

MEMORANDUM

TO: Transportation, Infrastructure, Energy and Environment Committee

FROM: ^{GO} Glenn Orlin, Deputy Council Administrator
^{MF} Michael Faden, Senior Legislative Attorney

SUBJECT: **Worksession:** Bill 33-13, Streets and Roads – Urban Road Standards and Pedestrian Safety Improvements

Bill 33-13, Streets and Roads – Urban Road Standards and Pedestrian Safety Improvements, sponsored by Councilmembers Berliner and Riemer, was introduced on December 10, 2013 (see introduced bill, ©1-7). Bill 33-13 would limit the width of travel lanes, turning lanes, and parking lanes, as well as the size of intersection curb radii in urban areas. Under the Bill as introduced, curb extensions (also called sidewalk bulb-outs) would be required in many cases where a road in an urban area is reconstructed. The Bill as introduced also would set target speeds at which vehicles should operate in specific contexts, to provide both for mobility for motor vehicles and a safe environment for pedestrians and bicyclists.

The introduced Bill would require certain road improvements to include a sufficient pedestrian refuge area, direct developers building road improvements to add curb ramps where appropriate, and require curb ramps to be built in accordance with federal ADA Best Practices.

The public hearing was held on January 23, 2014. The testimony and later correspondence expressed general support for the Bill's objectives. However, testimony was divided between those who advocated guidelines that would allow engineers to craft case-by-case solutions (see ©8-14), and those who supported setting certain specific standards in the law and leaving the rest for the guidelines (see ©15-26).

Working Group The bill's co-sponsors convened a working group of staff from the Council, Planning Department, and the County Departments of Transportation (DOT), Fire & Rescue Services (DFRS) and Permitting Services (DPS) (see sponsors' memo, ©27-28). The group met four times during October, and it was assisted by Toole Design, a planning firm under contract to DOT which has considerable experience in developing complete streets standards and guidelines. From the outset the group's purpose was to explore these issues in detail, but not necessarily to achieve consensus.

Redraft

After this exploration, Chairman Berliner recommended revisions to the original bill (see redraft, ©29-37). His approach would specify a maximum target speed, lane width, and curb radius for streets in urban areas, which are Metro Station Policy Areas and Road Code Urban Areas designated by Council resolutions (a map showing them is on ©38). It also would require the County Executive to develop complete street guidelines in the next 18 months.

The first 3 recommendations would apply to County streets located in urban areas:

1. *Maximum target speed.* Under the current law, maximum target speed is defined as “the maximum speed at which vehicles should operate on a thoroughfare in a specific context, consistent with the level of multimodal activity generated by adjacent land uses, to provide mobility for motor vehicles and a safe environment for pedestrians and bicyclists” (see ©32, lines 66-70). The target speed is so called because all the roadway design elements should be used to bring drivers to the point where they feel most comfortable driving at that speed. This Bill as introduced would set a target speed for each road classification in each type of area: urban, suburban, and rural (see ©34-35, lines 130-136).

The redraft refocuses on urban areas, so it would not set target speeds in suburban and rural areas. The target speed for all County streets in urban areas would be 25 mph, unless otherwise specified in an adopted master plan or CIP project.

2. *Lane width.* The introduced Bill calls for the width of a motor vehicle travel lane to be no wider than 10 feet, except that an outside curb lane would be no wider than 11 feet, including the gutter pan. The redraft retains this recommendation, but if a case is made for wider lanes at a particular location, the Planning Board could grant a waiver for improvements by a developer, and the Council could adopt a different width for a capital improvements program (CIP) project by so specifying on a project description form (PDF) (see ©34, lines 116-121).

Although a few County streets have lanes that are narrower, especially for left turns, 10 feet is considered the minimum width that can accommodate general traffic on a through lane. There is less room to maneuver in 10 foot-wide lanes than in the more standard 11- and 12 foot-wide lanes, which means that drivers would be more cautious and drive slower. This is important in urban areas, especially during off-peak times when traffic is lighter. (During peak hours, congestion itself reduces the speed in most urban areas.)

3. *Curb radii.* Tighter corners at intersections produce two positive results for pedestrians: they slow vehicular traffic traversing crosswalks, and they shorten the distance for pedestrians to cross. The introduced Bill would set the maximum curb radius at 15 feet. The redraft would retain this standard, but would allow a different radius if approved by the Planning Board as a condition of plan approval or the Council for a CIP project (see ©34, lines 122-126).

No issue generated more discussion in the working group than curb radii. All participants agreed that several factors contribute to the geometry of a feasible curb radius: the width of the approach lane along the curb; the width of the “receiving” roadway, including the

number of receiving lanes and their widths; the presence or absence of a bike lane; the presence or absence of a curb extension (or bulb-out); the angle at which the streets cross (the skew); the degree of allowable encroachment in the cross-street's approach lane(s); the volume of buses, tractor-trailers, and other large vehicles regularly making the turn; and the ability of fire apparatus to negotiate the turn. It is likely that most waivers granted would apply to curb radii.

The recommendations that follow would apply to all County streets:

4. *Pedestrian refuges.* The introduced Bill would require any mid-street pedestrian refuge to be at least 6 feet wide, and require them on any divided highway (a road with a median) with 6 or more through travel lanes (see ©34, lines 127-129).

5. *Shared use paths.* Current law defines a shared use path as being 8-12 feet wide. The redraft recognizes that 10 feet should be the typical width, but that a path could be as wide as 14 feet if its volume is high and passing is frequent. On the other hand, a path could be as narrow as 8 feet wide where bicycle and pedestrian use is expected to be low and adequate passing opportunities would be provided, or a physical constraint, such as an environmental feature, bridge abutment, utility structure, or wall, is present.

6. *Separated and buffered bike lanes.* Separated bike lanes, also known as cycle tracks, are not now defined in the County Code, although they have been included in at least two recently adopted master plans. The redraft would define a separated lane as a bikeway that is separated from motor vehicle travel lanes by a physical barrier, such as a landscape panel or a line of parked cars. The bill also defines a buffered bike lane as one that is separated from motor vehicle lanes by striped pavement (see ©31, lines 46-52). Including these definitions in the law would encourage their inclusion in future design and construction standards and guidelines.

7. *Curb ramps and stormwater gratings.* The current law requires curb ramps, stormwater gratings and other similar openings in the roadway to be designed so they are not a hazard to bicycle and wheelchair traffic. The law allows the County to satisfy this requirement if the minimum American with Disabilities Act (ADA) standards are met. The introduced Bill would require a higher standard for these facilities, as described in ADA's best practices guidelines (see ©33, lines 93-101).

8. *Complete streets infrastructure.* The redraft would formally include "complete streets" and "complete streets infrastructure" in the purpose and definitions language of the County Road Code. Although this would not substantively change the current law, which already requires each transportation facility in the County to be designed for all users, it clearly emphasizes that transportation rights-of-way are for pedestrians, bicyclists, and transit riders, as well as those driving or riding in motor vehicles. The redraft also expressly encourages facilitating new technologies, such as intelligent signals, smart parking meters, electric vehicle charging, car- and bike-sharing, and way-finding systems, to the maximum extent possible (see ©30-31, lines 10-36 and ©31-32, lines 53-65).

9. *Sidewalks.* The current law leaves broad discretion to the Council (for CIP projects) and to the Planning Board (for conditions of development plan approvals) on whether sidewalks

must be installed with a road project. The redraft would limit that discretion to 4 situations: in very low density rural zones, along rustic or country roads, where limits on impervious surface apply, and on tertiary residential streets where the Planning Board finds that a sidewalk is unnecessary (see ©32-33, lines 72-92). Where permittees are required to install sidewalks, the redraft would also require curb ramps if necessary (see ©36, lines 139-159).

Complete streets guidelines. In the Working Group, members concluded that a comprehensive set of complete streets guidelines could be produced within 18 months. The redraft directs the Executive to transmit a Method 2 regulation to the Council by June 1, 2016 that would include these guidelines (see ©36, lines 161-163). If these regulations are received as scheduled, the Council could act on them before the 2016 summer recess.

Applicability. Under the redraft, its new standards would not apply to any road project already in final design or construction when the Bill takes effect.

This packet contains:	<u>Circle #</u>
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Bill No. 33-13
Concerning: Streets and Roads – Urban
Road Standards and Pedestrian
Safety Improvements
Revised: _____ Draft No. _____
Introduced: December 10, 2013
Expires: June 10, 2015
Enacted: _____
Executive: _____
Effective: _____
Sunset Date: _____
Ch. _____, Laws of Mont. Co. _____

**COUNTY COUNCIL
FOR MONTGOMERY COUNTY, MARYLAND**

By: Councilmembers Berliner and Riemer

AN ACT to:

- (1) specify maximum standards for lane widths and curb radii on urban roads,
- (2) further define certain required certain pedestrian improvements; and
- (3) generally amend the laws governing road design and construction.

By amending

Montgomery County Code
Chapter 49, Streets and Roads
Sections 49-4, 49-29, 49-32, and 49-33

Boldface	<i>Heading or defined term.</i>
<u>Underlining</u>	<i>Added to existing law by original bill.</i>
[Single boldface brackets]	<i>Deleted from existing law by original bill.</i>
<u>Double underlining</u>	<i>Added by amendment.</i>
[[Double boldface brackets]]	<i>Deleted from existing law or the bill by amendment.</i>
* * *	<i>Existing law unaffected by bill.</i>

The County Council for Montgomery County, Maryland approves the following Act:

1 **Sec. 1. Sections 49-4, 49-29, 49-32, and 49-33- are amended as follows:**

2 **49-4. Public-private participation.**

3 The County Executive, on behalf of the County, may contract with any person,
4 who is building a real estate development or subdivision in the County, to participate
5 in the cost of any street, sidewalk, bikeway, gutter, curb or drainage construction,
6 landscaping, traffic control device, bikeshare station, electric vehicle charging
7 station, or placement of utilities, conduits or amenities in a street or road dedicated to
8 public use.

9 **49-25. Purpose and short title.**

10 This Article is intended to guide the planning, design, and construction of
11 transportation facilities in the public right-of-way. Each transportation facility in the
12 County must be planned and designed to:

- 13 (a) maximize the choice, safety, convenience, and mobility of all users,
14 (b) respect and maintain the particular character of the community where it
15 is located, [and]
16 (c) minimize stormwater runoff and otherwise preserve the natural
17 environment, and
18 (d) facilitate the future accommodation of improved transportation
19 technology elements, such as intelligent signals, smart meters, electric
20 vehicle charging, car- and bicycle-sharing, and way-finding systems.

