

Carroll County Transportation Corridors & Subarea Analysis

Planning Commission Update • July 2020

60 years, one plan.

1964 Comprehensive Plan



2014 Comprehensive Plan (as amended in 2019)

...the vision set forth by the **1962 Major Street Plan** has remained the focus of Carroll's transportation planning efforts ever since."

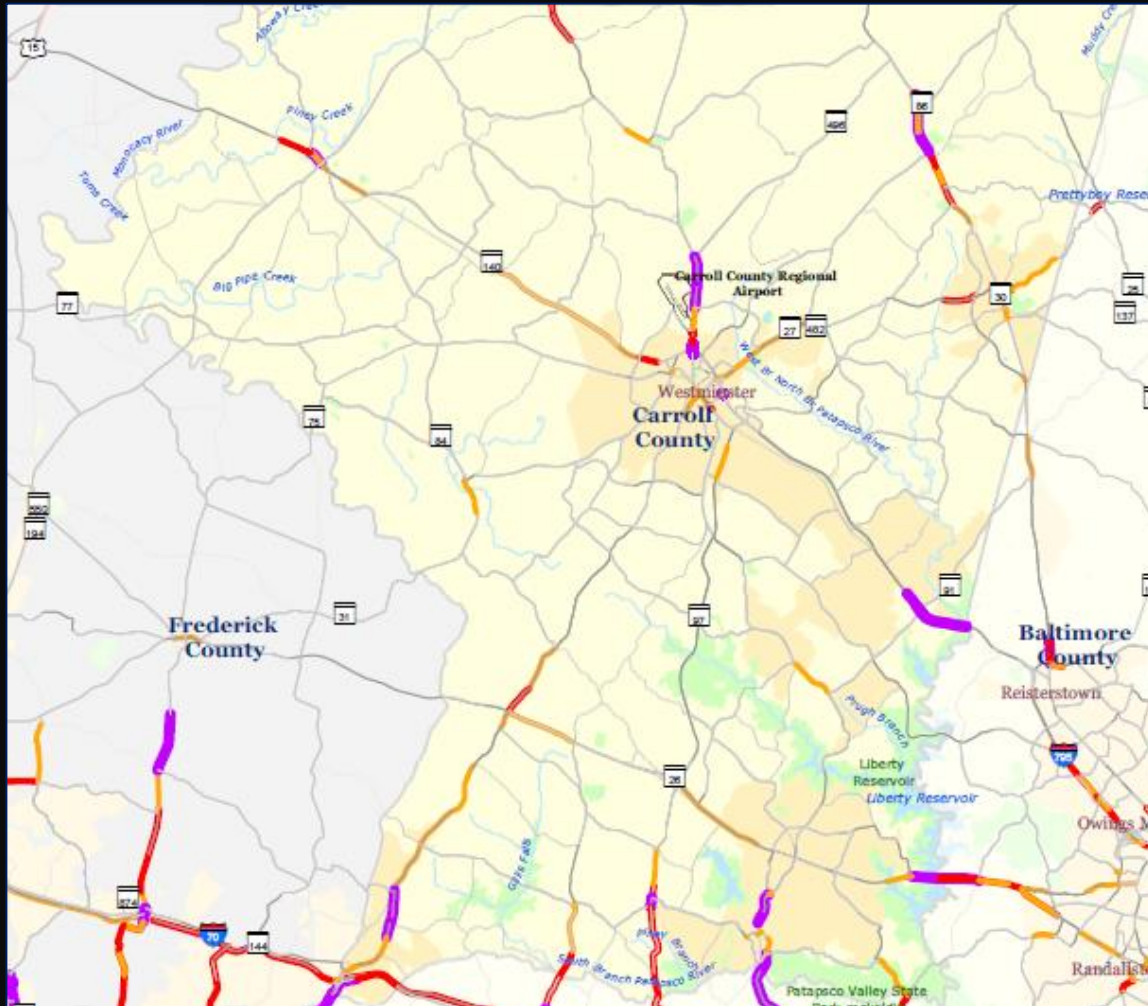
"...[it] is apparent that continuing to rely on the state exclusively for state transportation improvements is not realistic planning. It is becoming clear that the County will have to provide higher levels of funding for its transportation projects."

2020 Transportation Plan

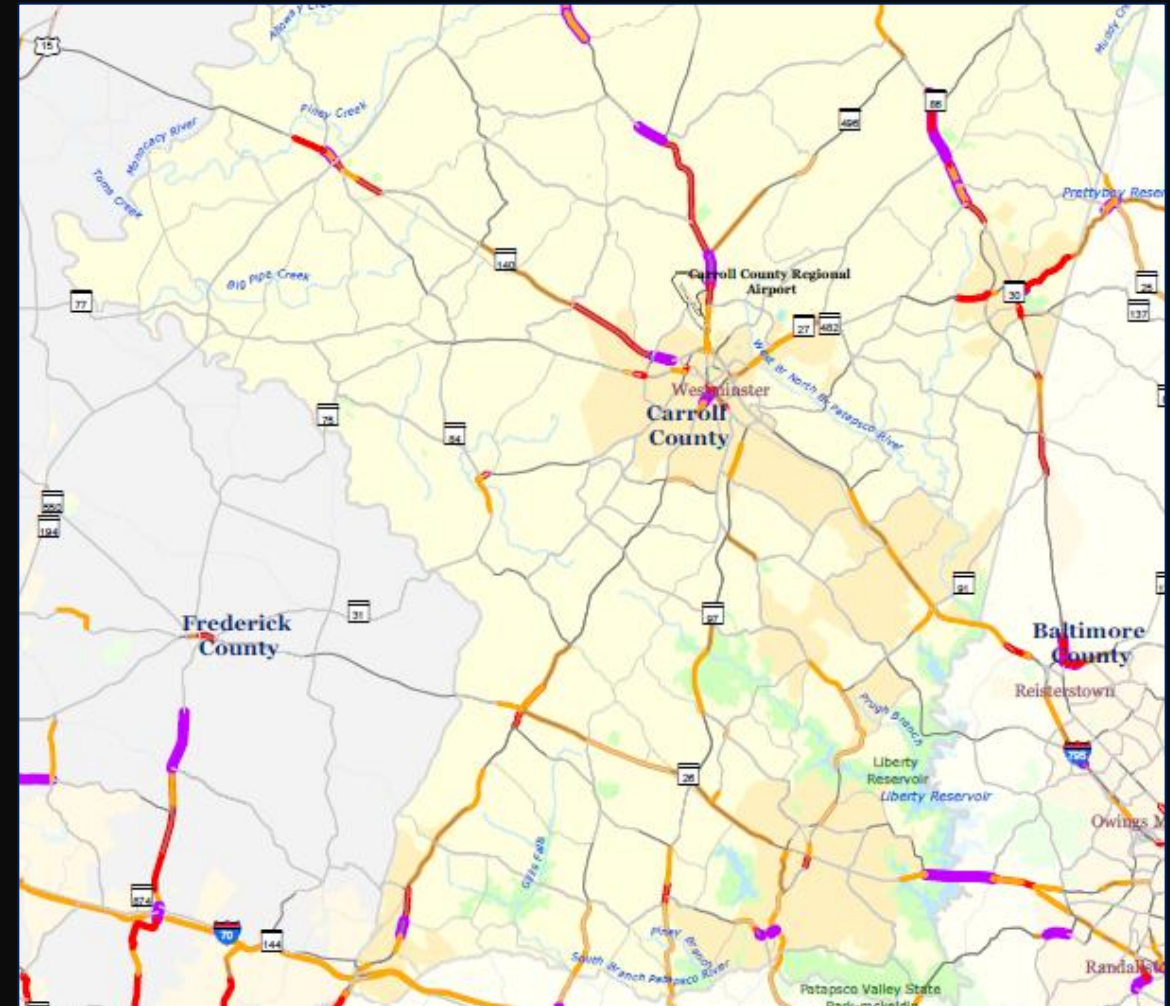


Another 25 years + \$870 million later...

2020 Traffic Congestion



2045 Traffic Congestion



Study Purpose

- assist County policymakers with **prioritization and implementation** of projects which will **improve mobility** within and approaching the County's DGAs over the next 20 years based on **objective standards**.
- identify **most promising potential improvements** in the context of fiscal realities and project delivery constraints.

Project Approach

Key Corridors and Subareas

- Growth Patterns
- Existing and Future Traffic Congestion
- Economic Development Plans

Traffic Issues & Challenges

- Local Access/Mobility
- Corridor Capacity
- Operational /Bottlenecks

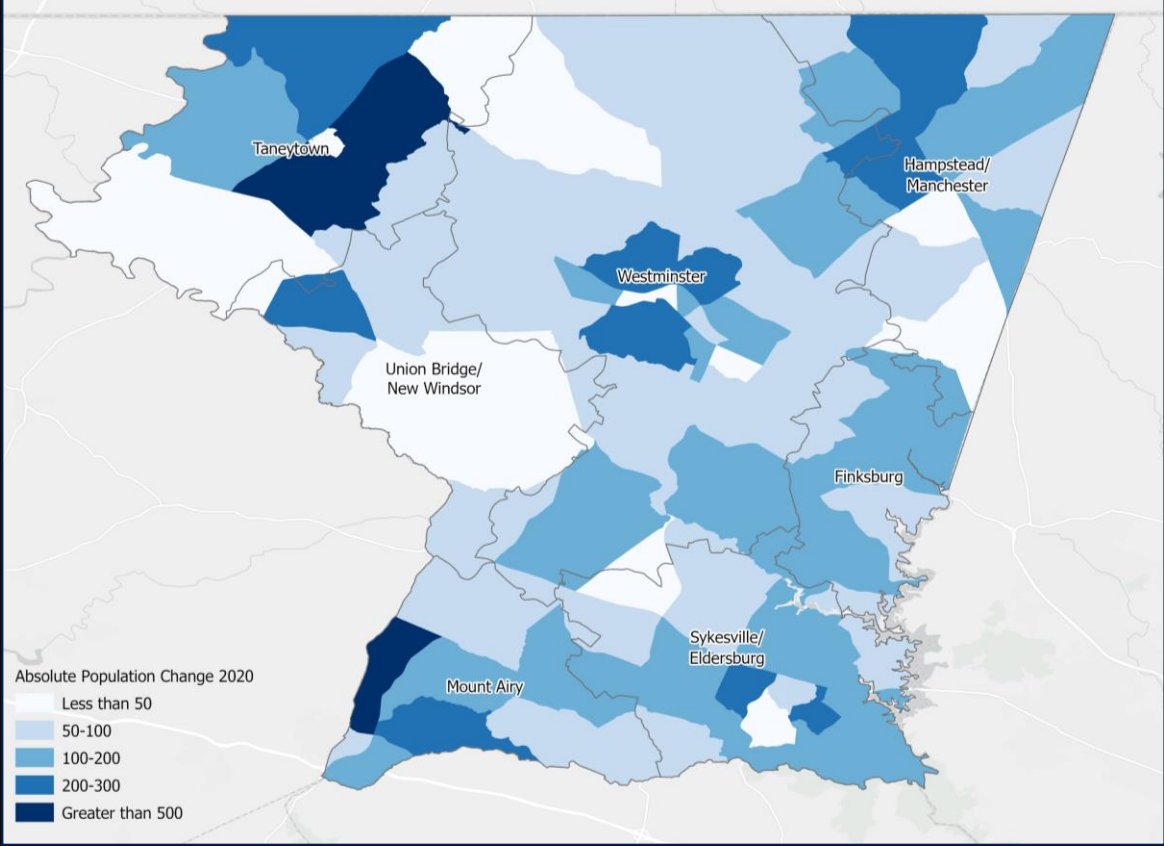
Possible Approaches

- Bypass/Major Road Expansion
- Intersection Improvements
- Local Street Grid
- Municipal plan inputs

