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TO: Richmond Selectboard

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SUBJECT: Next Steps regarding Traffic Calming for Cochran Road

Background

On October 21, 2022, I met with CCRPC's traffic calming engineers to discuss next steps for alleviating traffic issues on Cochran Road. They suggested the following:

1. Complete a Traffic Calming Study (similar to the [Blair Park Road Traffic Calming Study](#) completed in Williston)
2. Paint fog lines (also known as "edge lines") along Cochran Road
3. Paint "Slow Down" markings in the travel lanes in the 25 mph sections
4. Install a temporary speed hump or speed cushion, and monitor and evaluate its effects

Next Steps per the Town Traffic Calming Policy

The Town began applying the Traffic Calming Policy to Cochran Road in July 2022, and initiated a Level 1 response. In the last five months, we have taken some efforts to monitor and evaluate the conditions of Cochran Road and encouraging residents to drive slower through the Cochran Road corridor. But we have had technical and staffing difficulties. Per the policy, we have to monitor and evaluate the current conditions, and encourage residents to drive slower until at least January 2023.

If the issue has not been resolved through a Level 1 response, then we can escalate our response to a Level 2 or 3. A Level 2 response calls for looking into roadway enhancements and installing traffic calming treatment measures. Adding pavement markings and doing a traffic calming study would be appropriate Level 2 activities.

Next Steps with a Traffic Calming Study

I have already informed CCRPC that the Town will be interested in doing a Traffic Calming Study. This study will start in February or March 2023 and finish in early to mid-summer 2023. CCRPC has already engaged with Dubois & King to do the Traffic Calming Study. The same planners and engineers from Dubois & King who worked on the Richmond Bike, Walk, and Trails Plan and is currently working on the Richmond Western Gateway Scoping Study will be working on this Traffic Calming Study.

The Traffic Calming Study will have more data on the existing conditions of Cochran Road, and specific recommendations for traffic calming measures.

The expected cost of a Traffic Calming Study is \$5,000 to \$6,000. This would be a 20 percent match of the total cost of the study. Planning and Zoning has the budget to meet the match requirements.

Based on the recommendations from the Traffic Calming Study, the Town may choose to implement a traffic calming measure.

Painting Fog Lines and other pavement markings

The installation of fog lines on roads with center lines significantly reduces severe accidents. However, studies show that the addition of a fog line to roadways with center lines do not have a significant effect on vehicle speeds ([The Benefits of Pavement Markings: A Renewed Perspective Based on Recent and Ongoing Research \(dot.gov\)](#); [Investigation of the Safety Effects of Edge and Centerline Markings on Narrow, Low-Volume Roads \(virginiadot.org\)](#))

Vehicle speed is correlated with lane width. Narrowing travel lanes to 10-foot-wide travel lanes can lead to slower speeds. However, a narrow travel lane with a wide shoulder can modestly increase speeds ([Complete Streets - A Guide for Vermont Communities \(healthvermont.gov\)](#)).

Removing the center line altogether and painting fog lines can reduce speeds significantly ([Jeff Speck: For a Walkable City, Remove Centerlines on Local Streets – Streetsblog USA](#)).

CCRPC also recommended pavement markings such as painting the words “SLOW DOWN” in the travel lanes. Adding this can reduce speeds by one to two miles ([Appendix B. Catalog of Traffic Engineering Treatments - Factors Influencing Operating Speeds and Safety on Rural and Suburban Roads , January 2015 - FHWA-HRT-14-020 \(dot.gov\)](#)).

Josh and I talked with Road Foreman Pete Gosselin and Interim Police Chief Ben Herrick about the short term options. Gosselin was able to provide the following rough estimates for fog lines:

- \$4,000 for fog lines in the 25 mph sections
- \$18,000 for fog lines on the entire road

The companies that paint fog lines are booked for the rest of the season so this is a solution that could be implemented in the spring.

The “Slow Down” pavement markings could be done with Highway staff in the spring with a new stencil. The cost is estimated at less than \$1,000 for the stencil and paint, along with some staff time.

Speed Cushions

CCRPC staff suggested that the Town buy a temporary speed cushion to test its effectiveness and appeal by community members. Temporary rubber speed cushions cost less than \$1,000. Trucks can drive over speed cushions and studies show that speed cushions do not impact emergency services ([Traffic Calming ePrimer - Safety | Federal Highway Administration \(dot.gov\)](#)). One drawback is that these temporary speed cushions cannot be plowed in the winter.