

Route 1 Multimodal Improvements Study – Public Information Meeting No. 1

MEETING SUMMARY

SUBJECT: Public Information Meeting No. 1
DATE/TIME: Wednesday, December 16, 2020, 6:30 – 8:00 PM
LOCATION: Virtual, via GoToWebinar
PRESENTERS: **VDOT:** Dan Reinhard and Nick Roper
Kimley-Horn: John Martin, Geoff Giffin, and Danielle McCray
Q&A FACILITATOR: **VDOT:** Andy Beacher

INTRODUCTION:

The Route 1 Multimodal Improvements Study is identifying enhanced multimodal connectivity and accommodations along and across Route 1 in Crystal City to meet the changing transportation needs of this growing urban activity center. The need for this study is two-fold:

- Multimodal transportation demand is increasing from the creation of an additional Amazon U.S. Headquarters (HQ2) and other ongoing development in the Crystal City and Pentagon City area
- These areas are already heavily developed with limited space for expanding the footprint of the transportation network

On Wednesday, December 16, 2020, VDOT hosted a virtual public information meeting (PIM) to (1) introduce the study to the public, (2) solicit feedback on existing operational and safety conditions, and (3) highlight results of the recent survey of opportunities and priorities in the study area.

The virtual public meeting, consisting of a 30-minute presentation and a 1-hour Question & Answer period with VDOT and the study team, was promoted via multiple VDOT social media accounts, email distribution, local newspapers, and the study website. A total of 156 people registered for the virtual meeting; 106 people participated in the event.

PRESENTATION:

VDOT and the study team presented a prepared PowerPoint presentation for this PIM. ***Please refer to the copy of the meeting presentation attached to this meeting summary.*** The slides were used to cover the following topics:

- A. Study Overview
- B. Existing Conditions Analysis – Summary of Findings
- C. Online Survey – Summary of Input Received
- D. Concept Design Considerations – Brief Overview
- E. Next Steps – Study Schedule

SUMMARY OF DISCUSSION:

After the formal presentation, a Q&A discussion period was held during which members of the public asked the following questions and the study team provided responses. Listed below are the questions posed and responses provided by VDOT during the meeting.

1. Question: Is anyone from Arlington DES present?

Response: Yes. Richard Best from Arlington County Transportation Division was present for the meeting. Dennis Leach (Transportation Division Chief) and Eric Balliet (Transportation Division Communications) were also in attendance.

2. Question: The statement of work is rather vague – Is the state looking to expand roadway lanes, improve existing pedestrian crossings?

Response: The intention of the study is to maintain three lanes in each direction as is today. The study will focus on lowering Route 1 down to an at grade configuration because we need to obtain more information about the challenges of that configuration. This is not a routine project, and it is extremely complicated because of the construction phasing for demolition, maintenance of traffic, impact to adjacent buildings and potential impact to underground utilities and the Crystal City Metro station and tunnel. We are going to take these concepts and compare them to what was proposed in the sector plan and compare to the existing conditions so we have a good view of the different options.

3. Question: Why is this study not considering other alternatives that the community has expressed interest in, such as underpasses, partial at-grade conversion, or even tunneling?

Response: These options are not included in the sector plan, which is why they are not being considered with this study. There are physical restrictions to doing things like tunneling and lowering Route 1 below the existing intersections, such as the Metro station, Metro tunnel at 18th Street, and tunnel between the Crystal City Shops and the Crystal Gateway Marriott. Clearances are not available to provide a tunnel for Route 1 above the Metro Tunnel. A tunnel for Route 1 below the Metro tunnel would push it below sea level causing significant challenges. The study is looking at a homogeneous solution. A partial at-grade solution could be considered if the partial at-grade solution would address specific issues noted in the analysis.

4. Question: Could you also explain what "adequate" capacity for autos?

Response: We are considering all modes of transportation given that this effort is a multimodal study. Our intention is to look at all modes and find a balance the need for pedestrians, bicyclists, transit riders, as well as motorized vehicles. Adequacy for vehicles would be accommodating the volume of traffic that will be there in the future while balancing the volume with other modes of travel. In terms of speeds, it's not accommodating vehicles to speed through the corridor but to progress through at a reasonable speed while stopping for pedestrians.

