|Eldersburg/Sykesville

## Road Network

The Eldersburg/Sykesville Subarea (broadly referred to as the "Freedom Area") is in the southeastern corner of Carrol County, centered on the intersection of MD 32 and MD 26. MD 32 is classified as a principal arterial for its full length through the subarea and provides access south to Howard County and north to Finksburg and Westminster, while MD 26 -which provides access east to the Baltimore metropolitan area-is classified as a principal arterial only between the western branch of Liberty Reservoir and Emerald Lane and is classified as a minor arterial elsewhere in the subarea The area is also bisected in a northsouth direction by MD 97, which is classified as a major collector south of MD 26 before entering Howard County and ultimately onward Montgomery County, passing through Brookeville and Olney on its way to Wheaton and Silver Spring. North of MD 26, MD 97 is classified as a minor arterial and provides access to Westminster.


## Land Use and Demographics

Despite a low overall growth rate, the Eldersburg/ Sykesville Subarea is expected to add the second most amount of people, households, and jobs in Carroll County, as shown in Table 5.4

Over the past several years, the Eldersburg/Sykesville Subarea has rezoned many of its industrial parcels to commercial, creating ample opportunity for retail and office growth in the area. Most of the growth is expected to be contained along the main corridors, MD 26 and MD 32.

The most significant growth within the Eldersburg/ Sykesville Subarea is along MD 26, in Eldersburg's main growth area. Within the past five years, several major big box and chain stores have opened along MD 26 in Eldersburg. Retail jobs will continue to grow along the corridor, but the majority of Eldersburg's commercial growth will be in the northeast quadrant of the intersection of MD 26 and MD 32 and the growing Liberty Exchange Business Park. Additionally, about 300 new jobs are predicted east of the intersection of MD 26 and MD 97

The Freedom Maryland National Guard Readiness Center was completed in 2020 and the development of Warfield at Historic Sykesville is underway. Warfield at Historic Sykesville will consist of new residential and commercial uses, including 145 residential units. While the new Freedom Readiness Center generated approximately 10 full-time jobs, it houses hundreds of members of the National Guard for weekend drills. There are no areas of projected increase in worker population, indicating that traffic flow will be largely into and through this subarea.

Table 5.4 Freedom Area Growth 2020-40

| Type | Growth | Percent |
| :---: | :---: | :---: |
| Population | 2,316 | $6.2 \%$ |
| Workers | $(669)$ | $-3.5 \%$ |

Table 5.3 Recent and Committed Projects in the Freedom
$\left.\begin{array}{|cccc|}\hline \text { Table 5.3 Recent and Committed Projects in the Freedom } & & \text { Project } & \text { Status }\end{array} \begin{array}{c}\text { Construction } \\ \text { Cost }\end{array}\right]$


Figure 5.8. (left) Freedom Area In- Process Residential Developments and Population Growth 2020-40. [NOTE: The negative growth shown along MD 32 results from the closure of the Springfield Hospital Center.] Figure 5.9. (right) Freedom Area In-Process Commercial Developments and Employment Growth 2020-40.

## Commuter Flows

Eldersburg/Sykesville borders Howard County and Baltimore County, two counties with thriving job markets. Accordingly, a large portion of Eldersburg/Sykesville residents commute into these counties. Eldersburg/Sykesville is only the third most popular employment location for residents, behind Howard County and Baltimore County, and only $10 \%$ of residents work in other subareas within Carroll County.

Though residents tend to work elsewhere, more Eldersburg/Sykesville workers come from within the same subarea than anywhere else, and the second largest shares come from Baltimore County and the rest of Carroll County.


Figure 5.10 Commuting to Eldersburg/Sykesville


Figure 5.11 Commuting from Eldersburg/Sykesville

## Local Goals and Policies

Transportation challenges in the Eldersburg/Sykesville Subarea are related to three factors: historical indecision as to the function of MD 32, a mismatch between the County's land use plan, access controls, and supporting roadway network, and the state's interest and ability to deliver on a project which supports the County's vision. The earliest state plans for MD 32 envisioned a freeway running from Annapolis to Westminster that have since been curtailed in favor of dualized highway only as far as l-70, a project which will soon be completed. Looking ahead, despite local master plans calling for a dualized 4-lane roadway, the MD 32 Planning and Environmental Linkages (PEL) study completed by MDOT SHA concluded that such widening is not justified based on traffic forecasts through 2040. Still, the concentration of residential growth along MD 32, traffic volumes from further north towards Westminster and frequent driveway and side street access (without secondary access to MD 26) have created localized congestion that is difficult to resolve without further investments in the secondary road network and access controls.

