

## Memorandum

**To:** TISTWG Members  
**From:** Dan Hardy  
**Date:** June 7, 2015  
**RE:** Agenda for June 10 TISTWG Meeting

This memorandum and packet of materials provides an agenda for our June 10 meeting and summarizes the comments made on the materials distributed for the May 6 TISTWG teleconference.

- 1) Introductions (1:30-1:40)
- 2) Pro-Rata Share Approach (1:50-2:45)
  - a. June 10 proposal – see p. 2 – 4
  - b. May 6 materials (for reference) – see p. 5 - 16
- 3) VMT (2:45-3:15) – see p. 17 – 21 (from April meeting materials, for reference)
- 4) July 1 TISTWG and July 9 Planning Board roundtable agendas see p. 22

Also, the May 6 telecon minutes are attached as p. 23-25

## PRO-RATA SHARE CONCEPT WHITE PAPER

DRAFT for 6/10 Discussion

TISTWG members have expressed substantial interest in exploring the Pro-Rata Share concepts beyond the White Flint (established and operational) and White Oak (under development) geographic areas. This White Paper outlines a strategy for incorporating different types of Pro-Rata Share approaches into the 2016 Subdivision Staging Policy. It reflects a series of seven questions that the TISTWG has considered that help define the types, levels, and timeframes of analysis needed to put different options into policy and practice.

The following page summarizes the seven questions and high-level answers that should be incorporated into a 2016 Subdivision Staging Policy guidance on establishing future Pro-Rata Share Districts. The following pages provide additional detail and context on these considerations.

These questions are posed in general priority order. Question 1 is absolutely the first question to address; all other decisions regarding both the type of Pro-Rata Share Districts being established as well as the work program for the next year flow from the decision to retain a nexus-based approach associated with LATR, TPAR, and the impact tax as opposed to a more broad development policy approach. Question 2 is next in the priority list. Questions 3 through 7 are a suggested order of discussion, but their order may depend on the answers to Questions 1 and 2, both for a Countywide approach established in 2016 as well as for the establishment of any future Pro-Rata Share District established subsequently.

An overarching theme for the establishment of future Pro-Rata Share Districts is that they should be:

- Context-sensitive to the transportation needs of the local area and its constituents (including area residents, the business/development community, and implementing/operating agencies)
- Reflect countywide transportation plans and objectives, but not be limited by them. In particular, the need to achieve certain auto LOS objectives should perhaps be minimized

- Question 1. Should continuing Pro-Rata Share Approaches seek to:
  - A. functionally replace LATR
  - B. functionally replace TPAR, and
  - C. possibly also functionally replace development impact taxes for transportation, or
  - D. should they be established as a matter of policy independent of the LATR approach?

*From the perspective of any given small area plan, Option D is preferred as a means to facilitate the balanced achievement of plan objectives (transportation and otherwise). However, the establishment of planned infrastructure and services should still reflect Countywide transportation objectives, but not be limited to or by them.*

- Question 2. What geographic area(s) might be most appropriate for Pro-Rata Share approaches?

*Pro-rata share approaches are likely most appropriate in communities where traditional LATR barriers to infill are greatest, multimodal priorities create conflicts regarding appropriate plan vision and implementation, and overlapping/concurrent development patterns are most complex. Pro-rata share communities should have a Transportation Management District to oversee plan administration and monitor goal achievement.*

- Question 3. What types of improvements should be funded by a Pro-Rata Share District and over what timeframe?

*Master/sector planned infrastructure should be included, with coordination among state, local, and private sector implementers to define appropriate infrastructure funded by development impact fees. To promote transit investment, there is significant interest in increasing the funding of transit operations and pedestrian/bicycle infrastructure below the radar of improvements typically specified in master plans or sector plans (to potentially include more operational elements such as streetscaping, utility relocation, carshare/bikeshare programs, transit signal priority implementation, etc.). The coordination of LATR, TPAR, and Transportation Impact Tax revenues should be considered in conjunction with other public and private sector sources and a policy decision made by the County Council reflecting the needs of the district.*

*Pro-Rata Share District objectives, needs, and fees should be revisited periodically throughout the life of the implementation timeframe, generally every five to ten years over a two or three decade implementation process.*

- Question 4. Should a Pro-Rata Share District have a defined benefit element in addition to or instead of a defined contribution element?

*A defined benefit requires achievement of a certain performance standard (trip generation, mode share achievement) in addition to the defined contribution (the established impact charge, fee, or tax). The White Flint staging element attention to mode share is one example, the monitoring requirements of some “hard” Transportation Mitigation Agreements (TMAg) is another. This decision should be made on a case-by-case basis reflecting desired policy objectives, recognizing that a defined benefit increases potential for plan objective achievement but at a higher risk/barrier to implementation for the development community.*

- Question 5. Should participation in a Pro-Rata Share District be mandatory or can it be voluntary?

*Participation should be mandatory. The Subdivision Staging Policy already has a variety of alternative review procedures and similar TMAg approaches and processes for voluntary provision of innovative LATR solutions in areas without a formal Pro-Rata Share District.*

- Question 6. Should a Pro-Rata Share approach include a monitoring element that evaluates conditions over time and identifies mitigation strategies (if needed)?

*Yes. The monitoring element should continue to be biennial to synch with the County’s capital budgeting process, and (as noted in the response to Question 4) potential changes to mitigation strategies (including applicable charges and fees) should be included in a predictable process every five to ten years.*

- Question 7. What type of coordination needs to be considered with state and regional implementing agencies (such as the Maryland State Highway Administration, Maryland Transit Administration, and Washington Metropolitan Area Transit Authority) in order to develop a Pro-Rata Share approach?

