Summary

Master Plan of Highways and Transitways

The Technical Update to the Master Plan of Highways and Transitways (MPOHT) is being conducted to:

- Update the Master Plan to conform with the Montgomery County Code Chapter 49 for both the 2008 Context-Sensitive Design Standards and the 2014 Complete Streets Policy and Guidelines updates.
- Address technical inconsistencies that have accumulated over time and address them comprehensively,.
- Enhance the presentation, format and master plan tools to facilitate public understanding and use of the MPOHT.
- Enable continuous and more frequent updates on the Montgomery Planning website to keep MPOHT documents current and reflective of recently adopted master plans.

This document includes the following major work efforts:

1. Reclassification of ~~92~~ 118 road segments to correct inconsistencies.
2. Addition of 25 mph target speeds in all Urban Road Code areas on county roads to conform to the 2014 Road Code Complete Street Policy and Guidelines. ~~88.5 road miles identified in 277 segments.~~
3. Expansion of some existing Urban Road Code areas slightly and creation of five new Urban Road Code areas for Burtonsville, Kensington, Chevy Chase Lakes, Langley Crossroads, and Cabin Branch. Revised Bicycle-Pedestrian Priority Area Mapbook, shown with public transit facilities, including master-planned transitways, Metro stations and MARC rail stations instead of the Master Plan of Highways road network.
4. Revised Master Plan of Highways and Transitways Mapbook and Classification Table.

5 New Transitways / Bicycle-Pedestrian Priority Areas Mapbook, Transitways and Transit Stations Tables

Source of Copies

Montgomery County Planning Department (M-NCPPC)
8787 Georgia Avenue
Silver Spring, MD 20910

Planning Board May ~~Public Hearing~~ Draft | ~~January~~ 2018

ALL PAGES

Contents

Introduction

This update to Montgomery County's Master Plan of Highways and Transitways provides a comprehensive summary of all significant existing and planned highway and transitway facilities within the county. The new master plan provides a "road map" for making transportation investments within the context of a long-range vision. It ensures the future network of transportation facilities will serve residents, businesses, visitors and people passing through the county. A new functional master plan for bicycles, completed in 2017, is independent from this document.

Historical Context for Plan

The first bi-county Master Plan of Highways for Montgomery County and Prince George's County was approved and adopted in 1931, shortly after the creation of the Maryland-National Capital Park and Planning Commission in 1927. The last comprehensive update to the Master Plan of Highways was approved and adopted in 1955. The 1955 plan covered only the eastern one-third of Montgomery County within the Maryland-Washington Regional District as it existed at the time - roughly the area east of Georgia Avenue, east and south of the City of Rockville and the Potomac area southeast of Glen Road (Figure 1).

In 1956, the M-NCPPC planning area within Montgomery County was expanded to include all of the county (except for municipalities with independent planning authority). A draft Master Plan of Highways for the entire area of both Montgomery and Prince George's Counties was proposed in 1967, but the process was never completed. Since then, the master planning functions for each county have been separated. The amended plan currently is referred to as the *Master Plan of Highways and Transitways within Montgomery County.*

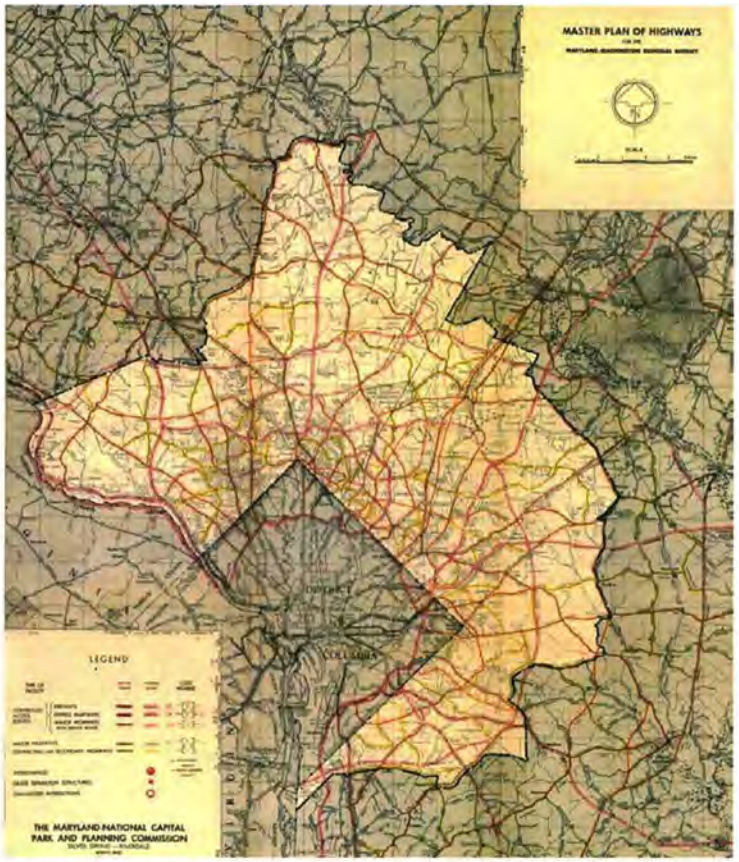

Figure 1: 1955 M-NCPPC Master Plan of Highways

Master Plans including Amendments	Date Approved and Adopted
Germantown Employment Area Sector Plan	October 2009
Twinbrook Sector Plan	January 2009
Damascus Master Plan	June 2006
Shady Grove Sector Plan	January 2006
Olney Master Plan	April 2005
Upper Rock Creek Master Plan	April 2004
Potomac Subregion Master Plan	April 2002
Takoma Park Master Plan	January 2001
Kemp Mill Master Plan	December 2001
Silver Spring East Master Plan	December 2000
North and West Silver Spring Master Plan	September 2000
Silver Spring CBD Sector Plan	March 2000
West and North Silver Spring Master Plan	September 2000
Master Plan (1998): Sandy Spring/Ashton	July 1998
Cloverly Master Plan	July 1997
White Oak Master Plan	February 1997
Four Corners Master Plan	December 1996
Clarksburg Master Plan and Hyattstown Special Study Area	June 1994
Aspen Hill Master Plan	April 1994
North Bethesda Garrett Park Master Plan	December 1992
Bethesda Chevy Chase Master Plan	April 1990
Germantown Master Plan	July 1989
Kensington-Wheaton Master Plan	May 1989
Damascus Master Plan	July 1985
Boyds Master Plan	February 1985
Gaithersburg and Vicinity Master Plan	January 1985
Capital View and Vicinity Sector Plan	July 1982

FAIRLAND MASTER PLAN

MARCH 1997

The roadway classifications used are consistent with the Montgomery County Road Code, Section 4.2. Classifications added with the 2008 Road Code revision include Controlled Major Highways, Minor Arterial Streets and Parkways. Information provided for each classified roadway includes the following:

MASTER PLAN

- Segment length (feet or miles)
- Right-of-way width (feet)
- Road Code road type classification
- Target speed (miles per hour)
- Existing number of through travel lanes
- Future (ultimate) number of through travel lanes
- Divided or undivided road
- Presence of a transitway (none, existing or future)
- MASTER PLANNED INTERCHANGES

INSERT TEXT

Public Transit Components

- Existing and proposed transitways
- Existing and proposed transit mode (bus rapid transit and light rail transit)
- Location of transitway within a right-of-way or in relation to road (i.e., median, curbside, elevated, exclusive/separate right-of-way)
- Locations of all Metrorail and MARC rail stations (shown for reference only)
- Location of Bicycle-Pedestrian Policy Areas (as approved by the Montgomery County Council).

The current Master Plan of Highways and Transitways surveys a total of 1,148 miles of existing and planned infrastructure throughout Montgomery County, as summarized in Table 4. Transitways are included in the above subtotal with the exception of 19.6 miles where transitways are located on their own right-of-way (i.e., Purple Line light rail transit) or bus rapid transit (BRT) routes planned to pass through other jurisdictions (i.e., Prince George's County, Rockville and Gaithersburg). It is interesting to note that transitways are planned on 116 miles or approximately 10 percent of the total MPOHT mileage inventory.

AND 5

Table 4: MPOHT Functional Classification by Mileage

Functional Classification	Existing	Planned	Total	Percent
Arterial	260.1	9.8	269.9	23.51%
Business	43.4	19.3	63.0	5.46%
Controlled Major Highway	23.0	0.0	23.0	2.00%
Country Arterial	48.6	0.4	49.0	4.27%
Country Road	28.7	0.0	28.7	2.50%
Exceptional Rustic Road	40.3	0.0	40.3	3.51%
Freeway	57.2	0.0	57.2	4.98%
Industrial	7.2	0.0	7.2	0.62%
Major Highway	194.2	9.8	204.0	17.77%
Minor Arterial	4.8	0.8	5.6	0.48%
Park Road	5.4	0.0	5.4	0.47%
Parkway	6.4	0.0	6.4	0.56%
Primary Residential	233.1	3.3	236.3	20.58%
Principal Secondary	1.9	0.0	1.9	0.17%
Rustic Road	150.4	0.0	150.4	13.10%
Total	**1104.8**	**43.3**	**1148.4**	**100.00%**

TABLE 5: MPOHT-TRANSIT MODE BY MILEAGE

Transitway Type	Total
Dedicated Transit ROW or Non MPOHT Road	
Dedicated Bus Rapid Transit (BRT)	14.7
Light Rail	4.9
Grand Total	19.6
MPOHT Right of Way	
Dedicated BRT	70.8
Dedicated BRT and Light Rail	1.1
BRT in Mixed Traffic	42.1
Light Rail	1.8
Grand Total	**115.8**

REPLACE

UPDATE MILEAGE

← INSERT TRANSITWAY TEXT WITH FIGURE 2

Montgomery County Road Code and Relationship to MPOHT

The 2008 Road Code update designated urban, suburban and rural area types throughout Montgomery County. Figure ~~2~~ 3 below displays the urban, suburban and rural areas within the county. In general, urban areas include central business districts, town centers, transit nodes or centers, or Metro Station Policy Areas (MSPA) with high density commercial and residential development. Rural areas are generally undeveloped or sparsely settled with development at low densities along a small number of roadways or clustered in small villages. Large portions of the county's rural areas are in the Agricultural Reserve. All other areas within the county (not considered urban or rural) are classified as suburban areas.

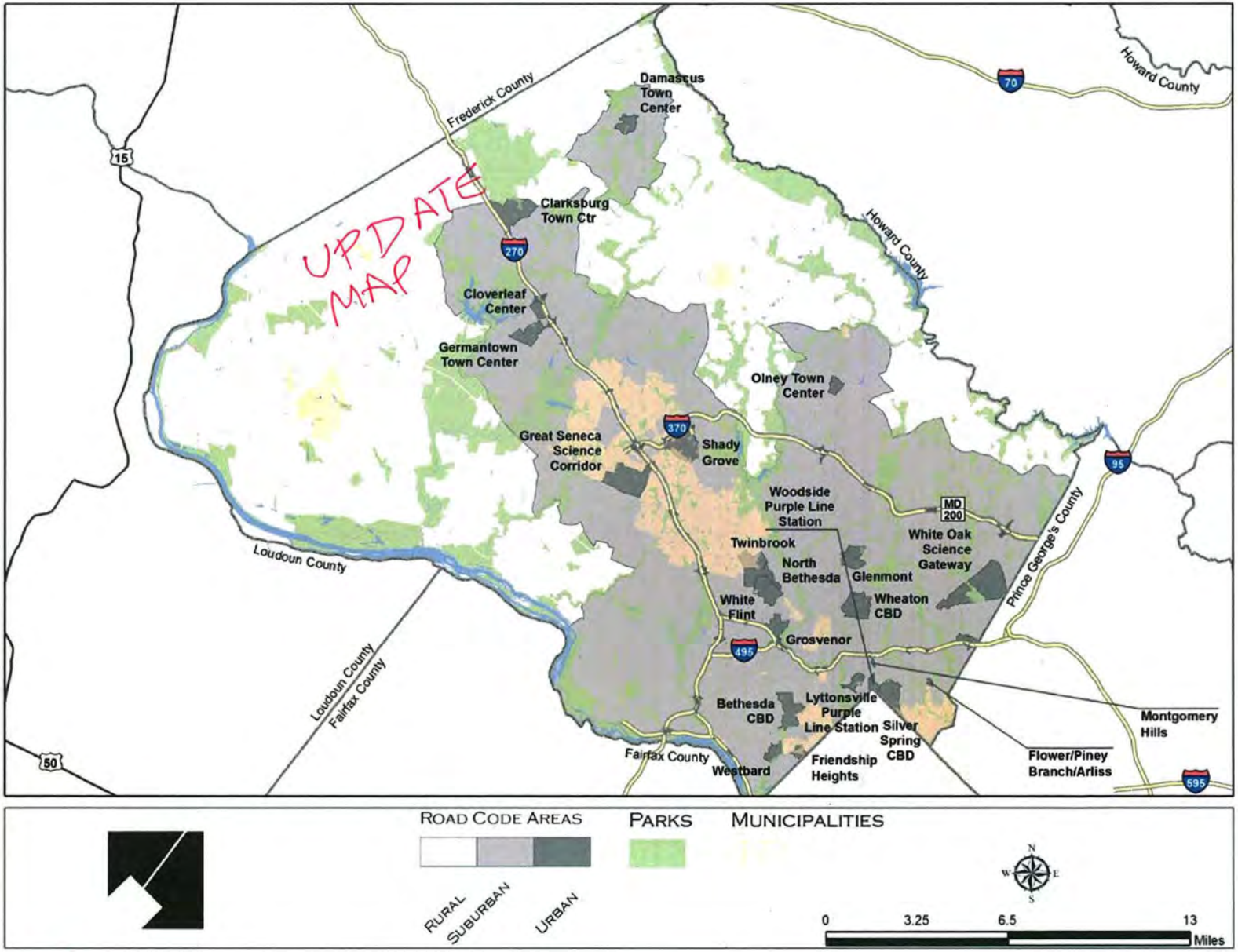

Figure 2: Road Code Areas

The designated urban areas are as follows:

