MCPB
Item No. 4
Date: 01-24-13

Local Area Transportation Review and Policy Area Transportation Review Guidelines

Eric Graye, Planning Supervisor, Functional Planning and Policy Division, eric.graye@montgomeryplanning.org, 301-495-4632
Mary Dolan, Chief, Functional Planning and Policy Division, mary.dolan@montgomeryplanning.org, 301-495-4552

Completed: 01/17/13

Description

The Montgomery County Council adopted the 2012-2016 Subdivision Staging Policy (SSP) on November 13, 2012. Two (2) key elements of that action were the adoption of: (1) Transportation Policy Area Review (TPAR) as the new area-wide transportation test as a replacement to Policy Area Transportation Mobility Review (PAMR) and (2) a revision to the Local Area Transportation Review (LATR) test requiring the application of the Transportation Research Board's *Highway Capacity Manual* methodology when an intersection is forecast to reach a serious level of congestion.

The Council's actions warranted an update of the guidelines used in support of the administration of the transportation-related elements of the SSP. The latest version of these guidelines, amended February 2012, is entitled "Local Area Transportation Review and Policy Area Mobility Review Guidelines". Over time, these guidelines had been amended piecemeal. The Council's adoption of TPAR and the modified LATR test provided staff the opportunity rewrite the guidelines with goals of:

- improving the readability and organization of the document for users (i.e., staff, the public and applicants);
- reflecting the Council's decisions regarding LATR and TPAR and;
- updating and correcting technical and process information.

Staff has reorganized the the guidelines to: (1) reflect the purpose and steps of LATR and TPAR; (2) follow the steps in the transportation review process and (3) clarify the responsibility of applicants and reviewing staff.

Summary

Staff recommends that the Planning Board adopt these guidelines and allow additional editing and clarifications as necessary.

The revised guidelines are entitled **"Local Area Transportation Review and Transportation Policy Area Mobility Review Guidelines"** (see Attachment 1). Relative to the former "Local Area Transportation Review and Policy Area Mobility Review Guidelines", key changes reflected in this document include:

1. **PAMR is "out", TPAR is "in"** - References to the former PAMR process and related mitigation requirements have been removed. Information describing the TPAR process and related mitigation requirements has been incorporated.

   The scope of mitigation to be considered in lieu of of payment for transit or roadway inadequacies is very limited at the request of the Montgomery County Department of Transportation (MCDOT). The 2012-2016 SSP resolution requires that "the applicant commits to either: (1) fully mitigate the incremental traffic impact of the subdivision by adding capacity or implementing a trip reduction program; or (2) pay a Transportation Mitigation Payment as provided in County law." MCDOT believes that roadway capacity improvements, in particular, be limited to the County projects considered eligible for testing in the TPAR analysis (see Appendix 6). This removes the provision for smaller projects to qualify for mitigation of the Transportation Mitigation Payment that PAMR had allowed and excludes beneficial improvements to capacity that might be done closer to the applicant's project location that are in the relevant master or sector plan.

2. **Two-tiered LATR test** – In addition to the traditional Critical Lane Volume (CLV) analysis, the more robust Highway Capacity Manual (HCM) analysis must be performed at intersections forecast to operate at a CLV of 1600 or greater. This requirement, and the standards associated with the application of this methodology, is specified.

3. **Determination of intersections to be studied** – Intersections located within the Cities of Rockville and Gaithersburg will be included in traffic studies as appropriate. These studies will be shared with these incorporated cities. Also, two intersections were added by the County Council for analysis in the Potomac Policy Area.

In support of staff's discussion of this item with the Planning Board, a flowchart depicting the key steps in the LATR/TPAR process is provided in the revised Guidelines (see page 6 of this document).

Attachment
1. Local Area Transportation Review and Transportation Policy Area Mobility Review Guidelines

EG/MD/am

Design new cover to indicate new version

Approved

Local Area Transportation Review and Transportation Area Policy Review Guidelines

January 2013

Logo

Montgomery County Planning Department

M-NCPPC

MontgomeryPlanning.org

Footer:

LATR/TPAR Guidelines version page number

Abstract

The *Local Area Transportation Review and Policy Area Mobility Review Guidelines* were updated by the Planning Board on May 13, 2010, June 17, 2011, and February 9, 2012.

On November 13, 2012 the County Council adopted changes to the Subdivision Staging Policy eliminating the Policy Area Mobility Review as an areawide test for transportation adequacy and replacing it with Transportation Policy Area Review. The Planning Board approved these revised guidelines to incorporate the Council's action on January 24, 2013. This document reflects those changes.

These Guidelines are to be used for preparation and review of transportation impact studies for development in Montgomery County. This document should be used by transportation engineers, planners, public agency reviewers, and community members participating in the development review process.

Source of Copies

The Maryland-National Capital Park and Planning Commission
8787 Georgia Avenue
Silver Spring, MD 20910-3760

Online at: www.mc-mncppc.org/transportation/index.shtm

Contents

Maps, Tables, Figures

Introduction

Section 50-35(k) of the County Code directs the Montgomery County Planning Board to find that public facilities will be adequate to serve proposed development. This Adequate Public Facilities (APF) finding requires forecasting traffic generated by proposed development and comparing it to the capacity of existing and programmed roads and transit. An applicant for proposed development must show that adequate transportation facilities will be in place within a specified period of time. Alternatively, the applicant must provide those facilities or make a Traffic Mitigation Payment toward areawide transportation needs. These guidelines show the methodology for determining adequacy, specify mitigation for projected traffic generated by proposed development projects, and describe how Traffic Mitigation Payments are determined.

There are two tests for determining transportation adequacy – the Local Area Transportation Review (LATR) test and the policy area test called Transportation Policy Area Review (TPAR). These tests are required by the 2012-2016 Subdivision Staging Policy adopted by the County Council on November 13, 2012.

LATR determines the adequacy of local roads by measuring congestion at roadway intersections based on critical lane volume (CLV) and volume to capacity ratio (v/c). The estimated vehicle trips generated by a proposed development are compared to the applicable policy area standard to evaluate likely future congestion. The development's trips that contribute to the intersections exceeding the standard must be mitigated in some fashion.

The TPAR test first considers whether if a policy area is considered inadequate for transit or roadways (or both). If the area is inadequate, a development in the area must make a Traffic Mitigation Payment based on the number of dwelling units or square footage of nonresidential space or make improvements that increase capacity in the policy area that address identified specified roadway and transit inadequacies.

These Guidelines explain the methodology for documenting and analyzing the likely impact of proposed development on intersection performance, that is, the LATR part of Subdivision Staging. The Guidelines focus on LATR is because this aspect of the transportation adequacy test reflects the majority of the analysis conducted by applicants using these Guidelines. The TPAR test is updated every two years by the Planning staff and adequacy standards are established by the Planning Board. The current TPAR standards (2012-2014) are also presented in this document.

The criteria in these Guidelines determine if a development can satisfy the requirements for transportation adequacy. Following the standards of the Subdivision Staging Policy, the Planning Board must not approve a development if unacceptable weekday peak-hour intersection congestion will result. The Planning Department staff's review and the Planning Board's decision is based on existing and programmed roads, available and programmed mass transportation, and physical improvements or trip mitigation measures to be provided by the applicant.

Together, the two transportation tests provide a complete picture of traffic impacts, and the necessary improvements to maintain congestion standards.

Applicability

LATR is applied to development projects that will generate more than 30 new weekday peak hour trips. TPAR is applied to projects that will generate three or more new weekday peak hour trips. Projects that generate fewer than 30 new weekday peak hour trips must prepare a traffic exemption statement describing the basis for any exemption from LATR and/or TPAR.

Both tests are applied by policy area (see Map 1). Detailed maps, with streets shown, can be found at: insert web link. Each policy area has a particular congestion standard for intersections, which is applied to meet the LATR test. Each policy area also has a transportation adequacy determination for roadway and transit service applied in the TPAR test. These standards and mitigation requirements are adopted by the County Council and specified in these Guidelines, which are updated as needed to reflect industry standards, local traffic conditions, and Council action.

LATR and TPAR compliance is not required for developments in the White Flint Policy Area if applicants agree to participate in the *White Flint Special Taxing District* for transportation infrastructure improvements in lieu of satisfying the transportation APF tests for LATR and TPAR.

LATR and TPAR mitigation and/or payments are not required for public facility project mandatory referrals, in which the Planning Board's comments are advisory. Mandatory referrals are often unique uses, such as school or other public services, and their traffic review follows Mandatory Referral Guidelines, which requires a pedestrian and bicycle safety statement, pedestrian and vehicular circulation plan, and a traffic exemption statement or traffic study as applicable.

Insert sidebar:

Project applications requiring LATR/TPAR studies

- preliminary plan (as part of a subdivision application)
- site plans not requiring subdivision
- special exception and zoning cases before the Board of Appeals

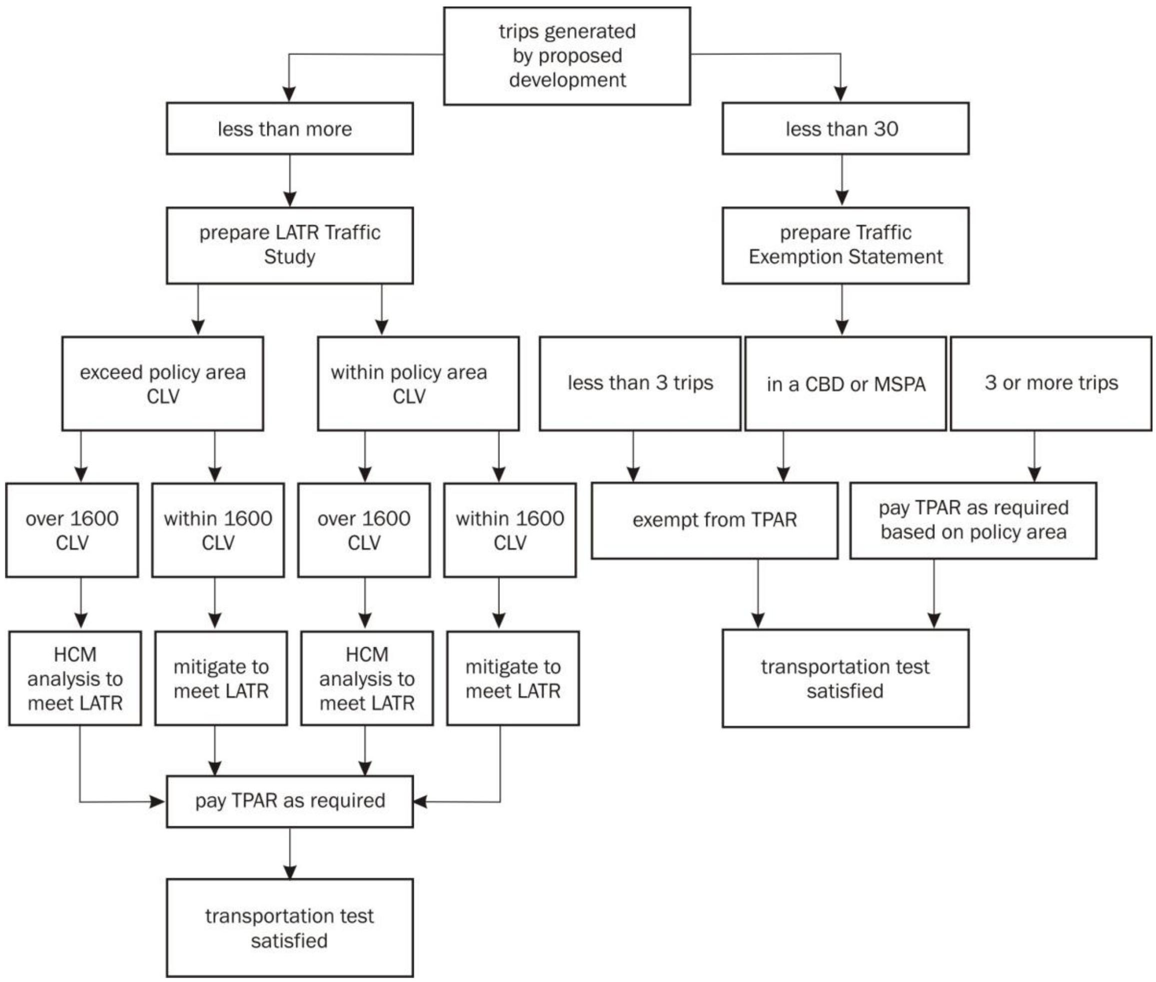
These Guidelines may also apply to building permit review cases requiring an APF finding, though in some cases (less than 12 months vacancy, no increase in square footage, fewer than 30 new weekday peak hour trips) the APF test may be approved administratively by Planning Department staff.

How to Use These Guidelines

These Guidelines are to be used by applicants to prepare traffic studies for Planning Board approval and by staff when reviewing those studies. These Guidelines are also recognized as the standard for reports to the Board of Appeals and Hearing Examiner for special exception and zoning cases, respectively.

The following chart illustrates the steps needed to arrive at a recommendation for approval of the transportation test for the Adequate Public Facilities Ordinance. These Guidelines describe the information needed from the applicant to determine the answer at each step of the process and the considerations staff must evaluate when reviewing the document.

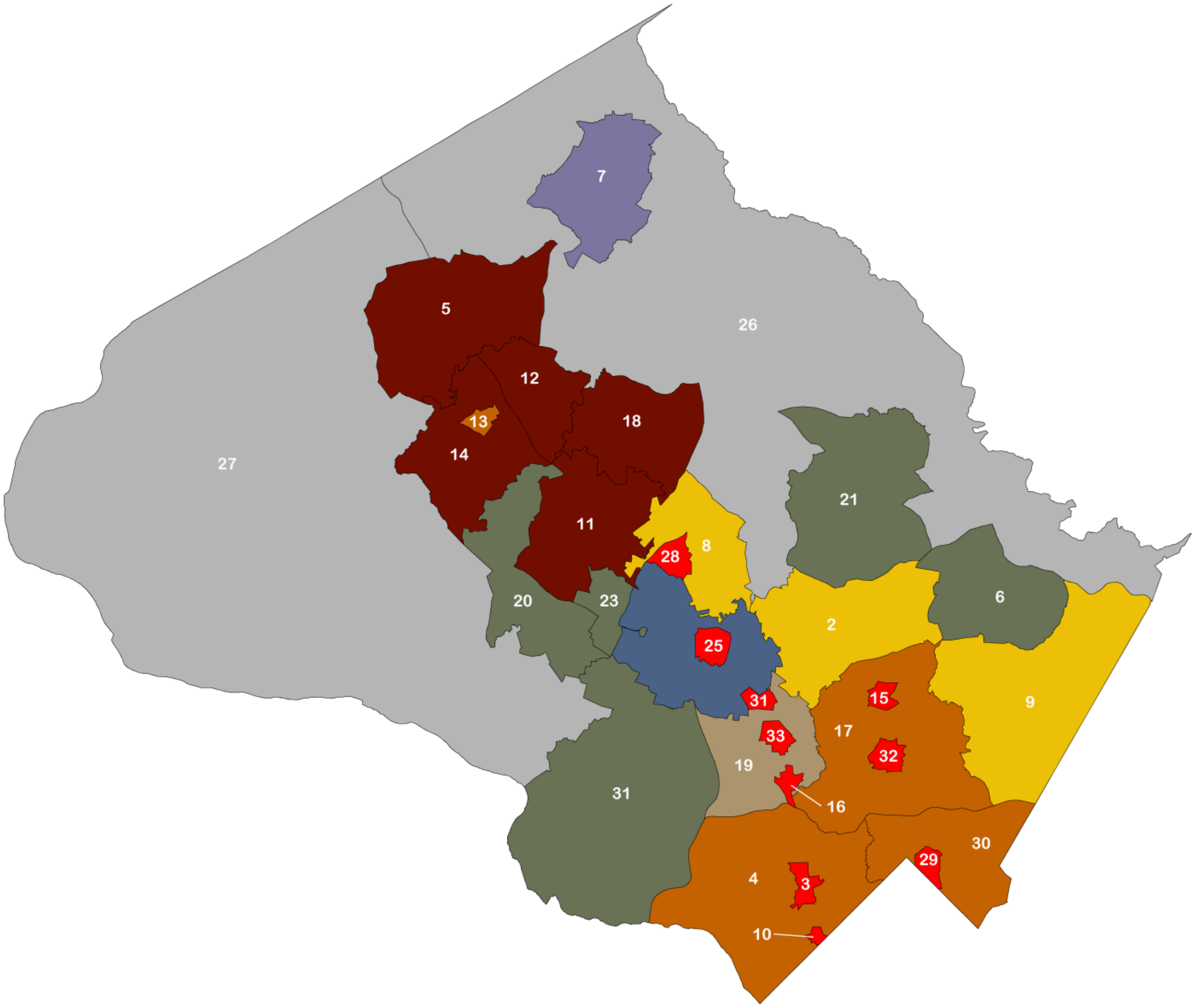
Figure 1
Montgomery County Transportation Review Process—LATR and TPAR



When proposed development is projected by the LATR test to generate an unacceptable level of peak hour congestion, the applicant should consult with Planning Department staff, the Montgomery County Department of Transportation (MCDOT), the Maryland State Highway Administration (SHA), and municipalities of Rockville and Gaithersburg (when applicable) to develop recommendations for trip reduction, including specific intersection improvements or pedestrian, bicycle, and transit enhancements that can mitigate the project's impact and thereby gain Planning Board approval.

The Guideline procedures outlined in this document are intended to provide a snapshot of estimated future traffic conditions for proposed development. These procedures are not intended to establish travel delay-free conditions.

