

Safety Pilot Project

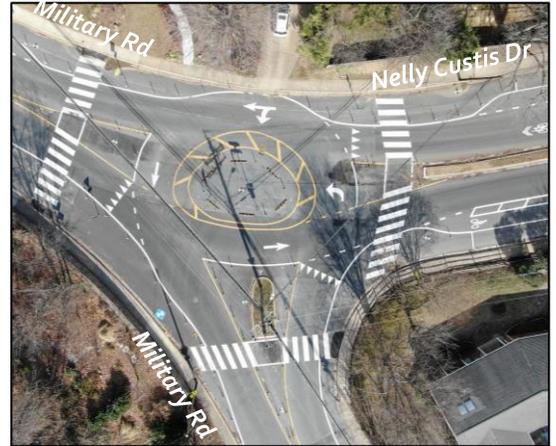
Military Road & Nelly Custis Drive Temporary Roundabout

Project Description: The County piloted a temporary roundabout to increase safety and functionality at the intersection of Military Road and Nelly Custis Drive. Findings from the pilot informed the design of safety improvements to be constructed during the final phase of the [Military Road Safety Improvements Project](#).

Safety Objectives: The goals of the project were to increase driver yield rates, shorten crossing distances for people walking through the intersection, provide predictable vehicle turning movements, reduce vehicle speeding, and improve overall intersection operations.

Project Timeline:

- **Fall 2021:** Temporary Roundabout Installation
- **Winter 2021/22:** Data Collection & Observation
- **Spring 2022:** Community Meeting & Feedback
- **Summer/Fall 2022:** Data Collection & Observation
- **Fall 2022:** Community Meeting & Recommendations



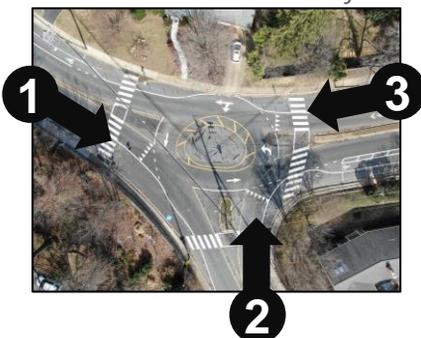
Before & After Data

Performance Measures: Metrics to assess the impacts of this pilot included (1) vehicle speeds, (2) driver yield rates to pedestrians crossing at the crosswalks, and (3) vehicle-to-vehicle yield rates.

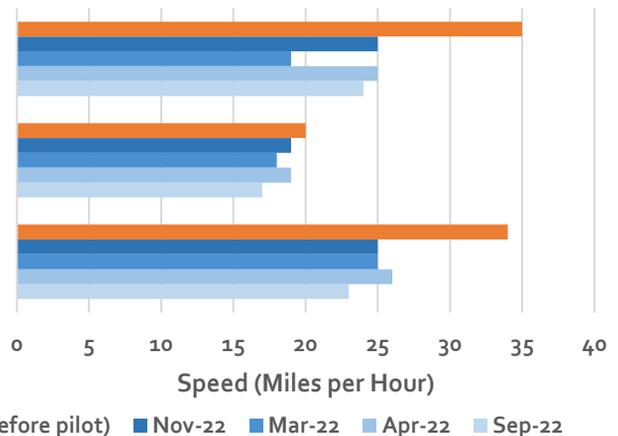
Speed: The pilot successfully reduced vehicle speeds from all approaches. Speeds on southbound Military Rd & westbound Nelly Custis approaching the intersection went from 34-35MPH before the pilot to 19-26MPH during the pilot. Speeds on northbound Military Rd saw a minor reduction from 20MPH to 18-19MPH.

Speeds Approaching the Intersection

Numbers on map correspond with numbers on chart at left.



