Coalition for Smarter Growth
DC • MD • VA

April 26, 2019

Virginia Department of Transportation

Re: Redesign requested for proposed Richmond Highway (Route 1) expansion from Jeff Todd Way to Sherwood Hall Lane

Encl: (1) Design for Rockville Pike
(2) CSG letter to Arlington, Alexandria, and NVTC re advanced TSP

Dear VDOT:

We appreciate your support for a multimodal Richmond Highway incorporating bus rapid transit, protected bikeways, and expanded sidewalks. However, we have significant concerns about the proposed cross-section and the negative impact it will have on pedestrian crossings, speed and safety, and the county's goal of an urban, walkable, mixed-use community. We urge important design changes.

The proposed cross-section is simply too wide and the design speed too high. It appears that moving cars at higher speeds is a goal which is superseding all other goals and roles for what local residents consider their "main street." The wide, high-speed design will undermine the county and community goals for a walkable, urban, more livable, mixed-use, transit-oriented community. Therefore, we urge you to:

1) Physically design the road for a 35 mph (not 45 mph) design speed
2) Narrow the lanes
3) Shrink the median to 48 feet
4) Reduce pedestrian crossing distances, maximize visibility of crosswalks, and ensure adequate number of crossing locations, particularly in highly-populated and transit-oriented development locations. Block lengths should be no more than 400-600 feet and in in rarer cases (outside of the TOD areas) absolutely no more than 800 feet.
5) Eliminate double left-hand turns
6) Factor in, design, and construct parallel road connections wherever possible
7) Ensure two-way cycle tracks on both sides of the road
8) Ensure that buildings are built to the sidewalk, with cycle tracks directly adjacent to the sidewalk, and an approximately 5-foot tree buffer next to the road – wide enough for safety with a 35-mph design speed and sufficient to support healthy tree growth
9) Ensure no high-speed right turns and bring the cycle tracks and crosswalks for sidestreets closer to the intersection corners to ensure visibility of bicyclists to turning drivers
10) Further evaluate the underpasses with all stakeholders to address the needs and concerns of local residents, bicyclists, pedestrians, and conservation experts.

We have closely reviewed the proposed design and compared it to the Metroway/Route 1 cross-section in Alexandria, the experience in Tysons Corner, and recent initiatives by Maryland State Highway Administration to make their urbanizing arterial roads safer. The expansion of Route 123 and Route 7, use of double-left turn lanes and other car-focused features is undermining the goals of the Tysons plan and dividing this urban center because it discourages pedestrian crossings. It is resulting in eight separate islands of TOD rather than a unified community. Meanwhile, in Maryland, the State Highway Administration has adopted a policy to reduce speeds on urbanizing arterials like Georgia Avenue to 25 mph in some locations, 35 mph in others, to narrow lanes to 10 feet (instead of 12 or 11), and to undertake other traffic calming measures.

A. Comparing Alexandria Metroway to VDOT Route 1 BRT design

Alexandria's Metroway: The design includes 23-24 feet for the BRT pavement and 12-foot buffers on each side = 48 feet. Alexandria inserts single left-hand turn lanes into the 12-foot buffer space.

VDOT Route 1: Your design appears to show a 29 feet right-of-way for BRT (5-6 more feet for BRT than in Alexandria) + 16 feet of additional land + 2 feet curb = 47 feet. But to this is added an 11-foot turn lane, for a total of 58 feet compared to 48 feet in Alexandria. The additional buffer is likely where you propose to insert an additional left-turn lane, but we strongly discourage the use of double-left turn lanes.

It appears that you increased the buffer for the cycle tracks to 8 feet from the 5.5 feet originally proposed. We believe this wider buffer is being forced by your 45-mph road design speed. Reducing the physical design speed will allow for a smaller buffer.

The 11-foot lane widths are an improvement over 12-foot wide lanes and we thank you. However, we urge you implement 10-foot lanes. We've also seen some designs where the inner most lane and left turn lanes are 10 feet, the middle lane 11 feet and the outer lane about 13 feet including the drain pan, allowing for local buses.

B. Speed

Alexandria's Route 1 posted speeds have been reduced from 35 mph to 25 mph. The Maryland State Highway Administration is starting to tame its arterials, reducing lane widths and speeds on Georgia Avenue (from 45 to 35 mph and from 35 to 25 mph), in addition to reducing lane widths to 10-feet and adding other traffic calming measures. See media story here.

It is not sufficient for VDOT to simply post the speed for 35 mph. The physical design must ensure 35 mph driving. While we know that some residents opposed a speed reduction a number of years ago, residents today recognize the benefits of a safer street and one that supports transit-oriented development. In addition, rush hour speeds certainly are not surpassing 35 mph today. Traffic signal timing can also be used to support smoother flow (see comments about advanced Transit Signal Priority below).