Urban Areas	Master Plan Area
Arliss/Flower/Piney Branch	East Silver Spring Master Plan
Bethesda ~~Central Business District~~ CBD	Bethesda Downtown Sector Plan
Clarksburg Town Center	Clarksburg Master Plan
Cloverleaf Center	Germantown Employment Area Sector Plan
Damascus	Damascus Master Plan
Friendship Heights ~~MSPA~~	Bethesda/Chevy Chase Master Plan
Germantown Town Center	Germantown Employment Area Sector Plan
Glenmont ~~MSPA~~	Glenmont Sector Plan
Great Seneca Science Corridor	Great Seneca Science Corridor Master Plan
Grosvenor	North Bethesda Garrett Park Master Plan
Lyttonsville Station	Greater Lyttonsville Sector Plan
Montgomery Hills ~~Parking Lot District~~	North and West Silver Spring Master Plan
Olney Town Center	Olney Master Plan
Shady Grove ~~MSPA~~	Shady Grove Sector Plan
Silver Spring CBD	Silver Spring CBD Master Plan
Twinbrook/~~North Bethesda~~/White Flint /White Flint 2	Twinbrook, North Bethesda/Garrett Park, White Flint and White Flint 2 Sector Plans
Wheaton CBD	Wheaton Sector Plan
White Oak Science Gateway	White Oak Science Gateway Master Plan
Woodside Station	Greater Lyttonsville Sector Plan

Functional Road Classification and Access/Mobility Curve

Functional classification is the process by which streets and highways are grouped into types or systems according to the character of traffic service that they are intended to provide[1]. Roads or highways are functionally classified in order to help plan appropriate design components for each type of facility. A well-designed roadway system has a mix of roadway types.

Each roadway type is designated based on its need or priority for access or mobility. Roads with high mobility, such as freeways, have high speeds and limited access. Roads with high accessibility have lower speeds and very few restrictions on access. Some roads, such as freeways, are designed with mobility as their primary function, while on the opposite end of the spectrum, local streets are designed to provide access to adjacent land uses. Figure 3 displays how different road types function in relationship to mobility and access.

[1] Flexibility in Highway Design, US Department of Transportation, Federal Highway Administration, page 3-1

Figure 3: Road Classification - Mobility/Access

Road classifications used in the Master Plan of Highways and Transitways are described on page 23 through page 28 as specified in the Montgomery County Road Code.

Each road classification has specific design standards based on its classification and its road code type (urban, suburban, and rural). These standards cover the following design considerations:

- Master plan right-of-way required (as specified in the Montgomery County Code), based on typical sections developed by the Montgomery County Department of Transportation (MCDOT) design standards, or as specified in master plans.
- Level of access control.
- Curbed (closed section) versus shoulders (open section).
- Intersection spacing (per Chapter 50, Subdivision of Land in the Montgomery County Code).
- Maximum target speed.
- Traffic calming and spacing standards (MCDOT Guidelines).
- Through traffic restrictions (MCDOT Guidelines).
- Provision of pedestrian facilities.
- Provision of bicycle facilities.

Functional Classification Comparison

One way to understand the differences between the road classification categories is to compare how their operational characteristics differ. Table 5 provides a summary comparison of some key geometric and operational characteristics of the county's road system. The number of travel lanes, whether the road is divided and how access is provided along a road are some key factors that are influenced or directly controlled by a road's classification.

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Table 5: Road Functional Classification - Comparison of Geometric and Operational Characteristics

Functional Hierarchy	No. Lanes	Minimum Right of Way (feet)	Control of Access	Divided Road-way?	Percent Through Traffic	Through Traffic Re-strictions Consid-ered?[3]	Traffic Calming Consid-ered?[3]	Heavy Truck Re-strictions Consid-ered?[4]
Freeway (per AASH-TO)	4 - 12	250 - 300	Interchanges Only	Always	50%+	Not Required	Not Required	No
Controlled Major High-way	6 - 8	150[1]	Interchanges and Public Road Inter-sections	Always	50%+	Not Required	Not Required	No
Parkway	4	120[1] - 150	Interchanges and Public Road Inter-sections	Always	50%+	Not Required	Not Required	No
Major Highway	4 - 6	120 - 150[1]	Driveway access acceptable in dens-er suburban and urban areas	Always	50%+	Not Required	Not Required	No
Arterial	2 - 4	80 - 120[1]	Some access to abutting property is expected	Typical	50%+	Not Required	Not Required	No
Minor Arte-rial	2 - 3	70 - 80	Access to abutting property is expect-ed	No	50%+	Not Required	Yes ~~(Type 3)~~ No Speed Humps	MCDOT decision
Primary Residential Street	2	70 (100)[2]	Access to abutting property is expect-ed	Allowed Not Typical	≤ 50%	Yes	Yes ~~(Type 2)~~	Yes
Secondary Streets (not in MPOHT)	2	60 - 78	Access to abutting property is expect-ed	No	Limited	Yes	Yes ~~(Type 1)~~	Yes
Tertiary Streets (not in MPOHT)	2	44 ~~41~~ - 50	Access to abutting property is expect-ed	No	0%	Yes	Yes ~~(Type 1)~~	Yes
County Code Reference		LMC §49-32d	LMC §49-31			LMC §49-30	LMC §49-30	

Notes:
1. COMCOR §49.28.01 - Context Sensitive Design Standards.
2. Measurements provided for undivided and (divided or dual) roads.
3. Traffic calming governed by Montgomery County Code, Chapter 49, Sec. 49-30.
4. MCDOT Memorandum –Policy Regarding the Installation of "No Through Trucks over 3/4 Ton" Regulations on County Roads, dated 1/12/81.

7 APPEND TABLE WITH INDUSTRIAL, BUSINESS, COUNTRY ARTERIAL & COUNTRY ROAD

Traffic calming device design types referenced previously are based on type and width of speed hump, spacing between adjacent speed humps and spacing between speed hump and adjacent intersections, as shown below in Table 6.

Table 6: Traffic Calming Standards – County Roads

Speed Hump Type	Width of Speed Hump (feet)	Min. Spacing between speed humps (feet)	Min. Spacing between speed hump and intersection (feet)
Type 1	Parabolic 12' wide	500'	200'
Type 2	Flat Top 12' wide	500'	200'
Type 3	Flat Top 22' wide	750'	300'

Note: Standards obtained from LMC §49-30 and COMCOR 49.30.01.

Operationally, through traffic percentage, along with daily traffic volumes and peak hour capacity (not presented in this table) are important, but just as important are Montgomery County Department of Transportation guidelines or policies that control how a particular roadway classification is managed, including traffic calming, through traffic and heavy truck traffic. Right-of-way (ROW) widths can vary based on site conditions and specified ROW widths in adopted master plans.

MPOHT Technical Evaluation

A total of eight technical changes are being proposed within the MPOHT to provide a more up-to-date master plan document that is consistent with Montgomery County Code. The eight technical changes are:

- Arterial to Minor Arterial
- New Primary Residential Streets
- Master Plan Inconsistencies
- Rural Road Code Boundary Issues
- Changes to Major Highways ~~and Controlled Major Highways~~
- Numbering/Identification of unnumbered streets from older plans
- Change resulting from existing or planned development
- Segments to be removed from MPOHT

Within these eight categories, a total of 92 road or transitway segments have been identified for re-classification. Table 7 summarizes the 92 changes by technical category.

Table 7: Proposed ~~Re-Classification Candidates~~ by Reason

Classification Change Description	Count
Arterial To Minor Arterial (Down-Classification)	18
New Primary Residential Streets	20
Master Plan Inconsistencies	16
Rural Rode Code Boundary Issues	11
Changes To Major Highways ~~And Controlled Major~~ Highways	12
Change Resulting From Existing Or Planned Development	9
Segments To Be Removed From MPOHT	6
TOTAL	**92**

Minor Arterial - A minor arterial is defined in the 2008 Road Code as "a two-lane arterial meant equally for through movement of vehicles and access to abutting property." Examples in Montgomery County include Leland Street and Battery Lane in Bethesda, Flower Avenue in Silver Spring and Stewartown Road in Montgomery Village.

While the type is a significant new addition to the Road Code, this change does not mean that all two lane arterials fit into this classification. It is important to remember that road function AND road geometry must be considered together to determine the appropriate functional road classification.

Minor Arterials are differentiated from Arterials and Primary Residential Streets in several ways. Table 8 below shows a comparison between Arterials, Minor Arterials and Primary Residential Streets. The key functional difference is the number of lanes (two) and the percentage through traffic. Each of these three road classifications have different road design standards, particularly regarding the permitting of traffic calming devices and implementation of through traffic restrictions.

Table 8: ~~Traffic Calming Standards – County Roads~~ COMPARISON OF SELECT HIGHWAY CLASSIFICATION TYPES. CHARACTERISTIC

~~Speed Hump Type~~	Arterials	Minor Arterials	Primary Residential Streets
Number of Lanes	2 to 4	2 to 3*	2
Percent Through traffic	>50%	>50%	≤50%
~~Max Daily Traffic Flow (vehicles per day)~~	~~35,000 to 50,000~~	~~18,000 to 20,000~~	~~15,000~~
Speed Humps Allowed? Per LMC §49-30, ER 32-08	No	Yes	Yes
Traffic Calming Considered per Road Code?	No	Yes	Yes
Medians? (Referred to as Dual Road Section in Road Code)	Yes, but can be undivided with turn pockets or center two-way left turn ("suicide") lane	No, turn pockets or center two-way left turn ("suicide") lane	Yes, but not typical
Target Speeds	25MPH URBAN; Varies ~~by Area Type~~ IN SUBURBAN AND RURAL AREAS	25MPH URBAN ~~Varies by Area Type~~, typically lower than arterials	25 mph Urban, 30 mph Other Areas
Volume Restriction Measures Considered?	No	No	Yes

* A three-lane cross section is an undivided roadway with one travel lane in each direction with a center two-way left turn lane (commonly referred to as a "suicide lane.")

For master plans completed before the adoption of the 2008 Road Code, roads that might have been considered a Minor Arterial would have been classified as Arterials or Primary Residential Streets. Therefore, candidate road sections were investigated for this Master Plan of Highways and Transitways, primarily in areas with existing master plans predating the adoption of the 2008 Road Code standards.

Recommended Minor Arterial Streets

For this MPOHT update, a total of 46 potential additional Minor Arterial candidates have been identified. Of the 46 road sections evaluated, this plan is recommending the re-classification of 18 Arterial streets to the Minor Arterial classification.

IN ADDITION, A TOTAL OF 24

~~The remaining 28~~ road sections are not recommended for re-classification at this time. While the potential re-classification of these ~~28~~ 24 road sections currently classified as Primary Residential Streets was considered, it was determined that these potential up-classifications deserve a more detailed future transportation effort including a more robust, focused public outreach element. They are, therefore, not recommended for re-classification within this master plan.

Table 9 on the following page presents the proposed Minor Arterial candidates. These proposed classification changes are displayed on Figure ~~4~~ 5.

Table 10 and Figures ~~5~~ 6 and ~~6~~ 7 present Minor Arterial candidates that were considered but that are not included as recommendations in this technical update. These road sections are currently Primary Residential Streets, which clearly serve an "arterial" function within the county's road network.

