

T&E COMMITTEE #3  
May 2, 2019  
**Worksession**

**MEMORANDUM**

April 30, 2019

TO: Transportation and Environment Committee  
FROM: <sup>GO</sup> Glenn Orlin, Deputy Director  
SUBJECT: White Oak Local Area Transportation Improvement Program (LATIP)  
PURPOSE: Briefing on the New Hampshire Avenue/Powder Mill Road area LATIP improvement<sup>1</sup>

On February 14, 2017 the Council approved Resolution 18-726 establishing the White Oak LATIP, establishing the LATIP fee and the projects to be funded by the fee (©1-3). The LATIP fee was established in the Subdivision Staging Policy (SSP) to allow new development in White Oak to pay the fee in lieu of meeting the SSP's Local Area Transportation Review (LATR) adequate public facilities requirement.

One of the projects ultimately to be built with LATIP fee revenue is an improvement in the vicinity of the New Hampshire Avenue/Powder Mill Road intersection in Hillandale. Unlike the other improvements listed on ©2, this one was not specifically defined at the time the program was approved. For the purposes of establishing the basis for the LATIP fee, the Council ascribed a \$5 million cost to it.

The Duffie Companies has proposed a set of four elements that would constitute this improvement. One element for which there is not a consensus is the addition of a slip ramp from the New Hampshire Avenue/Elton Road intersection to the existing ramp from southbound New Hampshire Avenue to the westbound Beltway (i.e., the Outer Loop). The Duffie Companies and the businesses along Elton Road favor this slip ramp, because it would bring the New Hampshire Avenue/Powder Mill Road intersection into conformance with the SSP's LATR delay standard (80 seconds/vehicle), and it would eliminate the problematic U-turns at New Hampshire Avenue/Powder Mill Road that are currently required by trucks and other traffic from Elton Road to reach the Outer Loop. Many residents east of the industrial properties on Elton Road are concerned that the slip ramp would induce cut-through traffic through their neighborhood, some of which is in Montgomery County but most of which is in Prince George's County. To alleviate this, one element of the plan is to install traffic calming on Elton Road—speed humps, neckdowns, islands, etc.—as has been done already on the Prince George's segment of Elton Road.

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<sup>1</sup> Key words: #WhiteOak, Hillandale.

The Department of Transportation held several public meetings regarding the set of elements, culminating in a public hearing on February 21, 2019. The technical report prepared by DOT is on ©4-13, and the Hearing Examiner's report with recommendations is on ©14-20. The Hearing Examiner recommended proceeding with all elements except for the slip ramp, which he proposed for a further, more comprehensive study. DOT Director Al Roshdieh concurred with the Hearing Examiner.

Chris Conklin, DOT's Deputy Director for Transportation Policy, will brief the Committee on this project and the schedule for the detailed study.

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Resolution No.: 18-726  
Introduced: December 13, 2016  
Adopted: February 14, 2017

**COUNTY COUNCIL  
FOR MONTGOMERY COUNTY, MARYLAND**

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Lead Sponsor: Council President

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**SUBJECT:** White Oak Local Area Transportation Improvement Program and Mitigation Payment

**Background**

1. Under County Code 52-51(a), an applicant for a building permit for any building on which an impact tax is imposed under this Article must pay to the Department of Finance a Mitigation Payment if this payment is required for a building included in a preliminary plan of subdivision that was approved under the Local Area Transportation Review provisions in the County Subdivision Staging Policy (SSP).
2. The 2016-2020 SSP adopted in Council Resolution 18-671 on November 15, 2016 states that the Planning Board may approve a subdivision in the White Oak Policy Area conditioned on the applicant paying a fee to the County commensurate with the applicant's proportion of the cost of a White Oak Local Area Transportation Improvement Program, including the costs of design, land acquisition, construction, site improvements, and utility relocation. The proportion is based on a subdivision's share of net additional peak-hour vehicle trips generated by all master-planned development in the White Oak Policy Area approved after January 1, 2016. The components of the White Oak Local Area Transportation Improvement Program and the fee per peak-hour vehicle trip will be established by Council resolution, after a public hearing.
3. On December 8, 2016 the Department of Transportation transmitted to the Council its recommended White Oak Local Area Transportation Improvement Program totaling \$131.7 million, and its recommended mitigation payment of \$6,500 per vehicle-trip.
4. A public hearing on this resolution was advertised and held on January 17, 2017.
5. The Planning, Housing and Economic Development Committee reviewed this resolution on February 6 and 7, 2017, and it forwarded its recommendations to the Council.

**Action**

The County Council for Montgomery County, Maryland approves the following resolution:

The White Oak Local Area Transportation Improvement Program consists of the following projects and programs:

**INTERSECTIONS**

• US 29 at Randolph Rd / Cherry Hill Rd	\$2,000,000
• Broadbirch Dr at Cherry Hill Rd & Plum Orchard Dr	\$3,600,000
• Broadbirch Dr at Tech Rd	\$1,700,000
• US 29 at Industrial Pkwy	\$4,400,000
• US 29 at Stewart Lane	\$3,300,000
• US 29 at Tech Road	\$3,300,000
• Tech Rd at Prosperity Dr / Old Columbia Pike	\$2,300,000
• Tech Road at Industrial Parkway	\$4,400,000
• MD 650 at Lockwood Dr	\$1,400,000
→ • MD 650 at Powder Mill Rd	\$5,000,000 ←
	<b>Subtotal \$31,400,000</b>

**TRANSIT**

• New Ride-On Service	\$8,400,000
• White Oak Circulator	\$2,400,000
• Increased service on Ride On Route 10	\$2,000,000
• Increased service on Ride On Route 22	\$1,800,000
• Hillendale Transit Center	\$500,000
• Bus Stop Improvements	\$100,000
	<b>Subtotal \$15,200,000</b>

**BIKEWAYS**

• M-10 US 29 (Columbia Pike)	\$2,800,000
• M-12 MD 650 (New Hampshire Ave)	\$6,600,000
• A-94 Powder Mill Rd	\$3,400,000
• A-105 Old Columbia Pike (Stewart Lane to Industrial Parkway)	\$5,000,000
• A-106 Industrial Pkwy	\$8,400,000
• A-107 Tech Rd	\$2,700,000
• A-108 Prosperity Dr	\$3,600,000
• A-286 Lockwood Dr	\$5,700,000
• Bikesharing stations and bikes	\$4,600,000
	<b>Subtotal \$42,800,000</b>

**NEW ROADS AND OTHER**

• A-105 Old Columbia Pike: bridge over Paint Branch	\$12,000,000
• LATR Analyses	\$400,000
	<b>Subtotal \$12,400,000</b>

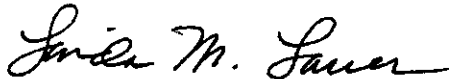
**Total \$101,800,000**

The fee is established at \$5,010 per vehicle-trip. The fee must be paid at a time and manner

consistent with Local Area Transportation Mitigation Payments as prescribed in Section 52-51 of the County Code. The Department of Finance must retain funds collected from this fee in an account to be appropriated for transportation improvements that result in transportation capacity and mobility for the specific projects in the White Oak Local Area Transportation Improvement Program.