5. Question: How do we find out the members of the task force?

Response: Task Force member organizations are shown on Slide 13 of the presentation. Task Force Meeting summaries are posted to the study website; the summaries include the names of members.

6. **Question:** Will the study consider the configuration of the 23rd Street intersection or is the assumption that it is being addressed separately by Arlington County?

Response: We are going to factor in planned transportation projects that are occurring or are planned for the study area and one project is 23rd Street improvements that Arlington County is planning. At this point, we are building off what the County is doing. Redevelopment efforts in Crystal City are also resulting in street improvements. For 23rd Street, there is a concept to move the Clark Street intersection to the east, which will make the Route 1/23rd Street intersection more efficient. The sector plan shows the intersection of Clark Street/23rd Street moving east in the future. For this intersection relocation to happen, it would require a combination of Arlington County working on the street projects and developers contributing to the street improvements, as well as the redevelopment of some parcels to allow Clark Street to shift to the east.

7. **Question:** Why aren't other alternatives being considered?

Response: Other alternatives aren't included in the sector plan. We are trying to focus this study on lowering Route 1 to grade to create an urban boulevard with at grade intersections at 15th Street and 18th Street because we do not have a lot of information about the feasibility of such a unique and complicated potential project. We chose this study to see what the constraints are to bring Route 1 at-grade and to understand what the costs would be. This study is a first step in achieving an urban boulevard for Route 1.

8. **Question:** Did you not count pedestrians and bicyclists on 18th St, where they would face a new signalized intersection?

Response: Yes. We do have pedestrian and bicycle count data; while this data is not shown on the slide, it will be available in the study report.

9. **Question:** As most accidents occur at signalized intersections, why add more such intersections? And it's unfortunate that the safe pedestrian crossing at 23rd Street via a tunnel has been closed.

Response: We are looking at an at-grade option because that appears to be the best practice at this time for urban boulevards. We are looking for ways that we can create an urban boulevard which is consistent with what is in the sector plan. That does not mean at grade configurations are the only things we can study, but it is the focus of this study. We can't speak to specifics regarding the tunnel at 23rd Street under Route 1, but we understand there were safety and security concerns.

10. **Question:** Looking at history of corridor, it was supposed to be a freeway. Due to community opposition we have at-grade intersections. These at-grade intersections are dangerous and adding more at-grade intersections would be more dangerous. The planning seems to be focused on an urban boulevard. We should take in account the massive development to the south. Urban boulevard sounds nice on paper, but you may be creating K Street and something less pleasant and not workable. I propose removal of the overpass and advocate for an underpass for the design concepts.

Response: The main focus of this study is the at-grade boulevard concept where we are comparing this concept to the existing grade-separated conditions and the sector plan recommendations, which were also grade-separated at the Route 1 intersection with 15th and 18th Streets.

11. Question: What is the posted speed limit on Route 1 today?

Response: The posted speed limit today is 35 mph in this segment of Route 1.

12. Comment: I'd like to point out that on the travel mode survey, a greater number of people are traveling by modes other than driving.

Response: We understand that Route 1 is a heavy multimodal corridor today, and it will continue to be in the future. A lot of development occurring in the corridor is focusing on modes other than cars. The study area is heavily transit-orientated today and will continue to be in the future. We will need to strike a balance among the modes as we carry this study forward.

13. Question: Is there any possibility for reconsideration of the 140-ft RBL to RBL width?

Response: The 140-ft width is what is shown within the sector plan, which is the guideline we are using with this study. We are mainly focused on this study between the curbs. The 140 feet includes the space behind the curb (20 feet on each side), which can be allocated in several ways (i.e., sidewalk, landscaping, streetlights, etc.). We are really focusing this effort on what the roadway is going to look like moving forward. We would direct the 140-ft RBL to RBL question to Arlington County.