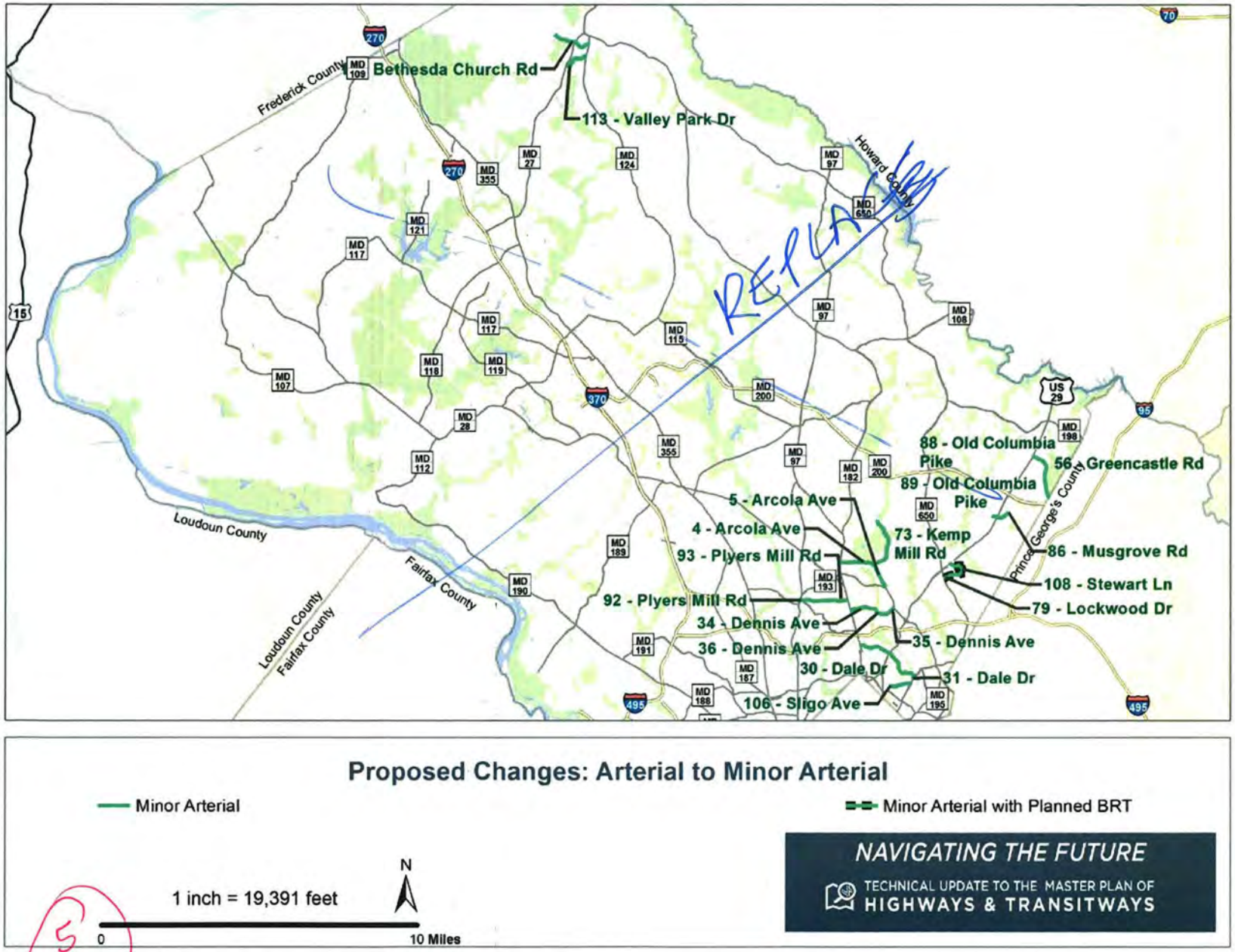

Figure 4: Proposed Classification Changes – Arterial to Minor Arterial

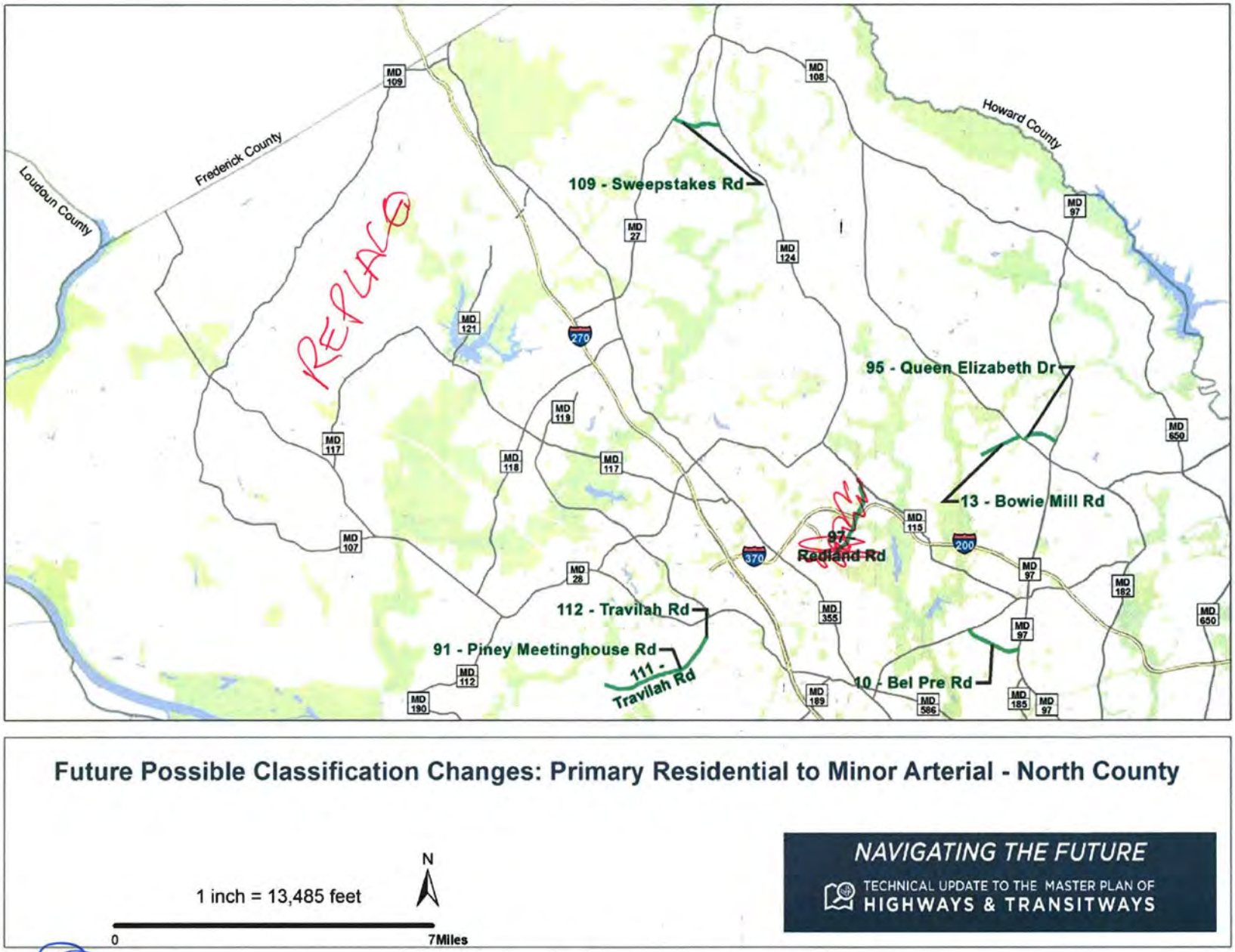

Figure 5: Future Possible Classification Changes – Primary Residential to Minor Arterial – North County

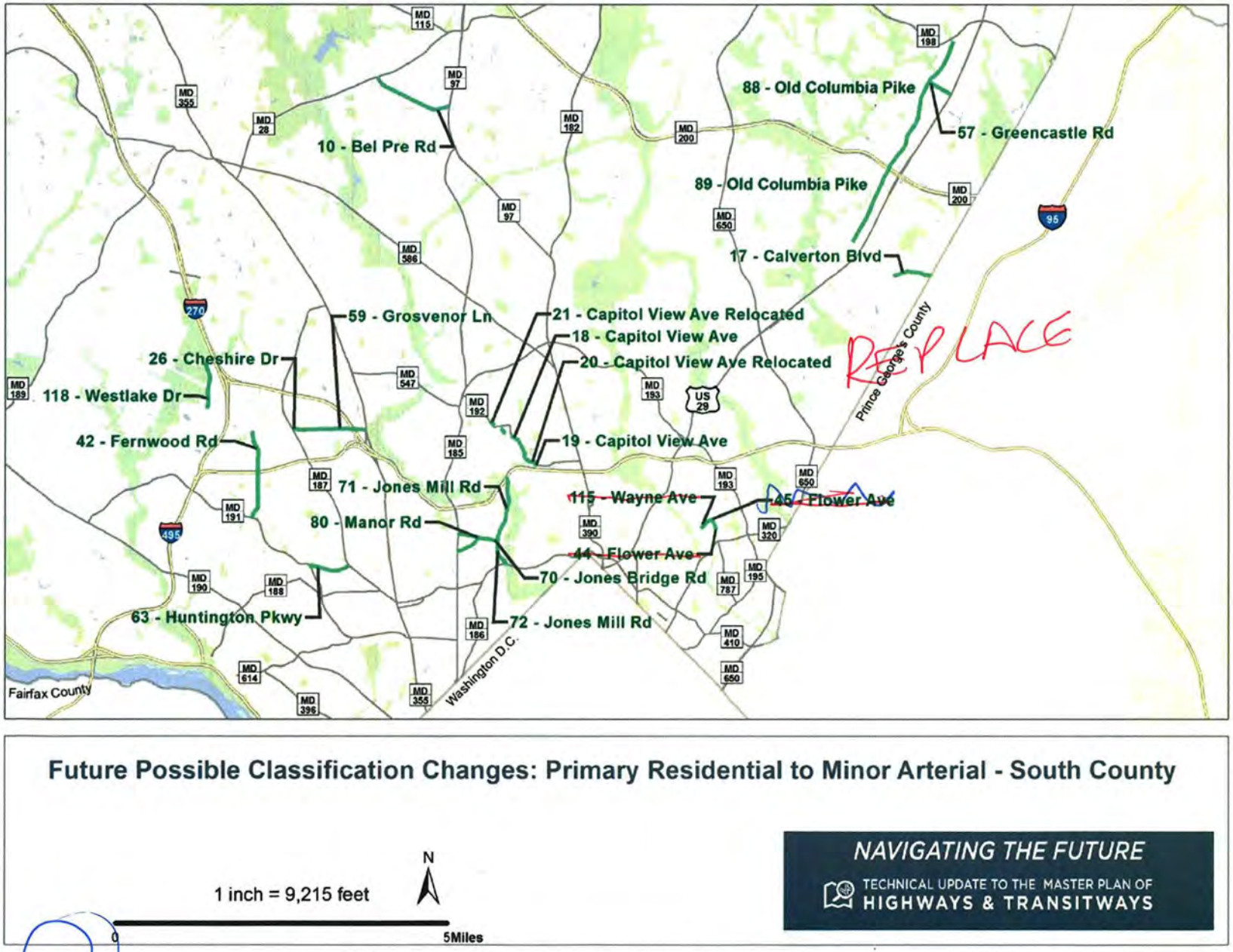

Figure 6: Future Possible Classification Changes - Primary Residential to Minor Arterial - South County

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Table 10: Future Possible Minor Arterial Candidates (Up-Classification)

ID	Name	From Location	To Location	Classification	Master Plan	Existing Lanes	Planned Lanes	Master Plan ROW Feet
10	Bel Pre Rd	Norbeck Rd	Georgia Ave	Primary Residential	Aspen Hill	2	2	80
13	Bowie Mill Rd	Cashell Rd	Olney-Laytonsville Rd	Primary Residential	Olney	2	2	80
17	Calverton Blvd	Cherry Hill Rd	Prince George's County Line	Primary Residential	Fairland	2-4	2-4	80
18	Capitol View Ave	Approximately 300' south of Beechbank Rd	Stoneybrook Dr	Primary Residential	Kensington-Wheaton	2	2	70
19	Capitol View Ave	Forest Glen Rd	Approximately 100' north of Forest Glen Rd	Primary Residential	Capital View	2	2	70
20	Capitol View Ave Relocated	Approximately 100' north of Forest Glen Rd	Approximately 300' south of Beechbank Rd	Primary Residential (Planned)	Kensington-Wheaton	N/A	2	70

ID	Name	From Location	To Location	Classification	Master Plan	Existing Lanes	Planned Lanes	Master Plan ROW Feet
21	Capitol View Ave Relocated	Stoney-brook Dr	Approx-imately 170' south of Edge-wood Rd	Primary Resi-dential (Planned)	Kensington-Wheaton	N/A	2	70
26	Cheshire Dr	Old George-town Rd	Grosve-nor Ln	Primary Residen-tial	North Bethesda/ Garrett Park	2	2	70
42	Fern-wood Rd	Bradley Blvd	Democra-cy Blvd	Primary Residen-tial	Bethesda-Chevy Chase	2	2	70
44	Flower Ave	Arliss St	Plymouth St	Primary Residen-tial	Long Branch Sector Plan	2	2	70
45	Flower Ave	Wayne Ave	Plymouth St	Primary Residen-tial	East Silver Spring	2	2	70
57	Greencas-tle Rd	Old Columbia Pike	Columbia Pike	Primary Residen-tial	Fairland	2	2	70
59	Grosve-nor Ln	Cheshire Dr	Rockville Pike	Primary Residen-tial	North Bethesda/ Garrett Park	2	2	70
63	Hunting-ton Pkwy	Old George-town Rd	Bradley Blvd	Primary Residen-tial	Bethesda-Chevy Chase	2D	2D	100
70	Jones Bridge Rd	Connecti-cut Ave	Jones Mill Rd	Primary Residen-tial	Chevy Chase Lake Sector Plan	2	2	70
71	Jones Mill Rd	Capital Beltway	Jones Bridge Rd	Primary Residen-tial	Bethesda-Chevy Chase	2	2	70

