



STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
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PUBLIC WORKSHOP SUMMARY

**SR-52/Kennett Pike at Owls Nest Road/Twaddell Mill Road
Safety Improvements
September 22, 2015; 4:00 – 7:00 PM
Centreville Layton School, 6201 Kennett Pike, Centreville**

A public workshop was held on the evening of September 22, 2015 at the Centreville Layton School to present proposed safety improvements for the intersection of SR-52/Kennett Pike and Owls Nest Road/Twaddell Mill Road and to seek input from the public regarding these proposed improvements.

A total of 77 people signed in at the workshop event. In addition, 28 comment forms, 31 letters, and 168 Centreville Civic Association petition forms were submitted during the timeframe between the public workshop and the end of the 30-day comment period on October 22, 2015.

Alternatives considered included:

- Installation of a conventional roundabout at the intersection
- Installation of a mini-roundabout at the intersection
- Installation of a traffic signal at the intersection
- Speed limit reduction
- Installation of additional pedestrian crosswalks within the Village
- Installation of in-pavement crosswalk lighting
- Trimming of shrubs at crosswalk “bump outs”
- Coordination of existing traffic signals to create gaps in traffic
- Elimination of on-street parking spaces near the intersection

Further engineering analyses were completed, and after thorough consideration with the assistance of public feedback, it is DelDOT’s recommendation to move forward with the installation of a traffic signal at the intersection of SR-52/Kennett Pike and Owls Nest Road/Twaddell Mill Road.

Proposed Design:

Following a comprehensive 2013 DeIDOT safety study of the Kennett Pike corridor through Centreville, several recommendations and improvements were made to enhance road user safety throughout the Village, including the installation of a traffic signal at the intersection of Kennett Pike and Owls Nest Road/Twaddell Mill Road.

The traffic signal heads will be mounted on one overhead mast arm, carrying seven of eight signal heads for all four approaches (one signal head will be attached to the vertical signal pole to provide additional visibility for approaching westbound traffic). Pedestrian signals and signal poles will be installed at all four corners of the intersections, and all existing pedestrian crosswalk locations will remain. In order to provide a context-sensitive design, decorative black signal poles will be used for both the vehicular traffic signal mast arm and the pedestrian signals.

Operationally, the traffic signal will allow both directions of Kennett Pike to flow at the same time. Each side street (Owls Nest Road and Twaddell Mill Road) will receive a green indication separately (i.e. split phasing) in order to eliminate conflicting turning movements due to the offset nature of the intersection. No left-turn arrow phases along Kennett Pike will be implemented at this time due to the low left-turning maneuvers being made.

Pedestrians crossing at the intersection will receive their own phase to cross. The pedestrian phase will only be activated when a pedestrian pushes a crosswalk button; the pedestrian phase will be skipped at all other times to allow for a more efficient vehicular traffic flow.

In order to accommodate emergency vehicle access through the intersection in an effort to expedite response times, emergency vehicle pre-emption detection will be provided in all directions to give priority to emergency vehicles needed to travel through the intersection.

Common Public Comments:

Why can't you install a roundabout instead?

Numerous analyses by several traffic engineers have shown that a roundabout at this intersection would cause major delays along Kennett Pike during the AM and PM peak periods due to the overwhelming majority of traffic traveling in one direction. Similarly, side street traffic would likely have a difficult time selecting an appropriate gap in which to enter the roundabout, creating additional delays on the side streets.

Additionally, the installation of a roundabout is much more costly, as additional right-of-way would need to be acquired in order to construct the project. This, coupled with the high construction costs, makes this option several years away from implementation.

As was suggested by members of the community, DeIDOT also reviewed the concept of a mini-roundabout. Although the mini-roundabout would encompass a smaller footprint within the intersection, it would likely experience the same issues as the traditional design—causing extensive delays along Kennett Pike during the AM and PM peak periods due to the majority of traffic traveling in one direction. Similarly, it is probable that this traffic would “choke” off motorists approaching from the side street and make it extremely difficult to turn left or right from the side streets. In addition, a mini-roundabout at this location would not be able to be designed to accommodate truck or bus traffic around the circulatory roadway, and therefore trucks and buses would be more likely to travel across the central island. Because of the lack of

physical channelization with the splitter islands and central island requiring to be flush (unlike that of the traditional roundabout design), the majority of traffic would likely either turn left prior to the central island or turn across the central island, rather than circulating around it, potentially causing a major safety concern. With these potential traffic capacity and safety issues in mind, the Department is not recommending the installation of a mini-roundabout at this location.

Why can't you reduce the speed limit to 25?

DelDOT has performed 12 speed studies since 2001 in the same locations along Kennett Pike, and all 12 have concluded that a 35 mph speed limit is appropriate through the Village. The posted speed limit will remain at 35 mph.

Installing a traffic signal will destroy the Village's charm.

The traffic signal has been designed to disturb as little of the surrounding landscape as possible, hence why a single mast arm is being proposed. The equipment to be used, including the signal's mast arm and the pedestrian signal poles, will be a decorative black design, which will complement the surroundings well.

Installing a traffic signal with no left turn lanes will encourage dangerous left turns off of Route 52.

Vehicles are making left turns against through traffic today—installation of a traffic signal will not change this traffic pattern. Due to the low volumes of left turning vehicles onto side streets and the high cost and impacts of installing left turn lanes on Kennett Pike at the intersection, the roadway geometry will remain as is. Should the need arise to provide an exclusive left-turn phase from Kennett Pike onto either Owls Nest Road or Twaddell Mill Road, DelDOT will evaluate it and make the necessary signal adjustments in the future.

The installation of the traffic signal will create total gridlock through the Village.

This is highly unlikely as the traffic signal will rest in green for both directions of Kennett Pike, so long as no vehicles are waiting on either Owls Nest Road or Twaddell Mill Road, or a pedestrian button has not been pushed. Analyses show that the delays with the implementation of a roundabout would be much more substantial than the delays with a traffic signal. There will certainly be additional delays and queuing on Kennett Pike once the signal is installed, but they are expected to be within an acceptable range.

How will emergency vehicles get through?

Emergency vehicles are equipped with a pre-emptive device which sends a call to the traffic signal, which then changes to green for the appropriate signal phase. The range of the pre-emptive device's signal is approximately 2,500 feet in advance of the intersection. The usage of this device will help clear out any existing queue and will permit the emergency vehicle through the intersection in any direction. Furthermore, analyses show that there will not be "total gridlock" so it is expected that emergency vehicles will be able to traverse through the intersection in a similar manner as currently exists today.

The presence of the signal will encourage more motorists to use Owls Nest Road and Twaddell Mill Road.

Due to extremely constricted roadway widths as well as numerous curves on both of these roadways, it is not anticipated that major traffic pattern changes will occur as a result of this

signal. If recurring side street delays are noticed, DelDOT will adjust the signal's timings accordingly.

Remove parking spaces at the intersection to improve visibility.

Any modifications to parking plans within the Village will require a general consensus among members of the community and then must be formally presented to DelDOT. DelDOT will not implement changes to parking plans within the Village without the community's buy-in.