Recommendations Summary

It is recommended that the alternatives be implemented in three separate phases. The phases increase in scope and cost to allow short term improvements to be implemented while allowing the County to plan for cost associated with long-term capital improvements. To address safety, mobility, and accessibility the following phases are recommended:

- **Phase 1:** Introduce shared-use path and widen shoulders along Conway Road, all-way stop control (AWSC) at Conway Road and Two Rivers Boulevard/Patuxent Ridge Road, pavement markings at Princess Shopping Center, and a bus turnaround.
- **Phase 2:** Implement Alternative 7 Option B (2-foot shoulders and no Shared Use Path) connection from Two Rivers Development to Meyers Station Road.
- **Phase 3A:** Complete Alternative 7 Option B from Meyers Station Road to Cronson Boulevard.
- **Phase 3B:** Introduce Roundabout at Two Rivers Boulevard and Conway Road.

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Transportation Facility Planning

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Phase 1: Existing Conditions

February 2022

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

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1 Introduction

The observed increases in vehicular trips associated with Two Rivers residential development, in addition to existing traffic utilizing Conway Road to reach MD 3 or Patuxent Road through the National Register-listed historic district of Woodwardville, and the introduction of the new West County Elementary School has ushered in a need for the Anne Arundel County Department of Public Works to evaluate the transportation improvement needs of the Conway Road Corridor from MD 3 to its western terminus near the St. John A.M.E. Zion Church. The intent of this study is to identify existing geometric deficiencies, improve traffic level of service (LOS), reduce crash potential, provide additional access to all modes including emergency response services, improve pedestrian and bicycle compatibility, and evaluate alternatives to address deficiencies while minimizing impacts to the natural and built environment. The project intends to promote a "Complete Streets" approach in accordance with adopted County policies. The County seeks to evaluate potential implementable improvements along the corridor to enhance mobility and accessibility for all modes.

The corridor is located within the Odenton Small Planning Area and the Odenton Small Area Plan addresses some local land use planning but doesn't provide detail for transportation or community-related policies within study area; however, the newly adopted General Development Plan (GDP) offers many planning-related policies, goals, and priorities that are applicable to this study. These are discussed in greater detail in Section 1.2.

This technical memo provides a baseline environmental inventory of natural, socioeconomic, and cultural resources in the study area to describe the location, type, and characteristics of resources that may be affected by potential infrastructure improvements and identify potential environmental constraints. This technical memo also provides a roadway geometric inventory, crash data analysis, existing traffic volumes, and existing traffic operational analysis.

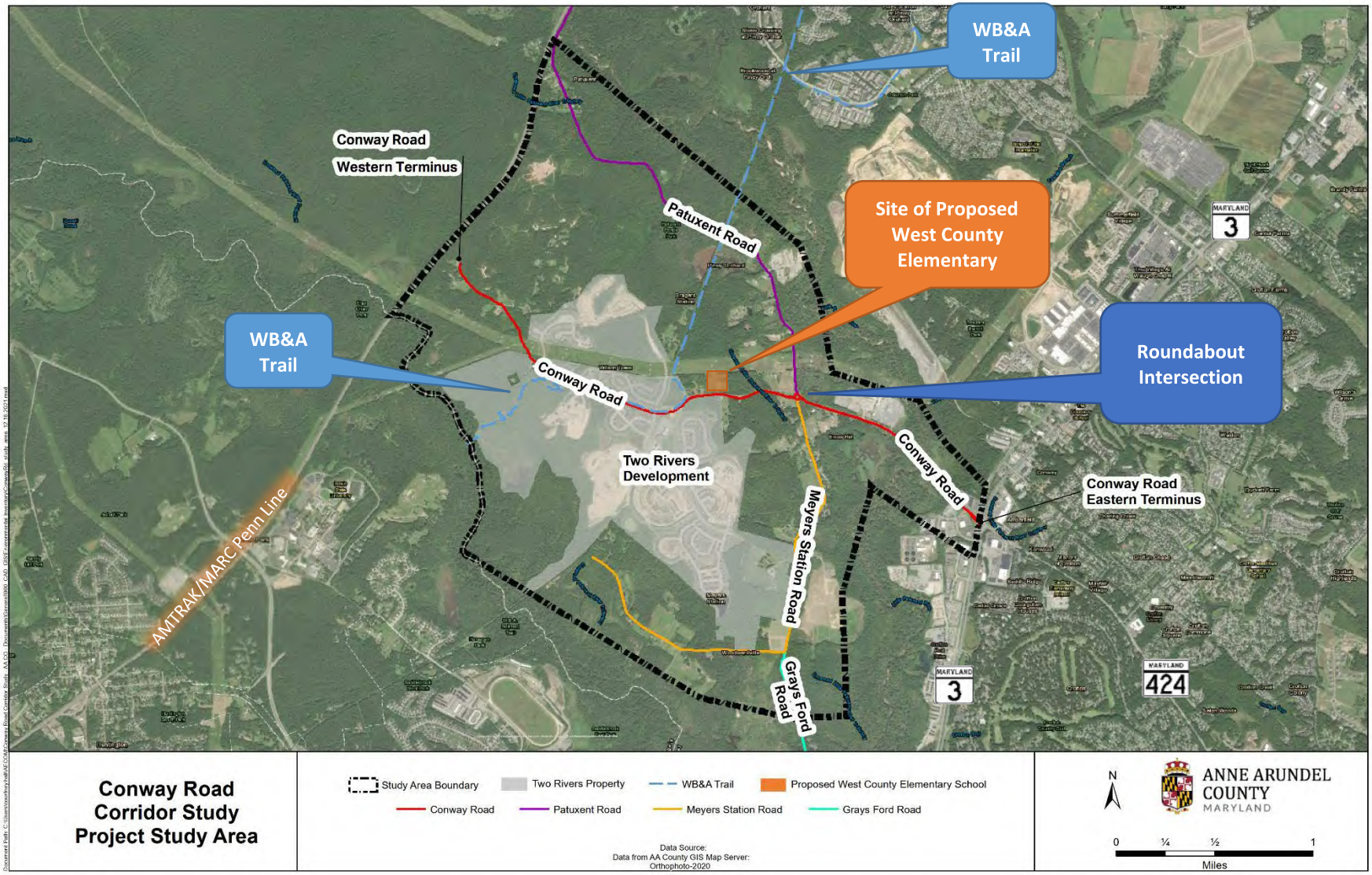
1.1 Project Location

The Conway Road from MD 3 to the Western Terminus Feasibility Study area is located in Odenton, Maryland, in central Anne Arundel County, approximately 20 miles northeast of Washington, DC and 10 miles northwest of Annapolis. Under the County Functional Classification System (2015)[1], Conway Road between MD 3 and Patuxent Road is functionally classified as a combination closed/open-section Minor Arterial and an open-section Collector from Patuxent Road to the western terminus. Conway Road carries up to over 15,000 vehicles per day (average of weekday traffic at Concord Boulevard, just west of MD 3, is 15,165).

The study area includes Conway Road from MD 3 to its western terminus, and surrounding areas (a sort of "land peninsula") that currently utilizes Conway Road as a means to reach MD 3 or Patuxent Road. The section of Conway Road in the study area is approximately 3.2 miles long with a posted speed limit of 40 mph from MD 3 to Two Rivers Boulevard and a posted speed limit of 30 mph from Two Rivers Boulevard to its western terminus. Conway Road, Patuxent Road, Grays Ford, and Myers Station Roads are all open roadway sections and are lined with light/utility poles. The study area boundary is shown in **Figure 1-1**.

[1] Anne Arundel County. 2015. Road Functional Classifications Bill No. 12-15. Available at: https://www.aacounty.org/departments/planning-and-zoning/research-and-gis/map-services/forms-and-publications/Functional_Class.pdf. Accessed October 22, 2021.

Figure 1-1: Study Area



1.2 Site Description

This study will focus on Conway Road from MD 3 to its western terminus, in addition to the area of the County that must use Conway Road as a means to reach MD 3 or Patuxent Road through the National Register-listed historic district of Woodwardville. Specifically, due to the substantial increase in traffic in the area primarily generated from the relatively new Two Rivers development, a number of issues have been identified and/or magnified, including the impact of road closures resulting from flooding and emergency incidents, limited access points, roadway geometry, drainage, and crash risk.

The corridor is located within the Odenton Small Planning Area; however, the newly adopted General Development Plan (GDP)[2] recommends the development of updated Region Plans. The project site is in Region 5, and the Region Plan process is anticipated to begin in April 2024. The current GDP, *Plan2040*, highlights many important planning related criteria, goals, policies, and priorities for land use, transportation, education, economic enhancement and equity, and preservation and restoration efforts; and while all elements of the GDP apply to this project, the study team choose the following to highlight as they directly apply to the scope of this study, including land use/growth governing criteria, transportation priorities, community enhancements, and preservation/restoration of the natural environment.

Land Use/Growth Governing Criteria are identified in the GDP for the study area as Tier 1A, 2A, 3, and 4, this helps better understand the anticipated future land uses and development efforts surrounding Conway Road:

- **Growth Tier 1A** Governing Criteria includes "areas served by public sewer systems and are located outside of designated targeted development, redevelopment, or revitalization area (growth areas)". Tier 1A areas are located in the vicinity of MD 3, Princess Shopping Center, and Concord Blvd/Professional Blvd.
- **Growth Tier 2A** Governing Criteria includes "areas planned to be served by public sewer systems (Planned or Future Sewer Service Category in the Water and Sewer Master Plan), and areas located outside of a designated Targeted Development. Redevelopment, or Revitalization Area (Growth Areas)". Tier 2A areas includes the Two Rivers Development and a few smaller areas north east of the Conway Corridor.
- **Growth Tier 3** Governing Criteria includes "areas not planned for public sewer service (No Public Sewer Service Category in the Water and Sewer Master Plan), and areas that are generally planned and zoned for large lot or rural residential uses". Tier 3 areas are generally located north east of Patuxent Road.
- **Growth Tier 4** Governing Criteria includes "areas not planned for sewer service, and areas that are generally planned or zoned for land, agricultural or resource protection or preservation; and are dominated by agricultural lands, forest lands, or other natural areas; or are rural legacy areas, priority preservation areas, or areas subject to covenants, restrictions, conditions or conservation easements for the benefit of, or held by a State agency or a local jurisdiction for the purpose of conserving natural resources or agricultural land". Tier 4 areas are the most dominant criteria for areas adjacent to

[2] Anne Arundel County. 2021. Plan2040 – Anne Arundel County General Development Plan. Available at: https://www.aacounty.org/departments/planning-and-zoning/long-range-planning/general-development-plan/plan2040-vol1-adopted/. Accessed January 6, 2022.

Conway Road west of the Little Patuxent River, not including the Two Rivers Development.

In addition, the GDP summarizes several transportation-related projects/policy efforts from the *Move Anne Arundel!* Transportation Functional Master Plan that affects the study area. They include:

- **Making communities more walkable –** "17 elementary schools are recommended for implementation of the Safe Routes to Schools program, including new pedestrian connections, highly visible signage, education and enforcement actives, and new public facilities such as schools and recreation centers should be sited and oriented to maximize pedestrian access".
- **Creating a Low-Stress Bicycle Network –** "The Washington, Baltimore & Annapolis Trail (WB&A Trail) Bridge Crossing over the Patuxent River, extend shared use paths, including the Odenton Trails, making on-street "last mile" connections from trails to nearby community activity centers, and work with Maryland Department of Transportation's State Highway Administration (MDOT SHA) to identify the disconnected segments of on-street bicycle facilities and prioritize filling out the network by extending lanes to logical termini".
- **Improving Regional Corridors to Make Commutes More Reliable –** "Convert MD 3 to a limited access freeway in three phases: MD 32 to Waugh Chapel Road, Waugh Chapel road to MD 450, and MD 450 to US 50".

The GDP also outlines several community and natural environmental preservation/restoration goals and policies applicable to this study, they include:

- **Planning for the Natural Environment –** "Preserve, enhance, and restore sensitive areas, including habitats of rare, threatened, and endangered species, streams, floodplains, tidal and non-tidal wetlands, bogs, shorelines, steep slopes, and all applicable buffers, and Create resilient, environmentally-sound and sustainable communities".
- **Planning for Healthy Communities –** "Provide a diverse range of accessible public recreational facilities to serve the needs of all County residents, and Provide a high-level of emergency medical care, fire protection, police protection, emergency management and an all hazards response to all residents and visitors of the County, including a comprehensive evacuation plan with adequate evacuation shelters".
- **Land Use, Community Revitalization, Cultural and Historic Resources –** "Preserve the agricultural and rural character of the County's Rural and Agricultural Policy Area; preserve and strengthen the County's existing and historic communities by encouraging resident-participation in planning processes, with particular emphasis on involvement of historically underrepresented and marginalized communities, and Reduce traffic congestion, provide adequate infrastructure and reliable multimodal connections and improve safety in Critical Corridor Policy Areas, which include areas adjacent to Conway Road".

Last, the GDP emphasizes the importance historic preservation, stating the County should "Develop and strengthen planning and protection measures for historic and archaeological resources and incorporate historic preservation effectively into planning and policy decision-

making". The nearby National-Register listed historic district of Woodwardville is an area that will be a focus of preservation efforts. In addition, Conway Road, Patuxent Road, Grays Ford Road, and Meyers Station Road are all identified as scenic and historic roads. Conway Road has changed noticeably and no longer retains the characteristics for which it was originally listed as a "Category 3" road under the 1997 Scenic and Historic Roads Commission. Patuxent Road was designated as a rural "Category 1" road in 1997 and retains a high degree of integrity today. Grays Ford and Myers Station Roads were both categorized as "Category 2" by the 1997 Commission, and both retain high levels of scenic and historic integrity. However, per Article 17-6-504 of the County Code, Scenic and Historic Roads, specific recommendations should be consistent with that section of code, but infrastructure improvements are not precluded.

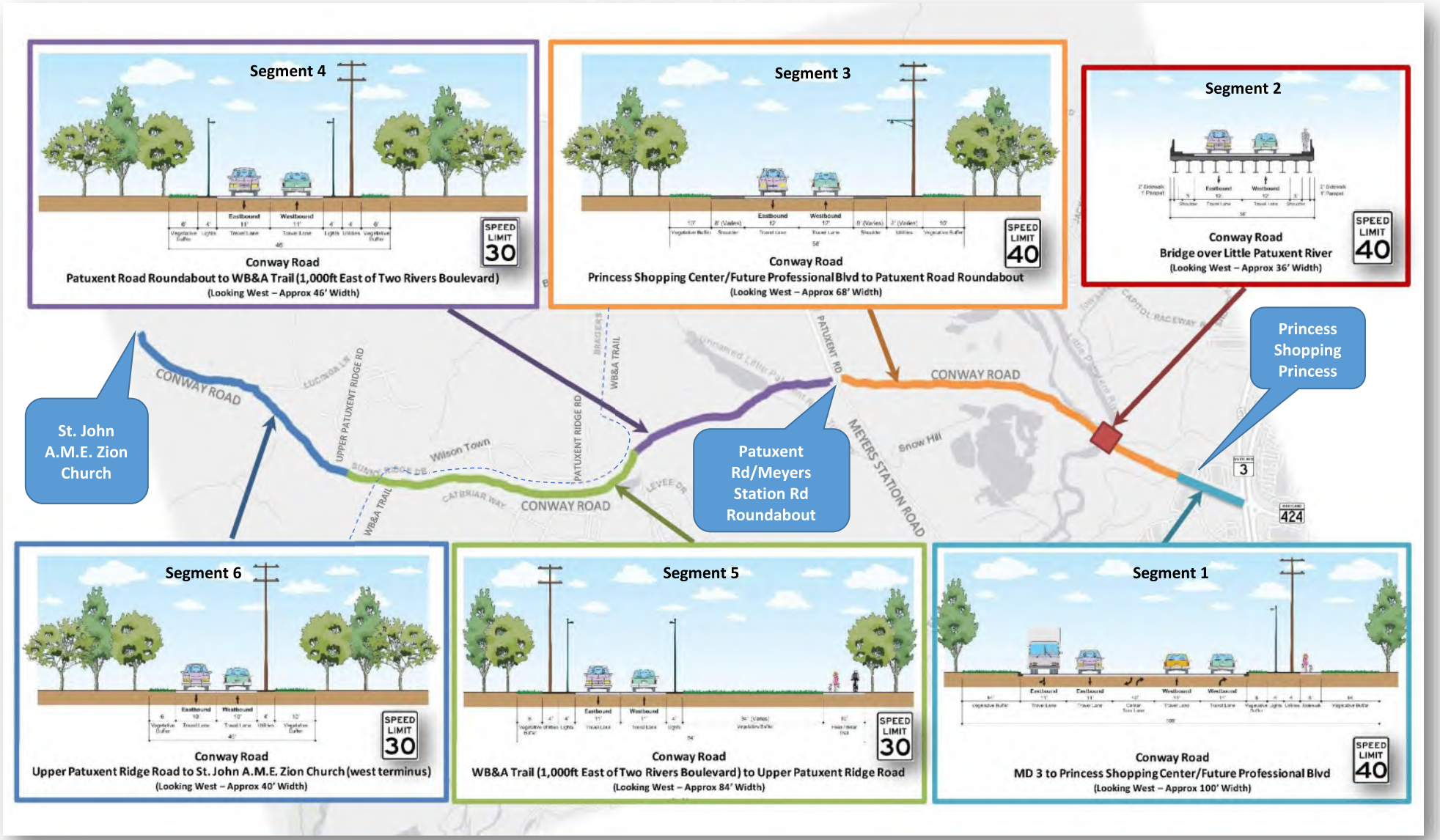
For the purposes of this study, the corridor has been broken into six distinct segments, each characterized by a unique existing typical section. As the study progresses the study team will focus on evaluating potential enhancements specific to each of these segments in ways complementary and sensitive to the existing conditions. See **Figure 1-2** for a general graphical depiction and **Appendix A** for detailed figures of the six existing typical section segments listed below:

- **Segment 1**: MD 3 to Princess Shopping Center Entrance/Future Professional Boulevard*
- **Segment 2**: Bridge over Little Patuxent River
- **Segment 3**: Princess Shopping Center Entrance/Future Professional Boulevard to Patuxent Road/Meyers Station Road Roundabout
- **Segment 4**: Patuxent Road/Meyers Station Road Roundabout to 1,000ft east of Two Rivers Boulevard (near the WB&A Trail)
- **Segment 5**: 1,000ft east of Two Rivers Boulevard to Upper Patuxent Ridge Road
- **Segment 6**: Upper Patuxent Ridge Road to St. John A.M.E. Church (Western Terminus)

*Future Professional Boulevard is a planned extension of existing Professional Boulevard (the road leading to the Patuxent Water Reclamation Facility, south of Conway Road). A planned connecting segment, approximately 600 feet long, has been identified by the developer; however, there is no construction timeline for this extension known at the time of publication of this report. It's being documented in the event the extension is built within the future horizon timeframes established for the analyses conducted as part of this study.

Growth from development has resulted in increased travel demand along this roadway. This corridor connects the primarily residential in-land peninsula area of Two Rivers with the larger corridor of MD 3, with a mix of uses, and the Piney Orchard area to the north. The presence of the WB&A Trail and programmed West County Elementary School (highlighted in **Figure 1-1** and discussed in detail later in this report) on Conway Road attracting traffic from outside the area, in addition to development along Conway Road in the area, has prompted the need to identify safe and efficient accommodations for all travelers, including for pedestrians and bicyclists, throughout the corridor. Concerns raised through public comment have included the limited extent of infrastructure improvements and the impacts of increased traffic congestion and crash risk. Adequate alternate routes do not exist in the event of partial or complete road closures. This impacts emergency response and access, as well as the ability of residents to access/exit the area.

Figure 1-2: Existing Typical Sections

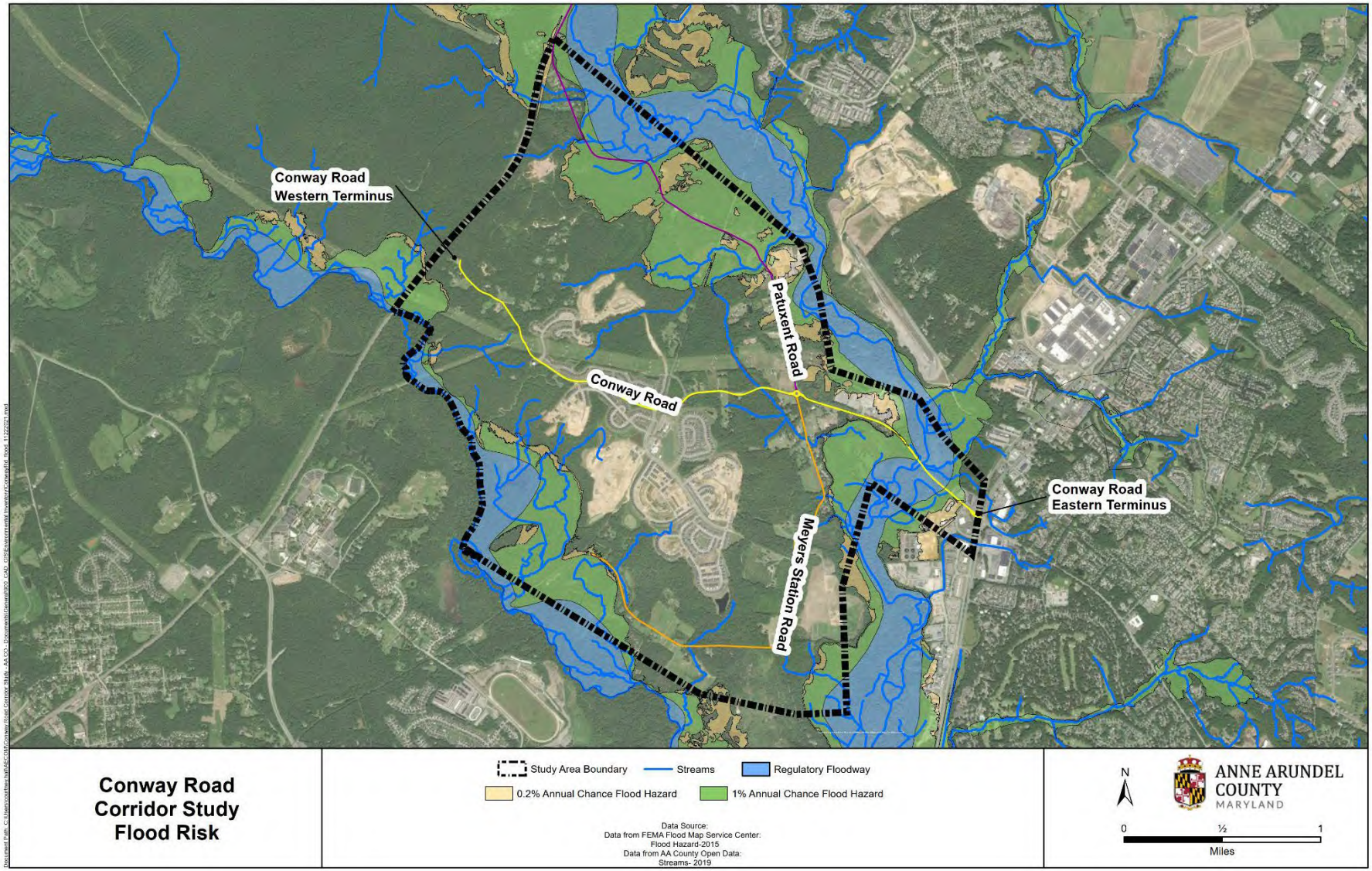


Portions of the scenic and historic Patuxent Road are located in low-lying floodplain zones identified by Federal Emergency Management Agency (FEMA) as "regulatory floodways" and defined "areas subject to inundation by the 1-percent-annual-chance flood event"[3]. This equates to approximately 4 major flooding events per year which cuts-off Patuxent Road to safe vehicular traffic passage (including emergency vehicles), leaving Conway Road towards MD 3 as the only access to and from the area. Flood warning signs and warning beacons exist along Conway Road and Patuxent Road to warn travelers of unsafe conditions (see **Figure 1-3**); however, this does not alleviate the impact to access caused by regular flooding. **Figure 1-4** illustrates the locations where Patuxent Road is within the FEMA regulatory floodway and where Patuxent Road, Conway Road, and Meyers Station Road fall within the 1-percent (approximately 4 major floods annually) and 0.2-percent (approximately 1 major flood annually) annual chance flood hazard zones. Citing growing concerns that flooding events may be increasing in frequency and severity, the County intends for this study to assess opportunities to provide additional alternative access to enhance overall safety, mobility, and accessibility within the study area.

Figure 1-3: Conway Road at MD 3, facing West (Princess Shopping Center on Right)

[3] FEMA. 2020. Road Zone AE and A1-30. Available at: https://www.fema.gov/glossary/zone-ae-and-a1-30. Accessed November 23, 2021.

Figure 1-4: FEMA Flood Risk Areas



According to Anne Arundel County Department of Recreation and Parks, the WB&A Trail is a nine-mile paved recreational trail from Odenton to the Patuxent River (see **Figure 1-1**) on the abandoned Washington, Baltimore and Annapolis Railroad right of way. Ultimately, the County is looking at the WB&A Trail as a link to the South Shore Trail in Odenton with the Patuxent River and an existing rail trail in Prince George's County. The County notes that, in addition to the regional implications and importance to local residents and recreationalists, the WB&A Trail is also a critical component of the East Coast Greenway and the American Discovery Trail.

The WB&A Trail has two major intersections within the study area – at Patuxent Road and at Conway Road. Crossing counts were taken at each location to obtain weekday and weekend counts are shown in **Table 1-1**. This study will assess safety and accessibility for users of the WB&A trail.

Table 1-1: WB&A Trail Crossing Location Counts

WB&A Crossing	Weekday Pedestrian	Weekend Pedestrian	Weekday Bicycle	Weekend Bicycle
Patuxent Road	92	101	41	45
Conway Road	14	11	20	11

As mentioned previously, the existing roadway segments along Conway Road are functionally classified as closed/open-section Minor Arterial and open-section Collector. **Table 1-2** provides a general comparison of the County's current Standard Roadway Cross-Section Design Requirements[4] with the existing conditions found along Conway Road. Differences are highlighted. These differences will be assessed as the project progresses.

Table 1-2: Standard Roadway Cross-Section Design Requirements vs. Existing Conditions

	Minor Arterial Requirements	Existing Minor Arterial Segment	Collector Requirements	Existing Collector Segment
Street Trees/Buffer	5' min	5' min	5' min	5' min
Sidewalk	5' min	Partial	5' min	None
Shared Use Path	10' min	None	10' min	Partial
Utility Strip	4' min	4' min	4' min	4' min
Shoulder	8' min	0' min to 8' max	N/A	0' min
Dedicated Bicycle Facilities	6' to 10'	None	4' to 6'	None
Stormwater Conveyance	9' min	0' to over 9'	9' min	0' to over 9'
Slope (outside R/W line)	2:1 max	2:1 max	2:1 max	2:1 max

[4] Anne Arundel County. July 31, 2020. Design Manual Updates – Updated Road Sections. Available at: https://www.aacounty.org/departments/public-works/orange-notices/DPW-20-03.pdf. Accessed January 5, 2022.

2 Environmental Inventory

2.1 Introduction

A baseline environmental inventory of natural, socioeconomic, and cultural resources in the study area was completed to describe the location, type, and characteristics of resources that may be affected by potential roadway improvements and identify potential environmental constraints. The results of the environmental inventory are illustrated in **Figure 2-1** and resources are characterized with respect to their location, potential regulatory significance, and known status. All references for the environmental inventory are included at the end of this document.

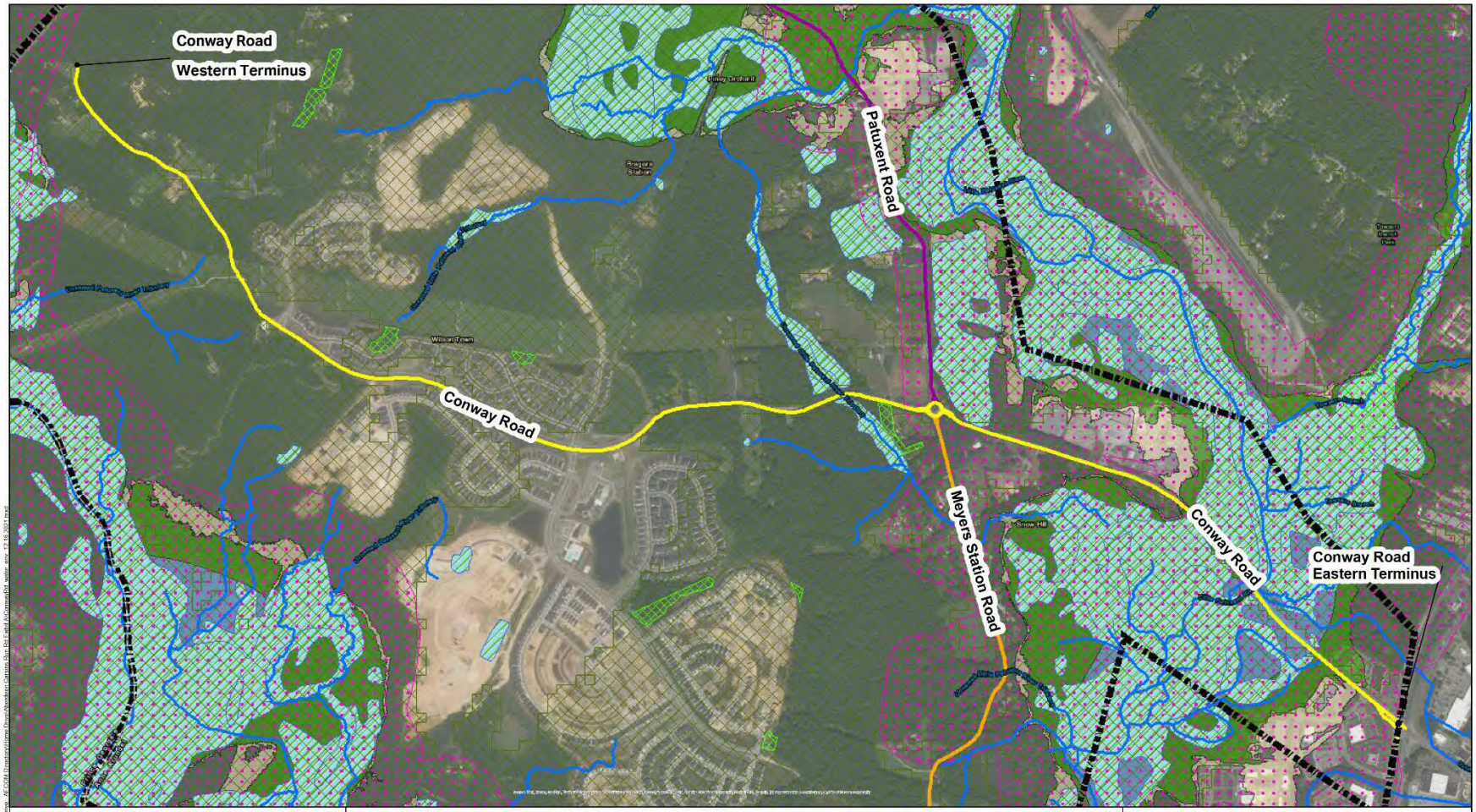
2.2 Development of the Project Base Mapping and Environmental Inventory

Anne Arundel County provided various data from available published sources for the Transportation Facility Planning – Conway Road from MD 3 to the Western Terminus Study. GIS data were used to identify land use, natural resources (wetlands, streams, soils, forests, and floodplains), community features, socioeconomic information, and historic cultural resources within the study area. A limited field reconnaissance was conducted on September 29, 2021 to verify published information. No detailed surveys, inventories, or delineations of waters of the U.S., including wetlands, were conducted.

Resource information was obtained from online sources including Maryland iMAP and Maryland's Environmental Resources and Land Information Network (MERLIN). Resource information obtained included National Wetland Inventory (NWI) and Maryland Department of Natural Resources (MDNR) wetlands and waterways, forest interior dwelling species, priority funding areas, parks, targeted ecological areas, and historic properties. The US Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) online database was accessed to determine the potential for any federally listed threatened or endangered species to occur in the study area. Information on the presence of any known protected habitat for State-listed threatened or endangered species in the study area was obtained from MERLIN. Land use, 2019 American Community Survey 5-Year Estimate data, demographic, and income data were obtained from the Maryland Department of Planning (MDP) and the US Census online database.

The USFWS IPaC list is included in **Appendix B.**

Figure 2-1: Environmental Inventory



2.3 Land Use

Land use in the study area consists of residential, rural agricultural, open space, and industrial areas in **Figure 2-2**[5]. Forested areas are located to the north and south of Conway Road with industrial areas north of Conway Road near MD 3 and residential developments north and south of Conway Road. Commercial complexes along the corridor include the Crofton Princess Center and Anchor Concrete Products. Residential developments along the corridor include Two Rivers Development shown in **Figure 2-3**.

Consistent with the land uses identified above, the County zoning classifications for the study area are shown in **Figure 2-4**. The predominant zoning classification is residential, with some industrial uses and open space.

The Maryland Department of Planning is responsible for the economic growth and development within the state. Priority Funding Areas (PFAs) are existing communities and places designated by local governments as needing state investment to support future growth. Areas eligible for county designation include existing communities and areas where industrial or other economic development is desired, and counties may designate areas planned for new residential communities which will be served by water and sewer systems and permitted residential density. The study area is located within a state eligible PFA from MD 3 to 100 feet northwest of Concord Boulevard.

[5] Anne Arundel County. 2021. Land Use and Zoning Viewer. Available at: https://gis.aacounty.org/portal/apps/webappviewer/index.html?id=b46df2f799bd489fbd855e509bf28c35. Accessed October 22, 2021

Figure 2-2: Land Use/Land Cover

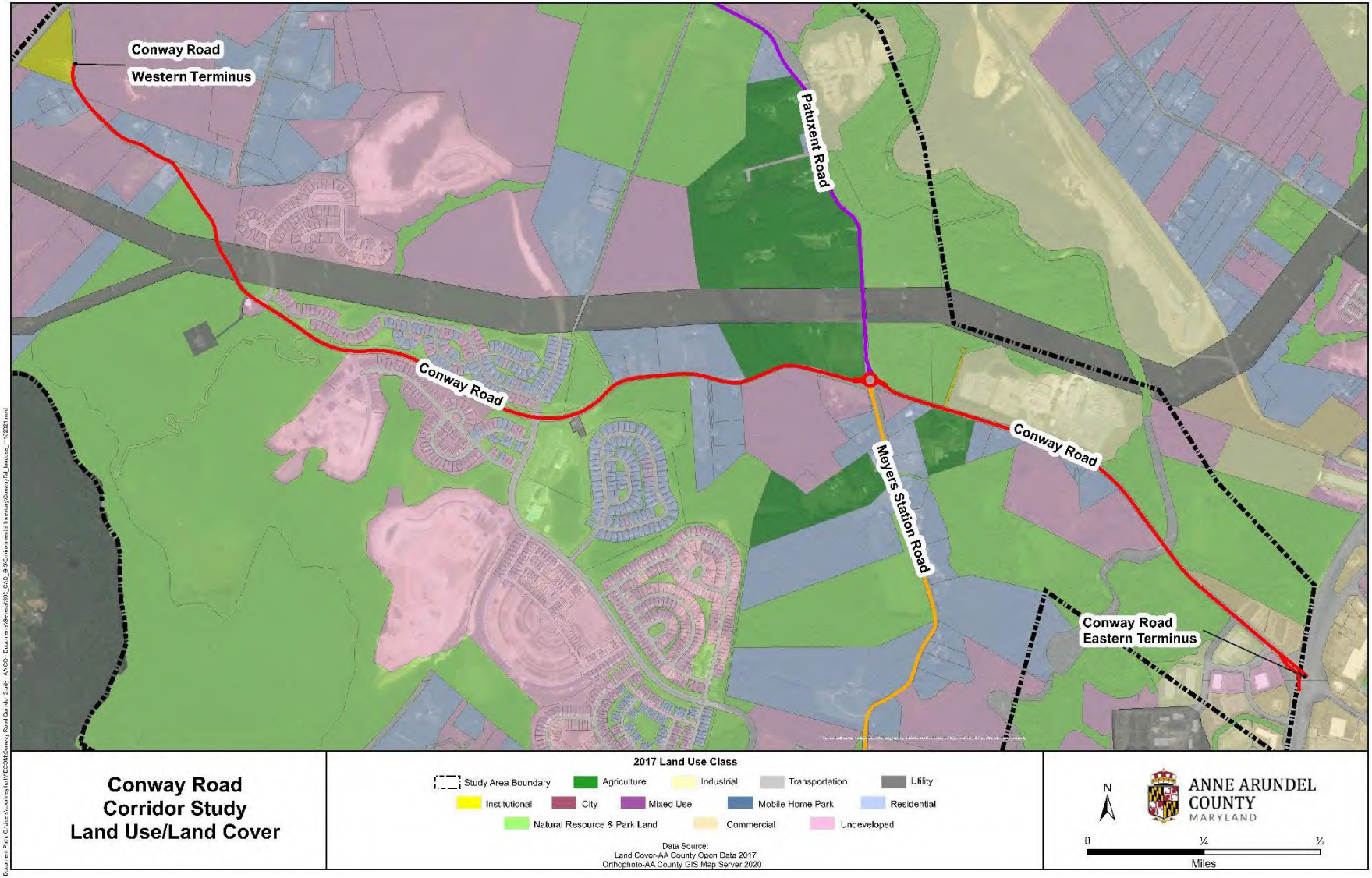
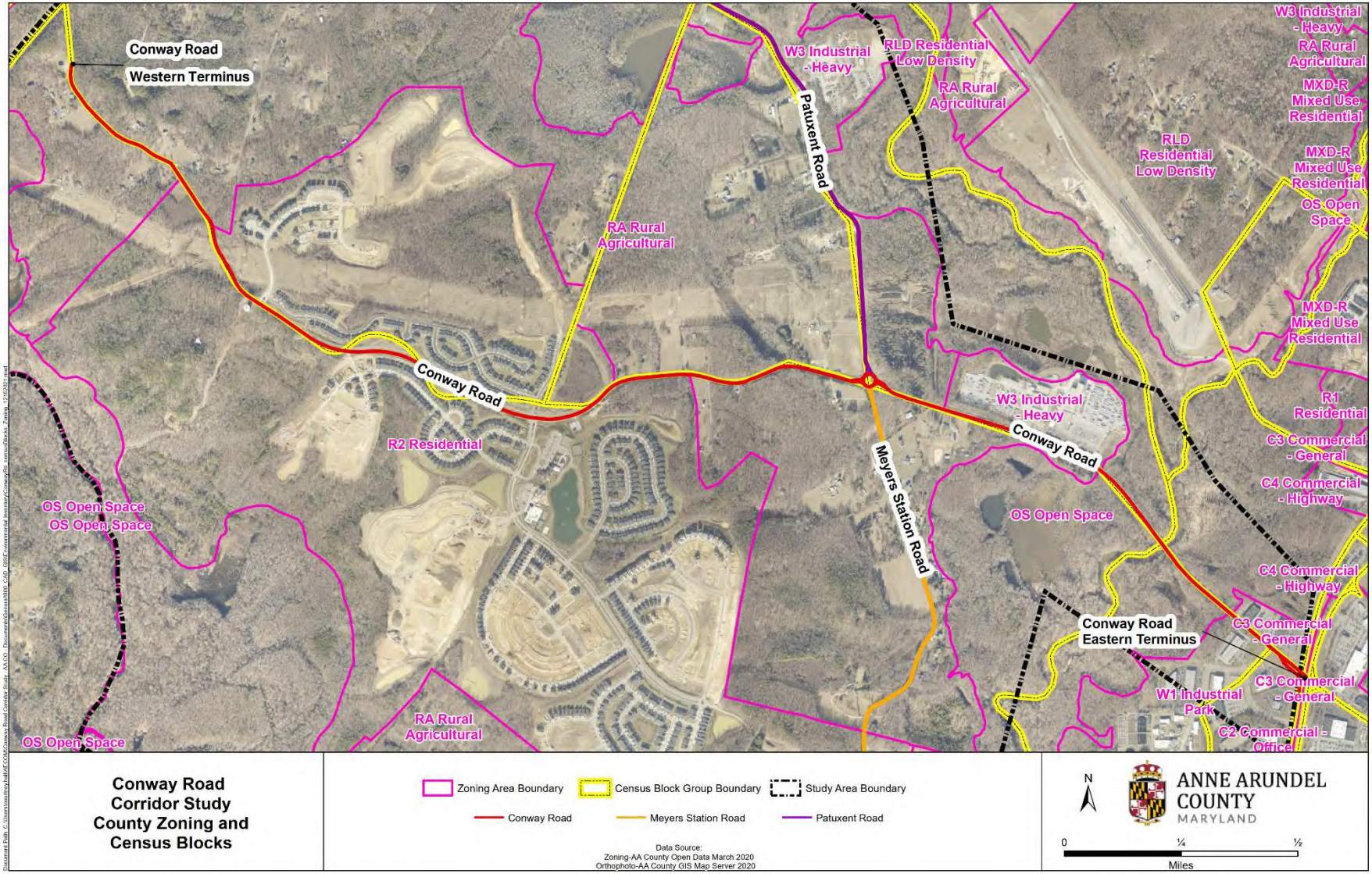


Figure 2-3: Two Rivers Development

Figure 2-4: County Zoning and Census Block Groups



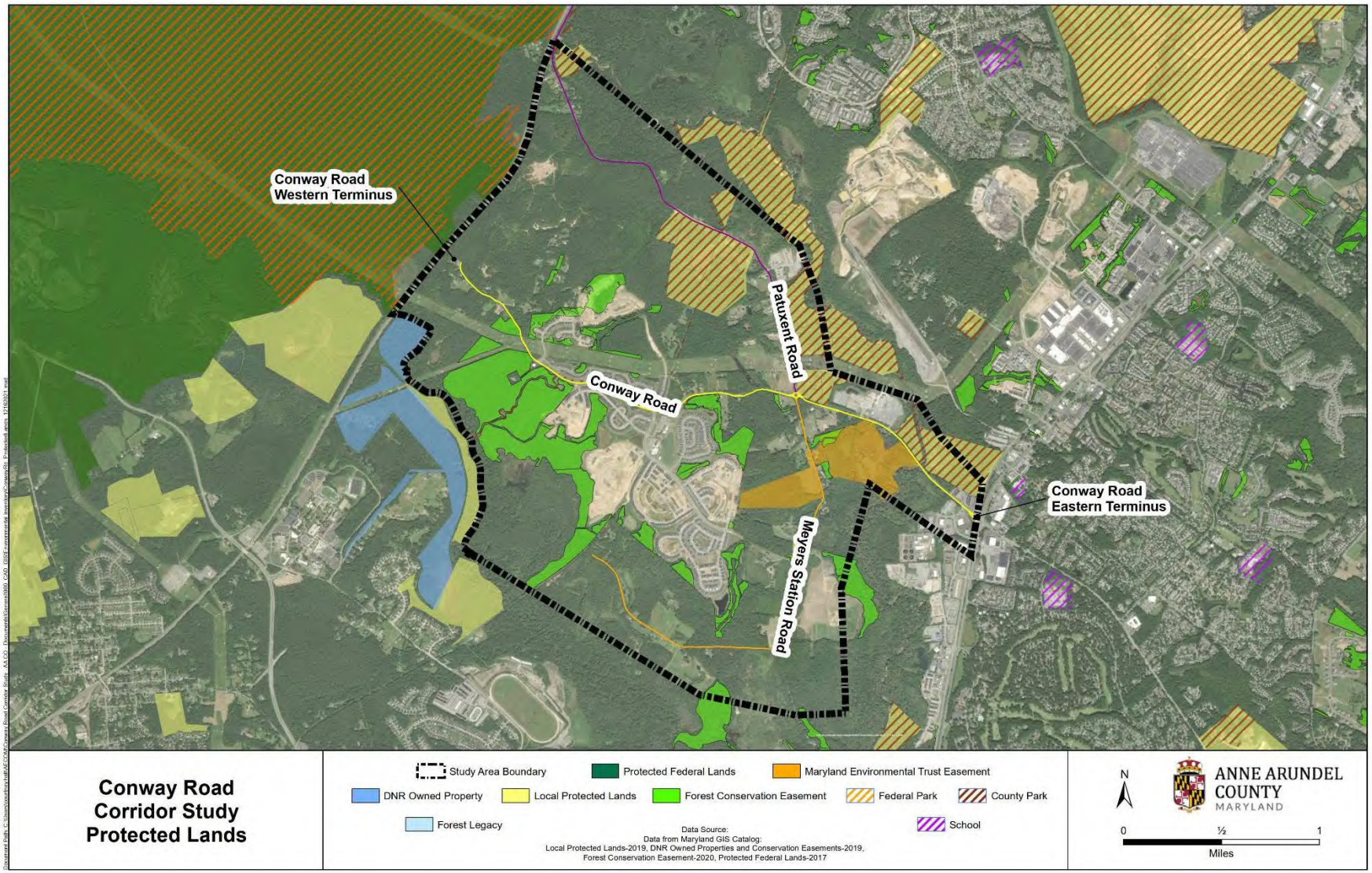
2.3.1 Protected Lands

There are several parcels within the study area designated as Protected Lands as shown in **Figure 2-5** and listed in **Table 2-1**. There are three primary types of protected lands identified: Local Protected Lands, Maryland Environmental Trust Easements, and Forest Conservation Act Easement areas. Local Protected Lands are County owned/maintained parcels and includes Parklands, Open Spaces, and Greenways. Maryland Environmental Trust Easements are owned by the Trust in conservatorship in order to preserve and maintain natural, agricultural, scenic, and cultural resources throughout Maryland. Forest Conservation Act Easements represent agreements reached between property owners and Anne Arundel County in which forested areas are identified, preserved, and protected by restricting the use of the area from any residential, commercial, industrial, or other structures of any kind to be constructed upon the area, nor will cutting or removing vegetation of any kind, grading, filing, dumping, or other non-permitted disruptive activities (other limitations and/or allowances may be made by substituting suitable land to mitigate impacts) be allowed.

Table 2-1: Protected Lands

Property	Protected Land Type	Notes
Ruppert/Patuxent Greenway Conway Park	Local Protected Lands	Two parcels split by Little Patuxent River
MD Environmental Trust Easement (1130Ego19.ANNE)	MD Environmental Trust	Multi Parcel (3/4) Easement 111.43 Acres
Patuxent River Greenway	Local Protected Lands	Multi Parcel (5) Easement
Riden/Patuxent River Greenway	Local Protected Lands	Single Parcel near Woodwardville
Patuxent Ponds Park	Local Protected Lands	Multi Parcel (2) Easement
Catherine Fleshman Plat	Forest Conservation Easement	1.3 Acres
Two Rivers Development	Forest Conservation Easement	Multi Parcel (5) Easement 4.41 Acres
1231 Collins Avenue	Forest Conservation Area	1.2 Acres
1215 Collins Avenue	Forest Conservation Area	0.96 Acres
Stephens Property	Forest Conservation Area	Multi Parcel (2) Easement 1.01 Acres
Deer Run Hollow Lot 4R & 5	Forest Conservation Area	3.48 Acres

Figure 2-5: Protected Lands



2.4 County Schools and School Bus Stop Locations

Three schools currently service the project area – Piney Orchard Elementary, Arundel Middle School, and Arundel High School. School bus routes and related bus stops operate throughout the school year[6] (see **Table 2-2** for full list of routes and stops). Three regular buses and one activity bus serve Piney Orchard Elementary and Arundel Middle School. Two regular and one activity school bus routes serve Arundel High School. Only bus number 227 is shared amongst the three schools - all other routes are served by unique buses. Bus stops are located at both designated stops and at intermittent locations, typically roadside pull-offs as needed to serve students without access to stops along Conway Road, Meyers Station Road, Two Rivers Boulevard, Patuxent Road, Waugh Chapel Road, and after Collins Lane. Although Two Rivers Boulevard is a private road, school bus stops are serviced by Anne Arundel County Public Schools along the road. Dedicated bus stops along Conway Road are at Collins Lane, Upper Patuxent Ridge Road for all schools served within the project area. Dedicated bus stops for Patuxent Road are at 5th Avenue for all schools served within the project area. A dedicated bus stop for Piney Orchard Elementary is provided along Two Rivers Boulevard at the crosswalk across from Orchard Oriole Way. A dedicated bus stop for Arundel Middle along Two Rivers Boulevard is located at the crosswalk near Sands Lens. A dedicated bus stop for Arundel High along Two Rivers Boulevard is located at Orchard Oriole Way and Broad Wing Drive. (See **Figure 2-6** for an illustration of bus stop locations)

Table 2-2: Bus Stop Locations

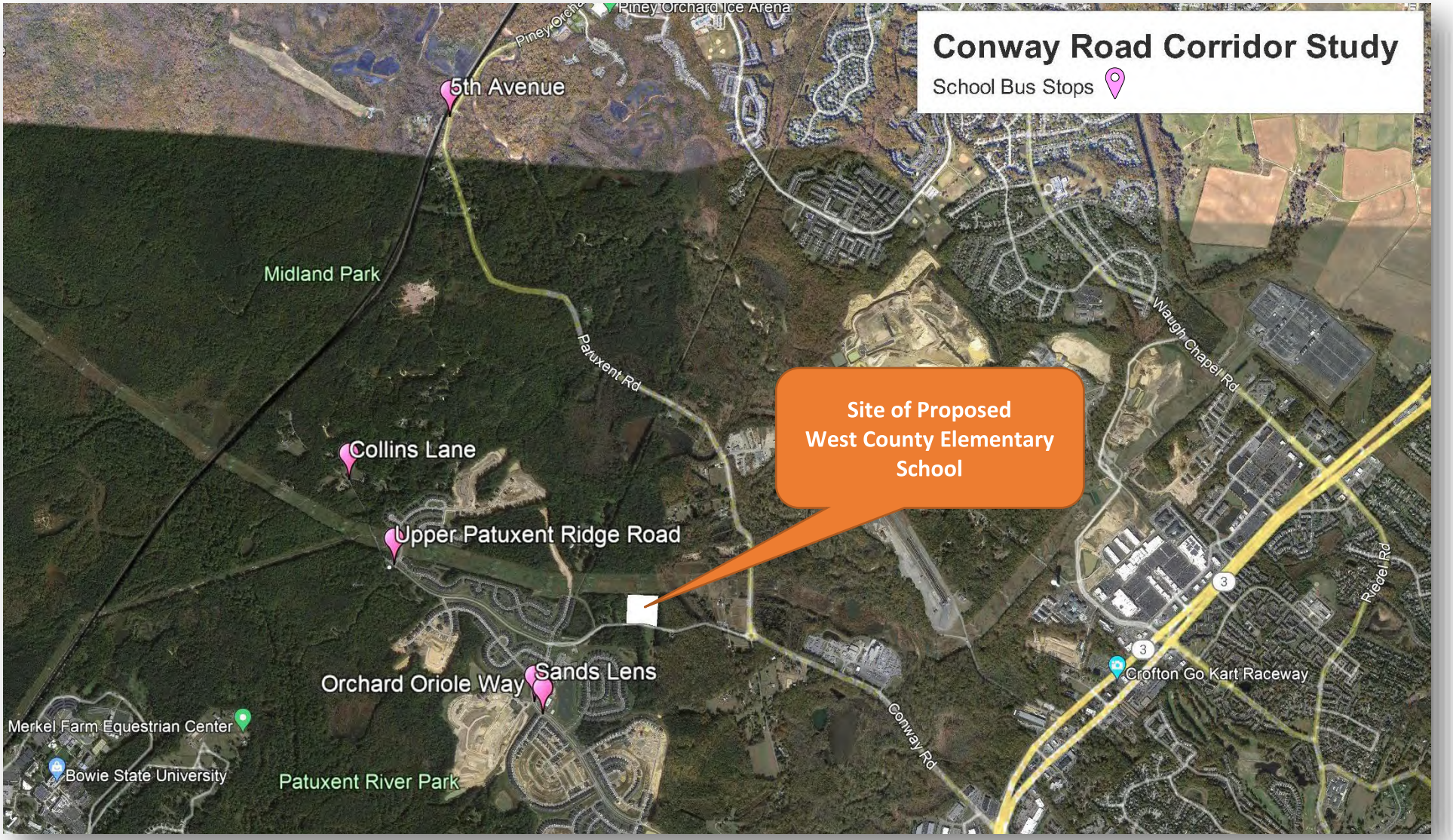
School	Bus Number	Stop Locations
Piney Orchard Elementary	227	Along Crain Highway South from Evergreen Road to Conway Road as necessary
		On and along Conway Road from Crain Highway to Patuxent Road as necessary
	342	Conway Road at Upper Patuxent Ridge Road (same side service)
		Conway Road at Collins Lane
		On and along Conway Road as necessary
	607	Along Meyers Station Road as necessary
		Two Rivers Boulevard at crosswalk location on the Broad Wing Side across from Orchard Oriole Way
		Along Patuxent Road as necessary
		Patuxent Road at 5th Avenue
	Activity Bus	Evergreen Road at Honeylocust Drive
		Two Rivers Boulevard at Orchard Oriole Way
		Conway Road at Patuxent Ridge Road
Arundel Middle School	107	Along Grays Ford Road as necessary
		Along Meyers Station Road as necessary
		Conway Road at Upper Patuxent Ridge Road
		Conway Road at Collins Lane

[6] Anne Arundel County Public Schools. 2021. School Year: 2021-2022 Bus Stop Times. Available at: https://busstops.aacps.org/. Accessed November 16, 2021.

School	Bus Number	Stop Locations
		Along Conway Road as necessary
		Two Rivers Boulevard at 1st crosswalk near Sands Lens
		Along Patuxent Road as necessary
		Patuxent Road at 5th Avenue
	227	Waugh Chapel Road at Reigle Court
		Waugh Chapel Road at Crawford Knoll Court
		Waugh Chapel Road at Haymeadow Court
		Piney Orchard Parkway at Orchard Knoll Way
		Piney Orchard Parkway at Orchard Square Way
		Waugh Chapel road at Blackcherry Way
	259	Waugh Chapel Road at Meadows Court
		On Waugh Chapel Road at open space before Dairy Farm traffic light of Sage Drive (same side service)
	Activity Bus 607	Two Rivers Boulevard at Orchard Oriole Way
		Two Rivers Boulevard at Broad Wing Drive
		Along Conway Road at Upper Patuxent Ridge Road
		Along Conway Road at Collins Avenue as necessary
		Along Grays Ford Road and Meyers Station Road as necessary
		Along Patuxent Road as necessary
Arundel High School	39	Along Conway Road as necessary
		Two Rivers Boulevard at Orchard Oriole Drive
		Two Rivers Boulevard at Broad Wing Drive
		Conway Road at Upper Patuxent Ridge Road
		Conway Road at Collins Avenue
		Along Patuxent Road as necessary
		Patuxent Road at 5th Avenue
	227	Waugh Chapel Road at Reigle Court
		Waugh Chapel Road at Crawfords Knoll Court
	Activity Bus	Two Rivers Boulevard at Orchard Oriole Way

As noted previously, Anne Arundel County has programmed the construction of a new Elementary School within the study area. West County Elementary School (see **Figure 2-6**) is being planned and is at 60% design, according to a July 2021 Construction Status update provided by County Board of Education. Construction documents are scheduled for completion in early 2022. West County Elementary School is being constructed, in part, to accommodate the current and increasing demand associated with the new residents of the Two Rivers Development; however, the new school is anticipated to draw students from other portions of the Odenton area as well. At this time the county anticipates an enrollment of approximately 600 students in the new school once construction is completed. This study will assess pedestrian and bicycle access needs and evaluate the potential impact on traffic operations associated with the proposed school.

Figure 2-6: Existing School Bus Stops & Site of Proposed West County Elementary



2.5 Cultural Resources

The team conducted a desktop survey using the Maryland Historical Trust's online database (Medusa). See **Figure 2-7** for general locations of cultural resources.

2.5.1 Scenic and Historic Roads

As noted in the introduction, Conway Road, Patuxent Road, Grays Ford Road, and Meyers Station Road are all identified as scenic and historic roads[7]. Conway Road has changed noticeably and no longer retains the characteristics for which it was originally listed as a "Category 3" road under the 1997 Scenic and Historic Roads Commission. Patuxent Road was designated as a rural "Category 1" road in 1997 and retains a high degree of integrity today. Grays Ford and Myers Station Roads were both categorized as "Category 2" by the 1997 Commission, and both retain high levels of scenic and historic integrity. See **Figure 2-7** for extents of scenic and historic roads within the study area.

2.5.2 Historic Places

Woodwardville Historic District is listed on the National Register of Historic Places. The community includes 16 historic structures. Additionally, nine properties located near the project corridor are listed on the Maryland Inventory of Historic Properties.

- AA-745: Center-gable house - 1323 Meyers Station Road
- AA-1016: Bragers Station Store - Patuxent Road, Woodwardvillle
- AA-984: Bituminous Construction Inc. Asphalt Plant, Patuxent Road, Woodwardvillle
- AA-890: Woodwardville Survey District. 937-987 Patuxent Road and 2811-2825 5th Avenue, Odenton
- AA-76: Meyer Log House, Bragers Road, Crofton.
- AA-1017: Bealmear Sawmill Site, Meyers Station Road, Crofton
- AA-2104: St. John A.M.E. Zion Church, Forks African Methodist Episcopal Zion Church (shown in **Figure 2-8**)
- PG 71A-37: Bridge P-0111 - Race Track Road over Horsepen Branch, Bowie
- PG 71A-4: Anderson House - 8707 Race Track Road, Bowie
- PG:71A-21: Bowie State University – 14000 Jericho Park Road, Bowie
- PG 71B-19: Colbert Family Farm Site - 9016 Race Track Road, Bowie

2.5.3 Archeological Sites

Several archeological sites are located within the study area. Along Patuxent River and its tributaries, there is a high potential for prehistoric sites and colonial period sites. These sites are generally found within 500 feet or potable waters, areas with well-drained soils and ecological diversity. Additionally, there is potential for archeological sites within farmsteads, homes along old roads, and near railroads. The location of known archeological sites is restricted to prevent looting and destruction of the resources.

[7] Anne Arundel County. 2006. Scenic and Historic Roads Inventory. Available at: https://www.aacounty.org/departments/planning-and-zoning/cultural-resources/forms-and-publications/Scenic_Historic_Roads_Inventory.pdf. Accessed October 22, 2021.

Figure 2-7: Historic Places

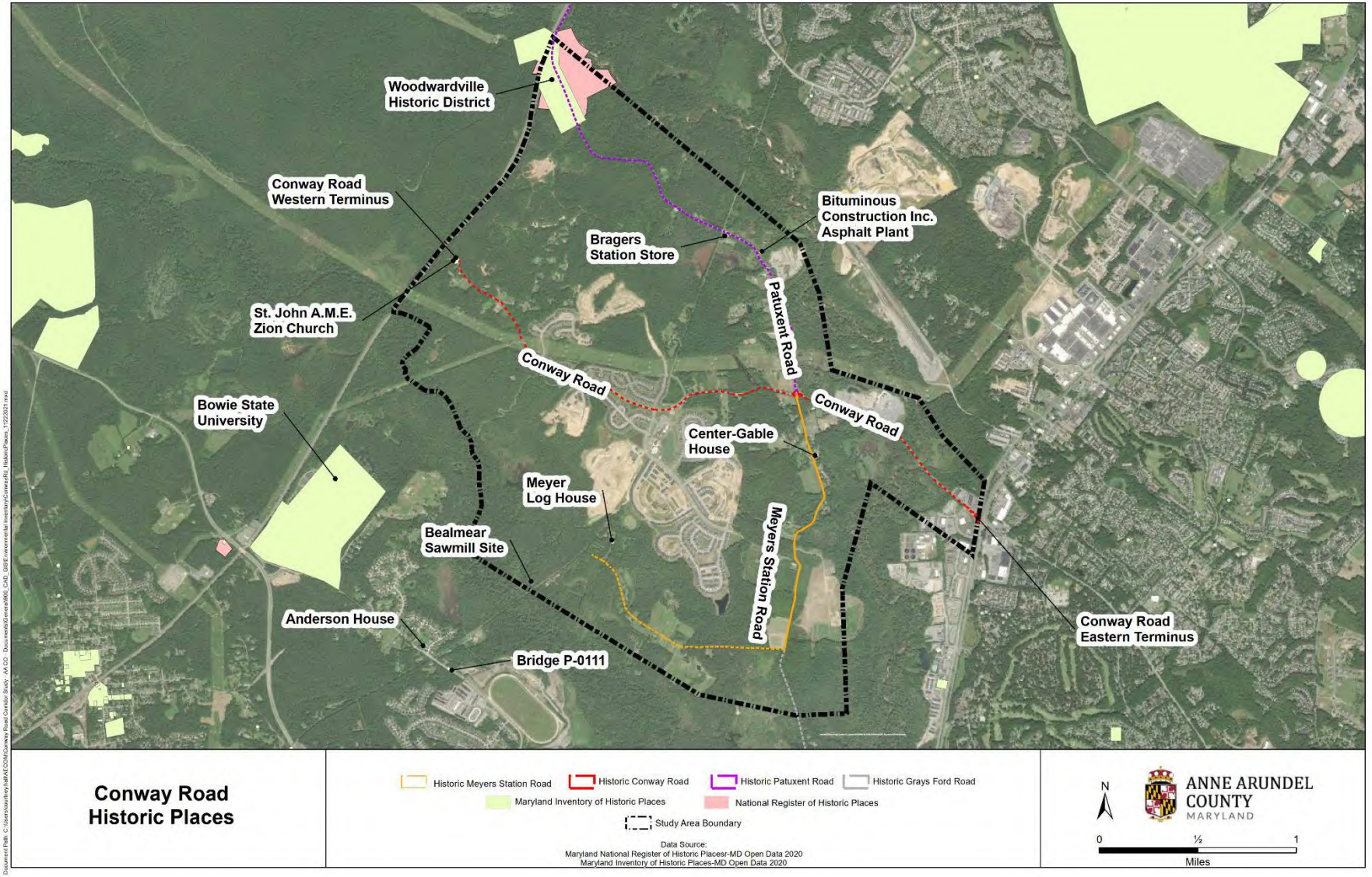


Figure 2-8: St. John A.M.E. Zion Church, located at Western Terminus of Conway Road

2.6 Natural Resources

An inventory of existing natural resources in the study area was completed using available published sources and limited field reconnaissance.

2.6.1 Waters of the US, Including Wetlands

The study area is located within the Little Patuxent River watershed and is drained by Little Patuxent River. Little Patuxent River and its tributaries are designated as Use Class I – water contact recreation and protection of nontidal warmwater aquatic life[8]. Instream work is prohibited in Little Patuxent and its tributaries between March 1 and June 15.

The Little Patuxent River (shown in **Figure 2-9**) is located within the study area and is a lower perennial riverine that flows from north to south of Conway Road and continues north of the Patuxent Road. The stream continues south to its confluence with the Patuxent River. The general locations of these waterways are shown in **Figure 2-1** environmental inventory map.

Figure 2-9: Little Patuxent River, facing North

[8] Maryland Department of the Environment. 2019. Designated Use Classes for Maryland's Surface Waters. Available at: https://mdewin64.mde.state.md.us/WSA/DesigUse/index.html. Accessed October 22, 2021.

MDNR identified several wetlands (approximately 30 systems containing 146 individual wetlands – according to MDNR database records) within the study area, one of which is *of special state concern* located near the southwest corner of the Patuxent Road / Bragers Road intersection. A field delineation of waters of the U.S., including wetlands, would be required to verify the presence of jurisdictional resources within the study area. For impacts to waters of the US, including wetlands and their buffers, authorization under the Clean Water Act may be required from the US Army Corps of Engineers (USACE) and the Maryland Department of the Environment (MDE).

2.6.2 Forests

Forested areas exist along Conway Road and along Patuxent Road. These forests are classified as an Oak-Hickory eastern forest cover type[9].

The 2003 Odenton Small Area Plan identifies the importance of minimizing forest impacts relative to increasing forest retention and open space to the extent possible. The Plan recognizes that protecting natural resources is a high priority for the community, and the retention of buffers along waterways is necessary to prevent further degradation of local streams such as the Little Patuxent River within the study area.

In addition to the broader goals employed during planning, development of forested areas is regulated pursuant to §17-6-301 (Forest Conservation) of the County Code. Linear transportation projects are exempt from the Forest Conservation provisions if the project does not result in the cutting, clearing, or grading of more than 20,000 square feet of forest. Any non-exempt linear project is required to satisfy the Forest Conservation provisions of the County Code including preparation of a Forest Stand Delineation (FSD) and Forest Conservation Plan (FCP) detailing the location of proposed forest retention, afforestation, and reforestation. There are approximately 11 Forest conservation easements are located within the study area[10].

2.6.3 Floodplains

The project area is in designated 100-year floodplains is regulated pursuant to Article 16 of the Anne Arundel County Code (Floodplain Management, Erosion and Sediment Control, and Stormwater Management). A review of FEMA floodplain mapping shows floodplains are mapped within the study area. Patuxent Road (shown in **Figure 1-4** is located within a designated 100-year floodplain and frequently floods. Additional details regarding flood prone areas within the study area are discussed in Section 1.2.

Figure 2-10 depicts the intersection of Bragers Road, the WB&A Trail, and Patuxent Road. This is a location that is often cutoff from motor vehicle, bicycle, and pedestrian access during significant rainfall events due to flooding closing portions of the facilities and making travel in the area hazardous.

[9] United States Department of Agriculture. 2016. Forest Atlas of the United States. Available at: https://forest-atlas.fs.fed.us/grow-forest-types.html. Accessed October 22, 2021.
[10] Anne Arundel County. 2021. Forest Conservation Easements. https://opendata.aacounty.org/datasets/forest-conservation-easements/explore?location=39.023735%2C-76.711823%2C13.73. Accessed October 22, 2021.

Figure 2-10: Patuxent Road at Bragers Road/WB&A Trail, facing North

2.6.4 Threatened and Endangered Species

The federal Endangered Species Act and the Maryland Nongame and Endangered Species Conservation Act provide the regulatory authority over activities affecting federal and State listed species in Maryland. Both the USFWS and the Maryland Department of Natural Resources (MDNR) maintain a database of listed rare, threatened, and endangered species and their habitats. MDNR's Sensitive Species Project Review Areas (SSPRA) mapping indicates that threatened or endangered species or habitat occurs within the study area. Coordination with the MDNR Environmental Review Program and Wildlife and Heritage Service (WHS) would be necessary to obtain current information on any known State listed or protected resources within the study area.

According to the USFWS IPaC system, except for occasional transient individuals, the only federally proposed or listed threatened or endangered species that may occur within the study area are the Northern Long-eared Bat (*Myotis septentrionalis*) and Monarch Butterfly (*Danaus plexippus),* listed as federally threatened. See **Appendix B** for details.

Potential habitat for threatened and endangered species is shown in **Figure 2-11.**

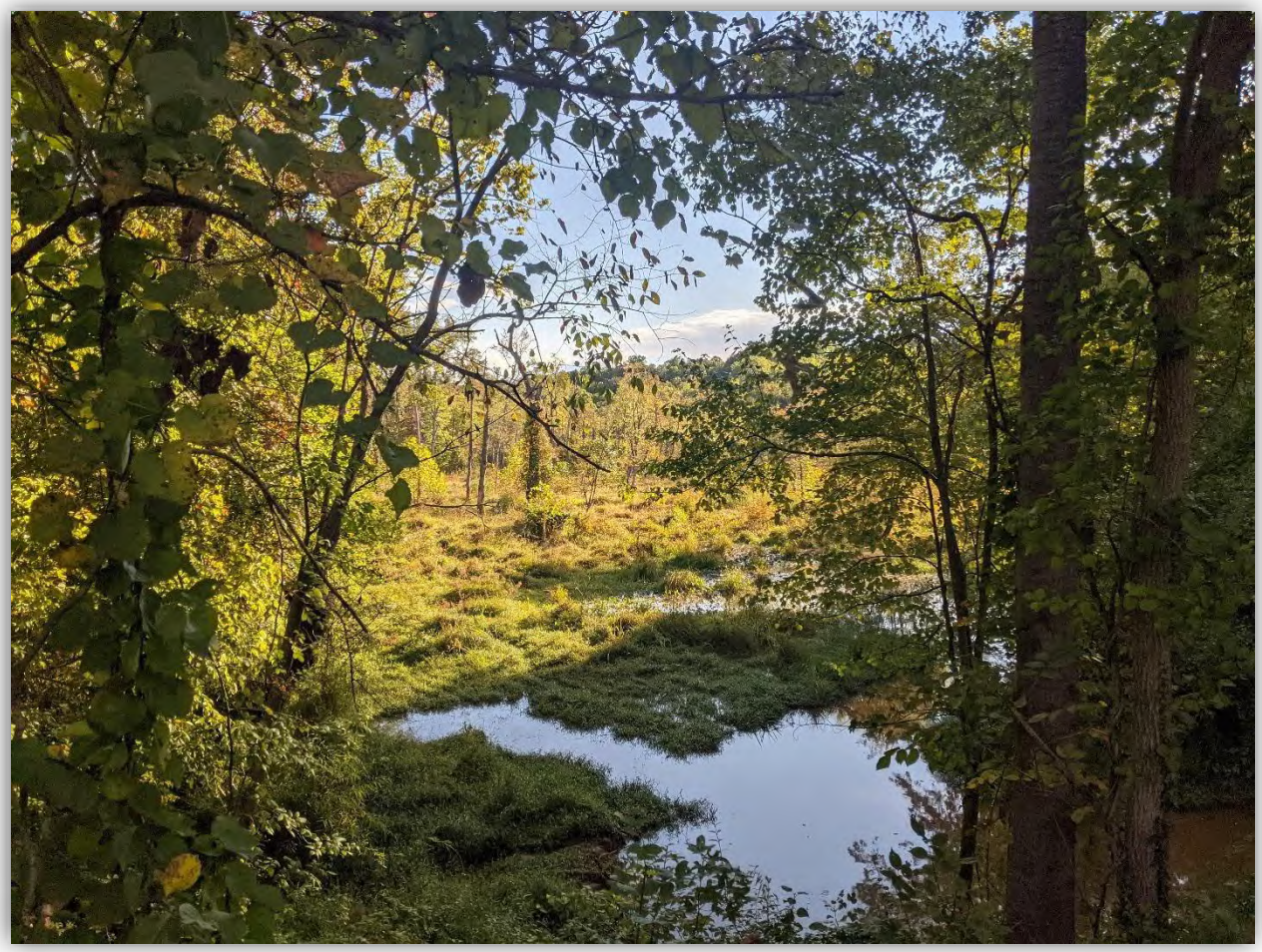


Figure 2-11: Potential Habitat along Conway Road, facing North

2.6.5 Population and Demographics

The U.S. Census identifies Odenton as a Census Designated Place (CDP). Population and demographic data estimates were obtained from the US Census 2019 American Community 5-Year Estimate Profile data[11]. The population for Odenton was 35,399 in 2010 and 41,846 in 2019, an increase of 18.2 percent. Comparatively, the population for Anne Arundel County was 527,020 in 2010 and 571,275 in 2019, an increase of 9.9 percent. **Table 2-3** shows the demographic distribution for Odenton and Anne Arundel County. Approximately 37.5 percent of the population in Odenton is minority, compared to a 27.3 percent minority population countywide.

[11] United States Census Bureau. 2019. 2019 American Community 5-Year Estimate Profile. Available at: https://data.census.gov/cedsci/table?q=Odenton&tid=ACSDP5Y2019.DP05. Accessed October 22, 2021.

Table 2-3: Demographic Distribution for Odenton and Anne Arundel County

	Odenton CDP		Anne Arundel County	
	Total	**Percentage**	**Total**	**Percentage**
Black or African American	9,512	22.7	95,710	16.8
American Indian and Alaska Native alone	34	0.1	1,175	0.2
Asian	2,731	6.5	21,605	3.8
Native Hawaiian and Other Pacific Islander alone	7	0.0002	386	0.1
Some Other Race alone	690	1.6	13,578	2.4
Two or More Races	2,721	6.5	23,351	4.1
Hispanic or Latino*	*3,572*	*8.5*	*44,621*	*7.8*
Total Minority	**15,695**	**37.5**	**155,805**	**27.3**
White Alone	26,151	62.5	415,470	72.7
Total Population	41,846	100	571,275	100

* Hispanic or Latino is a component of all races listed, breakout data included for illustrative purposes only.
Source: US Census 2019 American Community 5-Year Estimate Profile

Median Household Income

The median household income for the Odenton was $99,601 for the 2015-2019 American Community Survey 5-Year Estimates. The median incomes for Anne Arundel County and for Maryland during the same time period were $100,798 and $86,738, respectively. Median incomes for Odenton, Anne Arundel County, and Maryland are shown in **Table 2-4**. There are no identified low income populations within the study area; however, additional hotspot evaluations for pockets of lower income households will be investigated as the study progresses.

Table 2-4: Median Household Income, 2015-2019 (Odenton CDP)

	Median Household Income
Odenton	$99,601
Anne Arundel County	$100,798
Maryland	$86,738

Source: US Census 2019 American Community 5-Year Estimate Profile

3 Existing Conditions Traffic Analysis

The study area for this feasibility study includes Conway Road from MD 3 to its western terminus, and for the purposes of this traffic analysis can be characterized by six main intersections:

- Conway Road at MD 3 (Signalized)
- Conway Road at Concord Boulevard (Un-signalized)
- Conway Road at the Princess Shopping Center/Future Professional Boulevard intersection (Un-signalized)
- Conway Road at Patuxent Road/Meyers Station Road (Roundabout)
- Conway Road at Two Rivers Boulevard/Patuxent Ridge Road (Un-signalized)
- Conway Road at Upper Patuxent Ridge Road (Un-signalized)

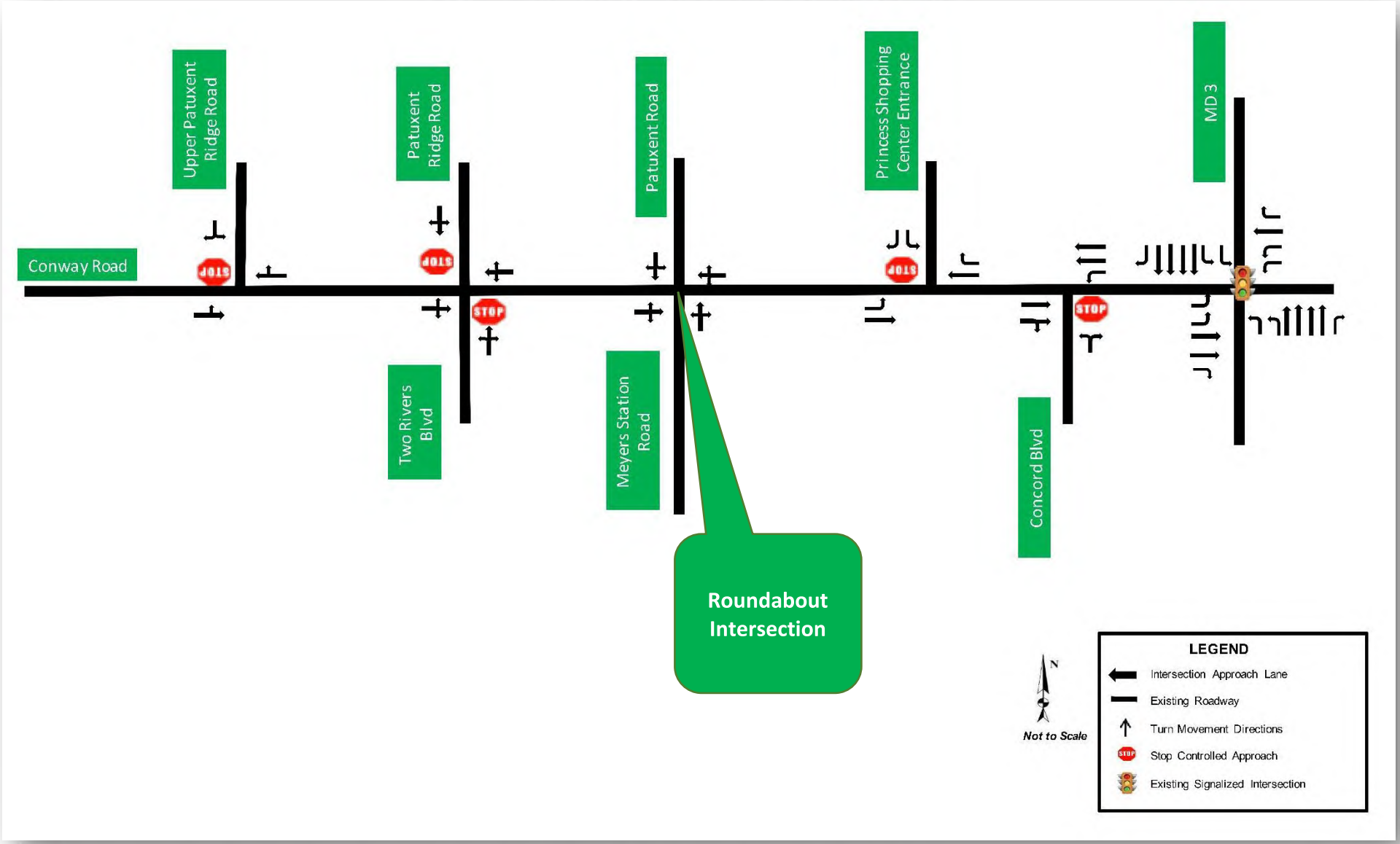
The following traffic analyses were conducted for this project:

- An inventory of existing geometric conditions
- An inventory of traffic controls, lane use, and speed limits
- Crash data analysis of the study segments and study intersections
- Existing volumes collection and balancing
- Highway Capacity Manual (HCM) 6 Level of Service (LOS) and intersection delay analysis at all study intersections

3.1 Existing Geometric Conditions

Existing geometric lane configurations were verified on a September 29, 2021 field visit. Conway Road is a two-lane county road with a speed limit of 30 to 40 MPH that provides access to the new Two Rivers development from MD 3. It is also used to reach Woodwardville and Odenton. See **Figure 3-1**.

Figure 3-1: Existing Geometric Lane Configuration



3.2 Crash Data Analysis

Crash data was obtained from MDOT SHA for the three-year period of 2018-2020 for the following study segments:

- Conway Road from MD 3 to Western Terminus
- Meyers Station Road from Conway Road to Southern Terminus
- Patuxent Road from Conway Road to 5th Avenue

And four study intersections:

- Conway Road/MD 424 at MD 3 (Signalized)
- Conway Road at Concord Boulevard (Un-signalized)
- Conway Road at Princess Shopping Center/Future Professional Blvd (Un-signalized)
- Conway Road at Patuxent Road/Meyers Station Road (Roundabout)

Available historical crash data is included in **Appendix C.**

3.2.1 Conway Road

Crash Data Results for Conway Road are shown in **Table 3-1** and **Table 3-2-** below.

Table 3-1: Crash Type for Conway Road

Year	Crash Type										
	Opposite Direction	Rear End	Sideswipe	Left Turn	Angle	Pedestrian	Parked Vehicle	Fixed Object	Overturned Vehicle	Other	Total
2018	0	0	0	0	2	0	0	2	0	0	4
2019	1	1	0	0	3	1	0	1	0	0	7
2020	2	2	0	1	0	0	0	2	0	0	7
Total	3	3	0	1	5	1	0	5	0	0	18

Table 3-2: Crash Severity for Conway Road

Year	Severity			
	Fatal	Injury	Property Damage Only (PDO)	Total
2018	0	2	2	4
2019	1	1	5	7
2020	0	2	5	7
Total	1	5	12	18

There was one fatal crash reported in the provided data, five crashes that resulted in injury, and twelve property damage crashes. The one fatal crash involved a pedestrian and took place at night in wet conditions. The crash occurred approximately .2 miles east of Patuxent road and there are no pedestrian facilities at the reported crash location.

3.2.2 Meyers Station Road

Crash data results for Meyers Station Road are shown in **Table 3-3** and **Table 3-4.**

Table 3-3: Crash Type for Meyers Station Road

Year	Crash Type									
	Opposite Direction	Rear End	Sideswipe	Left Turn	Angle	Pedestrian	Parked Vehicle	Fixed Object	Other	Total
2018	0	0	0	0	0	0	0	0	0	0
2019	0	0	0	0	0	0	0	1	0	1
2020	0	0	0	0	0	0	0	1	0	1
Total	0	0	0	0	0	0	0	2	0	0

Table 3-4: Crash Severity for Meyers Station Road

Year	Severity			
	Fatal	Injury	PDO	Total
2018	0	0	0	0
2019	0	1	0	1
2020	0	0	1	1
Total	0	1	1	2

There were no fatal crashes, one crash that resulted in injury, and one property damage crash. There were no discernible trends in crash types and crash severity on Meyers Station Road.

3.2.3 Patuxent Road

Crash data results for Patuxent Road are shown in **Table 3-5** and **Table 3-6**.

Table 3-5: Crash Type for Patuxent Road

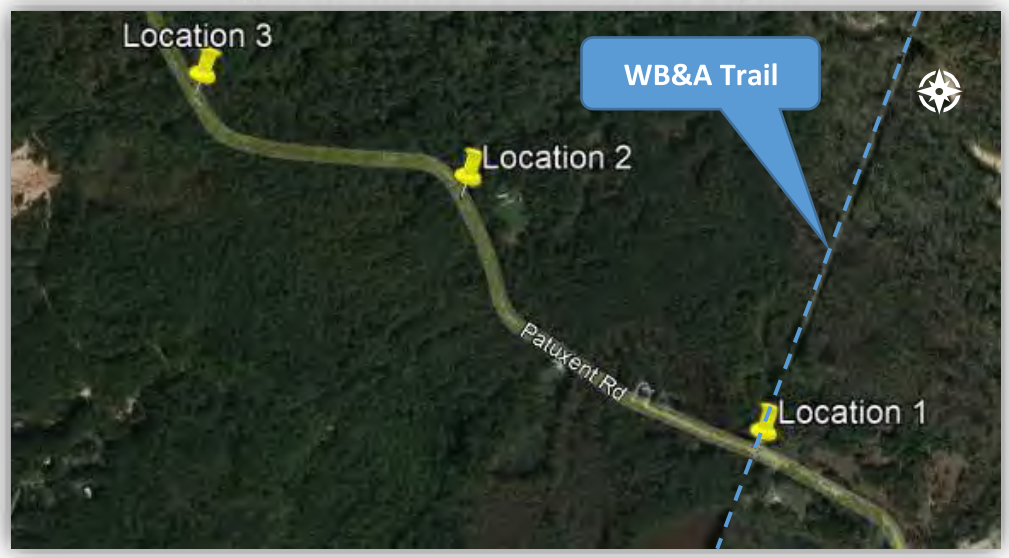
Year	Crash Type									
	Opposite Direction	Rear End	Sideswipe	Left Turn	Angle	Pedestrian	Parked Vehicle	Fixed Object	Other	Total
2018	2	3	0	1	1	0	0	9	2	18
2019	0	2	1	0	0	0	0	8	0	11
2020	0	0	0	0	0	1	0	6	0	7
Total	2	5	1	1	1	1	0	23	2	36

Table 3-6: Crash Severity for Patuxent Road

Year	Severity			
	Fatal	Injury	PDO	Total
2018	0	6	12	18
2019	0	5	6	11
2020	0	3	4	7
Total	0	14	22	36

There were no fatal crashes, 14 crashes that resulted in injury, and 22 property damage crashes. Most of the crashes involved a fixed object and occurred at the three locations along Patuxent Road shown in **Figure 3-2**.

Figure 3-2: Patuxent Road Crash Hotspots



Crash Hotspot Location 1, shown in **Figure 3-3**, is at the WB&A Trail crossing. Unlike the other hotspots, most of the crashes at this location were rear-end crashes.

Figure 3-3: Crash Hotspot Location 1

Crash Hotspot Location 2, shown in **Figure 3-4**, is located at a horizontal curve with guardrail on both sides of the roadway. All of the crashes were fixed object crashes, mostly involving ditches or culverts. Field examination showed damage to the guardrail, which most likely protected vehicles from more serious crashes.

Figure 3-4: Crash Hotspot Location 2

Crash Hotspot Location 3, shown in **Figure 3-5**, is located just south of Woodwardville. All the crashes at this location were fixed object crashes. Several signposts were tilted/leaning or damaged, which may have resulted from vehicular collisions. A radar speed sign was recently installed; however, crashes have not decreased in this location over the study period.

Figure 3-5: Crash Hotspot Location 3

3.3 Existing Traffic Volumes

Existing AM, PM, and Weekend turning movement counts were collected by Mead & Hunt on several Thursdays and Saturdays in September and October 2021 are provided in **Appendix D**. The raw volumes were then balanced to produce the study volumes. The resultant volumes are shown in **Figure 3-6** and **Figure 3-7.**

Existing Traffic Data is provided in **Appendix E**

3.3.1 Heavy Vehicle Volumes

The percentage of heavy vehicles in the study area is shown in **Table 3-7** below. The percentages range from 3.8 percent to 11.2 percent, with them generally being higher on the western end of Conway Road. This may be due to ongoing construction in the Two Rivers development. The concrete facility between the Little Patuxent River and Patuxent Road is also a contributor to heavy vehicle traffic.

Table 3-7: Heavy Vehicle Volumes

Location	Direction	% Heavy Vehicles
Conway Rd West of Upper Patuxent Ridge Rd	EB	10.30%
	WB	11.20%
Conway Rd West of Two Rivers Blvd	EB	7.00%
	WB	6.70%
Conway Rd East of Two Rivers Blvd to Patuxent Rd	EB	6.90%
	WB	6.00%
Conway Rd East of Patuxent Rd	EB	4.90%
	WB	5.50%
Conway Rd East of Little Patuxent Bridge	EB	4.80%
	WB	4.90%
Conway Rd West of Concord Blvd	EB	5.50%
	WB	8.10%
Patuxent Rd North of Conway Rd	NB	3.80%
	SB	5.00%
Meyer Station Rd South of Conway Rd	NB	9.10%
	SB	11.20%

Figure 3-6: Existing Weekday Volumes

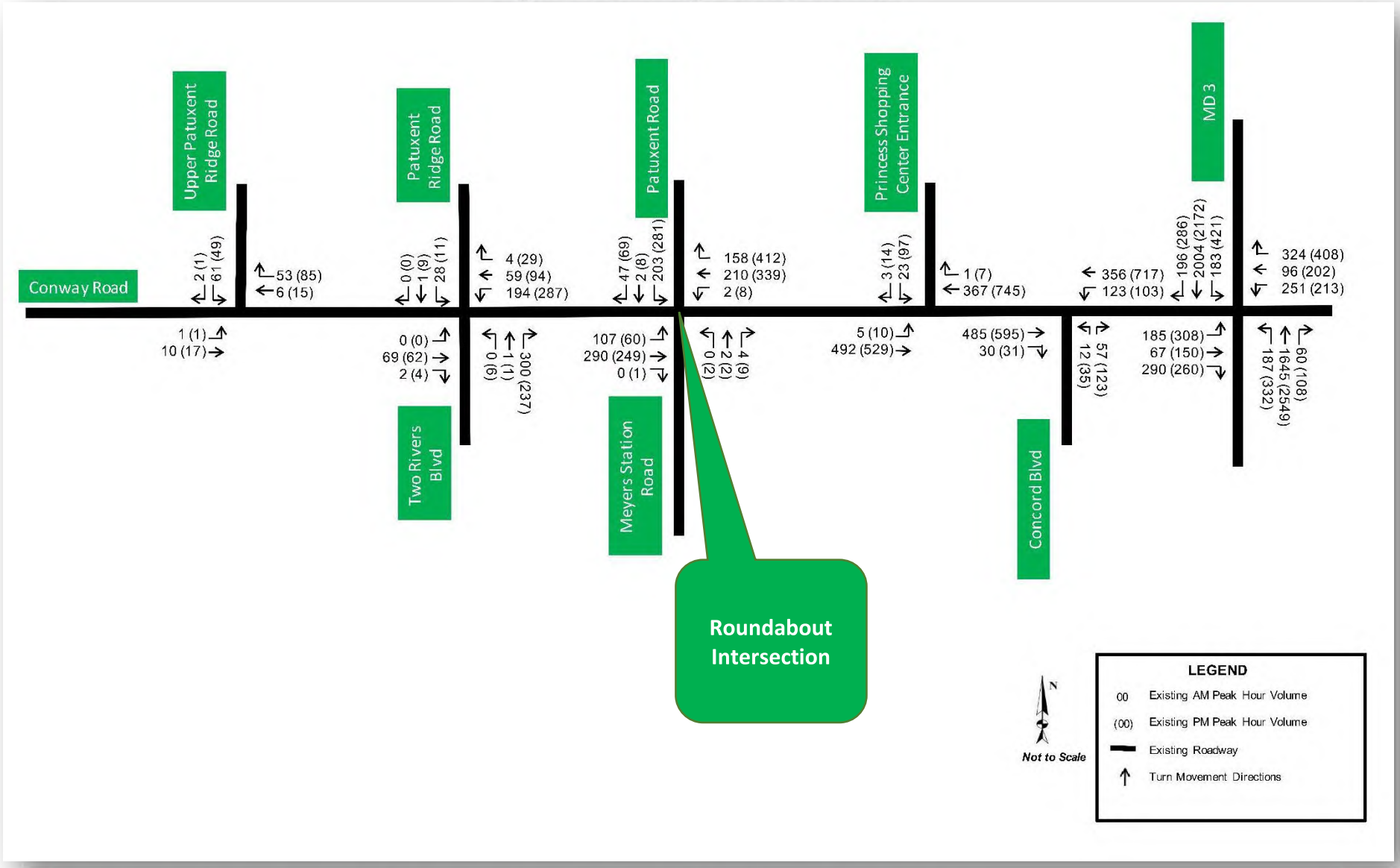
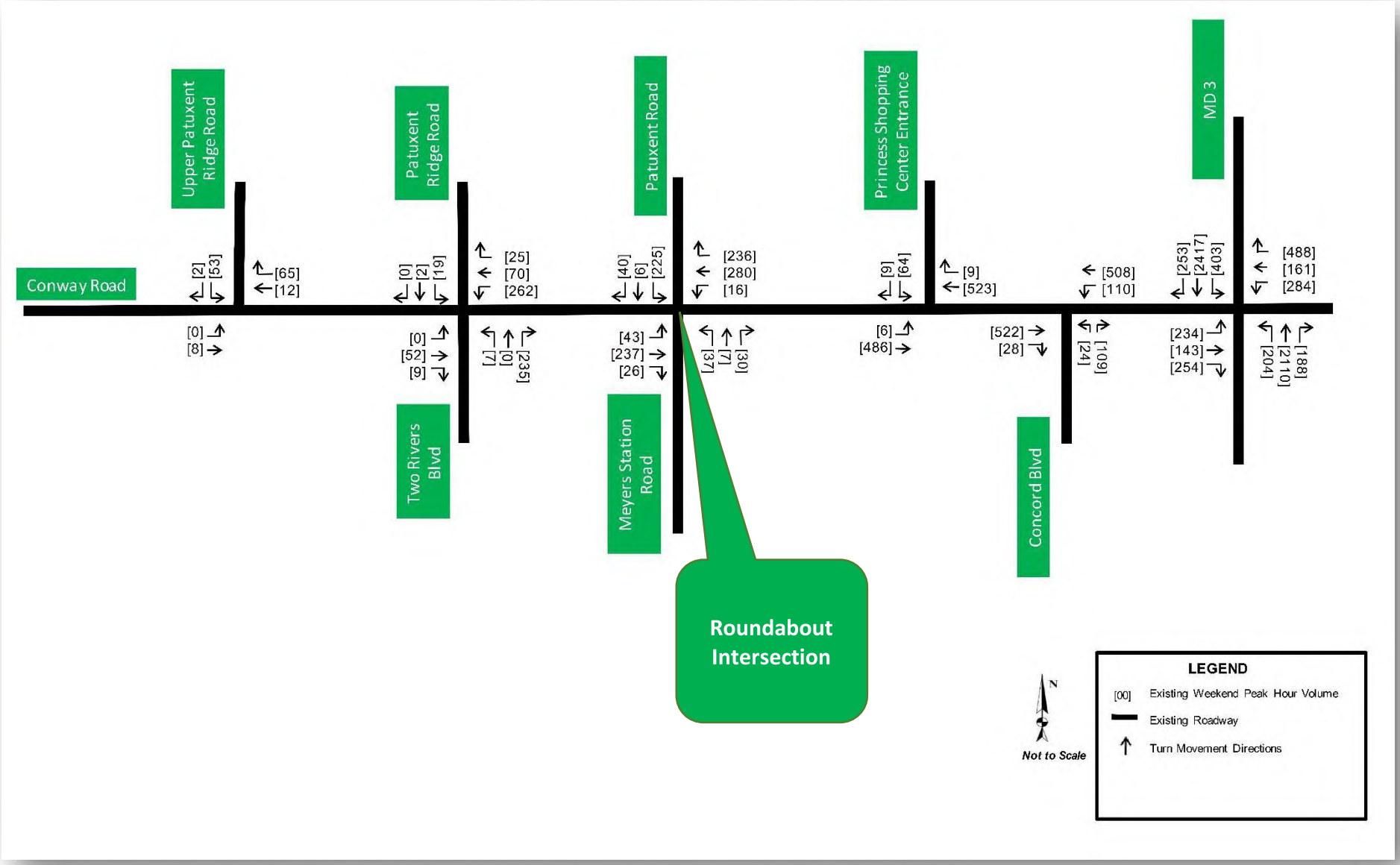


Figure 3-7: Existing Weekend Volumes



3.4 Existing Speeds

An analysis of existing speeds is provided below in **Table 3-8**. 85th percentile speed is defined as the speed that 85 percent of traffic travels below. The 10-MPH pace is the 10 MPH increment that the highest percent of vehicles travel at. Raw speed data is included in **Appendix F**.

