



2020

Montgomery Planning | Functional Planning & Policy Division

Subdivision Staging Policy Update

2020 County Growth Policy Worksession #4A

July 9, 2020



Today's Work Session

CHAPTER 5. TRANSPORTATION ELEMENT RECOMMENDATIONS

Vision Zero Integration into Local Area Transportation Review

- 5.1 Vision Zero Resources
- 5.2 Mitigation Prioritization
- 5.3 Development Review Committee
- 5.4 Vision Zero Impact Statement
- 5.5 Vision Zero Resources-Informed LATR

Congestion Standards in TOD Areas

- 5.6 Application of LATR in Red Policy Areas
- 5.7 Transit Corridor Congestion Standards
- 5.8 Purple Line Station Area Policy Area Categorization

5.9 Mobility Assessment Report

Policy Area Review

- 5.10 Auto and Transit Accessibility
- 5.11 Auto and Transit Travel Times
- 5.12 Vehicle Miles Traveled per Capita
- 5.13 Non-Auto Driver Mode Share
- 5.14 Low-Stress Bicycle Accessibility

METRO STATION POLICY AREA (MSPA) BOUNDARY RECOMMENDATIONS

- Forest Glen MSPA Boundary Establishment
- Grosvenor MSPA Boundary Change



Index of Recommendations

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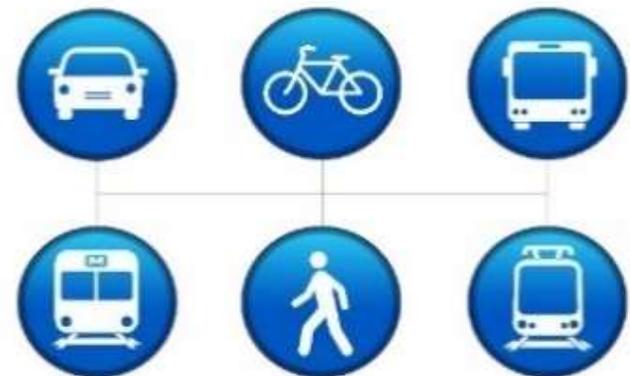
Chapter 5. Transportation Recommendations

Transportation Impact Study Approach

LATR

Local Area Transportation Review Guidelines

SPRING 2017



Motor Vehicle Metro Rail Bicycle Bus Rapid Transit MARC Train Pedestrian

MARYLAND - NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Transportation Impact Study Approach

R5.5

For LATR studies of new development generating 50 or more peak-hour weekday person trips, couple current multi-modal transportation adequacy tests with options that can be implemented over time utilizing Vision Zero-related tools and resources currently available and under development. When the appropriate set of tools described in Recommendation R5.1 are operational, the current multi-modal transportation adequacy tests should be updated as follows.

Transportation Impact Study Approach

R5.5

Revised LATR (Vision Zero-enhanced)

Previous Recommendation -

- Pedestrian System
 - Retain existing test for ADA compliance (50 pedestrian trip trigger)
 - Acceptable pedestrian level of comfort within 500 feet of the site boundary, or to transit stops within 1,000 feet (5 pedestrian trip trigger)
 - Lighting review (5 pedestrian trip trigger)
- Bicycle System
 - Existing test - low levels of traffic stress within 750 feet of the site (5 bicycle trip trigger)
- Transit System
 - Existing capacity test - peak load level of service (5 transit trip trigger)

Transportation Impact Study Approach (Vision Zero-Enhanced LATR)

R5.5 Comment Summary

- **The proposal to reduce the threshold for the pedestrian system, transit system and bicycle system adequacy tests to five (5) peak-hour trips is too onerous and would require smaller development projects in Metro Station Policy Areas to expend considerable resources satisfying these new regulatory mandates** that involve off-site improvements which may be disproportionate to the size of the project.

Transportation Impact Study Approach (Vision Zero-Enhanced LATR)

R5.5

Planning
Board

Commentary

- Planning Board generally supports this recommendation but notes that modifications should be incorporated to address public hearing testimony.



Transportation Impact Study Approach

R5.5 | Revised LATR (Vision Zero-enhanced)

- Safety System (50 **peak-hour** person trip trigger)
 - Vision Zero Test
 - Reduce the estimated number of crashes based on predictive safety performance functions or number of conflict points
- Motor Vehicle System (50 **peak-hour** person trip trigger)
 - Retain existing capacity test



Transportation Impact Study Approach

R5.5

Revised LATR (Vision Zero-enhanced)

- Pedestrian System
 - Retain existing test for ADA compliance (50 pedestrian peak-hour trip trigger)
 - Acceptable pedestrian level of comfort within 500 feet of the site boundary, or to transit stops within 1,000 feet (5 peak-hour pedestrian trip **and** 100 peak-hour person trip trigger)
 - Lighting review (5 peak-hour pedestrian trip trigger **and** 100 peak-hour person trip trigger)
- Bicycle System
 - Existing test - low levels of traffic stress within 750 feet of the site (5 peak-hour bicycle trip **and** 100 peak-hour person trip trigger)
- Transit System
 - Existing capacity test - peak load level of service (5 peak-hour transit trip **and** 100 peak-hour person trip trigger)