The County's 1962 Major Street Plan provided for several new major collectors to be constructed east of MD 32 that would knit together the local roadway network and provide connectivity to the area's major roadways for new developments. Of these, most of Macbeth Way and parts of Georgetown Boulevard and Monroe Avenue have been constructed. The local road network has developed into a connected set of streets that provide access between residential neighborhoods and the arterial throughways. There is some disconnectedness in the southeast quadrant which of MD 32 and MD 26 which should be addressed, although there is no consensus on how to do so.

In contrast, MD 26 primarily provides access to local destinations and serves as a commuting route into Baltimore County for Eldersburg and Sykesville residents, as communities to the north and south have their own arterial routes east (MD 140/I-795 and I-70, respectively), which were constructed largely as they were envisioned at the time the 1962 Major Street Plan was adopted.

These differing functions for the Freedom Area's arterials within the regional highway network have affected how the roadway corridors have developed in the area's core. Although the County's early master plans envisioned commercial development along both MD 26 and MD 32 as far south as Freedom Avenue in Eldersburg, development trends and land use designations have oriented commercial uses along MD 26 and only a short stretch of MD 32 between Piney Ridge Parkway/Macbeth Way and Johnsville Road/Bennett Road—a trend gently accelerated with the 2018 Freedom Community Comprehensive Plan—and maintained a primarily residential and rural character along MD 32 south of Eldersburg.

## Existing Traffic Conditions

The MD 26 corridor in Eldersburg experiences moderate intersection delay during peak hours and experiences reduced speeds between Ridge Road and MD 32 (See Figure 5.12). Its intersections with Panorama Drive and MD 32 operate at LOS D during both the AM and PM peak hours and its intersection with Ridge Road operates at LOS D during the PM peak hour. However, only at MD 32 do the eastbound and westbound approaches along MD 26 operate at LOS D or worse; at Panorama Drive and Ridge Road, eastbound and westbound approaches along MD 26 all operate at LOS C or better, while the northbound approach at Panorama Drive operates at LOS D and the northbound and southbound approaches at Ridge Road/Oklahoma Road operate at LOS E in the AM peak hour and LOS F and E, respectively, in the PM peak hour. This reflects prioritization of throughput on MD 26 over access to MD 26 from side streets.


Figure 5.12 Eldersburg/Sykesville Existing Traffic Conditions

## Existing Traffic Conditions Cont.

Typical travel speeds along Liberty Road through the commercial area range from 35-44 miles per hour in the eastbound direction and 30-34 miles per hour in westbound direction-dropping to as low as 20 miles per hour close to MD 32-during the AM peak hour. In the evening, travel speeds drop below 30 for a larger area along MD 26 through Eldersburg in both directions, and speeds drop as low as 15 miles per hour close to MD 32

By contrast, MD 32 does not have any intersections that operate at LOS D or worse other than at MD 26 , but experiences reduced travel speeds and queueing concerns through the center of Eldersburg between Johnsville Road/Bennett Road and Piney Ridge Parkway/Macbeth Way as well as at Freedom Avenue and Springfield Avenue. As along MD 26, side-street delays are greater than mainline delays along MD 32; all MD 32 signalized intersection approaches operate at B or better during the AM peak hour and LOS C or better during the PM peak hour, while all side-street intersections operate at LOS C or worse during the $A M$ peak hour and LOS D or worse during the PM peak hour.

Travel speeds along MD 32 operate from 35-44 miles per hour through most of the corridor, with reduced speeds (as low as 30 miles per hour) just north of Springfield Avenue and even more lower speeds (as low as 25 miles per hour in the northbound direction and 20 miles per hour in the southbound direction) north of MD 26 .

