VDOT Route 1 Feasibility Study: Phase 1 Draft Report

Arlington County Staff Comments

An interdepartmental team of County staff reviewed VDOT's Route 1 Feasibility Study Phase 1 Report and offered the following comments to the VDOT staff team. These comments are from technical staff and subject matter experts, commenting on elements of the VDOT Phase 1 Report that relate to their areas of expertise. This does not represent a formal position from Arlington County on the matter, which would receive Board review and approval. Staff reviewed the Phase 1 Report and submitted these comments with the understanding that VDOT will soon begin Phase 2 of the Route 1 Feasibility Study, which will include additional analysis of post-COVID traffic counts, feasibility of a grade-separated crossing at 18th Street, TDM Strategy development, speed study for reducing the speed limit to 25 mph, interim improvements at 23rd Street, and options for relocation of the Crystal City Multimodal Center (commuter bus stops on 18th Street). Staff is eager to learn more from the outcome of this additional analysis in order to advise County leadership on any impacts from the VDOT proposal.

Planning and Policy

- ES-5 (and full report pp 4-5) the document identifies three documents as providing a vision for National Landing, but does not clearly acknowledge that only one of the three (Crystal City Sector Plan) comprises adopted County policy, and the other two (NL BID and Livability 22202) are simply positions of those groups.
- **ES-28** would advise against suggesting that At-Grade scenario is more compatible with Vision for National Landing, since the official vision document for the area (Crystal City Sector Plan) included the Scenario for Route 1 with in-board ramps at 15th Street South. Also, hard to reconcile on ES-29 (and Table 8-1 on pp 151-152) assertion that Sector Plan configuration for Route 1 impedes future development, when that's not the case.

Pentagon City Planning Study and relation to Route 1

- This study did not include the additional development anticipated as part of the PDSP Update
 nor did it include the details of the Pen Place MMTA (as both of these studies are not yet
 finalized). Please speak to the potential sensitivity of the Route 1 project to increases in traffic
 on Eads Street as a result of either of these studies.
- Page 62— In first paragraph under 4.1, reference is made to Amazon HQ2 being approved for development. In fact, only the initial phase of 2.1 million square feet of HQ2 development has been approved and is currently under construction on the Metropolitan Park blocks.
 Subsequent phases of HQ2 development on the PenPlace site are currently under review.
- Page 109–7.3 This section references a "goal" of identifying existing VDOT ROW and street easements that could be repurposed for development. To the extent that some or much of this ROW that could be repurposed for private development is County controlled (in fee or easement), it should state as such. Any proposed repurposing of County ROW for private development would be subject to staff review with existing approved County plans and policies, would be proceed through the County's established development review/approval process, including an in-depth real estate review.

Analysis and Modeling

- The study should clarify that the traffic analysis doesn't show the at-grade option to be the better and/or safer option. The 30% potential traffic reduction through TDM is outside of a typical traffic study, and it can be applied to all options including the elevated and no-build options.
- The comparison graphic on Page 151 of the report contains several items that seem to conflict with the results outlined in the report:
 - Vehicular Traffic Operations of the at-grade concept appears to be significantly worse based on the results of the study—not neutral as indicated in the graphic.
 - Transit Effectiveness of the at-grade crossing also seems to be worse as detailed in the report—not neutral as indicated in the graphic.
 - Indicating that only the At-Grade option can be improved with TDM is misleading. Any TDM strategy that can be applied in the at-grade option should also be applicable in the other scenarios.
 - A separated pedestrian crossing at 18th is effectively the existing condition. At best, pedestrian safety would be worse with an at-grade crossing due to the increases in the right-turning conflicts—providing a tunnel or overpass would bring it to neutral.
- On page ES-19, concluding that the at-grade concepts will be less-costly is related to
 construction and project costs. Given that in the report it is acknowledged that the at-grade
 concepts generally lower speeds, increase congestion, and increase predicted collisions—
 shouldn't the operational costs also be monetized and compared?
- The impacts on southbound Route 1 during the PM peak period are concerning since these impacts could spill back into Route 110 and I-395.
- The impacts on 15th Street outlined in the report for the preferred alternative are concerning. The report states that EB queuing "extends out of the network" during the morning peak period. Based on the large reduction in available storage, these impacts are expected to impact traffic on 15th Street, Eads Street, and Fern Street. Based on the report, additional traffic is expected on these parallel routes. The additional volume combined with queuing issues on 15th could result in gridlock—especially with diverted traffic circulating the block.
- Pg. 62 How are the growth rates factored into the traffic projections? Do the 47% growth rate
 in population and 102 % growth rate in employment in 2040 represent a further decreased need
 via TDM strategies above what has been stated? I know we translate this growth using
 multimodal approaches, but these rates may further challenge the assumption that we can
 reduce the traffic along Route 1.
- Pg. 135 Would recommend VDOT provide a traffic diversion diagram and chart based on the projected traffic reductions w/TDM as well as what is shown in 2025 via the COG model. The current information is problematic for the community.
- Pg. 140 Question whether the pedestrian capacity rates are based on two-way flow with friction. This and given the Table 4-3 projected pedestrian volume increases, it appears that at a minimum the 18th street separate pedestrian and bicycle overpass should be seriously considered

Comments on Alternatives Presented and VDOT Recommended Alternative

- Pg. ES-22 The report says in multiple locations and on this page that there will be reduced LOS at the intersections and increased pedestrian and bicycle crashes unless there is a robust TDM strategy that is employed. This seems to shift responsibility to the County to implement (pg 128). What is the State willing to do to incentivize this at the local area of Crystal City, and provide funding for Arlington Commuter Services locally, versus some of the broader initiatives that would need to be implemented regionally?
- The Draft Plan only briefly mentions potential multi-modal improvements associated with the
 no-build scenario that would rely on the existing overpasses (usually just in the form of their
 timing and cost implications). Further clarity on what exactly these solutions entail (in both
 narrative and graphic format) will prove necessary for full documentation of this Phase 1
 review. Such details can also represent critical information should the preferred option (to
 lower Route 1) ultimately prove unsuccessful with the subsequent phases of review.
- Intermodal transit center and relocated bus bays: questions pertaining to real estate, potential co-location w/ redevelopment, timing/phasing. Overall, significant additional study is needed of all aspects related to the intermodal center. If intermodal transit center is not feasible, what will be the solution for the commuter bus stops along 18th Street (serving Fairfax Connector, Omniride, and Loudoun Transit) that are displaced?
- An at-grade Route 1 has many operational challenges. The short block lengths between parallel
 streets result in the need to coordinate signals and thus, the pedestrian delays will be increased
 on the minor parallel routes. The results point to negative impacts on the ability of transit to
 effectively serve the National Landing area. The at-grade scenario shown in the preferred
 alternative offers a more limited network connectivity while simultaneously introducing
 conflicts and sacrificing transit mobility.