The fee should be recalculated effective July 1 in odd-numbered years to reflect changes in the cost of the projects in the program. The first recalculation should go into effect on July 1, 2019. In addition, the program of projects and the calculation of peak-hour vehicle-trips should be comprehensively reviewed every six years, or sooner if the White Oak Master Plan is significantly amended.

This is a correct copy of Council action.



Linda M. Lauer, Clerk of the Council

## **BACKGROUND – LATIP**

In February 2017 the Council approved the Local Area Transportation Improvement Program, referred to as LATIP. This program evaluated the master plan as if it were a single development and identified the necessary infrastructure to serve this growth. A cost was assigned to this infrastructure, and a per-trip fee was estimated based on the number of trips the master plan was expected to generate in 2040 at 100% build-out. This fee is lockboxed such that its revenue can only be spent on projects included in the LATIP, all of which are located in the White Oak area.

At the intersection of New Hampshire Avenue (MD 650) and Powder Mill Road, the LATIP-identified treatments significantly deferred from the findings of the analysis previously performed as part of the White Oak Science Gateway Master Plan. There was inadequate time before the Council action to resolve this discrepancy, and the Council – acknowledging some amount of effort would be necessary – assigned a placeholder \$5 million to the intersection.

This placeholder was assigned with the expectation that the intersection would have to be further evaluated. It was done so with the awareness that pending development – largely led by the Duffie Companies – was imminently forthcoming.

The approval of LATIP left open the potential for private interests to propose changes to the program. In such cases, applicants would perform the analysis, seek technical concurrence, and this proposal would then be publicly vetted. This public hearing is a direct result of this process.

A crediting process was also established by the LATIP under the expectation that private development would be able to implement infrastructure in the program within a faster

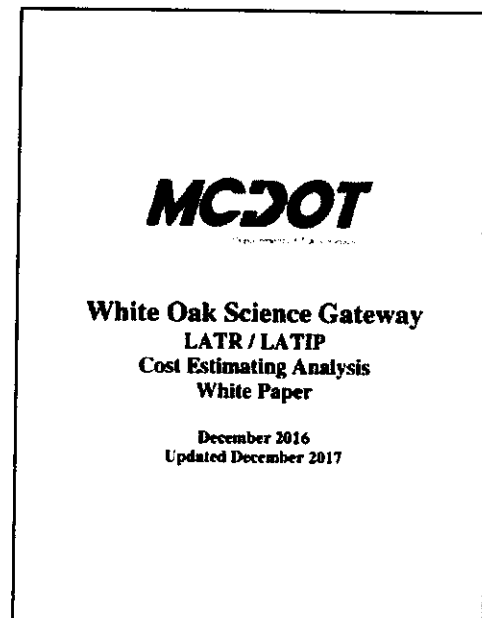
timeframe and at a lower cost than if left fully to the County to implement.

A development may build out infrastructure in the LATIP and receive credit toward their LATIP fee. Upon either (1) drawing down their LATIP fee obligation or (2) utilizing the full allocation for a project in the LATIP: a developer may then become eligible for impact tax credits.

Developers benefit from this approach by being able to see that LATIP infrastructure is provided nearest to them, instead of elsewhere in the White Oak area. The inclusion of impact tax credits further localizes funding, as impact taxes are otherwise expended countywide.

Additional information regarding LATIP is available in the White Paper available at:

<https://www.montgomerycountymd.gov/dot-dir/Resources/Files/LATR-WhitePaper.pdf>



## BACKGROUND – DEVELOPER

The Duffie Companies are a lead stakeholder in several developments in the immediate area. These include the Home2 Suites along Elton Road, which is under construction and nearly ready to obtain its Certificate of Occupancy. At that time the Duffie would be obligated to either pay the LATIP fee, or to build projects included in the LATIP fee for credit.

The timeline associated with the Certificate of Occupancy is the basis for the schedule of this public hearing, as a decision on the developer's proposal must be made in the near future as to determine whether Duffie will (1) construct treatments for credit in accordance with the proposal, or (2) pay the LATIP fee and impact taxes in full.

Other Duffie projects in the area include the Hillandale Gateway on the southwest quadrant of New Hampshire Avenue and Powder Mill Road, and the Hillandale Shopping Center located on the east side of New Hampshire Avenue, between Powder Mill Road and Elton Road.

## EVALUATION

Hillandale Gateway is currently moving through the County's Development Review process. It is via this process that the Duffie Companies prepared a proposal to replace the placeholder \$5 million in the LATIP with a newly analyzed set of proposed treatments.

At their expense, Duffie contracted with Lenhart Traffic Consulting, Inc. to perform a traffic analysis of the Hillandale area. This analysis focused on two intersections along New Hampshire Avenue: at Powder Mill Road as well as at Elton Road.

The analysis assumed a build year of 2040 and 100% of master plan build-out, which keeps with the methodology established by the

LATIP. It then added its own site-generated trips for the Hillandale Gateway project. While this technically double-counts the Gateway's trips, its application ensures that the trips are applied at a more nuanced level of detail that the areawide models used in the LATIP would not have captured.

The analysis did not assume any traffic currently originating from the Hillandale Shopping Center would change its behavior. Traffic exiting the shopping center onto Powder Mill Road would continue to use Powder Mill Road, and traffic exiting onto Elton Road would continue to use Elton Road. This assumption of a *0% diversion* will be referenced again later in this testimony.

As previously stated, any such proposed changes to the LATIP would have to seek technical concurrence and also be publicly vetted.

This analysis has been reviewed by both MCDOT as well as SHA, and both agencies find that the evaluation and its findings are technically sound. The proposed treatments meet the technical criteria established for the area by the Subdivision Staging Policy, which establishes a limit of 80 seconds of overall intersection delay.

