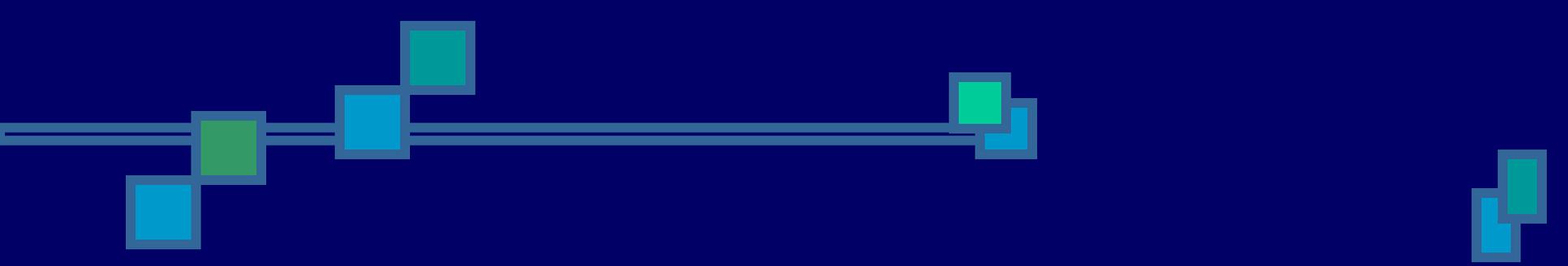


Site Impact Analysis in  
Montgomery County  
Local Area Transportation Review  
(LATR)  
Policy Area Mobility Review  
(PAMR)

GSCC Advisory Committee





# Scope of Work

## *Intersections*

- Number of intersections to be analyzed depends on the amount of site-generated trips. Ranging from one signalized intersections (for up to 250 trips) to 7 signalized intersections (for 2,750 trips or more) in each direction.

## *Background Development*

- Approved but un-built development in the study area (that is within the area of signalized intersections or areas nearby) will be identified in the scope of work. Their trips will be added to existing site trips to form a total future traffic
- The following requirements/procedures are clearly identified and provided in the LATR Guidelines: Trip Generation, Trip Distribution, and Trip Assignment.



# Pedestrian and Bike Circulation

- A pedestrian and bicycle impact statement is required in every traffic study before it is accepted.
- Valid pedestrian and bicycle counts must be submitted with the traffic study. All counts are submitted in a digital format that are entered into our database which updates intersection information.
- Staff reports must include a statement regarding the safety and efficiency of pedestrian and bike operation as well as availability of transit in the vicinity of the site.
- Pedestrian and Bike facilities are important for safety reasons and for promoting their use, particularly in the congested areas.