*Yes. As noted in the response to Question 3, the balance of funding by state, local, and private sources should be a policy element established on a case-by-case basis in conjunction with affected agencies.*

# PRO-RATA SHARE CONCEPT WHITE PAPER

DRAFT for 5/6 Discussion

TISTWG members have expressed substantial interest in exploring the Pro-Rata Share concepts beyond the White Flint (established and operational) and White Oak (under development) geographic areas. This White Paper outlines a strategy for incorporating different types of Pro-Rata Share approaches into the 2016 Subdivision Staging Policy. It proposes a series of questions for the TISTWG to consider that help define the types, levels, and timeframes of analysis needed to put different options into policy and practice.

- Question 1. Should continuing Pro-Rata Share Approaches seek to:
  - functionally replace LATR
  - functionally replace TPAR, and
  - possibly also functionally replace development impact taxes for transportation, or
  - should they be established as a matter of policy independent of the LATR approach?
- Question 2. What geographic area(s) might be most appropriate for Pro-Rata Share approaches?
- Question 3. What types of improvements should be funded by a Pro-Rata Share District and over what timeframe?
- Question 4. Should a Pro-Rata Share District have a defined benefit element in addition to or instead of a defined contribution element?
- Question 5. Should participation in a Pro-Rata Share District be mandatory or can it be voluntary?
- Question 6. Should a Pro-Rata Share approach include a monitoring element that evaluates conditions over time and identifies mitigation strategies (if needed)?
- Question 7. What type of coordination needs to be considered with state and regional implementing agencies (such as the Maryland State Highway Administration, Maryland Transit Administration, and Washington Metropolitan Area Transit Authority) in order to develop a Pro-Rata Share approach?

These questions are posed in general priority order. Question 1 is absolutely the first question to address; all other decisions regarding both the type of Pro-Rata Share Districts being established as well as the work program for the next year flow from the decision to retain a nexus-based approach associated with LATR, TPAR, and the impact tax as opposed to a more broad development policy approach. Question 2 is next in the priority list. Questions 3 through 7 are a suggested order of discussion, but their order may depend on the answers to Questions 1 and 2.

**Question 1. Should continuing Pro-Rata Share Approaches seek to:**

- a. functionally replace LATR**
- b. functionally replace TPAR, and**
- c. possibly also functionally replace development impact taxes for transportation, or**
- d. should they be established as a matter of policy independent of the LATR approach?**

This is a landmark question for the TISTWG to consider, and may warrant consideration by the Planning Board and County Council in the near term.

If the answer is a, b, and/or c, then the logical approach is to pursue a similar track as in White Flint (where a, b, and c were bundled into the Special Taxing District) or White Oak (which as currently scoped addresses only option a – LATR). **In this case, required analysis time and resources would almost certainly preclude actual implementation of any additional Pro-Rata Share District(s) as part of the regular Subdivision Staging Policy in fall 2016, but that Subdivision Staging Policy could set the stage and processes for subsequent implementation.** Both the White Flint and White Oak approaches involve multi-year efforts to define the District’s transportation needs ensure both a deliberative and the appropriate nexus between the anticipated transportation needs, the policy levers to be applied (LATR, TPAR, impact taxes) and the balance between public and private sector investment to address those needs.

If the answer includes c (development impact taxes), the approach needs to be expanded to include amendments to Section 52 of the County Code.

The 2016 Subdivision Staging Policy could lay out the approaches to be followed by providing the County’s direction on the remaining questions in this White Paper, and potentially establish ground rules to guide subsequent studies (as the parameters in the White Oak Science Gateway amendment this spring are guiding the MCDOT study this summer and fall).

Exhibits 1 through 4 reprise the three policy options presented at the January TISTWG meeting and add a fourth option to demonstrate one way a broad policy approach could be addressed.

If the answer is d, then there may be an opportunity to consider options that could be implemented as part of the 2016 Subdivision Staging Policy. However, such options would necessarily be fairly sweeping policy changes (i.e., pure exemptions from LATR, TPAR, and/or impact taxes) evaluated without a detailed, community-based, assessment of needs, nexus, and public/private sector investment balance. The focus of the current study effort in this case would need to shift to consideration of support for types and locations of development that would be subject to such sweeping changes.

A third option: The Florida Multimodal Transportation District (MMTD) offers one potential compromise that blends these two approaches; establishing a Pro-Rata Share based on the costs of improvements already identified in the CIP. In this case, the expectation would be to update the Pro-Rata Share estimates on a regular basis (likely every 2 or 4 years to align with CIP or SSP amendments). This process, geared towards short term improvements, would facilitate more rapid establishment of Pro-

Rata Share districts, but would likely be less predictable over time (particularly if more expensive CIP projects were warranted in subsequent analysis cycles to functionally replace LATR improvements).

**Question 2. What geographic area(s) might be most appropriate for Pro-Rata Share approaches?**

Two types of proposals have been identified:

- Continue the development of additional Sector Plan, or similarly sized, Districts such as White Flint and White Oak.
- Establish a broader Pro-Rata Share District, such as one that would encompass developments served by the Countywide Transit Corridors Functional Master Plan

For a **functional replacement of LATR, TPAR, and/or impact taxes**, our experience indicates that a relatively small and discrete study area is preferable for several reasons:

- Establishing consensus on transportation costs and benefits (as related to the tradeoffs between LATR and a Pro-Rata Share approach) in an equitable manner is more feasible in a smaller geographic area where constituent experiences are similar
- Defining projects to be funded by a Pro-Rata share approach is facilitated by smaller/discrete areas.
- Applying and tracking revenue spending is generally easier in a smaller/discrete area

An exception to this rule could be made if the Pro-Rata Share District is used for a policy independent of functional LATR improvement (i.e., the answer to Question 1 is “d”). The concept of a Pro-Rata Share District dedicated to funding BRT implementation would fall into this category.