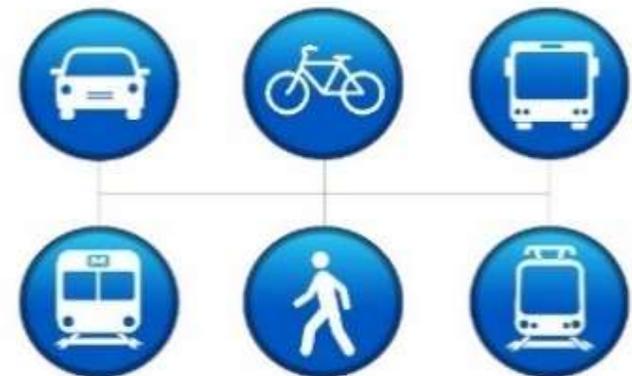


Chapter 5. Transportation Recommendations
Transportation Study
Scoping

LATR

Local Area Transportation Review Guidelines

SPRING 2017



Motor Vehicle Metro Rail Bicycle Bus Rapid Transit MARC Train Pedestrian

MARYLAND - NATIONAL CAPITAL PARK AND PLANNING COMMISSION

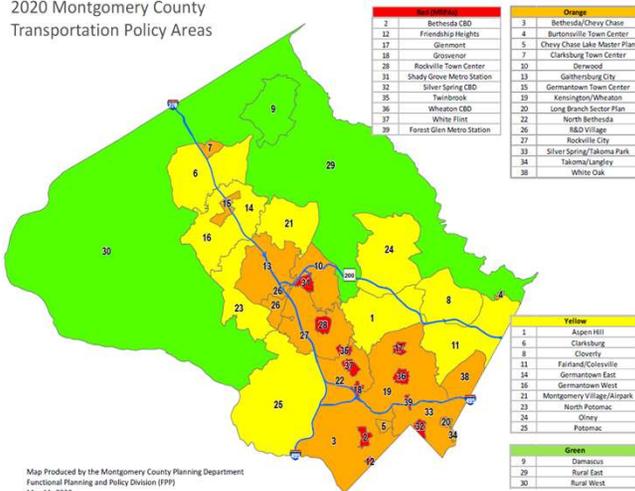
Transportation Study Scoping

R5.6

Eliminate the LATR study requirement for motor vehicle adequacy in **Red** Metrorail Station Policy Areas (MSPAs).

- Why do this?
 - Capacity-based measures often result in mitigation requirements in conflict with Vision Zero
 - Leverage significant Metrorail investment to support desired development
 - Multi-modal environment provides alternative travel mode opportunities
 - Robust street grid disperses traffic
- **Retain adequacy tests for non-auto modes (i.e., ped, bike and transit)**

2020 Montgomery County Transportation Policy Areas



Map Produced by the Montgomery County Planning Department
Functional Planning and Policy Division (FPP)
May 11, 2020

Transportation Impact Study Approach (Eliminate Motor Vehicle LATR Test in Red Policy Areas)

R5.6 Comment Summary

- Support this recommendation given that there are few improvements that can be made in MSPAs thus the studies provide little information. Most recommended LATR improvements in MSPAs run counter to the direction Vision Zero would direct.
- Ideally an UMP and resulting fees should be developed before making this change. However, until such a time that UMPs can be developed, a flat fee should be applied in order to provide uniformity among MSPAs. Suggest using the average of the LATIP fee for White Oak and Bethesda until individual MSPA fees can be established.



Transportation Impact Study Approach (Eliminate Motor Vehicle LATR Test in Red Policy Areas)