C. Double left turns

We request elimination of double left-hand turn lanes, which make the road wider and less safe for pedestrians to cross. Double left-hand turns are undermining the walkable, urban plan for Tysons.

D. Cycle tracks

The bicycle community has rightly pointed out that the cycle tracks on each side should be two-way. Given the width of the road – even with our proposed design changes, we should ensure bicyclists have the option to go both north and south on each side of the road. Bicyclists would be likely to do this anyway, so let's design for it and ensure the cycle tracks are wide enough. In turn, with a 35-mph design speed the buffer at

the edge of the roadway could be reduced to 5 feet and the buffer between sidewalk and cycle tracks could be reduced.

We also believe the cycle track design for Rockville Pike would be better for bicyclists and should be adopted for Route 1. See attached. The VDOT proposal to offsetting the cycle track crossing of the side roads at locations set way back from the corner can make it MORE dangerous for bicyclists because cars would not be expecting a crossing inset from the intersection and might not see the cyclist. Whereas if the bike rider is riding closer to the road at the intersection they will be more immediately visible and appear more like a vehicle in the flow of traffic. Having the pedestrian crossing closer to the intersection might make it safer for these users as well. Here too, we worry that VDOT's focus is more on vehicle flow and ensuring vehicles do not slow or stop in the right-hand lane. By designing to a 35-mph speed including with tighter turn radii, and bringing the cycle track and pedestrian crossing closer to the intersection, crossings will be safer. (we support further analysis and discussion about this with bicycling experts and experts in complete streets design)

E. Bicycle and pedestrian underpasses

We understand you are receiving many comments from both our bicycle partners and our conservation partners about the underpasses. We urge further evaluation of the underpasses with a wide range of stakeholders – local residents, bicyclists, pedestrians, and conservationists. There are significant safety concerns being raised by local residents. At a minimum we wish to see:

1) On street crossings retained for all intersection movements
2) If built, underpasses must ADA compliant, well lighted, maintained, and safe from crime
3) If built, underpasses must be built above the flood plain and not interfere with necessary stream restorations
4) Underpasses designed to connect to future environmentally compatible stream valley trails

F. Advanced transit signal priority

We have submitted a letter to Arlington, Alexandria and the Northern Virginia Transportation Commission, recommending adoption of a particular advanced Transit Signal Priority software for Metroway using 395/95 transit funding (attached). We urge adoption of similar advanced TSP for Embark Richmond Highway BRT. The technology reportedly does a better job of speeding buses, while optimizing vehicle and pedestrian movements.

G. Restoration of streams and floodplains

The Richmond Highway Project offers the opportunity restore floodplains and natural stream flow both through the elevated and extended bridges and through VDOT purchase of floodplain and wetlands areas for mitigation. We urge VDOT to help fund purchase and protection of the floodplains and Chesapeake Bay resource protection areas (RPAs).

H. Number of lanes and role of Route 1

Ideally, Route 1 would be two through lanes in each direction to serve as a truly safe and livable multimodal boulevard, much like the design of Route 1 through Alexandria's Potomac Yard. Planned parallel road capacity for the commercial revitalization nodes along Richmond Highway would help to the main arterial to have fewer lanes. But we won't fight this fight.

As for the argument that Route 1 is an evacuation route from DC, we have been frustrated to see this used as a reason to undermine the creation of more livable corridors. From what we've seen in the public record, a mass evacuation is not the preferred approach to nearly all potential incidents in DC. Shelter in place for those outside the limited impact radius of terrorist events, and keeping vehicles off the roads to allow for

emergency vehicle movement, is preferred. So, let's design for the communities we would like to live in today.

Summary:

The combination of what appears to be VDOT's goal for a 45-mph speed, along with three lanes in each direction, and room for double-left turn lanes is leading to design choices that are making the road too wide and fast. It leads to your decision for a 58 feet center right-of-way (47 feet plus 11 feet left turn lane), to then needing a wider bike buffer, and to 11 feet instead of 10 feet for the lanes. Your desire to allow for near term and future double left turns leads to this continuous extra wide center section. In addition, setting back the bike lanes for this 45 mph speed likely results in faster car turning movements and greater risk to bike riders and pedestrians. The design leads also to higher right-of-way costs and undermining the enclosed urban feel that Fairfax says is their plan for their TOD nodes.

With the cost for just 3.1 miles of road now at $372 million, redesigning the project to reduce right-of-way costs and improved safety and accessibility for pedestrians and bicyclists will likely be necessary to be able to afford a new Richmond Highway and to compete successfully for SmartScale funding. We strongly urge redesign along the lines we propose. Thank you.

Sincerely,

Stewart Schwartz
Executive Director