Information has been presented to the public at six meetings this year, culminating in tonight's public hearing:

- May 24<sup>th</sup> Kickoff presentation
- Oct 1<sup>st</sup> Hillandale Civic Association
- Oct 23<sup>rd</sup> Friends of White Oak
- Oct 24<sup>th</sup> Hillandale residents in Prince George's County
- Nov 7<sup>th</sup> East County Citizens Advisory Board
- Nov 8<sup>th</sup> Open House
- Nov 15<sup>th</sup> Public Hearing

## PROPOSAL

The analysis prepared by the Duffie Companies identifies four distinct components, including two treatments at the intersection of New Hampshire Avenue and Powder Mill Road, a slip-ramp and queue jump at Elton Road, and traffic calming along Elton Road.

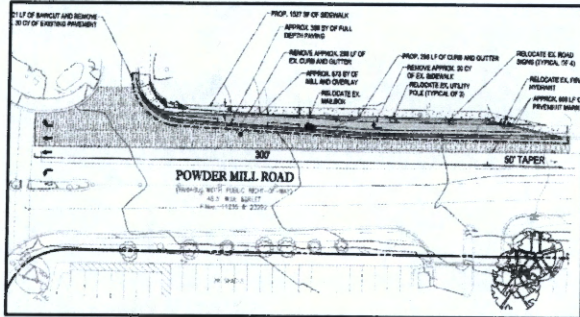


Figure 1 – East leg of Powder Mill Rd

As shown in Figure 1, along westbound Powder Mill Road is a right-turn lane that is relatively short and often blocked by queued left and thru vehicles. The developer proposes to extend this right-turn lane by over 200 ft as to improve its accessibility for right-turning motorists.

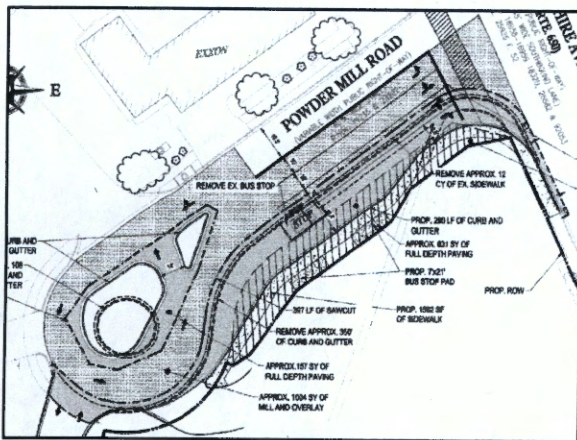


Figure 2 – West leg of Powder Mill Rd

As shown in Figure 2, along the eastbound Powder Mill Road approach to New Hampshire Avenue, the analysis proposes widening to add two total lanes: an additional approach lane and room for an additional outbound lane

toward the cul-de-sac. This widening directly serves the growth anticipated by the redevelopment of the Hillandale Gateway site.

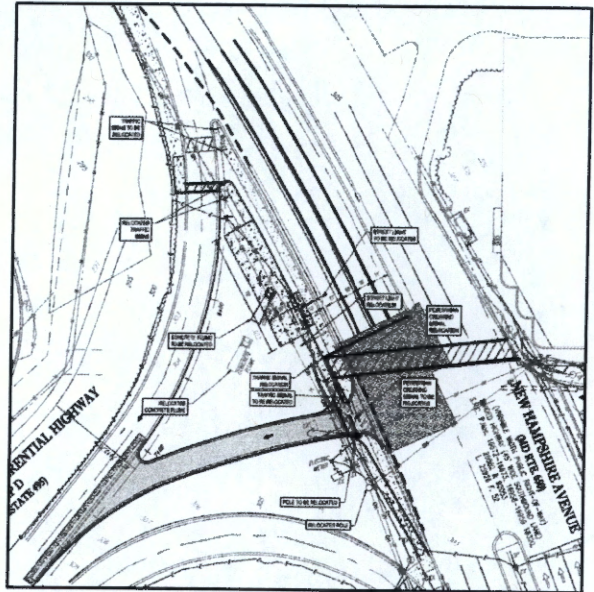


Figure 3 – Elton Slip-Ramp and Bus Stop / Queue Jump

As shown in Figure 3, a new slip-ramp is proposed as a west leg to the intersection of New Hampshire Avenue and Elton Road. This ramp would provide one-way thru access from westbound Elton Road directly to the Outer Loop of the Capital Beltway (I-495). This is focused primarily on relieving traffic that, today, generally travels through the Powder Mill intersection to travel between Elton and the Beltway.

Included in this slip-ramp design is a reconstruction of the southbound bus stop. The design proposes to include a queue jump lane whereby buses may exit the southbound flow of traffic to serve the bus stop and would receive an advance green signal to allow them to merge back into traffic ahead of other traffic.



