



DEPARTMENT OF ENVIRONMENTAL SERVICES
Division of Transportation and Development
Development Services Bureau

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Below are the responses to the questions received at the May 13, 2013 Meeting held at the Williamsburg Auditorium for the Williamsburg Boulevard and Kensington Street Intersection Project (N514). We made an effort to group the questions by topic since there was overlap with many of the submissions. We have made every effort to respond to all the questions submitted that evening, which were also answered by staff who attended the meeting. Thank you.

1. How does the County respond to the Wells letter?

Related Comments:

28	Q1	In view of the Wells findings that the proposed concept plan for W&K is unsafe and presentation of a safer alternative, will you undertake a clean slate analysis of the safest and best options for W&K in light of the NES.
31	Q1	The Wells report counters that the County design is dangerous and unsafe because west bound vehicles turning right from Williamsburg out Kensington to access ES1 will be mixed?? with pedestrians from the east median and bikes on Williamsburg and on Kensington.
32	Q1	The Wells letter concludes that as a result of the horizontal and vertical curve of westbound Williamsburg there is insufficient stopping distance by and amount of 59 feet to meet industry standards, which reinforces the conclusion than the current design is inherently dangerous and unsafe.
33	Q1	The Wells letter concludes that the east median has been widened to far, such that vehicles traveling south on Kensington will have difficulty and buses and large construction vehicles will be turning into eastbound traffic on Williamsburg Blvd or northbound traffic on Kensington because the turning radius is inadequate.
35	Q1	The Wells letter concludes that the widened east median and the large nub at NE corner eliminates the right turn lane on westbound Williamsburg causes buses and large construction vehicles to make a right into the southbound lane on Kensington.
36	Q1	The Wells letter concludes that the County design creates a hazardous condition for pedestrians crossing the east side from the SE corn to the western median to the NE corner because of the hazardous curve and uphill grade on westbound Williamsburg and recommends moving the primary crossing to the west side.

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Staff Response: The memorandum written by Wells and Associates to Gail Harrison on 05/13/2013 makes five main claims regarding the design of the intersection. Below is each claim followed by a response:

1. The nub on the southeast corner positions a northbound travelling vehicle to conflict with southbound vehicles, directing them into the southbound lane.
 - This statement is not factually correct. The nub on the southeast corner of the intersection follows the same exact alignment of the parking lane on the east side of northbound N Kensington St. There is no change in the alignment of the intersection for northbound or southbound vehicles on N Kensington St. For this reason, it does not change the location of a northbound vehicle and affect the alignment of the intersection. Therefore; the nub on the southeast corner does not position northbound travelling vehicles to conflict with southbound vehicles.
2. The nub on the northeast corner eliminates the westbound right turn lane on Williamsburg Blvd.
 - This statement is not factually correct. Neither the existing condition nor the proposed design of the intersection includes a marked right-turn lane. The nub on the northeast corner follows the same exact alignment of the parking lane on the north of westbound Williamsburg Blvd, and the east of southbound N Kensington St. Traffic will operate in the same manner under the proposed design as it does today. Right-turning vehicles will be able to use the adjacent pavement, crossing over the bicycle lane to turn right, after yielding to bicyclists.
 - The nub on the northeast corner allows for the intersection to operate as it currently does today while also reducing the crossing distance for pedestrians and making them more visible to vehicles. This improves the safety and comfort of pedestrians crossing at the intersection¹.
3. The Autoturn Analysis indicates that a bus cannot make a westbound to northbound movement without occupying a portion of the southbound lanes on N Kensington St. Additional radius than what is shown on the proposed concept plan is required at the northeast corner to provide enough space for a school bus to complete a westbound right turn movement safely without entering the opposing lane.
 - This statement is not factually correct. The Autoturn Analysis referred to in the memorandum was a preliminary draft document produced for internal discussion purposes only. This analysis used a city bus as the vehicle,

¹ According to the Federal Highway Administration: "Pedestrians rely on intersection locations to cross roadways. At the same time, by adding left and right turn lanes and large turning radii, intersections can be and often are the widest parts of roadways. The distance pedestrians must cross is an important consideration in design."