**Question 3. What types of improvements should be funded by a Pro-Rata Share District and over what timeframe?**

The answer to this question is dependent on both Questions 1 and 2 and is most appropriate for context-sensitive consideration with the community. Examples include:

- In White Flint, the Special Taxing District takes the form of an ad-valorem tax on all commercial properties that replaces LATR, TPAR, and transportation impact taxes. The ultimate consensus was to incorporate elements beyond typical LATR improvements such as the redesign of Rockville Pike for BRT within the Plan area and a second entrance to the Metrorail station, but not include any changes beyond the study area (five intersections were analyzed and considered for funding during the Plan development). Further, potential master planned improvements were distributed among three “buckets” of funding; private sector “on-site” streets, projects funded by the Special Taxing District revenue, and projects funded through other public sector sources.

[http://www.montgomerycountymd.gov/council/resources/files/res/2010/20101130\\_16-1570.pdf](http://www.montgomerycountymd.gov/council/resources/files/res/2010/20101130_16-1570.pdf)

[http://www6.montgomerycountymd.gov/content/council/pdf/agenda/cm/2010/101109/2010109\\_PHEDMFP1-2.pdf](http://www6.montgomerycountymd.gov/content/council/pdf/agenda/cm/2010/101109/2010109_PHEDMFP1-2.pdf) (see p. 33/35 of PDF)

- In White Oak, where only LATR is being replaced, discussions are currently underway regarding the extent of intersections to be analyzed (and potentially, but not necessarily, funded) from the Pro-Rata Share approach.  
[http://www.montgomerycountymd.gov/council/Resources/Files/agenda/col/2015/150428/20150428\\_5.pdf](http://www.montgomerycountymd.gov/council/Resources/Files/agenda/col/2015/150428/20150428_5.pdf)
- The City of Portland, Oregon has established two Transportation System Development Charge (TSDC) overlay zones, where the TSDC (similar to Montgomery's transportation impact tax) has been increased to provide funds for local contributions to a series of targeted projects, including the City's \$55M contribution to the \$1.5B Portland-Milwaukie Light Rail project. TSDC charges citywide can be paid up front or in installments, with interest, for up to 20 years. The TSDC is supplemental to the land use review process but plays a key role in several similar overlay districts where development only has an impact for levels above and beyond that explicitly included in a local master plan that informs the TSDC rates.
- Baltimore establishes fees for their Traffic Mitigation Zones in the central part of the city based on 10-year programmed improvements with the possibility of updating fees every five years.
- Delaware DOT has established a Transportation Improvement District (TID) process for a Pro-Rata Share approach that is implemented in coordination with local jurisdictions as needs arise, with parameters defined to meet those needs. Horizon years are generally 20 years in the future and incorporation of the TID parameters as part of the comprehensive plan.
- The Mobility Fee programs in Florida tend to identify both short-term and long-term needs, although like most impact fee programs (and both the calculation, and implementation, of Montgomery's impact tax), they do not necessarily abolish traffic impact study requirements. Smaller jurisdictions, like Kissimmee and Destin, have sufficiently defined multimodal needs that a multimodal project-driven approach can be applied to identify and fund sidewalks, bike paths, and transit circulator services. Larger jurisdictions tend to pursue a consumption-based approach that considers average unit costs for roadway based improvements (i.e., the total number of arterial lane miles needed), with the assumption that multimodal elements of the roadway are incorporated in those costs. Osceola County's current examination of a Mobility Fee provides one example of this consumption based approach to replace their current Road Impact Fee:  
[http://www.osceola.org/core/fileparse.php/2731/urlt/040915\\_Mobility\\_Fee\\_Study.pdf](http://www.osceola.org/core/fileparse.php/2731/urlt/040915_Mobility_Fee_Study.pdf)
- Pro-Rata Share approaches tend to focus on capital costs, with a frequent exception being the inclusion of some amortized operating cost elements for local shuttle services that primarily



benefit the District users and may also be funded through operating entities (such as the Montgomery County Transportation Management Districts and Urban Districts).

**Question 4. Should a Pro-Rata Share District have a defined benefit element in addition to or instead of a defined contribution element?**

Generally, Pro-Rata Share Districts operate on a defined contribution approach – a pay and go solution for development in any particular district. There are several ways that a defined benefit element can be coupled to the define approach element:

- Most Pro-Rata Share Districts or impact/mobility fees are re-evaluated periodically; the fee may rise or fall to the extent that additional projects are needed to achieve acceptable performance measures, or to achieve other policy objectives such as encouraging or discouraging certain types, locations, or timeframes of development.
- The White Flint Special Taxing District uses a staging approach to consider achievement of both mode shares and progress on critical infrastructure delivery. The Sector Plan and Special Taxing District legislation allow for changes to ad valorem tax structure if determined through a public process
- The Greater Colesville Citizens Association proposal suggests a defined benefit approach using site-specific mode share performance goal associated with individual site performance. There are several concerns with this proposal. First, it removes a key benefit of the Pro-Rata Share District – an improved certainty of development risk. Second, it creates a required linkage between developers and future owners that continues to prove problematic in the Transportation Mitigation Agreement arena. And finally, a common set of mode share assumptions may not be equitably and efficiently applicable to different types of development based on development types, sizes, and multimodal accessibility (distances to destinations by multiple modes) that influences mode shares. An alternative approach to achieving the same general approach would be to decouple the defined benefit approach from the Subdivision Staging Policy but establish development size and type thresholds for Traffic Mitigation Agreements, particularly for long-term, phased developments.