## Planning Approaches

Both the Freedom Community Comprehensive Plan and previous MD 32 planning studies recognize that a four-lane, dualized cross section of MD 32 would provide significantly more capacity than the roadway presently does. However, MDOT SHA's most recent planning study (2018) for MDOT SHA found that dualization of the roadway would not be necessary by 2040 to maintain acceptable operations. Similarly, the 2002 planning study for MD 26 proposed a four-to-six-lane dualized crosssection between MD 32 and the Liberty Reservoir; however, MDOT SHA's 2019 update of the MD 26 study found that traffic volumes had grown more slowly than expected. Widening and dualizing these arterials would require substantially more investment than making strategic improvements-whether along the arterial corridor or adjacent to it
The 2018 MD 32 Planning Study emphasizes strategic intersection improvements along MD 32 such as lengthening turn lanes or better managing access to reduce delays and queueing impacts. This approach supports traffic growth along the arterial roadway and is particularly useful when a high proportion of trips travel through the study corridor without turning onto or off of the arterial road.

A further study for MD 32 at MD 26 known as the Practical Design Concept Study identified strategies to improve intersection operations without a grade separation or major reconstruction of the intersection. Two concepts were identified as the most promising: creating a peak-hour only "managed lane" by connecting a series of acceleration and deceleration lanes along the south side of MD 26 east of MD 32; and using the existing roadway network as a "quadrant roadway" that diverts left turns through an intersection to use another intersection with less congestion to facilitate the left-turns.

The approach endorsed by the 2018 Freedom Community Comprehensive Plan prioritized increasing connectivity paralle to arterial roadways such as MD 26 and MD 32. This approach is intended to minimize the impact of local traffic on arteria intersections and helps to mitigate an imbalance between mainline and side street delays by allowing motorists from adjoining areas to access destinations in the corridor without having to turn onto the arterial road.

## 2040 Traffic Conditions with No Improvements

Traffic conditions along MD 26 are anticipated to deteriorate over the next two decades. While LOS at the Panorama Drive intersection will not degrade substantially, the MD 26/MD 32 intersection is forecast to drop to LOS F during the PM peak hour by 2040. In addition, the intersection of MD 26 with Hemlock Drive will remain the same, MD 26 with Georgetown Boulevard will degrade to LOS D during the PM peak hour, and the intersections of MD 26 with Fallon Road will drop to LOS F during the AM and PM peak hours. The intersection of MD 26 with Oakland Mills Road is forecast to drop to LOS E during the AM peak hour and LOS C during the PM peak hour by 2040. As they do today, side- street approaches to MD 26 will experience greater delay than eastbound and westbound approaches. Along MD 32, conditions will worsen to LOS D during the AM peak and LOS F during the PM peak at the Freedom Avenue intersection.


Figure 5.13. Eldersburg/Sykesville 2040 No-Build Traffic Conditions

## Recommended Approach

Neither MD 26 nor MD 32 need to be dualized during the twodecade time horizon of this analysis. However, the nature of each arterial roadway demands a different approach for each. Along MD 32, through traffic volumes at the most congested intersections (Sandosky Road/Raincliffe Road and Freedom Avenue) are five to seven times higher than side-street volumes. Therefore, this analysis recommends prioritizing throughput along MD 32 as outlined in the 2018 MDOT SHA planning study.

The most congested intersections along MD 26, in contrast, have mainline volumes only three to four and a half times higher than the side street volumes. Therefore, prioritizing connectivity alongside MD 26 will help to address local access needs without further burdening through travel on the arterial. These approaches are consistent with the Freedom Community Comprehensive Plan and MD 32 Planning Study, although the Freedom Community Comprehensive Plan would benefit from strengthening of its secondary road network recommendations, particularly in the southeast quadrant of MD 32 and MD 26 .

A quadrant roadway would require less (if any) construction than the "managed lanes" concept and could be quickly implemented to address delay at MD 32 and MD 26

## Note

*Planned major street MacBeth Way and Lee Lane from the 2019 Carroll County Master Plan are recommended for removal. Most promising potential improvement \#3 connecting sections of MacBeth Way and Lee Lane may not be feasible and othe alternatives for connectivity should be explored

Table 5.5 Most Promising Potential Improvements for the Eldersburg/Sykesville Area

Construct Dickenson Road between Oklahoma Road and
1, 2, 4 Georgetown Boulevard and manage access to MD 26 Cost: \$1M to \$2.5M
-examine the need for
nnectivity in the southeas quadrant of MD 32 and MD 26 Cost: TBD