R5.6

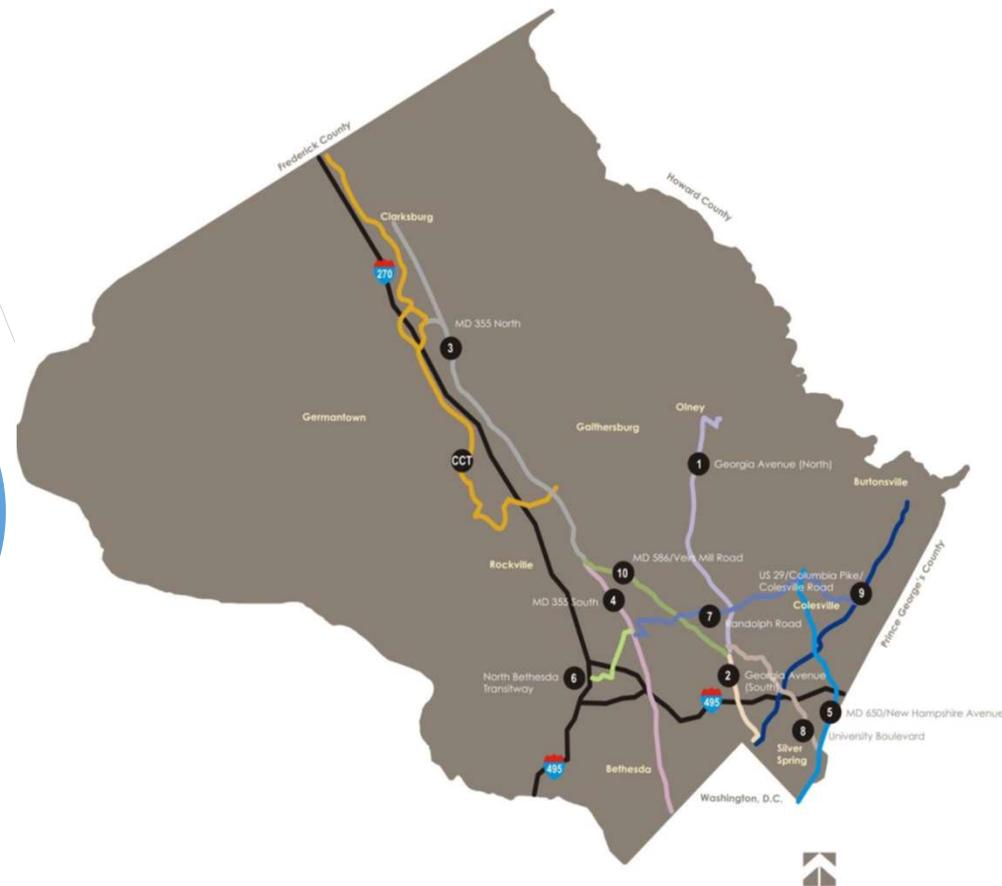
Planning Board Commentary

- Planning Board generally supports this recommendation but questions it's application in "terminal" MSPAs (i.e., Shady Grove and Glenmont).



Chapter 5. Transportation Recommendations

Transit Corridor Congestion Standards



Transit Corridor Congestion Standard

R5.7

Increase the intersection delay standard to 100 seconds/vehicle for transit corridor roadways in Orange and Yellow policy areas to promote multi-modal access to planned Bus Rapid Transit service in transit corridors.

- Why do this?
 - Consistency with Viers Mill Corridor Master Plan recommendation
 - Consistency with Vision Zero
 - Encourages transit-oriented development



- Transitway Corridors:**
1. Georgia Avenue North
 2. Georgia Avenue South
 3. MD355 North
 4. MD355 South
 5. New Hampshire Ave
 6. North Bethesda Transitway
 7. Randolph Road
 8. University Boulevard
 9. US29
 10. Veirs Mill Road
- CCT. Corridor Cities Transitway

Transit Corridor Congestion Standard

R5.7

- Transit corridor roadways traverse **Red**, **Orange** and **Yellow** policy areas
- Recommendation will **not** apply in **Red** Metro Station policy areas (consistent with recommendation R5.6)

Table 16 : Transit Corridor Roadway Intersection Congestion Standards

Transit Corridor Roadway (1)	Policy Area Traversed	Policy Area Category	Current Congestion Standard (secs/veh)	Proposed Congestion Standard (secs/veh)
1. Georgia Ave North	Olney Aspen Hill	Yellow	55 59	100
2. Georgia Ave South	Kensington/Wheaton Silver Spring/Takoma Park	Orange	80 80	100
3. MD 355 North	Clarksburg Clarksburg Town Center Germantown East Germantown Town Center Gaithersburg City Rockville City	Yellow Orange Yellow Orange Orange Orange	51 63 51 63 51 63	100
4. MD 355 South	Rockville City North Bethesda Bethesda/Chevy Chase	Orange	63 71 80	100
5. New Hampshire Ave	Fairland/Colesville White Oak	Yellow Orange	59 80	100
6. North Bethesda Twy: Old Georgetown Rd (2) Rock Spring Dr	North Bethesda	Orange	71	100
7. Randolph Road	Kensington/Wheaton White Oak	Orange	80	100
8. University Boulevard	Kensington/Wheaton Silver Spring/Takoma Park	Orange	80	100
9. US 29	Burtonsville Town Center Fairland/Colesville White Oak Kensington/Wheaton Silver Spring/Takoma Park	Orange Yellow Orange Orange Orange	71 59 80 80 80	100
10. Veirs Mill Road (3)	Kensington/Wheaton Aspen Hill North Bethesda Rockville City	Orange Yellow Orange Orange	80 59 71 63	100
11. Corridor Cities Twy: (4) Century Boulevard Observation Drive	Germantown West Germantown Town Center Germantown East Clarksburg	Yellow Orange Yellow Yellow	51 63 51 51	100



Transit Corridor Congestion Standard (Establish a 100 secs/vehicle delay standard for signalized intersections along transit corridor roadways.)

R5.7 Comment Summary

- Generally support this recommendation.
- Consider lowering the proposed delay standard to **80 seconds/vehicle**.
- Consider raising the proposed delay standard to **110 seconds /vehicle**.

Transit Corridor Congestion Standard (Establish a 100 secs/vehicle delay standard for signalized intersections along transit corridor roadways.)

R5.7

**Planning
Board**

Commentary

- Planning Board generally supports this recommendation.