Map 1
Subdivision Staging Policy Areas and Intersection Congestion Standards



LATR Intersection Congestion Standards by Policy Area
Based on Critical Lane Volume

policy area	**critical lane volume standard**
26 Rural East 27 Rural West	1,350
7 Damascus	1,400
5 Clarksburg 11 Gaithersburg City 12 Germantown East 14 Germantown West 18 Montgomery Village/Airpark	1,425
6 Cloverly 20 North Potomac 21 Olney 22 Potomac 23 R&D Village	1,450
2 Aspen Hill 8 Derwood 9 Fairland/White Oak	1,475
24 Rockville City	1,500
19 North Bethesda	1,550
4 Bethesda-Chevy Chase 17 Kensington-Wheaton 13 Germantown Town Center 30 Silver Spring-Takoma Park	1,600
3 Bethesda CBD 10 Friendship Heights CBD 29 Silver Spring CBD 32 Wheaton CBD 15 Glenmont MSPA 16 Grosvenor MSPA 25 Rockville Town Center MSPA 28 Shady Grove MSPA 31 Twinbrook MSPA 33 White Flint MSPA	1,800

Local Area Transportation Review

Intent and Standards

The LATR test is undertaken at two levels to best measure congestions levels. The initial Critical Lane Volume (CLV) analysis is performed to screen out intersections with a CLV less than 1,600, the threshold between stable (but close to congested) and unstable (over-congested) road conditions.

For intersections with a CLV of 1,600 or greater, the more detailed *Highway Capacity Manual (HCM)* method is used to measure delay. In these cases, the applicant should use a traffic-flow model such as Synchro or CORSIM.

In the HCM method, intersection level of service is expressed as a volume/capacity (v/c) ratio and the standards are set at levels parallel with the current CLV standards in a policy area. For example, the 1,600 CLV standard, applicable in the Bethesda/Chevy Chase, Silver Spring/Takoma Park, Kensington/Wheaton, and Germantown Town Center policy areas (see Map 1) is expressed as a v/c ratio of 1.00. For Metro Station Policy Areas (MSPAs), the applicable 1,800 CLV standard is expressed as a v/c ratio of 1.13 (that is, 1,800/1,600).

Insert sidebar:

Traffic Exemption Statement

Projects that are projected to generate less than 30 new weekday peak hour trips for LATR and less than three trips for TPAR may need to submit only a traffic exemption statement. This statement must demonstrate the conditions that justify the exemption.

Information to be included in a traffic exemption statement:

- development project location—Planning Area and policy area
- proposed nonresidential square footage
- proposed number of dwelling units (single-family or multifamily)
- proposed land uses (as defined by DPS)
- estimated number of new and total peak hour trips generated by the proposed land uses
- rationale for exemption

Applicant's Preparation of an LATR Traffic Study

Applicants should use the following general criteria and analytical techniques to demonstrate the expected impact on public roadway intersections by the proposed development. The analysis should consider existing traffic, background traffic generated by developments approved and not yet built, and projected traffic generated by the applicant's project. Planning Department staff may require that traffic from nearby unapproved applications also be included in the traffic study. Studies should also reflect any traffic improvements that will be made by nearby projects.

Scope of an LATR Traffic Study

If the project is not exempt, the applicant must prepare a traffic study. Depending on the project size, uses, and location, the contents of a traffic study will vary. The applicant and Planning Department staff, in a meeting or through correspondence, will scope the study using the elements described below. (For zoning and special exception cases, Planning Department staff may initiate a meeting with the applicant, the Hearing Examiner, and interested groups or individuals to establish the scope of the traffic analysis.)

Insert sidebar

A traffic study must consider the following elements:

1. CLV of intersections
2. Approved but unbuilt development
3. Existing intersection turning movement counts
4. Trip generation, directional distribution, and trip assignment
5. Mode split assumptions
6. CIP and CTP improvements
7. Circulation and Safety for High Traffic impact venues
8. Land use and size
9. Queuing/delay analysis (if applicable)
10. Pedestrian and bicycle impacts
11. Improvement and mitigation options
12. Traffic mitigation agreement (if needed)

1. Intersections

The number of intersections included will be based on the projected trips generated by the development under consideration (see page 22, Staff's Evaluation of an LATR Traffic Study, for specific criteria regarding "land at one location"). As shown in Table 1, the number of signalized intersections and significant non-signalized intersections in each direction is based on the maximum number of total weekday peak hour trips generated by the proposed land uses, unless Planning Department staff in consultation with MCDOT, SHA, and municipalities if appropriate, finds that special circumstances warrant a more limited study.

Table 1
Intersections to be Included in a Traffic Study

Weekday Peak Hour Site Trips	Minimum Number of Intersections in Each Direction
30 – 249	1
250 – 749	2
750 – 1,249	3
1,250 – 1,749	4
1,750 – 2,249	5
2,250 – 2,749	6
>2,750	7

The term "each direction" applies to every study intersection. For example, in a hypothetical grid, the first ring would include four intersections. The second ring would include not only the next four intersections along the streets serving the site, but also the four intersections with cross streets encountered in the first ring. As the number of intersections in each direction grows linearly from one to five, the number of total study area intersections grows at a greater rate.

Planning Department staff, in cooperation with the applicant, will use judgment and experience in deciding the significant intersections to be studied. For example, the ramps and termini of future interchanges will be treated as signalized intersections. The County's central business districts (CBDs) and Metro Station Policy Areas (MSPAs) have more closely-spaced intersections. Accordingly, not every signalized intersection should be studied and as a result, the study are may cover a larger area. Site access driveways are not included in the first ring of intersections.

When determining the intersections to be studied, Planning Department staff will also consider:

- geographic boundaries such as rivers, major streams, parks, interstate routes, railroads
- political boundaries, although intersections located within the Cities of Rockville and Gaithersburg, where the Planning Board does not have subdivision authority, will be included in the traffic study and the studies will be shared with nearby incorporated cities[1]
- contiguous land under common ownership
- the type of trip generated: existing, new, diverted, or pass-by
- the functional classification of roadways, for example six-lane major highway.

Insert sidebar

Pass-by trips are existing trips often generated by retail uses located along roadways and designed to draw from traffic already on the road.

Diverted trips are part of a chain of trips and travel on adjacent routes to access a particular site.

If a site's number of peak hour vehicle trips is projected to increase the critical lane volume through an intersection by fewer than five trips and the applicant is required to improve another intersection and/or is participating in a traffic mitigation program, that intersection does not need to be analyzed in the traffic study, even if it would otherwise be identified as appropriate to study. Applicants may develop a trip distribution and assignment pattern before the study scoping process and work with Planning Department staff to determine which intersections don't require full study. This process will be documented in the scoping correspondence.

CLV Intersection Analysis Method

An intersection's ability to carry traffic is expressed as CLV, the level of congestion at critical locations with conflicting vehicle movements, usually an intersection. Current CLV standards for each policy area are based on achieving approximately equivalent combined transportation roadway and transit levels of service in all areas of the County (see Map 1). Greater vehicular traffic congestion is permitted in policy areas with greater transit accessibility and use.

For a traffic study, the existing, background, and site-generated traffic for identified intersections should be measured against intersection capacity using the critical lane volume method. The analysis should be carried out for the peak hour of both the weekday morning and evening peak periods and should use traffic data for non-holiday weekdays and other non-typical occurrences.

The CLV method is generally accepted by most Maryland public agencies including SHA, MCDOT, the Cities of Rockville, Gaithersburg, Takoma Park, and M-NCPPC Planning Department. The methodology will fit most intersection configurations and can be easily varied for special situations and unusual conditions.

[1] In such cases, the coordination of any proposed intersection improvements shall be in accordance with the memorandum of understanding provided as Appendix 7.

While some assumptions, for example lane use factors (see Step 3 below), may vary between jurisdictions and agencies, the general CLV methodology is consistent. An excellent reference source is SHA's web site: insert link.

The CLV method can be used at signalized or unsignalized intersections. For unsignalized intersections, a two-phase operation should be assumed. The traffic volumes should be those approaching the intersection as determined in each step of the traffic study (existing, existing plus background, and existing plus background plus site).

Applicants should use the following steps to determine the congestion level of an intersection with a simple two-phase signal operation.

Step 1: Determine the signal phasing, number of lanes, and the total volume of entering turning movements on all intersection approaches and the traffic movements permitted in each lane.

Step 2: Subtract from the total approach volume any right-turn volume that operates continuously throughout the signal cycle, (a free-flow right-turn bypass). Also, subtract the left-turn volume if it has an exclusive lane. An exclusive turning lane must be long enough to store all of the turning vehicles in a typical signal cycle without overflowing into the adjacent through lanes. Otherwise, none or only percentage of the turning volume may be subtracted from the total approach volume.

Step 3: Determine the maximum volume per lane for each approach by multiplying the volume calculated in Step 2 by the appropriate lane-use factor selected from Table 2. (Note: Do not count lanes established for exclusive use such as right- or left-turn storage lanes. The lane use factor for a single exclusive use lane is 1.00. Consult with Planning Department staff and MCDOT regarding any overlap signal phasing.)

Table 2
Montgomery County Lane Use Factors

Number of Approach Lanes	Lane Use Factor*
1	1.00
2	0.53
3	0.37
4	0.30
5	0.25

* Based on local observed data and the 2010 Edition of the *Highway Capacity Manual*

Step 4: Select the maximum volume per lane in one direction (e.g., northbound) and add it to the opposing (e.g., southbound) left turn volume.

Step 5: Repeat Step 4 by selecting the maximum volume per lane in the opposite direction (e.g., southbound) and the opposing (e.g., northbound) left-turn volume.

Step 6: The higher total of Step 4 or Step 5 is the critical volume for phase one (e.g., north-south).

Step 7: Repeat Steps 4 through 6 for phase two (e.g., east-west).

Step 8: Sum the critical lane volumes for the two phases to determine the CLV for the intersection. At some intersections, two opposing flows may move on separate phases. For these cases, each opposing phase becomes a part of the intersection's CLV (see Table 3).

Step 9: Compare the resultant CLV for the intersection with the congestion standards in Map 1.

An example of a CLV calculation for a hypothetical intersection is provided in Table 3.

Table 3
Critical Lane Volume Calculations
reinsert lane sketches

direction from the	lane approach volume		critical lane use factor		approach volume		opposing lefts		lane volume per approach
north	775[1]	x	0.53	=	411	+	200	=	611
south	800[2]	x	0.53	=	424	+	175	=	599
	500	x	1.00	=	500	+	175	=	675[5]
east	700[3]	x	0.53	=	371	+	100	=	471
west	750[4]	x	0.53	=	398	+	150	=	548[5]

1 Approach volumes are the sum of through, right, and left turn movements in two lanes.
2 For a heavy right turn, evaluate worst of rights in one lane or through and rights in two lanes
3 Approach volumes are the sum of through and right turn movements in two lanes.
4 Approach volumes are through only because of free right and separate left.
5 Intersection Critical Lane Volume = higher sum = 675 + 548 = 1,223.

The following conditions should be observed where applicable.

- Right turn overlaps can be assumed where an exclusive right turn lane exists, except in cases when an approach is signed for a "no turn on red" condition.
- The CLV for five-leg intersections should be addressed according to the individual signal phases identified in the field.
- In cases where pedestrian crossing time criteria are not met, applicants must inform MCDOT and request that they revise the signal timing and be included in the pedestrian statement.
- Crossing distances are to be measured from the curb to the edge of the far travel lane (not curb to curb).
- "Desired times" are to be determined by dividing the crossing distance by 3.5 ft/sec and then subtracting the total clearance time for that associated phase, as per the *Manual on Uniform Traffic Control Devices*.
- The CLV calculation for roundabouts should calculate the sum of the approach flow and circulating flows, as defined by the *Highway Capacity Manual*, for each approach and comparing the highest sum to the LATR standards.

2. Approved but Unbuilt Development

As a general guideline, background traffic from approved but unbuilt developments will be in the same geographic area as the intersections to be studied, defined by a polygon connecting the intersections farthest from the site. If the background traffic is generated from a large, staged development, the traffic study and its review will also be staged. As noted above, background traffic data should also include effective trip mitigation programs or uncompleted physical improvements that have been required of nearby developments.

3. Existing Intersection Turning Movement Counts

Generally, intersection turning movement counts less than one year old when the traffic study is submitted are acceptable. Traffic counts should not be conducted:

- on a Monday or Friday
- during summer months when public schools are not in session
- on federal, state,or county holidays
- on the day before or after federal holidays
- during the last two weeks of December and the first week of January or when a major incident or event results in significantly different traffic volumes and patterns
- when weather or other conditions have disrupted normal daily traffic.

For special circumstances such as summer camps, non-summer or summer traffic counts, whichever is higher, will be used in the study.

4. Trip Generation, Directional Distribution, Directional Split, and Trip Assignment

Trip Generation

Trips projected to be generated by the proposed development and background traffic should be determined in accordance with the latest *Trip Generation Guidelines* (see Appendix 1). Developments that generate less than five peak hour background trips (i.e., subdivisions of four or fewer single-family detached houses) are not generally included unless located at a critical analyzed intersection, since tracking those trips is not pragmatic.

Trip generation equations and rates are shown in Appendix 1 for general office, retail, residential, fast food restaurants, child day care centers, private schools/educational institutions, senior/elderly housing, mini-warehouse, and automobile filling stations with or without ancillary uses. Equations for calculating trips from other land uses or zoning classifications can be obtained from the Institute of Transportation Engineer's (ITE) latest edition of the *Trip Generation Manual*. Guidance regarding pass-by, diverted, and internal trip capture rates can be found in this document.

Applicants should use Appendix 1 for trip generation rates and equations for typical land uses within Montgomery County. Planning Department staff can assist in calculating trips and using the trip generation tables in Appendix 2. Appendix 3 contains the trip generation rates for the Silver Spring, Bethesda, and Friendship Heights CBDs, which reflect higher transit use. Planning Department staff is authorized to make minor technical changes to Appendixes 1, 2, and 3 to reflect new information or to correct errors. Applicants should check with staff to ensure they are using the latest version of the Appendix.

Another special case is retail sites over 200,000 square feet of gross leasable area. Their trip generation rates will be set after discussion with staff and the applicant's analysis of data for one or more similar-sized retail sites within the County. In lieu of data collection, a trip rate set at two times the rate in the latest edition of ITE's *Trip Generation Manual* may be used.

In some cases, adjusting the trips from the trip generation rates and equations in the Appendix may be appropriate. For example, the effect of pass-by and diverted trips for retail, including fast food restaurants, child day care centers, and automobile filling stations; and the total trips from mixed uses such as office and retail will be considered on a case-by-case basis, using the best available information.

Deviations may also be appropriate for a particular site. Appropriate rates for these sites could be based on traffic counts of comparable facilities on vehicles both entering and leaving those sites, preferably in the County, and will be considered by staff.

Directional Distribution

Planning Department staff provides applicants with guidance pertaining to the directional distribution of background and site traffic generated by office and residential uses from the latest edition of the *Trip Distribution and Traffic Assignment Guidelines* (see Appendix 2). The distribution of trips entering and leaving the proposed development will be determined based on the relative location of other traffic generators, including background development, employment centers, commercial centers, regional or area shopping centers, transportation terminals, or other trip table information provided by staff. For land uses not covered in the Appendix, distribution should be developed in consultation with Planning Department staff.

Directional Split

The directional split is the percentage of the trips entering or leaving the site during the peak hour and the direction in which those trips are traveling. Appendix 1 contains the directional split for general land uses and Appendix 3 contains directional split assumptions for the Bethesda, Friendship Heights, and Silver Spring CBDs. For all other uses, refer to the latest edition of ITE's *Trip Generation Manual*. If data are not available, staff and the applicant will determine an appropriate in-out directional split.

Trip Assignment

Trip assignment is an estimate of the impact of future traffic on the nearby road network. It tends to be less accurate farther from the origin or destination of travel. The assignment factors shall be determined in consultation with Planning Department staff and applied to the generated trips. The resulting volumes will be assigned to the nearby road network. Generated trips, background traffic, and existing traffic will be combined to determine the adequacy of transportation facilities. Trip assignment will be extended to the nearest major intersection, or intersections, in consultation with Planning Department staff (see Table 1).

Once an intersection assignment exceeds a CLV of 2,000, diverting estimated traffic to alternate routes may be considered. Diversions will be based on feasible alternatives and should create a balance that reflects the project's traffic impacts on both primary and alternate routes and not through local residential streets. Impacts on primary and alternate intersections must be mitigated in accordance with the policy area congestion standards. Staff, in consultation with the applicant, SHA, and MCDOT will resolve these cases individually before presentation to the Planning Board.

5. Mode Split Assumptions

Estimates of transit use should be included if the study is to include trip reduction generated using vehicle-based trip factors. For mixed-use developments, the trip-generation rates and formulas in ITE's *Trip Generation Manual* include the impacts of transit users.

6. Capital Improvments Projects and Consolidated Transportation Program Improvements

Transportation projects fully funded for construction within six years in the latest version of the County's Capital Improvement Program (CIP), the State's Consolidated Transportation Program (CTP), or any relevant municipal capital improvements program should be included in the study, along with techniques for estimating traffic diversion to major new programmed facilities.

Applicants should use the CIP and CTP to define a capital improvements project to be included in their traffic study. For an improvement to qualify for use, it must be fully funded for construction in the first six years of the applicable CIP or CTP as of the date of the traffic study's submission.