REPLACE

MOVE TO EXISTING TABLE 12
PROPOSED = MINOR ARTERIAL

ID	Name	From Location	To Location	Classification	Master Plan	Existing Lanes	Planned Lanes	Master Plan ROW Feet
72	Jones Mill Rd	Jones Bridge Rd	East West Hwy (MD 410)	Primary Residential	Chevy Chase Lake Sector Plan	2	2	70
80	Manor Rd	Connecticut Ave	Jones Bridge Rd	Primary Residential	Chevy Chase Lake Sector Plan	2	2	70
88	Old Columbia Pike	Briggs Chaney Rd	Spencerville Rd	Primary Residential	Fairland	2	2	70
89	Old Columbia Pike	East Randolph Rd	Briggs Chaney Rd	Primary Residential	Fairland	2	2	80
91	Piney Meetinghouse Rd	Cavanaugh Dr/ Shady Grove Rd Extended	Travilah Rd	Primary Residential	Potomac	2	2	70
95	Queen Elizabeth Dr	Olney Laytonsville Road	Georgia Ave	Primary Residential	Olney	2	2	70
97	Redland Rd	Muncaster Mill Rd	Needwood Rd	Primary Residential	Shady Grove	2	2	70
109	Sweepstakes Rd	Ridge Rd	Woodfield Rd	Primary Residential	Damascus	2	2	70
111	Travilah Rd	Darnestown Rd	Dufief Mill Rd	Primary Residential	Potomac	2	2	70
112	Travilah Rd	Unicorn Way	Darnestown Rd	Primary Residential	Great Seneca Science Corridor	2	2	70

MOVE TO EXISTING TABLE 12 PROPOSED = MINOR ARTERIAL

ID	Name	From Location	To Location	Classifi-cation	Master Plan	Existing Lanes	Planned Lanes	Master Plan ROW Feet
115	Wayne Ave	Manches-ter Place Station - Purple Line	Flower Ave	Primary Residen-tial	East Silver Spring	2	2	70
118	Westlake Dr	Westlake Terr	Tucker-man Ln	Primary Residen-tial	Potomac	2	4	70

MOVE TO EXISTING TABLE 12
PROPOSED = MINOR ARTERIAL

REPLACE

New Recommended Primary Residential Streets

During the technical update to the Master Plan of Highways and Transitways, 20 potential Primary Residential Street candidates were identified. These proposed new residential streets are displayed in Table 11 and Figures 7 and 8. Primary Residential Streets play a critical role in serving as the major collector street within a residential neighborhood. They are designed to a higher standard than secondary residential streets with minimum rights of way of 70 feet for a two-lane road and 100 feet for a two-lane dual road (median/central island). Primary Residential Streets are more likely to service greater pedestrian, bicycle and vehicular needs than secondary streets.

In most cases, the recommendation is being made to reflect the current roadway function and use of the street in question. Two of the candidates in the Bethesda-Chevy Chase Master Plan are currently principal secondary streets, Burdette Road between Bradley Avenue and River Road and Seven Locks Road between McArthur Boulevard and I-495. The recommendations for Alderton Road in the Kensington-Wheaton Master Plan area would require a connection of this road across the Matthew Henson Trail.

Table 11: Primary Residential Candidates

ID	Name	From Location	To Location	Classification	Proposed Classification	Master Plan	Existing Lanes	Planned Lanes	Master Plan ROW Feet
1	Alderton Rd	Alderton Rd	Alderton Rd	N/A	Primary Residential (Planned)	MPOHT (Pending)	2	2	70
2	Alderton Rd	Alderton Rd (Proposed)	Popular Run Dr	N/A	Primary Residential	MPOHT (Pending)	2	2	70
7	Ballinger Drive	Wexhall Dr	Robey Rd	N/A	Primary Residential	MPOHT (Pending)	2	2	70
8	Battery Ln	Glenbrook Rd	Old Georgetown Rd	N/A	Primary Residential	MPOHT (Pending)	2	2	70
16	Burdette Rd	Bradley Blvd (MD 191)	River Rd	Principal Secondary	Primary Residential	Bethesda-Chevy Chase	2	2	70
37	Dorset Ave	River Rd	Wisconsin Ave	N/A	Primary Residential	MPOHT (Pending)	2	2	70
46	Flower Hill Way	Woodfield Rd	Snouffer School Rd	N/A	Primary Residential	MPOHT (Pending)	2	2	70
51	Glenbrook Rd	Fairfax Rd/Little Falls Pkwy	Old Georgetown Rd	N/A	Primary Residential	MPOHT (Pending)	2	2	70
58	Greentree Rd	Burdette Rd	I-495 Bridge	N/A	Primary Residential	MPOHT (Pending)	2	2	70
60	Gue Rd	5000' east of Ridge Rd	Howard Chapel Dr	Country Road	Primary Residential	Damascus	2	2	70

REPLACE TABLE

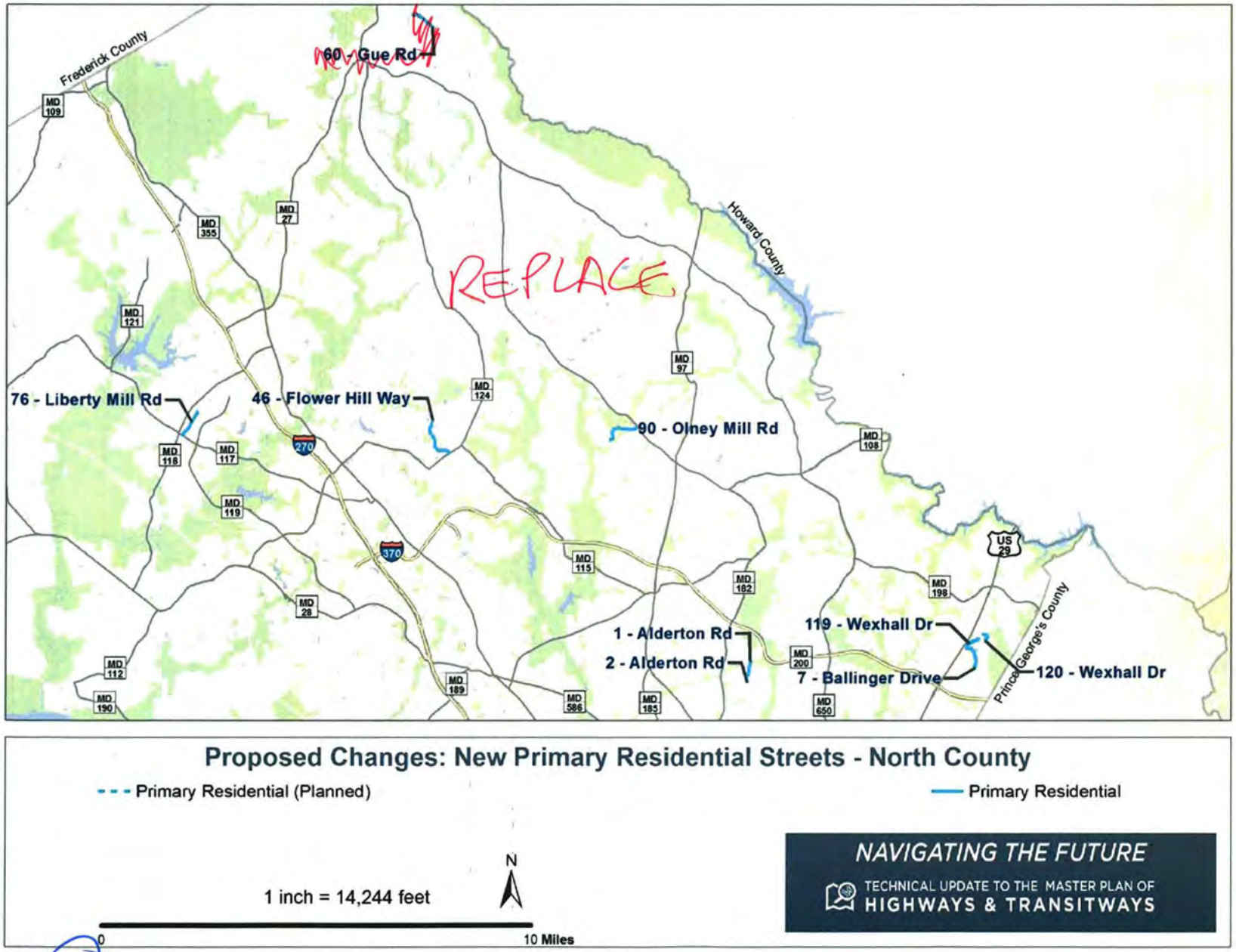


Figure 7: Proposed Classification Changes – New Primary Residential Streets – North County

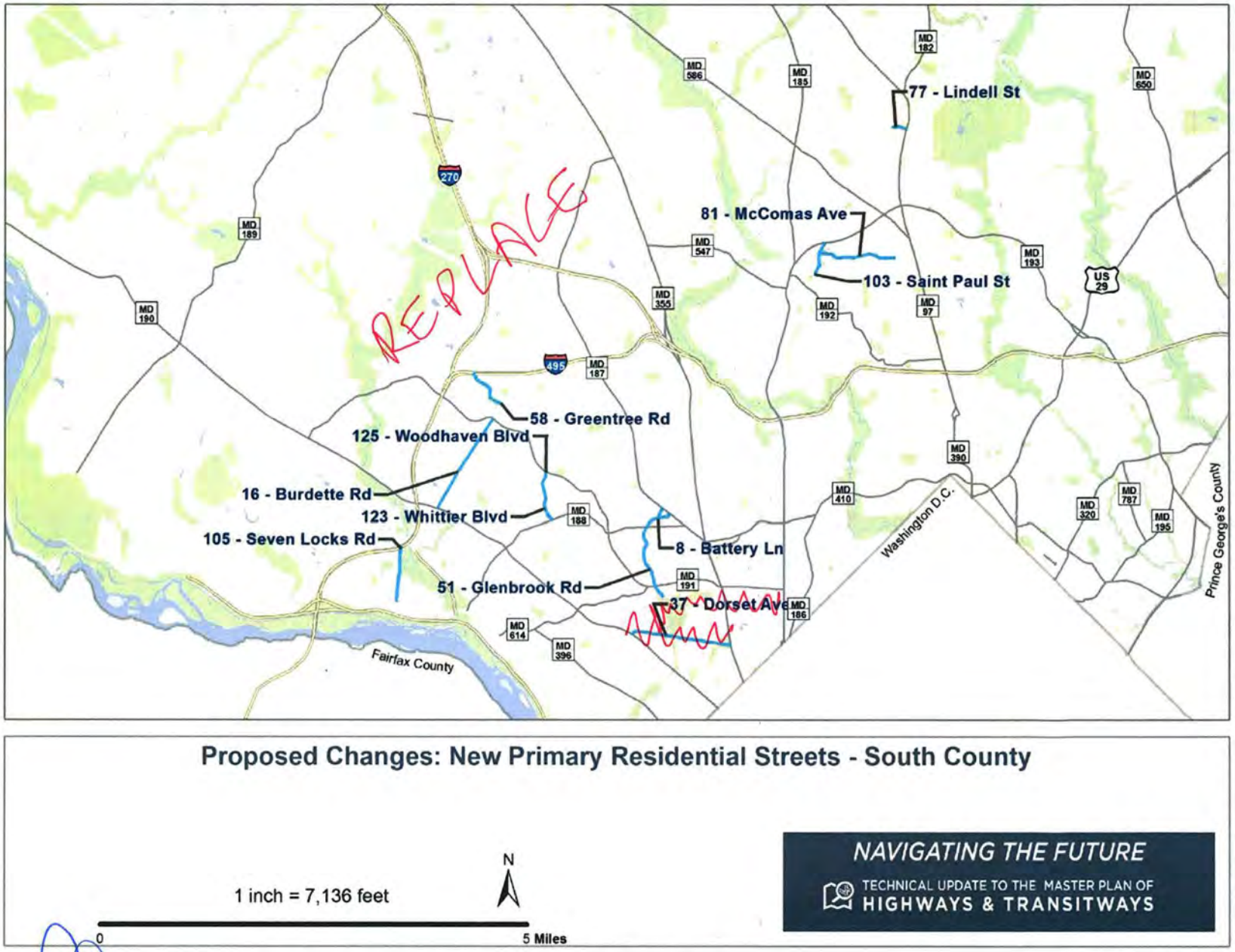


Figure 8: Proposed Classification Changes – New Primary Residential Streets – South County

Correction of Road Classification Inconsistencies

Master planning is conducted for specified geographic areas within Montgomery County. These plans are updated as needed. As a result, new plans are completed every year, whether for a sector plan, a master plan, a functional master plan or a master plan amendment. As our planning process evolves and the Montgomery County Code is modified, our transportation tools change as well. A solution envisioned in the 1970s or 1980s may no longer be appropriate, and there may be a need to re-evaluate transportation recommendations to ensure that the Master Plan of Highways and Transitways can provide a coordinated vision for the county.

