Braddock Road Multimodal Improvements FAQ

Topics

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General Questions

1. What are the primary goals of this project?

The primary purpose of this project is to design access management, operational improvements and multimodal improvements within the corridor, based on 2018 Task Force recommendations from the Braddock Road Multimodal Study (dated January 2018 by Fairfax County DOT). The improvements would enhance operational efficiency, bicycle and pedestrian access/safety, and access to transit (bus) along the subject section of Braddock Road, without adding additional through lanes, consistent with Task Force recommendations approved by the Fairfax County Board of Supervisors (BOS) in 2018.

2. How was the project area determined?

The area was determined by the Braddock Road Task Force, at the request of Supervisor Cook, and due to the level of congestion along the corridor.

3. I submitted a question in the Q&A during the meeting and it wasn't answered by the panel. Why? Will those be answered another way?

• Thank you for attending the meeting. There were a large number (over 260) of meeting attendees and more than 160 questions asked during the meeting. Due to meeting time constraints, the panel was unable to answer all questions during the meeting. However, these questions will be addressed through the comment summary from the meeting, which will be posted on the project webpage. In addition, this FAQ has also been prepared to provide answers to common questions.

4. Was the meeting recorded?

• Yes. A recording of the November 29 meeting can be found here, along with a PDF version of the presentation in English, Spanish, and Vietnamese.

5. I have a question about the proposed changes and impacts at a specific location, or I want to submit other comments. How can I share feedback or questions?
The formal comment period from the second Public Information Meeting (PIM #2) has ended; however further questions/comments may be directed to Calvin Britt, project manager, at calvin.britt@vdot.virginia.gov.

6. What are the next steps?

The project team is planning a third Public Information Meeting (PIM #3) in spring or summer 2023 to share more information about the team’s analysis as well as to share ideas for reducing impacts to the tree canopy. VDOT will send an email to all who have participated in the process to announce this meeting once it is scheduled.

Analysis of Alternatives

7. How was the preferred alternative selected? How is public input factored into project decisions?

- There were many factors considered when selecting the staff recommended alternative. The previous Fairfax County-led study criteria were used as a guide for the general weighting of each of the evaluation categories, with appropriate adjustments to focus on the intersection-specific evaluation in contrast to the corridor-wide metrics considered in the original study.
- The previous 2018 FCDOT study had six evaluation criteria with several sub-categories for some of the criteria. The project team followed the same format for the current project’s analyses and each criterion was assigned a relative significance that added up to a total score of 100.
- Quantitative numbers were assigned for various measures of effectiveness (MOE) such as delay, travel times, acreages impacted, etc. These MOEs were evaluated on a rating scale ranging from -2 to +2 as compared to the No-Build condition (No-Build would be equal to a score of 0). These ratings were then multiplied by weighting factors to come up with a combined score that was compared between the alternatives.
- Community preference was included as part of the ‘Community Impacts’ category.
- Category-specific Weighting Factors for this project are summarized below:

<table>
<thead>
<tr>
<th>Evaluation Category</th>
<th>Weighting Factor</th>
<th>MOEs Included</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>25%</td>
<td>Vehicular, Pedestrians, Cyclists, Transit</td>
</tr>
<tr>
<td>Community Impacts</td>
<td>20%</td>
<td>Access, Preference, Travel Times, Multimodal</td>
</tr>
<tr>
<td>Environmental Impacts</td>
<td>20%</td>
<td>Wetlands, Streams, Historic Sites, Air Quality, Park Land</td>
</tr>
<tr>
<td>Operations</td>
<td>20%</td>
<td>Vehicular, Pedestrians, Cyclists, Transit</td>
</tr>
<tr>
<td>Right-of-Way Impacts</td>
<td>10%</td>
<td>Acreage</td>
</tr>
<tr>
<td>Cost</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td></td>
</tr>
</tbody>
</table>
This can be compared to the weighting used by the Task Force for the earlier FCDOT project (2018), as shown below. The Task Force system used a weighting points system that added to 19.5 (as opposed to a weighing out of 100%, as used for this VDOT project). Performance measure scores under each MOE category were averaged and then multiplied by this weighting. For the VDOT project, the task force percentages were used as a base and adjusted to account for the additional categories and MOEs considered.

<table>
<thead>
<tr>
<th>Evaluation Category</th>
<th>Weighting Factor</th>
<th>MOEs Included</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation Network Efficiency</td>
<td>2.6</td>
<td>Travel Time, Person Throughput</td>
</tr>
<tr>
<td>Safety</td>
<td>4.7</td>
<td>Vehicular, Pedestrians, Cyclists</td>
</tr>
<tr>
<td>Mobility</td>
<td>4.7</td>
<td>Access (Vehicles, Pedestrians, Bicycles, Transit), Ped/Bike Travel times, Ped/Bike Circulation</td>
</tr>
<tr>
<td>Environment</td>
<td>4.5</td>
<td>Landscaping, Alternate Modes, Park Land, Noise, Air Quality</td>
</tr>
<tr>
<td>Right of Way</td>
<td>3</td>
<td>ROW areas, # Parcels</td>
</tr>
</tbody>
</table>

8. Were any traffic counts conducted after school and work traffic approached pre-pandemic levels?
   - Traffic volumes from the signal controllers at Burke Lake Road and Kings Park Drive were gathered from the signal detector loops for two periods in 2022 to compare to the volumes used in the study based on the pre-pandemic data.
   - The data showed that volumes were similar to the projected volumes being used in the traffic analysis.