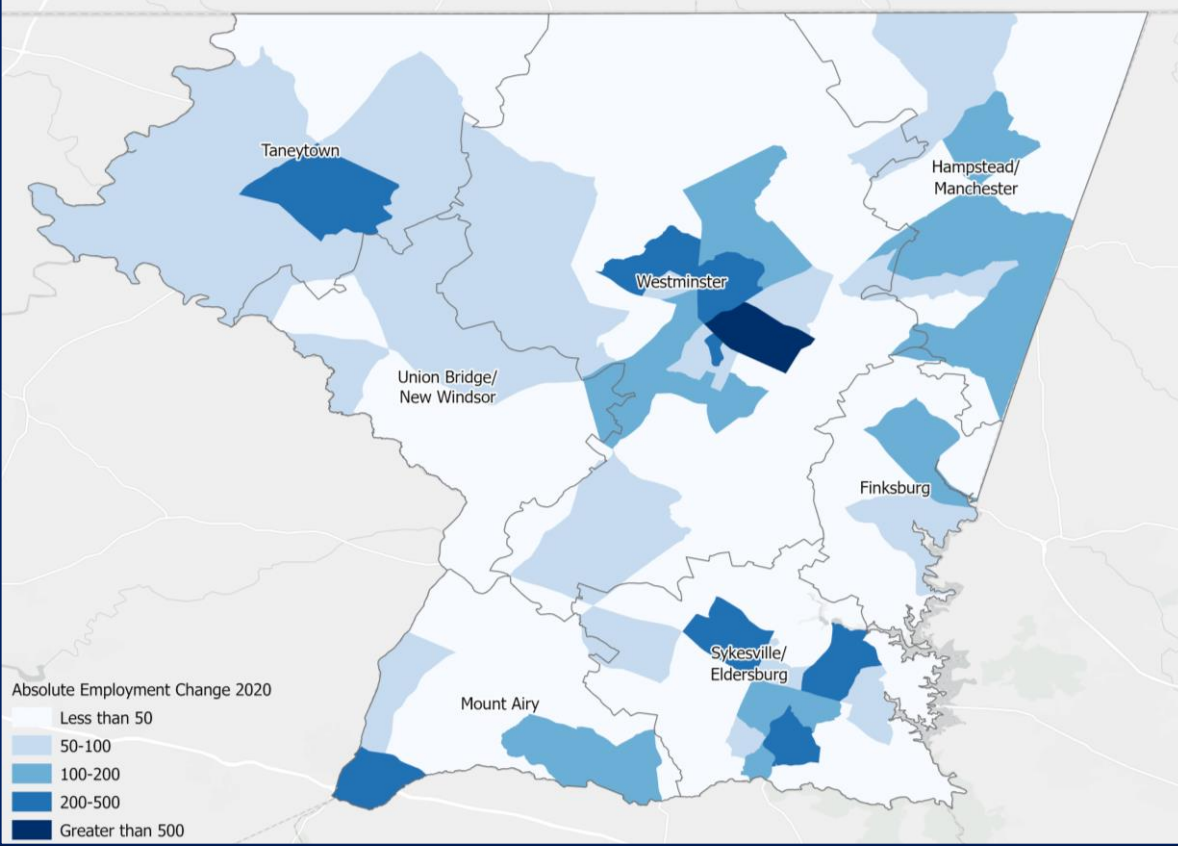
Most Promising Potential Improvements

- Congestion Improvement
- Cost
- Right-of-Way
- Environmental

2040 Population & Employment Growth



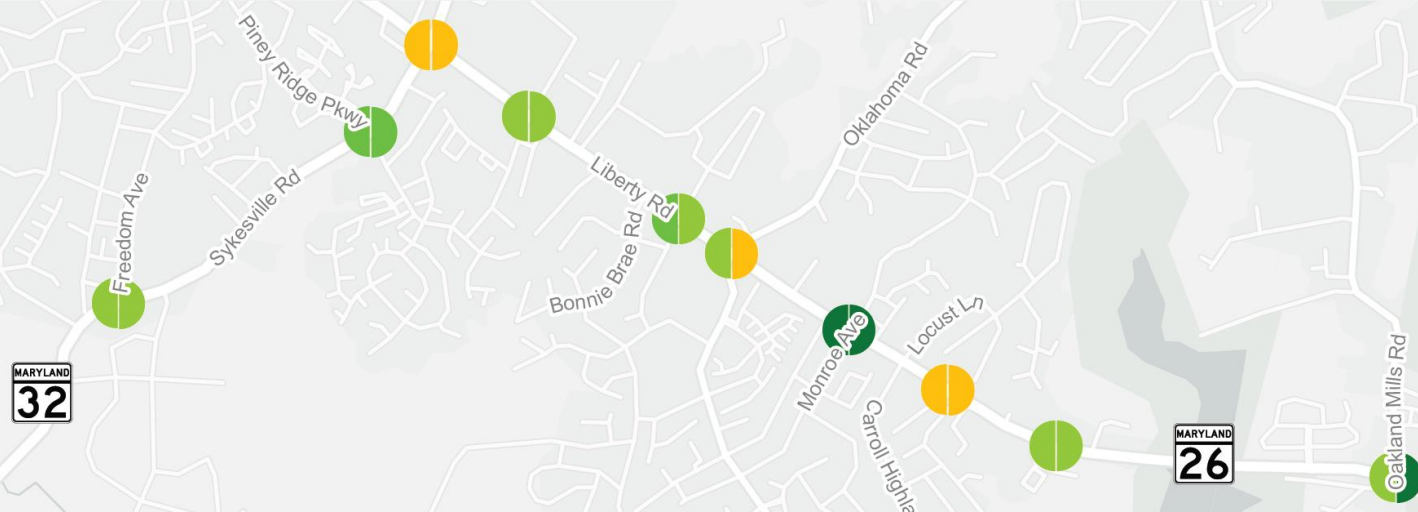
Population



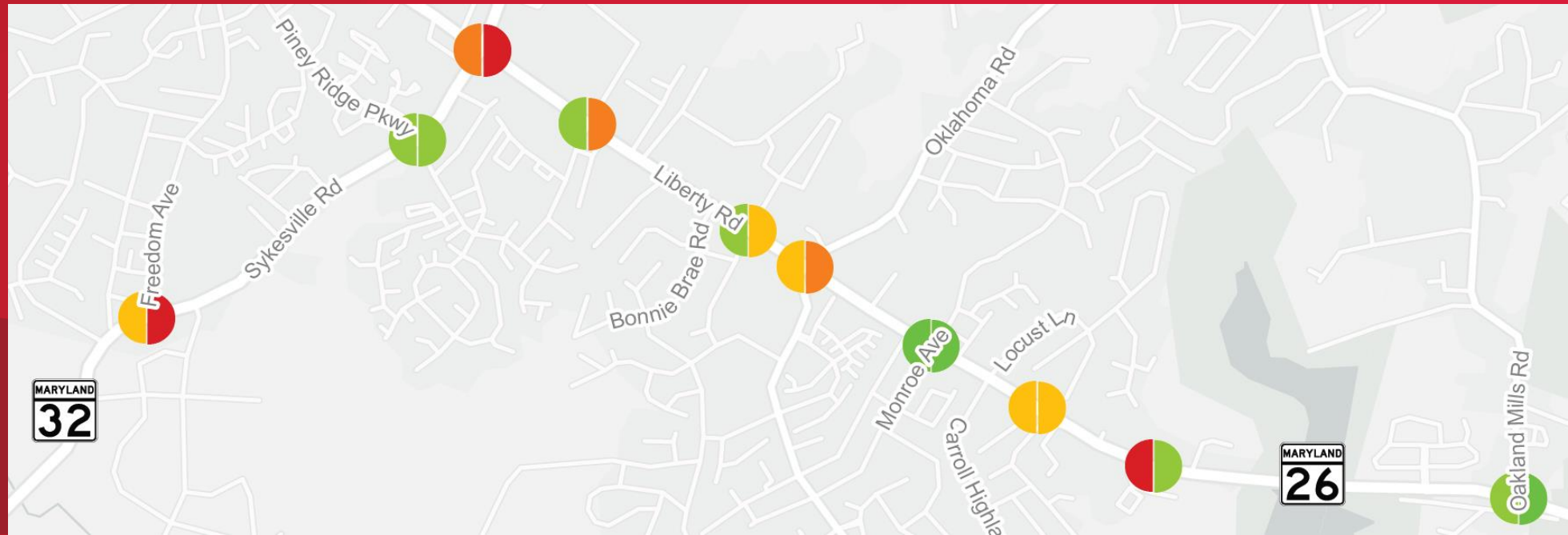
Employment

Eldersburg/Sykesville

Existing and Future Traffic Conditions



2020



2040

Key Issues



- MDOT SHA: Dualization not warranted until at least 2040
- Macbeth Way to Main Street improvements are typical of what can be expected: intersection improvements, turn lanes, auxiliary lanes.
- MD 32/MD 26 intersection is the primary capacity constraint.
- Frequent driveway and side street access have created localized congestion that is difficult to resolve without further investments in the secondary road network and access controls.

Most Promising Potential Improvements

Eldersburg/Sykesville

1

Implement the Quadrant Roadway concept from the MD 32 at MD 26 Practical Design Concept Study.

2

Construct Dickenson Road between Oklahoma Road and Georgetown Boulevard; restrict side street access.

3

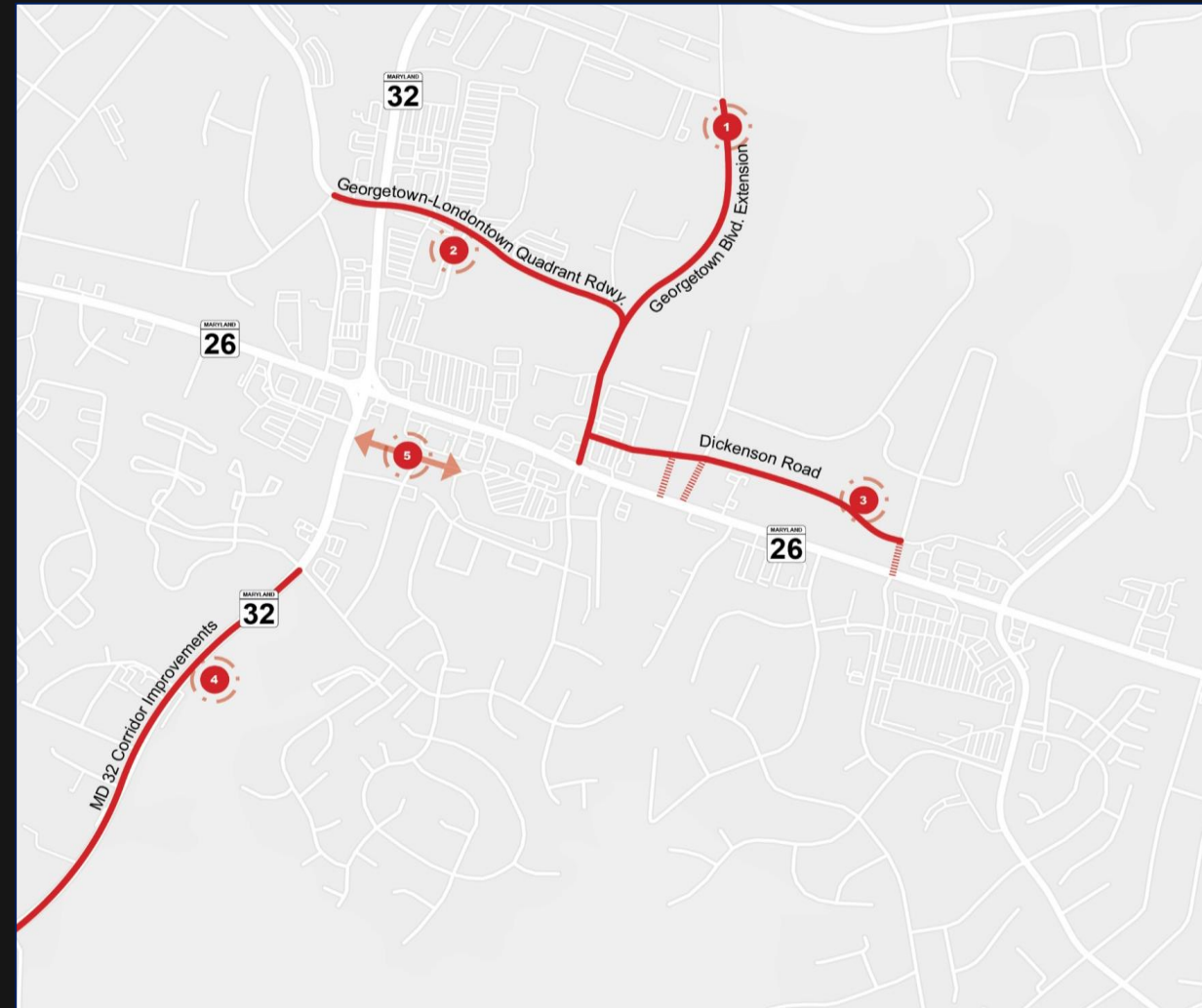
Extend Georgetown Boulevard to Progress Way.