Table 3-8: Existing Speeds

Location	Direction	Speed Limit	85th Percentile Speed	10-MPH Pace	% of Vehicles above speed limit
Conway Rd West of Upper Patuxent Ridge Rd	EB	30 MPH	31-35 MPH	<30 MPH	38%
	WB	30 MPH	36-40 MPH	<30 MPH	42%
Conway Rd West of Two Rivers Blvd	EB	30 MPH	41-45 MPH	30-40 MPH	85%
	WB	30 MPH	41-45 MPH	30-40 MPH	87%
Conway Rd East of Two Rivers Blvd to Patuxent Rd	EB	30 MPH	36-40 MPH	30-40 MPH	69%
	WB	30 MPH	36-40 MPH	30-40 MPH	82%
Conway Rd E of Patuxent Rd	EB	40 MPH	41-45 MPH	35-45 MPH	36%
	WB	40 MPH	46-50 MPH	35-45 MPH	51%
Conway Rd East of Little Patuxent Bridge	EB	40 MPH	46-50 MPH	40-50 MPH	75%
	WB	40 MPH	46-50 MPH	40-50 MPH	80%
Conway Rd West of Concord Blvd	EB	40 MPH	31-35 MPH	<30 MPH	2%
	WB	40 MPH	36-40 MPH	<30 MPH	6%
Patuxent Rd North of Conway Rd	NB	35 MPH	41-45 MPH	35-45 MPH	69%
	SB	35 MPH	36-40 MPH	30-40 MPH	56%

Location	Direction	Speed Limit	85th Percentile Speed	10-MPH Pace	% of Vehicles above speed limit
Meyer Station Rd South of Conway Rd	NB	35 MPH	36-40 MPH	<30 MPH	38%
	SB	35 MPH	41-45 MPH	30-40 MPH	45%

The county has identified the segment of Conway Road between Two Rivers Boulevard and Patuxent Road as a location with limited sight distance. The 85th Percentile speeds show speeds greater than 10 MPH over the speed limit. The County has suggested posting warning speed advisory signs of 20 MPH.

3.5 Existing Traffic Analysis

The existing year analysis was performed based on existing geometric lane configurations, existing traffic volumes, and existing signal timings provided by Anne Arundel County. The operational analyses at the study area intersections were performed for both AM and PM peak hours on a typical weekday, as well as Saturday peak.

The study area consists of four un-signalized intersections, one signalized intersection, and one roundabout. The capacity analyses performed followed the guidelines and procedures outlined in the Highway Capacity Manual (HCM 6). Synchro 11 traffic simulation software was used to perform the un-signalized and signalized intersection operational analyses. Sidra 9 traffic simulation software was used to perform the roundabout intersection operational analysis.

Existing Level of Service Analysis is found in **Appendix G.**

3.5.1 Signalized Intersection Analysis

The control delay for a signalized intersection is determined for each lane group and aggregated for each approach and for the intersection and divided by the number of vehicles. Based on these delay values, a grade or LOS ranging from LOS A, the best, to LOS F, the worst, are assigned. Each LOS represents a range of driver delay. Generally, for roadways in Anne Arundel County, and for the purposes of this study, LOS D is the worst acceptable operating condition.

Table 3-9 presents the LOS criteria for signalized intersections, which is directly related to the average intersection control delay value. The intersection LOS grades for signalized intersections are as follows:

Table 3-9: Signalized Intersections Level of Service (LOS) Criteria

Level of Service	Average Control Delay (seconds/veh)
A	≤ 10.0
B	>10.0 to 20.0
C	> 20.0 to 35.0
D	> 35.0 to 55.0
E	> 55.0 to 80.0
F	> 80.0

Source: Highway Capacity Manual

The signalized intersection operation analysis results are shown in **Table 3-10**.

Table 3-10: Signalized Intersection Analysis

Intersection	AM		PM		Weekend	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Conway Road at MD 3	36.4	D	68.6	E	44.7	D

Conway Road at MD 3 operates at an unacceptable LOS E in the PM peak. All movements operate at Level of Service E or worse except the right turn movements with yield control and the NB and SB through movements.

3.5.2 Un-Signalized Intersection Analysis

Since all un-signalized study intersections are two-way stop sign controlled intersections the Synchro analysis results provide an 'approach delay'. The approach delay is a volume weighted average of the approach control delay. The highest approach delay was chosen to represent the intersection control delay since the free movements have a control delay of zero seconds and would not be representative of the intersection. Based on these delay values, a "grade" of LOS ranging from LOS A, the best, to LOS F, the worst, are assigned. Generally, for roadways in Anne Arundel County, LOS D is the worst acceptable operating condition.

The intersection LOS "grades" as defined by the HCM for stop-controlled intersections are listed in **Table 3-11.**

Table 3-11: Un-signalized Intersections Level of Service (LOS) Criteria

Level of Service	Average Control Delay (seconds/veh)
A	≤ 10.0
B	10.0 to 15.0
C	15.0 to 25.0
D	25.0 to 35.0
E	35.0 to 50.0
F	> 50.0

Source: Highway Capacity Manual

The un-signalized intersections operation analysis results are shown in **Table 3-12**.

Table 3-12: Un-Signalized Intersection Analysis

Intersection	AM		PM		Weekend	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Conway Road at Concord Blvd	11.9	B	23.9	C	16.3	C
Conway Road at Princess Shopping Center	13.8	B	63.9	F	25.4	D
Conway Road at Two Rivers Blvd/Patuxent Ridge Road	25.8	D	27.6	D	27.3	D
Conway Road at Upper Patuxent Ridge Road	9.0	A	9.2	A	9.0	A

Conway Road at Princess Shopping Center is failing (LOS F) in the PM peak resulting from too much volume to/from MD 3 which does not allow left turns enough gap to turn onto Conway Road. All other un-signalized intersections operate at an acceptable LOS.

3.5.3 Roundabout Analysis

The control delay for a roundabout is determined for each lane group and aggregated for each approach and for the intersection and divided by the number of vehicles. Based on these delay values, a grade or LOS ranging from LOS A, the best, to LOS F, the worst, are assigned. Each LOS represents a range of driver delay. Generally, for roadways in Anne Arundel County, LOS D is the worst acceptable operating condition.

Table 3-13 presents the LOS criteria for roundabouts, as defined by HCM, which is directly related to the average approach delay value. The intersection LOS grades for roundabouts are as follows:

Table 3-13: Roundabout Level of Service (LOS) Criteria

Level of Service	Average Control Delay (seconds/veh)
A	≤ 10.0
B	10.0 to 15.0
C	15.0 to 25.0
D	25.0 to 35.0
E	35.0 to 50.0
F	> 50.0

Source: Highway Capacity Manual

The roundabout operation analysis results are shown in **Table 3-14**.

Table 3-14: Roundabout Analysis

Intersection	AM		PM		Weekend	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Conway Road at Meyers Station Road/Patuxent Road	6.8	A	10.1	B	7.5	A

The roundabout is operating at LOS B or better in all peaks.

3.5.4 Bicycle Level of Traffic Stress

Existing Bicycle Level of Traffic Stress (LTS) was identified using the MDOT Level of Traffic Stress Methodology. LTS varies from 0 to 5 with 0 being no stress from traffic and 5 being locations where bicycles are prohibited. LTS values for segments along Conway Road are summarized in **Table 3-15**.

Table 3-15: Bicycle Level of Traffic Stress

Section	Bicycle Facility	Speed Limit (mph)	Number of Through Lanes	Traffic Volume	On-Street Parking	Buffer Width	Shoulder Presence	Shoulder Width	LTS* Score
MD 3 to Princess Shopping Center	All Other Roadways	40	3	15056	No	N/A	No	N/A	4
Princess Shopping Center to Roundabout	Shoulder	40	2	11482	No	N/A	Yes	8'	3
Bridge over Little Patuxent River	All Other Roadways	40	2	11482	No	N/A	Yes	3'	4
Roundabout to WB&A Trail	All Other Roadways	30	2	7702	No	N/A	No	N/A	4
WB&A Trail to Upper Patuxent Ridge Road	Shared-Use Path	30	2	7702	No	34'	No	N/A	0
Upper Patuxent Ridge Road to St. John A.M.E. Zion Church	All Other Roadways	30	2	1725	No	N/A	No	N/A	2

**LTS varies from 0 to 5 with 0 being no stress from traffic and 5 being locations where bicycles are prohibited*

Because of the 40 MPH speed limit and shoulder width of less than 10 feet, Conway road has a LTS score of 3 or 4 from MD 3 to the Patuxent Road roundabout. Only when Conway road reaches the WB&A trail does the LTS score drop to 0. It then increases to 2 once the shared use path splits away due to the 30 MPH speed limit and a AADT of less than 3000 vehicles per day.

3.5.5 Pedestrian Level of Comfort

Existing Pedestrian Level of Comport (PLOC) was identified using the Montgomery County, MD Pedestrian Level of Comfort Methodology[12]. PLOC varies from to 4 with 1 being very comfortable and 4 being undesirable. PLOC values for segments along Conway Road are summarized in **Table 3-16**.

Table 3-16: Pedestrian Level of Comfort

Section	Speed Limit	On-Street Parking	Pathway Width	PLOC Score
MD 3 to Princess Shopping Center	40	No	N/A	4
Princess Shopping Center to Roundabout	40	No	N/A	4
Bridge over Little Patuxent River	40	No	N/A	4
Roundabout to WB&A Trail	30	No	N/A	4
WB&A Trail to Upper Patuxent Ridge Road	30	No	10'	1
Upper Patuxent Ridge Road to St. John A.M.E. Zion Church	30	No	N/A	4

Because there is no walkway along most of Conway Road, the PLOC is 4 in most roadway sections. Where WB&A trail runs parallel to Conway Road the PLOC is 1.

[12] Montgomery County Planning Department. December 2020. Montgomery County's Pedestrian Plan – Pedestrian Level of Comfort. Available at: mcatlas.org/pedplan/images/FINAL_PLOC_Methodology_Appendix.pdf. Accessed January 4, 2022

3.6 Summary of Existing Traffic Conditions

Two of the intersections operate at unacceptable LOS. As traffic volumes are expected to grow from future development at the Two Rivers, the operation conditions are anticipated to deteriorate.

Most of roadway sections have limited infrastructure for pedestrian and bike use, with either non-existing shoulders or shoulders less than 10’ wide. The only comfortable sections of Conway road occur when the WB&A runs parallel to Conway road.

Improvements to traffic capacity, improved public transit, or improved pedestrian/bike facilities should be investigated to as potential solutions to enhance mobility, improve operations, and achieve acceptable LOS in future years.

Safety improvements should also be considered and evaluated. These may include improved advanced signing, managing clear zones, or even increased speed enforcement.

4 References

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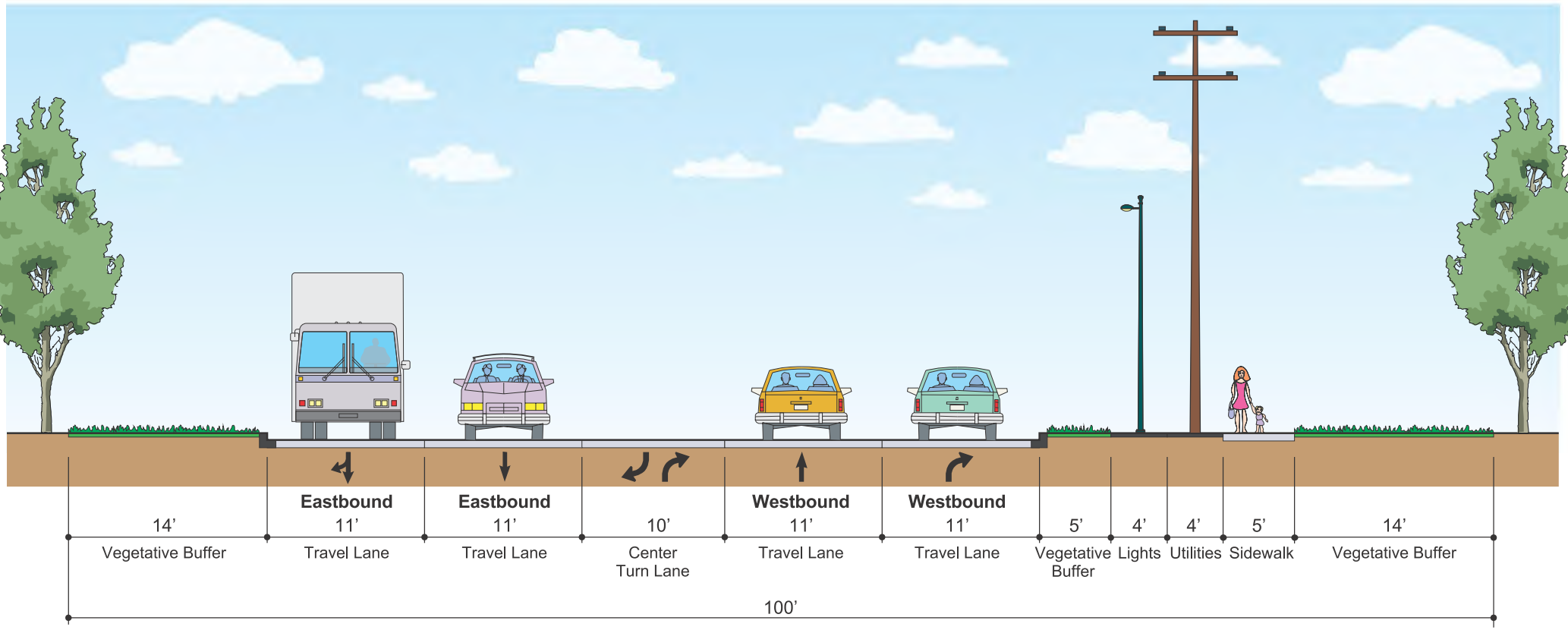
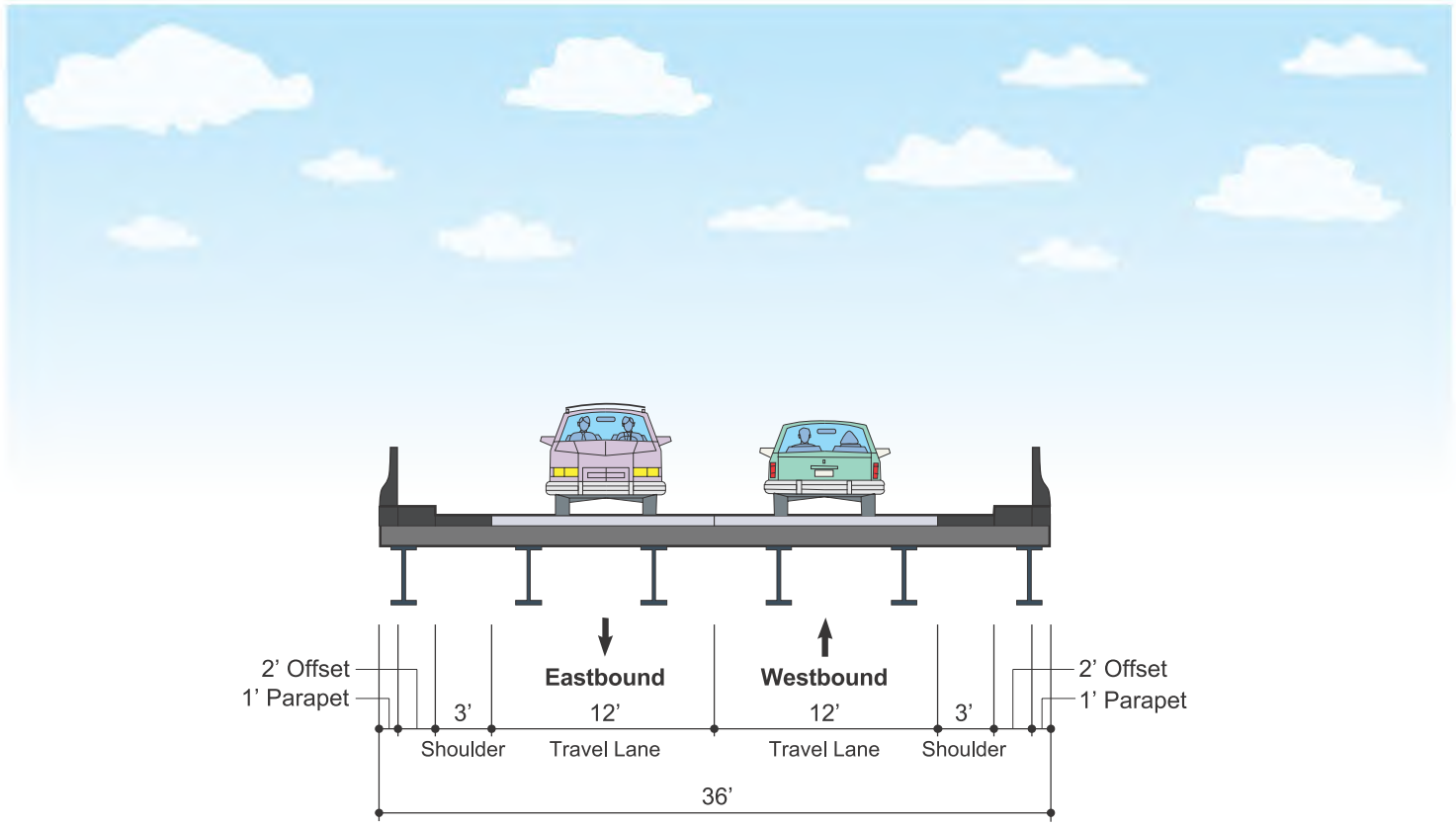
Appendix A:
Existing Typical Sections



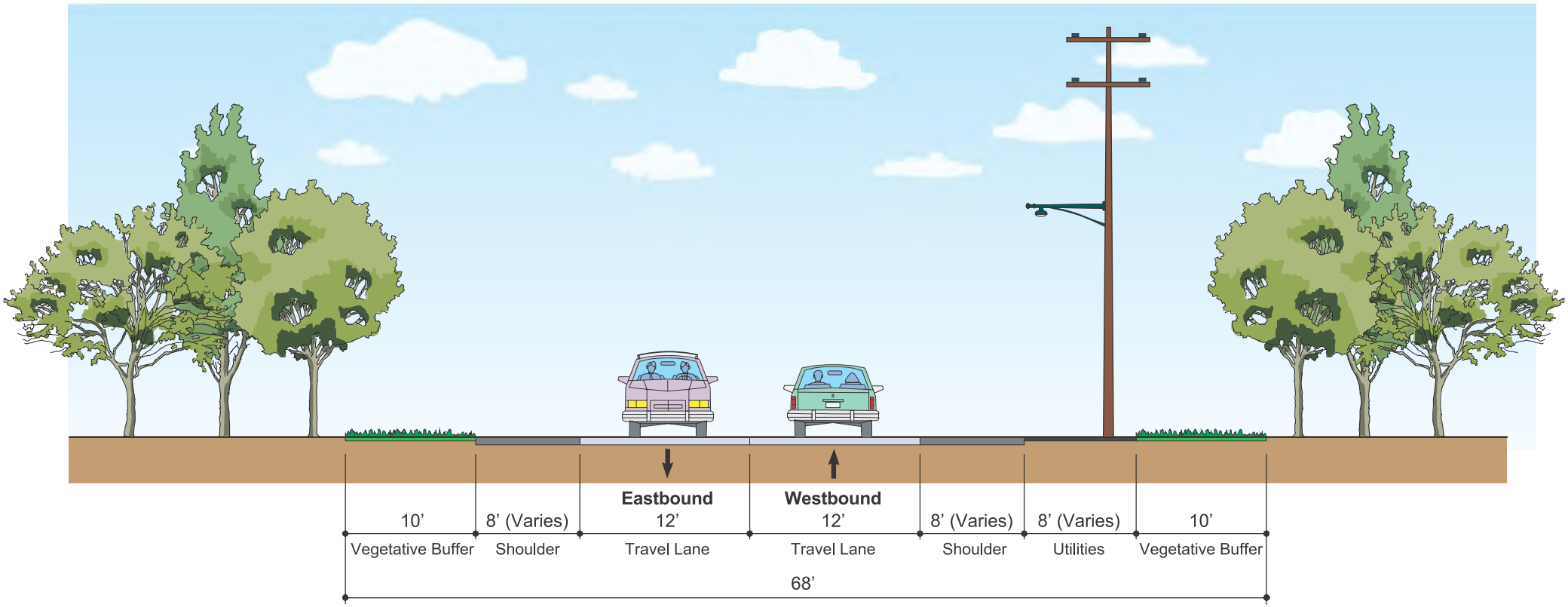
Conway Road

MD 3 to Princess Shopping Center/Future Professional Boulevard

(Looking West - Approximately 100-foot Width)



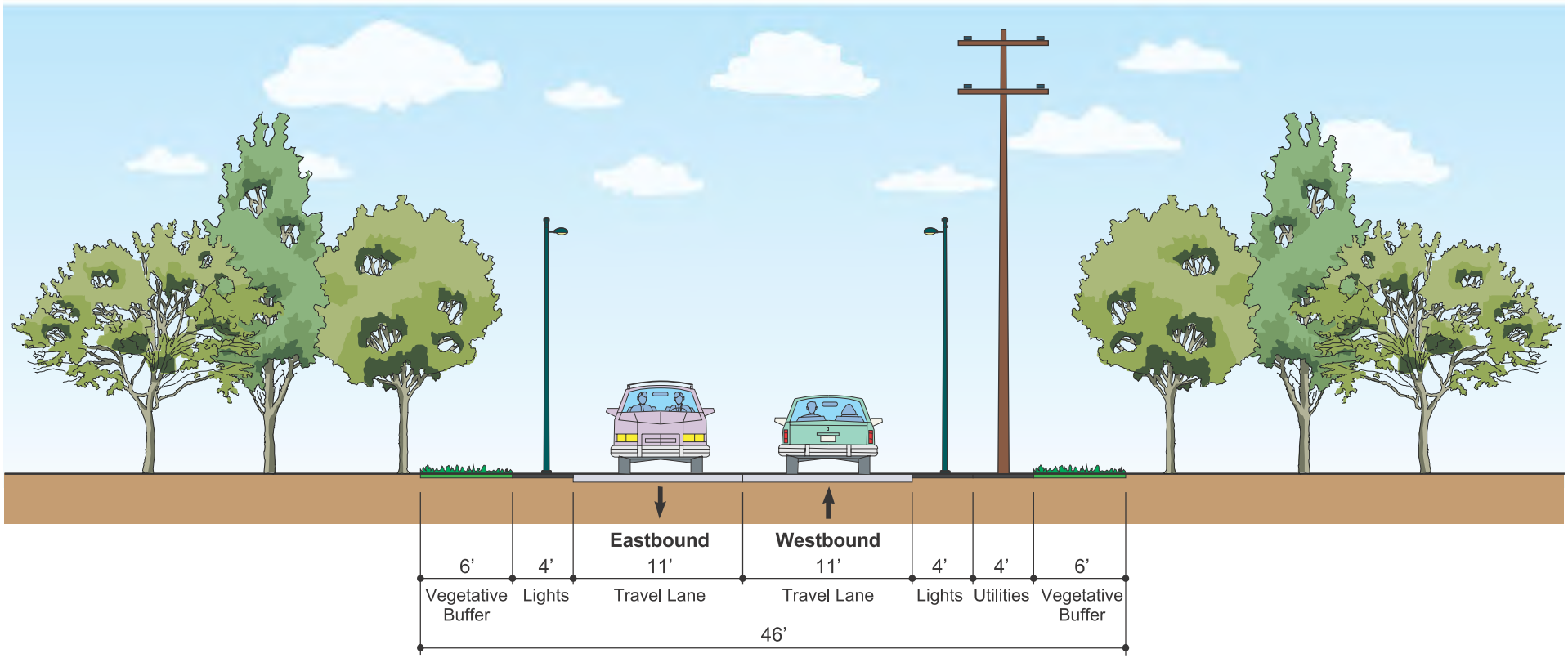
Conway Road
Existing Typical Section
Bridge Over Little Patuxent River
(Looking West - 36’ Width)



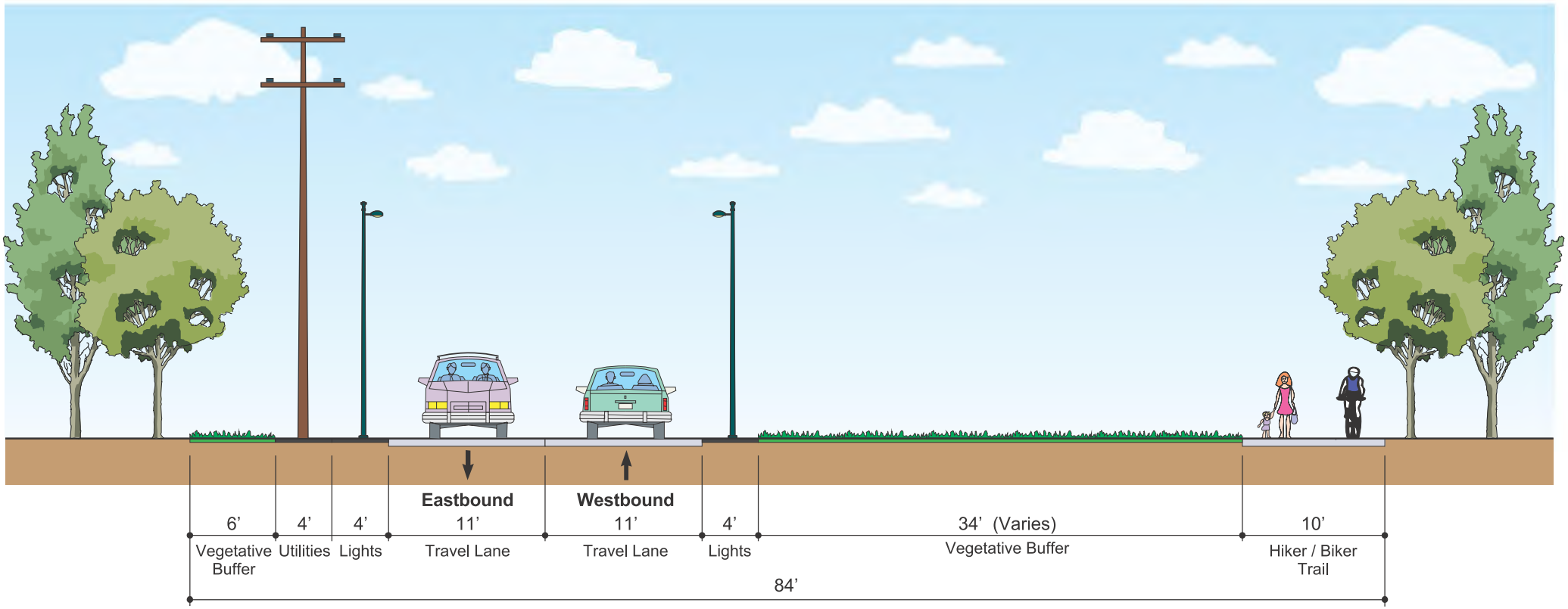
Conway Road

Princess Shopping Center/Future Professional Blvd to Patuxent Road/Meyers Station Road Roundabout

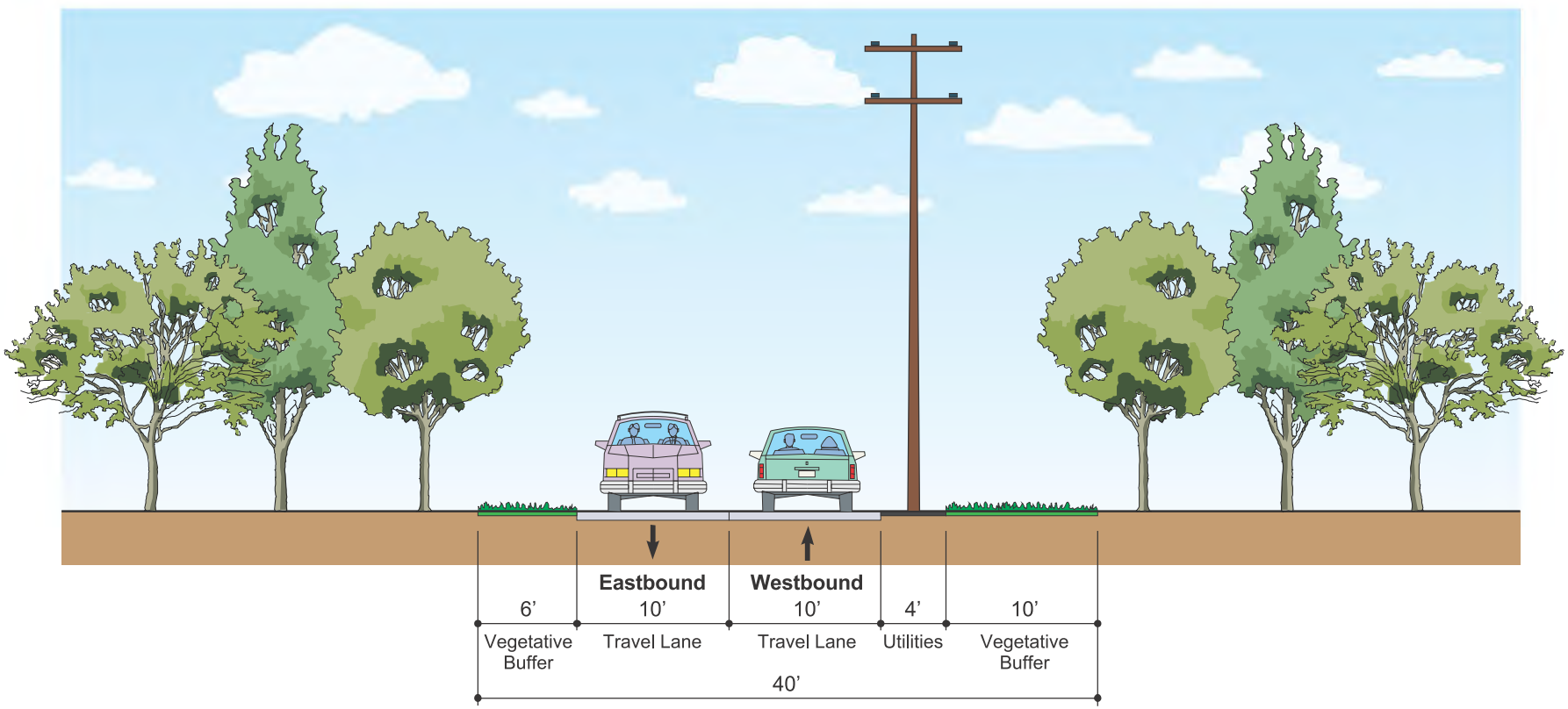
(Looking West - Approximately 68-foot Width)



Conway Road
Existing Typical Section
Roundabout to WB&A Trail
(1,000ft East of Two Rivers Boulevard)
(Looking West - 46’ Width)



Conway Road
Existing Typical Section
WB&A Trail to Upper Patuxent Ridge Road
(1,000ft East of Two Rivers Boulevard)
(Looking West - 84’ Width)



Conway Road
Existing Typical Section
Upper Patuxent Ridge Road to St. John A.M.E. Zion Church
(Looking West - 40’ Width)

Appendix B:
U.S. Fish and Wildlife IPAC Resource List

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

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Location

Anne Arundel and Prince George's counties, Maryland

Local office

Chesapeake Bay Ecological Services Field Office

(410) 573-4599
(410) 266-9127

177 Admiral Cochrane Drive
Annapolis, MD 21401-7307

http://www.fws.gov/chesapeakebay/
http://www.fws.gov/chesapeakebay/endsppweb/ProjectReview/Index.html

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

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Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* Wherever found This species only needs to be considered if the following condition applies: • Projects with a federal nexus that have tree clearing = to or > 15 acres: 1. REQUEST A SPECIES LIST 2. NEXT STEP: EVALUATE DETERMINATION KEYS 3. SELECT EVALUATE under the Northern Long-Eared Bat (NLEB) Consultation and 4(d) Rule Consistency key No critical habitat has been designated for this species. http://ecos.fws.gov/ecp/species/9045	Threatened

Insects

NAME	STATUS

Monarch Butterfly Danaus plexippus — Candidate

Wherever found

This species only needs to be considered if the following condition applies:

- The monarch is a candidate species and not yet listed or proposed for listing. There are generally no section 7 requirements for candidate species (FAQ found here: https://www.fws.gov/savethemonarch/FAQ-Section7.html).

No critical habitat has been designated for this species.
http://ecos.fws.gov/ecp/species/9743

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY

NOT FOR CONSULTATION

LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Bald Eagle *Haliaeetus leucocephalus** This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. http://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31
Black-billed Cuckoo *Coccyzus erythropthalmus** This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. http://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10
Blue-winged Warbler *Vermivora pinus** This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 1 to Jun 30
Bobolink *Dolichonyx oryzivorus** This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Jul 31
Canada Warbler *Cardellina canadensis** This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Aug 10
Cerulean Warbler *Dendroica cerulea** This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. http://ecos.fws.gov/ecp/species/2974	Breeds Apr 29 to Jul 20
Eastern Whip-poor-will *Antrostomus vociferus** This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Aug 20
Kentucky Warbler *Oporornis formosus** This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 20
King Rail *Rallus elegans** This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. http://ecos.fws.gov/ecp/species/8936	Breeds May 1 to Sep 5
Lesser Yellowlegs *Tringa flavipes** This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. http://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Prairie Warbler *Dendroica discolor** This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31

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Prothonotary Warbler Protonotaria citrea This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Jul 31
Red-headed Woodpecker Melanerpes erythrocephalus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
Rusty Blackbird Euphagus carolinus This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Willet Tringa semipalmata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 5
Wood Thrush Hylocichla mustelina This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

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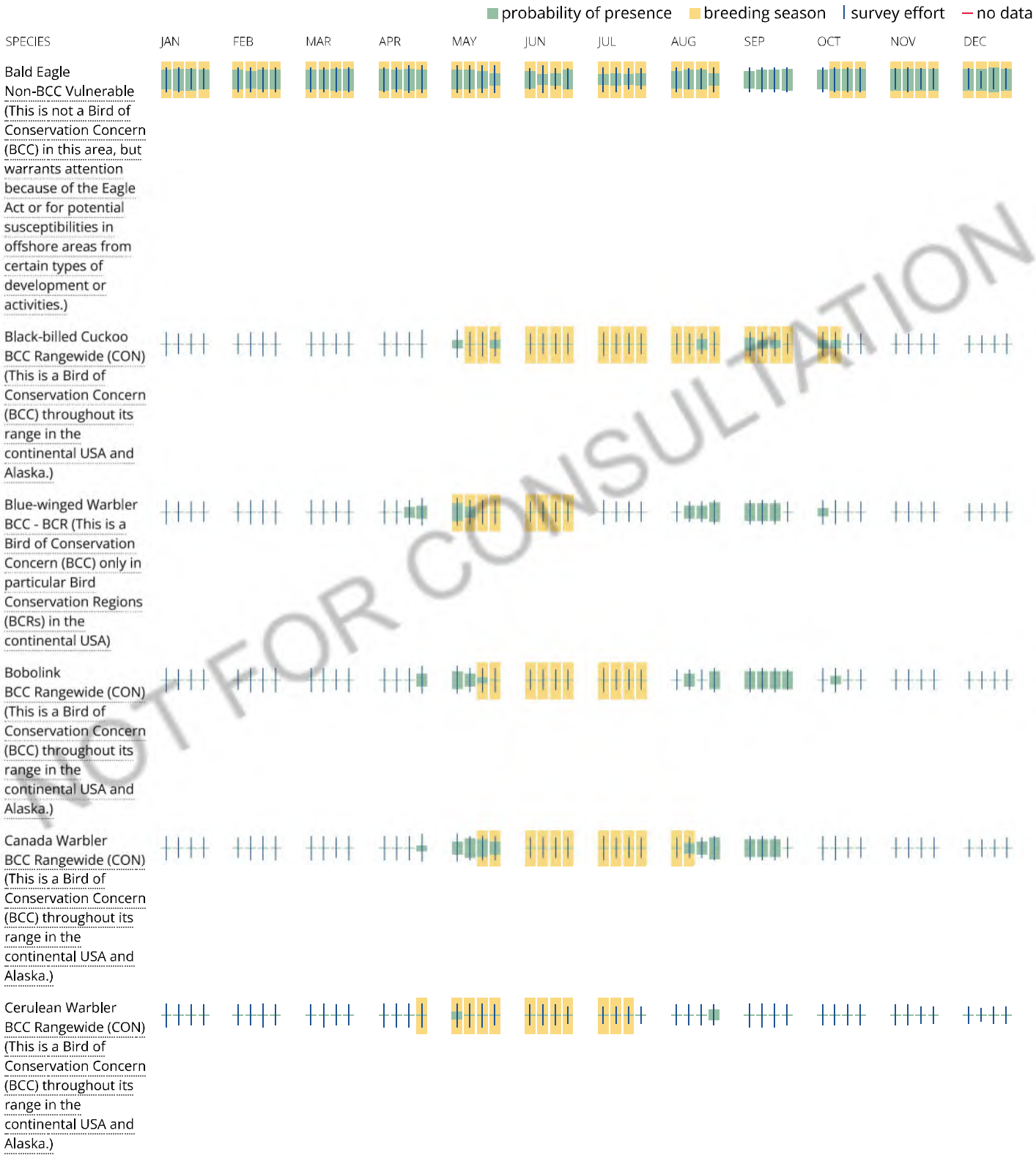
No Data (–)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



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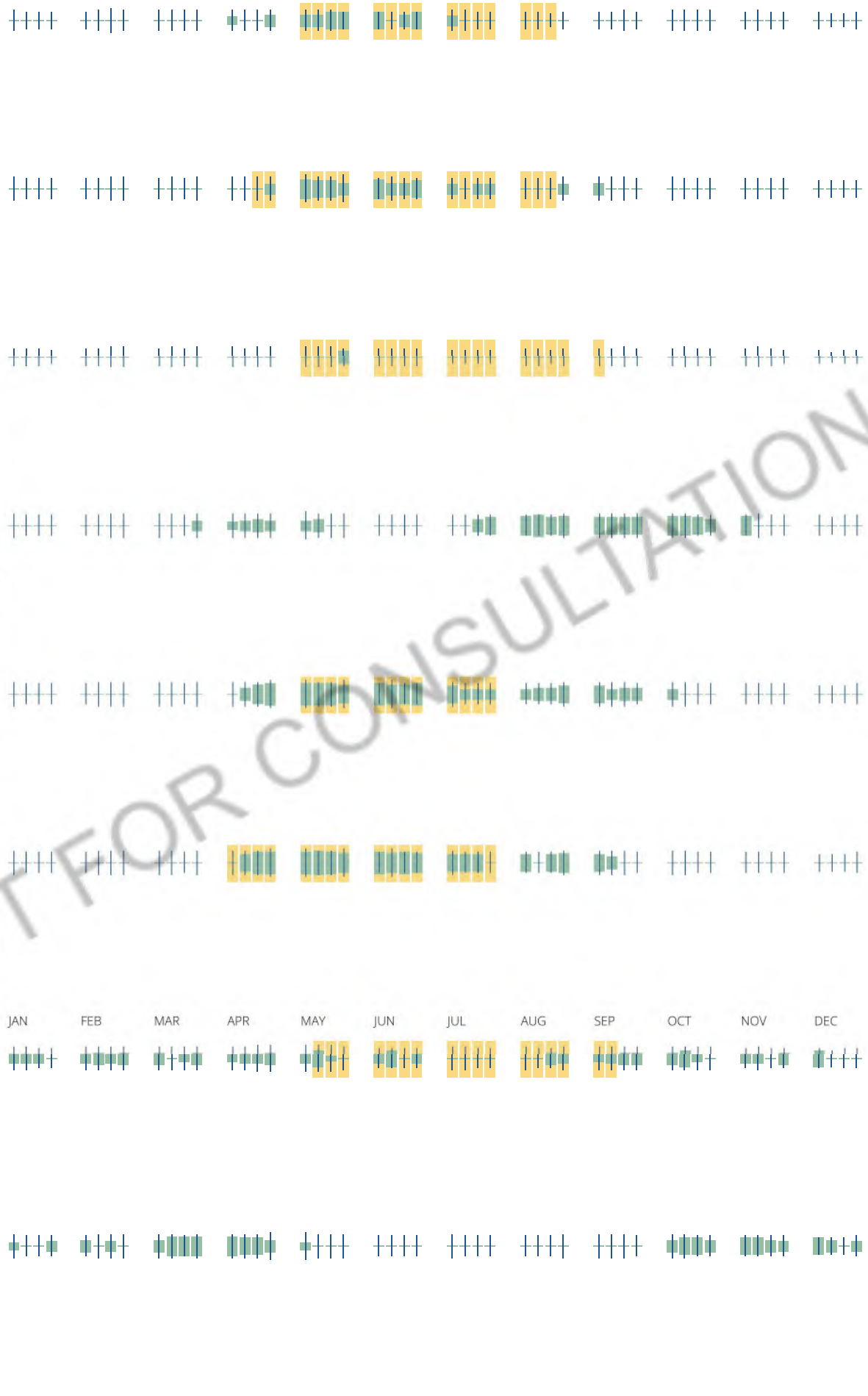

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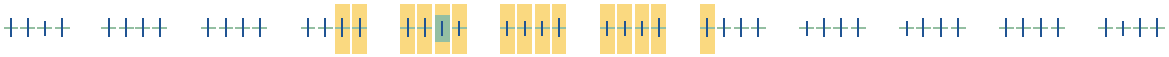
Willet
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Wood Thrush
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities

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(e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

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Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

This location overlaps the following National Wildlife Refuge lands:

LAND	ACRES
PATUXENT RESEARCH REFUGE	10,427.44 acres

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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Appendix C:
Crash Data

40082

Office of Traffic and Safety
Traffic Safety Analysis Division

Consultant Accident Data/Analysis Request Form

Request Date: September 15, 2021 Note: date set automatically

Location:
County: AA Route: Patuxent Road (CO 1040) Town/Place: Odenton

☐ at
☒ from Conway Road to 5th Ave Log Mile: 0.00 - 2.46

Purpose Needed:
☐ Signal Study ☐ Surface Evaluation ☐ Pavement Marking Study
☐ Sign Study ☐ Lighting Study ☒ General Traffic Study
☐ Other (Explain):

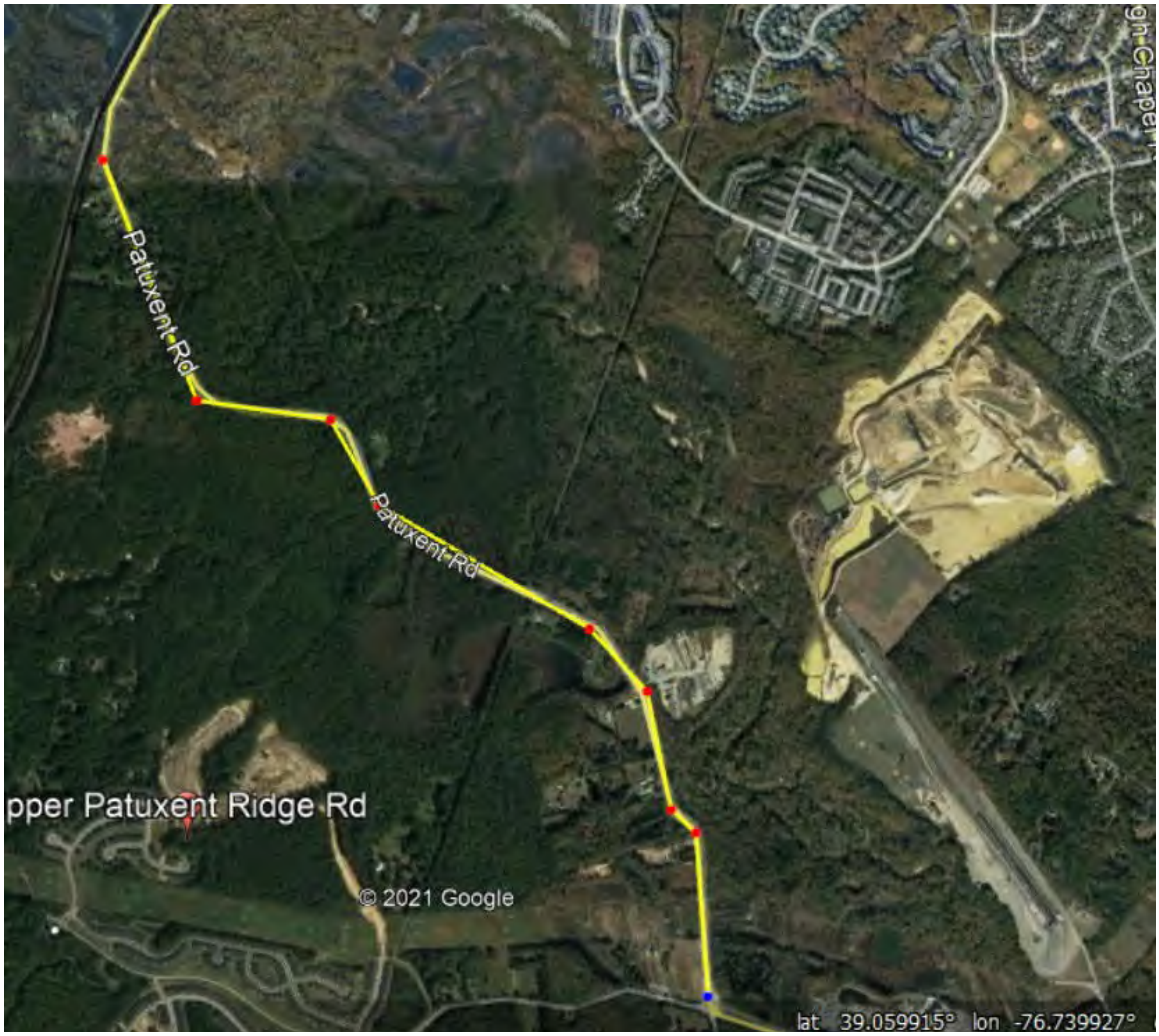
Originally Requested By: Adam Greenstein, on behalf of Anne Arundel County
When Needed:9/20/21

Work Requested:
☒ Accident Summary ☒ 3R Format (History) ☒ Accident Rates
☒ Study Worksheet ☒ Collision Diagram ☐ Other (Explain in Remarks)
☐ One Year ☐ Two Years
☒ Three Years ☐ Combined Years
☐ Specific Date –

Additional Instructions or Remarks:
Requested by: Michael Morganstein Title: Traffic Engineer
Consultant Firm: AECOM Consultant Subcontractor:
Phone: 301-996-2770 Fax:
Cell Phone: Email: Michael.morganstein@aecom.com

Please indicate map coordinates of location to be studied.
ADC: MD General Hwy. Grid Map: F12A

Send to: Traffic Safety Analysis Division,
7491 Connelley Drive Hanover, Maryland 21076
Phone: (410) 787-5822 Fax: (410) 787-5823 Email: WMacleod@sha.state.md.us



Send to: Traffic Safety Analysis Division,
7491 Connelley Drive Hanover, Maryland 21076
Phone: (410) 787-5822 Fax: (410) 787-5823 Email: WMacleod@sha.state.md.us

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC Study Worksheet Output rev. 10/2017-1

Name: Matthew Jagg

Date: 09/16/2021

Location: Patuxent Rd From: Conway Rd To: 5th Ave

Logmiles: From 0 To 2.46 Length: 2.46

County: Anne Arundel, D5 Period: January 01, 2018 To December 31, 2020

Note: Year 2020 data is incomplete and unedited!

YEAR >>	2018	2019	2020	Total
Fatal	0	0	0	0
No. Killed	0	0	0	0
Injury	6	5	3	14
No. Injured	9	5	4	18
Prop. Damage	12	6	4	22
Total Crashes	18	11	7	36
Severity Index	34	25	12	Avg 24
Opposite Dir.	2	0	0	2
Rear End	3	2	0	5
Sideswipe	0	1	0	1
Left Turn	1	0	0	1
Angle	1	0	0	1
Pedestrian	0	0	1	1
Parked Veh.	0	0	0	0
Fixed Object	9	8	6	23
Other	2	0	0	2
U-Turn	0	0	0	0
Backing	0	0	0	0
Animal	0	0	0	0
Railroad	0	0	0	0
Fire / Expl.	0	0	0	0
Overturn	2	0	0	2
Truck Related	0	0	0	0
Night Time	6	3	4	13
Wet Surface	6	3	2	11
Alcohol	1	1	0	2
Intersection	2	1	1	4
Total Vehicles	25	14	8	47
Total Trucks	0	0	0	0
Truck %	0.0	0.0	0.0	0.0

Comments:

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC Summary Output rev. 10/2017-1

Name: Matthew Jagg

Date: 09/16/2021

Location: Patuxent Rd From: Conway Rd To: 5th Ave

Logmiles: From 0 To 2.46 Length: 2.46

County: Anne Arundel, D5 Period: January 1, 2018 To December 31, 2020

Note: Year 2020 data is incomplete and unedited!

SEVERITY	FATAL	INJURY	P-DAMAGE	TOTAL
Accidents		14	22	36
Veh Occ		17		
Pedestrian		1		

AVG Severity Index: 24

DAY OF THE WEEK

SUN	MON	TUE	WED	THU	FRI	SAT	UNK
5	6	6	7	4	5	3	

MONTH OF THE YEAR

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK
1	4	2	1	5	1	4	1	6	3	3	5	

CONDITION	DRIVER	PED
Normal:	39	1
Alcohol:	2	
Other:	6	

TIME	12	01	02	03	04	05	06	07	08	09	10	11	UNK
AM:	5	1			1		2	1	2		1	4	
PM:	1	1	2	1	3	2	3	1	2	1		2	

VEHICLES INVOLVED PER ACCIDENT

1	2	3	4	5	6+	UNK	TOTAL
26	9	1					47

VEHICLE TYPE

	Motorcycle/Moped		Tractor Trailer
34	Passenger Vehicle		Passenger Bus
7	Sport Utility Veh	1	School Bus
1	Pick-Up Truck		Emergency Veh
	Trucks (2+3 axles)	30	Other Types

SURFACE

11	Wet
21	Dry
3	Sno/Ice
	Mud
1	Other

MOVEMENTS

NORTH			SOUTH			EAST			WEST		
LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT
	28		1	15					1		

OTHER MOVEMENTS 2

PROBABLE CAUSES

	Influence of Drugs		Improper Lane Change
2	Influence of Alcohol		Improper Backing
	Influence of Medication		Improper Passing
	Influence of Combined Subst.		Improper Signal
	Physical/Mental Difficulty		Improper Parking
3	Fell Asleep/Fainted, etc.		Passenger Interfere/Obstruct.
2	Fail to give full Attention		Illegally in Roadway
	Lic. Restr. Non-compliance		Bicycle Violation
1	Fail to Drive in Single Lane		Clothing Not Visible
	Improper Right Turn on Red		Sleet, Hail, Freezing Rain
2	Fail to Yield Right-of-way		Severe Crosswinds
	Fail to Obey Stop Sign		Rain, Snow
	Fail to Obey Traffic Signal		Animal
	Fail to Obey Other Control		Vision Obstruction
2	Fail to Keep Right of Center		Vehicle Defect
	Fail to Stop for School Bus		Wet
	Wrong Way on One Way		Icy or Snow Covered
3	Exceeded Speed Limit		Debris or Obstruction
	Operator Using Cell Phone		Ruts, Holes or Bumps
	Stopping in Lane Roadway		Road Under Construction
4	Too Fast for Conditions		Traffic Control Device Inop.
1	Followed too Closely		Shoulders Low, Soft or High
	Improper Turn	16	Other or Unknown

COLLISION TYPES		FATAL	INJURY	PROP	TOTAL
Opposite Dir	Related:			1	1
	UnRelated:		1		1
Rear End	Related:			2	2
	UnRelated:		2	1	3
Sideswipe	Related:				
	UnRelated:			1	1
Left Turn	Related:				
	UnRelated:			1	1
Angle	Related:				
	UnRelated:		1		1
Pedestrian	Related:		1		1
	UnRelated:				
Parked Vehicle	Related:				
	UnRelated:				
Other Collision	Related:				
	UnRelated:			2	2

F	Bridge	01			
I	Building	02			
X	Culvert/Ditch	03	2	2	4
E	Curb	04			
D	Guardrail/Barrier	05		1	1
	Embankment	06			
O	Fence	07			
B	Light Pole	08			
J	Sign Pole	09		1	1
E	Other Pole	10	4	5	9
C	Tree/Shrubbery	11	3	5	8
T	Contr. Barrier	12			
S	Crash Attenuator	13			
	Other Fixed Object				

WEATHER		ILLUMINATION		TOTALS	
28	Clear / Cloudy	18	Day	18-20	36
1	Foggy	3	Dawn/Dusk		
4	Raining	6	Dark - Lights On		
1	Snow / Sleet	7	Dark - No Lights		
2	Other	2	Other		

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC History Output rev. 10/2017-1 - Combined Year Listing

Name: Matthew Jagg

Date: 09/16/2021

Location: Patuxent Rd From: Conway Rd To: 5th Ave

Logmiles: From 0 To 2.46 Length: 2.46

County: Anne Arundel, D5 Period: January 01, 2018 To December 31, 2020

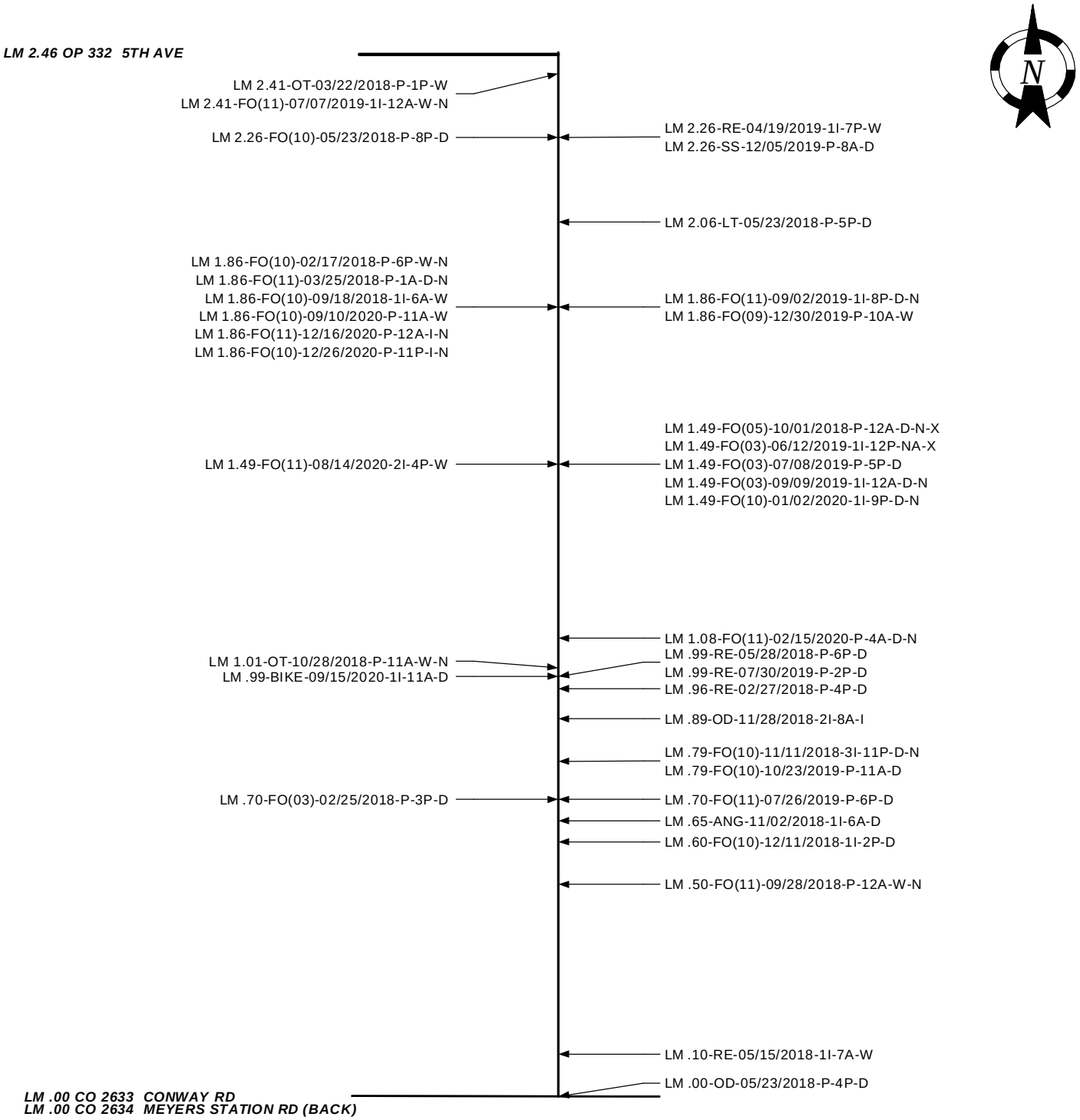
Note: Year 2020 data is incomplete and unedited!

MilePt	Int Rel	Date	Severity	Time	Light	Surface	Alc Rel	FixObj	Collision	Movement V1	Movement V2	Probable Cause
CO1040												
0.000	✓	05232018	Property	04P	Day	Dry			OPDIR	SS	NS	Fail to yield right-of-way
0.100		05152018	1 Injured	07A	Day	Wet			RREND	NS	NS	Other or Unknown
0.500		09282018	Property	12A	Night	Wet		11	FXOBJ	NS	--	Too fast for conditions
0.600		12112018	1 Injured	02P	Day	Dry		10	FXOBJ	NS	--	Other or Unknown
0.650		11022018	1 Injured	06A		Dry			ANGLE	WL	NS	Fail to yield right-of-way
0.700		02252018	Property	03P	Day	Dry		03	FXOBJ	SS	--	Fail to keep right of center
0.700		07262019	Property	06P	Day	Dry		11	FXOBJ	NS	--	Fail to keep right of center
0.790		11112018	3 Injured	11P	Night	Dry		10	FXOBJ	NS	--	Other or Unknown
0.790		10232019	Property	11A	Day	Dry		10	FXOBJ	NS	--	Too fast for conditions
0.890		11282018	2 Injured	08A	Day	Ice			OPDIR	SS	NS	Other or Unknown
0.960		02272018	Property	04P	Day	Dry			RREND	NS	NS	Other or Unknown
0.990	✓	05282018	Property	06P	Day	Dry			RREND	NS	NS	Followed too closely
0.990	✓	07302019	Property	02P	Day	Dry			RREND	NS	NS	Fail to give full attention
0.990	✓	09152020	1 Injured	11A	Day	Dry			PED	SS	--	Other or Unknown
1.010		10282018	Property	11A	Night	Wet			OTHER	SS	--	Too fast for conditions
1.080		02152020	Property	04A	Night	Dry		11	FXOBJ	NS	--	Other or Unknown
1.490		10012018	Property	12A	Night	Dry	✓	05	FXOBJ	NS	--	Under influence of alcohol
1.490		06122019	1 Injured	12P	Day		✓	03	FXOBJ	NS	--	Under influence of alcohol
1.490		07082019	Property	05P	Day	Dry		03	FXOBJ	NS	--	Fell asleep, fainted, etc.
1.490		09092019	1 Injured	12A	Night	Dry		03	FXOBJ	NS	--	Other or Unknown
1.490		01022020	1 Injured	09P	Night	Dry		10	FXOBJ	NS	--	Exceeded speed limit
1.490		08142020	2 Injured	04P	Day	Wet		11	FXOBJ	SS	NS	Other or Unknown
1.860		02172018	Property	06P	Night	Wet		10	FXOBJ	SS	--	Too fast for conditions
1.860		03252018	Property	01A	Night	Dry		11	FXOBJ	SS	--	Exceeded speed limit
1.860		09182018	1 Injured	06A	Day	Wet		10	FXOBJ	SS	--	Fell asleep, fainted, etc.
1.860		09022019	1 Injured	08P	Night	Dry		11	FXOBJ	NS	--	Exceeded speed limit
1.860		12302019	Property	10A	Day	Wet		09	FXOBJ	NS	--	Fell asleep, fainted, etc.
1.860		09102020	Property	11A		Wet		10	FXOBJ	SS	--	Other or Unknown
1.860		12162020	Property	12A	Night	Ice		11	FXOBJ	SS	--	Fail to give full attention
1.860		12262020	Property	11P	Night	Ice		10	FXOBJ	SS	--	Other or Unknown
2.060		05232018	Property	05P	Day	Dry			LFTRN	SL	NS	Other or Unknown
2.260		05232018	Property	08P	Day	Dry		10	FXOBJ	SS	--	Fail to drive in single lane
2.260		04192019	1 Injured	07P	Day	Wet			RREND	NS	NS	Other or Unknown
2.260		12052019	Property	08A	Day	Dry			SDSWP	NS	NS	Other or Unknown
2.410		03222018	Property	01P	Day	Wet			OTHER	SS	--	Other or Unknown
2.410		07072019	1 Injured	12A	Night	Wet		11	FXOBJ	SS	--	Other or Unknown

Fixed Object: 01 = Bridge 02 = Building 03 = Culvert/Ditch 04 = Curb 05 = Guardrail/Barrier 06 = Embankment 07 = Fence
08 = Light Pole 09 = Sign Post 10 = Other Pole 11 = Tree/Shrubbery 12 = Construction Barrier 13 = Crash Attenuator

Office of Traffic & Safety
Traffic Development & Support Division
Crash Analysis Safety Team

Location: Patuxent Rd From: Conway Rd To: 5th Ave
County: ANNE ARUNDEL
Study Period: 01/01/2018 to 12/31/2020
Analyst: Matthew Jagg Date: 09/16/2021



KEY:LogMile-CollisionType (FixedObjectStruck) -Date-Severity-Time-Surface-Illumination-Alcohol

template 06-27-06

F - Fatalities	SS - Sideswipe	FO - Fixed Object	OFFRD - Off Road	00 - Not Applicable	08 - Light Support Pole	N - Night
I - Injury	PARKD - Parked Vehicle	OOBJ - Other Object	RUNWY - Downhill Runaway	01 - Bridge or Overpass	09 - Sign Support Pole	X - Alcohol
P - Property Damage	PED - Pedestrian	OT - Overturn	FIRE - Explosion Fire	02 - Building	10 - Other Pole	D - Dry Surface
OD - Opposite Direction	BIKE - Bicycle	SPILL - Spilled Cargo	BCKNG - Backing	03 - Culvert or Ditch	11 - Tree Shrubbery	W - Wet Surface
LT - Left Turn	PEDAL - Other Pedalcycle	JCKKNF - Jackknife	UTURN - U-Turn	04 - Curb	12 - Construction Barrier	I - Icy Surface
RE - Rear End	CONVY - Other Conveyance	SPRTD - Units Separated	OTHR - Other	05 - Guardrail or Barrier	13 - Crash Attenuator	S - Snowy Surface
ANG - Angle	ANIML - Animal	NCOLL - Other Non Collision	UNK - Unknown	06 - Embankment	88 - Other	
				07 - Fence	99 - Unknown	

40057

Office of Traffic and Safety
Traffic Safety Analysis Division

Consultant Accident Data/Analysis Request Form

Request Date: August 31, 2021 Note: date set automatically

Location:

County: Anne Arundel Town/Place:
Odenton Route: Conway Road (CO 2633)
Log Mile: at
☒ from Bridge over little Patuxent River to Concord Boulevard (0.10-0.43)

Purpose Needed:

☐ Signal Study ☐ Surface Evaluation ☐ Pavement Marking Study
☐ Sign Study ☐ Lighting Study ☒ General Traffic Study
☐ Other (Explain):

Originally Requested By: Adam Greenstein, on behalf of Anne Arundel County
When Needed:9/20/21

Work Requested:

☒ Accident Summary ☒ 3R Format (History) ☒ Accident Rates
☒ Study Worksheet ☒ Collision Diagram ☐ Other (Explain in Remarks)

☐ One Year ☐ Two Years
☒ Three Years ☐ Combined Years
☐ Specific Date –

Additional Instructions or Remarks:
Requested by: Michael Morganstein Title: Traffic Engineer
Consultant Firm: AECOM Consultant Subcontractor:
Phone: 301-996-2770 Fax:
Cell Phone: Email: Michael.morganstein@aecom.com

Please indicate map coordinates of location to be studied.
ADC: MD General Hwy. Grid Map: F12A

Send to: Traffic Safety Analysis Division,
7491 Connelley Drive Hanover, Maryland 21076
Phone: (410) 787-5822 Fax: (410) 787-5823 Email: WMacleod@sha.state.md.us

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC Study Worksheet Output rev. 10/2017-1

Name: Matthew Jagg

Date: 09/15/2021

Location: Conway Rd From: West of Concord Blvd To: Little Patuxent River

Logmiles: From 0.101 To 0.43 Length: 0.33

County: Anne Arundel, D5

Period: January 01, 2018 To December 31, 2020

Note: Year 2020 data is incomplete and unedited!

YEAR >>	2018	2019	2020	Total
Fatal	0	0	0	0
No. Killed	0	0	0	0
Injury	1	0	1	2
No. Injured	1	0	1	2
Prop. Damage	1	2	0	3
Total Crashes	2	2	1	5
Severity Index	5	2	4	Avg 4
Opposite Dir.	0	0	1	1
Rear End	0	0	0	0
Sideswipe	0	0	0	0
Left Turn	0	0	0	0
Angle	1	1	0	2
Pedestrian	0	0	0	0
Parked Veh.	0	0	0	0
Fixed Object	1	1	0	2
Other	0	0	0	0
U-Turn	0	0	0	0
Backing	0	0	0	0
Animal	0	0	0	0
Railroad	0	0	0	0
Fire / Expl.	0	0	0	0
Overturn	0	0	0	0
Truck Related	0	1	0	1
Night Time	0	1	0	1
Wet Surface	0	1	0	1
Alcohol	0	0	0	0
Intersection	0	0	0	0
Total Vehicles	3	3	2	8
Total Trucks	0	1	0	1
Truck %	0.0	33.3	0.0	12.5

Comments:

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC Summary Output rev. 10/2017-1

Name: Matthew Jagg

Date: 09/15/2021

Location: Conway Rd From: West of Concord Blvd To: Little Patuxent River

Logmiles: From 0.101 To 0.43 Length: 0.33

County: Anne Arundel, D5 Period: January 1, 2018 To December 31, 2020

Note: Year 2020 data is incomplete and unedited!

SEVERITY	FATAL	INJURY	P-DAMAGE	TOTAL
Accidents		2	3	5
Veh Occ		2		
Pedestrian				

AVG Severity Index: 4

DAY OF THE WEEK

SUN	MON	TUE	WED	THU	FRI	SAT	UNK
1	1	1			2		

MONTH OF THE YEAR

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK
		1		1	1	1					1	

CONDITION	DRIVER	PED
Normal:	6	
Alcohol:		
Other:	1	

TIME

	12	01	02	03	04	05	06	07	08	09	10	11	UNK
AM:							1						
PM:	1			1	1				1				

VEHICLES INVOLVED PER ACCIDENT

1	2	3	4	5	6+	UNK	TOTAL
2	3						8

VEHICLE TYPE

	Motorcycle/Moped		Tractor Trailer
6	Passenger Vehicle		Passenger Bus
	Sport Utility Veh		School Bus
	Pick-Up Truck	1	Emergency Veh
1	Trucks (2+3 axles)	2	Other Types

SURFACE

1	Wet
4	Dry
	Sno/Ice
	Mud
	Other

MOVEMENTS

NORTH			SOUTH			EAST			WEST		
LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT
			2				2			4	

OTHER MOVEMENTS

PROBABLE CAUSES

	Influence of Drugs		Improper Lane Change
	Influence of Alcohol		Improper Backing
	Influence of Medication		Improper Passing
	Influence of Combined Subst.		Improper Signal
	Physical/Mental Difficulty		Improper Parking
1	Fell Asleep/Fainted, etc.		Passenger Interfere/Obstruct.
1	Fail to give full Attention		Illegally in Roadway
	Lic. Restr. Non-compliance		Bicycle Violation
	Fail to Drive in Single Lane		Clothing Not Visible
	Improper Right Turn on Red		Sleet, Hail, Freezing Rain
	Fail to Yield Right-of-way		Severe Crosswinds
	Fail to Obey Stop Sign		Rain, Snow
	Fail to Obey Traffic Signal		Animal
	Fail to Obey Other Control		Vision Obstruction
	Fail to Keep Right of Center		Vehicle Defect
	Fail to Stop for School Bus		Wet
	Wrong Way on One Way		Icy or Snow Covered
	Exceeded Speed Limit		Debris or Obstruction
	Operator Using Cell Phone		Ruts, Holes or Bumps
	Stopping in Lane Roadway		Road Under Construction
	Too Fast for Conditions		Traffic Control Device Inop.
	Followed too Closely		Shoulders Low, Soft or High
	Improper Turn	3	Other or Unknown

COLLISION TYPES		FATAL	INJURY	PROP	TOTAL
Opposite Dir	Related:				
	UnRelated:		1		1
Rear End	Related:				
	UnRelated:				
Sideswipe	Related:				
	UnRelated:				
Left Turn	Related:				
	UnRelated:				
Angle	Related:				
	UnRelated:			2	2
Pedestrian	Related:				
	UnRelated:				
Parked Vehicle	Related:				
	UnRelated:				
Other Collision	Related:				
	UnRelated:				

F	Bridge	01			
I	Building	02			
X	Culvert/Ditch	03			
E	Curb	04			
D	Guardrail/Barrier	05			
	Embankment	06			
O	Fence	07			
B	Light Pole	08			
J	Sign Pole	09			
E	Other Pole	10		1	1
C	Tree/Shrubbery	11	1		1
T	Contr. Barrier	12			
S	Crash Attenuator	13			
	Other Fixed Object				

WEATHER

4	Clear / Cloudy
	Foggy
1	Raining
	Snow / Sleet
	Other

ILLUMINATION

4	Day
	Dawn/Dusk
1	Dark - Lights On
	Dark - No Lights
	Other

TOTALS

18-20	5

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC History Output rev. 10/2017-1 - Combined Year Listing

Name: Matthew Jagg

Date: 09/15/2021

Location: Conway Rd From: West of Concord Blvd To: Little Patuxent River

Logmiles: From 0.101 To 0.43 Length: 0.33

County: Anne Arundel, D5 Period: January 01, 2018 To December 31, 2020

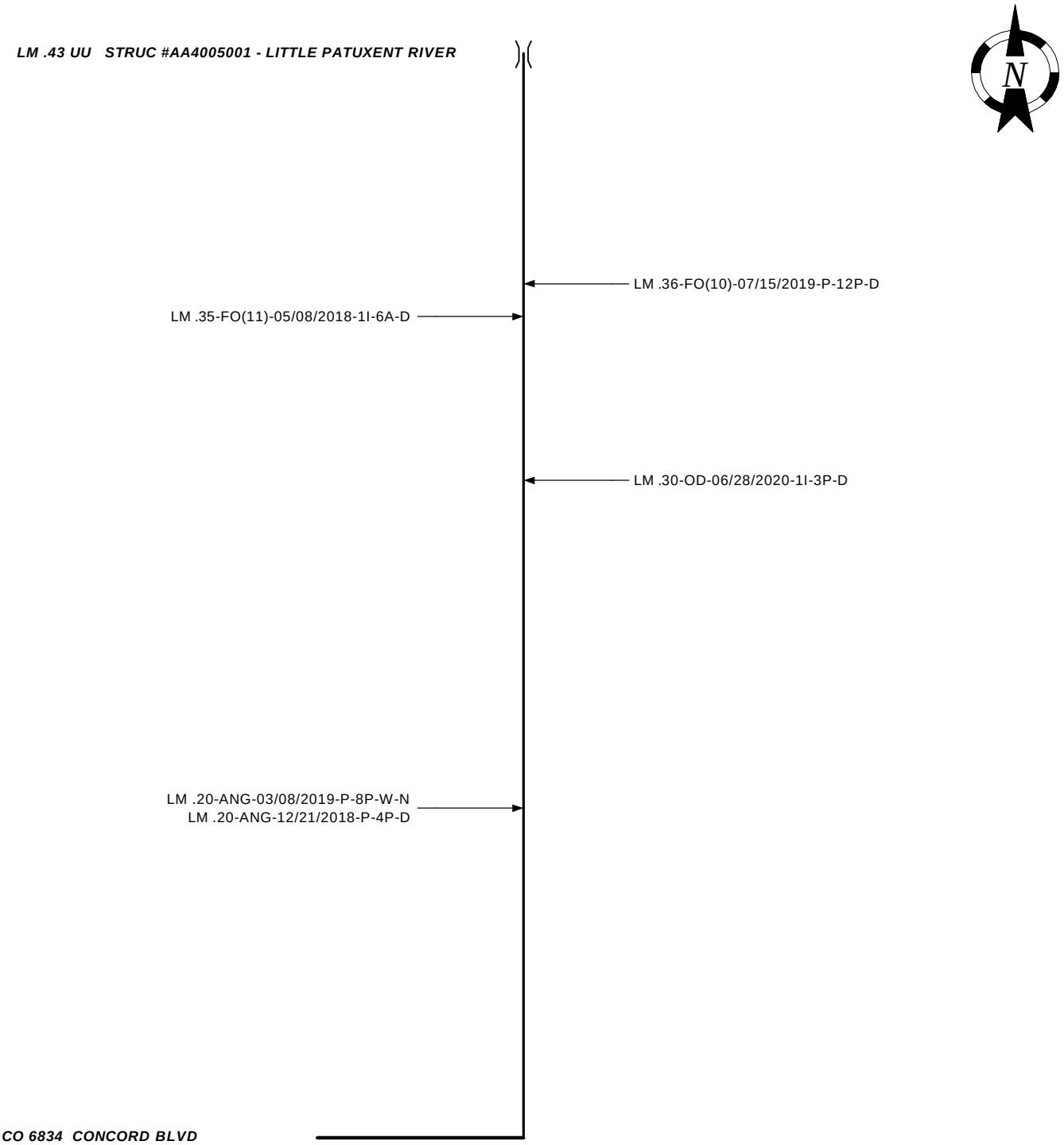
Note: Year 2020 data is incomplete and unedited!

MilePt	Int Rel	Date	Severity	Time	Light	Surface	Alc Rel	FixObj	Collision	Movement V1	Movement V2	Probable Cause
CO2633												
0.197		12212018	Property	04P	Day	Dry			ANGLE	WS	SL	Other or Unknown
0.197		03082019	Property	08P	Night	Wet			ANGLE	SL	WS	Fail to give full attention
0.300		06282020	1 Injured	03P	Day	Dry			OPDIR	ES	WS	Other or Unknown
0.350		05082018	1 Injured	06A	Day	Dry		11	FXOBJ	WS	--	Fell asleep, fainted, etc.
0.360		07152019	Property	12P	Day	Dry		10	FXOBJ	ES	--	Other or Unknown

Fixed Object: 01 = Bridge 02 = Building 03 = Culvert/Ditch 04 = Curb 05 = Guardrail/Barrier 06 = Embankment 07 = Fence
08 = Light Pole 09 = Sign Post 10 = Other Pole 11 = Tree/Shrubbery 12 = Construction Barrier 13 = Crash Attenuator

Office of Traffic & Safety
Traffic Development & Support Division
Crash Analysis Safety Team

Location: Conway Rd From: West of Concord Blvd To: Little Patuxent River
County: ANNE ARUNDEL
Study Period: 01/01/2018 to 12/31/2020
Analyst: Matthew Jagg Date: 09/14/2021



KEY:LogMile-CollisionType (FixedObjectStruck) -Date-Severity-Time-Surface-Illumination-Alcohol

template 06-27-06

F - Fatalities	SS - Sideswipe	FO - Fixed Object	OFFRD - Off Road	00 - Not Applicable	08 - Light Support Pole	N - Night
I - Injury	PARKD - Parked Vehicle	OOBJ - Other Object	RUNWY - Downhill Runaway	01 - Bridge or Overpass	09 - Sign Support Pole	X - Alcohol
P - Property Damage	PED - Pedestrian	OT - Overturn	FIRE - Explosion Fire	02 - Building	10 - Other Pole	D - Dry Surface
OD - Opposite Direction	BIKE - Bicycle	SPILL - Spilled Cargo	BCKNG - Backing	03 - Culvert or Ditch	11 - Tree Shrubbery	W - Wet Surface
LT - Left Turn	PEDAL - Other Pedalcycle	JCKKNF - Jackknife	UTURN - U-Turn	04 - Curb	12 - Construction Barrier	I - Icy Surface
RE - Rear End	CONVY - Other Conveyance	SPRTD - Units Separated	OTHR - Other	05 - Guardrail or Barrier	13 - Crash Attenuator	S - Snowy Surface
ANG - Angle	ANIML - Animal	NCOLL - Other Non Collision	UNK - Unknown	06 - Embankment	88 - Other	
				07 - Fence	99 - Unknown	

40058

Office of Traffic and Safety
Traffic Safety Analysis Division

Consultant Accident Data/Analysis Request Form

Request Date: August 31, 2021 Note: date set automatically

Location:

County: **AA** Route: Conway Road (CO 2633) Town/Place: Odenton
Log Mile:

☐ at
☒ from Concord Boulevard to MD 3 **(0.00-0.10)**

Purpose Needed:

☐ Signal Study ☐ Surface Evaluation ☐ Pavement Marking Study
☐ Sign Study ☐ Lighting Study ☒ General Traffic Study
☐ Other (Explain):

Originally Requested By: Adam Greenstein, on behalf of Anne Arundel County
When Needed:9/20/21

Work Requested:

☒ Accident Summary ☒ 3R Format (History) ☒ Accident Rates
☒ Study Worksheet ☒ Collision Diagram ☐ Other (Explain in Remarks)

☐ One Year ☐ Two Years
☒ Three Years ☐ Combined Years
☐ Specific Date –

Additional Instructions or Remarks:

Requested by: Michael Morganstein Title: Traffic Engineer
Consultant Firm: AECOM Consultant Subcontractor:
Phone: 301-996-2770 Fax:
Cell Phone: Email: Michael.morganstein@aecom.com

Please indicate map coordinates of location to be studied.
ADC: MD General Hwy. Grid Map: F12A

Send to: Traffic Safety Analysis Division,
7491 Connelley Drive Hanover, Maryland 21076
Phone: (410) 787-5822 Fax: (410) 787-5823 Email: WMacleod@sha.state.md.us

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC Study Worksheet Output rev. 10/2017-1

Name: Matthew Jagg

Date: 09/15/2021

Location: Conway Rd From: MD 3 (Robert Crain Hwy) To: Concord Blvd

Logmiles: From 0 To 0.1 Length: 0.10

County: Anne Arundel, D5

Period: January 01, 2018 To December 31, 2020

Note: Year 2020 data is incomplete and unedited!

YEAR >>	2018	2019	2020	Total
Fatal	0	0	0	0
No. Killed	0	0	0	0
Injury	0	1	0	1
No. Injured	0	2	0	2
Prop. Damage	0	3	2	5
Total Crashes	0	4	2	6
Severity Index	0	10	2	Avg 4
Opposite Dir.	0	1	0	1
Rear End	0	1	1	2
Sideswipe	0	0	0	0
Left Turn	0	0	1	1
Angle	0	2	0	2
Pedestrian	0	0	0	0
Parked Veh.	0	0	0	0
Fixed Object	0	0	0	0
Other	0	0	0	0
U-Turn	0	0	0	0
Backing	0	0	0	0
Animal	0	0	0	0
Railroad	0	0	0	0
Fire / Expl.	0	0	0	0
Overturn	0	0	0	0
Truck Related	0	1	0	1
Night Time	0	1	0	1
Wet Surface	0	0	1	1
Alcohol	0	0	0	0
Intersection	0	4	2	6
Total Vehicles	0	9	5	14
Total Trucks	0	1	0	1
Truck %	0.0	11.1	0.0	7.1

Comments:

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC Summary Output rev. 10/2017-1

Name: Matthew Jagg

Date: 09/15/2021

Location: Conway Rd From: MD 3 (Robert Crain Hwy) To: Concord Blvd

Logmiles: From 0 To 0.1 Length: 0.10

County: Anne Arundel, D5

Period: January 1, 2018 To December 31, 2020

Note: Year 2020 data is incomplete and unedited!

SEVERITY	FATAL	INJURY	P-DAMAGE	TOTAL
Accidents		1	5	6
Veh Occ		2		
Pedestrian				

AVG Severity Index: 4

DAY OF THE WEEK

SUN	MON	TUE	WED	THU	FRI	SAT	UNK
	1	1	1	1	1	1	

MONTH OF THE YEAR

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK
1	1	2		2								

CONDITION	DRIVER	PED
Normal:	8	
Alcohol:		
Other:	5	

TIME

	12	01	02	03	04	05	06	07	08	09	10	11	UNK
AM:													
PM:	1	1	1			1	2						

VEHICLES INVOLVED PER ACCIDENT

1	2	3	4	5	6+	UNK	TOTAL
	4	2					14

VEHICLE TYPE

	Motorcycle/Moped		Tractor Trailer
9	Passenger Vehicle		Passenger Bus
	Sport Utility Veh		School Bus
1	Pick-Up Truck		Emergency Veh
1	Trucks (2+3 axles)	3	Other Types

SURFACE

1	Wet
5	Dry
	Sno/Ice
	Mud
	Other

MOVEMENTS

NORTH			SOUTH			EAST			WEST		
LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT
2	1			5		1	2	1			

OTHER MOVEMENTS 2

PROBABLE CAUSES

	Influence of Drugs		Improper Lane Change
	Influence of Alcohol		Improper Backing
	Influence of Medication		Improper Passing
	Influence of Combined Subst.		Improper Signal
	Physical/Mental Difficulty		Improper Parking
	Fell Asleep/Fainted, etc.		Passenger Interfere/Obstruct.
1	Fail to give full Attention		Illegally in Roadway
	Lic. Restr. Non-compliance		Bicycle Violation
	Fail to Drive in Single Lane		Clothing Not Visible
	Improper Right Turn on Red		Sleet, Hail, Freezing Rain
	Fail to Yield Right-of-way		Severe Crosswinds
1	Fail to Obey Stop Sign		Rain, Snow
	Fail to Obey Traffic Signal		Animal
	Fail to Obey Other Control		Vision Obstruction
	Fail to Keep Right of Center		Vehicle Defect
	Fail to Stop for School Bus		Wet
	Wrong Way on One Way		Icy or Snow Covered
	Exceeded Speed Limit		Debris or Obstruction
	Operator Using Cell Phone		Ruts, Holes or Bumps
	Stopping in Lane Roadway		Road Under Construction
	Too Fast for Conditions		Traffic Control Device Inop.
	Followed too Closely		Shoulders Low, Soft or High
	Improper Turn	4	Other or Unknown

COLLISION TYPES		FATAL	INJURY	PROP	TOTAL
Opposite Dir	Related:		1		1
	UnRelated:				
Rear End	Related:			2	2
	UnRelated:				
Sideswipe	Related:				
	UnRelated:				
Left Turn	Related:			1	1
	UnRelated:				
Angle	Related:			2	2
	UnRelated:				
Pedestrian	Related:				
	UnRelated:				
Parked Vehicle	Related:				
	UnRelated:				
Other Collision	Related:				
	UnRelated:				

F	Bridge	01
I	Building	02
X	Culvert/Ditch	03
E	Curb	04
D	Guardrail/Barrier	05
	Embankment	06
O	Fence	07
B	Light Pole	08
J	Sign Pole	09
E	Other Pole	10
C	Tree/Shrubbery	11
T	Contr. Barrier	12
S	Crash Attenuator	13
	Other Fixed Object	

WEATHER

6	Clear / Cloudy
	Foggy
	Raining
	Snow / Sleet
	Other

ILLUMINATION

5	Day
	Dawn/Dusk
1	Dark - Lights On
	Dark - No Lights
	Other

TOTALS

18-20	6

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC History Output rev. 10/2017-1 - Combined Year Listing

Name: Matthew Jagg

Date: 09/15/2021

Location: Conway Rd From: MD 3 (Robert Crain Hwy) To: Concord Blvd

Logmiles: From 0 To 0.1 Length: 0.10

County: Anne Arundel, D5 Period: January 01, 2018 To December 31, 2020

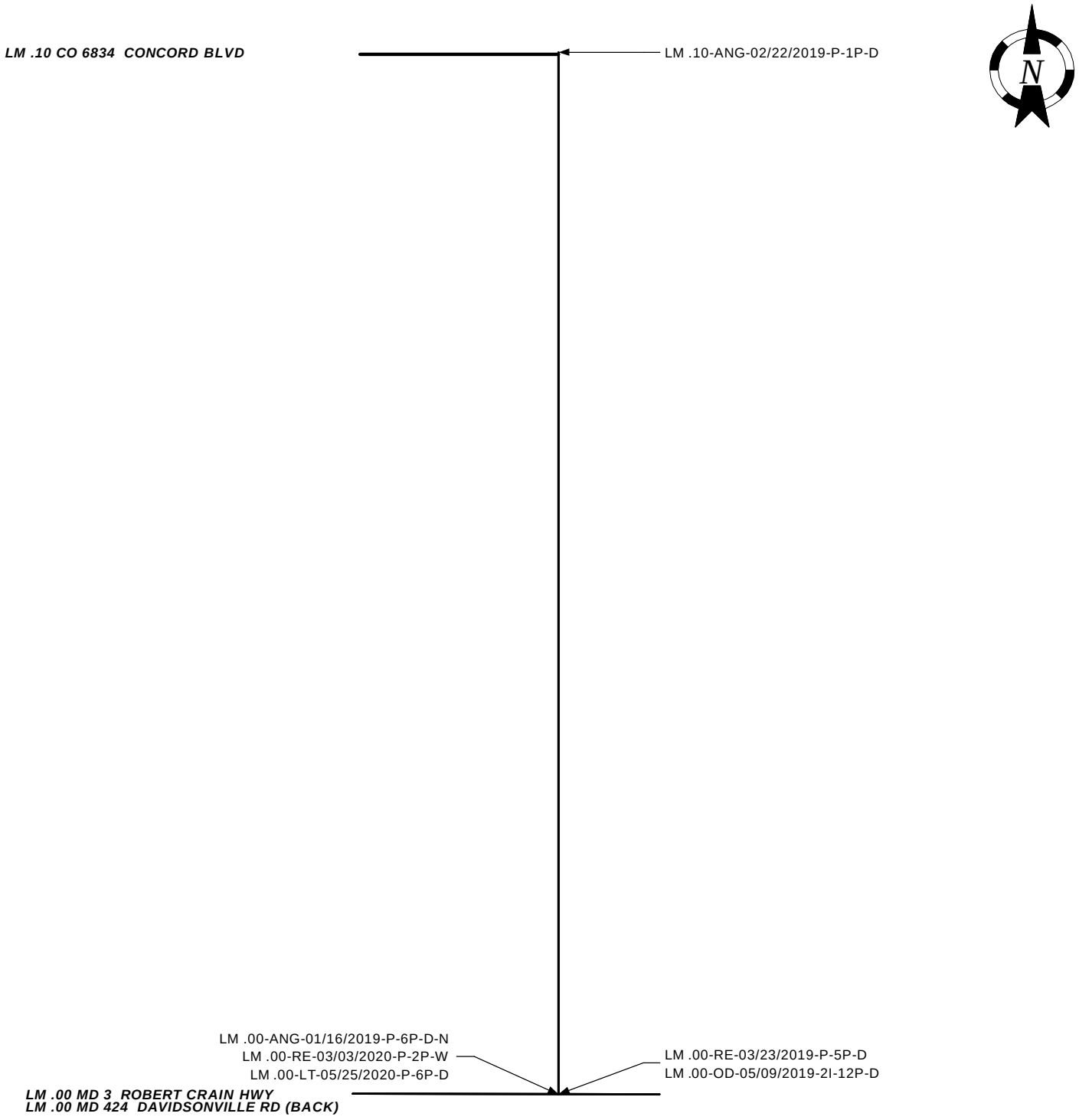
Note: Year 2020 data is incomplete and unedited!

MilePt	Int Rel	Date	Severity	Time	Light	Surface	Alc Rel	FixObj	Collision	Movement V1	Movement V2	Probable Cause
CO2633												
0.000	✓	01162019	Property	06P	Night	Dry			ANGLE	SS	ER	Other or Unknown
0.000	✓	03232019	Property	05P	Day	Dry			RREND	ES	EL	Other or Unknown
0.000	✓	05092019	2 Injured	12P	Day	Dry			OPDIR	SS	NS	Other or Unknown
0.000	✓	03032020	Property	02P	Day	Wet			RREND	SS	SS	Other or Unknown
0.000	✓	05252020	Property	06P	Day	Dry			LFTRN	NL	SS	Fail to give full attention
0.100	✓	02222019	Property	01P	Day	Dry			ANGLE	NL	ES	Fail to obey stop sign

Fixed Object: 01 = Bridge 02 = Building 03 = Culvert/Ditch 04 = Curb 05 = Guardrail/Barrier 06 = Embankment 07 = Fence
08 = Light Pole 09 = Sign Post 10 = Other Pole 11 = Tree/Shrubbery 12 = Construction Barrier 13 = Crash Attenuator

Office of Traffic & Safety
Traffic Development & Support Division
Crash Analysis Safety Team

Location: Conway Rd From: MD 3 (Robert Crain Hwy) To: Concord Blvd
County: ANNE ARUNDEL
Study Period: 01/01/2018 to 12/31/2020
Analyst: Matthew Jagg Date: 09/14/2021



KEY:LogMile-CollisionType (FixedObjectStruck) -Date-Severity-Time-Surface-Illumination-Alcohol

template 06-27-06

F - Fatalities	SS - Sideswipe	FO - Fixed Object	OFFRD - Off Road	00 - Not Applicable	08 - Light Support Pole	N - Night
I - Injury	PARKD - Parked Vehicle	OOBJ - Other Object	RUNWY - Downhill Runaway	01 - Bridge or Overpass	09 - Sign Support Pole	X - Alcohol
P - Property Damage	PED - Pedestrian	OT - Overturn	FIRE - Explosion Fire	02 - Building	10 - Other Pole	D - Dry Surface
OD - Opposite Direction	BIKE - Bicycle	SPILL - Spilled Cargo	BCKNG - Backing	03 - Culvert or Ditch	11 - Tree Shrubbery	W - Wet Surface
LT - Left Turn	PEDAL - Other Pedalcycle	JCKKNF - Jackknife	UTURN - U-Turn	04 - Curb	12 - Construction Barrier	I - Icy Surface
RE - Rear End	CONVY - Other Conveyance	SPRTD - Units Separated	OTHR - Other	05 - Guardrail or Barrier	13 - Crash Attenuator	S - Snowy Surface
ANG - Angle	ANIML - Animal	NCOLL - Other Non Collision	UNK - Unknown	06 - Embankment	88 - Other	
				07 - Fence	99 - Unknown	

40059

Office of Traffic and Safety
Traffic Safety Analysis Division

Consultant Accident Data/Analysis Request Form

Request Date: August 31, 2021 Note: date set automatically

Location:

County: **AA** Route: Conway Road (CO 2633) Town/Place: Odenton
Log Mile:

☐ at
☒ from Western Terminus to Upper Patuxent Ridge Road (1.92-3.235)

Purpose Needed:

☐ Signal Study ☐ Surface Evaluation ☐ Pavement Marking Study
☐ Sign Study ☐ Lighting Study ☐ General Traffic Study
☐ Other (Explain):

Originally Requested By: Adam Greenstein, on behalf of Anne Arundel County
When Needed:9/20/21

Work Requested:

☒ Accident Summary ☒ 3R Format (History) ☒ Accident Rates
☒ Study Worksheet ☒ Collision Diagram ☐ Other (Explain in Remarks)

☐ One Year ☐ Two Years
☒ Three Years ☐ Combined Years
☐ Specific Date –

Additional Instructions or Remarks:
Requested by: Michael Morganstein Title: Traffic Engineer
Consultant Firm: AECOM Consultant Subcontractor:
Phone: 301-996-2770 Fax:
Cell Phone: Email: Michael.morganstein@aecom.com

Please indicate map coordinates of location to be studied.
ADC: MD General Hwy. Grid Map: F12A

Send to: Traffic Safety Analysis Division,
7491 Connelley Drive Hanover, Maryland 21076
Phone: (410) 787-5822 Fax: (410) 787-5823 Email: WMacleod@sha.state.md.us

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC Study Worksheet Output rev. 10/2017-1

Name: Matthew Jagg

Date: 09/15/2021

Location: Conway Rd From: Upper Patuxent Ridge Rd To: Western Terminus

Logmiles: From 2.55 To 3.32 Length: 0.77

County: Anne Arundel, D5

Period: January 01, 2018 To December 31, 2020

Note: Year 2020 data is incomplete and unedited!