Chapter 5. Transportation Recommendations

Purple Line Station Policy Area Categorization

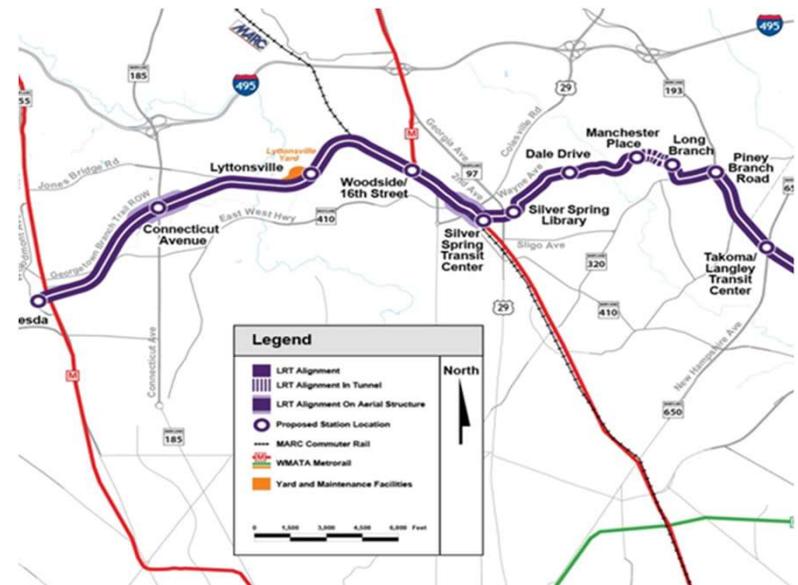


Purple Line Station Area Policy Area Categorization

R5.8

Place the three Purple Line Station policy areas in a new **dark red** policy area category. Conceptually, this change will reflect a “hybrid” between the red and orange policy area categorization.

- The Purple Line is imminent, scheduled for completion in 2023
- The Purple Line traverses three Purple Line policy areas:
 - Chevy Chase Lake
 - Long Branch
 - Takoma/Langley

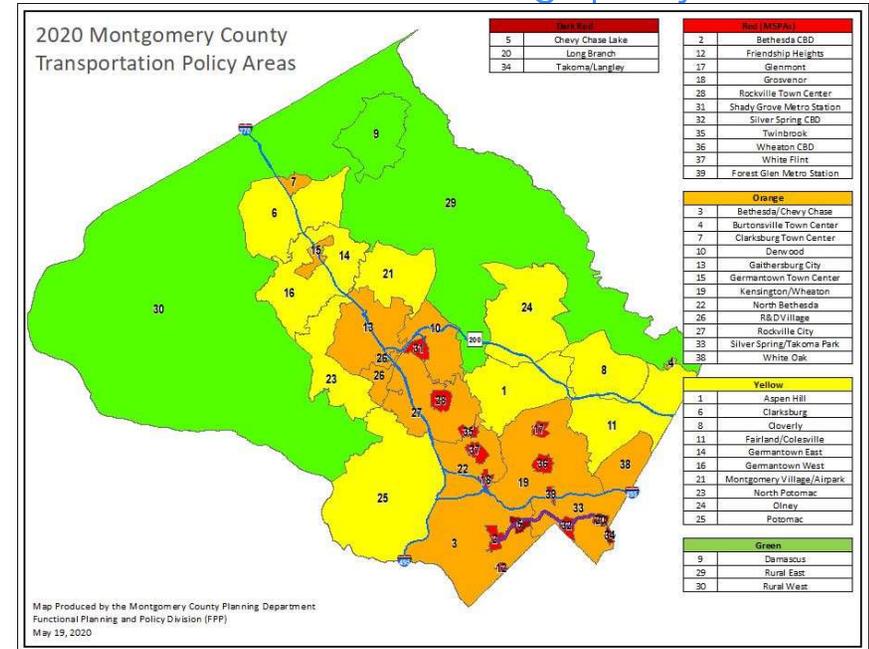


Purple Line Station Policy Area Categorization

R5.8

Place the three Purple Line Station policy areas in a new **dark red** policy area category. Conceptually, this change will reflect a “hybrid” between the red and orange policy area categorization.

- Why do this?
 - Recognition that policy area categorizations may change over time
 - Leverage improved transit service provided by Purple Line to support transit-oriented development



Purple Line Station Area Policy Area Categorization

R5.8

Commensurate with this new categorization, the congestion standard for signalized intersections and transportation impact tax rates in the Purple Line Station policy areas will change.

Building Type	PROPOSED				
	Red Policy Areas (Metro Stations)	Dark Red Policy Areas (Purple Line Stations)	Orange Policy Areas	Yellow Policy Areas	Green Policy Areas
Residential Uses					
Single-Family detached (per unit)	\$7,838	\$13,715	\$19,591	\$24,490	\$24,490
Single-Family attached (per unit)	\$6,413	\$11,222	\$16,030	\$20,038	\$20,038
Multifamily Low Rise (per unit)	\$4,986	\$8,726	\$12,465	\$15,582	\$15,582
Multifamily High Rise (per unit)	\$3,561	\$6,233	\$8,904	\$11,130	\$11,130
Senior Residential (per unit)	\$1,424	\$2,493	\$3,562	\$4,452	\$4,452
Student-Built Houses (per unit)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Commercial Uses					
Office (per sq. ft. GFA)	\$7.15	\$12.53	\$17.90	\$22.40	\$22.40
Industrial (per sq. ft. GFA)	\$3.60	\$6.25	\$8.90	\$11.20	\$11.20
Bioscience facility (per sq. ft. GFA)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Retail (per sq. ft. GFA)	\$6.35	\$11.18	\$16.00	\$19.95	\$19.95
Place of worship (per sq. ft. GFA)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Clergy House (per unit)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Private elementary and secondary school (per sq. ft. GFA)	\$0.55	\$1.00	\$1.45	\$1.85	\$1.85
Hospital (per sq. ft. GFA)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Charitable, Philanthropic Institution (per sq. ft. GFA)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Other nonresidential (per sq. ft. GFA)	\$3.60	\$6.25	\$8.90	\$11.20	\$11.20