4

Implement MD 32 operations and access improvements.

5

Re-examine options for connectivity in southeast quadrant.



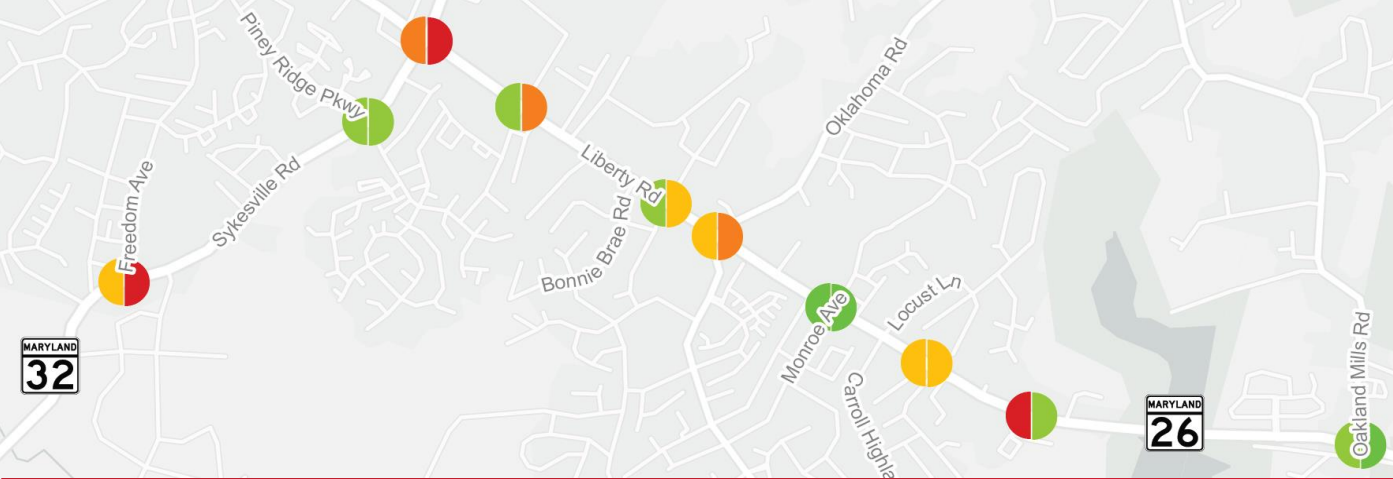
Georgetown/Londontown Quadrant Roadway

- Eliminating left turn phases increases capacity and improves safety
- No/low cost solution
- Rapid implementation