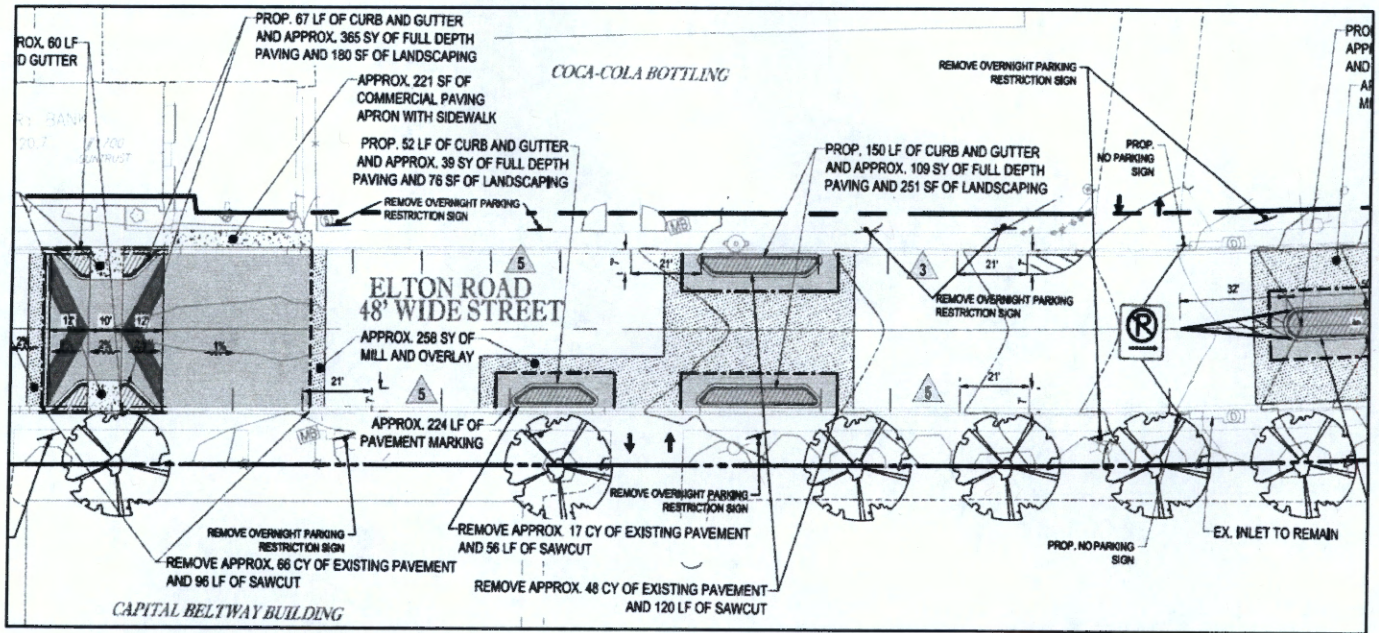


Figure 4 – Traffic calming along Elton Rd

Acknowledging community concerns regarding cut-through traffic along Elton Road, Figure 4 shows traffic calming along Elton Road which would be implemented prior to or concurrent with the slip-ramp. These measures include a mixture of horizontal and vertical deflection, utilizing speed tables &/or raised crosswalks, neckdowns, and islands to meter speeds through the Montgomery County portion of Elton Road.

Public testimony from several residents opposing the slip-ramp as well as from the Coca-Cola facility supported keeping the overnight parking restrictions currently shown as being removed.

Unrelated to this analysis and its proposed treatments, the Prince George's Department of Public Works and Transportation (PG-DPWT) recently installed speed humps along their respective portion of Elton Road.

## TRAFFIC IMPACTS

As previously noted, the delay thresholds for the area were established by the LATIP at 80 seconds of intersection delay. Figure 5 shows the intersection delay (in seconds) for the AM and PM peak periods at each intersection with New Hampshire Avenue, across several different scenarios. Also included is the Level of Service, a grading scale ranging from A (minimal delay) to F (exceeding congestion thresholds).

Scenario	Powder Mill Rd		Elton Rd	
	AM	PM	AM	PM
2040 Baseline	76.9 E	125.0 F	4.8 A	9.6 A
Full Build	55.8 E	76.1 E	4.3 A	7.3 A
Full Build 15% Diversion	46.0 D	71.2 E	10.0 A	9.4 A

Figure 5 – Intersection Delay

The **2040 Baseline** scenario is the “No Build” basis of comparison. It includes background trips from the master plan’s 100% build-out and the trips generated by the development. The 2040 Baseline scenario does not include any changes in the existing geometries and configurations, but does include background projects such as other LATIP projects in the area, BRT, and other master planned projects. It shows that without any action, the New Hampshire and Powder Mill intersection will fail during the evening peak period.

The **Full Build** scenario includes the 2040 Baseline scenario’s inputs as well as the treatments along the east and west legs of Powder Mill, the slip-ramp, queue jump, and traffic calming (though the queue jump and traffic calming have minimal effect on the model).

The proposed treatments at Powder Mill Road and Elton Road would reduce delay at Powder Mill by 27% in the AM and 39% in the PM. There would be little impact to operations at Elton Road.

This is accomplished primarily by enabling traffic on Elton to proceed directly to the Beltway instead of using the most common route of turning right onto New Hampshire, U-turning at Powder Mill, and returning as a right-turn onto the existing Beltway ramp.

Full Build was found to have a significant reduction in queueing along southbound New Hampshire in the AM peak period. The analysis identified a reduction in queue from an average 3790 ft to 1770 ft, a reduction of 53%. In the PM there was minimal reverse effect, as the northbound direction approaching Elton the analysis identified changed from an average 3690 ft to 3760 ft, an increase of 2%.

It was previously noted that the analysis assumed 0% of the traffic currently exiting the Hillendale Shopping Center onto Powder Mill Road would divert to Elton Road to use the Elton Road slip-ramp. Peak period observations in November 2018 found that 20% of the traffic along westbound Powder Mill Road consists of traffic exiting the shopping center.

The **Full Build 15% Diversion** scenario estimates that a sizeable share (75%) of the traffic exiting the Hillendale Shopping Center onto Powder Mill Road would instead use Elton Road to utilize the slip-ramp. Compared to the 2040 Baseline, this results in a 40% reduction in delay at Powder Mill in the AM, and a 43% reduction in delay at Powder Mill in the PM. There would, again, be minimal effect to overall operations at the Elton Road intersection.

**CONCERNS**

**CUT-THRU TRAFFIC**

The top concern raised by stakeholders relates to cut-through traffic between Riggs Road and New Hampshire Avenue, primarily using a route formed by Elton Road and Wooded Way, as highlighted in Figure 6.

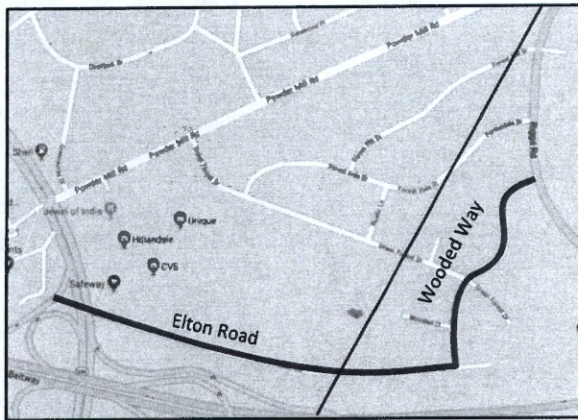


Figure 6 – Map of Hillandale. The cut-through route is highlighted in red. The County Line is shown in blue.

Concerns are primarily focused on traffic traveling westbound. From northbound Riggs Road, in particular, the Elton/Wooded route is an attractive and direct alternative compared to waiting through congestion at the intersection of Powder Mill Road and Riggs Road.

Businesses along Elton Road generate truck traffic that has purportedly made use of the Elton/Wooded route. Signing has been installed at the intersection of Riggs Road and Wooded Way prohibiting trucks.

Wooded Way is a steep and winding street. While speed humps were recently installed by PG-DPWT, residents have expressed continued dissatisfaction with the efficacy of the speed humps.

