Traffic Safety Measures Comparison for Fenway Road as of 10/20/17

Prepared by the Carderock Springs Citizens' Association "Traffic Safety Committee"

In 2016, the DOT and MC Police conducted three weeklong speed studies on three different parts of Fenway Road. In two out of the three speed studies, the data verified excessive speeds; therefore, Fenway Road is eligible for traffic calming measures. Later, in February 2017, MC Police Captain Didone personally evaluated Fenway Road. He wrote that "some of the residents perceive that there is a potential for traffic collisions and I concur with their assessment." He also wrote that Fenway Road is "sorely in need of roadway enhancements" and "I strongly encourage the Carderock Springs community to support the trial DOT roadway treatments."

This document is a "working" comparison which is based on the DOT's and MC Police's continued evaluations and recommendations. The goal of this comparison is to clearly present information on various traffic safety measures and their viability for Fenway Road. For photos of some of the below options, please see the linked photos on our CSCA website homepage, www.carderockcitizens.org.

VIABLE OPTIONS:

Measure	Safety Effectiveness	Impacts Street Parking	Impacts trees, land-scaping, driveways
Islands	Medium - High	Low	No impact
SMART unit	Low	No impact	No impact
Police enforcement	Low	No impact	No Impact

We've compiled more information below which includes these three viable options above, a maybe-viable option, and non-viable options:

Traffic Safety Measure	Status	More Information:
1. Islands	**An Option**	Islands are managed by the DOT. The permanent islands would be 18-inches wide with mountable curbs and ~40-50 feet long. There would be 3 to 4 foot shoulders in between the side islands and the edge of the road. Street parking would not be allowed along the island stretches. The DOT installed two "trial" islands in October. They will remain there for four months. During this period, the DOT will collect speed/volume data. The islands' objectives are to slow motorists' speeds and to redirect motorists' attention onto the road. The DOT will work with our residents to find mutally acceptable locations for the possible permanent islands.
2. SMART unit (flashing speed display)	**An Option**	The SMART (Speed Monitoring Awareness Radar Trailer) units are managed by the DOT and MC Police. They may be requested every four months on a first-come, first-served basis. They are temporary trailers which are placed on the street for five days.
3. Police enforcement	**An Option**	Per routine.
1. Electronic Speed Boards	**Maybe an Option**	The MC Police might be developing a NEW program which involves electronic speed boards. They are boards which are purchased by communities and managed jointly with the police. The police would monitor them for data collection. They flash speeds as motorists drive past them. Pending details include: the price, maintenance costs, safety effectiveness, suggested locations, # of boards, etc...
1. Speed cameras	**Not an Option**	The "Safe Speed Program" is managed by the MC Police. Permanently placed speed cameras or a "speed camera corridor" are no longer possible options for Fenway Road. The police concluded that the volume of cars was not significant enough to qualify Fenway Road for speed cameras.

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Traffic Safety Measure	Status	More Information:
2. Pavement markings	**Not An Option**	Specifically for Fenway Road, the DOT suggested a double yellow center line and two white edge lines. Or, it suggested two car lanes with a wider two-way pedestrian lane on one side as an option. Street parking would not have been allowed for both designs. Based on the "Fenway Road Safety Survey" results, the CSCA Board determined that there was not enough support for pavement markings on Fenway Road; therefore, they are no longer options.
3. Rain Garden bump-outs	**Not an Option**	Rain garden bump-outs are not walkable nor "bike-able." This option was not considered ideal given the high numbers of pedestrians and bikers who use Fenway Road regularly.
4. Traffic Circles (Round-abouts)	**Not An Option**	The DOT says, "One of the requirements for a traffic circle is that the volume of vehicles approaching an intersection on all legs be balanced or about the same, this would not be the case for the intersections along Fenway Rd." Also, the DOT says, "The minimum radius of the outer circle for a single lane round-about is 65'. This being the case, if a round-about/traffic circle was warranted, there would not be sufficient ROW." Fenway Road has 60' of ROW.
5. Stop signs	**Not An Option**	The DOT says, "'The Manual on Uniform Traffic Control Devices' explicitly states that a stop sign should not be used as a speed control device."
6. A lower speed limit	**Not An Option**	The DOT says, "In accordance with county policy, 25 mph is the lowest posted speed limit."
7. Access restrictions	**Not An Option**	The 2016 DOT traffic studies of Fenway Road showed that its volume did not meet the eligibility requirements per Executive Regulation 17-94AM. Fenway Road's highest volume was in the 40-50 vehicle per hour range. The volume must be at least 100 vehicles per hour to qualify. A link to the regulation: https://www.montgomerycountymd.gov/DOT-Traffic/Resources/Files/PDF/exreg17_94am.pdf.
8. Speed humps or raised crosswalks	**Not An Option**	The 2016 DOT traffic studies of Fenway Road showed that its volume did not meet the eligibility requirements per Executive Regulation 32-08. Fenway Road's highest volume was in the 40-50 vehicle per hour range. The volume must be at least 100 vehicles per hour to qualify. Note - Fenway Road's 85th percentile speed for two out of the three studies met the speed requirement for speed humps, but both the speed AND volume requirements need to be met. A link to the regulation: https://www.montgomerycountymd.gov/council/Resources/Files/res/2009/20091020_16-1169.pdf.
9. Private signs	**Not An Option**	The DOT owns the road and does not allow private signs to be installed.
10. Rumble strips	**Not An Option**	Rumble strips are typically used on highways or on roads to provide warnings to motorists of approaching hazards. Also, they are typically not used on roads near residences because of their noise effects.