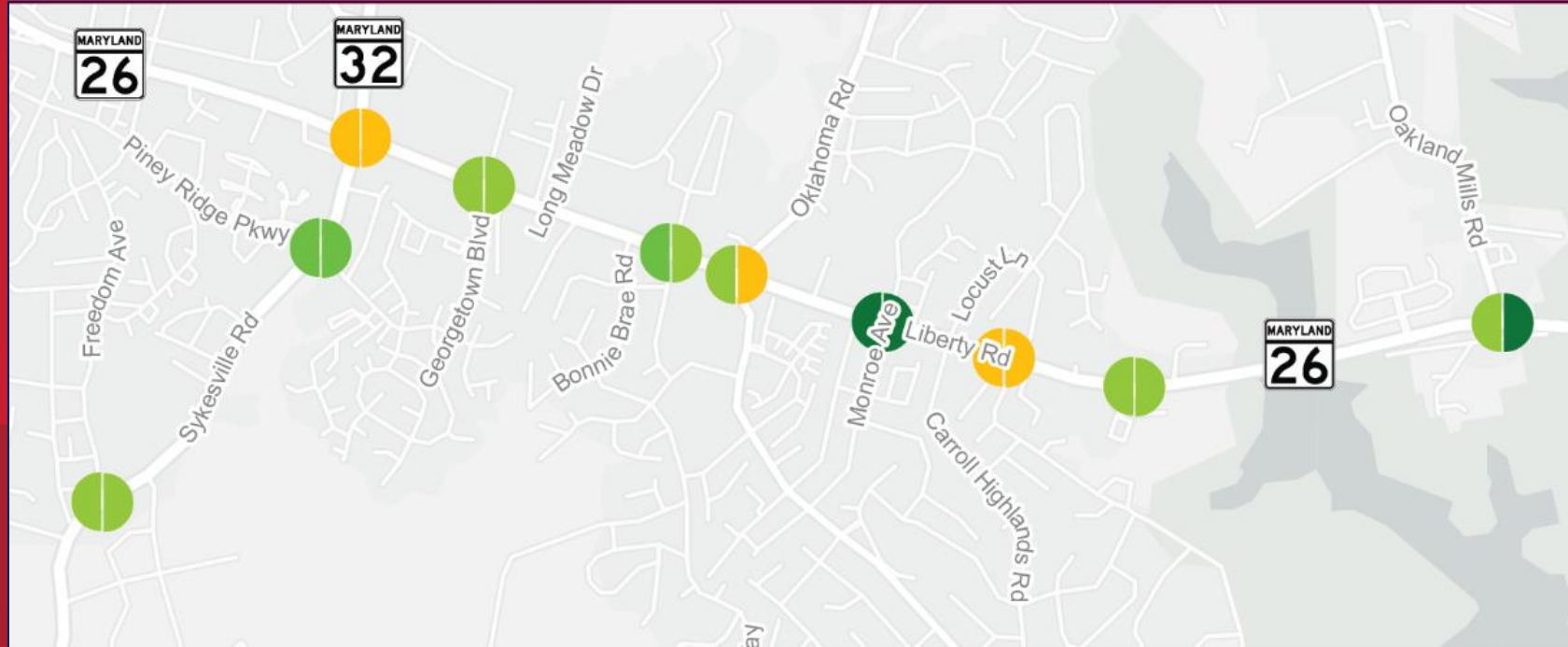
Eldersburg/Sykesville

Traffic Outcomes



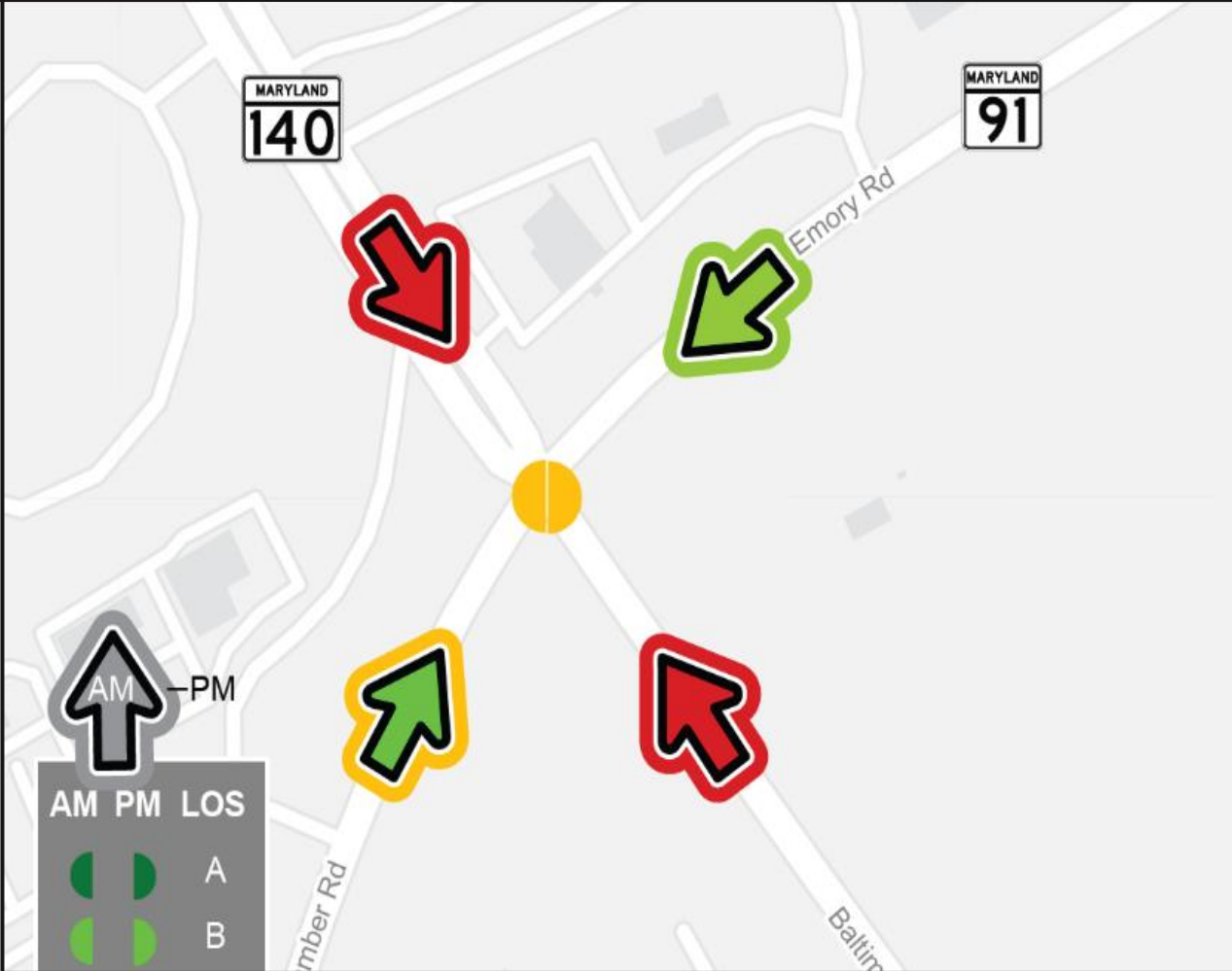
2040
No-Build

2040 with
Improvements

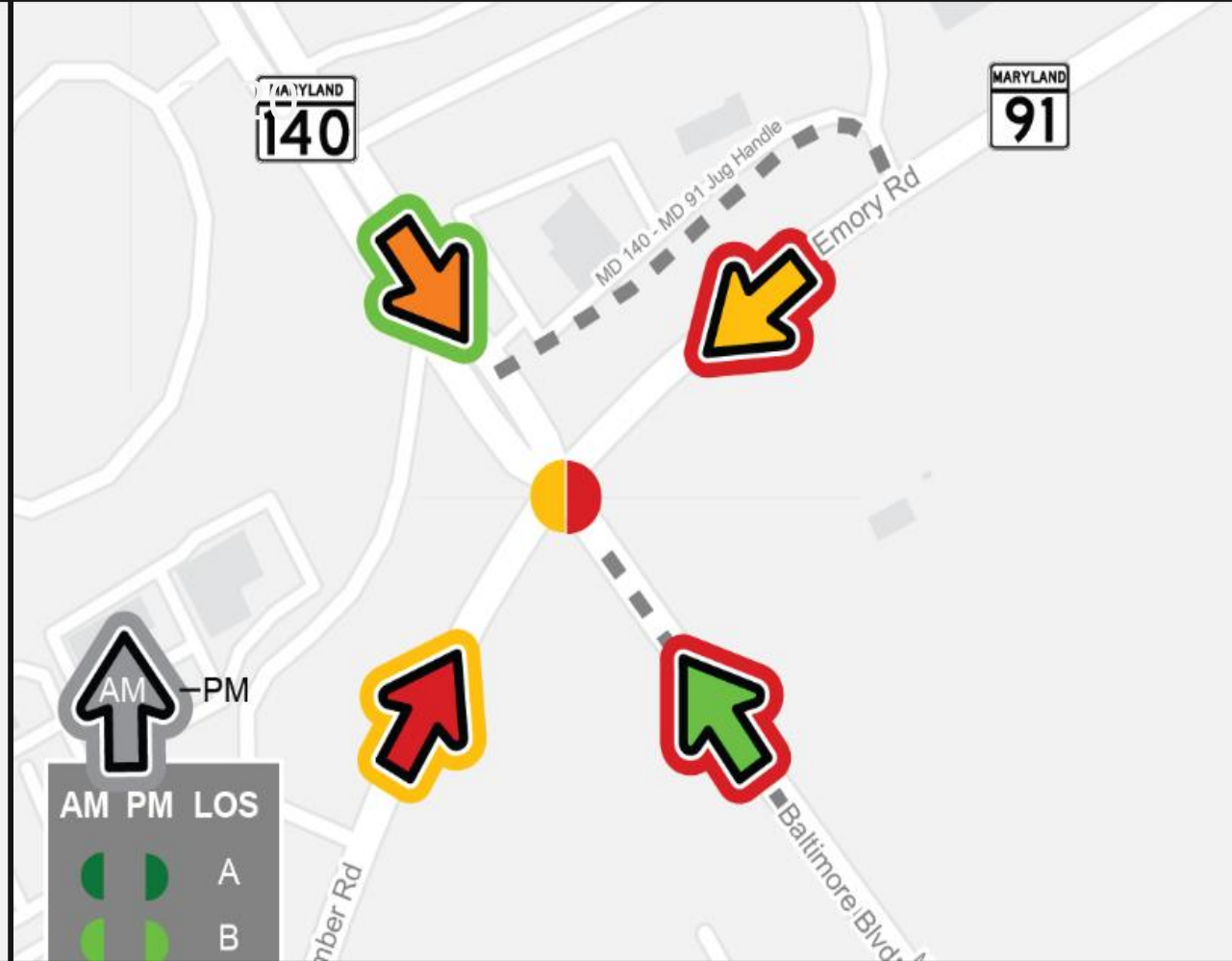


Finksburg

Existing and Future Traffic Conditions



2020

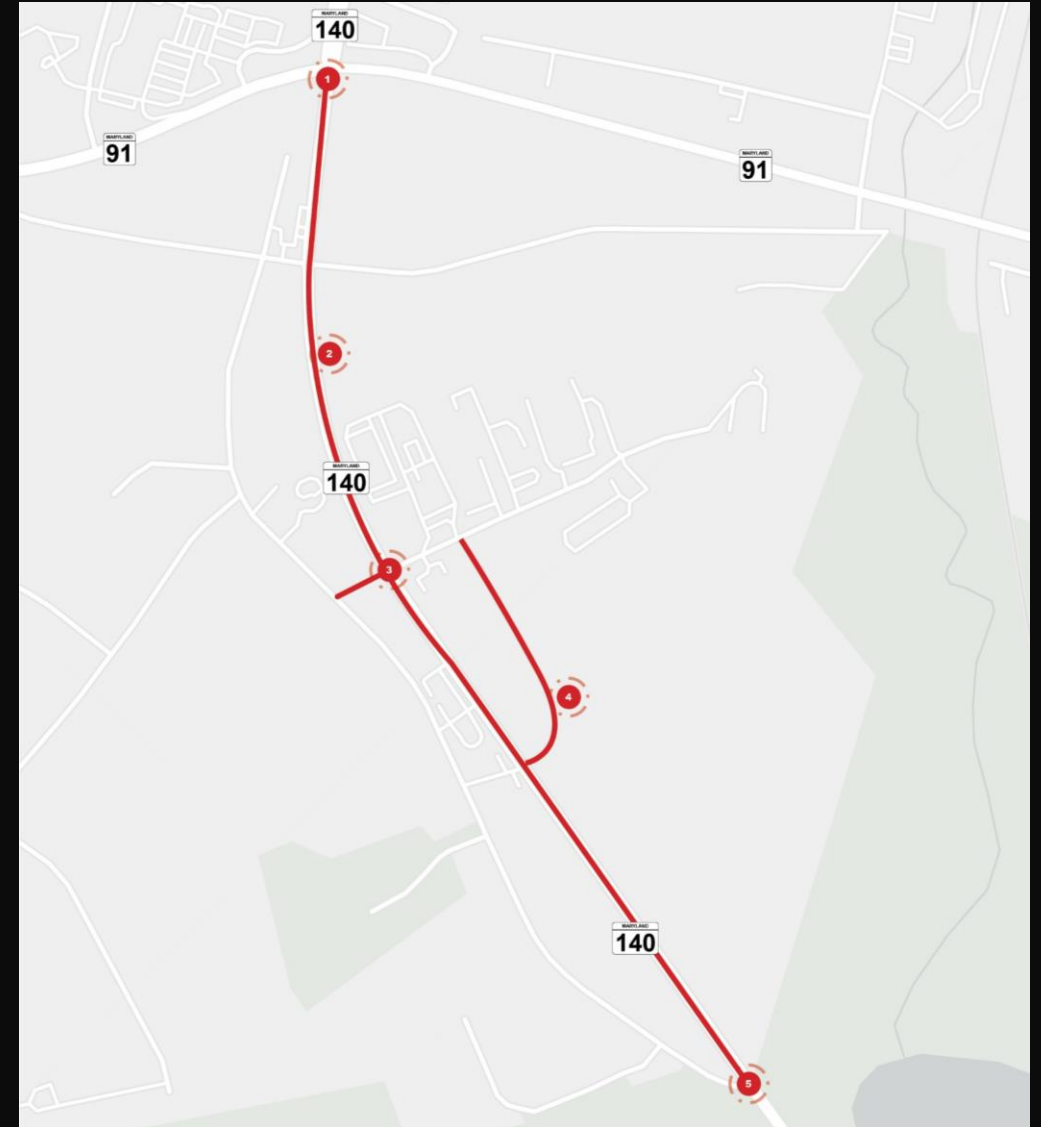


2040 with improvements

Most Promising Potential Improvements

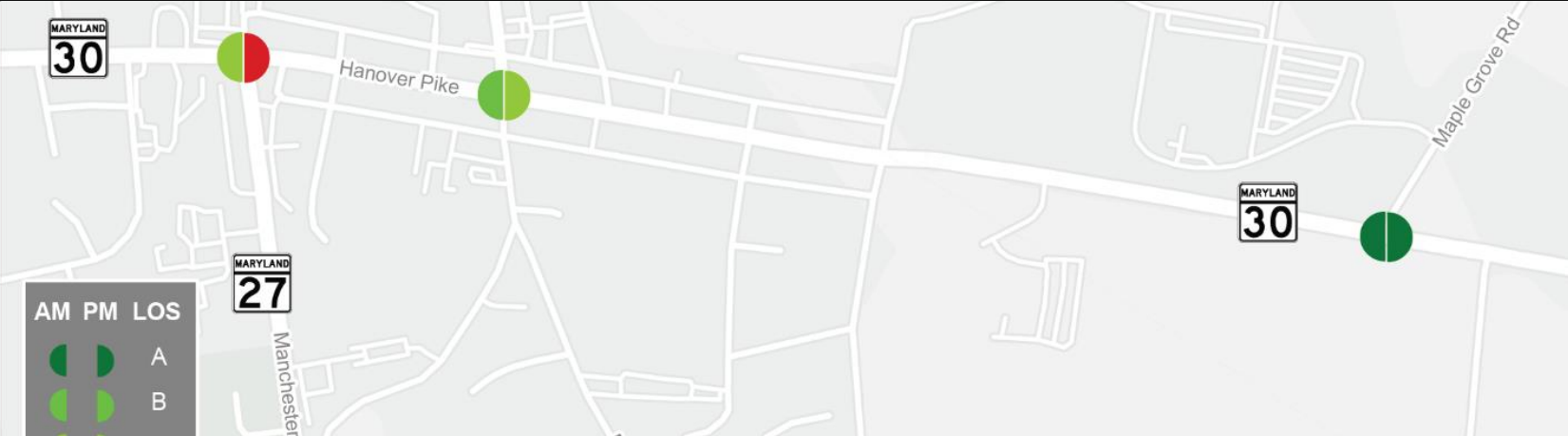
Finksburg

- 1 Construct to MD 140/MD 91 jughandle as recommended by MDOT SHA.
- 2 Install median along MD 140 from Baltimore County line to MD 91, with a single break at Dede Road
- 3 Extend Dede Road across MD 140 to connect to Old Westminster Pike.
- 4 Construct the Walnut Park Internal Circulation Road.
- 5 Convert the intersection of Old Westminster Pike and MD 140 to right-in/right-out access.

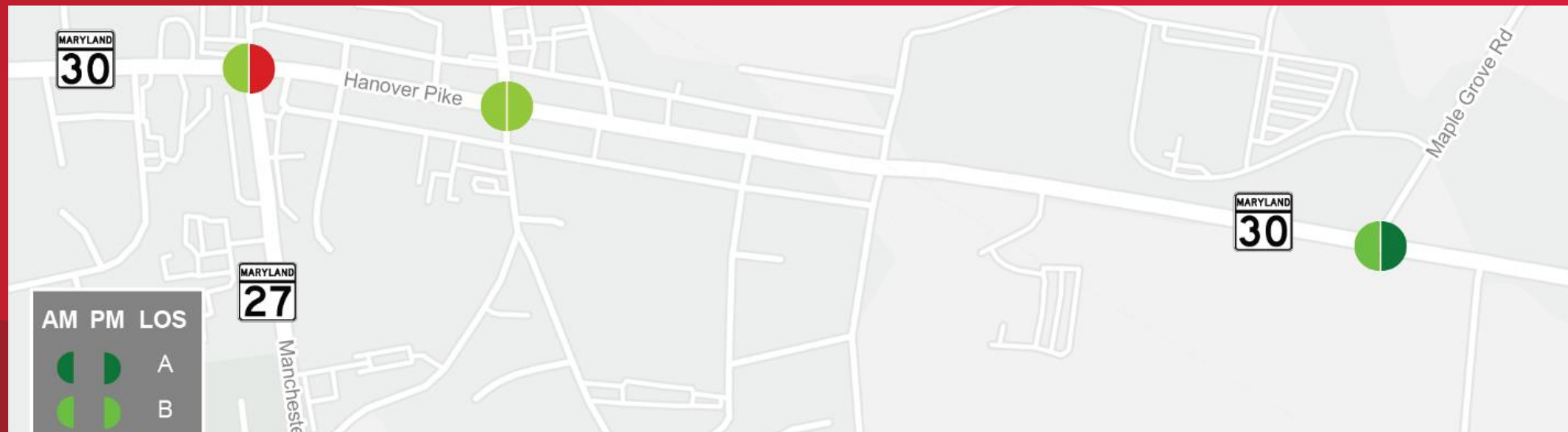


Hampstead/Manchester

Existing and Future Traffic Conditions



2020



2040 No-Build

Issues and Challenges

Hampstead/Manchester



- › Manchester Bypass is unlikely to ever be built. Benefit/cost is out of proportion, no right-of-way being reserved, and environmental issues are obstacles.



