

## MEMORANDUM

To: Cecily Bedwell, AICP, LEED-AP BD+C  
Design Collective

From: Rick Nau and Nick Addamo

Date: May 16, 2019

Subject: Edgewood Transit-Oriented Development (TOD)  
Existing Transportation Facilities

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## INTRODUCTION

The purpose of this Technical Memorandum is to document existing transportation conditions in the vicinity of the Edgewood MARC train station in support of the development of a plan for Transit-Oriented Development (TOD) in the Edgewood area. Information contained in this memo is based on observations and conversations with Harford County Planning and Zoning, Harford County Public Works, and Maryland Transit Administration (MTA). The regional transportation system is illustrated in Figure 1 and the local transportation system is illustrated in Figure 2.

## ROADWAY CHARACTERISTICS

The study area has good roadway access with a grid street system including Edgewood Road (Route 755) and Emmorton Road (Route 24) providing north-south access and I-95, Pulaski Highway (Route 40), Hanson Road, and Willoughby Beach Road providing east-west access. Harford County has not identified any significant traffic operational concerns in the study area.

### Edgewood Road (Route 755)

Edgewood Road is a primary north-south transportation corridor in Edgewood and directly serves Edgewood Station. It is classified as a Minor Urban Arterial and has an average daily traffic volume of 8,605 vehicles.<sup>1</sup> This state highway serves local traffic between Aberdeen Proving Ground to the south and U.S. Route 40 to the north where it connects to the broader regional transportation network. Its southern half between Aberdeen Proving Ground and Willoughby Beach Road consists of one lane in each direction separated by a double yellow centerline. Its northern half between Willoughby Beach Road and U.S. Route 40 consists of one lane in each direction with a center two-

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<sup>1</sup> Harford County Traffic Counts, 2019, Harford County Office of Community & Economic Development

way left turn lane. Edgewood Road also carries several Harford LINK bus routes between Edgewood and Bel Air to the north.

**Willoughby Beach Road**

Willoughby Beach Road is an east-west local street and is classified as an Urban Collector with an average daily traffic volume of 2,087 vehicles.<sup>2</sup> It crosses Edgewood Road just north of Edgewood Station and connects to residential neighborhoods on the east side of the community. The width and configuration of Willoughby Beach Road varies, but primarily consists of one lane in each direction, with a short segment consisting of two lanes in each direction in the vicinity of Edgewood Middle and High Schools.

**Hanson Road**

Hanson Road is another east-west local street that is classified as an Urban Collector with an average daily traffic volume of 2,210 vehicles.<sup>3</sup> It roughly parallels Willoughby Beach Road and connects residential neighborhoods and apartment developments on the west and east sides of the community with commercial developments at its intersection with Edgewood Road. Hanson Road east of Emmorton Road consists of one lane in each direction. West of Emmorton Road, Hanson Road consists of one lane in each direction and a center two-way left turn lane.

**Emmorton Road (Route 24)**

Emmorton Road is a primary north-south transportation corridor in Edgewood that roughly parallels Edgewood Road west of the train station. It is classified as a Principal Urban Arterial south of U.S. Route 40 and an Expressway north of U.S. Route 40 with an average daily traffic volume of 24,802 vehicles.<sup>4</sup> Also known as Route 24, it is a state highway that runs from Aberdeen Proving Ground to the south, through Bel Air, and to the Pennsylvania state line to the north, with several major interchanges near the study area including at U.S. Route 40 and Interstate 95. Heading north from Aberdeen Proving Ground, Emmorton Road consists of one lane in each direction and transitions to two lanes in each direction at Edgewood Road where it becomes an Expressway.

**Pulaski Highway (U.S. Route 40)**

Pulaski Highway, also known as U.S. Route 40, passes through Edgewood east-to-west on the north side of the community. It is a divided highway with a center median, with two lanes in each direction, plus additional turn lanes at intersections. Pulaski Highway is classified as a Principal Urban Arterial

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<sup>2</sup> Harford County Traffic Counts, 2019, Harford County Office of Community & Economic Development

<sup>3</sup> Harford County Traffic Counts, 2019, Harford County Office of Community & Economic Development

<sup>4</sup> Harford County Traffic Volume Map, 2015, Maryland Department of Transportation, State Highway Administration

with various big box retail, commercial, and residential complexes along it. Average daily traffic volume on Pulaski Highway is 25,470 vehicles.<sup>5</sup>