Purple Line Station Area Policy Area Categorization

R5.8

Commensurate with this new categorization, the congestion standard for signalized intersections and transportation impact tax rates in the Purple Line Station policy areas will change.

Purple Line Station Policy Area	Current HCM Delay Standard (seconds/vehicle)	Proposed HCM Delay Standard (seconds/vehicle)
Long Branch	80	100
Takoma/Langley	80	100
Long Branch	80	100



Purple Line Station Policy Area Categorization (Increase Intersection Delay Standard to 100 sec/vehicle)

R5.8 Comment Summary

- Generally agree with the direction of this recommendation. However, suggest a **110 seconds/vehicle delay standard** would be appropriate should this standard be applied to the transit corridor roadways described in Recommendation 5.7.

Purple Line Station Policy Area Categorization

R5.8 Comment Summary

- Place all three Purple Line Station Policy Areas in the **Red** policy area category (consistent with MSPAs) so that the applicable transportation impact surtax would apply.
- Place other areas planned for LRT or BRT service in the proposed **Dark Red** or **Red** policy area category so that the applicable transportation impact surtax would apply, including:
 - Lyttonsville (as a proposed **new** Purple Line Station Policy Area);
 - Policy areas (or portions thereof) proximate to planned BRT service (e.g., Viers Mill Road and US 29);
 - Council-designated strategic “Economic Opportunity Centers” and
 - MWCOG Designated “High/Highest Growth Jobs and Population Activity Centers” (identified in Hearing Draft Figures 4 and 5 on pages 11 and 12).

Purple Line Station Policy Area Categorization

R5.8

Planning Board

Commentary

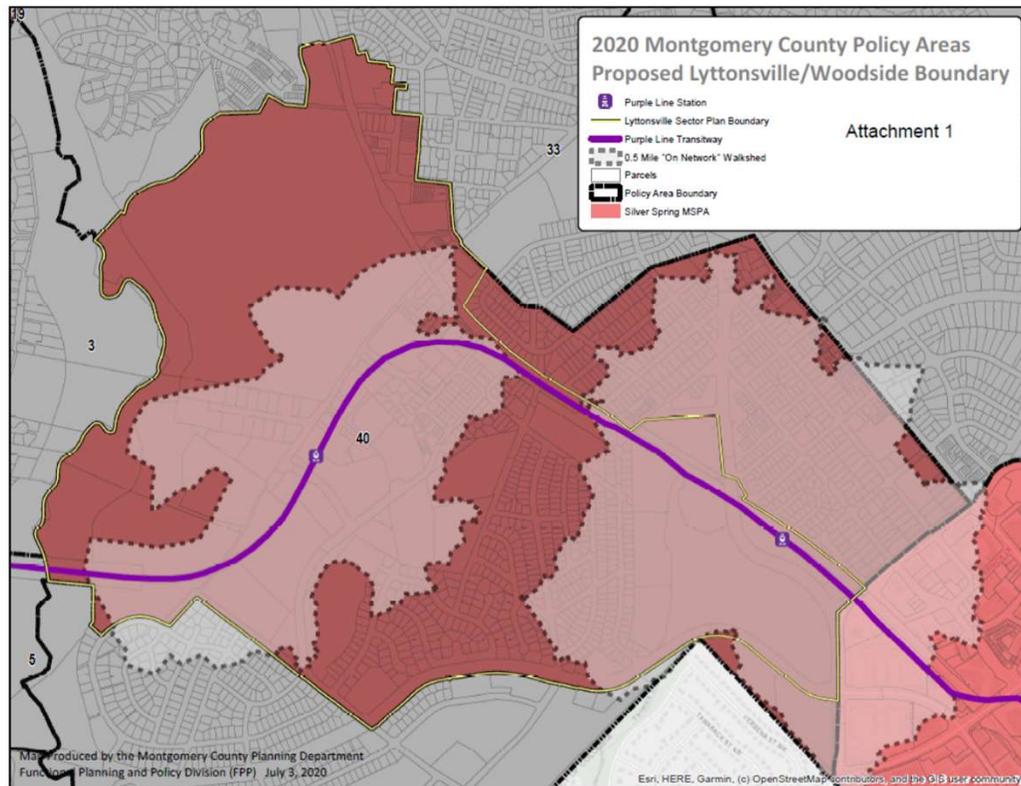
- Planning Board supports the **direction** of this recommendation. However, the Board directs the following changes:
 - Place all three existing Purple Line Station policy areas in the **Red** category.
 - Beyond the Silver Spring CBD, designate new **Red** Purple Line Station policy areas defined around the Lyttonsville, 16th Street/Woodside stations, Dale Drive and Manchester Place stations.