YEAR >>	2018	2019	2020	Total
Fatal	0	0	0	0
No. Killed	0	0	0	0
Injury	0	0	0	0
No. Injured	0	0	0	0
Prop. Damage	1	0	0	1
Total Crashes	1	0	0	1
Severity Index	1	0	0	Avg 0
Opposite Dir.	0	0	0	0
Rear End	0	0	0	0
Sideswipe	0	0	0	0
Left Turn	0	0	0	0
Angle	1	0	0	1
Pedestrian	0	0	0	0
Parked Veh.	0	0	0	0
Fixed Object	0	0	0	0
Other	0	0	0	0
U-Turn	0	0	0	0
Backing	0	0	0	0
Animal	0	0	0	0
Railroad	0	0	0	0
Fire / Expl.	0	0	0	0
Overturn	0	0	0	0
Truck Related	0	0	0	0
Night Time	0	0	0	0
Wet Surface	1	0	0	1
Alcohol	0	0	0	0
Intersection	1	0	0	1
Total Vehicles	2	0	0	2
Total Trucks	0	0	0	0
Truck %	0.0	0.0	0.0	0.0

Comments:

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC Summary Output rev. 10/2017-1

Name: Matthew Jagg

Date: 09/15/2021

Location: Conway Rd From: Upper Patuxent Ridge Rd To: Western Terminus

Logmiles: From 2.55 To 3.32 Length: 0.77

County: Anne Arundel, D5 Period: January 1, 2018 To December 31, 2020

Note: Year 2020 data is incomplete and unedited!

SEVERITY	FATAL	INJURY	P-DAMAGE	TOTAL
Accidents		0	1	1
Veh Occ				
Pedestrian				

AVG Severity Index: 0

DAY OF THE WEEK

SUN	MON	TUE	WED	THU	FRI	SAT	UNK
	1						

MONTH OF THE YEAR

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK
								1				

CONDITION	DRIVER	PED
Normal:	2	
Alcohol:		
Other:		

TIME

	12	01	02	03	04	05	06	07	08	09	10	11	UNK
AM:													
PM:							1						

VEHICLES INVOLVED PER ACCIDENT

1	2	3	4	5	6+	UNK	TOTAL
1	1						2

VEHICLE TYPE

	Motorcycle/Moped		Tractor Trailer
2	Passenger Vehicle		Passenger Bus
	Sport Utility Veh		School Bus
	Pick-Up Truck		Emergency Veh
	Trucks (2+3 axles)		Other Types

SURFACE

1	Wet
	Dry
	Sno/Ice
	Mud
	Other

MOVEMENTS

NORTH			SOUTH			EAST			WEST		
LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT
				1							1

OTHER MOVEMENTS

PROBABLE CAUSES

	Influence of Drugs		Improper Lane Change
	Influence of Alcohol		Improper Backing
	Influence of Medication		Improper Passing
	Influence of Combined Subst.		Improper Signal
	Physical/Mental Difficulty		Improper Parking
	Fell Asleep/Fainted, etc.		Passenger Interfere/Obstruct.
	Fail to give full Attention		Illegally in Roadway
	Lic. Restr. Non-compliance		Bicycle Violation
	Fail to Drive in Single Lane		Clothing Not Visible
	Improper Right Turn on Red		Sleet, Hail, Freezing Rain
	Fail to Yield Right-of-way		Severe Crosswinds
	Fail to Obey Stop Sign		Rain, Snow
	Fail to Obey Traffic Signal		Animal
	Fail to Obey Other Control		Vision Obstruction
	Fail to Keep Right of Center		Vehicle Defect
	Fail to Stop for School Bus		Wet
	Wrong Way on One Way		Icy or Snow Covered
	Exceeded Speed Limit		Debris or Obstruction
	Operator Using Cell Phone		Ruts, Holes or Bumps
	Stopping in Lane Roadway		Road Under Construction
	Too Fast for Conditions		Traffic Control Device Inop.
	Followed too Closely		Shoulders Low, Soft or High
1	Improper Turn		Other or Unknown

COLLISION TYPES		FATAL	INJURY	PROP	TOTAL
Opposite Dir	Related:				
	UnRelated:				
Rear End	Related:				
	UnRelated:				
Sideswipe	Related:				
	UnRelated:				
Left Turn	Related:				
	UnRelated:				
Angle	Related:			1	1
	UnRelated:				
Pedestrian	Related:				
	UnRelated:				
Parked Vehicle	Related:				
	UnRelated:				
Other Collision	Related:				
	UnRelated:				

F	Bridge	01
I	Building	02
X	Culvert/Ditch	03
E	Curb	04
D	Guardrail/Barrier	05
	Embankment	06
O	Fence	07
B	Light Pole	08
J	Sign Pole	09
E	Other Pole	10
C	Tree/Shrubbery	11
T	Contr. Barrier	12
S	Crash Attenuator	13
	Other Fixed Object	

WEATHER

1	Clear / Cloudy
	Foggy
	Raining
	Snow / Sleet
	Other

ILLUMINATION

1	Day
	Dawn/Dusk
	Dark - Lights On
	Dark - No Lights
	Other

TOTALS

18-20	1

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC History Output rev. 10/2017-1 - Combined Year Listing

Name: Matthew Jagg

Date: 09/15/2021

Location: Conway Rd From: Upper Patuxent Ridge Rd To: Western Terminus

Logmiles: From 2.55 To 3.32 Length: 0.77

County: Anne Arundel, D5 Period: January 01, 2018 To December 31, 2020

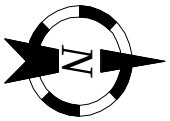
Note: Year 2020 data is incomplete and unedited!

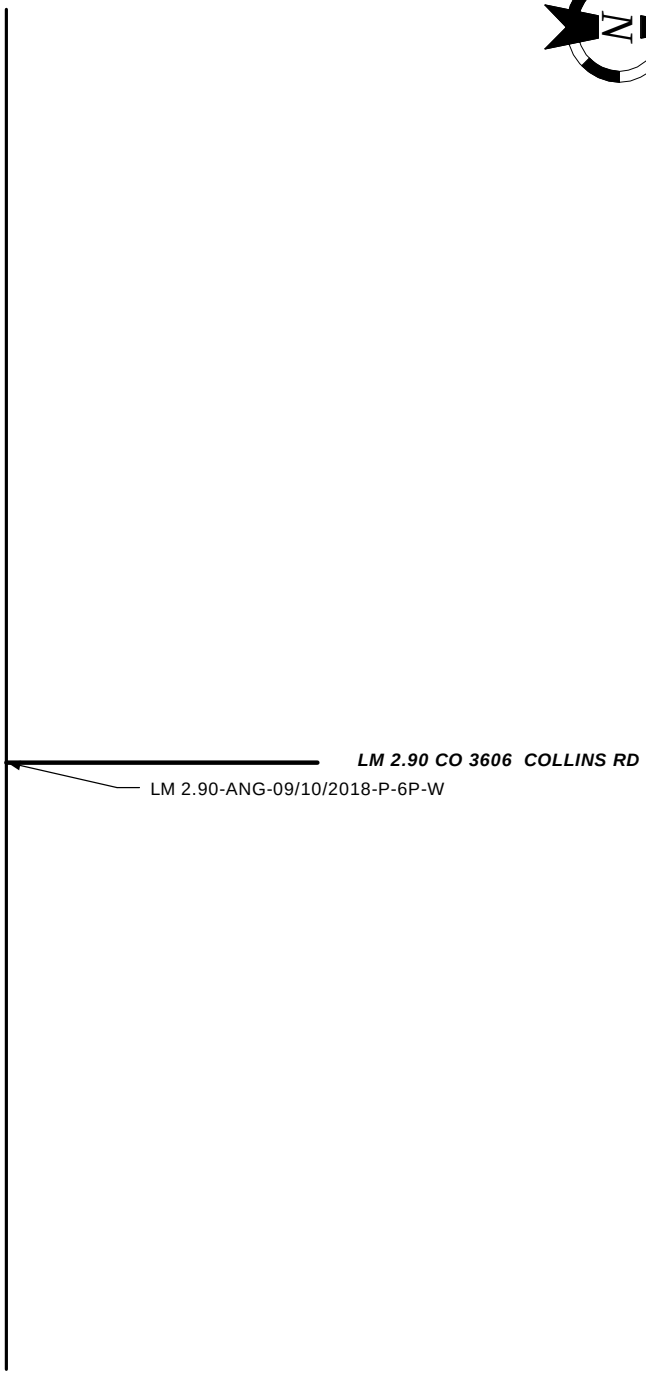
MilePt	Int Rel	Date	Severity	Time	Light	Surface	Alc Rel	FixObj	Collision	Movement V1	Movement V2	Probable Cause
CO2633												
2.900	✓	09102018	Property	06P	Day	Wet			ANGLE	WR	SS	Improper turn

Fixed Object: 01 = Bridge 02 = Building 03 = Culvert/Ditch 04 = Curb 05 = Guardrail/Barrier 06 = Embankment 07 = Fence
08 = Light Pole 09 = Sign Post 10 = Other Pole 11 = Tree/Shrubbery 12 = Construction Barrier 13 = Crash Attenuator

Office of Traffic & Safety
Traffic Development & Support Division
Crash Analysis Safety Team

Location: **Conway Rd From: Upper Patuxent Ridge Rd To: Western Terminus**
County: **ANNE ARUNDEL**
Study Period: **01/01/2018 to 12/31/2020**
Analyst: **Matthew Jagg** Date: **09/15/2021**





KEY:LogMile-CollisionType (FixedObjectStruck) -Date-Severity-Time-Surface-Illumination-Alcohol

template 06-27-06

F - Fatalities	SS - Sideswipe	FO - Fixed Object	OFFRD - Off Road	00 - Not Applicable	08 - Light Support Pole	N - Night
I - Injury	PARKD - Parked Vehicle	OOBJ - Other Object	RUNWY - Downhill Runaway	01 - Bridge or Overpass	09 - Sign Support Pole	X - Alcohol
P - Property Damage	PED - Pedestrian	OT - Overturn	FIRE - Explosion Fire	02 - Building	10 - Other Pole	D - Dry Surface
OD - Opposite Direction	BIKE - Bicycle	SPILL - Spilled Cargo	BCKNG - Backing	03 - Culvert or Ditch	11 - Tree Shrubbery	W - Wet Surface
LT - Left Turn	PEDAL - Other Pedalcycle	JCKKNF - Jackknife	UTURN - U-Turn	04 - Curb	12 - Construction Barrier	I - Icy Surface
RE - Rear End	CONVY - Other Conveyance	SPRTD - Units Separated	OTHR - Other	05 - Guardrail or Barrier	13 - Crash Attenuater	S - Snowy Surface
ANG - Angle	ANIML - Animal	NCOLL - Other Non Collision	UNK - Unknown	06 - Embankment	88 - Other	
				07 - Fence	99 - Unknown	

40060

Office of Traffic and Safety
Traffic Safety Analysis Division

Consultant Accident Data/Analysis Request Form

Request Date: August 31, 2021 Note: date set automatically

Location:

County: **AA** Route: Conway Road (CO 2633) Town/Place: Odenton Log

☒ at Concord Boulevard (CO 6834) Mile:**0.10 at 0.00**

☐

to

Purpose Needed:

☐ Signal Study ☐ Surface Evaluation ☐ Pavement Marking Study
☐ Sign Study ☐ Lighting Study ☒ General Traffic Study
☐ Other (Explain):

Originally Requested By: Adam Greenstein, on behalf of Anne Arundel County
When Needed:9/20/21

Work Requested:

☒ Accident Summary ☒ 3R Format (History) ☒ Accident Rates
☒ Study Worksheet ☒ Collision Diagram ☐ Other (Explain in Remarks)

☐ One Year ☐ Two Years
☒ Three Years ☐ Combined Years
☐ Specific Date –

Additional Instructions or Remarks:

Requested by: Michael Morganstein Title: Traffic Engineer
Consultant Firm: AECOM Consultant Subcontractor:
Phone: 301-996-2770 Fax:
Cell Phone: Email: Michael.morganstein@aecom.com

Please indicate map coordinates of location to be studied.
ADC: MD General Hwy. Grid Map: F12A

Send to: Traffic Safety Analysis Division,
7491 Connelley Drive Hanover, Maryland 21076
Phone: (410) 787-5822 Fax: (410) 787-5823 Email: WMacleod@sha.state.md.us

Conway Rd
Concord Blvd
Rte 3 N
3
424
N
400 ft
Google Earth
© 2021 Google

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC Study Worksheet Output rev. 10/2017-1

Name: Matthew Jagg

Date: 09/15/2021

Location: Conway Rd @ Concord Blvd

Logmiles: 0.1 At 0 Radius: 250 ft.

County: Anne Arundel, D5

Period: January 01, 2018 To December 31, 2020

Note: Year 2020 data is incomplete and unedited!

YEAR >>	2018	2019	2020	Total
Fatal	0	0	0	0
No. Killed	0	0	0	0
Injury	0	0	0	0
No. Injured	0	0	0	0
Prop. Damage	0	1	0	1
Total Crashes	0	1	0	1
Severity Index	0	1	0	Avg 0
Opposite Dir.	0	0	0	0
Rear End	0	0	0	0
Sideswipe	0	0	0	0
Left Turn	0	0	0	0
Angle	0	1	0	1
Pedestrian	0	0	0	0
Parked Veh.	0	0	0	0
Fixed Object	0	0	0	0
Other	0	0	0	0
U-Turn	0	0	0	0
Backing	0	0	0	0
Animal	0	0	0	0
Railroad	0	0	0	0
Fire / Expl.	0	0	0	0
Overturn	0	0	0	0
Truck Related	0	1	0	1
Night Time	0	0	0	0
Wet Surface	0	0	0	0
Alcohol	0	0	0	0
Intersection	0	1	0	1
Total Vehicles	0	2	0	2
Total Trucks	0	1	0	1
Truck %	0.0	50.0	0.0	50.0

Comments:

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC Summary Output rev. 10/2017-1

Name: Matthew Jagg

Date: 09/15/2021

Location: Conway Rd @ Concord Blvd

Logmiles: 0.1 At 0 Radius: 250 ft.

County: Anne Arundel, D5

Period: January 1, 2018 To December 31, 2020

Note: Year 2020 data is incomplete and unedited!

SEVERITY	FATAL	INJURY	P-DAMAGE	TOTAL
Accidents		0	1	1
Veh Occ				
Pedestrian				

AVG Severity Index: 0

DAY OF THE WEEK

SUN	MON	TUE	WED	THU	FRI	SAT	UNK
					1		

MONTH OF THE YEAR

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK
	1											

CONDITION	DRIVER	PED
Normal:	2	
Alcohol:		
Other:		

TIME

	12	01	02	03	04	05	06	07	08	09	10	11	UNK
AM:													
PM:		1											

VEHICLES INVOLVED PER ACCIDENT

1	2	3	4	5	6+	UNK	TOTAL
	1						2

VEHICLE TYPE

	Motorcycle/Moped		Tractor Trailer
1	Passenger Vehicle		Passenger Bus
	Sport Utility Veh		School Bus
	Pick-Up Truck		Emergency Veh
1	Trucks (2+3 axles)		Other Types

SURFACE

	Wet
1	Dry
	Sno/Ice
	Mud
	Other

MOVEMENTS

NORTH			SOUTH			EAST			WEST		
LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT
		1					1				

OTHER MOVEMENTS

PROBABLE CAUSES

	Influence of Drugs		Improper Lane Change
	Influence of Alcohol		Improper Backing
	Influence of Medication		Improper Passing
	Influence of Combined Subst.		Improper Signal
	Physical/Mental Difficulty		Improper Parking
	Fell Asleep/Fainted, etc.		Passenger Interfere/Obstruct.
	Fail to give full Attention		Illegally in Roadway
	Lic. Restr. Non-compliance		Bicycle Violation
	Fail to Drive in Single Lane		Clothing Not Visible
	Improper Right Turn on Red		Sleet, Hail, Freezing Rain
	Fail to Yield Right-of-way		Severe Crosswinds
1	Fail to Obey Stop Sign		Rain, Snow
	Fail to Obey Traffic Signal		Animal
	Fail to Obey Other Control		Vision Obstruction
	Fail to Keep Right of Center		Vehicle Defect
	Fail to Stop for School Bus		Wet
	Wrong Way on One Way		Icy or Snow Covered
	Exceeded Speed Limit		Debris or Obstruction
	Operator Using Cell Phone		Ruts, Holes or Bumps
	Stopping in Lane Roadway		Road Under Construction
	Too Fast for Conditions		Traffic Control Device Inop.
	Followed too Closely		Shoulders Low, Soft or High
	Improper Turn		Other or Unknown

COLLISION TYPES		FATAL	INJURY	PROP	TOTAL
Opposite Dir	Related:				
	UnRelated:				
Rear End	Related:				
	UnRelated:				
Sideswipe	Related:				
	UnRelated:				
Left Turn	Related:				
	UnRelated:				
Angle	Related:			1	1
	UnRelated:				
Pedestrian	Related:				
	UnRelated:				
Parked Vehicle	Related:				
	UnRelated:				
Other Collision	Related:				
	UnRelated:				

F	Bridge	01
I	Building	02
X	Culvert/Ditch	03
E	Curb	04
D	Guardrail/Barrier	05
	Embankment	06
O	Fence	07
B	Light Pole	08
J	Sign Pole	09
E	Other Pole	10
C	Tree/Shrubbery	11
T	Contr. Barrier	12
S	Crash Attenuator	13
	Other Fixed Object	

WEATHER

1	Clear / Cloudy
	Foggy
	Raining
	Snow / Sleet
	Other

ILLUMINATION

1	Day
	Dawn/Dusk
	Dark - Lights On
	Dark - No Lights
	Other

TOTALS

18-20	1

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC History Output rev. 10/2017-1 - Combined Year Listing

Name: Matthew Jagg

Date: 09/15/2021

Location: Conway Rd @ Concord Blvd

Logmiles: 0.1 At 0 Radius: 250 ft.

County: Anne Arundel, D5 Period: January 01, 2018 To December 31, 2020

Note: Year 2020 data is incomplete and unedited!

MilePt	Int Rel	Date	Severity	Time	Light	Surface	Alc Rel	FixObj	Collision	Movement V1	Movement V2	Probable Cause
CO2633												
0.100	✓	02222019	Property	01P	Day	Dry			ANGLE	NR	ES	Fail to obey stop sign

Fixed Object: 01 = Bridge 02 = Building 03 = Culvert/Ditch 04 = Curb 05 = Guardrail/Barrier 06 = Embankment 07 = Fence
08 = Light Pole 09 = Sign Post 10 = Other Pole 11 = Tree/Shrubbery 12 = Construction Barrier 13 = Crash Attenuator

Office of Traffic & Safety
Traffic Development & Support Division
Crash Analysis Safety Team

Location: Conway Rd @ Concord Blvd
County: ANNE ARUNDEL
Study Period: 01/01/2018 to 12/31/2020
Analyst: Matthew Jagg Date: 09/15/2021

Conway Rd

02/22/19-P-1P-D

Conway Rd

Concord Blvd

DATE-SEVERITY-TIME-SURFCE
NIGHT
ALCOHOL
DRUGS

SEVERITY
F - Fatalities
I - Injured
P - Property Damage Only

SURFACE
D - Dry Surface
W - Wet Surface
I - Icy Surface
S - Snowy Surface

00 - Not Applicable
01 - Bridge or Overpass
02 - Building
03 - Culvert or Ditch
04 - Curb
05 - Guardrail or Barrier
06 - Embankment
07 – Fence

08 - Light Support Pole
09 - Sign Support Pole
10 - Other Pole
11 - Tree Shrubbery
12 - Construction Barrier
13 - Crash Attenuator
88 - Other
99 - Unknown

B - Bicycle
P - Other Pedalcycle
C - Other Conveyance
T - Railway Train
A - Animal
O - Other Object
S - Spilled Cargo
J - Jackknife

U - Units Separated
N - Other Non collision
D - Off Road
R - Downhill Runaway
F - Explosion or Fire
? - Unknown

template 06-27-06

U - TURN
BACKING
OVERTURN
Parked Vehicle
P Pedestrian

40061

Office of Traffic and Safety
Traffic Safety Analysis Division

Consultant Accident Data/Analysis Request Form

Request Date: August 31, 2021 Note: date set automatically

Location:

County: A**A** Route: Conway Road (CO 2633) Town/Place: Odenton Log Mile: **0.00 at 2.18**

☒ at MD 3 to
☐ from

Purpose Needed:

☐ Signal Study ☐ Surface Evaluation ☐ Pavement Marking Study
☐ Sign Study ☐ Lighting Study ☒ General Traffic Study
☐ Other (Explain):

Originally Requested By: Adam Greenstein, on behalf of Anne Arundel County
When Needed:9/20/21

Work Requested:

☒ Accident Summary ☒ 3R Format (History) ☒ Accident Rates
☒ Study Worksheet ☒ Collision Diagram ☐ Other (Explain in Remarks)

☐ One Year ☐ Two Years
☒ Three Years ☐ Combined Years
☐ Specific Date –

Additional Instructions or Remarks:

Requested by: Michael Morganstein Title: Traffic Engineer
Consultant Firm: AECOM Consultant Subcontractor:
Phone: 301-996-2770 Fax:
Cell Phone: Email: Michael.morganstein@aecom.com

Please indicate map coordinates of location to be studied.
ADC: MD General Hwy. Grid Map: F12A

Send to: Traffic Safety Analysis Division,
7491 Connelley Drive Hanover, Maryland 21076
Phone: (410) 787-5822 Fax: (410) 787-5823 Email: WMacleod@sha.state.md.us

Concord Blvd
Conway Rd
Crain Hwy
3
424
Rte 3 N
Davidsonville Rd
Martha Gre
Google Earth
© 2021 Google
N
400 ft

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC Study Worksheet Output rev. 10/2017-1

Name: Matthew Jagg

Date: 09/15/2021

Location: MD 3 (Robert Crain Hwy) @ MD 424 (Davidsonville Rd) & Conway Rd

Logmiles: 2.18 At 8.24 Radius: 250 ft.

County: Anne Arundel, D5

Period: January 01, 2018 To December 31, 2020

Note: Year 2020 data is incomplete and unedited!

YEAR >>	2018	2019	2020	Total
Fatal	0	0	0	0
No. Killed	0	0	0	0
Injury	11	10	6	27
No. Injured	23	18	9	50
Prop. Damage	10	13	14	37
Total Crashes	21	23	20	64
Severity Index	46	50	34	Avg 43
Opposite Dir.	0	1	0	1
Rear End	14	12	9	35
Sideswipe	0	1	5	6
Left Turn	4	4	6	14
Angle	2	4	0	6
Pedestrian	0	1	0	1
Parked Veh.	0	0	0	0
Fixed Object	1	0	0	1
Other	0	0	0	0
U-Turn	0	0	0	0
Backing	0	0	0	0
Animal	0	0	0	0
Railroad	0	0	0	0
Fire / Expl.	0	0	0	0
Overturn	0	0	0	0
Truck Related	1	1	3	5
Night Time	9	5	8	22
Wet Surface	6	6	7	19
Alcohol	1	1	0	2
Intersection	21	23	20	64
Total Vehicles	49	48	44	141
Total Trucks	1	1	3	5
Truck %	2.0	2.1	6.8	3.5

Comments:

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC Summary Output rev. 10/2017-1

Name: Matthew Jagg

Date: 09/15/2021

Location: MD 3 (Robert Crain Hwy) @ MD 424 (Davidsonville Rd) & Conway Rd

Logmiles: 2.18 At 8.24 Radius: 250 ft.

County: Anne Arundel, D5

Period: January 1, 2018 To December 31, 2020

Note: Year 2020 data is incomplete and unedited!

SEVERITY	FATAL	INJURY	P-DAMAGE	TOTAL
Accidents		27	37	64
Veh Occ		49		
Pedestrian		1		

AVG Severity Index: 43

DAY OF THE WEEK

SUN	MON	TUE	WED	THU	FRI	SAT	UNK
17	8	11	7	7	8	6	

MONTH OF THE YEAR

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK
7	5	7	5	7	4	7	7	2	2	7	4	

CONDITION	DRIVER	PED
Normal:	101	1
Alcohol:	2	
Other:	34	

TIME

	12	01	02	03	04	05	06	07	08	09	10	11	UNK
AM:	2	1				2		1	2	3	3	4	
PM:	6	5	2	4	4	7	4	4	2	2	1	5	

VEHICLES INVOLVED PER ACCIDENT

1	2	3	4	5	6+	UNK	TOTAL
2	51	8	2	1			141

VEHICLE TYPE

	Motorcycle/Moped		Tractor Trailer
95	Passenger Vehicle		Passenger Bus
15	Sport Utility Veh		School Bus
8	Pick-Up Truck		Emergency Veh
5	Trucks (2+3 axles)	20	Other Types

SURFACE

19	Wet
43	Dry
	Sno/Ice
	Mud
2	Other

MOVEMENTS

NORTH			SOUTH			EAST			WEST		
LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT
8	38	1	6	54	1	2	1	1	6	6	2

OTHER MOVEMENTS 15

PROBABLE CAUSES

1	Influence of Drugs	1	Improper Lane Change
2	Influence of Alcohol		Improper Backing
	Influence of Medication	1	Improper Passing
	Influence of Combined Subst.		Improper Signal
	Physical/Mental Difficulty		Improper Parking
	Fell Asleep/Fainted, etc.		Passenger Interfere/Obstruct.
9	Fail to give full Attention		Illegally in Roadway
	Lic. Restr. Non-compliance		Bicycle Violation
	Fail to Drive in Single Lane		Clothing Not Visible
	Improper Right Turn on Red		Sleet, Hail, Freezing Rain
6	Fail to Yield Right-of-way		Severe Crosswinds
	Fail to Obey Stop Sign		Rain, Snow
7	Fail to Obey Traffic Signal		Animal
	Fail to Obey Other Control		Vision Obstruction
	Fail to Keep Right of Center		Vehicle Defect
	Fail to Stop for School Bus		Wet
	Wrong Way on One Way		Icy or Snow Covered
	Exceeded Speed Limit		Debris or Obstruction
	Operator Using Cell Phone		Ruts, Holes or Bumps
	Stopping in Lane Roadway		Road Under Construction
3	Too Fast for Conditions		Traffic Control Device Inop.
8	Followed too Closely		Shoulders Low, Soft or High
	Improper Turn	26	Other or Unknown

COLLISION TYPES		FATAL	INJURY	PROP	TOTAL
Opposite Dir	Related:		1		1
	UnRelated:				
Rear End	Related:		12	23	35
	UnRelated:				
Sideswipe	Related:		2	4	6
	UnRelated:				
Left Turn	Related:		8	6	14
	UnRelated:				
Angle	Related:		2	4	6
	UnRelated:				
Pedestrian	Related:		1		1
	UnRelated:				
Parked Vehicle	Related:				
	UnRelated:				
Other Collision	Related:				
	UnRelated:				

F	Bridge	01			
I	Building	02			
X	Culvert/Ditch	03			
E	Curb	04	1		1
D	Guardrail/Barrier	05			
	Embankment	06			
O	Fence	07			
B	Light Pole	08			
J	Sign Pole	09			
E	Other Pole	10			
C	Tree/Shrubbery	11			
T	Contr. Barrier	12			
S	Crash Attenuator	13			
	Other Fixed Object				

WEATHER

49	Clear / Cloudy
	Foggy
13	Raining
	Snow / Sleet
2	Other

ILLUMINATION

40	Day
1	Dawn/Dusk
19	Dark - Lights On
3	Dark - No Lights
1	Other

TOTALS

18-20	64

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC History Output rev. 10/2017-1 - Combined Year Listing

Name: Matthew Jagg

Date: 09/15/2021

Location: MD 3 (Robert Crain Hwy) @ MD 424 (Davidsonville Rd) & Conway Rd

Logmiles: 2.18 At 8.24 Radius: 250 ft.

County: Anne Arundel, D5

Period: January 01, 2018 To December 31, 2020

Note: Year 2020 data is incomplete and unedited!

MilePt	Int Rel	Date	Severity	Time	Light	Surface	Alc Rel	FixObj	Collision	Movement V1	Movement V2	Probable Cause
MD3												
2.150	✓	09042018	1 Injured	10P	Night	Dry		04	FXOBJ	NR	--	Improper passing
2.180	✓	01152018	Property	05A	Night	Dry			RREND	NS	NS	Other or Unknown
2.180	✓	01162018	3 Injured	07P	Night	Dry			RREND	SS	SS	Other or Unknown
2.180	✓	02142018	Property	12P	Day	Dry			RREND	NS	NS	Other or Unknown
2.180	✓	02182018	1 Injured	11P	Night	Dry			LFTRN	SL	NS	Fail to yield right-of-way
2.180	✓	02192018	Property	12P	Day	Wet			RREND	NS	NS	Too fast for conditions
2.180	✓	03252018	Property	11P	Night				RREND	SS	SS	Other or Unknown
2.180	✓	03302018	Property	04P	Day	Dry			LFTRN	SS	NL	Other or Unknown
2.180	✓	04152018	Property	04P	Day	Wet			RREND	SS	SS	Other or Unknown
2.180	✓	05142018	Property	01P	Day	Dry			ANGLE	SS	EL	Fail to obey traffic signal
2.180	✓	05272018	1 Injured	07P	Day	Wet			ANGLE	SS	WS	Fail to yield right-of-way
2.180	✓	06192018	Property	11A	Day	Dry			RREND	SS	SS	Other or Unknown
2.180	✓	06282018	Property	08A	Day	Dry			RREND	NS	NS	Other or Unknown
2.180	✓	07122018	3 Injured	12P	Day	Dry			RREND	NS	NS	Fail to give full attention
2.180	✓	07122018	2 Injured	09P	Night	Dry			LFTRN	SL	NS	Fail to obey traffic signal
2.180	✓	07272018	1 Injured	07P	Day	Dry			RREND	SS	SS	Fail to give full attention
2.180	✓	08212018	1 Injured	01P	Day	Wet			RREND	NS	NS	Followed too closely
2.180	✓	08262018	5 Injured	03P	Day	Dry			RREND	NS	NS	Fail to give full attention
2.180	✓	11062018	Property	06P	Night	Wet			RREND	SS	SS	Other or Unknown
2.180	✓	11252018	4 Injured	01A	Night	Wet			LFTRN	SL	NS	Fail to give full attention
2.180	✓	12212018	1 Injured	06P	Night	Dry	✓		RREND	SS	SS	Under influence of alcohol
2.180	✓	02092019	Property	05P	Day	Dry			RREND	NS	NS	Followed too closely
2.180	✓	03022019	Property	09A	Day	Wet			RREND	WS	WS	Fail to give full attention
2.180	✓	03032019	2 Injured	10A	Day	Dry			LFTRN	SL	NS	Other or Unknown
2.180	✓	04062019	4 Injured	04P	Day	Dry			SDSWP	SR	SS	Improper lane change
2.180	✓	04302019	1 Injured	05P	Day	Dry			LFTRN	NL	SS	Fail to give full attention
2.180	✓	05232019	Property	07A	Day	Dry			RREND	SS	SS	Too fast for conditions
2.180	✓	05252019	1 Injured	01P	Day	Dry			RREND	SS	SS	Followed too closely
2.180	✓	06102019	1 Injured	10A	Day	Wet			LFTRN	SS	NL	Fail to yield right-of-way
2.180	✓	07072019	Property	11P	Night	Wet			RREND	SS	SS	Other or Unknown
2.180	✓	07172019	1 Injured	11P	Night	Dry	✓		RREND	SS	SS	Under influence of alcohol
2.180	✓	08162019	4 Injured	09P					RREND	NS	NS	Other or Unknown
2.180	✓	08262019	Property	08A	Day	Dry			RREND	SS	SS	Followed too closely
2.180	✓	08292019	1 Injured	11P	Night	Dry			PED	NS	--	Other or Unknown
2.180	✓	09232019	Property	11A	Day	Dry			RREND	SS	SS	Other or Unknown
2.180	✓	10092019	Property	12P	Day	Dry			ANGLE	WS	SS	Other or Unknown

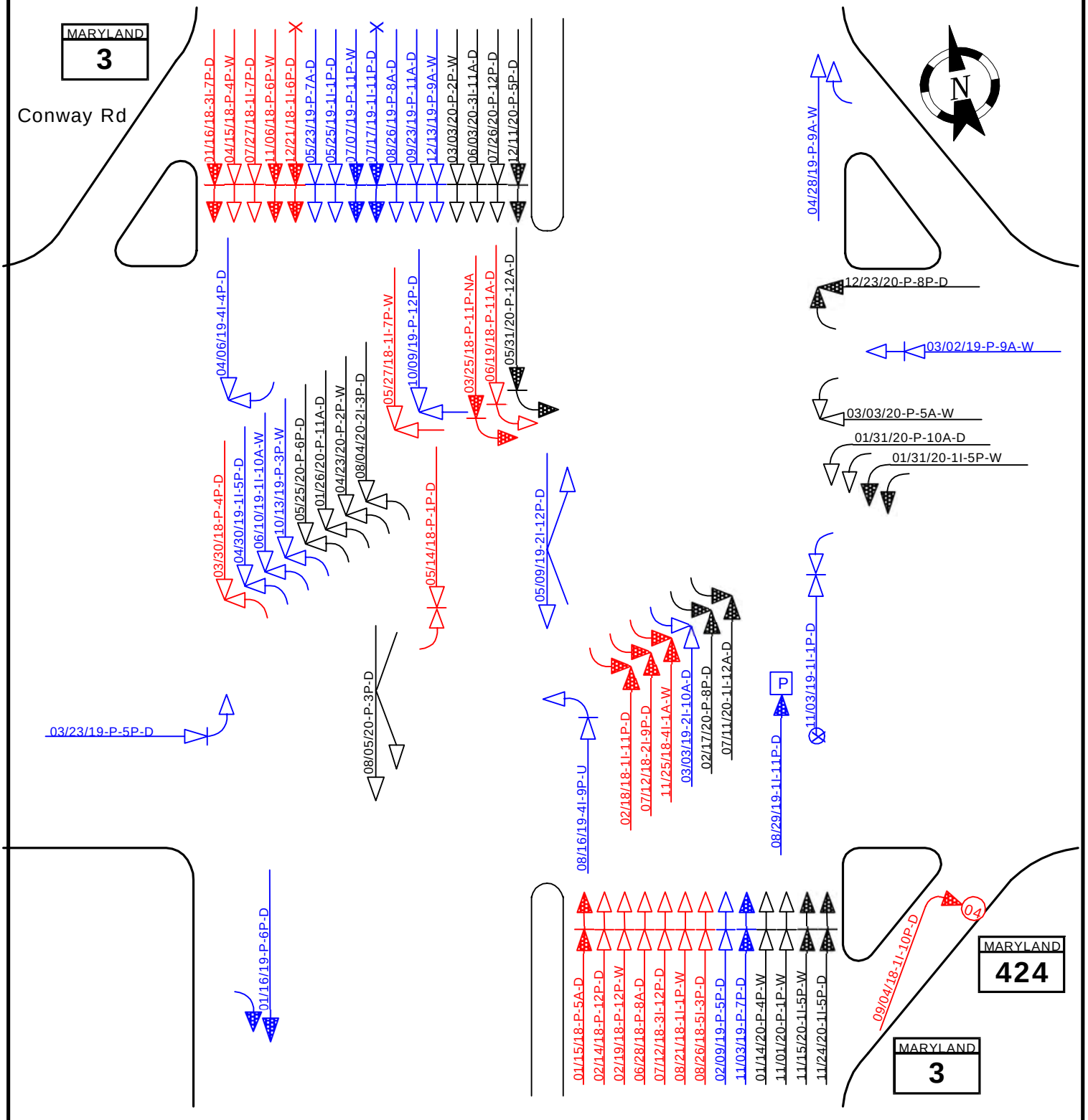
Fixed Object: 01 = Bridge 02 = Building 03 = Culvert/Ditch 04 = Curb 05 = Guardrail/Barrier 06 = Embankment 07 = Fence 08 = Light Pole 09 = Sign Post 10 = Other Pole 11 = Tree/Shrubbery 12 = Construction Barrier 13 = Crash Attenuator

MilePt	Int Rel	Date	Severity	Time	Light	Surface	Alc Rel	FixObj	Collision	Movement V1	Movement V2	Probable Cause
2.180	✓	11032019	1 Injured	01P	Day	Dry			ANGLE	WL	NS	Under influence of drugs
2.180	✓	11032019	Property	07P	Night	Dry			RREND	NS	NS	Fail to give full attention
2.180	✓	12132019	Property	09A	Day	Wet			RREND	SS	SS	Followed too closely
2.180	✓	01142020	Property	04P	Day	Wet			RREND	NS	NS	Too fast for conditions
2.180	✓	01262020	Property	11A	Day	Dry			LFTRN	NL	SS	Fail to obey traffic signal
2.180	✓	02172020	Property	08P	Night	Dry			LFTRN	SL	NS	Fail to yield right-of-way
2.180	✓	04232020	Property	02P	Day	Wet			LFTRN	NL	SS	Fail to yield right-of-way
2.180	✓	05312020	Property	12A	Night	Dry			RREND	SS	SS	Other or Unknown
2.180	✓	06032020	3 Injured	11A	Day	Dry			RREND	SS	SS	Followed too closely
2.180	✓	07112020	1 Injured	12A	Night	Dry			LFTRN	SL	NS	Fail to obey traffic signal
2.180	✓	07262020	Property	12P	Day	Dry			RREND	SS	SS	Followed too closely
2.180	✓	08042020	2 Injured	03P	Day	Dry			LFTRN	SS	NL	Fail to yield right-of-way
2.180	✓	08052020	Property	03P	Day	Dry			SDSWP	SS	SS	Other or Unknown
2.180	✓	11012020	Property	01P	Day	Wet			RREND	NS	NS	Other or Unknown
2.180	✓	11152020	1 Injured	05P	Night	Wet			RREND	NS	NS	Other or Unknown
2.180	✓	11242020	1 Injured	05P	Night	Dry			RREND	NS	NS	Other or Unknown
2.180	✓	12112020	Property	05P	Night	Dry			RREND	SS	SS	Followed too closely
2.200	✓	04282019	Property	09A	Day	Wet			ANGLE	WR	NS	Fail to give full attention
MD424												
8.240	✓	10132019	Property	03P	Day	Wet			LFTRN	NL	SS	Other or Unknown
8.240	✓	01312020	Property	10A	Day	Dry			SDSWP	WL	WL	Other or Unknown
8.240	✓	01312020	1 Injured	05P	Night	Wet			SDSWP	WL	WL	Fail to obey traffic signal
8.240	✓	03032020	Property	05A	Day	Wet			SDSWP	WS	WL	Fail to obey traffic signal
8.240	✓	12232020	Property	08P	Night	Dry			SDSWP	WR	WS	Fail to obey traffic signal
CO2633												
0.000	✓	01162019	Property	06P	Night	Dry			ANGLE	SS	ER	Other or Unknown
0.000	✓	03232019	Property	05P	Day	Dry			RREND	ES	EL	Other or Unknown
0.000	✓	05092019	2 Injured	12P	Day	Dry			OPDIR	SS	NS	Other or Unknown
0.000	✓	03032020	Property	02P	Day	Wet			RREND	SS	SS	Other or Unknown
0.000	✓	05252020	Property	06P	Day	Dry			LFTRN	NL	SS	Fail to give full attention

Fixed Object: 01 = Bridge 02 = Building 03 = Culvert/Ditch 04 = Curb 05 = Guardrail/Barrier 06 = Embankment 07 = Fence
08 = Light Pole 09 = Sign Post 10 = Other Pole 11 = Tree/Shrubbery 12 = Construction Barrier 13 = Crash Attenuator

Office of Traffic & Safety
Traffic Development & Support Division
Crash Analysis Safety Team

Location: MD 3 (Robert Crain Hwy) @ MD 424 (Davidsonville Rd) & Conway Rd
County: ANNE ARUNDEL
Study Period: 01/01/2018 to 12/31/2020
Analyst: Matthew Jagg Date: 09/15/2021



DATE-SEVERITY-TIME-SURFECE
NIGHT
ALCOHOL
DRUGS

SEVERITY
F - Fatalities
I - Injured
P - Property Damage Only

SURFACE
D - Dry Surface
W - Wet Surface
I - Icy Surface
S - Snowy Surface

00 - Not Applicable
01 - Bridge or Overpass
02 - Building
03 - Culvert or Ditch
04 - Curb
05 - Guardrail or Barrier
06 - Embankment
07 – Fence

08 - Light Support Pole
09 - Sign Support Pole
10 - Other Pole
11 - Tree Shrubbery
12 - Construction Barrier
13 - Crash Attenuator
88 - Other
99 - Unknown

B - Bicycle
P - Other Pedalcycle
C - Other Conveyance
T - Railway Train
A - Animal
O - Other Object
S - Spilled Cargo
J - Jackknife

U - Units Separated
N - Other Non collision
D - Off Road
R - Downhill Runaway
F - Explosion or Fire
? - Unknown

template 06-27-06

U - TURN
BACKING
OVERTURN
Parked Vehicle
P Pedestrian

40062

Office of Traffic and Safety
Traffic Safety Analysis Division

Consultant Accident Data/Analysis Request Form

Request Date: August 31, 2021 Note: date set automatically

Location:
County: **AA** Route: Conway Road (CO 2633) Town/Place: Odenton

☒ at Patuxent Rd (CO 1040)/Meyer Stations Rd (CO 2634) Log Mile: **1.18 at 0.00/0.00**

Purpose Needed:
☐ Signal Study ☐ Surface Evaluation ☐ Pavement Marking Study
☐ Sign Study ☐ Lighting Study ☒ General Traffic Study
☐ Other (Explain):

Originally Requested By: Adam Greenstein, on behalf of Anne Arundel County
When Needed:9/20/21

Work Requested:
☒ Accident Summary ☒ 3R Format (History) ☒ Accident Rates
☒ Study Worksheet ☒ Collision Diagram ☐ Other (Explain in Remarks)
☐ One Year ☐ Two Years
☒ Three Years ☐ Combined Years
☐ Specific Date –

Additional Instructions or Remarks:
Requested by: Michael Morganstein Title: Traffic Engineer
Consultant Firm: AECOM Consultant Subcontractor:
Phone: 301-996-2770 Fax:
Cell Phone: Email: Michael.morganstein@aecom.com

Please indicate map coordinates of location to be studied.
ADC: MD General Hwy. Grid Map: F12A

Send to: Traffic Safety Analysis Division,
7491 Connelley Drive Hanover, Maryland 21076
Phone: (410) 787-5822 Fax: (410) 787-5823 Email: WMacleod@sha.state.md.us

Patuxent-Rd
Conway-Rd
Meyers-Station-Rd
Google Earth
© 2021 Google
N
400 ft

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC Study Worksheet Output rev. 10/2017-1

Name: Matthew Jagg

Date: 09/15/2021

Location: Conway Rd @ Patuxent Rd & Meyers Station Rd

Logmiles: 1.18 At 0 Radius: 250 ft.

County: Anne Arundel, D5

Period: January 01, 2018 To December 31, 2020

Note: Year 2020 data is incomplete and unedited!

YEAR >>	2018	2019	2020	Total
Fatal	0	0	0	0
No. Killed	0	0	0	0
Injury	0	0	0	0
No. Injured	0	0	0	0
Prop. Damage	1	0	1	2
Total Crashes	1	0	1	2
Severity Index	1	0	1	Avg 1
Opposite Dir.	1	0	0	1
Rear End	0	0	1	1
Sideswipe	0	0	0	0
Left Turn	0	0	0	0
Angle	0	0	0	0
Pedestrian	0	0	0	0
Parked Veh.	0	0	0	0
Fixed Object	0	0	0	0
Other	0	0	0	0
U-Turn	0	0	0	0
Backing	0	0	0	0
Animal	0	0	0	0
Railroad	0	0	0	0
Fire / Expl.	0	0	0	0
Overturn	0	0	0	0
Truck Related	0	0	0	0
Night Time	0	0	0	0
Wet Surface	0	0	1	1
Alcohol	0	0	0	0
Intersection	1	0	1	2
Total Vehicles	2	0	2	4
Total Trucks	0	0	0	0
Truck %	0.0	0.0	0.0	0.0

Comments:

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC Summary Output rev. 10/2017-1

Name: Matthew Jagg

Date: 09/15/2021

Location: Conway Rd @ Patuxent Rd & Meyers Station Rd

Logmiles: 1.18 At 0 Radius: 250 ft.

County: Anne Arundel, D5

Period: January 1, 2018 To December 31, 2020

Note: Year 2020 data is incomplete and unedited!

SEVERITY	FATAL	INJURY	P-DAMAGE	TOTAL
Accidents		0	2	2
Veh Occ				
Pedestrian				

AVG Severity Index: 1

DAY OF THE WEEK

SUN	MON	TUE	WED	THU	FRI	SAT	UNK
			1	1			

MONTH OF THE YEAR

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK
	1			1								

CONDITION	DRIVER	PED
Normal:	2	
Alcohol:		
Other:	2	

TIME

	12	01	02	03	04	05	06	07	08	09	10	11	UNK
AM:													
PM:				1	1								

VEHICLES INVOLVED PER ACCIDENT

1	2	3	4	5	6+	UNK	TOTAL
	2						4

VEHICLE TYPE

	Motorcycle/Moped		Tractor Trailer
1	Passenger Vehicle		Passenger Bus
1	Sport Utility Veh		School Bus
1	Pick-Up Truck		Emergency Veh
	Trucks (2+3 axles)	1	Other Types

SURFACE

1	Wet
1	Dry
	Sno/Ice
	Mud
	Other

MOVEMENTS

NORTH			SOUTH			EAST			WEST		
LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT
	1			1			2				

OTHER MOVEMENTS

PROBABLE CAUSES

	Influence of Drugs		Improper Lane Change
	Influence of Alcohol		Improper Backing
	Influence of Medication		Improper Passing
	Influence of Combined Subst.		Improper Signal
	Physical/Mental Difficulty		Improper Parking
	Fell Asleep/Fainted, etc.		Passenger Interfere/Obstruct.
	Fail to give full Attention		Illegally in Roadway
	Lic. Restr. Non-compliance		Bicycle Violation
	Fail to Drive in Single Lane		Clothing Not Visible
	Improper Right Turn on Red		Sleet, Hail, Freezing Rain
1	Fail to Yield Right-of-way		Severe Crosswinds
	Fail to Obey Stop Sign		Rain, Snow
	Fail to Obey Traffic Signal		Animal
	Fail to Obey Other Control		Vision Obstruction
	Fail to Keep Right of Center		Vehicle Defect
	Fail to Stop for School Bus		Wet
	Wrong Way on One Way		Icy or Snow Covered
	Exceeded Speed Limit		Debris or Obstruction
	Operator Using Cell Phone		Ruts, Holes or Bumps
	Stopping in Lane Roadway		Road Under Construction
	Too Fast for Conditions		Traffic Control Device Inop.
1	Followed too Closely		Shoulders Low, Soft or High
	Improper Turn		Other or Unknown

COLLISION TYPES		FATAL	INJURY	PROP	TOTAL
Opposite Dir	Related:			1	1
	UnRelated:				
Rear End	Related:			1	1
	UnRelated:				
Sideswipe	Related:				
	UnRelated:				
Left Turn	Related:				
	UnRelated:				
Angle	Related:				
	UnRelated:				
Pedestrian	Related:				
	UnRelated:				
Parked Vehicle	Related:				
	UnRelated:				
Other Collision	Related:				
	UnRelated:				

F	Bridge	01
I	Building	02
X	Culvert/Ditch	03
E	Curb	04
D	Guardrail/Barrier	05
	Embankment	06
O	Fence	07
B	Light Pole	08
J	Sign Pole	09
E	Other Pole	10
C	Tree/Shrubbery	11
T	Contr. Barrier	12
S	Crash Attenuator	13
	Other Fixed Object	

WEATHER

1	Clear / Cloudy
	Foggy
1	Raining
	Snow / Sleet
	Other

ILLUMINATION

1	Day
	Dawn/Dusk
	Dark - Lights On
	Dark - No Lights
1	Other

TOTALS

18-20	2

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC History Output rev. 10/2017-1 - Combined Year Listing

Name: Matthew Jagg

Date: 09/15/2021

Location: Conway Rd @ Patuxent Rd & Meyers Station Rd

Logmiles: 1.18 At 0 Radius: 250 ft.

County: Anne Arundel, D5

Period: January 01, 2018 To December 31, 2020

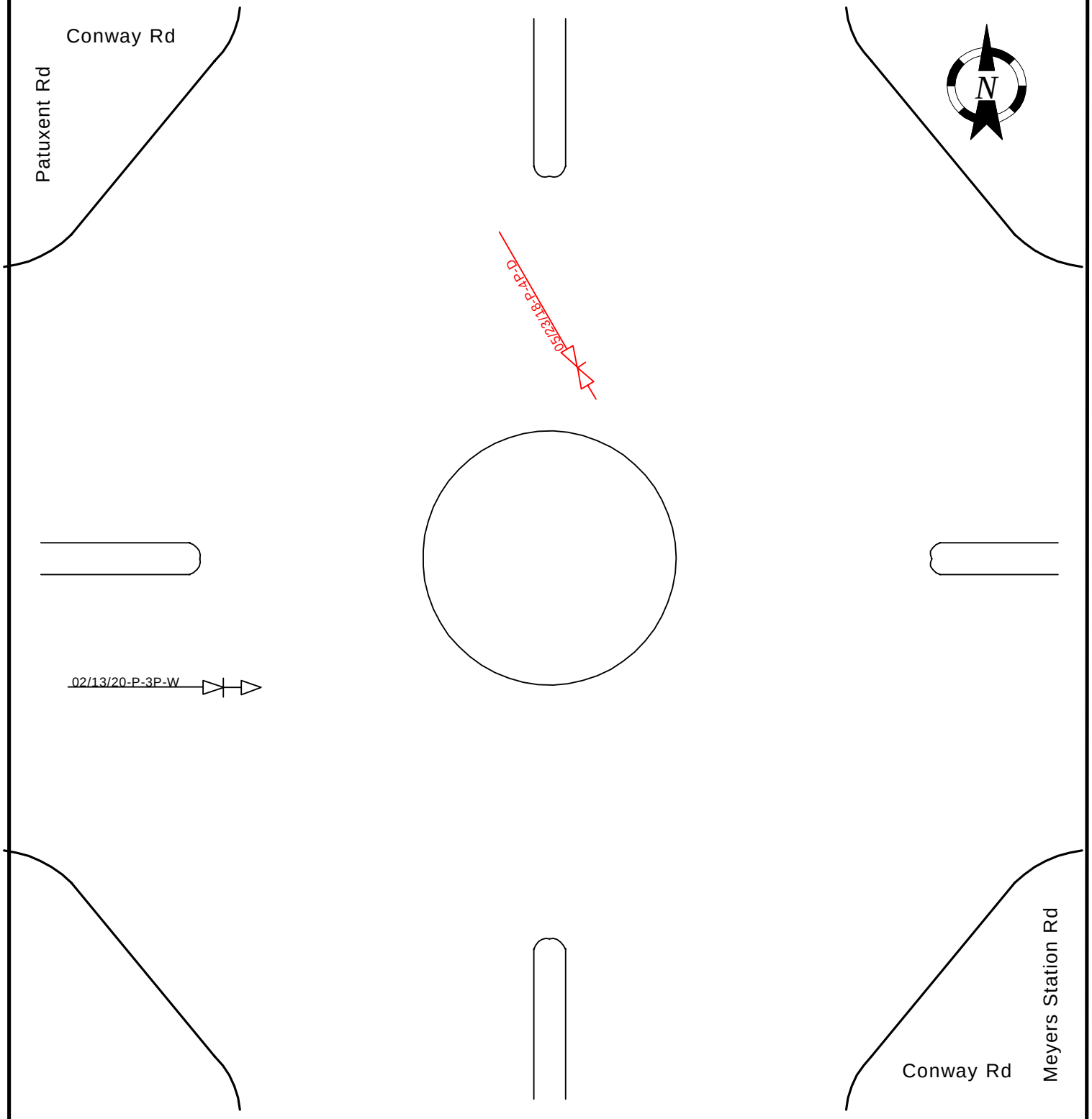
Note: Year 2020 data is incomplete and unedited!

MilePt	Int Rel	Date	Severity	Time	Light	Surface	Alc Rel	FixObj	Collision	Movement V1	Movement V2	Probable Cause
CO1040												
0.000	✓	05232018	Property	04P	Day	Dry			OPDIR	SS	NS	Fail to yield right-of-way
CO2633												
1.180	✓	02132020	Property	03P		Wet			RREND	ES	ES	Followed too closely

Fixed Object: 01 = Bridge 02 = Building 03 = Culvert/Ditch 04 = Curb 05 = Guardrail/Barrier 06 = Embankment 07 = Fence
08 = Light Pole 09 = Sign Post 10 = Other Pole 11 = Tree/Shrubbery 12 = Construction Barrier 13 = Crash Attenuator

Office of Traffic & Safety
Traffic Development & Support Division
Crash Analysis Safety Team

Location: Conway Rd @ Patuxent Rd & Meyers Station Rd
County: ANNE ARUNDEL
Study Period: 01/01/2018 to 12/31/2020
Analyst: Matthew Jagg Date: 09/15/2021



DATE-SEVERITY-TIME-SURFCE
NIGHT
ALCOHOL
DRUGS

SEVERITY
F - Fatalities
I - Injured
P - Property Damage Only

SURFACE
D - Dry Surface
W - Wet Surface
I - Icy Surface
S - Snowy Surface

00 - Not Applicable
01 - Bridge or Overpass
02 - Building
03 - Culvert or Ditch
04 - Curb
05 - Guardrail or Barrier
06 - Embankment
07 – Fence

08 - Light Support Pole
09 - Sign Support Pole
10 - Other Pole
11 - Tree Shrubbery
12 - Construction Barrier
13 - Crash Attenuator
88 - Other
99 - Unknown

B - Bicycle
P - Other Pedalcycle
C - Other Conveyance
T - Railway Train
A - Animal
O - Other Object
S - Spilled Cargo
J - Jackknife

U - Units Separated
N - Other Non collision
D - Off Road
R - Downhill Runaway
F - Explosion or Fire
? - Unknown

template 06-27-06

U - TURN
BACKING
OVERTURN
Parked Vehicle
P Pedestrian

40066

Office of Traffic and Safety
Traffic Safety Analysis Division

Consultant Accident Data/Analysis Request Form

Request Date: August 31, 2021 Note: date set automatically

Location:

County: AA Route: Meyer Station Road (CO 2634) Town/Place: Odenton Log Mile: **0.00-2.53**

☐ at to Southern Terminus
☒ from Conway Road (CO 2633)

Purpose Needed:

☐ Signal Study ☐ Surface Evaluation ☐ Pavement Marking Study
☐ Sign Study ☐ Lighting Study ☒ General Traffic Study
☐ Other (Explain):

Originally Requested By: Adam Greenstein, on behalf of Anne Arundel County
When Needed:9/20/21

Work Requested:

☒ Accident Summary ☒ 3R Format (History) ☒ Accident Rates
☒ Study Worksheet ☒ Collision Diagram ☐ Other (Explain in Remarks)

☐ One Year ☐ Two Years
☒ Three Years ☐ Combined Years
☐ Specific Date –

Additional Instructions or Remarks:

Requested by: Michael Morganstein Title: Traffic Engineer
Consultant Firm: AECOM Consultant Subcontractor:
Phone: 301-996-2770 Fax:
Cell Phone: Email: Michael.morganstein@aecom.com

Please indicate map coordinates of location to be studied.
ADC: MD General Hwy. Grid Map: F12A

Send to: Traffic Safety Analysis Division,
7491 Connelley Drive Hanover, Maryland 21076
Phone: (410) 787-5822 Fax: (410) 787-5823 Email: WMacleod@sha.state.md.us

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC Study Worksheet Output rev. 10/2017-1

Name: Matthew Jagg

Date: 09/15/2021

Location: Meyers Station Rd From: Conway Rd To: Southern Terminus

Logmiles: From 0 To 2.53 Length: 2.53

County: Anne Arundel, D5

Period: January 01, 2018 To December 31, 2020

Note: Year 2020 data is incomplete and unedited!

YEAR >>	2018	2019	2020	Total
Fatal	0	0	0	0
No. Killed	0	0	0	0
Injury	0	1	0	1
No. Injured	0	1	0	1
Prop. Damage	0	0	1	1
Total Crashes	0	1	1	2
Severity Index	0	4	1	Avg 2
Opposite Dir.	0	0	0	0
Rear End	0	0	0	0
Sideswipe	0	0	0	0
Left Turn	0	0	0	0
Angle	0	0	0	0
Pedestrian	0	0	0	0
Parked Veh.	0	0	0	0
Fixed Object	0	1	1	2
Other	0	0	0	0
U-Turn	0	0	0	0
Backing	0	0	0	0
Animal	0	0	0	0
Railroad	0	0	0	0
Fire / Expl.	0	0	0	0
Overturn	0	0	0	0
Truck Related	0	0	0	0
Night Time	0	0	0	0
Wet Surface	0	0	0	0
Alcohol	0	0	0	0
Intersection	0	0	0	0
Total Vehicles	0	1	1	2
Total Trucks	0	0	0	0
Truck %	0.0	0.0	0.0	0.0

Comments:

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC Summary Output rev. 10/2017-1

Name: Matthew Jagg

Date: 09/15/2021

Location: Meyers Station Rd From: Conway Rd To: Southern Terminus

Logmiles: From 0 To 2.53 Length: 2.53

County: Anne Arundel, D5 Period: January 1, 2018 To December 31, 2020

Note: Year 2020 data is incomplete and unedited!

SEVERITY	FATAL	INJURY	P-DAMAGE	TOTAL
Accidents		1	1	2
Veh Occ		1		
Pedestrian				

AVG Severity Index: 2

DAY OF THE WEEK

SUN	MON	TUE	WED	THU	FRI	SAT	UNK
	1				1		

MONTH OF THE YEAR

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK
							1		1			

CONDITION	DRIVER	PED
Normal:	1	
Alcohol:		
Other:	1	

TIME	12	01	02	03	04	05	06	07	08	09	10	11	UNK
AM:								1					
PM:					1								

VEHICLES INVOLVED PER ACCIDENT

1	2	3	4	5	6+	UNK	TOTAL
2							2

VEHICLE TYPE

	Motorcycle/Moped		Tractor Trailer
1	Passenger Vehicle		Passenger Bus
1	Sport Utility Veh		School Bus
	Pick-Up Truck		Emergency Veh
	Trucks (2+3 axles)	2	Other Types

SURFACE

	Wet
1	Dry
	Sno/Ice
	Mud
1	Other

MOVEMENTS

NORTH			SOUTH			EAST			WEST		
LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT
	1			1							

OTHER MOVEMENTS

PROBABLE CAUSES

	Influence of Drugs		Improper Lane Change
	Influence of Alcohol		Improper Backing
	Influence of Medication		Improper Passing
	Influence of Combined Subst.		Improper Signal
	Physical/Mental Difficulty		Improper Parking
	Fell Asleep/Fainted, etc.		Passenger Interfere/Obstruct.
	Fail to give full Attention		Illegally in Roadway
	Lic. Restr. Non-compliance		Bicycle Violation
	Fail to Drive in Single Lane		Clothing Not Visible
	Improper Right Turn on Red		Sleet, Hail, Freezing Rain
	Fail to Yield Right-of-way		Severe Crosswinds
	Fail to Obey Stop Sign		Rain, Snow
	Fail to Obey Traffic Signal		Animal
	Fail to Obey Other Control		Vision Obstruction
	Fail to Keep Right of Center		Vehicle Defect
	Fail to Stop for School Bus		Wet
	Wrong Way on One Way		Icy or Snow Covered
1	Exceeded Speed Limit		Debris or Obstruction
	Operator Using Cell Phone		Ruts, Holes or Bumps
	Stopping in Lane Roadway		Road Under Construction
	Too Fast for Conditions		Traffic Control Device Inop.
	Followed too Closely		Shoulders Low, Soft or High
	Improper Turn	1	Other or Unknown

COLLISION TYPES		FATAL	INJURY	PROP	TOTAL
Opposite Dir	Related:				
	UnRelated:				
Rear End	Related:				
	UnRelated:				
Sideswipe	Related:				
	UnRelated:				
Left Turn	Related:				
	UnRelated:				
Angle	Related:				
	UnRelated:				
Pedestrian	Related:				
	UnRelated:				
Parked Vehicle	Related:				
	UnRelated:				
Other Collision	Related:				
	UnRelated:				

F	Bridge	01			
I	Building	02			
X	Culvert/Ditch	03			
E	Curb	04			
D	Guardrail/Barrier	05			
	Embankment	06			
O	Fence	07			
B	Light Pole	08			
J	Sign Pole	09			
E	Other Pole	10		1	1
C	Tree/Shrubbery	11	1		1
T	Contr. Barrier	12			
S	Crash Attenuator	13			
	Other Fixed Object				

WEATHER

2	Clear / Cloudy
	Foggy
	Raining
	Snow / Sleet
	Other

ILLUMINATION

1	Day
	Dawn/Dusk
	Dark - Lights On
	Dark - No Lights
1	Other

TOTALS

18-20	2

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC History Output rev. 10/2017-1 - Combined Year Listing

Name: Matthew Jagg

Date: 09/15/2021

Location: Meyers Station Rd From: Conway Rd To: Southern Terminus

Logmiles: From 0 To 2.53 Length: 2.53

County: Anne Arundel, D5 Period: January 01, 2018 To December 31, 2020

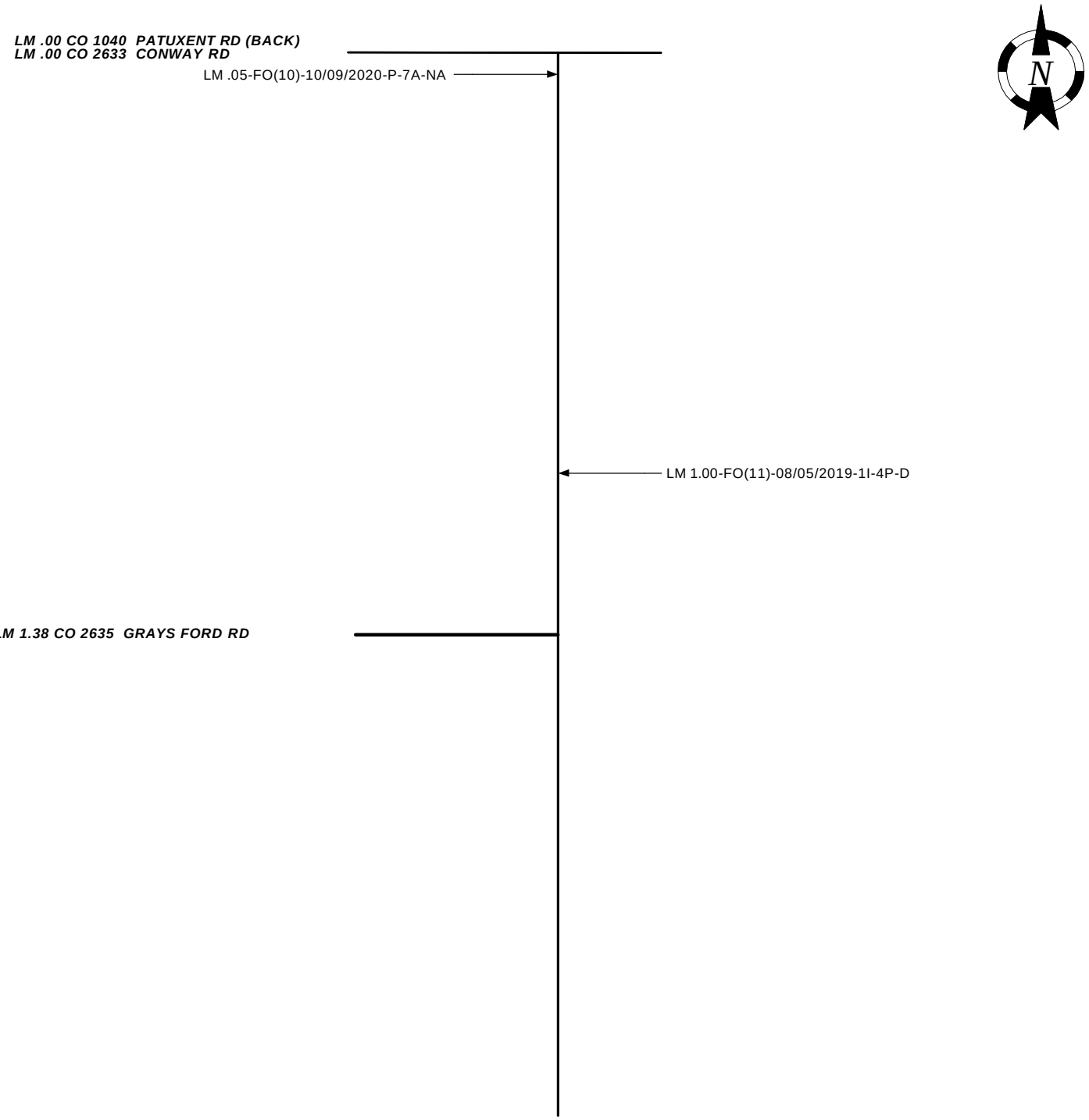
Note: Year 2020 data is incomplete and unedited!

MilePt	Int Rel	Date	Severity	Time	Light	Surface	Alc Rel	FixObj	Collision	Movement V1	Movement V2	Probable Cause
CO2634												
0.050		10092020	Property	07A				10	FXOBJ	SS	--	Other or Unknown
1.000		08052019	1 Injured	04P	Day	Dry		11	FXOBJ	NS	--	Exceeded speed limit

Fixed Object: 01 = Bridge 02 = Building 03 = Culvert/Ditch 04 = Curb 05 = Guardrail/Barrier 06 = Embankment 07 = Fence
08 = Light Pole 09 = Sign Post 10 = Other Pole 11 = Tree/Shrubbery 12 = Construction Barrier 13 = Crash Attenuator

Office of Traffic & Safety
Traffic Development & Support Division
Crash Analysis Safety Team

Location: Meyers Station Rd From: Conway Rd To: Southern Terminus
County: ANNE ARUNDEL
Study Period: 01/01/2018 to 12/31/2020
Analyst: Matthew Jagg Date: 09/15/2021



KEY:LogMile-CollisionType (FixedObjectStruck) -Date-Severity-Time-Surface-Illumination-Alcohol

template 06-27-06

F - Fatalities	SS - Sideswipe	FO - Fixed Object	OFFRD - Off Road	00 - Not Applicable	08 - Light Support Pole	N - Night
I - Injury	PARKD - Parked Vehicle	OOBJ - Other Object	RUNWY - Downhill Runaway	01 - Bridge or Overpass	09 - Sign Support Pole	X - Alcohol
P - Property Damage	PED - Pedestrian	OT - Overturn	FIRE - Explosion Fire	02 - Building	10 - Other Pole	D - Dry Surface
OD - Opposite Direction	BIKE - Bicycle	SPILL - Spilled Cargo	BCKNG - Backing	03 - Culvert or Ditch	11 - Tree Shrubbery	W - Wet Surface
LT - Left Turn	PEDAL - Other Pedalcycle	JCKKNF - Jackknife	UTURN - U-Turn	04 - Curb	12 - Construction Barrier	I - Icy Surface
RE - Rear End	CONVY - Other Conveyance	SPRTD - Units Separated	OTHR - Other	05 - Guardrail or Barrier	13 - Crash Attenuator	S - Snowy Surface
ANG - Angle	ANIML - Animal	NCOLL - Other Non Collision	UNK - Unknown	06 - Embankment	88 - Other	
				07 - Fence	99 - Unknown	

40081

Office of Traffic and Safety
Traffic Safety Analysis Division

Consultant Accident Data/Analysis Request Form

Request Date: August 31, 2021 Note: date set automatically

Location:

County: Anne Arundel Town/Place: Odenton
Route: Conway Road Log Mile:
☒ at Future Professionals Drive/ Crofton Princess Ctr Ent (1.97)
☐ from to

Purpose Needed:

☐ Signal Study ☐ Surface Evaluation ☐ Pavement Marking Study
☐ Sign Study ☐ Lighting Study ☒ General Traffic Study
☐ Other (Explain):

Originally Requested By: Adam Greenstein, on behalf of Anne Arundel County
When Needed:9/20/21

Work Requested:

☒ Accident Summary ☒ 3R Format (History) ☒ Accident Rates
☒ Study Worksheet ☒ Collision Diagram ☐ Other (Explain in Remarks)

☐ One Year ☐ Two Years
☒ Three Years ☐ Combined Years
☐ Specific Date –

Additional Instructions or Remarks:
Requested by: Michael Morganstein Title: Traffic Engineer
Consultant Firm: AECOM Consultant Subcontractor:
Phone: 301-996-2770 Fax:
Cell Phone: Email: Michael.morganstein@aecom.com

Please indicate map coordinates of location to be studied.
ADC: MD General Hwy. Grid Map:F12A

Send to: Traffic Safety Analysis Division,
7491 Connelley Drive Hanover, Maryland 21076
Phone: (410) 787-5822 Fax: (410) 787-5823 Email: WMacleod@sha.state.md.us

Conway Rd
Concord Blvd
Google Earth
© 2021 Google
N
400 ft

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC Study Worksheet Output rev. 10/2017-1

Name: Matthew Jagg

Date: 09/16/2021

Location: Conway Rd @ Princess Shopping Center

Logmiles: 0.197 At 0 Radius: 250 ft.

County: Anne Arundel, D5

Period: January 01, 2018 To December 31, 2020

Note: Year 2020 data is incomplete and unedited!

YEAR >>	2018	2019	2020	Total
Fatal	0	0	0	0
No. Killed	0	0	0	0
Injury	0	0	0	0
No. Injured	0	0	0	0
Prop. Damage	1	1	0	2
Total Crashes	1	1	0	2
Severity Index	1	1	0	Avg 1
Opposite Dir.	0	0	0	0
Rear End	0	0	0	0
Sideswipe	0	0	0	0
Left Turn	0	0	0	0
Angle	1	1	0	2
Pedestrian	0	0	0	0
Parked Veh.	0	0	0	0
Fixed Object	0	0	0	0
Other	0	0	0	0
U-Turn	0	0	0	0
Backing	0	0	0	0
Animal	0	0	0	0
Railroad	0	0	0	0
Fire / Expl.	0	0	0	0
Overturn	0	0	0	0
Truck Related	0	0	0	0
Night Time	0	1	0	1
Wet Surface	0	1	0	1
Alcohol	0	0	0	0
Intersection	0	0	0	0
Total Vehicles	2	2	0	4
Total Trucks	0	0	0	0
Truck %	0.0	0.0	0.0	0.0

Comments:

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC Summary Output rev. 10/2017-1

Name: Matthew Jagg

Date: 09/16/2021

Location: Conway Rd @ Princess Shopping Center

Logmiles: 0.197 At 0 Radius: 250 ft.

County: Anne Arundel, D5

Period: January 1, 2018 To December 31, 2020

Note: Year 2020 data is incomplete and unedited!

SEVERITY	FATAL	INJURY	P-DAMAGE	TOTAL
Accidents		0	2	2
Veh Occ				
Pedestrian				

AVG Severity Index: 1

DAY OF THE WEEK

SUN	MON	TUE	WED	THU	FRI	SAT	UNK
					2		

MONTH OF THE YEAR

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK
		1									1	

CONDITION	DRIVER	PED
Normal:	4	
Alcohol:		
Other:		

TIME

	12	01	02	03	04	05	06	07	08	09	10	11	UNK
AM:													
PM:					1				1				

VEHICLES INVOLVED PER ACCIDENT

1	2	3	4	5	6+	UNK	TOTAL
	2						4

VEHICLE TYPE

	Motorcycle/Moped		Tractor Trailer
4	Passenger Vehicle		Passenger Bus
	Sport Utility Veh		School Bus
	Pick-Up Truck		Emergency Veh
	Trucks (2+3 axles)		Other Types

SURFACE

1	Wet
1	Dry
	Sno/Ice
	Mud
	Other

MOVEMENTS

NORTH			SOUTH			EAST			WEST		
LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT
				2						2	

OTHER MOVEMENTS

PROBABLE CAUSES

	Influence of Drugs		Improper Lane Change
	Influence of Alcohol		Improper Backing
	Influence of Medication		Improper Passing
	Influence of Combined Subst.		Improper Signal
	Physical/Mental Difficulty		Improper Parking
	Fell Asleep/Fainted, etc.		Passenger Interfere/Obstruct.
1	Fail to give full Attention		Illegally in Roadway
	Lic. Restr. Non-compliance		Bicycle Violation
	Fail to Drive in Single Lane		Clothing Not Visible
	Improper Right Turn on Red		Sleet, Hail, Freezing Rain
	Fail to Yield Right-of-way		Severe Crosswinds
	Fail to Obey Stop Sign		Rain, Snow
	Fail to Obey Traffic Signal		Animal
	Fail to Obey Other Control		Vision Obstruction
	Fail to Keep Right of Center		Vehicle Defect
	Fail to Stop for School Bus		Wet
	Wrong Way on One Way		Icy or Snow Covered
	Exceeded Speed Limit		Debris or Obstruction
	Operator Using Cell Phone		Ruts, Holes or Bumps
	Stopping in Lane Roadway		Road Under Construction
	Too Fast for Conditions		Traffic Control Device Inop.
	Followed too Closely		Shoulders Low, Soft or High
	Improper Turn	1	Other or Unknown

COLLISION TYPES		FATAL	INJURY	PROP	TOTAL
Opposite Dir	Related:				
	UnRelated:				
Rear End	Related:				
	UnRelated:				
Sideswipe	Related:				
	UnRelated:				
Left Turn	Related:				
	UnRelated:				
Angle	Related:				
	UnRelated:			2	2
Pedestrian	Related:				
	UnRelated:				
Parked Vehicle	Related:				
	UnRelated:				
Other Collision	Related:				
	UnRelated:				

F	Bridge	01
I	Building	02
X	Culvert/Ditch	03
E	Curb	04
D	Guardrail/Barrier	05
	Embankment	06
O	Fence	07
B	Light Pole	08
J	Sign Pole	09
E	Other Pole	10
C	Tree/Shrubbery	11
T	Contr. Barrier	12
S	Crash Attenuator	13
	Other Fixed Object	

WEATHER

1	Clear / Cloudy
	Foggy
1	Raining
	Snow / Sleet
	Other

ILLUMINATION

1	Day
	Dawn/Dusk
1	Dark - Lights On
	Dark - No Lights
	Other

TOTALS

18-20	2

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC History Output rev. 10/2017-1 - Combined Year Listing

Name: Matthew Jagg

Date: 09/16/2021

Location: Conway Rd @ Princess Shopping Center

Logmiles: 0.197 At 0 Radius: 250 ft.

County: Anne Arundel, D5

Period: January 01, 2018 To December 31, 2020

Note: Year 2020 data is incomplete and unedited!

MilePt	Int Rel	Date	Severity	Time	Light	Surface	Alc Rel	FixObj	Collision	Movement V1	Movement V2	Probable Cause
CO2633												
0.197		12212018	Property	04P	Day	Dry			ANGLE	WS	SL	Other or Unknown
0.197		03082019	Property	08P	Night	Wet			ANGLE	SL	WS	Fail to give full attention

Fixed Object: 01 = Bridge 02 = Building 03 = Culvert/Ditch 04 = Curb 05 = Guardrail/Barrier 06 = Embankment 07 = Fence
08 = Light Pole 09 = Sign Post 10 = Other Pole 11 = Tree/Shrubbery 12 = Construction Barrier 13 = Crash Attenuator

Office of Traffic & Safety
Traffic Development & Support Division
Crash Analysis Safety Team

Location: Conway Rd @ Princess Shopping Center
County: ANNE ARUNDEL
Study Period: 01/01/2018 to 12/31/2020
Analyst: Matthew Jagg Date: 09/16/2021

DATE-SEVERITY-TIME-SURFCE
NIGHT
ALCOHOL
DRUGS

SEVERITY
F - Fatalities
I - Injured
P - Property Damage Only

SURFACE
D - Dry Surface
W - Wet Surface
I - Icy Surface
S - Snowy Surface

00 - Not Applicable
01 - Bridge or Overpass
02 - Building
03 - Culvert or Ditch
04 - Curb
05 - Guardrail or Barrier
06 - Embankment
07 – Fence
08 - Light Support Pole
09 - Sign Support Pole
10 - Other Pole
11 - Tree Shrubbery
12 - Construction Barrier
13 - Crash Attenuator
88 - Other
99 - Unknown

B - Bicycle
P - Other Pedalcycle
C - Other Conveyance
T - Railway Train
A - Animal
O - Other Object
S - Spilled Cargo
J - Jackknife

U - Units Separated
N - Other Non collision
D - Off Road
R - Downhill Runaway
F - Explosion or Fire
? - Unknown

template 06-27-06

U - TURN
BACKING
OVERTURN
Parked Vehicle
P Pedestrian

Appendix D:
Mead & Hunt Data Collection for H539620 Conway Road Corridor Study

December 8, 2021, *revised January 5, 2022*

Daniel Anderson
Engineer Manager, Transportation Engineering
Anne Arundel County Department of Public Works, Bureau of Engineering
2662 Riva Road, MS-7301
Annapolis, MD 21401

Subject: **Technical Memorandum** - Data Collection for H539620 Conway Road Corridor Study

Dear Mr. Anderson:

As part of the referenced project, Mead & Hunt Inc. is pleased to submit for your review the following technical memorandum summarizing our data collection effort along Conway Road. This effort included a signage inventory that was provided in digital CAD format under separate cover. Additionally, we conducted the following data collection effort summarized herein:

1. Eight (8) ADT counts;
2. Six (6) intersection counts;
3. Two (2) WB&A Trail intersection counts;
4. Determination of free-flowing AM/PM peak-period travel time;
5. Intersection sight distance measurements.

ADT counts:

We conducted speed/volume/classification tube counts for 7 consecutive days in 1-hour increments at eight locations:

- On Conway Road, near the Western terminus to Upper Patuxent Ridge Road
- On Conway Road, between Upper Patuxent Ridge Rd and Two Rivers Blvd / Patuxent Ridge Road
- On Conway Road, between Two Rivers Blvd / Patuxent Ridge Road and Patuxent Road / Meyers Station Road
- On Conway Road, between Patuxent Road / Meyers Station Road and the bridge over Little Patuxent River
- On Conway Road, between the bridge over Little Patuxent River and Concord Blvd
- On Conway Road, between Concord Blvd and MD 3
- On Patuxent Road at a point north of Conway Road and south of Woodwardville
- On Meyers Station Road at a point just south of Conway Road

In summary, the ADT along Conway Road was about 8,000 vehicles per day, west of the Patuxent Road traffic circle and about 11,000 east of the circle. The average speed was 35 mph west of the Patuxent Road traffic circle and about 44 mph east of the circle. FHWA Class 1 thru 4 (motorcycles, passenger cars, pickup trucks, and buses, respectively) represented about 95% of all vehicles. Raw data was provided in an Excel spreadsheet under separate cover.

Intersection turn-movement counts

We conducted 13-hour (6 AM to 7 PM) intersection turn movement counts on a Thursday when County schools were in session plus 4 additional hours on a Saturday (11 AM to 3 PM). Thursday Counts were conducted on 9/23/2021, while Saturday counts were conducted on 9/25/2021[1]. Intersection counts included bikes and pedestrians. Cameras and automated video capture technology were used to process data; and data was verified for accuracy based on historical data and expected volumes (due to land use, density, etc.). Counts were conducted at the following locations:

- Conway Road at Upper Patuxent Ridge Road
- Conway Road at Two Rivers Blvd / Patuxent Ridge Road
- Conway Road at Patuxent Road / Meyers Station Road
- Conway Road at Future unconstructed Professional Blvd / Private Driveway
- Conway Road at Concord Blvd
- Conway Road at MD 3

Raw data was provided in an Excel spreadsheet under separate cover.

Trail counts

We conducted 13-hour (6 AM to 7 PM) pedestrian and bike counts along the WB&A Trail on Thursday September 23rd and also a 4-hour Count (11am to 3pm) on Saturday, September 25th. Counts were conducted with video cameras and processed using machine vision to collect pedestrian and bike data in 1-hour increments. Counts were provided in an Excel spreadsheet under separate cover. Counts were conducted at the trail crossing of Conway Road at of Patuxent Road.

Travel Time Data Collection

We conduct five (5) free-flow Travel Time runs in both the AM and PM peak hour for each direction of Conway Road to provide travel time *in between each intersection* as well as for the overall corridor. Travel times are shown in the following tables (for both eastbound and west bound directions and for AM and PM peak periods) and have been previously provided under separate cover.

Table 1: AM peak period travel time runs (eastbound)

Heading Eastbound (min:sec)					
Cross Street	Run1	Run2	Run3	Run4	Run5
Conway Road at Upper Patuxent Ridge Road	0:00	0:00	0:00	0:00	0:00
Conway Road at Two Rivers Blvd / Patuxent Ridge Road	1:07	1:08	1:08	1:11	1:10
Conway Road at Patuxent Road / Meyers Station Road	2:24	2:26	2:25	2:27	2:26
Conway Road at Future unconstructed Professional Blvd / Private Driveway	3:16	3:17	3:16	3:18	3:16
Conway Road at Concord Blvd	4:02	4:04	4:02	4:02	4:01
Conway Road at MD 3	4:15	4:17	4:16	4:18	4:16

[1] Due to human error and windy conditions impacting camera angles, to locations were recounted: Concord at Conway was counted on Thursday and Saturday, September 30 and October 2, respectively; while Conway at Professional Blvd was counted October 21 and October 23, respectively.

Table 2: AM peak period travel time runs (westbound)

Heading Westbound (min:sec)					
Cross Street	Run1	Run2	Run3	Run4	Run5
Conway Road at MD 3	0:00	0:00	0:00	0:00	0:00
Conway Road at Concord Blvd	0:11	0:12	0:11	0:11	0:12
Conway Road at Future unconstructed Professional Blvd / Private Driveway	0:58	1:00	0:58	1:02	0:58
Conway Road at Patuxent Road / Meyers Station Road	1:46	1:47	1:45	1:49	1:45
Conway Road at Two Rivers Blvd / Patuxent Ridge Road	3:17	3:18	3:16	3:21	3:17
Conway Road at Upper Patuxent Ridge Road	4:19	4:19	4:17	4:21	4:20

Table 3: PM peak period travel time runs (eastbound)

Heading Eastbound (min:sec)					
Cross Street	Run1	Run2	Run3	Run4	Run5
Conway Road at Upper Patuxent Ridge Road	0:00	0:00	0:00	0:00	0:00
Conway Road at Two Rivers Blvd / Patuxent Ridge Road	1:01	1:09	1:07	1:02	1:01
Conway Road at Patuxent Road / Meyers Station Road	2:13	2:26	2:20	2:15	2:14
Conway Road at Future unconstructed Professional Blvd / Private Driveway	3:08	3:18	3:15	3:09	3:09
Conway Road at Concord Blvd	3:51	4:03	3:59	3:52	3:53
Conway Road at MD 3	4:03	4:14	4:10	4:05	4:06

Table 4: PM peak period travel time runs (westbound)

Heading Westbound (min:sec)					
Cross Street	Run1	Run2	Run3	Run4	Run5
Conway Road at MD 3	0:00	0:00	0:00	0:00	0:00
Conway Road at Concord Blvd	0:12	0:13	0:12	0:12	0:12
Conway Road at Future unconstructed Professional Blvd / Private Driveway	0:56	0:58	0:56	0:55	0:56
Conway Road at Patuxent Road / Meyers Station Road	1:44	1:45	1:45	1:43	1:43
Conway Road at Two Rivers Blvd / Patuxent Ridge Road	3:10	3:11	3:11	3:10	3:11
Conway Road at Upper Patuxent Ridge Road	4:13	4:13	4:15	4:14	4:14

Sight Distance measurements:

We conducted sight distance measurements along Conway Road (and the minor road approaches) at the six intersection locations for which we conducted turn movement counts:

- Conway Road at Upper Patuxent Ridge Road
- Conway Road at Two Rivers Blvd / Patuxent Ridge Road
- Conway Road at Patuxent Road / Meyers Station Road
- Conway Road at Future unconstructed Professional Blvd / Private Driveway
- Conway Road at Concord Blvd
- Conway Road at MD 3

The sight distance measurements include:

- Intersection Sight Distance for left turns from the main road
- Left and right turns from the driveway/side streets on the main road
- Stopping sight distance along the main road

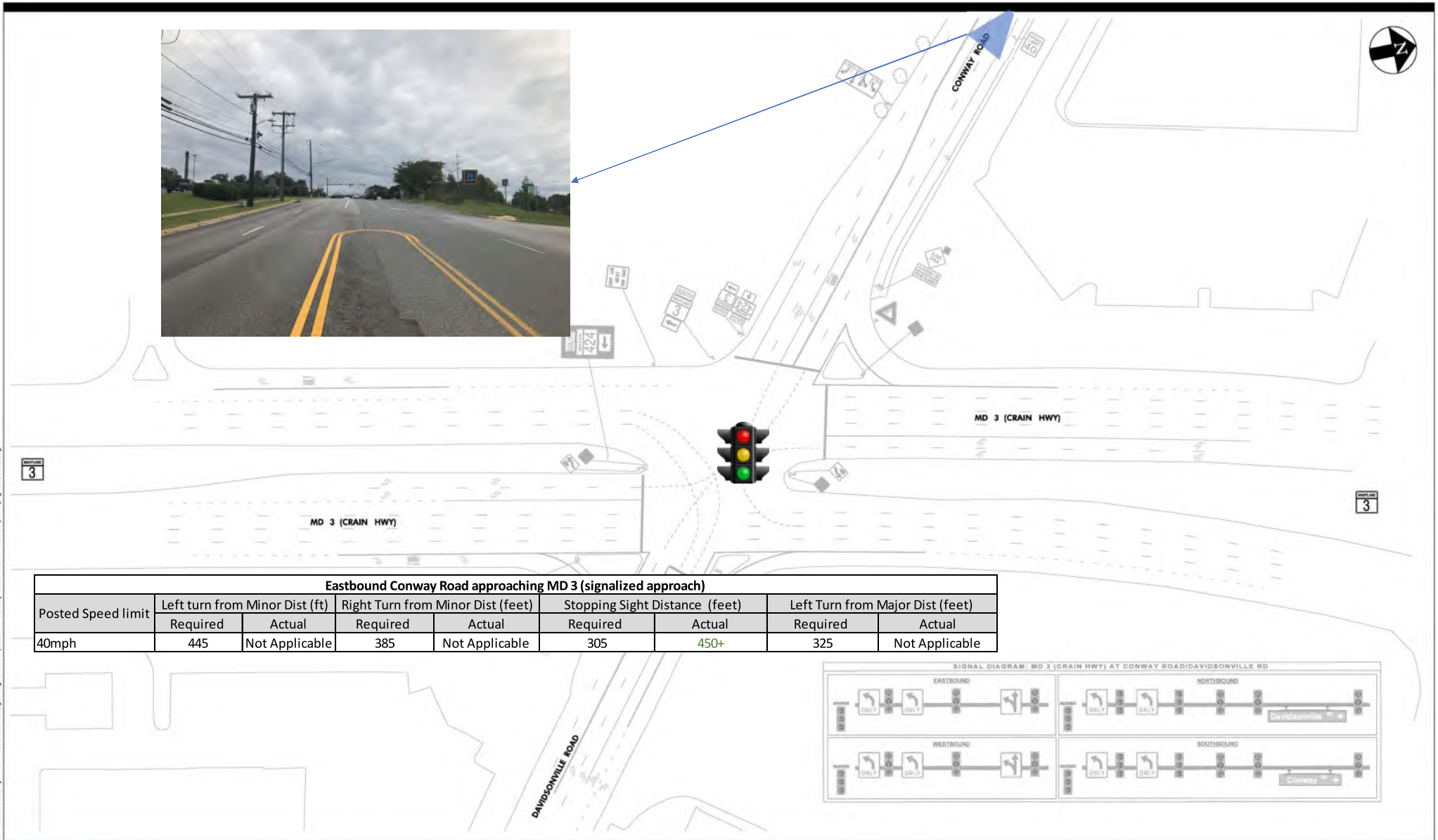
Sight Distance measurements and photos are provided in **Appendix A**, attached at the end of the memorandum. Sight distance was measured and compared against AASHTO's *A policy on Geometric Design of Highways and Streets* (the Green Book), 7th edition, 2018. In sum, there is ample existing sight distance for all locations, except for one – southbound motorists at Upper Patuxent Ridge Road, have limited sight distance looking right while trying to turn left on eastbound Conway Road. However, the road curvature and narrow width of the west leg of the intersection are likely to result in approach speeds far below the 30 mph speed limit.

Additionally, we evaluated Conway Road for any *non-intersection* related roadside obstructions as well as vertical sight distance limitations (e.g., hills or steep grades) that would limit safe travel. Generally, there was ample sight distance along Conway Road based on the posted speeds, with the exception of one location 800 feet west of the Patuxent Road traffic circle; as shown in the figure below, there is a short bridge that coincides with a sharp horizontal road curvature, where eastbound sight distance is temporarily limited to about 200 feet; this is less than the stopping sight distance required, ~250 feet, based on the average speed of 33 mph measured at this location (shown in Figure 1 and Figure 2). It is recommended that this location have an advisory speed limit of 20 mph.