14. Question: Are you saying that you will be analyzing a 99' road section, with 1-2 left turn bays (7-8 total lanes) at each intersection?

Response: Based on the travel demand forecast and based on potential new development, we are going to look at what the intersections would look like. We are going to try to minimize the footprint to accommodate the pedestrian and other modes, but we need to see what the analysis shows. We haven't made a decision about whether there would be one or two left turn lanes and at which intersection because we have not completed that analysis. We have done the existing conditions analysis to date and wanted to get input from the public before we move on with future conditions analyses and development of concepts.

15. Question: Do you have the numbers that show the percent split of local traffic (i.e., vehicles entering or exiting Rt. 1 between 12th and 23rd St.) versus through traffic along Rt. 1?

Response: Yes. The Route 1 corridor in the study area is still predominantly serving regional through trips. As a follow-up to the answer provided at the PIM, here are the result of the data:

- *55% of northbound trips in the AM are destined for Washington, DC, and 65% of southbound trips in the PM are coming from Washington, DC.*
- *Nearly 80% of northbound trips in the AM peak originate outside of Arlington County; approximately 50% of southbound trips in the PM are destined for outside of Arlington County.*
- *30% of northbound trips in the AM are destined for the National Landing area (though most of these exit the corridor south of 20th Street); 37% of southbound trips in the PM are destined for the National Landing area.*

- 16. Comment:** Population is continuing to grow and VDOT is increasing capacity. Can you tell us how many vehicles are going through the corridor on daily basis? Also, the Crystal City Sector Plan promised to not create street designs that divert traffic into neighborhoods to the west.

Response: Route 1 has average daily traffic of approximately 45,000. We understand the concern about traffic being diverted, and our analysis will look at potential traffic diversion with respect to possible concepts.

- 17. Question:** Is the removal of the raised portion of Route 1 from 20th street to the highway a done deal?

Response: No, it is not a done deal. It's the most unique of the options that we are considering. If we consider the sector plan option where we move the ramps inside, I would not anticipate that the vertical grades would change dramatically – we know a lot about that option. We do not know a lot about the option to take the road to grade and the associated impacts.

- 18. Question:** Most of the discussion focused on east-west movement, yet Route 1 is a major artery for north south traffic. How are potential increases in north-south traffic going to be handled especially given that new intersections will slow north-south traffic.

Response: North-south traffic and the future projections of north-south traffic is something that we are going to consider in the analyses as we move forward, but it hasn't been determined how we are going to deal with the movement of this traffic. We need to run through the models and see what the traffic looks like when we add the intersections at 15th and 18th Streets.

- 19. Question:** How soon will last week's Task Force meeting slides, tonight's meeting, and the two reports mentioned be posted? We will need to review them to make comments.

Response: Understood. We will attempt to get those up next week.

- 20. Question:** A speaker referred to "safety congestion." What is that?

Response: (From the speaker) I apologize if I misspoke. The statement was probably just talking about safety.

- 21. Question:** It seems there's a conflict between your original charge (based on the previous study) to make Route 1 more "urban friendly" and the results of the survey that Danielle presented, which showed that "urban friendly" was rated 2nd lowest, well behind safety and efficiency. How will you resolve that?

Response: The survey is one input and something we will have to consider as we move forward with the study. The public has expressed their feelings through the survey about what they think is important. As we get through the analyses, we will have to consider that input.

- 22. Question:** Can you speak to some of the assumptions of number of vehicles on Route 1 and numbers will remain the same in future. And that Route 1 should always have at least 3 lanes in the future? I would be interested in at-grade intersections if we were considering 2 lanes in each direction.

Response: From existing conditions standpoint, the daily traffic count is from actual traffic counts that have been performed (prior to COVID-19). For future conditions, we (VDOT) are working very closely with Arlington County staff and collaborating on the multimodal forecasts including vehicles. As we get to the point of developing concepts, we are going to be closely in step with Arlington County on those vehicular concepts and develop those concepts based on the forecasts.