9. What elements have been considered to improve safety for all users on and along Burke Lake Road?
   - Safety improvements along Burke Lake Road include restricting left turns to and from Grantham Street as well as lefts out of the shopping center across from Grantham Street. Additionally, the unsignalized crosswalk at Grantham Street will be removed. A HAWK (High-Intensity Activated CrossWalk) Pedestrian Beacon signal will be installed across Burke Lake Road just south of Grantham Street to provide a safer signalized crossing. A pedestrian crosswalk will be installed across Burke Lake Road at its intersection with Braddock Road to provide a continuous pedestrian path along the south side of Braddock Road.

10. The U-turn options seems unsafe and confusing. Can you provide more information about it?
    - During the public outreach, questions and concerns were raised regarding the proposed concepts that would involve using U-turns to make left turns west of Stone Haven and as part of the RCUT design at Wakefield Chapel Road. While
they may not seem intuitive, there are a number of advantages to the proposed U-turn designs:

- Safety benefits: They reduce the total number of crashes by reducing the total numbers of conflict points and the associated severe crashes. Note that the proposed U-turns west of Stone Haven and as part of the RCUT are protected, signalized movements.
- Operational benefits: By reducing the number of traffic signal phases, the traffic flow along the corridor is more efficient and reduces overall congestion as shown on the previous slide.
- Cost benefits: these are cost-effective solutions, which reduce or eliminate significant environmental and right of way (ROW) impacts.

- Because of the aforementioned benefits, this innovative option is recommended by FHWA and VDOT.
- During the meeting on November 29, 2022, we shared an animation to better explain the operation of the proposed U-turn at Wakefield Chapel Road, which uses a protected traffic signal phase, and is without any conflicting vehicle movements. View the meeting recording here to learn more about the RCUT design and view the animation.

11. Does the project propose removing the right turn onto Red Fox Drive from westbound Braddock Road?

- The right turn onto Red Fox Drive from westbound Braddock Road will not be impacted in the preferred alternative.
- Under Option 1 for Rolling Road, vehicles turning left from Rolling Road would not have safely been able to turn at Red Fox Drive and therefore, that movement would have needed to be restricted. However, this was not selected to part of the preferred option so the movement restriction will not be implemented.

12. Why is the light at Kings Park Drive proposed to be eliminated? How will the project address the decreased pedestrian and automobile connectivity if the stoplight is removed?

- The intersection of Kings Park Drive is located less than 600 feet east of the Burke Lake Road intersection. The Burke Lake Road intersection serves the highest volume during both morning and afternoon peak hours. This often results in severe congestion and excessive queues at this location and impacts the overall corridor operations. The signal at Kings Park is also one of the highest crash locations in the corridor.
- To address existing capacity and safety deficiencies, the removal of the signal at Kings Park Drive was identified as part of the preferred improvement concept from the original FCDOT study and approved by the Braddock District Task Force. This was further confirmed by the VDOT project team as part of the analyses performed for the current project effort.
- The removal of the Kings Park Drive traffic signal will:
  - allow for better corridor operations by increasing the storage length available for the westbound left turn movement at Burke Lake Road
reduce congestion from closely spaced signals (left turns are blocking thru lanes)
− provide better traffic signal coordination through concurrent movement during the heaviest movements of northbound rights and westbound lefts (overlap signal phase)
− promote safety by reducing the total number of conflict points.

• Additional improvements proposed in conjunction with the elimination of the signal are intended to address concerns expressed by key stakeholders in the area. These improvements include a signalized U-turn between Kings Park Drive and Stone Haven Drive for eastbound vehicles with a signalized crosswalk

13. What changes are proposed for Ravensworth Road? What measures will be taken to improve automobile safety at the Braddock/Ravensworth intersection?

• Several improvements are identified for the Ravensworth Road intersection area:
  − Drivers using the existing I-495 northbound off-ramp currently have to make a challenging weave to access the left turn lanes if they wish to continue onto eastbound Braddock Road. To reduce this difficult weaving movement, the proposed improvement includes a relocated northbound off-ramp. This ramp would be controlled by a traffic signal stopping eastbound Braddock Road to allow for direct and protected movements into the left turn lanes onto Ravensworth Road.
  − To improve pedestrian access, crosswalks will be added to all four legs of the Braddock Road at the Ravensworth Road intersection.
  − An additional eastbound left turn lane from Braddock Road onto Ravensworth Road (total two left turn lanes) is proposed to double the capacity for that movement and improve overall operations at the intersection. There is only one existing eastbound left turn lane.
  − Ravensworth Road will be widened to two lanes in the northbound direction for approximately 2000 feet to accommodate the two eastbound left turn lanes and provide sufficient distance to transition back to one lane.
  − Bike lanes will be added in each direction on Ravensworth Road.
  − There is a shared-use path from Braddock Road to the Ravensworth Baptist Church.