Figure 1: View along Conway Road looking east, approximately 800 feet west of Patuxent Road

Figure 2: Location of eastbound sight distance limitation

APPENDIX A – SIGHT DISTANCE MEASUREMENTS



Eastbound Conway Road approaching MD 3 (signalized approach)								
Posted Speed limit	Left turn from Minor Dist (ft)		Right Turn from Minor Dist (feet)		Stopping Sight Distance (feet)		Left Turn from Major Dist (feet)	
	Required	Actual	Required	Actual	Required	Actual	Required	Actual
40mph	445	Not Applicable	385	Not Applicable	305	450+	325	Not Applicable

Mead & Hunt

Conway Road at MD 3 (Crain Highway)
Sight–Distance

SCALE: 1" = 40'

Sheet No. 1

OPERATOR:02430 – PLOTTED: 10/18/2021
FILE NAME: \2018\18 Anne Arundel County A–E Roads and Bridges Agrt 15010\Task 11 Conway Road traffic counts\DWG\SightDistance.dgn

Concord Blvd (minor) approaching Conway Road (major)								
Posted Speed limit	Left turn from Minor Dist (ft)		Right Turn from Minor Dist (feet)		Stopping Sight Distance (feet)		Left Turn from Major Dist (feet)	
	Required	Actual	Required	Actual	Required	Actual	Required	Actual
40mph	445	500+	385	450	305	Not Applicable	325	500+
30mph	335	Not Applicable	290	Not Applicable	200	Not Applicable	245	Not Applicable
15mph	170		145		80		125	

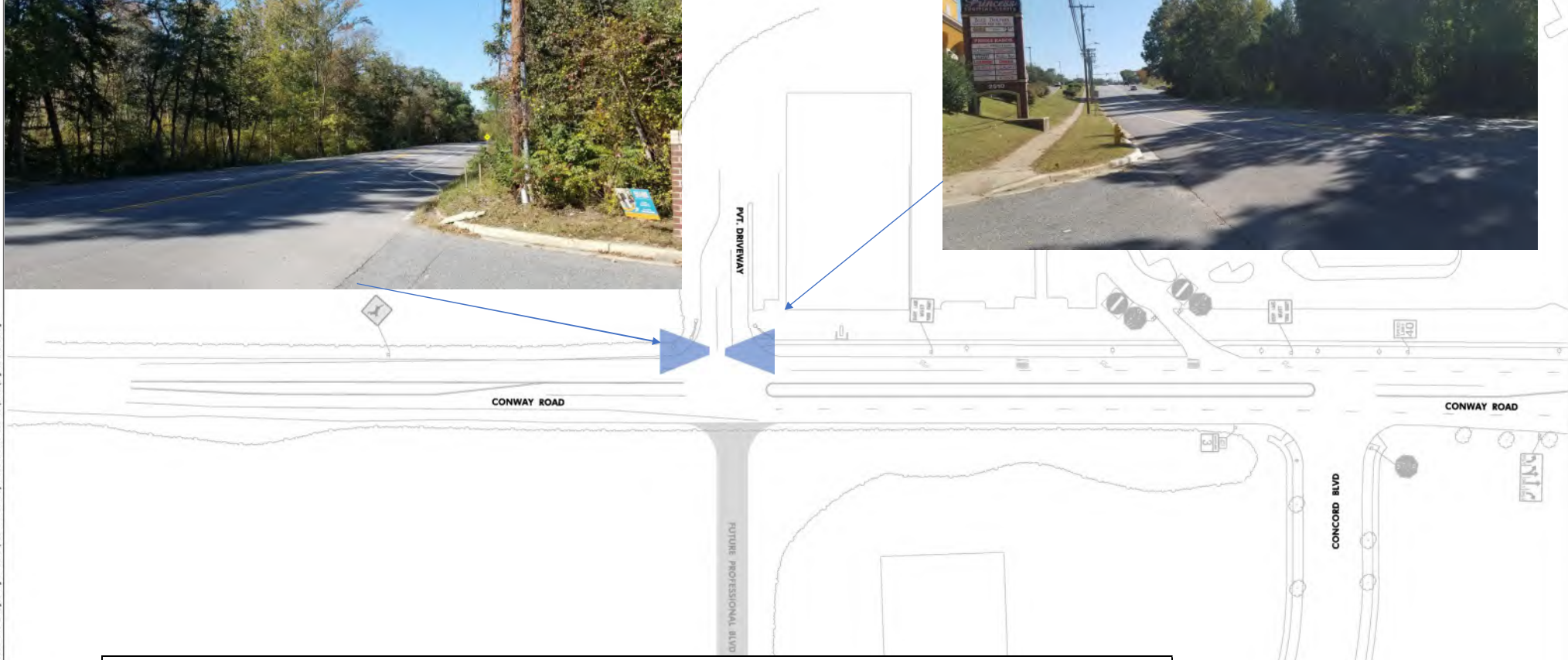
Mead & Hunt

Conway Road at Concord Boulevard
Sight–Distance

SCALE: 1" = 40'

Sheet No. 2

OPERATOR(2430) — PLOTTED: 10/18/2021
FILE NAME: \2018\18 Anne Arundel County A-E Roads and Bridges Agrt 15010\Task 11 Conway Road traffic counts\DWG\SightDistance.dgn



Commercial Driveway (minor) approaching Conway Road (major)								
Posted Speed limit	Left turn from Minor Dist (ft)		Right Turn from Minor Dist (feet)		Stopping Sight Distance (feet)		Left Turn from Major Dist (feet)	
	Required	Actual	Required	Actual	Required	Actual	Required	Actual
40mph	445	500+	385	500+	305	Not Applicable	325	500+
30mph	335	Not Applicable	290	Not Applicable	200	Not Applicable	245	Not Applicable

Mead & Hunt

Conway Road at Private Driveway /Future Professional Blvd.
Sight–Distance

SCALE: 1" = 40'

Sheet No. 3

OPERATOR02430 — PLOTTED: 10/18/2021
FILE NAME: \2018\18 Anne Arundel County A–E Roads and Bridges Agt 150'0\Task 11 Conway Road traffic counts\DWG\SightDistance.dgn

Patuxent Road (minor) approaching Conway Road (major) - Traffic Circle								
Posted Speed limit	Left turn from Minor Dist (ft)		Right Turn from Minor Dist (feet)		Stopping Sight Distance (feet)		Left Turn from Major Dist (feet)	
	Required	Actual	Required	Actual	Required	Actual	Required	Actual
SB Approach 15mph	170	Not Applicable	145	300	80	500+	125	Not Applicable
EB Approach 15mph	170	Not Applicable	145	150	80	500+	125	Not Applicable
NB Approach 15mph	170	Not Applicable	145	300+	80	500+	125	Not Applicable
WB Approach 15mph	170	Not Applicable	145	200	80	500+	125	Not Applicable

Mead & Hunt

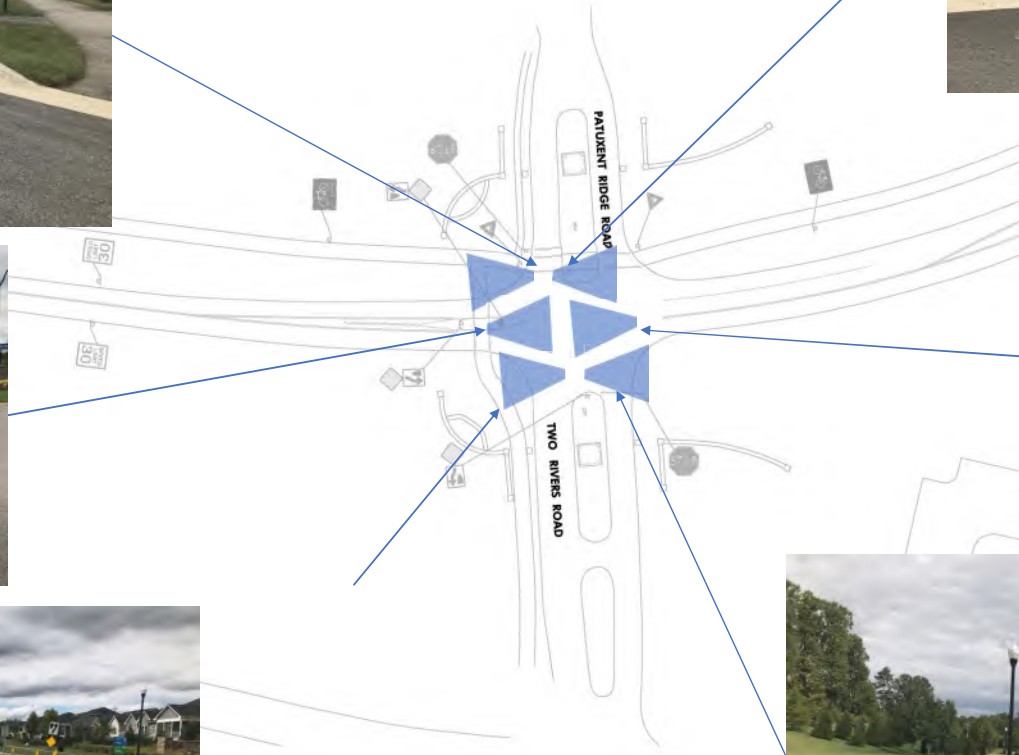
Conway Road at Patuxent Road /Meyers Station Road
Sight–Distance

SCALE: 1" = 40'

Sheet No. 4

OPERATOR\02430 – PLOT DATE: 2/18/2019 2:43:39 PM
FILE NAME: \2018\18 Annapolis Area Traffic Counts\DWG\SightDistance.dgn
ges Agrt 15010\Task 11 Conway Road traffic counts\DWG\SightDistance.dgn

Patuxent Road (minor) approaching Conway Road (major)								
Posted Speed limit	Left turn from Minor Dist (ft)		Right Turn from Minor Dist (feet)		Stopping Sight Distance (feet)		Left Turn from Major Dist (feet)	
	Required	Actual	Required	Actual	Required	Actual	Required	Actual
SB Approach 30mph	335	500+	290	450	200	300+	245	400
NB Approach 30mph	335	500+	290	450	200	300+	245	500



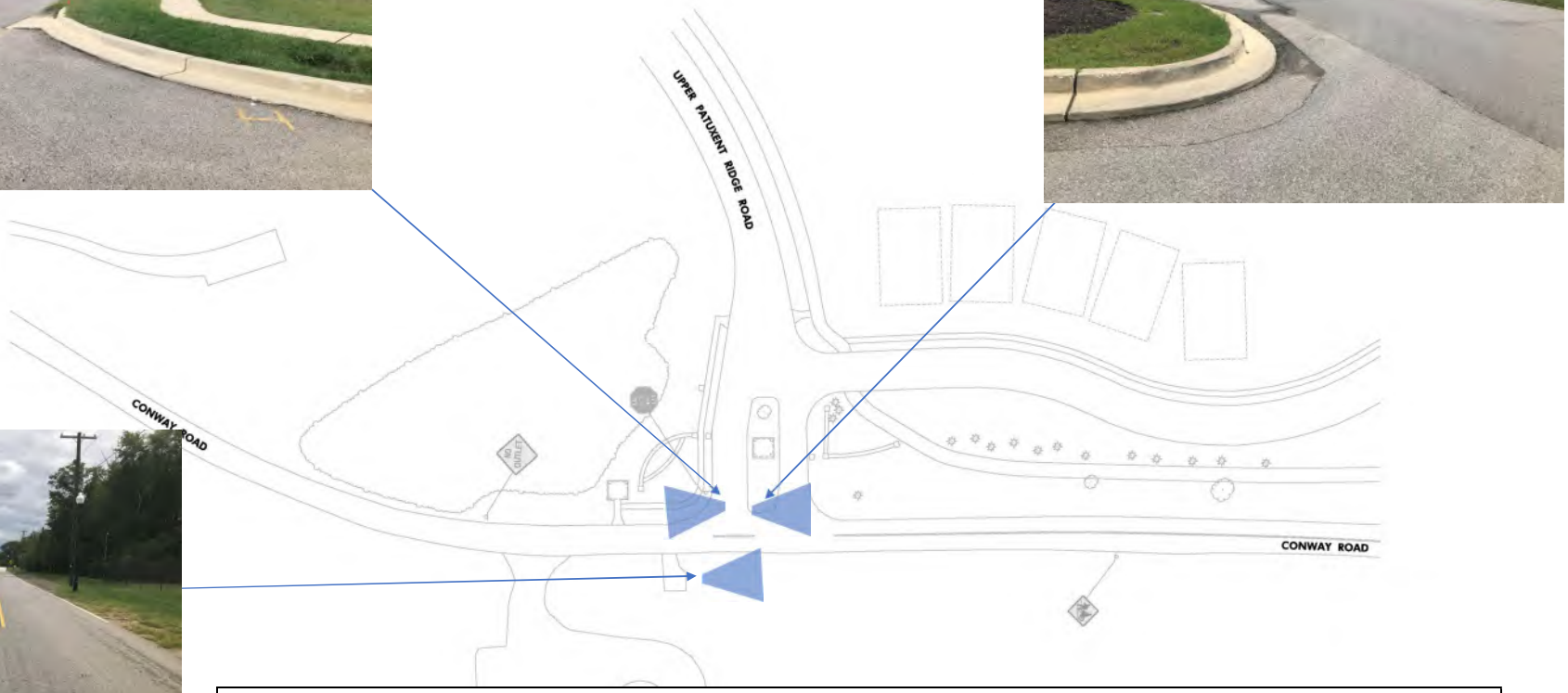
Mead & Hunt

Conway Road at Patuxent Ridge Road /Two Sight–Distance

SCALE: 1" = 40'

Sheet No. 5

OPERATOR02430 – PLOTTED: 10/18/2021
FILE NAME: \2018\18 Anne Arundel County A–E Roads and Bridges Agrt 15010\Task 11 Conway Road traffic counts\DWG\SightDistance.dgn



Upper Patuxent Ridge Road (minor) approaching Conway Road (major)								
Posted Speed limit	Left turn from Minor Dist (ft)		Right Turn from Minor Dist (feet)		Stopping Sight Distance (feet)		Left Turn from Major Dist (feet)	
	Required	Actual	Required	Actual	Required	Actual	Required	Actual
SB Approach 30mph	335	200*	290	500+	200	300+	245	500+

*The west leg of Conway Road is a narrow windy road and it is unlikely that 30 mph speeds will be reached by drivers

Mead & Hunt

Conway Road at Upper Patuxent Ridge Road
Sight–Distance

SCALE: 1" = 40'

Sheet No. 6

OPERATOR02430 — PLOTTED: 10/18/2021
FILE NAME: \2018\18 Anne Arundel County A–E Roads and Bridges Agr. 15010\Task 11 Conway Road traffic counts\DWG\SightDistance.dgn

Appendix E:
Existing Traffic Data

Traffic Signal Configuration Controller Sequence

MD 3 at MD 424/Conway Road

Maryland State Highway Administration

ECONOLITE

MOVING TRAFFIC FORWARD

(4) MD 3 & MD 424 - MD 3 & MD 424 - Econolite Type - Cobalt

Configuration Controller Sequence

Phase Ring Sequence and Assignment (MM) 1-1-1

Hardware Alternate Sequence Enable: No

Phase Ring Sequence.....(Note: Sequences identical to the prior one are not printed)

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
	B		B	B		B		B								
Sequence 1																
Ring 1	1	2	5	3	4	9	10	13	14	.	.	.	.	.	.	.
Ring 2	.	6	7	.	8	11	12	15	16	.	.	.	.	.	.	.

Phases In Use/Exclusive Ped (MM) 1-2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phases In Use	X	X	X	X	X	X										
Exclusive Ped																

Phase Compatibility (MM) 1-1-2

Phase	
n/a	Barrier Mode

Phase and Overlap Descriptions

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Approach	N	S	E	W	S	N	N	N	N	N	N	N	N	N	N	N
Movement	L	T	LTR	LTR	L	T										
Associated PED																
Overlap	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**
Approach	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Movement																

Administration (MM) 1-7-1

Enable Controller/Cabinet Interlock CRC	No
CRC (16 bit)	6A08
Enable Automatic Backup to Datakey	No

Backup Prevent (MM) 1-1-3

Timing Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	.		.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
6	.	.	.	.	.		.	.	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.		.	.	.	.	.	.	.	.
9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	

Simultaneous Gap (MM) 1-1-4

Phase Must Gap With Phase Disable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	.		.	.	.	X	.	.	.	.	.	.	.	.	.	.
3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
6	.	X	.	.	.		.	.	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.		.	.	.	.	.	.	.	.
9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
Disable	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Load Switch Assignments (MM) 1-3

	Phase / Overlap	Type	Dimming				Power Up	Auto		Flash Together
			Red	Yellow	Green	Dark		Red	Yellow	
1	1	O				-	Auto	X		
2	2	O				-	Auto		X	X
3	0	O				-	Auto	X		
4	4	O				-	Auto	X		X

5	5	O				-	Auto	X		
6	6	O				-	Auto		X	X
7	0	O				-	Auto	X		
8	8	O				-	Auto	X		X
9	0	P				-	Auto			
10	0	P				-	Auto			
11	0	P				-	Auto			
12	0	P				-	Auto			
13	0	O				-	Auto	X		
14	0	O				+	Auto	X		X
15	0	O				-	Auto	X		
16	0	O				+	Auto	X		X

Maryland State Highway Administration

ECONOLITE

MOVING TRAFFIC FORWARD

(4) MD 3 & MD 424 - MD 3 & MD 424 - Econolite Type - Cobalt

Controller Timing Plan (MM) 2-1

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-LTR	W-LTR	S-L	N-T	N	N	N	N	N	N	N	N	N	N
Min Green	8	25	8	8	8	25	0	0	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	0	0	0	0	0	0	0	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	7	0	7	0	7	0	7	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	4.0	6.0	3.0	3.0	4.0	6.0	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	25	60	25	30	30	60	35	35	35	35	35	35	35	35	35	35
Max2	45	80	35	45	45	80	40	40	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.0	5.5	4.0	4.0	5.5	5.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	4.0	3.0	3.0	3.0	3.0	1.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	10	0	10	10	10	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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ECONOLITE

MOVING TRAFFIC FORWARD

(4) MD 3 & MD 424 - MD 3 & MD 424 - Econolite Type - Cobalt

Controller Overlaps

Vehicle Overlaps (MM) 2-2

Overlap	Type	Lag Green	Yellow	Red	Adv. Green

Phases

Overlap	Phase	Included	Protect	Ped Protect	Not Overlap	Modifier	Lag X Phases	Lag 2 Phases	Flash Green
A	1	Yes	No	No	No		No	No	.
B	2	Yes	No	No	No		No	No	.
B	5	Yes	No	No	No		No	No	.
D	4	Yes	No	No	No		No	No	.
E	5	Yes	No	No	No		No	No	.
F	6	Yes	No	No	No		No	No	.
G	7	Yes	No	No	No		No	No	.
H	3	Yes	No	No	No		No	No	.
I	9	Yes	No	No	No		No	No	.
J	10	Yes	No	No	No		No	No	.
K	11	Yes	No	No	No		No	No	.
L	12	Yes	No	No	No		No	No	.

PPLT FYA

Overlap	Protected Phase (Left Turn)	Permissive Phase (Opposing Thru)	Flashing Arrow Output	Flashing Arrow Output CH	Delay Start of FYA	Delay Start of Clearance	Action Plan SF Bit Disable	Ped Protected Enable

Guaranteed Minimum Time Data (MM) 2-4

Phase	Min Green	Walk	Ped Clear	Yellow	Red Clear	Overlap Green
A01	5	0	7	3.0	0.0	5
B02	5	0	7	3.0	0.0	5
C03	5	0	7	3.0	0.0	5
D04	5	0	7	3.0	0.0	5
E05	5	0	7	3.0	0.0	5
F06	5	0	7	3.0	0.0	5
G07	5	0	7	3.0	0.0	5

H08	5	0	7	3.0	0.0	5
I09	5	0	7	3.0	0.0	5
J10	5	0	7	3.0	0.0	5
K11	5	0	7	3.0	0.0	5
L12	5	0	7	3.0	0.0	5
M13	5	0	7	3.0	0.0	5
N14	5	0	7	3.0	0.0	5
O15	5	0	7	3.0	0.0	5
P16	5	0	7	3.0	0.0	5

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ECONOLITE

MOVING TRAFFIC FORWARD

(4) MD 3 & MD 424 - MD 3 & MD 424 - Econolite Type - Cobalt

Controller Options

Controller Options (MM) 2-6-1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Grn Ph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Guar Passage																
Non-Act I		X				X										
Non-Act II																
Dual Entry																
Cond Service																
Cond Reservice																
Ped Re-Service																
Rest In Walk																
Flashing Walk																
Ped Clr-Yel																
Ped Clr-Red																
IGRN + Veh Ext																

Ped Clear Protect: Off Unit Red Revert: 2.0 MUTCD 3 Seconds Don't Walk: No

Pre-Timed Mode (MM) 2-7

Enable Pre-Timed Mode: No Free Input Disables Pre-Timed: No

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Pre-Timed																

Phase Recall Options (MM) 2-8

Plan # 1

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector	X			X	X											
Vehicle Recall		X				X										
Ped Recall																
Max Recall																
Soft Recall																
No Rest																
Al Calc																

Maryland State Highway Administration

ECONOLITE

MOVING TRAFFIC FORWARD

(4) MD 3 & MD 424 - MD 3 & MD 424 - Econolite Type - Cobalt

Coordination Pattern Data
Coordinator Pattern Data (MM) 3-2

Coordinator Pattern # 1

Split Pattern	1	TS2 (Pat-Off)	0-1	Splits In	Seconds
Cycle	150	Std (COS)	9	Offsets In	Seconds
Offset Value	11s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	1		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-LTR	W-LTR	S-L	N-T	N	N	N	N	N	N	N	N	N	N
Splits (Split Pat 1)	26	35	26	32	31	61	31	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	150s	92s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 2

Split Pattern	2	TS2 (Pat-Off)	0-2	Splits In	Seconds
Cycle	150	Std (COS)	81	Offsets In	Seconds
Offset Value	114s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	2		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-LTR	W-LTR	S-L	N-T	N	N	N	N	N	N	N	N	N	N
Splits (Split Pat 2)	21	48	21	35	25	69	25	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	150s	94s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0	
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0	

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 3

Split Pattern	3	TS2 (Pat-Off)	0-3	Splits In	Seconds
Cycle	180	Std (COS)	10	Offsets In	Seconds
Offset Value	0s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	3		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-LTR	W-LTR	S-L	N-T	N	N	N	N	N	N	N	N	N	N
Splits (Split Pat 3)	27	54	27	36	36	81	36	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	180s	117s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 4

Split Pattern	4	TS2 (Pat-Off)	1-1	Splits In	Seconds
Cycle	180	Std (COS)	82	Offsets In	Seconds
Offset Value	0s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	4		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-LTR	W-LTR	S-L	N-T	N	N	N	N	N	N	N	N	N	N
Splits (Split Pat 4)	26	66	25	35	28	92	27	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	180s	119s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 5

Split Pattern	5	TS2 (Pat-Off)	1-2	Splits In	Seconds
Cycle	180	Std (COS)	154	Offsets In	Seconds
Offset Value	18s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	5		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-LTR	W-LTR	S-L	N-T	N	N	N	N	N	N	N	N	N	N
Splits (Split Pat 5)	23	73	20	32	32	96	32	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	180s	128s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 6

Split Pattern	6	TS2 (Pat-Off)	1-3	Splits In	Seconds
Cycle	250	Std (COS)	14	Offsets In	Seconds
Offset Value	25s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	1		
Phase Reservice	No	Action Plan	6		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N-L	S-T	E-LTR	W-LTR	S-L	N-T	N	N	N	N	N	N	N	N	N	N
Splits (Split Pat 6)	38	100	25	37	50	138	50	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	250s	188s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0	
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0	

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Maryland State Highway Administration

ECONOLITE

MOVING TRAFFIC FORWARD

(4) MD 3 & MD 424 - MD 3 & MD 424 - Econolite Type - Cobalt

Time Base Action Plan
Action Plan (MM) 5-2

Action Plan - 1 - "1"

Pattern	1	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 2 - "2"

Pattern	2	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 3 - "3"

Pattern	3	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
	No	Pmt Queue Delay	No

Pmt Ped Priority
Ret
Pmt Cond Delay No

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 4 - "4"

Pattern	4	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 5 - "5"

Pattern	5	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
	No	Pmt Queue Delay	No

Pmt Ped Priority
Ret
Pmt Cond Delay No

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 6 - "6"

Pattern	6	Override Sys	No
Timing Plan	1	Sequence	1
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 98 - "??"

Pattern	Free	Override Sys	No
Timing Plan	0	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
	No	Pmt Queue Delay	No

Pmt Ped Priority
Ret
Pmt Cond Delay No

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall	X	X	X	X	X	X										
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 99 - "??"

Pattern	Free	Override Sys	No
Timing Plan	0	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 100 - "??"

Pattern	Flash	Override Sys	No
Timing Plan	0	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
	No	Pmt Queue Delay	No

Pmt Ped Priority
Ret
Pmt Cond Delay No

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Maryland State Highway Administration

ECONOLITE

MOVING TRAFFIC FORWARD

(4) MD 3 & MD 424 - MD 3 & MD 424 - Econolite Type - Cobalt

Time Base Day Plan/Schedule
Day Plan (MM) 5-3

Day Plan #1 - "1"

Event	Action Plan	Start Time
1	99	00:00
2	1	09:30
3	99	21:30

Day Plan #2 - "2"

Event	Action Plan	Start Time
1	99	00:00
2	4	05:30
3	1	09:30
4	5	15:00
5	1	18:45
6	99	21:30

Day Plan #3 - "3"

Event	Action Plan	Start Time
1	99	00:00
2	2	06:00
3	4	06:30
4	98	09:00
5	5	15:00
6	1	18:45
7	99	21:30

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 1

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X						X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan No.: 2

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
		X	X	X	X	X	

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Traffic Turning Movement Counts

Study Name 18-18.11-CONCORD
Start Date 10/02/2021
Start Time 11:00 AM
Site Code CONCORD

	CONWAY RD Westbound			CONCORD BLVD Northbound			CONWAY RD Eastbound		
Start Time	Thru	Left	U-Turn	Right	Left	U-Turn	Right	Thru	U-Turn
11:00 AM	112	31	0	30	4	0	3	100	0
11:15 AM	119	30	0	30	6	0	5	128	0
11:30 AM	135	25	0	26	5	0	6	126	0
11:45 AM	126	30	1	27	8	0	9	134	0
12:00 PM	128	25	0	25	5	0	8	128	0
12:15 PM	134	23	0	29	11	0	8	152	0
12:30 PM	120	28	1	35	4	0	4	130	0
12:45 PM	131	33	0	19	7	0	9	131	0
1:00 PM	119	20	0	26	8	0	5	129	0
1:15 PM	127	35	0	28	3	0	4	153	0
1:30 PM	113	15	0	23	3	0	6	125	0
1:45 PM	131	28	0	29	5	0	2	114	0
2:00 PM	141	24	0	30	2	0	4	126	0
2:15 PM	128	25	0	27	4	0	8	131	0
2:30 PM	118	28	0	36	10	0	5	125	0
2:45 PM	145	19	1	19	5	0	4	130	0

Study Name 18-18.11-CONCORD
Start Date 10/02/2021
Start Time 11:00 AM
Site Code CONCORD

	CONWAY RD Westbound		CONCORD BLVD Northbound		CONWAY RD Eastbound	
Start Time	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW
11:00 AM	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0

Study Name 18-18.11-CONCORD
Start Date 10/02/2021
Start Time 11:00 AM
Site Code CONCORD

	CONWAY RD Westbound		CONCORD BLVD Northbound		CONWAY RD Eastbound	
Start Time	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW
11:00 AM	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0

Study Name 18-18.11-concord
Start Date 09/30/2021
Start Time 6:00 AM
Site Code concord w

	CONWAY RD Westbound			CONCORD BLVD Northbound			CONWAY RD Eastbound		
Start Time	Thru	Left	U-Turn	Right	Left	U-Turn	Right	Thru	U-Turn
6:00 AM	33	6	0	0	0	0	0	62	0
6:15 AM	29	7	0	1	0	0	1	58	0
6:30 AM	42	14	0	4	1	0	3	83	0
6:45 AM	77	16	0	6	0	0	0	105	0
7:00 AM	75	14	0	10	2	0	6	132	0
7:15 AM	71	13	0	10	1	0	7	115	0
7:30 AM	63	21	0	7	0	0	4	147	0
7:45 AM	79	23	0	18	3	0	8	107	0
8:00 AM	95	36	0	7	3	0	6	111	0
8:15 AM	78	24	0	11	2	0	9	99	0
8:30 AM	102	25	0	16	2	0	3	115	0
8:45 AM	81	38	0	23	5	0	10	111	0
9:00 AM	87	30	0	20	6	0	6	123	0
9:15 AM	88	26	0	20	5	0	6	106	0
9:30 AM	70	21	0	19	1	0	1	99	0
9:45 AM	85	27	0	27	1	0	5	88	0
10:00 AM	78	27	0	23	5	0	1	113	0
10:15 AM	93	20	0	16	3	0	2	102	0
10:30 AM	91	17	0	18	6	0	9	80	0
10:45 AM	76	28	0	21	6	0	3	100	0
11:00 AM	94	21	0	24	7	0	4	109	0
11:15 AM	97	16	0	17	4	0	1	87	0
11:30 AM	98	23	0	25	2	0	5	75	0
11:45 AM	115	29	0	31	2	0	5	114	0
12:00 PM	121	27	0	27	4	0	3	125	0
12:15 PM	122	29	0	19	9	0	5	105	0
12:30 PM	120	20	0	26	3	0	1	114	0
12:45 PM	106	35	0	28	5	0	4	115	0
1:00 PM	100	17	0	27	4	0	5	110	0
1:15 PM	116	33	0	23	1	0	3	100	0
1:30 PM	122	31	0	30	6	0	3	97	0
1:45 PM	102	27	1	26	3	0	2	130	0
2:00 PM	116	35	0	28	11	0	2	116	0
2:15 PM	119	28	0	25	3	0	3	134	0
2:30 PM	108	26	0	30	5	0	8	129	0
2:45 PM	134	24	0	24	9	0	4	132	0
3:00 PM	123	14	0	26	4	0	3	153	0
3:15 PM	151	21	0	20	9	0	5	120	0
3:30 PM	146	26	0	26	5	0	5	129	0
3:45 PM	114	21	0	19	3	0	6	120	0
4:00 PM	109	27	0	31	3	0	6	130	0
4:15 PM	158	34	0	33	4	0	5	133	0
4:30 PM	165	29	0	47	3	0	14	132	0
4:45 PM	206	32	0	44	10	0	8	150	0
5:00 PM	178	29	0	30	7	0	9	156	0
5:15 PM	166	34	1	39	13	0	7	152	0
5:30 PM	193	31	0	26	8	0	3	142	0
5:45 PM	179	15	0	30	6	0	9	130	0
6:00 PM	179	23	0	28	8	0	6	141	0
6:15 PM	185	22	0	31	5	0	1	134	0
6:30 PM	152	15	0	19	4	0	2	118	0
6:45 PM	169	12	0	16	4	0	1	111	0

Study Name 18-18.11-concord
Start Date 09/30/2021
Start Time 6:00 AM
Site Code concord w

	CONWAY RD Westbound		CONCORD BLVD Northbound		CONWAY RD Eastbound	
Start Time	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW
6:00 AM	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0
5:00 PM	0	0	1	0	0	0
5:15 PM	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0

Study Name 18-18.11-concord
Start Date 09/30/2021
Start Time 6:00 AM
Site Code concord w

	CONWAY RD Westbound		CONCORD BLVD Northbound		CONWAY RD Eastbound	
Start Time	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW
6:00 AM	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0
10:30 AM	0	0	0	0	1	0
10:45 AM	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0
11:30 AM	0	0	0	1	0	0
11:45 AM	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0
4:15 PM	1	0	0	0	0	0
4:30 PM	0	0	0	0	0	0
4:45 PM	0	0	0	1	0	0
5:00 PM	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0

Study Name 18-18.11-Pro
Start Date 10/23/2021
Start Time 11:00 AM
Site Code PRO SAT

	BUSINESS ENT Southbound			CONWAY RD Westbound			CONWAY RD Eastbound		
Start Time	Right	Left	U-Turn	Right	Thru	U-Turn	Thru	Left	U-Turn
11:00 AM	0	19	0	2	90	0	115	3	0
11:15 AM	2	19	0	1	93	0	114	1	0
11:30 AM	1	10	0	0	102	0	109	4	0
11:45 AM	5	12	0	0	114	0	121	0	0
12:00 PM	1	13	0	1	104	0	102	1	0
12:15 PM	1	10	0	3	92	0	112	2	0
12:30 PM	2	22	0	2	83	0	110	2	0
12:45 PM	4	16	0	3	107	0	117	3	0
1:00 PM	3	18	0	3	97	0	121	2	0
1:15 PM	4	17	0	0	93	0	108	2	0
1:30 PM	2	17	0	0	102	0	143	0	0
1:45 PM	0	28	0	0	93	0	130	3	0
2:00 PM	4	17	0	1	99	0	106	1	0
2:15 PM	1	20	0	2	110	0	111	1	0
2:30 PM	1	26	0	0	90	0	110	3	0
2:45 PM	3	23	0	1	104	0	109	1	0

Study Name 18-18.11-Pro
Start Date 10/23/2021
Start Time 11:00 AM
Site Code PRO SAT

	BUSINESS ENT Southbound		CONWAY RD Westbound		CONWAY RD Eastbound	
Start Time	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW
11:00 AM	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0

Study Name 18-18.11-Pro
Start Date 10/23/2021
Start Time 11:00 AM
Site Code PRO SAT

	BUSINESS ENT Southbound		CONWAY RD Westbound		CONWAY RD Eastbound	
Start Time	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW
11:00 AM	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0
12:15 PM	1	0	0	0	0	0
12:30 PM	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0

Study Name 18-18.11-PRO
Start Date 10/21/2021
Start Time 6:00 AM
Site Code PRO W

	BUSINESS ENT Southbound			CONWAY RD Westbound			CONWAY RD Eastbound		
Start Time	Right	Left	U-Turn	Right	Thru	U-Turn	Thru	Left	U-Turn
6:00 AM	0	0	0	0	32	0	62	0	0
6:15 AM	0	0	0	0	46	0	72	0	0
6:30 AM	2	5	0	0	43	0	83	1	0
6:45 AM	1	0	0	1	61	0	111	1	0
7:00 AM	4	9	0	0	64	0	117	0	0
7:15 AM	2	5	0	0	77	0	107	1	1
7:30 AM	2	1	0	1	88	0	141	0	0
7:45 AM	0	6	0	0	95	0	136	3	0
8:00 AM	0	3	0	0	89	0	132	1	0
8:15 AM	0	4	0	0	74	0	114	0	0
8:30 AM	2	10	0	1	102	0	116	3	0
8:45 AM	1	6	0	0	99	0	130	1	0
9:00 AM	1	4	0	0	78	0	125	0	0
9:15 AM	3	1	0	0	83	0	112	1	0
9:30 AM	1	7	0	1	79	0	108	1	0
9:45 AM	0	5	0	0	60	0	95	1	0
10:00 AM	1	7	0	0	64	0	94	0	0
10:15 AM	2	5	0	0	67	0	91	0	0
10:30 AM	1	10	0	0	74	0	90	2	0
10:45 AM	1	8	0	0	76	0	86	2	0
11:00 AM	1	4	0	1	77	0	72	0	0
11:15 AM	1	5	0	0	91	0	100	2	0
11:30 AM	1	20	0	1	95	0	100	1	0
11:45 AM	4	14	0	1	92	0	103	5	0
12:00 PM	3	17	0	1	93	0	90	1	0
12:15 PM	1	14	0	0	115	0	90	3	0
12:30 PM	8	20	0	1	116	0	91	2	0
12:45 PM	2	25	0	2	105	0	101	2	0
1:00 PM	2	22	0	1	103	0	76	1	0
1:15 PM	2	19	0	0	113	0	87	2	0
1:30 PM	3	16	0	3	101	0	92	2	0
1:45 PM	3	15	0	3	94	0	108	0	0
2:00 PM	1	20	0	1	90	0	90	3	0
2:15 PM	5	18	0	2	83	0	103	4	0
2:30 PM	3	16	0	3	105	0	100	0	0
2:45 PM	3	24	0	0	93	0	100	0	0
3:00 PM	1	16	0	0	93	0	95	1	0
3:15 PM	0	31	0	0	121	0	135	2	0
3:30 PM	1	11	0	0	126	0	116	4	0
3:45 PM	2	29	0	0	129	0	123	3	0
4:00 PM	3	24	0	1	146	0	119	1	0
4:15 PM	2	15	0	1	144	0	137	2	0
4:30 PM	3	12	0	2	139	0	165	1	0
4:45 PM	4	20	0	1	160	0	157	5	0
5:00 PM	5	20	0	1	172	0	121	4	0
5:15 PM	3	23	0	1	151	0	160	2	0
5:30 PM	4	28	0	1	145	0	139	1	0
5:45 PM	5	17	0	0	158	0	114	4	0
6:00 PM	2	29	0	1	141	0	116	3	0
6:15 PM	2	17	0	2	128	0	132	2	0
6:30 PM	9	21	0	1	151	0	110	2	0
6:45 PM	4	23	0	2	122	0	109	1	0

Study Name 18-18.11-PRO
Start Date 10/21/2021
Start Time 6:00 AM
Site Code PRO W

	BUSINESS ENT Southbound		CONWAY RD Westbound		CONWAY RD Eastbound	
Start Time	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW
6:00 AM	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0

Study Name 18-18.11-PRO
Start Date 10/21/2021
Start Time 6:00 AM
Site Code PRO W

	BUSINESS ENT Southbound		CONWAY RD Westbound		CONWAY RD Eastbound	
Start Time	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW
6:00 AM	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0
12:00 PM	1	0	0	0	0	0
12:15 PM	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0

Study Name 18-18.11-MD 3
Start Date 09/23/2021
Start Time 6:00 AM
Site Code MD 3-W

	MD 3 Southbound				DAVIDSONVILLE RD Westbound				MD 3 Northbound				CONWAY RD Eastbound			
Start Time	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn
6:00 AM	13	301	0	0	33	2	50	0	4	175	10	1	28	4	19	0
6:15 AM	13	327	15	0	40	8	31	0	1	270	11	3	35	4	16	0
6:30 AM	20	399	30	0	56	10	56	0	3	284	17	1	43	9	16	0
6:45 AM	31	471	33	0	59	13	56	0	3	279	27	0	60	13	33	0
7:00 AM	25	451	43	4	65	13	60	0	11	444	21	0	73	13	45	0
7:15 AM	19	431	36	3	68	14	53	0	7	459	19	2	68	9	33	0
7:30 AM	21	418	29	1	110	17	70	0	4	411	27	2	48	6	28	0
7:45 AM	34	410	56	4	76	19	51	0	16	414	40	3	71	18	38	0
8:00 AM	36	518	36	4	83	19	78	0	14	393	34	3	59	13	30	0
8:15 AM	43	577	39	10	64	23	71	0	10	394	33	5	48	11	42	0
8:30 AM	45	498	61	6	98	18	55	0	18	422	44	2	62	11	44	0
8:45 AM	42	411	47	10	79	24	47	0	18	436	46	2	46	19	39	0
9:00 AM	51	400	55	7	76	20	39	0	22	354	47	2	45	22	54	0
9:15 AM	34	410	53	7	80	23	46	0	14	368	20	4	32	21	41	0
9:30 AM	47	420	52	13	66	14	41	0	20	393	34	4	35	16	31	0
9:45 AM	39	399	62	15	73	20	50	0	10	286	41	5	38	20	45	0
10:00 AM	40	348	54	6	58	15	43	0	23	328	37	5	36	9	32	0
10:15 AM	35	290	54	6	63	20	40	0	36	290	38	3	33	13	36	0
10:30 AM	36	295	59	13	76	25	58	0	18	332	33	5	36	15	45	0
10:45 AM	41	265	58	14	66	19	33	0	32	312	33	7	37	20	39	0
11:00 AM	38	318	38	17	65	19	39	0	20	322	33	2	34	20	37	0
11:15 AM	51	316	90	19	83	15	53	0	33	395	33	8	62	23	41	0
11:30 AM	44	290	55	18	96	32	52	0	19	328	27	3	35	22	50	0
11:45 AM	55	300	90	18	78	30	51	0	13	379	35	7	48	26	54	0
12:00 PM	58	279	67	16	91	26	65	0	24	407	41	5	56	22	59	0
12:15 PM	52	356	68	8	89	30	57	0	32	369	47	9	40	22	61	0
12:30 PM	49	318	68	15	92	33	57	0	27	396	34	6	54	14	50	0
12:45 PM	62	340	79	19	90	31	50	0	28	460	42	6	48	18	61	0
1:00 PM	62	308	69	15	74	14	42	0	31	331	45	3	33	15	49	0
1:15 PM	49	361	86	9	80	33	42	0	34	387	50	6	47	21	44	0
1:30 PM	42	346	78	26	89	22	46	0	42	474	39	2	52	22	52	0
1:45 PM	59	356	75	21	73	28	46	0	30	442	45	3	49	29	51	0
2:00 PM	57	378	75	16	94	34	69	0	35	475	33	8	40	12	56	0
2:15 PM	57	421	63	16	68	27	51	0	37	498	40	5	59	19	57	0
2:30 PM	51	423	93	15	89	32	63	0	50	538	49	3	47	13	51	0
2:45 PM	47	424	89	15	88	29	51	0	48	586	29	4	74	14	41	0
3:00 PM	69	440	97	17	68	24	60	0	11	584	53	3	44	23	36	0
3:15 PM	71	455	110	14	73	22	57	0	14	621	56	5	61	31	39	0
3:30 PM	63	504	103	18	67	23	57	0	13	613	68	3	48	27	35	0
3:45 PM	57	560	100	13	94	42	61	0	19	622	71	1	60	27	53	0
4:00 PM	57	431	98	25	85	40	46	0	25	637	75	5	83	25	51	0
4:15 PM	60	452	92	24	86	45	50	0	39	614	58	5	68	23	57	0
4:30 PM	60	457	108	16	77	37	56	0	33	660	84	8	62	35	67	0
4:45 PM	66	426	102	21	96	46	54	0	31	638	72	7	53	28	55	0
5:00 PM	65	498	113	14	91	42	40	0	35	626	87	2	54	29	58	0
5:15 PM	65	529	94	20	104	59	43	0	19	663	70	5	73	29	84	0
5:30 PM	66	578	117	12	102	46	54	0	26	685	72	6	54	22	55	0
5:45 PM	81	516	98	16	91	49	54	0	33	650	93	1	42	28	56	0
6:00 PM	59	549	112	14	111	43	62	0	30	551	82	8	49	45	68	0
6:15 PM	75	547	106	22	97	37	48	0	37	548	71	5	75	17	51	1
6:30 PM	54	445	98	10	88	28	52	0	34	496	62	7	65	29	48	0
6:45 PM	68	408	82	17	98	37	51	0	34	438	52	7	39	33	40	0

Study Name 18-18.11-MD 3
Start Date 09/23/2021
Start Time 6:00 AM
Site Code MD 3-W

	MD 3 Southbound		DAVIDSONVILLE RD Westbound		MD 3 Northbound		CONWAY RD Eastbound	
Start Time	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW
6:00 AM	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0
1:30 PM	1	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0

Study Name 18-18.11-MD 3
Start Date 09/23/2021
Start Time 6:00 AM
Site Code MD 3-W

	MD 3 Southbound		DAVIDSONVILLE RD Westbound		MD 3 Northbound		CONWAY RD Eastbound	
Start Time	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW
6:00 AM	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
9:00 AM	1	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0
10:30 AM	0	1	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	1	0	0	0
3:45 PM	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0

File Name: J:\! DATA FILES\18-18-11\CONWAY RD AT PATUXENT RD-MEYERS STATION RD_WEEKEND.ppd
Start Date: 9/25/2021
Start Time: 11:00:00 AM
Site Code: 00000000
Comment 1: Weather:
Comment 2: Counted By:
Comment 3: Town:
Comment 4: Country

	PATUXENT RD From North				CONWAY RD From East				MEYERS STATION RD From South				CONWAY RD From West			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
########	62	0	6	0	1	50	45	0	5	1	4	0	14	71	11	0
########	53	1	5	0	2	57	45	0	12	4	3	0	9	63	9	0
########	47	1	8	0	3	60	49	0	6	2	9	0	12	44	1	0
########	63	2	10	0	4	42	41	0	10	1	9	0	10	61	9	0
########	42	2	17	0	1	41	41	0	9	0	7	0	10	49	7	0
########	52	0	7	0	1	56	41	0	14	2	5	0	11	63	7	0
########	56	2	17	0	0	63	49	0	5	2	7	0	12	61	8	0
########	50	0	9	0	0	68	52	0	4	0	3	0	18	56	6	0
########	50	0	13	0	4	63	46	0	8	1	7	0	10	66	10	0
########	59	0	10	0	1	60	54	0	6	0	3	0	9	62	8	0
########	57	0	13	0	2	55	49	0	8	1	7	0	9	62	7	0
########	66	0	7	0	1	54	47	0	7	1	5	0	10	44	2	0
########	41	2	10	0	3	47	53	0	5	1	1	0	15	58	2	0
########	41	0	15	0	0	71	59	0	6	0	6	0	13	54	3	0
########	44	1	13	0	2	45	42	0	2	2	5	0	10	58	1	0
########	35	0	9	0	2	51	56	0	1	1	0	0	12	43	1	0
########	50	0	14	0	0	63	55	0	6	0	5	0	4	53	0	0
########	54	1	6	0	0	54	50	0	1	0	4	0	10	55	0	0
########	36	0	9	0	2	63	52	0	0	2	1	0	9	58	3	0
########	46	0	8	1	0	46	47	0	0	1	4	1	6	56	1	1

File Name: J:\! DATA FILES\18-18-11\CONWAY RD AT PATUXENT RD-MEYERS STATION RD_WEEKEND.ppd
Start Date: 9/25/2021
Start Time: 11:00:00 AM
Site Code: 00000000
Comment 1: Weather:
Comment 2: Counted By:
Comment 3: Town:
Comment 4: Country

	PATUXENT RD From North				CONWAY RD From East				MEYERS STATION RD From South				CONWAY RD From West			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
########	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0
########	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
########	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

File Name: J:\! DATA FILES\18-18-11\CONWAY RD AT PATUXENT RD-MEYERS STATION RD_WEEKEND.ppd
Start Date: 9/25/2021
Start Time: 11:00:00 AM
Site Code: 00000000
Comment 1: Weather:
Comment 2: Counted By:
Comment 3: Town:
Comment 4: Country

	PATUXENT RD From North				CONWAY RD From East				MEYERS STATION RD From South				CONWAY RD From West			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
########	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0
########	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
########	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

File Name: J:\! DATA FILES\18-18-11\CONWAY RD AT PATUXENT RD-MEYERS STATION RD_WEEKDAY.ppd
Start Date: 9/23/2021
Start Time: 6:00:00 AM
Site Code: 00000000
Comment 1: Weather: AM-RAIN/PM CLEAR
Comment 2: Counted By: DON, GARY
Comment 3: Town:
Comment 4: Country: ANNE ARUNDEL

	PATUXENT RD From North				CONWAY RD From East				MEYERS STATION RD From South				CONWAY RD From West			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
#######	26	0	0	0	0	8	7	0	0	0	2	0	2	22	0	0
#######	30	0	3	0	0	9	9	0	0	1	1	0	12	29	0	0
#######	49	1	5	0	0	17	16	0	0	0	1	0	14	25	0	0
#######	54	0	4	0	0	30	18	0	0	0	3	0	19	33	0	0
#######	58	0	7	0	0	26	13	0	0	0	2	0	16	55	0	0
#######	50	0	8	0	0	22	17	0	1	0	2	0	27	60	0	0
#######	41	1	12	0	0	13	24	0	0	0	1	0	34	45	0	0
#######	52	0	9	0	3	26	24	0	1	2	4	0	25	52	0	0
#######	54	0	10	0	0	37	15	0	0	2	1	0	20	65	0	0
#######	42	1	8	0	0	29	24	0	0	0	0	0	20	42	0	0
#######	47	1	16	0	1	37	47	0	0	0	0	0	39	77	0	0
#######	35	0	13	0	1	32	22	0	0	0	3	0	28	46	0	0
#######	56	1	18	0	1	49	30	0	0	0	2	0	14	48	0	0
#######	29	0	10	0	0	38	13	0	0	1	2	0	10	30	0	0
#######	31	0	13	0	1	32	23	0	0	0	2	0	8	41	0	0
#######	29	0	11	0	2	44	21	0	0	0	1	0	9	46	0	0
#######	24	0	4	0	1	34	18	0	0	1	2	0	15	36	0	0
#######	24	0	8	0	0	38	25	0	0	0	6	0	6	41	0	0
#######	19	1	3	0	1	31	19	0	0	1	2	0	10	50	1	0
#######	23	1	3	0	3	40	13	0	1	1	2	0	9	51	0	0
#######	23	2	7	0	0	39	17	0	1	1	1	0	14	46	0	0
#######	30	1	3	0	0	28	24	0	0	0	3	0	6	51	0	0
#######	19	0	6	0	2	34	21	0	1	1	1	0	13	55	2	0
#######	22	0	11	0	3	43	20	0	0	0	3	0	15	48	0	0
#######	33	2	13	0	0	47	34	0	0	0	4	0	10	71	1	0
#######	25	0	10	0	0	47	25	0	0	0	3	0	11	61	0	0
#######	34	0	7	0	4	47	27	0	0	0	0	0	9	56	0	0
#######	32	0	9	0	1	46	29	0	1	0	2	0	8	66	0	0
#######	23	0	5	0	3	56	21	0	1	0	0	0	12	49	1	0
#######	32	0	9	0	0	50	29	0	1	0	1	0	11	43	0	0
#######	18	0	8	2	2	48	22	2	0	0	0	2	9	58	1	2
#######	31	1	12	0	1	54	32	0	1	0	2	0	6	52	1	0
#######	30	1	10	0	3	47	40	0	1	1	1	0	10	61	0	0
#######	36	0	14	0	1	50	40	0	0	0	0	0	15	62	0	0
#######	32	1	13	0	1	44	43	0	0	0	2	0	14	39	0	0
#######	58	3	15	0	5	41	35	0	1	1	3	0	18	44	1	0
#######	41	3	10	0	3	53	46	0	1	0	1	0	24	39	0	0
#######	45	1	26	0	2	57	58	0	0	0	1	0	13	44	0	0
#######	55	0	30	0	0	62	54	0	0	1	3	0	10	53	1	0
#######	58	1	34	0	3	57	57	0	0	0	1	0	8	37	1	0
#######	79	2	20	0	1	52	75	0	0	0	2	0	11	65	2	0
#######	60	0	6	0	2	52	65	0	0	2	1	0	16	51	0	0
#######	74	0	23	0	2	63	74	0	0	0	1	0	13	56	0	0
#######	72	0	21	0	1	67	76	0	0	0	2	0	9	51	0	0
#######	76	0	13	0	3	62	93	0	0	0	0	0	11	44	0	0
#######	72	1	11	0	0	61	96	0	2	2	1	0	12	57	1	0
#######	47	1	17	0	3	67	68	0	0	0	1	0	14	53	0	0
#######	50	3	16	0	1	81	94	0	0	0	1	0	16	48	0	0
#######	62	3	25	0	4	69	74	0	0	0	1	0	18	51	0	0
#######	54	2	10	0	3	75	53	0	0	0	1	0	17	60	0	0
#######	48	0	8	0	2	53	57	0	0	1	3	0	13	48	1	0
#######	45	0	12	0	1	66	49	0	0	0	0	0	4	36	0	0

File Name: J:\! DATA FILES\18-18-11\CONWAY RD AT PATUXENT RD-MEYERS STATION RD_WEEKDAY.ppd
Start Date: 9/23/2021
Start Time: 6:00:00 AM
Site Code: 00000000
Comment 1: Weather: AM-RAIN/PM CLEAR
Comment 2: Counted By: DON, GARY
Comment 3: Town:
Comment 4: Country: ANNE ARUNDEL

	PATUXENT RD From North				CONWAY RD From East				MEYERS STATION RD From South				CONWAY RD From West			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
#######	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
#######	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
#######	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
#######	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
#######	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

File Name: J:\! DATA FILES\18-18-11\CONWAY RD AT PATUXENT RD-MEYERS STATION RD_WEEKDAY.ppd
Start Date: 9/23/2021
Start Time: 6:00:00 AM
Site Code: 00000000
Comment 1: Weather: AM-RAIN/PM CLEAR
Comment 2: Counted By: DON, GARY
Comment 3: Town:
Comment 4: Country: ANNE ARUNDEL

	PATUXENT RD From North				CONWAY RD From East				MEYERS STATION RD From South				CONWAY RD From West			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
#######	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Study Name 18-18.11-PROFESSIONAL DR
Start Date 09/25/2021
Start Time 11:00 AM
Site Code PROFESSIONAL DR

	PROFESSIONAL DR Southbound				CONWAY RD Westbound				DRIVEWAY Northbound				CONWAY RD Eastbound			
Start Time	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn
11:00 AM	0	0	0	0	0	108	0	0	1	0	0	0	0	129	0	0
11:15 AM	0	0	0	0	0	114	0	0	0	0	0	0	0	116	0	0
11:30 AM	0	0	0	0	0	108	0	0	0	0	1	0	0	119	0	0
11:45 AM	0	0	0	0	0	96	1	0	0	0	0	0	0	132	0	0
12:00 PM	0	0	0	0	0	111	0	0	0	0	0	0	0	110	0	0
12:15 PM	0	0	0	0	0	106	0	0	0	0	0	0	0	121	0	1
12:30 PM	0	0	0	0	0	112	0	0	0	0	0	0	0	117	0	0
12:45 PM	0	0	0	0	0	124	0	0	0	0	0	0	0	121	0	0
1:00 PM	0	0	1	0	1	116	1	0	0	0	0	0	0	121	0	0
1:15 PM	0	0	0	0	0	116	1	0	0	0	0	0	0	134	0	0
1:30 PM	0	0	0	0	0	106	0	0	1	0	0	0	0	129	0	0
1:45 PM	0	0	0	0	0	102	1	0	0	0	0	0	0	114	0	0
2:00 PM	0	0	0	0	0	103	0	0	0	0	0	0	0	101	0	0
2:15 PM	0	0	0	0	0	133	0	0	0	0	0	0	0	100	0	0
2:30 PM	0	0	0	0	0	92	1	0	0	0	0	0	0	110	0	0
2:45 PM	0	0	0	0	0	112	1	0	1	0	0	0	0	84	0	0

Study Name 18-18.11-PROFESSIONAL DR
Start Date 09/25/2021
Start Time 11:00 AM
Site Code PROFESSIONAL DR

	PROFESSIONAL DR Southbound		CONWAY RD Westbound		DRIVEWAY Northbound		CONWAY RD Eastbound	
Start Time	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW
11:00 AM	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0

Study Name 18-18.11-PROFESSIONAL DR
Start Date 09/25/2021
Start Time 11:00 AM
Site Code PROFESSIONAL DR

	PROFESSIONAL DR Southbound		CONWAY RD Westbound		DRIVEWAY Northbound		CONWAY RD Eastbound	
Start Time	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW
11:00 AM	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0

Study Name 18-18.11-PROFESSIONAL DR
Start Date 09/23/2021
Start Time 6:00 AM
Site Code PROFESSIONAL DR W

	PROFESSIONAL DR Southbound				CONWAY RD Westbound				DRIVEWAY Northbound				CONWAY RD Eastbound			
Start Time	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn
6:00 AM	0	0	0	0	0	17	0	0	0	0	0	0	0	50	0	0
6:15 AM	0	0	0	0	0	22	0	0	0	0	0	0	0	66	0	0
6:30 AM	0	0	0	0	0	38	0	0	0	0	0	0	0	72	0	0
6:45 AM	0	0	0	0	0	53	0	0	0	0	0	0	0	102	0	0
7:00 AM	0	0	0	0	0	40	0	0	0	0	0	0	0	119	0	0
7:15 AM	0	0	0	0	0	40	0	0	0	0	0	0	0	114	0	0
7:30 AM	0	0	0	0	0	44	0	0	0	0	0	0	0	85	0	0
7:45 AM	0	0	0	0	0	53	0	0	0	0	0	0	0	122	0	0
8:00 AM	0	0	0	0	0	59	0	0	0	0	0	0	0	109	0	0
8:15 AM	0	0	0	0	0	63	0	0	1	0	0	0	0	94	0	0
8:30 AM	0	0	0	0	0	83	0	0	0	0	0	0	0	127	0	0
8:45 AM	0	0	0	0	0	65	0	0	0	0	0	0	0	88	0	0
9:00 AM	0	0	0	0	0	79	0	0	0	0	0	0	0	105	0	0
9:15 AM	0	0	0	0	0	55	0	0	0	0	0	0	0	73	0	0
9:30 AM	0	0	0	0	0	58	0	0	0	0	0	0	0	72	0	0
9:45 AM	0	0	0	0	0	66	0	0	0	0	1	0	0	86	0	0
10:00 AM	0	0	0	0	0	56	0	0	0	0	0	0	0	60	0	0
10:15 AM	0	0	0	0	0	68	0	0	0	0	0	0	0	77	0	0
10:30 AM	0	0	0	0	0	61	0	0	0	0	0	0	1	71	0	0
10:45 AM	0	0	0	0	0	58	1	0	0	0	0	0	0	79	0	0
11:00 AM	0	0	0	0	0	61	0	0	0	0	0	0	0	70	0	0
11:15 AM	0	0	0	0	0	65	1	0	0	0	0	0	0	97	0	0
11:30 AM	0	0	0	0	0	64	0	0	1	0	0	0	0	81	0	0
11:45 AM	0	0	0	0	0	64	0	0	0	0	0	0	0	82	0	0
12:00 PM	0	0	0	0	0	83	0	0	0	0	0	0	0	108	0	0
12:15 PM	0	0	0	0	0	74	1	0	0	0	0	0	0	98	0	0
12:30 PM	0	0	0	0	0	83	0	0	0	0	0	0	0	94	0	0
12:45 PM	0	0	0	0	0	86	0	0	0	0	0	0	0	95	0	0
1:00 PM	0	0	0	0	0	84	0	0	0	0	0	0	0	76	0	0
1:15 PM	0	0	0	0	0	81	0	0	0	0	0	0	0	71	0	0
1:30 PM	0	0	0	0	0	75	0	0	0	0	0	0	0	98	0	0
1:45 PM	0	0	0	0	0	92	0	0	0	0	0	0	0	91	0	0
2:00 PM	0	0	0	0	0	91	0	0	0	0	0	0	0	86	0	0
2:15 PM	0	0	0	0	0	84	0	0	0	0	0	0	0	100	0	0
2:30 PM	0	0	0	0	0	89	0	0	0	0	0	0	0	77	0	0
2:45 PM	0	0	0	0	0	80	0	0	0	0	1	0	0	109	0	0
3:00 PM	0	1	0	0	0	104	0	0	0	0	0	0	0	78	0	0
3:15 PM	0	0	0	0	0	123	0	0	0	0	0	0	0	96	0	0
3:30 PM	0	0	0	0	0	114	0	0	1	0	0	0	0	97	0	0
3:45 PM	0	0	1	0	0	123	0	0	0	0	0	0	0	107	1	0
4:00 PM	0	0	0	0	0	134	1	0	0	0	0	0	0	143	0	0
4:15 PM	0	0	0	0	0	117	0	0	1	0	0	0	0	112	0	0
4:30 PM	0	0	0	0	0	151	0	0	2	0	0	0	0	133	0	0
4:45 PM	0	0	0	0	0	142	0	0	0	0	0	0	1	134	0	0
5:00 PM	0	0	0	0	0	171	1	0	0	0	0	0	0	124	0	0
5:15 PM	1	0	0	0	1	163	0	0	1	0	0	0	0	173	0	0
5:30 PM	0	0	0	0	0	141	0	0	0	0	0	0	0	101	0	1
5:45 PM	0	0	0	0	0	191	0	0	1	0	0	0	0	114	0	0
6:00 PM	0	0	0	0	0	163	0	0	1	0	0	0	0	111	0	0
6:15 PM	0	0	0	0	0	142	1	0	1	0	0	0	0	122	0	0
6:30 PM	0	0	0	0	0	126	0	0	0	0	0	0	0	96	0	0
6:45 PM	0	0	0	0	0	131	0	0	0	0	0	0	0	80	0	0

Study Name 18-18.11-PROFESSIONAL DR
Start Date 09/23/2021
Start Time 6:00 AM
Site Code PROFESSIONAL DR W

	PROFESSIONAL DR Southbound		CONWAY RD Westbound		DRIVEWAY Northbound		CONWAY RD Eastbound	
Start Time	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW
6:00 AM	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0

Study Name 18-18.11-PROFESSIONAL DR
Start Date 09/23/2021
Start Time 6:00 AM
Site Code PROFESSIONAL DR W

	PROFESSIONAL DR Southbound		CONWAY RD Westbound		DRIVEWAY Northbound		CONWAY RD Eastbound	
Start Time	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW
6:00 AM	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0
1:15 PM	1	1	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0

Study Name 18-18.11-2 RIVERS BLVD
Start Date 09/25/2021
Start Time 11:00 AM
Site Code 2 RIVERS BLVD

	PATUXENT RIDGE RD Southbound				CONWAY RD Westbound				TWO RIVERS BLVD Northbound				CONWAY RD Eastbound			
Start Time	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn
11:00 AM	0	0	7	0	4	8	52	0	66	0	2	0	14	23	0	0
11:15 AM	0	2	7	0	5	20	56	0	66	0	3	0	1	14	0	0
11:30 AM	0	0	4	0	6	8	59	0	44	0	2	0	3	17	0	0
11:45 AM	0	0	5	0	6	14	50	0	63	0	1	0	2	14	0	0
12:00 PM	0	0	3	0	5	21	62	0	62	0	1	0	3	7	0	0
12:15 PM	0	0	6	0	2	13	59	0	55	1	5	0	5	12	0	0
12:30 PM	0	0	5	0	11	15	59	0	63	0	0	0	4	16	0	0
12:45 PM	0	0	2	0	6	14	59	0	63	1	3	0	2	16	1	0
1:00 PM	0	0	3	0	9	16	64	0	63	0	3	0	3	19	0	0
1:15 PM	0	1	6	0	3	20	55	0	61	3	1	0	2	21	0	0
1:30 PM	0	0	3	0	5	10	54	0	55	1	4	0	1	13	0	0
1:45 PM	0	0	5	0	5	20	52	0	47	0	3	0	5	9	0	0
2:00 PM	0	0	4	0	4	15	53	0	49	0	1	1	2	16	0	0
2:15 PM	1	0	7	0	2	25	54	0	40	0	2	0	3	24	0	0
2:30 PM	0	0	4	0	2	11	58	0	52	1	1	0	3	10	0	0
2:45 PM	1	0	5	0	4	6	53	0	38	1	0	0	1	11	0	0

Study Name 18-18.11-2 RIVERS BLVD
Start Date 09/25/2021
Start Time 11:00 AM
Site Code 2 RIVERS BLVD

	PATUXENT RIDGE RD Southbound		CONWAY RD Westbound		TWO RIVERS BLVD Northbound		CONWAY RD Eastbound	
Start Time	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW
11:00 AM	3	0	0	0	0	0	1	0
11:15 AM	5	1	0	0	0	0	2	1
11:30 AM	1	2	0	0	0	0	0	2
11:45 AM	2	5	0	0	0	0	0	2
12:00 PM	0	2	0	0	0	0	0	0
12:15 PM	1	1	0	0	0	0	1	1
12:30 PM	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0
1:15 PM	1	0	0	0	0	0	1	1
1:30 PM	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0
2:15 PM	2	1	0	0	0	0	1	0
2:30 PM	1	0	0	0	0	0	0	0
2:45 PM	1	1	0	0	0	0	0	0

Study Name 18-18.11-2 RIVERS BLVD
Start Date 09/25/2021
Start Time 11:00 AM
Site Code 2 RIVERS BLVD

	PATUXENT RIDGE RD Southbound		CONWAY RD Westbound		TWO RIVERS BLVD Northbound		CONWAY RD Eastbound	
Start Time	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW
11:00 AM	1	1	0	0	0	0	0	0
11:15 AM	4	2	0	0	0	0	2	1
11:30 AM	3	3	0	0	0	0	5	3
11:45 AM	2	2	0	0	0	0	2	1
12:00 PM	1	0	0	0	0	0	0	0
12:15 PM	5	3	0	0	0	0	5	0
12:30 PM	1	1	0	0	0	0	1	2
12:45 PM	2	0	0	0	0	0	2	1
1:00 PM	0	2	0	0	0	0	0	2
1:15 PM	1	2	0	0	0	0	1	1
1:30 PM	0	1	0	0	0	0	0	0
1:45 PM	2	0	0	0	0	0	1	0
2:00 PM	1	0	0	0	0	0	2	3
2:15 PM	1	2	0	0	0	0	2	1
2:30 PM	0	0	0	0	0	0	0	1
2:45 PM	1	1	0	0	0	0	2	0

Study Name 18-18.11-2 RIVER
Start Date 09/23/2021
Start Time 6:00 AM
Site Code 2 RIVER W

	PATUXENT RIDGE RD Southbound				CONWAY RD Westbound				TWO RIVERS BLVD Northbound				CONWAY RD Eastbound			
Start Time	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn
6:00 AM	0	0	1	0	2	3	4	0	21	1	0	0	0	8	0	0
6:15 AM	0	0	2	0	0	6	6	0	31	0	0	0	0	8	0	0
6:30 AM	0	0	4	0	2	2	15	0	28	0	2	0	2	11	0	0
6:45 AM	0	0	2	0	3	7	30	0	53	0	0	0	0	16	0	0
7:00 AM	0	1	2	0	2	5	23	0	61	0	0	0	1	17	0	0
7:15 AM	0	0	1	0	1	5	32	0	55	0	0	0	0	18	0	0
7:30 AM	0	1	6	0	0	5	21	0	55	1	0	0	0	22	0	0
7:45 AM	0	0	5	0	0	7	29	0	52	0	1	0	0	17	0	0
8:00 AM	0	0	2	0	1	16	35	0	59	1	0	0	0	21	0	0
8:15 AM	0	0	2	0	0	11	33	0	56	0	0	0	1	10	0	0
8:30 AM	0	1	9	0	1	13	44	0	82	0	0	0	0	22	0	0
8:45 AM	0	0	11	0	1	9	42	0	58	0	0	0	1	8	0	0
9:00 AM	0	0	4	0	2	15	69	0	48	0	0	0	1	9	0	0
9:15 AM	0	0	3	0	2	7	46	0	29	0	0	1	0	5	0	0
9:30 AM	0	1	2	0	4	4	40	0	41	0	0	0	1	8	0	0
9:45 AM	0	1	3	0	2	7	48	0	35	0	1	0	1	14	0	0
10:00 AM	1	1	4	0	5	19	28	1	40	0	1	0	0	7	0	0
10:15 AM	0	0	3	0	0	6	38	0	38	1	1	0	0	7	0	0
10:30 AM	1	0	6	0	3	7	26	0	39	1	2	0	2	12	0	0
10:45 AM	0	0	3	0	1	8	37	0	47	0	2	0	0	10	0	0
11:00 AM	0	0	5	0	4	9	40	0	47	1	1	0	1	11	0	0
11:15 AM	0	0	5	0	2	10	36	0	47	0	0	0	1	7	0	0
11:30 AM	0	1	4	0	5	9	28	0	51	0	1	0	0	17	0	0
11:45 AM	0	0	2	0	5	8	43	0	52	1	1	1	2	11	0	0
12:00 PM	0	0	7	0	6	13	47	0	60	0	1	0	0	13	0	0
12:15 PM	0	0	7	0	6	12	40	0	48	0	0	0	4	17	0	0
12:30 PM	0	1	4	0	2	12	38	0	50	1	0	0	2	11	0	0
12:45 PM	0	2	6	0	5	7	47	0	53	0	0	0	1	10	0	0
1:00 PM	0	0	4	0	8	17	46	0	47	0	1	0	0	9	0	0
1:15 PM	1	0	2	0	2	13	43	0	39	1	1	0	1	10	0	0
1:30 PM	0	0	2	0	5	9	41	0	55	1	1	0	0	17	0	0
1:45 PM	1	0	4	0	4	14	49	0	42	0	1	0	3	10	0	0
2:00 PM	0	1	9	0	8	9	42	0	51	1	1	0	2	16	0	0
2:15 PM	0	0	2	0	5	13	54	0	58	0	0	0	0	12	0	0
2:30 PM	0	0	2	0	5	10	41	0	48	0	0	1	1	10	0	0
2:45 PM	0	1	3	0	8	6	56	0	41	0	2	0	2	17	0	0
3:00 PM	0	2	5	0	6	5	52	0	38	0	4	0	1	15	0	0
3:15 PM	0	1	4	0	3	17	56	0	48	1	4	0	1	9	0	0
3:30 PM	0	0	2	0	6	20	69	0	40	0	4	0	0	11	0	0
3:45 PM	0	0	0	0	4	21	65	0	42	0	0	0	1	7	0	0
4:00 PM	0	2	4	0	7	17	49	0	58	0	1	0	0	21	0	0
4:15 PM	0	1	6	0	3	19	47	0	42	0	2	0	3	18	0	0
4:30 PM	0	1	6	0	6	12	66	0	48	1	2	0	1	17	0	0
4:45 PM	1	0	1	0	6	21	58	0	45	2	0	0	1	20	0	0
5:00 PM	0	2	0	0	4	15	66	0	50	0	1	0	1	10	0	0
5:15 PM	0	0	2	0	7	18	72	0	59	0	1	0	1	11	0	0
5:30 PM	0	0	2	0	6	22	57	0	52	1	4	0	1	14	0	0
5:45 PM	0	8	3	0	3	28	82	0	50	0	1	0	1	19	0	0
6:00 PM	0	1	3	0	9	21	61	0	51	0	0	0	1	8	0	0
6:15 PM	0	1	2	0	6	21	61	0	55	1	1	0	3	20	0	0
6:30 PM	0	1	6	0	3	8	48	1	43	0	3	0	2	12	0	0
6:45 PM	0	1	4	0	3	17	60	0	32	0	1	0	0	3	0	0

Study Name 18-18.11-2 RIVER
Start Date 09/23/2021
Start Time 6:00 AM
Site Code 2 RIVER W

	PATUXENT RIDGE RD Southbound		CONWAY RD Westbound		TWO RIVERS BLVD Northbound		CONWAY RD Eastbound	
Start Time	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW
6:00 AM	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0
11:15 AM	0	1	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0
12:15 PM	0	1	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0
1:30 PM	1	0	0	0	0	0	1	0
1:45 PM	1	1	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0
3:15 PM	1	0	0	0	0	0	0	0
3:30 PM	1	0	0	0	0	0	0	0
3:45 PM	3	1	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	1	1	0	0	0	0	0	0
4:30 PM	3	2	0	0	0	0	0	0
4:45 PM	1	2	0	0	0	0	1	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	2	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	1	0
6:15 PM	2	0	0	0	0	0	0	1
6:30 PM	1	1	0	0	0	0	0	0
6:45 PM	0	1	0	0	0	0	0	0

Study Name 18-18.11-2 RIVER
Start Date 09/23/2021
Start Time 6:00 AM
Site Code 2 RIVER W

	PATUXENT RIDGE RD Southbound		CONWAY RD Westbound		TWO RIVERS BLVD Northbound		CONWAY RD Eastbound	
Start Time	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW
6:00 AM	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0
9:15 AM	0	1	0	0	0	0	0	0
9:30 AM	1	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	2
11:00 AM	0	0	0	0	0	0	0	0
11:15 AM	0	1	0	0	0	0	3	0
11:30 AM	0	1	0	0	0	0	0	3
11:45 AM	1	1	0	0	0	0	2	0
12:00 PM	1	0	0	0	0	0	0	0
12:15 PM	1	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	2	0
12:45 PM	0	1	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	1	1
1:30 PM	1	1	0	0	0	0	3	2
1:45 PM	0	0	2	0	2	0	2	2
2:00 PM	1	0	0	0	0	0	1	0
2:15 PM	0	0	0	0	0	0	1	0
2:30 PM	1	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	1	0
3:00 PM	0	1	0	0	0	0	0	0
3:15 PM	1	2	0	0	0	0	1	2
3:30 PM	0	0	0	0	0	0	1	2
3:45 PM	1	0	0	0	0	0	1	4
4:00 PM	2	1	0	0	0	0	3	2
4:15 PM	1	4	0	0	0	0	1	5
4:30 PM	0	1	0	0	0	0	2	2
4:45 PM	3	0	0	0	0	0	4	3
5:00 PM	3	4	0	0	0	0	4	3
5:15 PM	1	1	0	0	0	0	2	1
5:30 PM	1	0	0	0	0	0	4	1
5:45 PM	4	1	0	0	0	0	3	1
6:00 PM	0	0	0	0	0	0	1	1
6:15 PM	1	1	0	0	0	0	1	2
6:30 PM	0	1	0	0	0	0	0	0
6:45 PM	1	2	0	0	0	0	0	3

Study Name 18-18.11-UPPER PATUXENT
Start Date 09/25/2021
Start Time 11:00 AM
Site Code UPPER PATUXENT

	UPPER PATUXENT RIDGE RD Southbound			CONWAY RD Westbound			CONWAY RD Eastbound		
Start Time	Right	Left	U-Turn	Right	Thru	U-Turn	Thru	Left	U-Turn
11:00 AM	0	29	0	11	2	0	5	0	0
11:15 AM	0	14	0	21	3	0	0	0	0
11:30 AM	1	16	0	11	1	0	1	0	0
11:45 AM	0	11	0	11	3	0	3	0	0
12:00 PM	1	8	0	15	3	0	3	0	0
12:15 PM	0	15	0	19	1	0	2	0	0
12:30 PM	0	13	0	12	0	1	3	0	0
12:45 PM	1	12	0	11	3	0	3	0	0
1:00 PM	0	16	0	13	2	0	7	0	0
1:15 PM	1	14	0	16	1	0	2	1	0
1:30 PM	1	8	0	13	3	0	4	0	0
1:45 PM	0	15	0	18	2	0	2	1	0
2:00 PM	0	15	0	9	6	0	3	0	0
2:15 PM	0	16	0	21	5	0	6	0	0
2:30 PM	0	10	0	9	3	0	1	0	0
2:45 PM	0	14	0	8	2	0	2	1	0

Study Name 18-18.11-UPPER PATUXENT
Start Date 09/25/2021
Start Time 11:00 AM
Site Code UPPER PATUXENT

	ER PATUXENT RIDG Southbound		CONWAY RD Westbound		CONWAY RD Eastbound	
Start Time	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW
11:00 AM	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0

Study Name 18-18.11-UPPER PATUXENT
Start Date 09/25/2021
Start Time 11:00 AM
Site Code UPPER PATUXENT

	ER PATUXENT RIDG Southbound		CONWAY RD Westbound		CONWAY RD Eastbound	
Start Time	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW
11:00 AM	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0
12:45 PM	1	0	0	0	0	0
1:00 PM	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0

Study Name 18-18.11-UPPER
Start Date 09/23/2021
Start Time 6:00 AM
Site Code UPPER W

	UPPER PATUXENT RIDGE RD Southbound			CONWAY RD Westbound			CONWAY RD Eastbound		
Start Time	Right	Left	U-Turn	Right	Thru	U-Turn	Thru	Left	U-Turn
6:00 AM	0	7	0	2	1	0	1	0	0
6:15 AM	0	4	0	3	1	0	3	0	0
6:30 AM	0	11	2	3	0	0	2	1	0
6:45 AM	0	15	0	3	0	0	2	0	0
7:00 AM	1	10	0	3	0	0	5	0	0
7:15 AM	3	13	0	4	0	0	3	1	0
7:30 AM	0	16	3	3	1	0	3	0	0
7:45 AM	0	16	0	8	2	0	2	0	0
8:00 AM	0	15	0	16	1	0	3	0	0
8:15 AM	2	12	4	9	1	0	1	1	0
8:30 AM	0	18	6	8	0	0	2	0	0
8:45 AM	0	7	0	6	2	0	2	0	0
9:00 AM	0	8	0	13	1	0	0	0	0
9:15 AM	0	6	0	6	0	0	2	0	0
9:30 AM	0	7	0	3	0	0	1	0	0
9:45 AM	0	10	0	8	2	0	3	0	0
10:00 AM	0	1	1	15	3	0	3	0	0
10:15 AM	0	9	1	5	0	0	1	0	0
10:30 AM	0	13	0	7	4	0	2	0	0
10:45 AM	0	6	0	9	2	0	3	0	0
11:00 AM	0	12	0	6	0	0	1	0	0
11:15 AM	0	4	0	10	3	0	2	0	0
11:30 AM	0	13	0	9	2	0	3	0	0
11:45 AM	0	10	0	7	1	0	1	0	0
12:00 PM	0	10	0	10	2	0	2	1	0
12:15 PM	1	19	0	5	3	0	3	0	0
12:30 PM	0	10	0	9	1	0	2	0	0
12:45 PM	0	6	0	6	2	0	2	0	0
1:00 PM	0	6	0	13	3	0	1	0	0
1:15 PM	0	11	0	9	4	0	2	0	0
1:30 PM	1	9	0	7	1	0	5	0	0
1:45 PM	0	9	0	12	2	0	4	0	0
2:00 PM	1	7	0	7	2	0	4	0	0
2:15 PM	0	5	0	10	2	0	2	0	0
2:30 PM	0	10	0	7	2	0	0	0	0
2:45 PM	1	15	0	6	1	0	3	0	0
3:00 PM	0	12	0	6	1	0	2	0	0
3:15 PM	0	9	2	17	4	0	1	0	0
3:30 PM	0	5	1	15	9	0	3	0	0
3:45 PM	0	5	3	15	4	0	2	0	0
4:00 PM	1	17	2	13	3	0	4	0	0
4:15 PM	0	13	0	19	4	0	4	1	0
4:30 PM	2	14	0	12	2	0	1	0	0
4:45 PM	0	15	0	18	2	0	4	0	0
5:00 PM	0	12	0	13	3	0	1	0	0
5:15 PM	0	8	0	17	1	0	1	0	0
5:30 PM	1	11	0	21	3	0	4	1	0
5:45 PM	0	14	0	21	3	0	4	0	0
6:00 PM	0	4	0	15	4	0	4	0	0
6:15 PM	0	17	0	20	5	0	4	0	0
6:30 PM	0	11	0	9	3	0	1	0	0
6:45 PM	0	5	0	13	4	0	2	0	0

Study Name 18-18.11-UPPER
Start Date 09/23/2021
Start Time 6:00 AM
Site Code UPPER W

	ER PATUXENT RIDG Southbound		CONWAY RD Westbound		CONWAY RD Eastbound	
Start Time	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW
6:00 AM	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0
3:45 PM	2	0	0	0	0	0
4:00 PM	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0

Study Name 18-18.11-UPPER
Start Date 09/23/2021
Start Time 6:00 AM
Site Code UPPER W

	ER PATUXENT RIDG Southbound		CONWAY RD Westbound		CONWAY RD Eastbound	
Start Time	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW
6:00 AM	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0
10:30 AM	1	0	0	0	0	0
10:45 AM	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0
1:30 PM	1	0	0	0	0	0
1:45 PM	0	2	0	0	2	2
2:00 PM	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0
3:15 PM	0	1	0	0	0	0
3:30 PM	0	0	0	0	0	0
3:45 PM	2	19	0	0	0	0
4:00 PM	0	3	0	0	0	0
4:15 PM	0	0	0	0	0	0
4:30 PM	3	0	0	0	0	0
4:45 PM	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0

Appendix F:
Speed Data

Sabra & Associates, Inc.
7055 Samuel Morse Drive Suite 100
Columbia, MD 21046
1 443 741 3500

ANNE ARUNDEL

Site Code:

Station ID: CONWAY RD. W. OF UPPER PATU

EB

	31	36	41	46	51	56	61	66	71	76	81		
	30	35	40	45	50	55	60	65	70	75	80	9999	Total
09/26/21	2	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	0	0	1	0	0	0	0	0	0	0	0	1
02:00	3	0	0	0	0	0	0	0	0	0	0	0	3
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	1	0	0	0	0	0	0	0	0	0	0	0	1
07:00	4	0	0	0	0	0	0	0	0	0	0	0	4
08:00	1	4	0	0	0	0	0	0	0	0	0	0	5
09:00	3	5	2	0	0	0	0	0	0	0	0	0	10
10:00	9	5	0	0	0	0	0	0	0	0	0	0	14
11:00	4	4	4	0	0	0	0	0	0	0	0	0	12
12 PM	11	4	0	0	0	0	0	0	0	0	0	0	15
13:00	6	5	1	0	0	0	0	0	0	0	0	0	12
14:00	5	2	0	0	1	0	0	0	0	0	0	0	8
15:00	6	2	4	0	0	0	0	0	0	0	0	0	12
16:00	6	5	6	0	0	0	0	0	0	0	0	0	17
17:00	4	0	1	0	0	0	0	0	0	0	0	0	5
18:00	9	3	1	1	0	0	0	0	0	0	0	0	14
19:00	3	0	0	0	0	0	0	0	0	0	0	0	3
20:00	8	0	0	0	0	0	0	0	0	0	0	0	8
21:00	3	0	0	0	0	0	0	0	0	0	0	0	3
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	89	39	19	2	1	0	0	0	0	0	0	0	150
Grand Tota	700	283	115	21	3	1	0	0	0	0	0	0	1123
	62.33%	87.53%	97.77%	99.64%	99.91%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
% of vehicles over spe	37.67%												

Sabra & Associates, Inc.
7055 Samuel Morse Drive Suite 100
Columbia, MD 21046
1 443 741 3500

ANNE ARUNDEL

Site Code:

Station ID:

CONWAY RD. W. OF UPPER PA

WB

	30	35	40	45	50	55	60	65	70	75	80	9999	Total
09/26/21	4	1	0	0	0	0	0	0	0	0	0	0	5
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	1	1	0	0	0	0	0	0	0	0	0	0	2
07:00	1	1	0	0	0	0	0	0	0	0	0	0	2
08:00	1	1	0	1	0	0	0	0	0	0	0	0	3
09:00	1	4	2	0	0	0	0	0	0	0	0	0	7
10:00	2	4	2	1	0	0	0	0	0	0	0	0	9
11:00	4	2	4	1	0	0	0	0	0	0	0	0	11
12 PM	9	1	1	0	0	0	0	0	0	0	0	0	11
13:00	15	2	2	0	0	0	0	0	0	0	0	0	19
14:00	10	3	0	0	0	0	0	0	0	0	0	0	13
15:00	10	3	0	0	0	0	0	0	0	0	0	0	13
16:00	6	1	1	0	0	0	0	0	0	0	0	0	8
17:00	8	3	2	0	0	0	0	0	0	0	0	0	13
18:00	4	2	1	0	0	0	0	0	0	0	0	0	7
19:00	6	2	3	2	0	0	0	0	0	0	0	0	13
20:00	2	0	0	0	0	0	0	0	0	0	0	0	2
21:00	3	0	0	0	0	0	0	0	0	0	0	0	3
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	88	31	18	5	0	0	0	0	0	0	0	0	142
Grand Tota	654	299	141	26	7	1	0	0	0	0	0	0	1128
	57.98%	84.49%	96.99%	99.29%	99.91%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
% of vehicles over spee		42.02%											

Sabra & Associates, Inc.
7055 Samuel Morse Drive Suite 100
Columbia, MD 21046
1 443 741 3500

ANNE ARUNDEL

Site Code:

Station ID: CONWAY RD. W. OF TWIN RIVE

EB

	30	31	36	41	46	51	56	61	66	71	76	81	
	30	35	40	45	50	55	60	65	70	75	80	9999	Total
09/26/21	1	2	3	0	0	0	0	0	0	0	0	0	6
01:00	0	0	0	0	0	1	0	0	0	0	0	0	1
02:00	0	2	0	1	0	0	0	0	0	0	0	0	3
03:00	0	0	1	1	0	0	0	0	0	0	0	0	2
04:00	0	0	0	0	1	0	0	0	0	0	0	0	1
05:00	0	1	2	0	0	0	0	0	0	0	0	0	3
06:00	0	3	2	1	0	0	0	0	0	0	0	0	6
07:00	1	5	7	3	1	0	0	0	0	0	0	0	17
08:00	1	4	15	8	6	1	0	0	0	0	0	0	35
09:00	3	13	21	10	5	0	1	0	0	0	0	0	53
10:00	4	15	24	13	1	1	0	0	0	0	0	0	58
11:00	5	14	22	18	3	1	0	0	0	0	0	0	63
12 PM	11	14	18	8	4	0	0	0	0	0	0	0	55
13:00	3	15	11	10	8	1	0	0	0	0	0	0	48
14:00	3	13	12	9	3	0	0	0	0	1	0	0	41
15:00	14	13	22	7	5	1	0	0	0	0	0	0	62
16:00	2	15	17	16	5	1	0	0	0	0	0	0	56
17:00	5	8	26	5	5	0	0	0	0	0	0	0	49
18:00	7	10	11	12	0	3	0	0	0	0	0	0	43
19:00	5	9	12	3	1	0	0	0	0	0	0	0	30
20:00	3	4	7	2	1	1	0	0	0	0	0	0	18
21:00	1	3	5	3	0	1	0	0	0	0	0	0	13
22:00	0	3	2	0	0	0	0	0	0	0	0	0	5
23:00	0	1	0	1	0	0	0	0	0	0	0	0	2
Total	69	167	240	131	49	12	1	0	0	1	0	0	670
Grand Tota	890	1618	2019	1112	332	79	19	2	2	1	1	0	6075
	14.65%	41.28%	74.52%	92.82%	98.29%	99.59%	99.90%	99.93%	99.97%	99.98%	100.00%	100.00%	
% of vehicles over spe		85.35%											

Sabra & Associates, Inc.
7055 Samuel Morse Drive Suite 100
Columbia, MD 21046
1 443 741 3500

ANNE ARUNDEL

Site Code:

Station ID: CONWAY RD. W. OF TWIN RIVERS BLVD.

