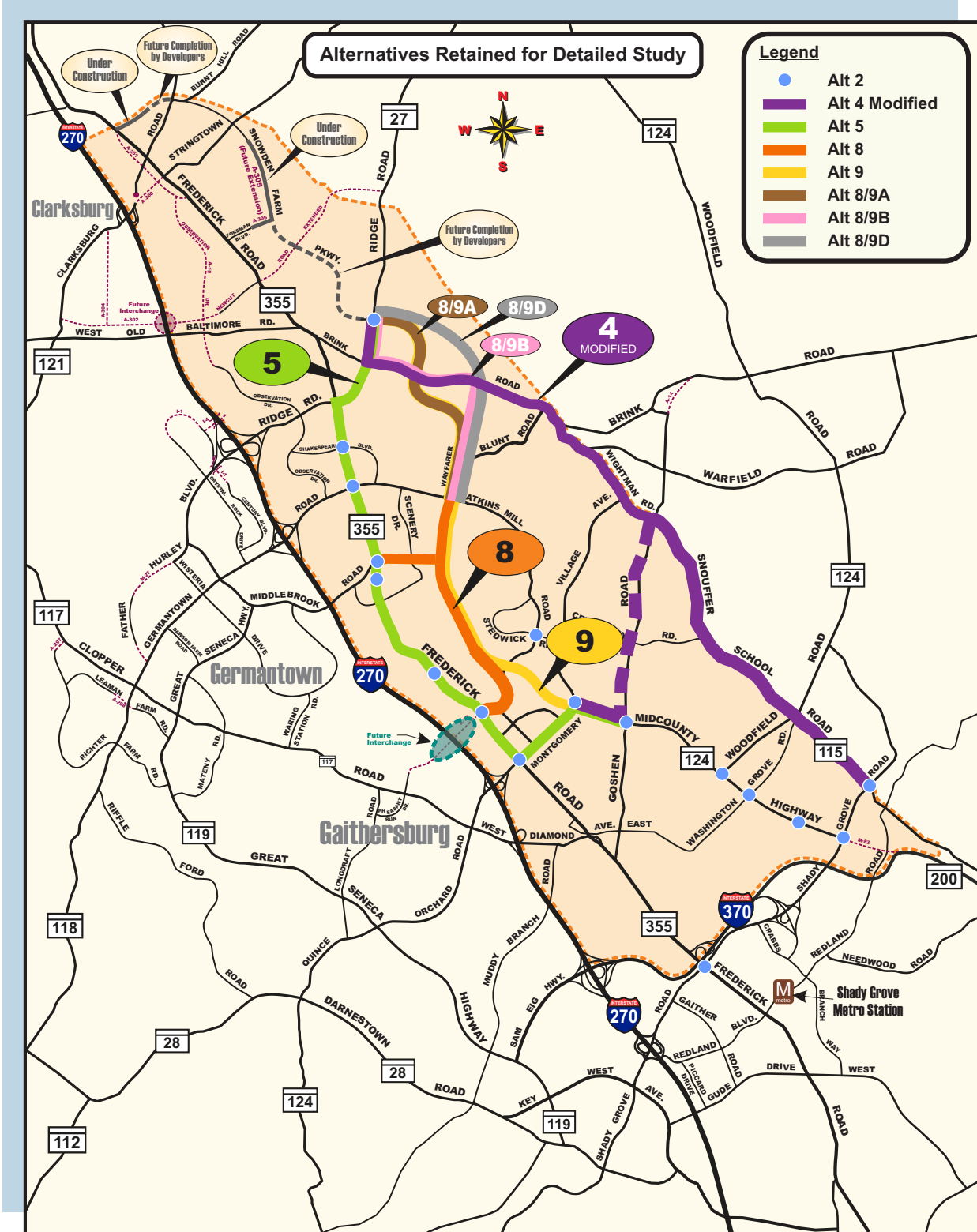


SECTION II

PURPOSE AND NEED





II. PURPOSE AND NEED

A. Purpose and Goals

The purpose of the MCS is to develop transportation improvements in Montgomery County, east of I-270, between Clarksburg and Gaithersburg that will:

- Reduce projected congestion on local roadway facilities between Clarksburg and Gaithersburg, east of I-270, improving travel conditions for local residents along the corridor;
- Provide a north-south corridor which improves the safety and efficiency of short and moderate length trips in the study area, including travelers passing through the corridor;
- Improve vehicular, pedestrian and bicycle access and overall system connectivity to residential, commercial and employment destinations in Clarksburg and in the eastern areas of Gaithersburg and Germantown; and
- Be implemented in an environmentally sensitive manner using measures to avoid, minimize, and mitigate impacts.

B. Project Need

The need for this project is based on the following:

1. Accommodate planned land use and future growth. This region of the county is among the fastest growing for both employment and housing, with the majority of the county's remaining residential and employment growth planned within the MD 355/I-270 Technology Corridor. Within the study area alone, approximately 35,000 new households and 95,000 new jobs are expected to be created by year 2040, based on M-NCPPC projections. This development relies on the implementation of the highway network and its associated capacity as programmed in the area master plans. Area master plans were approved because they provided balance between the approved land uses and the transportation infrastructure planned to serve those land uses. Any roadway improvement in Montgomery County must be programmed in the master plan. Conversely, if roadway improvements programmed in the master plan are not completed, the master plan must be updated to modify proposed development in a manner that will maintain a safe transportation network.
2. Reduce existing and future congestion. Several intersections along MD 355 and other major local roadways in the study area were approaching unacceptable levels of service or were failing in the peak hours in 2005. Almost every existing signalized intersection is projected to worsen over time and one-fourth of the 65 intersections evaluated would fail to meet the County's congestion standard by





2030. North-south travel times along the existing arterials are also projected to significantly increase over the planning horizon.

3. Enhance the efficiency of the roadway network and improve the connections between economic centers. Currently, MD 355 serves localized north-south travel. MD 355 has little to no access control, with over 100 access points between MD 27 and MD 124, a distance of 4.3 miles. Improved network efficiency and connections between economic and residential centers in the study area are needed to facilitate the movement of goods and people in the region and to accommodate the growth that Montgomery County and the state of Maryland are striving to attract to the MD 355/I-270 Technology Corridor.
4. Improve vehicular safety. Nearly all the existing highways comprising the build alternatives currently experience crash rates higher than the statewide average for similar facilities. Key factors contributing to the high crash rates are congestion at intersections, lack of access controls, and the high number of entrances, driveways, and intersections along the corridors.
5. Facilitate and provide bicycle and pedestrian connections. Montgomery County promotes bicycle travel as an alternative to the automobile, consistent with the 2005 *Countywide Bikeways Functional Master Plan*. The region lacks adequate north-south, off-street and on-street bicycle facilities necessary to provide continuity and connections between existing and proposed bicycle facilities in the region.
6. Enhance homeland security. Improved north-south access would enhance emergency response/evacuation and incident management by providing an efficient alternative to the existing congested north-south routes. Furthermore, diverting traffic from the existing routes would improve emergency response and incident management along local roadways.
7. Improve the quality of life. Reducing commuting times and offering a safer alternative to the congested local roads would enhance the overall quality of life for motorists, bicyclists, and pedestrians.

