



## Local Area Transportation Review (LATR) Pedestrian Adequacy Test Technical Guidance



Eric Graye, Planning Supervisor, Functional Planning and Policy Division, [eric.graye@montgomeryplanning.org](mailto:eric.graye@montgomeryplanning.org), 301-495-4632



Pamela Dunn, Chief, Functional Planning and Policy Division, [pamela.dunn@montgomeryplanning.org](mailto:pamela.dunn@montgomeryplanning.org), 301-650-5649

Completed: 07/12/18

### Background

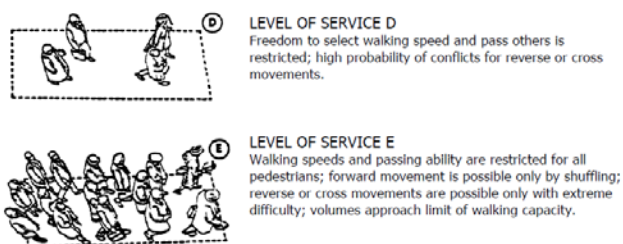
The 2016-2020 Subdivision Staging Policy (SSP) describes context-sensitive, multi-modal transportation adequacy tests that were incorporated into the *2017 Local Area Transportation Review (LATR) Guidelines*. In this context, **pedestrian system adequacy** is based on crosswalk capacity, in combination with a requirement to address Americans with Disabilities Act (ADA) non-compliance issues within a certain distance of a proposed project. This requirement is based on the logic that there is a nexus between new development and existing inadequate pedestrian circulation conditions when the new development generates sufficient pedestrian activity to substantially affect exposure to the inadequate conditions.

Pedestrian system adequacy is defined as providing level of service (LOS) D or better for any signalized crosswalk (see Figure 1 below). The methodology for evaluating pedestrian level of service is described in the 2010 Highway Capacity Manual (HCM) in Chapter 18. Any development site that generates more than 50 pedestrian peak hour trips (including trips to transit) must:

- Fix (or fund) ADA non-compliance issues within a 500' radius of the development site boundary and
- Ensure LOS D for crosswalk pedestrian delay (or no more delay than existing) at LATR study intersections within 500' of site boundaries or within areas where the County's road construction code specifies use of urban design standards.

Regardless of the development size and location, if an intersection operational analysis is triggered for any intersections within a Road Code Urban Area (RCUA)/Bicycle Pedestrian Priority Area (BPPA), mitigation must not increase average pedestrian crossing time at the intersection.

**Figure 1: Pedestrian Level of Service (LOS)**



LOS	Pedestrian Space (ft <sup>2</sup> /p)	Expected Flows and Speeds		
		Avg. Speed, <i>S</i> (ft/min)	Flow per Unit Width, <i>v</i> (p/ft/min)	<i>v/c</i>
A	≥ 35	260	0-7	0.0-0.3
B	25-35	250	7-10	0.3-0.4
C	15-25	240	10-15	0.4-0.6
D	10-15	225	15-20	0.6-0.8
E	5-10	150	20-25	0.8-1.0
F	< 5	< 150	Variable	Variable

## Summary

In applying the new LATR pedestrian adequacy test, it has come to staffs attention that there is too little information provided in the 2016-2020 SSP and the *2017 LATR Guidelines* that gives guidance to applicants for completing the ADA non-compliance assessment. Based on early experience with this new requirement, the execution of the pedestrian adequacy test presents several challenges – particularly in urbanized areas (i.e., Red and Orange policy areas identified in the 2016-2020 SSP), including: (1) the need for applicants to conduct an ADA non-compliance field survey that is “fair and reasonable” and (2) the need to ensure that the cost/burden associated with addressing inadequate pedestrian conditions is shared equitably among applicants in proximity to the development site.

To address these issues, MCDOT staff recommends the technical procedure described in the attached April 3, 2018 memo to Planning Department staff. The proposed procedure is tiered, based on the significance for access to the subject development project coupled with the likelihood of participation in addressing ADA non-compliance issues by other nearby development projects. An applicant’s requirements to fix or fund corrections to these conditions will depend on the location of the conditions relative to the project site. This procedure has been applied to the Marriott International Headquarters project in downtown Bethesda as described in the attached April 13, 2018 letter from Marriott’s engineering consultants to Planning Department staff. The proposed MCDOT technical procedure serves to provide useful guidance to other projects in need of addressing ADA non-compliance issues as an element of LATR requirements.