WB

	30	35	40	45	50	55	60	65	70	75	80	9999	Total
09/26/21	0	3	5	2	0	0	0	0	0	0	0	0	10
01:00	1	2	0	1	0	0	0	0	0	0	0	0	4
02:00	0	1	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	1	1	0	0	0	0	0	0	0	0	2
05:00	0	0	0	0	0	1	0	0	0	0	0	0	1
06:00	0	2	3	0	0	0	0	0	0	0	0	0	5
07:00	1	2	4	1	1	0	0	0	0	0	0	0	9
08:00	0	3	5	4	1	0	0	0	0	0	0	0	13
09:00	3	7	6	11	0	0	0	0	0	0	0	0	27
10:00	4	8	15	6	2	1	0	0	0	0	0	0	36
11:00	1	13	32	10	4	1	0	0	0	0	0	0	61
12 PM	12	14	17	10	2	2	1	0	0	0	0	0	58
13:00	6	22	23	12	7	0	0	0	0	0	0	0	70
14:00	5	20	17	13	3	0	0	0	0	0	0	0	58
15:00	5	12	15	18	7	1	0	0	0	0	0	0	58
16:00	4	8	19	12	5	1	0	0	0	0	0	0	49
17:00	2	5	18	14	5	2	0	0	0	0	0	0	46
18:00	6	12	14	10	5	0	0	0	0	0	0	0	47
19:00	4	20	18	8	3	0	0	0	0	0	0	0	53
20:00	3	8	8	2	1	0	0	0	0	0	0	0	22
21:00	0	5	7	2	0	0	0	0	0	0	0	0	14
22:00	2	4	2	4	0	0	0	0	0	0	0	0	12
23:00	1	0	1	1	0	0	0	0	0	0	0	0	3
Total	60	171	230	142	46	9	1	0	0	0	0	0	659
Grand Tota	760	1578	2078	1134	360	59	18	6	2	1	0	0	5996
	12.68%	38.99%	73.65%	92.56%	98.57%	99.55%	99.85%	99.95%	99.98%	100.00%	100.00%	100.00%	

% of vehicles over spe 87.32%

Sabra & Associates, Inc.
7055 Samuel Morse Drive Suite 100
Columbia, MD 21046
1 443 741 3500

ANNE ARUNDEL
ODENTON

Site Code:
Station ID:
CONWAY RD. E. OF TWO RIVERS - PATUXENT R

EB

		31	36	41	46	51	56	61	66	71	76	81		
	30	35	40	45	50	55	60	65	70	75	80	9999	Total	
09/26/21	6	3	5	2	0	0	0	0	0	0	0	0	16	
01:00	2	0	3	0	0	0	1	0	0	0	0	0	6	
02:00	0	0	3	2	0	0	0	0	0	0	0	0	5	
03:00	1	1	2	0	0	1	0	0	0	0	0	0	5	
04:00	0	1	3	3	1	0	0	0	0	0	0	0	8	
05:00	2	7	4	2	1	1	0	0	0	0	0	0	17	
06:00	8	10	11	2	3	0	0	0	0	0	0	0	34	
07:00	26	31	29	16	2	0	0	0	0	0	0	0	104	
08:00	60	50	62	15	2	0	0	0	0	0	0	0	189	
09:00	78	54	91	29	3	3	0	0	0	0	0	0	258	
10:00	83	86	108	21	0	2	0	0	0	0	0	0	300	
11:00	61	106	109	22	4	0	0	0	0	0	0	0	302	
12 PM	68	94	106	26	2	0	0	0	0	0	0	0	296	
13:00	48	60	81	30	6	0	0	0	0	0	0	0	225	
14:00	34	58	73	33	3	0	0	0	0	0	0	0	201	
15:00	25	67	75	29	2	1	0	0	0	0	0	0	199	
16:00	15	88	79	12	2	0	0	0	0	0	0	0	196	
17:00	26	70	101	25	0	0	0	0	0	0	0	0	222	
18:00	44	51	45	16	4	0	0	0	0	0	0	0	160	
19:00	78	52	30	7	1	0	0	0	0	0	0	0	168	
20:00	56	23	24	11	1	1	0	0	0	0	0	0	116	
21:00	13	13	9	5	3	0	0	0	0	0	0	0	43	
22:00	5	6	6	2	0	0	0	0	0	0	0	0	19	
23:00	5	1	1	1	1	0	0	0	0	0	0	0	9	
Total	744	932	1060	311	41	9	1	0	0	0	0	0	3098	
Grand Tota	8783	9164	8015	2193	282	36	4	0	0	0	0	1	28477	
	30.84%	63.02%	91.17%	98.87%	99.86%	99.99%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%		
% of vehicles over spe		69.16%												

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1				Sabra & Associates, Inc.												Page 14
2				7055 Samuel Morse Drive Suite 100												
3				Columbia, MD 21046												
4	ANNE ARUNDEL			1 443 741 3500										Site Code:		
5	ODENTON													Station ID:		
6														CONWAY RD. E. OF TWO RIVERS - PATUXENT R		
7																
8																
9	WB															
10			31	36	41	46	51	56	61	66	71	76	81			
11		30	35	40	45	50	55	60	65	70	75	80	9999	Total		
12	09/26/21	2	15	19	2	1	0	0	0	0	0	0	0	39		
13	01:00	3	9	5	4	0	0	0	0	0	0	0	0	21		
14	02:00	1	1	3	0	1	0	0	0	0	0	0	0	6		
15	03:00	0	2	0	1	0	0	0	0	0	0	0	0	3		
16	04:00	0	1	3	4	0	0	1	0	0	0	0	0	9		
17	05:00	0	2	2	0	3	0	0	0	0	0	0	0	7		
18	06:00	2	8	9	1	0	0	0	0	0	0	0	0	20		
19	07:00	4	12	11	8	1	0	0	0	0	0	0	0	36		
20	08:00	11	23	28	12	0	0	0	0	0	0	0	0	74		
21	09:00	16	41	59	11	1	0	0	0	0	0	0	0	128		
22	10:00	25	57	82	22	0	0	0	0	0	0	0	0	186		
23	11:00	14	76	134	20	2	0	0	0	0	0	0	0	246		
24	12 PM	24	98	119	21	2	1	0	0	0	0	0	0	265		
25	13:00	27	84	118	29	3	2	0	0	0	0	0	0	263		
26	14:00	16	81	109	39	1	0	0	0	0	0	0	0	246		
27	15:00	32	79	116	32	6	0	0	0	0	0	0	0	265		
28	16:00	37	83	112	27	4	0	0	0	0	0	0	0	263		
29	17:00	26	93	114	26	4	1	0	0	0	0	0	0	264		
30	18:00	23	80	84	21	2	0	0	0	0	0	0	0	210		
31	19:00	37	84	65	13	3	0	0	0	0	0	0	0	202		
32	20:00	10	53	46	10	1	0	0	0	0	0	0	0	120		
33	21:00	6	31	18	8	0	0	0	0	0	0	0	0	63		
34	22:00	4	14	18	2	0	0	0	0	0	0	0	0	38		
35	23:00	0	7	6	2	1	0	0	0	0	0	0	0	16		
36	Total	320	1034	1280	315	36	4	1	0	0	0	0	0	2990		
38																
39	Grand Tota	4922	10305	9442	2132	245	24	4	0	1	0	0	0	27075		
40																
41		18.18%	56.24%	91.11%	98.99%	99.89%	99.98%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%			
42																
44	% of vehicles over spe		81.82%													

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1				Sabra & Associates, Inc.										Page 7		
2				7055 Samuel Morse Drive Suite 100												
3				Columbia, MD 21046												
4	ANNE ARUNDEL			1 443 741 3500										Site Code:		
5	ODENTON													Station ID:		
6														CONWAY RD. E. OF PATUXENT RD.		
7																
8																
9	EB															
10			31	36	41	46	51	56	61	66	71	76	81			
11		30	35	40	45	50	55	60	65	70	75	80	9999	Total		
12	09/26/21	2	1	12	9	3	0	0	0	0	0	0	0	27		
13	01:00	0	0	5	4	3	1	0	0	0	0	0	0	13		
14	02:00	0	0	1	4	1	1	1	1	0	0	0	0	9		
15	03:00	0	1	2	0	0	1	0	0	0	0	0	0	4		
16	04:00	0	1	4	5	3	0	0	0	0	0	0	0	13		
17	05:00	0	1	8	9	5	1	0	1	0	0	0	0	25		
18	06:00	1	3	17	17	7	2	0	0	0	0	0	0	47		
19	07:00	3	7	58	49	19	8	2	0	0	0	0	0	146		
20	08:00	6	16	92	112	17	3	3	0	0	0	0	0	249		
21	09:00	15	26	142	127	30	5	0	0	0	0	0	0	345		
22	10:00	41	34	193	132	32	6	1	0	0	0	0	0	439		
23	11:00	47	41	162	133	38	5	0	0	1	0	0	0	427		
24	12 PM	46	46	139	118	30	4	3	0	0	0	0	0	386		
25	13:00	23	25	103	132	37	8	0	0	0	0	0	0	328		
26	14:00	31	21	139	116	30	5	2	1	0	0	0	0	345		
27	15:00	23	25	112	132	44	7	1	0	0	0	0	0	344		
28	16:00	33	30	157	96	28	7	1	1	0	0	0	0	353		
29	17:00	32	24	115	121	22	6	1	0	0	0	0	1	321		
30	18:00	102	38	99	93	18	1	1	0	0	0	0	0	352		
31	19:00	23	32	96	53	17	1	0	0	0	0	0	0	222		
32	20:00	12	17	62	43	14	2	0	0	0	0	0	0	150		
33	21:00	1	14	24	24	7	1	2	0	0	0	0	0	73		
34	22:00	1	4	16	23	7	2	0	1	0	2	0	0	56		
35	23:00	3	2	4	6	7	4	0	0	0	0	0	0	26		
36	Total	445	409	1762	1558	419	81	18	5	1	2	0	1	4700		
38																
39	Grand Tota	7493	5127	15330	12042	3030	519	102	24	16	5	3	31	43691		
40																
41		17.15%	28.88%	63.97%	91.53%	98.47%	99.66%	99.89%	99.95%	99.98%	99.99%	100.00%	100.07%			
42																
44	% of vehicles over speed limit				36.10%											

Sabra & Associates, Inc.
7055 Samuel Morse Drive Suite 100
Columbia, MD 21046
1 443 741 3500

ANNE ARUNDEL
ODENTON

Site Code:
Station ID:
CONWAY RD. E. OF PATUXENT R

WB

	30	35	40	45	50	55	60	65	70	75	80	9999	Total
09/26/21	0	0	10	25	17	4	3	0	0	0	0	0	59
01:00	0	1	6	14	14	11	3	1	0	0	0	0	50
02:00	0	0	0	5	5	3	1	0	0	0	0	0	14
03:00	0	0	2	2	1	0	1	1	0	0	1	0	8
04:00	0	1	0	2	5	2	0	1	0	0	0	0	11
05:00	1	0	0	4	7	4	0	1	0	1	0	0	18
06:00	0	0	2	14	7	4	0	0	0	0	1	0	28
07:00	3	0	12	32	23	6	2	2	0	0	0	0	80
08:00	5	1	17	41	50	14	5	0	0	0	0	0	133
09:00	9	9	32	82	56	13	4	0	0	0	0	0	205
10:00	28	14	76	104	48	14	4	1	0	0	0	0	289
11:00	27	3	76	141	89	9	1	0	0	0	0	0	346
12 PM	32	18	98	157	76	13	7	0	0	0	0	0	401
13:00	29	19	112	147	58	9	2	0	0	0	0	0	376
14:00	30	9	83	158	80	20	5	0	0	0	0	1	385
15:00	26	10	106	169	73	13	2	0	0	0	0	0	399
16:00	17	12	75	151	98	15	3	1	0	0	0	0	372
17:00	35	16	81	125	84	8	4	0	0	0	0	0	353
18:00	58	16	80	101	37	5	2	0	0	0	0	0	299
19:00	13	16	99	108	46	18	4	1	0	0	0	0	305
20:00	8	7	45	80	63	9	1	2	0	0	0	0	215
21:00	1	3	19	43	40	15	4	0	0	0	0	0	125
22:00	0	2	5	17	25	8	3	1	0	0	0	0	61
23:00	0	1	0	9	15	4	2	2	0	1	0	0	34
Total	322	158	1036	1731	1017	221	63	14	0	2	2	1	4566
Grand Tota	5631	2547	9846	12280	5262	1126	249	54	14	8	4	7	37021
	15.21%	22.09%	48.69%	81.86%	96.07%	99.11%	99.78%	99.93%	99.97%	99.99%	100.00%	100.02%	

% of vehicles over speed limit 51.33%

Sabra & Associates, Inc.
7055 Samuel Morse Drive Suite 100
Columbia, MD 21046
1 443 741 3500

ANNE ARUNDEL
ODENTON

Site Code:
Station ID:
CONWAY RD. E. OF LITTLE PAT

EB

			31	36	41	46	51	56	61	66	71	76	81			
		30	35	40	45	50	55	60	65	70	75	80	9999	Total		
09/26/21	1	2	7	21	17	5	2	0	0	0	0	0	55			
01:00	0	1	12	11	15	4	4	2	1	0	0	0	50			
02:00	0	0	1	5	4	3	1	0	0	0	0	0	14			
03:00	0	0	3	1	1	1	0	0	2	0	0	0	8			
04:00	1	0	0	0	8	2	0	1	0	0	0	0	12			
05:00	0	0	1	3	9	2	1	2	0	0	0	0	18			
06:00	0	0	8	14	4	4	2	1	0	1	0	0	34			
07:00	0	1	6	23	26	11	5	3	1	1	0	0	77			
08:00	5	1	11	40	51	19	5	1	0	0	1	0	134			
09:00	18	3	22	69	72	24	7	3	0	0	0	0	218			
10:00	23	5	43	91	82	41	7	4	0	0	0	0	296			
11:00	16	4	49	133	127	32	12	0	0	0	0	0	373			
12 PM	18	3	34	182	133	41	5	1	1	0	0	0	418			
13:00	18	9	48	156	109	31	10	0	0	0	0	0	381			
14:00	16	7	59	137	128	43	6	1	0	0	0	0	397			
15:00	18	11	42	172	117	32	7	0	0	0	0	0	399			
16:00	15	5	30	144	139	37	3	1	1	0	0	0	375			
17:00	22	6	36	127	141	30	6	4	0	0	0	0	372			
18:00	19	5	37	132	104	34	10	1	2	0	0	0	344			
19:00	7	12	56	121	91	20	4	2	0	1	0	0	314			
20:00	5	11	34	76	58	24	5	1	0	0	0	0	214			
21:00	0	3	18	41	37	15	4	0	0	0	2	0	120			
22:00	0	2	12	19	13	10	2	2	0	0	0	0	60			
23:00	0	0	2	14	12	6	0	1	0	0	0	0	35			
Total	202	91	571	1732	1498	471	108	31	8	3	3	0	4718			
Grand Tota	2000	1229	6748	15360	10732	2976	596	145	42	14	4	0	39846			
	5.02%	8.10%	25.04%	63.59%	90.52%	97.99%	99.49%	99.85%	99.95%	99.99%	100.00%	100.00%				

% of vehicles over speed limit 74.96%

Sabra & Associates, Inc.
7055 Samuel Morse Drive Suite 100
Columbia, MD 21046
1 443 741 3500

ANNE ARUNDEL
ODENTON
WB

Site Code:
Station ID:
CONWAY RD. E. OF LITTLE PATU

			31	36	41	46	51	56	61	66	71	76	81			
		30	35	40	45	50	55	60	65	70	75	80	9999	Total		
09/26/21	0	1	2	12	8	3	1	0	0	0	0	0	27			
01:00	0	1	0	3	4	4	1	0	0	0	0	0	13			
02:00	0	0	0	2	1	3	0	1	2	0	0	0	9			
03:00	0	0	2	1	0	0	0	1	0	0	0	0	4			
04:00	0	0	1	3	9	6	1	0	0	0	0	0	20			
05:00	0	0	4	5	10	2	4	0	0	0	0	0	25			
06:00	2	1	3	12	14	7	4	0	1	0	0	0	44			
07:00	0	0	6	46	53	28	7	2	0	0	0	0	142			
08:00	2	0	8	55	127	43	6	1	0	0	0	0	242			
09:00	3	0	21	105	145	57	13	1	0	0	0	0	345			
10:00	8	2	46	152	132	42	8	1	0	0	0	0	391			
11:00	11	2	57	191	152	28	3	0	0	0	0	0	444			
12 PM	10	5	49	165	135	30	5	0	0	0	0	0	399			
13:00	10	3	24	99	145	44	6	1	0	0	1	0	333			
14:00	6	0	27	132	123	43	6	1	0	0	0	0	338			
15:00	9	8	32	105	132	38	11	0	1	0	0	0	336			
16:00	5	1	35	117	122	38	6	2	0	0	0	0	326			
17:00	10	3	21	141	125	24	1	0	1	0	0	0	326			
18:00	9	3	25	109	93	17	3	0	0	0	0	0	259			
19:00	11	11	42	103	53	10	1	0	0	0	0	0	231			
20:00	7	4	22	50	53	11	3	1	0	0	0	0	151			
21:00	1	1	9	30	17	13	2	1	0	0	0	0	74			
22:00	2	1	7	12	26	7	1	2	0	0	0	0	58			
23:00	1	2	0	6	5	5	5	2	0	0	0	0	26			
Total	107	49	443	1656	1684	503	98	17	5	0	1	0	4563			
Grand Tota	1312	934	5796	15296	12979	3590	604	121	23	10	3	0	40668			
	3.23%	5.52%	19.77%	57.39%	89.30%	98.13%	99.61%	99.91%	99.97%	99.99%	100.00%	100.00%				
% of vehicles over speed limit				80.23%												

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1				Sabra & Associates, Inc.												Page 7
2				7055 Samuel Morse Drive Suite 100												
3				Columbia, MD 21046												
4	ANNE ARUNDEL			1 443 741 3500										Site Code:		
5	ODENTON													Station ID:		
6														CONWAY RD. W. OF CONCORD		
7																
8																
9	EB															
10			31	36	41	46	51	56	61	66	71	76	81			
11		30	35	40	45	50	55	60	65	70	75	80	9999	Total		
12	09/26/21	25	10	2	4	0	0	0	0	0	0	0	0	41		
13	01:00	17	5	5	1	0	0	0	0	0	0	0	0	28		
14	02:00	1	2	3	2	1	0	0	0	0	0	0	0	9		
15	03:00	2	1	0	1	0	0	0	0	0	0	0	0	4		
16	04:00	6	13	2	2	0	0	0	0	0	0	0	0	23		
17	05:00	6	9	4	4	1	0	0	0	0	0	0	0	24		
18	06:00	9	25	8	5	0	0	0	0	0	0	0	0	47		
19	07:00	45	58	28	15	2	1	1	0	0	0	0	0	150		
20	08:00	106	94	51	4	7	0	0	0	0	0	0	0	262		
21	09:00	201	141	57	10	2	2	0	0	0	0	0	0	413		
22	10:00	289	151	44	5	1	1	0	0	0	0	0	0	491		
23	11:00	400	122	44	9	1	1	0	0	0	0	0	0	577		
24	12 PM	362	123	41	10	2	0	0	0	0	0	0	0	538		
25	13:00	321	141	43	9	0	0	0	0	0	0	0	0	514		
26	14:00	295	150	35	10	1	1	1	0	0	0	0	0	493		
27	15:00	267	126	48	9	3	2	0	0	0	0	0	0	455		
28	16:00	288	136	49	5	1	2	0	0	0	0	0	0	481		
29	17:00	253	146	39	3	1	0	0	0	0	0	0	0	442		
30	18:00	265	101	29	4	0	0	0	0	0	0	0	0	399		
31	19:00	236	77	19	3	0	1	1	0	0	0	0	0	337		
32	20:00	127	59	14	4	2	0	0	0	0	0	0	0	206		
33	21:00	82	26	17	8	2	0	0	0	0	0	0	0	135		
34	22:00	37	27	7	6	1	0	0	0	0	0	0	0	78		
35	23:00	20	16	6	2	1	0	0	0	0	0	0	0	45		
36	Total	3660	1759	595	135	29	11	3	0	0	0	0	0	6192		
38																
39	Grand Tota	36028	12456	3993	799	214	59	18	1	0	0	0	0	53568		
40																
41		67.26%	90.51%	97.96%	99.45%	99.85%	99.96%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%			
42																
44	% of vehicles over speed limit				2.04%											

Sabra & Associates, Inc.
7055 Samuel Morse Drive Suite 100
Columbia, MD 21046
1 443 741 3500

ANNE ARUNDEL
ODENTON

Site Code:
Station ID:
CONWAY RD. W. OF CONCORD

WB

			31	36	41	46	51	56	61	66	71	76	81			
		30	35	40	45	50	55	60	65	70	75	80	9999	Total		
09/26/21	17	25	14	7	1	1	0	0	0	0	0	0	65			
01:00	10	14	12	10	1	2	0	0	0	0	0	0	49			
02:00	0	6	6	1	1	0	0	0	0	0	0	0	14			
03:00	0	4	1	1	0	0	0	0	0	0	0	0	6			
04:00	5	2	6	2	1	0	0	1	0	0	0	0	17			
05:00	9	3	4	6	0	2	0	0	0	0	0	0	24			
06:00	21	11	9	1	1	1	0	0	0	0	0	0	44			
07:00	24	37	24	14	2	2	0	0	0	0	0	0	103			
08:00	71	48	39	15	3	2	0	0	0	0	0	0	178			
09:00	125	108	53	15	3	3	0	0	0	0	0	0	307			
10:00	188	133	68	37	1	0	1	0	0	0	0	0	428			
11:00	243	160	74	34	7	1	0	0	0	0	0	0	519			
12 PM	250	169	102	23	7	2	0	0	0	0	0	0	553			
13:00	244	172	93	26	6	3	0	0	0	0	0	0	544			
14:00	237	174	81	27	9	2	0	0	0	0	0	0	530			
15:00	178	209	98	26	7	1	0	0	0	0	0	0	519			
16:00	196	176	89	29	3	1	0	0	0	0	0	0	494			
17:00	223	166	89	27	10	0	0	0	0	0	0	0	515			
18:00	196	160	64	20	4	1	0	0	0	0	0	0	445			
19:00	144	122	72	21	5	4	1	0	0	0	0	0	369			
20:00	81	85	68	19	3	0	0	0	0	0	0	0	256			
21:00	47	40	26	21	4	1	2	2	0	0	0	0	143			
22:00	10	29	12	14	3	0	0	0	0	0	0	0	68			
23:00	5	11	13	6	0	0	1	0	0	0	0	0	36			
Total	2524	2064	1117	402	82	29	5	3	0	0	0	0	6226			
Grand Tota	24916	16712	8043	2532	525	129	29	7	1	2	0	0	52896			
	47.10%	78.70%	93.90%	98.69%	99.68%	99.93%	99.98%	99.99%	100.00%	100.00%	100.00%	100.00%				
% of vehicles over speed limit				6.10%												

Sabra & Associates, Inc.
7055 Samuel Morse Drive Suite 100
Columbia, MD 21046
1 443 741 3500

ANNE ARUNDEL
ODENTON

Site Code:
Station ID:
PATUXENT RD N. OF CONWAY

NB

	30	31	36	41	46	51	56	61	66	71	76	81	
	30	35	40	45	50	55	60	65	70	75	80	9999	Total
09/26/21	1	4	19	7	1	0	0	0	0	0	0	0	32
01:00	2	5	8	9	4	4	0	0	0	0	0	0	32
02:00	0	2	3	5	0	1	0	0	0	0	0	0	11
03:00	0	1	2	0	1	0	0	0	0	0	0	0	4
04:00	1	0	2	4	1	0	0	0	1	0	0	0	9
05:00	2	1	3	5	3	0	0	0	0	0	0	0	14
06:00	1	2	8	3	1	1	0	1	0	0	0	0	17
07:00	5	8	17	24	3	0	0	1	0	0	0	0	58
08:00	11	7	30	34	7	1	0	0	0	0	0	0	90
09:00	15	11	65	38	7	4	1	0	0	0	0	0	141
10:00	12	30	80	46	12	0	0	0	0	0	0	0	180
11:00	55	35	93	61	14	2	0	0	0	0	0	0	260
12 PM	87	37	102	73	17	0	0	0	0	0	0	0	316
13:00	109	27	97	80	10	4	0	0	0	0	0	0	327
14:00	53	27	84	84	20	1	2	0	0	0	0	0	271
15:00	44	28	94	72	19	5	1	0	0	0	0	0	263
16:00	60	19	95	87	16	1	0	0	0	0	0	0	278
17:00	44	20	70	60	22	2	1	0	0	0	0	0	219
18:00	15	25	86	42	9	3	0	0	0	0	0	0	180
19:00	18	33	64	45	8	2	0	0	0	0	0	0	170
20:00	16	28	46	30	13	0	0	0	0	0	0	0	133
21:00	13	15	21	27	8	4	0	0	0	0	0	0	88
22:00	2	3	9	9	8	0	0	0	0	0	0	0	31
23:00	0	5	4	8	3	0	0	0	0	0	0	0	20
Total	566	373	1102	853	207	35	5	2	1	0	0	0	3144
Grand Tota	4601	3599	9974	6718	1459	213	36	14	5	1	0	0	26620
	17.28%	30.80%	68.27%	93.51%	98.99%	99.79%	99.92%	99.98%	100.00%	100.00%	100.00%	100.00%	

% of vehicles over speed limit 69.20%

Sabra & Associates, Inc.
7055 Samuel Morse Drive Suite 100
Columbia, MD 21046
1 443 741 3500

ANNE ARUNDEL
ODENTON

Site Code:
Station ID: PATUXENT RD N. OF CONWAY

SB

	30	31	36	41	46	51	56	61	66	71	76	81	
	30	35	40	45	50	55	60	65	70	75	80	9999	Total
09/26/21	2	6	11	5	0	0	0	0	0	0	0	0	24
01:00	0	3	3	4	0	0	0	0	0	0	0	0	10
02:00	0	1	3	4	0	0	0	0	0	0	0	0	8
03:00	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	1	1	2	4	0	0	0	0	0	0	0	0	8
05:00	3	1	2	0	2	0	0	0	0	0	0	0	8
06:00	1	0	14	5	1	0	0	0	0	0	0	0	21
07:00	5	8	24	10	5	0	0	0	0	0	0	0	52
08:00	12	15	48	32	3	1	0	0	0	0	0	0	111
09:00	29	37	50	25	6	0	0	0	0	0	0	0	147
10:00	55	28	86	39	4	0	0	0	0	0	0	0	212
11:00	45	20	131	47	0	0	0	0	0	0	0	0	243
12 PM	67	53	65	9	1	0	0	0	0	0	0	0	195
13:00	77	30	67	14	2	0	0	0	0	0	0	0	190
14:00	41	59	84	23	0	0	0	0	0	0	0	0	207
15:00	34	20	99	38	3	1	0	0	0	0	0	0	195
16:00	38	46	88	20	0	0	0	0	0	0	0	0	192
17:00	20	43	79	25	1	0	0	0	0	0	0	0	168
18:00	31	40	68	24	3	0	0	0	0	0	0	0	166
19:00	36	18	47	10	2	0	0	0	0	0	0	0	113
20:00	19	14	29	10	1	0	0	0	0	0	0	0	73
21:00	10	5	25	9	2	0	0	0	0	0	0	0	51
22:00	3	4	28	8	2	0	0	0	0	0	0	0	45
23:00	1	6	3	7	4	1	0	0	0	0	0	0	22
Total	531	458	1056	372	42	3	0	0	0	0	0	0	2462
Grand Tota	5465	4847	9683	3120	320	27	8	1	0	0	0	0	23471
	23.28%	43.94%	85.19%	98.48%	99.85%	99.96%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	

% of vehicles over speed limit 56.06%

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1				Sabra & Associates, Inc.												Page 7
2				7055 Samuel Morse Drive Suite 100												
3				Columbia, MD 21046												
4	ANNE ARUNDEL			1 443 741 3500										Site Code:		
5	ODENTON													Station ID:		
6														MEYER STATION RD. S. OF CO		
7																
8																
9	NB															
10			31	36	41	46	51	56	61	66	71	76	81			
11		30	35	40	45	50	55	60	65	70	75	80	9999	Total		
12	09/26/21	0	0	1	0	0	0	0	0	0	0	0	0	1		
13	01:00	1	0	0	0	0	0	0	0	0	0	0	0	1		
14	02:00	0	0	0	0	0	0	0	0	0	0	0	0	0		
15	03:00	0	0	0	0	0	0	0	0	0	0	0	0	0		
16	04:00	1	0	1	0	0	0	0	0	0	0	0	0	2		
17	05:00	1	0	0	0	0	1	0	0	0	0	0	0	2		
18	06:00	0	0	1	1	0	0	0	0	0	0	0	0	2		
19	07:00	2	1	3	1	1	0	0	0	0	0	0	0	8		
20	08:00	3	1	1	0	0	0	0	0	0	0	0	0	5		
21	09:00	1	3	3	4	0	1	0	0	0	0	0	0	12		
22	10:00	1	0	3	3	0	0	0	0	0	0	0	0	7		
23	11:00	4	3	3	3	2	0	0	0	0	0	0	0	15		
24	12 PM	2	7	3	1	0	0	0	0	0	0	0	0	13		
25	13:00	2	4	3	0	0	0	0	0	0	0	0	0	9		
26	14:00	0	1	1	3	4	0	0	0	0	0	0	0	9		
27	15:00	4	2	5	2	0	0	0	0	0	0	0	0	13		
28	16:00	12	5	3	0	0	0	0	0	0	0	0	0	20		
29	17:00	6	3	3	1	0	0	0	0	0	0	0	0	13		
30	18:00	1	3	2	1	0	0	0	0	0	0	0	0	7		
31	19:00	3	3	0	0	0	0	0	0	0	0	0	0	6		
32	20:00	0	1	0	0	0	0	0	0	0	0	0	0	1		
33	21:00	0	0	0	0	0	0	0	0	0	0	0	0	0		
34	22:00	2	0	0	0	0	0	0	0	0	0	0	0	2		
35	23:00	0	0	0	0	0	0	0	0	0	0	0	0	0		
36	Total	46	37	36	20	7	2	0	0	0	0	0	0	148		
38																
39	Grand Tota	489	425	356	144	43	7	0	0	0	0	0	0	1464		
40																
41		33.40%	62.43%	86.75%	96.58%	99.52%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%			
42																
44	% of vehicles over speed limit			37.57%												

Sabra & Associates, Inc.
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1 443 741 3500

ANNE ARUNDEL
ODENTON
Site Code:
Station ID:
MEYER STATION RD. S. OF CO

SB

	30	35	40	45	50	55	60	65	70	75	80	9999	Total
09/26/21	0	0	1	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	1	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	1	0	0	0	0	0	0	0	0	0	1
07:00	0	1	0	2	0	0	1	0	0	0	0	0	4
08:00	0	1	6	0	0	0	0	0	1	0	0	0	8
09:00	1	3	1	2	0	0	0	0	0	0	0	0	7
10:00	3	0	4	2	2	1	0	0	0	0	0	0	12
11:00	2	6	6	2	1	0	0	0	0	0	0	0	17
12 PM	3	4	3	6	0	0	0	0	0	0	0	0	16
13:00	5	1	1	1	0	0	0	0	0	0	0	0	8
14:00	0	0	0	0	2	1	0	0	0	0	0	0	3
15:00	1	5	2	1	1	0	0	0	0	0	0	0	10
16:00	3	5	2	6	1	0	0	0	0	0	0	0	17
17:00	4	4	1	4	0	0	0	0	0	0	0	0	13
18:00	3	4	0	3	0	0	0	0	0	0	0	0	10
19:00	2	1	1	2	0	1	0	0	0	0	0	0	7
20:00	0	0	2	0	0	0	0	0	0	0	0	0	2
21:00	0	1	1	0	0	0	0	0	0	0	0	0	2
22:00	0	1	0	0	1	0	0	0	0	0	0	0	2
23:00	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	28	38	32	32	8	3	1	0	1	0	0	0	143
Grand Tota	341	445	365	196	65	14	1	1	1	0	0	0	1429
	23.86%	55.00%	80.55%	94.26%	98.81%	99.79%	99.86%	99.93%	100.00%	100.00%	100.00%	100.00%	

% of vehicles over speed limit 45.00%

Appendix G:
Existing Level of Service Analysis

HCM 6th Signalized Intersection Summary
1: MD 3 & Conway Road

11/15/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	185	67	290	251	96	324	187	1645	60	183	2004	196
Future Volume (veh/h)	185	67	290	251	96	324	187	1645	60	183	2004	196
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	201	73	0	273	104	0	203	1788	0	199	2178	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	246	253		329	178		247	3799		245	3813	
Arrive On Green	0.07	0.07	0.00	0.10	0.10	0.00	0.07	0.59	0.00	0.07	0.59	0.00
Sat Flow, veh/h	3456	3554	1585	3456	1870	1585	3456	6434	1585	3456	6434	1585
Grp Volume(v), veh/h	201	73	0	273	104	0	203	1788	0	199	2178	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1870	1585	1728	1609	1585	1728	1609	1585
Q Serve(g_s), s	10.3	3.5	0.0	14.0	9.6	0.0	10.4	28.4	0.0	10.2	37.5	0.0
Cycle Q Clear(g_c), s	10.3	3.5	0.0	14.0	9.6	0.0	10.4	28.4	0.0	10.2	37.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	246	253		329	178		247	3799		245	3813	
V/C Ratio(X)	0.82	0.29		0.83	0.58		0.82	0.47		0.81	0.57	
Avail Cap(c_a), veh/h	346	355		538	291		346	3799		374	3813	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	82.4	79.3	0.0	80.0	78.0	0.0	82.4	20.9	0.0	82.4	22.6	0.0
Incr Delay (d2), s/veh	9.9	0.6	0.0	5.7	3.0	0.0	12.4	0.4	0.0	10.0	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	1.6	0.0	6.5	4.8	0.0	5.1	11.0	0.0	4.9	14.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	92.4	79.9	0.0	85.7	81.1	0.0	94.8	21.3	0.0	92.5	23.2	0.0
LnGrp LOS	F	E		F	F		F	C		F	C	
Approach Vol, veh/h		274	A		377	A		1991	A		2377	A
Approach Delay, s/veh		89.0			84.4			28.8			29.0	
Approach LOS		F			F			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	21.3	114.8		19.8	20.9	115.2		24.1				
Change Period (Y+Rc), s	8.5	* 8.5		7.0	8.0	8.5		7.0				
Max Green Setting (Gmax), s	19.5	* 85		18.0	18.0	57.5		28.0				
Max Q Clear Time (g_c+I1), s	12.2	30.4		12.3	12.4	39.5		16.0				
Green Ext Time (p_c), s	0.5	45.5		0.5	0.4	17.5		1.2				

Intersection Summary	
HCM 6th Ctrl Delay	36.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	485	30	123	356	12	57
Future Vol, veh/h	485	30	123	356	12	57
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	527	33	134	387	13	62

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	560	0	1006	280
Stage 1	-	-	-	-	544	-
Stage 2	-	-	-	-	462	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1007	-	238	717
Stage 1	-	-	-	-	546	-
Stage 2	-	-	-	-	601	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1007	-	206	717
Mov Cap-2 Maneuver	-	-	-	-	337	-
Stage 1	-	-	-	-	546	-
Stage 2	-	-	-	-	521	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.3	11.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	599	-	-	1007	-
HCM Lane V/C Ratio	0.125	-	-	0.133	-
HCM Control Delay (s)	11.9	-	-	9.1	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.4	-	-	0.5	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	492	367	1	23	3
Future Vol, veh/h	5	492	367	1	23	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	0	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	535	399	1	25	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	400	0	-	0	944	399
Stage 1	-	-	-	-	399	-
Stage 2	-	-	-	-	545	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1159	-	-	-	291	651
Stage 1	-	-	-	-	678	-
Stage 2	-	-	-	-	581	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1159	-	-	-	290	651
Mov Cap-2 Maneuver	-	-	-	-	416	-
Stage 1	-	-	-	-	675	-
Stage 2	-	-	-	-	581	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	13.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1159	-	-	-	416	651
HCM Lane V/C Ratio	0.005	-	-	-	0.06	0.005
HCM Control Delay (s)	8.1	-	-	-	14.2	10.6
HCM Lane LOS	A	-	-	-	B	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0

Intersection	
Int Delay, s/veh	8.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	69	2	194	59	4	0	1	300	28	1	0
Future Vol, veh/h	0	69	2	194	59	4	0	1	300	28	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	75	2	211	64	4	0	1	326	30	1	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	68	0	0	77	0	0	565	566	76	728	565	66
Stage 1	-	-	-	-	-	-	76	76	-	488	488	-
Stage 2	-	-	-	-	-	-	489	490	-	240	77	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1533	-	-	1522	-	-	436	434	985	339	434	998
Stage 1	-	-	-	-	-	-	933	832	-	561	550	-
Stage 2	-	-	-	-	-	-	561	549	-	763	831	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1533	-	-	1522	-	-	387	372	985	201	372	998
Mov Cap-2 Maneuver	-	-	-	-	-	-	387	372	-	201	372	-
Stage 1	-	-	-	-	-	-	933	832	-	561	471	-
Stage 2	-	-	-	-	-	-	479	470	-	510	831	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	5.8	10.5	25.8
HCM LOS			B	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	980	1533	-	-	1522	-	-	204
HCM Lane V/C Ratio	0.334	-	-	-	0.139	-	-	0.155
HCM Control Delay (s)	10.5	0	-	-	7.7	0	-	25.8
HCM Lane LOS	B	A	-	-	A	A	-	D
HCM 95th %tile Q(veh)	1.5	0	-	-	0.5	-	-	0.5

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	10	6	53	61	2
Future Vol, veh/h	1	10	6	53	61	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	11	7	58	66	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	65	0	-	0	49	36
Stage 1	-	-	-	-	36	-
Stage 2	-	-	-	-	13	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1537	-	-	-	960	1037
Stage 1	-	-	-	-	986	-
Stage 2	-	-	-	-	1010	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1537	-	-	-	959	1037
Mov Cap-2 Maneuver	-	-	-	-	959	-
Stage 1	-	-	-	-	985	-
Stage 2	-	-	-	-	1010	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1537	-	-	-	961
HCM Lane V/C Ratio	0.001	-	-	-	0.071
HCM Control Delay (s)	7.3	0	-	-	9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2

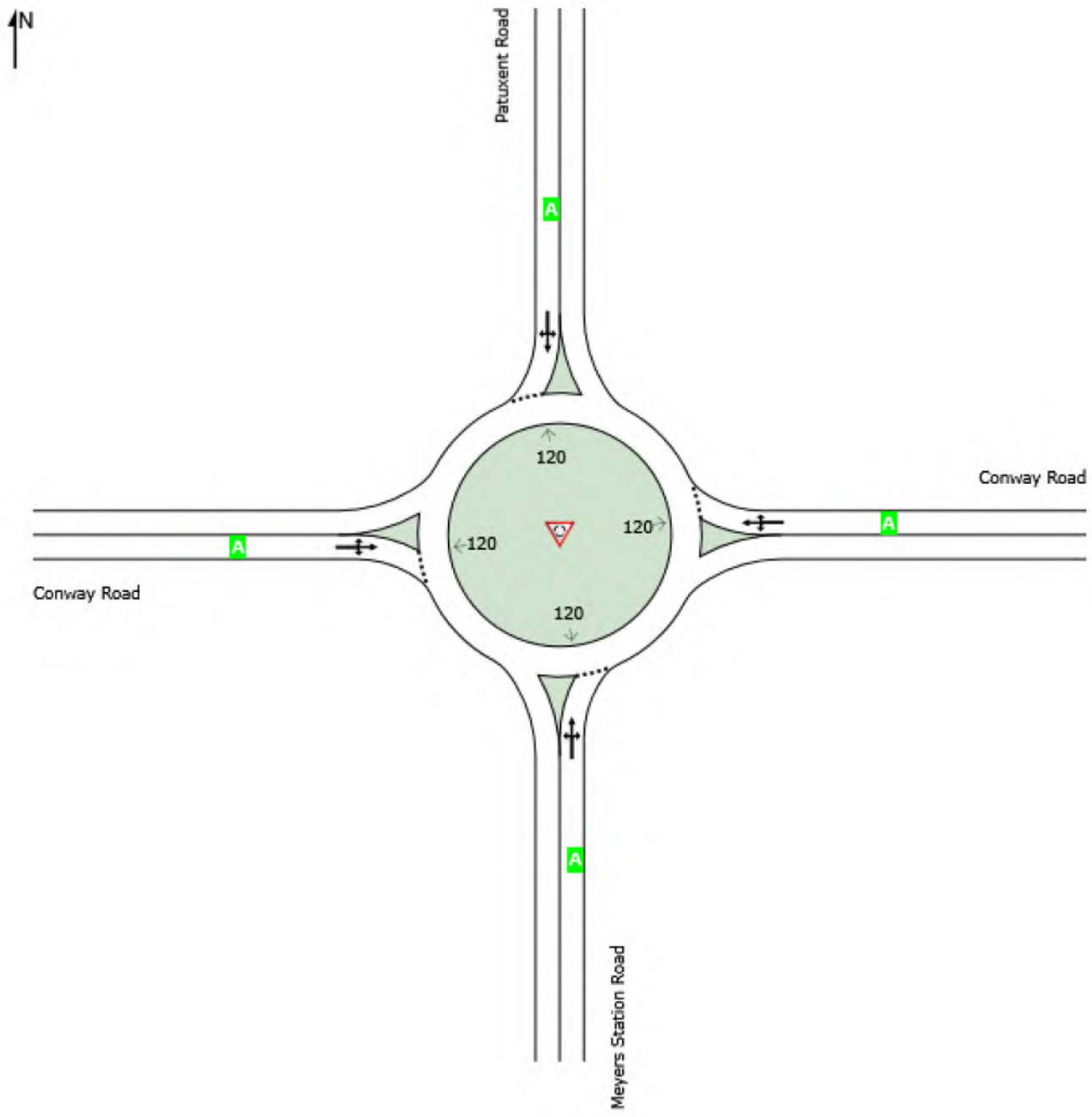
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 101 [Conway Road (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

	Approaches				Intersection
	South	East	North	West	
LOS	A	A	A	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Delay Model: HCM Delay Formula (Geometric Delay is not included).

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	308	150	260	213	202	408	332	2549	108	421	2172	286
Future Volume (veh/h)	308	150	260	213	202	408	332	2549	108	421	2172	286
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	335	163	0	232	220	0	361	2771	0	458	2361	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	250	257		448	242		288	3187		451	3509	
Arrive On Green	0.07	0.07	0.00	0.13	0.13	0.00	0.08	0.50	0.00	0.13	0.55	0.00
Sat Flow, veh/h	3456	3554	1585	3456	1870	1585	3456	6434	1585	3456	6434	1585
Grp Volume(v), veh/h	335	163	0	232	220	0	361	2771	0	458	2361	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1870	1585	1728	1609	1585	1728	1609	1585
Q Serve(g_s), s	13.0	8.0	0.0	11.3	20.9	0.0	15.0	68.7	0.0	23.5	47.4	0.0
Cycle Q Clear(g_c), s	13.0	8.0	0.0	11.3	20.9	0.0	15.0	68.7	0.0	23.5	47.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	250	257		448	242		288	3187		451	3509	
V/C Ratio(X)	1.34	0.64		0.52	0.91		1.25	0.87		1.02	0.67	
Avail Cap(c_a), veh/h	250	257		480	260		288	3187		451	3509	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	83.5	81.2	0.0	73.1	77.3	0.0	82.5	40.3	0.0	78.3	29.4	0.0
Incr Delay (d2), s/veh	178.4	5.1	0.0	0.9	31.5	0.0	139.4	3.5	0.0	46.2	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.0	3.9	0.0	5.1	12.1	0.0	12.3	28.0	0.0	13.4	18.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	261.9	86.3	0.0	74.0	108.7	0.0	221.9	43.8	0.0	124.5	30.4	0.0
LnGrp LOS	F	F		E	F		F	D		F	C	
Approach Vol, veh/h		498	A		452	A		3132	A		2819	A
Approach Delay, s/veh		204.4			90.9			64.3			45.7	
Approach LOS		F			F			E			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	32.0	97.7		20.0	23.0	106.7		30.3				
Change Period (Y+Rc), s	8.5	* 8.5		7.0	8.0	8.5		7.0				
Max Green Setting (Gmax), s	23.5	* 89		13.0	15.0	64.5		25.0				
Max Q Clear Time (g_c+I1), s	25.5	70.7		15.0	17.0	49.4		22.9				
Green Ext Time (p_c), s	0.0	18.2		0.0	0.0	14.8		0.5				

Intersection Summary		
HCM 6th Ctrl Delay		68.6
HCM 6th LOS		E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	595	31	103	717	35	123
Future Vol, veh/h	595	31	103	717	35	123
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	647	34	112	779	38	134

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	681	0	1278	341
Stage 1	-	-	-	-	664	-
Stage 2	-	-	-	-	614	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	907	-	158	655
Stage 1	-	-	-	-	474	-
Stage 2	-	-	-	-	502	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	907	-	139	655
Mov Cap-2 Maneuver	-	-	-	-	139	-
Stage 1	-	-	-	-	474	-
Stage 2	-	-	-	-	440	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	23.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	359	-	-	907	-
HCM Lane V/C Ratio	0.478	-	-	0.123	-
HCM Control Delay (s)	23.9	-	-	9.5	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	2.5	-	-	0.4	-

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	529	745	7	97	14
Future Vol, veh/h	10	529	745	7	97	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	0	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	575	810	8	105	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	818	0	-	0	1407	810
Stage 1	-	-	-	-	810	-
Stage 2	-	-	-	-	597	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	810	-	-	-	153	380
Stage 1	-	-	-	-	438	-
Stage 2	-	-	-	-	550	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	810	-	-	-	151	380
Mov Cap-2 Maneuver	-	-	-	-	151	-
Stage 1	-	-	-	-	432	-
Stage 2	-	-	-	-	550	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	63.9
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	810	-	-	-	151	380
HCM Lane V/C Ratio	0.013	-	-	-	0.698	0.04
HCM Control Delay (s)	9.5	-	-	-	71	14.9
HCM Lane LOS	A	-	-	-	F	B
HCM 95th %tile Q(veh)	0	-	-	-	4.1	0.1

Intersection	
Int Delay, s/veh	7.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	62	4	287	94	29	6	1	237	11	9	0
Future Vol, veh/h	0	62	4	287	94	29	6	1	237	11	9	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	67	4	312	102	32	7	1	258	12	10	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	134	0	0	71	0	0	816	827	69	941	813	118
Stage 1	-	-	-	-	-	-	69	69	-	742	742	-
Stage 2	-	-	-	-	-	-	747	758	-	199	71	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1451	-	-	1529	-	-	296	307	994	243	313	934
Stage 1	-	-	-	-	-	-	941	837	-	408	422	-
Stage 2	-	-	-	-	-	-	405	415	-	803	836	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1451	-	-	1529	-	-	238	239	994	149	244	934
Mov Cap-2 Maneuver	-	-	-	-	-	-	238	239	-	149	244	-
Stage 1	-	-	-	-	-	-	941	837	-	408	329	-
Stage 2	-	-	-	-	-	-	306	323	-	594	836	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	5.6	10.6	27.6
HCM LOS			B	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	911	1451	-	-	1529	-	-	181
HCM Lane V/C Ratio	0.291	-	-	-	0.204	-	-	0.12
HCM Control Delay (s)	10.6	0	-	-	8	0	-	27.6
HCM Lane LOS	B	A	-	-	A	A	-	D
HCM 95th %tile Q(veh)	1.2	0	-	-	0.8	-	-	0.4

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	17	15	85	49	1
Future Vol, veh/h	1	17	15	85	49	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	18	16	92	53	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	108	0	-	0	82	62
Stage 1	-	-	-	-	62	-
Stage 2	-	-	-	-	20	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1483	-	-	-	920	1003
Stage 1	-	-	-	-	961	-
Stage 2	-	-	-	-	1003	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1483	-	-	-	919	1003
Mov Cap-2 Maneuver	-	-	-	-	919	-
Stage 1	-	-	-	-	960	-
Stage 2	-	-	-	-	1003	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1483	-	-	-	921
HCM Lane V/C Ratio	0.001	-	-	-	0.059
HCM Control Delay (s)	7.4	0	-	-	9.2
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2

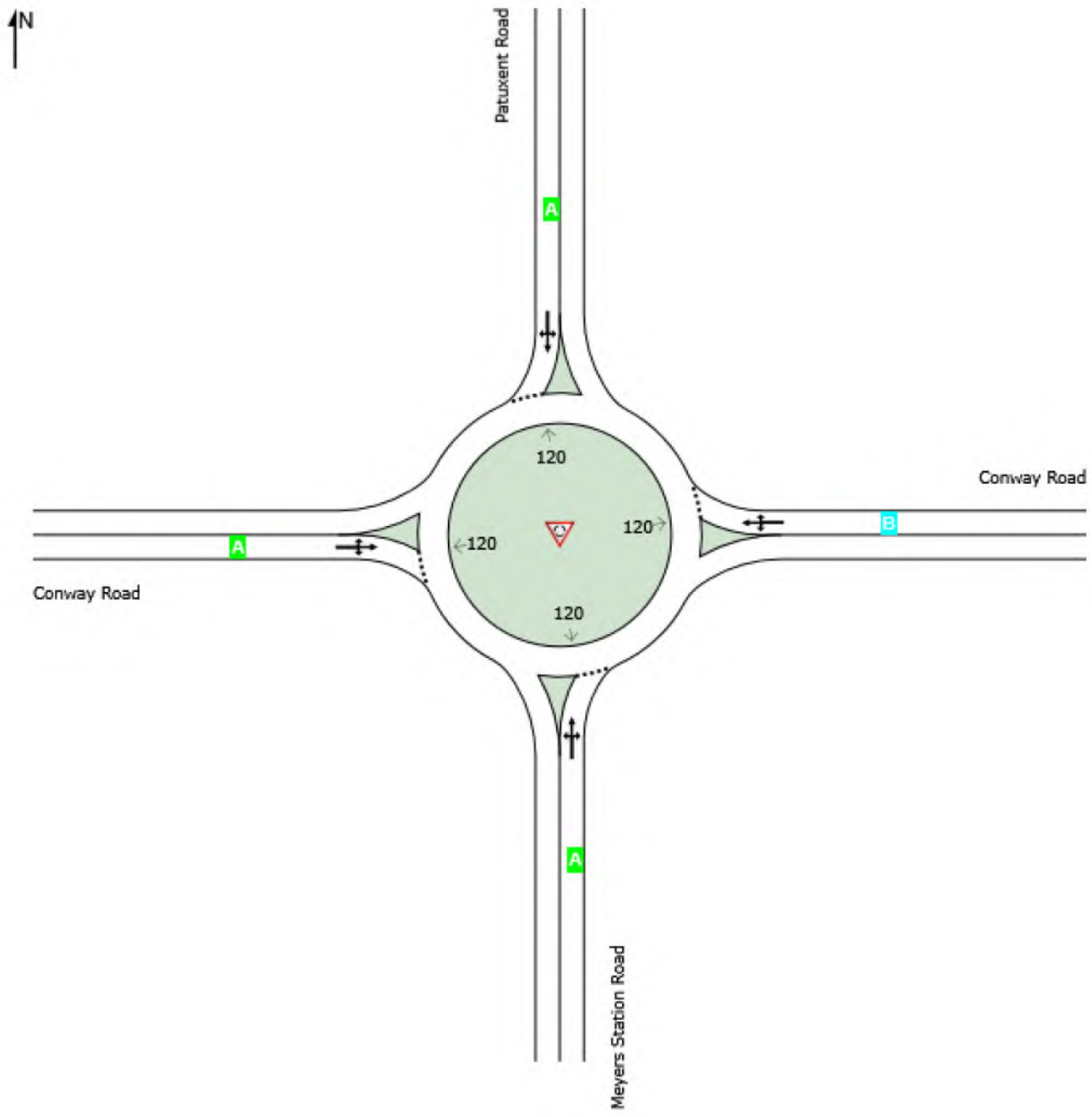
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 101 [Conway Road (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

	Approaches				Intersection
	South	East	North	West	
LOS	A	B	A	A	B



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Delay Model: HCM Delay Formula (Geometric Delay is not included).

HCM 6th Signalized Intersection Summary
1: MD 3 & Conway Road

11/15/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	234	143	254	284	161	488	204	2110	188	403	2417	253
Future Volume (veh/h)	234	143	254	284	161	488	204	2110	188	403	2417	253
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	254	155	0	309	175	0	222	2293	0	438	2627	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	317	326		395	214		277	2872		487	3285	
Arrive On Green	0.09	0.09	0.00	0.11	0.11	0.00	0.08	0.45	0.00	0.14	0.51	0.00
Sat Flow, veh/h	3456	3554	1585	3456	1870	1585	3456	6434	1585	3456	6434	1585
Grp Volume(v), veh/h	254	155	0	309	175	0	222	2293	0	438	2627	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1870	1585	1728	1609	1585	1728	1609	1585
Q Serve(g_s), s	10.8	6.2	0.0	13.0	13.7	0.0	9.5	46.0	0.0	18.7	50.7	0.0
Cycle Q Clear(g_c), s	10.8	6.2	0.0	13.0	13.7	0.0	9.5	46.0	0.0	18.7	50.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	317	326		395	214		277	2872		487	3285	
V/C Ratio(X)	0.80	0.48		0.78	0.82		0.80	0.80		0.90	0.80	
Avail Cap(c_a), veh/h	438	450		576	312		415	2872		518	3285	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	66.8	64.7	0.0	64.6	64.9	0.0	67.8	35.7	0.0	63.4	30.4	0.0
Incr Delay (d2), s/veh	7.3	1.1	0.0	4.3	10.6	0.0	8.5	2.4	0.0	18.3	2.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	2.8	0.0	5.9	7.1	0.0	4.5	18.5	0.0	9.5	19.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.0	65.8	0.0	68.9	75.5	0.0	76.3	38.1	0.0	81.7	32.5	0.0
LnGrp LOS	E	E		E	E		E	D		F	C	
Approach Vol, veh/h		409	A		484	A		2515	A		3065	A
Approach Delay, s/veh		70.9			71.3			41.5			39.5	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	29.7	75.5		20.8	20.0	85.1		24.1				
Change Period (Y+Rc), s	8.5	* 8.5		7.0	8.0	8.5		7.0				
Max Green Setting (Gmax), s	22.5	* 54		19.0	18.0	26.5		25.0				
Max Q Clear Time (g_c+I1), s	20.7	48.0		12.8	11.5	52.7		15.7				
Green Ext Time (p_c), s	0.5	6.0		0.9	0.6	0.0		1.4				

Intersection Summary		
HCM 6th Ctrl Delay		44.7
HCM 6th LOS		D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	2.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	522	28	110	508	24	109
Future Vol, veh/h	522	28	110	508	24	109
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	567	30	120	552	26	118

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	597	0	1098	299
Stage 1	-	-	-	-	582	-
Stage 2	-	-	-	-	516	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	976	-	207	697
Stage 1	-	-	-	-	522	-
Stage 2	-	-	-	-	564	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	976	-	182	697
Mov Cap-2 Maneuver	-	-	-	-	182	-
Stage 1	-	-	-	-	522	-
Stage 2	-	-	-	-	495	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	16.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	461	-	-	976	-
HCM Lane V/C Ratio	0.314	-	-	0.123	-
HCM Control Delay (s)	16.3	-	-	9.2	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	1.3	-	-	0.4	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	486	523	9	64	9
Future Vol, veh/h	6	486	523	9	64	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	0	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	528	568	10	70	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	578	0	-	0	1110	568
Stage 1	-	-	-	-	568	-
Stage 2	-	-	-	-	542	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	996	-	-	-	232	522
Stage 1	-	-	-	-	567	-
Stage 2	-	-	-	-	583	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	996	-	-	-	230	522
Mov Cap-2 Maneuver	-	-	-	-	230	-
Stage 1	-	-	-	-	563	-
Stage 2	-	-	-	-	583	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	25.4
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	996	-	-	-	230	522
HCM Lane V/C Ratio	0.007	-	-	-	0.302	0.019
HCM Control Delay (s)	8.6	-	-	-	27.3	12
HCM Lane LOS	A	-	-	-	D	B
HCM 95th %tile Q(veh)	0	-	-	-	1.2	0.1

Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	52	9	262	70	25	7	0	235	19	2	0
Future Vol, veh/h	0	52	9	262	70	25	7	0	235	19	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	57	10	285	76	27	8	0	255	21	2	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	103	0	0	67	0	0	723	735	62	850	727	90
Stage 1	-	-	-	-	-	-	62	62	-	660	660	-
Stage 2	-	-	-	-	-	-	661	673	-	190	67	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1489	-	-	1535	-	-	342	347	1003	280	351	968
Stage 1	-	-	-	-	-	-	949	843	-	452	460	-
Stage 2	-	-	-	-	-	-	452	454	-	812	839	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1489	-	-	1535	-	-	288	278	1003	177	282	968
Mov Cap-2 Maneuver	-	-	-	-	-	-	288	278	-	177	282	-
Stage 1	-	-	-	-	-	-	949	843	-	452	369	-
Stage 2	-	-	-	-	-	-	360	364	-	605	839	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	5.8	10.3	27.3
HCM LOS			B	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	936	1489	-	-	1535	-	-	184
HCM Lane V/C Ratio	0.281	-	-	-	0.186	-	-	0.124
HCM Control Delay (s)	10.3	0	-	-	7.9	0	-	27.3
HCM Lane LOS	B	A	-	-	A	A	-	D
HCM 95th %tile Q(veh)	1.2	0	-	-	0.7	-	-	0.4

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	8	12	65	53	2
Future Vol, veh/h	0	8	12	65	53	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	9	13	71	58	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	84	0	-	0	58	49
Stage 1	-	-	-	-	49	-
Stage 2	-	-	-	-	9	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1513	-	-	-	949	1020
Stage 1	-	-	-	-	973	-
Stage 2	-	-	-	-	1014	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1513	-	-	-	949	1020
Mov Cap-2 Maneuver	-	-	-	-	949	-
Stage 1	-	-	-	-	973	-
Stage 2	-	-	-	-	1014	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1513	-	-	-	951
HCM Lane V/C Ratio	-	-	-	-	0.063
HCM Control Delay (s)	0	-	-	-	9
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2

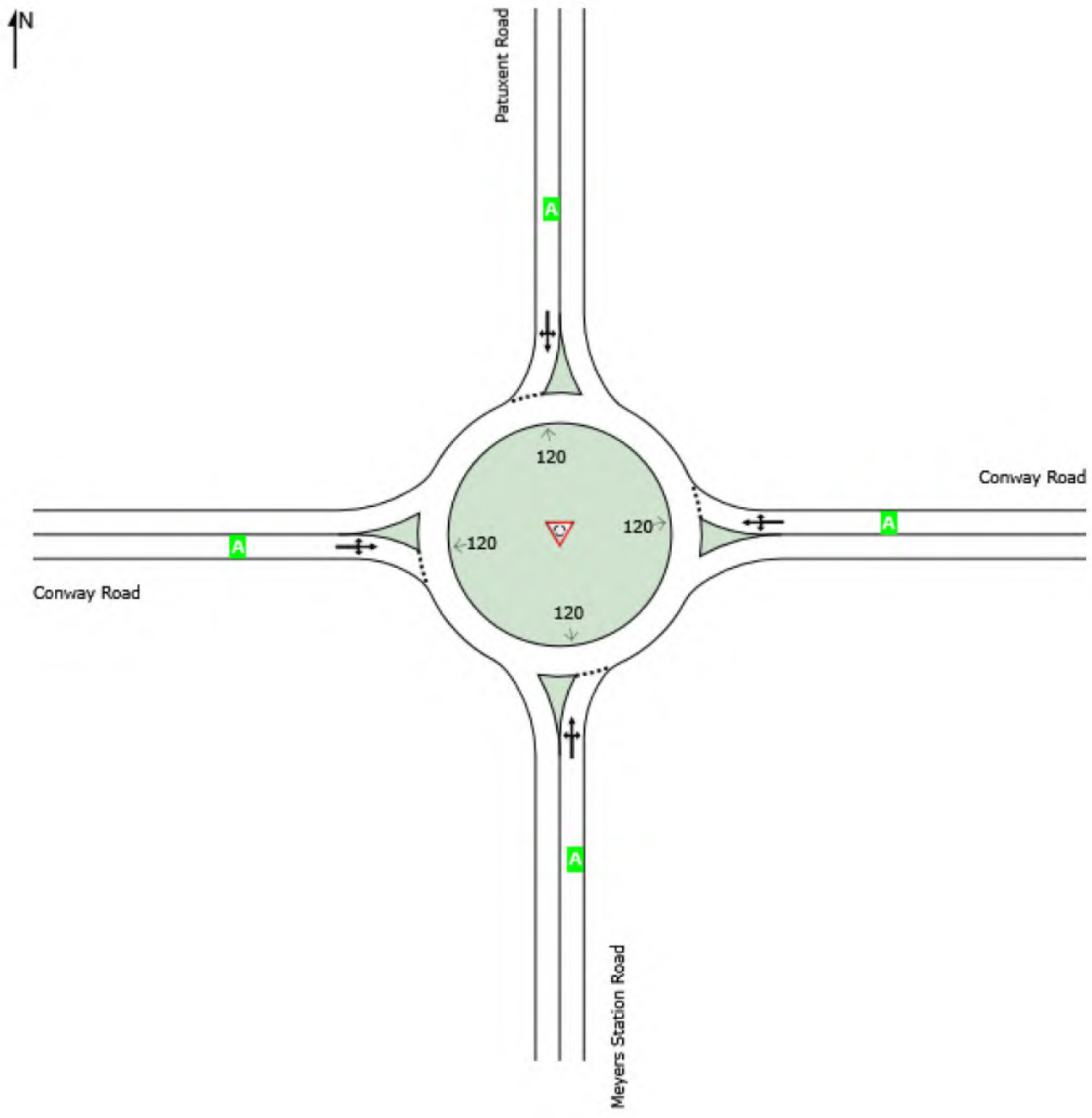
LANE LEVEL OF SERVICE

Lane Level of Service

Site: 101 [Conway Road (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

	Approaches				Intersection
	South	East	North	West	
LOS	A	A	A	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Delay Model: HCM Delay Formula (Geometric Delay is not included).

ANNE ARUNDEL COUNTY
MARYLAND

Transportation Facility Planning

Conway Road from MD 3 to the Western Terminus

Project No.: H539600

Contract No.: H539620

FINAL Purpose and Need Statement

REVISED

April 2022

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

Introduction

This Purpose and Need Statement has been prepared by Anne Arundel County Department of Public Works to document the purpose of this facility panning study, highlight the transportation-related needs of the study area, outline the goals and objectives necessary to address the needs, and present the approach by which proposed enhancements will be evaluated and measured for success.

For additional background and details on the existing conditions within the project study area, including traffic and safety data, please refer to the *Phase 1: Existing Conditions Technical Memorandum*, finalized in January 2022. This document has been developed using the Maryland Department of Transportation (MDOT) Purpose and Need format.

Purpose and Need

The **purpose** of the Conway Road Facility Planning Study is to: provide accessible pedestrian and bicycle facilities along Conway Road necessary to enhance Pedestrian Level of Comfort (PLOC) and bicyclist Level of Traffic Stress (LTS) and enhance connective facilities; reduce conflicts between vehicles and pedestrians/bicyclists; address vehicular accessibility issues related to roadway flooding and closures; enhance traffic operations within the study area along Conway Road; and reduce conflicts between fixed objects and vehicles within the study area.

The **need** for the project is driven by several factors including: current and projected vehicular usage of Conway Road exceeding current capacity at some locations; sub-standard pedestrian and bicycle accommodations; and flooding and other blockage hazards resulting in closure of the road that create safety and accessibility issues for residents who can be cut off from vehicular ingress/egress and emergency response services.

Regarding traffic operations and related needs, for the purposes of this study, the county considers any facilities operating at Level of Service (LOS) E or F to be failing and in need of operational enhancements. (Note: LOS at two-way stop-controlled intersections is determined by approach that operates the worst.) The County is also pursuing the construction of a new Elementary School (at this time referred to as West County Elementary School) along Conway Road between Patuxent Road and Two Rivers (shown in **Figure 1**), which is anticipated to result in increased vehicular, pedestrian, and bicycle trips (including increased school bus activity). Additionally, this study will assess focused enhancements to Conway Road to ensure the adjacent and connecting Scenic & Historic Roads and sensitive historic resources in the study area are protected and that their contributing features and cultural qualities are maintained or enhanced. **Figure 2** depicts locations of sensitive historical resources within the study area.

Study Area Context

The Conway Road Facility Planning Study Area focuses on the corridor between MD 3 and the Western Terminus of Conway Road and is in Odenton, Maryland, in west-central Anne Arundel County, approximately 20 miles northeast of Washington, DC and 10 miles northwest of Annapolis. Under the County Functional Classification System (2015), Conway Road between MD 3 and Patuxent Road is functionally classified as a combination closed/open-section Minor Arterial and from Patuxent Road to the western terminus as an open-section Collector. Conway Road carries approximately 15,000 vehicles per day (average of weekday traffic at Concord Boulevard, just west of MD 3, is 15,165).

Conway Road is approximately 3.2 miles long with a posted speed limit of 40 mph from MD 3 to Two Rivers Boulevard and a posted speed limit of 30 mph from Two Rivers Boulevard to its western terminus. The study area boundary is shown in **Figure 1**.

Figure 1: Study Area

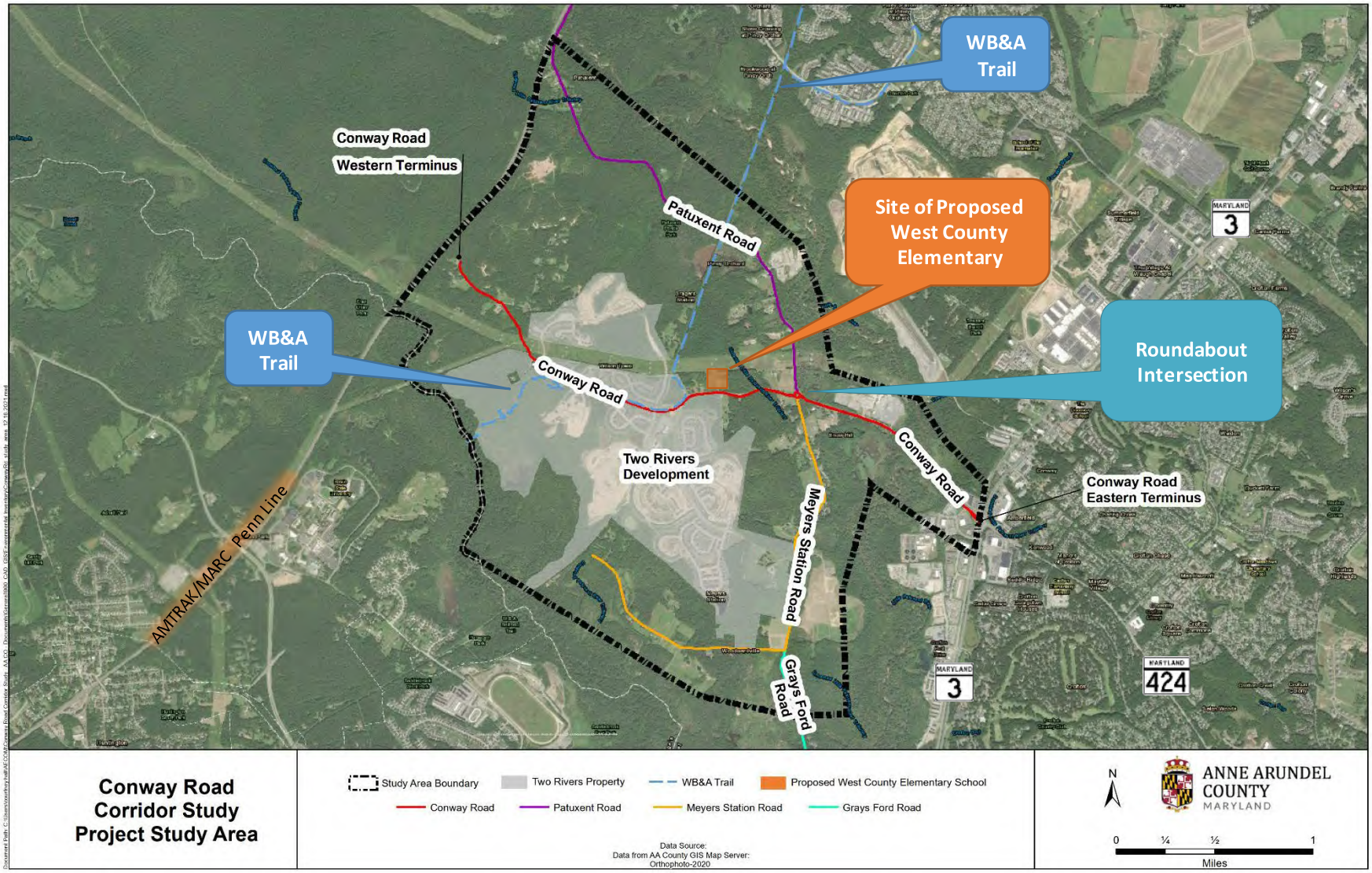
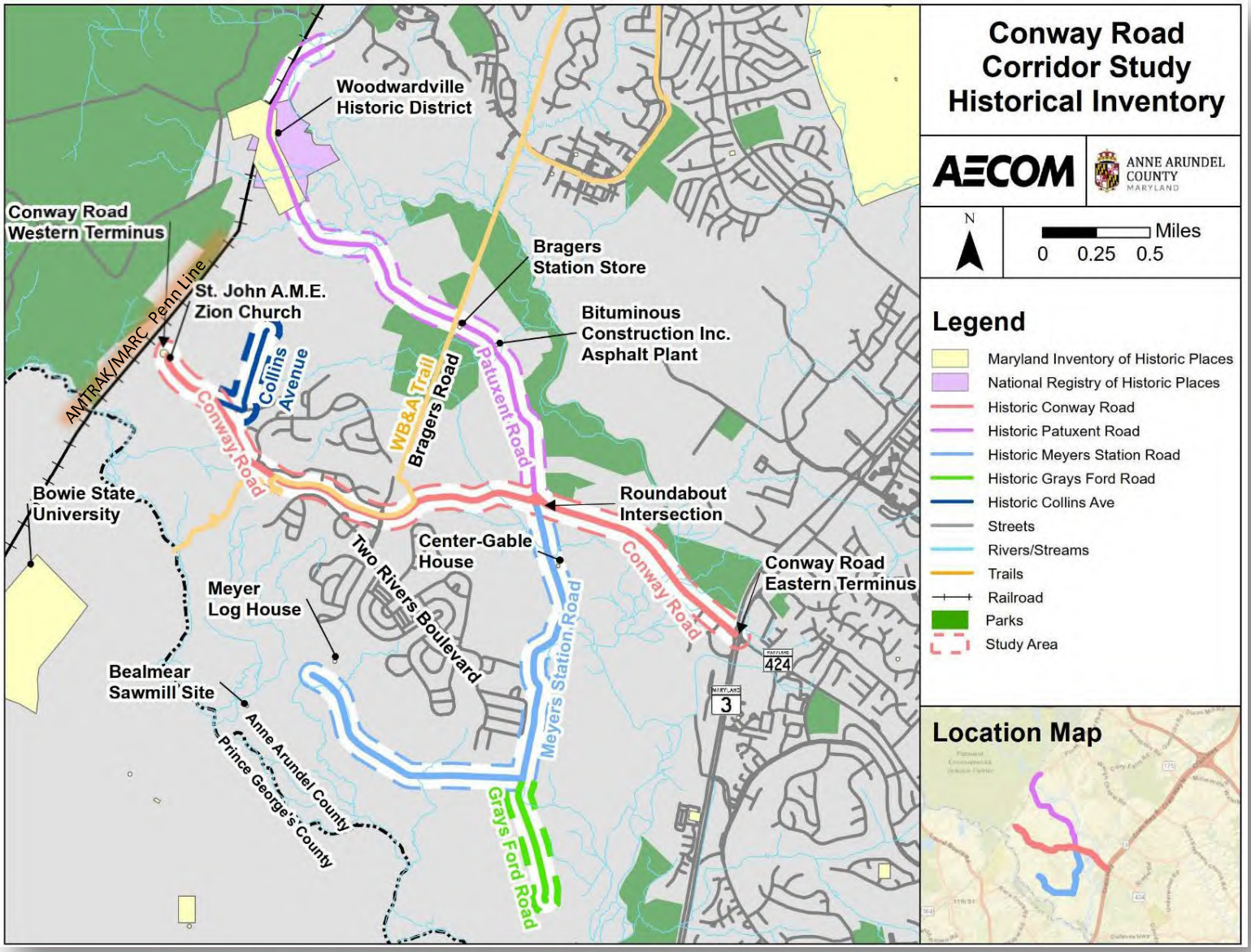


Figure 2: Sensitive Historical Resources Inventory



Goals and Objectives

Goal 1: Enhance accessibility for vehicles, pedestrians, and bicyclists along Conway Road

- Objective 1-1: Provide accessible pedestrian and bicycle facilities along Conway Road necessary to enhance Pedestrian Level of Comfort (PLOC) and bicyclist Level of Traffic Stress (LTS) and enhance connective facilities that coincide with the programmed construction of the new Elementary School and the WB&A ped/bike crossing over the Patuxent River. Montgomery County's PLOC methodology and MDOT's LTS methodology were used to evaluate bicycle and pedestrian facilities as documented in the *Phase 1 Existing Conditions Technical Memorandum*.
- Objective 1-2: Address accessibility issues related to roadway flooding and look for opportunities to provide alternative ingress/egress options for residents and emergency response during high water events.

Goal 2: Enhance traffic operations along Conway Road

- Objective 2-1: Enhance traffic LOS (where LOS E or worse) within the study area along Conway Road, which are determined to be necessary and contextually reasonable/feasible.
- Objective 2-2: Assess potential traffic mitigation options on a case-by-case basis to properly address traffic operational needs with context sensitive solutions.

Goal 3: Enhance vehicular and pedestrian/bicyclist safety within the study area

- Objective 3-1: Reduce conflicts between fixed objects and vehicles within the study area.
- Objective 3-2: Reduce conflicts between vehicles and pedestrians/bicyclists, particularly the potential for run-off-road incidents.

Needs and Metrics

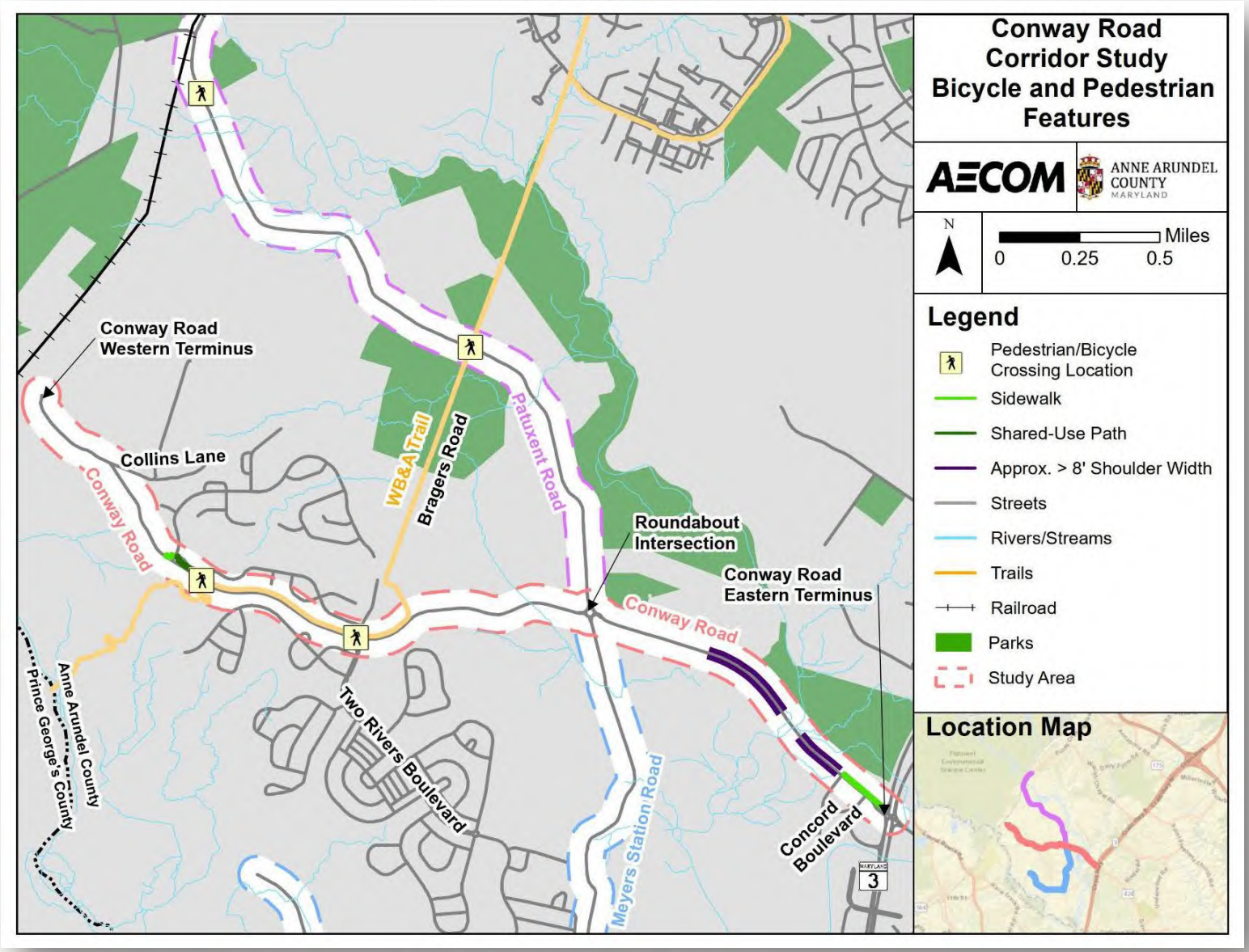
Goal 1: Enhance accessibility for vehicles, pedestrians, and bicyclists along Conway Road

Baseline Conditions

The WB&A Trail (shown along with other existing bicycle/pedestrian compatible facilities in **Figure 3**) follows Braggers Road across Patuxent Road, along Conway Road through Two Rivers Road. Currently between Conway Road between Princess Shopping Center and approx. 1,000 feet east of Two Rivers Boulevard, there are intermittent shoulders, but no sidewalk or bicycle facilities. Additionally, there are no sidewalk facilities or bicycle facilities on Patuxent Road or Meyers Station Road thus creating challenging conditions for pedestrians and bicyclists using the area to access the existing WB&A trail or traveling to the shopping centers at the intersection of Conway Road and MD 3. As documented in the *Phase 1: Existing Conditions Technical Memorandum*, the quantified pedestrian PLOC rate earned a high score and is considered undesirable for five out of six segments along Conway Road. Likewise, bicycle LTS has a high score for four of six segments. For the LTS and PLOC assessment methodology used, high scores are reflective high motor vehicle speeds and volumes combined with a lack of physical separation from vehicular movements, which when these factors are combined are considered less-than-desirable conditions for pedestrians and bicyclists. Considerations need to be made for pedestrians and bicyclists, but the safety, mobility, and accessibility of students and faculty traveling to and from the proposed West County Elementary School should be an area of focus.

Patuxent Road between Piney Orchard and Conway Road, as well as a segment of Conway Road just west of the Little Patuxent Bridge, experience flooding several times each year. The flooding is known to force road closures and has required swift water rescue efforts. The flooding limits the ingress/egress

Figure 3: Bicycle and Pedestrian Features



ability of residents and emergency response services to locations within the study area. Limited access during high water events creates safety and mobility issues for existing area residents and businesses and could be a potential issue for the proposed West County Elementary School.

Measuring Success

As described within *Move Anne Arundel* (the County's Transportation Functional Master Plan), the County has a goal to expand existing shared use paths as well as provide on-street bicycle facilities that connect trails to transit routes and community destinations. The approved plan calls for a shift away from Single Occupancy Vehicles to alternate modes as a strategy for reducing vehicular congestion. Moreover, the County's recently released *Vision Zero Draft Plan* (now available for public review) provides the framework necessary to "promote and facilitate a safer roadway system for all users by saving lives, [and] Vision Zero also supports more sustainable and healthier communities through increasing the number of pedestrians and bicyclists on the road and reducing vehicular use and emissions"[1].

Providing safe and appealing shared-use paths will attract more people to walk/bike, thereby relieving traffic, reducing emissions, and improving health. Based on this goal, the addition of pedestrian facilities to Conway Road will help to realize the county's pedestrian/bicycle connectivity goal. As reported in the Existing Conditions Technical Memorandum, existing users of the WB&A Trail cross the Patuxent Road intersection between 40 and 100 times per day. These volumes are anticipated to increase when the WB&A Trail connection across the Patuxent River is completed; tying-in with existing trail segments in Prince George's County and drawing in additional users. The WB&A Trail bridge over the Patuxent River will be under construction in 2022. Benchmarks for future pedestrian and bicyclist volume increases and reductions in pedestrian/bicycle crash risk and incident severity could be established and monitored. Adding paths and/or bike lanes to Conway Road will make it attractive for bicyclists and pedestrians traveling from east of Route 3 to access the WB&A Trail. However, crossing Route 3 at Conway Road is treacherous and in need of bike/ped improvements. To address Objective 1-1, the County will assess pedestrian and bicycle enhancements that will look to improve PLOC and bicycle LTS ratings along Conway Road.

Conway Road currently has two access points (one to/from MD 3 and one to/from Patuxent Road) which include frequently flooded road segments. By addressing high water/flooding locations and/or providing an additional access route to Conway Road, existing and future travel will be more reliable. Safety will also be enhanced for residents of the study area because emergency response services will have an enhanced and/or alternate route to bypass flooding zones. An additional access route may also help to enhance traffic operations within the study area. To address Objective 1-2, the County will assess conceptual alternative access routes and evaluate those routes for their ability to provide ingress/egress access for residents and emergency vehicles, enhancement traffic operations within the study area.

Goal 2: Enhance traffic operations along Conway Road

Baseline Conditions

Existing AM and PM peak hour conditions at signalized intersections in the study area are shown in **Table 1**. Existing AM and PM peak hour conditions at un-signalized intersections in the study area are

[1] Anne Arundel County. 2022. Vision Zero Draft Plan. Available at: https://www.aacounty.org/departments/transportation/vision-zero/vision-zero-draft-plan.pdf. Accessed Feb. 2022.

shown in **Table 2,** and the existing traffic conditions at the roundabout are in **Table 3**. The intersections of Conway Road at MD 3 and Conway Road at Princess Shopping Center have existing LOS of E and F respectively. For more details on existing traffic, see the Existing Conditions Technical Memorandum. Highway Capacity Manual (HCM) 6 LOS and intersection delay analysis was used to assess key study area intersections for existing conditions and forecasted future 2045 (horizon year) no-build conditions developed from the Baltimore Metropolitan Council (BMC) regional travel demand model. Existing 2021 traffic volume stick-figure diagrams are provided in **Appendix A**.

Table 1: Existing LOS and Delay – Signalized Intersections

Intersection	AM		PM		Weekend	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Conway Road at MD 3	36.4	D	68.6	E	44.7	D

Table 2: Existing LOS and Delay – Un-Signalized Intersections

Intersection	AM		PM		Weekend	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Conway Road at Concord Blvd	11.9	B	23.9	C	16.3	C
Conway Road at Princess Shopping Center	13.8	B	63.9	F	25.4	D
Conway Road at Two Rivers Blvd/Patuxent Ridge Road	25.8	D	27.6	D	27.3	D
Conway Road at Upper Patuxent Ridge Road	9.0	A	9.2	A	9.0	A

Table 3: Existing LOS and Delay – Roundabout

Intersection	AM		PM		Weekend	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Conway Road at Meyers Station Road/Patuxent Road Roundabout	6.8	A	10.1	B	7.5	A

Forecasted future 2045 no-build conditions during the AM and PM peak hours at signalized intersections in the study area are shown in **Table 4**. Forecasted future 2045 no-build AM and PM peak hour conditions at un-signalized intersections in the study area are shown in **Table 5**, and the forecasted traffic conditions at the roundabout are shown in **Table 6**. The intersections of Conway Road at MD 3 and Conway Road at Princess Shopping Center have LOS of F and are expected to experience significant delays. Forecasted future 2045 traffic volume stick-figure diagrams are provided in **Appendix B**.

Table 4: Forecasted Future 2045 No-Build LOS and Delay – Signalized Intersections

Intersection	AM		PM		Weekend	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Conway Road at MD 3	43.2	D	85.2	F	80.9	F

Table 5: Forecasted Future 2045 No-Build LOS and Delay – Un-Signalized Intersections

Intersection	AM		PM		Weekend	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Conway Road at Concord Blvd	14.5	B	34.0	D	24.4	C
Conway Road at Princess Shopping Center	16.7	C	> 90.0	F	60.5	F
Conway Road at Two Rivers Blvd/Patuxent Ridge Road	>90.0	F	> 90.0	F	> 90.0	F
Conway Road at Upper Patuxent Ridge Road	9.3	A	9.5	A	9.5	A

Table 6: Forecasted Future 2045 LOS and Delay – Roundabout

Intersection	AM		PM		Weekend	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Conway Road at Meyers Station Road/Patuxent Road Roundabout	13.1	B	20.3	C	13.4	B

Existing year and forecasted future 2045 no-build condition Annual Average Daily Traffic (AADT) volumes are shown in **Table 7** below:

Table 7: Existing 2021 and Forecasted Future 2045 AADT

Segment	AADT 2021	AADT 2045
West of Upper Patuxent Ridge Rd	316	979
Upper Patuxent Ridge Rd to Two Rivers Blvd	1725	4047
Two Rivers Blvd to Patuxent Rd	7892	15172
Patuxent Rd to Concord Blvd	11510	17551
Concord Blvd to MD3	15166	22245

Measuring Success

As traffic volumes are expected to grow within the study area, associated operations are anticipated to deteriorate during the AM and PM peak hours under the 2045 no-build condition as shown above. A few key driving forces related to the anticipated increases in traffic volumes are:

- Planned development at the Two Rivers community - the anticipated build-out of the Two Rivers community is 2,376 homes from roughly 1,000 existing homes today.
- Population in Anne Arundel County is expected to grow by approximately 0.40% annually based on projections documented in the Anne Arundel County General Development Plan, *Plan2040* as well as growth rates used in the regional BMC travel forecasting model used to develop forecasted traffic volumes within the study area.
- The introduction of the West County Elementary School (anticipated 600 students and additional faculty and support staff).

To address Objective 2-1, the County will evaluate possible minor capacity and operational enhancements along Conway Road at key locations. Improvements in future LOS and delay can be measured to show enhancements in vehicle mobility. To address Objective 2-2, the County will evaluate potential traffic mitigation options on a case-by-case basis to address traffic operational needs with

context sensitive solutions like traffic calming, traffic warning signs, traffic signal timing adjustments, conversion to all-way stop control, traffic signalization, and turning lane queuing/bypass capacity at intersections. No new through lanes are planned for Conway Road.

Goal 3: Enhance vehicular and pedestrian/bicyclist safety within the study area

Baseline Conditions

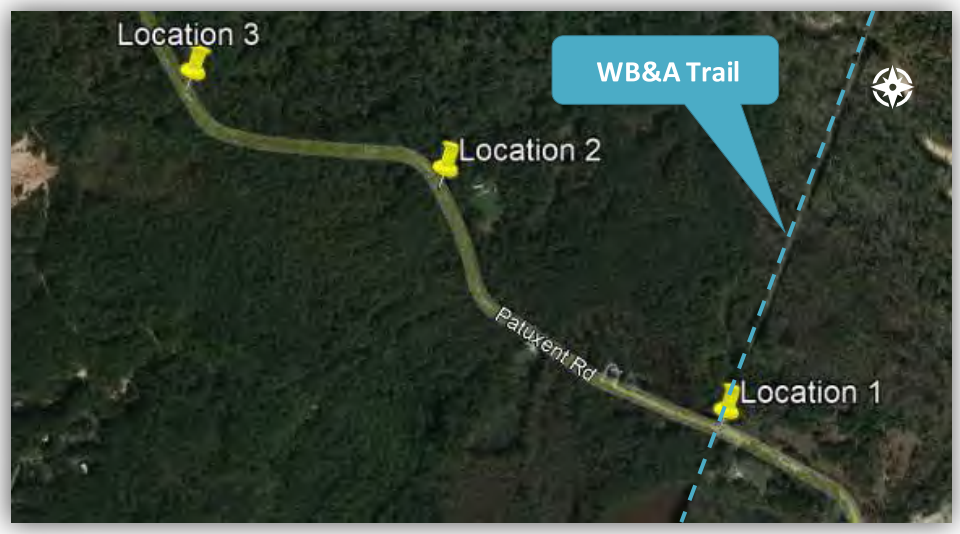
Crashes can result in non-recurring congestion and delays which negatively affect the ability of vehicles to travel within the study area and represent potential personal safety hazards for the travelling public. Crash data was obtained from Maryland Department of Transportation State Highway Administration (MDOT SHA) for the three-year period of 2018-2020 for Study Area intersections. **Table 8** summarizes the crash data. Crash data was not available for intersections in the Two Rivers development as the intersections are too new to be included in the State database. From the MDOT SHA data there were no discernible trends in crash types and crash severity on Conway Road or Meyers Station Road; however, along Patuxent Road most of the crashes involved a fixed object or rear-end collisions which occurred at three hot-spot locations shown in **Figure 4**.

Table 8: Crash Severity by Road*

Crash Severity	Study Intersection		
	Conway Road	Meyers Station Road	Patuxent Road
Fatal	0	0	0
Injury	4	1	14
Property Damage Only	11	1	22
Total	15	2	36

*As noted in the Existing Conditions Report, a potential data gap is being assessed; any resulting changes will be added via addendum

Figure 4: Patuxent Road Crash Hotspots



As noted in the *Phase 1: Existing Conditions Technical Memorandum*, the County has identified the segment of Conway Road between Two Rivers Boulevard and Patuxent Road as a location with limited sight distance. Specifically, at a location 800 feet west of the Patuxent Road/Meyers Station Road

Roundabout, as shown in **Figure 5**, there is a short bridge that coincides with a sharp horizontal road curvature, where eastbound sight distance is temporarily limited to about 200 feet; this is less than the American Association of State Highway and Transportation Officials (AASHTO) minimum recommended stopping sight distance of 305 feet for this type of road, based on the 85th Percentile speeds of 40 mph calculated at this location. Overall, the 85th Percentile speeds show speeds greater than 10 mph over the posted speed limit, suggesting that speed and visibility could be contributing to crash risk.

Figure 5: Example of Limited Sight Distance on Conway Road west of Patuxent Road

Measuring Success

Roadway safety will be measured by reducing crash risk related to vehicle conflicts with fixed objects, pedestrians, bicyclists, and other vehicles. The County has suggested posting warning speed advisory signs of 20 mph in locations where reduced stopping-sight distance and 85th percentile speeds exceeding 10 mph over the posted limit have been documented. To address Objective 3-1, the County will assess hotspot crash locations and evaluate opportunities to enhance roadway geometrics and stopping-sight distances and employ other context sensitive solutions and traffic calming measures to deter excessive traffic speeds through enforcement and other deterrent features. Future speed studies or application of speed detecting/recording devices can be used to assess the success of these measures. To address Objective 3-2, the County will look to reduce crash risk between vehicles and pedestrians/bicyclists at conflict points and provide measures aimed at reducing potential run-off-road incidents.

Coinciding with the Goal 1 Objectives to enhance ped/bike accessibility, the County will also assess safety enhancement provisions like separated ped/bike facilities and/or properly marked shared facilities, advance warning signs and markings, improved lighting, improved sight distance, and other context sensitive compete streets/streetscaping design elements that could contribute to overall ped/bike comfort and safety.

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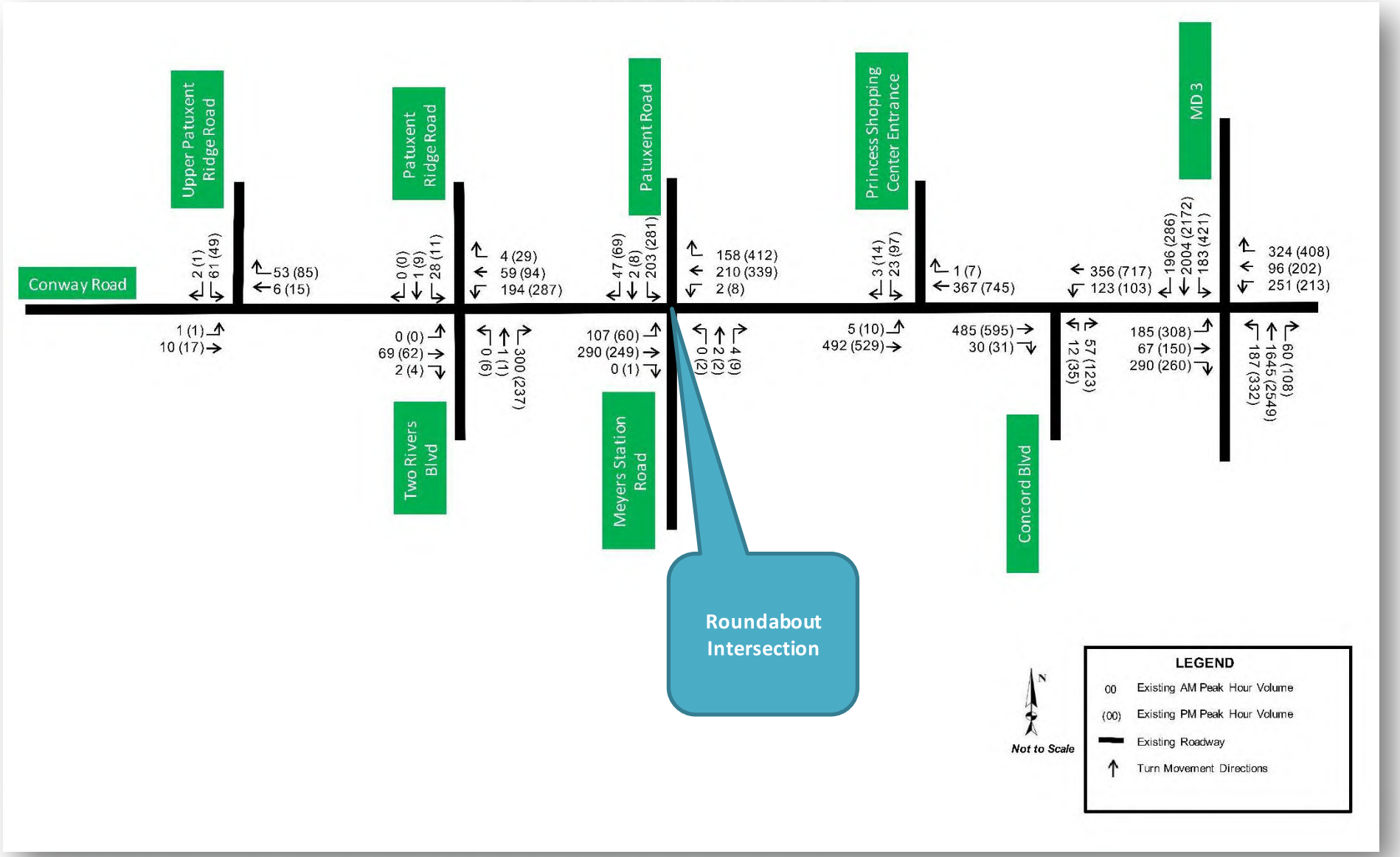
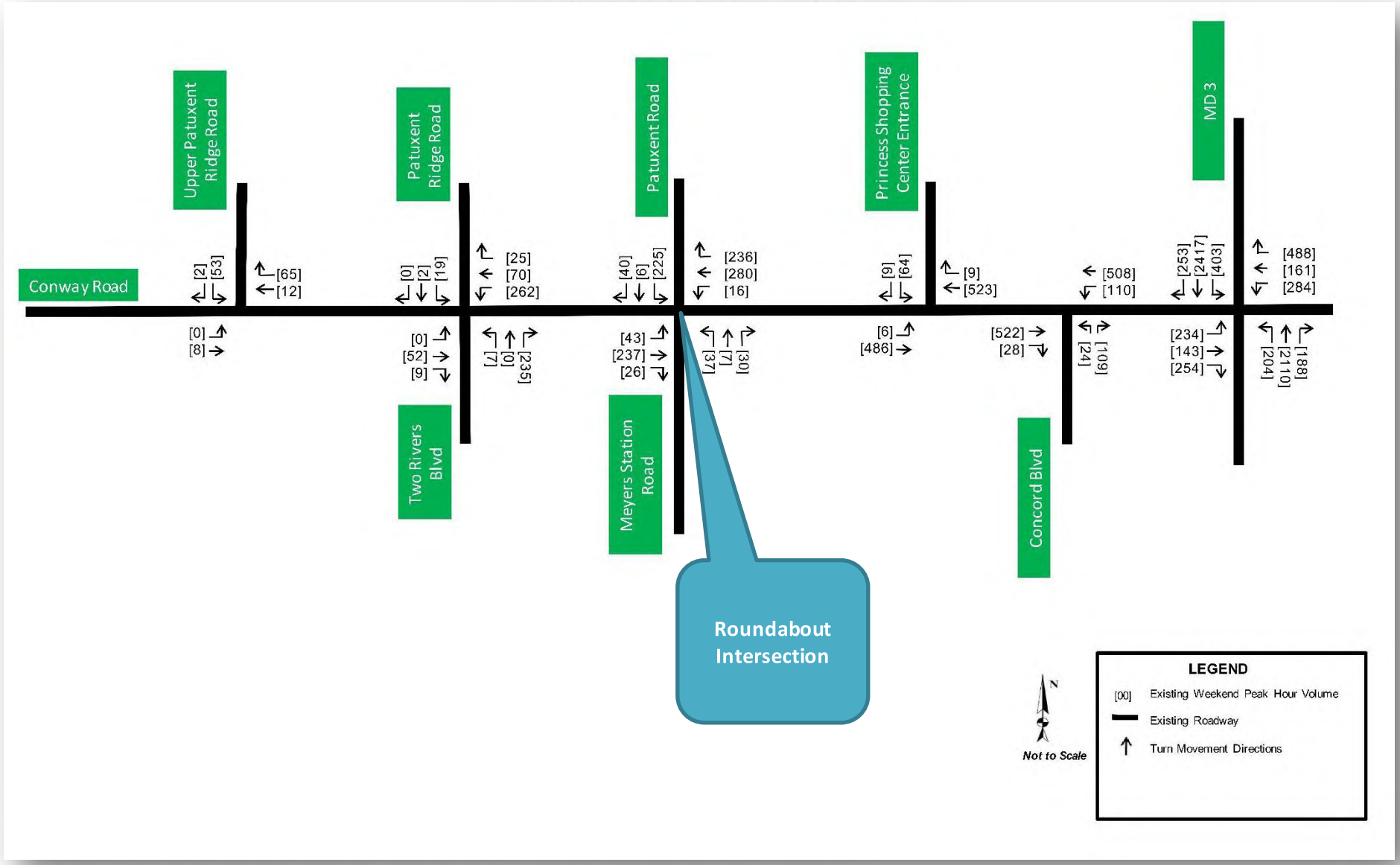
Appendix A
Existing 2021 Peak Hour Traffic Volumes

Existing Weekday Peak Hour Volumes

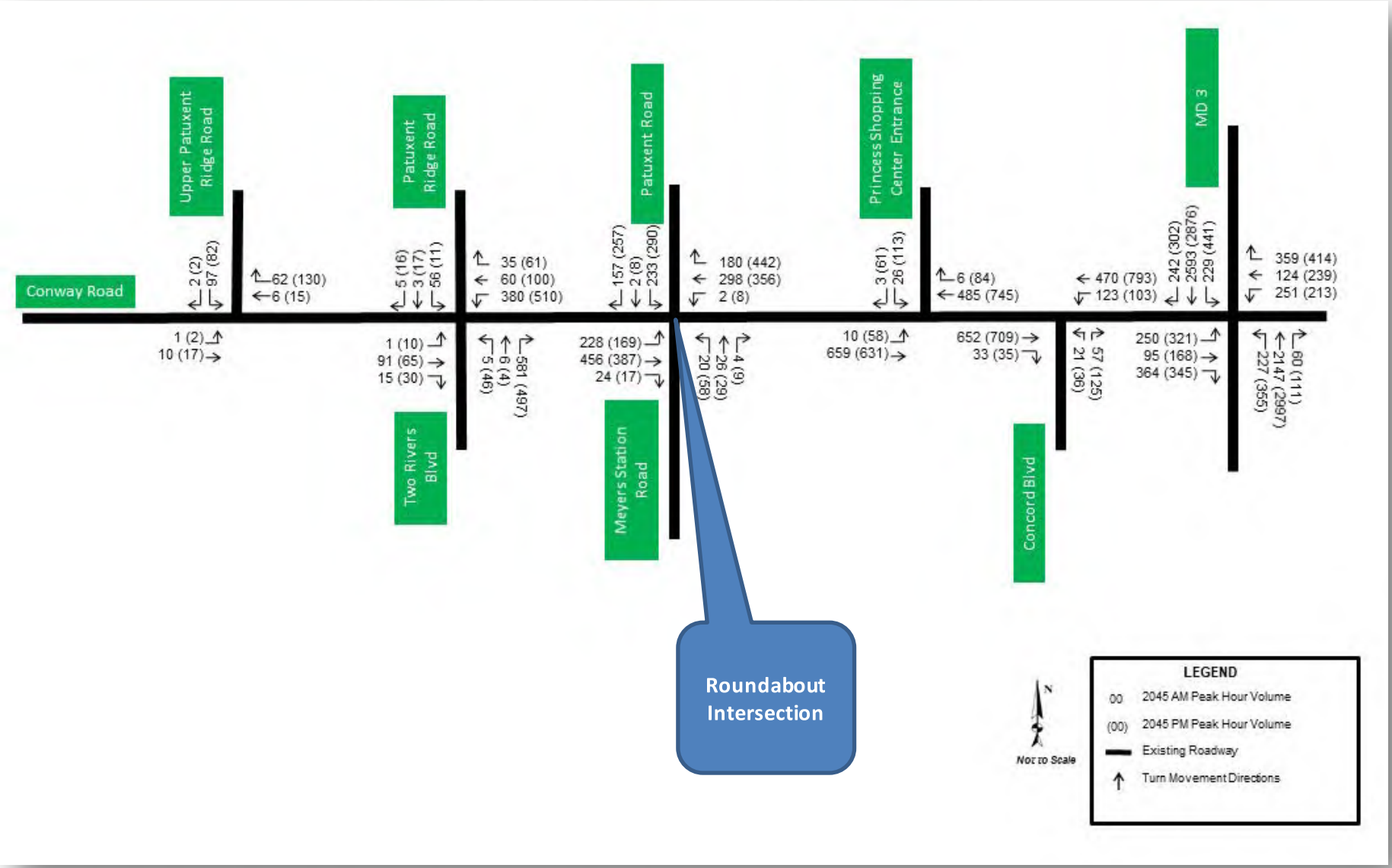


Existing Weekend Peak Hour Volumes

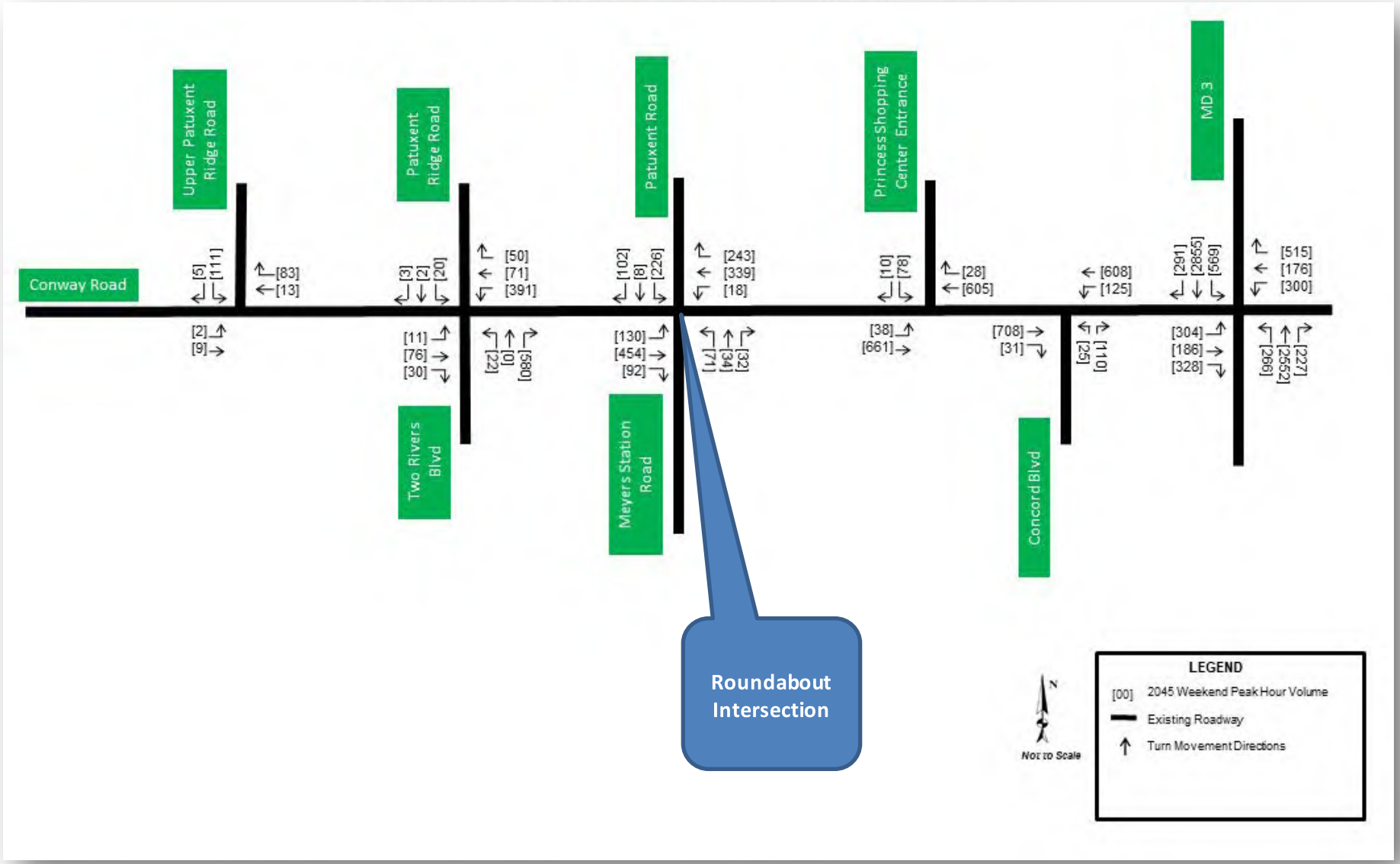


Appendix B
Forecasted 2045 Peak Hour Traffic Volumes

Forecasted Future 20245 No-Build Weekday Peak Hour Traffic Volumes



Forecasted Future 20245 No-Build Weekend Peak Hour Traffic Volumes



ANNE ARUNDEL COUNTY
MARYLAND

Transportation Facility Planning

Conway Road from MD 3 to the Western Terminus

Project No.: H539600

Contract No.: H539620

FINAL Technical Memorandum

Phase 3: Future Conditions

August 2022

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

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1. Introduction

This Future Conditions Technical Memorandum has been prepared by the Anne Arundel County Department of Public Works to document the assessment of potential proposed conceptual improvements considered to address the needs of the study area. See Figure 1 for an overview map of the Study Area.