For more information, here are three relevant links to the Montgomery County Government website:

1 http://www.montgomerycountymd.gov/DOT-Traffic/calming_devices.html (traffic calming devices)

2 http://www.montgomerycountymd.gov/dot-dte/sidewalk/SWevaluation.html (sidewalks)

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3 http://www.montgomerycountymd.gov/POL/Chief/bureaus/field/traffic/ateu/index.html (speed cameras)

If you would like more information on traffic calming devices and their effficacy, here's a link: http://www.ite.org/traffic/tcstate.asp. This link takes you to a report called "Traffic Calming: State of the Practice", 1999, by the Institute of Transportation Engineers (ITE) and the Federal Highway Authority (FHA). The Montgomery County Department of Transportation (DOT) referred us to this report and told us that it's their main source of data. It is the most recent and extensive study ever done on traffic calming measures in the United States to date. Lastly, per the FHA website: "The purpose of this report is to provide balanced information so readers can make their own informed decisions." For quick reference points to this report, we've compiled notes below of this comparison for you.

Chapter 5 - "Traffic Calming Impacts" (Note: Below are a few quick reference points to guide you to the correct page for further review.)

Page	Description
102	Photo of Huntington Parkway with bump-outs, speeds went from 34 to 30 mph
105	"The data demonstrate that even with wide spacing of slow points, speeds after traffic calming do not rise all the way to pre-calming levels."
108	"Speed control measures categorically reduced traffic volumes by about 15 percent." (in all studies)
109	Collisions - "Perhaps the most compelling effect of traffic calming is in the area of safety. By slowing traffic, eliminating conflicting movements, and sharpening drivers' attention, traffic calming may result in fewer collisions. And, because of lower speeds, when collisions do occur, they may be less serious. What makes positive safety impacts so important is that opposition to traffic calming is often based principally on safety concerns and concerns related to emergency response."
109	British Columbia report: "Safety Benefits of Traffic Calming" which summarized 43 international studies: "Collision frequencies declined by 8-100%.
110	"In this particular survey, traffic circles and chicanes (obstacles like bump-outs) had the most favorable impacts on safety, reducing collision frequency by an average of 82 percent."
111	"Traffic calming in the United States is largely restricted to low-volume residential streets. Collisions occur infrequently on such streets to begin with, and systematic changes in collision rates may get lost in the random variation from year to year."
112	Table which details "Average annual collision frequencies before and after traffic calming."
114	"Other Quality of Life Impacts" - street life and property values
116	Noise levels: The more speeds are reduced, the more noise levels are reduced.
116	"Impacts of Education and Enforcement" - neighborhood traffic safety campaigns, radar speed display units, photo-radar speed enforcement, and targeted police enforcement

Thank you for your engagement and support! If you have questions or suggestions, please email one of the Traffic Safety Committee Members.

- The Traffic Safety Committee: Bill Draper, Bill Moore, Karen Roman, and Julie Weber