

CHEVY CHASE VILLAGE

ESTABLISHED 1890

July 28, 2014

Ms. Melinda Peters
Administrator
Maryland State Highway Administration
707 North Calvert Street, C-400
Baltimore, MD 21202

RE: Pedestrian-Activated Traffic Signal at Connecticut Avenue (MD 185) and Lenox St.

Dear Ms. Peters:

I am writing on behalf of the Chevy Chase Village Board of Managers to strongly urge you to reconsider and halt the current plan to install a flashing yellow signal on MD-185 (Connecticut Ave.) at Lenox St. in Chevy Chase Village. We are pleased that SHA recognizes that changes are needed to protect pedestrians at this intersection, but we strongly feel that the currently planned change is ineffective and possibly dangerous. The signal proposed by SHA has a 65 percent failure rate according to Federal studies. Much better alternatives are available that are safer, cost-effective, and minimally disruptive to vehicular traffic.

The SHA plan was described in a letter to Ms. Patricia Baptiste dated April 15, 2014, and was further described by Cedric Ward of the State Highway Administration in his meeting with Village representatives on May 5, 2014. The flashing yellow light planned by SHA will not protect pedestrians and may even increase the risk of pedestrian and vehicle crashes. Based on a review of extensive Federal research on pedestrian safety, the only truly effective protection is to install a full color traffic signal.

Why we need a pedestrian crossing solution

- MD-185 is a six-lane arterial roadway that bisects Chevy Chase Village. The portion in the Village is by far the longest uninterrupted stretch of Connecticut Avenue inside the Beltway.
- Pedestrians need to cross MD-185 to access public transportation and to attend Village functions and access local government services in the Village Hall (which also houses the Village's 24-hour Communications Center and Police Department), use the post office, and access Village parks.

CHEVY CHASE VILLAGE

5906 Connecticut Avenue
Chevy Chase, Maryland 20815
Phone (301) 654-7300
Fax (301) 907-9721
ccv@montgomerycountymd.gov
www.chevychasevillagemd.gov

BOARD OF MANAGERS

MICHAEL L. DINGER
Chair
PATRICIA S. BAPTISTE
Vice Chair
RICHARD M. RUDA
Secretary
DAVID L. WINSTEAD
Assistant Secretary

GARY CROCKETT
Treasurer
ROBERT C. GOODWIN, JR.
Assistant Treasurer
ELISSA A. LEONARD
Board Member

VILLAGE MANAGER
SHANA R. DAVIS-COOK
LEGAL COUNSEL
SUELLEN M. FERGUSON

- The closest signalized intersection to the north is 1/3 mile away from the proposed signal at Lenox. Walking there to find a safe crossing point is impractical at best and effectively impossible for some of our residents.
- To the south is Chevy Chase Circle, which if anything is more difficult and dangerous for pedestrians to cross than MD-185.
- A recent accident where a resident crossing with his walker was struck by a car illustrates the danger.

Why the SHA's planned solution is unacceptable

- According to the Federal Highway Administration, flashing yellow signals of the kind SHA proposes result in only 35% of cars yielding to pedestrians.
- There already is a flashing yellow light near Lenox on southbound MD-185 to alert traffic about the upcoming traffic circle. Another flashing yellow light for pedestrians is thus likely to be even less effective than it would otherwise be.
- The proposed signal will not be visible to crossing pedestrians, so they will not even know whether it is still active when they attempt to cross the second half of the road, or whether its initiation was delayed to synchronize with the light at Bradley.
- The signal, while ineffective, may give pedestrians a false sense of security, making it possibly more dangerous than no signal at all.