### **Interstate 95**

While located outside of the immediate Edgewood Station study area, Interstate 95 is a significant east-west corridor for the region, Harford County, and Maryland as a whole. Vehicular connections between I-95 and Edgewood can be made via the cloverleaf interchange at Emmorton Road / Route 24. The segment of I-95 closest to Edgewood has an average daily traffic volume of 149,075 vehicles.<sup>6</sup>

## **BUS TRANSIT OPERATIONS**

### **Commuter Bus Service**

The Maryland Department of Transportation (MDOT) operates commuter bus service in Harford County under the authority of the Maryland Transit Administration (MTA). The MTA's Route 420 between Harve de Grace and Hopkins passes through Edgewood with stops along Pulaski Highway (U.S. Route 40) at Paul Martin Drive and Woodbridge Center Way, about 1.5 miles northwest of Edgewood Station. Route 420 service runs on weekdays to serve peak-hour commuter demand. More information on this service can be found at <https://www.mta.maryland.gov/schedule?type=commuter-bus>.

### **Local Bus Service**

Local fixed-route bus service is operated by Harford Transit. Harford Transit runs six LINK bus routes, two of which serve Edgewood, with major transfer hubs located in Bel Air and Aberdeen. Route 2/Blue Line operates between Bel Air and Aberdeen with stops in Edgewood. Route 2/Blue Line stops closest to Edgewood Station at the intersection of Nuttal Avenue and Edgewood Road, about 1,000 feet north of the station. Route 3/Silver Line operates between Aberdeen and Joppatowne with stops along Pulaski Highway at various commercial complexes and shopping centers. Transit passenger amenities like shelters, seating, lighting do not exist at bus stops within the study area adjacent to Edgewood Station.

Harford County's HarfordNEXT Master Plan has identified several goals to improve and expand the bus transit network, including improvements to passenger amenities at bus stops, especially those that increase safety, comfort, and accessibility. Additionally, to work towards the goal of improving transit services and increasing ridership, HarfordNEXT envisions improved bus routes, schedules, and headways, new fixed-route services, and increased services to Edgewood Station in order to feed Maryland Area Regional Commuter (MARC) rail service.

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<sup>5</sup> Harford County Traffic Volume Map, 2015, Maryland Department of Transportation, State Highway Administration

<sup>6</sup> Harford County Traffic Volume Map, 2015, Maryland Department of Transportation, State Highway Administration



*Bus stop and shelter on Pulaski Highway / U.S. Route 40, which serves MTA commuter bus route 420 and Harford Transit LINK Route 2/Blue Line and Route 3/Silver Line. Source: Google Maps*

**Park-and-Ride Lots**

Two park-and-ride commuter lots exist in Edgewood that are owned and maintained by the Maryland State Highway Administration. The 75-space Abingdon park-and-ride lot is located on Emmorton Road (Route 24), just southeast of its intersection with Edgewood Road. The 295-space Edgewood MARC Station park-and-ride lot is located on Edgewood Road (Route 755), and is split across both sides of the Amtrak and MARC tracks. Both of these park-and-ride lots are open to the public and free of charge to all users.

Harford County’s HarfordNEXT Master Plan has identified a goal to improve local park-and-ride lots to better encourage shifts to transit and ridesharing. To achieve this, HarfordNEXT proposes improving intermodal connectivity by providing MTA and Harford Transit LINK services to park-and-ride lots in the county.

**Paratransit and Demand-Response Service**

In accordance with the Americans with Disabilities Act of 1990, Harford Transit provides paratransit services for persons with disabilities and seniors in need of transportation. Trips are made by appointment on a first-come, first-served basis. Service is operated on weekdays and select holidays and only within Harford County. Harford Transit also offers Extended Demand Response Service to eligible individuals with disabilities, senior citizens, and low-income individuals.

**Carpool and Vanpool**

The Harford Commuter Assistance program offers commuters help with starting and joining carpools and vanpools in the county. Aberdeen Proving Ground employees currently run over thirty vanpools to both the Edgewood and Aberdeen sides of the facility. Leased vans are available via Rideshare by Enterprise.

**RAIL TRANSIT OPERATIONS****Maryland Area Regional Commuter (MARC)**

The Maryland Department of Transportation (MDOT) operates commuter rail service under the authority of the Maryland Transit Administration (MTA). The Penn Line of the Maryland Area Regional Commuter (MARC) system serves Edgewood with service to Baltimore Penn Station and Washington Union Station. Travel times on the Penn Line are approximately 25 minutes from Edgewood to Baltimore Penn Station and approximately 90 minutes from Edgewood to Washington Union Station. Not all Penn Line trips serve Edgewood, resulting in a service schedule that restricts weekday commuting options and does not serve the employment needs of the community. Weekday service south to Baltimore and Washington DC includes six trains, only two of which fall within the morning peak commuting period. Northbound service from Washington DC and Baltimore back to Edgewood includes seven trains, only two of which fall within the evening peak commuting period. Daily ridership at Edgewood Station is 293 passengers.<sup>7</sup>

Harford County's HarfordNEXT Master Plan has identified several goals to improve and expand commuter rail service, including working with MTA to provide additional MARC service outside of peak hours and on weekends and expanding service to Delaware and Pennsylvania.