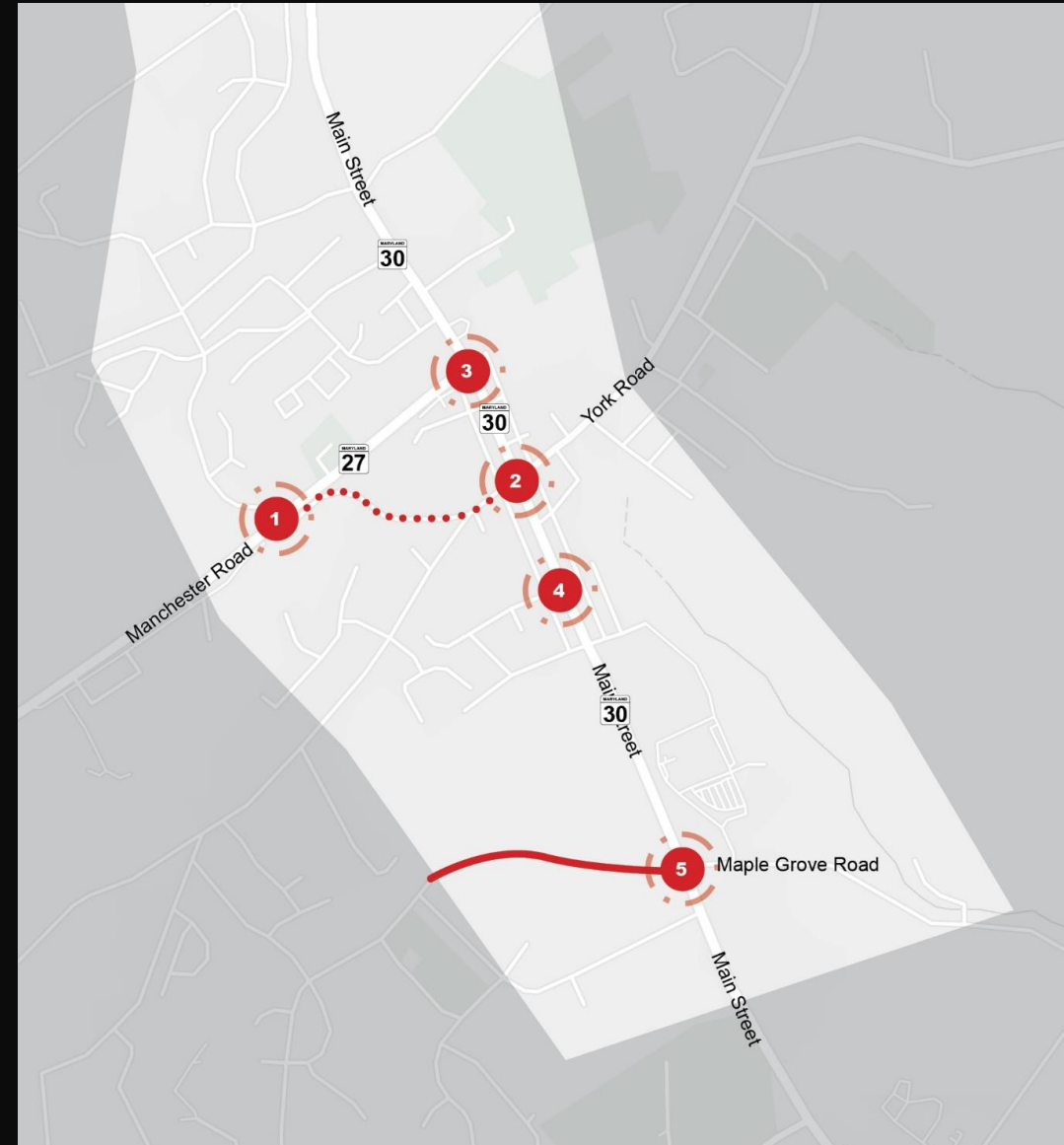
- › Current planning and operational emphasis is on through trips to/from Pennsylvania.
- › Opportunities exist to strengthen the street grid to facilitate local traffic, mitigate cut through traffic and make minor improvements to reduce northbound MD 30 queuing through downtown Manchester.



Most Promising Potential Improvements

Hampstead/Manchester

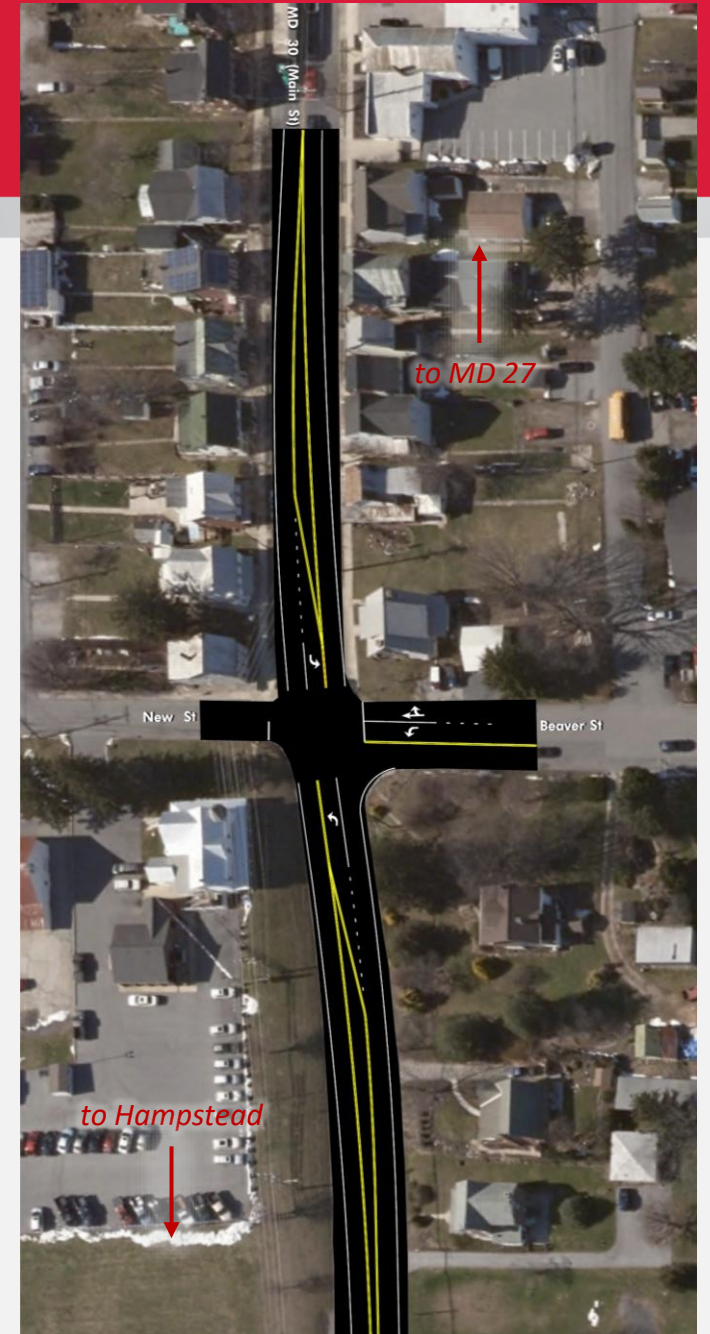
- 1 Install roundabout at MD 27/Westminster St.
- 2 Provide a signalized left-turn lane from MD 30 to Westminster Street with traffic calming on Westminster Street.
- 3 Access Equity in Signal Timing
- 4 Slightly widen the northbound approach to MD 30 at New Street to provide a dedicated left turn lane; consider closing High Street or prohibiting left turns to/from High Street.
- 5 Extend Southwestern Avenue to MD 30 at Maple Grove Road to create four-way signalized intersection or roundabout.



Improvement Concepts Hampstead/Manchester



MD 27 at Westminster Street



MD 30 at Beaver St./New St.

Hampstead/Manchester

Traffic Outcomes



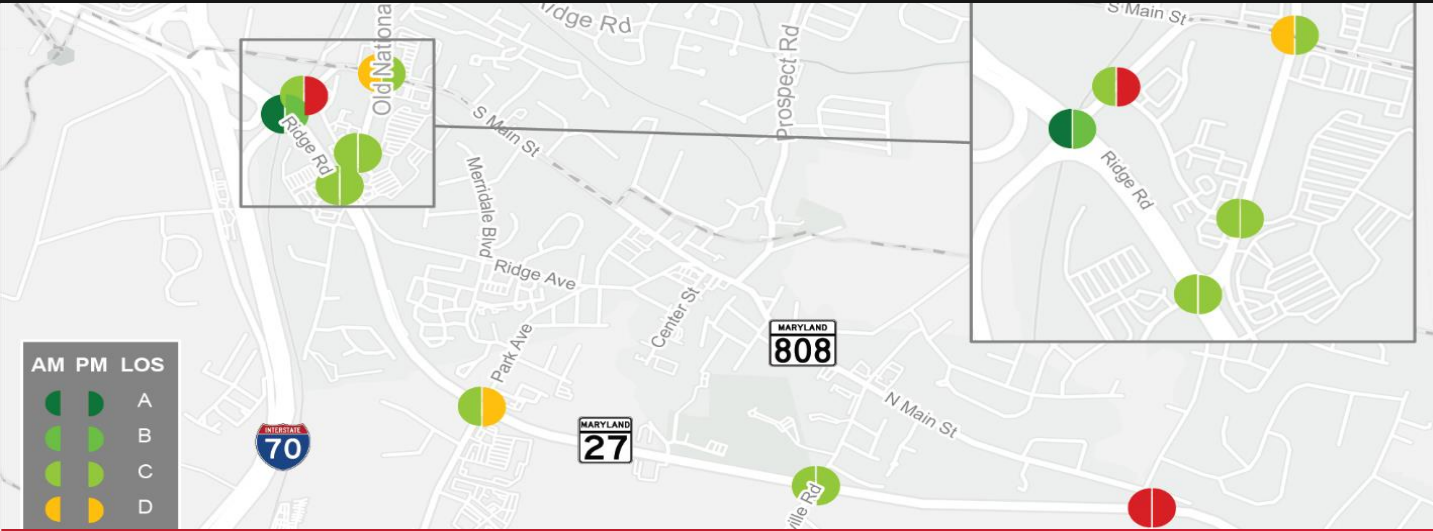
2040 No-Build

2040 with
Improvements

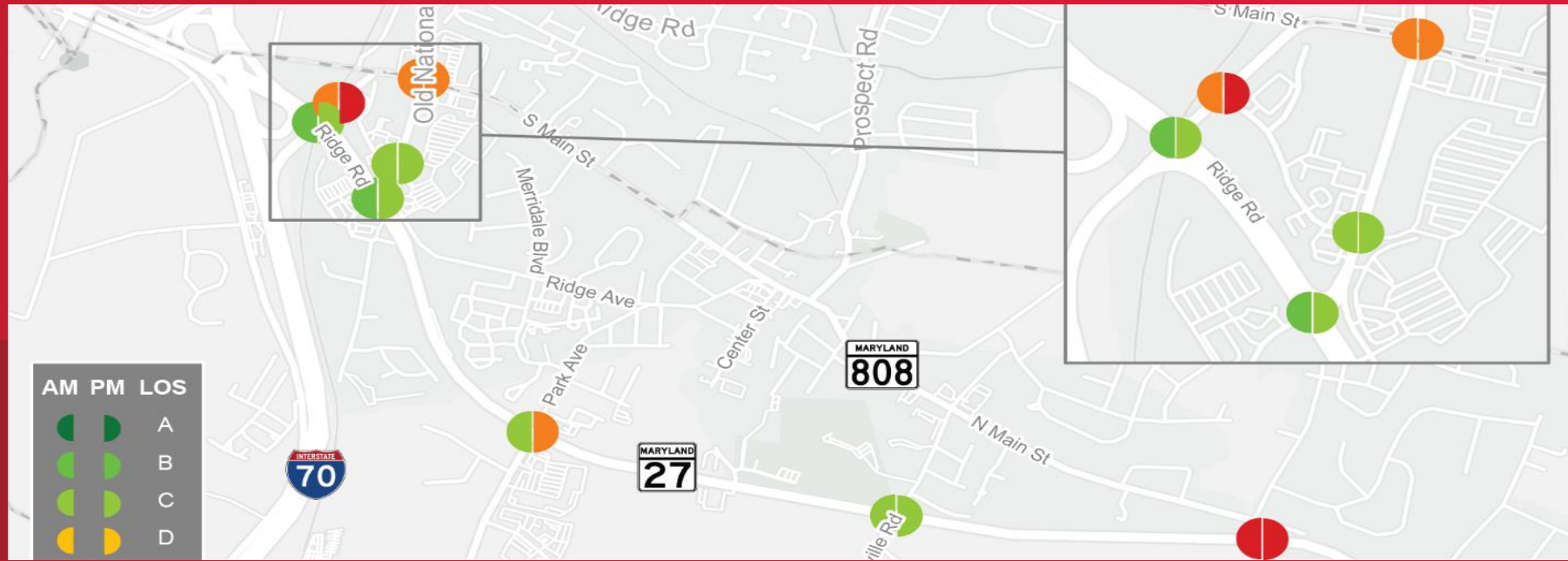


Mt. Airy

Existing and Future Traffic Conditions



2020



2040 No-Build

Mt. Airy

Issues & Observations



- › Improvements over the past ten years have kept performance acceptable for through travel along MD 27
- › Greater intersection delay is along Main Street and Ridgeville Boulevard, as well as side-street approaches to MD 27
- › Greater connectivity to the east (Century Drive extension to West Watersville) and west (Center Street extension) will keep short trips off MD 27
- › MD 94 has unused capacity.