Inconsistencies typically occur on roadways that bisect plan boundaries. An example is a road where the road classification changes at a plan boundary, however, the road characteristics or transportation function do not change at all. This effort re-evaluates these inconsistencies, which in some cases might be appropriate as currently coded, and in other cases, recommends a road classification change to improve consistency. Table 12 lists road classification inconsistencies, listing the road name and limits, plans affected, current classification in the two adjacent road sections and proposed resolution. Theses proposed changes are displayed on Figure 9. 10

There is a classification inconsistency on Avery Road where it crosses the Aspen Hill and Upper Rock Creek Master Plan boundary. A very short section of Avery Road in the Aspen Hill Master Plan is currently classified as a Primary Residential Street. Avery Road in the adjacent Upper Rock Creek Master Plan is classified as an Arterial. Reclassifying this short section of road between the Rockville city limit and the Upper Rock Creek Master Plan boundary from Primary Residential to Arterial would correct this inconsistency.

The planned section of Montrose Parkway between Chapman Avenue and Veirs Mill Road was originally approved with the clear intent that this road was to be a Parkway, restricted to heavy trucks. The Parkway classification is therefore the appropriate classification for this planned road, not an Arterial.

Classification inconsistencies were found in other parts of the county, including Cashell Road in Olney, Castle Boulevard in the Fairland area and East Village Avenue in Montgomery Village.

WERE BOTH

5 INDUSTRIAL PARKWAY IN THE WHITE OAK SCIENCE GATEWAY AREA

EXISTING SECTION OF MONTROSE PARKWAY BETWEEN MONTROSE ROAD AND HOYA STREET AND THE

Table 12: Re-Classification Candidates to Correct Master Plan Inconsistencies

ADD 4 SEGMENTS FROM EXISTING TABLE 10

ID	Name	From Location	To Location	Classification	Proposed Classification	Master Plan	Existing Lanes	Planned Lanes	Proposed Planned Lanes	Master Plan ROW Feet
6	Avery Rd	Aspen Hill MP Boundary	Rockville City Limits	Primary Residential	Arterial	Aspen Hill	2	2	2	80
22	Cashell Rd	Bowie Mill Rd	Hines Rd	N/A	MINOR Arterial	MPOHT (Pending)	2	2	2	80
23	Cashell Rd	Hines Rd	Emory Ln	Primary Residential	MINOR Arterial	Olney	2	2	2	80
24	Castle Blvd	Briggs Chaney Rd	~~Woodvale Apartments~~	Industrial	~~Primary Residential~~	Fairland	2	2	2	80
25	Castle Blvd	~~Woodvale Apartments~~	Castle Ridge Circle	Industrial	Primary Residential	Fairland	2	2	2	80
39	East Village Ave	Goshen Rd	Woodfield Rd	Primary Residential	Arterial	Montgomery Village Master Plan	4	4	4	80
62	Heritage Hills Dr	Olney-Laytonsville Rd	Georgia Ave	Arterial	Primary Residential	Olney	2	2	2	80
83	Montrose Pkwy (Proposed)	Chapman Ave (Maple Ave)	Parklawn Avenue	Arterial (Planned) with planned BRT	Parkway (Planned) with planned BRT	Countywide Transit Corridors	4D	4D + T	4D + 0T	300
84	Montrose Pkwy (Proposed)	Parklawn Avenue	Rock Creek Park	Arterial (Planned) with planned BRT	Parkway (Planned) with planned BRT	Countywide Transit Corridors	N/A	4D + T	4D + 0T	300

1,115' NORTH OF BRIGGS CHANEY ROAD

REPLACE

BUSINESS

ID	Name	From Location	To Location	Classification	Proposed Classification	Master Plan	Existing Lanes	Planned Lanes	Proposed Planned Lanes	Master Plan ROW Feet
85	Montrose Pkwy (Proposed)	Rock Creek Park	Veirs Mill Rd	Arterial (Planned) with planned BRT	Parkway (Planned) with planned BRT	Countywide Transit Corridors	N/A	3-4D + T	4D + 0T	300
98	Redland Rd	Needwood Rd	Crabbs Branch Way	Primary Residential	MINOR Arterial	Shady Grove	2	4	4	80
99	Riffle Ford Rd	700' north of Woodsboro Dr	220' east of Hallman Ct	N/A	Arterial	MPOHT (Pending)	2	4	4	80
110	Tech Rd	Old Columbia Pike	Columbia Pike	Business	Arterial	Fairland	4	4	4	80
116	Wayne Ave	Sligo Creek Pkwy	Manchester Place Station - Purple Line	Primary Residential with planned light rail	MINOR Arterial with planned LRT	Purple Line Functional Plan	2	2 + 2 T	2 + 2 T	70
124	Woodfield Rd	Fieldcrest Rd	Warfield Rd	Major Highway	Arterial	Montgomery Village Master Plan	2-6	6	4	100
126	Cabin John Parkway	Clara Barton Parkway	I-495	Freeway	Parkway	Bethesda-Chevy Chase	4	4	4	Varies

REPLACE

ADD MONTROSE PARKWAY FROM MONTROSE ROAD TO HOYA STREET - PARKWAY
ADD INDUSTRIAL PARKWAY FROM US ROUTE 29 TO FDA BLVD - BUSINESS

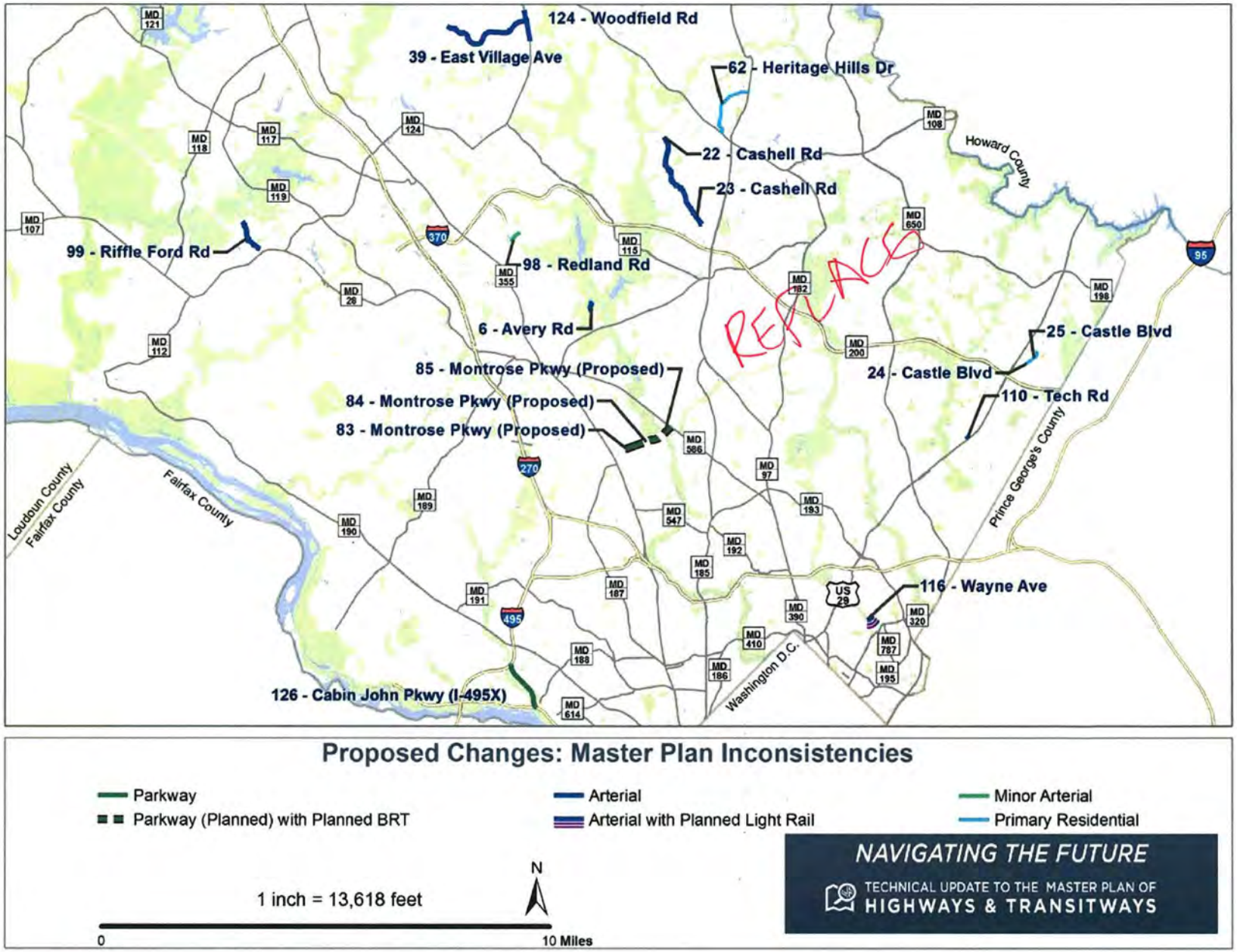


Figure 9: Proposed Classification Changes – Master Plan Inconsistencies

10

Rural Road Code Boundary Issues

Road classification inconsistencies were noted on many roads that border the Rural/Suburban Road Code boundary. While this transition from suburban to rural land use can be abrupt, it is critical that the roads facilitate this transition seamlessly. A total of 10 classification changes and one road segment elimination are proposed as summarized in Table 13 and displayed in Figure 10.

Notable recommendations include the classification consistency along Brink Road between Wightman Road and the Town of Laytonsville line to classify this road as a Country Arterial. This stretch of road is located within the Agricultural Reserve. The section of Brink Road between Goshen Road and Wightman Road is currently unclassified in the MPOHT and the section between Goshen Road and the Town of Laytonsville line is classified as an Arterial.

Modifications to the classification on Clopper Road are being proposed to ensure consistency with the recommendations from the MARC Rail Communities Plan by transitioning Clopper Road between Little Seneca Creek and Germantown Road from a Major Highway into an Arterial. The Whites Ferry Road recommendations are being made to remove a planned road relocation. This relocation is not viewed as necessary or consistent with the character of the road and the Country Arterial classification.

Table 13: Re-Classification Candidates – Rural Boundary Modifications

ID	Name	From Location	To Location	Classification	Proposed Classification	Master Plan	Existing Lanes	Planned Lanes	Proposed Planned Lanes	Master Plan ROW Feet
12	Bordly Dr	Georgia Ave	Brighton Dam Rd	Primary Residential	Country Road	Olney	2	2	2	70
14	Brink Rd	Goshen Rd	Town of Laytonsville	Arterial	Country Arterial	Agriculture and Open Space	2	2	2	80
15	Brink Rd	Wightman Rd	Goshen Rd Extended	N/A	Country Arterial	MPOHT (Pending)	2	2	2	80
28	Clopper Rd	Little Seneca Creek	Germantown Rds	Major Highway	Arterial	Boyds / Germantown	2	6	4	150
38	Dorsey Rd	Warfield Rd	Olney-Laytonsville Rd	Primary Residential	Country ~~Road~~ ARTERIAL	Upper Rock Creek	2	2	2	70
52	Goshen Rd	Warfield Rd	Brink Rd	Arterial	Country Arterial	Agriculture and Open Space	2	2	2	80
53	Goshen Rd Extended	Goshen Mill Court	Brink Rd	Arterial (Planned)	Country Arterial (Planned)	Agriculture and Open Space	N/A	2	2	80
61	Hawkins Creamery Rd	Woodfield School Rd	Woodfield Rd	Primary Residential	Country Road	Damascus	2	2	2	70
114	Warfield Rd	Woodfield Rd	Olney-Laytonsville Rd	Primary Residential	Country ~~Road~~ ARTERIAL	Gaithersburg Vicinity / Upper Rock Creek	2	2	2	70

ID	Name	From Location	To Location	Classification	Proposed Classification	Master Plan	Existing Lanes	Planned Lanes	Proposed Planned Lanes	Master Plan ROW Feet
121	Whites Ferry Rd	Poolesville eastern boundary	Approx. 2000' east of Poolesville boundary	N/A	Country Arterial	MPOHT (Pending)	2	2	2	80
122	Whites Ferry Rd Relocated	Approx 2000' E of Poolesville boundary	Partnership Rd	Country Arterial (Planned)	To be removed from MPOHT	Agriculture and Open Space	N/A	2	2	80