- 23. Question: On the slide showing speeds, the key indicates dark green as 65 MPH. Is that an error? Maybe I needed more time looking at it, but it looks like it would be more useful if the key differentiated for both delay and speeding over the speed limit.**

Response: The key says less than or equal to 65 MPH and the one above it is 35 mph. We would anticipate that majority of those speeds would be just above 35 mph given that the posted speed is 35 mph. Regarding the delay, the delay will be a part of the existing conditions document that you will be able to review on the study website.

- 24. Question: Do the traffic counts on Route 1 require 3 lanes all day long? On Glebe road one lane on each side functions as parking during non-rush hours. Could that work here?**

Response: We are still working with the County to obtain the traffic forecasts they are using for their area-wide study. Street parking during off-peak hours and weekends has been discussed with the County. It is an option that may be receive further discussion in the future, but a final determination will not be made during this study.

- 25. Comment: Thanks for not adding more room for more cars. If we allow more cars, we will get more cars. We are in a climate emergency and very much need to dial back on individual motor vehicles.**

This study does not intend to add lanes to Route 1 or appreciably increase vehicle capacity in the corridor.

- 26. Question: Can you make your data available as part of this existing conditions report, including existing and projected peak hour traffic volumes, peak hour directions, intersection levels of service, etc.? And the basis/assumptions/etc. of the future projected volumes?**

Response: We are reviewing a draft existing condition report, and we would anticipate that we could make that data available going forward.

- 27. Question: Does anyone on the study team actually live in the Crystal City area? It would be so useful in order for this to be less academic than it sounds now.**

Response: All of the team lives in Northern Virginia or DC, except one, and that one engineer, until recently, lived in Pentagon City for almost three years. Several of us were a part of the Crystal City sector plan working with Richard Best (Arlington County PM). Members of our team led the multimodal transportation study as part of that plan. The study team feels like we have your best interest at heart and have real world experience right there in Crystal City. We are working very closely with Arlington County (staff members are on the call tonight). We are using their existing conditions model from their Pentagon City Planning Study as the basis for this study. We look forward to working with the public moving forward.

- 28. Question:** Will this study consider bike facilities along Route 1 or just crossing it? They seem conspicuously absent on the cross-section shown in the presentation.

Response: In coordination with Arlington County, we are not looking at bicycle facilities on Route 1 itself. The County has a robust bicycle facility network throughout Crystal City, and there are bicycle facilities parallel to Route 1. Bike facilities on Route 1 are also not in the sector plan. What we are looking at are east-west bicycle routes across Route 1, which would provide you the ability to access those north-south routes that are parallel to Route 1 on either side.

- 29. Question:** The Pentagon City Planning Study is discussing the need for a new elementary school in either Pentagon or Crystal City. Has ACPS been consulted on whether or not a fully at-grade Route 1 would be considered safe to cross, or if it would cut off the planned walkshed for a new school?

Response: We are looking to provide safety to all modes of transportation. With regards to Arlington County schools, we have not consulted them specifically. While we can reach out, we are taking the PCPS existing conditions analysis as our base for this study. As the County progresses that study, we are going to be progressing concepts and analyses for at an urban boulevard on Route 1. At some point in the future, we anticipate that we will need to converge/bring the two studies together to confirm feasibility of future concept. This ongoing coordination should address any issues Arlington County schools may have.

- 30. Question:** What is the basis for designing for a 30 mph speed limit?

Response: 30 mph is more conducive to the urban boulevard described in the sector plan; that's why we collaborated with Arlington County and chose that 30 MPH design speed. We understand that there are higher speeds to the north and lower speeds when you get to Alexandria. We are trying to find that middle ground where we can pass volume along Route 1 but at the same time create that urban boulevard.

- 31. Question:** Your first project goal is improving multimodal safety for all travelers (yea) – and your survey results show that ped safety was our highest priority. How would you IMPROVE the safety at 18th Street where we currently have no conflict with Route 1, which is above us? And how would you reconcile these necessary safety improvements with Goal 4, maintaining traffic flow, and how would you keep commuters off our parallel side streets (e.g. Crystal Drive, Eads, Fern)?