**Question 5. Should participation in a Pro-Rata Share District be mandatory or can it be voluntary?**

We have not found any true Pro-Rata Share District in which an applicant has a choice to conduct a traditional impact study or opt for a Pro-Rata Share approach in lieu of a traffic impact study. Partly this is due to the limited number of places that have abolished traditional traffic impact studies.

Options like Montgomery’s Alternative Review Procedure (where a higher impact tax payment is established based on a general sense of the impact tax/LATR contribution), which remains an appropriate approach for voluntary selection of a Pay-and-Go mechanism.

Even with a mandatory Pro-Rata Share approach, an applicant that wishes to promote certain planned transportation investments should (and can, in most cases) be allowed to provide the desired improvement (if consistent with the District's comprehensive plan) and be credited with a reduced Pro-Rata Share payment.

**Question 6. Should a Pro-Rata Share approach include a monitoring element that evaluates conditions over time and identifies mitigation strategies (if needed)?**

Regardless of the answers to the prior questions, we believe that a Pro-Rata Share district should include a monitoring program that provides information to constituents on the District's transportation system performance, as well as an opportunity to revisit and adjust those goals (and the fee requirements, if found necessary). The monitoring systems for the White Flint Sector Plan, the Great Seneca Science Corridor Plan, the County's Transportation Management Districts, and the Mobility Analysis Report are examples of monitoring elements on a biennial cycle designed to be in synch with and inform the biennial CIP process.

Conditions can be expected to change from those initially assumed in a Pro-Rata share calculation over a long-range period, necessitating revisions to the assumptions and costs of development. The actual decision to revisit Pro-Rata share costs should not be made on a biennial basis, however, for two primary reasons. First, a longer tenure for given costs is desirable to establish consistency in development predictability. Second, the analysis process itself takes time to perform and review. A process for reviewing Pro-Rata share costs might reasonably be expected every 5 to 10 years, and even then, only acted upon if the monitoring program indicates that adjustments are needed.

**Question 7. What type of coordination needs to be considered with state and regional implementing agencies (such as the Maryland State Highway Administration, Maryland Transit Administration, and Washington Metropolitan Area Transit Authority) in order to develop a Pro-Rata Share approach?**

This question has two elements. The first element relates to the general division of funding and implementation responsibilities for regionally and locally serving transportation facilities. There are very few "bright lines" defining the boundaries between the two, and judgment is required. A current example is the White Oak Policy Area traffic study direction to include needed at-grade intersection improvements along US 29 that are needed in part to serve local development (while also helping through traffic to some extent), but not include the master planned grade-separated interchanges that are often viewed as part of a broader, statewide system (although they also provide local traffic benefits).

Similarly, the current Transportation Impact Tax rates were established based on an assessment of the improvements likely to be implemented using County funds (see page 191-195 in the 2007-2009 Growth Policy document hotlinked below).

[http://www.montgomeryplanning.org/research/growth\\_policy/growth\\_policy\\_2007\\_2009/documents/InfrastructureFinancing.pdf](http://www.montgomeryplanning.org/research/growth_policy/growth_policy_2007_2009/documents/InfrastructureFinancing.pdf)

This assessment of \$1.182B in long-term infrastructure needs divided by 101,000 new peak hour vehicle trips formed the basis for the \$11,000 per peak hour vehicle trip value for non-auto facilities (which has since been escalated due to inflation).

The second element relates to the level of information or study needed by MCDOT to assess access permit requirements (essentially driveway access design and operations considering anticipated adjacent street traffic). Typically in the few places without a Traffic Impact Study process (including White Flint) a much more narrowly-focused circulation plan will be required, where background traffic may be assessed using analyst judgment on the nature and timing of known or anticipated changes.

# M-NCPPC LATR Study

## Balancing Placemaking Objectives

### Alternative Philosophical Approach #1: Incentivizing Smart Growth

(analysis should streamline development approvals in urban / infill areas)

Transect Area	Placetype examples		CLV standard	Scoping Peak Hour Person Trip Threshold	Analysis	Mitigation
	Current	Potential Changes				
T-6	All MSPAs	Urban MSPAs	1800	500	High level of "exemptions", focus on Bike/Ped concerns	Pay and Go
T-5	Some Urban Policy Areas	Suburban MSPAs, Purple Line Stations	1650	200		TDM, Fix Bike/Ped Gaps at \$~12K/trip
T-4	Other Urban Policy Areas		1600	75	Moderate level of "exemptions", focus on Auto concerns	Multimodal based on need
T-3	Downcounty Suburban Policy Areas		1450-1550	50		
T-2	Upcounty Suburban Policy Areas		1400-1450	50		
T-1	Rural		1350	30		

# M-NCPPC LATR Study

## Balancing Placemaking Objectives

### Alternative Philosophical Approach #2: Strengthening Multimodal Analysis

(analysis should provide most robust analysis in urban areas where operational concerns are greatest)