Elton Road is relatively straight, but two hills can affect the speed of traffic along its length. Each hill approximately peaks at the center of each land use: one hill centered on the residential area, one hill centered on the commercial/industrial area, and the lowest

point between them located where the land use changes.

The traffic calming proposed by the applicant and developed in coordination with MCDOT (shown previously in Figure 4) is intended to simultaneously reduce speeds while also discouraging cut-through traffic. It is intended that in combination with PG-DPWT’s speed humps: the reduced speeds may reduce the attraction of using the Elton/Wooded route as a cut-through.

While the slip-ramp and associated traffic calming could be implemented independently of any work at Powder Mill Road, traffic calming along Elton Road would be obligated to occur before or concurrent to any slip-ramp construction. The slip-ramp would not be permitted to operate without traffic calming measures along Elton Road.

Additional traffic calming alternatives have been shared with the community, including restricting either Elton Road or Wooded Way to one-way eastbound.

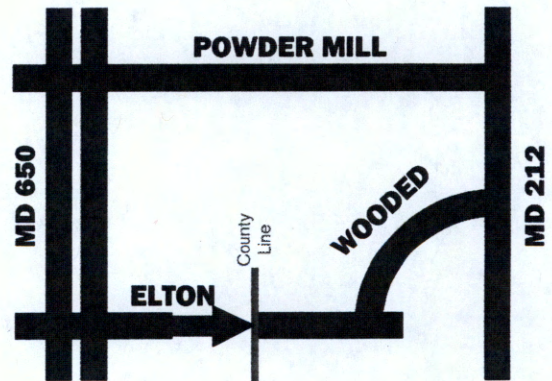


Figure 7 – Restricting Elton to One-Way Eastbound

A restriction along Elton Road (Figure 7) would occur approximately at the change in land use between residential and commercial / industrial, utilizing a raised island to physically block westbound flow at that point. The street could remain bidirectional on either side of the island. An example of such a treatment is shown in Figure 8.

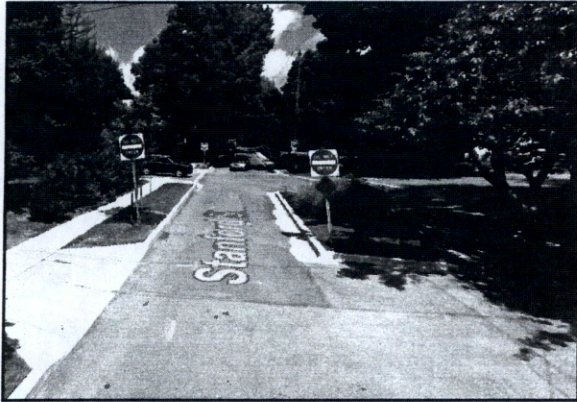


Figure 8 – Example of a one-way restriction island

With approval by PG-DPWT, this same treatment could be used to restrict traffic along Wooded Way at its intersection with Riggs Road, reinforcing a prohibition on turns onto Wooded Way (Figure 9). Alternately this restriction could also be accomplished through signing only, restricting right- and/or left-turns from Riggs either all day or by time of day.

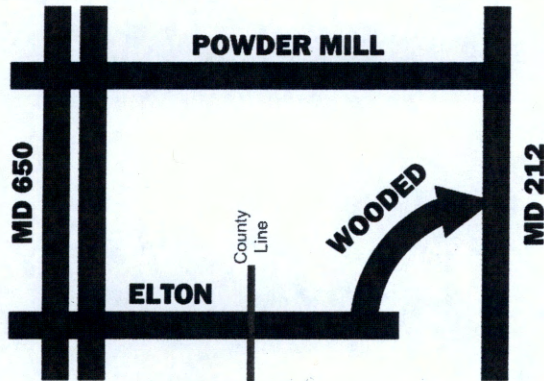


Figure 9 – Restricting Wooded Way to One-Way Eastbound

Both restrictions would be expected to significantly reduce cut-through access. However, a restriction on Elton Road would also limit the neighborhood's own access to New Hampshire Avenue as well as the Beltway and commercial land uses that they may wish to visit. The restriction along Wooded Way would also affect neighborhood access, though perhaps not as strongly as a restriction along Elton Road.

Additional concerns were raised by the community in response to these traffic calming

options, particularly regarding their risk of shifting cut-through traffic onto other streets such as Forest Dale Drive and Forest Hill Drive, highlighted in Figure 10.

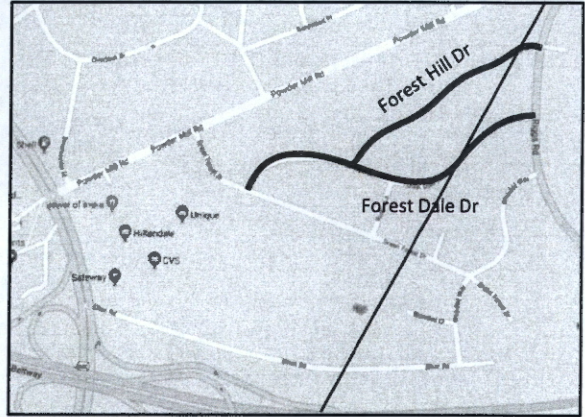


Figure 10 – Map of Hillandale

Under ideal conditions we would assert that these routes are so serpentine as to make cut-through options unpalatable as compared to using Powder Mill Road. However, we recognize stakeholders' concerns that congestion at the Powder Mill Road / Riggs Road intersection is so significant that cut-through traffic along Forest Hill / Forest Dale could potentially remain a viable option for motorists attempting to avoid congestion.

Further consideration of traffic calming along these streets could be included as part of our regular traffic calming program, or action toward addressing congestion at the Powder Mill / Riggs intersection would provide a particularly significant deterrent to cut-through traffic.

An additional concern has been raised by the community regarding the impacts to Powder Mill Road if larger shares of cut-through traffic are successfully deterred from Elton Road. There has been no analysis at this time of such impacts.

None of these additional calming measures would be implemented without community support, and may require coordination with PG-DPWT (who have been consulted as part of this evaluation).

## CONCERNS                      INTERSECTION SAFETY

Concern has been raised that the addition of a slip-ramp at Elton Road would introduce several new conflict points where none exist today.

This includes a new thru movement across the intersection which, while unopposed, does cross additional vehicles through the intersection. As these are indeed new crossing points that would not have otherwise been present, they do increase exposure to any red light violations along New Hampshire Avenue, or any pedestrians crossing against a DO NOT WALK signal on the new west leg.