If a capital project is not currently fully funded for construction within six years of the capital program, but such funding is reasonably anticipated to occur in the next capital program, Planning Department staff may recommend the Planning Board delay an APF decision until the County or State is ready to appropriate that funding. The Planning Board would then require the developer to consult with the County or State when building permit applications are filed. If the County or State agrees in writing that the capital project will be constructed within six years, then the developer will contribute an amount equivalent to the cost of the LATR improvements at that time.

7. Circulation and Safety

The traffic study should provide peak hour turning movement projections (into and out of the site) for all driveways to commercial and multifamily residential developments, sites that share access through an easement agreement, and proposed intersections of any new public streets with existing public roads.

On sites with public or private facilities with 800 or more seats or that can otherwise accommodate 800 or more people during an event, which may have high traffic impacts, traffic studies should address concerns about site access and circulation.

8. Land Use and Size

The study should include the number and square footage of buildings on the site and whether they are commercial, residential, or some other use, the number of housing units or beds in residential developments, and/or students/children enrollment capacity and staff persons for schools/day care centers.

9. Queuing Analysis

The study should be based on data from the Highway Capacity Manual methodology, and reflect the different standards for CBDs and MSPAs (see Map 1). See page X for more detail.

10. Pedestrian and Bicycle Impact Statement

To ensure safe and efficient pedestrian and bicycle access and circulation to and within the site, the study will include:

- pedestrian and bicycle counts at each intersection leg and an accounting of pedestrians and bicyclists crossing multiple legs
- any capital or operating modifications required to maximize safe pedestrian and bicyclist access to the site and surrounding area
- inventory map of existing and proposed sidewalks, off-road shared-use paths, and bikeways near the site noting whether these facilities are generally consistent with the County's Road Code design standards for sidewalk, path, landscape panel width, and street trees
- existing and proposed bus stops, shelters, and benches, including real time transit information
- pedestrian and bicycle accommodations at nearby intersections, including crosswalks, countdown pedestrian signals (CPS), push buttons, median refuges, and ADA-compliant ramps and accessible pedestrian siganls (APS)
- information on bus route numbers, service frequency, and end destinations of bus routes

- in CBDs and MSPAs, recognition of peak pedestrian and bicycle activity periods
- inventory of existing streetlighting and additional lighting needs in the vicinity of the site.

11. Improvement and Mitigation Recommendations
The study should include a feasible range of traffic engineering improvements and/or trip mitigation measures associated with implementing the development.

12. Traffic Mitigation Agreement
If an applicant is proposing trip reduction measures, the study must include:

- a description of proposed Traffic Mitigation Agreement (TMAg) elements that will be approved by the Planning Board and MCDOT, and included in the opinions issued by the Board of Appeals. The description must include the following elements:
    - the vehicle trip reduction goals, including the specific number of peak hour vehicles to be reduced in both the weekday morning and evening peak periods
    - the TMAg's actions and a quantitative assessment of how they will achieve the required vehicle trip reduction goal
    - the required duration of the TMAg (its term, which is typically 12 years after achieving its trip reduction goals and may be extended in perpetuity for such cases as I-3 zoned properties)
    - whether the TMAg will be enforced based on the provision of specified actions (regardless of outcome), the measured outcome (regardless of actions provided), or a combination of both
    - the measures to be used in enforcement
    - the suggested method of monitoring
    - a security instrument to fund the continuation of the traffic mitigation program for its remaining term if the applicant defaults
    - the penalties if the vehicle trip reduction goals are not met.
- written statements from both MCDOT and Planning Department staffs concurring with the proposed approach to traffic mitigation.

Additional Guidance on Scope Elements

The project's size and location will determine its traffic impact as will the land uses in the proposed development. In calculating their impact, the applicant's traffic study must consider the following factors.

Peak Hour
Traffic studies should be based on the one-hour period with the highest trips during the typical weekday morning (6:30 a.m. to 9:30 a.m.) and/or evening (4:00 p.m. to 7:00 p.m.) peak period. This one-hour period shall be determined from the highest sum of the existing traffic entering all approaches to each intersection during four consecutive 15-minute intervals.

Traffic Data
Current existing traffic volume data may be available from the Planning Department's intersection traffic count database, SHA, or MCDOT. New traffic counts should be conducted by the applicant if, in staff's opinion, traffic volumes have increased due to some change in the traffic pattern, such as the completion of a nearby development or roadway project after the count was made. Applicants are responsible for collecting new traffic counts if turning movement data are more than one year old when

the project application is considered complete by the Planning Department or if their locations for which traffic count data are non-existent.

Intersection traffic counts obtained from public agencies or conducted by the applicant must be manual turning movement counts of vehicles and pedestrian/bicycle crossing volumes in 15-minute intervals covering the typical weekday peak periods, 6:30 a.m. to 9:30 a.m. and 4:00 p.m. to 7:00 p.m., or some other agreed upon time period. The data must be collected in 15-minute intervals to allow selection of the peak hour within the nearest 15 minutes. All weekday peak-period turning movement data should be submitted as part of the applicant's traffic study.

All new intersection traffic counts for vehicles, pedestrians, and bicycles must be submitted digitally to Planning Department staff to become part of the Planning Department's Intersection Traffic Count database, which is available to developers, consultants, and others. Traffic counts affected by adverse weather or nearby traffic incidents will not be accepted (see page 14, Preparing an LATR Traffic Study, Existing Intersection Turning Movement Counts).

Submitting an LATR Traffic Study

If an applicant is uncertain whether a traffic study is required, a traffic exemption statement must be filed as a part of an applicant's development submittal. The traffic exemption statement must show:

- that the number of peak hour vehicle trips generated by the project's proposed land use is fewer than 30 trips
- how the TPAR test is satisfied.

Planning Department staff will review the initial traffic exemption statement and determine if a traffic study is necessary.

If a traffic study is necessary, Planning Department staff has 15 working days to develop a study scope after receiving a written request and working with the applicant. As part of the scope, staff will supply the applicant with information on approved but unbuilt developments, nearby intersections to study, trip distribution and traffic assignment guidelines, and other information required to complete the study.

When determined to be complete and adequate, the applicant can return the study with the complete development application. In either case, staff has 15 working days to let the applicant know if the study is complete and adequate.

TPAR and LATR are separate evaluation processes, but must be examined concurrently as part of a development application submission. Each applicant must satisfy both TPAR and LATR requirements. The requirements must be addressed in a single document, which may include a combination of traffic exemption statements and traffic studies.

Traffic Study Submittals

Two copies of the traffic study must be submitted with the development application. Once Planning Department staff confirms that the traffic study is complete and adequate, 13 copies must be submitted within five working days of notification, along with a PDF copy for inclusion in the application file and available for public view via the website's Development Activity Information Center.

A complete and adequate traffic study must include:

- A site or area map showing:
  - existing roads serving the site and any CIP or CTP transportation improvements that are fully funded for construction within six years and that affect traffic at the critical intersections
  - nearby approved but unbuilt developments and associated improvements that would affect traffic at the critical intersections with their location shown on the area map. (This information is provided by staff and included as part of the traffic study.)

- Name and contact information of the licensed or certified professional submitting the traffic study. LATR traffic studies must be submitted by a registered Professional Engineer (PE), Certified Professional Traffic Operations Engineer (PTOE), Certified Professional Transportation Planner (PTP) or AICP Certified Transportation Planner (AICP CTP).

- Existing pedestrian and bicycle weekday morning and evening peak period traffic count summaries for the intersections analyzed in the traffic study. The summary should include any non-ADA-compliant or safety deficiencies.

- For approved but unbuilt development:
  - weekday morning and evening peak hour trips expected to be generated by each nearby approved but unbuilt development, including the source of the generation rates and equations for each
  - trip distribution patterns, as percentages, during the weekday morning and evening peak hours. The pattern of both distribution and assignment should be shown on an area map of the local roadway network.

- For the proposed development:
  - weekday morning and evening peak hour trips entering and leaving the site, including the site driveways
  - trip distribution patterns, as percentages, during the weekday morning and evening peak hours. The pattern of both distribution and assignment should be shown on an area map of the local roadway network.

- Maps that show separately and in combination:
  - existing weekday morning and evening peak hour traffic volumes using the affected highway system, including turning movements at analyzed intersections
  - projected weekday morning and evening peak hour trips assigned to the affected highway system and turning movements at analyzed intersections for all nearby approved developments, included as part of the background
  - traffic volumes derived by adding trips from approved development to existing traffic
  - if a roadway CIP/CTP or developer-sponsored project is considered as being in place, the resulting reassignment and redistribution of trip patterns
  - projected weekday morning and evening peak hour trips assigned to the affected highway system and turning movements at analyzed intersections for the proposed development
  - traffic volumes derived by adding site trips to the sum of existing plus background traffic assigned to the affected highway system and turning movements at the analyzed intersections.

- Any study performed to help determine how to assign recorded or proposed development trips, such as a license plate study or special turning movement counts.

- Copies of all critical lane volume analyses for each analyzed intersection, showing calculations for each approach.

- A list of all transportation improvements, if any, that the applicant agrees to provide and a scaled drawing of each improvement showing available or needed right-of-way, proposed roadway widening, and area available for sidewalks, bikeway, landscaping, as required. Coordination with MCDOT, SHA and, if impacted, the Cities of Rockville and Gaithersburg, should be shown.

- Electronic copies of all vehicle, pedestrian, and bicycle traffic counts in approved digital format submitted to insert website. Traffic counts affected by adverse weather, nearby traffic incidents, or other factors resulting in non-typical volumes will not be accepted.

Before a traffic study is accepted for review, the applicant must show proof that the MCDOT Development Review Fee (to review the traffic study) has been paid, in accordance with Executive Regulation No. 28-06 AM (Schedule of Fees for Transportation-related Reviews of Subdivision Plans and Documents).

Once a traffic study is determined to be complete and adequate (see Table 4), the date of receipt becomes the completion date. Planning Department Transportation staff will inform the Planning Department's Development Application and Regulatory Coordination division that the study is complete and adequate. As part of a development application, the traffic study will follow the standard notification process.

Planning Department staff is available to review the traffic study's recommendations with community representatives. Traffic studies are available for public review as part of the application's general file. Copies can be made or requested from the applicant, as needed. PDF copies are also available online at the Planning Department's Development Activity Information Center (DAIC).

After the traffic study is complete and adequate, Planning Department staff will distribute it to MCDOT, SHA, and incorporated cities, if applicable. Traffic studies should be distributed at or before the date when subdivision plans are distributed for review by the Development Review Committee. They will have 30 days to review the traffic study and comment on its recommendations. Planning Department staff will determine if a traffic study's recommendations are acceptable in consultation with the applicant, MCDOT, and SHA. Planning Department staff will work with the applicant to obtain comments from SHA and MCDOT five weeks prior to a scheduled Planning Board hearing.

It is the applicant's responsibility to determine how to respond to written and/or oral communication by Planning Department staff regarding issues associated with and/or required modifications to the traffic study.

Table 4

Checklist for Complete and Adequate Traffic Studies

Applicants should consider the following questions that Planning Department staff will use to determine whether a traffic study is complete and adequate, and can be accepted for DRC review and eventual decision by the Planning Board.

Process
Traffic study submitted/receipt date
Contact information of licensed or certified person who prepared it
Has an electronic copy of traffic counts been received/receipt date
Have the fees required by Executive Regulation 28-06 AM been paid?
Does the study follow LATR/TPAR Guidelines, the traffic study scope letter, and generally accepted transportation planning principles?
Are policy area congestion standards, lane configurations, lane factors, and CLV calculations in the traffic study acceptable?
Information about surrounding area
Are existing traffic conditions presented accurately?
Are pipeline developments adequately represented?
Are background traffic conditions appropriate?
Are the relevant fully-funded transportation network improvements included?
Information about the proposed development
Does the study reflect latest submitted development plan and land uses?
Is site trip generation estimated according to LATR requirements?
Is the TPAR fee calculated based on the number of dwelling units and gross square footage?
Are assumptions for the percent of new, diverted, pass-by, internal trips acceptable?
Does site trip distribution represent regional travel patterns in the LATR/TPAR Guidelines and local road network?
Is site trip assignment acceptable?
Information about proposed mitigation
If proposed, what percentage of LATR trips needs to be reduced and mitigated? Are intersection and roadway improvements identified?
Is the Pedestrian and Bicycle Impact Statement acceptable?
Are necessary trip reduction measures identified?
Are intersection and roadway improvements identified?
If proposed, are trip reduction measures acceptable?
If proposed, are the required elements of the Traffic Mitigation Agreement (TMAg) identified?
Has the PDF copy of the traffic study been submitted?

Staff's Evaluation of a Traffic Study

Planning Department staff evaluates traffic studies considering the following elements, described here to ensure consistent review by staff and to provide applicants additional information about how their studies will be analyzed. The review includes variations for MSPAs, CBDs, and projects with multiple applicants.

Project Size and Location

To warrant a LATR traffic study, a proposed development must have a measurable traffic impact on a local area. Measurable traffic impact is defined as a development that generates 30 or more total (i.e., existing, new, pass-by, and diverted) weekday peak hour trips in the morning (6:30 a.m. to 9:30 a.m.) and/or evening (4:00 p.m. to 7:00 p.m.) peak hours. If the proposal generates less than 30 trips or is a renovation of an existing development and will generate no net increase in trips, a traffic exemption statement is required instead of a traffic study.

A LATR traffic study is not required for any expansion that generates five or fewer additional peak hour trips if use and occupancy permits for at least 75 percent of the originally approved development were issued more than 12 years before the LATR traffic study scope request. Otherwise, the number of signalized intersections in the study will be based on the increased number of peak hour trips rather than the total number of peak hour trips.

To determine if a development will generate 30 or more weekday trips, Planning Department staff uses the following criteria:

- For office or residential development, all peak hour trips are counted even if, as part of the analysis, some of the trips will be considered as existing, pass-by, or diverted trips to the site from existing traffic.

- For retail development, pass-by and diverted trips are included in establishing the 30-vehicle threshold for a traffic study and later, for designing site access and circulation. Pass-by and diverted trips are not added to site-generated trips because they are already on the network, but diverted turning movements are considered in evaluating CLV measurement.

- Planning Department staff shall exercise their professional judgment in consultation with the applicant in determining the appropriate land area to consider. Parcels that will be separated by unbuilt roadways remain "land at one location" but parcels separated by business district streets, arterial roadways, major highways, or freeways may cease to be "land at one location" even if still in common ownership.

In certain circumstances, Planning Department staff may, in consultation with the applicant, require analysis of traffic conditions during a different three-hour weekday peak period for example, 6:00 a.m. to 9:00 a.m. (versus the standard 6:30 a.m. to 9:30 a.m.) or 3:30 p.m. to 6:30 p.m. (versus the standard 4:00 p.m. to 7:00 p.m.), to reflect the site's location or trip-generation characteristics, existing conditions, or background traffic. For example, a school where classes end before the start of the evening peak period.

The applicant calculates the number of trips using the following sources:

- in the Silver Spring, Bethesda, and Friendship Heights CBD Policy Areas, use the trip generation rates in Appendix 3, Tables 3-1 or 3-2.

- in all other parts of the County:
  - for general office, general retail, residential, fast food restaurant, private school, child day-care center, automobile filling station, senior/elderly housing, or mini-warehouse, use the formulas provided in Appendix 1 and the tables provided in Appendix 2.
  - for other land uses, use the latest edition of the *Trip Generation Manual* published by the Institute of Transportation Engineers (ITE).

For some specialized land uses, trip-generation rates may not be available. In such cases, Planning Department staff may request that determining rates be a part of the traffic study, most likely by collecting existing driveway counts at similar land uses. If special rates are to be used, staff must approve them prior to submission of the traffic study.

An applicant shall not avoid the intent of this requirement by submitting piecemeal applications or approval requests. However, an applicant may submit a plan of subdivision for less than 30 peak hour trips if agreeing in writing that, upon filing future applications, the applicant will comply with the requirements of the LATR/TPAR Guidelines when the total number of site-generated peak hour vehicle trips at one location has reached 30 or more. Then, a traffic study will be required to evaluate the impact of the total number of site-generated trips in accordance with the Guidelines.

Planning Department staff may elect to waive the criteria described in this section if the development results in no net increase in weekday peak-hour trips.

Congestion Standards

Congestion standards, based on CLV data, vary throughout the County, depending on the character of development and the availability of transit options. These standards are developed by policy area and adopted in the most recent Subdivision Staging Policy (see Map 1). Planning Department staff maintains an inventory of intersection traffic data based on traffic counts collected by MCDOT, SHA, and private traffic consultants to provide applicants with a preliminary assessment of conditions in the vicinity of a proposed development.

Reviewing Development in MSPAs and CBDs

In reviewing MSPA and CBD applications, staff uses the following criteria.

Adequacy of Traffic Flows

- Any intersection with a CLV less than 1600 will, in most cases, be considered acceptable with no further analysis required. The CLV will be calculated in accordance with the procedures defined in these Guidelines.

- If the CLV is 1,600 or higher, an HCM analysis shall be performed. Existing queues shall be measured by the applicant and total traffic (existing, background, and site) and planned roadway and circulation changes shall be taken into account. The HCM methodology shall be applied using simulation software such as SYNCHRO or CORSIM based on simulation parameters agreed upon by the applicant and Planning Department staff. The average queue length in the weekday peak hour should not extend more than 80 percent of the distance to an adjacent signalized intersection, provided the adjacent signalized intersections are greater than 300 feet apart. The 80 percent standard provides a margin of safety for peaking. If adjacent signalized intersections are closer together than 300 feet, the average queue length in the weekday peak hour should not extend more than 90 percent of the distance to the adjacent signalized intersection. The assumed signal timing analysis must be consistent with the crossing time required for pedestrians as described in the CLV Analysis Methods section (page 13).