Why "engineering judgment" is appropriate in this case

The law provides specific warrants (mostly vehicle or pedestrian traffic counts) for installation of a traffic signal, and also allows the use of engineering judgment. In our meeting with Cedric Ward, he indicated that engineering judgment only applies in situations where one of the numeric warrants is close to being met. We respectfully suggest that the law includes the option of engineering judgment to enable consideration of special circumstances that are not addressed by the listed warrants. Our situation is full of such special circumstances:

- MD-185 is a narrow roadway with no shoulder and a small median (about 46 inches) that provides little protection for pedestrians, bicyclists, people with children, or people with disabilities.
- The lanes are too narrow to allow buses and trucks to stay within one lane. So drivers are distracted to an unusual degree by partially blocked lanes and lane-changing traffic, making it more likely that pedestrians will not be seen.
- There are no left turn lanes, so cars frequently come to a stop in the left lane waiting to turn. This causes further distraction and more sudden lane changes.
- The Village has a relatively large number of older residents. Our median age is 11 years older than the over-all Maryland median age, and 12% of our residents are over 70.
- As described above, alternative crossing locations are either unreasonably distant or themselves dangerous.

- The closest alternative places to access bus transportation are Western Avenue and Wisconsin Avenue, both of which still require crossing MD-185 or navigating the Circle for our East side residents.
- The Village straddles MD-185, unlike other municipalities inside the Beltway. So the lack of a safe crossing place is especially important here.

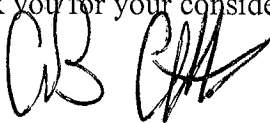
Residents of the Village request that a full color signal be installed on MD-185 at Lenox St. Because the full color signal will be pedestrian-activated, the disruption to vehicular traffic will be minimal but we will achieve a success rate in excess of 99 percent in vehicular yielding. In contrast, the proposed flashing yellow light achieves a vehicular yielding rate of about 35 percent and may actually increase pedestrian risk because the would-be pedestrian has no way of knowing that the vehicle has seen the signal and the vehicle is under no obligation to stop unless the pedestrian is in the roadway.

Nationwide, pedestrian safety is improving. In a recently-released report by the State Governors Association, pedestrian fatalities in the first six months of 2013 fell 8.7 percent compared with the same period in 2012. Unfortunately, Maryland is in the minority of states in which things are getting worse: Maryland pedestrian fatalities increased by 28 percent over this period.¹

We strongly urge SHA to take aggressive, effective steps to bring down this worrisome trend in pedestrian fatalities in Maryland. The pole-mounted flashing yellow light proposed by SHA has a 65 percent failure rate according to extensive analysis published by the FHWA. In the alternative, a full color signal has a 99 percent effectiveness rate in vehicle yielding. By selecting a signal with a high failure rate, SHA is allowing pedestrian safety to lag the nationwide trend in lowering pedestrian fatalities. Please take the alternative course of installing a full color signal that has been proven effective and help Maryland join the rest of the nation in protecting pedestrians.

We look forward to working with you to implement an effective pedestrian crossing for Chevy Chase Village.

Thank you for your consideration,



Chevy Chase Village Board of Managers
by Gary Crockett, Chair, ad-hoc Pedestrian Safety Committee

¹ Williams, A. Pedestrian Traffic Fatalities by State: Preliminary Data. Governors Highway Safety Association, March 2014.

Additional information

Arterial roadways such as MD-185 account for more than half of pedestrian fatalities nationwide.¹

The speed limit on MD-185 in the Village is 30 MPH. Pedestrians struck at this speed have a 25 to 45 percent fatality rate.²

Maryland vehicle code provides that a pedestrian does not have the right of way unless she/he steps into the roadway.³ Otherwise, vehicles have no obligation to stop for a pedestrian waiting at the curb or median strip.

Maryland vehicle code does not require a vehicle to stop for a flashing yellow light. A vehicle is only required to proceed with caution for a flashing yellow light.

In contrast, Maryland vehicle code does require a vehicle to stop for a red light.⁴

Maryland guidelines make it clear that pedestrian and bicycle traffic has equal importance with vehicular traffic in promoting safety.⁵

Extensive research by the Federal Highway Administration (FHWA) documents near-complete vehicle yielding to pedestrians with a full color signal (about 99 percent).⁶

FHWA research also documents substantial improvements in pedestrian safety when Hybrid Personal Beacons (HPB) or Rectangular Rapid Flashing Beacons (RRFB) are installed, although these devices are not as effective as a full color traffic signal (80+ percent effectiveness as opposed to 99 percent effectiveness for the full color signal).⁷

¹Smart Growth America, Dangerous by Design. May 2014, p. 11.