Purple Line Station Policy Area Categorization

Conceptual Lyttonsville/Woodside Policy Area

R5.8 Planning Board Commentary



Categorize as **Red** policy area?

Why do this?

- Recently Adopted (2016) Greater Lyttonsville Sector Plan
- Incentive TOD development
- Leverage Purple Line public investment

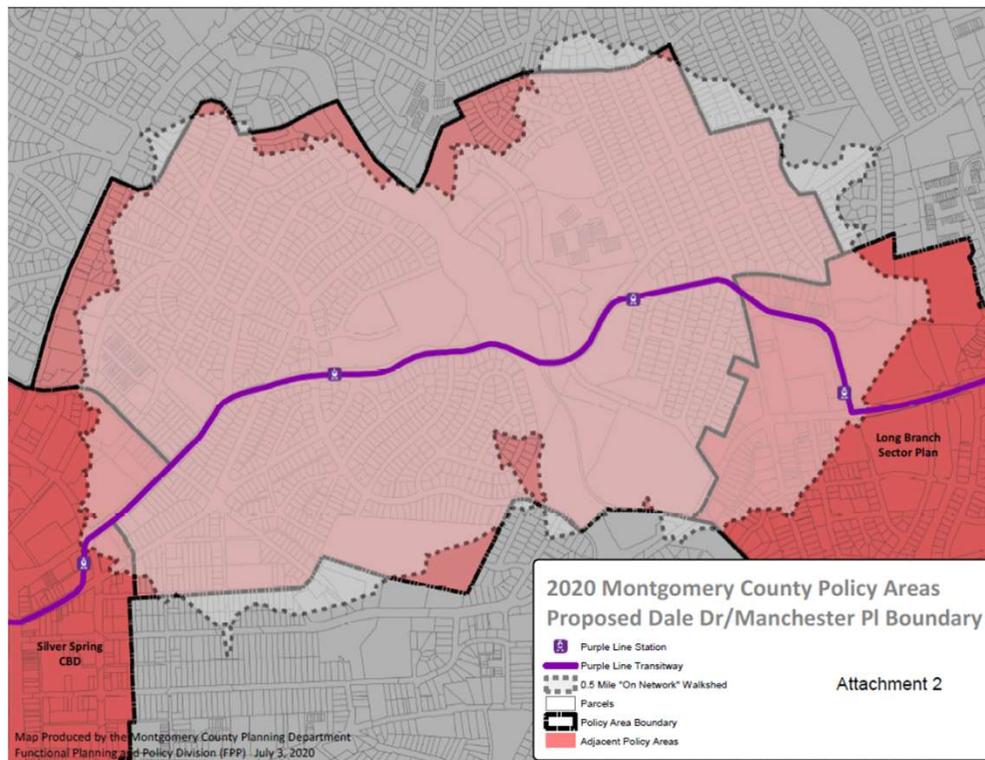
Why not do this?

- No imminent development interest (action is premature?)
- Gentrification concerns

Purple Line Station Policy Area Categorization

Conceptual Dale Drive/Manchester Place Policy Area

R5.8 Planning Board Commentary



Categorize as **Red** policy area?

Why do this?

- Incentive TOD development
- Leverage Purple Line public investment

Why not do this?

- No recently adopted sector plan for this area.
- No imminent development interest (action is premature?)
- Gentrification concerns



Chapter 5. Transportation Recommendations

Policy Area Review for Master Plans



VEIRS MILL CORRIDOR MASTER PLAN



CONNECTING COMMUNITIES

PLANNING BOARD DRAFT
December 2018

Policy Area Review – Auto & Transit Accessibility

R5.10

The proposed auto and transit accessibility metric is the average number of jobs that can be reached within a 45-minute travel time by automobile or walk access transit.

What? Number of jobs accessible within 45 minutes greater than future baseline conditions

Auto: 1,159,950 jobs on average

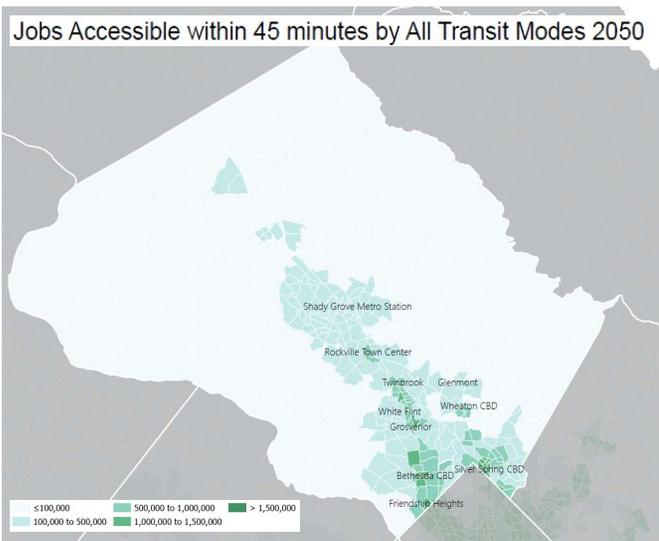
Transit: 134,160 jobs on average

How? Travel/4 Model

Where? TAZ level; population-weighted average to County

Why? Indicates accessibility to destinations

Can demonstrate accessibility tradeoff of new destination options, increased density of development, increased congestion, and transportation network changes