21 To achieve these goals, each County road and street must be designed so that
22 the safety and convenience of all users of the roadway system - including pedestrians,
23 bicyclists, transit users, automobile drivers, commercial vehicles and freight haulers,
24 and emergency service vehicles - is accommodated. Each road and street must
25 facilitate multi-modal use and assure that all users can travel [safety] safely in the
26 public right of way. A specified quantity of stormwater must be managed and treated
27 on- site, in the road or street right-of-way, including through the use of vegetation-

28 based infiltration techniques. These [contest] context-sensitive policies must be
29 employed in all phases of publicly or privately funded facility development,
30 including planning, design, construction, [and] reconstruction, and streetscaping.

31 * * *

32 **49-26. Definitions.**

33 * * *

34 *Target Speed:* the speed at which vehicles should operate on a [throughfare]
35 thoroughfare in a specific context, consistent with the level of multimodal activity
36 generated by adjacent land uses, to provide mobility for motor vehicles and a safe
37 environment for pedestrians and bicyclists. [The target speed is usually the posted
38 speed limit.]

39 * * *

40 **49-29. Pedestrian walkways, bikeways, and wheelchair traffic.**

41 * * *

42 (b) To promote the safety of bicycle and wheelchair travel throughout the
43 County, the County Executive must [establish] adopt, by regulation,
44 standards and specifications to build and maintain ramps at curbed
45 intersections and storm water gratings and other openings along roads
46 and streets, in each case of a design and type that is not a hazard to
47 bicycle and wheelchair traffic and is consistent with Americans with
48 Disabilities Act best practices guidelines published by the United States
49 Department of Justice. These ramps, gratings, and openings must be
50 built and maintained as part of each project under subsection (a).

51 **49-32. Design standards for types of roads.**

52 (a) The design standards adopted under this Article govern the construction
53 or reconstruction of any County road except Rustic Roads and
54 Exceptional Rustic Roads. If the Planning Board, in approving a

55 subdivision or site plan, [determines] finds that a waiver from any
 56 applicable design standard is necessary to promote context-sensitive
 57 design of a specific road, the Executive or the Executive’s designee
 58 must adopt the Board’s recommendation unless the Executive or [the]
 59 designee [concludes that] notifies the Board why approving the waiver
 60 would significantly impair public safety. The County Council may
 61 adopt alternative standards for a specific road constructed or
 62 reconstructed in a project in the approved capital improvements
 63 program.

64 * * *

- 65 (g) Each through travel or turning lane on an urban road must be no wider
 66 than 10 feet, except a through travel or turning lane abutting an outside
 67 curb, which must be no wider than 11 feet, including the gutter pan.
 68 Each parking lane on an urban road must be no wider than 8 feet,
 69 including the gutter pan.
- 70 (h) The curb radius at the corner of each intersection of urban roads must
 71 not exceed 15 feet. Curb extensions must be provided at the ends of
 72 each permanent parking lane except where a right-turn lane is
 73 designated.
- 74 (i) Each pedestrian refuge must be at least 6 feet wide. A pedestrian refuge
 75 must be provided at each intersection on a divided highway with 6 or
 76 more through travel lanes.
- 77 (j) Unless otherwise specified in a master plan or the approved capital
 78 improvements program, the target speeds in the table below must
 79 govern the construction or reconstruction of any County road except
 80 Rustic Roads and Exceptional Rustic Roads:

85 (e) If a lot or lots front on a public road, the permittee must install
86 sidewalks, ramps, curbs, and gutters, except on any Secondary or
87 Tertiary Residential Street[,] or on any Service Drive fronting on any lot
88 in a residential zone. This requirement does not apply if the minimum
89 net lot area for a one-family detached dwelling in that zone is larger
90 than 25,000 square feet, except that [a sidewalk must be installed] the
91 permittee must install sidewalks and ramps on any primary or higher
92 classification road. However, the Planning Board may require the
93 applicant to install sidewalks, ramps, curbs, and gutters in any such zone
94 if the Board finds, as a condition of approval of a preliminary
95 subdivision plan or site plan, that sidewalks, ramps, curbs, and gutters at
96 that location are necessary to allow access:

- 97 (1) to a sidewalk;
- 98 (2) to a bus or other public transit stop;
- 99 (3) to an amenity or public facility that will be used by occupants of
100 the site or subdivision; or
- 101 (4) by persons with disabilities.

102 Before the Planning Board approves any requirement under the
103 preceding sentence, the Board must give the Departments of Permitting
104 Services and Transportation a reasonable opportunity to comment on
105 the proposed requirement.

106 * * *

107 *Approved:*

108
109

Craig L. Rice, President, County Council

Date

6

110 *Approved:*

111

112

Isiah Leggett, County Executive

Date

113 *This is a correct copy of Council action.*

114

115

Linda M. Lauer, Clerk of the Council

Date

1

**Testimony of County Executive Isiah Leggett
before the Transportation, Infrastructure,
Energy and Environment (T&E) Committee**

Bill 33-13

January 23, 2014

Good evening, Chairman Berliner and members of the T&E Committee. For the record my name is Art Holmes, Director of Montgomery County's Department of Transportation, testifying on behalf of County Executive Isiah Leggett.

The County Executive and the Department of Transportation endorse the goals of the legislation to reduce vehicle speeds and provide improved pedestrian safety and mobility.

We support the design of transportation facilities which incorporate the policies of Complete Streets and Context Sensitive Design, providing a balance of transportation modes for all users and recognizing the context within which the facility is located.

The design and operation of intersections and roads in an urban environment is a complex matter that ultimately involves:

- the safety of all users of the facilities: pedestrians, bicyclists and motorists;
- the need to provide safe and adequate access for the delivery of goods and services to businesses that operate in urban environments;
- the accessibility and response time of emergency vehicles to ensure the protection of our residents and businesses.

There are more than 200 intersections in the four Urban Areas of Bethesda, Silver Spring, White Flint and Wheaton. And there are more than one hundred additional intersections in the other Urban Areas of the County.

The variability of factors at roadways and intersections throughout the County's urban areas means that each urban area presents different challenges. Significant differences exist between the down-county urban areas of Bethesda, Silver Spring and Friendship Heights in comparison with Urban Areas in Clarksburg, Damascus and Olney. These differences include congestion levels, pedestrian activity, development densities, vehicle speeds, frequency of large vehicles, uses of the streetscape, etc.

Therefore, we believe it is important to provide flexibility in designing roads and intersections so that in each urban area all factors can be adequately balanced. We suggest an approach that would develop design guidelines, similar to those developed and adopted in other major urban areas such as Boston and Chicago, to guide the design decisions involved in roadway and intersection design.

January 22, 2014

Montgomery County Council
Transportation, Infrastructure, Energy and Environment Committee
100 Maryland Avenue, 5th Floor
Rockville, MD 20850

**RE: Montgomery County Council Public Hearing
Thursday, January 23, 2014
Bill 33-13, Streets and Roads Urban Road Standards and Pedestrian Safety Improvements**

Dear Councilmembers:

RK&K has reviewed the draft legislation for **Bill 33-13, Streets and Roads Urban Road Standards and Pedestrian Safety Improvements** and appreciates the opportunity to offer comments on the proposed amendments. We have a long history of providing transportation engineering design services for Montgomery County, the State of Maryland, and a wide range of transportation and public works agencies throughout the Mid-Atlantic region. Furthermore, we are very familiar with the County's current Road Code (adopted in 2008) and a wide range of Complete Streets and Urban Design guidelines from our work with the County, MD SHA, MD MTA, WMATA, District of Columbia DOT, Virginia DOT, City of Takoma Park, City of Rockville, City of Alexandria, City of Falls Church, and others.

We applaud the County's efforts to strengthen its commitment to Complete Streets design principles. We believe the County made great strides in enhancing its ability to develop "Complete Streets", with the update to its Road Code and Roadway Design Standards, in 2008. We believe the proposed legislation is another valuable effort to further strengthen the County's ability to develop its roadways as complete streets that are safe and functional for all roadway users, including pedestrians, bicyclists, transit, cars, trucks, and buses.

We understand the objectives of the proposed legislation are to strengthen the County's ability to develop Complete Streets, by amending the road design requirements, defining pedestrian requirements, and specifying specific standards for various roadway components. The new guidelines include requirements for transportation technology; compliance with ADA guidelines; specific lane width, parking lane curb radii and refuge island minimum/maximum dimensions; revised target speeds and sidewalk ramp requirements.

While we understand and support the objectives behind each of the new requirements in the legislation, we would caution the County about setting specific limits for design features, such as lane widths and curb radii, since it is very difficult to identify specific lane widths and curb radii that are applicable to all potential situations. For instance, lane widths and curb radii should be guided by the appropriate design speed, design vehicle and land use, along with transportation functions within the project area. Transportation characteristics that could potentially vary include types of vehicles (cars, trucks, buses, emergency vehicles); operations (parking, loading/unloading, transit, taxi pickup, bicycling, and walking), among others. We believe it is important that design guidelines maintain some flexibility so that stakeholders have the opportunity to evaluate all of the goals, needs, and constraints of a specific project and develop a design that is most effective at meeting those goals, while appropriately considering the project constraints. In addition, design guidelines should have the flexibility to change with future research and technology, as they continue to evolve in the industry and in our society.

Personally, as a former Secretary of Maryland DOT, I would suggest forming a Working Group similar to the Boston approach, in developing your own set of Complete Street Guidelines. As a starting point, the Working Group might begin with the consideration of several available guidelines that have been developed by organizations with specialized expertise and experience in the design of Complete Streets principles. Discussions with those who have developed existing guidelines would also likely be beneficial. Based on my 48 years in transportation, learning from others who have already undertaken similar efforts regarding complex issues often provides real benefits to the final product.

