



ARLINGTON COUNTY TRANSPORTATION COMMISSION

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Ms. Mary Hynes, Chair
Arlington County Board
2100 Clarendon Boulevard
Arlington, VA 22201

Traffic Signals Policy Recommendation

Dear Chairman Hynes,

I am writing on behalf of the Transportation Commission to recommend that the County develop a Traffic Signals Policy and implement several interim measures until a Traffic Signal Policy can be developed and adopted through a broad community process. The commission has endeavored over the last 6 months to start fulfilling more of the expectations set forth in the new Advisory Group Handbook. Specifically, we are working on the expectation to “Bring matters to the Board’s attention related to policy implementation or the need for new or revised policies.” This has not been a common practice for the commission over the last few years, but our goal will be to make this effort a priority at future meetings.

The Transportation Commission began exploring the topic of traffic signaling at its meeting on October 30, 2014. At that time, we invited Engineering & Operations staff to provide a presentation and participate in a Q&A with Commission members. Based on that session we identified a number of areas in which our signalization has not been brought up to date, particularly in facilitating pedestrian and bicycle crossings. Some examples:

- Crystal City has become a popular pedestrian destination with many lovely walkable streets and increasing retail outlets. Unfortunately for pedestrians, many intersections are less enticing; walk signals taking a long time to come and cause an increasing level of frustration for those who want to cross safely. In fact, if the pedestrian does not push a button to ask permission to cross, that walk signal may never come or s/he might have to wait 2 to 3 times longer than a motorist would ever have to wait to get through that intersection. Additionally, the walk signal may only last long enough to get the pedestrian to the median, forcing him/her to wait an additional long light cycle in order to complete the street crossing.
- Pentagon City has become a marvelous area for bicyclists, especially with the newly parking-protected, green-painted bike lanes. But if that bicyclist pulls up to the wrong intersection, s/he may be in for a rude surprise. Without a car, that red light in front of him/her may never turn green. That signal only changes to green when it detects a vehicle is waiting, and either isn’t capable of, or hasn’t been configured to detect a bicycle.

A core principle of our Master Transportation Plan (MTP) is “moving more people with less traffic”, but the MTP only recommends that signals be updated to LEDs in order to save energy and that signal timing be “optimized” every three years. Unfortunately, without any clarification as to what traffic signals should be optimized for, they seem to have been optimized to move cars as quickly and efficiently as possible, to the detriment of pedestrians and cyclists.

The Federal Highway Administration's *Signal Timing Manual* makes it clear that signal timing decisions cannot be made in a vacuum – engineers need policy that expresses the values and priorities of the community. A Signal Timing Policy does not take away the need for and use of an engineer's professional judgment. A Signal Timing Policy helps set the objectives for each signal timing plan and the engineers use their expertise and professional judgment to best meet those objectives. County staff have been responsive in offering to re-examine the timing of various signals, but this problem requires a comprehensive solution, not a piece-meal one.

Signal timing often requires trade-offs between various modes at an intersection, such as vehicles versus pedestrians and bicycles. These tradeoffs could result in competing ideas, such as safe pedestrian crossing times versus maximizing automobile capacity. A Signal Timing Policy would make clear the community's priorities and values and ensure that the timing of our signals reflect those priorities and values.

Poor signal timing can result in more than just delays; it can be a safety hazard. Pedestrians who repeatedly have to wait through long signal times at numerous crossings are less likely to obey the pedestrian signals. Cyclists who get a red at every light or every other light because their speed does not line up with the "progression speed" of the signal timing are less likely to obey those red lights.

The Transportation Commission believes that an in-depth solution to the deficiency of traffic signaling policy is needed for the County. We respectfully recommend to the Board the following:

- 1) Direct the County Manager to prioritize the development of a Traffic Signal Policy to guide County staff as they optimize signal timing and prioritize signal upgrades and procurements. This could potentially lead to a much-needed update to the Streets Element of the Master Transportation Plan.
- 2) Direct the County Manager to implement several interim measures until a Traffic Signal Policy can be developed and adopted through a broad community process including:
 - a. Signals that cannot detect cyclists should be prioritized for retrofit or replacement.
 - b. Signals should be adjusted so that Pedestrians never have to push a button in order to cross safely and legally throughout the Metro Corridors and in other areas of high pedestrian activity, such as Shirlington and the Columbia Pike corridor.
 - c. The top intersections for bicycle and pedestrian collisions should be evaluated to determine whether changes in Signal Timing and operations can reduce the conflicts that are leading to collisions.

I am happy to answer any questions at 571-482-8454 or chris@dodgersden.com

Best,

Chris Slatt
Chairman