Site Access and Pedestrian/Bicycle Safety
In addition to the traffic flow analysis, applicants must demonstrate that the following guidelines are not violated by their site development.

- Vehicle access points for parking and loading must be located so that they will not interfere with traffic flows on the adjacent streets or with access points to neighboring buildings or transit terminal areas. Access directly onto roads classified as arterials or above should be avoided, but if proposed it will be considered in the context of the application.

- In addition to the pedestrian and bicycle impact statement, pedestrian and bicycle safety shall be assessed based on the potential for conflicts between pedestrians, bicycles, and vehicles. Actions shall be taken to minimize conflicts and ensure pedestrian and bicycle safety on and adjacent to the site.

In MSPA cases where pedestrian crossing time criteria are not met, the applicant must inform MCDOT and request them to revise the signal timing. Any adjustments must be documented in the traffic study submitted as part of the development application. In the analysis, all pedestrian and bicycle movements are assumed to be made at the street level.

Other Criteria
- Total traffic is defined as the existing traffic, plus trips from approved but unbuilt development, plus the trips from the proposed development during the peak hour of the weekday morning and evening peak periods.

- Critical intersections are those within the CBD or MSPA, defined by Planning Department staff, generally adjacent to the site, or allowing site traffic to enter an arterial or major road. In some cases, where site volumes are large, additional intersections within or contiguous to the CBD or MSPA may be identified by staff for inclusion in the traffic study.

- Vehicles can be assigned to parking garages encountered on their trip into the CBD or MSPA. The capacity of parking garages must be accounted for based on guidance from Planning Department staff and consultation with MCDOT.

- Trip generation rates for background and site development traffic are contained in Appendixes 1, 2, and 3.

Multiple Applicants

Applicants can request that trip mitigation programs or intersection improvements be considered for more than one application. In those cases, the program or improvement must provide enough capacity to allow all participating applicants to satisfy LATR conditions.

An intersection improvement that is not yet complete may be used by two or more developments to meet LATR conditions. To be considered, the improvement must provide sufficient capacity to:

- result in a CLV that is less than the congestion standard for that policy area
- equal 150 percent of the CLV impact generated by the developments, that is, the intersection improvement must not only mitigate the impact of a proposed development, but improve conditions.

Any type of mitigation listed in this document or acceptable to MCDOT, SHA, and the Planning Board can be used to achieve this goal.

When development is conditioned on intersection and roadway improvements by more than one application, those improvements must be permitted and bonded[1], under construction, or under contract for construction prior to the issuance of building permits for any new development. Exceptions may be made if an applicant's trip contribution to an intersection or roadway is less than 25 percent of the sum of total trips[2].

This requirement may be fulfilled by the creation of a road club or other mechanism approved by the Planning Board that:

- includes the terms, conditions, and responsibilities for funding 100 percent of the cost for design approval, right-of-way acquisition, and construction of the improvements as set forth in the individual project APF approvals; and ensures that all parties contribute in accordance with their respective shares to the total cost of the improvements
- ensures the improvements are either permitted and bonded[1] or under contract for construction within three years of the first building permit issued for any of the developments dependent on the required improvements
- ensures the improvements are substantially complete and open within five years of the first building permit issued for any of the developments dependent on the required improvements.

---

[1] This condition is satisfied if the project is included in the first six years of the County's Capital Improvement Program or the State's Consolidated Transportation Program and the developers' contribution is applied to that project.

[2] Trip total is the sum of the total peak-hour trips generated by all developments required by the Planning Board to participate in the construction of the particular improvement.

If the second or third conditions above have not been met, no building permit that is conditioned on construction of the improvements may be issued to any other participant in the road club until all above conditions are met[3]. If a road club or other mechanism is formed, but not all parties responsible for the improvements join, the non-participating parties will not be permitted to proceed with platting or construction of their projects until they either join the road club or, if the improvements have been completed, reimburse the other road club participants for their share of the total costs. Non-participating parties include those with projects with preliminary plan or APF approvals, which are obligated to participate in the same improvements, whether the approval occurred before or after the road club formation.

Construction of an improvement by one applicant does not relieve other applicants of their responsibility to participate in the cost of that improvement. The final percentage of the construction cost contribution is determined by the participating applicants.

If the Planning Board grants an extension of the APF requirements, for an approved preliminary plan for example, Planning Department staff will determine if the traffic study needs to be updated based on the APF validity period.

Participation in Transportation Improvements
The Planning Board may require that applicants participate in some capital program transportation improvements. Participation will be proportional to the development impact on the improvement and will be determined by Transportation Planning staff, MCDOT, SHA, and other agencies that fund transportation-related improvements. If the traffic study identifies roadway changes or other transportation-related activities required to mitigate the proposed development's on- or off-site impact, these changes will be the responsibility of the applicant as part of satisfying LATR procedures.

Traffic Mitigation Agreement
Each applicant in a Transportation Management District (TMD) must have a proposed Traffic Mitigation Agreement (TMAg) outlining a participation plan for trip reduction measures and other strategies for participating in efforts to achieve the non-auto mode share goals for that policy area. This plan should be prepared in conjunction with the area's TMD, MCDOT, and Planning Department staff. The TMAg for TMD participation may be structured to incorporate applicable LATR and TPAR requirements.

A TMAg may be required in areas where Transportation Demand Management is anticipated in the future, or in situations where the applicant has claimed credit for travel volume reductions by using transit without identifying specific measures to guarantee those reductions.

Proposed Traffic Mitigation Agreements should be:

- submitted as a draft, electronically and in writing, with subdivision plan submissions (the draft document should detail the project's proposed the trip reduction program)
- executed and recorded before the issuance of the project's first building permit.

[3] In certain APF approvals, an applicant is not required to build an improvement until a certain number of building permits have already been released. Such a project would not be responsible for constructing those improvements until the specified number of building permits has been released.

Information Provided by Staff

The following information may be provided to the applicant by Planning Department and MCDOT staffs for use in the traffic study.

- Existing traffic counts at selected locations. (The applicant shall be required to update these data if the application is submitted more than one year after the applicant submits a completed development application to the Planning Department.)
- Trip generation rates or equations and their source.
- Initial directional distributions (see Appendix 4) to be refined based on the existing road network
- In CBDs, parking garage capacity information and locations of future public parking garages.
- A list of approved but unbuilt developments and their locations.
- Public and private transportation improvements in the study area, with funding assigned for construction within six years (see Appendix 6).

Staff Findings

In their report to the Planning Board, staff presents findings for each of the following categories and makes recommendations about the adequacy of transportation facilities. The Planning Board will use these findings and recommendations, along with comments and recommendations from the public, MCDOT, SHA, and incorporated cities and towns, to determine the adequacy of public facilities for the proposed development.

Staff determines adequacy by finding that:
- congestion conditions will not exceed policy area standards
- proposed intersections improvements are feasible and will improve congestion conditions
- the applicant will pay to a fund to make required improvements.

Transportation Solutions
If the applicant's traffic study identifies a condition that exceeds the congestion standard for the policy area, Planning Department staff will notify the applicant, MCDOT and SHA so that feasible mitigation can be developed. The Planning Department staff may recommend and the Planning Board may approve traffic mitigation agreements, non-automobile transportation facilities, or physical road improvements, alone or in combination, as the required means to relieve local congestion. For LATR, priority will be given to non-physical improvements in MSPAs and CBDs. No mitigation is required under TPAR in MSPAs.

The Subdivision Staging Policy seeks to reduce congestion in areas where it may already be unacceptable. It stipulates that in policy areas where local area conditions exceed the congestion standard, development may only be approved if the applicant agrees to mitigate the LATR impact by either:

- making improvements that bring the local area condition to within the congestion standard, and
- reducing CLV to equals 150 percent of the CLV impact generated by the development.

Whenever modifications to signalized intersections and other physical improvements are proposed to remedy congestion standard issues, the traffic study must provide preliminary information to establish the feasibility of implementing the proposed measures. In these instances, the traffic study should include:

- alternative intersection improvements that were considered but not recommended, plus the rationale for not proposing them
- existing and proposed pavement
- existing and proposed right-of-way
- the length and width of proposed modifications
- cross sections of existing and proposed improvements in the right-of-way
- modifications to receiving lanes (such as additional through or turn lanes) or right-turn lanes
- the adequacy of turn radii—particularly for opposing vehicle movements where additional turn lanes are proposed
- proposed changes to the operation of existing traffic signals (timing, phasing, etc.).

Once the applicant, Planning Department staff, and MCDOT and SHA have identified solutions that will create local transportation capacity, these solutions will be incorporated as conditions of approval in the Planning Department staff report. These solutions could include additional traffic engineering or operations changes beyond those currently programmed, or new transit or ridesharing activities.

For applicants participating in traffic mitigation or in intersection improvements to satisfy LATR requirements, that participation also counts toward meeting LATR for intersections where site-generated trip volume is less than five critical lane movements.

Establishing Local Congestion Standards
The applicant's traffic study submitted must identify a development proposal's impact and the degree of intersection congestion for the peak hour of weekday morning and evening peak periods by comparing the calculated CLVs with the policy area congestion standards in Map 1. For intersections straddling policy area boundaries, the higher congestion standard shall be used.

In establishing the LATR congestion standards, an approximate equivalent level of service that balances transit availability with roadway congestion in all County policy areas is assumed. In areas of greater transit accessibility and use, greater traffic congestion is permitted (see Map 1).

If staff finds that congestion standards are exceeded under background conditions, an applicant is required to provide a traffic mitigation program consisting of either or both trip reduction or intersection improvements. The mitigation program should:

- bring the intersection to acceptable levels of congestion, or
- improve operating conditions to equal 150 percent of the CLV impact generated by the development.

Unavoidable Congestion
In their analysis, Planning Department staff will identify alternate routes to serve associated trips that could mitigate congestion. If there are no appropriate alternate routes, then it must be assumed that trips from the proposed development will increase local area congestion. It is not appropriate to anticipate that the development's associated trips associated would use local streets other than for site access unless those streets are classified as arterial, business district, or higher.

Transportation Demand Management Strategies
As part of the traffic study review and approval, staff, in coordination with MCDOT, will confirm the degree to which transit, ridesharing, or other TDM activities can mitigate vehicle trips generated by a development. This activity should occur before the traffic study scoping letter stage to aid in preparing and reviewing the report. If the proposed development or immediate area can be served with transit or ridesharing services, then priority will be given to developing a transit alternative or trip mitigation program using transit. If it is physically or fiscally ineffective for public agencies to provide transit or ridesharing services, then it must be assumed that trips from the proposed development will increase local area congestion. In most cases, TDM strategies will be included in TMAgs and monitored over time to ensure effectiveness.

Project-Related Traffic
Planning Department staff will identify the degree to which local traffic congestion is attributable to the proposed development by measuring traffic from three sources: existing traffic, background traffic generated by the total of all nearby approved but unbuilt development, and total trips generated by the proposed development. The more trips the proposed development contributes to local traffic congestion, the greater the local impact area.

Table 5
LATR Intersection Congestion Standards—Critical Lane Volume and Volume-to-Capacity Equivalencies

These standards for congestion in each policy area are based on critical lane volume measurements and volume-to-capacity equivalencies based on data in the Highway Capacity Manual.

policy area	**critical lane volume standard**	**volume to capacity equivalent**
Rural East Rural West	1,350	0.84
Damascus	1,400	0.88
Clarksburg Gaithersburg City Germantown East Germantown West Montgomery Village/Airpark	1,425	0.89
Cloverly North Potomac Olney Potomac R&D Village	1,450	0.91
Aspen Hill Derwood Fairland/White Oak	1,475	0.92
Rockville City	1,500	0.94
North Bethesda	1,550	0.97
Bethesda-Chevy Chase Germantown Town Center Kensington-Wheaton Silver Spring-Takoma Park	1,600	1.0

Bethesda CBD Silver Spring CBD Wheaton CBD Friendship Heights CBD Glenmont MSPA Grosvenor MSPA Rockville Town Center MSPA Shady Grove MSPA Twinbrook MSPA White Flint MSPA	1,800	1.13

Exceptions to LATR

There are several exceptions or additions to the LATR process and standards.

In the Potomac Policy Area the only developments subject to LATR are those with site-generated trips that will impact the following intersections:

- Montrose Road and Seven Locks Road
- Democracy Boulevard and Seven Locks Road
- Tuckerman Lane and Seven Locks Road
- Bradley Boulevard and Seven Locks Road
- Democracy Boulevard and Westlake Drive
- Westlake Drive and Westlake Terrace
- Westlake Drive and Tuckerman Lane
- River Road and Bradley Boulevard
- River Road and Piney Meetinghouse Road
- River Road and Seven Locks Road
- River Road and Falls Road
- Falls Road and Democracy Boulevard.

Insert Map 2
Potomac Policy Area LATR Intersections

Alternative Review Procedure

The congestion standard for intersections in Metro Station Policy Areas is a CLV of 1,800 (see Map 1) and development within these areas is eligible for the Subdivision Staging Policy's Alternative Review Procedure, which exempts projects from LATR and requires paying twice the TMD fees and reducing their trips by at least 50 percent.

For applicants using the Alternative Review Procedure, (see Subdivision Staging Policy Section TA1), the solutions must be identified, agreed to, and made conditions of approval.

Insert sidebar:

Subdivision Staging Alternative Review Process

For commercial or residential developments, an applicant can meet LATR requirements by doing all of the following:

- paying 75 percent of the applicable development impact tax without claiming any credit for transportation improvements
- participating in and paying an on-going annual contribution to a Transportation Management Organization (TMO) if and when one exists
- mitigating 50 percent of their total weekday morning and evening peak hour vehicle trips per a executed and recorded TMAg
- submitting a traffic study to identify intersection improvements and trip mitigation measures that would have been required.

An applicant for a subdivision that will be built completely within an MSPA need not take any action under TPAR or LATR if they agree in a contract with the Planning Board and MCDOT to:

- submit an application containing all information, including a traffic study, that would normally be required for LATR
- meet trip reduction goals of no less than 50 percent set by the Planning Board as a condition of approving that subdivision, either by reducing trips from the subdivision itself or from other occupants of that policy area per an executed and recorded Traffic Mitigation Agreement, and provide a surety document to ensure that the reduction of trips in fact takes place
- participate in programs operated by, and take actions specified by, a TMO to be established for that policy area (or a group of policy areas) to meet the established mode share goals
- pay an on-going annual contribution or transportation development impact tax to fund the TMO's operating expenses, including minor capital item such as buses, as established by County law
- pay 75 percent of the applicable General District Transportation Impact tax without claiming any credits for transportation improvements.

To calculate mitigated trips for the Alternate Review Procedure the applicant must explicitly document the conversion between person-trips and vehicle trips to account for transit use, vehicle occupancy, walk/bike use, internal site trip capture, and telecommute options. The estimates should document the effect of home-based work trips separately from all other trips. Special trip rates in Appendix X, such as for office uses within 1,000 feet of Metrorail stations outside the Beltway, or rates for any uses within the Bethesda, Silver Spring, and Friendship Heights CBDs should not be used in either ARP or LATR-TPAR trip calculations. Countywide rates in Appendixes 1 and 2 are allowed, otherwise calculation rates and procedures recommended by the ITE or the TRB must be applied and referenced for Planning Department staff to consider the quantification of any trip reduction proposal.

Alternative Solutions and Mitigation Approaches

If an applicant's LATR findings indicate an unacceptable intersection congestion level, they have options to mitigate that impact. They may make physical or program improvements as outlined below.

In general, any mitigation measure or combination of mitigation measures must be scheduled for completion or be operating before or at the same time the proposed development is scheduled to be completed. The nature, design, and scale of any additional facility or program must receive approval from any government agency that would construct or maintain it, and the applicant and public agency must execute an appropriate agreement before the Planning Board approves a record plat.

Both the subdivision plan and the necessary mitigation measures must be consistent with an adopted master plan or other relevant land use policy statement. For the Planning Board to accept an intersection improvement as a mitigation measure, the applicant must show that alternative non-auto mitigation measures are not feasible or desirable. In evaluating mitigation measures proposed by an applicant, the Board must place a high priority on design excellence to create a safe, comfortable, and attractive public realm for all users, with a particular focus on high-quality pedestrian and transit access to schools, libraries, recreation centers, and other neighborhood facilities.

If an approved subdivision already had constructed or participated in the construction of off-site improvements to accommodate its peak hour trips (based upon the LATR requirements the Board imposed when it approved a development plan) and if the development later converts one or more approved uses or reduces its size so that the subdivision generates fewer or an equal number of peak hour trips than estimated when the Board imposed the LATR requirements, the trip mitigation agreement must reduce the development's peak hour trip mitigation requirement by one trip for each peak hour trip that no longer would be generated by the development. If the conversion of all or part of the a subdivision from one use to another would cause a different trip distribution or would place new or different burdens on one or more intersections, and if the subdivision is otherwise required to do so, the subdivision must construct or contribute to improvements specified by the Board to mitigate that result.

Applicants required to make intersection improvements to satisfy LATR may apply the capital cost of those improvements toward any TPAR mitigation obligation only if the conditions qualifying those improvements as being appropriate for TPAR mitigation are met (see page 40).

LATR Mitigation Options

Traffic Mitigation Agreements

The applicant may be required to reduce or mitigate trips by entering into a legally-binding transportation mitigation agreement (TMAg). Each traffic mitigation program will be required to operate for at least 12 years, but not more than 15 years, once trip reduction requirements are initially achieved and after use and occupancy permits are drawn. Some elements are designed to continue in perpetuity.