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which is a much larger vehicle with a more stringent turn radius requirement than a conventional school bus. It is common for staff to begin discussions using this type of vehicle before moving on to a more detailed analysis. The Autoturn Analysis performed with a conventional school bus shows that the westbound to northbound right-turn can be performed safely without encroaching into the southbound lane of N Kensington St.

- The Wells and Associates memorandum states that according to the American Association of State Highway and Transportation Officials (AASHTO), a conventional school bus requires a minimum radius of 23.8 feet for the rear wheel path and a lane width of approximately 15 feet if not to encroach into another lane when making a 90 degree turn. The design meets or exceeds both of these guidelines (radius of 25 feet and the receiving lane width of 15 feet), as shown in the attached exhibit. Therefore; conventional school buses, construction equipment, and emergency response vehicles can make a westbound to northbound movement without occupying a portion of the southbound lanes on N Kensington St and additional radius is not needed.
 - Although it is possible to design an intersection with a larger radius that would accommodate the largest vehicles, such as city buses and semitrailers, there are impacts to this approach that must be considered². Larger radii create wider intersections which increase the crossing distance for pedestrians and allow vehicles to turn at a higher rate of speed. Arlington County's approach seeks to balance the needs of motor vehicles and pedestrians. It does so by selecting a design vehicle that is most likely to frequently use the intersection while avoiding high turning speeds and longer pedestrian crossings³.
4. The widened median on the east leg of the intersection should be scaled back to a point where a school bus, fire truck, and large construction equipment can efficiently and safely make the southbound to eastbound left turn.
- This statement is not factually correct. As demonstrated by the attached Autoturn exhibit, a conventional school bus can safely make a turn from southbound N Kensington St to eastbound Williamsburg Blvd. Fire trucks and large construction equipment can also make this turn because they occupy a turning path similar to or smaller than a conventional school bus.

² According to the Federal Highway Administration: "The dimensions of the corner radius send a message to drivers entering residential neighborhoods regarding the speed they can drive and should be designed with this in mind. Encouraging fast speeds around intersection corners into residential areas will undermine efforts to lower operating speeds within the neighborhoods themselves. In addition, faster speeds create an unsafe environment for pedestrians."

³ According to AASHTO: "The designer should consider the largest design vehicle that is likely to use the facility with considerable frequency or a design vehicle with special characteristics appropriate to a particular location in determining the design of such critical features as radii at intersections."

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5. Since the required stopping sight distance is greater than the available distance, adequate stopping sight distance would not be provided, compromising the safety of pedestrians and reinforcing the fact that the current design is inherently unsafe.
- This statement is not factually correct. The Wells and Associates memorandum states that the 85th percentile speed is 36 miles per hour on Williamsburg Blvd. This is an erroneous statement. The Wells and Associates report assumed a design speed of 40 miles per hour. This is an arbitrary assumption which is not based on data or industry standard practice. The Wells and Associates Memorandum calculates the required stopping distance based on the above, which is not relevant information.
 - While the posted speed limit is 30 miles per hour, Transportation Engineering industry practice is to calculate stopping sight distance based on the 85th percentile speed when such data is available⁴. The 85th percentile speed is available for both westbound Williamsburg Blvd (33 miles per hour) and eastbound Williamsburg Blvd (38 miles per hour). Arlington County applied a more conservative design speed of 35 miles per hour for westbound Williamsburg Blvd and 40 miles per hour for eastbound Williamsburg Blvd. The recommended stopping sight distance for these speeds when considering the grade of the roadway is 237 feet for westbound Williamsburg Blvd and 305 feet for eastbound Williamsburg Blvd.
 - For westbound Williamsburg Blvd, the available sight distance for a southbound vehicle from N Kensington St is 275 feet which meets the minimum of 237 feet. For eastbound Williamsburg Blvd, the available sight distance for a northbound vehicle from N Kensington St is over 500 feet which meets the minimum of 305 feet. The available sight distance for a pedestrian crossing the intersection on the east side (which is where the marked crosswalk and pedestrian refuge will be) is 240 feet which meets the minimum of 237 feet.