Policy Area Review – Auto & Transit Accessibility

R5.10 Comment Summary

- We understand the objective to look at policy area transportation impacts for Master Plans, but are unsure why this should require a mandate within the SSP. If this recommendation moves forward, we believe that there should be higher standards than the baseline requirements to help us work towards our mode share, climate, and congestion goals.
- Do not have enough information to take a position on this recommendation.

Policy Area Review – Transit Accessibility

R5.10 Hypothetical Example

Jobs Accessible within 45 Minutes by Transit

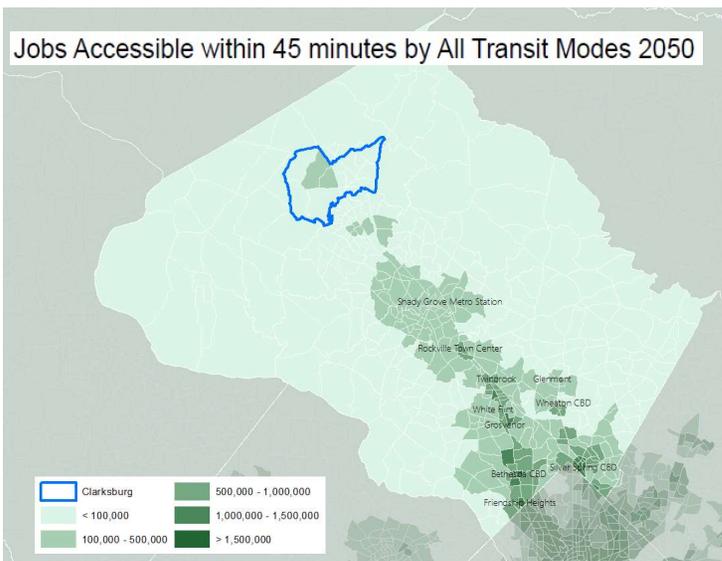
Montgomery County Future Baseline:	134,160
Clarksburg Existing:	850
Clarksburg Future Baseline:	26,700

Scenario: Suppose a proposed master plan adds more residents to Clarksburg than planned in the Future Baseline (with no other changes)

Result: Reduced Montgomery County average job accessibility by transit

Potential Policy Responses:

- Improve jobs/housing balance by adding transit-accessible jobs within Clarksburg
- Add transit service to connect the new or existing housing to jobs



Policy Area Review – Auto & Transit Travel Times

R5.11

The proposed metric for auto and transit travel times is average time per trip, considering all trip purposes.

What? Average travel time per trip (all trips) less than future baseline
19 minutes for Auto (vs. 16 minutes existing)
52 minutes for Transit (vs. 50 minutes existing)

How? Travel/4 Model + custom script

Where? TAZ level; County average for all trips

Why? Indicates total amount of time spent traveling per trip
Travel time more intuitive measure of burden than intersection delay
Changes in a Policy Area affect travel times not only for that policy area but for much of the County.
Congestion may increase, but effects on travel times for individual trips may be offset by changes to trip distribution patterns and shorter trip distances afforded by new destination options in closer proximity.



Policy Area Review – Auto & Transit Travel Times

R5.11 Comment Summary

- Support this recommendation but suggest it should only apply to work-related trips.
- We understand the objective to look at policy area transportation impacts for Master Plans, but are unsure why this should require a mandate within the SSP. If this recommendation moves forward, we believe that there should be higher standards than the baseline requirements to help us work towards our mode share, climate, and congestion goals. For example, we should set more equal standards for average time per trip. 19 minutes for auto trips and 52 minutes for transit encapsulates the transit inequities ingrained into our land use and transportation planning.
- Do not have enough information to take a position on this recommendation.



Policy Area Review – Transit Travel Times

R5.11

Clarification

What is included in transit travel times?

Total end-to-end travel time, including:

- In-Vehicle Time
- Initial Wait Time
- Transfer Wait Time
- Access Time (walk or drive)



Policy Area Review – Transit Travel Times

R5.11 Clarification

Why might transit travel times increase between existing and future baseline conditions, even with additional transit infrastructure and service?

New Connections – New transit options that are faster than current options but longer than the average transit travel time (e.g. 355 BRT from Clarksburg to Rockville, plus potential transfers)

Congestion – Local buses in mixed traffic are subject to general traffic congestion, which increases between existing and future baseline conditions

Travel Demand Patterns – Travel demand patterns shift between existing and future baseline conditions, reflecting land use changes (e.g., significant job growth in White Oak, which has longer-than-average transit travel times)



Policy Area Review – Transit Travel Times

R5.11

Clarification

How could future transit travel times be reduced?