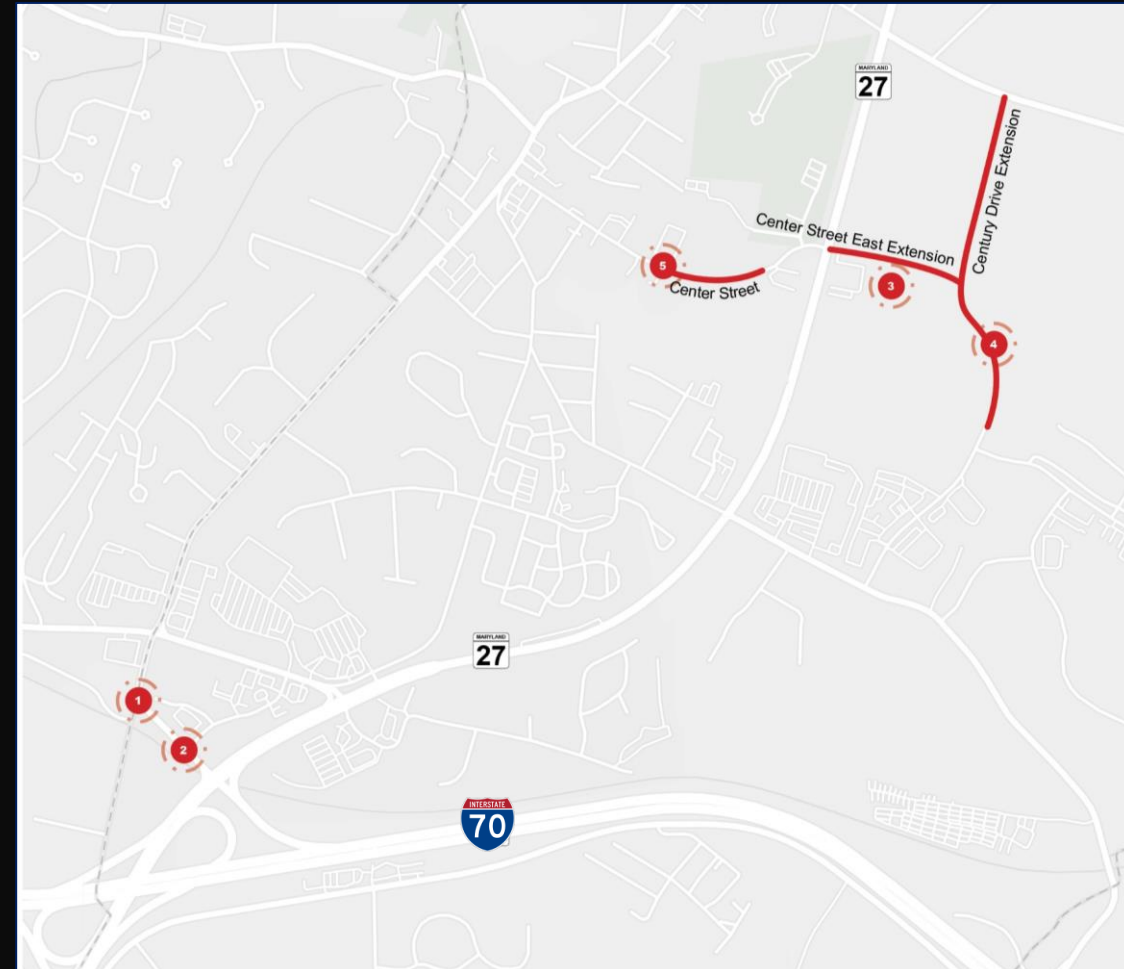


MD 27 at Gillis Falls/Harrisville Roads Realignment

Mt. Airy

Most Promising Potential Improvements

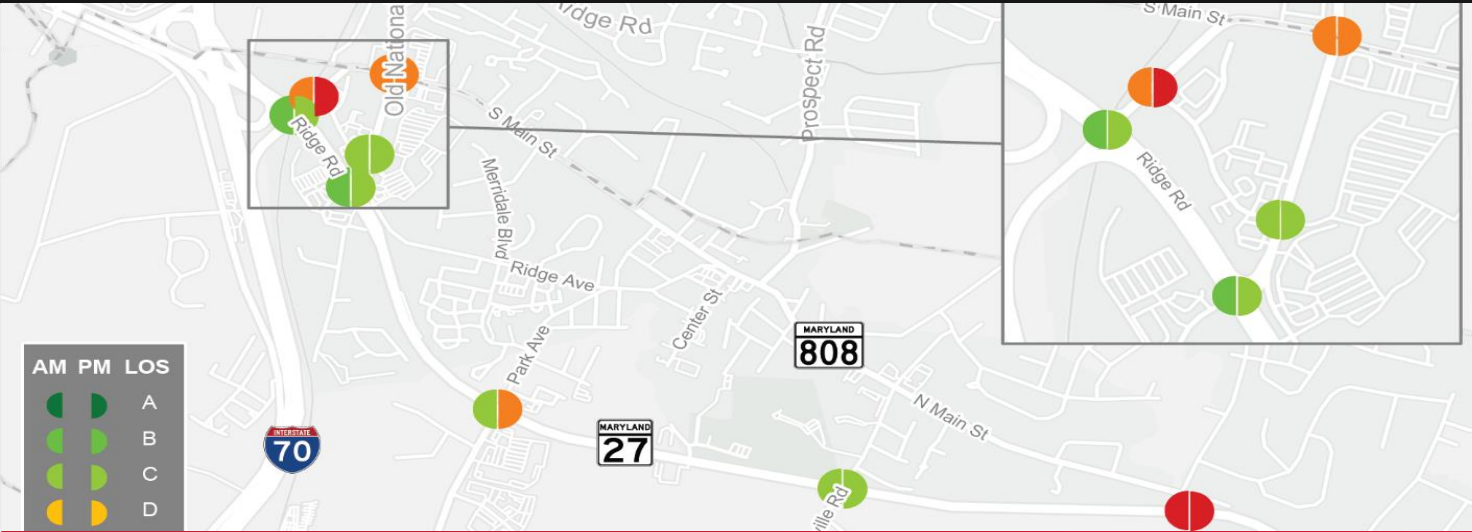
- 1 Single-lane roundabout at South Main Street/Rising Ridge Road
- 2 Eliminate left turns from Ridgeside Drive to South Main Street
- 3 Extend Center Street east of MD 27
- 4 Extend Century Drive to West Watersville Road
- 5 Connect Center Street across the Beck property
- 6 Spot improvements along MD 94 (not shown)