Transect Area	Placetype examples		CLV standard	Scoping Peak Hour Person Trip Threshold	Analysis	Mitigation
	Current	Potential Changes				
T-6	All MSPAs	Urban MSPAs	1800	30	Focus on operational assessment for all modes	Multimodal based on need
T-5	Some Urban Policy Areas	Suburban MSPAs, Purple Line Stations	1650	30		
T-4	Other Urban Policy Areas		1600	30	Focus on planning level assessment for all modes	
T-3	Downcounty Suburban Policy Areas		1450-1550	30		
T-2	Upcounty Suburban Policy Areas		1400-1450	30		
T-1	Rural		1350	30		

# M-NCPPC LATR Study

## Balancing Placemaking Objectives

### Alternative Philosophical Approach #3: Fewer, But More Intensive, Studies

(analysis should address multimodal needs but promote infill development)

Transect Area	Placetype examples		CLV standard	Scoping Peak Hour Person Trip Threshold	Analysis	Mitigation
	Current	Potential Changes				
T-6	All MSPAs	Urban MSPAs	1800	75	Focus on operational assessment for all modes	Pay and Go
T-5	Some Urban Policy Areas	Suburban MSPAs, Purple Line Stations	1650	75		TDM, Fix Bike/Ped Gaps at \$~12K/trip
T-4	Other Urban Policy Areas		1600	50	Focus on planning level assessment for all modes	Multimodal based on need
T-3	Downcounty Suburban Policy Areas		1450-1550	50		
T-2	Upcounty Suburban Policy Areas		1400-1450	50		
T-1	Rural		1350	50		

# M-NCPPC LATR Study

## Balancing Placemaking Objectives

### Alternative Philosophical Approach #4: Broader Policy Approach

(analysis should replace LATR in certain places with more Pro-Rata Share or broader policy approaches)

Transect Area	Placetype examples		CLV standard	Scoping Peak Hour Person Trip Threshold	Analysis	Mitigation
	Current	Potential Changes				
T-6	All MSPAs	Urban MSPAs	No LATR Studies, with mitigation consisting of either a Pro-Rata Share Fee, a Policy-Based Fee (i.e., twice the applicable Transportation Impact Tax), or other approaches such as VMT or PMT fees.			
T-5	Some Urban Policy Areas	Suburban MSPAs, Purple Line Stations				
T-4	Other Urban Policy Areas		1600	50	Focus on planning level assessment for all modes	Multimodal based on need
T-3	Downcounty Suburban Policy Areas		1450-1550	50		
T-2	Upcounty Suburban Policy Areas		1400-1450	50		
T-1	Rural		1350	50		

T6



MIXED USE INTENSITY	High
ACTIVITY DENSITY (jobs + people/ac)	100+ /ac
AVG. BLDG. HEIGHT	8+ Stories
TYPICAL MAX BLDG. HEIGHT	20+ Stories
TYPICAL NET FAR	2.30+
SUPPORTED TRANSIT TECHNOLOGY	LRT/Rail

T5



MIXED USE INTENSITY	High
ACTIVITY DENSITY (jobs + people/ac)	60-100/ac
AVG. BLDG. HEIGHT	6 Stories
TYPICAL MAX BLDG. HEIGHT	12 Stories
TYPICAL NET FAR	1.38-2.30
SUPPORTED TRANSIT TECHNOLOGY	BRT/LRT

T4



MIXED USE INTENSITY	Moderate
ACTIVITY DENSITY (jobs + people/ac)	25-60/ac
AVG. BLDG. HEIGHT	4 Stories
TYPICAL MAX BLDG. HEIGHT	8 Stories
TYPICAL NET FAR	0.57-1.38
SUPPORTED TRANSIT TECHNOLOGY	Express Bus

T3



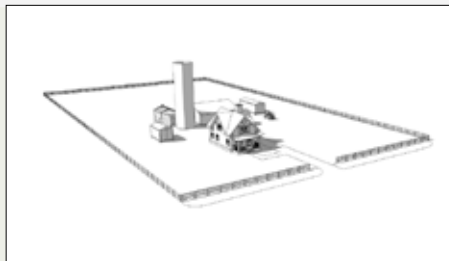
MIXED USE INTENSITY	Moderate
ACTIVITY DENSITY (jobs + people/ac)	10-25/ac
AVG. BLDG. HEIGHT	3 Stories
TYPICAL MAX BLDG. HEIGHT	5 Stories
TYPICAL NET FAR	0.23-0.57
SUPPORTED TRANSIT TECHNOLOGY	Fixed Route Bus

T2



MIXED USE INTENSITY	Low
ACTIVITY DENSITY (jobs + people/ac)	1-10/ac
AVG. BLDG. HEIGHT	1.5 Stories
TYPICAL MAX BLDG. HEIGHT	3 Stories
TYPICAL NET FAR	0.02-0.23
SUPPORTED TRANSIT TECHNOLOGY	Demand Response

T1



MIXED USE INTENSITY	Very Low
ACTIVITY DENSITY (jobs + people/ac)	0-1/ac
AVG. BLDG. HEIGHT	1 Stories
TYPICAL MAX BLDG. HEIGHT	2 Stories
TYPICAL NET FAR	0-0.02
SUPPORTED TRANSIT TECHNOLOGY	Demand Response

Figure 27 - Illustrations of Typical Block Types by Transect Zone.