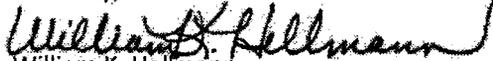
Potential resources include:

- City of Boston, *Boston Complete Streets Guidelines*
- City of Chicago, *Complete Streets Design Guidelines*
- City of Philadelphia, *Philadelphia Complete Streets Design Handbook*
- NACTO *Urban Street Design Guide*
- NACTO *Bicycle Design Guide*
- ITE *Designing Walkable Urban Thoroughfares: A Context Sensitive Approach*
- AASHTO *A Guide for Achieving Flexibility in Highway Design*
- AASHTO *Guide for the Development of Bicycle Facilities*
- AASHTO *Guide for the Planning, Design, and Operation of Pedestrian Facilities*
- FHWA *Manual on Uniform Traffic Control Devices (MUTCD)*

These resources would provide valuable information to the Working Group, regarding all aspects of Complete Streets design, including lane widths, parking lanes, curb radii, refuge island design, sidewalks, bike lanes, curb ramps, curb extensions, crosswalks, intersection design, transit lanes, transit stops, buffers, frontage space, street trees, signing, pavement markings, signalization, landscaping, etc. Considering the information presented by these resources, the Working Group would be able to develop a comprehensive set of Complete Street guidelines for Montgomery County. By utilizing the resulting comprehensive set of Complete Streets guidelines, future stakeholders (agency representatives, government officials, businesses, and community representatives) would then be able to develop a street design that best meets the specific needs and constraints of each individual project.

We appreciate the opportunity to provide our comments on the pending legislation for its Urban Road Standards. If you have any questions regarding our comments, please do not hesitate to contact me at 1.800.787.3755.

Sincerely,



William K. Hellmann

Partner Emeritus

(Former Secretary, MDOT)

Christopher Conklin
411 Oak Knoll Ter
Rockville, MD 20850
January 21, 2014

Montgomery County Council
100 Maryland Avenue
Rockville, MD 20850

Dear Councilmembers:

I am writing to suggest an alternative course of action to achieve the objectives of Bill 33-13 introduced by Councilmember Roger Berliner. The objectives of the Bill are laudable – providing for appropriate intersection design elements in urban areas. However, the rigid standards proposed are, by themselves, insufficient to achieve the stated objectives and may compromise the ability of design professionals to provide safe and effective facilities.

Intersection design is complex and involves a large number of variables. Detailed consideration of context-specific considerations is critical so that the most appropriate measures, within the constraints found at each location, can be incorporated. To provide a safe environment for pedestrians, the design also needs to make sure that routine service by large vehicles (transit, deliveries, fire & rescue, etc.) is safely accommodated. Requiring specific design values by law is counter to best-practices for context sensitive design and hampers the ability of design professionals to meet the continually evolving needs of our urban areas. In some ways, prescribing design values to apply to all situations is like requiring, by law, a doctor to prescribe one medication for all patients. As evidence, consider this statement by the National Association of City Transportation Officials (NACTO) in their highly-regarded *Urban Street Design Guide*:

“It is important to note that urban situations are complex. The treatments and topics discussed in this guide must be tailored to individual situations and contexts. NACTO encourages good engineering judgment in all cases.”

A few years ago, I had the privilege of working with the County Executive’s Task Force to develop the *Context Sensitive Road Design Standards*. During this process, addressing intersection design was identified as an area that needed additional work including stakeholder engagement. Using a stakeholder-informed process to develop intersection design guidelines is the best way for the County to meet its objectives for improving pedestrian and bicycle facilities in the County’s urban areas. This process would allow for formulation of guidelines that respond to the objectives of Bill 33-13 while recognizing the need for appropriate flexibility in design.

Respectfully,



Christopher Conklin

Testimony before the Transportation, Infrastructure, Energy and Environment (T & E)
Committee-January 23, 2014

Bill 33-13

Good evening Chairman Berliner and members of the T&E Committee. For the record, my name is Ron Welke. I was the Chief, Division of Traffic Engineering, in the Department of Transportation for Montgomery County (MCDOT) from 1974 to 1994. Subsequently, I was a Supervisor for Development Review at the Maryland-National Capital Park & Planning Commission (M-NCPPC) in Montgomery County from 1996 to 2004.

With that professional background, I bring a unique perspective to the issues and recommendations contained in Bill 33-13. In both of my positions, frequently I was involved in spirited discussions with professional staff from both agencies as well as local transportation engineering consultants regarding the specific elements of roadway and intersection design. I have the highest respect for Larry Cole at M-NCPPC and Edgar Gonzales and Emil Wolanin at MCDOT.

In my professional judgment, it is not appropriate to legislate traffic engineering design elements such as maximum target speeds, maximum curb radii and maximum lane widths in urban areas. The specific conditions related to each situation must be taken into account before a decision is made, and that is the job of the professionals. A balance must be reached between the competing and often conflicting goals of safety and mobility; of pedestrians, bicyclists and transit vehicles, in an urban environment.

For example, a curb radius of 15' does reduce the crossing distance at an intersection for pedestrians and tends to slow vehicles down as they make a right turn. However, a transit vehicle or a UPS delivery truck may not be able to make that right turn without either encroaching on the approach lane or mounting the curb, both safety issues. A 20' or 25' radius may be more appropriate in that case.

Similarly, setting target speeds or speed limits too low may violate driver expectations and cause a disparity in actual speeds, another safety issue. During my tenure with MCDOT, we established a safe and realistic speed limit policy that, to the best of my knowledge, is still in effect today.

These decisions should be left to the professionals. I recommend that the County Council set general goals in Bill 33-13, and that a working group be established to develop design guidelines that will reflect the consensus of all stakeholders and provide a balance between the safety and mobility objectives unique to each situation.

**Testimony by Francine E. Waters on January 23, 2014
before the Montgomery County Council during their consideration of
the
Bill 33-13, Road Code Amendments**

I am pleased to speak to you today on behalf of Lerner Enterprises, concerning our support of Bill 33-13, Road Code Amendments.

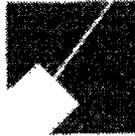
Lerner Enterprises has long supported the vision for the White Flint Sector and these amendments to the road code are one step closer in facilitating the realization of that vision. The implementation of pedestrian friendly, bike friendly, walkable, livable urban areas are embodied in the proposed road code amendments.

It is also important, however, to build in flexibility to accommodate freight, truck, fire and rescue movement. Consideration should be given to permitting, waiver and/or exception procedures as part of the application of this amendment such that the process not be laborious to the applicant. The Montgomery County Department of Transportation could perhaps administer the waiver rather than having the applicant return to the Planning Board for approval.

Language such as seen in the D.C. Design and Engineering manual that states "Where it is appropriate to provide for turning vehicles within minimum space, the corner radii should be based on the minimum turning path of the selected design vehicles." DDOT Design and Engineering manual provides additional guidance for urban traffic movements as cited on pages 31-7 and 31-8.

We would also ask that the language as found in the Section entitled Road Construction Requirements on page 6 Item e (3), be revised to include the first sentence of item 6 (e) in order to clarify that this condition applies only to the site and abutting public roads.

We applaud your efforts to lower speeds by reduced pavement widths, to increase pedestrian safety by shortening crossing distances, to minimize storm water runoff and to accommodate multi-modal transportation choices, to name but a few benefits of this bill. We look forward to the approval of the urban design road standards for Montgomery County and thank you for your consideration of our two modifications and/or clarifications.



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

OFFICE OF THE CHAIR

January 24, 2014

The Honorable Craig Rice, President
Montgomery County Council
100 Maryland Avenue
Rockville, Maryland 20850

Re: Bill 32-13: Motor Vehicles and Traffic - Off-Street Public Parking Regulations - Plug-in Vehicles, and Bill 33-13: Streets and Roads – Urban Road Code Standards Pedestrian Safety Improvements

Dear Mr. ^{Craig}~~Rice~~.

At our regularly scheduled meeting on January 23, 2014, the Planning Board discussed the aforementioned bills and voted to support them with the following comments:

Bill 32-13

We support Bill 32-13 as introduced.

Bill 33-13

We agree with the goals of Bill 33-13 to expand and enhance the county's complete streets policy and to facilitate the implementation of pedestrian- and bike-friendly, livable, walkable areas as envisioned in the county's approved master plans. We support passage of the bill with some detailed comments as enumerated below, but believe that some additional efforts should be made to meet its goals in a way that provide the flexibility needed for context-sensitive implementation.

We have now had more than five years of experience with both the 2007 changes to the Road Code and the subsequent 2008 Executive Regulations that were created to implement them. We believe that a comprehensive, multi-agency review of the Road Code is needed to assess the impact of the 2007 overhaul and recommend any additional necessary changes to the code. A state-of-the-practice review of other Complete Streets efforts nationwide should be included in this effort.

One item that we believe is overdue is the creation of Executive Regulations to govern the standards for intersection construction. This is an item that was put on hold due to the limited amount of time available to complete the rest of the road standards in 2008, but is greatly needed to facilitate development in our urban areas. We recommend that Bill 33-13 include language directing the Executive to complete these standards within eighteen months of the adoption of the bill, and that adequate funding be provided in the operating budget to cover the staffing and consultant services needed to complete this task as well as the multi-agency review.

The following additional comments are offered on Bill 33-13:

1. Delete "Section 3. Regulations" in its entirety.
2. Add "Bicycle-Pedestrian Priority Area" to Section 49-11(b)(1) as shown:
Section 49-11 Permit to obstruct public rights-of-way.
(b) The Director must not issue a permit for reconstruction or repair of a sidewalk or shared use path for more than 6 months, or to close a curb lane, sidewalk, or shared use path for work on an abutting structure, utilities, or infrastructure for more than 15 days, unless a safe alternate walkway or shared use path is provided on the same side of the street:
(1) in a Metro Station Policy Area, Town Center Policy Area, Bicycle-Pedestrian Priority Area, or other area expressly identified in a Council resolution;
3. Add: "Section 49-11(i): The Director of the Department of Permitting Services must maintain a publicly accessible database of all current permits granted by this section to close sidewalks, curb lanes, or bikeways with the dates of closure and reopening."
4. Section 49-26 Bikeway
 - a. (a): Revise as follows: "Shared use path: A paved path that is typically 10[8' – 12]' wide but that can vary between 8' and 14', that is designated for bicycles and pedestrians, and that is separated from motorized traffic by a [curb,]barrier[,] or landscape panel."
 - b. Add: "(d): Cycle Track: A bicycle facility that is physically separated from vehicular and pedestrian infrastructure. Separation may be vertical (curb), horizontal (landscaped panel, parking lane, bollards), or a combination."
5. Section 49-27: Revise as follows:
 - (a) This Article applies to all roads in the County, except any:
 - [(a)1] State road;
 - [(b)2] Federal road;
 - [(c)3] Road located in any park under the jurisdiction of the Maryland-National Capital Park and Planning Commission;
 - [(d)4] Private road; or
 - [(e)5] Municipally owned and maintained road.
 - (b) This Article also applies to County-maintained sidewalks and off-road bikeways along any road.

