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TRAFFIC OPERATIONS MEMORANDUM NO. 2003

ADA Project Compliance Scenarios for Traffic Signal Projects – September 2020

Effective Immediately, the following ADA project compliance scenarios for traffic signal projects are intended to provide supplemental design guidance to the Roadway Design Guidelines Instructional Bulletin 20-17 update regarding Chapter 3 (Multimodal Design).

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PBF:SKB
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ADA-PROWAG Project Compliance Scenarios for TDOT Traffic Signal Design Projects (September 2020)

Project Scenario #1

Project Description: This project plans to upgrade the traffic signal controller to an Advanced Transportation Controller (ATC), vehicular signal heads to Light Emitting Diode (LED), pedestrian signal heads to countdown pedestrian signal heads, and pedestrian pushbuttons to Accessible Pedestrian Signals (APS) devices at an existing signalized intersection. The intersection has existing crosswalks and curb ramps.

ADA-PROWAG Guidance: The existing curb ramps will be required to be upgraded to meet ADA-PROWAG standards since existing pedestrian signal facilities are being altered.

Project Scenario #2

Project Description: This project plans to upgrade the traffic signal controller to ATC and vehicular signal heads to LED at an existing signalized intersection. The intersection has existing crosswalks and curb ramps, but no pedestrian signal heads or pushbuttons for these crosswalks and curb ramps.

ADA-PROWAG Guidance: No upgrades to the existing curb ramps will be required since there are no existing pedestrian signal facilities being altered. In addition, no pedestrian signals and pushbuttons will be required for installation since there are none existing at the intersection.

Project Scenario #3

Project Description: This project plans to upgrade the traffic signal controller to ATC and vehicular signal heads to LED at an existing signalized intersection. The existing pavement marking crosswalks are being restriped and one of the crosswalks is being adjusted to provide a better alignment with the existing curb ramps. There are no pedestrian signal heads or pushbuttons for these crosswalks and curb ramps.

ADA-PROWAG Guidance: No upgrades to the existing curb ramps will be required since there are no existing pedestrian signal facilities being altered. In addition, no pedestrian signals and pushbuttons will be required for installation since there are none existing at the intersection. Restriping existing crosswalk pavement markings does not require upgrades to existing curb ramps.

Project Scenario #4

Project Description: This project plans to upgrade the traffic signal controller to ATC at an existing signalized intersection. The intersection has existing crosswalks and curb ramps, but no pedestrian signal heads or pushbuttons for these crosswalks and curb ramps.

ADA-PROWAG Guidance: No upgrades to the existing curb ramps will be required since there are no existing pedestrian signal facilities being altered. In addition, no pedestrian signals and pushbuttons will be required for installation since there are none existing at the intersection.

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Project Scenario #5

Project Description: This project plans to upgrade the traffic signal controller to ATC at an existing signalized intersection. The new ATC traffic signal controller has advanced pedestrian timing capabilities in the software (i.e. leading pedestrian intervals) that the existing traffic signal controller did not have, however the advanced pedestrian timing capabilities in the software are not being implemented as part of this project. The intersection has existing pedestrian signals, pedestrian pushbuttons, crosswalks, and curb ramps.

ADA-PROWAG Guidance: No upgrades to the existing pedestrian signals, pedestrian pushbuttons, and curb ramps will be required since there are no existing pedestrian signal facilities being altered. Please note that if the advanced pedestrian timing capabilities in the software are implemented in the future, then the existing pedestrian signals, pedestrian pushbuttons, and curb ramps will be required to be upgraded to meet ADA-PROWAG standards at that time since the existing pedestrian signal facilities would be altered.

Project Scenario #6

Project Description: This project plans to upgrade the traffic signal controller to ATC at an existing signalized intersection. The new ATC traffic signal controller has advanced pedestrian timing capabilities in the software (i.e. leading pedestrian intervals) that are not available in the existing traffic signal controller, but the advanced pedestrian timing capabilities are being implemented as part of this project. The intersection has existing pedestrian signals, pedestrian pushbuttons, crosswalks, and curb ramps.

ADA-PROWAG Guidance: The existing pedestrian signals, pedestrian pushbuttons, and curb ramps will be required to be upgraded to meet ADA-PROWAG standards since existing pedestrian signal facilities are being altered.

Project Scenario #7

Project Description: This project plans to only optimize both vehicular and pedestrian traffic signal timings at multiple existing signalized intersections along a roadway corridor. No new traffic signal equipment is being installed at these existing signalized intersections. The intersections have existing pedestrian signals, pedestrian pushbuttons, crosswalks, and curb ramps.