# Methods To Reduce LATR Impact

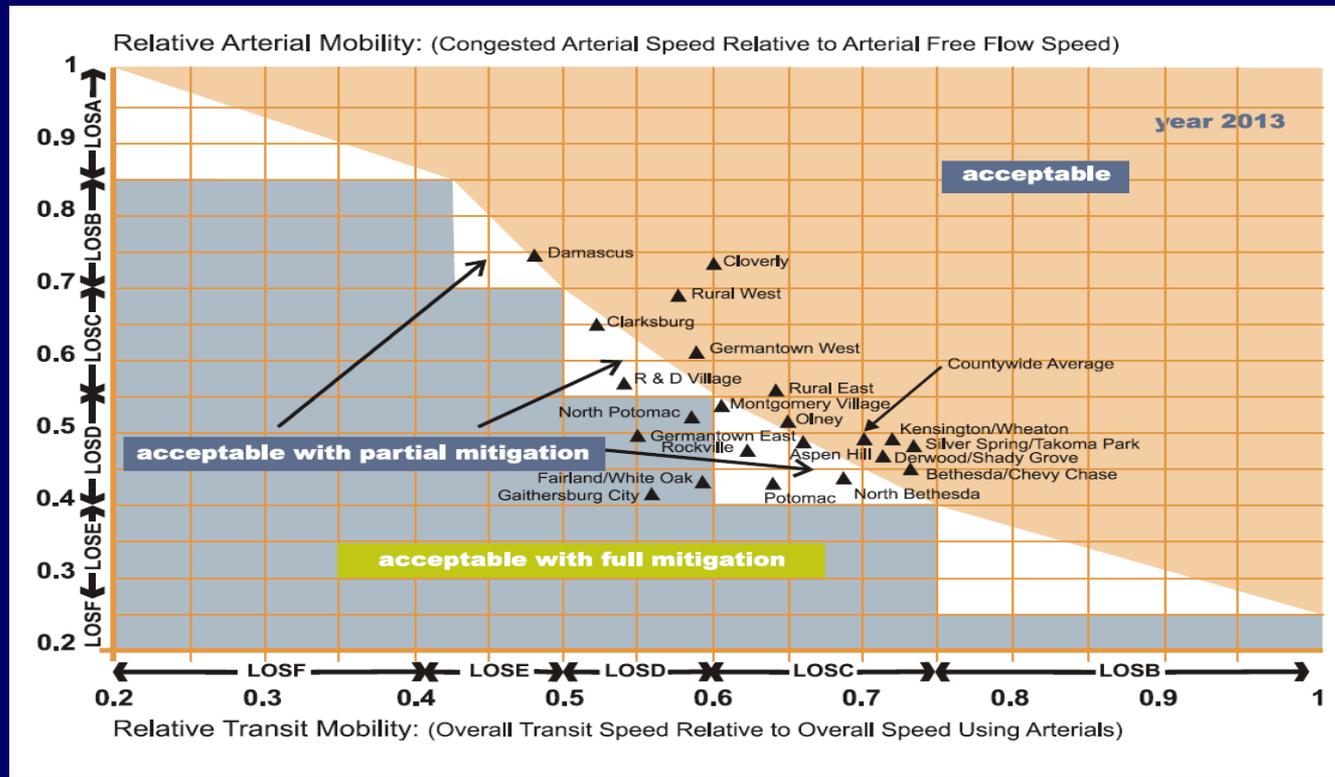
- Non-Automobile Transportation amenities such as bus shelter, real-time transit information sign, sidewalks, bike pads and other amenities in the vicinity of the site.
- Non-Automobile amenities are used for trip credits. These trip credits are measured in relation to the policy area congestion standards.
- For example, 100 linear feet of five-foot sidewalk will grant the applicant the following trip credits:



# Methods To Reduce LATR Impact

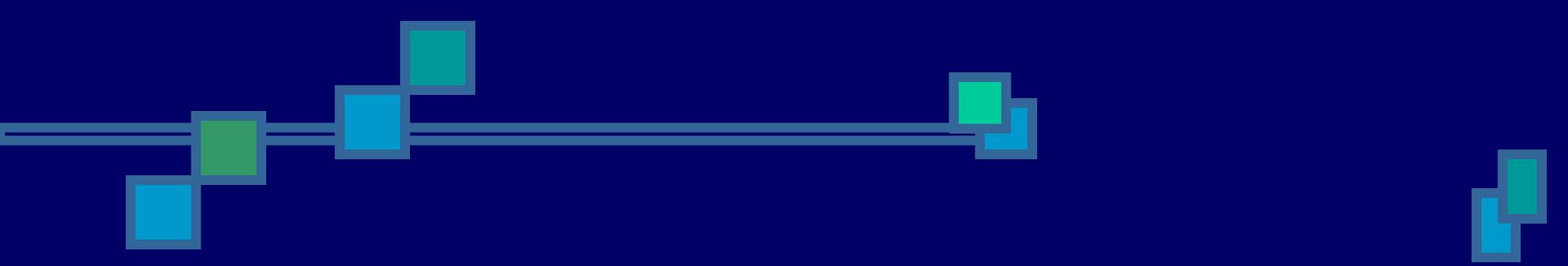
- 0.5 trip in area with 1,350-1,500 CLV,
- 0.75 trip in 1,550-1600 CLV and
- 1.0 trip in areas with 1,800 CLV congestion standard.
- Legally binding trip mitigation agreements extending 12 - 15 years.

# Policy Area Mobility Review (PAMR)

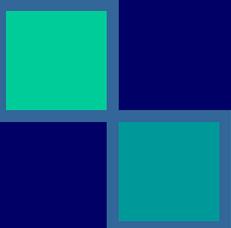


## Policy Area FY 11 Trip Mitigation Required

■ Aspen Hill	15%
■ Bethesda/Chevy Chase	30%
■ Derwood/Shady Grove	15%
■ Fairland/White Oak	45%
■ Gaithersburg City	50%
■ Germantown East	50%
■ Kensington/Wheaton	10%
■ Montgomery Village/Airpark	5%
■ North Bethesda	30%
■ North Potomac	10%
■ Olney	10%
■ Potomac	45%
■ R & D Village	35%
■ Rockville	20%
■ Silver Spring/ Takoma Park	10%



# HCM Vs. CLV

- 
- CLV is a planning tool ---while HCM is an operational tool.
  - CLV is easy to understand and easy to explain to public
  - CLV analysis does not include variables such as pedestrian's traffic, type of vehicles, signal timing, and average vehicle delay to determine Level of Service.
  - CLV is a tool only for analyzing intersections –HCM is used for intersections, freeways, progression and so forth.
  - A comparison of CLV vs. HCM analysis for evaluation of intersection congestion was done for Montgomery County, Maryland in 1997.