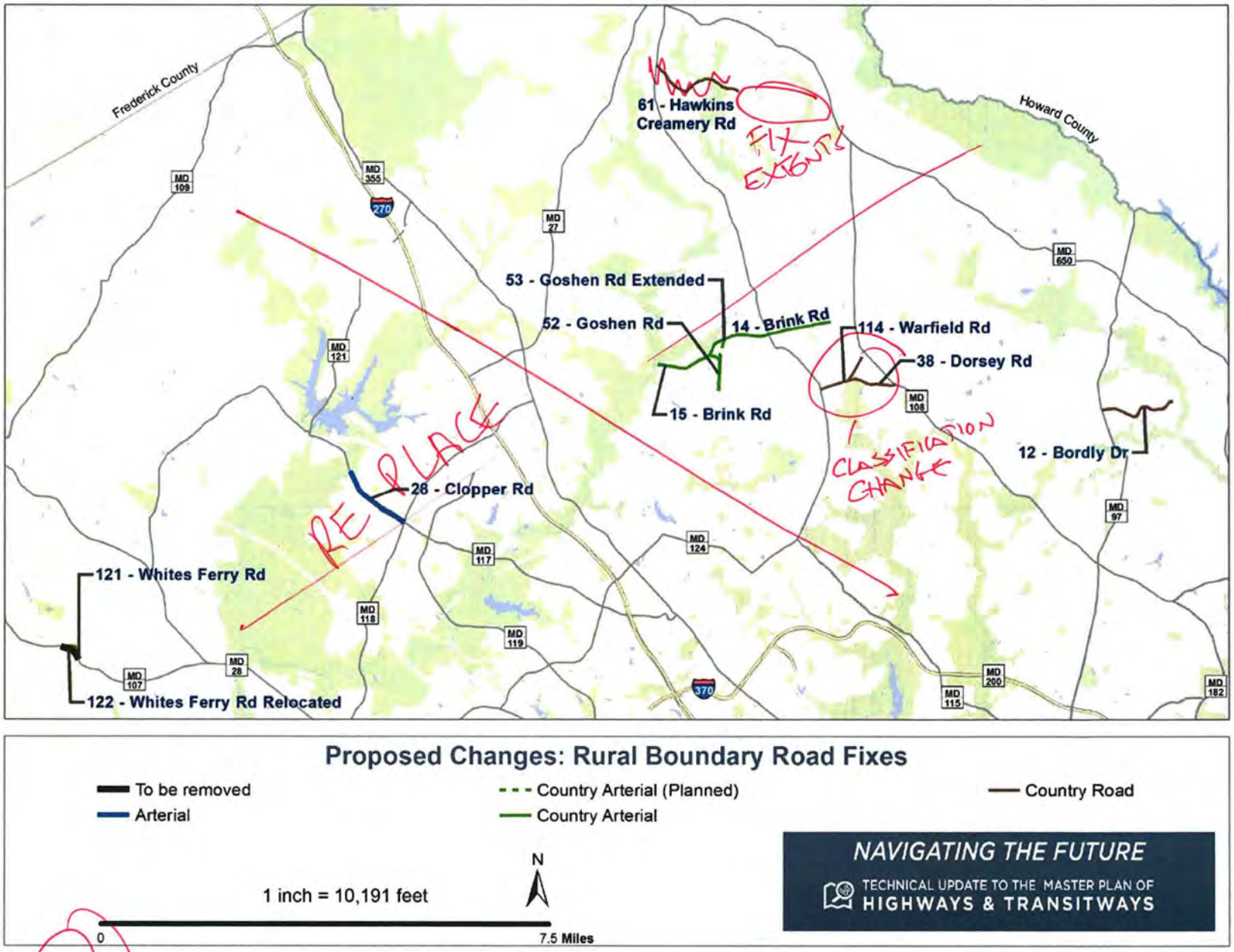


Figure 10: Proposed Classification Changes – Rural Boundary Modifications

Proposed Classification Changes on Major and Controlled Major Highways

There are 12 proposed classifications changes on roads that are currently classified as either a Major Highway or a Controlled Major Highway. Most of these changes are to provide consistency between adjacent road sections or to provide a smoother, more logical transition between road classification types. Table 14 provides the listing of the proposed classification changes. These changes are displayed in Figure 11.

Numbering/Identification of Unnumbered Streets From Older Plans

Several older plans were completed without clearly identifying technical details for all master-planned streets. The typical detail includes a road classification type, street identification number (i.e., B-# for a Business District Street, A-# for an Arterial Street, etc.), right-of-way width, target speed, existing number of travel lanes, future planned number of travel lanes and, in some cases, a planned cross section.

A total of 75 Primary Residential or Business District Streets have been identified in the MPOHT that are currently missing street identification numbers. These unnumbered streets are found in the following master plans or sector plans:

- Friendship Heights Sector Plan (seven Business District Streets)
- Germantown Master Plan (16 Primary Residential streets)
- Kensington-Wheaton Master Plan (13 Primary Residential streets)
- Silver Spring Central Business District Sector Plan (35 Business District streets)
- Purple Line Functional Master Plan (one Business District street)
- Takoma/Langley Crossroads Sector Plan (three Business District streets)

Appendix A contains a table listing these unnumbered streets and adds appropriate information to assign a classification identification number to each. This identification is simply a bookkeeping procedure to ensure that all roads included in the MPOHT have sufficient, consistent information. New road designations for Primary Residential and Business District streets added to this plan are generally numbered in a north-to-south, west-to-east direction.

MOVE TO AFTER MAP ON PAGE 62 (TOP OF PAGE)

Table 14: Proposed Classification Changes – Major and Controlled Major Highways

ID	Name	From Location	To Location	Classification	Proposed Classification	Master Plan	Existing Lanes	Planned Lanes	Proposed Planned Lanes	Master Plan ROW Feet
32	Damascus Rd	Laytonsville Rd (MD 108)	2800' east of Woodfield Rd	Major Highway	Arterial	Damascus	2	2	2	120
33	Darnestown Rd	Whites Ferry Rd	Riffle Ford Rd	Major Highway	Arterial	Agriculture and Open Space	2	2	2	120
40	Father Hurley Blvd	Crystal Rock Dr	CSX Tracks	Controlled Major Highway	Major Highway	Germantown Employment Area Sector Plan (2009)	4D	6D	6D	120
47	Germantown Rd	Darnestown Rd	Great Seneca Creek (Southern Branch)	Major Highway	Arterial	Potomac	2	2-4D	2	120
48	Germantown Rd	Great Seneca Creek (Northern Branch)	Riffle Ford Rd	Major Highway	Arterial	Germantown (1989)	2D	2-4	2	120
49	Germantown Rd	Great Seneca Creek (Southern Branch)	Great Seneca Creek (Northern Branch)	Major Highway	Arterial	Agriculture and Open Space	2	2-4	2	120
50	Germantown Rd	Riffle Ford Rd	Richter Farm Rd	Major Highway	Arterial	Germantown (1989)	2D	6D	4D	120

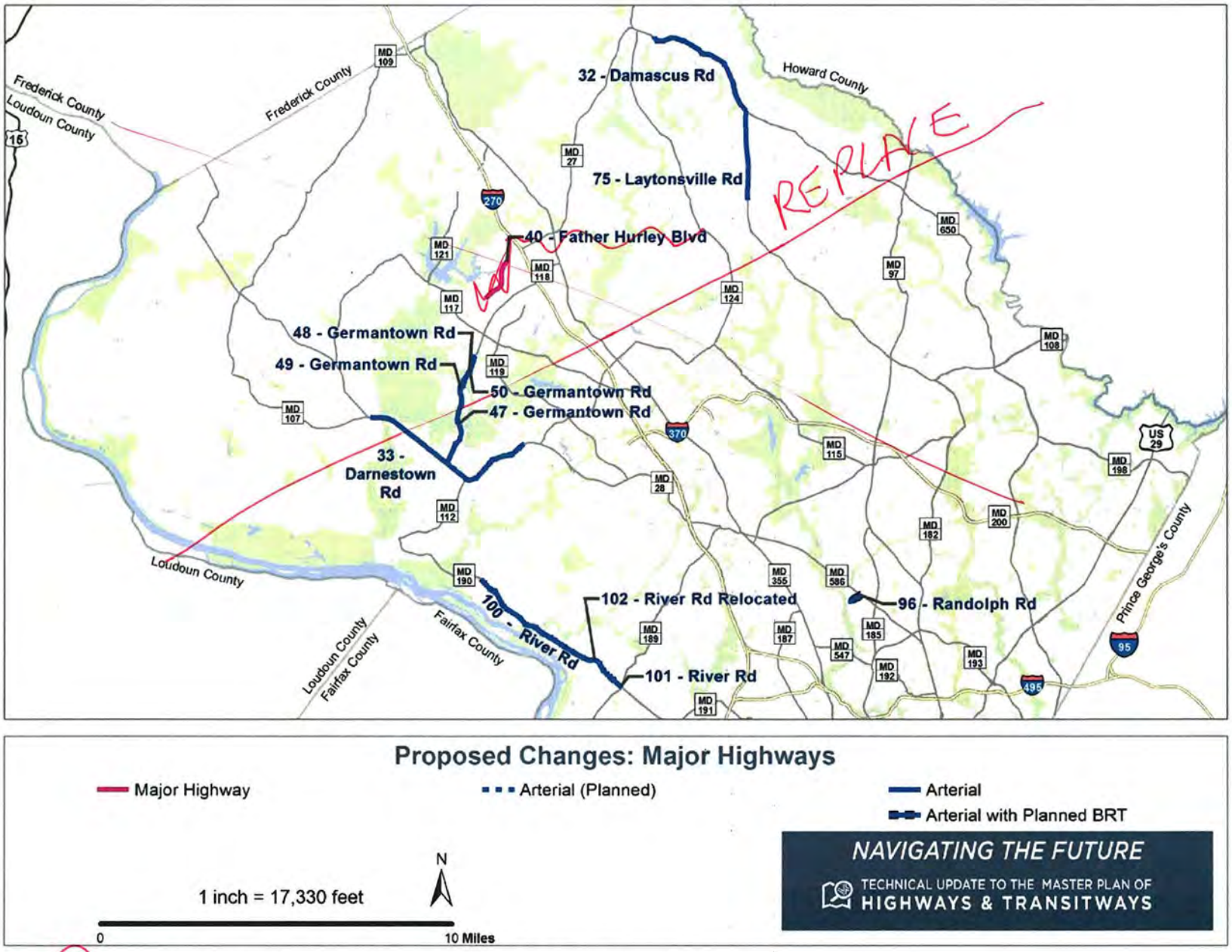


Figure 11: Proposed Classification Changes – Major and Controlled Major Highways

12

MOVE UNNUMBERED STREET SECTION HERE

Changes From Existing or Planned Development

Development can sometimes alter components of a master plan, based on Planning Board approvals, including planned streets that are no longer possible to implement or were significantly changed due to private and public sector projects. For example, the Cabin Branch development in Clarksburg was approved by the Planning Board and it impacted master planned roads. A second development, the Montgomery College Germantown Campus, has a planned road that was modified during the development process.

NEW PP

MOVE OBS. DRIVE DISC

The intent of the Master Plan of Highways and Transitways is to delete such unrealized streets or make appropriate corrections in the plan based on the modifications to the streets. Table 15 on the following page lists the master-planned streets that should be modified for the Cabin Branch development. These changes are displayed in Figure 12.

3

Major changes that resulted from the Cabin Branch development include the re-alignment and widening of Clarksburg Road between I-270 and West Old Baltimore Road. In addition, a planned four-lane north-south divided arterial with a 120-foot wide, master-planned right-of-way through the Cabin Branch development (A-304) from the Clarksburg Master Plan was replaced with two parallel two-lane business district streets (Broadway Avenue and Cabin Branch Avenue) each with 80-foot wide master-planned rights of way.

MODIFY DISCUSSION TO FIX FIGURE 13/12 ISSUE

Whelan Lane, now classified as a four-lane arterial (A-304), is proposed as part of this MPOHT update to be re-classified as a two-lane Industrial Street with a 60-foot wide master-planned right of way. The relocation of Clarksburg Road also requires the designation of a 550-foot long section of Old Clarksburg Road to connect to Whelan Lane. This road should be designated as a two-lane Industrial Street with a 60-foot master-planned right-of-way. Finally, a one-block section of Gosnell Farm Road, which connects Clarksburg Road with Old Clarksburg Road should be designated as a Business District Street with an 80-foot wide master-planned right-of-way.

12

Observation Drive Connector (or Extension) is a small road connection between Observation Drive and Goldenrod Lane. This extension was necessitated by a deviation for the Germantown Master Plan in Observation Drive improvements through the Montgomery College Germantown Campus. Observation Drive was originally planned to use the alignment of what is now Goldenrod Lane. The connection proposed would re-connect Observation Drive, as shown in Figure 13 from the Montgomery College Master Plan, with a two-lane business district street connector road near an existing surface parking lot. This street should provide two planned travel lanes and a 25 miles per hour target speed within an 80-foot right-of-way.

Figure 13: Observation Drive Extension shown in Montgomery College Master Plan
Source: Montgomery College Facilities Masterplan for the Germantown Campus, page GT-58, 2016.