TMAg measures could include:
- subsidizing transit fares to increase ridership
- constructing and maintaining a new park-and-ride facility providing funds to increase use of an existing park-and-ride facility
- funding a private shuttle service, for example, to and from the site to a nearby Metrorail station or park-and-ride facility
- constructing queue-jumper lanes, providing traffic signal priority treatment for transit (after MCDOT and SHA have implemented this process) and other techniques to improve bus travel times (only results that improve travel times will be considered)
- parking management activities
- establishing live-near-work, flex-time, or telecommuting programs.

Other measures may be suggested by applicants, Planning Department staff, or MCDOT. Creative approaches to reducing traffic impacts are encouraged. The final trip reduction measures must be approved by the Planning Department and MCDOT staffs.

To ensure compliance with the contract conditions, TMAgs will be monitored on a quarterly basis, at minimum, at the applicant's expense by MCDOT staff or a consultant selected by the Planning Board. If the quarterly monitoring finds that the goals are not being met, the TMAg will be monitored on a monthly basis until the goals are met for three consecutive months. When the goals aren't being met, staff and the applicant will work together to seek alternative or additional measures and monthly monitoring would take place until the trip reduction goals are met.

Non-Auto Transportation Facilities

To maintain an equivalent level of service for both auto and non-auto modes of travel, the Planning Board may permit an applicant to reduce the roadway improvements or traffic mitigation in exchange for non-auto transportation facilities that will enhance pedestrian safety or encourage non-auto mode choices.

Such facilities must be implemented to reduce the congestion levels at intersections that exceed the congestion standard and where an improvement need has been identified. Trip distribution and assignment assumptions in the LATR study are key factors in determining local intersection impacts and the level of trip mitigation required.

Table 6
Graduated and Maximum Trip Credits Related to Congestion Standards

non-automobile transportation facility	trip credit vs. congestion standard		
	1,350-1,500	1,550-1,600	1,800
100 linear feet of five-foot wide sidewalk	0.5	0.75	1.0
100 linear feet of eight-foot wide bike path			1.0
other non-automobile facilities	$12,000 per vehicle trip		
maximum trip credits	60	90	120

Table X identifies trip reduction options. Any or all of these may be used for a given application. The maximum trip reduction per development is a function of the policy area congestion standard for the development site.

In determining the adequacy of improvements, the Planning Board must balance the environmental and community impacts of reducing congestion as well as the safe and efficient accommodation of pedestrians, bike riders, and bus patrons. Periodic monitoring may or may not be required of non-auto transportation facilities.

Non-auto facilities to mitigate congestion include sidewalks, bike paths, Super Shelters, bus shelters and benches, bike racks and lockers, and static or real time transit information signs, described in more detail below.

Sidewalks, Bike Paths, Pedestrian Refuge Islands, Accessible or Countdown Pedestrian Signals, and Curb Ramps

These features can be constructed off-site and should provide safe access from the proposed or existing development to any of the following uses:

- rail or bus transit stations or stops
- public facilities (school, library, park, post office, etc.)
- recreation centers
- retail centers that employ 20 or more persons at any time
- housing developments of 27 or more single-family detached units
- office centers that employ 100 or more persons
- existing sidewalks or bike paths
- adjacent private amenity space (sitting area, theater, community center).

Accessible pedestrian signals (for the visually-impaired), retrofitting existing traffic signals with countdown lights, and reconstructing existing substandard curb ramps (to current ADA guidelines) should be allowed as optional facilities.

These features must be within one-quarter mile of the edge of the proposed development. For transit stations or stops, the frequency of transit service must be at intervals of 20 minutes or less during the weekday morning and evening peak periods. Appropriate new bikeway segments can be found in the *Countywide Bikeways Functional Master Plan*, or in the applicable master or sector plan. The Plan prioritizes bikeways by activity center, for example Metro stations, CBDs, park trails, etc.

Super Shelters, Bus Shelters, and Benches

An applicant may propose to construct a Super Shelter, bus shelter, or bench, including a concrete pad. Encouraging bus use can reduce weekday peak hour vehicle trips by diverting some person-trips to buses. Two types of shelters can be provided: standard bus shelters and Super Shelters.

- The County has an agreement with Clear Channel Outdoor, Inc. (CCO) to provide a minimum of 500 standard bus shelters in the County. CCO has first choice of locations for these shelters, a number of which will carry advertising. Standard bus shelters provided under LATR must be located in areas where CCO chooses not to provide shelters. CCO must be offered right of first refusal for any new sites before shelter placement is accepted from the developer.
- Super Shelters include heating and lighting, have larger capacity, four walls (with openings to enter and exit), and a higher level of design than standard shelters. A Super Shelter is located on Rockville Pike near Marinelli Road (as part of an agreement with Target/Home Depot). They may be provided only where CCO has chosen not to provide shelters. If agreed to by MCDOT and the developer,

Super Shelters should be incorporated as part of development planning and coordinated with existing and planned locations for standard shelters.

All shelters must be on a bus route, at an existing stop or a new stop approved by DTS, within one-quarter mile of the edge of the proposed development. The service frequency must be at 20 minute intervals or less during the weekday morning and evening peak periods.

Bike Racks and Lockers
An applicant may propose to reduce LATR impact by providing bike racks, lockers, or secured bike area in a parking garage for a minimum of eight bikes at an activity center located within a one-mile radius of the edge of the development.

Transit Information Signs and Kiosks
An applicant may propose to reduce LATR impact by providing static or electronic signs and information kiosks at bus shelters, large office buildings, retail centers, transit centers, or residential complexes. The signs should communicate scheduled or real-time transit information, for example, the scheduled or estimated arrival of the next bus on a given route. The applicant must work with and obtain approval from WMATA for Metrobus routes or with the Montgomery County Department of Transit Services (DTS) for Ride On routes.

Static transit information signs may be provided only at locations other than CCO-provided standard bus shelters, since they include that information. The applicant will be required to provide for changing static transit information that could be provided as often as three times a year.

Other Non-Auto Facilities
An applicant may reduce LATR impact by providing other non-auto facilities, including but not limited to bus layover spaces, crosswalks or pedestrian bridges, on-road bicycle lanes, park-and-ride lots, park trails, transit stations, streetlights, transitways, and busways.

For these facilities, pedestrians and bicyclists should be able to safely cross any roadway to reach their destination. The applicant may provide improvements that Planning Department, MCDOT, and SHA staffs agree would increase the safety of the crossing.

Applying Trip Reduction Measures

Applicants may only apply a trip reduction measure after the total number of peak hour trips is determined using standard trip rates. Developments generating more than 30 total weekday peak hour trips will be required to complete a traffic study, which should include proposed trip reduction strategies. Applicants may be required to gather data on current bus patronage or pedestrian/bicycle activity within the local area to aid in evaluating the strategies.

Payment Instead of Construction
Where an applicant has made a good faith effort to implement an acceptable improvement and where the Board finds that a desirable improvement cannot feasibly be implemented by the applicant but that it can be implemented by a public agency within six years after the subdivision is approved, the County Council has authorized the Planning Board to accept payment to the County of a fee commensurate with the cost of the required improvement.

Multiple Applicants

Applicants can request that trip mitigation programs or intersection improvements be considered for more than one application. In those cases, the program or improvement must provide enough capacity to allow all participating applicants to satisfy LATR conditions.

An intersection improvement that is not yet complete may be used by two or more developments to meet LATR conditions. To be considered, the improvement must provide sufficient capacity to:

- result in a CLV that is less than the congestion standard for that policy area and
- equal 150 percent of the CLV impact generated by the developments, that is, the intersection improvement must not only mitigate the impact of a proposed development, but improve conditions.

Any type of mitigation listed in this document or acceptable to MCDOT, SHA, and the Planning Board can be used to achieve this goal if it can be shown to be effective.

When development is conditioned on intersection and roadway improvements by more than one application, those improvements must be permitted and bonded[1], under construction, or under contract for construction prior to the issuance of building permits for any new development. Exceptions may be made if an applicant's trip contribution to an intersection or roadway is less than 25 percent of the sum of total trips[4].

This requirement may be fulfilled by the creation of a road club or other mechanism approved by the Planning Board that:

- includes the terms, conditions, and responsibilities for funding 100 percent of the cost for design approval, right-of-way acquisition, and construction of the improvements as set forth in the individual project APF approvals; and ensures that all parties contribute in accordance with their respective shares to the total cost of the improvements
- ensures the improvements are either permitted and bonded[1] or under contract for construction within three years of the first building permit issued for any of the developments dependent on the required improvements
- ensures the improvements are substantially complete and open within five years of the first building permit issued for any of the developments dependent on the required improvements.

---

[1] This condition is satisfied if the project is included in the first six years of the County's Capital Improvement Program or the State's Consolidated Transportation Program and the developers' contribution is applied to that project.

[4] Trip total is the sum of the total peak-hour trips generated by all developments required by the Planning Board to participate in the construction of the particular improvement.

Transportation Policy Area Review

Intent and Standards

Transportation Policy Area Review (TPAR) is a policy area-wide test of public transportation facilities. The test is separate from LATR in that it considers average transportation system performance for defined policy area boundaries. This process evaluates the adequacy of transit and roadways separately to allow more in-depth analysis and staging of improvements of these two types of transportation.

TPAR measures **transit adequacy** by evaluating neighborhood bus service using three measures of adequacy: coverage, peak headway, and span of service.

- Coverage is the percentage of the "transit-supportive area" of a policy area that is within ¼-mile of a bus stop or ½-mile of a transit station. This definition is consistent with the Transportation Research Board's *Transit Capacity and Quality of Service Manual* (2nd edition, 2002) that describes a "transit-supportive area" as one with a household density of at least three units per gross acre or an employment density of at least four jobs per gross acre. Transit-supportive areas do not include land uses such as parks, farms, golf courses, bodies of water, major road rights-of-way, and low-density housing and employment zones.
- Peak headway is average time between buses traveling in the same direction during the weekday peak hour in the peak direction.
- Span of service is the average duration of weekday bus service for that subset of routes in each policy area that is scheduled to operate throughout most of the day without a split in service during the midday hours.

Table 7 summarizes current local bus service in each policy area used to evaluate transit adequacy.

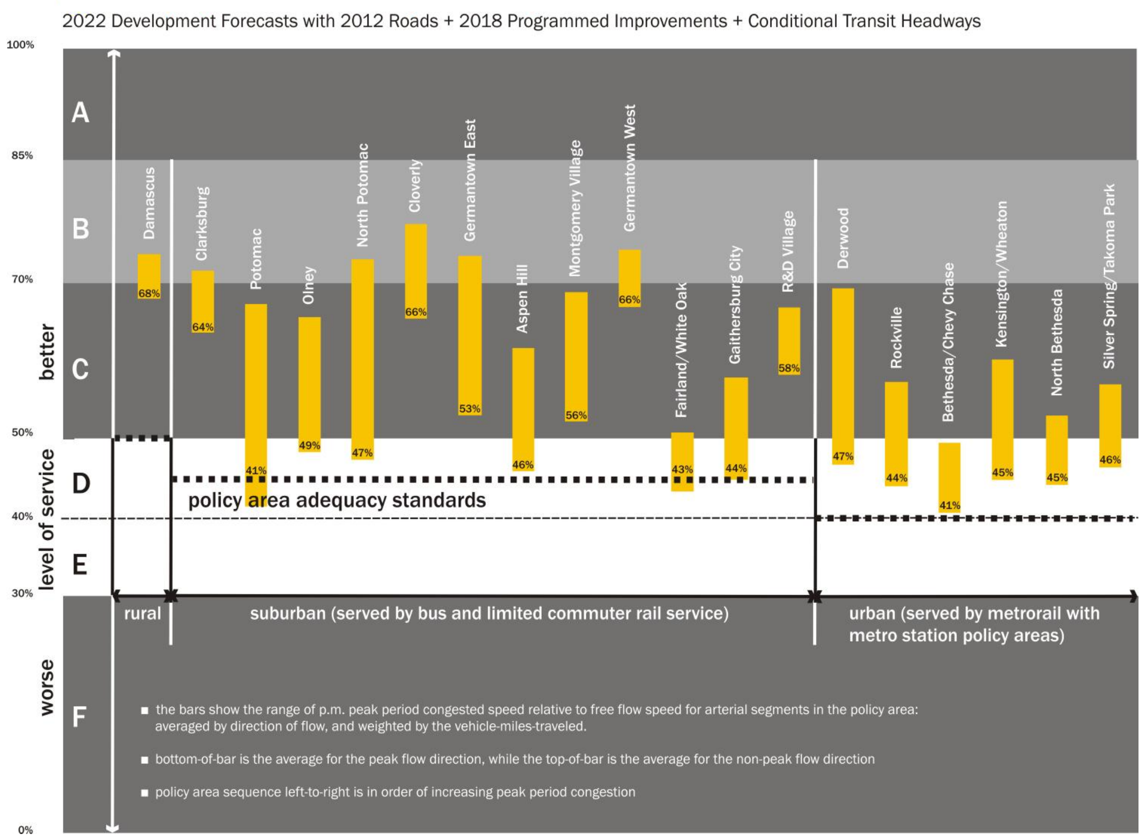
Table 7
TPAR Transit Adequacy Analysis Results

Policy area	transit test	roadway test	TPAR payment
Rural areas			
Rural East	exempt	exempt	
Rural West	exempt	exempt	
Damascus	adequate	adequate	
Suburban areas			
Aspen Hill	adequate	adequate	
Clarksburg	inadequate	adequate	25 % of Impact Tax
Fairland/White Oak	adequate	inadequate	25 % of Impact Tax
Gaithersburg City	adequate	inadequate	25 % of Impact Tax
Germantown East	inadequate	adequate	25 % of Impact Tax
Germantown West	inadequate	adequate	25 % of Impact Tax
Montgomery Village/Airpark	inadequate	adequate	25 % of Impact Tax
Cloverly	inadequate	adequate	25 % of Impact Tax
North Potomac	inadequate	adequate	25 % of Impact Tax
Olney	inadequate	adequate	25 % of Impact Tax
Potomac	inadequate	exempt	25 % of Impact Tax
R&D Village	inadequate	adequate	25 % of Impact Tax
Urban areas			
Derwood	inadequate	adequate	25 % of Impact Tax
Rockville City	inadequate	adequate	25 % of Impact Tax
North Bethesda	inadequate	adequate	25 % of Impact Tax
Bethesda-Chevy Chase	inadequate	adequate	25 % of Impact Tax
Germantown Town Center	inadequate	adequate	25 % of Impact Tax
Kensington-Wheaton	inadequate	adequate	25 % of Impact Tax
Silver Spring-Takoma Park	inadequate	adequate	25 % of Impact Tax
CBDs and Metro Station Policy Areas			
Bethesda CBD	exempt	adequate	
Silver Spring CBD	exempt	adequate	
Wheaton CBD	exempt	adequate	
Friendship Heights CBD	exempt	adequate	
Glenmont MSPA	exempt	adequate	
Grosvenor MSPA	exempt	adequate	
Rockville Town Center MSPA	exempt	adequate	
Shady Grove MSPA	exempt	adequate	
Twinbrook MSPA	exempt	adequate	
White Flint MSPA	exempt	exempt	

TPAR measures **roadway adequacy**, based on vehicle miles traveled (VMT) over a 10-year horizon (year 2022) by forecasting travel speed on arterial roads in peak travel directions (derived from the Planning Department's regional travel demand model). This figure is compared to uncongested, free flow speed. Roads with the most trips are weight-averaged to reflect their impact on the overall network.

The resulting ratio of forecasted speed to uncongested speed is consistent with analysis standards in the *Highway Capacity Manual*. It is then compared with Subdivision Staging Policy adequacy standards for Urban, Suburban, and Rural policy areas—40 percent (level of service D/E), 45 percent (mid-Level of Service D), and 50 percent (level of service C/D), respectively.

Figure 2
Adequacy of the main roads countywide summary – Year 2022 Forecast



Three policy areas—Potomac, Fairland/White Oak, and Gaithersburg City—are forecast to be inadequate or approach inadequacy by 2022.

Evaluating a TPAR Condition

Staff will evaluate the following information submitted by the applicant, using the TPAR adequacy standards in the relevant policy area.

- The development's policy area.
- The type of development as defined in the development impact legislation.

TPAR Mitigation Options

The Transportation Mitigation Payment is charged to developments in policy areas determined as inadequate for transit or roadway conditions based on the analysis prepared every two years by Planning Department staff and approved by the Planning Board. It is calculated as an amount equal to a percentage of the General District Transportation Impact Tax based on the type and amount of development. It is possible to provide significant improvements to transit or roadway capacity instead of making the payment. The TPAR payment must be made prior to release of any building permit and may not be credited toward the applicable development impact tax. The funds are used to make transportation improvements that will bring a policy area into roadway and transit adequacy.

- No TPAR compliance is necessary if the Planning Board finds that the proposed development will generate three or fewer new peak hour trips, or if the proposed development is in a policy area adequate for both transit and roadways (including all MSPAs).

- TPAR compliance is necessary in policy areas found inadequate. Applicants may either make a lump sum payment or make physical improvements that will address the inadequacy. Payment rates for roadways and transit are to equal 25 percent of the General District Transportation Impact tax for the same project based on the type and amount of development.

In areas inadequate for both roadways and transit, payment rates are set to equal 50 percent of the General District Transportation Impact Tax for the same project based on the type and amount of development.

Improvements made by applicants required to mitigate roadway inadequacies must:
- be in the same policy area as the development project
- be on a road included in Appendix 6
- be a County road, not a state or local road
- have logical end points and must connect at least two signalized intersections
- be approved by MCDOT for operation and safety considerations.