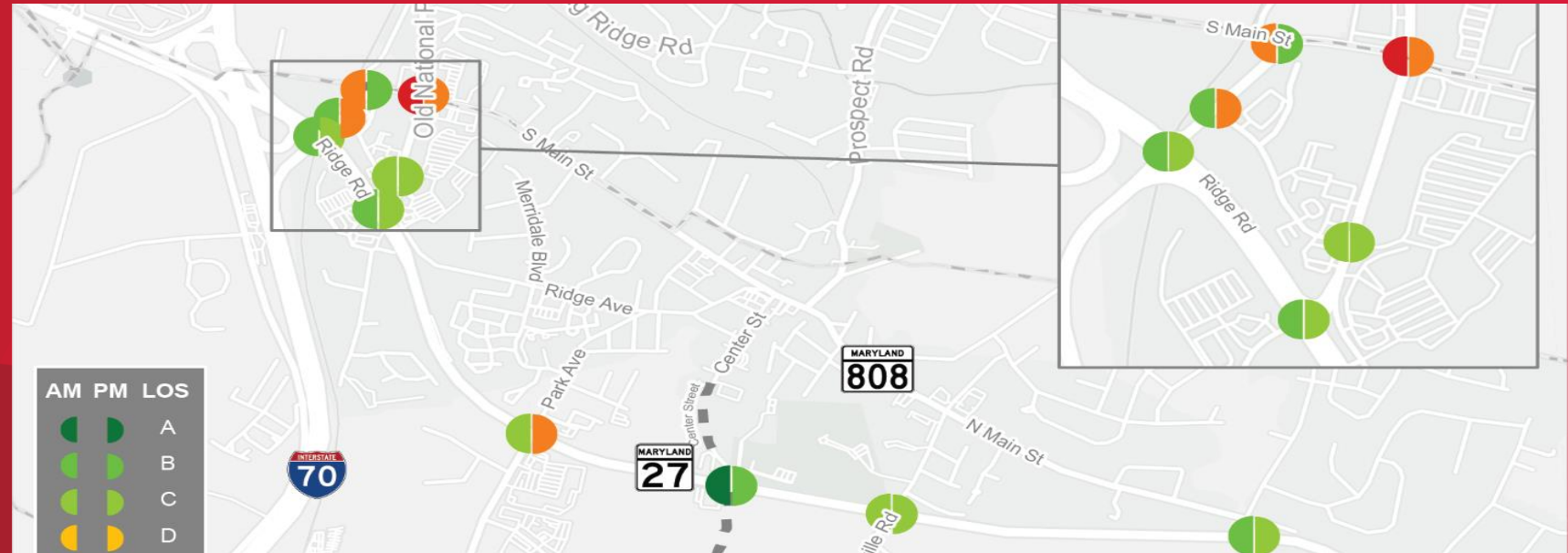
Mt. Airy

Traffic Outcomes

2040 No-Build

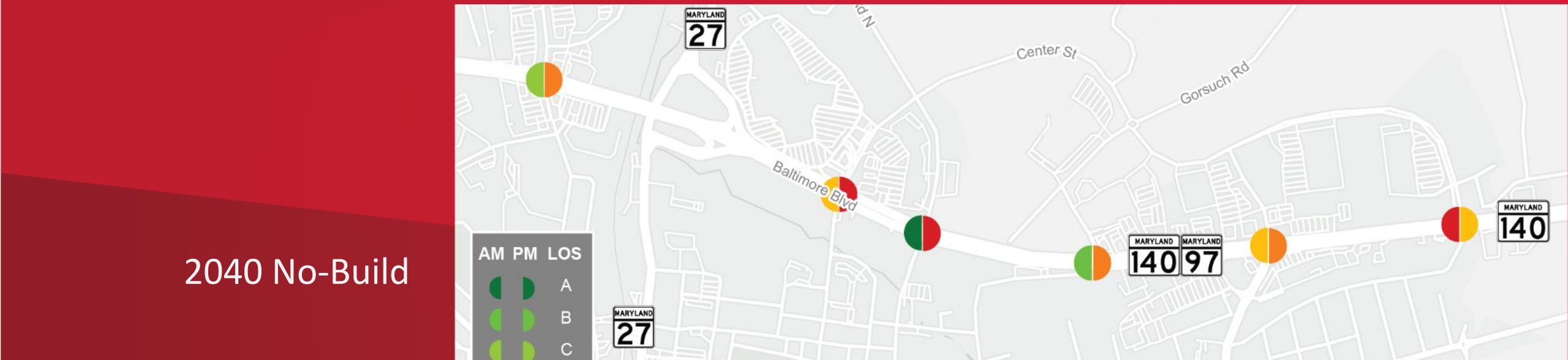
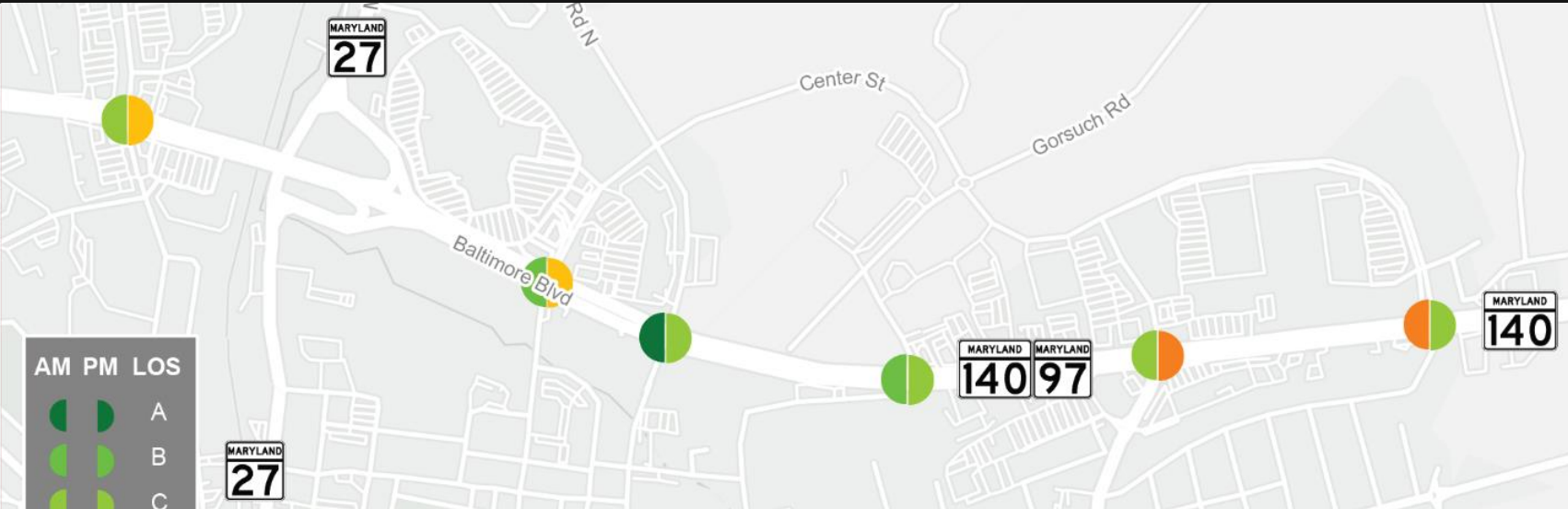


2040 with
Improvements



Westminster

Existing and Future Traffic Conditions



Westminster

Issues & Observations

- › Maximize 2045 project along MD 140 is \$271 million; even breakout projects are each \$60m+. More cost-effective solutions may exist.
- › Center & Market Streets are an underutilized resource.
- › Opportunities may exist to divert through traffic before entering downtown Westminster along MD 97.



Planning Approaches

	Southern Connector (1960s)	CFI/SPUI (2000s)	Quadrant Roadways
Traffic Benefit	Low/moderate; provides alternative route	Significant per intersection but not corridor-wide	significant on a corridor-wide basis
Impact to Natural Resources	Significant impacts to farmland, forest and streams.	None	None
Right-of-Way	New 1.25- mile corridor required.	At least three business displacements	None
Cost	\$10 - \$12 million	\$30 - \$70 million per intx	> \$3 million
Business Access	not affected	Frontage roads	Longer travel paths

Most Promising Potential Improvements Westminster

1

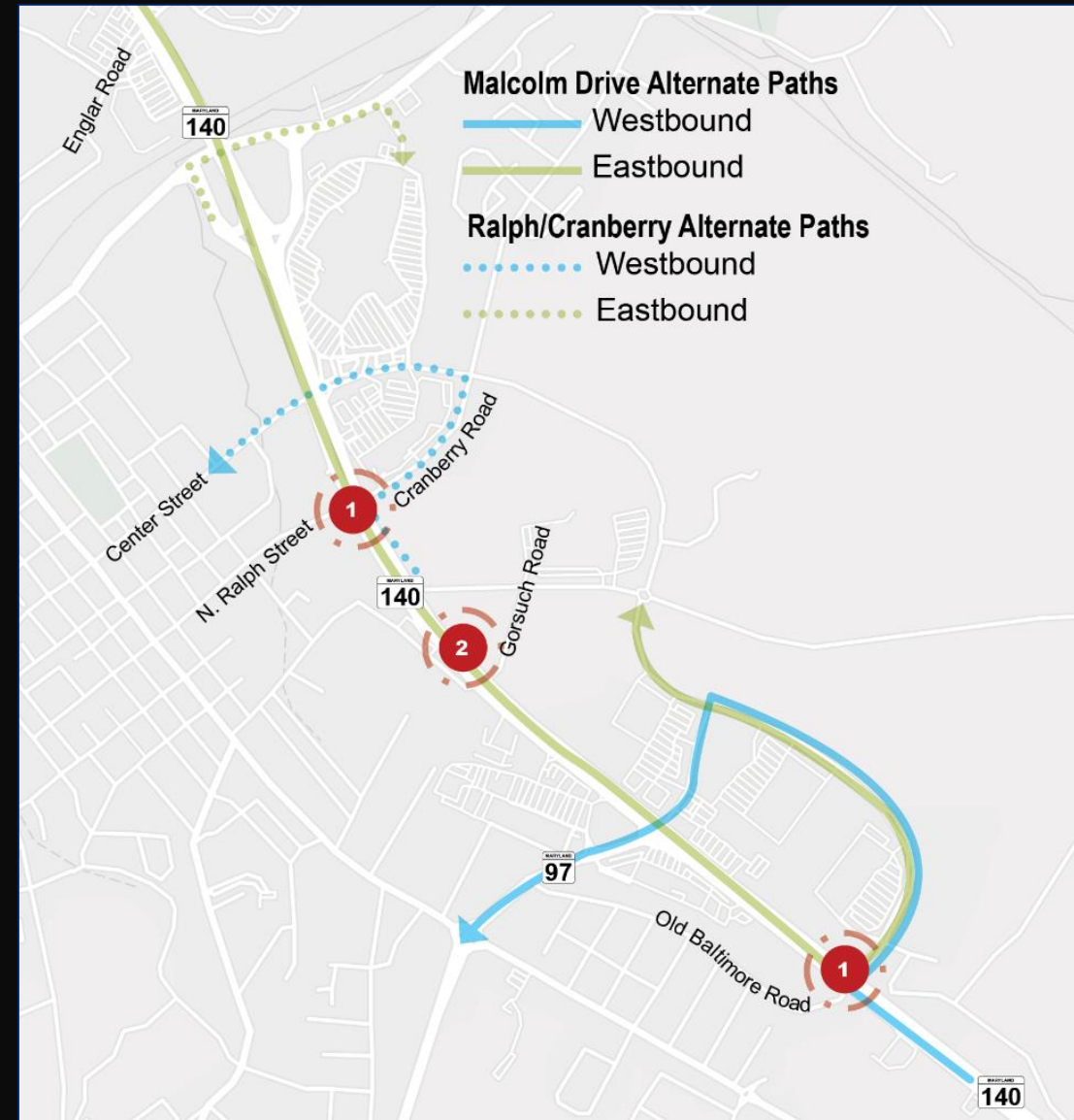
Re-route westbound left turns from MD 140 to use Center Street and Malcolm Drive.

1

Reroute eastbound left turns from MD 140 to use MD 27 and Market Street or create Michigan Left at/near Nursery Road

2

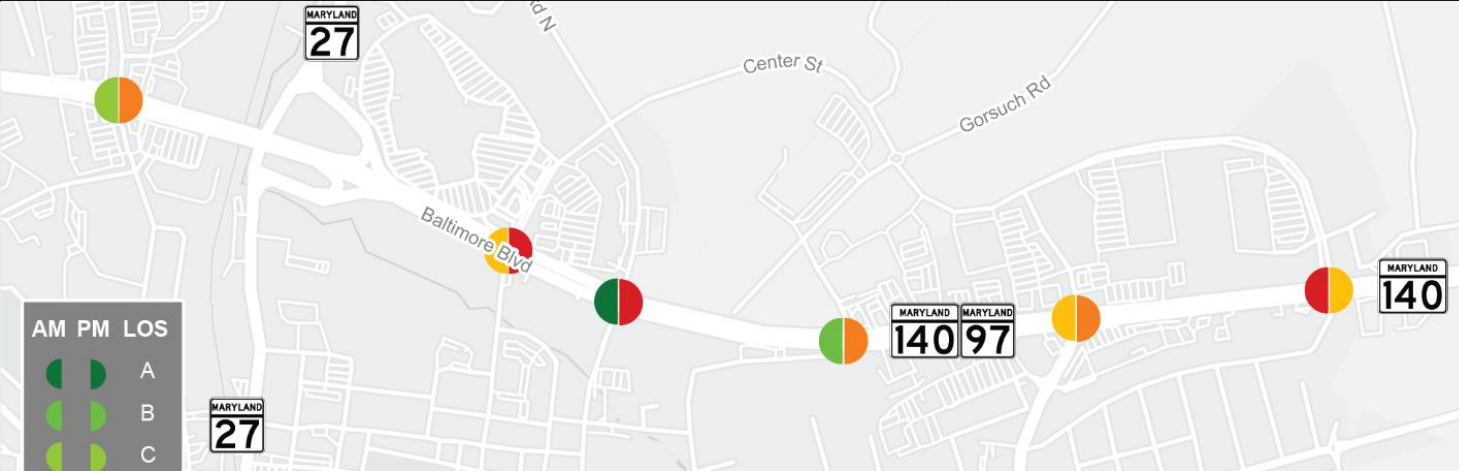
Convert Gorsuch Road to Right-in/Right-out