Potential Policy Responses

- Further improve transit performance (e.g., dedicated facilities, queue jumps, increased frequencies, etc.) to reduce wait times and increase average transit travel speeds
- Increase opportunities to shorten travel distances
 - Balanced land uses
 - Additional local transit routes to connect more destinations
- Locate future land use growth in areas with high transit accessibility and short transit travel times

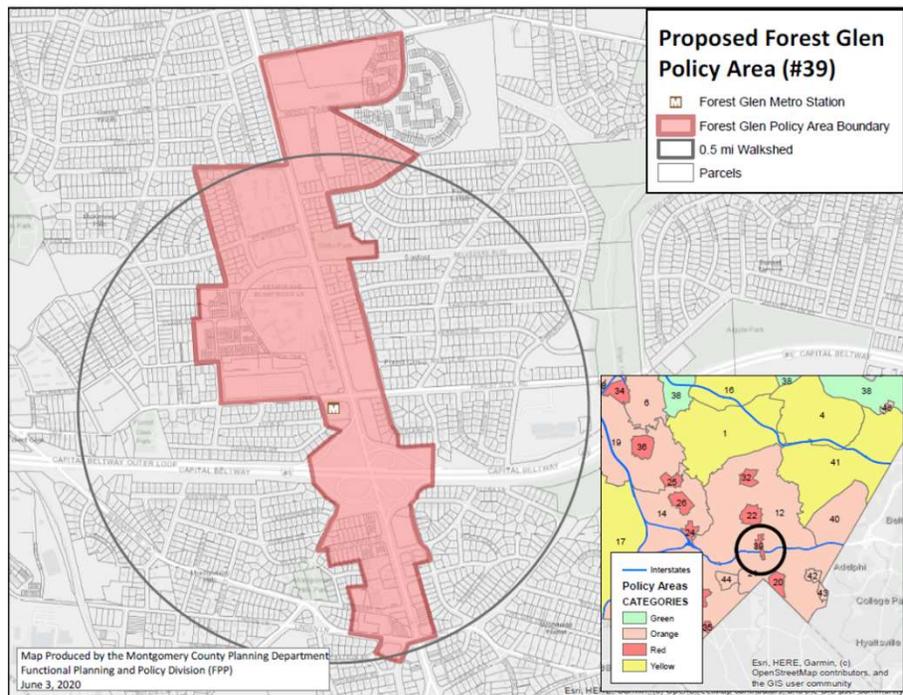


Metro Station Policy Area Boundary Recommendations



Forest Glen Metro Station Policy Area (MSPA)

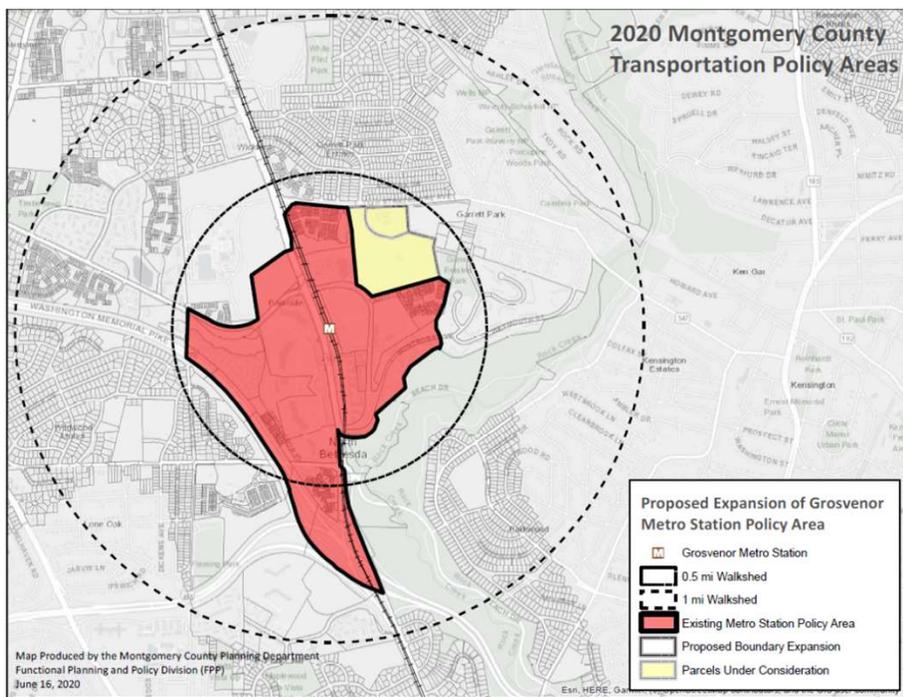
Pursuant to the resolution approving the recently adopted Forest Glen/Montgomery Hills Sector Plan, define the precise boundary of the new Forest Glen MSPA.



- Policy area boundary **generally** defined as the Sector Plan area ½ mile radius from the Forest Glen Metro Station.

Grosvenor Metro Station Policy Area (MSPA)

Revise the boundary of the Grosvenor MSPA to incorporate two parcels abutting the northeast end of the policy area.



- **Academy of the Holy Cross and Saint Angela Hall** properties
- Rezoning contemplated to support additional residential density