Improvements made by applicants required to mitigate incremental transit inadequacies may only consist of the purchase of new Ride On buses to provide improved transit service in the relevant policy area if that policy area is inadequate for peak headway or coverage. The number of buses required to achieve mitigation will be determined in consultation with Planning Department and MCDOT staffs. If the relevant policy area is inadequate for span of service, the TPAR payment is the only option.

The cost of the transportation capacity improvement must be equal to or exceed the value of the TPAR payment and the expenditure to is not creditable for future use under the transportation impact tax (that is, the TPAR payment and the impact tax are additive). In general, any mitigation measure or combination of mitigation measures must be scheduled for completion or be operating before or at the same time the proposed development is scheduled to be completed. The nature, design, and scale of any additional facility or program must receive approval from any government agency that would construct or maintain it and the applicant and public agency must execute an appropriate agreement before the Planning Board approves a record plat.

Appendix

Appendix 1 LATR Weekday Peak Hour Trip Generation Formulas and Rates

Appendix 2 LATR Weekday Peak Hour Trips Generated by Land Uses

Appendix 3 LATR Weekday Peak Hour Trip Generation Rates and Directional Splits for the Bethesda, Friendship Heights, and Silver Spring CBDs

Appendix 4 LATR Trip Distribution and Traffic Assignment Guidelines

Appendix 5 LATR Delegation Procedures for Certain APF Findings by Staff at Time of Building Permit

Appendix 6 Unbuilt Master Plan Projects for TPAR Mitigation

Appendix 7 Inter-agency Traffic Study Memorandum of Understanding

Local Area Transportation Review and Transportation Policy Area Review Guidelines Appendix

January 2013

Logo
Montgomery County Planning Department
M-NCPPC
MontgomeryPlanning.org

Footer:
LATR/TPAR Guidelines Appendix   page number

LATR-TPAR Guidelines

Appendix

Appendix 1

LATR Weekday Peak Hour Trip Generation Formulas and Rates

Table 1-1
General Office

Applicable Size	Formula/Rate	Directional Distribution			
		AM		PM	
		Enter	Exit	Enter	Exit
Under 25,000 sf GFA	AM: T = 1.38(A) PM: T = 2.24(A)				
25,000 sf GFA and over	AM: T = 1.70(A) – 8 PM: T = 1.44(A) + 20	87%	13%	17%	83%
Over 300,000 sf GFA with special characteristics (See Table B-1)	AM: T = 1.70(A) + 115 PM: T = 1.44(A) + 127				
Within 1,000-foot radius of Metrorail station and outside the Beltway (D)	AM: Deduct P = 50% total trips from "T" PM: Deduct P = 4 (1000-D)/100 from "T"				

T = weekday peak-hour vehicle trips A = gross floor area (GFA) of building in 1,000 sf
P = percentage reduction in trips (P/100) D = straight line distance (in feet) from the main entrance to station

Table 1-2
General Retail

Applicable Size	Formula/Rate*	Directional Distribution			
		AM		PM	
All sizes except convenience retail	AM: Use 25% of the weekday evening peak-hour trips	Enter	Exit	Enter	Exit
Under 50,000 sf GLA	PM: T = 12.36(A)	52%	48%	52%	48%
From 50,000 sf up to 200,000 sf GLA	PM: T = 7.43(A) + 247				
Over 200,000 sf GLA	Special analysis required by applicant or use two times applicable ITE rate				
Convenience retail not part of a shopping center or groups of stores	AM and PM: Use applicable ITE formula/rate				

T = weekday peak-hour vehicle trips A = gross leasable area (GLA) of building in 1,000 sf
*For no major food chain store, deduct (P): P = 0.05 + 0.002 (200-A)

Table 1-3
Fast Food Restaurants

	Formula/Rate	Directional Distribution			
		AM		PM	
		Enter	Exit	Enter	Exit
Weekday peak-hour trip-generation rates of fast food restaurants vary based on their type of menu selection (e.g., hamburgers vs. tacos vs. chicken) and their location relative to traffic volume on the adjacent roadway.	Develop trip-generation rates based on driveway counts from existing similar fast food restaurants at similar locations (e.g., McDonald's Restaurant on major highways) if data are available or can be obtained from previous studies. Otherwise, use ITE trip-generation data.	53%	47%	53%	47%

Table 1-4
Residential

Applicable Size	Formula/Rate		Directional Distribution			
			AM		PM	
			Enter	Exit	Enter	Exit
Single-Family Detached	**Under 75 units** AM: T = 0.95 (U) PM: T = 1.11 (U)	75 units or over AM: T = 0.62 (U) + 25 PM: T = 0.82 (U) + 21	25%	75%	64%	36%
Townhouses	**Under 100 units** AM: T = 0.48 (U) PM: T = 0.83 (U)	100 units and over AM: T = 0.53 (U) – 5 PM: T = 0.48 (U) + 35	17%	83%	67%	33%
Garden, Low-Rise, and Mid-Rise Apartments [2.2] (one to nine stories)	**Under 75 units** AM: T = 0.44 (U) PM: T = 0.48 (U)	75 units and over AM: T = 0.40 (U) + 3 PM: T = 0.47 (U) + 1	20%	80%	66%	34%
High-Rise Apartments (ten or more stories)	**Under 100 units** AM: T = 0.40 (U) PM: T = 0.46 (U)	100 units and over AM: T = 0.29 (U) + 11 PM: T = 0.34 (U) + 12	25%	75%	61%	39%

T = weekday peak-hour vehicle trips U = housing units

Note: For residential units in the Bethesda, Friendship Heights, and Silver Spring CBD Policy Areas, use Appendix C. For residential units in all other Metro Station Policy Areas, the number of trips in Table A-4 may be reduced by 18 percent.

Table 1-5
Private School (Weekday Morning Peak Period)

Applicable Size	Formula/Rate	Comments
K-8	AM: T = N x 0.92	For the weekday morning peak period, a special study is required to determine the trip-generation rate for private schools with over 400 students.
K-12	AM: T = N x 0.78	For the evening peak period, the applicant may be required to provide more data on site-generated traffic if it is anticipated that there will be major school-sponsored events during the evening peak period that would generate 50 or more weekday peak-hour trips.
Private schools predominately grades 10-12	Use the rates in the Institute of Transportation Engineer's *Trip Generation Report* for high schools (Land Use Code 530)	Trip-generation formulas or rates for private schools were developed based on the number of students during only the weekday morning peak period. Since classes for private schools end before the weekday evening peak period, a trip-generation rate during the weekday evening peak period was not developed.

	Trip Purpose			Directional Distribution	
Grade	New	Pass-by	Diverted	Enter	Exit
K-8	53%	15%	32%	54%	46%
K-12	65%	6%	29%	59%	41%

T = weekday peak-hour vehicle trips N = number of students

Table 1-6
Automobile Filling Station

Applicable Size	Formula/Rate			
	Trip Rates per Pumping Station[1]:	**AM**	**PM**	
For stations with/without car washes, convenience stores, and garages T = N x (trip rate)	Station with fuel sales and:		Upcounty[2]	Downcounty[2]
	1) no other facilities	11.31	14.96	14.96
	2) garage	11.00	16.67	11.09
	3) convenience store[3]	12.28	21.75	12.32
	4) car wash and convenience store	17.33	21.75	15.08

Percentage by Trip Purpose

Weekday Peak Period	New	Pass-by	Diverted
AM	15%	60%	25%
PM	15%	50%	35%

Directional Distribution

AM		**PM**	
Enter	Exit	Enter	Exit
53%	47%	51%	49%

T = weekday peak-hour vehicle trips N = number of pumping stations (or positions)

[1]A pumping station is defined as the area at which any one vehicle can stop and pump fuel at any one time. A pumping station could also be referred to as a fueling position in front of a single nozzle dispenser or a multi-produce dispenser

[2]Downcounty locations are considered the urbanized areas with a congestion standard of 1,500 or higher (see Table 1). All other locations are considered up-County.

[3]Note: A convenience store as an accessory use to an automobile filing station must have less than 1,650 square feet of patron area. Otherwise, such land uses are considered to be a “convenience store with gasoline pumps” with trip-generation rates in the ITE *Trip Generation Report* under Land Use Code 853.

Table 1-7
Senior/Elderly Housing

Type of Facility	Formula/Rate
Retirement Community with active seniors and minimal support services	Use ITE Land Use Code 250
Independent-Living Facilities with some support services plus minimal assisted-living and nursing home facilities	Formula Up to 150 units: AM: T = 0.05 (U) PM: T = 0.04 (U) Over 150* units: AM: T = 0.08 (U) PM: T= 0.11 (U)
Assisted-Living Facilities	AM: T = 0.03 (U) PM: T = 0.06 (U)
Nursing Homes	As a land use requiring a special exception, site-generated traffic can be determined based on the statement of operations rather than using ITE's trip-generation data. Except for the administrative staff, employees usually arrive before the weekday morning peak period to prepare and serve breakfast. They usually stay through the weekday evening peak period to prepare and serve dinner.

T = weekday peak-hour vehicle trips U = detached, attached apartment unit and/or room
*Usually large facilities with different levels of support services; may be considered "life cycle" care

Table 1-8
Mini-Warehouse

Type of Facility	Formula/Rate		Comments
On-Site Vehicle Rental			
No	AM: T = 0.01 (N)	PM: T = 0.01 (N)	Based on ITE Land Use Code 151 supplemented with more current local data
Yes	AM: T = 0.015 (N)	PM: T = 0.02 (N)	

T = weekday peak-hour vehicle trips N = number of storage units

Table 1-9
Child Daycare Center

Applicable Size	Formula/Rate
For 6 to 25 staff	AM: T = 1.75N + 17 PM: T = 2.06N + 16

	Trip Purpose			Directional Distribution			
				AM		PM	
Peak Period	New	Pass-by	Diverted	Enter	Exit	Enter	Exit
AM	32%	27%	41%	53%	47%	49%	51%
PM	27%	12%	61%				

T = weekday peak-hour vehicle trips N = number of staff

Appendix 2

LATR Weekday Peak Hour Trips Generated by Land Uses

Table 2-1
Number of Weekday Peak Hour Trips Generated by General Office

General

Bldg Size (SF of GFA)	Weekday Peak-Hour Trips AM	PM
5,000	7	11
10,000	14	22
15,000	21	34
20,000	28	45
25,000	35	56
30,000	43	63
40,000	60	78
50,000	77	92
60,000	94	106
70,000	111	121
80,000	128	135
90,000	145	150
100,000	162	164
110,000	179	178
120,000	196	193
130,000	213	207
140,000	230	222
150,000	247	236
160,000	264	250
170,000	281	265
180,000	298	279
190,000	315	294
200,000	332	308
220,000	366	337
240,000	400	366
260,000	434	394
280,000	468	423
300,000	502	452
320,000	536	481
340,000	570	510
360,000	604	538
380,000	638	567
400,000	672	596
420,000	706	625
440,000	740	654
460,000	774	682
480,000	808	711
500,000	842	740

Equations Used

AM peak-hour trips = 1.38(GFA/1000)
PM peak-hour trips = 2.24(GFA/1000)

<u>25,000 sf and over</u>

AM peak-hour trips = 1.70 (GFA/1000) – 8
PM peak-hour trips = 1.44(GFA/1000) + 20

Special Cases

If a building is within 1,000 feet of a Metrorail station and outside the Beltway, reduce weekday peak-hour trips from chart at left.

Straight Line Distance to Station (in feet)	Percent Reduction in Trips AM	PM
0	50%	40%
50	50%	38%
100	50%	36%
150	50%	34%
200	50%	32%
250	50%	30%
300	50%	28%
350	50%	26%
400	50%	24%
450	50%	22%
500	50%	20%
550	50%	18%
600	50%	16%
650	50%	14%
700	50%	12%
750	50%	10%
800	50%	8%
850	50%	6%
900	50%	4%
950	50%	2%
1,000	50%	0%

If a building is over 300,000 sf with a single employer and NOT part of an activity center with different land uses

Building Size (SF of GFA)	Weekday Peak-Hour Trips AM	PM
300,001	625	559
320,000	659	588
340,000	693	617
360,000	727	645
380,000	761	674
400,000	795	703
420,000	829	732
440,000	863	761
460,000	897	789
480,000	931	818
500,000	965	847

Equations Used

AM peak-hour trips = 1.70(GFA/1000) + 115
PM peak-hour trips = 1.44(GFA/1000) + 127

Note: Trip generation rates are calculated using the size of individual buildings, not the combined size of a group.

Table 2-2
Number of Weekday Peak Hour Trips Generated by General Retail

With Major Food Chain Store

Bldg Size (SF of GLA)	Peak-Hour Trips AM	Peak-Hour Trips PM
50,000	155	619
55,000	164	656
60,000	173	693
65,000	182	730
70,000	192	767
75,000	201	804
80,000	210	841
85,000	220	879
90,000	229	916
95,000	238	953
100,000	248	990
105,000	257	1027
110,000	266	1064
115,000	275	1101
120,000	285	1139
125,000	294	1176
130,000	303	1213
135,000	313	1250
140,000	322	1287
145,000	331	1324
150,000	340	1362
155,000	350	1399
160,000	359	1436
165,000	368	1473
170,000	378	1510
175,000	387	1547
180,000	396	1584
185,000	405	1622
190,000	415	1659
195,000	424	1696
200,000	433	1733

Equations Used

50,000 to 200,000 sf

AM peak-hour trips = 0.25 [7.43 (GLA/1000) + 247]
PM peak-hour trips = 7.43 (GLA/1000) + 247

Adjustment Factor for No Major Food Chain Store

P = 0.05 + 0.002 [200 – (GLA/1000)]

Note:
Under 50,000 sf, no equations, since major food chain store is typically at least 50,000 sf

Without Major Food Chain Store

Bldg Size (SF of GLA)	Peak-Hour Trips AM	Peak-Hour Trips PM
5,000	9	35
10,000	18	70
15,000	27	108
20,000	36	146
25,000	46	185
30,000	57	226
35,000	67	268
40,000	78	311
45,000	89	356
50,000	101	402
55,000	108	433
60,000	116	464
65,000	124	496
70,000	132	529
75,000	141	563
80,000	149	597
85,000	158	633
90,000	167	668
95,000	176	705
100,000	186	743
105,000	195	781
110,000	205	820
115,000	215	859
120,000	225	899
125,000	235	941
130,000	246	982
135,000	256	1025
140,000	267	1068
145,000	278	1112
150,000	289	1157
155,000	301	1203
160,000	312	1249
165,000	324	1296
170,000	336	1344
175,000	348	1393
180,000	360	1442
185,000	373	1492
190,000	386	1543
195,000	399	1594
200,000	412	1646

Equations Used

Under 50,000 sf

AM peak-hour trips = 0.25 [12.36(GLA/1000)](1-P)
PM peak-hour trips = [12.36 (GLA/1000)](1-P)

50,000 to 200,000 sf

AM peak-hour trips = 0.25 [7.43(GLA/1000) + 247](1-P)
PM peak-hour trips = [7.43(GLA/1000) + 247](1-P)

Table 2-3
Number of Weekday Peak Hour Trips Generated by Residential Units

No. of Units	Single-Family		Townhouse		Garden Apartment		High-Rise Apartments	
	AM	PM	AM	PM	AM	PM	AM	PM
1	1	1	0	1	0	0	0	0
5	5	6	2	4	2	2	2	2
10	10	11	5	8	4	5	4	5
15	14	17	7	12	7	7	6	7
20	19	22	10	17	9	10	8	9
25	24	28	12	21	11	12	10	12
30	29	33	14	25	13	14	12	14
35	33	39	17	29	15	17	14	16
40	38	44	19	33	18	19	16	18
45	43	50	22	37	20	22	18	21
50	48	56	24	42	22	24	20	23
55	52	61	26	46	24	26	22	25
60	57	67	29	50	26	29	24	28
65	62	72	31	54	29	31	26	30
70	67	78	34	58	31	34	28	32
75	72	83	36	62	33	36	30	35
80	75	87	38	66	35	39	32	37
85	78	91	41	71	37	41	34	39
90	81	95	43	75	39	43	36	41
95	84	99	46	79	41	46	39	44
100	87	103	48	83	43	46	40	46
110	93	111	53	88	47	53	43	49
120	99	119	59	93	51	57	46	53
130	106	128	64	97	55	62	49	56
140	112	136	69	102	59	67	52	60
150	118	144	75	107	64	72	55	63
160	124	152	80	112	67	76	57	66
170	130	160	85	117	71	81	60	70
180	137	169	90	121	75	86	63	73
190	143	177	96	126	79	90	66	77
200	149	185	101	131	83	95	69	80
210	155	193	106	136	87	100	72	83
220	161	201	112	141	91	104	75	87
230	168	210	117	145	95	109	78	90
240	174	218	122	150	99	114	81	94
250	180	226	128	155	103	119	84	97
275	196	247	141	167	113	130	91	106
300	211	267	154	179	123	142	98	114
325	227	288	167	191	133	154	105	123
350	242	308	181	203	143	166	113	131
375	258	329	194	215	153	177	120	140
400	273	349	207	227	164	189	127	148
425	289	370	220	239	173	201	134	157
450	304	390	234	251	183	213	142	165
475	320	411	247	263	193	224	149	174
500	320	431	260	275	203	236	156	182
550	366	472	287	299	223	260	171	199
600	397	513	313	323	243	283	185	216

Note: For residential units in the Bethesda, Friendship Heights, and Silver Spring CBD Policy Areas, use Appendix C. For residential units in all other Metro Station Policy Areas, the number of trips in Table 2-3 may be reduced by 18 percent.