Implement the Quadrant Roadway concept from the MD 32 at MD 26 Practical Design Concept Study.
Cost: $\mathbf{\$ 1 0 0 K}$ to $\mathbf{\$ 2 5 0 K}$

## Extend Georgetown Boulevard

 between Londontown Boulevard and Progress Way Cost: $\mathbf{\$ 2 . 5 M}$ to $\$ \mathbf{5 M}$Construct strategic operational improvements along MD 32
7 between the Howard County line as outlined in the MD 32

Planning Study
Cost: $\mathbf{\$ 1 0 M}$ to $\mathbf{\$ 2 5 M}$

This will provide connectivity to all the commercial properties along the north side of MD 26 for residents of the residential neighborhoods in the northeast quadrant of Eldersburg without requiring them to travel on MD 26 or MD 32, as well as allow inter- parcel connectivity between the commercial properties along MD 26 without requiring motorists to turn onto or travel on Liberty Road. The planned eastern segment of Dickenson Road between Oklahoma Road and Monroe Avenue would partially duplicate existing connectivity provided by Monroe Avenue north of MD 26 and should be prioritized lower than this western segment.

This study does not recommend a specific improvement for this quadrant However, the lack of a connected network in the southeast quadrant of MD 32 and MD 26 appears to hamper local circulation and add trips to MD 32 and MD 26 at the intersections where there is already the most congestion. *Connecting the two sections of MacBeth Way is the most logical route, although connecting the two sections of Lee Lane or extending Allen Drive to 2 nd Street may also improve the efficiency of the secondary roadway network.

This will improve performance at the MD 32 at MD 26 intersection by removing the turning phase from eastbound MD 32 to southbound on MD 26 , thereby reducing queues and delays for through travelers on MD 32. As noted in the MD 32 at MD 26 concept study, the quadrant roadway approach for the northeast quadrant (Londontown Boulevard and Georgetown Boulevard) could be implemented quickly and easily with signing, marking, and flexible delineators as a pilot of this concept.

In conjunction with the new segment of Dickenson Road, this will provide inter-parcel connectivity to the full northeastern quadrant of Eldersburg's commercial core, as well as reduce burden on the MD 26/MD 32 intersection. Limiting the extension to Progress Way maintains separation between the commercial/light industrial and residential land uses.

MDOT SHA has determined that the dualization of MD 32 is not warranted by forecasted traffic volumes through at least 2040. These improvements will improve traffic flow and reliability in the corridor.

## Explanation of Benefits/Impacts

Cost Range: Cost estimates used in this study come from a range of sources each with their own assumptions and methodology (i.e., level of design, year of expenditure, contingency percentage, etc.) Rather than identifying a specific cost estimate, a common range category is used across all projects for comparative purposes.
Potential Impacts: Impacts are shown as a surrogate measure for project complexity as well as the potential for environmental harm. Projects requiring right-of-way acquisition typically have a longer project development life- cycle than those that do not require acquisition; projects which cross streams or wetlands or are in the floodplain require additional analytical rigor and permitting than those which do not cross through; impact analysis was performed by desktop review using Maryland's Environmental Resources and Land Information Network (MERLIN).


Figure 5.14 Most Promising Potential Improvements in the Freedom Area

## Benefits and Impacts

According to the traffic analysis from the MD 32/MD 26 Practical Design Concept Study prepared by MDOT SHA, implementing the northeast quadrant roadway (Londontown Boulevard to Georgetown Boulevard) would improve intersection operations considerably. Performing the MD 26 improvements will ease access to the commercial properties along Liberty Road and improve operations at arterial intersections by reducing local motorists' need to travel through them. Specifically, constructing Dickenson Road between Oklahoma Road and Georgetown Boulevard will reduce side-street demand at those intersections. Along MD 32, constructing Georgetown Boulevard between Londontown Boulevard and Progress Way will reduce side-street demand at Progress Way as well as left-turn and southbound demand at the MD 32/MD 26 intersection. Finally, constructing strategic intersection improvements as outlined in the MD 32 Planning Study will improve travel times and reduce queuing delays for through travelers along Sykesville Road.
Constructing targeted improvements along Sykesville Road in the Freedom area will help reduce travel times from areas north of Eldersburg to points south along MD 32 and reduce demand on other north-south routes within the County such as MD 97 and MD 27. Increasing local connectivity for businesses along Liberty Road in Eldersburg will support the County's development and growth management goals by helping to focus commercial and industrial development in the core of the Freedom area.


