


City of Alexandria, Virginia

MEMORANDUM

DATE: NOVEMBER 30, 2009

TO: THE HONORABLE MAYOR AND MEMBERS OF CITY COUNCIL

FROM: JAMES K. HARTMANN, CITY MANAGER 

SUBJECT: CONSIDERATION OF INSTALLATION OF PEDESTRIAN-ACTUATED TRAFFIC SIGNALS

ISSUE: City Council consideration of a recommendation to install pedestrian-actuated beacons to improve pedestrian safety in uncontrolled, midblock crosswalks on Yoakum Parkway, Duke Street at Telegraph Road, and Braddock Road.

RECOMMENDATION: That City Council authorize installation of the pedestrian-actuated beacons on: (a) 200 Block of Yoakum Parkway, (b) Duke Street at Telegraph Road (4) Mount Vernon Avenue at Kennedy Street and (3) Braddock Road at the Braddock Road Metrorail Station pursuant to City Code Section 10-2-7. Following a public hearing, the Traffic and Parking Board voted unanimously on November 23, 2009 to recommend installation of the beacons. The proposed location on Mount Vernon Avenue at Kennedy Street was previously approved as a development condition of Mount Vernon Commons (DSP 2005-00041) by City Council on Dec. 16, 2006.

BACKGROUND: Pedestrians are having difficulty crossing streets at several uncontrolled, midblock locations where motorists are not stopping or yielding for pedestrians in crosswalks.

To address the problem, the City proposes to install a new pedestrian-actuated beacon that may improve motorist compliance. Although the beacon is not in the current Manual on Uniform Traffic Control Devices (MUTCD) the Rectangular Rapid Flashing LED Crosswalk Beacon (Enhancer), was granted interim approval by the Federal Highway Administration in July 2008 for agency use at midblock crossings not controlled by traffic signals or stop signs.

This new device may provide the City with a lower-cost solution to a problem with many marked crosswalks that do not meet MUTCD warrants for the installation of traffic signals, which is that many motorists do not stop or yield to pedestrians crossing in the crosswalk. Where these beacons have been installed, independent evaluations have recorded that after one year over 85% of motorists stop or yield to crossing pedestrians with zero rear-end conflicts. A rapid flash beacon is currently being used successfully in Washington, DC after having been installed in the summer of 2008.

The locations proposed for installation are used by more than 25 pedestrians per hour during peak hour, are typically near heavily-used transit stops and are locations where staff has documented repeated community requests for safety improvements. A fourth location, the intersection of Mount Vernon Ave. and Kennedy Street, was approved for installation of a pedestrian-actuated warning signal by the City Council in 2006 in association with the Mount Vernon Avenue Commons project (which is also known as the “Triangle” property and “Del Ray Central”).

Other uncontrolled, midblock locations in Alexandria were identified for improvements in the 2008 Pedestrian and Bicycle Mobility Plan. Pending successful completion of this pilot, the beacons could be installed elsewhere in the City.

The locations currently proposed for installation of rapid flash beacons are:

1. 201 Yoakum Parkway (midway between Edsall Road and Stevenson Avenue): Heavily-used transit stops are located on both sides of the four-lane roadway between multi-family housing units. Until fall 2009, this location had no accessible curb ramps or marked crosswalk. The City added accessible ramps and a high-visibility crosswalk but the rapid flash beacon is intended to improve motorist compliance.
2. Duke Street at Telegraph Road: The sidewalk on the north side of Duke Street between West Taylor Run and Roberts Lane is heavily used by pedestrians headed to-and-from Old Town, PTO and the King Street Metro. Crosswalks currently exist at the two vehicular ramps but motorists rarely yield to pedestrians.
3. Braddock Road at Braddock Road Metro: This heavily-used mid-block location is currently delineated by in-pavement lights. By adding the rapid-flash beacons, the City intends to improve visibility of the signals and compliance by motorists.
4. Mount Vernon Ave. at Kennedy Street: As noted above, this location was approved as a development condition of Mount Vernon Commons (DSP 2005-00041) by City Council on December 16, 2006. The developer has contributed \$16,000 for installation of the pedestrian signal which will cover the complete signal installation at one crosswalk.

FISCAL IMPACT: The cost of installing the pedestrian-actuated beacons is estimated at approximately \$91,000 for assembly and installation. The beacons are solar-powered and will not require on-going electrical costs. Capital funding for this installation is included in the department’s FY 2010 budget.

STAFF:

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