The slip-ramp would also introduce a new merge point where it joins the existing ramp from southbound MD 650 to the Outer Loop. As is typical of such configurations, traffic from southbound MD 650 would have a Yield condition. Again, this is a new conflict point where none exists today, though as both vehicles are traveling in approximately the same direction: collisions at such merge areas tend to be of low severity.

Contrasting this is the reduction of left-turns from westbound Powder Mill Road onto southbound New Hampshire Avenue (shopping center traffic that would instead exit via Elton Road) as well as U-turns from northbound New Hampshire to southbound New Hampshire (traffic along Elton currently trying to reach the Outer Loop).

Left- and U-turns tend to be associated with higher severity crashes. U-turns also come into particularly frequent conflict with right-turns owing to many motorists being unfamiliar with who has the right-of-way in such situations. U-turns can also conflict with pedestrians crossing against a DO NOT WALK, but doing so across a leg of traffic

that is often unoccupied by vehicles and a common (even if unlawful) activity.

Specific to the Powder Mill intersection are longstanding issues with U-turning trucks, originating from commercial and industrial uses along Elton Road. U-turning trucks must complete the maneuver either by making a three-point turn (which involves reversing on a major highway) or running up and over the curb (where users such as pedestrians and bicyclists are frequently located). Given the exposure of a three-point turn and vulnerability of pedestrians and bicyclists, collisions in these cases have an increased risk of being severe or fatal.

Shifting traffic away from the Powder Mill intersection and toward Elton also reduces traffic using the free-flow ramp from southbound New Hampshire toward the Outer Loop. Reducing traffic along this ramp reduces the exposure between motorists and pedestrians crossing this ramp.

Similarly, reducing the number of right-turns from Elton Road onto New Hampshire Avenue reduces the exposure between right-turning motorists and pedestrians crossing on the WALK signal.

Improvements in safety are anticipated from a reduction in congestion at and between the intersections. Congestion can cause road users to find themselves in atypical situations (such as blocked intersections or crosswalks) and can also lead to more sudden and aggressive user behavior.

It is our judgment that the risks of creating new conflict points is significantly outweighed by the benefits of reducing volumes associated with high-risk conflict points elsewhere.

(11)

## CONCERNS

## BUS STOPS

A frequent concern regarding congestion along New Hampshire Avenue is the effect of buses through the corridor, with the assertion that buses effectively cause New Hampshire Avenue to operate as a 4-lane highway instead of a 6-lane highway.

WMATA operates the C8, K6, and K9 through the area, and Montgomery County Ride-On operates the 20 and 24. These produce a high volume of buses such that there is often a bus present between Powder Mill Road and Elton Road.

This location is also a major transfer area, with a master planned transit center on the west leg of Powder Mill Road and significant development both existing and anticipated in the immediate area. The large volumes of bus passengers using stops in this area results in longer dwell times for each bus as passengers board and alight.

Bus stops are located in each direction at both Powder Mill Road and Elton Road, with the stops being located approximately 500 feet apart. All four stops experience significant ridership.

MCDOT staff are reviewing operations in this area to evaluate bus stop consolidation. The issues along the northbound direction would remain an issue whether the proposed treatments do or do not occur, and have minimal effect on the findings of this analysis. Along the southbound direction, the proposed queue jump area at Elton removes buses from the traffic stream at one of the four stops in the immediate area.

Concern has also been raised that the queue jump lane results in a shortened bus stop, and that this may affect how many buses can queue at this stop at a time. Currently there is 200 feet of space before buses at the

southbound New Hampshire @ Elton stop would block the existing southbound ramp onto the Outer Loop. The proposed designs would shorten this to 120 feet. At a typical length of 40 feet per bus, this would reduce bus queuing capacity at the bus stop from 5 buses to 3 buses.

This stop, specifically, is served by the 20, 24, C8, and K6. The 20 and 24 both terminate and layover in the cul-de-sac on the west leg of Powder Mill Road such that this should eliminate risk of bus bunching. The C8 has a scheduled stop at FDA and the K6 has a terminating layover at the Lockwood Transit Center, in both cases being near enough as to significantly reduce the risk of bus bunching.

Bus frequency during each peak period is included in Figure 11. Based on these frequencies and noting the measures to reduce bus bunching: it is unlikely that more than three buses would be expected to queue at this bus stop at the same time, other than on rare or extraneous occasions. In such cases it is anticipated that the buses would quickly clear such that they are no longer blocking either the thru lanes or the existing access to the Outer Loop ramp.

Route	AM	PM
Ride-On 20	8	15
Ride-On 24	25	N/A
WMATA C8	30	30
WMATA K6	12	20

Figure 11 – Southbound Bus Headways / Frequency

Compared to the benefits to auto traffic of shifting buses out of the through lanes it is our judgment that any occasions where buses would queue beyond the bus stop are significantly outweighed by the more regular occurrence of buses not blocking any travel lanes at all.

**CONCERNS**                      **OTHER ALTERNATIVES**

During public meetings other alternatives were raised by the public for consideration.

One alternative is to provide a new left-turn movement along southbound New Hampshire Avenue to access the existing northbound flyover ramp to I-495, located just north of Oakview Drive.

An additional suggestion received from public input is to provide a connection between the Powder Mill cul-de-sac and the Outer Loop.

The applicant has not performed an evaluation of either of these suggested options. Any such evaluation would have to occur at a later date as part of a separate development consideration, or as part of a County-managed analysis under LATIP.

Another alternative is to focus exclusively on treatments only at Powder Mill Road. Included in **Figure 12** are intersection delays for 2040 baseline (No Build), the Full Build, and a scenario where only the treatments on the east and west legs of Powder Mill Road be implemented (that is: not constructing the slip-ramp).

Noting the previous discussion regarding 0% versus 15% diversion associated with traffic from the Hillandale Shopping Center: all metrics here assume 0% diversion.

Scenario	Powder Mill Rd		Elton Rd	
	AM	PM	AM	PM
2040 Baseline	76.9 E	125.0 F	4.8 A	9.6 A
Full Build	55.8 E	76.1 E	4.3 A	7.3 A
Powder Mill Only	59.6 E	88.0 F	5.7 A	6.2 A

Figure 12 – Intersection Delay

Constructing only the treatments at Powder Mill Road does not result in an intersection that passes the defined congestion threshold of 80 seconds in 2040.