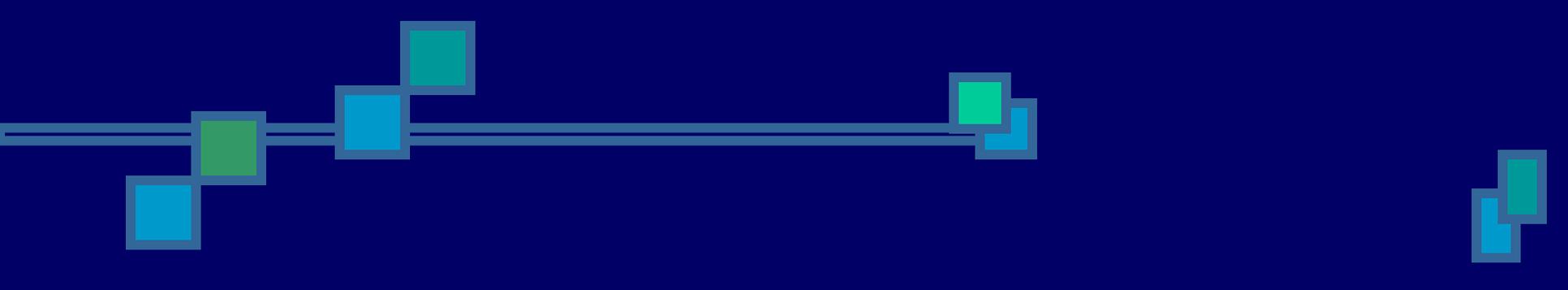
# Principal Findings

- CLVs between 1,525 and 1,650 are near but NOT over capacity and no risk of excessive delay (V/C ration of 0.8-0.87). When compared to HCM, it was within the range of acceptable average vehicle delay of 60 seconds.
- CLV between 1,650 and 1,800 are usually above capacity, with risk of experiencing average vehicle delay above 60 seconds.
- CLV of **1,800 standard in the metro areas** will most likely cause excessive delay (V/C ratio of 0.95 or more). But our policy is that transit facility is available for those who want to avoid congestion.
- CLV of 1,660 is reasonable practical “capacity” of an intersection with minimal risk of unacceptable delay.



## Staging of Developments and the Infrastructure to accommodate it.

1. How much more development can be accommodated if any, with the existing infrastructure. **THIS IS THE FIRST STAGE**
2. While the first stage of development is going on, how much (realistically) the existing infrastructure can be enhanced to meet the requirements of moving to the next stage
3. The last stage of development, "end state" need infrastructure enhancements to complete the recommended growth.
4. No development should go forward unless all identified requirements of enhancing infrastructure are met.
5. At the **end of each stage**, a comprehensive traffic study for the area will be done to ensure what was previously predicted is true. If the overall congestion standard (**compared to overall capacity**) is below what was predicted, then the next stage of development can go forward.



## Benefits of Staging Developments

- This program gives legal enforcement mechanism to make sure development is not outpacing public facilities to support it.
- It gives a level of comfort to general public that there is a mechanism to stop or allow the future development to continue.
- It encourages government and the developers to make sure public facilities are being provided for the next stage as they go forward with what they are allowed to develop at any time.
- If the public facilities are not in place, and government cannot deliver, the developers should be given the choice of providing the infrastructure if they want to go forward sooner,.

## Examples of Infrastructure Enhancement

- *Each one is clearly identified in each stage. Examples include:*

1. A Transportation Management Organization must be established and operating.
2. Non-auto Driver Mode Share achieved
3. Additional transit facilities provided.
4. All bicycle and pedestrian facilities on the plan complete.
5. Certain intersections improved.
6. Certain parking policies implemented.
7. The Master Plan be reviewed and if needed, be amended at the end of a particular stage.
8. Additional bus routes and frequency provided