



Route 1, County Route 522 to Thomas Avenue, Hard Shoulder Running (HSR) Pilot Project

South Brunswick and North Brunswick Townships, Middlesex County

Virtual Public Information Center - Presentation Transcript

SLIDE 1 – Cover and Introduction

Hello. I am here to provide a presentation on the Route 1 Hard Shoulder Running pilot project. The project runs from County Route 522 to Thomas Avenue in South Brunswick and North Brunswick Townships in Middlesex County. The NJDOT Project Manager is Aimee Hurst. The designer is Advantage Engineering Associates. My name is Richard Jaffe. I am the Project Manager for the project from Advantage Engineering.

SLIDE 2 – Project Location

Here you see the project location for this project. Down in the lower left at County Route 522, the project begins and then it proceeds through several traffic signals all the way through the rest of South Brunswick Township towards the north into North Brunswick Township where it terminates at the Aaron Road - Main Street intersection. The project length is 4.9 miles, the speed limit is 55 miles per hour, and the number of lanes in each direction is 2 lanes minimum. Also, there is a shoulder which is sometimes used as an auxiliary or third lane along this section of roadway.

SLIDE 3 – Agenda

For this presentation, we will provide you with the project purpose, an overview, the schedule, major project elements, and then offer an opportunity for you to provide questions, comments, and your input.

SLIDE 4 – Project Purpose

Route 1 experiences congestion and delays during the weekday AM/PM rush hours. Implementing the hard shoulder running will reduce the peak congestion.



## SLIDE 5 – What is Hard Shoulder Running (HSR)

What is HSR? Hard Shoulder Running allows vehicles to use the shoulder as a travel lane. This will only be for certain designated hours. During other hours, the shoulder will remain as a shoulder. HSR adds a lane without needing to widen the road. HSR was successfully piloted just south of this project during the year 2017. That section, which was so successful it is still in effect, runs from Independence Way to County Route 522.

## SLIDE 6 – Existing HSR Limits

Shown here is Route 1 working between Independence Way and Aaron Road. The lower bar is Route 1 northbound and as you can see from left to right there are 3 colors. The blue color represents an existing 3-lane portion of Route 1. The yellow color is the existing HSR condition where it's 2 lanes in that direction during non-HSR periods, but 3 travel lanes during HSR periods. Then it goes back to an existing 3-lane section, which again, working from left to right, then you see a red section. That red section is an existing 2-lane condition at all times that near Aaron Road meets an existing 3-lane section.

The upper bar from right to left is Route 1 south bound. And as you can see, it starts as a 3-lane section then there is a 2-lane section, shown in red, that eventually ties into the HSR section which gives you 3 lanes during rush hour. And then, at the far-left side, it then meets an existing 3-lane section.

## SLIDE 7 – Proposed HSR Limits

This proposed project will be turning those red bars into the yellow bars that you see there. You will have a 3-lane section in both directions where there is currently only 2. That will be during the HSR designated hours.

## SLIDE 8 – HSR Signage

HSR locations will be identified by Static Signs and portable Dynamic Message Signs.

## SLIDE 9 – Striping Details

Dotted lines will be implemented where you may cross the stripes during the HSR hours.



#### SLIDE 10 Operational Hours Sign

The HSR hours will be posted along Route 1 and the cross streets. As you can see in this sign, cars only may use the shoulder. The designated HSR periods will be Monday through Friday from 6 AM to 10 AM and also from 4 PM to 7 PM. These are associated with the rush hours or peak travel hours on Route 1.

#### SLIDE 11 Driveway Warning Signs

Caution signs will be posted on driveways to remind travelers of HSR hours.

#### SLIDES 12 and 13 – Finnegans Lane

The HSR will be providing 3 travel lanes from the southern limits to the northern limits as shown here. Lane 1 is the inside lane, lane 2 is the middle lane, and lane 3 is what is sometimes a shoulder but during those 6 AM to 10 AM and 4 PM to 7 PM hours, that third lane is a travel lane rather than a shoulder.

One notable exception to the HSR segment that we will be implementing is towards Finnegans Lane in the Route 1 southbound direction. Aaron Road has 3 lanes which merge to 2 prior to Finnegans Lane. With the HSR implementation, that third lane at Aaron Road will continue but only to Finnegans Lane. Shown here is what will be happening for traffic. The 2 left lanes, 1 and 2, will continue south towards Trenton. The third lane, shown in yellow, is an exit only to Finnegans Lane. This will be done so as to not block the exit ramp towards Finnegans Lane. The red Xs show the segment where the Route 1 shoulder will remain as a shoulder. Then, on the southside of the Finnengans lane signalized traffic intersection, the third lane as an HSR will begin.

#### SLIDE 14 – Construction Activities

Construction activities will include roadway resurfacing,

#### SLIDE 15 – Construction Activities

curb repair work,



#### SLIDE 16 – Construction Activities

and traffic cameras on utility poles for visual coverage and operations monitoring.

#### SLIDE 17 – Construction Activities

There will also be a restriping of lanes as follows: We will reduce the left shoulder width from 3 feet to 1 foot, expand the right shoulder width from 10 feet to 12 feet, and the two existing travel lane widths will remain as 12 feet.

#### SLIDE 18 – Lane Shift

Please note this change of cross section width will be in effect at all times, 24/7, 7 days a week,

#### SLIDE 19 – Lane Shift

so that the left shoulder will always be 1 foot and the right shoulder will be 12 feet, whether it is working as an HSR or as a shoulder.

#### SLIDE 20 – Project Schedule

The project schedule is as follows: the construction will be occurring from June 2024 to August 2024. Most construction will be done during the nighttime hours. This will minimize work zone impacts to traffic flow. The HSR pilot activation is scheduled to begin in late August 2024. The static and DMS signs will be activated to alert motorists when this project is activated. The pilot evaluation period will begin upon activation and will continue for at least 6 months. We will be evaluating traffic operations and travel times. We will be comparing conditions before and after the HSR implementation. We will be looking for opportunities to continually improve the operations during the activation. We will be looking to address any operational concerns as well.

#### SLIDE 21 – Questions/Comments/Input

We welcome your feedback. Please submit questions and comments through the NJDOT website. Thank you.