RHODE ISLAND DEPARTMENT OF TRANSPORTATION
ACCESSIBLE PEDESTRIAN SIGNAL
IMPLEMENTATION POLICY

I. Introduction

The Rhode Island Department of Transportation (RIDOT) shall follow this policy guidance with respect to the implementation of Accessible Pedestrian Signals (APS). When further regulations and guidelines regarding APS (such as the United States Access Board’s [USAB] Public Rights-Of-Way Accessibility Guidelines [PROWAG]) are updated and/or adopted by the USAB, the United States Department of Transportation, and/or the United States Department of Justice, this policy may be amended to be consistent with any required modifications.

II. Background

Title II of the Americans with Disabilities Act (ADA), 42 U.S.C. § 12132, or § 504 of the Rehabilitation Act, 29 U.S.C. § 794 requires access to the public right-of-way for people with disabilities. Access to traffic signal information is an important feature of accessible sidewalks and street crossings for pedestrians who have vision impairments. The Federal Highway Administration has strongly encouraged states to implement the draft PROWAG policy for APS installation pending approval of the final PROWAG guidelines. The national trend is to incorporate APS devices where feasible.

Section 4A.02 of the Manual on Uniform Traffic Control Devices (MUTCD) defines APS as a device that communicates information about pedestrian timing in a non-visual format such as audible tones, verbal messages, and/or vibrating surfaces. The draft PROWAG definition is similar, however, under PROWAG, APS devices must include both audible and vibrotactile functions. APS devices let pedestrians who are blind or visually impaired know when the WALK interval begins and terminates. APS devices can also provide directional guidance, which is particularly useful at non-perpendicular intersections and at wide multi-lane crossings. APS can also help blind pedestrians find the pedestrian pushbutton and be informed that the pedestrian actuation has been registered.

III. Implementation of APS for Construction Projects

Construction Projects are defined as work which will be advertised for completion by private contractor(s). If the scope and/or ultimate contract documents of a Construction Project includes one or more of the following at a given location(s), then the design of such project shall call for installation of APS at each such location (for all marked crosswalks in the signalized intersection) unless installation is deemed to be technically infeasible as determined by the RIDOT ADA Technical Infeasibility Determination Policy Design Waiver process.
• New and/or upgraded pedestrian signal head(s)
• New and/or upgraded pedestrian signal detector(s) and/or pushbutton(s)

IV. Implementation of APS for Maintenance Activities

Maintenance Activities are defined as work which will be completed by RIDOT employees (“in-house” staff) and not advertised for completion by private contractors. Traffic Signal-related Maintenance Activities include the following, whether they are completed on an emergency basis or not:

• Adjustment, repair, or replacement of traffic signal infrastructure
• Changes to traffic signal phasing or timing
• Inspection or evaluation of traffic signal infrastructure and/or operations

Installation of APS is not required for Maintenance Activities. However, for any of the following Maintenance Activities, the Highway and Bridge Maintenance Division shall notify the Managing Engineer of the Traffic Management and Highway Safety Section of the work, who will then place the intersection on a schedule for implementation of APS at a future date as described in Section V:

• Replacement of pedestrian signal head(s)
• Replacement of pedestrian signal detector(s) and/or pushbutton(s)

V. Requests for APS

If there is any question as to the applicability of either Section III or IV regarding APS implementation for Construction Projects and Maintenance Activities, the location(s) shall be evaluated as described in this Section.

RIDOT will consider requests to install APS at RIDOT-maintained signalized intersections based upon receipt of a completed APS request form (See Attachment 1). If the request is not a RIDOT maintained signalized intersection, then RIDOT Customer Service will inform the requestor to forward the request to the appropriate local authority.

RIDOT Customer Service will provide an acknowledgement of receipt of each APS request to the requestor within 30 days and inform the requestor whether an evaluation will be performed or whether the location is already included in a Construction Project.

When a request for APS is for a signalized intersection that does not currently include pedestrian signals, the RIDOT will make a request to the State Traffic Commission (STC) on behalf of the requestor for installation of pedestrian signals. The STC will consider the request, and if pedestrian signals are approved for installation, then APS will be installed as required by Section III.
If an evaluation is determined to be necessary, it will be completed and added to the priority list as shown in Section VI.

**VI. Prioritization of Implementation**

If it is determined that an evaluation is to be performed, staff from the Traffic Engineering Unit will then conduct an engineering evaluation of the signalized intersection to determine if installation of APS is justified. This evaluation should be completed based on guidance in MUTCD Section 4E.09 and by utilizing the National Cooperative Highway Research Program (NCHRP) Prioritization Tool included in NCHRP Project 3-62. In performing the evaluation, staff may consult with the Governor’s Commission on Disabilities and with the local jurisdiction to solicit community involvement and comments on the proposed request. The evaluation should also include environmental review including coordination with historic and cultural resources sections.

The MUTCD (Section 4E.09) states that if a signalized location presents difficulties for pedestrians who have visual disabilities to cross the roadway, an engineering evaluation should be conducted to determine whether installation of APS is necessary. The evaluation should consider potential demand or request for APS; traffic volumes including periods of low volumes or high right turn on red volumes; complexity of signal phasing or intersection geometry. These elements are included in the NCHRP Prioritization Tool discussed below.

The NCHRP Prioritization Tool provides traffic engineers and other technical practitioners with the means to take measurable characteristics of a pedestrian crosswalk and produce a rating that reflects the relative crossing difficulty for pedestrians who are blind or otherwise sensory impaired. The system of scoring is based on the premise that it is the individual crosswalk that is critical, as opposed to the APS intersection as a whole. However, if it is determined that APS is justified for one or more crosswalks, then APS shall be implemented for all crosswalks in the intersection.

The engineering evaluation will be used to determine a priority for the installation of APS devices. The score obtained from the NCHRP method shall be used to determine an overall rating. Where multiple requests are pending, the scores should be arranged in order from the highest to the lowest. Locations with the highest scores should be considered highest priority. The goal is for all requests for APS installation to receive a fair and equal assessment and to ensure that available funds are expended in the most effective manner. The resulting APS Priority List will be accomplished within a reasonable timeframe based on readiness of design and available funding.

The APS Priority List will be routinely updated based on additional requests and locations removed from the list (due to scheduled and completed work at signalized intersections via construction and/or maintenance work).

RIDOT will post the APS Priority List on its website for public review and comment. RIDOT may also schedule meetings with the Governor’s Commission on Disabilities to review the APS Priority List and other intersections which may be included in the Construction Program.
The APS Priority List will be used by RIDOT to schedule funding for design and construction of APS.

VII. Changes to This Policy

RIDOT reserves the right to amend this policy pending revisions to federal and/or state regulations and/or guidelines. The policy amendments will be made available on the RIDOT website for public comment prior to official incorporation.