Figure 5.15 EIdersburg/Sykesville 2040 Traffic Conditions with Most Promising Potential Improvements

## |Finksburg

## Road Network

Finksburg is in eastern Carroll County, southeast of Westminster and north of Eldersburg. MD 140, a principal arterial, runs in a northwest-southeast direction between Westminster and Reisterstown and is the primary axis along which Finksburg is oriented. Intersecting MD 140 in Finksburg is MD 91, which is classified as a minor arterial north of MD 140 and a major collector north of the Patapsco River before it crosses into Baltimore County near Upperco. South of MD 140, MD 91 is a principal arterial and runs 3.2 miles southwest to a " $T$ " intersection with MD 32, which is classified as a principal arterial south of MD 91 and a minor arterial north of the intersection and provides access south to Sykesville and north to Westminster.


Table 5.6 Recent and Committed Projects in the Finksburg Area Location Project Status $\begin{gathered}\text { Construction } \\ \text { Cost }\end{gathered}$

## MD 140-New

acceleration lane from Completed \$487,000
A Kays Mill Road onto eastbound MD 140

## Land Use and Demographics

The Finksburg Subarea is an area of Carroll County with a low population and moderate commercial activity. While the Subarea is on pace with the growth rates of the other Carroll County subareas over the next 20 years, actual development is expected to be minimal (Table 5.7).
The small amount of population, household, and employment growth anticipated to occur in the Finksburg areas will primarily occur along MD 140 from the Baltimore County line to Kays Mill Road. The Finksburg Corridor, as described in the 2013 Finksburg Corridor Plan, is home to small businesses, office, and retail uses, while surrounding areas of Finksburg contain more service and industrial uses.

## Table 5.7 Finksburg Area Growth 2020-40

| Type | Growth | Percent |
| :---: | :---: | :---: |
| Population | 657 | $6.9 \%$ |
| Workers | $(148)$ | $-2.7 \%$ |
| Employment | 305 | $12.1 \%$ |



[^0] and Employment Growth 2020-40

## Commuter Flows

Finksburg residents mainly work in Carroll County and Baltimore County. Of the residents who work in Carroll County, most work in Westminster. Over half of the workers employed in Finksburg live in Carroll County, with the largest share coming from Westminster.


Figure 5.18 Commuting to Finksburg


Figure 5.19 Commuting from Finksburg

## Local Goals and Policies


 alignment of arterial roads in Finksburg assumed its present form

 Pike near Roaring Run Community Park.


 the 1970 street plan.


 intersection improvements, bicycle and pedestrian facilities.

 The plan also noted that "the northwest quadrant of the MD 140/MD 91 intersection presents unique problems that do not appear to have any easy solutions."

## Existing Traffic Conditions

MD 140 through Finksburg experiences congested and highly directional traffic during peak hours; nearly three-quarters of traffic during the AM peak hour travels eastbound, while more than two-thirds of traffic during the PM peak hour travels westbound, and the peak hour directions experience congestion at the MD 140/MD 91 (Gamber Road/Emory Road). While there is significant intersection delay at the MD 140/MD 91 intersection-the intersection operates at LOS D during the AM and PM peak hours with 100 to 125- seconds of delay typical for through movements along MD 140travel speeds remain above 45 miles per hour along MD 140 and above 35 miles per hour along MD 91 during both peak hours. Planned residential and economic growth in points north and west (Westminster, Taneytown, southern Pennsylvania) will contribute to continued traffic congestion along MD 140 through 2040.

## Planning Approaches

Two overarching approaches could be taken to addressing Finksburg's transportation challenges: stay the course managing growth in the area, acknowledging that development farther north in Westminster will continue to strain the local transportation network and therefore transportation improvements in Finksburg must be supplied exclusively by the County or MDOT-SHA, or permit additional local development in order to leverage private investment into a better local transportation network. Staying the course would conform to the Carroll County Master Plan and the expectations of local residents but would require additional public funding, while permitting additional local development would lessen the need for public funding but represent a departure from four decades of local land use policy


Figure 5.20 Finksburg Existing Traffic Conditions

## Recommended Approach


 this analysis recommends "staying the course." The County and MDOT SHA should continue to pursue access management strategies along MD 140 in Finksburg, and to ensure that employees, customers, and residents of Finksburg are still able to access local destinations, the County should pursue strategic roadway connections that will allow for access to and from MD 140 from nearby residences and businesses while minimizing impacts on the arterial roadway.