- (1) Eastbound Military Rd West of Nelly Custis Dr
- (2) Northbound Military Rd South of Nelly Custis Dr
- (3) Westbound Nelly Custis Dr East of Military Rd

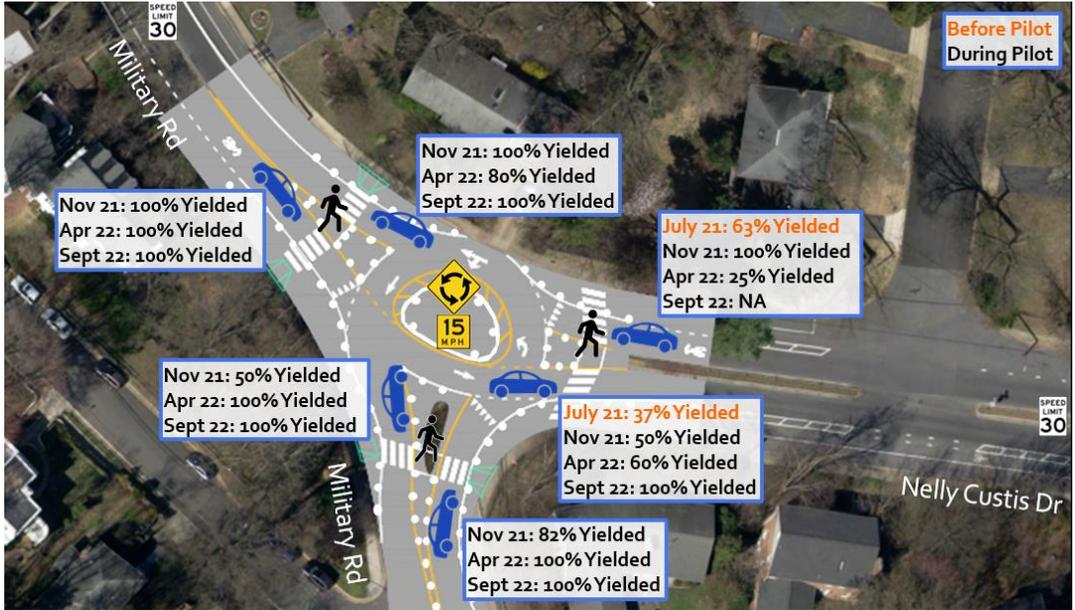


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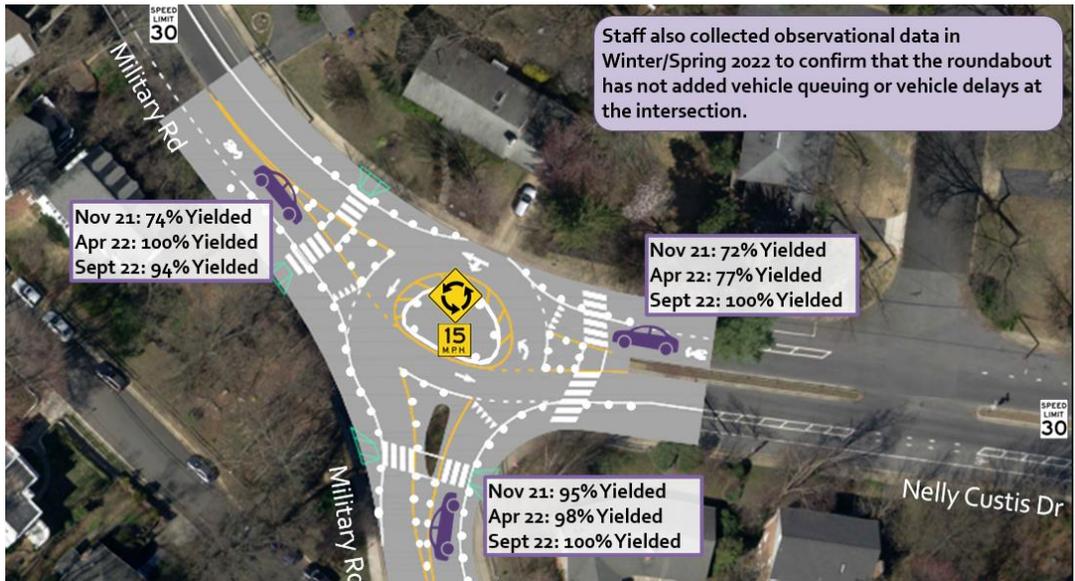
Driver Yield Rates to Pedestrians Crossing:

Despite a low sample size, data generally indicate that yield rates are high for pedestrians at new crosswalks and improved at pre-existing crosswalks.



Vehicle-to-Vehicle Yield Rates:

Vehicle to vehicle yield rates have improved over the course of the pilot, indicating that drivers are becoming familiar and responsive to the roundabout.



Findings & Next Steps

Due to positive safety impacts, the temporary roundabout pilot condition will remain in place as the “interim condition” before the construction of the permanent roundabout capital project. The temporary roundabout will be enhanced in the spring 2023.