Staff will discuss the application of the proposed ADA non-compliance technical assessment procedure at the Planning Board’s July 19, 2018 meeting.

## Recommendation

**Staff recommends the Planning Board approve the proposed technical guidance for incorporation into the *2017 LATR Guidelines*.**

### Attachments:

1. April 3, 2018 memorandum, “MCDOT LATR Pedestrian Adequacy Test Technical Guidance”
2. April 18, 2018 letter, “Bethesda Marriott ADA Study Notice of Observed Deficiencies at Public Intersection Curb Ramps and Sidewalk Network within 500’ of Site Corners”

EG/PD/aj



Isiah Leggett  
County Executive

Al R. Roshdieh  
Director

DEPARTMENT OF TRANSPORTATION

MEMORANDUM

April 3, 2018

TO: Eric Graye, AICP, PTP, Planning Supervisor  
Functional Planning and Policy Division  
Maryland National Capital Park and Planning Commission

FROM: Rebecca Torma, Acting Manager *RT*  
Development Review Section  
Office of Transportation Policy

SUBJECT: Technical Guidance: 2016 Subdivision Staging Policy (SSP)  
ADA Noncompliance Test Procedures for urbanized areas

This memorandum provides guidance to the development community on how to perform the pedestrian system adequacy test as required in the 2016 Subdivision Staging Policy (SSP) and the Local Area Transportation Review (LATR) guidelines, Fall 2017. The SSP has a goal to achieve an approximately equivalent transportation level of service in all areas of the County and provides for multi-modal transportation adequacy tests, including a test for pedestrian system adequacy. The SSP requires that any site that generates more than 50 pedestrian peak hour trips (including trips to transit) must "fix (or fund) Americans with Disabilities Act (ADA) non-compliance issues within a 500' radius of the site boundaries..." However, there is little additional guidance in the SSP or LATR guidelines for completing this assessment. Based on early experience with this new requirement, MCDOT recommends the procedure outlined below to the Planning Department for determination of project compliance within urbanized areas (Red/Orange Policy Areas).

This procedure is tiered based on the significance for access to the project and likelihood of participation in addressing ADA non-compliance issues by other nearby projects. The applicant's requirements to fix or fund corrections to these conditions will depend on the location of the condition with respect to the project site.

1. **Establish evaluation tiers.** The project-specific tiers should be confirmed at the scoping stage by the Planning Department, in consultation with MCDOT, before any assessment is done. The following guidance is provided for determining the tiers.
  - a. **Tier 1 –Primary sidewalk**
    - i. The public or private street frontage of the project.
    - ii. The same side of street up to the nearest public street intersection, or a maximum distance of 250 feet from the project boundary, measured along the street.

Office of the Director

101 Monroe Street 10<sup>th</sup> Floor · Rockville Maryland 20850 · 240-777-7170 · 240-777-7178 FAX

[www.montgomerycountymd.gov](http://www.montgomerycountymd.gov)

Located one block west of the Rockville Metro Station

- iii. Approximately 25 feet along each intersecting street within 1.a.i and 1.a.ii.

**b. Tier 2 – Connected sidewalk**

- i. The same side of the street as the project between the first public road intersection and 250 feet (if applicable), measured along the fronting street.
- ii. The corresponding opposite side of the street as 1.a.ii and 1.b.i.
- iii. Approximately 25 feet along each intersecting street within 1.b.i, and 1.b.ii.

**c. Tier 3 –Network connections**

- i. Between 250 feet and 500 feet, measured along the fronting street.
- ii. The corresponding opposite side of the street.
- iii. Along both sides of each intersecting street in 1.a and 1.b, up to the next public road intersection or a maximum distance of 500 feet from the project boundary, measured along the street.
- iv. Approximately 25 feet further along each intersecting street identified in 1.c.iii.