Wells and Associates did not have, and did not contact the County to attempt to obtain, the necessary information to conduct an analysis of the design. County staff were alarmed that conclusions were reached in such a manner; and reached out to Wells and Associates on several occasions to direct them to the information that would be necessary to conduct an analysis of the design. Wells and Associates acknowledged receiving this information and verbally acknowledged that the data invalidates their conclusions. County staff are astounded that Wells and Associates have neither retracted their memorandum nor issued an revision.

⁴ According to AASHTO: "the selected design speed should be a logical one with respect to the anticipated operating speed, topography, and adjacent land use, and the functional classification of the highway... the selected design speed should be a high-percentile value in [the] speed distribution curve (i.e., inclusive of nearly all of the desired speeds of drivers, wherever practical)".



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2. How will the design affect the bike lanes along Williamsburg Blvd?

Related Comments:

8	Q1	As bike traffic increases and is growing (with 10-15 bikes at once) will loss of bike lanes cause difficulties with traffic and bike safety as they hit these nubs?
9	Q2	Concerned about the loss of the bike lane.

Staff Response: The design will provide for six-foot wide bicycle lanes for both eastbound Williamsburg Blvd and westbound Williamsburg Blvd. The bicycle lanes will continue through the intersection at the same widths, though they may not necessarily be painted on the pavement in the immediate intersection area. This is typical industry practice and is how most bicycle lanes are marked across intersections in Arlington County.

3. Please provide a summary of the engineering study at the intersection and the calculated sight distance?

Related Comments:

9	Q6	I believe the major problem with the intersection is the lack of visibility caused by the hill. This won't solve the problem.
24	Q1	How will the planned configuration alleviate the problem of not being able to see the traffic coming up Williamsburg Blvd. from Harrison when trying to cross Williamsburg on Kensington?

Staff Response: A field measurement of the sight distance at the intersection was performed for vehicles that are turning from northbound and southbound N Kensington St onto eastbound and westbound Williamsburg Blvd. Additionally, this measurement was performed for pedestrians crossing Williamsburg Blvd on the east side of the intersection.

Minimum recommended stopping sight distance is a function of the speed of vehicles travelling on Williamsburg Blvd (because a vehicle travelling at a certain speed requires a certain distance to come to a stop). Transportation Engineering industry common practice is to base sight-distance on the 85th percentile of observed speeds, when such data is available. For westbound Williamsburg Blvd, this speed is 33 miles per hour; and for eastbound Williamsburg Blvd, this speed is 38 miles per hour. To be conservative, the westbound speed is rounded to the nearest 5 mph increment; which is



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35 mph. The eastbound speed is rounded to the nearest 5 mph increment; which is 40 mph.

The available sight distance of 275 feet for westbound vehicles on Williamsburg Blvd meets the industry standard guideline of 237 feet for this facility. The available sight distance of over 500 feet for eastbound vehicles on Williamsburg Blvd meets the industry standard guideline of 305 feet for this facility. The available sight distance of 240 feet for pedestrians crossing the intersection on the east side (which is where the marked crosswalk and pedestrian median refuge will be) meets the industry standard guideline of 237 feet for this facility.

- 4. Summarize the results of the turning analysis and the methodology used.

Related Comments:

16	Q1	Have you actually done the turning activities with REAL school buses?
27	Q1	Everyone has received in ????? Copy of turn analysis conducted by County Staff dated 4-16 shows busses can't make right turn from Williamsburg on to N. Kensington.
35	Q2	Unless turning radius is increased to meet industry standards, buses, fire trucks and large construction vehicles will jump the NE corner and or go into the southbound Kensington lane.

Staff Response: The intersection of Williamsburg Blvd and N Kensington St is designed to accommodate a conventional school bus. As such, an analysis was performed for a conventional school bus which demonstrated that all turning movements at the intersection can be made safely.