<http://www.smartgrowthamerica.org/documents/dangerous-by-design-2014/dangerous-by-design-2014.pdf>

² Speed camera data collected by Village of Chevy Chase. Impact Speed and Pedestrian's Risk of Severe Injury or Death, AAA Foundation for Traffic Safety, Sept. 2011, p. 9. FHWA Safety Program. Pedestrian Safety Strategic Plan: Background Report. Fig. 4. http://safety.fhwa.dot.gov/ped_bike/pssp/background/psafety.cfm

³ Maryland Driver's Manual, p. 13... <http://www.mva.maryland.gov/resources/docs/DL-002.pdf>. MD Annotated Code, Transportation Article §21-502

⁴ Maryland Driver's Manual, p. 12. <http://www.mva.maryland.gov/resources/docs/DL-002.pdf>. MD Annotated Code, Transportation Article §21-202 and §21-204.

⁵ State Highway Administration, Maryland Manual of Uniform Traffic Control Devices (MDMUTCD), section 4B.01. "Word such as pedestrians and bicycles are used redundantly in the sections of Part 4 to encourage sensitivity to these elements of 'traffic'."

⁶ Mead, J., Zegeer, C., and Bushell, M. Evaluation of Pedestrian-Related Roadway Measures: A Summary of Available Research, Federal Highway Administration, Publication No. DTFH61-11-H-00024, April 2013. See in particular pages 84-85.

⁷ See Mead, et al, *ibid*. See also Fitzpatrick, Kay, Susan T. Chrysler, Ron Van Houten, William W. Hunter, and Shawn Tanner. Evaluation of Pedestrian and Bicycle Engineering Countermeasures: Rectangular Rapid Flashing Beacons, HAWKS, Sharrows, Crosswalk Markings, and the Development of an Evaluation Methods Report, Federal

SHA representatives have stated that they are aware of the FHWA research and consider it valid.

Detailed analysis of SHA proposal

As described by SHA representatives, SHA plans to install two rectangular signs with a pedestrian-activated amber flashing light at two locations on MD-185 (Connecticut Ave.) approaching the intersection with Lenox St. The pedestrian will have a push button with a small red light to indicate that it has been activated. There will be no indication to the pedestrian when it is safe to cross the street. There will be no signal to traffic on Lenox St.

Consider what will happen when a pedestrian wishes to cross MD-185 safely. At present, a pedestrian waiting to cross MD-185 at Lenox St. has no protection and traffic does not stop for a pedestrian on the curb (this is the experience more than 99.9 percent of the time).

With the proposed flashing yellow light, a pedestrian presses the activation button. The pedestrian will have no way of knowing that the vehicles have seen a signal because the lights face away from the pedestrian. Initiating the flashing yellow signal may be delayed in order to synchronize it with a full color signal at Bradley Lane (about 1/3 mile north of Lenox St.). There will be no "Walk Now" or similar visual or audio signal to the pedestrian that it is safe to step into the roadway. The vehicle has no obligation to stop for a pedestrian waiting on the curb because the pedestrian is not in the roadway. As a consequence, traffic will continue to flow and the pedestrian will not have any improvement in safety compared with the current situation of no signal at all.

A pedestrian who has begun to cross MD-185 and is stopped at the median by oncoming traffic faces an even worse situation. Vehicles have no obligation to stop (and empirically, they do not stop). The pedestrian does not even have a pushbutton to activate the flashing yellow light at this point. If the pedestrian is stranded on the median while the flashing yellow light times out, there will no longer be any form of signal to approaching vehicles.

A Full Color Traffic Signal is Justified at Lenox St.