6. Sec 49-29(b): Add “and accessibility” after safety: “To promote the safety and accessibility of bicycle, pedestrian, and wheelchair travel throughout the County, the County Executive must establish, by regulation, standards and specifications to build and maintain ramps at curbed intersections and storm water gratings and other openings along roads and streets, in each case of a design and type that is not a hazard to bicycle and wheelchair traffic. These ramps, gratings, and openings must be built and maintained as part of each project under subsection (a).”
7. Add “at curb ramps at T intersections and” after “provided” in Section 49-32(h) as shown in Bill 33-13, as well as additional language to modify the strict requirement that curb radii not be greater than 15 feet: “The curb radius at the corner of each intersection of urban roads must not exceed the greater of 15 feet or the smallest feasible curb radius to accommodate the design vehicle. Curb extensions must be provided at curb ramps at T intersections and at the ends of each permanent parking lane except where a right-turn lane is designated.”

We suggest the language to soften the curb radius requirement because it appears that the 15-foot requirement may be too strict to accommodate all locations, including those where large trucks and buses may frequently be turning. The term “smallest feasible curb radius” is used in the Boston Complete Streets Guidelines, which may be useful to consult in the discussions on this bill.

8. Add Section 49-22(k): Shared use paths must be at least 10 feet wide except where:
 - (1) bicycle traffic and pedestrian use of the facility is expected to be low and adequate passing opportunities would be provided; or
 - (2) a physical constraint such as an environmental feature, bridge abutment, utility structure, or wall is present.
9. Add language on curb extensions to provide adequate and safe access: Section 49-33(e): If a lot or lots front on a public road, the permittee must install sidewalks, curbs, and gutters except on any Secondary or Tertiary Residential Street, or Service Drive fronting on any lot in a residential zone. This requirement does not apply if the minimum net lot area for a one-family detached dwelling in that zone is larger than 25,000 square feet, except that a sidewalk must be installed on any primary or higher classification road. However, the Planning Board may require sidewalks, curbs[,] and gutters, and curb extensions in any such zone if the Board finds, as a condition of approval of a preliminary subdivision plan or site plan, that sidewalks, curbs[,] and gutters, and curb extensions at that location are necessary to allow adequate and safe access:
 - (1) to a sidewalk;
 - (2) to a bus or other public transit stop;

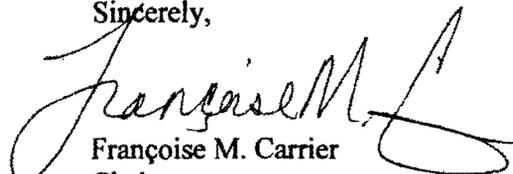
(3) to an amenity or public facility that will be used by occupants of the site or subdivision; or

(4) by persons with disabilities.

10. Add Section 49-33(l)(3): “Curbs in urban areas must not exceed six inches in height.”
11. Add Section 49-33(m): Continuous street lighting must be provided on all public roads and intersections in urban areas and Bicycle-Pedestrian Priority Areas to the standards of the American Association of State Highway and Transportation Officials.
12. Add reference to sidewalk: Section 49-36(g): “For any proposed road or sidewalk construction the permittee must post a notice in a conspicuous place on each project site as near to a public road as practicable. The notice must take the form of a sign that the Department must furnish to the permittee when the Department issues the permit. The sign must state that the construction is authorized by the Department of Permitting Services under permit and must display the permit number. The permittee must post the sign continuously during construction of the work covered by the permit and until final inspection. A person must not remove the sign until the Department completes its final inspection. If any other person removes the sign or if the sign is damaged, lost, or destroyed, the permittee must replace the sign within 24 hours, excluding Saturdays and Sundays. The Department must issue new signs upon request to replace signs that are damaged, lost, or destroyed. A permittee who does not comply with this subsection has violated the permit.”
13. Replace the term “shared use path” with “bikeway” in the following sections: 40-45(a), 49-34(e), 49-35(a)(1), 49-51, 49-57(1), 49-57(2), and 49-62(a).

Thank you for the opportunity to review these bills and for your attention to this matter. If you have any questions or comments concerning our review, please call Larry Cole at 301-495-4528.

Sincerely,



Françoise M. Carrier
Chair

Enclosure

11



Coalition for Smarter Growth

DC • MD • VA

January 23, 2014

Montgomery County Council
100 Maryland Ave
Rockville, MD

RE: Bill 33-13, Streets and Roads – Urban Road Standards and Pedestrian Safety Improvements

Dear County Council:

Thank you for this opportunity to comment on Bill 33-13 which seeks to amend the County’s Urban Road Standards. My name is Kelly Blynn and I am speaking on behalf of the Coalition for Smarter Growth, the leading non-profit group advocating for transit and walkable communities in the DC region, which counts thousands of supporters in Montgomery County.

Support for Bill 33-13

We support Councilmember Riemer and Berliner’s proposed amendments to the Urban Road Standards. We applaud the forward thinking transit investments that Montgomery County has committed to in recent years, and believe this bill will be a critical complement to those investments by creating a transportation network that is safe, accessible, and attractive to residents walking and cycling to transit stops.

Last year, Montgomery County saw a troubling rise in pedestrian fatalities, with over 11 fatalities by June of 2013. The pedestrian crash rate has held steady despite the best efforts of the Pedestrian Safety Initiative. While enforcement is one piece of the puzzle, nothing compares to the constant impact of good street design that encourages lower vehicle speeds.

This bill makes many critical changes to the Road Code that will ensure much safer and more accessible street designs for county roads for all users. One of those critical changes is reducing travel lane widths from 11’ to 10’ and curb lanes from 14’ to 11’, which is consistent with best practices from around the country. One 1997 study in Colorado found an exponential increase in accidents on wider streets compared to narrower streets, due to increased speeds.¹ While wide curb lanes were once believed to better accommodate cyclists, more current bike planning theory favors cyclists using the entire lane instead. Wider curb lanes can often encourage close passing at high speeds, creating a dangerous condition for cyclists.

A second key change would be reducing curb radii in urban areas from 30’ to 15’. Wide turning radii encourage fast moving turns, and make pedestrian crossings longer, creating dangerous pedestrian conditions.

Third, this bill would designate target speeds for different road classifications, a key measure which was omitted when the Road Code was last amended. Lower speeds are critical for reducing pedestrian fatalities: while less than 20% of pedestrians survive crashes with cars or trucks at 40mph, 55% survive at 30mph, and over 95% survive at 20mph.ⁱⁱ

19

The final change we would like to especially commend is to ensure that ADA best practices are enshrined in the

County's Road Code. Today, only minimum compliance is required, resulting in pedestrian facilities that are more uncomfortable and difficult for persons with disabilities, seniors, or those using strollers to use. One example of ADA best practices that make sidewalks more comfortable for persons with disabilities is maintaining a level sidewalk across driveways so those in wheelchairs have to navigate fewer ramps.

We understand some of these changes may spark concern about the ability for emergency services, public works, or other large vehicles to navigate urban streets. Our allies at the Congress for New Urbanism have done excellent work finding common ground between pedestrian safety and smart growth advocates, and the emergency response communityⁱⁱⁱ. Today nationwide, traffic injuries represent the vast majority of calls to fire departments compared to fire emergencies. By designing streets to reduce speeds, we can drastically reduce the number and severity of traffic-related crashes to begin with.

Another excellent report from the Local Governments Commission^{iv} looks closely at traffic calming measures' impact emergency response times. They found that while measures like speed humps caused several seconds of delay, curb extensions and reduced turning radii caused a negligible amount of delay or actually improved times. Given the enormous overall benefits to public safety of slowing traffic speeds, I urge you to look into these reports referenced in our testimony.

Proposed amendments

We join with Action Committee for Transit in recommending that the Council consider including school zones in addition to urban areas in this bill, in order to protect students who walk to school and encourage more children to do so.

Additionally, we support strengthening the requirements for pedestrian accommodations during construction. While changes have been made in the past to strengthen requirements, there have been egregious exceptions in recent years, including a closed sidewalk next to the Wheaton Metro station on Georgia Avenue for many months.

We also support the addition of cycle tracks to the definition of bikeways as requested by the planning department. Cycle tracks, which use height or bollards to create a barrier between cyclists and cars, have been shown to improve safety and encourage higher rates of cycling.

We'd also like to see the bill clarify the exemption of state roads from these regulations, since the county does maintain and sometimes constructs sidewalks in urban areas along state roads. Since many state roads are key pedestrian thoroughfares in urban areas and around transit stations, their inclusion is critical to the success of this bill.

We appreciate your consideration of these amendments and our suggestions, and thank you again for your work to protect the safety of pedestrians, cyclists, and drivers in Montgomery County. Thank you again for this opportunity.

ⁱ "Residential Street Typology and Injury Accident Frequency". Peter Swift, P. E., Dan Painter, AICP, Matthew Goldstein. http://www.cnu.org/sites/www.cnu.org/files/swift_painter_goldstein_study.pdf

ⁱⁱ "Designing Safe Urban Thoroughfares", Institute of Transportation Engineers. <http://www.ite.org/css/FactSheet9.pdf>.

ⁱⁱⁱ Congress for the New Urbanism, Emergency Response and Street Design Initiative. <http://www.cnu.org/emergencyresponse>.

^{iv} "Emergency Response: Traffic Calming and Traditional Neighborhood Streets". Dan Burden for Local Government Commission, 2001. http://www.lgc.org/freepub/docs/community_design/guides/emergency_response_manual_2001.pdf



Montgomery County Group

January 23, 2014

Dear County Council,

A profound obstacle to smart growth in Montgomery County is the difficulty pedestrians have doing the most common of actions: safely and comfortably crossing the street. To fulfill the county's goal of creating walkable, bikable, multi-modal communities, it is therefore critical that you pass Bill 33-13, Urban Road Standards and Pedestrian Safety Improvements. The Montgomery County Sierra Club strongly supports this bill and commends Roger Berliner and Hans Riemer for introducing it. Our roads and intersections are currently engineered with a car-first mentality, and this bill will go a long way toward changing that.