For additional background and details on the existing conditions within the project study area, including traffic and safety data, please refer to the Phase 1: Existing Conditions Technical Memorandum, finalized in January 2022. For additional information on the project purpose, study area needs, goals and objectives, and future forecasted traffic conditions, please refer to the Purpose and Need Statement.

2. Assessment Background

2.1 Study Purpose and Need

As stated in the Purpose and Need Statement, the purpose of the Conway Road Facility Planning Study is to: provide accessible pedestrian and bicycle facilities along Conway Road necessary to enhance Pedestrian Level of Comfort (PLOC) and bicyclist Level of Traffic Stress (LTS) and enhance connective facilities; reduce conflicts between vehicles and pedestrians/bicyclists; address vehicular accessibility issues related to roadway flooding and closures; enhance traffic operations within the study area along Conway Road; and reduce conflicts between fixed objects and vehicles within the study area.

The need for the project is driven by several factors including: current and projected vehicular usage of Conway Road exceeding current capacity at some locations; sub-standard pedestrian and bicycle accommodations; and flooding and other blockage hazards resulting in closure of the road that create safety and accessibility issues for residents who can be cut off from vehicular ingress/egress and emergency response services. With the introduction of the new West County Elementary School, a new bus turnaround area near the western terminus of Conway Road was considered to assist with anticipated increases in school bus traffic.

2.2 Public Involvement

Public input was solicited and compiled as part of a public meeting on March 23, 2022, along with an open public comment period that ended in early April 2022. Comments were captured during the public meeting, via an on-line commenting tool available through the project webpage, and via emails/phone communications to study team members. There were over 160 public comments and recommendations reviewed by the study team and integrated into the conceptual improvement development and assessment process. The public comments matrix, public meeting transcript, and public meeting chat are located in Appendix A, Appendix B, and Appendix C, respectively. Public comments generally included, but were not limited to, insights and suggestions related to the following topics (number of related comments in parentheses):

- Traffic safety & operations (65)
- Pedestrian and bicycle safety (39)
- New West County Elementary School & School Buses (14)
- Access and roadway flooding/closures (76 total, of which 38 specifically indicated they were in favor of new access to Meyers Station Road / South of Conway)
- Potential impacts to property (2)
- Utilities (4)
- Impacts to natural resources and community facilities (2)
- Impacts to historic and cultural resources (3)
- Miscellaneous comments/questions (10)

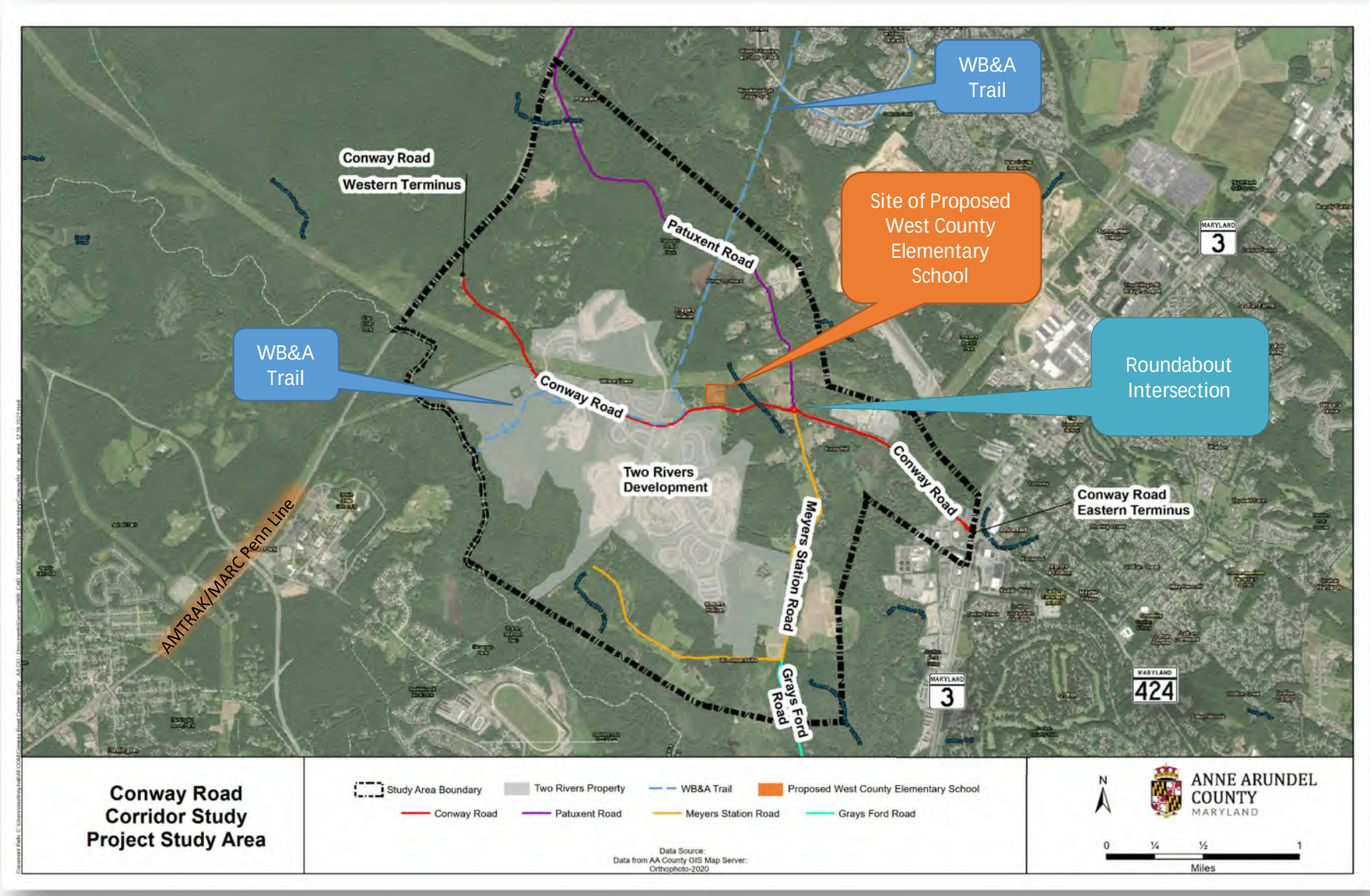


Figure 1: Study Area

2.3 Facility Planning Process Summary

This project is in the initial stages of planning and overall development. The Anne Arundel County Transportation Facility Planning Process for this study has been segmented into three phases, as shown in Figure 2. Phase 1 focused on data collection and documentation of existing conditions – these will be the baseline functions against which all proposed improvements will be comparatively assessed. Phase 2 included developing project Purpose and Need, evaluating traffic operations under future no-build conditions, conducting initial public outreach, and the assessment of preliminary conceptual solutions to address study area needs. Phase 3, where we are now, involves the completion of the study with a Final Report that provides recommended improvements and documents additional community input on the recommendations. Once Phase 3 of this study is completed, the County will determine if funding can be allocated towards the design and implementation of recommended improvements. There are currently no funding provisions nor set timeline for subsequent design and implementation phases.

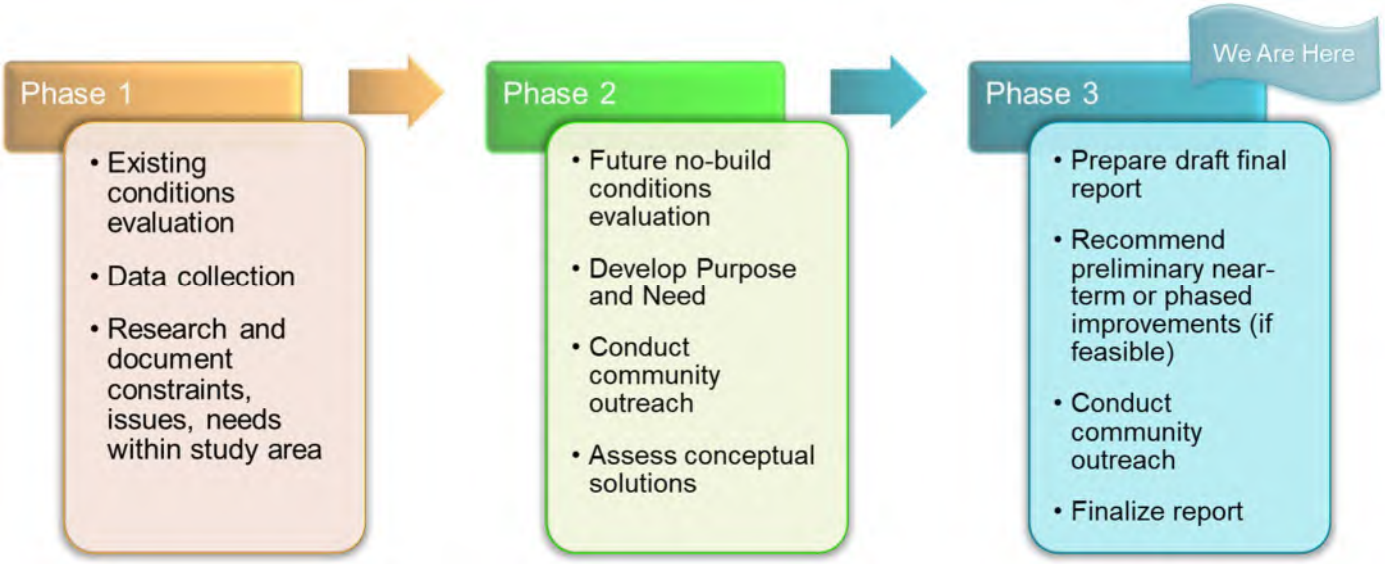


Figure 2: Facility Planning Process

3. Conceptual Improvement Development and Assessment Process Overview

3.1 Improvement Development & Screening Process

As conceptual improvement options are developed, they each go through a screening process that begins with understanding the needs of the community and establishing goals and objectives to address known issues (as documented in the Purpose and Need Statement and compiled from public and agency stakeholder input). See Figure 3 for a visual representation of the improvement development and screening process.

Step two involves the development of conceptual improvement options and evaluation criteria to identify assessment priorities necessary to balance the needs of the surrounding communities and those who travel along these corridors against the potential risks and impacts associated with implementation.

Step three involves the screening of conceptual improvement options and the documentation of potential risks and measures of success. Once conceptual improvements are developed and refined, they will then be evaluated against the priorities established in step two, and the performance potential vs impacts and other risk-related components are documented.

Step four will utilize the screening process to provide recommendations on preferred/feasible conceptual improvement options for future capital programming and potential implementation. The recommendations will incorporate suggested measures for how to move forward with further developing the conceptual improvements through subsequent phases of funding identification, permitting, design, and implementation.

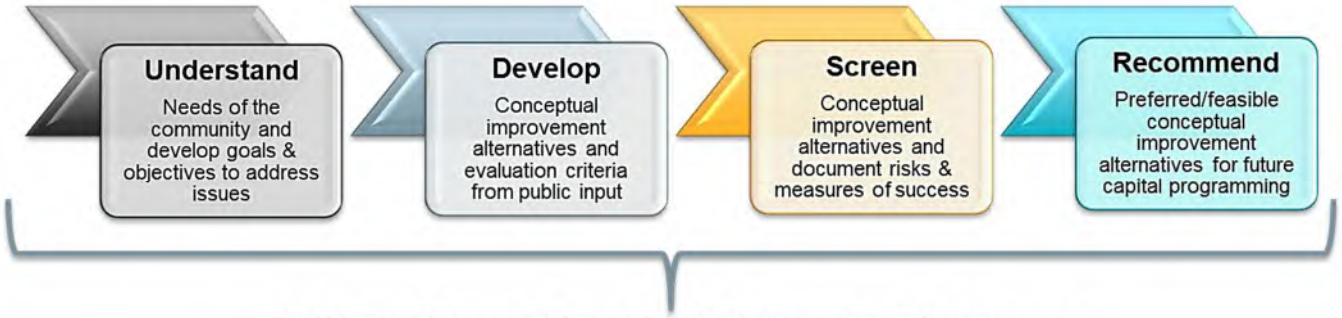


Figure 3: Improvement Development Screening Process

3.2 Evaluation Criteria

As documented in the Purpose and Need Statement, the county has established several goals and objectives with corresponding measures of success that will be used, along with other standard evaluation criteria like anticipated operations, impacts, and costs, to help evaluate the proposed conceptual improvements. Evaluation criteria includes:

- Improve PLOC and bicycle LTS ratings along Conway Road.
- Provide safe and reliable redundant ingress/egress access for residents and emergency vehicles.
- Mitigate traffic operation needs to achieve Level of Service (LOS) D or better and reduce delays.
- Enhance traffic safety via context-sensitive solutions.
- Minimize impacts to property, natural resources (forested areas, waters/wetlands/floodplains, etc.) community facilities (parks, green space, trails, etc.), cultural and historic resources (historic and scenic routes, historic properties/districts, places of worship, etc.), and other protected features (protected lands, conservation easements, etc.).
- Evaluate potential risks and benefits.
- Estimate capital costs.

3.3 Conceptual Enhancements Considered

The study investigated several conceptual improvement options to address the study area's needs and in response to public input. The following is a general overview of the conceptual improvements considered. Additional details on the improvements are provided in the subsequent sections:

1. Conceptual improvements along Conway Road, including:
    - Pedestrian and bicycle Shared Use Path, sidewalks, and on-road bicycle shoulder lanes along Conway Road to address PLOC and LTS and reduce conflicts between pedestrians/bicyclists and motor vehicles.
    - Conceptual traffic operational improvements (traffic warning signs, traffic controls, new intersection designs) at key locations along Conway Road.

- Conceptual enhancement and/or introduction of shoulders along Conway Road to add on-road bicycle facilities, and potentially address conflicts between motor vehicles and fixed objects.

2. Conceptual new access road alternatives to provide redundant accessibility during flooding and closures on Conway Road.
3. A potential bus turnaround area near the western terminus of Conway Road.

4. Conceptual Improvements Along Conway Road

The following are the specific details related to proposed conceptual improvements along Conway Road.

4.1 Pedestrian and Bicycle Safety and Accessibility Enhancements

The study team investigated a series of pedestrian and bicycle safety and accessibly enhancements, including a separated shared use path, sidewalks, and bike lane shoulders.

Sidewalk adjacent to Conway Road as a standalone improvement would introduce a need for curb and gutter, would require significant changes to roadway drainage and stormwater management (SWM), and would significantly expand the overall footprint of Conway Road while not providing significant enhancements for bicycle travel and LTS scores. Sidewalks would provide minor improvements for PLOC, but the potential impacts and costs outweigh the potential benefits; therefore, sidewalks were screened out and dropped from consideration.

Bike lane shoulders would, as a standalone improvement, improve LTS on Conway Road. This improvement would also introduce the need to widen the overall roadway while not improving PLOC scores or providing enhancements for non-bicyclist pedestrians. Concerns were raised from the public that widening shoulders could induce higher motor vehicle speeds and potentially increase crash risk. Bike lanes alone were screened out and dropped from consideration.

A combination of adjacent sidewalk and bike lane shoulders were considered and would provide minor improvements to both PLOC and LTS; however, the overall resulting impact due to the expansion of Conway Road was determined to be undesirable with impacts, costs, and potential for higher vehicle speeds outweighing potential benefits to pedestrians and cyclists. In addition, project stakeholders have raised concerns about changes, like introducing curb and gutter and significantly widening shoulders, that would drastically alter the Scenic and Historic character of Conway Road; therefore, this option was screened and dropped from consideration.

A ten-foot-wide shared use path separated from the north side (westbound) of Conway Road was investigated and determined to provide the highest possible improvement to both PLOC and LTS. The shared use path would introduce impacts to property and natural resources and associated implementation costs, but it would not require the introduction of closed section curb and gutter drainage facilities, nor would it be likely to contribute to higher vehicle speeds. Introducing a shared use path would provide connectivity between the Two Rivers Development, the planned West County Elementary School, the WB&A Trail, and the MD 3 corridor. The shared use path improvement option was carried forward for detailed assessment.

Shoulder widening was considered to enhance sight distance and provide emergency access relief in the event of lane closures. Between 2017 and 2021, according to county records, there were three instances of trees falling on along Conway Road between MD 3 and Upper Patuxent Ridge Road. It was not confirmed whether or not the trees caused road closures. In March 2022, a large brush fire along Patuxent Road near Bragers Road caused Conway Road to be closed west of the existing roundabout at

Patuxent Road and Conway Road. Additionally, there have been numerous closures on Patuxent Road between 5th Avenue and Bragers Road due to channel flow blockage. Regular closures on Patuxent Road directly impact the operations along Conway Road, causing congestion that could interfere with emergency response efforts. To address the concerns associated with road closures and accessibility, potential shoulder widening was carried forward for detailed assessment. The study team anticipates the additional passive pavement could be utilized in the event of lane closures for incident bypass purposes. The study team recognizes the potential for higher traffic speeds and impacts related to shoulder widening. As the project proceeds through future phases of the approval and design process, efforts should be made to strategically reduce impacts and implementation costs through variable shoulder widths. In addition, traffic calming measures like speed warning signs, traffic bollards, road diets, and pavement markings should be considered as appropriate in order to deter vehicle speeds in excess of posted limits.

Similarly, future development phases of the proposed Shared Use Path should be designed in a way that best fits the character of the corridor with particular attention given to:

- the scenic and historic nature of the designated roadway;
- protected public lands;
- culturally significant resources and communities;
- the sensitivity of adjacent ecological resources; and
- the potential affects to private properties.

Figure 4 provides a more detailed plan view of the proposed shoulder widening and shared-use path.

Figure 5 depicts the proposed shoulder widening and shared-use path typical section (63-foot overall width).

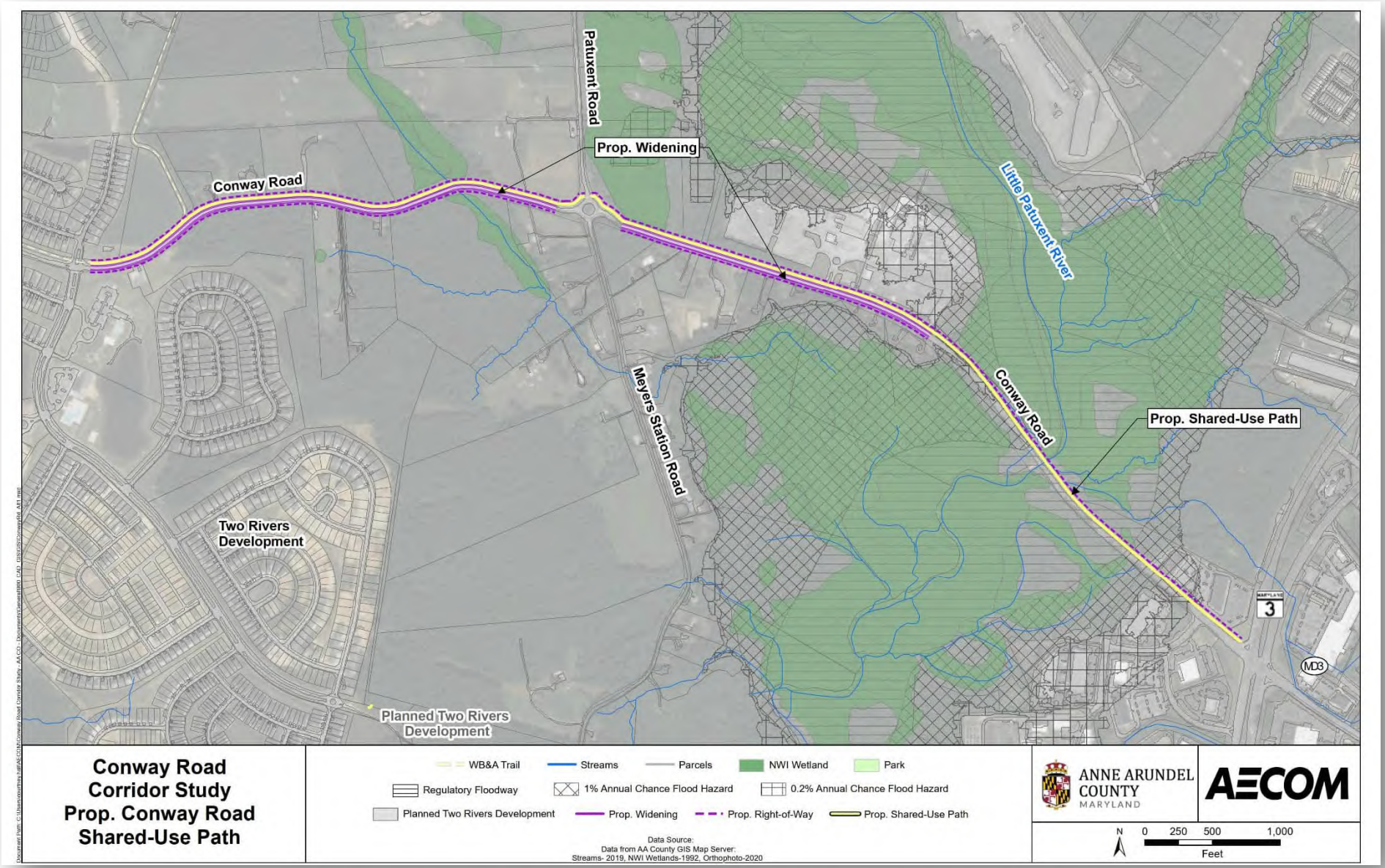


Figure 4: Conceptual Shoulder Widening and Shared Use Path along Conway Road

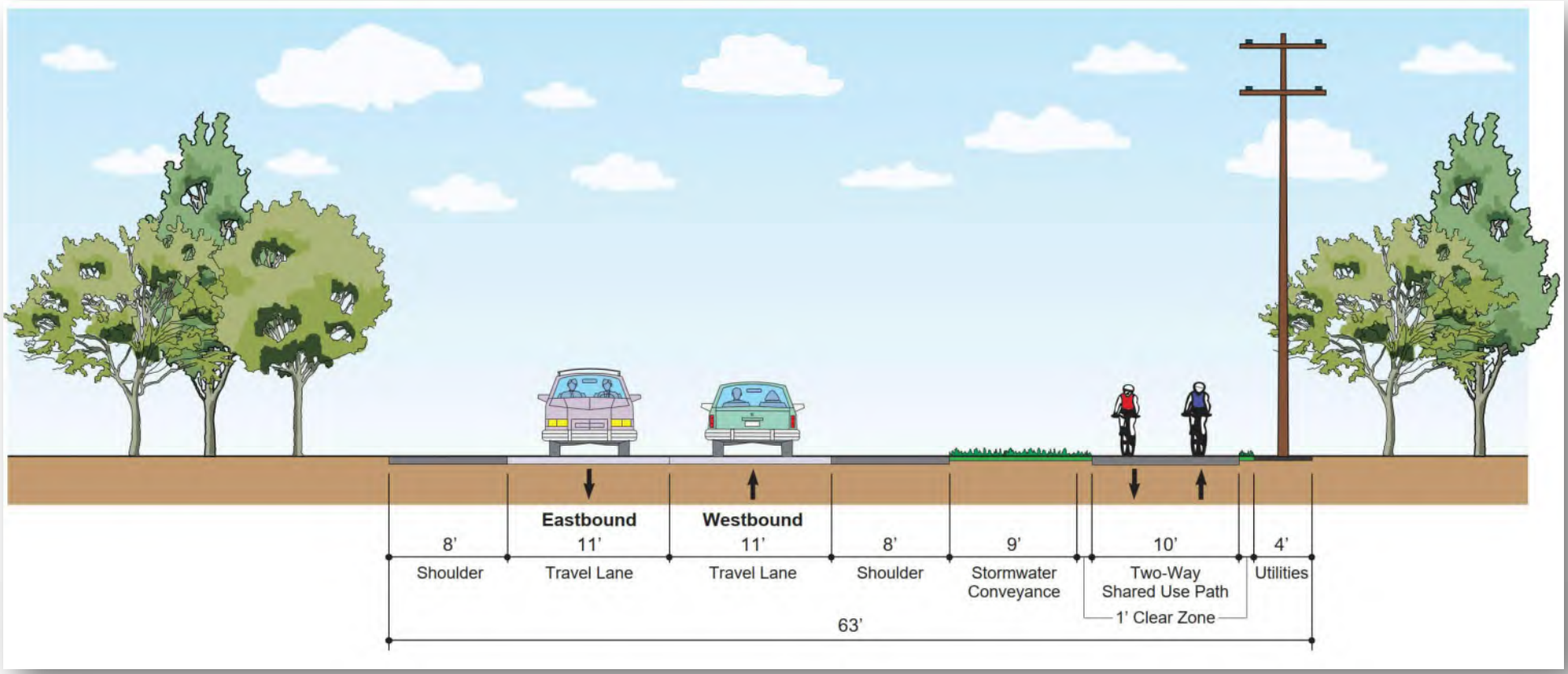


Figure 5: Conceptual Improvements - Conway Road Typical Section with 8-foot Shoulders & 10-foot Shared Use Path

4.2 Roadway Enhancements

The study team investigated a series of potential roadway improvements along Conway Road to address operations and safety needs, including intersection safety improvements, traffic control options, sight distance enhancements, and accessibility enhancement measures.

As discussed in Phase 1: Existing Conditions Technical Memo and the Phase 2: Purpose and Need Statement, addressing safety through traffic calming and improved sight distances were top priorities for the study team. Improvements like widening shoulders to improve sight distance was considered, but concerns were raised by stakeholders that wider shoulders could lead to higher vehicle speeds and would impact the scenic and historic character of the roadway. However, the team determined that shoulders could provide potential access enhancement during emergency lane closure events and could help to address access issues. Shoulder widening was included in the detailed assessment of improvements.

At the four-legged intersection of Two Rivers Boulevard/Patuxent Ridge Road/Conway Road, the future forecasted traffic is expected to operate at LOS F, with delays more than 90 seconds per vehicle for those turning left out of Patuxent Ridge Road. To address these anticipated operational issues, the study team investigated an all-way stop control (AWSC) condition and a roundabout. See the roundabout inset (Figure 6) for a graphical depiction.

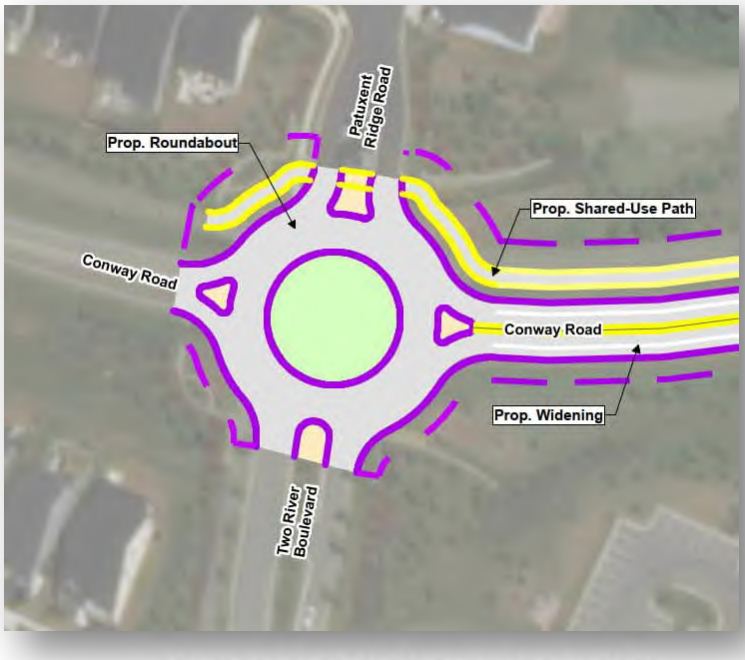


Figure 6: Conceptual Roundabout Detail

These improvements could be phased in with the AWSC being introduced as an immediate low-cost/low-impact option while a roundabout is further assessed and designed by the County. Additional discussions on anticipated traffic operations, impacts, and costs are discussed below. The study team anticipates that pedestrians and bicyclists would benefit from an AWSC with proper signage and markings acting to slow traffic speeds and allow for improved crossing of Conway Road. The study team also anticipates that the roundabout would provide operational relief and calm traffic speeds but could require additional signing and marking to ensure safe access to the WB&A trail in accordance with County standards. These proposed intersection improvements have been carried forward for detailed assessment.

At the three-legged intersection of Conway Road and the Princess Shopping Center, the future forecasted traffic is anticipated to operate at LOS F, with delays more than 90 seconds per vehicle for those turning left out of the Shopping Center. If Professional Drive is extended to create a full four-legged intersection (as planned), it is anticipated that a traffic signal would be warranted and introduced at that time. However, under the current configuration, the study team recommends improving sight distance for drivers by trimming vegetation at the intersection and to consider modifying existing lane markings to provide vehicles a center turn/receiving lane on Conway Road as a low-cost/low-impact enhancement for those left turning vehicles (as shown in Figure 7).

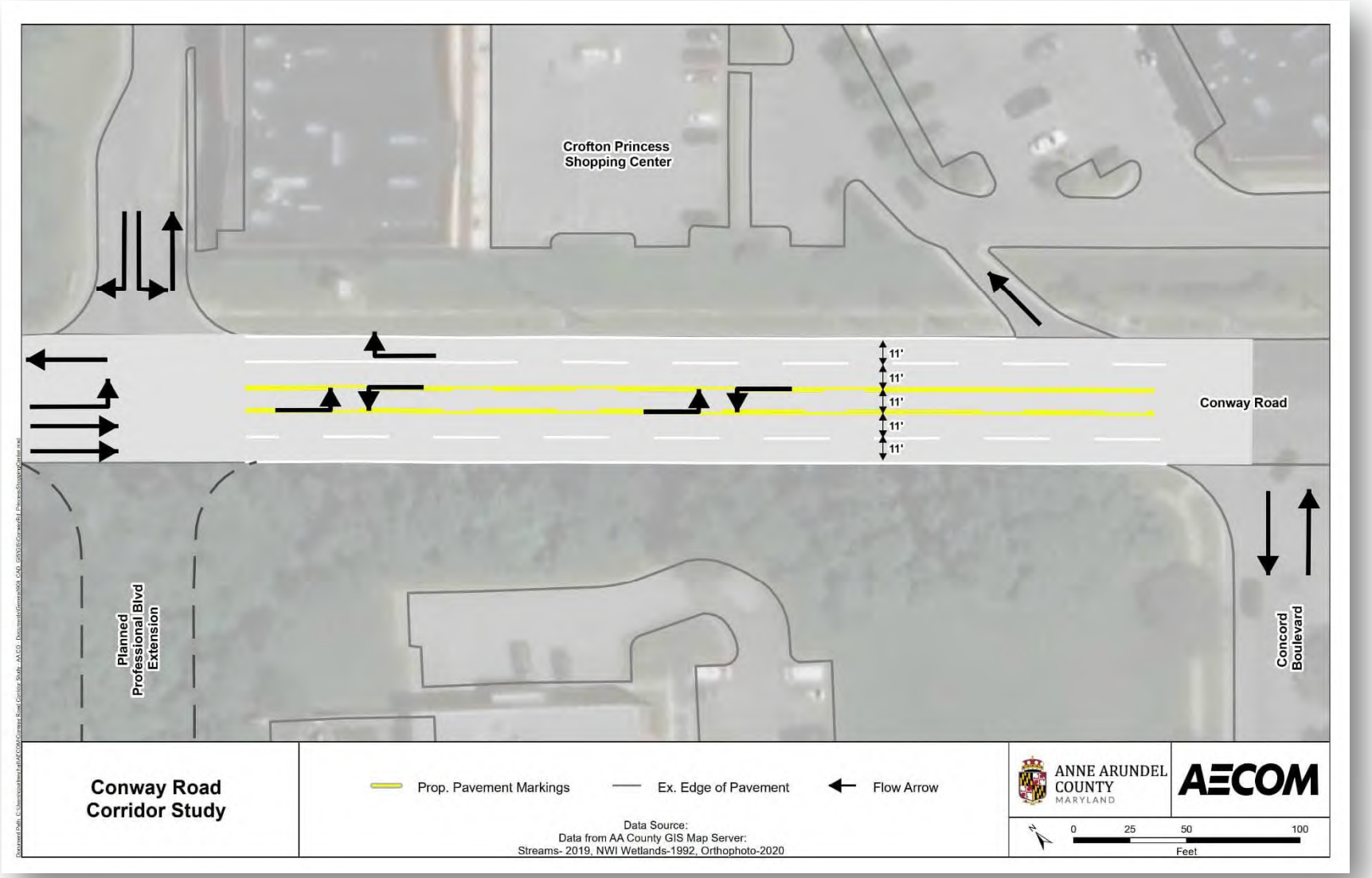


Figure 7: Conceptual Princess Shopping Center Lane Configuration

5. Conway Road Impact Assessment

Table 1 provides a summary of anticipated impacts resulting from pedestrian and bicycle facility and roadway conceptual enhancements along Conway Road proposed to be carried forward for possible recommendation. Impacts were developed and assessed based upon the assumption of a 15-foot limit-of-disturbance (LOD) offset from the edge of proposed improvements. Any features within the LOD are considered an impact related to construction. These impact calculations are based on preliminary conceptual planning level design and are subject to change as proposed improvements are further developed, refined, and designed.

Table 1: Anticipated Impacts for Pedestrian/Bicycle and Roadway Enhancements on Conway Road

	Wetlands & Floodplains	Streams	Cultural Resources	Open Space/ Parks	Forested Areas	Forest Interior Dwelling Species	Conservation Areas	Private Property
Conway Road Widening & Shared Use Path	0.40 acres (AC) Wetlands 2.99 AC Floodplain	496.20 Linear Feet (LF)	Scenic & Historic Conway Road*	0.29 AC Open Space 2.44 AC Parks	5.06 AC	1.36 AC	0.01 AC	6.62 AC
Shared Use Path	0.13 AC Wetlands 2.81 AC Floodplain	382.63 LF	Scenic & Historic Conway Road*	1.16 AC Parks	2.10 AC	0.57 AC	N/A	2.42 AC
Traffic Control Signs/Markings at Princess Shopping Center	N/A	N/A	N/A	N/A	0.1 AC	N/A	N/A	N/A
Traffic Control Signs/Markings at Two Rivers Boulevard	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roundabout at Two Rivers Boulevard	N/A	N/A	Scenic & Historic Conway Road*	0.24 AC Open Space 0.19 AC Parks	N/A	N/A	N/A	0.15 AC

*Impacts to Conway Road Scenic & Historic Route include new pavement markings and signage, tree clearing, possible drainage areas, and changes to traffic volumes. Permit coordination for impacts to conservation areas and scenic & historic routes, per County Code Article 17-6-504, will be required as needed. The County has noted that the shared use path can be appropriately incorporated into the scenic & historic character of the road.

6. Conway Road Traffic Assessment

6.1 Existing Conditions Summary (No-Build)

The 2045 No-Build analysis was performed based on existing geometric lane configurations, traffic volumes projected using the Baltimore Metropolitan Council (BMC) regional travel demand model, and existing signal timings provided by Anne Arundel County. The operational analyses at the study area

intersections were performed for both AM and PM peak hours on a typical weekday, as well as Saturday peak.

The study area consists of four un-signalized intersections, one signalized intersection, and one roundabout. The capacity analyses performed followed the guidelines and procedures outlined in the Highway Capacity Manual (HCM 6). Synchro 11 traffic simulation software was used to perform the un-signalized and signalized intersection operational analyses. Sidra 9 traffic simulation software was used to perform the roundabout intersection operational analysis.

The control delay for a signalized intersection is determined for each lane group and aggregated for each approach and for the intersection and divided by the number of vehicles. Based on these delay values, a grade or LOS ranging from LOS A, the best, to LOS F, the worst, are assigned. Each LOS represents a range of driver delays. Generally, for roadways in Anne Arundel County, and for the purposes of this study, LOS D is the worst acceptable operating condition. See Table 2 for LOS thresholds.

Table 2: Level of Service (LOS) for Signalized Intersections

Level of Service	Average Control Delay (seconds/veh)
A	≤ 10.0
B	>10.0 to 20.0
C	> 20.0 to 35.0
D	> 35.0 to 55.0
E	> 55.0 to 80.0
F	> 80.0

Source: Highway Capacity Manual

For two-way stop sign controlled intersections, the Synchro analysis results provide an 'approach delay'. The approach delay is a volume weighted average of the approach control delay. The highest approach delay was chosen to represent the intersection control delay since the free movements have a control delay of zero seconds and would not be representative of the intersection. Based on these delay values, a "grade" of LOS ranging from LOS A, the best, to LOS F, the worst, are assigned. Generally, for roadways in Anne Arundel County, LOS D is the worst acceptable operating condition. See Table 3 for LOS thresholds.

Table 3: Level of Service for Un-Signalized Intersections

Level of Service	Average Control Delay (seconds/veh)
A	≤ 10.0
B	10.0 to 15.0
C	15.0 to 25.0
D	25.0 to 35.0
E	35.0 to 50.0
F	> 50.0

Source: Highway Capacity Manual

The control delay for an AWSC intersection or roundabout is determined for each lane group and aggregated for each approach and for the intersection and divided by the number of vehicles. Based on these delay values, a grade or LOS ranging from LOS A (the best) to LOS F (the worst), are assigned. Each LOS represents a range of driver delays. Generally, for roadways in Anne Arundel County, LOS D is the worst acceptable operating condition. See Table 3 for LOS thresholds.

The forecasted future 2045 no-build conditions during peak hours at signalized intersections in the study area are shown in Table 4. Forecasted future 2045 no-build peak hour conditions at un-signalized intersections in the study area are shown in Table 5, and the forecasted traffic conditions at the existing Conway Road / Patuxent Road / Meyers Station Road roundabout are shown in Table 6. The intersections of Conway Road at MD 3, Conway Road at Princess Shopping Center, and Conway Road at Two Rivers Blvd / Patuxent Ridge Road operate at LOS F in the PM and Weekend peaks. Conway Road at Two Rivers Blvd / Patuxent Ridge Road also operates at LOS F in the AM peak and is expected to experience significant delays. See Appendix D for Traffic Volume and Turning Movement Diagrams.

Table 4: Forecasted Future 2045 No-Build LOS and Delay – Signalized Intersections

Intersection	AM		PM		Weekend	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Conway Road at MD 3	43.2	D	85.2	F	80.9	F

Table 5: Forecasted Future 2045 No-Build LOS and Delay – Un-Signalized Intersections

Intersection	AM		PM		Weekend	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Conway Road at Concord Blvd	14.5	B	34.0	D	24.4	C
Conway Road at Princess Shopping Center	16.7	C	> 90.0	F	60.5	F
Conway Road at Two Rivers Boulevard/ Patuxent Ridge Road	>90.0	F	> 90.0	F	> 90.0	F
Conway Road at Upper Patuxent Ridge Road	9.3	A	9.5	A	9.5	A

Table 6: Forecasted Future No-Build 2045 LOS and Delay – Existing Roundabout

Intersection	AM		PM		Weekend	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Conway Road at Meyers Station Road / Patuxent Road Roundabout	13.1	B	20.3	C	13.4	B

Although both Conway Road at MD 3 and Conway Road at Princess Shopping Center operate at unacceptable LOS, as noted previously, this assessment will not consider improvements to either intersection:

- MD 3 is a roadway owned and maintained by MDOT SHA, and any geometric improvements (i.e., extra lanes, additional turning bay length) or adjusted signal timing could have unintended consequences on the MD 3 corridor and could sacrifice operations in a much larger area. Any changes to MD 3 would have to be coordinated with MDOT SHA.
- The ultimate implementation of an extension of Professional Drive (a potential leg of the Princess Shopping Center intersection) is uncertain, and any improvements will need to incorporate the

planned geometry changes. Any proposed improvements to sight distances and lane markings may help improve vehicle movements but are not expected to substantially enhance traffic operations.

6.2 Future Forecasted Roadway Enhancement Summary (Future-Build)

As noted previously, proposed stop control changes to AWSC at Conway Road and Two Rivers Boulevard / Patuxent Ridge Road are anticipated to provide reduction in delays, particularly for vehicles turning left onto Conway Road. In addition, the stop condition for all approaches would be expected to help calm motor vehicle speeds and provide a safer crossing condition for pedestrians and bicyclists. Further, introducing a roundabout at this intersection is expected to provide additional operations enhancement and reduced delays for all movements, particularly on the Two Rivers Blvd and Patuxent Ridge Road approaches.

Per the Maryland MUTCD Section 2B.07, the minimum volumes and delays for considering an all-way stop controlled intersection are:

- The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and the combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour.

Although we do not have 8-hour volume data for the build year, since the AM and PM volumes at Conway Road and Two Rivers Boulevard / Patuxent Ridge Road are well over the minimum of 300 vehicles per hour (VPH) on Conway Road and 200 VPH on Two Rivers Blvd / Patuxent Ridge Road, we assume the volume warrant is met. This is supplemented by the substantial delays on Two Rivers Blvd, which is more than triple the 30-second warrant threshold.

As shown in Table 7, converting the intersection of Conway Road at Two Rivers Boulevard / Patuxent Ridge Road to an AWSC intersection would reduce the delay in the AM and Weekend peak hours compared to the no-build (see Table 5 for no-build conditions). However, the intersection will still experience failing operations during all peak travel periods.

Table 7: Forecasted Future 2045 Build LOS and Delay – AWSC

Intersection	AM		PM		Weekend	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Conway Road at Two Rivers Boulevard / Patuxent Ridge Road	50.2	F	> 90.0	F	56.8	F

Since the AWSC does not bring Conway Road at Two Rivers Blvd / Patuxent Ridge Road to an acceptable LOS, the study team analyzed the impacts of a potential roundabout. As shown in Table 8, converting Conway Road at Two Rivers Blvd / Patuxent Ridge Road to a roundabout would reduce the delays in all peak hour periods as compared to the no-build condition (see Table 5 for no-build conditions), resulting in LOS A during all three peak periods. The County may consider a phased approach to this intersection by first introducing an all-way stop condition to reduce delays and later implementing a roundabout.

Table 8: Forecasted Future 2045 Build LOS and Delay – Conceptual Roundabout

Intersection	AM		PM		Weekend	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Conway Road at Two Rivers Boulevard / Patuxent Ridge Road	7.9	A	8.8	A	8.1	A

The proposed eight-foot shoulders along eastbound and northbound Conway Road between Patuxent Ridge Road and the Anchor Concrete Products driveway are to provide additional safety and accessibility of emergency vehicles and accessibly opportunities during travel lane closures. The clearing associated with shoulder implementation may also enhance sight distances along Conway Road, thereby improving safety, but may result in increased motor vehicle speeds. As the project proceeds through future phases of development, traffic calming measures like speed warning signs, variable shoulder widths, pavement markings and bollards to deter vehicle speeds in excess of posted limits should be strategically incorporated to offset potential increased vehicle speeds induced by shoulders.

The proposed ten-foot shared-use path along westbound Conway Road is not expected to impact traffic operations along Conway Road or at corresponding intersections. Additionally, the proposed shared-use path can be incorporated into the scenic and historic nature of Conway Road. The path is anticipated to attract additional pedestrians and bicyclists as a safe route between MD 3 and the WB&A Trail. It is also expected to serve as a safe route for pedestrians/bicyclists accessing the planned West County Elementary School. New pedestrian warning signs and pedestrian crossing pavement markings at all crossing locations would need to be implemented in conjunction with path implementation, particularly at the Conway Road/Patuxent Road/Meyers Station Road Roundabout. The clearing associated with path implementation may also enhance sight distances along Conway Road, thereby improving safety without introducing additional roadway/shoulder pavement that may result in increased motor vehicle speeds.

Proposed changes to pavement markings and trimming of vegetation at the Princess Shopping Center intersection are anticipated to provide minor improvement in overall traffic operations by providing enhanced sight distances and an available center turn receiving lane.

7. Conway Road Cost Assessment

The following summary provides a quantitative assessment of anticipated capital costs for the conceptual improvements along Conway Road proposed to be carried forward for possible recommendation. Cost-per-mile values based on Maryland Department of Transportation State Highway Administration (MDOT SHA) Cost Estimating Manual (2017) and the Planning Level Cost Estimating Tool for Bicycle Infrastructure Projects (MDOT and Baltimore Regional Transportation Board's Bicycle/Pedestrian Advisory Group) was used to develop the costs below. Cost assumptions from MDOT's manuals include:

- Access Road Functional Classification: Collector
- High Range Cost Per Mile for 12' Lane Width = $7,000,000 (does not include SWM, utilities, environmental mitigation, or contingency – these costs are included as additional line-items below)
- Assumed planning level contingency = 25% (lower risk improvements use 15%)
- Assumed SWM percentage (based on previous project experience) = 30%
- Assumed Utilities percentage (based on previous project experience) = 20%

- Assumed Environmental Mitigation percentage (based on previous project experience) = 25%
- Assumed Milling and Resurfacing = $100,000/mile
- No estimated right-of-way acquisition costs included

7.1 Conway Roadway Improvements – Shoulders and Shared Use Path

- Length = 7,089' (1.3 miles) shoulders and shared-use path
- Length = 3,817' (0.7 miles) only shared-use path
  - Roadway pavement (two 8-foot shoulders) width = 16'
  - SWM (30%) = $3,759,318
  - Utilities (20%) = $2,506,212
  - Environmental Mitigation (25%) = $2,506,212
  - Planning contingency (25%) = $3,132,765
  - Milling and Resurfacing (two 11-foot travel lanes) = $134,261
  - Roadway total = $24,569,830
- Shared-use path (one side, 10' width) = $8,473,451
- Conway Road Improvements (Rounded) Total: $33 Million

7.2 Conway Road Shared-Use Path as Standalone Improvement

- Length = 9,044'
- Shared-use path (one side) = 10' width
- Assumed rolling terrain and lighting needed for shared-use path, along with contingencies included
- Approximate shared-use path (Rounded) Total: $7 Million

7.3 Conway Road at Two Rivers Blvd / Patuxent Ridge Road AWSC intersection

- Anne Arundel County DPW provided pricing for signs and lane markings for AWSC
- Includes estimated preliminary design and admin fees (contingent on County process) = $5,000
- Assumed 4 new signs (two new stop signs and two new stop-ahead warning signs) and two sign modifications and new pedestrian crossing signs = $5,000
- Assumed new stop bar pavement markings on Conway = $1,500
- Assumed new stop bar pavement markings on Patuxent River Road (cost may be covered by developer) = $2,500
- Assumed no upgrades to existing lighting or utility work
- Planning contingency 15% (lower contingency used due to reduced risk) = $2,100
- Approximate all-way stop-controlled intersection total: $16,100

7.4 Conway Road at Two Rivers Boulevard / Patuxent Ridge Road Roundabout

- Assume similar cost as the comparable one-lane Oakwood Road/Old Mill Boulevard roundabout project (H583500) included in the FY2023 Proposed Capital Budget and Program (https://www.aacounty.org/departments/budget-office/proposed-budget/)
- Approximate Roundabout total: $3,200,000

7.5 Conway Road at Princess Shopping Center Pavement Marking Update

- Assume work to be done by County Maintenance Shop
- Assume new center turn receiving lane markings with possible temp lane closure= $8,000
- Approximate Princess Shopping Center Pavement Marking Update total: $8,000

8. Conceptual New Access Route Alternatives

The following are the specific details related to proposed conceptual new access routes to provide redundant accessibility for residents and emergency response services. The conceptual access routes were assumed to be functionally classified as open section collector roads and would follow County Design Manual recommendations for posted speeds (max 30 mph), travel lane widths of 11 feet, shoulder widths of 5 feet, 9-foot drainage conveyance area, an optional 10-foot shared use path, and a 4-foot utility panel.

To find the most reasonable and effective connectivity solution, the study team initially investigated 20 potential new access route alignments that were spread all throughout the study area. The alternatives considered are shown in Appendix E. These 20 alternative alignments were then evaluated and screened against the following criteria and scored based on degrees of anticipated impacts (the lower the score, the higher the anticipated potential the route has for implementation for its ability to meet the study purpose and need with lower impacts and costs):

- High levels of anticipated impacts: 3 points
- Medium-high: 2 points
- Medium: 1 point
- Low/no impact: 0 points

In addition to public and agency stakeholder feedback, the screening evaluation assessed the following:

- Does the alternative achieve the goals and objectives stated in the purpose and need?
- Is a bridge over Patuxent River or Little Patuxent River, or other major structure required? If so, what is length and anticipated level of impact to surrounding features?
- Does it avoid areas with a documented history of roadway flooding/closures?
- Floodplain impacts
- Wetland impacts
- Waterbody crossings
- Does the alternative alignment cross into Prince George's County?
- Cultural/Historic resource impacts (including impacts to scenic and historic routes)
- Property impacts
- Parks and Protected Lands impacts
- Impacts to existing pedestrian/bicycle facilities
- Forested area impacts
- Required modifications to existing intersections or other roadways

With a score of sixteen points, the lowest-scoring access route alternative route assessed was Alternative 7, located in the southeast quadrant of the study area and would connect the southern end of Two Rivers Boulevard across Meyers Station Road to Cronson Boulevard. This access route alignment was determined by the team to possess the most potential viability and selected to be the focus of the detailed assessment.

As part of the assessment process, the team determined it would be best to assess two access route typical section options, one with a wider relative footprint (59-foot overall width) and meets the County Design standards; and a second narrower footprint (37-foot overall width) that could potentially reduce impacts and costs (assuming design exceptions could be obtained by the County to accommodate implementation of this sub-standard design).

Alternative 7 would provide a connection between Two Rivers Boulevard, Meyers Station Road, and Cronson Boulevard via approximately 5,800 feet of new roadway (1.1 miles). Alternative 7 would introduce two new intersections – one offset intersection with Meyers Station Road and one at Cronson Boulevard. Figure 8 depicts the conceptual access route alignment for Alternative 7 Option A with 5-foot shoulders, 10-foot Shared Use Path and 15-foot LOD Offset. Figure 9 depicts the wider Alternative 7 Option A typical section. Figure 10 depicts the conceptual access route alignment for Alternative 7 Option B with 2-foot shoulders, no Shared Use Path and 15-foot LOD Offset. Figure 11 illustrates the narrower Alternative 7 Option B typical section.

Alternative 7 Options A and B would impact wetlands, floodplains, and waterway systems associated with the Little Patuxent River; details presented below. The conceptual alignment would require structure crossings of the Little Patuxent River and would introduce changes to the character of the Scenic and Historic Meyers Station Road (e.g., additional traffic volumes, tree clearing, new intersection signage and markings, and drainage areas).

Myers Station Road was categorized as "Category 2" by the 1997 Scenic and Historic Road Commission and retains high levels of scenic and historic integrity. Per Article 17-6-504 of the County Code, Scenic and Historic Roads, specific infrastructure improvements should be consistent with that section of code, and a permit will be required to implement the proposed changes associated with Alternative 7. The County's Office of Planning and Zoning has expressed their opposition to an access alignment that would affect any route designated Scenic and Historic. The Department of Public Works and Office of Planning and Zoning will continue to work to reconcile these concerns as the project progresses through future phases of development.

Alternative 7 Options A and B consists of two legs. One connects Two Rivers Boulevard to Meyers Station Road and a second connects Meyers Station Road to Cronson Boulevard. Both legs impact private property. The leg connecting Two Rivers Boulevard to Meyers Station Road impacts forest conservation easements. The leg connecting Meyers Station Road to Cronson Boulevard would impact the existing Two Rivers Community Park (this is not a public space) and would require reconfiguration of their access drive and gate (not included in the cost estimates).

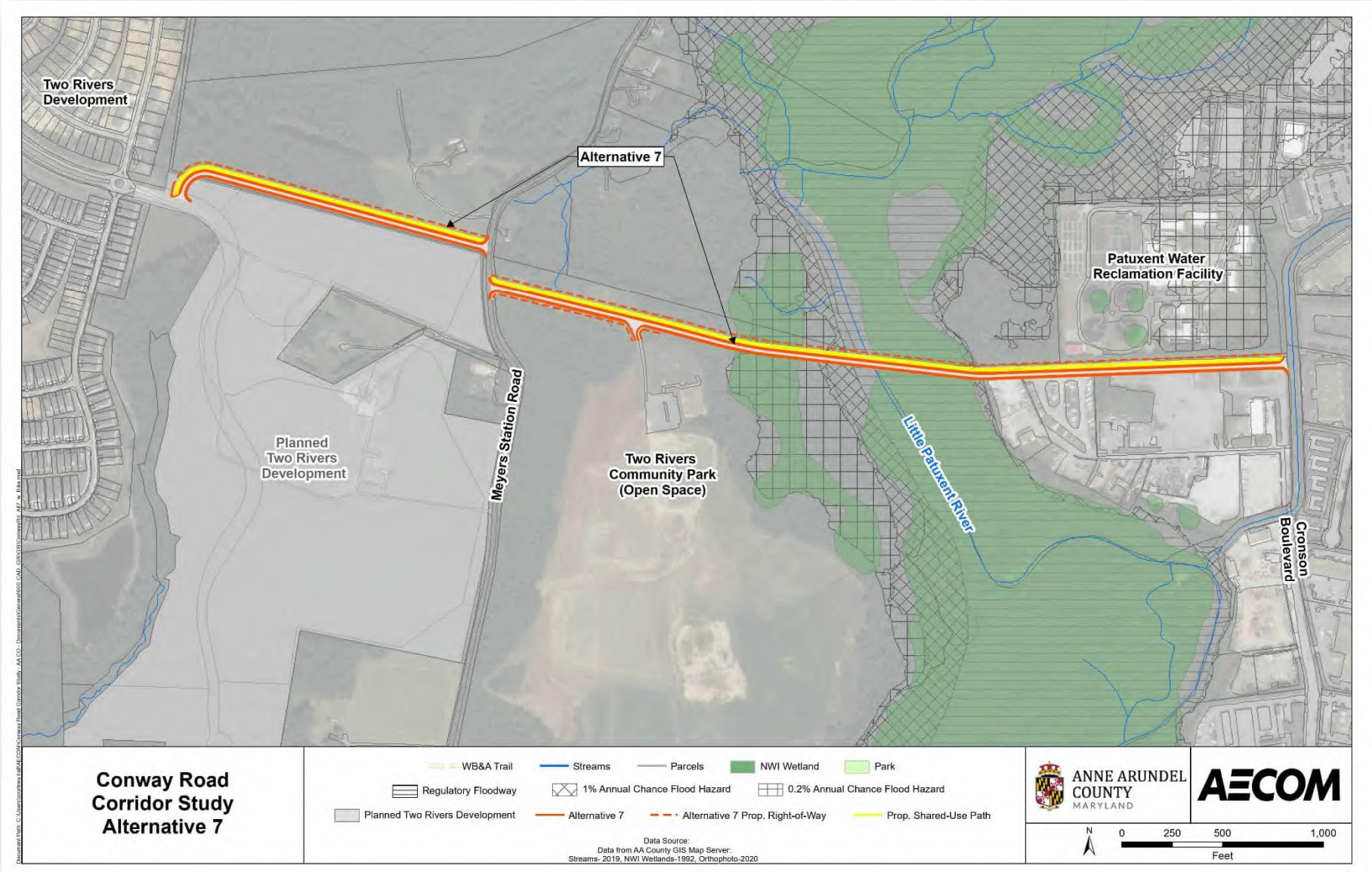


Figure 8: Conceptual Access Route Alternative 7 Option A (5-foot Shoulders & Shared Use Path)

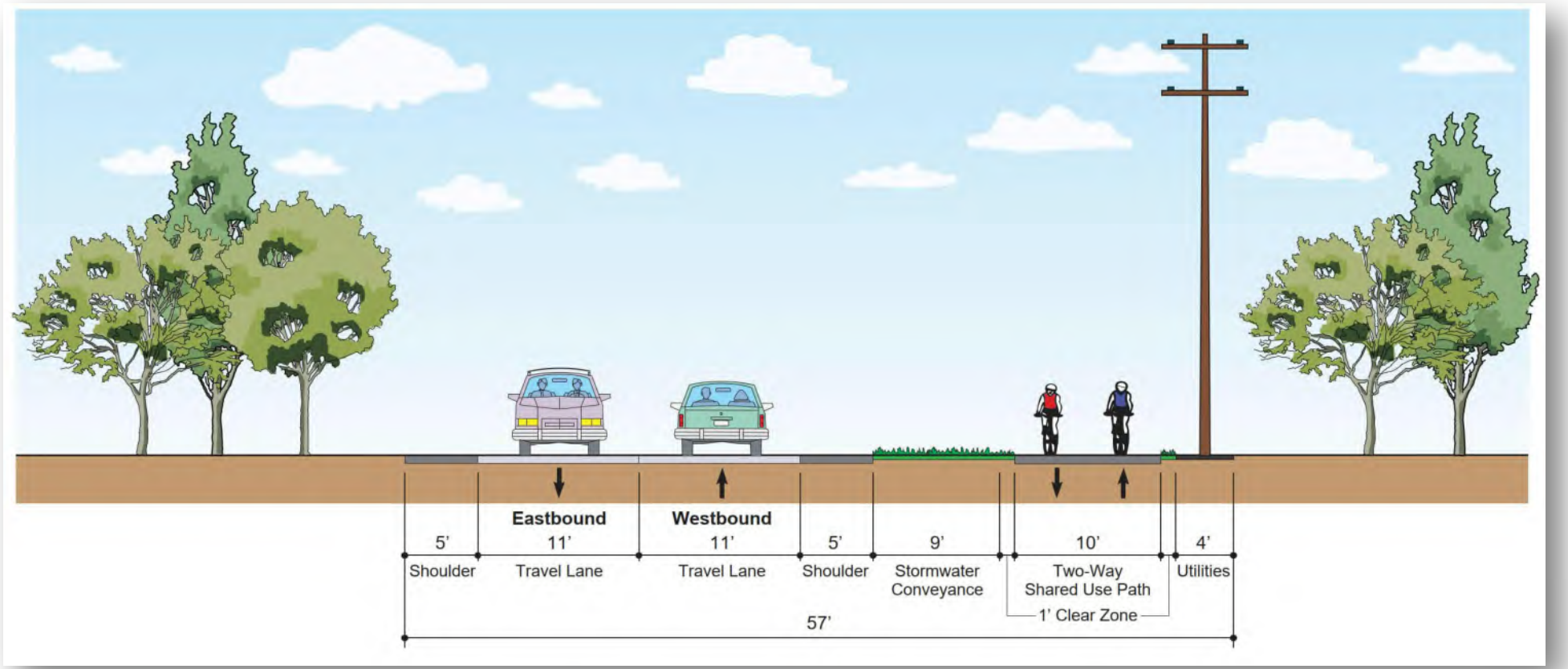


Figure 9: Conceptual Access Alternative 7 Option A Typical Section (5-foot Shoulders, Shared Use Path)

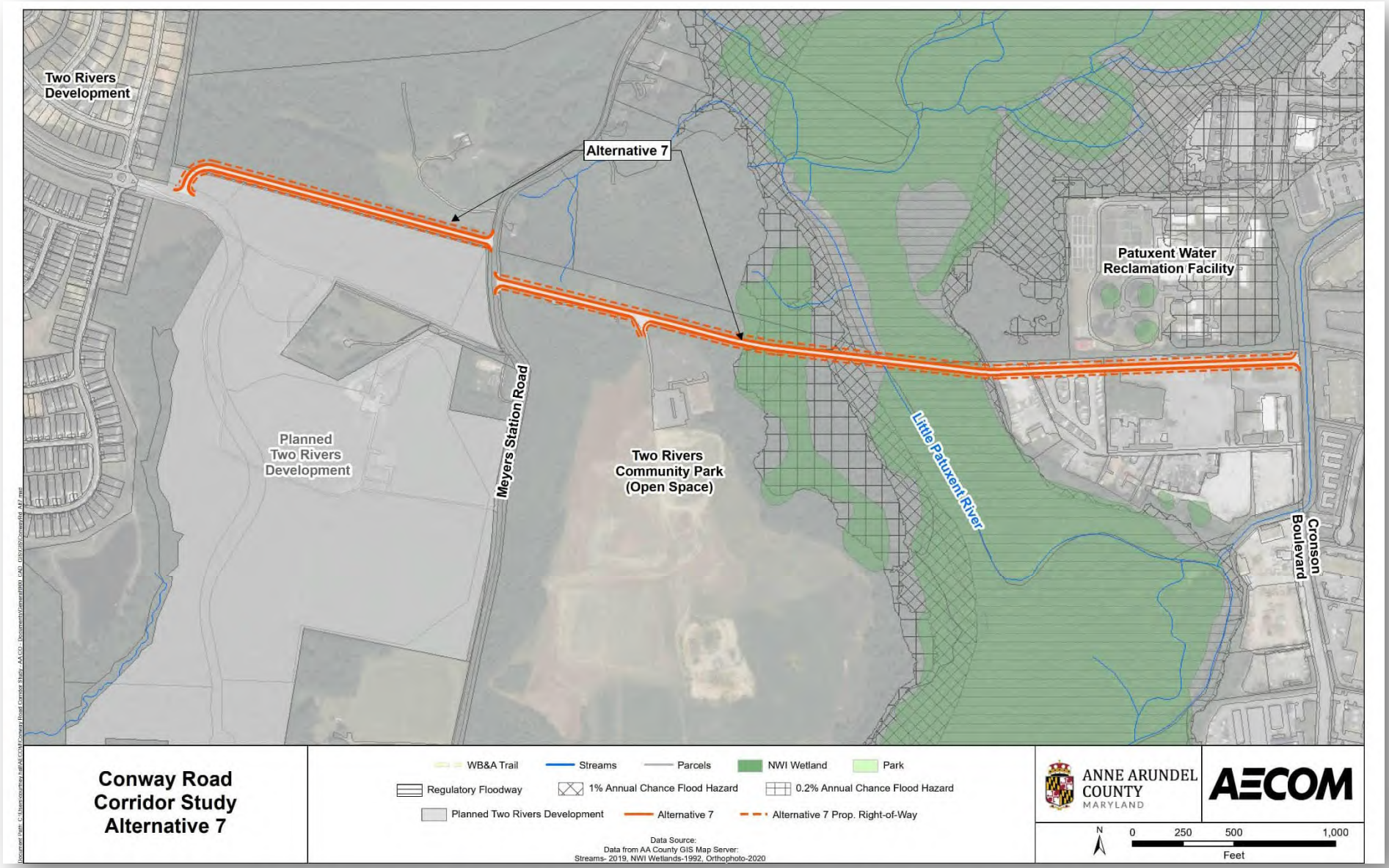


Figure 10: Conceptual Access Route Alternative 7 Option B (2-foot Shoulders, No Shared Use Path)

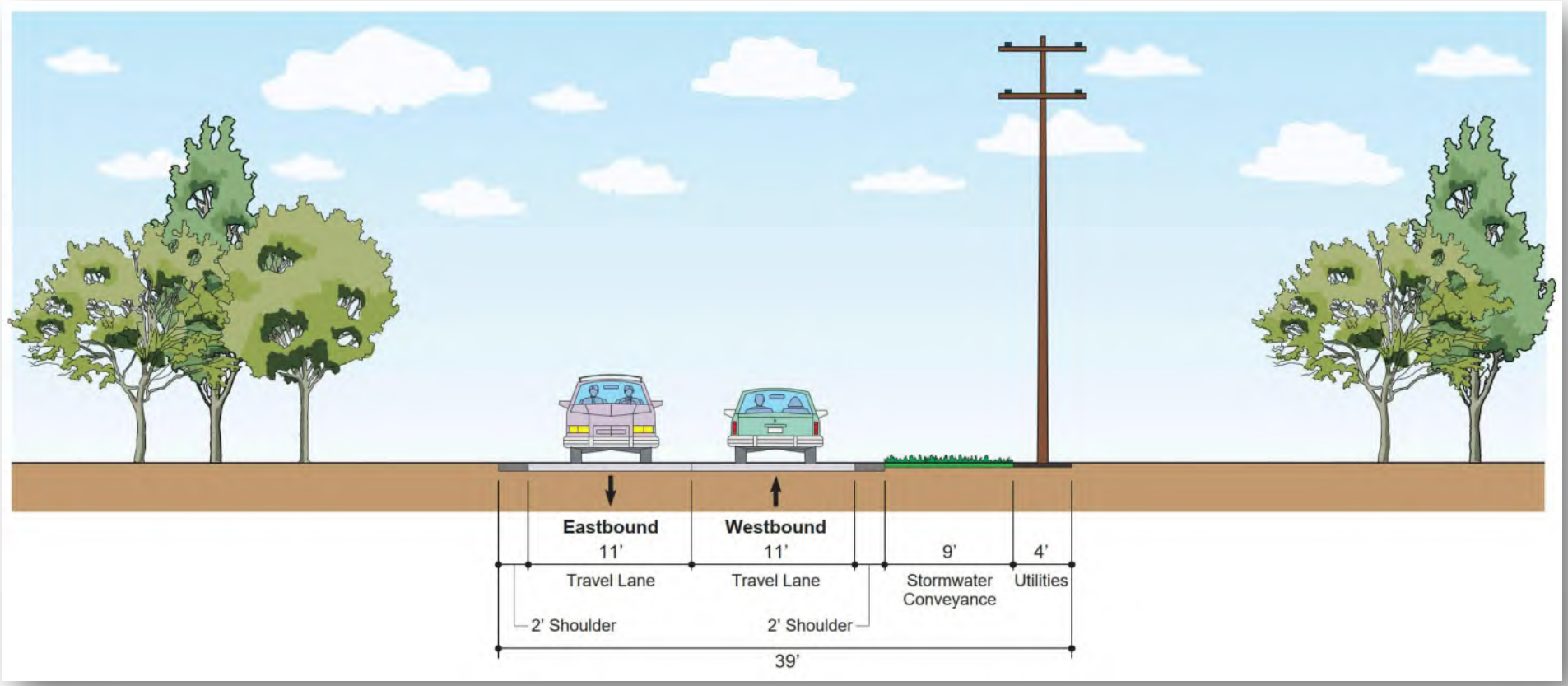


Figure 11: Conceptual Access Alternative 7 Option B Typical Section (2-foot Shoulders, No Shared Use Path)

9. Access Route Alternatives Impact Assessment

Table 9 provides a summary of anticipated impacts resulting from conceptual access alignment Alternative 7 Options A and B. Impacts were developed and assessed based upon the assumption of a 15-foot limits-of-disturbance (LOD) offset from the edge of proposed improvements. Any features within the LOD are considered a potential impact related to construction. These impact calculations are based on preliminary conceptual planning level design and are subject to increase or decrease as proposed improvements are further developed, refined, and designed.

Table 9: Anticipated Impacts for Conceptual Access Alignment Alternatives 7

	Wetlands & Floodplain	Streams	Cultural Resources	Open Space/ Parks	Forested Areas	Forest Interior Dwelling Species	Conservation Areas	Private Property	Planned Two Rivers Development
Alternative 7 Option A 5' Shoulders and Shared-Use Path	1.58 AC wetlands 2.29 AC floodplains	100.62 LF	Scenic & Historic Meyers Station Rd*	0.24 AC Open Space	6.82 AC	7.65 AC	2.21 AC	10.34 AC	0.26 AC Developer Owned Common Space
Alternative 7 Option B 2' Shoulders	1.02 AC wetlands 1.50 AC floodplains	65.65 LF	Scenic & Historic Meyers Station Rd*	0.15 AC Open Space	4.37 AC	4.91 AC	0.82 AC	6.91 AC	0.18 AC Developer Owned Common Space
	*Impacts to Meyers Station Road Scenic & Historic Route include new intersections, tree clearing, pavement markings and signage, possible drainage areas, and changes to traffic volumes. Permit coordination for impacts to conservation areas and scenic & historic routes, per County Code Article 17-6-504, will be required as needed.								

10. Access Route Traffic Assessment

When the conceptual access route alignment Alternative 7 (note, Option A and B have the same alignment and there are no anticipated differences in traffic operations between the two) was introduced in the future forecast 2045 BMC regional travel demand model run and compared to the 2045 No-build conditions (shown in Figure 12), the following observations were made:

1. The access route would attract traffic in both the alternatives, away from Conway Road.
2. Reduced congestion on Conway Road could potentially attract (induce) traffic that uses Conway Road and Patuxent Road as the preferred route over MD 3 going north to south, which would utilize some of the available capacity of Conway Road released by the added roads in the alternatives. This also would result in an increase in the volume on Patuxent Road and slightly alleviated congestion on MD 3. As above, a small percentage of vehicles which were previously using MD 3 would now likely prefer the Patuxent Road / Conway Road approach.
3. The north-south portion of Meyers Station Road also could experience an increase of a few hundred vehicles per day based on the new traffic routing options that would use Meyers Station Road.
4. If a new access route alignment alternative is implemented between Two Rivers Boulevard and Cronson Boulevard, the reduction in volumes on Conway Road would negate the need for any intersection operational improvements at Two Rivers / Patuxent Ridge Road.

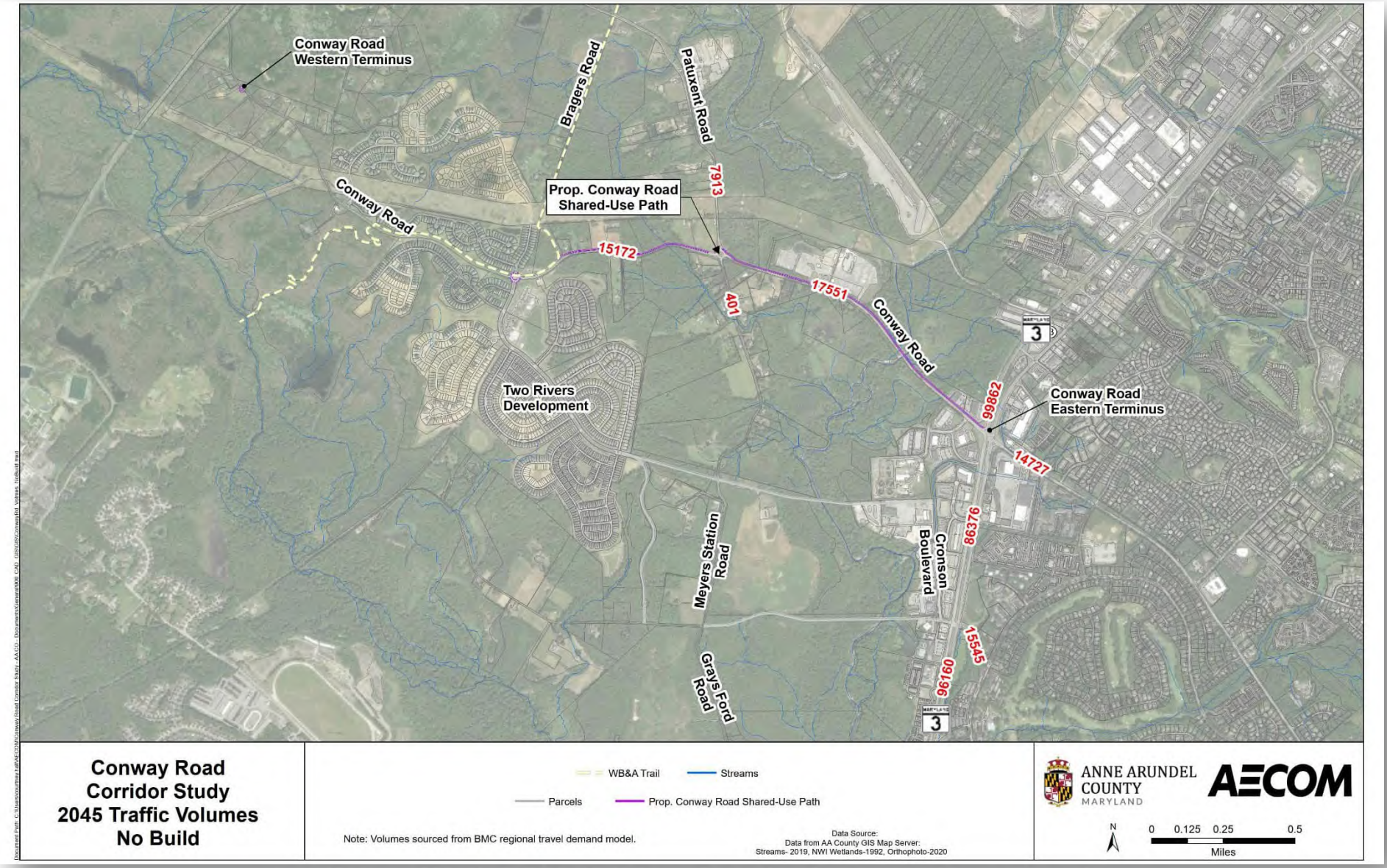


Figure 12: Future 2045 No-Build Traffic Volumes Comparison for Conceptual Access Alternatives

10.1 Access Alternative 7 Operations Analysis

Forecasted future 2045 Alternative 7 conditions during peak hours at signalized intersections in the study area are shown in Table 10. Forecasted future 2045 Alternative 7 peak hour conditions at un-signalized intersections in the study area are shown in Table 11, and the forecasted traffic conditions at the roundabout are shown in Table 12. Compared to no-build (see Tables 4, 5, and 6 for no-build conditions), all intersections operate at acceptable LOS except for MD 3 in the PM and Weekend peaks.

Table 10: Forecasted Future 2045 Build LOS and Delay – Signalized Intersections

Intersection	AM		PM		Weekend	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Conway Road at MD 3	35.6	D	68.9	E	55.9	E

Table 11: Forecasted Future 2045 Build LOS and Delay – Un-Signalized Intersections

Intersection	AM		PM		Weekend	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Conway Road at Concord Boulevard	11.6	B	17.4	C	14.1	B
Conway Road at Princess Shopping Center	12.5	B	29.0	D	21.0	C
Conway Road at Two Rivers Boulevard / Patuxent Ridge Road	18.7	C	16.2	C	17.4	C
Conway Road at Upper Patuxent Ridge Road	9.3	A	9.5	A	9.5	A

Table 12: Forecasted Future Build 2045 LOS and Delay – Roundabout

Intersection	AM		PM		Weekend	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Conway Road at Meyers Station Road / Patuxent Road Roundabout	7.3	A	10.0	A	8.7	A

10.2 Access Alternative 7 Operations Analysis Summary

As shown in Figure 13, future travel demand forecast modeling presents Alternative 7 as drawing more traffic away from Conway Road (down to 12,300 trips east of the roundabout and 8,600 west of roundabout from 17,600 east and 15,172 west of roundabout under existing no-build). Alternative 7 may also alleviate congestion at the MD 3/Conway Road intersection; however, at the same time it could induce increases in new trips along Meyers Station Road (up to 930 trips from 400 under no-build) and along Patuxent (up to 9,400 from 7,900 under no-build), both of which are designated by the County as Scenic & Historic Routes and subject to future permitting coordination.

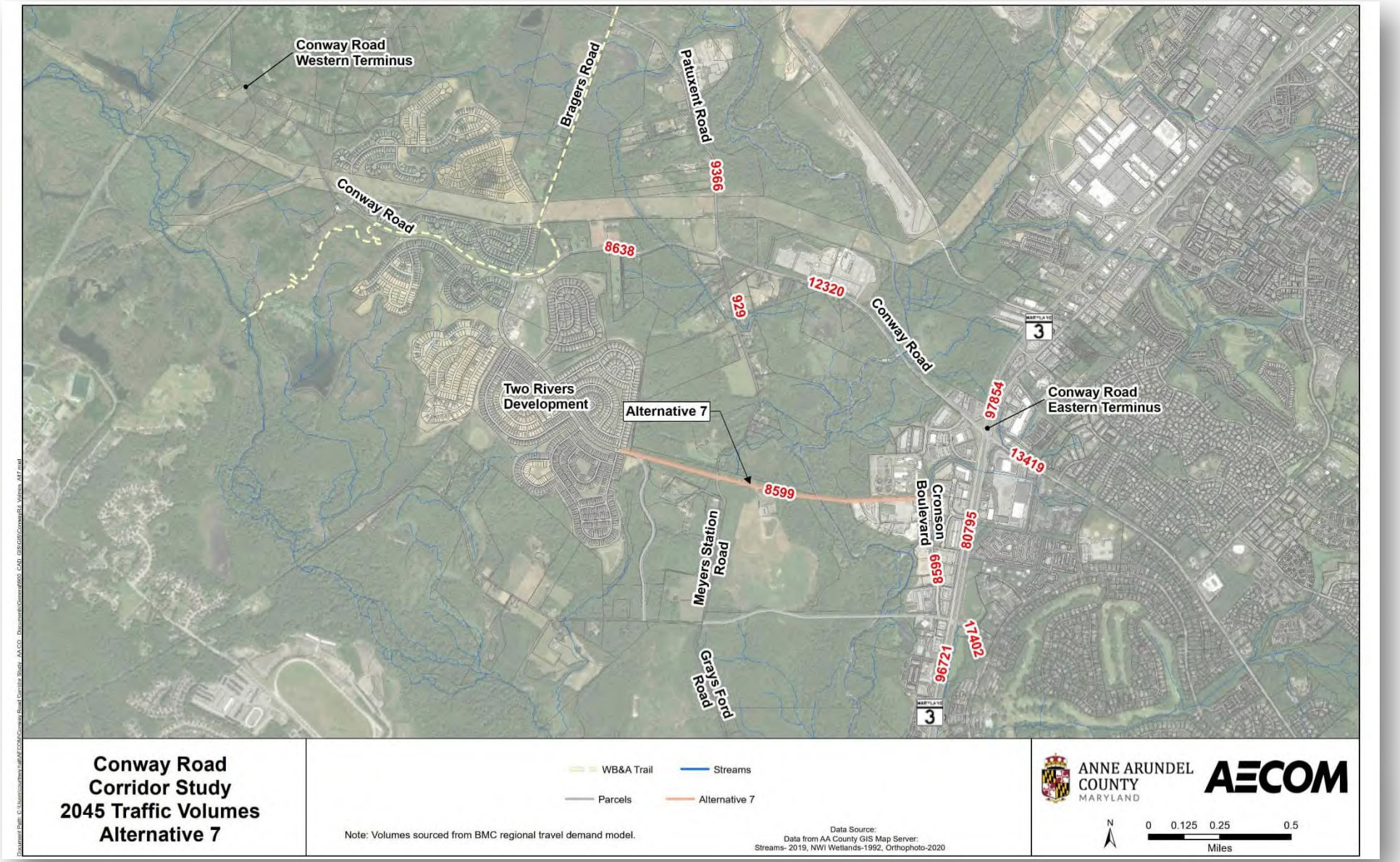


Figure 13: Future 2045 No-Build Traffic Volumes Access Alternative 7

11. Access Route Cost Assessment

The following summary provides a quantitative assessment of anticipated capital costs for the conceptual access route alignment Alternative 7 Options A and B. Cost-per-mile values based on Maryland Department of Transportation State Highway Administration (MDOT SHA) Cost Estimating Manual (2017) and the Planning Level Cost Estimating Tool for Bicycle Infrastructure Projects (MDOT and Baltimore Regional Transportation Board's Bicycle/Pedestrian Advisory Group) was used to develop the costs below. Cost assumptions from MDOT's manuals include:

- Access Road Functional Classification: Collector
- High Range Cost Per Mile for 12' Lane Width = $7,000,000 (does not include SWM, utilities, environmental mitigation, or contingency – these costs are included as additional line-items below)
- Assumed roadway structure cost = $320/SF
- Assumed planning level contingency = 40%
- Assumed SWM percentage (based on previous project experience) = 40%
- Assumed Utilities percentage (based on previous project experience) = 20%
- Assumed Environmental Mitigation percentage (based on previous project experience) = 25%
- No estimated right-of-way acquisition costs included

11.1 Access Alignment Alternative 7 Option A – 5-foot Shoulders with Shared Use Path

- Length = 5,653' (1.1 miles)
- Roadway pavement width = 32'
  - Roadway subtotal cost = $19,985,354
  - Structure over Little Patuxent River cost = $3,008,000
  - Roadway subtotal cost (with structure) = $22,993,354
  - SWM (40%) = $9,197,341
  - Utilities (20%) = $4,598,671
  - Environmental Mitigation (25%) = $5,748,338
  - Planning contingency (40%) = $9,197,341
  - Roadway total = $51,735,045
- Shared-use path (one side, 10' width) = $4,392,116
- Approximate Access Alignment Alternative 7 Option A (Rounded) Total: $56.1 Million

11.2 Access Alignment Alternative 7 Option B – 2-foot Shoulders with No Shared Use Path

- Length = 5,653' (1.1 miles)
- Roadway pavement width = 26'
  - Roadway subtotal cost = $16,238,100
  - Structure over Little Patuxent Parkway cost = $2,556,800
  - Roadway subtotal cost (with structure) = $18,794,900
  - SWM (40%) = $7,517,960
  - Utilities (20%) = $3,758,980
  - Environmental Mitigation (25%) = $4,698,725
  - Planning contingency (40%) = $7,517,960
  - Roadway total = $42,288,524
- Approximate Access Alignment Alternative 7 Option B (Rounded) Total: $42.3 Million

12. Conceptual School Bus Turnaround Option

Currently school buses serving Anne Arundel Public Schools use the St. John A.M.E. Zion Church parking area located at the western terminus of Conway Road as their turnaround location. As part of the implementation of the planned West County Elementary School and with increases in students and buses in the study area, the County is investigating the potential for a new dedicated school bus turnaround facility.

The Study team identified an undeveloped area directly adjacent to Conway Road that would potentially utilize a grassy frontage space, as shown in Figure 14 below. This location would allow buses to run routes serving Conway Road, the Two Rivers Development, and homes on Collins Lane and Lucinda Lane.

Figure 14: Conceptual Bus Turnaround Detail

The conceptual bus turnaround is designed to accommodate the turning radius of a standard county school bus (40-foot turning radius). This location was selected based on the moderate potential for impacts to natural and cultural resources compared to other locations west of Collins Lane. Impacts to impervious services (approximately 1 acre) and private property (approximately 0.15 acres) would be anticipated. The implementation of this bus turnaround could be considered a change to the character of Conway Road's Scenic and Historic route designation and should be considered before carrying forward. The County has noted that this area has historically been a neighborhood with concentrations of minority and lower-income populations where Environmental Justice issues will need to be addressed. Specifically, the community of Wilson Town and the leadership of St. John A.M.E. Zion Church should be consulted and included in the decision making process if/when this bus turnaround feature is further developed. The County Office of Planning and Zoning notes, "this historically Black community, founded in the decades before Emancipation has experienced centuries of adverse effects from lands taken from them over the centuries – first by railroad system in the late 19th century, then the Federal government from expansion of Fort Meade and for the BGE power transmission lines, actions that have cut away and bifurcated their historic community. Any further takings or impositions of public needs upon their lands be carefully considered and undertaken only after thoughtful consultation with the community." Because of its history, it is considered a potentially extremely sensitive archeologic area. To account for these potential issues, a 40% contingency has been added to the cost estimate. Based on MDOT SHA cost estimating guidance, the estimated cost to implement this conceptual school bus turnaround would be:

- Pavement area = 2,040 SF
- MDOT SHA Manual Low Range = $51/SF
- Pavement subtotal cost = $104,040
- Planning contingency (40%) = $41,616
- Approximate School Bus Turnaround (Rounded) Total = $150,000

13. Preliminary Recommendations

Team recommendations will be provided by the team as part of the final report. Phasing implementation of potential improvements will be considered and documented.

APPENDIX A
Public Comments Matrix

INTERACTIVE WEB MAP COMMENTS		
ROAD	**COMMENT**	**ADDITIONAL**
CONWAY	The road between the entrance to Two Rivers and Crain Highway is unusable for bicycles and pedestrians. The really needs to be a path (shared use would be fine) for pedestrians/bicyclists to move through that corridor.	
CONWAY	Road has no shoulder. Should be two lanes each direction similar to Piney Orchard road. Street lights are one foot from street! Lights are always been hit and broken. Don't need all these lights and should be set back at least 10 feet from shoulder.	
CONWAY	Should have 4 lane roads into the roundabout. Or eliminate roundabout with lights for four lanes of traffic each way.	
CONWAY	This intersection is so dangerous and gets backed up with needing to turn left to go back into Conway. You cannot see left from all the brush. If there's a car going right it blocks your view and you also cannot see for incoming traffic.	It's a dangerous intersection
CONWAY	Shoulders should be added between the roundabout and the Two Rivers neighborhood. It would allow traffic to pass in case of an accident and would make it safer for cyclists.	
CONWAY	at the intersection of Conway rd and Route 3, the left turn lane on the northbound section needs to be lengthened. traffice regularly backs up just past the entrance to the left turn lanes.	
CONWAY	We need more access roads into Two rivers community. With the new school we will at least two points of access into school. We will need road that leads to Myers Station and well as access that leads to Patuxent road.	. Bike or sidewalk to RT3 would increase accidents due to attempting to cross RT3.or bike on RT3.If we could utilize exisiting WB/A trail tie into that if needed. Fire and Medical responses in Two Rivers are frequent due to 55+ communities.
CONWAY	I suggest a study of the amount of traffic that heads south once the drivers arrive at the turn onto Rt 3. People tend to use the easiest route to get to where they are going. If other roads are added to Patuxent to arrive at Rt 3 and want to head	go South, it is likely they would still choose Conway.
CONWAY	Alternate access to Rte 3 is essential. We have been stuck within our community for hours at times when trees have fallen or vehicles have crashed into utility poles.	
CONWAY	It would be nice if there was a plan to connect Conway Rd with MD 197. Currently there is no pretty way to get to MD 197 with making a very inconvenient circuitous journey back to Rt 3 and on to Rt 450 to RaceTrack rd and on to Jericho Park Rd.	
CONWAY	Waste dump currently being studied by Anne Arundel county in this area would greatly increase large truck traffic on Conway	
CONWAY	Put intelligent traffic light in. Flashing during none peak traffic times. Max wait times and controlled left turns.	
CONWAY	Leave this alone it works great	
CONWAY	Upper Patuxent ridge road need to be a through road. It is not safe to have all traffic funneling up through the only available ingress\egress.	There should also be a second entrance/exit out of Two Rivers by Myers's Station Road
CONWAY	The fact that this road is closed off by a poor quality fence, blocking people from connecting to Conway is very unsafe. Other than this road, there is no way to leave this part of our community, especially when school bus stops are being used	Poor visibility is very dangerous to the children using the school buses.
CONWAY	I request that the County consider adding to Conway Road a separated (could be on same roadway for example an expanded shoulder) bicycle lane on each side of Conway road between Route 3 and the intersection with Meyers Station Road and Patuxent Road.	This would facilitate access from Crofton to the W,B&A Trail.
CONWAY	2 lanes of traffic turning left from Rt 3 is forced to merge into one land, plus there is a turn lane on the left going into Aldi center. Similarly, two lanes of traffic cross over from Davidsonville Rd again creating a need to merge into one lane.	
CONWAY	Traffic is turning right into shopping center, merging into one lane, and turning left into the Aldi all at the same time. It is VERY DANGEROUS.	
CONWAY	Conway between the round about and TR must be widened, with sidewalks and bike land. Currently there is no room for two-way traffic and walkers/bikers.	
CONWAY	Thank you for taking on this project. I am sure you will determine what changes are needed on Conway to accommodate traffic into & out of the new elementary school. Overall, wider lanes will be helpful for the vehicles that currently use Conway Rd.	
CONWAY	I don't know how many homes are still being built at 2 rivers, but it is rediculous that the road was not widened to accommodate all the traffic, including construction. WIDE Shoulders or a dedicated bike lane needs to extend from Princess Center	
CONWAY	hoping this bridge will be installed soon. It's been 2 years since the path went in, and the extension on the other side is ready to be connected.	
CONWAY	Other than Conway Road, there are no alternative routes to leave the Two Rivers Subdivision area. If the road is blocked west of the traffic circle, emergency vehicles can't get thru.	
CONWAY	This road is not walkable; nor is it conducive to biking. There are wise shoulders almost the entire length of Conway from Rte. 3 to the roundabout - why do they stop? The best way to keep vehicular traffic down is to offer alternatives.	
CONWAY	By NO means should Conway road be improved with respect to vehicular traffic! Any effort to widen or otherwise "improve" Conway west of the roundabout will only ENCOURAGE more traffic, faster speeds, & more danger for pedestrians and cyclists	
CONWAY	This intersection had lane markings adjusted to accommodate construction trucks exiting Two Rivers Blvd. to make a right onto Conway. In doing so, it squeezed westbound Conway traffic to one lane.	Left turn lane onto Two Rivers Blvd. needs to be reestablished to allow through, and right turn, traffic to get through.
CONWAY	Concern over two rivers community not having alternative way makes this community unsafe during any emergency. I have experienced this twice already and hope the country will have a second look to find fix for this issue and widening the Conway road.	
CONWAY	Conway Rd after the circle needs to be widened considering the amount of traffic from the Two Rivers community. The roads are very narrow with no shoulder.	
CONWAY	Please provide another entrance/exit fro the Two Rivers subdivision. There are close to 2,000 homes with only one way out. It's a safety issue. If one entrance is closed due to an accident, we are all trapped and no emergency vehicles can get in!	
CONWAY	This seems to be a possible accident point. The traffic pattern is complicated and it is difficult to see out your left side when exiting the Aldi shopping center.	
CONWAY	Propose connecting Conway road to 197 laurel bowie road for easier access in and out of the community and into Bowie.	
CONWAY	This is a major wildlife crossing area. With the increased traffic and few of them driving at the posted speed, wildlife is often hit along this stretch of road.	
CONWAY	There are 4 driveways in this area entering Conway Rd . It is not unusual to turn east on Conway Rd with no cars in view to have one dangerously close within seconds.	From the entrance of Two Rivers to the circle there needs to be speed mediation devices in place. Posted speed limit signs are not working and the area is dangerous.
CONWAY	There is only one way in and out of the community of more than 1,500 households. If blocked, people can't get to work, school, or appointments, nor can emergency vehicles have access. The most recent road block occurred on 03/20/2022.	
CONWAY	Recommend creating an access road from the western terminus of Conway Road that connects north to Patuxent Road and south to Bowie State University. This will provide multiple routes to and from Two Rivers.	This will spread traffic density to and from Two Rivers, West County Elementary, and the future athletic complex. This will also ensure emergency vehicles have multiple access points in the event the Conway Road traffic circle is blocked.