OK

Table 15: Classification Adjustments Due to Cabin Branch Development

ID	Name	From Location	To Location	Classification	Proposed Classification	Master Plan	Existing Lanes	Planned Lanes	Proposed Planned Lanes	Master Plan ROW Feet
1	Broadway Ave	Clarksburg Rd (MD 121)	West Old Baltimore Rd	Arterial	Business	Clarksburg	2D	4D	2D	120
~~2~~ 3	Cabin Branch Ave	Clarksburg Rd (MD 121)	Little Seneca Pkwy	N/A	Business	MPOHT (Pending)	2D	N/A	2D	80
~~3~~ ~~4~~ 6	Clarksburg Rd	Byrne Park Dr	Goldeneye Ave	Arterial	Arterial	Clarksburg	4D	6D	4D	150
~~4~~ 5	Clarksburg Rd	Dunlin St	Byrne Park Dr	Arterial	Arterial	Clarksburg	2	4D	2	80
~~5~~ 4	Clarksburg Rd	West Old Baltimore	Dunlin St	Arterial	Arterial	Clarksburg	2	2-4D	2	80
~~6~~ 7	Gosnell Farm Rd	Clarksburg Rd (MD 121)	Old Clarksburg Rd	N/A	Business	MPOHT (Pending)	4D	N/A	4D	80
~~7~~ 8	Old Clarksburg Rd	Gosnell Farm Rd	Whelan Ln	N/A	Industrial	MPOHT (Pending)	2	N/A	2	60
~~8~~ 9	Whelan Ln	Old Clarksburg Rd	Clarksburg Correctional Facility	Arterial	Industrial	Clarksburg	2	4D	2	120

RE-ORDER

ADD A NEW SECTION 2 BROADWAY AVE BET. WEST OLD BALTIMORE ROAD AND LITTLE SENECA PARKWAY EX=2, PLANNED=4D, PROPOSED=4D ROW=120'

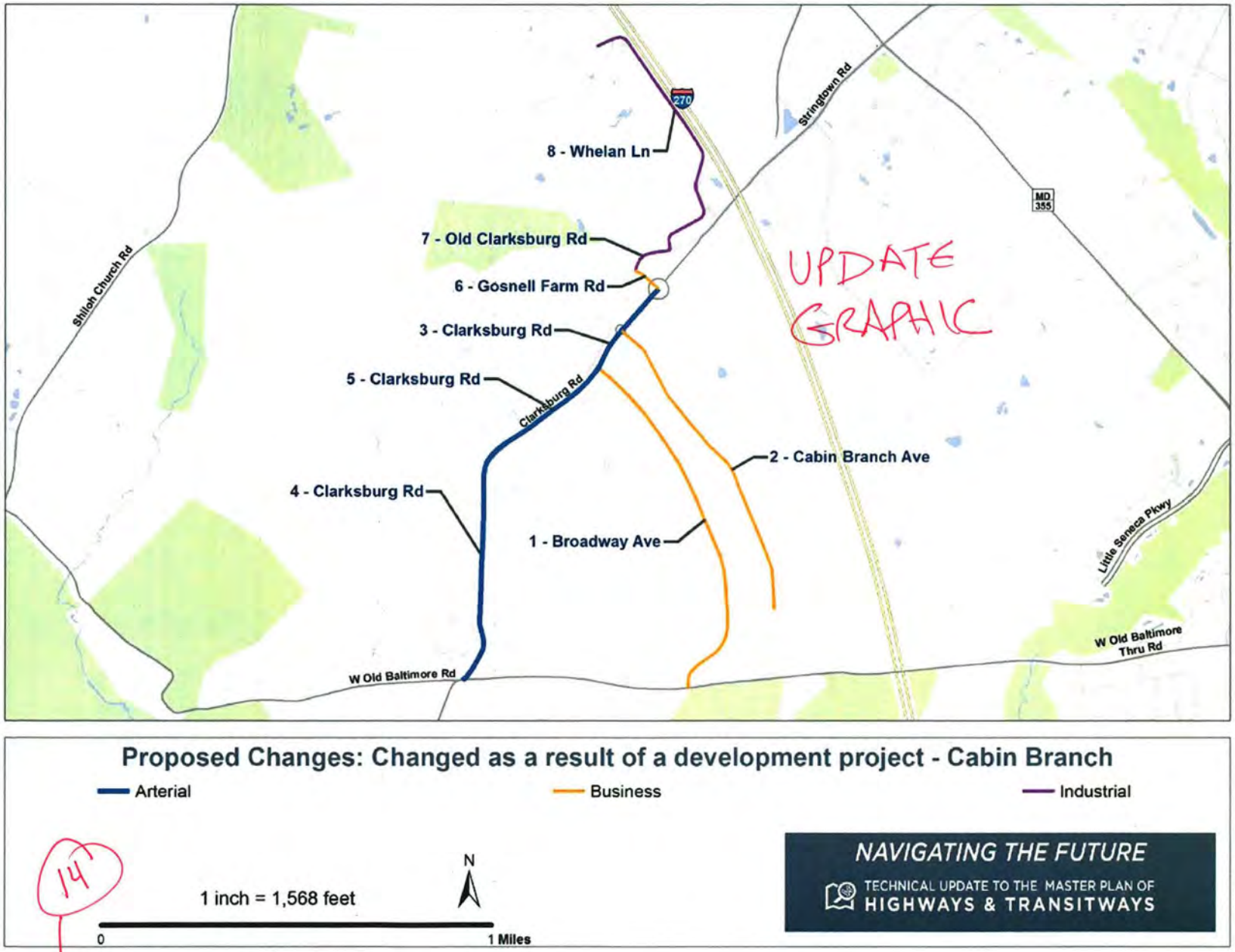


Figure 12: Cabin Branch Development – Master Plan Roads Modified

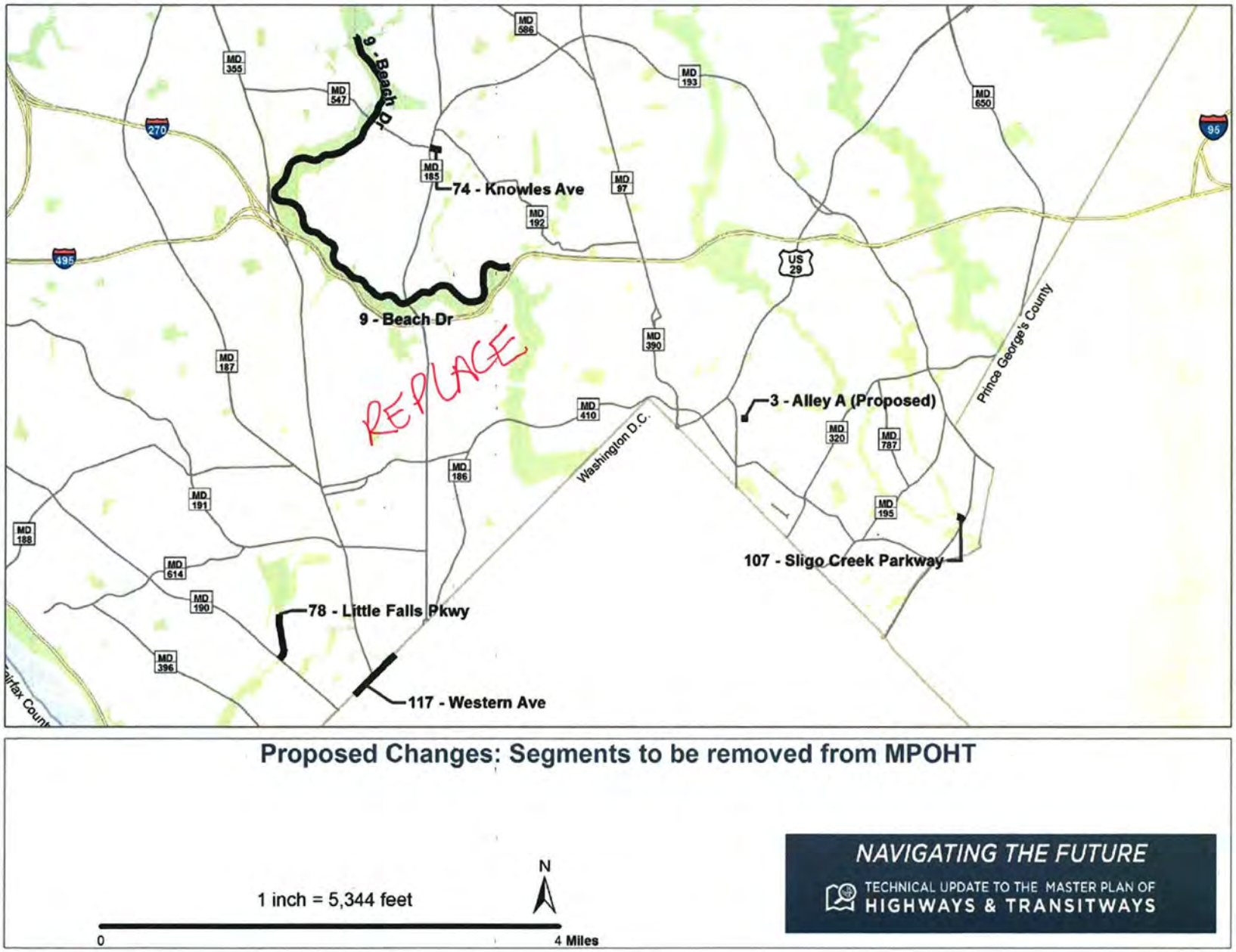


Figure 14: Road Segments Recommended to be Removed from the MPOHT

15

INSERT TEXT → ROW CHANGES NEEDED TO SUPPORT THE BICKLE MASTER PLAN INCLUDING TABLE 17

Inclusion of HOV Lanes

Proposed high occupancy vehicle (HOV) lanes were officially adopted into in the MPOHT in 2004 for I-495 between the I-270 West Spur and the American Legion Bridge. The existing I-270 HOV lanes have never been formally adopted into the MPOHT. These HOV lanes are an important component of our county's transportation system so the existing and planned HOV lanes are proposed to be added into the MPOHT through this technical update.

Previous MPOHT maps also did not display the planned I-495 HOV lanes. Table 17 → 18 displays the I-270 road segments that would be modified in the MPOHT to specify both existing and planned HOV lanes. With this update to the MPOHT, HOV lanes will be displayed clearly on the Mapbook and noted in the Classification Table. HOV access interchanges were also designated on I-270 at Dorsey Mill Road and at Fernwood Drive. These locations are noted as HOV Access Interchanges. (SEE APPENDIX A FOR INTERCHANGE TABLE).

CHANGE TO A SUB-HEADING

Addition of Target Speeds in Urban Road Code Areas

With the Complete Streets Road Code change in 2014, the maximum target speed for county roads in Urban Road Code areas was set at 25 miles per hour. Previously, the MPOHT only identified target speeds specifically identified in the relevant master plans. This practice has only rarely been included in master plans in the past. To be consistent with the Road Code, all Urban Road Code, county-owned roads should be assigned a target speed of 25 mph unless the following conditions apply:

- A target speed was identified in previous master plans.
- The road was designed with a target speed higher than 25 mph and it would not be feasible to attain a 25 mph through traditional engineering and enforcement methods. This exclusion appears to have been added to exempt design projects in process during or completed before the Road Code was modified. It is clear that the intent of future design projects within the Urban Road Code should be designed and implemented to achieve the 25 mph target speed on all county-owned roads.

MOVE THIS SECTION TO FOLLOW p.72 WITHIN URBAN ROAD CODE DISCUSSION

Table 18 → 19 contains a summary of road mileage by classification where 25 mph target speeds are proposed to be added to the MPOHT. These roads are located in the Urban Road Code and do not currently have a target speed identified in an adopted master plan. A total of 277 → 180 road segments were identified with a combined mileage of 88.5 → 49.3 miles. These segments represent 7.7 → 4.2 percent of the total road mileage in the MPOHT. A detailed table summarizing these proposed locations is provided by Urban Road Code area in Appendix B → E.

Table 17: I-270 HOV Lane Segments

Road Name	From Location	To Location	Classification	Master Plan	Existing Lanes	Planned Lanes	Master Plan ROW	Existing HOV Lane	Pro-posed HOV Lanes
I-270	Clarksburg Rd	Little Seneca Creek	Freeway with HOV Lanes	Clarksburg	6D	8D	350	1 NB	2
I-270	Little Seneca Creek	Great Seneca Creek	Freeway with HOV Lanes	Germantown Employment Area Sector Plan (2009)	6D	12D	300	1 NB	2
I-270	Little Seneca Creek	Great Seneca Creek	Freeway with HOV Lanes	Germantown Employment Area Sector Plan (2009)	8D	12D	300	1 NB	2
I-270	Great Seneca Creek	Quince Orchard Rd/ Montgomery Village Ave	Freeway with HOV Lanes	Great Seneca Science Corridor	8D	12D	300	1 NB	2
I-270	Great Seneca Creek	W Diamond Ave	Freeway with HOV Lanes	Great Seneca Science Corridor	10D	12D	300	1 NB	2
I-270	Diamond Ave	I-370	Freeway with HOV Lanes	Great Seneca Science Corridor	10D	12D	300	2	2
I-270	I-370	Shady Grove Rd	Freeway with HOV Lanes	Great Seneca Science Corridor	12D	12D	300	2	2
I-270	Shady Grove Rd	W Gude Dr	Freeway with HOV Lanes	Agriculture and Open Space	12D	12D	300	2	2
I-270	W Gude Dr	I-270 Spur	Freeway with HOV Lanes	North Bethesda-Garrett Park/Potomac	12D	12D	Varies	2	2
I-270	I-270 Spur	Capital Belt-way (I-495)	Freeway with HOV Lanes	North Bethesda-Garret Park/Potomac	6D	6D	300	2	2
I-270 Spur	I-270	Capital Belt-way (I-495)	Freeway with HOV Lanes	North Bethesda-Garrett Park/Potomac	6D	6D	300	2	2

9

Table 18: Urban Road Code – Designation of 25 mph Target Speed

Classification	Total Miles
Arterial	18.9
Arterial (Planned)	1.6
Arterial (Planned) with planned BRT	1.1
Arterial with planned BRT	5.2
Arterial with planned light rail	0.2
Business	30.6
Business (Planned)	11.6
Business with planned BRT	0.1
Business with planned light rail	0.5
Major Highway	3.2
Major Highway (Planned)	0.4
Major Highway with planned BRT	1.2
Minor Arterial	2.8
Primary Residential	10.6
Primary Residential (Planned)	0.5
Grand Total	**88.5**

REPLACE

NEW AND EXPANDED URBAN AREAS [SUBHEADING]

Potential Expansion of Urban Road Code Boundaries

The Master Plan of Highways and Transitways is an appropriate place for modifying Urban Road Code boundaries. In preparing the plan, a review of existing Urban Road Code areas was conducted and potential modifications were identified for consideration with this technical update. These locations are summarized in Table 19. ~~Graphics showing the proposed boundary changes are displayed in Appendix C~~. The intent of any change was to make the Urban Road Code boundaries consistent with existing or planned urban character, including zoning.