Equations Used

SINGLE-FAMILY DETACHED

Under 75 Units

AM peak-hour trips = 0.95(# of units)
PM peak-hour trips = 1.11(# of units)

75 Units and Over

AM peak-hour trips = 0.62(# of units) + 25
PM peak-hour trips = 0.82(# of units) + 21

TOWNHOUSES OR SINGLE-FAMILY ATTACHED

Under 100 Units

AM peak-hour trips = 0.48(# of units)
PM peak-hour trips = 0.83(# of units)

100 Units and Over

AM peak-hour trips = 0.53(# of units) - 5
PM peak-hour trips = 0.48(# of units) + 35

GARDEN AND MID-RISE APARTMENTS
(one to nine stories)

Under 75 Units

AM peak-hour trips = 0.44(# of units)
PM peak-hour trips = 0.48(# of units)

75 Units and Over

AM peak-hour trips = 0.40(# of units) + 3
PM peak-hour trips = 0.47(# of units) + 1

HIGH-RISE APARTMENTS
(ten or more stories)

Under 100 Units

AM peak-hour trips = 0.40(# of units)
PM peak-hour trips = 0.46(# of units)

100 Units and Over

AM peak-hour trips = 0.29(# of units) + 11
PM peak-hour trips = 0.34(# of units) + 12

Table 2-4
Number of Weekday Peak Hour Trips Generated by a Child Daycare Center

Number of Staff	Total AM Trips	Total PM Trips
6	28	28
7	29	30
8	31	32
9	33	35
10	35	37
11	36	39
12	38	41
13	40	43
14	42	45
15	43	47
16	45	49
17	47	51
18	49	53
19	50	55
20	52	57
21	54	59
22	56	61
23	57	63
24	59	65
25	61	68

	Directional Distribution		Trip Purpose		
Peak Period	Entering	Exiting	New	Pass-by	Diverted
AM	53%	47%	32%	27%	41%
PM	49%	51%	27%	12%	61%

Note: For six or fewer staff, there is no need for a traffic study to satisfy LATR. The applicant may proffer a specific schedule of the arrival and departure of those staff arriving during weekday peak periods specified in the special exception statement of operation.

Table 2-5
Number of Weekday Peak Hour Trips Generated by a Private School

Number of Students Enrolled	School Program for Kindergarten to: 12th Grade	8th Grade
25	20	23
50	38	46
75	59	69
100	78	92
125	98	115
150	117	138
175	137	161
200	156	184
225	176	207
250	195	230
275	215	253
300	234	276
325	254	299
350	273	322
375	293	345
400	312	368

Note: For over 400 students, a special study is required to determine the trip-generation rate.

Table 2-6

Number of Weekday Peak Hour Trips Generated by an Automobile Filling Station

No. of Pumping Stations	With Fuel Only		With Fuel and Garage Only				With Fuel and Convenience Store Only				With Fuel, Car Washes, and Convenience Store			
	All Areas		Upcounty		Downcounty		Upcounty		Downcounty		Upcounty		Downcounty	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1	11	15	11	17	11	11	12	22	12	12	17	22	17	15
2	23	30	22	33	22	22	25	44	25	25	35	44	35	30
3	34	45	33	50	33	33	37	65	37	37	52	65	52	45
4	45	60	44	67	44	44	49	87	49	49	69	87	69	60
5	57	75	55	83	55	55	61	109	61	62	87	109	87	75
6	68	90	66	100	66	67	74	131	74	74	104	131	104	90
7	79	105	77	117	77	78	86	152	86	86	121	152	121	106
8	90	120	88	133	88	89	98	174	98	99	139	174	139	121
9	102	135	99	150	99	100	111	196	111	111	156	196	156	136
10	113	150	110	167	110	111	123	218	123	123	173	218	173	151
11	124	165	121	183	121	122	135	239	135	136	191	239	191	166
12	136	180	132	200	132	133	147	261	147	148	208	261	208	181
13	147	194	143	217	143	144	160	283	160	160	225	283	225	196
14	158	209	154	233	154	155	172	305	172	172	243	305	243	211
15	170	224	165	250	165	166	184	326	184	185	260	326	260	226
16	181	239	176	267	176	177	196	348	196	197	277	348	277	241
17	192	254	187	283	187	189	209	370	209	209	295	370	295	256
18	204	269	198	300	198	200	221	392	221	222	312	392	312	271
19	215	284	209	317	209	211	233	413	233	234	329	413	329	287
20	226	299	220	333	220	222	246	435	246	246	347	435	347	302
Rate per Pumping Station	11.31	14.96	11.00	16.67	11.00	11.09	12.28	21.75	12.28	12.32	17.33	21.75	17.33	15.08

Appendix 3

LATR Weekday Peak Hour Trip Generation Rates and Directional Splits for the Bethesda, Friendship Heights, and Silver Spring CBDs

Table 3-1
Weekday Morning and Evening Peak-Hour Trip Generation Rates for the Bethesda and Friendship Heights CBDs

Land Use Per Trip Rate Unit	**Rate** AM Peak-Hour Vehicle Trips per Unit of Development	**% In**	**% Out**	**Rate** PM Peak-Hour Vehicle Trips per Unit of Development	**% In**	**% Out**
Office (1,000 sf)	1.50*	85	15	1.50	25	75
Retail (1,000 sf)	0.65	50	50	2.60	50	50
Grocery Store (1,000 sf)	1.22	70	30	6.20	50	50
Residential High Rise (dwelling unit)	0.30	20	80	0.30	67	33
Residential Garden Apt. (dwelling unit)	0.45	20	80	0.45	67	33
Residential Townhouse (dwelling unit)	0.45	20	80	0.45	67	33
Residential Single-Family (dwelling unit)	0.80	25	75	0.80	67	33
Hotel (room)	0.22	60	40	0.22	55	45
Miscellaneous Service (1,000 sf)	1.30	50	50	1.30	50	50
Hospital (employee)	0.33	70	30	0.29	30	70
Industrial (1,000 sf)	1.10	85	15	1.10	15	85

Table 3-2
Weekday Morning and Evening Peak Hour Trip Generation Rates for the Silver Spring CBD

	Morning			Evening		
Land Use	**Rate**	**% In**	**% Out**	**Rate**	**% In**	**% Out**
Office (existing vacant/1,000 sf)	1.60*	85	15	1.60	15	85
Office (pending + future/1,000 sf)	1.40	85	15	1.40	15	85
Industrial (1,000 sf)	1.00	85	15	1.00	15	85
Retail (1,000 sf)	0.50	50	50	2.00	50	50
Residential (high rise)	0.30	20	80	0.30	70	30
Residential (townhouse)	0.45	20	80	0.45	67	33
Hotel (room)	0.20	60	40	0.20	55	45

Information in Table A-4 and B-3 as annotated may be used in lieu of the residential trip genration rates in Appendix C. *May use the lower Coiuntywide rate of 1.38*(gross square fet of building in 1,000 sf [2.1]

Appendix 4

Trip Distribution and Traffic Assignment Guidelines

Introduction

This document provides trip distribution guidance to be used in all traffic studies prepared for development sites in Montgomery County. Vehicle trip distribution and trip assignment are described in Sections VII-D and VII-F of the Guidelines. For most development sites, the process is a combination of trip distribution and traffic assignment.

Definitions

Trip distribution specifies the location where trips that originate at a development site are destined to, and the origin of trips that are destined to a development site.

Traffic assignment specifies the individual local area intersections used to access (enter and leave) a development site.

Discussion

The tables in this appendix provide generalized assumptions for trip distribution for both background development(s) and the development site. For the purpose of reviewing trip distribution, Transportation Planning staff divided the region into 16 geographic areas, called super districts. Eleven of these super districts are in Montgomery County, as shown in Map 4-1. The remaining five super districts represent neighboring jurisdictions.

The trip distribution assumptions are contained in Tables 4-1 through 4-11 for developments within each of the eleven super districts in Montgomery County. For each super district, the assumed distribution of trips for general office development and for residential development is listed. For instance, 18.1 percent of trips generated by a general office development in Germantown (see Table 4-9) would be expected to travel to or from Frederick County. However, only two percent of trips generated by a residential development in Germantown would be expected to travel to or from Frederick County.

The trip distribution assumptions in these tables are based on 1990 census journey-to-work information, updated to reflect regional housing and employment totals as of 1998. The distribution for residential development in each super district is based on the reported workplace locations for 1990 census respondents who lived in that super district. Similarly, the distribution for office development for each super district is based on the distribution of all census households nationwide that reported a workplace in that super district. Trip distribution for other land uses will be decided based on consultation with staff and the applicant prior to submission of the traffic study.

The application of the trip distribution information in Tables 4-1 through 4-11 is straightforward in cases where a traffic study has a limited number of alternate routes. In other cases, judgment is required to convert the trip distribution information into traffic assignment information useful for conducting the Local Area Transportation Review.

Figure 4-2 provides an example of how the trip distribution information can be converted to traffic assignment information for a hypothetical case in the Rockville/North Bethesda super district with both office and residential components.

The leftmost column of data shows the trip distribution by super-district as found in Table 4-4 (used for development in the Rockville/North Bethesda super district). The information located in the center of the table (inside the boxes) describes the assumed route, or assignment, taken for trips between the site and each super-district. *The data inside the boxes must be developed using judgment and confirmed by Transportation Planning staff.* The rightmost portion of the table multiplies the percent of trips distributed to each super-district by the percent of trips from that super-district assigned to each route to calculate the percent of total site-generated trips using each combination of distribution and assignment. The assignment data is then summed to develop an aggregate trip assignment for the trips generated by the office and residential components of the site, respectively.

Map 4-1
Super Districts in Montgomery County

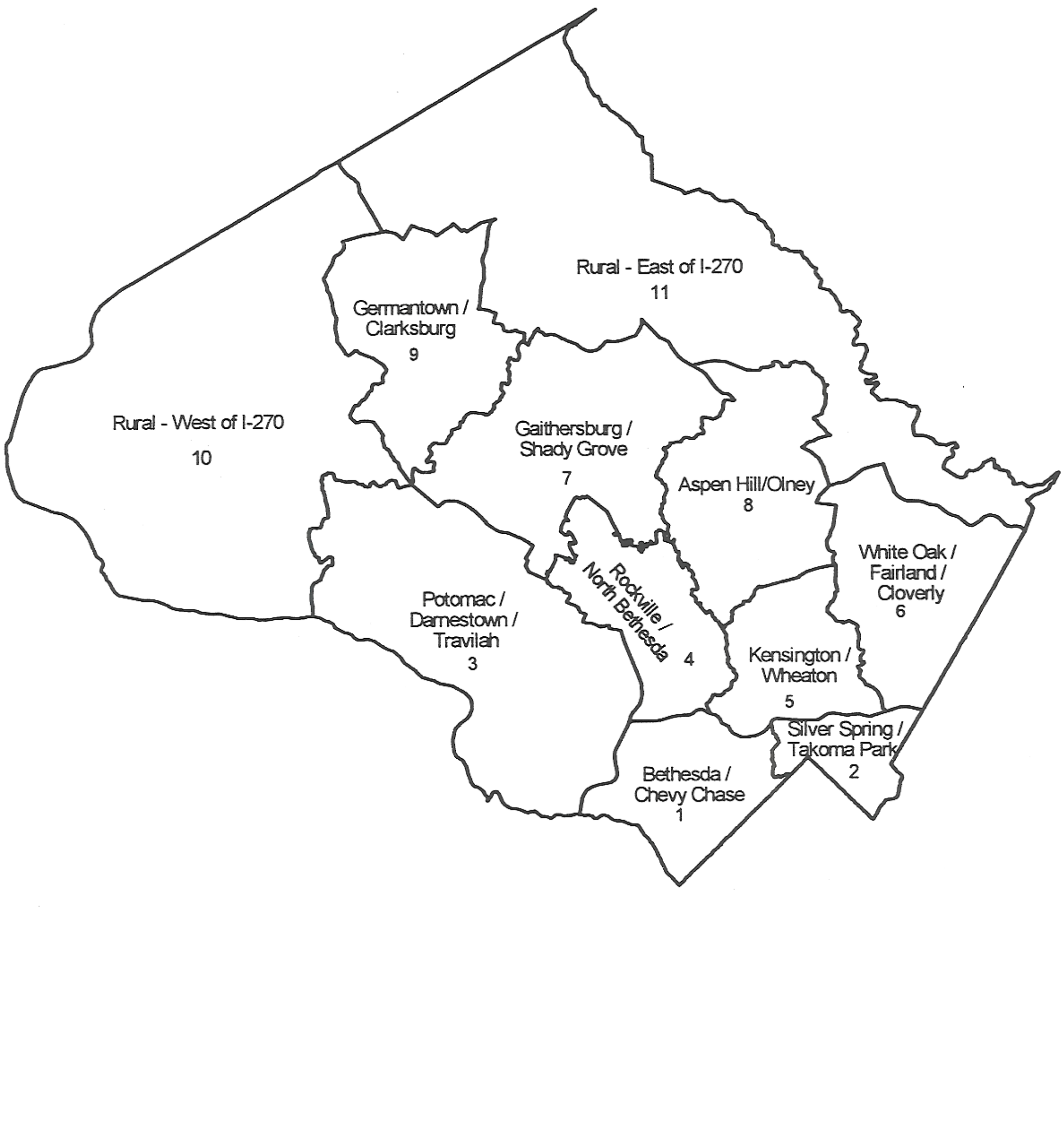


Table 4-2
Trip Distribution Converted to Traffic Assignment

Figure 2. Trip Distribution - Assignment Matrix
Hypothetical Case in North Bethesda with both Office and Residential Components

Part 1. Office Component

	Trip distribution by super-district	Trip assignment for origin by super-district: Montrose west	MD 355 north	Randolph east	MD 355 south	MD 187 south	TOTAL		Trip assignment for development case: Montrose west	MD 355 north	Randolph east	MD 355 south	MD 187 south	TOTAL
Bethesda	**3.5%**				50%	50%	100%		0.0%	0.0%	0.0%	1.8%	1.8%	3.5%
Silver Spring	**2.2%**				100%		100%		0.0%	0.0%	0.0%	2.2%	0.0%	2.2%
Potomac	**8.0%**	80%				20%	100%		6.4%	0.0%	0.0%	0.0%	1.6%	8.0%
Rockville	**12.8%**	25%	75%				100%		3.2%	9.6%	0.0%	0.0%	0.0%	12.8%
Kensington	**7.2%**			80%	20%		100%		0.0%	0.0%	5.8%	1.4%	0.0%	7.2%
Fairland	**4.1%**			80%	20%		100%		0.0%	0.0%	3.3%	0.8%	0.0%	4.1%
Gaithersburg	**14.4%**	75%	25%				100%		10.8%	3.6%	0.0%	0.0%	0.0%	14.4%
Olney	**8.5%**	20%	50%	30%			100%		1.7%	4.3%	2.6%	0.0%	0.0%	8.5%
Germantown	**6.5%**	90%	10%				100%		5.9%	0.7%	0.0%	0.0%	0.0%	6.5%
Agricultural Area (West)	**0.9%**	100%					100%		0.9%	0.0%	0.0%	0.0%	0.0%	0.9%
Agricultural Area (East)	**4.2%**	40%	40%	20%			100%		1.7%	1.7%	0.8%	0.0%	0.0%	4.2%
Washington, DC	**3.6%**	70%			30%		100%		2.5%	0.0%	0.0%	1.1%	0.0%	3.6%
Prince George's County	**8.8%**				100%		100%		0.0%	0.0%	0.0%	8.8%	0.0%	8.8%
Virginia	**7.8%**	80%		10%		10%	100%		6.2%	0.0%	0.8%	0.0%	0.8%	7.8%
Frederick County	**4.6%**	100%					100%		4.6%	0.0%	0.0%	0.0%	0.0%	4.6%
Howard County	**2.9%**		10%	10%	80%		100%		0.0%	0.3%	0.3%	2.3%	0.0%	2.9%
TOTAL	**100.0%**								**43.9%**	**20.1%**	**13.5%**	**18.4%**	**4.1%**	**100.0%**
								USE ==>	**44%**	**20%**	**14%**	**18%**	**4%**	**100%**

Part 2. Residential Component

	Trip distribution by super-district	Trip assignment for origin by super-district: Montrose west	MD 355 north	Randolph east	MD 355 south	MD 187 south	TOTAL		Trip assignment for development case: Montrose west	MD 355 north	Randolph east	MD 355 south	MD 187 south	TOTAL
Bethesda	**15.6%**				50%	50%	100%		0.0%	0.0%	0.0%	7.8%	7.8%	15.6%
Silver Spring	**2.4%**				100%		100%		0.0%	0.0%	0.0%	2.4%	0.0%	2.4%
Potomac	**3.3%**	80%				20%	100%		2.6%	0.0%	0.0%	0.0%	0.7%	3.3%
Rockville	**31.0%**	25%	75%				100%		7.8%	23.3%	0.0%	0.0%	0.0%	31.0%
Kensington	**2.6%**			80%	20%		100%		0.0%	0.0%	2.1%	0.5%	0.0%	2.6%
Fairland	**0.7%**			80%	20%		100%		0.0%	0.0%	0.6%	0.1%	0.0%	0.7%
Gaithersburg	**10.6%**	75%	25%				100%		8.0%	2.7%	0.0%	0.0%	0.0%	10.6%
Olney	**1.7%**	20%	50%	30%			100%		0.3%	0.9%	0.5%	0.0%	0.0%	1.7%
Germantown	**1.0%**	90%	10%				100%		0.9%	0.1%	0.0%	0.0%	0.0%	1.0%
Agricultural Area (West)	**0.0%**	100%					100%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Agricultural Area (East)	**0.2%**	40%	40%	20%			100%		0.1%	0.1%	0.0%	0.0%	0.0%	0.2%
Washington, DC	**13.9%**	70%			30%		100%		9.7%	0.0%	0.0%	4.2%	0.0%	13.9%
Prince George's County	**6.1%**				100%		100%		0.0%	0.0%	0.0%	6.1%	0.0%	6.1%
Virginia	**9.7%**	80%		10%		10%	100%		7.8%	0.0%	1.0%	0.0%	1.0%	9.7%
Frederick County	**0.5%**	100%					100%		0.5%	0.0%	0.0%	0.0%	0.0%	0.5%
Howard County	**0.7%**		10%	10%	80%		100%		0.0%	0.1%	0.1%	0.6%	0.0%	0.7%
TOTAL	**100.0%**								**37.7%**	**27.0%**	**4.2%**	**21.7%**	**9.4%**	**100.0%**
								USE ==>	**38%**	**27%**	**4%**	**22%**	**9%**	**100%**

figure2

Table 4-1
Trip Distribution Report in Super District 1: Bethesda/Chevy Chase

Auto-Driver Trip Distribution for Development in Super District 1: Bethesda/Chevy Chase