The SHA representatives rely exclusively on a single criterion (current pedestrian volume) in the Maryland Manual of Uniform Traffic Control Devices (MDMUTCD) to justify their decision while ignoring other warrants and common sense that would easily justify a full color signal. In both written and oral presentations, SHA representatives cite only the volume of pedestrian traffic crossing MD-185 as the basis for rejecting a full color traffic signal. The MDMUTCD offers nine warrants that may be considered in justifying a traffic signal, as well as the overarching guidance that "engineering judgment" and other data may also justify a signal. Among the factors not being considered are: presence of public facilities, age of the population,

Highway Administration, Pub. No. FHWA-HRt-11-039, April 2011, p. 16.
<http://www.fhwa.dot.gov/publications/research/safety/pedbike/11039/11039.pdf>. See also Fitzpatrick, K., and Park, E. Safety Effectiveness of the HAWK Pedestrian Crossing Treatment. Federal Highway Administration, Publication No. HRT-10-042, July 2010. <http://www.fhwa.dot.gov/publications/research/safety/10042/10042.pdf>

physical or other disabilities of the population, and accident history. The Village meets each of these considerations. The Village Hall and post office are actively used (more than 3,000 transactions at the Village Hall per year and more than 30,000 transactions at the post office). The average age of Village residents is above the national average. Several individuals with physical and/or visual disabilities live in the Village. Furthermore, in the last few months, one of the Village's older residents was struck while crossing MD-185 while he was using his walker.

The preponderance of this overall evidence makes it clear that conditions in the Village meet the intent and spirit of the factors that justify a full color signal.

A Pedestrian-Activated Full Color Traffic Signal at Lenox St. Will Not Adversely Affect Vehicular Traffic

The Village request for a pedestrian-activated full color signal at Lenox St. is a carefully developed proposal that will minimize negative impacts on vehicular traffic while providing excellent protection to pedestrians. The selection of the site minimizes cut-through traffic because West Lenox St. is a one-way eastbound street. Consequently, northbound traffic on MD-185 will not use the light to make a left turn. Traffic officials already have long-term experience with a very similar installation on MD-185 where a pedestrian-activated full color signal mid-block near Woodbine Street has been in operation for several decades. Because the light is normally green and is activated infrequently, there is de minimis interruption of vehicular traffic at this location.

A Full Color Pedestrian-Activated Signal is a Cost-Effective Alternative

We understand that the principal costs of the flashing yellow signal consist of site acquisition, surveying and engineering, and installation. The incremental cost of installing a full-color signal rather than a flashing yellow signal is de minimis. Furthermore, we understand from SHA representatives that funds already exist for installing such devices and that cost is not the deciding criterion.

The Proposed "Trial Period" Is Not a Satisfactory Substitute for a Full Color Signal

In your letter, you indicate that a flashing yellow light will be installed and evaluated after one year. This does not appear to offer any prospect for improving pedestrian safety. When Village residents met with Cedric Ward on May 5, 2014, residents asked what evidence from such a trial would lead him to consider that a full color signal is justified. Mr. Ward stated directly that no information could be collected that would lead him to conclude that a full color signal was justified. An unsatisfactory trial might result in the yellow signals being removed, but not in the full-color signal being installed.

Mr. Ward indicated that if the flashing yellow signal were found to not be stopping traffic for pedestrians, SHA would work with local enforcement personnel to increase compliance. Village representatives pointed out that it would be difficult, if not impossible, to enforce compliance if the flashing yellow lights were facing away from Lenox St. Unlike devices such as a red light

camera, no automated system would be able to document that vehicles were encroaching on pedestrian right of way while the signal was activated at the time.

What Specifically is Needed for Pedestrian and Bicycle Safety

In order to provide for pedestrian and bicycle safety, the Village strongly urges SHA to reject the flashing yellow light and instead to install a full color signal with the following attributes:

- A full color signal system that faces traffic on both MD-185 and the entering streets of East and West Lenox.
- A pedestrian-activated signal, showing solid green to vehicles on MD-185 unless a request for light change is initiated.

A pedestrian activation mechanism and interface that indicates to the would-be pedestrian or bicyclist in both visual and audio format when it is safe to cross MD-185.