As a Montgomery County resident who lives without a car, I see firsthand every day the difficulties pedestrians face. My wife and I moved to Silver Spring in 2002 excited about the chance to give up our automobile and live in one of the premier smart growth communities in the United States. We were soon disillusioned by a constant stream of cars whipping down the street at untenable speeds, turning right in front of us at crosswalks, and otherwise hindering and endangering us. At that time there was a crosswalk to the Silver Spring library that nobody used, because cars would simply run people down; we had to walk to the corner to cross at the light merely to access the library. When we moved to Rockville in 2005, we saw more of the same. Among countless incidents, I recall an elderly lady with a cane stranded in a puny median because she was unable to cross Rockville Pike in the time given by the light. Other streets are engineered so that one cannot simply cross at the light; it takes waiting through three light cycles and crossing three times merely to get to the other side.

Bill 33-13 will put a stop to many of these problems, providing tighter turn radii, lower target speeds, and narrower lanes, slowing cars to speeds where they are less likely to hit pedestrians. Since each ten miles-per-hour greatly increases impact, it would lessen the damage of those accidents that do occur. According to a National Highway Traffic Safety Administration report, a car traveling 20 mph that strikes a pedestrian will kill only 5% of the time, but the number rises dramatically to nearly 100% at 50 mph (<http://www.nhtsa.gov/people/injury/research/pub/hs809012.html>). Creating pedestrian refuges would allow elderly, the handicapped, and families with children to safely cross the street in stages. Further codifying ADA best practices is also necessary; better facilities will allow the disabled to engage in basic tasks such as shopping and eating at restaurants. One caveat is that curb extensions should be built in such a way as to allow bicycle traffic to flow freely without obstructing cars.

The vast majority of those who make county laws, engineer county streets, and testify at meetings have a car and do not understand what it is like to live without one. Yet tens of thousands of residents without a vehicle have no voice in setting the policy that engineers our communities. In addition, more and more people, young and old, are choosing to live without a car; families, too, prefer not to have the burden of owning multiple vehicles. And, of course, most people with cars prefer to walk for errands, entertainment, and nearby destinations.

Our society's dependence on cars generates greenhouse gases along with asthma-inducing local pollution. It encourages road building and parking that lead to stormwater runoff and fragment nature. Creating walkable streets and neighborhoods will enable smart growth communities that counter these unsustainable practices. It will encourage people to further use Metro as well as the light rail and rapid transit systems that our county is building. Passing the right laws, and engineering our streets for use by all, is part of an investment in a sustainable future. We urge the County Council to pass Bill 33-13.

Sincerely,

Ethan Goffman
Transit Chair
Montgomery County Sierra Club Group

Streets and Roads - Urban Road Standards and Pedestrian Safety Improvements

Testimony Submitted to the Montgomery County Council, January 23, 2014

Presented by Cavan Wilk on behalf of the Action Committee for Transit

Montgomery County's urban areas are growing, but their wide, fast streets, designed to prioritize drivers over everyone else, are holding them back.

Bill 33-13 before the Montgomery County Council will unshackle our downtown areas as well as letting our emerging ones blossom to their true potential. The bill supports our county and state's explicit Smart Growth policies while further enhancing our environmental and economic health.

Bill 33-13 is an update of the county's Road Code, which was approved in 2008 as an attempt to create "complete" streets that accommodate pedestrians and cyclists in addition to drivers. To offer recommendations, County Executive Ike Leggett convened a 24-member task force, including representatives from groups like the Coalition for Smarter Growth and the Washington Area Bicyclist Association, as well as AAA. Many of the bill's progressive features fell by the wayside due to AAA pressure to allow wider roads and remove street trees, which spokesperson Lon Anderson called a hazard to drivers.

Bill 33-13 will help the Road Code fulfill its original purpose. Whether in emerging walkable urban places like Wheaton or already celebrated traditional walkable urban downtowns like Bethesda and Silver Spring that were built before cars became common, wide, fast streets are unpleasant to walk on at best, and at worst, a danger to pedestrians. This bill will make those streets safer by slowing traffic and forcing drivers to pay attention.

Opponents of this bill will complain about features such as smaller turning radii and ten foot wide lanes. They will try to pretend that the status quo doesn't really encourage drivers to speed around too-wide corners at 30 miles per hour into a lane that is as wide as those on an interstate highway. Curbs with smaller turning radii force drivers to slow down and look for pedestrians in the crosswalk while also decreasing the length of the crosswalk for pedestrians, making it safer and more convenient to cross the street.

Drivers drive as fast as they perceive road conditions will allow. They slow down on Connecticut Avenue south of East-West Highway because safe driving on the narrow lanes there requires more care and attention. The speed cameras on Connecticut Avenue record instances where a driver *doesn't* take heed of the road conditions. Meanwhile, drivers continue to speed on 16th Street between East-West Highway and Georgia Avenue because of the interstate-width lanes. The speed cameras there record drivers *who do* respond to road conditions. Our downtown areas need downtown streets, not interstate highways.

Further, many streets in economically vibrant walkable urban sections of the neighboring District of Columbia such as Woodley Park have narrower lanes and smaller turning radii. There is no evidence of unreasonable difficulty or any complaint from delivery vehicles about fulfilling orders. Durable goods and foodservice outlets are comparably well stocked as in Montgomery County.

The Action Committee for Transit believes that Bill 33-13 requires strengthening in order to fully meet its objectives. We reiterate our position in our Safe Walk to Schools Campaign that the maximum width on travel lanes near schools, regardless of the road type, should be ten feet. We also believe that the Montgomery County Department of Transportation should not be allowed to use sidewalk construction as an excuse for lane widening. The road code should specify that when sidewalks or other pedestrian improvements are built, lanes must remain at their existing width or be narrowed.

2

MONTGOMERY COUNTY COMMISSION ON PEOPLE WITH DISABILITIES
TESTIMONY BEFORE THE COUNTY COUNCIL
BILL 33-13 STREETS AND ROADS – URBAN STANDARDS AND PEDESTRIAN SAFETY IMPROVEMENT
Patricia Gallalee, Chair - Charlie Crawford, Vice-Chair
January 23, 2014

Good Evening. My name is Patricia Gallalee and I am testifying on behalf of the Commission on People with Disabilities. We are pleased to see that this bill includes language that the design and type of streets and roads are consistent with the proposed accessibility guidelines developed by the U.S. Access Board. Once these guidelines are finalized and adopted by the Department of Justice, they will become legally enforceable requirements. The Federal Highway Administration, the agency tasked with enforcing accessibility in the public right of way, already requires jurisdictions to use these guidelines in federally funded projects and uses them as a best practice when completing accessibility investigations.

The concern I have is that when we plan these pedestrian spaces that we keep in mind that use by a greater number of pedestrians means that we must build and maintain the sidewalks to be clear and unencumbered for proper movement and mobility. Large planters, trees surrounded by cobblestones, and sprawling outdoor restaurant seating can make it virtually impossible for the pedestrian to enjoy a pleasant walk. Now consider what this might be like if you are blind or using a wheelchair. At the Washingtonian Center I have had to disrupt someone's meal so that I could get by. I can't tell you how many times people have to scatter and jump out of the way of that cute train. I have experienced massive traffic jams during events in the town square here in Rockville due to the amount of clutter on the sidewalks. Right now the ice rink was installed and activated without moving any outdoor seating making it a challenge to navigate for both people with and without disabilities.

The proposed accessibility guidelines require that a pedestrian access route, continuous and unobstructed path of travel, be provided for pedestrians with disabilities within the sidewalk or path. There is a minimum required width of 4 feet with 5 foot wide passing areas every 200 feet. Alternate pedestrian access routes are required when the sidewalk is closed temporarily due to construction, maintenance, alterations and must be accessible. We ask you to support a 5 foot pedestrian access route and that it be enforced so that furniture, vending machines, utilities, construction equipment and other clutter do not obstruct access for people with disabilities

We ask you to consider including and increasing the number of shared use paths in master planning throughout the County. These are paths that provide a means of off-road transportation and recreation for various users, including pedestrians, bicyclists, runners, skaters and others, including people with disabilities. Shared use paths unlike most sidewalks are physically separated from streets by an open space or barrier. They also differ from trails because they are designed not just for recreation purposes but for transportation as well. They are used extensively in many jurisdictions.

The issue of making the roadways safe for all pedestrians, while important for all, is critical for people with disabilities. As a group, pedestrians with disabilities are less able to adjust to fast traffic and short cycling cross walk lights and run a higher risk of injury in these settings. Further, community streets should be safe for all pedestrians and should not be used as fast speed through-ways as a convenience for commuters. Making local streets and roads faster increases risk to all pedestrians (and disproportionately so for people with disabilities), reduces foot traffic and, hence, potential customers for local merchants and squelches the local economy.

For these reasons the Commission is in support of the amendments and request that you include language on shared paths as well as provide community education to the public as to who to call to enforce the standards. Thank you for the opportunity to speak with you tonight on this important issue.



2599 Ontario Rd. NW
Washington, DC 20009
P: 202.518.0524 F: 202.518.0936

WASHINGTON AREA BICYCLIST ASSOCIATION

WWW.WABA.ORG

**Testimony of the Washington Area Bicyclist Association for
Bill 33-13, Streets and Roads - Urban Road Standards and Pedestrian Safety Improvements**

To the Members of the Montgomery County Council:

Thank you for the opportunity to provide testimony on the Bill 33-13, Urban Road Standards and Pedestrian Safety Improvements. The Washington Area Bicyclist Association represents over 1,000 members in Montgomery County. Thank you to the Councilmember Berliner and Reimer for their leadership in making the streets and roads in Montgomery Council safer for all road users, especially the most vulnerable bicyclists and pedestrians

Montgomery County has taken many steps forward to support bicycling in the county, including building new trails, paths and on-street bike lanes and launching the highly anticipated Capital Bikeshare system. We applaud these efforts to encourage residents to use a bicycle for transportation and consider a change in the Montgomery County Code to support safer streets the next step in creating livable communities. Major elements of Bill 33-13, including narrowing travel lanes, lowering speed limits, and reducing curb radii to slow vehicles through intersection will be a great step in safer streets. We support these elements but have concerns about other proposed changes to the County Code and the potential unintended consequences for county bicyclists.

