



Legislation Text

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City of Alexandria, Virginia

MEMORANDUM

DATE: SEPTEMBER 5, 2018

TO: THE HONORABLE MAYOR AND MEMBERS OF CITY COUNCIL

FROM: MARK B. JINKS, CITY MANAGER /s/

DOCKET TITLE:

Consideration of a High-Intensity Activated Crosswalk Beacon (HAWK) Traffic Signal at the Intersection of Franklin and Alfred Streets.

ISSUE: Consideration of whether to install a High-Intensity Activated Crosswalk Beacon (HAWK) at the intersection of Franklin and Alfred Streets to control cars and allow pedestrians to cross safely.

RECOMMENDATION: That City Council approve the installation of the HAWK traffic signal at the Franklin Street and Alfred Street intersection, with approval to upgrade to a full traffic signal in the future if warrants are met.

BACKGROUND: Franklin Street is a one-way street going eastbound and serves as a major entry point to Old Town. Alfred Street is two-way and runs parallel to Patrick Street. In 2015 staff installed curb extensions, high visibility crosswalks and signage to improve this crossing however, pedestrians continue to face challenges because of the high traffic volume and speed and wide crossing distance. Additionally, there is a bus stop on the south side of Franklin Street.

DISCUSSION: During the Route 1 South Small Area Plan planning process, staff received a number of comments and heard concerns regarding pedestrian safety at the intersection of Franklin and Alfred streets. Staff also received consistent comments about this intersection in the Vision Zero planning effort. This intersection is adjacent to a high-crash corridor and staff has previously implemented measures to improve pedestrian safety at this location. However, the volume of vehicles turning right from Route 1 onto Franklin Street, particularly in the morning, continues to be a risk factor. Because of the ongoing community concerns, wide street width and volume of traffic, staff is recommending additional measures be taken to improve the safety of this crossing.

Staff conducted a traffic signal warrant analysis for this intersection in 2016. This intersection did not meet the

Manual on Uniform Traffic Control Devices (MUTCD) warrants for a regular traffic signal or a HAWK signal because traffic and pedestrian volumes were too low. However, a HAWK signal is proposed to address the complexity of the pedestrian crossing. Most of the Franklin Street traffic turns from Patrick Street onto Franklin Street. Pedestrians cannot see the Patrick Street traffic when they initiate their crossing. The distance is so short between the crosswalk and Patrick Street that pedestrians may not have enough time to complete their crossing by the time traffic turning from Patrick Street reaches the crosswalk at Franklin and Alfred Streets. This creates a very dangerous condition which the HAWK signal will improve. If this intersection meets the warrants for a full traffic signal, the City would upgrade the infrastructure in the future to provide the necessary equipment. The proposed HAWK signal will be designed and constructed in a manner to allow conversion into a full traffic signal if needed in the future.

The intersection of Franklin Street and Alfred Street is 275 feet from Route 1. The HAWK will be pedestrian actuated to prevent long queues of traffic from extending into northbound Route 1. The HAWK is a Federal Highway Administration approved signal-beacon designed to help pedestrians safely cross busy streets. The unit is dark until it is activated by a pedestrian. When pedestrians want to cross the street, they press a button that activates the warning flashing yellow lights. After a set amount of time, the indication changes to a solid yellow light to inform drivers to prepare to stop. The device then displays a dual solid red light for drivers on the major street and a walking person symbol (symbolizing WALK) for the pedestrians. The beacon then displays an alternating flashing red light, and pedestrians are shown a flashing upraised hand (symbolizing DONT WALK) with a countdown display advising them of the time.

Additional safety measures expected to be included as near-term mobility improvements in the Route 1 South draft plan will also be installed at this intersection. These include painted curb extensions and a concrete bus bulb to shorten the crossing distances and provide improved and accessible access to the transit stop.

On June 25, 2018 the Traffic and Parking Board recommended that the City Council approve the installation of the HAWK signal at this location with approval to upgrade to a full traffic signal in the future as warrants are met. The Traffic and Parking Board docket is included as Attachment 1.

FISCAL IMPACT: Complete Street funds have been identified for the construction of this signal as part of the Vision Zero Program and the near-term safety and mobility commitments made in the Route 1 South Small Area Plan. The installation cost is estimated to be approximately \$65,000. The operating fiscal impact of the proposed HAWK signal is minor, less than \$500 annually for electricity and maintenance and can be absorbed into the existing operating budget.

ATTACHMENTS:

Attachment 1: Traffic and Parking Board Docket

Attachment 2: Presentation

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