## LATR CONCEPT SUMMARY

### SA-3: Alternative Review Procedure for Very Low VMT

#### Process: Scoping Elements

#### Sub-Process: Study Alternative Review Procedures

#### Concept in a Nutshell:

Developments that generate a very low VMT should be able to be credited with the same types of benefits as those that generate low vehicle trips. A development that, by virtue of increasing the overall development density or diversity of its site context, reduces VMT generated by surrounding land uses should be able to take credit for that reduced VMT as well. Three levels of Very Low VMT are considered:

- **Type 1 Zero-VMT Development:** M-NCPPC would identify development types and locations that reduces areawide VMT and are automatically exempted from any transportation mitigation action (i.e., no action under LATR, TPAR, or transportation impact taxes)
- **Type 2 Very Low VMT Development:** M-NCPPC will identify development types and locations that generate low VMT rates that could be considered to have a *de minimis* effect based on reduced areawide VMT should follow the *de minimis* rules (i.e., no action under LATR, but still action based on TPAR and payment of transportation impact taxes)
- **Type 3 Mitigated VMT Development:** Applicants may propose that M-NCPPC consider their development a Low-VMT case following the same logic currently applied under concept SA-1, a 50% reduction in vehicle impact monitored through a Traffic Mitigation Agreement (TMAg). The Type 3 development would operate under the same approach as in SA-1, except that VMT would be measured rather than vehicle trips:
  - Applicant proposes analysis, mitigation, and monitoring to achieve site-generated VMT that is 50% or lower than that VMT which would otherwise be assumed to be generated by the site.
  - No action under LATR or TPAR
  - Payment of twice the applicable transportation impact tax
  - TMAg with accepted monitoring, mitigation, and incentives/disincentives for achieving the 50% VMT reduction.

#### Primary Purpose:

Recognize the benefits of density and diversity in urban areas not only in achieving a modal shift away from auto drivers but also the benefits of shorter trip lengths for those who do use autos.

#### Effect on:

Study Objective	Strengths	Weaknesses
Improving context-sensitivity and multimodal <b>analysis</b>	Introduces combination of development type and	None

	surrounding context	
Improving <b>predictability</b>	Enables applicants to consider development proposals that eliminate need for any action under LATR	None
Streamlining <b>implementation</b>	None	None

### Relationship to Current LATR (or prior growth policy concepts)

Type 1 and Type 2 cases are new, based loosely upon the concepts emanating from initial SB 743 concepts in California jurisdiction and a desire to establish a baseline for potential VMT reduction scenarios.

Type 3 cases are similar to, and framed to replicate, the current Alternative Review Procedure for reducing vehicle trips by 50% in conjunction with a Traffic Mitigation Agreement (TMAg), as described in LATR Concept SA-1.

### Expected Application Area:

The Type 1 and Type 2 cases have been developed for new residential development within the Bethesda and Silver Spring CBDs, which are selected because these two CBDs have:

- development densities and J/HH ratios are both high enough that new residential development of the right size and characteristics is arguably capable of reducing overall areawide VMT
- Transportation Management Districts to help support and monitor effects across the CBDs

### Examples of Application

The assessment of low VMT development types 1, 2, and 3 are described below.

#### Type 1: Zero VMT Development

The basic theory of a Zero-VMT Development is that, by virtue of its location or characteristics, the activities it generates reduces VMT generation by nearby development sites to such an extent that the change in total areawide VMT after introduction of the new development is at most zero (and possibly a net reduction in areawide VMT occurs). In other words, the development site can take credit for reducing VMT at other sites as part of its VMT calculation.

A basic challenge with this approach is that it is difficult to conclude that any new development actually takes vehicle trips off the road from nearby developments. For instance, we would expect that a new residential development in Bethesda or Silver Spring would generate a number of walk/bike trips to adjacent retail locations, thereby positively affecting both the total number of person-trips, total amount of sales, and the total non-auto driver mode share at those adjacent retail locations. However, it is unlikely that the presence of new walk trips would also result in the removal of a prior auto trip to

the same retail location. The one exception could be for retail experiences (the most exclusive restaurants or sold-out entertainment venues) but these are the rare exception rather than the rule.

However, the journey to work trip describes a case wherein the introduction of a new walk/bike trip should result in the removal of another trip. The number of available jobs in Bethesda at any point in time is finite; if a resident of a new development takes a job in a nearby building, it stands to reason that that very same job/position must have been vacated by someone else who may or may not have been a Bethesda resident. Since many of those jobs are held by persons who drive a long distance to work in Bethesda, we can convert the typical Bethesda office worker's journey to/from work VMT into a credit for the new development. This approach is described in the attached table for a hypothetical 200 unit development (the size of the residential development is not proposed as a factor in the mathematics at hand, but using a specifically sized development makes it easier to conceptualize the data) and summarized below:

- Step A. Consider VMT generated by new development
  - MWCOG Household Travel Survey indicate that Silver Spring and Bethesda households generate an average of 16.19 VMT
  - The residential development will generate trips by non-residents (deliveries, friends, maintenance staff, etc.); estimated based on 85%/15% generic peak period directional split and an estimate that non-resident trips are generally about half the length of resident trips
  - The development generates about 3,481 daily VMT
- Step B. Consider VMT generated by a typical CBD employee
  - We know from the Bethesda TMD 2009 survey report (latest info readily available) that there's a NADMS (all times of day) of about 38%, so in other words, 62% of Bethesda employees drive to work.
  - The average trip length (admittedly, for all modes) is 15.8 miles one way
  - Therefore the "typical" Bethesda employee generates about 19.6 VMT daily
- Step C. Consider how likely it is for the new residential development to generate employees in Bethesda
  - From the Bethesda TMD we know that about 4% of employees walk or bike to work; we use this as a surrogate for local employees (some will walk from outside the CBD, and some residents inside the CBD will take transit or drive to work)
  - These 4% of employees total about 1538 employees, which works out to about 0.16 employee in every Bethesda CBD household
  - The 200 unit residential unit may therefore produce about 33 Bethesda CBD residents walking/biking to work, each of whom displaces a typical Bethesda employee generating about 19.6 VMT traveling to/from work.
  - The net benefit of the new development at reducing journey-to-work VMT is therefore about 654 VMT.
- Step D. Consider the residential site VMT generation in contrast to its effect in reducing areawide VMT:
  - 3,481 VMT generated by the site