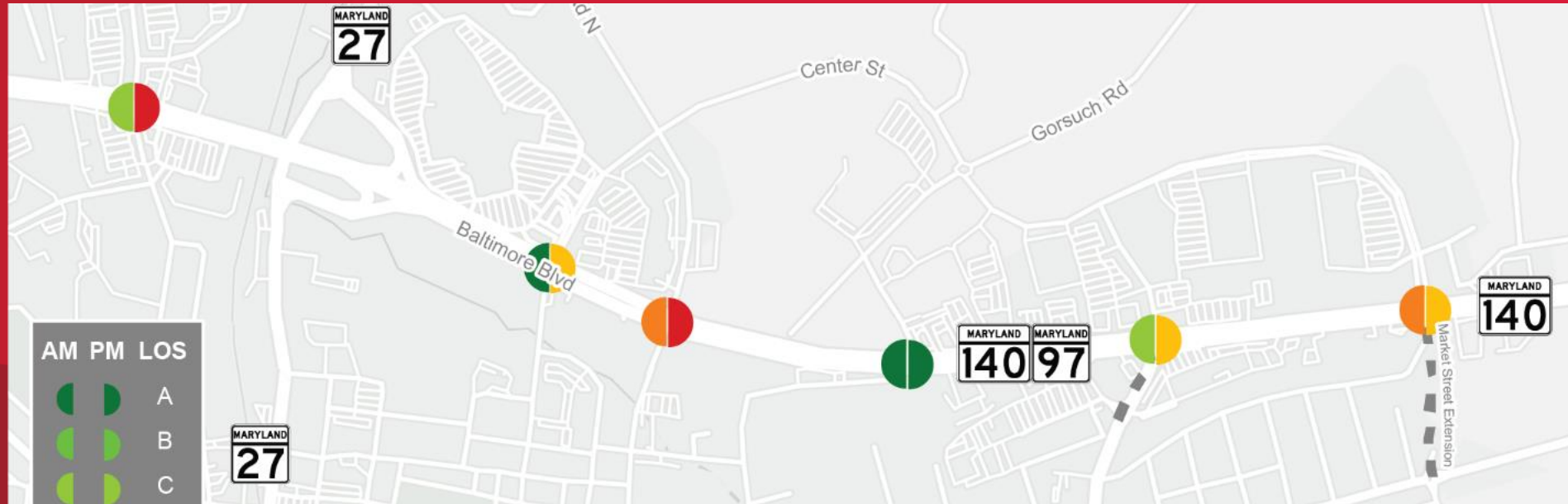
Westminster

Traffic Outcomes

2020

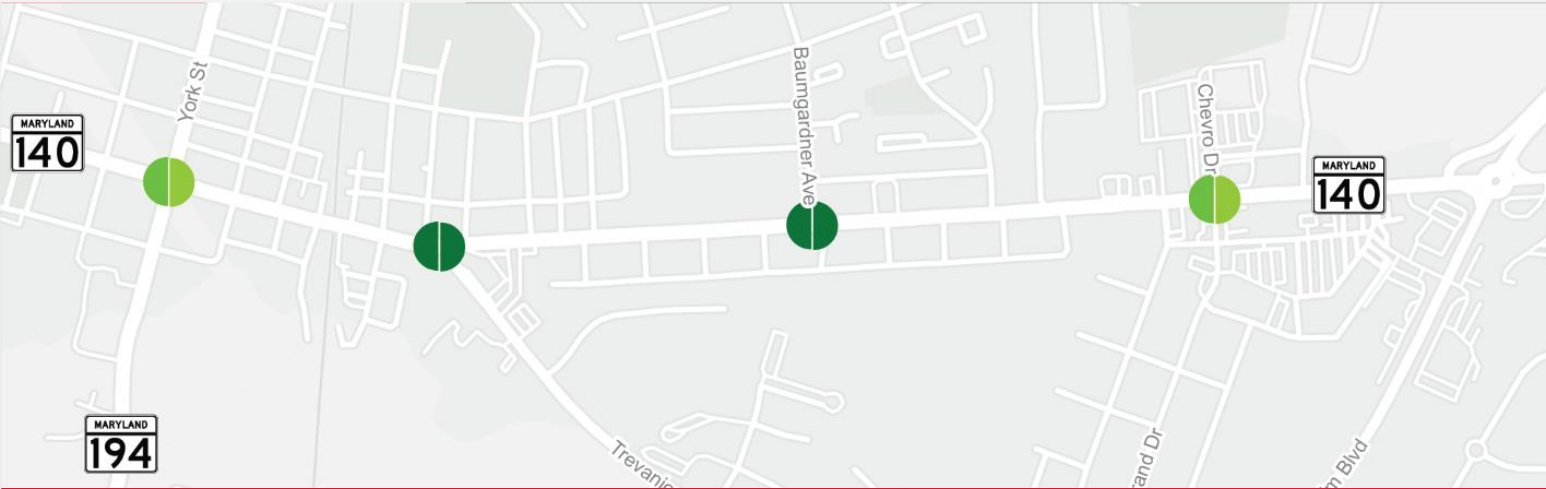


2040 No-Build



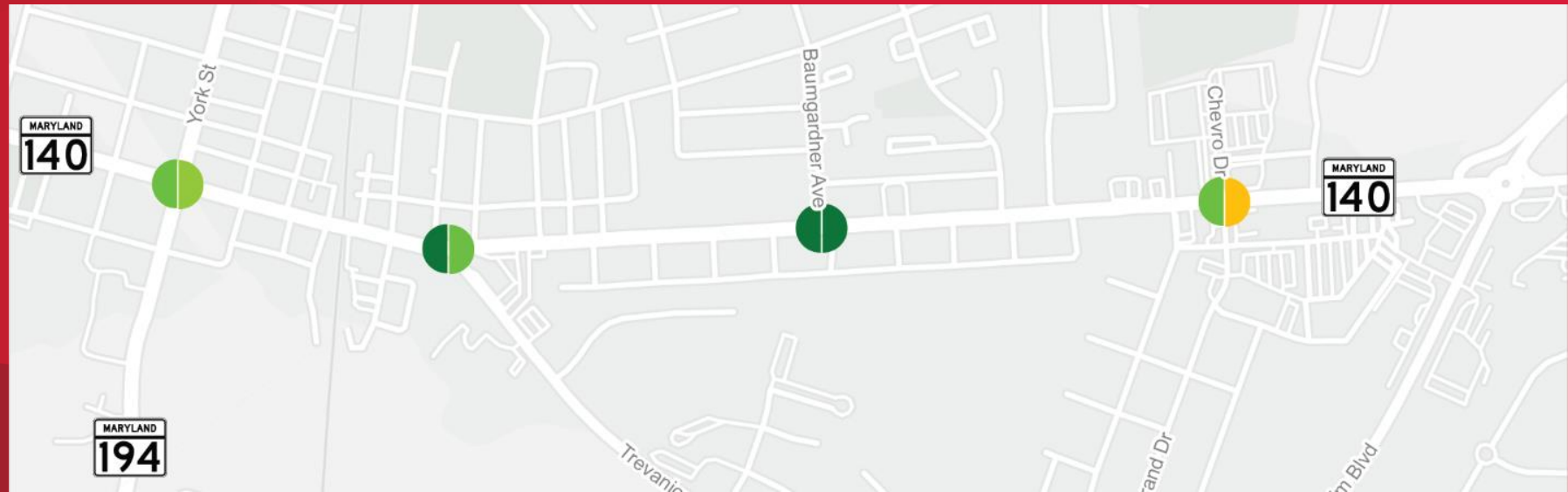
Taneytown

Existing and Future Traffic Conditions



2020

2040 No-Build &
with improvements



Issues & Observations

Taneytown

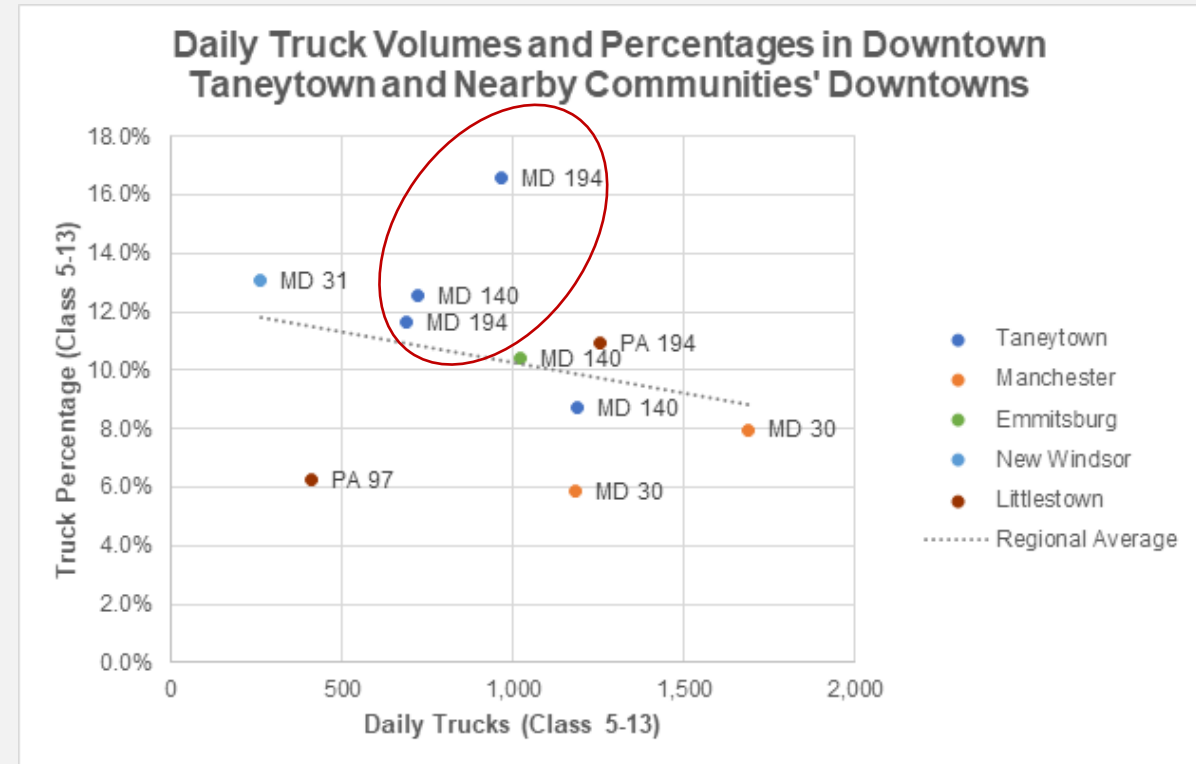


› Only 1 of 26 signalized turning movements operate at LOS E or worse in 2045 no-build conditions. Minor operational issues can be “cleaned up” with signal/striping improvements.

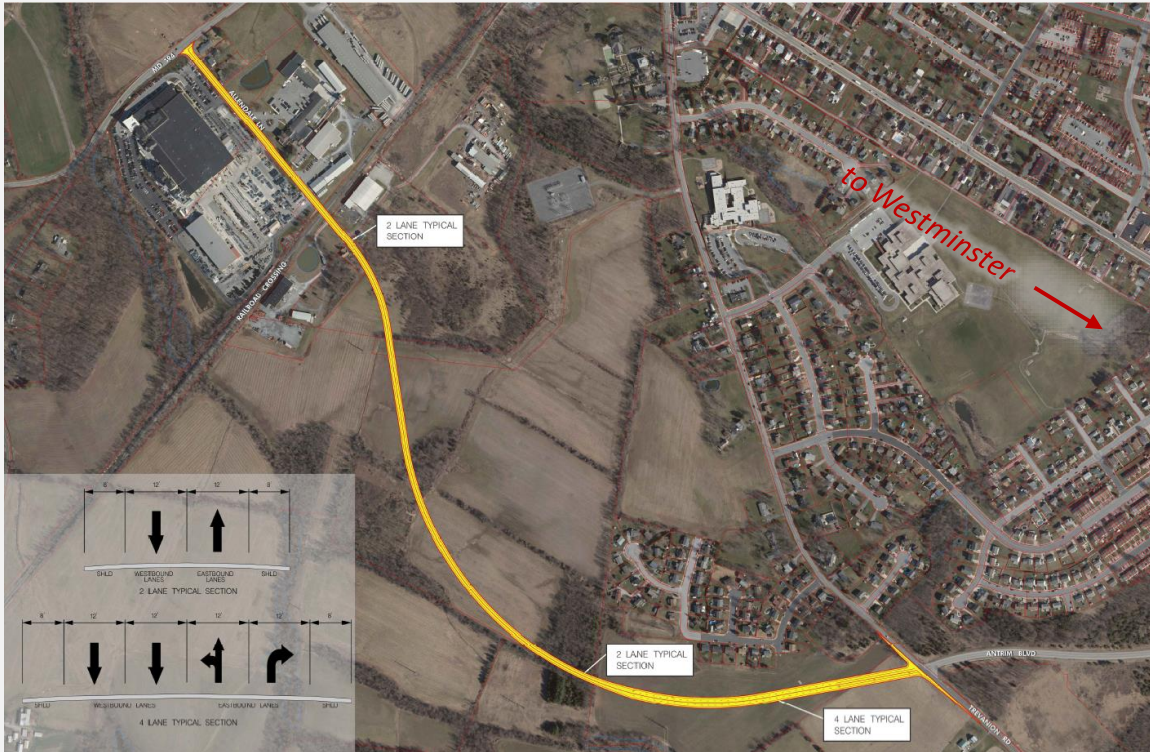


› None of the City’s planned roadways are necessary from a traffic perspective; only as access points for new development. Some ROW has been reserved.

› Truck traffic represents a very large percentage of total daily trips through Taneytown on MD 140/MD 194. These concerns are raised in master plan.



Most Promising Potential Improvement Taneytown



- Construct Allendale Lane extension and connect to shortened Antrim Boulevard extension.
- \$10.4m vs. \$68m full extension to MD 140

Additional Policy Recommendations

- study **subscription-based commuter bus service** from the county to major employment centers in the Washington, DC suburbs and from York/Adams Counties to Baltimore.
- study **traffic impact fees** to address the long list of transportation capacity and connectivity improvements needed to maintain a high quality of life.
- reconvene **corridor-level access management planning** processes and follow through with such plans to achieve adoption by the respective municipalities.
- develop a **right-of-way preservation strategy** for potential road improvements with priority given to those areas where development is most likely to occur over the next decade.

Summary

- Moderate growth in population, employment and traffic through 2040.
- Road capacity is generally adequate with some hotspots.
- Major projects are no longer the order of the day.
- Advocating for practical design projects will gain MDOT's attention as will local matching funds.