Response: We are just starting into the future conditions analyses. We will have to wait and do the analyses and see where they takes us. As far as keeping traffic off of the parallel side streets, we are going to be looking at the forecast and running the models to see if traffic looks like it would divert or not. We understand that the community is concerned about this. We will look at the concepts to see if there are diversions anticipated and report back to you.

- 32. Question:** Does the study adequately take into account the needs of traffic generated for the airport, and for the massive new development south of Crystal City?

Response: As far as the forecasts go, as mentioned, we are going to be looking at the years 2025, as well 2040. We are going to assume all the development that has been approved by both the City of Alexandria and Arlington County will be in place. We are working very closely with Arlington County

to make sure that both studies are consistent from an assumption standpoint for those future developments. The airport is also a stakeholder in this study.

- 33. Question:** The Crystal City Sector Plan calls for no street designs that divert traffic into the neighborhoods to the West. Please be mindful of those neighborhoods and avoid any new designs of Route 1 that slow Route 1 traffic which has the effect of pushing traffic to other north/south routes that end up pushing traffic into and through neighborhoods. Can you comment on that fact and tell us if that is a goal for the new design?

Response: We need to get into those designs and really run the models and see what the results are. We understand your concern and will consider that as we look at the models going forward.

- 34. Question:** If you design for 30 mph, cars will go faster. Arlington has an adopted Vision Zero strategy which calls for reducing speeds to improve safety. DRPT guidelines allow for 25 mph design speeds on urban boulevards. Why not design for 25mph here?

Response: The study team is mindful of the fact that 25 mph is considered safer for pedestrians. We are starting with the consideration of 30 mph which is a reduction from present-day 35 mph speed limit and consistent with other arterial streets in Arlington County. We are not ruling out 25 mph. We have to balance the different modes of transportation that are using the corridor. We also have constraints from the north where we have people coming off what is a freeway and getting them slowed down quickly enough to meet that 25 or 30 mph speed. We also have to consider that progression into Alexandria.

- 35. Question:** How does one become a member of the task force?

Response: VDOT coordinated with Arlington County on the many organizations that are represented on the task force. Those organizations were invited to appoint someone to be on the task force.

- 36. Question:** What kind of budget is allowed for all this work? Is it unlimited?

Response: The budget for the current study is \$2 million. It is undetermined what additional studies will be needed going forward and what those budgets will be. That is something we will determine as we get further down the road.

- 37. Question:** Are you considering additional connections or widening of the Mount Vernon trail to help cyclists and pedestrians access the area?

Response: The Mount Vernon Trail is not part of this scope of work. We understand that some other trail connections may need to be looked at to provide better connectivity, but it is beyond the scope of what we are looking at with this study.

- 38. Comment:** I think that the study should strongly consider reducing the width to two lanes in each direction. A 6-lane highway is incompatible with any kind of vibrant and comfortable experience for non-drivers.

Response: The number of lanes will be reviewed as part of the multimodal analysis, but it is anticipated that 6 lanes will be required based on the current 45,000 vehicles per day counts (ca.

2018). We need to keep in mind the concern about traffic being diverted onto other streets if the vehicle capacity on Route 1 is constrained.

Questions 39 through 83 were received in writing via the GoToWebinar platform during the PIM, but the time limit prevented a verbal answer. Responses are provided below to these questions.

39. Question: How will the apartments near 20th street be affected?

Response: We do not know how specific properties may be impacted at this time by potential urban boulevard concepts.

40. Question: The survey showed that pedestrian safety was the biggest concern. Can you help us understand how creating new 99' pedestrian crossings will increase pedestrian safety vs what's there today?

Response: Pedestrian safety will be considered in the proposed design concepts. In the next phase of this study, we will review and discuss tradeoffs and benefits of different concepts from the perspective of the pedestrian and other modes.

41. Question: Was removal of the overpasses a condition imposed by Amazon?

Response: No. The types of intersections are not specifically stated in the MOU between the Commonwealth and Amazon; however, an at-grade urban boulevard was one of the options discussed during negotiations.