County staff followed the industry standard of performing such analyses through the use of computer software (AutoTurn) to simulate the path occupied by a vehicle when turning. In accordance with the state of the practice and national guidelines; dimensions of the conventional school bus and its turning path were based on vehicle manufacturers' specifications in commercially available computer programs.

A preliminary draft document used only as a starting point for internal discussions has caused concern among some residents. This document displays a city bus turn, which requires a larger radius than a conventional school bus. It is common for County staff to begin discussions using this type of vehicle before moving on to a more detailed analysis. The detailed analysis is then conducted using a design vehicle that is most likely to frequently use the intersection, which is a conventional school bus. The



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AutoTurn analysis demonstrated that a conventional school bus, construction equipment, and emergency response vehicles can perform all turning movements at the intersection safely.

5. Why not look at making Kensington one-way?

Related Comments:

3	Q1	Why not make this section of Kensington St. one-way.
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Staff Response: Arlington County’s Master Transportation Plan focuses on increasing circulation and connectivity as a general policy. This is best enumerated in the MTP through Streets Policy #6: (Arlington MTP- Goals and Policies Summary – November 2007, pg. 7)

“Maintain and enhance a grid-style street network. Facilitate desired creation, realignment or relocation of existing streets as appropriate...”

Making North Kensington Street a one-way street would reduce the ability for residents to circulate and navigate the area, causing longer trips to be made to get from one place to another. Were possible in Arlington, the County is generally exploring ways to turn existing one-way streets back to two-way streets.

6. Why was dismissal time for ES skipped in calculations?

Related Comments:

6	Q2	Why was dismissal time for ES skipped in calculations?
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Staff Response: When the Toole study was done they looked at the Williamsburg Middle School site as a campus, functioning with two facilities that would generate traffic at different times. Their analysis showed that the middle school with 1,200 students in the future would far exceed the traffic generation of the proposed 600 student elementary school. When looking at the AM time periods the middle school arrival, between 7:00am and 8:00am, was studied as the peak generator for traffic on the site. In addition during the morning the elementary school arrival was determined to coincide with the AM peak hour for Williamsburg Blvd, coinciding with the time when most commuters would be using the adjacent roadways, so the morning elementary arrival was also studied. In the afternoon and early evening since, dismissal of Williamsburg Middle School and the proposed elementary school occur outside of the PM peak hour the expansion was determined to have little effect on the PM peak hour and it was not specifically analyzed. As the middle school would be the heaviest



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generator of traffic from the campus, it was the only dismissal period studied, assuming that the elementary school would not have as much impact as the middle school and its 1,200 students.

7. What are is the project cost for the proposed NC project at Williamsburg and Kensington? What would the cost of signalization be? Please also describe the cost for the various signalization options.

10	Q1	Please explain the physical difference and cost difference between a flashing light, HAWK signal and a traffic signal w/o traffic control (pedestrian initiated only) and a full traffic signal.
9	Q4	Which is cheaper a light or nub construction.
9	Q5	How much do the nubs cost?

Staff Response: The cost of the proposed NC project at Williamsburg and Kensington St is currently estimated to be \$150,000. A more detailed estimate will be prepared once the final plans and details are completed. It is likely some of the pedestrian improvements that are part of the NC project would be required in signalization of the intersection.

Staff Response: Full signalization of the intersection would cost between \$175,000 and 250,000. A HAWK signal would cost between \$100,000 and \$150,000. The installation of a Rapid Flash Beacon at the intersection would cost between \$20,000 and \$30,000. These ranges are provided as site specific issue could significantly affect cost.

These Federal Highway Administration (FHWA) links provide background on the HALK and Rapid Flash Beacon signals.

HALK

http://safety.fhwa.dot.gov/provencountermeasures/fhwa_sa_12_012.htm

Rapid Flash Beacon

<http://safety.fhwa.dot.gov/intersection/resources/techsum/fhwasa09009/>

8. Can a traffic signal be installed after the nubs are installed?

Related Comments:

4	Q1	Why not let design as planned be built, and then, if there is a need to adjust, we can.
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Staff Response: Yes, the intersection could be signalized after the construction of the NC. Staff has reviewed the design of the NC project to ensure that the NC project would not preclude future signalization of the intersection.