CONWAY	Conway Rd from the circle to Two Rivers is too narrow for pedestrians, let alone large trucks. It should be widened just like Conway to Rte. 3. Unfortunately it is the only egress from Two Rivers.	Consider conducting an evacuation drill with 300 vehicles all leaving at the same time. It won't work.
CONWAY	I greatly agree that this road needs improvements Widening and adding a bike lane would be fabulous. Safety and access especially when the school is built and for us bike riders.	
CONWAY	We need bike lanes from route 3 to Two Rivers Blvd.	
CONWAY	Lanes are narrow making cars close to each other causing accidents. No space for pedestrians and others. The lanes could be enlarged. Another road could be considered for traffic as no other lane exists in case of accident on Conway Rd..	
CONWAY	Addition of safe cycling & walking path would be great	
CONWAY	crossing from conway to davidsonville road accross rt 301 in the two lanes is not easy. Needs to be lines drawn. Once you come up over the hill, if you are in the right the car on your left is in your lane 90% of the time.	Almost an accident every time and could be avoided with some kind of marking
CONWAY	Make light from 3 north onto Conway longer. Does not let entire lane of cars through.	
CONWAY	This turn lane is awkward, cars sit in the lane and slowly move into in impeding traffic coming from 3N	
CONWAY	There needs to be additional access into Two Rivers from the East side, can we connect at Lemons Bridge Road?	
CONWAY	One reason we chose Two Rivers is because Conway Road is narrow, winding and scenic. Improving it may destroy that charm and encourage faster traffic.	
CONWAY	No alternative road for vehicles if Conway Rd blocked	Provide vehicle access to Meyers Station Rd from Two Rivers Blvd
CONWAY	Street lights are damaged by passing vehicles	move street lights farther away from sides of road
CONWAY	I have almost been hit front on numerous times as cars and especially trucks seem to have difficulty maintaining themselves on the correct side of the double yellow line on this narrow, winding road.	please consider adding periodic road dividers or bumps on the double yellow line to keep drivers on their side of the road.
CONWAY	Can more street lights be added. Kind of dark in this area at night	
CONWAY	Extend one of the roads from Two Rivers Ryan all ages community out to meet Patuxent road.	Extend a road from TwonRivers main community to Myers Station Road
CONWAY	we need another exit from 2R into the main road	
CONWAY	Easy fix, remove all the dirt and grass covering the curbs so it's easier to see the roads edge.	
CONWAY	This section of road from the traffic circle to the main intersection of Two Rivers should have a couple feet of road shoulder on each side for added safety as well as proper drainage / storm drains	A second way out of Two Rivers should be added.
CONWAY	This is a test point	
CONWAY	Testing point	
CONWAY	This is entire problem, a result of terrible decisions being made, why on God's green earth would you build homes in 2 Rivers, it's a freaking flood zone!! The real solution to all of this, STOP building where we shouldn't build in the 1st place!!	
CONWAY	While there is a stop sign on Upper Patuxent Ridge, the hill leading up toward the water tower presents a lot of blind spots and potential for accidents for cars and bike riders.	
CONWAY	Any traffic events that happen on either side of this circle cause massive delays in all directions as there are no other ways out or around incidents, particularly if you are coming from the West portion of Conway or Meyer Station.	
CONWAY	there needs to be a better way for the merging traffic.	
CONWAY	need better sighting	
CONWAY	this should be the only entrance into princess center. allowing for better merging	
CONWAY	There should be a way to get out of Two rivers that is before the new school. Right now the two lane road will be impenetrable if there isn't an alternate way out or in.	
CONWAY	Move light post back from road edge to reduce frequent poles being knocked down	
CONWAY	Safer pedestrian and bike crossing across rt3 at conway or elsewhere would allow better bikable access to trails east of Rt 3/i97. Currently the only safe path goes up and around the airport.	
CONWAY	Bike and pedestrian lanes on conway would be highly desired to connect the new two rivers development to all the shops available on rt3	
CONWAY	Connecting the western terminus of Conway Road would be extremely beneficial. A second exit from the community on the opposite end would greatly reduce traffic near the proposed site of the elementary school.	
CONWAY	Deny construction of landfill access to prevent heavy trucks from further congesting Conway.	
CONWAY	Approximate location of drainage issue. High water and flow across road.	
CONWAY	Connect Conway to Patuxent with new road that parallels BWA train, Bragers Rd	
CONWAY	Could we look into connecting a road from Conway Rd to Lemons Bridge Rd alongside the BGE powerlines? It's a long pathway, but would provide a valuable alternative exist passage way without needing to go to Rt 3.	
Conway Rd	I am 100% behind efforts to increase the county's efforts to put in bike trails.	
Conway Rd	There is a need to connect this end of Upper Patuxent Rd. to Conway without going through the 55+ section of Two Rivers (where no children live). Since children from the "Woodlands" section of Two Rivers will be attending the new West County . Since	Elementary School, perhaps as the school is built with access roads, a through road could be built by the school connecting Upper Patuxent Road with Conway Road.
Conway Rd	With the increase in bus traffic, the traffic circle should either be widened for an additional lane, or turned into a 4 way intersection with a traffic light. There are too many large vehicles going through this circle and the circle is too small	The School buses are too long to safely navigate this circle at it's current circumference and the road angles
Conway Rd		There have been several times where an accident has closed the road and limited access to and from two rivers. When the school opens, this will be further complicated by school buses.
Conway Rd	We have had several occasions where we have been unable to return home, or our family have been unable to visit, because accidents/fires caused police to turn away all traffic approaching the roundabout. i.e. traffic from Rte down Conway west is . .	. . turned back, and from Patuxent south. When this happens there is no access (or egress) from the Two Rivers.
Conway Rd	We need additional exit and entrance to Two Rivers development in case of road closure	
Conway Rd	Conway needs to be extended to connect to Laurel Bowie Rd. This will alleviate some traffic on Rt 3, as we now have no choice but to go east on Conway to Rt 3.	It should not be too difficult to build a bridge over the Amtrak tracks. This will cut down some traffic that now has to go out to Route 3.
Conway Rd	Please consider adding a side walk on Conway road, especially with upcoming West Elementary	
Conway Rd	I am truly concerned that the traffic on Conway Road will be horrible with a new school. We already have busses coming in and out of Two Rivers, going to other local middle and high schools. I don't feel the road is able to sustain such traffic.	I am also concerned that the road will be dangerous for the kids. Trucks and cars drive fast and do not stay in between the lines. Thank you for listening. :)
Conway Rd	I would regularly use a bike path along Conway from Route Three to Two Rivers Boulevard. Ideally it would be 10 feet wide with a guard rail separating it from the road.	
Conway Rd	The intersection with Rte 3 is very dangerous/scary to cross by bicycle. I have done it many times.Please give us a bike lane or crosswalk - anything to indicate that "bikes belong here".	
Conway Rd	Additional lanes on Conway and turn lanes into the development. The amount of traffic doesn't allow for us easy access. Additionally, another entrance needs to be added to the community.	
Conway Rd	The road needs to be widened and visibility around the bend right after the circle improved. A few car accidents have occured along this road. Also improvments for non motorized vehicles needed. Thank you	
Conway Rd	With the new school and the thousands of people living in Two Rivers, more lanes need to be added and expansion. It is not safe, especially in the winter	
Conway Rd	For people on bicycle, on foot or mobility devices, the bridge is a stress point. There's no real shoulder on the bridge and the edges are full of debris.	
Conway Rd	Observed high speeds along Conway from MD3 to the traffic circle. People are coming off of MD3 at a high rate of speed and carry that speed; increase it on the downhill and all the way to the traffic circle.	
Conway Rd	The traffic circle can be challenging for less experienced bicycle riders as some people in cars will try and squeeze by you in the approaches and even in the circle. I'm not sure what can be done, but it is a challenge.	
Conway Rd	There needs to be bike / ped infrastructure between the traffic circle and the WB&A Trail. Most of the people in cars are pretty decent here, but it's narrow, no shoulders, and sightlines aren't the best.	
Conway Rd	I suspect once the bridge is open the trail crossing will become more popular and may need some sort of treatment to make it more visible.	
Conway Rd	There's a number of people that park along the roadway here to go fishing; not necessarily an issue, but something to be aware of when considering improvements.	

Conway Rd	Safe Bike / Ped infrastructure is going to be even more important as Two Rivers continues to grow AND with the addition of West County ES and the adjoining Recreation/Sports Fields.	
Conway Rd	Another entrance needs to be added to the community	
Conway Rd	Need to have another connection point to get out to Conway to avoid blockage, as we've seen recently, in an emergency situation. This also allows traffic to bypass the school area to ensure that one portion of road isn't flooded with all traffic.	
Conway Rd	An outlet to connect with Patuxent road from the back of Two Rivers would be very useful for emergency access and limiting traffic at the one loop at Conway	
Conway Rd	Extend Conway to connect to Patuxent. Assumes we are successful in blocking the landfill project.	
Conway Rd	I would like to see the road being widened and made safe for pedestrians and bicyclists. Especially if there will be a school built. Another entrance would be great to have another way to leave Two rivers.	
GENERAL	Allow connection from Upper Patuxent Ridge to Patuxent Ridge.	
GENERAL	Open Patuxent Ridge Rd to Upper Patuxent Ridge Road so that there is another way out of the Woodlands community. The road already exist but it was barricaded to prevent through traffic.	
GENERAL	Create a sidewalk or connecting path to the new West County Elementary School. This will allow for children and families to walk and bike ride to school from the community. The road should also be widened to allow for a turning lane into the school	
GENERAL	lived in Md 40 years, off 301, this entire problem is a result of poor decisions, solution STOP building NEW stuff & actually USE what's been here !!!!	
GENERAL	concern that traffic will come down OLEANDER WAY	
GENERAL	There should be an additional exist for the residents on the north side of Conway Rd to Patuxent Rd through an expanded Bragers Rd.	
GENERAL	Upper Patuxent Ridge Rd and Patuxent Ridge Rd should be connected for the residents in the Woodlands community to facilitate a more efficient and safer way to exist the neighborhood.	
General Comment	The ideal 2nd entry/exit for Two Rivers would be a connection to MD-197. This would alleviate traffic off MD-3, increase mass transit access to BSU MARC, aligns with MDOT's BSU Station Area Concept, and potentially provide a link to MD-170.	Option has greater obstacles vs. east-facing options (Patuxent & Amtrak crossing, encroaches on Refuge), however this would benefit a wider range of communities (and maybe a wider tax base of support?) versus a plan that benefits only Two Rivers
General Comment	Potential access point from Two Rivers Community via Meyers Station Rd	
General Comment	Potential access point to/from Two Rivers to alleviate single point of entry.	
General Comment	Potential connection to Piney Orchard Blvd/MD170 parallel to tracks; connection to Conway Rd.	
GRAYS	There should be consideration to bring traffic into Two Rivers further south on Rt 3. This would relieve some of the congestion at 3 and Conway Road.	
GRAYS	Could this road be extended to route 3 south.	
Grays Ford Rd	Add an alternative route to avoid Conway Rd, but still gain access to Route 3	
MEYERS	If Two Rivers could connect with Meyers Station Rd, it would provide a secondary exit capability, if Conway became impassable. It would also lighten the load on Conway during heavy traffic times.	There is a desperate need for an alternative access/exit to Two Rivers. There are a LOT of people living here for there to be only one way out, on a two lane road. This is a tradgedy waiting to happen.
MEYERS	Two Rivers Blvd connection to Meyers Station is needed for our community.	
MEYERS	New road connecting two rivers at Mayer station	
MEYERS	Need a second entrance to Two Rivers from Meyers Station Road. Conway Road was blocked for two hours past roundabout on March 20 due to fire and no entrance to Two Rivers was available.	
MEYERS	It's important to have more than one way to access and leave the Two Rivers neighborhood in case the first way is shut down	
MEYERS	There should be an egress from two rivers blvd to meters station rd	
MEYERS	Must have another exit route from Two Rivers community besides via Conway Road and Two Rivers Blvd. More homes, plus the school=traffic back up. In an emergency, it's a dangerous situation.	
MEYERS	We need an additional exit from the two rivers community aside from Conway. This community is very large and conway can backup and stop all traffic.	
MEYERS	Please consider the addition of another entrance and exit from the Two Rivers House community	
MEYERS	We desperately need another entrance/exit into two rivers from Meyers Station. It is unsafe to only have 1 on Conway. Please and Thank you!	
MEYERS	The ability to access Meyers Station Rd. from Two Rivers Blvd could provide additional access to Conway Rd.	
MEYERS	Additional access point to Conway via Two Rivers Blvd and Meyers Station Rd, would provide additional access to the Conway circle. At present if there is an obstruction between Conway and Two Rivers Blvd all residents of Two Rivers are stranded.	
MEYERS	It will be critical to have a 2nd exit road to Two Rivers as the development grows even more.	
MEYERS	An additional ingress/egress access point is needed for the Two Rivers Community somewhere along Meyers Station Road	
MEYERS	Connect the end of TR Blvd. to Myers Station Road. This will serve as a much needed SECOND entrance/exit to the community.	
MEYERS	Two Rivers needs additional exits, 2 exits doesn't even begin to serve such a large community. The single exit to Conway is downright dangerous.	This needs to be completed ASAP. Brush Fire on Paxutent Road has prevented TR Residents from entering the community.
MEYERS	Why isn't this road paved to exit?	
MEYERS	TEST - this comment is a test and only a test of the commenting system - TEST	
MEYERS	2nd access to two river blvd	
MEYERS	Meyers Station should connt to Two Rivers Boulevard to provide a seconday entry/exit in case of emergencies	
MEYERS	I'm sure the people who live on Meyers Station Rd would hate it, but this could be an additional exit from Two Rivers.	
MEYERS	Connect Two Rivers Blvd to Meters Sta, build bridge to Cronson	
MEYERS	2nd exit out of two rivers necessary	
MEYERS	Could the county explore connecting Meyers Station Rd directly to Rt 3 as an alternative to Conway Rd? Maybe it could connect to Cronson Blvd by the USPS building?	
Meyers Station Rd	There should be a secondary exit from Two Rivers. The place that makes the most sense is onto the lower part of Meyers Station Rd.	
Meyers Station Rd	Meyers Station Rd needs to be extended and connected with Rack Track Rd. We need a 2nd exit out of the Two Rivers area.	This will also alleviate some of the Rte 3 traffic, as many of us go west, not each, every day to work.
Meyers Station Rd	Add a second entry/exit for Two Rivers, it is needed especially with the new phase of development.	
Meyers Station Rd	Extend to connect with Rt 3 to provide safety exit to the south.	A SECOND EXIT FROM TWO RIVERS IS CRITICAL!
PATUXENT	Homes in the Ryan area have only one way out and we are deep into the community. To have something on the other end would be safer than what we have now. We can't even use the other exit off of Conway going thru the 55 + area .	They voted to have that as an emergency road only when at least 50 or more houses will be being built next to their area. thank you
PATUXENT	I request that the County put in separated bike lane (can be on the same roadway for example in an expanded shoulder) for Patuxent Road from the intersection with Conway Road (roundabout) and where it becomes a separated roadway in Piney Orchard.	This would facilitate bicycle safety between Piney Orchard and Crofton and facilitate usage of W,B&A Trail.
PATUXENT	Anytime there is an accident at the round about the traffic is stopped. No entry	To two rivers. With the school opening adding pedestrian walk ways will back up traffic even more. We need access to another road that doesn't feed to Conway or patuxent
PATUXENT	There is excessive flooding in this location that prevents traffic flow.	
PATUXENT	Recommend building a walking bridge for the bike path over Patuxent Rd due to the high amount of traffic. This would alleviate potential accidents and injury of bikers/runners.	
PATUXENT	When Patuxent floods, traffic is severely impacted. While there are warning signs at the circle, they aren't always accurate.	
PATUXENT	Allow access from Conway thru Patuxet Ridge Rd to allow additional access to the Woodlands subdivision and lessen Conway traffic.	
PATUXENT	Build bridge and connect Patuxent Rd to Evergreen Rd	
PATUXENT	There should be a connection to Patuxent Rd through Upper Patuxent Ridge Rd so that residents have an alternative passageway if Conway Rd is closed/blocked/etc. This could go by Patuxent Ponds Park potentially?	
Patuxent Rd	The intersection with the WB&A trail with Patuxent Rd is dangerous. Cars zoom past and often ignore signage, and because of the curvature it's difficult to see them coming. Help!	
Patuxent Rd	This whole road is a hot mess. Narrow, no shoulders, bad sightlines and high observed speeds in spite of the work that the county's done to calm the traffic.	
Patuxent Rd	I suspect once the bridge is open the trail crossing will become more popular and may need some sort of treatment to make it more visible.	
Patuxent Rd	It's worth considering adding more signage to indicate the trail head parking; especially as the trail becomes more popular	
Patuxent Rd	Consider enhanced cross treatments (e.g., beacons) at this crossing.	
Patuxent Rd	Large number of people park here to fish, swim and picnic. It's a challenge with the number of cars, people, and trash left behind.	There's No Parking signage here, but it's routinely ignored.
Patuxent Rd	Need to consider how to restrict traffic on Bragers when West County Elementary School and the recreation fields are built out. I'm NOT talking about the residents of Bragers, I'm talking about potential visitor to the School and/or Recreation fields	A large influx of people in cars on Bragers (WB&A Trail) driving and parking would be disaster.

Email		
Conway Rd	TO WHOM IT MAY CONCERN: While you are considering Conway Road improvements, it's about time to improve Conway Road after your pass Two Rivers housing development that takes you to the the historic Wilson Town. The community ends at the Saint John Church where the Road dead ins. It's a shame in 2022 this road is still not up to date with double yellow passing lines and related. Concerned past resident of Wilson Town.	
Conway Rd	Good morning Holly - Can the 2 lanes of Conway road be widened another 4'? The big trucks take up so much space, sometimes going over the line, that it becomes dangerous for oncoming traffic. Would love to see a bike lane/pedestrian lane along this road. Thank you. Two Rivers Resident	
Conway Rd	Dear Mr. Greenstein: Adam, As Project Manager/Contact for the Conway Road Project, I was hoping that you could add the attached pictures to the Zoom conference call material which is scheduled for Wednesday the 23rd. Yesterday, there was a fire located near the traffic circle on Conway Road which blocked all access to the Two Rivers Community for over an hour. This is just one more example of the urgency to suspend any further development in the area which impacts the Conway Road corridor. Emergency situations such as this fire and recent accidents have left the residents of this 55+ community totally isolated (especially in times of a medical emergency). Thank you in advance and I look forward to the meeting on Wednesday.	
Conway Rd	Hello Holly, As a 78 year old Two Rivers resident who was stuck in Sunday's backup on Conway Road, I would like to speak at tomorrow's zoom meeting. Please let me know that you received my request to speak and that you have put me on the resident speakers list. Thank You.	
Conway Rd	Hello Mr. Greenstein, Thank you for your virtual meeting last night. My husband and I found it very interesting. Your work is definitely cut out for you because the only option we see to help alleviate a traffic nightmare once the elementary school opens is to add lanes to Conway Road and it appears this will not be possible. We now realize that Two Rivers never should have been built and are deeply, deeply disappointed in how this community has been handled by the developers. However, the main reason I am writing is because last night someone brought up Patuxent Ridge Road and Upper Patuxent Ridge Road needing to be connected. I am a resident who has lived on Patuxent Ridge Road in The Highlands Village for six years now and wanted to explain to you the circumstances. I believe these two roads are private and that it may not even be a county issue but wanted to give background in case it does become a county issue. When my husband and I purchased our house in October of 2015 we were under the impression it would be a totally 55+ community. Ryan Homes did not inform us of the fact it had already been approved for All Ages also. When we found that out, we were partially put at ease when we were told by executives of both Ryan Homes (builders) and Koch Homes (developers) that our street would become a dead end if the community on the other side of the power lines ends up being an All Ages community. I remember being told that the developers wished to not put a road in through the BGE easement at all once it was decided it was going to be an All Ages community but that the Fire Chief at the time insisted it be built as an emergency access road. We understood the need for that. We were all also assured in 2015 that Villages (55+) and Hamlets (All Ages) would not physically connect with each other within the community. This helped to put our minds at ease that we would be able to enjoy a quiet 55+ community environment that we thought we were buying into even with All Ages residents living here. Currently, the other side is an almost-finished All Ages community called The Woodlands and their main street is named Upper Patuxent Ridge Road. There has been a gate installed at the end of our street (Patuxent Ridge Road) with a lock. Before the gate was installed, there was only a fence barrier on tires that could easily be moved and the residents of The Woodlands moved it almost every day. Many of the drivers from there sped down our road and one such driver almost hit a resident who lives on this street. It is now sometimes unlocked and left open for construction trucks, which we are not happy about, but we haven't been able to do anything about that and at least it is locked back up in the evening.	
General Comment	Hi Holly, Will any kind of transcript of the discussion and/or chats be forwarded to participants? Thanks! Blessings,	
General Comment	Adam, Unfortunately I was unable to attend last night. I have reviewed the presentation, but would like to know if the entire zoom question/answer period following the presentation was also recorded and available to review? Thx, Two Rivers	

Conway Rd	Hello Mr. Greenstein, Thank you for coordinating last night's informative zoom session on the Conway Rd., Corredor. After thinking about the experience that I went through with my disabled husband, trying to get home on Sunday, I'm now realizing how difficult it will be for Anne Arundel County to figure out how to provide an additional entrance to our Two rivers community. Certainly, the Two rivers developer must have paid Anne Arundel County a lot of money for the County to have allowed such a large community to be built without having adequate roads to access that community. At this point, I think the only way around this dangerous inadequate road situation is for Anne Arundel County to pay whatever is needed to have another entrance to Two rivers made available. This might involve paying large sums of money to homeowners whose land would be needed to put in that road. Until that second entrance has been completed, the current emergency use only entrance should be expanded to be used by those of us in the community, such as myself, who feel that it is imperative for us to get home quickly. Caring fof a husband with Parkinssons and Lewybodies who needs to take medication on a regular schedule and who experiences meltdowns in stressful situations, is not easy. This is compounded by the fact that I do not see well enough to drive after dark. Please help Anne Arundel County to remediate this situation as quickly as possible. Thank you	
Conway Rd	Adam: This is to further explain the suggestion I made during last night's zoom meeting, regarding a second access route into Two Rivers, and is in lieu of using the interactive map to provide my comments. At the end of this email I will also briefly touch on needed improvements to Conway Road itself. Feel free to make this email part of the public record. I take it as a given that the need to improve traffic conditions along Conway Road, and the need to provide for a second ingress into Two Rivers, are inextricably linked. Anything that creates an alternative means of entering or exiting Two Rivers would reduce traffic volumes on Conway and thus contribute to the cause of improved safety. At the same time, it is important to avoid a configuration where both ingress/egress routes might be rendered impassable by a single event, e.g., a traffic accident, flood, or any other situation having the potential to block traffic. Fire and emergency services must have a foolproof means of reaching all parts of the Two Rivers development at all times. Because of the two-lane configuration of both Patuxent Road and the portion of Conway Road between Two Rivers and the Little Patuxent bridge, this presents a real challenge. I believe there is only one logical solution, namely: (1) to re-configure the proposed "emergency" road between the southern end of Two Rivers Blvd. and Meyers Station Road as an unrestricted two-lane road; (2) to continue this road on the east side of Meyers Station Rd. in an easterly direction (ideally through the use of a traffic circle); (3) to erect a bridge allowing the passage of this road over the Little Patuxent River; and (4) to construct an intersection of this road with Cronson Blvd. which connects with Crain Hwy. I will hereinafter refer to this concept as "Two Rivers Blvd. Extension" (TRBE). By using a traffic circle, impacts to existing local traffic on Meyers Station Road would be minimized. Admittedly, people exiting Two Rivers by this route who are heading to points north might still choose to use Patuxent Rd., and thus add to traffic volumes on the relatively short portion of Meyers Station Rd. between the two circles. This is unavoidable. Those headed in an easterly direction would have their choice of heading north on Meyers Station and then east on Conway, or alternatively, remaining on Two Rivers Blvd. Extension in order to get to Crain Hwy. Those heading south would undoubtedly stay on TRBE and then get on Crain Hwy. southbound. Traffic on the portion of Meyers Station Rd. south of the new circle should be unaffected. While not perfect, I believe this is really the only viable means of achieving a second egress from Two Rivers. Let's consider each of the other two alternatives that were mentioned in last night's meeting: •Extending Conway Road to the west, presumably to connect with either Patuxent Road or one of the roads in the vicinity of Bowie State University. If the proposed connections involved road construction on the west side of the railroad tracks, this would necessitate a means of crossing the tracks other than at-grade, as well as the need to negotiate with the Federal government relative to the use of Patuxent Refuge land – both potential dealbreakers. But even if all the new	
General Comment	Holly, I attended the zoom meeting regarding Conway Road. I would like to contact one of the panel members. Her first name is Lori and I believe she's with the zoning board. Unfortunately I did not get her last name. Could you send me her email address so I can contact her regarding my question. Thank you.	

APPENDIX B
PUBLIC MEETING TRANSCRIPT

H539620 Conway Road – Virtual Public Meeting, 3/23/2022

Zoom Meeting Transcript

Adam Greenstein, DPW Proj. Mgr.

00:38:54We appreciate you being here this evening.

00:38:58My name is Adam greenstein i'm the project manager for the economy record or study being conducted by the incremental county department of public works.

00:39:07A couple of housekeeping items real quick before we get started, as you might have seen when you entered the room this meeting is being recorded.

00:39:15In addition to that, and audio transcription will be saved so both the recording and the transcription will be added to our project website.

00:39:23As early as possible next week will need a couple of days to edit the files and post them, so it will be available for everyone to see on the project web page So if you wanted to see the recording again look through that discussion you're more than welcome to do so.

00:39:36If needed, you can request closed captions for our host via button at the bottom of your screen, that you should be able to see.

00:39:45You can request a live transcript to using the more button.

00:39:48Which is on the right side of the bottom of your screen on the toolbar if you have any issues feel free to enter in the chat and let me know if you have any problems and i'll work with our hosts this evening to try to get that resolved.

00:40:00This evening, our meeting will begin with a presentation about 20 to 25 minutes or so.

00:40:04it's a pre recorded presentation and it will be shared, on your screen, along with audio so please make sure to stay muted, so we don't get any feedback and make sure it's as large as possible and make sure that your sound is on as well.

00:40:16This same recording will also be loaded to the project web page early next week.

00:40:22So, in case you just wanted to see the presentation recording but not necessarily the entire meeting recording you're welcome to do so and we'll notify everyone when that's available, but we recommend you checking out the website probably around Tuesday or Wednesday.

00:40:39In case.

00:40:41Just a couple of other notes here will also share a PDF version of the slides if you just wish to see that visual content will also be posted on the project web page next week.

00:40:49All this content will be available through and past the end of the public comment period, which ends on April 1 and you're free you're free to provide input and ask questions.

00:40:59But the comments that will be provided as part of the public comment period will only be those through the end of next week.

00:41:05At the end of the day, on April 1.

00:41:08Any comments provided tonight anything by email any phone calls any other input, there will be comments posted anything that requires a response to provide clarification from the county project team.

00:41:18will be posted on the site as well there'll be a document with all the comments anything needing a specific response for clarification.

00:41:25In addition to any questions, we will provide answers to those questions as well, whether it's we are able to answer it tonight, or if it requires some internal discussion on our project team.

00:41:35We will be able to provide those answers that information will be provided, after the end of the public comment period, so we can make sure we can compile every single comment all questions that we receive that will be posted in early April, so you can digest that as well.

00:41:50For that information, once the project website is considered, complete with that additional information after the end of April will send notifications to the community leaders and elected officials, so we can get the word out.

00:42:01So you can check out those answers to your questions any follow up related to comments.

00:42:08We do for kindly request that you stay muted throughout the duration of the meeting.

00:42:13Our host will be keeping an eye on muting just to make sure that there's no extra background noise no feedback to make sure that anyone speaking can be heard loud and clear, especially.

00:42:22members of the public and communities like yourselves so everyone can be heard on the recording and we can make sure that we clearly understand comments and concerns and discuss those questions along the way.

00:42:33If you do wish to ask a question or provide a comment, please use the raise hand feature.

00:42:38If you're not familiar with the raise hand feature in zoom at the bottom of your screen you'll see a button that says reactions, with a SMILEY face and a plus sign just above it click that and then there's a button that says raise.

Adam Greenstein, DPW Proj. Mgr.

00:42:53Please make sure to use that and not the other features above make sure that you click the button that says raise hand what we'll do is in the order of the requests from raising hands that we received will ask you to unmute.

00:43:04Whether it comes from the host who will send you a prompt on your screen or all.

00:43:09Mention you by name and you're welcome to unmute when you're done with your comment or question, please make sure to meet yourself at the end and we appreciate your flexibility and understanding and that process.

00:43:22i'd like to go through some brief introductions for the project team i'm not going to introduce everyone on the county's project team this evening.

00:43:28I just want to highlight a couple of key folks and then what i'd also like to do is, if you are with the county's consultant.

00:43:35With the county or with the Maryland Department of Transportation if you wouldn't mind and your name on the screen editing your name, so it shows who you represent one member of the project team, whether it's the county office, the state or consultant team from a calm.

00:43:50That way, you can get a better idea of who we are.

00:43:53dentists Simpson from a calm, is our consultants project manager Dennis Would you mind doing a brief introduction and i'm meeting yourself.

Dennis Simpson, AECOM

00:44:06hi def Simpson i'm project manager for a calm we're assisting the county with doing the study of can we wrote quarter.

Adam Greenstein, DPW Proj. Mgr.

00:44:14Thanks so much Dennis there are several others from the county and the state, as I mentioned in our consultant team a consultant team as Dennis mentioned is from a calm, we have folks from the Department of Public Works the office of transportation, the office of planning and zoning.

00:44:29The Department of recreation and parks, the county by commissioning bike AAA and some folks from internal county public schools, not every person from all those divisions are on the call tonight.

00:44:40What I meant to say is that they're members of our project team, so if there's a question comes comes up that we cannot answer for you will get in touch.

00:44:47With one of them get you in contact with them, so we can answer those questions and make sure that you get the information that you need.

00:44:55just wanted to provide one quick disclaimer on the project itself before we begin the presentation and I appreciate your patience with these housekeeping notes.

00:45:02We sincerely appreciate the folks who have reached out to us by providing comments on the project website, we received a good number of emails phone calls.

00:45:11and other information from members of your communities with input and questions and concerns about the project and we understand that there are a lot of questions related to existing.

00:45:22planned and future potential developments in the vicinity of the conway record or the goal of this study is to account for general growth in the area generally considering what those developments might look like.

00:45:35and considering things that are definitely plan to happen, which we'll get to in detail things that we're not quite sure about.

00:45:42So.

00:45:44The future of the corridor is intended to generally account for what the roadway might need to look like in the future to account for how the county is growing.

00:45:52How these developments are coming in, but the goal is not necessarily directly to address those development questions, we can.

00:45:59work with you to communicate with the office of transportation and the office of planning and zoning at the county to delve into those in a little bit more detail.

00:46:07So if you have do have questions about that may be best to address those either in an email or separate phone call to me and my contact information will be made available in the chat and in the presentation we'll go through some of that information during the presentation itself.

00:46:22The presentation will also include information on other projects, not necessarily tied to development that involved the Maryland Department of Transportation state highway administration and other partners.

00:46:32For the county will make sure to highlight that we get a chance, including some that are already in planning and design.

00:46:40With That being said, Dennis i'd like to turn it turn it over to you and the a calm team for any other preliminary notes and then to start our presentation.

Dennis Simpson, AECOM

00:46:56Thanks Adam, I will just say we've got a couple of folks here from a common on the on the call to be able to answer questions related to traffic, the future forecast existing traffic conditions.

00:47:10As well as.

00:47:12Some of the material that's being presented in terms of testing conditions with that i'll turn it back over to Adam to go ahead and start the presentation.

Adam Greenstein, DPW Proj. Mgr.

00:47:22Great thanks, give me just one second to pull that up.

00:47:46Second, sorry some technical difficulties, but thank you for your patience i'm going to share my screen.

00:47:51i'm going to share my sound.

00:48:03If you do have any issues seeing the presentation, please let me know in the chat I want to make sure that everyone can see the content that we have here today.

Unknown Speaker

00:48:23Thank you for your interest in the conway road corner study county project number H 539620.

00:48:32The following presentation highlights the initial phases of the transportation facility planning process for an arundel county department of public works for this segment of conway road between Maryland route three and conway's Western at terminus.

00:48:51This presentation will touch on the following topics a general overview of the study area and some of its defining characteristics, a summary of the county's purpose for pursuing this project highlights of the phases of the planning process for this study.

00:49:09A review of documented existing conditions within the study area, including various transportation facilities resources traffic safety flood zones, etc.

00:49:21A summary of the planned changes anticipated to occur that affect the study area, a discussion of the needs identified for the study area that the county will look to address.

00:49:33an overview of the alternatives development and screening process with an example of a preliminary conceptual improvement and information on how you can provide your input and communicate with the study TEAM members.

00:49:50The conway road study area is focused on the approximately 3.2 mile segment from Maryland three to the western terminus near the St john me Zion church.

00:50:03There is one signals intersection at Maryland three crane highway one round about intersection at patuxent road slash Meyer station road inside street stock controlled intersections found throughout the Court or.

00:50:18Under the county functional classification system conway road between Maryland three and the roundabout is functionally classified as minor arterial with a posted speed limit of 40 miles per hour.

00:50:31And as a collector from the roundabout to the western terminus with it posted speed limit of 30 miles per hour these classifications are reflective of the way conway functions within the local transportation system and relates to traffic volumes speeds and surrounding land uses.

00:50:51This study also acknowledges the abundant sensitive natural and historic, cultural resources private properties and the productive parklands that comprise the land uses surrounding conway road patuxent road and fire station road.

00:51:11arundel county department of public works is conducting the economy road corner study to provide accessible pedestrian and bicycle facilities along conway road.

00:51:22necessary to enhance pedestrian and bicycle mobility and safety and provide improve connectivity to existing and plan facilities.

00:51:32Reduce conflicts between vehicles and pedestrians and bicyclists address via killer accessibility, issues related to roadway flooding and closures.

00:51:42enhance traffic operations within the study area along conway road and reduce complex between fixed objects and vehicles within the study area.

00:51:54The an arundel county transportation facility planning process for this study has been segmented into three phases.

00:52:03Phase one have focused on data collection and documentation of existing conditions, these will be the baseline functions, against which all proposed improvements will be comparatively assess.

00:52:16phase to where we are now includes developing project purpose and need evaluating traffic operations under future no bill conditions.

00:52:25Conducting initial public outreach and the assessment of preliminary conceptual solutions to address study area needs.

00:52:34Phase three will involve the completion of the study with a final report that provides recommended improvements and documents additional Community input on the recommendations.

00:52:46Once phase three of this study is completed the county will determine if funding can be allocated towards the design and implementation of recommended improvements there are currently no funding provisions nor set timeline for subsequent design and implementation phases.

00:53:06For the purposes of this study economy road has been divided into six distinct segments, as shown.

00:53:14These segments reflect changes and roadway characteristics like increases or decreases in number of lanes posted speed limits roadway with.

00:53:24presence of pedestrian facilities and or changes in adjacent land uses.

00:53:30These typical sections depictions of the roadway cross section us to illustrate the general composition of the transportation features.

00:53:39are also provided in the existing conditions technical report available to view on the project web page these segments will be used as a study considers possible improvements and evaluates potential impacts.

00:53:56As shown on the figure, there are few existing dedicated pedestrians bicycle facilities along conley road.

00:54:05There is one relatively short segment of existing sidewalk along the North side of conway road.

00:54:10Between Maryland three and the entrance to the Princess shopping Center there are no pedestrian crossing facilities provided at the Maryland three intersection.

00:54:20For more experienced bicyclists there are existing eight foot shoulders from the Princess shopping Center entrance to just west of the anchor concrete products facility.

00:54:31The web and a trail a dedicated bicycle sash pedestrian shared us path to versus the study area and provide some pedestrian slash bike accommodations along conway road at the two rivers development.

00:54:45As part of the assessment of existing conditions, the county conducted an analysis of the experience most pedestrians and bicyclists would encounter along conway road.

00:54:56An assessment of bicycles level of traffic stress was conducted using adopted Maryland Department of Transportation methodology.

00:55:05Where roadway segments are evaluated and assign a score of zero through five with the zero being a facility suitable for all ages and abilities, such as a shared use path.

00:55:17And a five being bicycle access prohibited most of conway road score at high levels of three or four indicating bicycle is riding on the segments of conway should be enthused and confidence score of three or strong and fearless score of four.

00:55:35Where the web and a trail runs parallel to economy road, the level of traffic stress is zero or all ages and abilities.

00:55:45Similarly, the county assessor pedestrian level of comfort using adopted Montgomery county planning department methodology.

00:55:54which has been deemed inappropriate methodology for use in other locations around Maryland and has been coordinated with the Maryland Department of Transportation.

00:56:04pedestrian level of comfort evaluations great facilities with a score ranging between one and four with one being very comfortable and for being undesirable.

00:56:16Because there is no walkway along most of conway road the pedestrian level of comfort is undesirable score for in most roadway sections were web and a trail runs parallel to conway road the pedestrian level of comfort is very comfortable score of one.

00:56:38The study area contains abundant sensitive natural resources, water resources, like rivers streams wetlands and boggs mature forested areas protected lands floodplains and dwelling habitat for sensitive species.

00:56:54As possible improvements are evaluated the county will be cognizant of the potential to negatively impact these resources and look to minimize avoid and document associated risks to consider, as part of the decision making process.

00:57:14The study area also contains extensive culturally and historically significant properties and features that the county will look to avoid or minimize potential negative effects to contributing elements.

00:57:27conway road patuxent road and Meyer station road are all designated scenic and historic rose by Anne arundel county.

00:57:36These designations set design limitations on extent of changes to existing facility characteristics that can be approved, public safety and adequate transportation accommodations must be provided, but the ultimate design must account for the.

00:57:52resource manager of these facilities and the surrounding resources.

00:57:57As shown in the figure the Woodward avail historic district along patuxent road is on the national register of historic places, and there are several properties identified by the Maryland inventory historic properties within this study area.

00:58:15Existing traffic conditions are graded based on operational levels of service during peak periods of travel when traffic volumes are at the highest levels.

00:58:25For the transportation research boards highway capacity manual intersections are assigned a grade A through F.

00:58:33Based upon a ratio of traffic volumes available capacity and travel delays great a is considered a free flow conditions, with little to no delays.

00:58:44and great F represents complete congestion with extensive travel delays for the purposes of this study the county considers great at D, as the worst acceptable condition.

00:58:55roundabouts and signaling intersections are assessed using the weighted average delay for each approach using different levels of service benchmarks to great operational functions.

00:59:06To way stock control controlled intersections are assessed using the delay of the worst performing approach as Wayne only the more free flowing movements wouldn't fully reflect the level of service experienced by all users.

00:59:23Based upon the peak hour traffic volumes and delay data collected, as part of this study.

00:59:28conway road is currently experiencing inadequate operations at the Maryland route three slash conway road in our section and at the Princess shopping Center entrance to conway road.

00:59:40For the existing conditions report all movements at the Maryland brute three in our section.

00:59:46operate at level of service of E except northbound and southbound Maryland three through movements and the northbound eastbound westbound and southbound channelized yield control right turn it movements, the approach on conway road.

01:00:04The weighted average of delay of through movements left turns right turns experience long delays and operate at unacceptable levels during the evening peak travel times.

01:00:16In addition, vehicles that are attempting to turn left out of the Princess shopping Center during peak periods experience long delays and failing level of service conditions.

01:00:30The county collected and documented prevailing traffic speeds at key locations along conway road patuxent road and mire station road.

01:00:39The data is presented as 85th percentile speeds, which represents the speed at which 85% of traffic moves at or below.

01:00:49This means that 15% of traffic travels at speeds above the 85th percentile number.

01:00:55Establishing the prevailing speeds at these locations will help engineers identify where traffic speeds are not compatible with the roadway environment and assist with identifying measures to properly address potential safety needs.

01:01:12Existing school bus stops are located along conway road and within the two rivers development intermittent stops also occur at intervals along conway meyers station and patuxent roads as needed to provide transportation for local school children.

01:01:31Currently services around at the Western terminus of conway at the St john AMA Zion church this study intends to look for opportunities to provide an improved turnaround for buses, so they no longer need to rely on the church parking area.

01:01:51crash data provided by the Maryland Department of Transportation illustrates the police reported crash incidents within this study area.

01:02:00Between January 2018 and December 2020 note that the crash data presented here has been updated and corrected through coordination efforts between the county and Maryland Department of Transportation.

01:02:15To address a data gap identified after the existing conditions technical report and draft purpose and need statement was initially published.

01:02:25There were 18 reported crashes on conway road, including one involving a pedestrian fatality.

01:02:33The fatal incident occurred in 2019 on conway road approximately 0.2 miles East of the roundabout intersection at night and wet conditions.

01:02:44groupings of crashes, have also been reported on conway road near the Maryland three intersection and close to the Princess shopping Center.

01:02:53There were 36 reported crashes on patuxent road with higher rate of incident clusters identified at two locations, you know would reveal and at the patuxent road web and a trail crossing.

01:03:07Most of these crashes involved fixed objects suggesting vehicles have run off road 14 of these crashes involve injuries.

01:03:15There were two crashes documented on Meijer station road identifying potential safety needs and looking for opportunities to enhance traffic and pedestrian bicycle safety, our primary goals and objectives for this study.

01:03:32flooding and associated road closures are a well documented issue within this study area, particularly along patuxent road historical data indicates the road floods on average more than four times each year.

01:03:47The county recognizes the need to try to address flooding and related road closures, to prevent limited accessibility for residents, businesses and emergency response agencies.

01:03:59In addition to the efforts associated with this study the county is developing plans and obtaining permits to install advanced warning signs placed at three locations on patuxent road.

01:04:12Economy road at the north end of the impacted area at sandy walkway and east of liberty bill, which will be activated by sensors that detect high water installation is plan to begin in early 2023.

01:04:29This map highlights were flooding and road closures, have been documented, we would like to hear from residents and those who drive through the study area for their perspectives on flooding and road closures.

01:04:42Your first hand accounts insights ideas and suggestions are valued and will be utilized as a key resource as we look for opportunities to address safety.

01:04:52accessibility and mobility needs for those who travel to and within the study area.

01:04:59We encourage you to provide comments specific to geographic locations via the interactive map on the project web page click on the edit symbol and then drag your cursor over the map to the specific location relevant to your comment slash question.

01:05:20There are many changes occurring or program to occur within this study area they include the introduction of a plan new elementary school.

01:05:29The extension of the web, in a trail across the protection river and rehabilitation or replacement design of the conway road bridge over the little patuxent river.

01:05:41The continued growth associated with the plan to completing of the two rivers development around 1300 more residential units are anticipated and the anticipated annual countywide population growth of 0.4%.

01:06:00The county worked with the baltimore metropolitan Council, which is the regional metropolitan planning organization for the baltimore metro area.

01:06:09The baltimore metropolitan Council is tasked with curating the regional transportation demand model which is a tool used by planners and traffic engineers to develop future travel demand forecasts.

01:06:22These forecasts consider planned changes in land uses and projects that are program for implementation, such as the new elementary school and the new two rivers homes being built.

01:06:34It incorporates anticipate in population growth forecasts and potential changes in demographics, that could have spurred changes in transportation demand patterns.

01:06:44This traffic model was used by our traffic engineers to develop a set of forecasted at future.

01:06:52No bill peak period traffic simulations that assumed all other planned developments and projects are to be completed between now and 2045.

01:07:02If nothing is done to change traffic operations on conway road traffic could potentially function with notably higher delays and failing levels of service at several intersections.

01:07:13Including at Maryland three at the Princess shopping Center and at the two rivers boulevard patuxent Ridge road intersection.

01:07:25Based upon the collected existing conditions data, a review of anticipated changes within the study area.

01:07:32And forecast in traffic operations, the following needs have been identified and will be used for the development and assessment of potential transportation enhancements.

01:07:44improve traffic operations and safety to enhance the experience for all modes of travel within the corridor.

01:07:51enhance bicycle and pedestrian connectivity and accessibility, with welcoming and convenient facilities.

01:07:57improve access slash mobility related to flooding and road closures address potential safety concerns related to emergency response and investigate opportunities.

01:08:08To provide redundancies within the transportation systems in the event of road closures.

01:08:14Provide context sensitive transportation facilities that blend in with surrounding land uses in a way that combines appropriate aesthetics with functionality.

01:08:25protect the abundant sensitive resources properties and cultural elements that contribute to the unique history of the study area.

01:08:36As potential improvement alternatives are developed, they will each go through a screening process that begins with understanding the needs of the Community.

01:08:45and establishing goals and objectives to address known issues, as documented in the draft purpose and need statement.

01:08:53This fundamental step will help ensure this study team has thorough knowledge of the study area and can properly focus resources on opportunities to enhance transportation needs.

01:09:06Step two involves the development of conceptual improvement alternatives and evaluation criteria using public and agencies stakeholder input.

01:09:16The study team will draw on years of planning and design experience to create conceptual improvement alternatives.

01:09:23But the public and stakeholder input we've received will be vital in helping to identify assessment priorities necessary.

01:09:31to balance the needs of the surrounding communities and those who travel along these quarters against the potential risks and impacts associated with implementation.

01:09:42Step three involves the screening of conceptual improvement alternatives and the documentation of potential risks and measures of success.

01:09:52Once conceptual improvements are developed and refined they will then be evaluated against the priorities established in step two.

01:10:00And the study team will document performance potential versus impacts and other risk related component.

01:10:07Step four will utilize the screening process to provide recommendations on preferred feasible conceptual improvement alternatives for future capital programming and potential implementation.

01:10:20The recommendations will incorporate suggested measures for how to move forward with further developing the conceptual improvements to subsequent phases of funding identification permitting.

01:10:33design and implementation, as mentioned public engagement and input will be critical to the success of this study and will be sought and applied throughout the process.

01:10:47This slide depicts a preliminary conceptual enhancement option example of the proposed typical section from the roundabout in our section to the web and a trail.

01:10:59This proposed enhancement could include changes to conway road, such as the introduction of five foot shoulders to address vehicle run off road incidents.

01:11:09Providing bicyclists with a more comfortable on road riding experience and enhancing site distance around curves.

01:11:17This preliminary example has not yet been fully evaluated and is subject to change as the study progresses the county will assess the potential impacts to resources and properties estimate associated construction costs.

01:11:32and evaluate the risks and benefits of this enhancement option and many like it, the results of these evaluations will be published and shared publicly in order to help solidify recommendations for next steps in the process, if any, are determined feasible.

01:11:52your input matters we value your input and appreciate any insights you'd care to share with the study team about your needs and concerns for the study area.

01:12:02we'd like to hear from you about what improvements or enhancements should be investigated some examples include but are not limited to.

01:12:10bicycle and pedestrian enhancements what types of facilities, would you like to see, and where some examples include shared us paths sidewalks on road cycle tracks.

01:12:23Safety enhancement ideas new traffic signals warning signs pavement organs lighting what might help pedestrians bicyclists and motor vehicles travel more safely.

01:12:36Do you have suggested methods to calm traffic and vehicle speeds help us identify locations or psychic distance is an issue.

01:12:44Do you have thoughts on possible new access routes to bypass areas with flooding issues we welcome and encourage sharing any suggestion and questions you may have.

01:12:56arundel county encourages your participation in this study and welcomes any feedback, you can offer tell us what matters to you.

01:13:04Please review the existing conditions technical memo and the draft purpose and need statement and access the interactive map via the county web page to provide your insight.

01:13:15If you have any questions, please contact Adam greenstein project manager at 443-569-9587 or email Adam greenstein at a county.org.

01:13:31This completes our presentation, thank you for joining us and we look forward to your continued participation in the conway wrote a quarter study.

01:13:41The following slide highlights some terms to know as a reference to elements discussed in the presentation, the final slide it provides additional contact information for various county services.

01:13:58This slide highlights and defines a few planning terms to help you better understand the data we are presenting and hopefully helps us all communicate more effectively together.

01:14:18You are a list of Anna arundel county departments, you can contact, if you have specific questions or concerns, thank you for attending.

Adam Greenstein, DPW Proj. Mgr.

01:14:37Thanks so much for your patience and listening to and viewing the presentation we do apologize for some of the technical difficulties that we're having being able to mute participants.

01:14:49Some unexpected issues that do tend to come up in these events zoom.

01:14:53Normally works, a little bit better for us, but thank you for your cooperation, your understanding flexibility and your patients will do our best to make sure that things mean maintain as organized and quiet as possible, except for those who are speaking.

01:15:07What i'd like to do is when we get into the Q amp a session if needed.

01:15:14Dennis if you or someone else from your team don't mind pulling up and having at the ready a PDF version of the slides.

01:15:21That way, if we need to see something visually in order to help answer a question, we can always also pull up other graphics on Google earth, if you could have a couple things ready.

01:15:30That might be most helpful.

01:15:33While we're going through this, so what i'd like to do is i'm going through the chat to see if anyone does have a raised hand and I don't see anyone specifically i'm going to do a quick scan.

01:15:45Okay, I see one, let me just make sure I don't miss Michelle before I get to you just to make sure okay see a couple in case there's any other issues with the zoom give me just one minute to scan all the attendees and i'll come back so we can start that so give me just one moment.

01:16:05Okay, great.

01:16:08I see, to make sure I didn't miss anybody.

01:16:13Okay, and before we get into the Q amp a just to let you know we'll do the best we can, to answer your questions.

01:16:19Please make sure when we do call on you to unmute and as soon as you're done with your question or your comment, please make sure to mute yourself if we do have that background noise, we will end up meeting everybody.

01:16:29and trying to keep things organized also, this is not the end of the conversation So if you don't get a chance to mention a question.

01:16:35A comment anything like that, as mentioned in the presentation and on the project website feel free to contact me anyone else on the project team with questions comments by email.

01:16:44By phone, we are here to help you and want to make sure that we can do the best that we can to serve you in your communities with That being said.

01:16:53lenore chevelle I apologize if I did not pronounce your name correctly, but you're welcome to unmute if you have a question or comment.

Lenore Shavell

01:17:00Thank you, I have a comment um my husband and I were involved in the backdrop on Sunday on conway road, he was in an uber coming home from.

01:17:12target, I was driving my car home from all these days out called me to say that there was this traffic on Comet was stopped So then, when I came to.

01:17:24Then I came to a stop so then he told me the uber driver turned on to Miller falls to get him home, I said tell the uber driver she can't get get you home on Miller false.

01:17:34So I said tell the uber driver to turn around, so I said tell the uber driver to take you to the all these parking lot i'll meet you back there.

01:17:41So I went around the circle came back to all these parking lot he met me there we were relieved, because at least we were together.

01:17:50So that was the first step of relief, then we had to figure out what to do so, we knew what it was this backup I emailed the Community neighborhood.

01:17:59from two rivers saying don't go on conway it stopped etc, etc, and then.

01:18:06We still didn't know what to do, because we didn't know how long I was going to be stopped up so we decided to go to dinner well, so we went.

01:18:14went to attorneys for dinner, and that dinner was good, but the thing is, it was getting later and I been 78 do not.

01:18:23Like to drive at night I don't feel I see well at night, much less on conway road, so instead of enjoying my dinner, I was staring out the window.

01:18:32So I finally emailed again the Community say if anybody knows I I tried to Google the situational conway could not find out whether it was open or not it was pointless for us to go back and stay in that mom and that backup so.

01:18:46I I googled and somebody I mean I emailed and somebody's email back saying conway is now open, so I thought yay we can go home, it was.

01:18:59Thank heavens for daylight savings time if it hadn't been daylight savings time it would have been dark by then.

01:19:03I don't drive at night, my husband has parkinson's and Lewy bodies, he was supposed to take his medication at six o'clock.

01:19:12But he couldn't because we were so completely messed up so anyway, and you supposed to wait for an hour after taking medication after meals, so the heck with medication, we got home.

01:19:23At 730 goddess medication, which meant I had to wait up until 1130 to give them as next dosage because they're asked me for hours difference, you know between dosage.

01:19:34But i'm trying to say is it was so unbelievably anxiety provoking for me and he my husband when he gets stressed kind of loses it at times, he was great, thank God, but.

01:19:49It took me the whole next day to get over the stress, I still think i'm not if all of it, I know all this needs to be done to improve the roads, but we've got to have another access road to this Community you we have too many older people.

01:20:07We can't we just can't rely on COM we wrote only this is wrong so something has to happen and it can't wait three or four years.

01:20:16that's it so what I want to say thank you for letting me know we.

Adam Greenstein, DPW Proj. Mgr.

01:20:19We sincerely appreciate you mentioning that in that personal level of detail, we can understand that, beyond just the need to get to and from.

01:20:28where you live, is not just if the road is closing you want to get home a little bit sooner than it means a lot more than that that it's about emergency situations like yours or emergency services trying to get to and from.

01:20:38Your homes flooding roadway closures down trees now utility lines things like fires other crashes that really disrupt.

01:20:46Your daily lives, and so, as you mentioned it's something that we're trying to address as quickly as possible and trying to find other connections to provide alternate access is to inform the Community in that area, so it can save you that trouble, possibly in the future.

Lenore Shavell

01:21:00Thank you.

Adam Greenstein, DPW Proj. Mgr.

01:21:01from others on the project team can probably highlight this a little bit more um one thing to keep in mind is the one.

01:21:11Primary the biggest rather difficulty of trying to provide this altar connections, is that they need to go through that.

01:21:18Engineering design process, it does take a lot of time.

01:21:21And we will continue to work with your communities to just try to find other ways to work around those issues as possible understanding that there are severe limitations on what's out there right now.

01:21:31As the presentation noted and as other members of our project team can.

01:21:35highlight we're looking at several different alternatives.

01:21:38They come with some challenges they come with environmental risks related to wear those roads go and they impact environmental features natural habitat waterways things like that.

01:21:46But that's, not to say they're completely out of the question and we want to make sure that we continue to look at all available options.

01:21:52So the point that you mentioned about needing an alternate connection at least helps us to further emphasize that need, regardless of whether our connection is to try to best suit the needs of as many of the residents as possible.

Lenore Shavell

01:22:03Thank you.

Adam Greenstein, DPW Proj. Mgr.

01:22:03We thank you for raising your points we really appreciate that if you don't mind muting we would appreciate that as well, thanks so much.

01:22:10Jim holman.

Jim Holman

01:22:14hey everyone Adam.

01:22:17A couple couple things that are on my mind, and please forgive me if I offend anybody I don't mean to, but when two rivers originally came in individuals who bought into the Community had to know that it was only one way in one way out now to reverse it a nice job designing the circle.

01:22:38Which is far better than a four way stop where traffic light.

01:22:42problem is people do not yield the speed limit there is two miles per hour i've seen people coming off the conway group toxin row.

01:22:51flying around that yield sign, as if to say you're not going to get through that yield sign on me, we had an incident where a resident.

01:23:00had an officer approach them and ask them why they were stopping at the yield sign well they stopped the deals on because they couldn't get out because nobody else was using proper.

01:23:12No matter which way we go and trying to add a second.

01:23:18out, so to speak, for COM we re two rivers i'm, the only way I see without involving the circle which everything is going to come back to the circle.

01:23:28No matter where you take it off Meyer station road or you take it off patuxent road everybody going to the circle that's where it's gonna bottleneck, what about taking conway route over to Jericho red.

01:23:43tape taken it into PG county that would be the what what I see as one, the more efficient ways to provide two rivers, with the second out so they're not getting bottled up at the circle or conway route over tux and reuben the floods conway protection road shuts down everybody is.

01:24:04Here at a standstill nobody's getting out back there the original residents to river residents nobody's getting out.

01:24:14How do we go about solving that that there is a way out where we're not hitting a road that's loaded or trees or down.

Adam Greenstein, DPW Proj. Mgr.

01:24:23Right Thank you Mr home information that point, similar to what miss chevelle was mentioning earlier and.

01:24:31A little bit more to highlight the specific ideas that you have in mind on other connections for conway road to avoid issues that might occur, the roundabout or the flooding issues on patuxent.

01:24:40There are a couple of specific alternatives that we're not necessarily highlighted in detail in the presentation if folks from the a con team or others from the county project team wanted to highlight that.

01:24:50More than welcome to add to that what some of the alternatives, we are looking at, but nothing is set in stone and they're just recommendations, even if we were to come up with one.

01:24:59specific recommendation does not guarantee that a future project entails that but at least we can try to push that forward.

01:25:05Some of the alternatives we're looking at extending the Western end of conway road northward or some other type of roadway connection up to the north, at my connected toxin road up towards the watch apple area.

01:25:16And piney orchard parkway a couple of different options for connections down across the patuxent river towards Prince george's county.

01:25:24as well, we are also looking at connections to the east understanding that that doesn't necessarily help with the concerns that you raised about.

01:25:32The round about and if you're stuck with that one way in one way out type of scenario it doesn't necessarily help you there, but those are a couple of really good points and we're glad you mentioned that will look.

01:25:42into that a little bit further before we get to others who have their hands raised.

01:25:48If you don't mind if you've already spoken what you can do is in the raise hand feature if you go back to do the same thing you can also lower your hand as well.

01:25:56And that might be helpful, just to me, we can make sure we know who's still waiting to provide input comments and questions, so thank you so much.

01:26:07deseret cheek.

Desiree Cheek

01:26:15Yes, hi this is Jim cheek.

01:26:19i'm a bit of a cynic I feel like a lot of things typically are driven by other motivating factors and to me, one of the biggest motivating factors is the potential construction of a school in this area.

01:26:33You would want to make sure that the roads are safe, before we started bringing great school children in is there a.

01:26:40date established and, if so, what it is for construction of that school.

Adam Greenstein, DPW Proj. Mgr.

01:26:45So I do believe we have that I don't have that in front of me.

01:26:50Brian or Dennis do you happen to have the notes from our previous discussion on the completion date of that school, I know there is a date within the next couple of years, but I don't know that offhand.

Desiree Cheek

01:27:03Thank you said.

01:27:06If you can include it in the notes that would be good.

Dennis Simpson, AECOM

01:27:08Absolutely had.

01:27:10It scheduled to open in the 2024 school year okay.

Adam Greenstein, DPW Proj. Mgr.

01:27:16fall so starting with for got it fall of.

01:27:1924 thanks so much Dennis.

Desiree Cheek

01:27:20Thank you.

Adam Greenstein, DPW Proj. Mgr.

01:27:22Thanks, Mr cheek.

01:27:26Okay.

01:27:30Kathy freshman.

cathy Fleshman

01:27:32Can you hear me.

Adam Greenstein, DPW Proj. Mgr.

01:27:33loud and clear.

cathy Fleshman

01:27:35I am a resident of the forks of the toxin I have lived here my entire life, I feel very sorry for the individuals who have bought into rivers, because of developer was not honest with them, there was a lot of things they should have known before they moved here and we're not told.

01:27:54And all the years i've lived here, yes, we have had fires we've had other incidents that have closed the roads, and we have learned to live with it.

01:28:03And I guess one of my questions is why is the county and under the old administration, they allowed this development, to get out of hand, it was not properly designed or implemented.

01:28:15And why do we continue to let people build more homes if they can't control the situation that we've got now.

01:28:27wildlife, I mean we've lost millions of trees and wildlife has no place to go now so that's a consideration, it needs to be taken into.

01:28:41The answer to fix this, this is a crazy situation, no matter what you do you're not gonna be able to fix this road, I mean people are going to have to give up property on either side of conway road there are water and sewer lines underneath the ground, how are they going to do.

01:28:58To get back up in order to proceed with this.

01:29:02And then the streetlights I have gone and actually measured them there any a couple of inches from the road and we've had a number of them taken down already I don't understand how the county could have allowed them to put them so close to the end of the road.

01:29:17This whole thing is totally out of him.

01:29:20The multi generational part of this project, we didn't know that was coming we you know we were screwed, just like the two rivers people, we thought it was a senior development but, as now, the county allow them to go forward with more, this is why we're having all these issues now.

01:29:38horrible situation and there's no fixing it.

01:29:42that's all I have to say.

Adam Greenstein, DPW Proj. Mgr.

01:29:44As freshmen, thank you for raising those points we understand that they are sensitive, they can be contentious they can be stressful and give.

01:29:51residents and other stakeholders travelers in this area, a lot of heartache i'll try to give at least a little bit of high level insight, which I know you've mentioned some of these points before since we've spoken and try to provide a little insight but.

01:30:03I may ask, at least for some high level guidance from folks and a couple of different groups to help discuss with further discuss these points.

01:30:14On the discussion of development, I agree that there are.

01:30:19Challenges and ways that we can better communicate with communities constituents residents on the development process and how things are done granted, there are processes requirements standards and regulations that do change over time that's not something that I get involved in.

01:30:35what's called a gross amount of detail, but there are folks on our project team from the office of transportation and office of planning and zoning who are involved in that process, I can probably shed some more light.

01:30:46If anyone from a low tier O P, would like to unmute and provide more insight feel free to do so.

01:30:51Otherwise, Miss flesh and what i'd like to do is ensure that that comment will be on the record and your questions will be.

01:30:58And that way we can actually provide a detailed written response it'll go on the project web page and i'd be also happy to discuss that further with you.

01:31:05Over the phone at some point in the next few weeks to kind of discuss that further, possibly with a small group meeting with some of the folks from the county and the state on that process.

01:31:14And maybe provide a little bit more insight into how some of those things happen, whether they were good or bad.

01:31:20On this side of the potential wiping on the roadway, as you mentioned the utilities that said under the roadway there could be potential impacts to those.

01:31:29In terms of trying to reconstruct the roadway itself.

01:31:33Since we haven't yet gotten to determining exactly what the feature roadway section might look like and what types of.

01:31:38Construction activities might be required, we don't yet know, especially since we haven't selected what we call a preferred alternative of different elements of these improvements, what would be required to provide them.

01:31:49Widening would only increase specifically include potential shoulders or bike lanes.

01:31:56Plus any impacts coming in from potential new share these paths sidewalks things like that, but the road itself will not be wide enough to provide any additional through lanes.

01:32:04The goal is to keep one through lane in each direction to keep it as constricted as possible, which also helps keep speeds down, but then it specific intersection we could.

01:32:12Specific intersections along the Court or we could.

01:32:16incorporate turn lanes, to make sure the people waiting to make turns out of the way through traffic which can reduce crash risk understanding that at those locations at intersections there could be more extensive property impacts, I apologize if I didn't cover every individual point.

01:32:33That you had mentioned, the one thing that I can do is first again call on others from the county from transportation planning and zoning if there's anything, we would like to add on the development questions.

01:32:44feel free otherwise miss flesh might be i'd be happy to schedule another offline conversation with you.

cathy Fleshman

01:32:49For speed, I mean the more improvements, you make to this road more issues we're gonna have to speak because the people in two rivers that's one of their biggest is now they're complaining about I mean we all are put the more proven to make the worst situation we're going to have.

01:33:07And you know if you have a paper bag, you know and get so much in that paper bag you can't keep sticking more stuff in it and the bill to continue so i'd like to know why they continue to allow building to go on.

01:33:20If we.

01:33:22With the situation as it is now.

Adam Greenstein, DPW Proj. Mgr.

01:33:26On the point of speed and then I can actually um.

01:33:30y'all i'll try to discuss in just a little bit more detail about speeds, you are correct that changes to the roadway can.

01:33:38Sometimes, result in people being encouraged to travel at higher speeds.

01:33:44When you have those shoulders those bike lanes when the roadway feels a little bit wider you maybe you do a little bit of clearing it feels more open.

01:33:51The goal of the design, that would be incorporated into a future capital project, not necessarily in what we're calling this concept level design or planning level study.

01:34:01would be to provide specific design elements like carbon gutter signing other streetscapes elements relocation of some of the lighting that you're talking about so it looks like in a certain way that encourages.

01:34:13Lower speeds, so we try to match the compatibility of the needs to provide those shoulders for bike compatibility bike lanes paths and sidewalks.

01:34:21With the design of the roadway that actually makes it feel like you're going too fast and it actually encourages people to slow down.

01:34:27using other physical elements that are considered in the realm of what we call traffic calming or speed management.

01:34:33Other design features and intersections that will help people keep their speeds down there really is no perfect solution and.

01:34:39We wouldn't really get into that until the end of the study once we go into the engineering design phase of a future capital project, at which point you everyone else in this meeting with us this evening.

01:34:49Other members of the public elected officials and other communities can provide input on the engineering design process, what do you want that road to look like you can actually look at the individual details and provide more input.

01:34:59On what you think makes sense and what you don't that would be some other time down the line, but at least it's another opportunity as we.

01:35:07aim to keep as we mentioned in the presentation trying to keep those speeds down, where we are currently seeing issues we understand that the constituents in the area, some of your neighbors folks into rivers.

01:35:18Anyone living in this area, might be experiencing concerns related to speed and how it impacts crash risk.

cathy Fleshman

01:35:24And who's paying for all all these improvements, is it the developer, or is this going to be taxpayers.

Adam Greenstein, DPW Proj. Mgr.

01:35:30That I wouldn't be able to answer at this time that's something we can look into part of that might depend on the schedule for certain.

01:35:36developer improvements developer projects when they come in relative to some of the recommendations coming out of this study.

01:35:42I don't want to give you a wrong answer but that's something we'll look into and post in the answers to the questions on the website and you and I can also have another conversation on that, when we have more information to share.

01:35:53Margaret Chi Ziegler I don't want to put you on the spot, because it's there anything on development related topics that you wanted to add.

Margaret Kaii-Ziegler - OPZ

01:36:00um well.

01:36:02So i'm Margaret sigler i'm in the office of transportation and i'm I head up a new section that's been created that does transportation review for development review.

01:36:16Just a couple things because it's very complicated and what you're talking about is really adequate public facilities.

01:36:23Which is our adequate public facilities ordinance in terms of schools in terms of roads.

01:36:29Help projects get approved the two rivers project is up a plan unit development a PD so it was planned and approved number of years ago and it's being developed in phases so as you're seeing different pieces of it develop it was something that was.

01:36:50conceptually approved a number of years ago, so it's not that we're approving pieces of it as it comes along it's actually something that had been approved before and it's just now being implemented.

cathy Fleshman

01:37:04Okay, if the work that my point is that we agree to a senior development back here, we did not agree to multigenerational and neither did any of those seniors who bought into that project.

01:37:16So the more building that the county allows the more issues is going to bring to us and there's just a solution to fixing it, I mean it's out of hand this is crazy.

Margaret Kaii-Ziegler - OPZ

01:37:26you're what you're talking about is this are out of put public facilities requirements, so there was a and it has to do with schools and I don't want to have sideline this meeting, talking about APS.

01:37:39I would be happy to discuss it with you, maybe offline on the side, or if anybody else wants to.

01:37:45Because it is pretty complicated, and it would take a little while to explain it but.

01:37:52I don't know I see lori just came on board, you want to.

Lori Rhodes, County Executive's Ofc

01:37:55yeah my name is lori roads i'm the deputy chief administrative officer for land use, under the.

01:38:00county executive pittman's office there was a town hall back in May of 2020 where I kind of provided the residents of two rivers, with some history, about how this two rivers project came about.

01:38:16For those who work did not get a chance to participate in that meeting i'll be happy to share the information that I provided them to talk about decisions that were made.

01:38:28During prior administrations that led to the approval of this development with this one way in one way out road, there were zoning changes and.

01:38:38Many things that occurred, but they did obtain their approvals and under the pitman administration we are the ones that need to try to find solutions to make.

01:38:49This road safer, but it's not something that's simple to do because of all of the things that were pointed out in the presentation there's flooding climate change we're going to see more flooding.

01:39:03they're seeing it going to Stuart roads, so the purpose of this study really extends from that town hall meeting that was held in.

01:39:14Where I talked about, you know how staff and planning and zoning were overruled by leadership at that time to allow this.

01:39:22property which was originally zone are a rural agricultural which would allow one dwelling unit for 20 acres it's now our two, and so we can't go back and change those approvals that that were already made.

01:39:39As Margaret had has indicated a PD of 2000 units can be built over a number of years 20 or more years, and so the approvals were obtained the pitman administration now holds the bag for trying to figure out how to use taxpayer dollars.

01:40:01To find more better improvements to make it safer, but it's very challenging to try to figure out in this this meeting what a second.

01:40:13Access would look like and then also yes, we do have to look at the school and and figure out what that safety is going to be what that mitigation will be.

01:40:23On the road, so I mean that's just the honest answer about the two rivers development i'd be happy to talk to anyone offline if you want to have additional additional conversation about the information that I share back in 2020.

Adam Greenstein, DPW Proj. Mgr.

01:40:40Thanks so much lori and thanks Margaret for contributing and providing that valuable insight.

01:40:45As they mentioned happy to have more offline conversations we can provide more clarity with a little bit more of a free schedule, given that we're scheduled until 9pm tonight.

01:40:54As I mentioned in the chat will try to get to answering some of those questions in the chat directly responding in text as we try to get to your questions with those who have your virtual hands raise.

01:41:05Anything that we don't get to we'll make sure to post on the project website you'll be all be notified when that's available, so you can make sure you get a Thor response, but with That being said, Raymond Donnelly.

Raymond Donnelly

01:41:20Thank you so i'm going to ask a very direct question because I haven't heard addressed, yet I, so I am a new homeowner in two rivers as well, I was directly affected by the closure that happened on Sunday afternoon late.

01:41:38Again it underscore the fact that you know, there is only really one access way to two rivers.

01:41:46And you know, like like every like my neighbors I was stuck sitting in my car for an hour and a half to two hours you know, without an alternative access.

01:41:56In terms of a you know, and I am in favor as I think many of my co owners here in two rivers have multiple access routes i'm in favor of.

01:42:06You you all developing a an access route from the far Western end of conway road which I hadn't thought of previously makes a lot of sense, but it seems to me.

01:42:17Many of us, if not all of us into rivers could have got home with without you know with a lot less stress if there was completion of that small section at the end of.

01:42:30Two rivers boulevard which basically trunk case at the circle, if that were connected to Meijer station road.

01:42:39That is the shortest amount of land that you know it seems to me in terms of an actual physical development that would be the easiest to accomplish so is that an option and where's that at.

Adam Greenstein, DPW Proj. Mgr.

01:42:52We haven't looked at that, specifically in terms of this assessment, who are still in the general phase of looking at the potential different connections, but Margaret I see you unmuted if you have additional insight on that.

Margaret Kaii-Ziegler - OPZ

01:43:04The next the last phase of two rivers that is under review, right now, currently has an emergency access it was required by the fire department that would connect to fire station road.

01:43:17it's not planned as a public road or an access to the development currently it is, but it is an emergency access to the Community.

Raymond Donnelly

01:43:29For something that's simply a few hundred yards, it seems to me that would be the least problematic to to implement physically.

01:43:36And then, again, you know even as an interim solution until an arundel county can devise you know, an alternate route, you know from the Western side of conway road.

01:43:47Anyway, that's my two cents.

Adam Greenstein, DPW Proj. Mgr.

01:43:50Now Thank you so much, Mr Donnelly, I appreciate you raising those points, and we can certainly look more into that potential connection and given what.

01:43:59Margaret is declared just mentioned about that emergency access we'll just continue looking into that a little bit more detail and you'll see more information on a decision of what that could look like or whether or not that's feasible some time through the end of the study period.

01:44:17jamming your own I apologize if I didn't pronounce your name correctly feel free to unmute.

Bob Mignon

01:44:22Okay, thank you very much, first of all, for having this meeting.

01:44:27But you know, for many years, my husband, I have lived in this county and we've we've been involved in these kinds of development type things before my concern is this I.

01:44:37appreciate everything you're doing for us, and I can appreciate the limitations of the county executive, but the real issue always comes down to.

01:44:47money and we need to move rapidly on this, I did put this in the chat but I can't stress enough i'm also a teacher when those school buses.

01:44:57are rolling down that road, every morning, if you think people were mad now they're going to be furious then you're cannot get in and out of it you've got a load those kids on an auto buses and parents are going to be behind.

01:45:11Trying to load their children in and out of their cars we're at I gotta say this, and I can't say it and I don't know who you want me to talk to, and I don't want an offline chat I want.

01:45:25Because you are representatives on this level, and I know what a fine job you do, by the way, because I did a small area plan with your department long ago.

01:45:34it's got to be the political people who want me to cast that vote, who get in here and find a way to find the money to get this done.

01:45:43Miss flashman raise the issue before regarding the lights that you know they're going to be dead people like how many people have to die, first because becomes the question.

01:45:55How much do we put up with if our fire this we will repair brush fire and must have just missed before they cut us off, but all roads lead to that circle.

01:46:06So how many elderly people, we have to be a little elderly ourselves, you know.

01:46:11How many people are going to not be able to get out in time, because the road is blocked or the fire department can come, I mean the human cost of this is so high.

01:46:23That what i'm asking is I I know you want to have offline chance I don't want an offline chat I want you to go back and say they want a public meeting.

01:46:32And they want to put pressure on everybody involved, and that includes the developer, who could, by the way, be required to continue to pay impact fees.

01:46:43After all, the he pulls out of here because he is impacted us so much after all Laurel park.

01:46:49which really doesn't impact anybody that much anymore still pays impact fees to that area of the county so that's my comment, and again I think you and I hope everybody will remember this come voting time if they don't step up and help us thank you.

Adam Greenstein, DPW Proj. Mgr.

01:47:06I appreciate you raising the point and I apologize for not getting to that beforehand on your point and Miss fleischmanns point on the roadway overhead lighting Poles.

01:47:15The fact that they are so close to the road generally is from a safety perspective, yes, I completely agree the county in the state completely agree that type of design does present a lot of crash risk.

01:47:25At the time, and I know there are folks from pw on the call feel free to.

01:47:30provide additional insight if there's anything that I missed, and there are folks from the traffic engineering division within dp w who unfortunately we're not able to join tonight who can provide additional information on that specifically.

01:47:42At the time that they were installed, there were likely or definitely worse specific standards regulations policies and guidelines that inform where they're installed, they were likely very different at the time, depending on when that actually occurred.

01:47:57In the process of doing that type of design and construction for roadway lighting, sometimes, for better or worse, in this case in the perception and the actuality of the higher level of crash risk.

01:48:12There can be applications for design exceptions in order to say, for example, make sure that we get a light Pole and where we feel we need better visibility at night.

01:48:20But there's features along the roadside that prevented from being either installed farther away from the road at a different point along the road there's a lot of details that we couldn't necessarily get into.

01:48:30Tonight, it would take.

01:48:31Another good amount of time and take away from the opportunity for others to respond that's generally what goes into it, we try to avoid those design exceptions wherever possible and follow the standards, making sure that we protect motorists from those lights.

01:48:45As part of our assessment we are looking into these lights and detail to see what we can do to relocate them by putting in things like paths.

01:48:55shoulders, they will be moved farther from the traveling but unfortunately that's part of the engineering design process even relocating those lights before any other changes occur does take a little bit of time.

01:49:06it's not as fast as say putting in a traffic sign or upgrading payment markings that might take 1690 120 days.

01:49:12It goes through a design process that could take six months or more, we can try to expedite that as soon as possible, and the more that you reach out to us pushing for those things, the faster that we can get it done.

01:49:22If you were to send us a message from your community to say it's not just me saying this.

01:49:26it's me my neighbors these hundreds of people to say, this is a problem and it's in writing it pushed it puts more pressure on us to make sure that we're doing the best we can.

01:49:36and make them more visible to try to address that problem as soon as possible, it unfortunately doesn't resolve the problem that you're bringing up.

01:49:43Right now, but we're going to do the best that we can to try to work with communities, before any action is taken to encourage people to keep their speeds down be more vigilant, be more aware at night.

01:49:55Just anything that we can do to work with you on safe driving and travel practices, not a perfect solution, but we will do what we can and I look forward to continuing to work with you.

01:50:04On that on questions related to funding developer impact fees things like that I can't get into those in detail Those are questions for a PC on the office of transportation who probably have more information on the budget process, making sure that we can get this capital projects.

01:50:24or a capital project proposed as part of the county's budget as soon as possible so improvements that do take multiple years to get in we can consider something like.

01:50:33Doing pieces, which can be quicker but doesn't address all of the needs along the corridor trying to find different strategies to address those as quickly as possible.

01:50:41Lastly, and then i'll try to move on to others, and I apologize everyone's patients who are waiting to ask questions and provide other comments.

01:50:49On the school, one of the driving factors of the schedule of this project was trying to get it started and completed.

01:50:55as quickly as possible we're our goal is to finish it within the next couple of months that way we can try to move really quickly and get something started some interim small changes started.

01:51:07and hopefully as much done to improve conditions in the area before the school goes in that was one of the driving factors that making sure that we can try to account for that school bus traffic both.

01:51:17to and from the school bus turnaround concerns that were raised in the presentation to the end of the roadway school bus stops and neighborhoods.

01:51:23just trying to see what we can do in all facets related to what we're looking at before the school is completed, trying to make those things compatible understanding that if the school goes in without some of those improvements there could be some notable concerns.

01:51:37I feel, like, for the sake of time it's probably best if I don't go into any more detail.

01:51:42Is there anyone here from the office of transportation who might be able to provide more insight on the funding related issues i'll give just a minute for that and then we'll move on.

Margaret Kaii-Ziegler - OPZ

01:51:55So I don't know if anyone's from transportation is here, but I can tell you that.

01:52:00The study is the first step of putting something into the VIP wants to study is done it's easier to put a project into the CFP for funding.

01:52:08But until you've done the study it you don't normally put it into a tip without having some kind of background information done first and that's essentially what the step is.

Adam Greenstein, DPW Proj. Mgr.

01:52:18Thanks Margaret I appreciate that additional insight.

01:52:23And I thank you again for your questions and comments.

01:52:27i'm moving on to the next raised hand David finkelstein.

David Finkelstein

01:52:39And Okay, thank you, this day.

01:52:43I particularly wanted my question the war he rose.

01:52:49Can you tell us where things stand with the just deep landfill because, obviously, if.

01:52:55it's going to be a disaster this thing is built up here with all the problems we have now and then you don't need about 750 trucks a day.

01:53:05that's 1500 trips in and out of those trucks way 70,000 pounds one loaded it's going to be an absolute disaster and with the school will be even worse is one of those trucks flips over tell us what what's happening with this thing already.

Lori Rhodes, County Executive's Ofc

01:53:22Well, I have not been directly involved with that case, but I understand the board of appeals close the case and left it for the land use attorneys to submit their closing arguments.

01:53:35As you know, the county recommended denial of the time extension variance so if the board of appeals denies that variants that means this case is done, they will not be able to proceed with their special exception md he has.

01:53:52indicated to the county that they are going to review the environmental permit.

01:53:59Based on the State requirements and they're not going to put that on hold, while they're trying to get a time extension variants through the county so those two processes are separate.

01:54:10Empty he did approve the phase three I believe that's phase three of five phases, but i'm not focused on the M D process i'm more concerned about the outcome.

01:54:23Of the time extension, because that is what's needed to breathe life into that special exception, and as far as i'm concerned the applicant has not.

01:54:34obtained fee simple access of conway road, which was one of the conditions on the 1993 approval of the special exception so until they can do that which that's the side of the the former, I mean the future school.

01:54:53I don't believe they will ever be able to meet all of the conditions of the special exception that that's my opinion on that.

David Finkelstein

01:55:00case but I certainly hope you're right, because if that thing ever gets built 750 trucks at we're at 70,000 pounds each you think your problems up here now, this is Kenny city compared what that's what a day.

Lori Rhodes, County Executive's Ofc

01:55:15I mean they can get all of their phases of the M D approval, but until they get their zoning approval which they do not have they needed zoning certificate of use, which they do not possess.

01:55:30that's what they need to operate and they don't have that.

David Finkelstein

01:55:33So I wouldn't get too hung up on me.

Lori Rhodes, County Executive's Ofc

01:55:37Okay.

01:55:42All right, thank you you're welcome.

Adam Greenstein, DPW Proj. Mgr.

01:55:45I appreciate the questions on those development related issues, one thing I did want to highlight is that.

01:55:51To reiterate something that I mentioned earlier, is that the goal is to try to incorporate for potential changes to the area and best accommodate the transportation system design for that future.

01:56:03Community layout other developments coming in.

01:56:08Not necessarily mentioning anything specific but conversations on how does other things might come in is not directly tied to this, what I would like to do to make sure we can get as much input on the project specifically as possible.

01:56:19is to make sure that we can note that those things were raised and try to provide more information and other opportunities for discussion.

01:56:26on those points, but for now, the primary goal, and I appreciate everyone's understanding and flexibility on that is just to focus on the process of the study that we're currently going through.

01:56:35The Thank you very much for that, but I do appreciate you mentioning that, as we understand that it's a very sensitive topic steph s.

Steph S

01:56:46Hello.

01:56:47Thank you for the call and everything tonight, this is wonderful very informative So my question is I haven't heard anybody bring up on the chat about the web and a trail my husband and I were both runners and cyclists and we absolutely love the trail we utilize it all the time.

01:57:09And so I was wondering about.

01:57:13The intersection at patuxent road with the wp and a trail is a big pedestrians and cyclists crossing and cars just fly on by there.

01:57:26Is this project, taking into account some of those pedestrian crossings and then also with some of the other potential maybe access roads will they be crossing over the web and a trail making for more pedestrian vehicle crossings so that's all thank you.

Adam Greenstein, DPW Proj. Mgr.

01:57:47i'll try to provide a couple of points and then.

01:57:50Brian Lang not to try to put you on the spot, but I know you've been i've been talking about this quite a bit, but it might be helpful for you to provide a couple of other points that I might miss.

01:57:58on points of additional crossings we haven't gotten to that point in exactly understanding.

01:58:04What might happen with future access points to the corridor and how that would interplay with the future layout of the web and a trial itself, even though the On your first point, even though the study is primarily focused on the comedy rope cord or as we mentioned.

01:58:22The project team us with the county the state and our consultant, with a calm have looked at.

01:58:28Some of those other potential or ongoing safety issues and other concerns related to the web and a trail web and a trail crossings on patuxent road.

01:58:37As you mentioned, it is a concern there crossings there, there are police reported crashes that have we've.

01:58:44noted at that location and trying to find ways to improve safety, their understanding what types of crashes are happening.

01:58:52What times of day times of year and getting into a little bit more of the details, there are ways that we can try to improve the quality of that crossing to reduce the level of conflict.

01:59:01improve the level of safety for everyone, make it a more comfortable environment for both motorists.

01:59:06and pedestrians and bicyclists using the trail we can't necessarily get into specifics tonight, but there are different ways.

01:59:13That we can try to improve the safety of that location through the engineering design process, there are certain things that we can do their low cost low cost.

01:59:21Quick hit elements through operations and maintenance budget that the county has that can provide.

01:59:26some level of improvement that's not necessarily meant to be permanent condition or ideal to solve all the problems.

01:59:32Nothing that we do is going to solve all the problems that it's at least trying to get a first step in there and then through the rest of the design process other recommendations coming out of the study we can come up with more notable.

01:59:44Design physical features.

01:59:47That would hopefully help improve the performance.

01:59:50Of that location.

01:59:52Brian is there anything that you believe I might have missed there.

Brian Lange (AECOM)

01:59:58I folks my name is Brian lying i'm an engineer, with a calm part of the consultant team.

02:00:05Adam I think you nailed it with your response there I don't have a whole lot to add other than just to re emphasize that you know.

02:00:12The feedback that we're getting signed is really fantastic I really do appreciate everyone who's joined to share these thoughts because really this is sort of the the foundational.

02:00:22moment, as we work towards developing potential enhancements you know for things related to traffic operations pedestrian bicycle safety all these things so.

02:00:32You know we're going to take all this input from from you all and use that to then develop potential solutions to address some of these issues so.

02:00:40You know our goal really is to learn tonight use that information that we learn to then develop potential solutions and then we'll bring those solutions to you all at another time.

02:00:53In the near future, most likely a similar meeting like this, where we will lay out and really kind of show you what the sort of ideas and we come up with our so yeah definitely appreciate this feedback and you'll be seeing some results in the near future.

Adam Greenstein, DPW Proj. Mgr.

02:01:09Thanks so much Brian appreciate that.

02:01:15See and Mr holman I know that you said you were looking to provide additional insight and I know that you've been waiting for a while, I just wanted to make sure that those who haven't had a chance to speak, yet have a chance to provide some input, I will come to you.

02:01:26And Mr finkelstein if your hand is still up and you do have additional points i'll come back to you as well, however, if either of you don't have anything more to add, please make sure to use the raise hand feature to take your hand down so we know who to focus on.

Adam Greenstein, DPW Proj. Mgr.

02:01:41Go ahead dawn.

Dawn Thomas, Rec and Parks, AA Count

02:01:42Sorry, I didn't know he saw that I.

02:01:46unmuted myself, I was hoping, I could just answer a little bit about the web and a trail i'm don Thomas with recreation and parks and we are looking forward to kicking off at the bridge construction next month, there are no additional crossings of the web and a trail planned it is.

02:02:06portions of it are protected by program open space funding.

02:02:12So there are three driveways that near the conway road area that have use of the former railroad right away the trail area, which is also known as bloggers rose in that area.

02:02:26And our I wanted to share that the transportation engineering division of the department of public works is looking at the intersection of the production road and the trail.

02:02:39Due to the issues that have been raised and they're going to have a consultant review the location and develop enhancements for safety, thank you.

Adam Greenstein, DPW Proj. Mgr.

02:02:50Thanks so much john for providing that additional clarification, one thing that I wanted to highlight.

02:02:58Regarding the web and a trail is there is an ongoing plan to provide a connection to the portion of the trail in Prince george's county in order to provide a longer trail.

02:03:06That also, as some of you have mentioned further emphasizes the need for us.

02:03:10To improve the level of safety at the existing crossings, making sure that as we potentially see activity on the trail grow which we'd love to see people walking and biking out and about in the county.

02:03:20Active transportation finding other ways to get around staying healthy that enabled us to continue working with you longer everyone.

02:03:28feeling good and staying positive, there is a public meeting coming up for that project on April 5 i'm going to post a link in the chat so you can find more information about that.

02:03:41Project give me just one second to do that if you have any issues accessing that link feel free to let me know in the chat.

02:03:49i'm moving on becky Davis.

Becky Davis

02:03:54All right, good evening, I just wanted to make a comment about the flooding, I wanted to encourage the the study team to continue looking at those points of flooding along.

02:04:07Along patuxent I know that that con was the focus but part of the issue, I think, with with transportation along conway is that the I have a second grader and she takes the bus every day to find the orchard, and so.

02:04:22i'm wondering if if the flooding issues that that are we're starting to see on on conway are but but are dramatically seen on patuxent are going to be part of the study.

02:04:34And you know when I asked my daughter's bus driver, what do you do when the road is closed for flooding on patuxent.

02:04:42i'm assuming that that that bus was rerouted across route three but actually no she is told to drive through the flood so.

02:04:52i'm not sure how that's safe but that's, that is what she reported and I witnessed, so I think it's it's definitely a concern as before the school is built, you know as students are transported on the buses to and from piney orchard.

Adam Greenstein, DPW Proj. Mgr.

02:05:09Thank you so much for raising those points it's a little concerning to hear that the bus drivers are driving to this little roadways it is dangerous i'm not necessarily condoning anything specific so i'm not.

02:05:20going to provide any more insight on that, but it can be concerning generally from a safety perspective, as you mentioned.

02:05:27Regarding the flooding itself, independent of the ideas that we're trying to come up with an alternate connections this study.

02:05:35As you saw on the presentation and can review on the project web page when information is posted online.

02:05:41talks about the general issues related to flooding, as we mentioned the frequency of flooding the locations where it's seen most.

02:05:48trying to get more of your input on where you're seeing those issues and, as you highlighted you're seeing it on conway and pathak since we appreciate you reiterating those concerns.

02:05:56In order to kind of further dive into that a little bit the study itself will not necessarily do detailed calculations of what the extent of flooding is.

02:06:05And how to mitigate it, but the recommendations in the study will say that there is a need to allocate budget, and there can be.

02:06:12A portion of what will be a planning or concept level cost estimate, a very high level with some margin of error cost estimate for what some improvements are all these improvements what that could cost in order to get them done through a capital project in the future in this tip.

02:06:28Once something like this potentially goes into a future capital project that as part of that engineering design process, we would have to do a more detailed assessment of those locations that flood.

02:06:38figuring out what might be contributing to them, whether it's low roadway roadside features.

02:06:44combinations of lots of different factors and then run a set of calculations, to determine what needs to be done to potentially redesign the roadway.

02:06:51to account for those specific issues we don't have any details at this time, but that's something that one we can.

02:06:58look into as part of the future capital project and to that the public will be able to stay involved in every stage of a project once it begins in the future, there will be multiple stages of public input, so you can be part of that conversation as well, and continue to share that information.

02:07:16i'm amanda de Maria.

Amanda DiMaria

02:07:19yeah actually this is her husband she registered for for us.

02:07:25So.

02:07:26there's I guess a roadway or an access way between the 55 and older community as well as the woodlands Community that is not going to be completely connected.

02:07:39And as a safety issue, I think it should actually that roadway should connect between the two communities and I don't know who we need to talk to to make that happen.

Adam Greenstein, DPW Proj. Mgr.

02:07:54Thank you for mentioning that again in terms of talking about specific details about that I.

02:08:00don't want to provide any incorrect information and understand that sometimes it can be frustrating for offline conversations, but we'll make sure that that's noted and try to provide some additional detail.

02:08:10As we compile responses to questions and additional clarification on comments, but thank you for raising that point.

Amanda DiMaria

02:08:17You know, who I need to talk to about that.

Adam Greenstein, DPW Proj. Mgr.

02:08:21Your best bet actually probably start through me any questions that come up that we can't get to in detail tonight.

02:08:29You can feel free to use my contact information send me an email or give me a call it's on the project web page and i'll also re enter it in the chat.

02:08:38Even if i'm not the best person to answer that question, I will make sure to acknowledge that I got your information, got your questioning your request and get you in touch with the people who can provide that information to you.

Amanda DiMaria

02:08:49Thanks Adam.

02:08:50i'm happy to have all that information.

Adam Greenstein, DPW Proj. Mgr.

02:08:52Sure thanks so much appreciate it Jim home in something else that you wanted to add.

Jim Holman

02:08:58Well, yes i'm appreciate the time again.

02:09:03In quick answer to the hiker bike trail it talks to the speed limit at home, but toxin rate is 35 miles an hour in that general area.

02:09:12There have been several times, where i've gone down the route under the speed limit at 30 only to have people not utilize the STOP signs on the hike and bike trail and just come straight out in the red stop sign to there for a reason.

02:09:26Secondly, I agree with ramin put a bridge over patuxent road, so that the individuals who used a hiker biker trail are not inconvenienced, especially during rush hour, you know they can be sitting at desktops i'm waiting and it is not safe The other thing Meyer station road.

02:09:49When john's tomato and two rivers projects came to our Community.

02:09:56It was clearly specified to us that there would be one entrance into two rivers one emergency entrance for the fire trucks.

02:10:06I live on fire station right and as now, we have a lot of traffic and again we appreciate people coming down and join the beauty of our street in our neighborhood.

02:10:18The last thing we want is hundreds and hundreds of cars to be using Meyer station as a bypass when it wasn't that way before.

02:10:27And we do enjoy and love our Community, the way it is We also appreciate our neighbors at two rivers, but why should we be inconvenience, because the developer failed on their part.