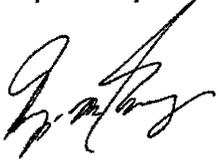
Bill 33-13 includes a provision to require curb extensions at the end of every parking lane. Curb extensions are an excellent intervention for slowing car traffic and creating safer crossings for pedestrians. However, many bicyclists ride in open parking lanes when traffic is heavy. Curb extensions could create conflicts at intersections where bicyclists would have to merge back into car traffic. The bill should consider bike-friendly designs that does not preclude bicyclist from using existing roads. Similarly, requiring pedestrian refuges at every intersection could create conflicts with existing and proposed bicycle lanes. The bill should direct county agencies to construct pedestrian refuges that accommodate standard on-street bike lanes and protected bike lanes.

Within the existing Montgomery County Road Code are four templates for the allocation of street space in business districts. This bill should amend these templates to include bike lanes as a standard feature on these streets. Bill 33-13 proposes narrower travel lanes which will create extra space. County staff should be advised through this bill to allocate this new space for standard on-street bike lanes or protected bike lanes. The current Road Code allows for inadequately narrow bike lanes when adjacent to parking lanes. This bill should amend the current Road Code to ensure bikes lanes are at least the standard width (5 feet) when next to parking. Narrow bike lanes put

bicyclists in harm's way of drivers who open car doors into the bicyclist's path; sufficiently wide bike lanes can significantly reduce the likelihood of such crashes.

With the changes outlined in this testimony, WABA supports Bill 33-13 and thanks the councilmembers Berliner and Reimer for leading the effort to create safer streets for all Montgomery County residents. Safer streets will encourage more county residents to choose alternative modes of transportation including transit, walking, and bicycling.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Greg Billing". The signature is stylized with a large initial "G" and a long, sweeping underline.

Greg Billing
Advocacy Coordinator
Washington Area Bicyclist Association



MONTGOMERY COUNTY COUNCIL
ROCKVILLE, MARYLAND

ROGER BERLINER
COUNCILMEMBER
DISTRICT 1

CHAIRMAN
TRANSPORTATION, INFRASTRUCTURE
ENERGY & ENVIRONMENT COMMITTEE

MEMORANDUM

April 10, 2014

TO: Arthur Holmes, Jr., Director, Department of Transportation
 Steve Lohr, Chief, Department of Fire & Rescue Services
 Diane Schwartz Jones, Director, Department of Permitting Services
 Gwen Wright, Director, Department of Planning

FROM: Roger Berliner, Councilmember 
 Hans Riemer, Councilmember 

SUBJECT: Staff working group for Bill 33 – 13, Streets and Roads - Urban Road Standards and Pedestrian Safety Improvements

Earlier this year we co-sponsored Bill 33-13 that would revise road construction standards to enhance the pedestrian and bicycle mobility and general traffic safety in our urban areas. The bill identifies particular quantified standard dimensions for lane widths, curb radii, and other street elements. The Council's January 23, 2014 public hearing on this bill demonstrated that there is overwhelming support in the community for this approach.

However, we recognize that these elements are closely interrelated, and there may be circumstances where the context would suggest different standards. Therefore, rather than bringing the bill directly to Committee worksessions, we prefer to have Council staff convene a working group—consisting of representatives from the primary County government stakeholder departments—to better understand these interrelationships and contexts. We understand the following staff members are being made available to participate in this working group over the next several weeks:

- Larry Cole and David Anspacher, Planning Department
- Bruce Johnston and Emil Wolanin, DOT
- Marie LaBaw, DFRS
- Atiq Panjshiri, DPS
- Glenn Orlin, Council staff

We have asked Glenn Orlin to chair the group and convene their meetings. One of us may attend meetings periodically as observers, so the meetings will be held in the Council offices.

We may not be able to reach a consensus among the staffs on all matters. Nevertheless, we believe this exchange of ideas and information will lead to our recommending a more nuanced set of recommended standards in the bill when it comes back before the T&E Committee.

Thank you for allowing your staffs to participate in this exercise. Glenn will be calling for the first meeting of this working group soon.

cc: Craig Rice, Council President
Nancy Floreen, Councilmember

RB:HR

Bill No. 33-13
Concerning: Streets and Roads – Urban
Road Standards and Pedestrian
Safety Improvements
Revised: 10-23-14 Draft No. 2
Introduced: December 10, 2013
Expires: June 10, 2015
Enacted: _____
Executive: _____
Effective: _____
Sunset Date: _____
Ch. _____, Laws of Mont. Co. _____

**COUNTY COUNCIL
FOR MONTGOMERY COUNTY, MARYLAND**

By: Councilmembers Berliner and Riemer

AN ACT to:

- (1) specify maximum standards for lane widths and curb radii on urban roads;
- (2) further define certain required certain pedestrian improvements; and
- (3) generally amend the laws governing road design and construction.

By amending

Montgomery County Code
Chapter 49, Streets and Roads
Sections 49-4, 49-25, 49-26, 49-29, 49-32, and 49-33

Boldface	<i>Heading or defined term.</i>
<u>Underlining</u>	<i>Added to existing law by original bill.</i>
[Single boldface brackets]	<i>Deleted from existing law by original bill.</i>
<u>Double underlining</u>	<i>Added by amendment.</i>
[[Double boldface brackets]]	<i>Deleted from existing law or the bill by amendment.</i>
* * *	<i>Existing law unaffected by bill.</i>

The County Council for Montgomery County, Maryland approves the following Act:

1 **Sec. 1. Sections 49-4, 49-25, 49-26, 49-29, 49-32, and 49-33 are amended**
 2 **as follows:**

3 **49-4. Public-private participation.**

4 The County Executive, on behalf of the County, may contract with any person,
 5 who is building a real estate development or subdivision in the County, to participate
 6 in the cost of any street, including any sidewalk, bikeway, gutter, curb or drainage
 7 construction, landscaping, traffic control device, bikeshare station, electric vehicle
 8 charging station, or placement of utilities, conduits, or other amenities in a street or
 9 road dedicated to public use.

10 **49-25. [[Purpose and short title]] Complete streets policy and standards.**

11 This Article is intended to guide the planning, design, and construction of
 12 transportation facilities in the public right-of-way. Each transportation facility in the
 13 County must be planned and designed to:

- 14 (a) maximize the choice, safety, convenience, and mobility of all users,
 15 regardless of age, ability, or mode of transportation,
- 16 (b) maintain or expand connectivity for users,
- 17 [[b)] (c) respect and maintain the particular character of the community
 18 where it is located, [and]
- 19 [[c)] (d) minimize stormwater runoff and otherwise preserve the natural
 20 environment, and
- 21 [[d)] (e) to the maximum extent possible, facilitate the future accommodation
 22 of improved transportation technology elements, such as intelligent
 23 signals, smart parking meters, electric vehicle charging, car- and
 24 bicycle-sharing, and way-finding systems.

25 To achieve these goals, each County road and street must be designed so that
 26 the safety and convenience of all users of the roadway system - including pedestrians,
 27 bicyclists, transit users, automobile drivers, commercial vehicles and freight haulers,

28 and emergency service vehicles - is accommodated. Each road and street must
 29 facilitate multi-modal use and assure that all users can travel [safety] safely in the
 30 public right of way. A specified quantity of stormwater must be managed and treated
 31 on- site, in the road or street right-of-way, including through the use of vegetation-
 32 based infiltration techniques. These [contest] context-sensitive policies must be
 33 employed in all phases of publicly or privately funded facility development,
 34 including planning, design, construction, [and] reconstruction, and streetscaping.
 35 Each transportation project must incorporate complete streets infrastructure sufficient
 36 to promote safe and convenient travel along and across the right-of-way for all users.

37 * * *

38 **49-26. Definitions.**

39 * * *

40 *Bikeway*: any area expressly intended for bicycle travel, including any:

41 (a) *Shared use path*: a paved path [[8'-12']] that is typically 10 feet wide
 42 but can vary between 8 feet and 14 feet wide, designated for bicycles
 43 and pedestrians, that is separated from motorized traffic by a curb,
 44 barrier, or landscape panel.

45 * * *

46 (d) *Separated bike lane*, also known as a protected bike lane or cycle track:
 47 a bikeway that is physically separated from motor vehicles and
 48 pedestrian facilities. The separation may be vertical, such as a curb;
 49 horizontal, such as a landscape panel or parking lane; or a combination.
 50 Separated bike lanes may be in one-way or two-way configurations.

51 (e) *Buffered bike lane*: a bike lane separated from a motor vehicle travel
 52 lane with an area of striped pavement.

53 Complete streets: Streets that are planned, designed, and constructed to enable
 54 safe access for all users, including pedestrians, bicyclists, motorists, and transit riders

55 of all ages and abilities, commercial vehicles, freight haulers, and emergency service
 56 vehicles.

57 Complete streets infrastructure: Design features that contribute to a safe,
 58 convenient, and comfortable travel experience, including such features as sidewalks;
 59 shared use paths, bike lanes, and separated bike lanes; bike stations and bike storage
 60 facilities; narrow motor vehicle lanes and tight curb radii; street trees, planting strips,
 61 and other right-of-way landscaping; curbs and accessible curb ramps; curb
 62 extensions, crosswalks, and refuge islands; raised medians; pedestrian and traffic
 63 signals, including countdown and accessible signals; signage; streetlighting; street
 64 furniture; bicycle parking facilities; stormwater management; public transportation
 65 stops and shelters; dedicated transit lanes; and traffic calming devices.

66 Maximum Target Speed: the maximum speed at which vehicles should operate
 67 on a [throughfare] thoroughfare in a specific context, consistent with the level of
 68 multimodal activity generated by adjacent land uses, to provide mobility for motor
 69 vehicles and a safe environment for pedestrians and bicyclists. [The target speed is
 70 usually the posted speed limit.]