9. Can a traffic signal be put into "flash" outside of the peak hours of school arrival and departure?

Related Comments:

5	Q3	Do not want a 24x7x365 light when the problem exists only during a smaller period
22	Q1	Does Arlington install traffic signals that operate only during peak traffic?

Staff Response: It is technically possible to place as signal in flash for specific periods of the day. This is not a common or typical practice in the county. Such operation does not assist in predictability causing driver confusion. As a precedent it could lead to a proliferation of traffic signals in the county.

10. If a light at Kensington is useless, how do we get rid of it?

Related Comments:

20	Q1	If a light at Kensington is useless, how do we get rid of it?
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Staff Response: Arlington County does not have an established process for removing a traffic signal.

11. Is the proposed no left-turn at 36th and Harrison going to be 24/7 or for only portions of the day.

Related Comments:

10	Q3	Would the no-left turn sign at 36th and Harrison be in effect 24-hours a day or just during school rush hours.
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Staff Response: The no left-turn restriction is proposed to only occur during the one to two hour period associated with the morning arrival of elementary and middle school students.

12. Traffic signal vs. flashing light.



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Related Comments:

1	Q2	Perhaps a flashing light might be helpful.
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Staff response: An intersection warning flasher is planned. Full signalization of the intersection, assigning right-of-way is not warranted or justified at this time. For more information please refer to staff's response related to the signal warrant analysis.

13. What are the County's recommendations for safe route to school routes? How does this relate to Alice Bowers comments about the intersection?

Related Comments:

14	Q1	Please explain "safe routes to schools materials and how these will direct children coming from the west to walk to N. Harrison and then back to the Elementary school entrance.
15	Q1	Alice Bowers, Head of County Crossing Guards has stated that this intersection requires a signal for safety.
15	Q3	At the May 1 PFRC meeting the County indicated it might recommend no crossing guard. Do you support this?
30	Q1	Steve Stricker in an email of March 25th, 2013 informed Rob Gibson that Alice Brown strongly feels that the W&K intersection needs to be fully signalized when ES1 opens and does not believe a that a rapid flash beacon would not be adequate for the safety of crossing guards and pedestrians.

Staff Response: Staff has recommended to APS, and will continue to through the review of the Use Permit, for the elementary and middle school to instruct students, using safe route to school materials to cross Williamsburg Blvd at North Harrison Street. While the NC project will improve pedestrian safety at the Williamsburg Boulevard and North Kensington Street crossing, during the morning and afternoon arrivals and dismissal, it will be safest to cross at the signalized intersection at Harrison Street were a crossing guard would also be stationed.

Ms. Bowers has indicated to her supervisor that her comment to Steve Stricker has been misrepresented and the she was not trying to imply that the intersection must be signalize, rather if a crossing guard is to be stationed there, to cross students, that it should be signalized.

14. Will the intersection be monitored in the future to evaluate the effect of the design?



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Related Comments:

7	Q2	How will you monitor the design?
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Staff Response: Yes, the intersection will be monitored in the future and Staff is committed to continue to investigate questions and concerns related to the intersection in the future.

15. Will there be flashing school zone 25 MPH signs above Kensington and before Williamsburg Blvd?

Related Comments:

6	Q1	Will there be flashing school zone 25 MPH signs above Kensington and before Williamsburg Blvd.
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Staff Response: As part of the elementary school Use Permit school zone signage will be studied and incorporated into the plan as appropriate. In addition staff will be studying Williamsburg Blvd. to see if it is appropriate to reduce the speed limit to 25 MPH.

16. Please discuss how the increases in school traffic and the existing commuter traffic were considered in both the schools project and in the review of the NC project.