42. Question: My understanding is that Metroway between Pentagon City and Braddock road may be discontinued completely. Should that result in Metroway not being included in any way in the study.

Response: The study team is working closely with Arlington County to include approved and planned multimodal projects (including transit projects) in our assumptions as we advance the travel demand forecasting and concept development.

43. Comment: Comment not a question - Geoff clearly stated that the worst spots along the corridor with respect to both safety (# of crashes) and efficiency (delay for vehicles, including transit, peds and bikes). So it makes no sense to add 2 more at-grade intersections when it's clear that all it will do is make safety and efficiency worse.

Response: Just because an intersection is at-grade does not mean that it is unsafe or that it causes unnecessary delay. The intersections at 20th and 23rd Streets S are extremely complex due the offset at 20th Street S and the proximity of Clark Street and driveway entrances to those intersections. This study will review whether at-grade intersections at 15th and 18th Streets could operate efficiently and safely.

44. Comment: NO! 15th and 18th should stay raised!

Response: Please see response to Questions 2, 7, and 41 above.

- 45. Comment: A 100' pedestrian crossing over 7-8 lanes of vehicle traffic will never be safe. Narrow the road section by decreasing lanes.**
The distance of a pedestrian crossing does not necessarily make it unsafe. The design of the intersection plays a crucial role in safety. The crossing distance does impact signal timing and operations. These factors will be analyzed as we move forward.
- 46. Question: How many pedestrians are crossing Route 1 via 18th Street, versus the other intersections shown on your slide?**
Response: The data will be provided in the existing conditions document to be posted on the project website.
- 47. Question: Will you consider eliminating all at grade business entrances on Route 1 such as the Hampton Inn, Exxon, the McDonalds, and the Holiday Inn?**
Response: We have not discussed access to business entrance on Route 1 but will explore how access may be modified or enhanced under different concept designs.
- 48. Question: Did you consider reducing lanes and adding protected bike lanes? I'd be in favor**
Response: At this point, we believe 6 through lanes will be necessary to accommodate traffic, and we are not looking at bicycle facilities on Route 1 itself. Arlington County has a robust bicycle facility network through Crystal City. There are routes parallel to Route 1.
- 49. Question: Alexandria has two travel lanes on Route 1. Why not consider 2 travel lanes in this area?**
Response: We are working closely with Arlington County staff and collaborating on the multimodal traffic forecast including vehicles. As we get to the point of developing concepts, we are going to be closely in step with Arlington County on those vehicular concepts and develop the concepts based on those forecasts.
- 50. Comment: At grade intersections are more dangerous!!!**
Response: See the response to Comment 43 above.
- 51. Question: You said that a tunnel at 18th Street for bikes and pedestrians would be a significant obstacle. Why? There's a tunnel to the Marriott. Does that stay?**
Response: See the response to comment 3 above. There was an underpass at 23rd Street that was recently closed by the County. The study will consider possible impacts to existing subsurface facilities like the current access to the Marriott.
- 52. Question: So what happens should all the study data show only disadvantages with lowering Route 1 with the only advantage being "it was in the Sector Plan" and somebody said it was a best practice?**
Response: We are currently exploring the feasibility of the at-grade concept and will document the advantages and tradeoffs for that concept as compared to existing conditions and the sector plan concept.