71 * * *

72 **49-29. Pedestrian walkways, bikeways, and wheelchair traffic.**

73 (a) Bikeways and [[walkways]] sidewalks must be constructed when any
 74 County road is constructed, reconstructed, or relocated, [[unless the
 75 County Council finds (for a road improvement authorized in a capital
 76 improvements program) or the Planning Board finds (for a road
 77 improvement made a condition of preliminary plan or site plan
 78 approval) that bikeways or walkways sidewalks in that location would
 79 reduce public safety, would not be feasible, or would be
 80 disproportionate in cost to their probable use]] except any sidewalk:

- 81 (1) in front of a lot for a single-family detached dwelling in a rural
- 82 zone that is larger than 25,000 square feet;
- 83 (2) on any roadway classified as exceptional rustic, rustic, country
- 84 arterial, or country road;
- 85 (3) on a tertiary residential street if the Planning Board finds that a
- 86 sidewalk is unnecessary for pedestrian movement, or
- 87 (4) if the site is located in an environmentally sensitive area with
- 88 limits on the amount of impervious surface allowed.

89 [[All bikeways and walkways]] Each bikeway and sidewalk must
 90 conform to approved capital improvements programs and be consistent
 91 with applicable area master plans and transportation plans adopted by
 92 the Planning Board.

93 (b) To promote the safety of bicycle and wheelchair travel throughout the
 94 County, the County Executive must [~~establish~~] adopt, by regulation,
 95 standards and specifications to build and maintain ramps at curbed
 96 intersections and storm water gratings and other openings along roads
 97 and streets, in each case of a design and type that is not a hazard to
 98 bicycle and wheelchair traffic and is consistent with Americans with
 99 Disabilities Act best practices guidelines published by the United States
 100 Department of Justice. These ramps, gratings, and openings must be
 101 built and maintained as part of each project under subsection (a).

102 **49-32. Design standards for types of roads.**

103 (a) The design standards adopted under this Article govern the construction
 104 or reconstruction of any County road except Rustic Roads and
 105 Exceptional Rustic Roads. [[If the]] The Planning Board, in approving
 106 a subdivision or site plan, [~~determines~~] [[finds that]] may approve a
 107 waiver from any applicable design standard [[is]] when a waiver is

108 necessary to promote context-sensitive design of a specific road[[, the
 109 Executive or the Executive’s designee must adopt the Board’s
 110 recommendation unless the Executive or [the] designee [concludes that]
 111 notifies the Board why approving the waiver would significantly impair
 112 public safety]]. The County Council may adopt alternative standards
 113 for a specific road constructed or reconstructed in a project in the
 114 approved capital improvements program.

115 * * *

116 (g) Each through travel or turning lane on an urban road must be no wider
 117 than 10 feet, except a through travel or turning lane abutting an outside
 118 curb, which must be no wider than 11 feet, including the gutter pan[[.
 119 Each]], and each parking lane on an urban road must be no wider than 8
 120 feet, including the gutter pan, except where a waiver or alternative
 121 standard is approved under subsection (a).

122 (h) The curb radius at the corner of each intersection of urban roads must
 123 not exceed 15 feet[[.]] except where curb extensions are provided or
 124 where a waiver or alternative standard is approved under subsection (a).
 125 [[Curb extensions must be provided at the ends of each permanent
 126 parking lane except where a right-turn lane is designated.]]

127 (i) Each pedestrian refuge must be at least 6 feet wide. A pedestrian refuge
 128 must be provided at each intersection on a divided highway with 6 or
 129 more through travel lanes.

130 (j) Unless otherwise specified in a master plan or the approved capital
 131 improvements program, the maximum target [[speeds in the table below
 132 must govern the construction or reconstruction of any County road
 133 except Rustic Roads and Exceptional Rustic Roads:]] speed for a road
 134 in an urban area is 25 mph.

<u>[[Classification</u>	<u>Target Speed</u>
<u>Freeway</u>	<u>55-65 mph</u>
<u>Controlled Major Highway</u>	<u>50 mph</u>
<u>Parkway</u>	<u>urban: 25 mph</u>
	<u>Suburban: 40 mph</u>
<u>Major Highway</u>	<u>urban: 25 mph</u>
	<u>Suburban: 35-40 mph</u>
	<u>rural: 45 mph*</u>
<u>Country Arterial</u>	<u>Suburban: 40 mph</u>
	<u>rural: 40-45 mph*</u>
<u>Arterial</u>	<u>urban: 25 mph</u>
	<u>Suburban: 35 mph</u>
	<u>rural: 40 mph*</u>
<u>Minor Arterial</u>	<u>urban: 25 mph</u>
	<u>Suburban: 30 mph</u>
	<u>rural: 35 mph*</u>
<u>Business District Street</u>	<u>25 mph</u>
<u>Industrial Street</u>	<u>25 mph</u>
<u>Country Road</u>	<u>25 mph</u>
<u>Primary and Principal Secondary Residential Streets</u>	<u>25 mph</u>
<u>Secondary Residential Streets</u>	<u>20 mph</u>
<u>Tertiary Residential Street</u>	<u>20 mph</u>
<u>Alley</u>	<u>15 mph]]</u>

135 [[*Target speed for these classifications in suburban and rural
 136 commercial zones is 30 mph.]]

137 **49-33. Road construction requirements.**

138 * * *

139 (e) If a lot or lots front on a public road, the permittee must install
 140 sidewalks, ramps, curbs, and gutters, except on any Secondary or
 141 Tertiary Residential Street[,] or on any Service Drive fronting on any lot
 142 in a residential zone. This requirement does not apply if the minimum
 143 net lot area for a one-family detached dwelling in that zone is larger
 144 than 25,000 square feet, except that [a sidewalk must be installed] the
 145 permittee must install sidewalks and ramps on any primary or higher
 146 classification road. However, the Planning Board may require the
 147 applicant to install sidewalks, ramps, curbs, and gutters in any such zone
 148 if the Board finds, as a condition of approval of a preliminary
 149 subdivision plan or site plan, that sidewalks, ramps, curbs, and gutters at
 150 that location are necessary to allow access:

- 151 (1) to a sidewalk;
- 152 (2) to a bus or other public transit stop;
- 153 (3) to an amenity or public facility that will be used by occupants of
- 154 the site or subdivision; or
- 155 (4) by persons with disabilities.

156 Before the Planning Board approves any requirement under the
 157 preceding sentence, the Board must give the Departments of Permitting
 158 Services and Transportation a reasonable opportunity to comment on
 159 the proposed requirement.

160 * * *

161 **Sec. 2. Regulations; applicability.** The County Executive must transmit to
 162 the Council, by June 1, 2016, a regulation adopted under Method 2 that contains
 163 comprehensive complete streets guidelines. Any revised road design and
 164 construction standards in Chapter 49, as amended in Section 1 of this Act, do not
 165 apply to any road construction project that is in final design or construction when this

166 Act takes effect.

167 *Approved:*

168

169

Craig L. Rice, President, County Council

Date

170 *Approved:*

171

172

Isiah Leggett, County Executive

Date

173 *This is a correct copy of Council action.*

174

175

Linda M. Lauer, Clerk of the Council

Date

Master Plan of Highways & Transitways Montgomery County, MD

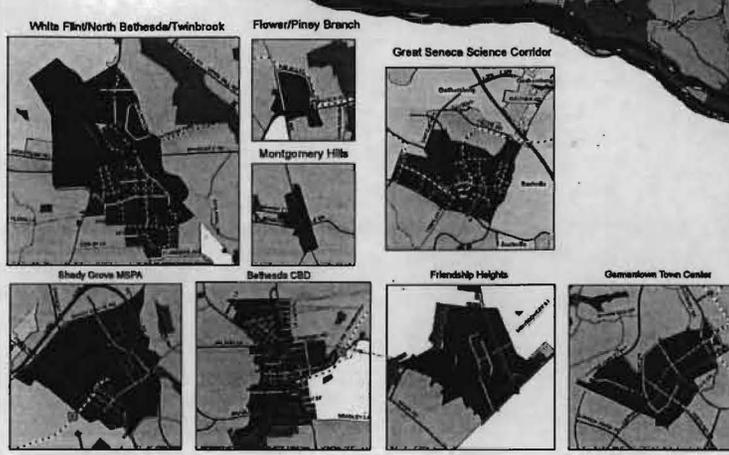
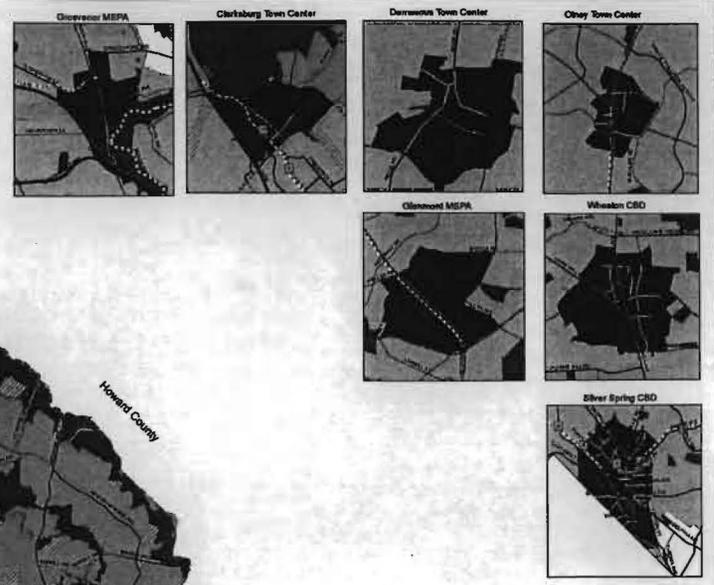
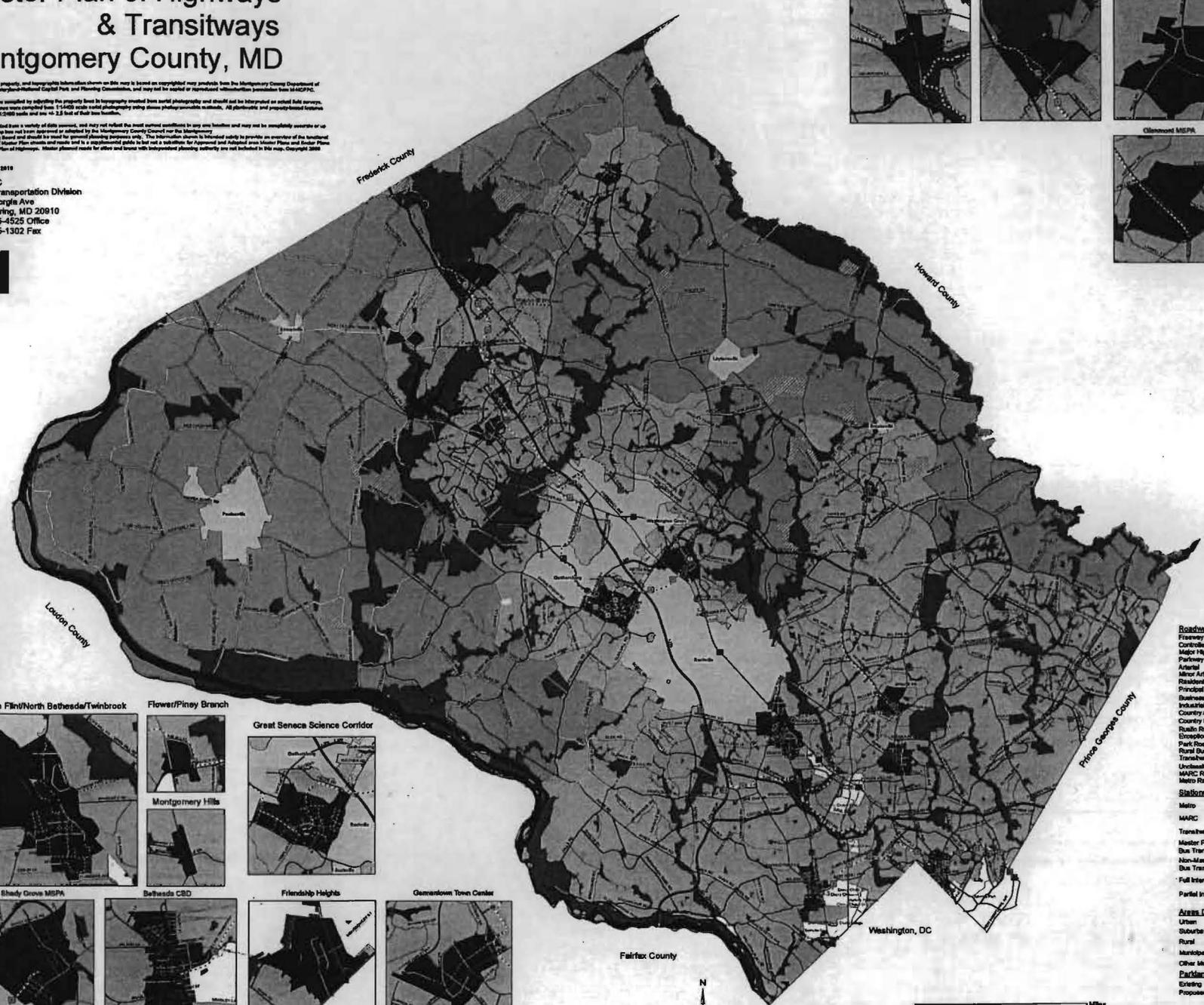
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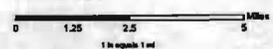
Drafted April, 2010