## Table 5.8 Most Promising Potential Improvements for the Finksburg Area

| \# | Description | Justification | Potential Impacts (Y/N) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\begin{aligned} & \frac{n}{0} \\ & \frac{c}{0} \\ & \frac{0}{0} \\ & 3 \end{aligned}$ |  |
| 1 | Convert the intersection of Old Westminster Pike and MD 140 to right-in/right-out access Cost: \$100K to \$250K | This will allow construction of the continuous median, and aid in the consolidation of left turns at Dede Road and MD 91. | N | N/A | N | N |
| 2, 7 | MD 140 Median Construct a median from the Baltimore County line to MD 91, with a single break at Dede Road Cost: \$1M to \$2.5M | This will eliminate midblock left turns by removing the existing center turn lane and turn lanes at Cedarhurst/Old Gamber Road and consolidating left turns at MD 91 and <br> Dede Road. North/south movements across the Cedarhurst/Old Gamber intersection will not be permitted. | N | 0 | N | N |
| 3-4 | MD 140/MD 91 Jughandle Cost: \$1M to \$2.5M | The Baltimore Region's Constrained Long-Range <br> Transportation Plan includes $\$ 170$ million for a full interchange at the intersection of MD 140/MD 191. This is a worthy planning goal that can be implemented incrementally as land is acquired and resources become available. The most critical element of this improvement is the proposed jug-handle interchange to by remove left turns from MD 140 onto southbound MD 91 from the signal phase. This increase throughput on MD 140 and have a particular benefit to afternoon peak hour traffic which is the high point of congestion in Finksburg. | Y | 0 | N | N |
| 5 | Extend Dede Road across MD 140 to connect to Old Westminster Pike Cost: \$1M to \$2.5M | This will provide access from westbound MD 140 to Old Westminster Pike once the median and access closures are constructed, as well as provide local access between the Walnut Park industrial park and destinations along Old Westminster Pike. | Y | 0 | N | N |

[^1]
## Benefits and Impacts

These improvements will allow for greater separation between motorists heading to and from destinations within Finksburg and through travelers between Baltimore County and points north. Specifically, shifting local traffic from MD 140 to parallel roads by constructing a median and extending Dede Road will allocate more capacity along MD 140 to through vehicles and reduce delays caused by left-turning vehicles.

Construction of the jug handle at the MD 140/MD 91 intersection will eliminate left turns off MD 140 in both directions, making more signal cycle time available for through traffic. In the eastbound direction, this would reduce AM peak hour through delays to around 60 seconds and PM peak hour through delays to less than 20 seconds. In the westbound direction, queues to access the jug handle may extend back to and through the MD 140/MD 91 intersection during the PM peak, which would result in delays similar to existing conditions. Along MD 91, queues and delays would lengthen, especially for the southbound approach. In summary, the proposed jug handle would improve operations for the eastbound approach during both peak hours and for the westbound approach during the AM peak hour. The northbound and southbound approaches would have moderately longer queues and delays than under existing conditions, but volumes along MD 91 are much lower than along MD 140. Combined with access management improvements along MD 140 these improvements would improve throughput and reduce delays on MD 140 while maintaining access to businesses and residences in Finksburg.

Because MD 140 through Finksburg is a major route between Carroll County and the Baltimore metropolitan area, reducing delay through Finksburg would ease travel for commuters from Westminster and points west. Reducing delays on MD 140 may also induce some commuters who currently travel south on MD 32 towards and experience congestion at the MD 32/MD 26 intersection to travel south on MD 140 instead.


Figure 5.22 Finksburg 2040 Traffic Conditions with Most Promising Potential Improvements


[^0]:    Figure 5.16 (left) Finksburg Area In-Process Residential Developments and Population Growth 2020-40. Figure 5.17 (right) Finksburg Area In-Process Commercial Developments

[^1]:    Figure 5.21 Most Promising Potential Improvements in the Finksburg Area