Related Comments:

11	Q3	What consideration has been made for Williamsburg as a significant commuter route? The study does not seem to consider the volume will be increased.
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Staff Response: Existing and projected traffic volumes at the intersection of Williamsburg Boulevard and North Kensington Street were studied as part of Toole Design Group's Williamsburg Middle School and New Elementary School #1 – School Transportation Plan (Toole Report). Staff has reviewed the study methodology, assumptions and findings within the Toole Report, determining that the report is appropriate for use in the planning and review of the elementary school. The report indicates that the traffic on Williamsburg Boulevard at Williamsburg Boulevard and North Kensington Street would continue to operate acceptable level of service with the increase in school traffic. In addition the traffic volume increases projected in the Tool



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Report were used to inform the Signal Warrant analysis for the intersection discussed in more detail in a separate question.

17. Summarize the traffic signal warrant findings?

Related Comments:

21	Q2	Could you discuss how the county determined that the intersection does not meet warrants for installation of a traffic signal?
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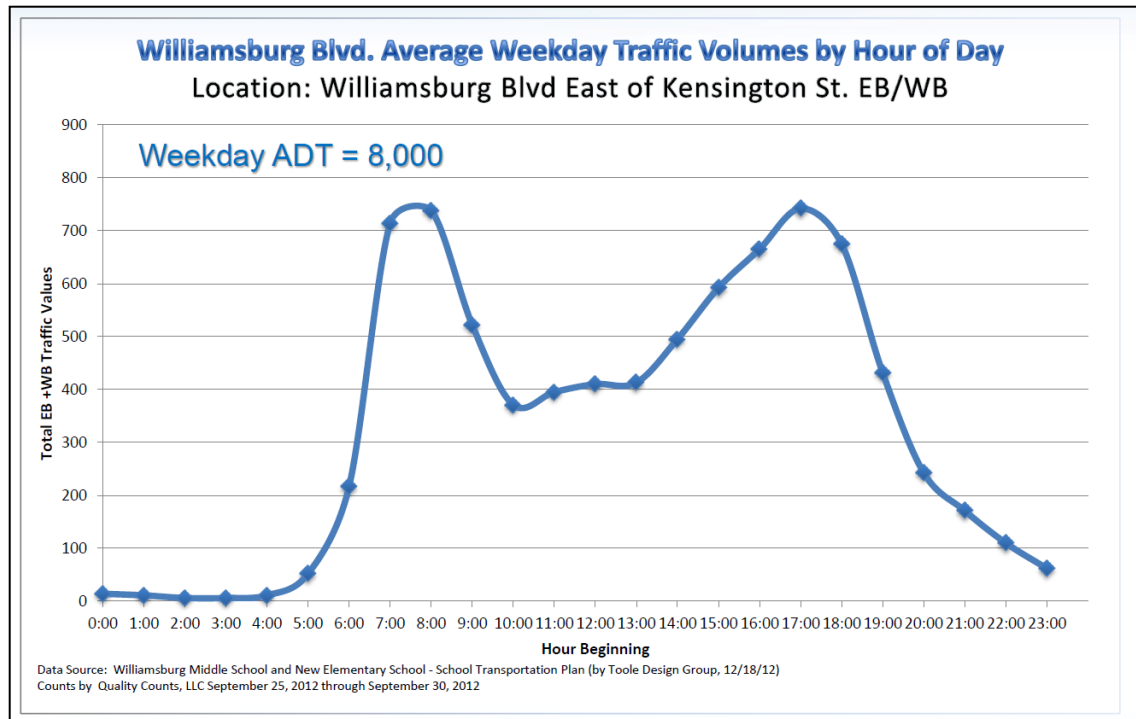
Staff Response: Staff used traffic volume data collected and presented in the Toole Report, future traffic volume projections for the subject roadways developed in the Toole Report along with County historical count and accident data in the traffic signal warrant analysis. Staff reviewed the 9 warrants for installing a traffic signal, established in the U.S. Department of Transportation – Federal Highways Administration *Manual on Uniform Traffic Control Devices (MUTCD), 2009 Edition*, to determine the need for a signal. These 9 warrants are summarized as:

- **Warrant 1, Eight-Hour Vehicular Volume**
- **Warrant 2, Four-Hour Vehicular Volume**
- **Warrant 3, Peak Hour**
- **Warrant 4, Pedestrian Volume**
- **Warrant 5, School Crossing**
- **Warrant 6, Coordinated Signal System**
- **Warrant 7, Crash Experience**
- **Warrant 8, Roadway Network**
- **Warrant 9, Intersection Near a Grade Crossing**

For Warrants 1, 2 staff looked at average weekday traffic volume data by hour of day collected for the Toole report to see if warrants could be met or if additional data for North Kensington Street would be need.