Trip Distribution to Super District for	Office Development	Residential Development
1. Bethesda/Chevy Chase	11.7%	22.8%
2. Silver Spring/Takoma Park	3.8%	2.1%
3. Potomac/Darnestown/Travilah	7.3%	1.8%
4. Rockville/North Bethesda	9.4%	9.8%
5. Kensington/Wheaton	8.7%	1.6%
6. White Oak/Fairland/Cloverly	4.3%	0.7%
7. Gaithersburg/Shady Grove	7.5%	4.0%
8. Aspen Hill/Olney	5.1%	0.4%
9. Germantown/Clarksburg	3.3%	0.2%
10. Rural: West of I-270	0.6%	0.0%
11. Rural: East of I-270	2.0%	0.15%
12. Washington, DC	7.4%	39.5%
13. Prince George's County	12.4%	4.6%
14. Virginia	12.2%	11.7%
15. Frederick County	2.1%	0.2%
16. Howard County	2.2%	0.5%

Table 4-2
Trip Distribution Report in Super District 2: Silver Spring/Takoma Park

Auto-Driver Trip Distribution for Development in Super District 2: Silver Spring/Takoma Park

Trip Distribution to Super District for	Office Development	Residential Development
1. Bethesda/Chevy Chase	2.2%	9.1%
2. Silver Spring/Takoma Park	11.5%	13.3%
3. Potomac/Darnestown/Travilah	2.2%	0.9%
4. Rockville/North Bethesda	3.0%	7.7%
5. Kensington/Wheaton	10.0%	4.6%
6. White Oak/Fairland/Cloverly	11.9%	2.7%
7. Gaithersburg/Shady Grove	3.9%	4.2%
8. Aspen Hill/Olney	6.3%	0.8%
9. Germantown/Clarksburg	1.3%	0.6%
10. Rural: West of I-270	0.1%	0.6%
11. Rural: East of I-270	2.8%	0.2%
12. Washington, DC	7.2%	32.5%
13. Prince George's County	24.5%	12.8%
14. Virginia	6.4%	8.9%
15. Frederick County	1.1%	0.2%
16. Howard County	5.6%	1.4%

Table 4-3
Trip Distribution Report in Super District 3: Potomac/Darnestown/Travilah

Auto-Driver Trip Distribution for Development in Super District 3: Potomac/Darnestown/Travilah

Trip Distribution to Super District for	Office Development	Residential Development
1. Bethesda/Chevy Chase	5.7%	13.0%
2. Silver Spring/Takoma Park	2.4%	1.9%
3. Potomac/Darnestown/Travilah	21.0%	6.2%
4. Rockville/North Bethesda	12.1%	20.5%
5. Kensington/Wheaton	6.8%	1.4%
6. White Oak/Fairland/Cloverly	2.3%	0.7%
7. Gaithersburg/Shady Grove	11.1%	13.3%
8. Aspen Hill/Olney	5.1%	0.6%
9. Germantown/Clarksburg	4.5%	1.7%
10. Rural: West of I-270	1.1%	0.1%
11. Rural: East of I-270	2.2%	0.2%
12. Washington, DC	3.8%	22.1%
13. Prince George's County	7.2%	5.1%
14. Virginia	10.4%	12.4%
15. Frederick County	2.8%	0.4%
16. Howard County	1.5%	0.4%

Table 4-4
Trip Distribution Report in Super District 4: Rockville/North Bethesda

Auto-Driver Trip Distribution for Development in Super District 4: Rockville/North Bethesda

Trip Distribution to Super District for	Office Development	Residential Development
1. Bethesda/Chevy Chase	3.5%	15.6%
2. Silver Spring/Takoma Park	2.2%	2.4%
3. Potomac/Darnestown/Travilah	8.0%	3.3%
4. Rockville/North Bethesda	12.8%	31.0%
5. Kensington/Wheaton	7.2%	2.6%
6. White Oak/Fairland/Cloverly	4.1%	0.7%
7. Gaithersburg/Shady Grove	14.4%	10.6%
8. Aspen Hill/Olney	8.5%	1.7%
9. Germantown/Clarksburg	6.5%	1.0%
10. Rural: West of I-270	0.9%	0.0%
11. Rural: East of I-270	4.2%	0.2%
12. Washington, DC	3.6%	13.9%
13. Prince George's County	8.8%	6.1%
14. Virginia	7.8%	9.7%
15. Frederick County	4.6%	0.5%

16. Howard County	2.9%	0.7%

Table 4-5
Trip Distribution Report in Super District 5: Kensington/Wheaton

Auto-Driver Trip Distribution for Development in Super District 5: Kensington/Wheaton

Trip Distribution to Super District for	Office Development	Residential Development
1. Bethesda/Chevy Chase	2.7%	12.3%
2. Silver Spring/Takoma Park	6.2%	6.9%
3. Potomac/Darnestown/Travilah	2.6%	1.6%
4. Rockville/North Bethesda	5.1%	14.8%
5. Kensington/Wheaton	26.0%	11.1%
6. White Oak/Fairland/Cloverly	10.6%	2.2%
7. Gaithersburg/Shady Grove	5.5%	6.0%
8. Aspen Hill/Olney	10.3%	2.0%
9. Germantown/Clarksburg	2.1%	0.6%
10. Rural: West of I-270	0.2%	0.0%
11. Rural: East of I-270	4.3%	0.4%
12. Washington, DC	3.7%	22.6%
13. Prince George's County	11.9%	9.5%
14. Virginia	4.1%	8.2%
15. Frederick County	1.5%	0.2%
16. Howard County	3.2%	1.5%

Table 4-6
Trip Distribution Report in Super District 6: White Oak/Fairland/Cloverly

Auto-Driver Trip Distribution for Development in Super District 6: White Oak/Fairland/Cloverly

Trip Distribution to Super District for	Office Development	Residential Development
1. Bethesda/Chevy Chase	1.3%	6.8%
2. Silver Spring/Takoma Park	4.5%	9.0%
3. Potomac/Darnestown/Travilah	1.7%	0.6%
4. Rockville/North Bethesda	1.7%	9.3%
5. Kensington/Wheaton	6.1%	5.0%
6. White Oak/Fairland/Cloverly	23.5%	9.3%
7. Gaithersburg/Shady Grove	3.2%	3.8%
8. Aspen Hill/Olney	6.2%	1.4%
9. Germantown/Clarksburg	0.4%	0.4%
10. Rural: West of I-270	0.1%	0.0%
11. Rural: East of I-270	2.8%	1.1%
12. Washington, DC	3.7%	23.4%
13. Prince George's County	26.4%	20.1%
14. Virginia	3.4%	7.1%
15. Frederick County	1.6%	0.0%

16. Howard County	13.4%	2.7%

Table 4-7
Trip Distribution Report in Super District 7: Gaithersburg/Shady Grove

Auto-Driver Trip Distribution for Development in Super District 7:
Gaithersburg/Shady Grove

Trip Distribution to Super District for	Office Development	Residential Development
1. Bethesda/Chevy Chase	1.8%	8.5%
2. Silver Spring/Takoma Park	1.5%	2.2%
3. Potomac/Darnestown/Travilah	6.6%	2.1%
4. Rockville/North Bethesda	5.6%	23.7%
5. Kensington/Wheaton	3.7%	1.9%
6. White Oak/Fairland/Cloverly	2.2%	0.9%
7. Gaithersburg/Shady Grove	25.2%	32.4%
8. Aspen Hill/Olney	5.3%	1.8%
9. Germantown/Clarksburg	10.9%	3.4%
10. Rural: West of I-270	1.6%	0.1%
11. Rural: East of I-270	7.1%	0.8%
12. Washington, DC	2.5%	8.4%
13. Prince George's County	6.7%	4.0%
14. Virginia	4.6%	7.9%
15. Frederick County	12.1%	1.3%
16. Howard County	2.6%	0.6%

Table 4-8
Trip Distribution Report in Super District 8: Aspen Hill/Olney

Auto-Driver Trip Distribution for Development in Super District 8:
Aspen Hill/Olney

Trip Distribution to Super District for	Office Development	Residential Development
1. Bethesda/Chevy Chase	1.2%	9.3%
2. Silver Spring/Takoma Park	1.9%	5.5%
3. Potomac/Darnestown/Travilah	1.9%	1.5%
4. Rockville/North Bethesda	6.1%	22.5%
5. Kensington/Wheaton	8.6%	5.7%
6. White Oak/Fairland/Cloverly	5.5%	2.8%
7. Gaithersburg/Shady Grove	9.4%	11.0%
8. Aspen Hill/Olney	26.0%	8.1%
9. Germantown/Clarksburg	3.1%	0.8%
10. Rural: West of I-270	0.1%	0.1%
11. Rural: East of I-270	14.1%	1.3%
12. Washington, DC	2.2%	15.2%
13. Prince George's County	6.4%	7.7%
14. Virginia	3.1%	6.2%
15. Frederick County	4.7%	0.4%
16. Howard County	5.7%	1.9%

Table 4-9
Trip Distribution Report in Super District 9: Germantown/Clarksburg

Auto-Driver Trip Distribution for Development in Super District 9:
Germantown/Clarksburg

Trip Distribution to Super District for	Office Development	Residential Development
1. Bethesda/Chevy Chase	0.6%	8.1%
2. Silver Spring/Takoma Park	1.4%	1.6%
3. Potomac/Darnestown/Travilah	5.5%	1.8%
4. Rockville/North Bethesda	3.5%	22.9%
5. Kensington/Wheaton	2.3%	1.6%
6. White Oak/Fairland/Cloverly	1.6%	0.2%
7. Gaithersburg/Shady Grove	17.2%	30.2%
8. Aspen Hill/Olney	2.5%	1.3%
9. Germantown/Clarksburg	25.2%	10.5%
10. Rural: West of I-270	2.6%	0.1%
11. Rural: East of I-270	8.0%	1.0%
12. Washington, DC	0.7%	7.0%
13. Prince George's County	5.8%	3.8%
14. Virginia	3.0%	7.4%
15. Frederick County	18.1%	2.0%
16. Howard County	2.1%	0.5%

Table 4-10
Trip Distribution Report in Super District 10: Rural – West of I-270

Auto-Driver Trip Distribution for Development in Super District 10:
Rural – West of I-270

Trip Distribution to Super District for	Office Development	Residential Development
1. Bethesda/Chevy Chase	0.8%	9.7%
2. Silver Spring/Takoma Park	2.7%	0.7%
3. Potomac/Darnestown/Travilah	4.3%	2.9%
4. Rockville/North Bethesda	2.1%	20.1%
5. Kensington/Wheaton	0.8%	1.2%
6. White Oak/Fairland/Cloverly	0.0%	0.4%
7. Gaithersburg/Shady Grove	7.0%	30.0%
8. Aspen Hill/Olney	3.0%	0.4%
9. Germantown/Clarksburg	4.1%	7.1%
10. Rural: West of I-270	47.7%	9.1%
11. Rural: East of I-270	1.7%	0.5%
12. Washington, DC	0.0%	7.4%
13. Prince George's County	2.1%	1.7%
14. Virginia	4.8%	4.5%
15. Frederick County	18.9%	3.8%
16. Howard County	0.0%	0.5%

Table 4-11
Trip Distribution Report in Super District 11: Rural – East of I-270

Auto-Driver Trip Distribution for Development in Super District 11:
Rural – East of I-270

Trip Distribution to Super District for	Office Development	Residential Development
1. Bethesda/Chevy Chase	0.4%	5.9%
2. Silver Spring/Takoma Park	0.8%	3.9%
3. Potomac/Darnestown/Travilah	1.3%	1.0%
4. Rockville/North Bethesda	1.3%	17.7%
5. Kensington/Wheaton	3.4%	3.8%
6. White Oak/Fairland/Cloverly	8.8%	2.1%
7. Gaithersburg/Shady Grove	9.0%	23.5%
8. Aspen Hill/Olney	8.8%	6.9%
9. Germantown/Clarksburg	4.9%	4.1%
10. Rural: West of I-270	0.4%	0.1%
11. Rural: East of I-270	27.5%	6.7%
12. Washington, DC	0.5%	7.3%
13. Prince George's County	9.8%	7.0%
14. Virginia	0.5%	5.2%
15. Frederick County	10.5%	2.0%
16. Howard County	12.1%	2.8%

APPENDIX 5

Delegation Procedures for Certain APF Findings by Staff at Time of Building Permit

For a building permit where a traffic exemption statement is submitted to demonstrate that TPAR is not applicable and an LATR traffic study are not needed, or when the LATR traffic study is conducted with a finding that no mitigation is required, Planning Department staff can make a finding that public facilities will be adequate to support the proposed development, set the validity period for the APF approval, and authorize release of the building permit.

For a building permit where the TPAR test requires mitigation less than five trips, Planning Department staff may authorize release of the building permit by letter if:

1. Planning Department staff finds that the public facilities will be adequate for the proposed development with the proposed trip mitigation and sets the validity period for the APF approval; and
2. MCDOT, the Superintendent of the Montgomery County Public School System, County Fire and Rescue Services, the Department of Police, and DPS have been notified of the method of mitigation, and have not explicitly objected; and
3. interested parties and the applicant have been given notice of the pending case, and have not objected to the proposed mitigation (see below, Noticing); and
4. a copy of a permit for construction within the right-of-way for the mitigation item has been received from DPS by the building permit coordinator.

For cases requiring mitigation of five or more vehicle trips, the item will be scheduled for an APF finding at a public hearing before the Planning Board after 1, 2, and 4 above are met. If no objections are raised by any interested parties or any of the agencies listed in 2 above, the case may be scheduled as a consent item before the Planning Board.

If an Applicant requests a hearing before the Planning Board or if any interested party or agency listed in 2 or 3 above objects to the proposed mitigation, the item will be scheduled for an APF finding at a public hearing before the Planning Board.

Noticing

The applicant must notify all confronting and adjacent property owners, and community and homeowners associations (following the procedure in the Development Review Manual [link]) of the application for APF approval as well as any proposed mitigation measures. The notice must also state that anyone objecting to the proposal must do so in writing within 14 days to Transportation Planning and provide the appropriate contact information.

Appendix 6
Unbuilt Master Plan Projects

To come from consultant as a manipulatable word or excel file
(4 page size tables)

Appendix 7
Inter-agency Traffic Study Memorandum of Understanding

MEMORANDUM OF UNDERSTANDING BETWEEN

THE CITY OF GAITHERSBURG

AND

THE CITY OF ROCKVILLE

AND

THE MONTGOMERY COUNTY PLANNING BOARD OF THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

FOR

regarding traffic reports (traffic impact study or applicable traffic statement) of proposed development and through the coordination and review of such reports; and

WHEREAS, the parties acknowledge that each has a different set of standards for traffic reports within their jurisdiction.

NOW, THEREFORE, the Parties agree to the following:

1. The methodology for determining the scope of traffic reports for proposed development projects, and also for analyzing the intersections included in such reports, will be determined in accordance with the standards set by the approving jurisdiction.

2. If a proposed development project has a signalized intersection within the scope's study area and located in a neighboring jurisdiction (one of the other parties to this MOU), that such intersection will be analyzed as part of the required traffic reports in accordance with the standards set by the approving jurisdiction.

3. Each Party will notify their neighboring jurisdiction when a project is submitted for review that includes a signalized intersection within the scope's study area and located in that neighboring jurisdiction. This includes notification of pre-Development Review Committee/Development Review Team (DRC/DRT) meetings and regular DRC/DRT meetings for such project.

4. When a signalized intersection falls within a neighboring jurisdiction, the approving jurisdiction will provide the neighboring jurisdiction with a copy of the applicable traffic report scope between the applicant and the approving jurisdiction. The approving jurisdiction will also provide the accepted traffic report to the neighboring jurisdiction. The neighboring jurisdiction will then be allowed up to thirty (30) days to review and submit comments back to the approving jurisdiction regarding the proposed development's traffic report.

IN WITNESS WHEREOF, the undersigned being duly authorized by the respective agencies, has signed this MOU.

City of Gaithersburg, Maryland:

John Schlichting, Director, Planning and Code Administration

Date: 10/10/12

City of Rockville, Maryland:

Susan Swift, Director, Community Planning & Development Services

Date: 10-2-12

Montgomery County Planning Department:

Rose Krasnow, Acting Director

Date: 9-27-12

Local Area Transportation Review and Transportation Policy Area Review Guidelines Appendix

January 2013

Logo

Montgomery County Planning Department
M-NCPPC
MontgomeryPlanning.org

Bar code to come