Additional work would be necessary, and to date there has not been further evaluation of what such needs would entail. Again, given the timing of the developer’s schedule versus their proffered treatments: any further evaluation would have to occur as part of a separate development consideration, or as part of a County-managed analysis under LATIP.

**CONCERNS**                      **OTHER CAPITAL PROJECTS**

Bus Rapid Transit (BRT) and the I-270 / I-495 Traffic Relief Plan (TRP) are both major capital projects in the area. Both have not had any design performed to-date, and as these treatments being proposed at Hillandale cannot explicitly design with them in mind.

Given the scale of the BRT and TRP it is our judgment that the proposed Hillandale treatments are incidental to both. The designs of BRT and TRP would transcend the Hillandale treatments.

However, as both are still many years – if not more than a decade – away from construction and operation: it is anticipated that any treatments implemented in Hillandale would receive adequate utility as to be considered a worthwhile use of resources.

CEIV

FEB 25 2019

MCDOT  
DIRECTOR'S OFFICE

**IN THE MATTER OF:**

**HILLANDALE LATIP TREATMENTS**

**BEFORE: Jose Thommana, Public Hearing Officer, Department of Transportation**

**PUBLIC HEARING OFFICER'S RECOMMENDATION**  
**AMENDED FEBRUARY 21, 2019**

**I. Background**

As a part of several redevelopment projects in the area, the Duffie Companies has proposed a change to the Local Area Transportation Improvement Program (LATIP), a program administered by the Montgomery County Department of Transportation (MCDOT). The background of the LATIP and the applicant's proposal is included in the attached MCDOT Technical Report. A description of the project was shared during the Public Hearing by Christopher Conklin, Deputy Director of MCDOT.

In advance of the Public Hearing, MCDOT participated in five public meetings between May and November 2018, including an Open House on November 8<sup>th</sup>, 2018. A Public Hearing was held at the White Oak Recreation Center on November 15<sup>th</sup>, 2018, beginning at 7:00 PM. The public record was held open for additional comments until 7:30 AM on November 26<sup>th</sup>, 2018.

Public notice of the hearing was published in the *Washington Post* on October 31<sup>st</sup> and November 7<sup>th</sup>, 2018 and advertised on the MCDOT website. Information was also promulgated through community associations, groups, and organizations with the assistance of Peter Fosselman, Planning Coordinator for the White Oak Science Gateway Master Plan in the Office County Executive's Office, and Jewru Bandeh, Director of the East County Regional Services Center.

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## II. Summary of Testimony

Oral and/or written comments were received from a total of 75 unique individuals. 10 responses were identified as being residents of the area of Hillandale that would be most affected by a slip-ramp. 28 responses were identified as individuals working within the area that would be most affected by a slip-ramp. 25 responses were identified as corresponding to areas located in the general vicinity, but not within the area that would be most affected by a slip-ramp. 4 responses were received from elected officials. 1 response was received from the Housing Opportunities Commission. 7 respondents' affiliations could not be positively identified.

The proposed modifications to the east and west legs of Powder Mill Road received 54 and 51 responses in support, respectively. They respectively received 2 and 3 responses in opposition.

The proposed modification to the southbound bus stop at Elton Road received 35 responses in support and 1 response in opposition. The higher proportion of responses with no position on this item is likely a result of how much of the discussion at Elton tending to focus on the slip-ramp; not on the bus stop's proposed modifications.

The proposed slip-ramp connecting Elton Road to the Outer Loop received 51 responses in support and 19 responses against. However, responses on this had a significant difference depending on the respondent's affiliation. Businesses along the area that would be most affected by the slip-ramp were 100% in support, whereas residents in the same affected area were 100% against. The neighborhood's civic association, State Senator, and three State Delegates all submitted testimony in opposition to the slip-ramp.

## III. Concerns – Cut-Through Traffic

Opposition toward the slip-ramp consistently focused on concern about the safety impacts of cut-through traffic. The attached MCDOT Technical Report details efforts to address cut-through traffic concerns, including traffic calming treatments proposed by the Duffie Companies as well as the potential for additional mitigation options beyond these calming treatments.

There was no public testimony explicitly opposing the traffic calming proposed by the applicant, though sentiment from residents is that it would still be inadequate toward addressing the core cut-through concerns.

Among the 10 resident responses from the area that would be most affected, the additional traffic mitigation measures received 1 response in support and 4 responses in opposition. As also highlighted in the MCDOT Technical Report, the concerns with the additional mitigation measures were that they impeded the neighborhood's own access, and that without addressing other issues causing cut-through traffic the potential would remain the cut-through traffic could shift to other routes through the neighborhood.

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**IV. Concerns – Non-Auto; Induced Demand**

Several respondents called attention to the impacts to non-auto users, the aesthetic environment, and that the analysis consider the effects of induced demand.

Induced demand is a condition whereby providing additional capacity can cause users who would have otherwise been discouraged from using that facility to now take advantage of it. This often relates to a condition where additional vehicle trips may be generated by people who were otherwise traveling at off-peak times, using different routes, traveling by non-auto modes, or some other alternative.

The 2040 models used in the LATIP analysis account for induced demand. With this in mind it may be better to approach this concern in the inverse: how not building the necessary infrastructure would result in additional congestion, and to what degree this additional congestion would be accepted. Such acceptances are already accounted for in the congestion thresholds established by the Subdivision Staging Policy.

**V. Concerns – Miscellaneous**

Other common concerns focused on intersection safety, the impacts of stopped buses on other traffic, the need for a larger and more detailed analysis, and the impacts of other major projects such as Bus Rapid Transit or the I-270/495 Traffic Relief Plan. These are responded to in detail in the MCDOT Technical Report.

Many respondents highlighted a need to evaluate signal timing through the corridor, particularly with a focus on clearing traffic on New Hampshire Avenue between Powder Mill Road and Elton Road so that traffic entering this block is able to do so.

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## VI. Conclusions and Recommendations

Based on the public testimony and technical considerations I believe the following courses of action to be recommended at this time:

### **Approve widening of the west leg of Powder Mill Road at New Hampshire Avenue. Eligible for LATIP credit.**

As this is functionally the site access to the Hillandale Gateway project, this work is particularly important to accommodating the traffic to and from the site. Of 75 responses, 51 were in favor and 3 were against. Opposition was not clarified in 1 response, was part of a universal opposition to all proposed treatments in another response, and the third response was concerned about impacts on non-auto users.