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For the highest eight hour period (12:00pm to 8:00pm) 410 vehicles per hour or more were observed. The threshold for the Eight-Hour Warrant regardless of side street volumes would be 500 vehicles per hour. For 4 of the 8 hours there would not even be enough volume on Williamsburg Boulevard to meet the warrant requirements regardless of the volumes on the side street, ruling it out for further analysis. Warrant 2 for Four-Hour vehicular volumes was similarly ruled out. During the peak four-hour period (3:00pm to 7:00pm) 600 vehicles per hour or more were observed. Based on this over 200 vehicles per hour would be required on North Kensington Street which is approximately double the projected volumes for the street during the peak hour. Since each of the 4 hours must meet these thresholds Warrant 2 can't be met.

To analyze Warrant 3 for Peak Hour Volumes staff looked at 6 possible peak hours, using count data for 3 existing hours along with traffic volumes for 3 projected future hours. In both cases, existing and future, the same three hour periods were studied;

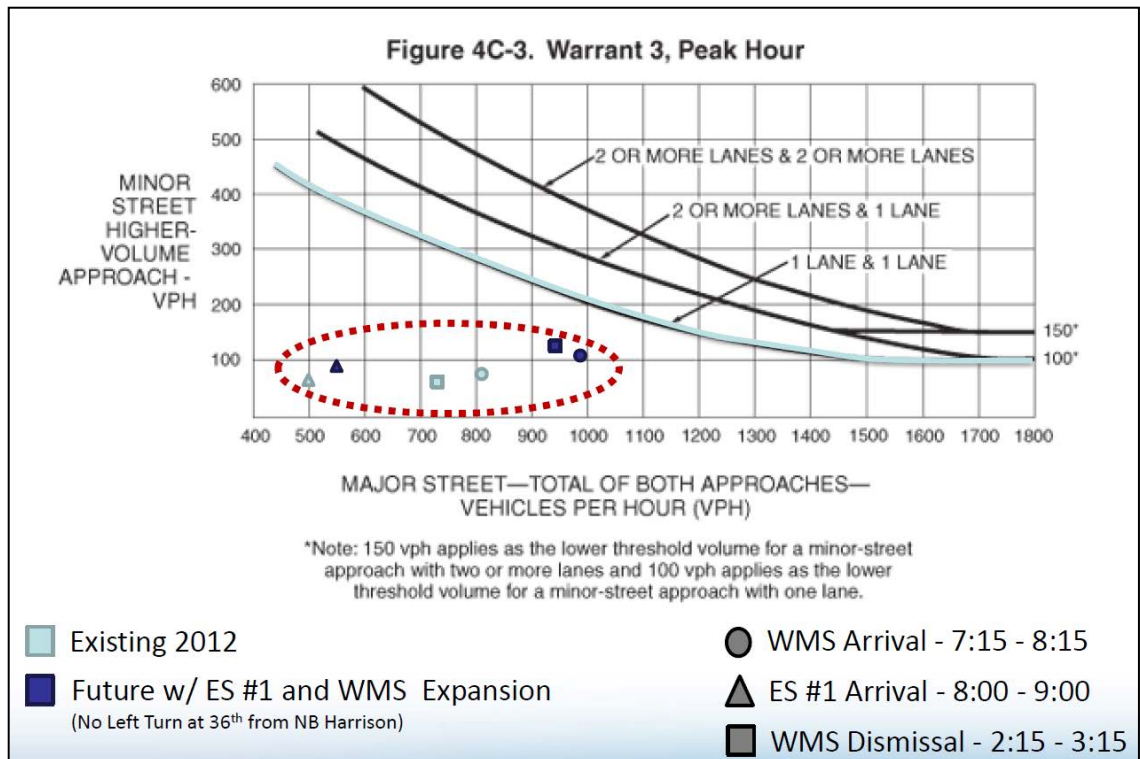
- Williamsburg Middle School Arrival: 7:15am – 8:15am
- AM Peak Hour: 8:00am – 9:00am
- Williamsburg Middle School Dismissal: 2:15pm – 3:15pm

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As all of this data was derived from information presented in the Toole Report, staff confirmed the volumes and projections with Toole Design Group.