- 654 VMT reduced by replacing typical Bethesda employees
- 19% reduction in site generated VMT attributable to the new residential development.
- Step E. Consider parking restrictions to reduce VMT attributable to the new residential development to be equal to the offset provided by reduced employee journey-to-work VMT
  - Currently, average household owns 1.2 vehicles, or 240 total
  - New building generates 14.5 VMT per owned vehicle (VMT includes that generated by visitors, etc.)
  - In order to limit VMT to 654 VMT offset associated with lower journey-to-work VMT in Step C, the number of vehicles would need to be limited to 45, or 0.23 vehicles per household, or equal to 0.23 spaces per vehicle.
  - (Note: this value may be a tad high; as vehicles/DU drop, it's reasonable to assume that the proportion of non-resident vehicle VMT might increase due to increased deliveries and use of taxis or carshare; from a policy perspective we would argue this is close enough).

**Conclusion: M-NCPPC should grant a Very-Low VMT exemption to any residential building in the Bethesda or Silver Spring CBDs that provide fewer than 0.16 resident parking spaces per unit.**

**Type 2: Very Low VMT Development**

Using the assumptions in Type 1, we can postulate that whatever the *de minimis* rate ends up being for Silver Spring and Bethesda CBD development, it can be increased to reflect the lower VMT associated with residential development in jobs-heavy CBDs of Bethesda and Silver Spring, subject to parking restrictions as noted below:

Using reasonable facsimiles of the current vehicle trip generation rates and a 30 vehicle trip level of *de minimis* working out to about 60 vehicle trips

If parking is limited to	The number of units for a <i>de minimis</i> finding would be
No limit	71
0.8 spaces per DU	74
0.6 spaces per DU	98
0.4 spaces per DU	147
0.2 spaces per DU	295

**Next Study Steps**

Respond to TISTWG comments. Note that this thresholds described for this approach would need to be adjusted as we work on person-trip *de minimis* rates.

Very Low VMT Option  
 Red numbers indicate placeholders

**1. Type 1: Zero-VMT Development**  
 Case Study - Bethesda and Silver Spring CBDs

- A Identify VMT from new proposed development
  - 200 High rise DU
  - 16.19 Current daily VMT generation rate per DU (MWCOG HTS)
  - 3238 VMT from DU residents
  - 0.075 Factor for visitor/delivery VMT (source TBD - based on reverse flow in peak periods from ITE x 50% triplength reduction)
  - 3481 VMT for total development
  
- B Identify VMT for Bethesda employees
  - 38% Non-Auto Driver Mode Share (from Bethesda TMD surveys, 2009 report p. 59)
  - 15.8 One-way average auto trip length (from Bethesda TMD surveys, 2009 report. 60)
  - 19.6 VMT for JTW for "typical Bethesda employee"
  
- C Identify extent of VMT reduction for new proposed development
  - 4% Percent new residential development walk/bike to work (Bethesda TMD surveys, 2009 report p. 60)
  - 38446 Total number of employees in Bethesda (current master plan effort - MWCOG 2015)
  - 1538 Walking/biking employees
  - 9207 Total number of households in Bethesda (current master plan effort - MWCOG 2015)
  - 0.167 Number of locally employed residents per DU
  - 33.4 Total new DU residents that walk/bike to work, replacing "typical" Bethesda employee
  - 654 Total reduced JTW VMT associated with new development
  
- D VMT effect of new development
  - 3481 New development VMT generated
  - 654 Reduced VMT from employee replacement
  - 19% Percent goal achieved for Very Low VMT Option 1 (total reduced VMT)
  
- E Parking restriction affect
  - 0.83 Average vehicles/household (from MWCOG Household Travel Survey)+D37
  - 166 Total vehicles in building
  - 21.0 Total VMT per vehicle (including VMT generated by non-residents)
  - 654 Allowable VMT for zero-VMT development
  - 31 Number of vehicles allowed
  - 0.16 Parking spaces per DU

**Type 2: Very Low VMT Development**

- A Comparison against current "de minimis" rules for Low VMT Option 2 (adjusted de minimis amount)
  - The de minimis rate could be raised by 19% without parking restrictions
  - If current de minimis definition triggers traffic study at 60 Dus
  - Then:
  - With the following parking restriction: The de minimis rate would be
 

None	71 Dus
0.80 spaces/DU	74 Dus
0.60 spaces/DU	98 Dus
0.40 spaces/DU	147 Dus
0.20 spaces/DU	295 Dus

## **July 1 TISTWG Agenda**

- Final review/comment on Pro-Rata Share Approach
- Summary and status of LATR Concepts moving forward
- Status and schedule of TPAR and trip generation
- Status and schedule of travel modeling strategic plan study

## **July 9 Planning Board Roundtable discussion**

- Status and schedule of Subdivision Staging Policy and related studies
  - LATR
  - TPAR
  - Travel/4 model development
  - Travel Modeling Strategic Plan
  - Trip generation / relationship to parking generation
- Subdivision Staging Policy status report
  - Pro-rata share approach
  - Very Low VMT approach
  - Other key initiatives
- Relationship to other Board initiatives
  - Master plan schedule/process
  - CR Zone implementation
  - Development Review Manual