While I do not dispute that a wider crossing is inherently less conducive toward non-auto users, the widening is considered necessary for moving toward the 80 second congestion threshold established for the area. This threshold was intended to allow for the maximum amount of congestion currently permitted in areas unserved by Metrorail stations, and was established with awareness of impacts to non-auto users.

### **Approve extending the westbound right-turn lane on Powder Mill Road at New Hampshire Avenue. Eligible for LATIP credit.**

This extension would help right-turning traffic bypass queued thru/left traffic. Of 75 responses, 54 were in favor and 2 were against. One response was universally opposed to all proposed treatments, and the other response cited concerns with impacts to non-auto users and aesthetics.

The extension of the turn lane could result in right-turning traffic more quickly approaching the intersection with New Hampshire Avenue, potentially increasing the potential that they more aggressively enter into the crosswalk to turn right on red (where pedestrians might be in the east leg crosswalk), or that they more quickly perform a right-turn on green (where pedestrians might be in the north leg crosswalk).

Accordingly I advise that in their coordination with SHA for final design and construction of this treatment: the intersection be designed as to provide improved visibility between motorists and pedestrians, and that motorists' speeds on approach to and around the turn be moderated. This may include tightening the curb radii to the maximum extent feasible, cross-hatching the crosswalks, and other treatments as identified in detailed design. I note that this intersection is located in a designated Urban Area as well as a County-designated (albeit not State-designated) Bicycle and Pedestrian Priority Area.

Another commonly highlighted concern inquired about right-of-way impacts to the adjacent church. It appears that all land that would be necessary for this extension is located within the public right-of-way.

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**Defer consideration of the slip-ramp at this time. MCDOT to perform a more comprehensive evaluation of alternatives. MCDOT to cooperate with SHA / PG-DPWT on addressing congestion and traffic calming.**

I concur with the input of elected officials, the Hillandale Citizens Association, and residents in the community that the full scale of impacts to the community have not been adequately evaluated, including attention toward how existing congestion along Maryland Route 212 induces cut-through traffic.

Should a slip-ramp be considered again in the future I believe that two issues must first be resolved:

- (1) MCDOT conduct a more detailed and comprehensive analysis of alternative treatments in the Hillandale area in comparison to the present Elton proposal.

Without the slip-ramp the intersection of New Hampshire Avenue and Powder Mill Road is forecast to fail by the year 2040. It is expected that the next LATIP reevaluation (as part of its recurring 6-year cycle) would be unlikely to evaluate the area in as detailed a manner as is likely necessary. MCDOT should perform a more focused analysis as a complement to the regular LATIP analyses.

- (2) Further measures be taken to address cut-through traffic through the neighborhood.

Measures toward addressing cut-through traffic will likely be led predominantly by either the Maryland State Highway Administration (SHA) or the Prince George's Department of Public Works and Transportation (DPWT). Such measures may entail additional efforts to reduce traffic turning into the neighborhoods, addressing congestion at the Powder Mill Road / Riggs Road intersection, and/or some other alternative developed in coordination with the local community.

Based on public testimony I do not feel that traffic calming options in Montgomery County could alone fully address the concerns, but MCDOT could partnering on traffic calming treatments in Montgomery County as a complement to efforts led by SHA or DPWT.

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**Approve traffic calming along Elton Road. Ensure adequate truck turning radii into applicable properties. Evaluate overnight parking restrictions. Not eligible for LATIP credit.**

I believe the proposed traffic calming along Elton Road would be beneficial to cut-through concerns as well as improving the aesthetics of the Montgomery County portion of Elton Road. There was overall support for this traffic calming including from among both affected residents and businesses, with 55 responses explicitly in support and 1 against. The 1 comment in opposition was universally against all potential treatments.

I recognize several concerns raised in public testimony in support of preserving overnight truck parking restrictions as well as ensuring adequate truck turning radii into applicable properties. Future evaluations concurrent with new development will further consider these restrictions in concert with the needs of the local community, and how they might be applied toward time-of-day and types of vehicles.

This work, however, would no longer be eligible for LATIP credit. With the deferment of consideration of a slip-ramp there is no longer a legal nexus tying traffic calming to the LATIP. I therefore recognize that the Duffie Companies may choose not to construct this work as there is no longer a financial incentive for them to do so.

**Approve bus queue jump along southbound New Hampshire Avenue if SHA approves queue jump signals. Support further evaluation of bus stops along New Hampshire Avenue. Not eligible for LATIP credit, but may be eligible for Impact Tax credit.**

I believe this proposed treatment would partly address concerns identified in public testimony relating to bus blockages, provided that SHA approves queue jump bus signals. There were 35 responses in support and 1 response against the queue jump, with that latter respondent universally opposed to all proposed treatments. 8 respondents specifically highlighted bus blockages as an issue, making it one of the most commonly raised issues.

However, with the deferment of the slip-ramp this project would no longer be a part of any LATIP-eligible projects. As this facility is not included in the LATIP it would not itself be eligible for LATIP credit. However, it may still be eligible for Impact Tax credit. While approved, I recognize that the Duffie Companies may choose not to construct this work as there is reduced financial incentive for them to do so.

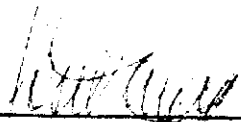
I support further evaluation and potential consolidation of bus stops along New Hampshire Avenue, as recommended by a number of respondents. These evaluations will be made by MCDOT Transit Services staff in coordination with WMATA as a part of MCDOT's regular program.

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**MCDOT to evaluate signal timing along New Hampshire Avenue at and in the vicinity of Powder Mill Road and Elton Road**

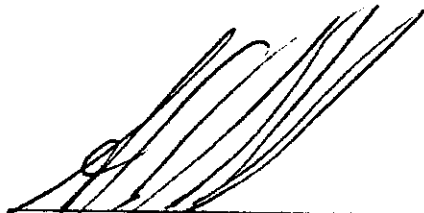
A multitude of respondents shared concerns with signal timing along New Hampshire Avenue at and between Powder Mill Road and Elton Road. MCDOT Traffic Engineering and Operations staff will evaluate the signal timing in this corridor and implement and changes as necessary.

Respectfully submitted,

  
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Jose Thommana, Public Hearing Officer

The Public Hearing Officer's Report and Recommendations have been reviewed and the project is hereby authorized to proceed as noted in the recommendations.

Date: 3-4-19

  
\_\_\_\_\_  
Al R. Roshdiah, Director  
Department of Transportation

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