Table 19: Urban Road Code Boundaries – Proposed Changes

Proposed Urban Road Code Area	Master Plan	Proposed Change
Burtonsville	Burtonsville Crossroads	New Urban Area
Kensington	Kensington Sector Plan	New Urban Area
Langley Crossroads	Takoma Langley Crossroads	New Urban Area
Cabin Branch	Clarksburg/Ten-Mile Creek	New Urban Area
Chevy Chase Lake	Chevy Chase Lake	New Urban Area
Germantown	Germantown Employment Area Sector Plan	Expand Area and Merge Germantown Town Center and Cloverleaf Urban Areas
Piney Branch	East Silver Spring	Expand Boundaries
Great Seneca Science Corridor	Great Seneca Science Corridor	Expand Boundaries to include ~~Montgomery~~ College campus

THE UNIVERSITIES AT SHADY GROVE

Each proposed Urban Road Code boundary change is discussed below:

Burtonsville (New) – The Burtonsville Crossroads Sector Plan envisioned a village character and a divided boulevard with improved pedestrian and bicycle accommodations. Designating Burtonsville between Old Columbia Pike and Old US Route 29 as an Urban Road Code area would help to achieve this goal by requiring more complete streets design principles.

Kensington (New) – Downtown Kensington along the University Boulevard and Connecticut Avenue corridors is a dense suburban area with more urban characteristics than suburban. Travel speeds are low (30 mph or lower), curb cuts are frequent, traffic volumes are very high and pedestrian activity is moderate, with commercial development along the corridor. This community has a designated Bicycle-Pedestrian Priority Area, which makes it unique among the BPPAs, as most now overlap with Urban Road Code areas to a large degree. This Urban Road Code would connect exactly with the Wheaton Urban Road Code on University Boulevard at Drumm Avenue and extend to the south on Connecticut Avenue as far south as Warner Street. This Urban Road Code area will also extend along Metropolitan Avenue to just south of Edgewood Road.

Langley Crossroads (New) - The Langley Crossroads area currently functions as an urban area. The surrounding land uses, road geometry, curb cuts, posted speed limits, existing and planned transit service make this recommendation a high priority. The construction of the Purple Line, plus the existing Langley bus center, further emphasize this area's need for Urban Road Code design standards and practices.

Cabin Branch (New) - This large development region in Clarksburg was developed with an urban design philosophy. While suburban in density, Cabin Branch has narrow streets, road design elements and street-scale development that could be further reinforced with the designation of the region as an Urban Road Code area.

Chevy Chase Lake (New) - The area immediately surrounding the planned Connecticut Avenue Purple Line station stop is proposed as a new Urban Road Code area. This area will extend along Connecticut Avenue from Manor Road on the north to 450 feet to the north of Dunlop Street.

Germantown – Currently, there are two Urban Road Code area designations for Cloverleaf Center and Germantown Town Center. The recommendation is to consolidate these centers into one larger area by filling in the Century Boulevard corridor and extending the northern limits to the north of Dorsey Mill Road.

Piney Branch – The existing Piney Branch Urban Area is quite small. With the construction of the Purple Line, the recommendation for this area is to expand the Urban Road Code boundary significantly to the east and west.

Great Seneca Science Corridor - The boundaries of the existing Urban Road Code should be expanded slightly by including the ~~Montgomery College~~ campus.

UNIVERSITIES AT SHADY GROVE

MOVE "ADDITION OF TARGET SPEEDS... FROM P. 68 INCLUDE TABLE 19 ON PAGE 70

INSERT GREENHOUSE GAS EMISSIONS ANALYSIS TEXT

Master Plan of Highways and Transitways Tools

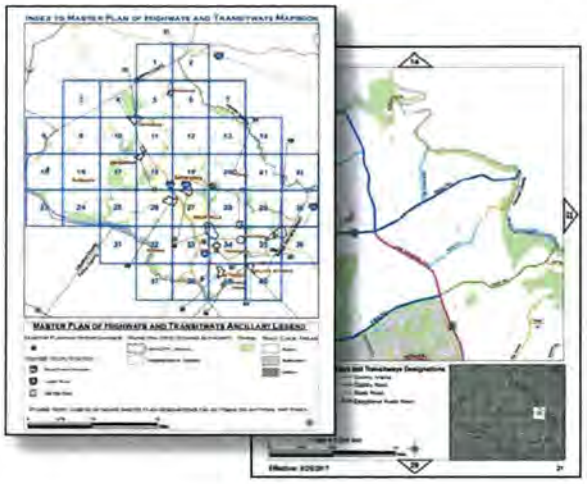
To support the Master Plan of Highways and Transitways, tools were created to visually present the MPOHT in various media. These include:

- The official Mapbook and Classification Table present the amended MPOHT. These documents are provided on the MPOHT website and updated periodically as the MPOHT is amended. On each page of these products, an effective date is noted when changes are made to the plan.
- The MPOHT Functional Classification Story Map demonstrates the importance of functional classifications in the development of a well-balanced transportation network. The map can be used to display the entire MPOHT or each highway and transitway classification individually. This tool displays the amended MPOHT and is updated periodically in sync with the official Mapbook and Classification Table.
- The Bicycle-Pedestrian Priority Areas (BPPAs) Mapbook improves the graphical format of the county's designated BPPA maps. It follows the plan's Mapbook format and displays the BPPAs within the context of the existing and planned transit facilities (planned transitways and existing Metro and MARC rail stations).

Mapbook and Classification Table

The mapping product used to summarize the Master Plan of Highways and Transitways is called the Mapbook and is continuously maintained by the Montgomery County Planning Department. This macro-activated pdf file, accessed online through the Department's website, displays the plan in a grid-based format and can be navigated by clicking on one of 56 pages. Sheets 1-40 contain the grid pages within Montgomery County, while sheets 41-56 contain urban area detailed maps.

From a Mapbook page, subsequent pages can be accessed by clicking on the triangular pointers or navigating back to the index page by clicking on the tinted inset map in the lower right. The pdf document also can be viewed in conventional fashion.



The Classification Table provides an alphabetical summary of all highways and transitways within the master plan. This table provides detailed information on road extents, classification, MPOHT numbering, existing lanes, planned lanes, target speed (mph), transitways accompanying roads and the transit mode.

The Mapbook and Classification Tables for the currently adopted MPOHT are provided in Appendix D.

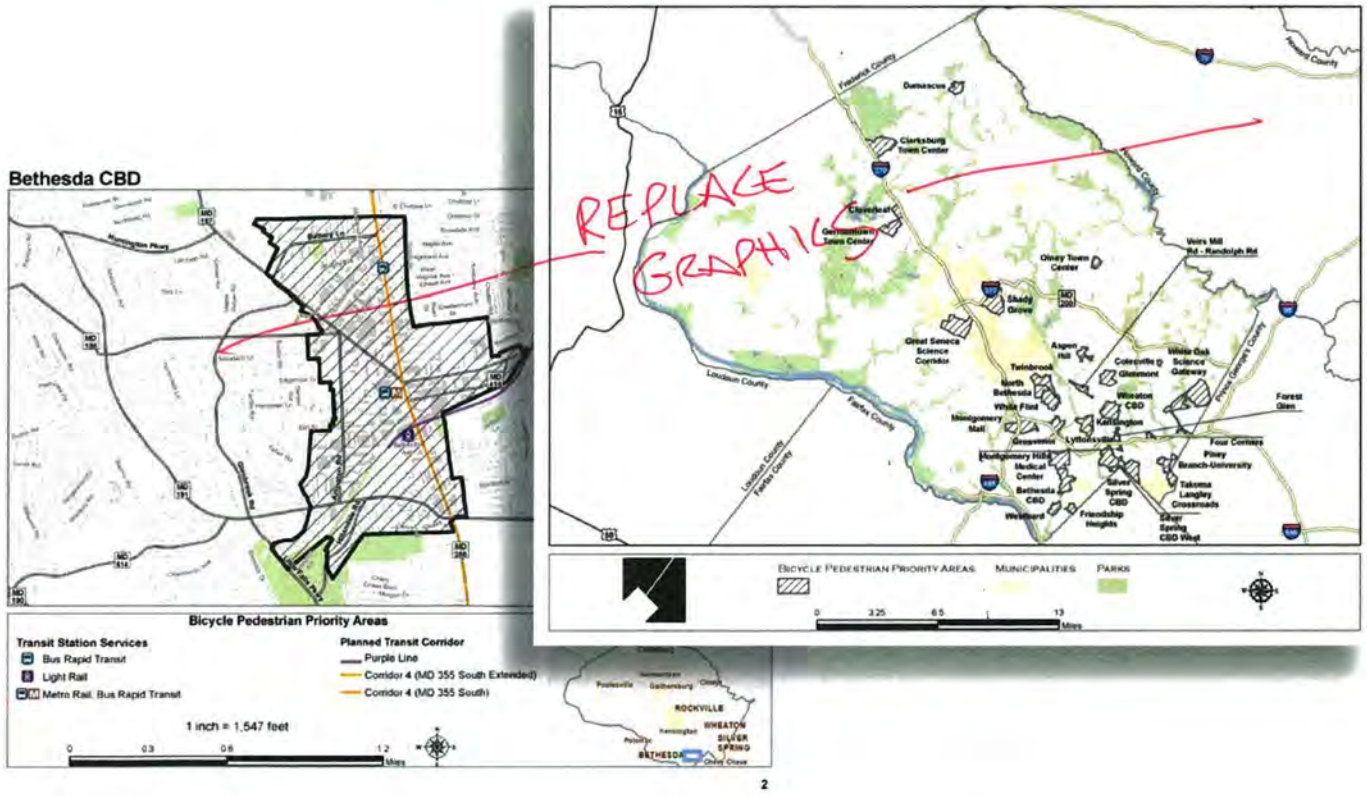
TRANSITWAYS/

Bicycle-Pedestrian Priority Area Mapbook

INSERT TEXT

Bicycle-Pedestrian Priority Areas (BPPAs) are defined in the Maryland State Code as a geographical area where the enhancement of bicycle and pedestrian traffic is a priority. These locations overlap most of the existing Urban Road Code Urban areas, but also include many locations within suburban areas where there is proximity to existing and proposed public transit lines. BPPAs are adopted within Montgomery County by the County Council as part of the master planning process.

A Mapbook summarizing the adopted Bicycle-Pedestrian Priority Areas (BPPAs) is provided in Appendix E. No changes to BPPAs are being recommended in this master plan technical update. The format of the graphical presentation of BPPAs was modified to be more consistent with the MPOHT format.



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Community Outreach

Public Meetings – Road Classification Changes

A total of five public outreach meetings were held around Montgomery County to discuss road classification changes on the following dates in 2017 and locations:

At each meeting, Planning Department staff presented the purpose and history of the Master Plan of Highways, an explanation of the functional classification system and a review of the changes proposed in the master plan update. Staff demonstrated the Mapbook, Functional Classification Story Map and MPOHT Feedback Map, and provided assistance to attendees using these tools to comment on the plan.

Brookville Road (MD 186) was the road segment that received the most comments during the outreach process. This road between the District of Columbia border and East-West Highway (MD 410) is currently classified as a Primary Residential Street. The initial proposed change was to modify this road classification to the Minor Arterial category. This recommendation has since been dropped from this technical plan update.

Brookville Road is a narrow, two-lane road in a 50-foot wide right of way with homes located very close to the road edge. Concern was raised that a classification change would lead to increased traffic or major property impacts due to road widening in the future. There are no plans to widen this road, but there is considerable public concern about the use of this road as a through traffic cut-through route to bypass congestion on Connecticut Avenue and East-West Highway. The 173 comments about Brookville Road represent more than 90 percent of the comments received on the Feed-back Map opposing a classification change (191).

In addition to the online outreach, a total of 29 e-mails or letters were received by the Chair of the Montgomery County Planning Board. Of these, 28 comments were in opposition to the proposed re-classification of Brookville Road and one comment was in opposition to the Corridor Cities Transitway, a proposed bus rapid transit route.

INSERT TEXT — PUBLIC HEARING

Stay up-to-date with the latest new and information about the Master Plan of Highways and Transitways at

montgomeryplanning.org/planning/transportation/highway-planning/master-plan-of-highways-and-transitways/