The figure below shows all the six period plotted on the MUTCD chart for Warrant 3.



The figure demonstrates that none of the six periods reviewed would meet the minimum requirements for Warrant 3, ruling it out.

Warrant 4 for Pedestrian Volumes was also ruled out because no data showed that the minimum pedestrian volume of 133 pedestrians per hour occurs or would occur with the addition of new students to the Williamsburg campus.

Warrant 5 for School Crossings identifies the following standard:

“The need for a traffic control signal shall be considered when an engineering study of the frequency and adequacy of gaps in the vehicular traffic stream as related to the number and size of groups of schoolchildren at an established school crossing across the major street shows that the number of adequate gaps in the traffic stream during the period when the schoolchildren are using the crossing is less than the number of minutes in the same period (see Section 7A.03) and there are a minimum of 20



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schoolchildren during the highest crossing hour.” MUTCD, 2009 edition, Section 4C.06., pg.442

As discussed in a separate question about Safe Routes to School, staff does not recommend that this location be identified as an established school crossing of Williamsburg Boulevard. Rather, the established crossing should be at the existing signalized intersection of Williamsburg Boulevard and North Harrison Street. The intersection is not only signalized, in addition the intersection is recommended to be staffed by a crossing guard (and is currently staffed by a crossing guard during middle school arrival and departure). Outside of that consideration staff also reviewed pedestrian counts for the intersection (in the Toole Report), that should that fewer than 20 pedestrians cross during the existing middle school arrival and departure hours. Base on approved boundary information from APS, staff does not believe that the 20 schoolchildren threshold set by the warrant would be met with the addition of the elementary school to the campus. Based on this staff believes Warrant 5 for Schools Crossings would not be met. In the future however conditions my need to be reviewed again.

Warrant 7 for Crash Experience was reviewed to see if reported crashes at the intersection could warrant signalization. This warrant has multiple parts that must be met, but the following is the most relevant to the review:

“B. Five or more reported crashes, of types susceptible to correction by a traffic control signal, have occurred within a 12-month period, each crash involving personal injury or property damage apparently exceeding the applicable requirements for a reportable crash; and” MUTCD, 2009 edition, Section 4C.08., pg.445

As discussed in the question about accident history, only one crash was reported at the intersection between 2008 and 2012. The crash was a rear-end collision which is not a type of crash susceptible to correction by a traffic control signal. As the number of reported crashes does not meet the thresholds for the warrant, Warrant 7 was also ruled out.

Warrants 6, 8, and 9 were identified to be not applicable to the intersection and no further review was performed.

This review shows that none of the applicable warrants would be met justifying signalization.

18. What is the accident history for the intersection?

Related Comments:



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3	Q3	Is the intersection dangerous and what are the numbers of recorded accidents?
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Staff Response: There has only been one documented crash at the intersection between 2008 and 2012. In 2008 a westbound vehicle on Williamsburg Blvd rear-ended a vehicle that slowed to make the left turn from westbound Williamsburg Blvd to Southbound Kensington Street. Signalization is not used as a mitigation strategy for rear-end collisions. It is not uncommon and well documented that rear-end collisions can increase after an intersection is signalized.

19. What would the impacts to surrounding streets?

Related Comments:

19	Q1	Any consideration give to N.36th between John Marshall and Kensington St. re: traffic volumes between opening and close of WES school hours.
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Staff Response: Signalization of the intersection of Williamsburg Blvd and North Kensington Street would most likely draw more traffic to North Kensington Street.