**Montgomery County Planning Department  
Transportation Impact Study Technical Working Group (TISTWG)  
Meeting #8 (Teleconference) – LATR Concepts and SSP Changes**

**May 6, 2015  
1:30 – 3:30 PM**

1. Attendees
  - a. MNCPPC: Eric Graye, Tom Autrey, Jaesup Lee, Ed Axler
  - b. Andrew Bossi
  - c. Cherian Eapen
  - d. Eileen Finnegan
  - e. Ed Papazian
  - f. Harriett Quinn
  - g. Rebecca Torma
  - h. Dan Wilhelm
2. Discussion on Pro-Rata Share
  - a. Is LATR broken to the extent that it needs wholesale replacement? It remains a helpful tool for evaluation.
    - i. Need for replacement ideally considered during master plan phase as in White Flint, with small geographic area and property owner collaboration and consensus
    - ii. Concern that a blanket pro-rata share across the whole County is inappropriate
    - iii. More small area plans on how to implement new CR Zone is probably helpful to define land use yields and transit station/system opportunities
    - iv. On the other hand, in most developed areas of the County LATR is not very effective – hence our study and problem statement from fall 2015
    - v. Interest in shifting more from LOS to mode share goals
    - vi. Pro-rata share does address the “free rider” or “last in” concern at least in the near term (vesting is still an issue over the long term; the White Flint approval and expiration of Staging Allocation Requests demonstrates one way to do this that required a deliberative and extensive revision to existing processes.
  - b. Discussion on geographic area – in a place like White Oak do we need multiple policy areas or pro-rata districts?
    - i. We are only beginning the test of White Oak Pro-Rata concept; level of plan buildout versus realistic absorption over time still an open question as may be the detailed designs for integrating transit and auto needs; MD 650/Powder Mill intersection concept not viewed by many as the desired model for countywide BRT.
    - ii. Pro-rata share planning should be done at master plan stage – wasn’t for White Oak
  - c. Discussion on monitoring and refinement

- i. Pro-rata share concepts should be revisited/updated every 5 to 10 years
    - ii. Agencies and public need to stay on top of traffic studies (by public sector if LATR studies are no longer provided under pro-rata concepts) and then implementation
    - iii. Concern is that pro-rata share appears to give full entitlement to full build of every property – what could happen is you get closer to full buildout and still have allocation or capacity issues. Again, White Flint Staging Allocation Request is one possible solution; others could be developed but key remains a continual monitoring of the system as plans evolve.
  - d. Discussion on transit system planning and implementation
    - i. Ideally, everyone pays fair share, County or State makes improvement
    - ii. But for transit and ped improvements, our master plans aren't (and probably won't be) explicit to define benefits. For instance, we can master plan the transit station, but where does the transit go to? For instance, in Hillandale; it's all about destinations on US 29 or requiring multiple-seat rides to access other desired destinations.
    - iii. Discussion on state/County split. In WOSG, County/pro-rata share intersections will either need to be designed to incorporate future State-provided BRT or risk precluding it.
    - iv. Discussion on relationship to other LATR concepts like protected intersections; again would be ideal to identify at time of master plan.
- 3. To revisit Agenda Item Question 1 – Option D is the boldest proposal – to develop pro-rata share approaches independent of achieving overall LATR mobility/accessibility goals Countywide – is appropriate?
  - a. What's desirable about Option D:
    - i. Facilitating a sort of streamlined pay and go in places where traditional LATR barriers to infill are greatest, multimodal priorities create conflicts regarding appropriate plan vision/implementation, and overlapping/concurrent development patterns are most complex
    - ii. Moving from pure vehicle trip generation to other metrics – could be person trips or mode share – as basis for appropriate payment
  - b. What's not desirable about Option D
    - i. Tying wide-ranging locations with disparate (or as yet unknown) needs into a single pro-rata system: the same concerns on the table in White Oak about synthesizing Hillandale and Percontee/Site 2 needs into a common development impact approach will be even more complicated if places like Bethesda CBD and Aspen Hill Shopping Center are added into the same discussion.
  - c. How Option D would work best
    - i. New pro-rata shares come online as developers propose it or master plans are done
    - ii. Apply within TMD areas (and/or set up new ones) so monitoring capabilities exist and the blending of capital-system improvement and operating-system



management/maintenance can be balanced (to be context-sensitive about the presence of Urban Districts, Parking Lot Districts, etc.) and allocation of income/outlay (i.e., impact tax for capital, urban district/TMD for operating needs)

- iii. Even without LATR, there should be a multimodal impact statement associated with development to describe existing conditions, general multimodal needs, and access permit assumptions/decisions

4. VMT

- a. Concerns expressed about VMT still seem to be philosophical rather than related to specific "SA-3" Very Low VMT proposal currently on the table. For those concerned about VMT, please read the 4 page proposal in the handout and send Dan or Eric notes on the specifics (and don't worry about what's being discussed in California!)

5. Administrative

- a. Review of forthcoming modeling study
  - i. Looking to identify pros and cons of moving in certain directions over the next several years with either processes, software, or services
  - ii. Partnership with MCDOT – study completed in next six months, but with a long range strategy for implementation
  - iii. Proposal is for strategic plan, not for specific tools or vendor products
  - iv. Review of U of MD "dynamic assignment" tool by Board and Council in 2014 was part of the impetus for the study, but there are concerns with that approach (apparent lack of transit sensitivity, cost of system maintenance/application as two examples) that this study needs to explore.