



NC Capital Area Metropolitan Planning Organization

Staff Report

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Agenda Date: 4/1/2021
To: Technical C

Agenda Item: 5.2

NCDOT Multimodal Connected Vehicle Pilot Project

Keith Mims, NCDOT

The North Carolina Department of Transportation (NCDOT) Multimodal Connected Vehicle Pilot (MMCVP) aims to create a connected environment that can evaluate the impact of Connected Vehicle (CV) technology on driver and pedestrian safety. This connected environment will include an application delivering safety notifications to all users of the multimodal application: pedestrians, cyclists, transit, and motorists. The CV applications will use a hybrid DSRC/cellular communication system with in-vehicle and roadside CV infrastructure.

The pilot will also focus heavily on improvements to the NCSU Wolfline bus system. To improve transit vehicle efficiency, a new Intelligent Traffic Signal System (I-SIG) will be deployed to implement Transit Signal Priority (TSP) and collect and analyze High-Resolution Data.

The NCDOT MMCVP explores technologies to improve the day-to-day transportation experience for pedestrians, cyclists, motorists, and transit drivers and passengers. To properly evaluate the integration of these technologies, a small geographic area inclusive of the NCSU campus was identified as an ideal location for testing. Using the data gathered in the pilot, NCDOT Multimodal Connected Vehicle Pilot (MMCVP) hopes to expand the successful technologies to additional geographic areas in the region and across the state.

Requested Action: Receive as information