53. **Comment:** Arlington County put in bike lanes on Potomac Avenue and made cycling less safe. The choice is flat tires in the bike lane or "taking the lane" and risky, distracted drivers.
Response: Please see response to Question 28.
54. **Question:** How long would it take a parent with child to cross 100' of vehicle traffic?
Response: Assuming a conservative walk speed of 3.5 ft per second, it would take approximately 29 seconds to cross a 100 ft cross section.
55. **Question:** I see nothing in the documents acknowledging the fact that the area is heavily used by tourists and other visitors from – plans should include a component that makes the area comprehensible and safe for them
Response: Signage along Route 1, as well as wayfinding signs for tourists and visitors, are not part of this study but may be part of the future project.
56. **Comment:** The audience should be aware that there is, in my opinion, considerable support for the sector plan that contemplates at grade boulevard conditions... can we remind the audience about the sector plan (when that was concluded, what the process entailed)
Response: The sector plan concepts will be reviewed as part of this study and compared with at grade concepts. This review and comparison will be discussed with the public and documented in the study report. The section plan was developed in the late 2000's and adopted by the County Board on September 28, 2010. There was indeed a considerable amount of public input that informed the approved sector plan.
57. **Comment:** If you did a VISSIM model you definitely know through vs local traffic.
Response: See the response to Question 15 above.
58. **Question:** What impact will planned development in Potomac Yards have on Route 1 on traffic flow on Route 1 into Crystal City? It is at grade and signalized in Alexandria and should it continue that way as it enters Crystal City?
Response: The future conditions traffic analysis will show how other approved and planned development adjacent to the study area will influence travel patterns and flow.
59. **Question:** Would intersections also be limited by the 140 ft. curb to curb limit? Single and double turn lanes typically make the cross sections even wider.
Response: 140 feet would be typical; intersections will be evaluated individually based on forecasted traffic, but it is anticipated that the 140' section would accommodate one left turn lane. If needed, a 2nd left turn lane could be accommodated with the 140' section given with certain tradeoffs, including a narrower pedestrian refuge.
60. **Question:** The speaker advocating for fast traffic on Route 1 asserted higher volumes on surface streets, where the County recently published "22202 data" that does NOT back that up. Can DES speak to this?

Response: Arlington County does not maintain historic traffic count data for Route 1, and average weekday daily traffic (AWDT) for Route 1 data has not been reported for the study area. Overall, the 22202 reporting has shown that Cumulative Average Daily Weekday Traffic AWDT is down 18% since the year 2000, with the 22202 study area. This cumulative estimate is based on data from 25 locations that traffic volumes have been collected since the year 1980. According to VDOT's historical count data, Route 1 traffic in the study area is holding relatively steady between 47,000 and 50,000 vehicles per day (vpd) between 2007 and 2019. VDOT is utilizing Arlington County's PDSP traffic model as the basis for this study, and the model shows a volume of 45,492 vpd, which is based on actual counts.

- 61. Comment: I agree with both callers....an Urban Boulevard is a pipe dream, just make route 1 an easy, safe north-south thoroughfare**

Response: An urban boulevard is what is called for in the County's approved sector plan. The sector plan urban boulevard remains elevated at 15th and 18th Streets. This study is considering an at-grade urban boulevard and will provide a comparison between the two configurations.

- 62. Question: How will you be assessing potential bicycle and pedestrian safety & crash risk at the new at-grade intersections?**

Response: Pedestrian and bicycle level of traffic stress will be assessed at each intersection area.

- 63. Comment: Do not naively assume growth in vehicle traffic in the future. All the DES-compiled 22202 data shows the opposite! Don't use flawed future forecasts to justify 7-8 lanes.**

Response: The Route 1 study is utilizing Arlington County's traffic model from the Pentagon City Planning Study as a base for the existing and future conditions traffic models. The County is aware of these traffic trends and has made traffic projections accordingly.

- 64. Question: What other bike/pedestrian safety measures (design & operations) are you studying? No right on red? physical protection at intersections (bollards)? automated enforcement?**

Response: Various design and operational measures will be considered to address bicycle and pedestrian safety at intersections, but many of these measures go beyond the scope of this study. Details such as bollards could be considered in a follow up study or future project.

- 65. Question: is the sample size in the survey considered a statistically representative sample of Arlington resident views?**

Response: We believe that the survey responses are representative of people who live in the study area and/or frequently travel the corridor.

- 66. Comment: overpasses for Pedestrian/bicyclist only**

Response: A pedestrian overpass is an option that can be considered in the future but is unlikely to completely replace the need for crossing Richmond Highway on an at-grade urban boulevard.