ADA-PROWAG Guidance: No upgrades to the existing pedestrian signals, pedestrian pushbuttons, and curb ramps will be required since this project only optimizes both vehicular and pedestrian traffic signal timings and no new traffic signal equipment is being added to these intersections along the roadway corridor. The optimization of vehicular and pedestrian traffic signal timings is considered a traffic signal maintenance activity if no new traffic signal equipment is being included in the project.

ADA-PROWAG Project Compliance Scenarios for TDOT Traffic Signal Design Projects (September 2020)

Project Scenario #8

Project Description: This project plans to install a new traffic signal at a location and include pedestrian signal features such as pedestrian signals, pedestrian pushbuttons, crosswalks, and curb ramps.

ADA-PROWAG Guidance: The new pedestrian signals, pedestrian pushbuttons, crosswalks, and curb ramps will be required to meet ADA-PROWAG standards.

Project Scenario #9

Project Description: This project plans to upgrade vehicular signal heads to LED at an existing signalized intersection. During the design process, it was determined that one of the intersection approaches needed the installation of an additional vehicular signal head and that all the vehicular traffic signal heads needed to be rewired. The intersection has existing pedestrian signals, pedestrian pushbuttons, crosswalks, and curb ramps.

ADA-PROWAG Guidance: No upgrades to the existing pedestrian signals, pedestrian pushbuttons, and curb ramps will be required since there are no existing pedestrian signal facilities being altered.

Project Scenario #10

Project Description: This project plans to upgrade existing vehicular detection (loop detection) to less intrusive vehicular detection (such as radar or video detection) at an existing signalized intersection. The intersection has existing pedestrian signals, pedestrian pushbuttons, crosswalks, and curb ramps.

ADA-PROWAG Guidance: No upgrades to the existing pedestrian signals, pedestrian pushbuttons, and curb ramps will be required since there are no existing pedestrian signal facilities being altered.

Project Scenario #11

Project Description: This project plans to upgrade the traffic signal controller software to a newer version because the traffic signal controller manufacturer released a new version of software for their traffic signal controller that fixes known bugs and makes their software more compatible with other devices. The intersection has existing pedestrian signals, pedestrian pushbuttons, crosswalks, and curb ramps.

ADA-PROWAG Guidance: No upgrades to the existing pedestrian signals, pedestrian pushbuttons, and curb ramps will be required since there are no existing pedestrian signal facilities being altered.

ADA-PROWAG Project Compliance Scenarios for TDOT Traffic Signal Design Projects (September 2020)

Project Scenario #12

Project Description: This project plans to install and/or replace existing sidewalks, curb ramps, and crosswalk pavement markings along a roadway corridor. One intersection along the roadway corridor is an existing signalized intersection that has existing pedestrian signals, pedestrian pushbuttons, crosswalks, and curb ramps.

ADA-PROWAG Guidance: No upgrades to the existing pedestrian signals, pedestrian pushbuttons, and curb ramps will be required since there are no existing pedestrian signal facilities being altered. However, the crosswalks and curb ramps at the existing signalized intersection would need to be upgraded to meet ADA-PROWAG standards if that type of work is required to be included in the project plans at all intersections along the roadway corridor.

Project Scenario #13

Project Description: This project plans to install and/or replace existing sidewalks, curb ramps, and crosswalk pavement markings along a roadway corridor. One intersection along the roadway corridor is an existing signalized intersection that has existing pedestrian signals, pedestrian pushbuttons, crosswalks, and curb ramps. The project plans include that the existing pedestrian signal heads will be upgraded to countdown pedestrian signal heads and the pedestrian pushbuttons to APS devices.

ADA-PROWAG Guidance: The existing pedestrian signals, pedestrian pushbuttons, and curb ramps will be required to be upgraded to meet ADA-PROWAG standards since existing pedestrian signal facilities are being altered.

Project Scenario #14

Project Description: This project resulted from conducting a routine traffic signal timing maintenance review at an existing signalized intersection. The intersection has existing pedestrian signals, pedestrian pushbuttons, crosswalks, and curb ramps. During the maintenance review, it was discovered on one of the pedestrian crossings that the pedestrian signal clearance timing interval (i.e. don't walk time) did not have enough time for a pedestrian to cross the roadway safely. The only change being made to the traffic signal controller is the correction of the pedestrian signal clearance timing interval.

ADA-PROWAG Guidance: No upgrades to the existing pedestrian signals, pedestrian pushbuttons, and curb ramps will be required since the pedestrian signal timing alteration was being made during a routine traffic signal timing maintenance review of the existing signalized intersection.