**2. Adequacy Determination**

**a. Tier 1**

- i. The applicant should identify and fix ADA non-compliance issues with sidewalk ramps, traffic signals, significant trip hazards, cross slope deviations, and broken, missing, structurally failing sidewalks.
- ii. Beyond the site frontage, the applicant is not required to relocate utilities or traffic signal cabinets, reconstruct utility vaults, relocate fire hydrants, relocate street trees or relocate manhole covers.

**b. Tier 2**

- i. The applicant should identify and fix ADA non-compliance issues with sidewalk ramps, traffic signals, significant trip hazards, and missing or structurally failing sidewalks.
- ii. A minimum recommended contribution of \$100,000 toward ADA compliance may satisfy this requirement.

**c. Tier 3**

- i. The applicant should identify and fix ADA non-compliance issues with sidewalk ramps, traffic signals, significant trip hazards, and missing or structurally failing sidewalks.
- ii. A minimum recommended contribution of \$50,000 toward ADA compliance may satisfy this requirement.

- 3. For applicants to comply with the pedestrian system adequacy test, the contributions should be placed into a CIP fund for the relevant policy area (if applicable) or the countywide ADA Compliance Transportation CIP (P509325).

If you have any questions regarding this memorandum please call Rebecca Torma, at 240-777-2118.



April 13, 2018

Mr. Matthew Folden, AICP  
Planner Coordinator  
Montgomery County Planning Department  
Planning Area 1  
8787 Georgia Avenue  
Silver Spring, MD 20910

Re: Bethesda Marriott ADA Study  
Notice of Observed Deficiencies at Public Intersection  
Curb Ramps and Sidewalk Network within 500' of Site Corners

Mr. Folden:

Upon request by 7750 Wisconsin LLC, and BCH Hotel, LLC, between December 19<sup>th</sup>, 2017 and January 5<sup>th</sup>, 2018, Vika surveyors performed a field survey and field scan of the public sidewalk network within 500 feet of each corner of the proposed Marriott Headquarters site in Bethesda, MD. The field survey and scan was supplemented by field walks and visual observations by two engineers using a smart level. The goal was to investigate the sidewalk network and public intersection curb ramps for compliance with ADA standards and identify those deficient areas that are in keeping with MCDOT's April 3, 2018 memorandum regarding a 3-tier approach to the study. A general summary of the field observations at each intersection and sidewalk section, including deficiencies noted, has been listed below for each tier identified by MCDOT in their April 3, 2018 memo.

The ADA non-compliance study is being submitted concurrent with a certified site plan for the project in accordance with Condition 14 of the approved Preliminary Plan and Site Plan. Pursuant to the extensive discussions which transpired during the Planning Board's public hearing on this matter, the applicant will work with M-NCPPC, MCDPS, and MCDOT to determine which improvements are subject to fixing or funding pursuant to this condition (considering the scope, cost and magnitude of the identified improvements needed) and the applicant's pro-rata fair share of contributions to the non-compliant ADA issues identified in the study (considering other funding sources and other public and private projects/properties within 500 feet of the subject curb-ramps and sidewalks that should contribute to ADA improvements by virtue of redeveloping).

Summary of Field Observations (refer to ADA Study Exhibit for details):

Tier 1 – To Be Fixed

- Cracked/ uneven pavers – needs repair.
- Curb ramp cross slope exceeds 2%.

Tier 2 – To Be Funded

- Cracked/ uneven pavers – needs repair.
- Curb ramp is less than 36" wide.
- Curb ramp has less than 36" sidewalk at top of the ramp.
- Curb ramp longitudinal slope exceed 8.33%.

Tier 3 – To Be Funded

- Cracked/ uneven pavers – needs repair.
- Curb ramp cross slope exceeds 2%.
- No sidewalk ramp at driveway entrance.
- Curb ramp does not have a detectable warning mat.
- Sidewalk is less than 36" minimum width.
- Curb ramp is not contained in the crosswalk.
- Curb ramp gutter slope exceeds 5%.
- Curb ramp has less than 36" sidewalk at top of the ramp.
- No crosswalk at intersection.
- No curb ramp at the opposite side of the street.

Sincerely,  
**VIKA Maryland, LLC**

*Ghassan S. Khouri*

Ghassan S. Khouri,  
P.E. Associate

SHEET NO. \_\_\_\_\_