- 67. Question: Doesn't using the term "alternate modes of transportation" as just used, indicate a VDOT bias that cars are "normal" and everything else is "alternate?"**

Response: There is not bias to a specific mode of travel.

- 68. Question:** What will the cycle times be on these new intersections at 15th and 18th? 23rd is currently 2.5 minutes long, and if you are keeping the corridor coordinated at that cycle length, a 30 second crossing phase would imply up to a 2-minute wait for pedestrians/cyclists/drivers to cross.

Response: At this time, the study team has not yet evaluated future conditions and cycle lengths.

Potential pedestrian crossing times and cycle lengths will be evaluated in future conditions analyses.

- 69. Comment:** Arlington DES "22202 data" showed 2014 volume on Route 1 as 30k. It's not believable that it's increased to 45k in 5 years.

Response: 45,000 vehicles per day is based on actual traffic counts for the segment of Route 1 in the study area (from 23rd Street S. to 12th Street S.). The 30,000 vpd provided in the 22202 traffic data is for a segment of Route 1 south of the study area.

- 70. Comment:** The community obviously wants this project to be more bikeable and walkable, are you open to changing plans based on community feedback?

Response: The study will consider bicycle and pedestrian networks and crossings in the corridor. No decisions have been made with respect to moving forward with any particular concepts.

- 71. Question:** How will the neighborhoods in Aurora Highlands be affected?

Response: We do not know how specific properties may be impacted at this time.

- 72. Question:** In the future will Route 1 be amenable for adding bicycle infrastructure?

Response: At this point we are not looking at bicycle facilities on Route 1 itself. Arlington County has a robust bicycle facility network throughout Crystal City. There are routes parallel to Route 1. The study will examine bicycle infrastructure crossing Route 1.

- 73. Question:** Why would you not include a dedicated bicycle facility along Route 1 as part of this?

Response: At this point we are not looking at bicycle facilities on Route 1 itself. Arlington County has a robust bicycle facility network throughout Crystal City. There are routes parallel to Route 1. The study will examine bicycle infrastructure crossing Route 1.

- 74. Comment:** Following up on Chris Slatt's question: if an objective is to have building fronts along Route 1, then it would seem that not having adequate bike facilities along the fronts of the buildings is a significant oversight.

Response: The study team will coordinate with Arlington County to confirm their plans for the bicycle network in the corridor.

- 75. Comment:** Your data shows people speeding on Route 1 with a 35 mph speed limit. Design for 25 mph so people might stay under 30.

Response: Given the existing roadway alignment and types of vehicles that must be accommodated, the roadway geometry itself is unlikely to be the determining factor in driver speed. The study will examine a variety of measures that discourage speeding.

76. **Question:** How is this study taking into account all the new development in Potomac Yard in Alexandria, including the new metro stop and other transit developments?
Response: The study team is working closely with Arlington County to include approved and planned projects in our assumptions as we advance forward with forecasting and concept development.
77. **Comment:** Please note that there are parallel roads west of route 1. And avoid pushing traffic onto them...Crystal Drive, Clark Street and Main Line, Potomac Avenue
Response: The on-going traffic analysis will reveal if traffic is shifting to alternate routes.
78. **Question:** How will this project, when completed, be integrated into the portion of US 1 south of 23rd? Absent some consideration, the speeds of that portion of roadway will likely affect the speeds north of 23rd.
Response: The study will consider how potential urban boulevard concepts will integrate with the segments of Route 1 to the south of the study corridor.
79. **Question:** Will the remaining questions be answered in writing before the minutes are posted?
Response: The remaining questions are being answered with this PIM summary.
80. **Question:** Has any speed study been conducted on US 1 that yields more detailed results?
Response: The simulation models were calibrated based on travel time and speed data.
81. **Comment:** Aren't you just confusing motorists with multiple speed limits along the relatively short length of US 1?
Response: It is believed that a well-signed corridor will communicate the speed limits to motorists along Route 1. Consideration will be given to speed limits in adjacent roadway sections if a project with lower speed moves forward.