The MARC Growth and Investment Plan (MGIP) Update 2013-2050 identifies TOD as a strategy to increase ridership while supporting sustainable communities and economic health. The MGIP focuses on four primary objectives:

- Maintain state of good repair
- Increase ridership
- Improve service
- Enhance the customer experience

The MGIP identifies a number of strategies and actions that will improve service to the Edgewood station including:

- Maintaining the MARC system in a state of good repair contributes to a positive passenger experience. The procurement of new rail cars and locomotives improves customer experience. Track and signaling improvements contribute to reliability, on-time performance and safety.

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<sup>7</sup> HarfordNEXT / Maryland Department of Transportation (MDOT)

- There are plans in the 2020 to 2029 timeframe for new storage and maintenance facilities in the Penn Line North area. This would help to support expansion of peak service to the Aberdeen and Edgewood areas in the 2030 to 2050 timeframe and a potential connection to SEPTA to the north.
- General improvements to enhance the customer experience include e-ticketing, the provision of bike racks at stations, EV charger installations and improved transit connectivity throughout the Baltimore region.

**PEDESTRIAN AND BICYCLE FACILITIES**

Edgewood is served by a network of sidewalks on many of its streets, including those in and around the study area and Edgewood Station. Recently completed work on Edgewood Road features new and reconstructed sidewalks between Willoughby Beach Road and Aberdeen Proving Ground, with direct links to the platforms and passenger amenities at Edgewood Station. Hanson Road has also had sidewalks installed recently between Boxelder Drive and Emmorton Road, with an extension to Meadowood Drive to be installed in the near future. Other streets like Willoughby Beach Road and Trimble Road also have segments of sidewalk, but pedestrian access and comfort is negatively affected by long crossing distances, missing sidewalk segments, lack of marked crosswalks, multiple travel lanes, driveways, high vehicular speeds, and pedestrian-unfriendly design treatments such as slip lanes at intersections.



*Sidewalks and crosswalks along Edgewood Road at the entrance to Edgewood Station. Source: Google Maps*

On-street bicycle facilities are limited in Edgewood. Curbside bicycle lanes are marked on approximately one-half mile of Edgewood Road between Willoughby Beach Road and Aberdeen

Proving Ground, connecting directly to the study area and Edgewood Station. However, this pair of bicycle lanes offers no physical protection or design treatments at intersections, and stops short of connecting the study area and station with the more central commercial and residential areas of the community north of Willoughby Beach Road. Additionally, as noted in Harford County’s 2013 Bicycle and Pedestrian Master Plan, Pulaski Highway / U.S. Route 40 is designated as a State Bicycle Route but lacks marked, dedicated space for cyclists.



*On-street bicycle lane on Edgewood Road, just north of Edgewood Station. Source: Google Maps*

Several pedestrian and bicycle destinations and activity centers exist in and around the study area and Edgewood Station that contribute to demand for such facilities, as well as the need for new and improved facilities. These destinations and activity centers include:

- Edgewood Station
- Aberdeen Proving Ground
- Deerfield Elementary School
- Edgewood Elementary School
- Edgewood Middle School
- Edgewood High School
- Boys & Girls Clubs of Harford and Cecil Counties
- Harford County Library
- Edgewood Plaza Shopping Center

Harford County's HarfordNEXT Master Plan has identified several goals to improve and expand pedestrian and bicycle facilities to elevate connectivity, safety, access, and overall community mobility. This includes implementation of a Safe Routes to School program, provisions for bicycle parking for commercial developments, prioritization of needs for new and improved pedestrian links, and additional traffic calming, Complete Streets, and road diet design efforts to make streets more inviting and safer for pedestrian and bicycle travel. The County has identified specific pedestrian and bicycle needs, including sidewalks on Edgewood Road between Emmorton Road and Pulaski Highway. The County is also in the process of updating its Trail Plan, which will emphasize the need for pedestrian and bicycle safety. A proposed bicycle path along Willoughby Beach Road and Trimble Road will be included in this plan.