02:10:40To make sure they're have proper access in and out of the theater.

Adam Greenstein, DPW Proj. Mgr.

02:10:47Thanks so much, oh no, thank you appreciate that similar to a lot of those other access questions related to development.

02:10:56I hate to provide you that what might unfortunately feel like a cop out answer but I don't want to give you any incorrect information if there are others on the call.

02:11:03From the county who could provide more insight on that specific issue feel free to unmute it five more information on.

02:11:11Your point regarding the safety of those trail crossings, we certainly understand that some type of alternative.

02:11:18Facility could be safer from a crash risk perspective, there are many different things that could be done to improve the safety and, yes, one of the items in our toolbox that.

02:11:28could be considered, but I don't want to get your hopes up is Gray separating those crossings, there are a lot of other factors.

02:11:38That go into those types of decisions.

02:11:41Lessons learned from around the State, a lot of other counties in the area have come on in our region.

02:11:48Across Maryland and even beyond have considered ideas like that for trail crossings elevated sidewalk crossings in many different types of scenarios urban, rural and everything in between trails.

02:12:01neighborhood sidewalks and they do provide that benefit of physically separating the trail users from traffic, so there is no conflict.

02:12:12They do present some issues related to personal safety where when you're on that structure if there's something that happens on that structure if or whether it's a tunnel underneath the roadway.

02:12:22You could get stuck there could be a lot of things that happen that's, not to say that that would totally prevent us from considering that but it's one thing to take into account.

02:12:31Given the nature of the area that construction that would be required could result in additional environmental impacts sensitive species water resources, it tends to be a much higher cost that's, not to say that we want to.

02:12:44Put that high cost as a higher priority than people's personal safety, that is, the county's number one priority is your personal safety and trying to address them as much as possible.

02:12:53The goal of looking at those are different alternatives is trying to determine.

02:12:57What the best cost benefit is where we can make the crossing as safe as possible, make sure it's cost effective make sure.

02:13:03That it can be done quickly it's sustainable for the future, but then still even after improvements are done in the future, still looking at other alternatives to further improve conditions and keep an eye on things moving forward.

02:13:18On either of those points Is there anyone else from the a calm team, the county or the state that wanted to provide more insight.

02:13:24Or has anything to add on any of the other questions or comments those far related to traffic safety development questions, although I would recommend that they'd be brief speeds environmental issues alternate road connections streetlights the round about.

02:13:41Any other thoughts or concerns from the project team that you wanted to add.

02:13:47Not to put anyone on the spot just wanted to make sure I didn't miss anything or trying to fill in the gaps here.

Lori Rhodes, County Executive's Ofc

02:13:53Now, I just want to let everyone know that I am looking at the chat and I am actually taking pictures of the comments, so that I can have conversations when I return to work tomorrow.

Adam Greenstein, DPW Proj. Mgr.

02:14:07Thank you lori appreciate that all of the content in this meeting, both between the chat audio video the shared presentation will all be saved, as part of the complete transcript.

02:14:17I want to reiterate something that I mentioned in the chat earlier, I was not able to simultaneously track items in the chat and try to answer questions as well.

02:14:27So what I would like to do is make sure that we will provide answers to every individual question or try to address other concerns that need clarification.

02:14:35When we provide that compile document that will go on the project web page after the end of the public comment period with that information so your specific individual questions can be answered we're not going to leave anything on touched.

02:14:48Is there anyone else anyone here on the call from the project team or otherwise from the communities.

02:14:56Community representatives or leadership, would like to add anything for the conversation we do have this zoom call available until 9pm and i'm happy to stay on if you'd like to.

02:15:07raise points if other people are logging off and you want to have that small feel that small group working group type of feeling happy to help with that as well, but at nine o'clock, we will have to close the zoom room.

02:15:27William rossiter.

William Rossiter

02:15:33Thank you, I just wanted to maybe expand upon what one of the earlier participants had suggested visa V.

02:15:43Changing the emergency exit that's being planned for the far end of two rivers boulevard that is going to connect with.

02:15:51fire station road and changing that into a regular traffic artery.

02:15:56And then somebody else also said well you know that's that's fine, but you know I live on Meyer station road and we're not keen on seeing a lot of traffic new traffic appearing on that road.

02:16:06seems to me the ideal solution, although would involve additional cost would be to extend that road due east of Meijer station road, in other words have it cross Meyer station road and you could accomplish that with a traffic circle.

02:16:24To make things flow a little better, and then have that road cross the little patuxent river and hook up with route three at a point south of where conway road hooks up with route three that way you've got two independent exits from the two rivers neighborhood that are totally.

02:16:47You know, separated from each other and there's really no way a single accident could shut down both of those.

02:16:57eeg races from the neighborhood simultaneously obviously that would involve the construction of a bridge.

02:17:04It would also involve connecting it, you know building an intersection at route three or with one of those industrial park roads that come off of the West side of route three already but.

02:17:17At least, then you would have to fully functioning exits from the neighborhood that could not be impacted by the same traffic accident.

02:17:27Just a thought.

Adam Greenstein, DPW Proj. Mgr.

02:17:28Absolutely no, we appreciate you mentioning that kind of along the same lines as similar points raised.

02:17:34Earlier, acknowledging those challenges that's kind of what unfortunately makes those ideas that could really provide so much benefit.

02:17:43To all of the communities in this area, but come with so many challenges, particularly in this area between environmental issues costs.

02:17:52and other restrictions that make these things kind of tough, even in areas that have fewer environmental considerations historic and scenic related needs cultural resources it's still a great challenge to do something like that well we're going to certainly.

02:18:08Leave that on the table, I apologize if I missed some of your points and trying to take some notes and answer some questions as well.

02:18:17and trying to make sure that we account for everything you.

02:18:21Provided insight on.

02:18:24But we'll make sure that we can get a thorough and more detailed response in the official record that goes on the project website.

Adam Greenstein, DPW Proj. Mgr.

02:18:38Brian land.

02:18:39Are you.

02:18:40Thinking about possibly sharing some additional information related to that.

02:18:45And for those on the call real quick Brian before we move on, if you don't mind, please muting yourself, unless you raise your hand or use the raise hand feature to speak, and we really appreciate your cooperation, thanks so much.

Brian Lange (AECOM)

02:19:05yeah Adam I was thinking if folks wanted to hang on I could.

02:19:09bring an aerial map up and we could talk a little bit more about some of these.

02:19:11possible access options.

02:19:14Just.

02:19:15Maybe have a visual to go along with this discussion.

02:19:18A lot of really good ideas being shared tonight so just wanted to thought, maybe we could highlight some of these two.

Adam Greenstein, DPW Proj. Mgr.

02:19:27we're still on if you'd like to stay on you're more than welcome to stay and be part of the discussion as we share some more information on these connections.

02:19:34If you prefer to drop off again.

02:19:37Thank you for coming We appreciate you being here feel free to reach out.

02:19:42at any time.

02:19:43we're here to answer questions you can feel free to reach out to me directly, just to make it easy and I will final questions and comments to others on the project team who can provide more information than I can.

02:19:51or i'll do my best to answer your questions, but if you're interested in.

02:19:55Seeing more information.

02:19:56On some of these connections and other idea that we're talking about feel.

02:19:59free to hang on and we'll share some more with.

02:20:01You go ahead, Brian whenever you're ready.

Brian Lange (AECOM)

02:20:03Hopefully, you can see my screen here.

Adam Greenstein, DPW Proj. Mgr.

02:20:07Not not quite yet, at least on my end.

02:20:10Okay, not yet.

Brian Lange (AECOM)

02:20:18We try this.

Adam Greenstein, DPW Proj. Mgr.

02:20:19While you're doing that Brian again if you don't mind for those who are still on.

02:20:24The would appreciate, if you wouldn't mind stay muted, unless you.

02:20:29Unless you.

02:20:29Use the raise hand feature thanks so much for your cooperation, I apologize not trying to make anything personal but just wanted to make sure that we can all see and hear everything that's going on, so thanks for your understanding.

Brian Lange (AECOM)

02:20:44me try this again real quick sure.

Adam Greenstein, DPW Proj. Mgr.

02:20:46Thanks everyone for your patience, as we try to get the visual up on the screen and thanks for.

02:20:49Your help Brian.

Brian Lange (AECOM)

02:20:52Share screen.

02:21:03Are you able to see it now.

Adam Greenstein, DPW Proj. Mgr.

02:21:05not yet it was up for just a second, and then we lost it.

Brian Lange (AECOM)

02:21:16about now.

Adam Greenstein, DPW Proj. Mgr.

02:21:18there's something loading so, at least on my screen, I can see a Google earth satellite view that shows the quarter and the project.

Brian Lange (AECOM)

02:21:25Excellent I can see if he nods and smiles are good appreciate your patience, Sir yeah so let's let's just talk real quick about some of these central access ideas.

02:21:34You know, again Adams are done a great job highlighting the challenges that we're facing I mean it's.

02:21:39A very unique situation that we have on our hands here I mean, obviously we recognize the need for potential additional access, but in order to provide that access we really have.

02:21:50A pretty loaded deck against us, you know it's been mentioned the potential for property impacts certainly a high potential for impact to sensitive natural resources.

02:22:01You know there's a whole number of issues related to the cultural sensitivity of this area with historic properties scenic and historic roads.

02:22:11And, of course, you know we're really kind of bound not only by these two rivers, the little toxin toxin but we've also got.

02:22:20boundaries of the CSS i'm sorry, excuse me, this is the Amtrak railroad line and then even beyond to the West we've also got the toxin refuge.

02:22:30So you know and even throw into it we've got a pretty significant electrical transmission corridor running through the heart of the area, so again.

02:22:39there's a lot to understand and assess, but certainly you know we're not going to let that prevent us from really trying to look in.

02:22:47Consider all reasonable and feasible alternatives as we look at these access potential options so.

02:22:54Again, hopefully, on my screen, you can see here towards the top we've got conway road with our traffic circle here we've got patuxent fire station.

02:23:04fire station coming down over here, and of course i'm trying to circle, if you can see with my cursor.

02:23:10The two rivers development with two rivers boulevard running through the heart of the development and I think what I heard tonight was a lot of folks asking you know it seems like perhaps relatively.

02:23:24Short extension of two rivers across to Meijer station would be one potential option to consider, and that is certainly one that we're looking into again recognizing the.

02:23:38The risks and potential impacts associated with that you know, certainly we do recognize that Meijer station is a senior can store road certainly was.

02:23:48designed to handle a certain amount of traffic that may not have anticipated development like this, so.

02:23:56Definitely some issues to think about not only from the physical impacts, but also from the traffic operation impacts that would be considered as we assess this but, again, one idea would be looking at that connection.

02:24:09And my understanding is that the two rivers development owns the parcel of land that sort of down to the south here sort of bound by Meijer station, I think, fire station.

02:24:21hooks over here to the West so really kind of in this area here, and I believe that the development plans that were mentioned earlier.

02:24:33One of the ideas, extending two rivers, down to the south, through this parcel accessing additional homes plan to be built here, and I believe somewhere in here is where that idea of the emergency fire access.

02:24:49is being floated again don't quote me on this, because I know that the development processes is an ever changing one, but at least, from what I had.

02:24:58learned that that is one potential option so going with that idea if there is an extension, maybe you know it doesn't go straight across the Meijer station, but rather extends further south.

02:25:11Ultimately, maybe there's an opportunity again, you know we'll have to understand you know what are the great differentials involved, what are some of the sensitivities that may be here in this mature forested area.

02:25:24But again, if this road is extended down perhaps there's an opportunity to tied in with this leg of Meijer station road.

02:25:33And again looking at a possibility.

02:25:37Certainly, full of potential issues but.

02:25:42If we were to extend Meyer station across little patuxent river, which is that would introduce a structure crossing tying in here with this, I think this is.

02:25:56This cars came over the name of this one, I apologize.

02:26:01Believe it saw there's crofton and on the other side it's named something like crofton but it's not exactly croft and.

02:26:07boulevard conquer Thank you that's it, so I knew.

Adam Greenstein, DPW Proj. Mgr.

02:26:10The second as well, Brian.

Brian Lange (AECOM)

02:26:12Right I knew it was another mother or the start of the sea so.

02:26:16yeah again.

02:26:18significant issues, you can see there's a large pond back here that we would have to try to align the road to sort of avoid you've got the post office some sort of light industrial complexes I think this is a storage place.

02:26:35And again, the the the natural the sensitivities with the water resources through here, we know there's a lot of wetlands floodplains all those things, but again, those are all the things that we're going to try to assess as we really try to look at at these potential connection ideas.

02:26:51You know it's.

02:26:53can't emphasize enough that we are still very early on in this process, you know a lot of these assessments are going to be done at a very high level.

02:27:01Just to get an idea of okay well if we did this, this is what it would mean, and this is roughly what the impacts and costs and risk would be if we did just from here to here, this is what it would mean.

02:27:11And even you know, the idea of looking at a westward extension is something that we can we thought about as a team, something that will discuss certainly anytime you have a crossing of rail line presents a significant number of factors to consider.

02:27:30So, but again it's still something that will will look at document try to understand it as we look for opportunities to move forward, I believe some folks may have even suggested a extension of, say, the production Ridge northward up to patuxent road.

02:27:50Those are also some things we might be able to look at maybe there's some other alignments that could connect up to production road again all things that will will investigate.

02:28:00And ultimately, what our plan is to you know do a high level assessment put those ideas and thoughts and risk evaluations into a document and then share those with you as part of the.

02:28:14The process to determine what what really is the best path forward and certainly again, you know we do recognize the sensitivity of the web and a trail, and this is that crossing location, that we were talking about earlier where folks had mentioned some safety concerns.

02:28:30So we are certainly cognizant that this is a facility that we really do not want to introduce some other intersection with as don had mentioned, you know this.

02:28:44This facility definitely has a lot of protection protections given that sort of park light status, and you know uses by pedestrians and bicyclists so any alignment we do consider most like will look to certainly avoid crossing the web and a trail.

02:29:03But again yeah that's that's sort of where we are right now all ideas are on the table so anything that you all have to share that might help us any insights you could offer that's that's really what a what we would love to receive from you all.

Adam Greenstein, DPW Proj. Mgr.

02:29:18So much for sharing that information, Brian appreciate the additional details and clarification and some of the idea that we're thinking about.

02:29:25And for everyone, still here just to reiterate what Brian mentioned we're still looking at a lot of different alternatives, nothing is set in stone.

02:29:32Even after the end of the study, nothing is set in stone, where things can still be modified and change over time, as the county goes through a project consideration process for a project request process and then in the future, things would be refined.

02:29:45Just to reiterate what will be involved through the rest of the public involvement process and beyond.

02:29:53To reiterate what I mentioned at the beginning of the meeting, and thank you again for joining us, but in case you weren't there at the beginning.

02:30:02The public outreach period here the public comment period will end on Friday April 1.

02:30:12I apologize I lost my my train of thought that is the end of the period where we would stop.

02:30:19Adding comments questions and other information provided by all of you into the public record that goes on the project website to show exactly what every.

02:30:28single item that has been discussed with these communities During this meeting, and through this month long period that began at the beginning of.

02:30:35March, however, after that time, that does not mean that you do not have the ability to communicate with us, we are here.

02:30:43to serve you it's exactly what the county is here for your taxpayer dollars go to the work that we do in order to try to provide these improvements wherever possible it's not an easy process.

02:30:53We can't always meet your needs that we're going to do the best that we can.

02:30:57after April 1 if you have questions if you have comments you're still more than welcome to reach out to us i'm happy to discuss them over email or on phone calls with you.

02:31:07We can know that people still have questions and keep a separate record that wouldn't necessarily be directly incorporated into our final recommendations, but as part of the larger dialogue of the future.

02:31:16Of this area so we're always here at your disposal anytime that you need us to try to at least, to the best of our abilities answer your questions and address any concerns.

02:31:26That you have I know we're reaching the top of the hour at 9pm is there anything else from the county project team any of the county projects, the Maryland Department of Transportation a calm the county executives office anyone else that I missed would like to provide any final thoughts.

02:31:51With That being said, I sincerely appreciate such a large group being here really shows that your communities are committed to the future of this area, not just the comedy record or the entire area with all of your communities in the vicinity of the roadway.

02:32:09We really value your input, I cannot emphasize that enough, it might sound like a broken record but it's really one of the biggest factors that we take into account in formalizing our final recommendations for this study.

02:32:19Please continue bugging us please continue reaching out that will do more than so many other things and trying to help us determine what the future of this area will look like from a transportation perspective.

02:32:30thanks again for being here have a good night take care, and we look forward to working with you soon.

APPENDIX C
PUBLIC MEETING CHAT TRANSCRIPT

H539620 Conway Road – Virtual Public Meeting, 3/23/2022

Zoom Meeting Chat Record

Adam Greenstein - DPW Proj. Mgr. 20:39

Thanks everyone for calling in and joining us this evening. We appreciate you being here. We will start right around 7pm.

Adam Greenstein - DPW Proj. Mgr. 24:54

Thanks everyone for calling in and joining us this evening. We appreciate you being here. We will start right around 7pm. Please make sure to mute your microphone for the time being.

Adam Greenstein - DPW Proj. Mgr. 27:44

Thanks everyone for calling in and joining us this evening. We appreciate you being here. We will start right around 7pm. Please make sure to mute your microphone for the time being.

Adam Greenstein - DPW Proj. Mgr. 29:59

Thanks everyone for calling in and joining us this evening. We appreciate you being here. We will start right around 7pm. Please make sure to mute your microphone for the time being.

LaTawnya Askins 59:47

Someone has a hot mic. Please mute.

Judith Wagner 01:00:21

Agree! Mute!

Adam Greenstein, DPW Proj. Mgr. 01:00:30

Please make sure to stay muted unless asked to unmute. Thank you for your cooperation.

Adam Greenstein, DPW Proj. Mgr. 01:01:54

Please make sure to stay muted.

Adam Greenstein, DPW Proj. Mgr. 01:13:12

Please make sure to mute your microphones. Thank you.

Nicole DiLorenzo 01:16:15

I am a little concerned about the school coming into the neighborhood. Is there a plan to widen the road before any construction happens for the school? :)

Alicia Ellis 01:20:24

I second her comment.

Becky Davis 01:20:26

That's right Ms. Shavell!

Becky Davis 01:24:06

I have lived in Two Rivers since 2018. Before I purchased, we were told by developers, the 2nd entrance was coming. We are still waiting.

Tracy Starr 01:24:56

Yes a road out to Jericho would be very helpful

Netsanet Kiffle 01:27:11

May 2022

Netsanet Kiffle 01:27:33

construction is scheduled to begin May 2022

Monica D Jackson 01:28:09

This might be outside scope of topic. What plans are the to have the county buses pick up students living in the Woodlands within there section rather on Conway & Upper Patuxent Road? Understand bus pick-ups for singe home on Conway Rd. No need to have another backup when there are ample streets for pick-ups within Woodlands? Not a parent BTW.

Ayanna Vedor-McNeil 01:29:36

Great questions and comments Cathy!

Monica D Jackson 01:30:06

Agree 100% with Cathy.

Lori Rhodes, County Executive's Ofc 01:32:50

Please contact me at exrhod20@aacounty.org and I will ask my Land Use depts. to provide answers to any questions pertaining to the Two Rivers development process.

Robert Mignon 01:34:52

When you schedule that conversation, please make it a meeting open to the public. In addition to the other concerns, if a school is built, we must be concerned with school buses. This will also cause back ups. We are not getting a rapid enough potential for change if this school is on the building venue for 2024. Jeanne Mignon

Robert Mignon 01:36:41

The developer needs to pay impact fees for all of this.

Adam Greenstein, DPW Proj. Mgr. 01:37:26

For those providing questions and comments here in the chat, we will try to answer them during the meeting. If not, we will provide responses in the compiled responses on the project website.

Amanda DiMaria 01:38:17

look, we are already done with the 55+ only communities. bow we face a LANDFILL. Let's all agree to make sure this does not go through!!!

Nicole DiLorenzo 01:38:51

Agreed Amanda...we all need to give to the Go Fund me to pay the attorneys.

Shirley Alexander 01:39:57

Thank you for your honesty, Ms. Rhodes.

Amanda DiMaria 01:40:25

Let's all stop fighting and stop being so mad about what has changed with zoning. It's done and the houses are nearly all built. I'm sorry you don't have what you thought would have as a 55+ community. now we have a LANDFILL coming.

cathy Fleshman 01:43:48

The fight on the landfill is not over yet...we are still fighting as MDE just approved Phase III. Unfortunately, as Mrs Rhodes is saying... in 2015 single family homes were approved and the PUD

of Two Rivers continues. Now we need to move forward on making our area safer, keeping it rural even with a new school coming.

Lori Rhodes, County Executive's Ofc01:44:40

Contact me regarding the landfill. MDE approval doesn't constitute zoning approval which the County recommended denial of the variance.

Becky Davis01:45:04

Meyer's Station Road definitely seems like a top priority to explore, agreed Raymond!

Netsanet Kiffle01:46:36

I third Raymond's idea. Why wasn't this considered before Raymond mentioned it? it seems like a no brainer! it could connect to 3 down by Exxon.

Bob Shean01:48:25

Can something be done to improve the shoulders immediately to enhance safety and provide a means of going around accidents or disabled vehicles. The shoulders are steep in some areas and non-existent in other areas,

Ralph Davis01:50:58

Time line for the school to open is 2024, which means estimated school construction is 2023. It does not looking like Conway road improvement and funding will be avialable by 2023

Tracy Starr01:51:17

I support this and also the idea of a town hall. Definitely needed to hear all residents and find money and try to get stuff done more rapidly.

Amanda DiMaria01:52:09

What about the tree(s) over the guardrailed curve on Conway just before the circle? I've called in twice to report one of those trees that's hanging dangerously over the road. I was told they can't do anything until it falls. But when it falls, it'll fall into the road, potentially on one or more passing cars.

Becky Davis01:52:41

So is it possible we will have Conway road construction + Elementary school construction + Landfill construction all happening on a 2 lane road in the next year?!

Adam Greenstein, DPW Proj. Mgr.01:54:41

On the road construction for school, project improvements from this study, and landfill, we do not yet have details on how they would all coordinate, as several elements of the schedules are still not yet determined.

Becky Davis01:55:06

Thank you

Raymond Donnelly02:00:17

Simple Fix: Install an overpass or underpass for the trail.

Alicia Ellis02:00:28

Once schedules are determined, is coordination going to be a required part of this process?

Adam Greenstein, DPW Proj. Mgr.02:00:47

Ms. Ellis - yes, there will be coordination every step of the way moving forward.

Alicia Ellis02:00:58

Thank you

Adam Greenstein, DPW Proj. Mgr.02:01:08

For those who asked questions earlier, I apologize for not responding in time. We will make sure to respond through the compiled answers on the project webpage.

Tracy Starr02:01:24

A walking bridge/path across patuxent road for improving safety would be a quicker way to fix that right now I would think/suggest.

Raymond Donnelly02:01:34

Install an overpass or underpass for the trail over or under Patuxent Rd.

Amanda DiMaria02:02:03

Can we also connect Conway/Patuxent Ridge Rd (55+ community) to the Woodlands Upper Patuxent Ridge Rd? there is supposed to be an emergency access point but it would alleviate safety/traffic issues to connect these two points. it would take an ambulance an extra 5 minutes to access a home that they could access in 30 seconds (plus the time to go back out to a hospital)

Shirley Alexander02:02:50

No!

Steph S02:03:36

Thank you Dawn!

Adam Greenstein, DPW Proj. Mgr.02:03:43

https://www.aacounty.org/departments/public-works/dpw-meetings/event/04/05/2022/L-Virtual%20Meeting/T-%20Public%20Meeting/wba-trail-virtual-public-preconstruction-meeting

Shirley Alexander02:03:45

The 55+ and All Ages are not to be connected.

Monica D Jackson02:03:57

Will this slide presentation be available on-line for download?

Adam Greenstein, DPW Proj. Mgr.02:04:10

Ms. Jackson - yes, it will be posted online on the project webpage next week

Monica D Jackson02:04:47

TY

Crystal B.02:05:09

Could speed cameras be a potential solution (by the trail specifically). Certainly a deterrent. These are usually found in close vicinity of schools as well.

Judith Wagner02:06:51

What caused the big backup on Conway road last Sunday nite? Anyone know?

Jim Holman02:07:11

fire

George Daughtry02:07:28

brush fire on bragers

Becky Davis02:07:48

A fire truck was blocking one of the lanes on Conway in order to access the fire hydrant

Judith Wagner02:08:11

Also, mr holman's idea that the emergency road needs to be built. May be the county exec could issue a state of emergency to stop all further development until that emergency road 8s finished.

Judith Wagner02:08:46

That is the developer's responsibility, no?

Steven Onken02:08:57

Alll those in the Highlands were told with absolute certainty when they purchased their homes that the road would NOT be a drive-through from Woodlands.

Adam Greenstein, DPW Proj. Mgr.02:09:05

Ms. B. - speed cameras be considered but is a much more complicated situation. Safer for an offline conversation.

John Trageser02:09:20

It is not a county road. It is the developers road.

Shirley Alexander02:10:52

You are absolutely correct, Steven. Plus, there are 55+ people who live way back in The Watershed, so people in The Woodlands are no less safe than they are when it comes to emergency issues. The map on the Two Rivers website clearly shows the road as not an actual road but is grayed out to indicate an emergency access road. An emergency access road it should remain. That is what our community was promised!

John Trageser02:11:11

Meyers Station is used more now due to the Garden.

Judith Wagner02:13:17

I am in watershed. Am emergency on Conway road would be accessible to the woodlands by diverting folks to two rivers blvd. Emergency only, of course.

Lade Anjorin 02:13:32

Good evening. I live in Two Rivers on the Ryan homes all ages side. Specifically Conway and Upper Paxtuent Ridge Road. My concern is a safety one. We are restricted from entering and leaving our community. It is dangerous. We need other access roads. Also, I have children at Arundel HS and MS. When will the bus stop open within the community.

Ralph Davis 02:14:18

Is this Conway road project fast tracked?

Jim Holman 02:14:38

Thank you for your time and giving us this presentation. I will be looking forward to a public forum.

Lade Anjorin 02:15:00

The roads in woodlands section of TR is not enough to accommodate all the people who live there and there are more homes being built.

Jim Holman 02:15:02

Can speed bumps be added to the circle

Steph S 02:15:04

Thank you!

Amanda DiMaria 02:15:33

Thank you Lade

Adam Greenstein, DPW Proj. Mgr. 02:15:54

On speed humps, typically they are not installed in roundabouts, but there are other designs that can be considered to reduce speeds near the circle.

Lade Anjorin 02:16:20

Thanks for providing an opportunity to speak on these matters.

Adam Greenstein, DPW Proj. Mgr. 02:16:51

Mr. Davis - we will work to move a project forward as quickly as possible, but there is no official fast track.

Steven Onken 02:17:31

I likewise support greater bike and pedestrian traffic along route 3. why there is a very wide shoulder almost down to the roundabout and then ceases to exist between there and Two Rivers is mind boggling. I specifically know several 55+ residents who would gladly BIKE to Aldi, etc. rather than drive if it were feasible.

Michele Floam 02:17:34

I support better and safe bicycle access to Route 3

Monica D Jackson 02:17:35

Ms. Rhodes next to smiley face in Chat click on 3 dots to Save Chat to a text file.

Jim Holman 02:17:47

Conway road into PG county is better than use of Meyers station road

Steven Onken 02:18:20

The Two Rivers garden area is within a very short distance of the industrial area west of Route 3 - a possible a

George Daughtry 02:18:22

A push button crossing light could be installed at WB&A and Patuxent Rd to help with slowing down and stopping traffic.

Alicia Ellis 02:18:35

I don't understand why Patuxent Rd is not included as a main focus of this study, along with Conway Rd. The school and increased traffic impacts Patuxent Rd as well. Patuxent Rd is not built to handle the amount of traffic that now runs on it, with very narrow lanes and no shoulders. The road is quickly developing pot holes and crumbling on the outside sides of the lanes of the road. The increased traffic that is yet to come will severely impact this road. Is there any room to widen the scope of this traffic study/project to fully include Patuxent Rd?

Francis Howard 02:18:39

Please consider buried power utilities along the entire length of Conway.

Cathy Buckman 02:18:52

is there any thouhts about buying the property from the landfill developer (assuming the landfill doesn't get appproved) to help build some other access roads?

Jim Holman 02:19:14

Great ideal Cathy

Tom Lyons 02:19:23

When is the WBA bike path bridge into PGCo going to start construction?

Ayanna Vedor-McNeil 02:20:16

While I appreeciate this meeting format and the promise of feedback to be posted on the project's webpage, what other action steps can we as homeowners take to actively participate in this ongoing process?

Theresa Gregory 02:20:37

Thank you, this was very informative.

Lisa Cornwell 02:20:55

Ms. Ellis - Patuxent Road through Historic Woodwardville is on the National Register of Historic Places / Roads. Those of us that reside here wish to keep our property.

Dawn Thomas, Rec and Parks, AA Count 02:22:00

The trail bridge will begin next month. Adam shared a link in the chat.

Adam Greenstein, DPW Proj. Mgr. 02:22:24

Ms. Vedor-McNeil - reach out to us as much as necessary. Send requests in writing, especially to elected officials, or even more so a letter from your community's leadership. There will be another working group meeting with community leaders before the end of the study, and there will be public involvement at multiple stages as part of any future capital projects.

Chris Fritsch 02:22:39

We live on Conway Rd between the circle and two rivers entrance. Exiting our driveway is dangerous, even with no cars in sight when I turn onto Conway, I have been nearly rear ended by cars traveling up to 50 mph in the 30 mph zone. Can we not use speed humps to slow folks down to

a safe speed? The creek next to us is a wildlife corridor and these speeding cars are detrimental to the wildlife crossing as well.

Ayanna Vedor-McNeil 02:23:17

Thank you for your response.

Adam Greenstein, DPW Proj. Mgr. 02:23:53

Mr. Fritsch, there are several opportunities we could incorporated to calm traffic speeds. Speed humps that traverse the entire road width present challenges to emergency services, but other designs could be considered. We can also work to improve sight lines around curves and at intersection both through vegetation trimming and more extreme measures through capital projects.

Karla Mandell 02:26:33

Crawford

Adam Greenstein, DPW Proj. Mgr. 02:26:56

Thanks for the clarification - my mistake.

Adam Greenstein, DPW Proj. Mgr. 02:27:21

I may have been looking at a different location, as Concord is nearby.

Jim Holman 02:27:58

build bridge over the railway

Shirley Alexander 02:29:07

I think you mean Upper Patuxent Ridge Road to Patuxent Road. Not Patuxent Ridge Road.

Peter Baer 02:29:21

Excellent presentation, many thanks!!!!!!

Monica D Jackson 02:29:35

On map can you point out elementary proposed location?

Jim Holman 02:29:58

What about the safety of the people who live on Meyers Station Road who use farm equipment and do use Meyers Station Road

Patrick Duncan 02:30:48

Appreciate the DWP and County Team's time for informing us this evening. Very informative!! Adam, masterful job on moderating!

Patrick Duncan 02:30:59

*DPW

Peter Baer 02:31:35

Monica, check out http://ourtworivers.com/landfill/landfill.html it shows the location of the school.

Amanda DiMaria 02:31:47

Thank you, everyone!

Alicia Ellis 02:31:51

Thank you for your presentation!

Chris Fritsch 02:32:12

Thank you

Cathy Buckman 02:32:22

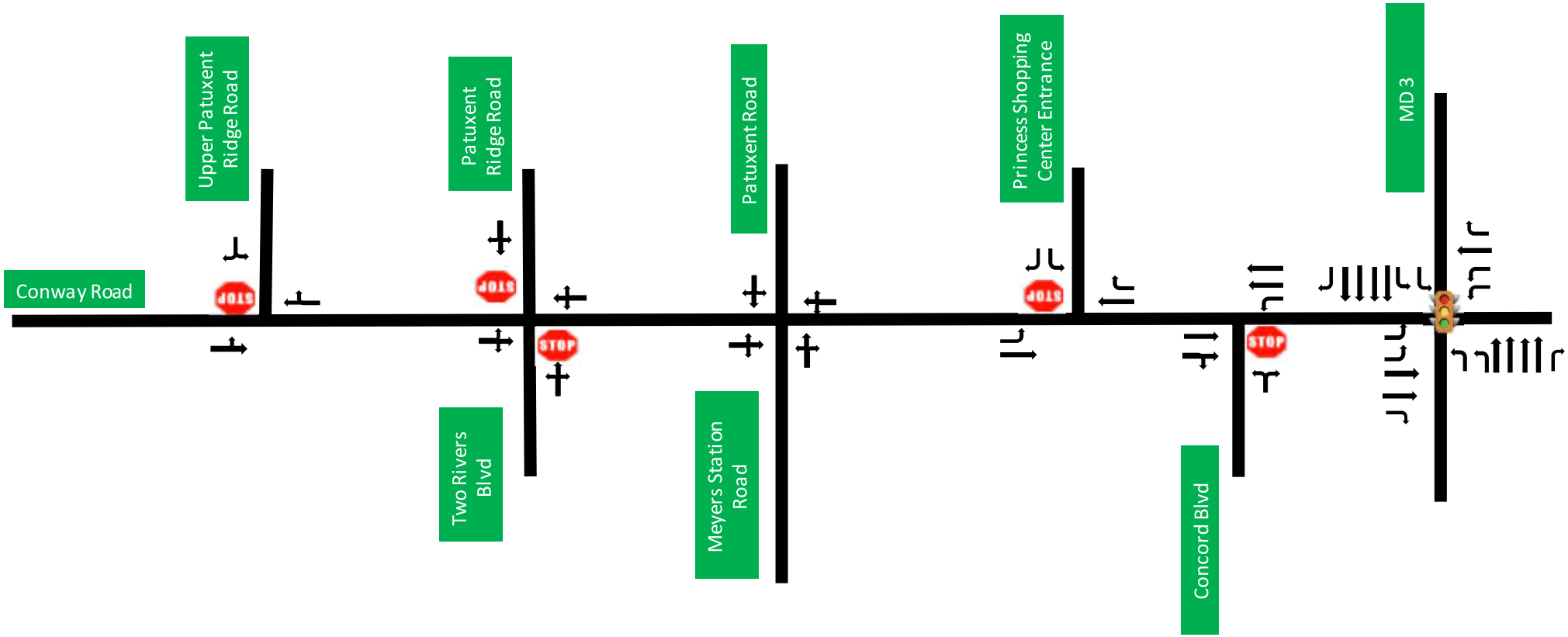
thank you

Qiana Ray, DPW Cust Rel 02:32:44

Good night

APPENDIX D
TURNING MOVEMENT FIGURES

Existing Turning Movements On Conway Road and Intersection Side Streets



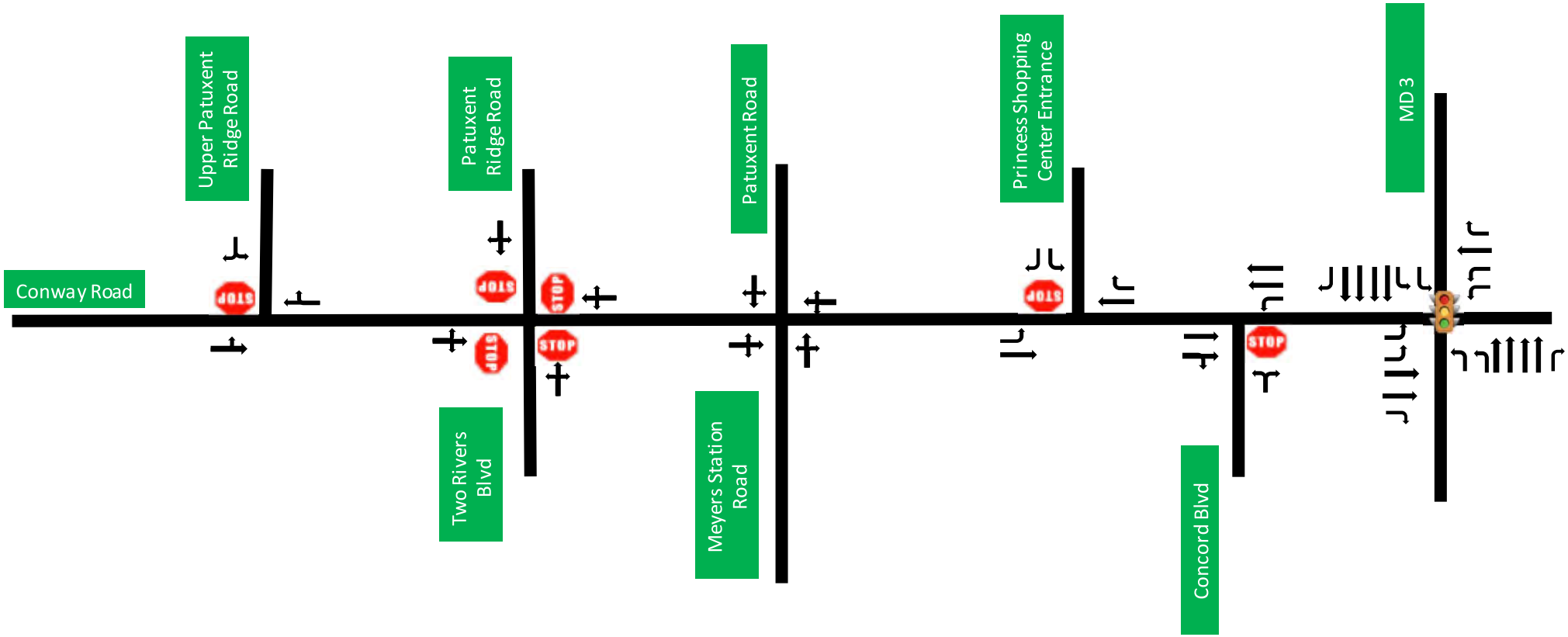
NO-BUILD

Not to Scale

LEGEND

- Intersection Approach Lane
- Existing Roadway
- Turn Movement Directions
- Stop Controlled Approach
- Existing Signalized Intersection

Traffic Controls on Conway Road with Proposed Conceptual All-Way-Stop-Control at Two Rivers Boulevard/Patuxent Ridge Road



BUILD – AWSC

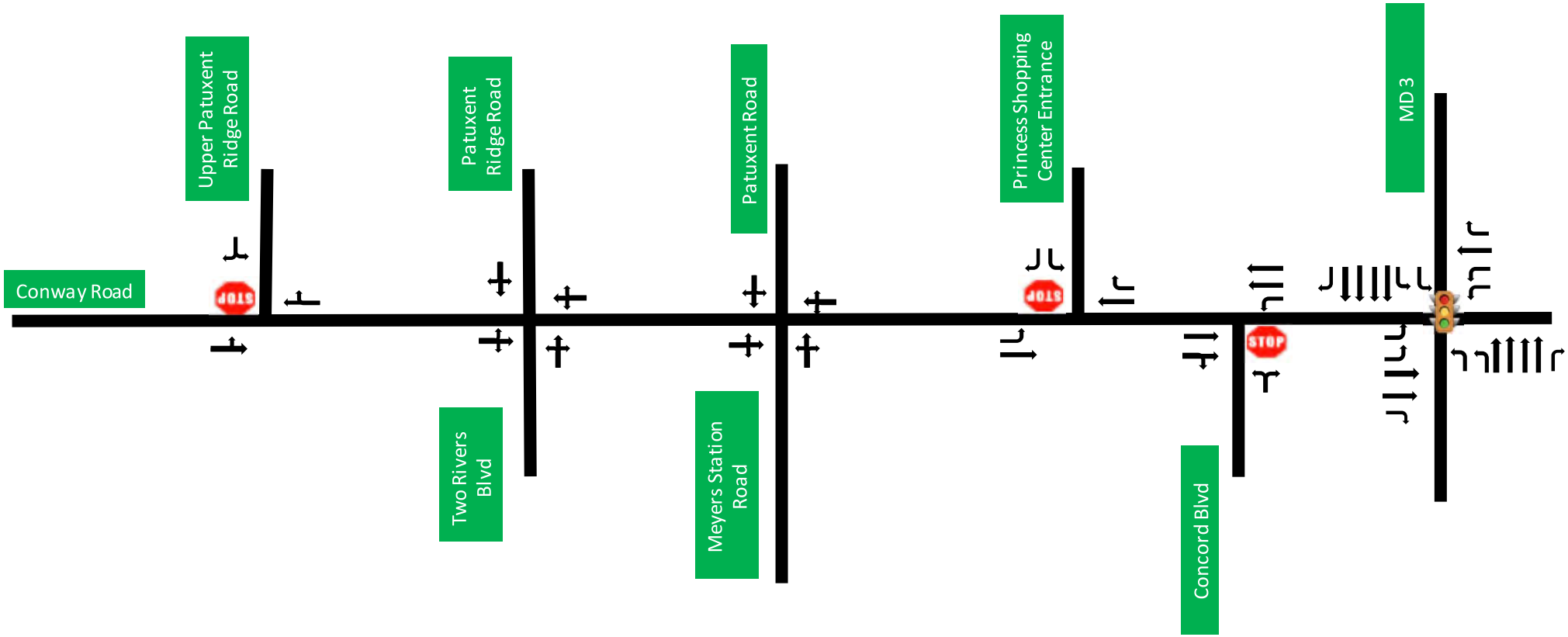
LEGEND

- Intersection Approach Lane
- Existing Roadway
- Turn Movement Directions
- Stop Controlled Approach
- Existing Signalized Intersection

N

Not to Scale

Turning Movements and Stop Controls on Conway Road with Proposed Conceptual Roundabout at Two Rivers Boulevard/Patuxent Ridge Road



BUILD – ROUNDABOUT

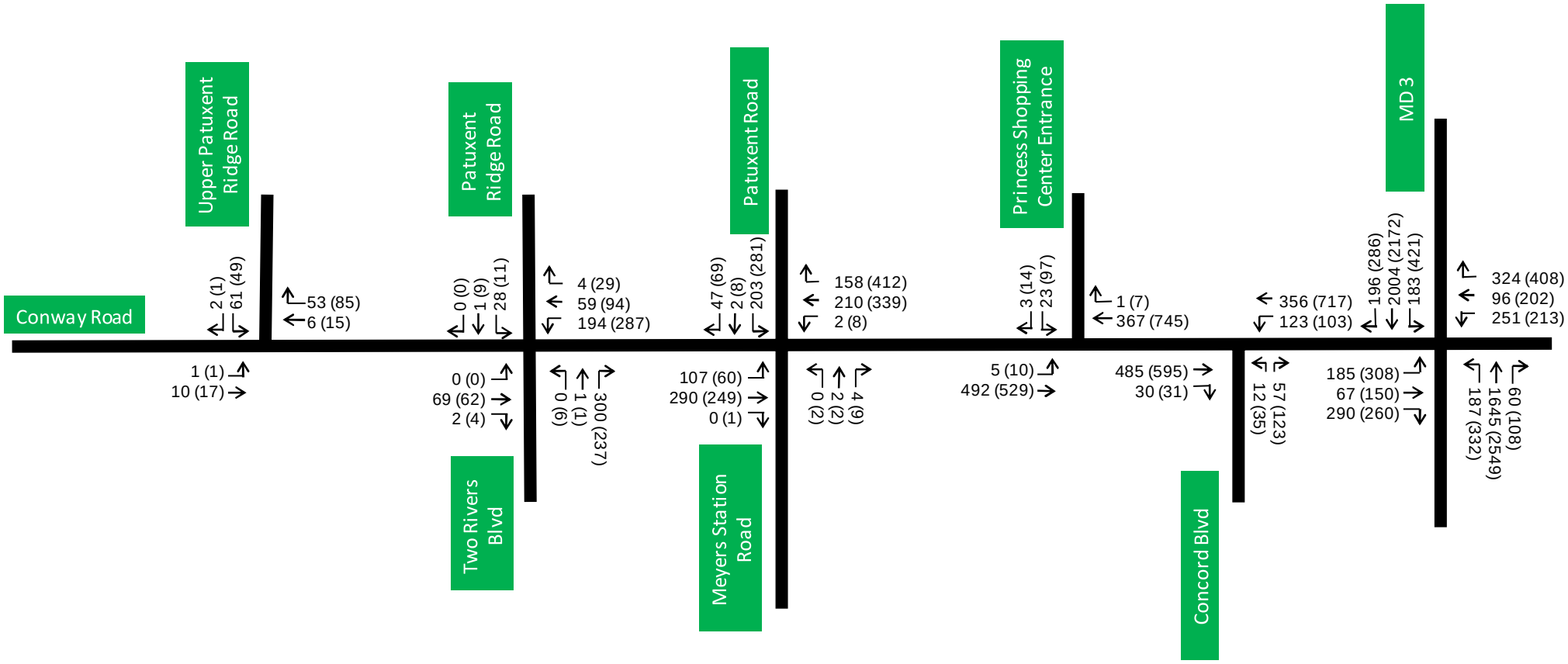
N

Not to Scale

LEGEND

- Intersection Approach Lane
- Existing Roadway
- Turn Movement Directions
- Stop Controlled Approach
- Existing Signalized Intersection

Existing Weekday AM and PM Peak Period Turning Movements on Conway Road and Intersecting Roads

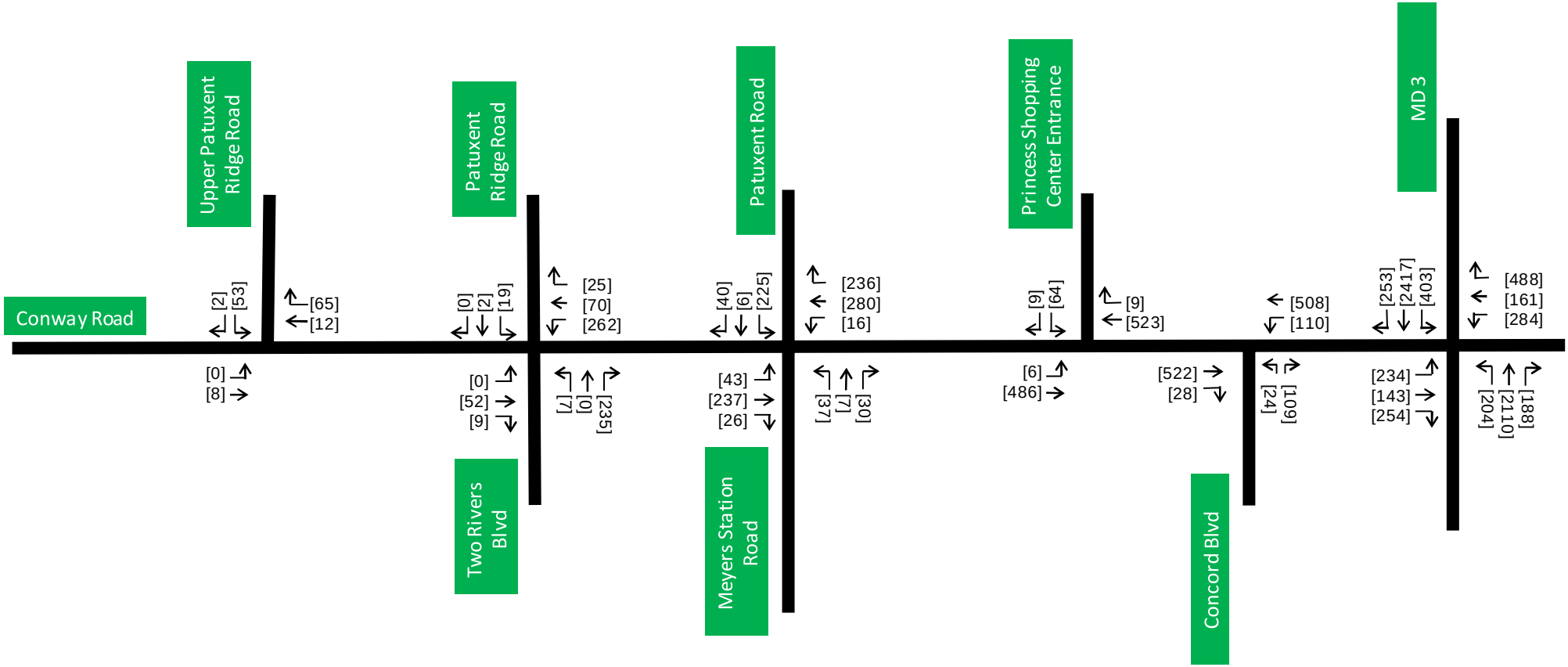


Not to Scale

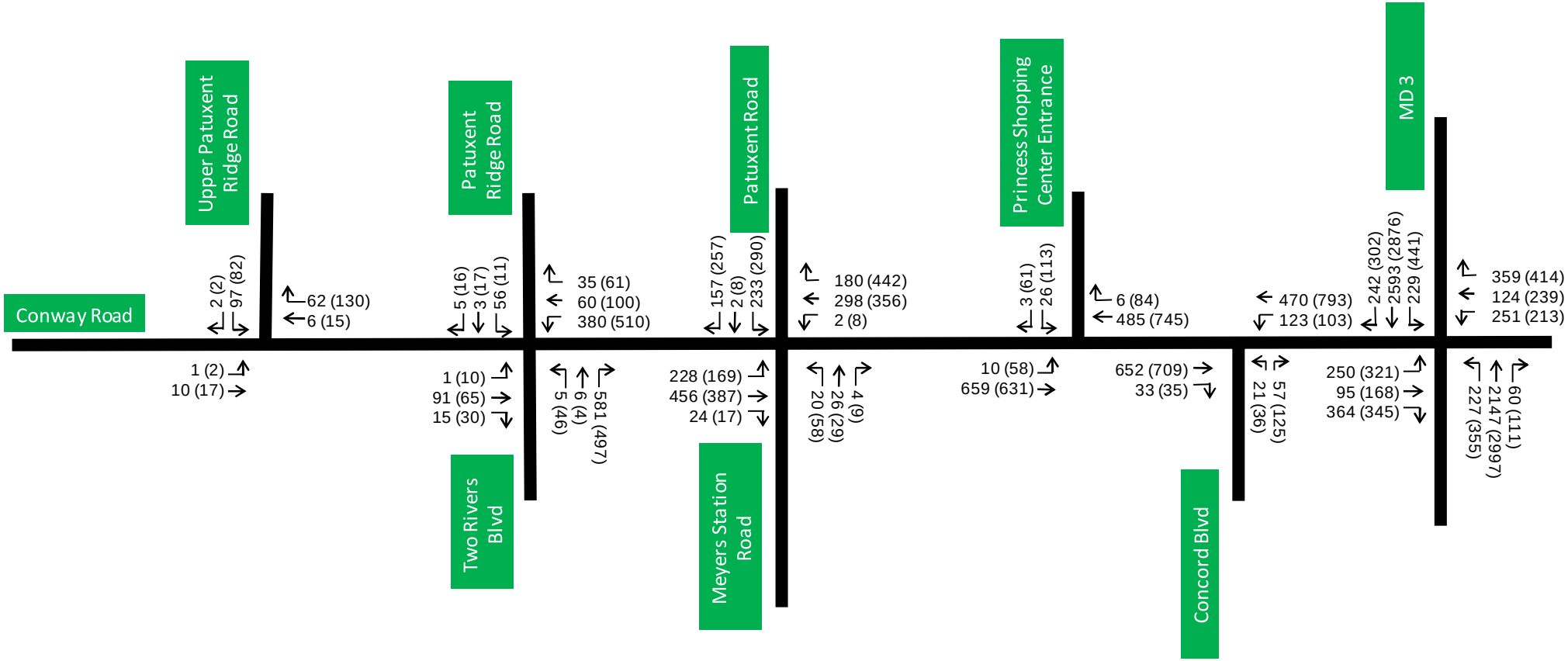
LEGEND

- 00 Existing AM Peak Hour Volume
- (00) Existing PM Peak Hour Volume
- Existing Roadway
- Turn Movement Directions

Existing Weekend AM and PM Peak Period Turning Movements on Conway Road and Intersecting Roads



Future Forecasted 2045 Weekday AM and PM Peak Period Turning Movements on Conway Road and Intersecting Roads

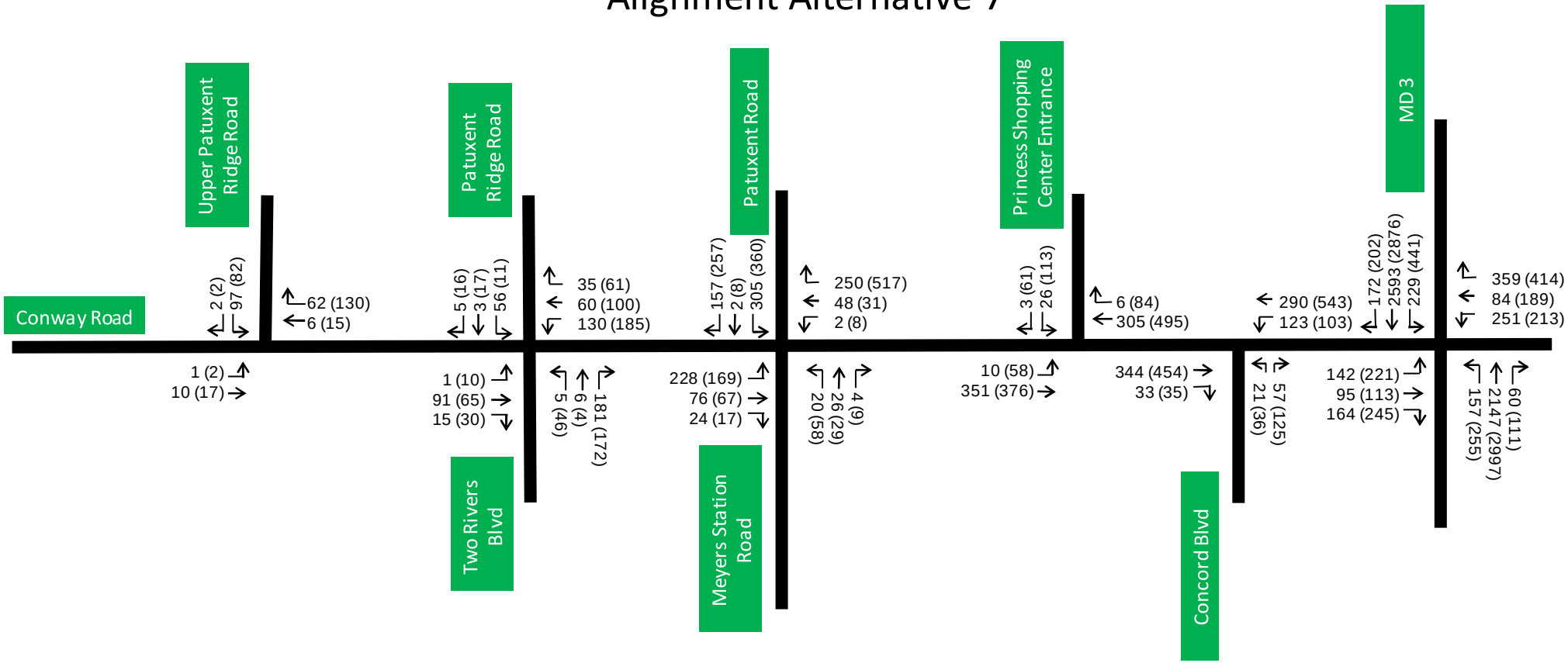


Not to Scale

LEGEND

00	2045 AM Peak Hour Volume
(00)	2045 PM Peak Hour Volume
	Existing Roadway
	Turn Movement Directions

Future Forecasted 2045 Weekday AM and PM Peak Period Turning Movements on Conway Road and Intersecting Roads with Conceptual Access Alignment Alternative 7

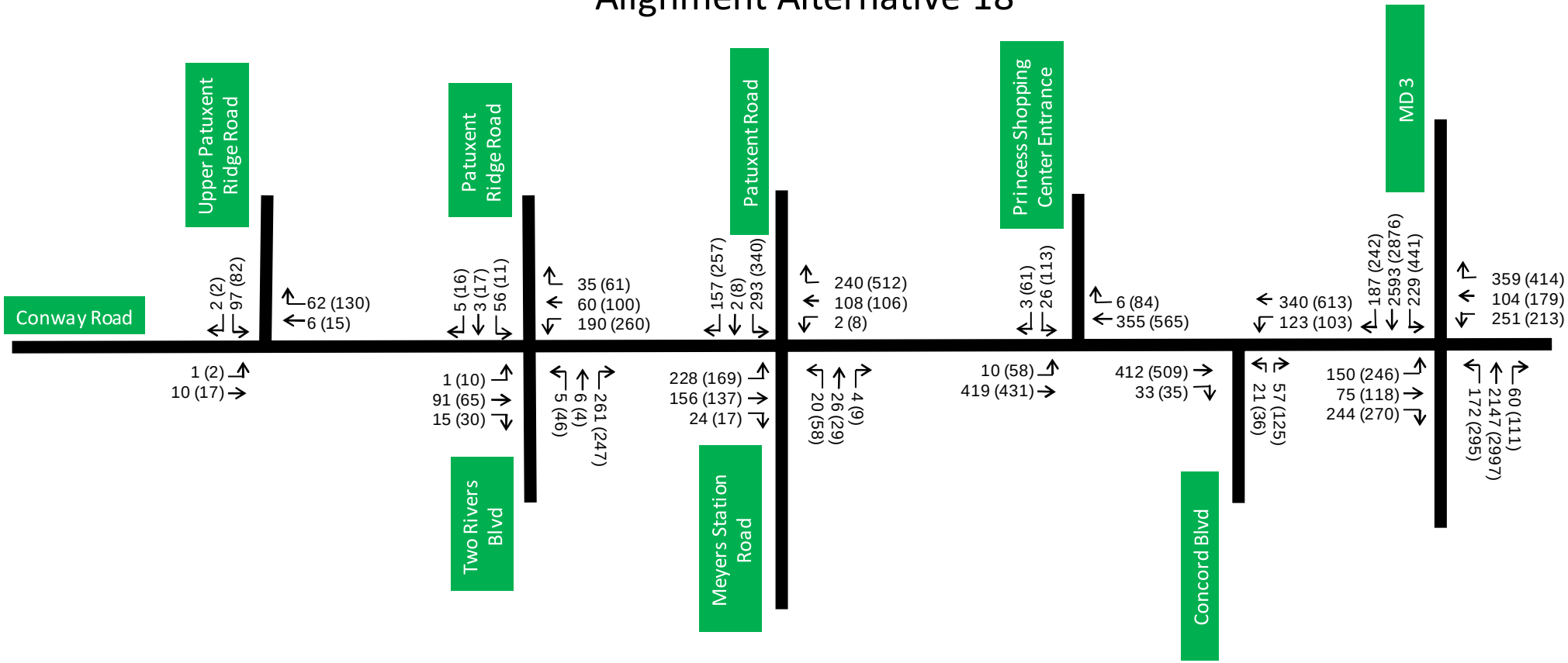


Not to Scale

LEGEND

- 00 — 2045 Alt 7 AM Peak Hour Volume
- (00) — 2045 Alt 7 PM Peak Hour Volume
- Existing Roadway
- Turn Movement Directions

Future Forecasted 2045 Weekday AM and PM Peak Period Turning Movements on Conway Road and Intersecting Roads with Conceptual Access Alignment Alternative 18

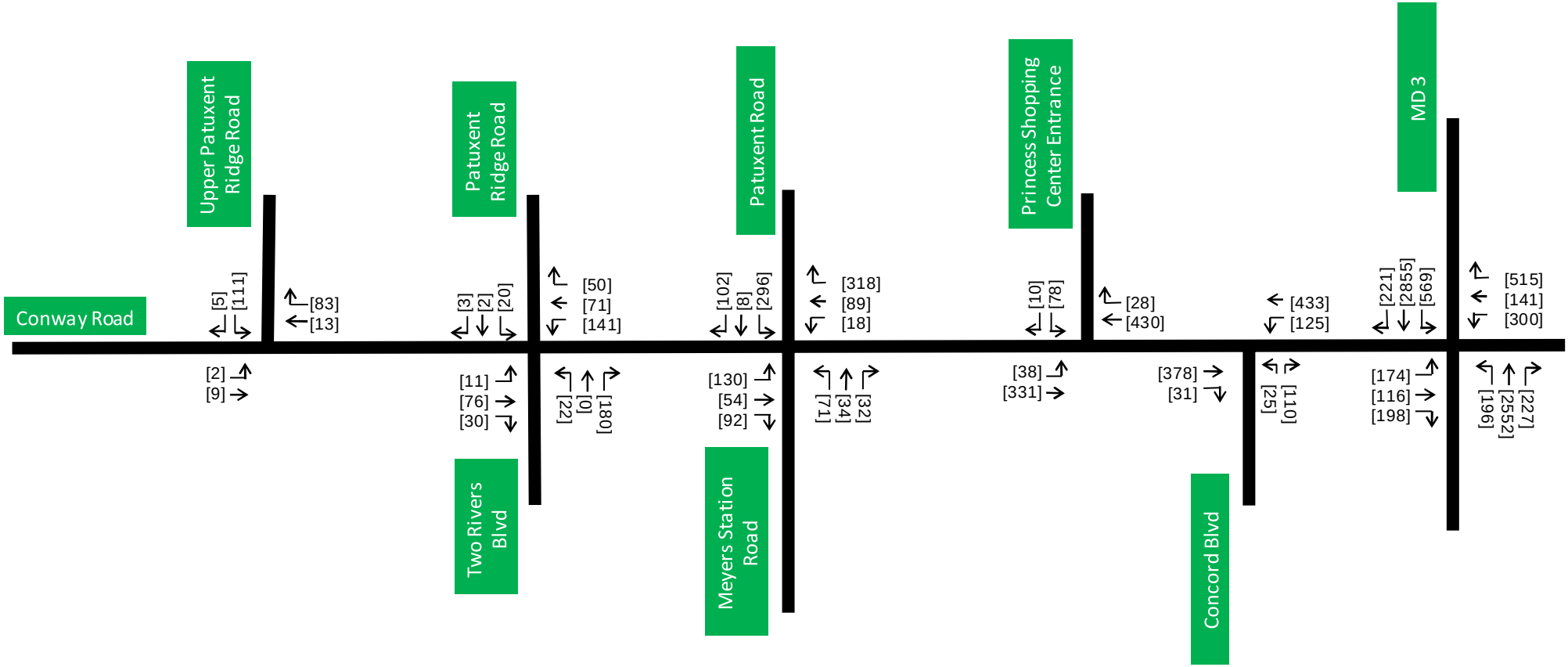


Not to Scale

LEGEND

00	2045 Alt 18 AM Peak Hour Volume
(00)	2045 Alt 18 PM Peak Hour Volume
	Existing Roadway
	Turn Movement Directions

Future Forecasted 2045 Weekend AM and PM Peak Period Turning Movements on Conway Road and Intersecting Roads



Not to Scale

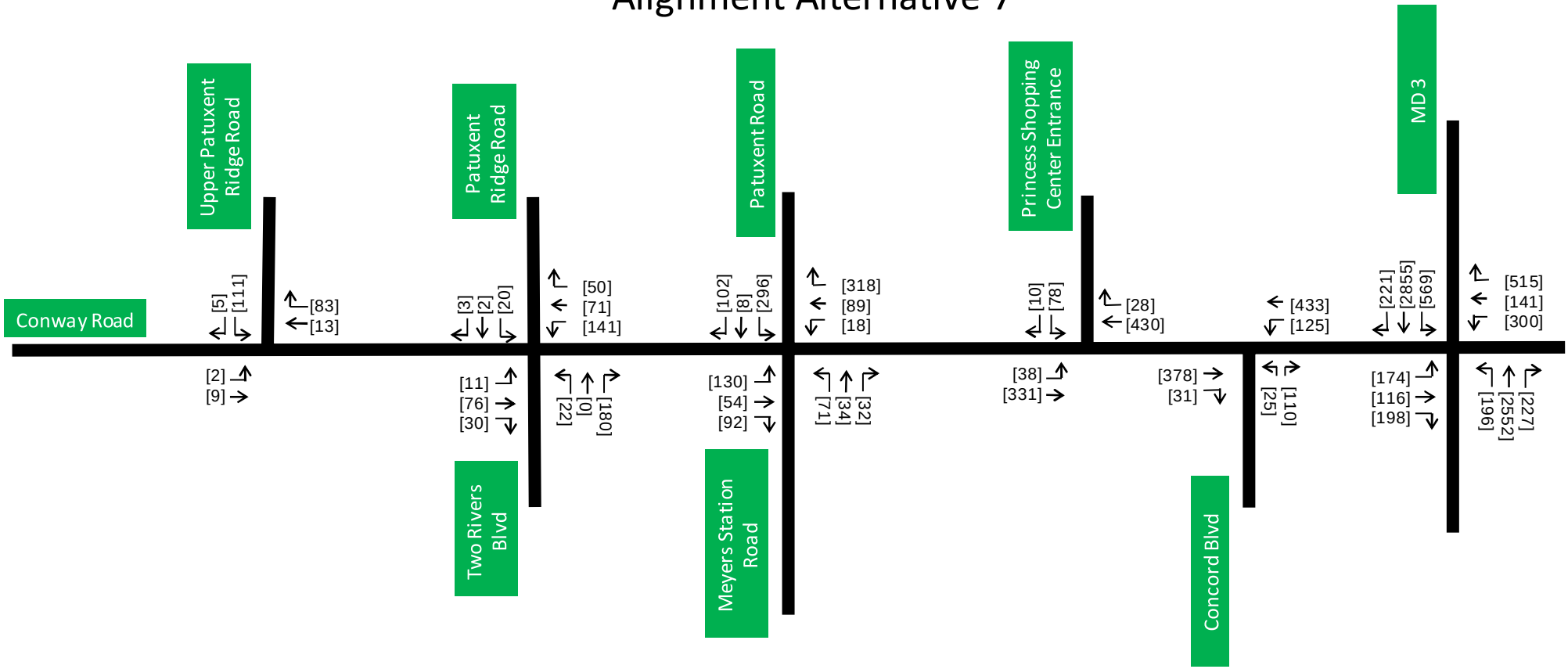
LEGEND

[00] 2045 Weekend Peak Hour Volume

Existing Roadway

Turn Movement Directions

Future Forecasted 2045 Weekend AM and PM Peak Period Turning Movements on Conway Road and Intersecting Roads with Conceptual Access Alignment Alternative 7



Not to Scale

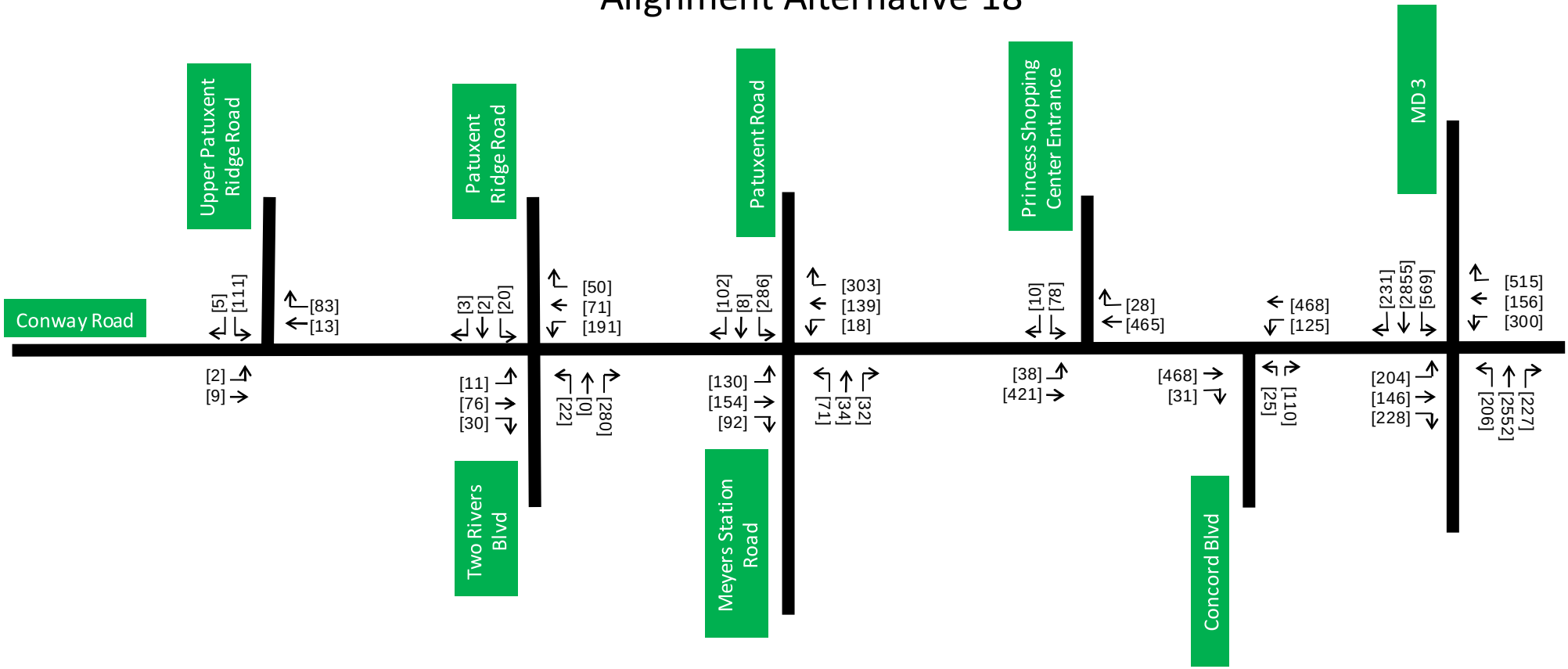
LEGEND

[00] 2045 Alt 7 Weekend Peak Hour Volume

Existing Roadway

Turn Movement Directions

Future Forecasted 2045 Weekend AM and PM Peak Period Turning Movements on Conway Road and Intersecting Roads with Conceptual Access Alignment Alternative 18



Not to Scale

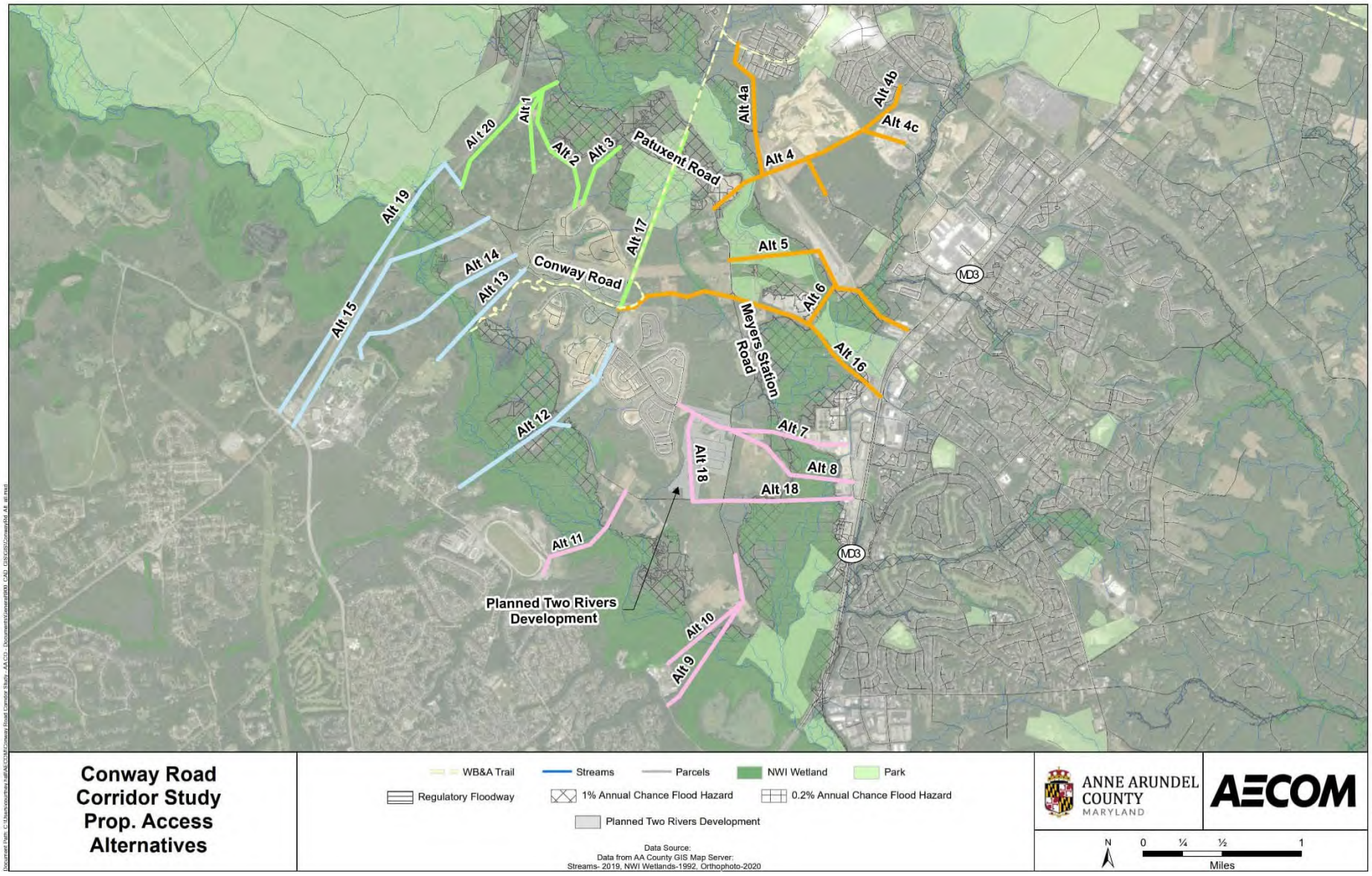
LEGEND

[00] 2045 Alt 18 Weekend Peak Hour Volume

Existing Roadway

Turn Movement Directions

APPENDIX E
ACCESS ROUTE ASSESSMENT MAP


Alt 20
Alt 1
Alt 2
Alt 3
Patuxent Road
Alt 4a
Alt 4b
Alt 4c
Alt 4
Alt 19
Alt 17
Alt 5
Alt 14
Conway Road
Alt 13
MD3
Alt 6
Alt 15
Meyers Station Road
Alt 16
Alt 12
Alt 7
Alt 18
Alt 8
Alt 18
Alt 11
MD3
Planned Two Rivers Development
Alt 10
Alt 9
Conway Road Corridor Study Prop. Access Alternatives
WB&A Trail
Streams
Parcels
NWI Wetland
Park
Regulatory Floodway
1% Annual Chance Flood Hazard
0.2% Annual Chance Flood Hazard
Planned Two Rivers Development
Data Source:
Data from AA County GIS Map Server:
Streams- 2019, NWI Wetlands-1992, Orthophoto-2020
ANNE ARUNDEL COUNTY MARYLAND
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Transportation Facility Planning
Conway Road from MD 3 to the Western Terminus

Project No.: H539600
Contract No.: H539620
FINAL Technical Memorandum
Phase 3: Preliminary Recommendations
August 2022

1. Introduction

This Preliminary Recommendations Technical Memorandum has been prepared by the Anne Arundel County Department of Public Works (DPW) to document the potential implementation of proposed conceptual improvements considered to address the needs of the study area.

For additional details, graphical depictions of proposed improvements, and background on the recommended alternatives discussed herein and the related future forecasted traffic conditions, please refer to the *Phase 3: Future Conditions Technical Memorandum*. For additional information on the existing conditions within the project study area, including traffic and safety data, please refer to the *Phase 1: Existing Conditions Technical Memorandum*, finalized in January 2022. For additional details on the project purpose, study area needs, goals and objectives, and future forecasted traffic conditions, please refer to the *Phase 2: Purpose and Need Statement*.

2. Preliminary Recommendations

Recommendations were developed based on alternatives analysis, feedback from County staff, and community outreach.

Before the outlining the preliminary recommendations of this study, it is important to highlight the current concerns expressed by the County's Office of Planning and Zoning (OPZ). From a letter dated July 11th, OPZ expressed concerns about the following:

- Impacts to designated Scenic and Historic Roads, specifically Patuxent Road, Meyers Station Road, and Grays Ford Road.
- Expressed opposition to Alternative 7 – Option B related to potential impacts to Scenic and Historic character of Meyer Station Road and the surrounding ecological resources.
- Major concerns about the proposed bus turnaround proposed in the vicinity of the Wilsonville community at the western end of Conway Road. OPZ notes a long history of public project impacts to this community and stresses that careful and thoughtful coordination should occur with community members as part of future planning and design efforts.
- Concerns raised about the potential for higher vehicle speeds related to shoulder widening along Conway Road.

DPW is committed to coordinating with OPZ to reconcile their documented concerns as part of future phases of design development.

As the project proceeds through future phases of the approval and design process, additional efforts should be made to incorporate traffic calming measures like speed warning signs, variable shoulder widths, traffic bollards, road diets, and pavement markings as appropriate in order to deter vehicle speeds in excess of posted limits. Similarly, future development phases of the proposed Shared Use Path should be designed in a way that best fits the character of the corridor with particular attention given to:

- the scenic and historic nature of the designated roadway;
- protected public lands;
- culturally significant resources and communities;
- the sensitivity of adjacent ecological resources (including but not limited to wetlands, waters, forest interior dwelling species, any endangered/threatened species, and forested areas); and
- the potential affects to private properties.

Considerations for the time and costs required to obtain permit approvals will be critical for future planning and design phases for this project. Conversion of parkland must be approved in advance by the Maryland Board of Public Works.

With the above concerns noted, the alternatives are suggested to be implemented in three separate phases. The phases increase in scope and cost to allow short term improvements to be implemented while allowing the County to plan for cost associated with long-term capital improvements. **A matrix of impacts and costs for each phase and improvement element is provided at the end of this document.** The following phases are recommended:

- **Phase 1:** Introduce shared-use path (between WB&A Trail and MD 3), widen shoulders (from Two Rivers Boulevard / Patuxent Ridge Road to Anchor Concrete) along Conway Road, all-way stop control (AWSC) at Conway Road and Two Rivers Boulevard / Patuxent Ridge Road, pavement markings at Princess Shopping Center, and bus turnaround. (Considerations for segmental implementation of shoulders is suggested, as detailed in Section 3, below.)
- **Phase 2:** Implement Alternative 7 Option B (2-foot shoulders and no Shared Use Path) connection from Two Rivers Development to Meyers Station Road.
- **Phase 3A:** Complete Alternative 7 Option B from Meyers Station Road to Cronson Boulevard.
- **Phase 3B:** Introduce Roundabout at Two Rivers Boulevard and Conway Road.

From a traffic operations perspective, if Phases 2 and 3A are implemented by 2040, the Phase 1 all-way stop control and Phase 3B are not necessary as Phases 2 and 3A would alleviate volumes at the intersection of Two Rivers Boulevard and Conway Road.

3. Phase 1

The recommendations in Phase 1 are to provide relatively short-term improvements to Conway Road. Short-term improvements are those considered to be those that could be implemented within 5 to 10 years.

Widen Shoulders

Eight-foot shoulders are proposed along eastbound and westbound Conway Road between Two Rivers Boulevard / Patuxent Ridge Road and the Anchor Concrete Products driveway. The proposed shoulders are to provide additional safety and accessibility of emergency vehicles. The clearing associated with shoulder implementation may also enhance sight distances, reduce conflicts between fixed objects and vehicles along Conway Road, and lessen the chance for vehicles to run off road. It is noted that the possibility of narrower shoulders will be evaluated during future phases of the design development process.

The study team acknowledges and has discussed the potential for increased vehicle speeds that wider shoulders could induce. As noted previously, future phases of design development should look to incorporate elements that would deter higher than posted speeds. A balance between providing a facility that allows for safe pedestrian, bicycle, and motor vehicle travel must be strived for in accordance with the County's commitment to Vision Zero. Ultimately, considerations for variable width shoulders should be investigated to potentially calm vehicle speeds, reduce impacts, and lower implementation costs.

The County may also consider a segmental implementation approach to lower costs and expedite construction. For example, the County could initially design and construct shoulders from Two Rivers to the Patuxent Road / Meyers Station Road Roundabout as Segment 1. Then at a later time, design and construct Segment 2 from the Roundabout to Anchor Concrete to complete the project.

There were 18 public written comments provided via the interactive commenting website and two comments documented in public meeting transcript summaries in support of widening Conway Road. In the public meeting transcript, there was one comment against improvements to Conway Road over concerns that it may increase speeds along the corridor.

The anticipated cost (rounded) for the shoulder improvement is $24,570,000.

Shared-Use Path

The proposed ten-foot **shared-use path** along westbound Conway Road between MD 3 and Patuxent Ridge Road is not expected to impact traffic operations along Conway Road or at corresponding intersections. This meets the Purpose and Need by reducing conflicts between vehicles and pedestrians/bicyclists as well as by enhancing Pedestrian Level of Comfort (PLOC) and bicyclist Level of Traffic Stress (LTS) and enhance connective facilities.

There were 39 public comments in support of improving pedestrian facilities along Conway Road and two comments documented in public meeting transcript summaries in support of additional bicycle facilities along Conway Road. There were no comments explicitly against the development of a share-use path along Conway Road.

The anticipated cost (rounded) for the shared-use path improvement is $8,470,000.

Princess Shopping Center Roadway Improvement

At the three-legged intersection of Conway Road and the Princess Shopping Center, the future forecasted traffic is anticipated to operate at LOS F in 2045, with delays in excess of 90 seconds per vehicle for those turning left out of Princess Shopping Center. If Professional Drive is ultimately extended to create a full four-legged intersection (as planned), it is anticipated that a traffic signal would be warranted and introduced as part of that developer planned improvement. However, until the time that Professional Drive is extended, the study team recommends improving sight distance for drivers by trimming vegetation at the intersection and to consider modifying existing lane markings to provide vehicles a center turn/receiving lane on Conway Road.

There were three public comments in support of intersection improvements at the Princess Shopping Center and Conway Road. There were no comments explicitly against the improvement of the intersection at Princess Shopping Center.

The anticipated cost for the intersection improvement is $8,000.

All-Way Stop Control

Converting the intersection of Conway Road at Two Rivers Boulevard / Patuxent Ridge Road to an all-way stop control (AWSC) intersection would enhance traffic safety and reduce the delay in the AM and Weekend peak hours, as shown in **Table 1**. The AWSC is also anticipated to help improve safety for pedestrians and bicyclists by potentially slowing traffic and providing gaps for added crossing safety. From a traffic perspective, if Phases 2 and 3 can be completed by 2040, the AWSC is not necessary as short-term operations improvement; however, it is still recommended as a traffic safety enhancement.

The anticipated cost (rounded) for the intersection improvement is $16,000.

Table 1: Forecasted Future 2045 Build LOS and Delay – AWSC

Intersection	AM		PM		Weekend	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Conway Road at Two Rivers Boulevard / Patuxent Ridge Road	50.2	F	> 90.0	F	56.8	F

Bus Turnaround

With the introduction of the new West County Elementary School, a new bus turnaround area near the western terminus of Conway Road was considered to assist with anticipated increases in school bus traffic. Currently school buses serving Anne Arundel Public Schools use the St. John A.M.E. Zion Church parking area located at the western terminus of Conway Road as their turnaround location. The implementation of this bus turnaround could be considered a change to the character of Conway Road's Scenic and Historic route designation and subject to the permitting requirements of County Code Article 17-6-504.

The County has also noted that this area has historically been a neighborhood with concentrations of minority and lower-income populations where Environmental Justice issues will ultimately need to be acknowledged and addressed. Specifically, the community of Wilson Town and the leadership of St. John A.M.E. Zion Church should be consulted and included in the decision-making process if/when this bus turnaround feature if further developed. OPZ notes this historically black community has experienced many adverse effects from lands taken from them over the centuries by public actions that have cut away and bifurcated their historic community. Any further takings or impositions of public needs upon their lands should be carefully considered and undertaken only after thoughtful consultation with the community.
It is recommended that a context sensitive turnaround area where school buses serving students within the western part of Conway Road be provided near this historically underserved community, done in a way that is inclusive and sensitive to the needs of the residents while making efforts to preserve the character of the neighborhood and historic nature of St. John A.M.E. Zion Church.

The Study Team identified an open area directly adjacent to Conway Road that would potentially utilize a grassy frontage space, see Section 12 of the *Phase 3: Future Conditions Technical Memorandum*. This location would allow buses to run routes serving Conway Road, the Two Rivers Development, and homes on Collins Lane and Lucinda Lane.

While there were no comments that directly state support for or against a bus turnaround, there are 14 public comments in support of improving access to school facilities. The County Public Schools have indicated adding a bus turnaround is a high priority. These improvements to Conway Road would increase safety for pedestrians, bicyclists, and drivers. It is recommended that this phase be implemented first because it will provide short-term improvements to Conway Road.

The anticipated cost for the bus turnaround improvement is $150,000.

4. Phase 2

Phase 2 will provide a new access route connection from the Two Rivers Development to Meyers Station Road. This phase recommends implementation of access route Alternative 7 Option B (2-foot shoulders with no shared use path) to the development for additional accessibility for residents and emergency responders and to potentially alleviate the left turn traffic from Conway Road onto Two Rivers Boulevard. With the connection from the Two Rivers Development to Meyers Station Road, traffic volumes on Meyers Station Road and the new access route are anticipated to **draw 200 to 500 vehicles per day**. Therefore 200-500 fewer vehicles will use Conway Road west of Patuxent Road. The minor diversion of vehicles alone will not bring the LOS to an acceptable level. The implementation of access route Alternative 7 Option B would be a change to the character of Meyers Station Road's Scenic and Historic route designation and subject to the permitting requirements of County Code Article 17-6-504.

There were 76 public comments in support of providing additional access points to the Two Rivers Development. Of those 76 comments, 38 were specifically in support of the providing an access from the Meyers Station Road points south of Conway Road. There were several additional documented comments in support of additional access provided in the public meeting transcript summaries. During the public meeting, there were two comments against providing additional access from the Two Rivers Development to Meyers Station Road due to increased traffic on Meyers Station Road. Based on the overall public comments received as part of this study, this phase would be supported by the residents who voiced concerns about limited access as a near-term solution.

The anticipated cost (rounded) for Phase 2 access route is $10,640,000.

5. Phase 3

Phase 3A achieves the accessibility goals set forth in the study purpose and need by providing a full additional redundant access point to the communities along Conway Road including the Two Rivers Developments. If Phase 3A is not implemented, it is recommended that Phase 3B be implemented to improve traffic along Conway Road at Two Rivers Boulevard/Patuxent Ridge Road.

Phase 3A

Phase 3A will complete the connection from Two Rivers Development to Cronson Boulevard via the Alternative 7 Option B access route alignment. This connection will run from Meyers Station Road to Cronson Boulevard. This alternative would meet the Purpose and Need by avoiding flooding and other

blockage hazards resulting in closure of the Patuxent Road and Conway Road that create safety and accessibility issues for residents who can be cut off from vehicular ingress/egress and emergency response services. The new connector road would impact wetlands, floodplains, and waterway systems associated with the Little Patuxent River; however, future design development phases should look to strategically incorporate elevated roadway and structures to mitigate potential impacts and eliminate possible flooding risks. The conceptual alignment would require structure crossings of the Little Patuxent River. No improvements will be made to Meyers Station Road.

Forecasted future 2045 no-build peak hour conditions at un-signalized intersections in the study area are shown in **Table 2**. Forecasted future 2045 Alternative 7 peak hour conditions at un-signalized intersections in the study area are shown in **Table 3.** This phase improves LOS for AM, PM, and Weekend for all unsignalized intersections within the study area. Similar to Phase 2, The implementation of access route Alternative 7 Option B could be considered a change to the character of Meyers Station Road's Scenic and Historic route designation and subject to the permitting requirements of County Code Article 17-6-504.

There were 22 public comments in support of providing an alternative access to provide redundant access in the event of road closures and numerous more documented comments of support in the public meeting transcript summaries. In the public meeting, there were two comments against providing additional access to Meyers Station Road due to increased traffic on Meyers Station Road.

The anticipated cost (rounded) for Phase 3A access route is $31,650,000.

Table 2: Forecasted Future 2045 No-Build LOS and Delay – Un-Signalized Intersections

Intersection	AM		PM		Weekend	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Conway Road at Concord Boulevard	14.5	B	34.0	D	24.4	C
Conway Road at Princess Shopping Center	16.7	C	> 90.0	F	60.5	F
Conway Road at Two Rivers Boulevard / Patuxent Ridge Road	>90.0	F	> 90.0	F	> 90.0	F
Conway Road at Upper Patuxent Ridge Road	9.3	A	9.5	A	9.5	A

Table 3: Forecasted Future 2045 Build Alternative 7 LOS and Delay – Un-Signalized Intersections

Intersection	AM		PM		Weekend	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Conway Road at Concord Boulevard	11.6	B	17.4	C	14.1	B
Conway Road at Princess Shopping Center	12.5	B	29.0	D	21.0	C
Conway Road at Two Rivers Boulevard / Patuxent Ridge Road	18.7	C	16.2	C	17.4	C
Conway Road at Upper Patuxent Ridge Road	9.3	A	9.5	A	9.5	A

Phase 3B

The roundabout is recommended because the AWSC does not bring Conway Road at Two Rivers Boulevard / Patuxent Ridge Road to an acceptable LOS, the study team analyzed the impacts of a

potential roundabout. Because the AWSC does not bring Conway Road at Two Rivers Blvd / Patuxent Ridge Road to an acceptable LOS, the study team recommends constructing a roundabout. Converting Conway Road at Two Rivers Boulevard / Patuxent Ridge Road to a roundabout would reduce the delays in all peak hour periods, as shown in **Table 4**, resulting in LOS A during all three peak periods. If Phases 2 and 3A are completed by 2040, Phase 3B would not be necessary.

The anticipated cost for Phase 3A is $3,200,000.

Table 4: Forecasted Future Build 2045 LOS and Delay – Conceptual Roundabout

Intersection	AM		PM		Weekend	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Conway Road at Two Rivers Boulevard / Patuxent Ridge Road	7.9	A	8.8	A	8.1	A

Matrix of Impacts and Costs by Phase and Improvement Element

Phase	Proposed Improvement Elements	Wetlands & Floodplains	Streams	Cultural Resources	Open Space/Parks**	Forested Areas	Forest Interior Dwelling Species	Conservation Areas	Private Property	Planned Two Rivers Development	Estimated Cost (rounded)
Phase 1	Conway Road Shoulder Widening	0.27 acres (AC) Wetlands 0.18 AC Floodplain	113.57. Linear Feet (LF)	Scenic & Historic Conway Road*	0.29 AC Open Space 1.28 AC Parks	2.96 AC	0.79 AC	0.01 AC	4.20 AC	N/A	$24,570,000
	Shared Use Path	0.13 AC Wetlands 2.81 AC Floodplain	382.63 LF	Scenic & Historic Conway Road*	1.16 AC Parks	2.10 AC	0.57 AC	N/A	2.42 AC	N/A	$8,470,000
	Traffic Control Signs/Markings at Princess Shopping Center	N/A	N/A	N/A	N/A	0.1 AC	N/A	N/A	N/A	N/A	$8,000
	Traffic Control Signs/Markings at Two Rivers Boulevard	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$16,000
	Bus Turnaround	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.14 AC	N/A	$150,000
	Phase 1 Total	*0.40 AC Wetlands* *2.99 AC Floodplain*	*496.20 LF*	*Scenic & Historic Conway Road**	*0.29 AC Open Space* *2.44 AC Parks*	*5.07 AC*	*1.36 AC*	*0.01 AC*	*6.76 AC*	*N/A*	*$33,220,000*
Phase 2	Access Route Alternative 7 Option B (Two Rivers Boulevard to Meyers Station Road*)	N/A	N/A	Scenic & Historic Meyers Station Road*	0.15 AC Open Space	1.93 AC	2.02 AC	N/A	2.12 AC	0.18 AC Developer Owned	$10,640,000
Phase 3A	Alternative 7 Option B (Meyers Station Road* to Cronson Boulevard)	1.02 AC Wetlands 1.50 AC Floodplains	65.65 LF	Scenic & Historic Meyers Station Road*	N/A	2.45 AC	2.88 AC	0.82 AC	4.79 AC	N/A	$31,650,000
Phase 3B	Roundabout at Two Rivers Boulevard	N/A	N/A	Scenic & Historic Conway Road*	0.24 AC Open Space 0.19 AC Parks	N/A	N/A	N/A	0.15 AC	0.15 AC Developer Owned	$3,200,000
Total		***1.42 AC Wetlands*** ***4.49 AC Floodplains***	***561.85 LF***	***Scenic & Historic Conway Road & Meyers Station Road****	***0.68 AC Open Space*** ***2.63 AC Parks***	***9.45 AC***	***6.26 AC***	***0.83 AC***	***13.82 AC***	***0.33 AC Developer Owned***	***$78,700,000***

***Impacts to Conway Road and Meyers Station Road** Scenic & Historic Route include new intersections, tree clearing, pavement markings and signage, possible drainage areas, and changes to traffic volumes**. Permit coordination for impacts to conservation areas and scenic & historic routes, per County Code Article 17-6-504, will be required as needed.**

****Considerations for the time and costs required to obtain permit approvals will be critical for future planning and design phases for this project. Conversion of parkland must be approved in advance by the Maryland Board of Public Works.**