14. I don’t see very many people biking or walking along Braddock. How does the project justify the addition of these bike/ped amenities?

• Braddock Road currently provides inconsistent pedestrian and bicycle facilities. There are various sections of sidewalk and trail along the corridor, but continuity is lacking and the corridor is heavily geared toward vehicular traffic. Furthermore, the trail is narrow (just 6’ wide), and many of the trail sections are very steep, with grades over 10% in several places. The trails along Braddock Road are not
ADA-compliant and are impediments to usage for all but the fittest and most fearless users—6’ is insufficient width for most bicyclists to pass comfortably.

- The proposed 10’-wide shared-use paths will be ADA-compliant and more accessible for all users, and are consistent with the recommendations in the County’s 2018 Braddock Road Multimodal Study, which recommended the “Intersection and Corridor Improvements Alternative” (see page 9-2) that is being advanced in the current project:

15. How will the shared use path be comfortable and safe for users when it is adjacent to such a heavily traveled road?

- The proposed shared-use path is separated by a 10-foot buffer from the outside edge of the vehicular lanes (8 feet from the face of curb). This is in accordance with Page A(1)-25 of VDOT’s Road Design Manual. The purpose of the buffer is twofold: it provides reasonable separation between the vehicular traffic and the path users, and it provides room for the placement of traffic signs without encroachment into either the roadway or the path.

16. Why can't the existing Braddock Road bike path be improved instead of constructing a new shared use path?

- The existing path is much narrower than the proposed shared use path. Also, grades in this area are significantly steeper. A maximum of five percent (5%) grade must be achieved to meet the ADA compliance requirements and help ensure that the path can be used by more community members. Therefore, to make improvements to the current path (and ensure ADA compliance), extensive reconstruction and grading would be required. This would likely result in additional tree removal and potential encroachment into existing properties.

17. What potential benefits would a pedestrian bridge provide versus a signalized crosswalk, or vice versa?
Potential benefits a pedestrian bridge would bring include:
- A pedestrian bridge provides a grade-separated crossing where pedestrians and bicyclists will not have any conflict with vehicles, significantly improving the safety for those modes.
- Additionally, the crossing can be made regardless of the traffic signal phasing.
- One other advantage is that if pedestrians cross on the bridge as opposed to at the crosswalk, vehicles will be able to make turns without waiting for pedestrians and, thereby, increase the efficiency of the traffic operations.

There are some potential downsides to a pedestrian bridge.
- It would take 4–6 minutes to go over the bridge and up and down ramps. That is longer than crossing at street level which take on average 1-2 minutes.
- The bridge may freeze over in winter and require closure for safety reasons.
- The bridge adds a significant project cost.

18. Is the project team looking into better light synching to improve automobile travel times?
- As part of this study and future construction, the coordination and timing of the signals is being studied in depth and new timings will be implemented to optimize the new intersection designs. Preliminary analysis shows improvements in overall corridor travel times and less overall intersection delays.

Potential Impacts

19. Will Braddock Road still provide the same bus service to surrounding neighborhoods?
- No, bus routes are being altered as part of this project. There are some areas where we propose consolidation/relocation of bus stops along Braddock Road to increase safety and efficiency of travel for the buses and their users. In general, this means having bus stops at locations with signalized or grade-separated (where a bridge is used) crossings as well as placing the stops on the far side of intersections, so the bus stops after a signal and not before.

20. I am concerned that my neighborhood will be impacted by cut-through traffic as a result of this project. How is this being addressed?
- Typically, neighborhood cut-through traffic is an attempt to avoid delays and congestion along the primary route. The project is proposing several intersection and multimodal improvements to alleviate existing and projected future congestion and improve the overall operations along Braddock Road. Once implemented, these improvements are expected to improve traffic flow, improve capacity, relieve delays, and help or discourage cut-through traffic.
Separately, Fairfax County also manages a cut-through traffic mitigation program known as the Residential Traffic Administration Program (RTAP). For more information about this program, interested individuals may visit the County’s RTAP webpage.

21. How is this project addressing tree loss?

- The tree impacts shown to date are very preliminary and there are multiple factors that could change those limits as the design progresses, including the need for utility relocations. That said, the team has committed to taking a proactive approach to examining additional options to reduce tree impacts, including targeted adjustments to the typical section, use of retaining walls, and/or refinements to proposed stormwater management facilities, among others. The results of these additional analyses will be presented at the planned 3rd public information meeting.

22. Will this project lead to increased noise? How will that be addressed?

- Per FHWA policy, noise studies are conducted only in conjunction with a “Type I” highway construction project. A Type I project is defined as a proposed federal or federal-aid highway project for the construction of a highway on new location or the physical alteration of an existing highway, which significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes. Since the proposed improvements do not qualify to be a Type I project, noise cannot be studied for this project.