MNCPPC
MOVE/Transportation Division
8757 Georgia Ave
Silver Spring, MD 20910
(301) 495-4525 Office
(301) 495-1302 Fax



LEGEND

Roadway Classification	Existing	Planned
Freeway	—————	—————
Controlled Major Highway	—————	—————
Major Highway	—————	—————
Parkway	—————	—————
Arterial	—————	—————
Minor Arterial	—————	—————
Residential Primary	—————	—————
Principal Secondary	—————	—————
Business	—————	—————
Industrial	—————	—————
Country Arterial	—————	—————
Country Road	—————	—————
Rural Road	—————	—————
Exceptional Private Road	—————	—————
Park Road	—————	—————
Rural Business	—————	—————
Transway	—————	—————
Unclassified Road	—————	—————
MARC Rail	—————	—————
Metro Rail	—————	—————
Stations & Interchanges	Existing	Planned
Metro	■	■
MARC	■	■
Transitway Stops	■	■
Master Planned Bus Transit Center	■	■
Non-Master Planned Bus Transit Center	■	■
Full Interchange	●	●
Partial Interchange	○	○
Areas Designated in the Road Code		
Urban	■	■
Suburban	■	■
Rural	■	■
Municipalities with Independent Planning Authority	■	■
Other Municipalities	■	■
Parkland		
Existing	■	■
Proposed	■	■



38

LEGISLATIVE REQUEST REPORT

Bill 33-13

Streets and Roads – Urban Road Standards and Pedestrian Safety Improvements

DESCRIPTION:	Limits the width of travel lanes, turning lanes, and parking lanes, as well as the size of intersection curb radii in urban areas. Requires curb extensions (sidewalk bulb-outs) in many cases where a road in an urban area is reconstructed. Sets target speeds at which vehicles should operate in specific contexts. Requires certain road improvements to include a sufficient pedestrian refuge area, directs developers building road improvements to add curb ramps where appropriate, and requires curb ramps to be built in accordance with federal ADA Best Practices.
PROBLEM:	Certain design standards currently do not produce roads that are appropriate for urban areas and do not provide sufficient accommodate for pedestrians and bicyclists.
GOALS AND OBJECTIVES:	To provide both for mobility for motor vehicles and a safer environment for pedestrians and bicyclists.
COORDINATION:	Department of Transportation, Department of Permitting Services, Planning Board
FISCAL IMPACT:	To be requested.
ECONOMIC IMPACT:	To be requested.
EVALUATION:	To be requested.
EXPERIENCE ELSEWHERE:	To be researched.
SOURCE OF INFORMATION:	Michael Faden, Senior Legislative Attorney, 240-777-7905 Glenn Orlin, Deputy Council Administrator, 240-777-7936
APPLICATION WITHIN MUNICIPALITIES:	To be researched.
PENALTIES:	Not applicable.

Fiscal Impact Statement
Council Bill 33-13, Streets and Roads – Urban Road Standards and
Pedestrian Safety Improvements

1. Legislative Summary

The proposed bill:

- Limits the widths of travel lanes, turning lanes, and parking lanes, as well as the size of intersection curb radii in urban areas;
- Requires curb extensions (sidewalk bulb-outs) in many cases where a road in an urban area is reconstructed;
- Sets target speeds at which vehicles should operate in specific contexts;
- Requires certain road improvements to include a sufficient pedestrian refuge area;
- Directs developers building road improvements to add curb ramps where appropriate; and
- Requires curb ramps to be built in accordance with the federal Americans with Disabilities Act (ADA) best practices.

2. An estimate of changes in County revenues and expenditures regardless of whether the revenues or expenditures are assumed in the recommended or approved budget. Includes source of information, assumptions, and methodologies used.

The proposed legislation does not impact County revenues.

The fiscal impact on expenditures is limited to the cost of modifications to construction plans currently in the design stage. The range of costs of these modifications is unknown; such additional costs would be site specific and cannot be forecasted with any reliability.

For example, a project further along in design would incur a higher cost for the modifications under the proposed bill compared to a project in an early planning phase. In addition, the fiscal impact to a project is dependent on its size, complexity, and scope (i.e., a project with two or more turning lanes would require more modifications than a project with a single turning lane).

3. Revenue and expenditure estimates covering at least the next 6 fiscal years.

See item #2 above.

4. An actuarial analysis through the entire amortization period for each bill that would affect retiree pension or group insurance costs.

Not applicable.

5. Later actions that may affect future revenue and expenditures if the bill authorizes future spending.

Not applicable.

6. An estimate of the staff time needed to implement the bill.

The impact to staff time needed to implement the bill would be limited to potential modifications of construction plans currently in the design process. It is estimated that

this impact would be minimal, but would be site specific and cannot be forecast with any reliability.

7. An explanation of how the addition of new staff responsibilities would affect other duties.

Not applicable.

8. An estimate of costs when an additional appropriation is needed.

Impact on expenditures is limited to the cost of modifications to construction plans currently in design. It is not known with any specificity the value of these additional costs. Such additional costs would be site specific and cannot be forecasted with any reliability.

9. A description of any variable that could affect revenue and cost estimates.

Variables include the time and cost to modify current plans not yet approved and additional construction costs such as labor and materials for constructing to the proposed standards.

10. Ranges of revenue or expenditures that are uncertain or difficult to project.

Uncertain expenditures include: the additional time needed for design and the cost of labor and materials needed for modifying a project to the proposed standards.

11. If a bill is likely to have no fiscal impact, why that is the case.

The bill is likely to have a fiscal impact to the expenditure items specified in item #10.

12. Other fiscal impacts or comments.

Not applicable.

13. The following contributed to and concurred with this analysis: (Enter name and department).

Bruce Johnston, Department of Transportation

Naeem Mia, Office of Management and Budget



Jennifer A. Hughes, Director
Office of Management and Budget

1/13/14

Date

Economic Impact Statement
Bill 33-13, Streets and Roads – Urban Road Standards and Pedestrian Safety
Improvements

Background:

This legislation would limit the width of travel lanes, turning lanes, parking lanes, and the size of intersection curb radii in urban areas. Bill 33-13 (Bill) would require curb extensions where a road in an urban area is reconstructed. The Bill would set vehicle speed limits, provide for mobility of motor vehicles, and safety for pedestrians and bicyclists.

1. The sources of information, assumptions, and methodologies used.

The Department of Finance assumes that this bill will not affect construction plans that have been approved by the Montgomery County Planning Department and permits issues by the Department of Permitting Services.

2. A description of any variable that could affect the economic impact estimates.

Costs to developers to modify current plans not yet approved and additional construction costs such as labor and materials.

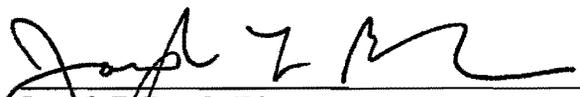
3. The Bill's positive or negative effect, if any on employment, spending, saving, investment, incomes, and property values in the County.

Because of the possibility of additional costs to the developers above current specifications as discussed in paragraph 2, it is not known with any specificity the value of those costs. Therefore such costs would be site specific and cannot be forecasted with any reliability.

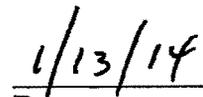
4. If a Bill is likely to have no economic impact, why is that the case?

It is uncertain that the Bill would or would not have an economic impact because of the availability of specific data.

5. The following contributed to and concurred with this analysis: David Platt and Rob Hagedoorn, Finance.



Joseph F. Beach, Director
Department of Finance



Date