East County Citizens Advisory Board

November 22, 2022

Mr. Marc Elrich
County Executive, Montgomery County Maryland
101 Monroe Street, Second Floor, Rockville, MD 20850

Subject: **US 29 Bus Rapid Transit Mobility and Reliability Study**

Dear Mr. Elrich,

On behalf of the East County Citizens Advisory Board (ECCAB), we would like to provide feedback and recommendations to you and the County Council, on the **US 29 Bus Rapid Transit Mobility and Reliability Study**, which the Count Council's T&E committee is scheduled to discuss and possibly take action on before the end of this month (Nov 28).

I would like to thank the you and the County Council for persistent leadership and support of making our transportation network safer, more efficient, and more equitable. We appreciate your support in particular of advancing long-awaited transit projects in East County, such as the BRT routes on US 29 (in operation) and New Hampshire Avenue (in design).

Our Board supports the Median Bus Lane alternative because; it provides *Consistency with General Plan*, *Addressing Historical Inequities*, and *Provides Transit Reliability*. Based upon our review of the three alternatives: the No-Build Alternative, the Managed Lane Alternative, and the Median Bus Lane Alternative, the East County Citizens Advisory Board recommends the Median Bus Lane Alternative over the Managed Lane Alternative.

As described in the addendum to this letter,

- the Median Bus Lane Alternative is preferred because it is more aligned with the policy objectives of Thrive 2050,
- provides superior transit reliability,
- better addresses historical inequities in East County, and
- is better suited to the unique geometry and demographics of the US 29 corridor.

Our recommendations are consistent with letters submitted by the ECCAB in previous years as well as the analysis performed by staff at the Montgomery County Planning Department. The Planning Board voted unanimously on November 10, 2022 to recommend the Median Bus Lane over the Managed Lane Alternative, for many of the same reasons outlined in this letter.

We thank you again for your thoughtful consideration of the Board's comments regarding the US 29 Mobility & Reliability Study.

Sincerely,

Peter Myo Khin
Chair, East County Citizens Advisory Board

cc:
County Council President, Gabe Albornoz
Tom Hucker, County Council T&E Committee Chair
Jewru Bandeh, Director, East County Regional Office
Christopher Conklin, Director MCDOT

Attachment: Addendum to letter

Addendum

US 29 Bus Rapid Transit Mobility and Reliability Study

The East County Citizens Advisory Board (Board) provides this addendum as attachment to the letter sent t0 Montgomery County, County Executive Marc Elrich regarding the **US 29 Bus Rapid Transit Mobility and Reliability Study.**

The Board supports the Median Bus Lane alternative. This recommendation is consistent with previous ECCAB letters of support for dedicated bus lanes along US 29 for several years**.** Among other benefits, the managed lane option is **A)** more consistent with the County's general plan, **B)** addresses long-standing transportation inequities in East County, and **C)** offers the most reliability for transit riders. Furthermore, the Median Bus Lane alternative is better suited to the unique geometry and demographics of the US 29 corridor, for reasons explained in this letter (items **D, E, F, G, H**).

The ECCAB received a presentation from MCDOT at our November 2, 2022 Board meeting reviewing the results of the study. The study was further discussed at the ECCAB's Planning & Economic Development (PED) Committee on November 7, 2022. A summary of our findings is provided below.

A) Consistency with General Plan

Of the two options evaluated by MCDOT, the Median Bus Lane alternative is most consistent with Thrive Montgomery 2050. In particular, Montgomery County's new general plan has an explicit policy goal of improving our public transit system to make it "the fastest, most convenient and most reliable way to travel". While both alternatives are anticipated to provide travel time savings for transit riders, only the Median Bus Lane option is designed to primarily benefit transit riders.

The Managed Bus Lane Alternative is specifically designed to incentivize automobile travel: while it is true that incentivizing carpoolers is consistent with the general plan's goals for reducing vehicle miles traveled (VMT) per capita and non-auto driver mode share, it should be noted that the Managed Lane Alternative also reduces travel times for drivers of single-occupancy vehicles, which conflicts with Thrive's goal to "*improve travel times and travel costs of transit services to achieve greater parity with automotive travel*".

It is worth noting that the Glossary of Thrive 2050 defines BRT as a system where buses "operate in dedicated lanes, either physically or through signing and marking, *distinct from general purpose lanes used by automobiles*", and the new general plan makes no implied or explicit references to managed lanes, carpooling, or HOV lanes.

The County Council voted unanimously to approve Thrive 2050 less than a month ago. The new general plan repeatedly emphasizes the importance of dedicated bus lanes and improving transit to make it competitive with driving. Only the Median Bus Lane option advances these goals.

B) Addressing Historical Inequities

The 1981 Eastern Montgomery County Plan master plan allowed for thousands of apartments and townhouses to be built in White Oak and Briggs Chaney in anticipation of a rapid transit line along US 29. One of the underlying concepts of the 1981 Plan was "transit serviceability," wherein high-density communities would be provided with fast, high-quality, and reliable transit, to provide alternatives to driving. When the Fairland Master Plan was revised in 1997, the concept of "transit serviceability" was removed altogether, deprioritizing the plans to expand transit even for the development that had already occurred, let alone what was to come.

As noted in Thrive 2050, the decision in previous general plans to remove Route 29 as a growth corridor "contributed to effectively directing new public and private investment away from the East County and toward the established Urban Ring and I-270 corridor". The new general plan states that re-establishing Route 29 as a growth corridor "is vital to reversing decades of no growth and ensuring that the benefits of growth are more equitably distributed across lines of geography, class, and race."

The two alternatives MCDOT offers are fundamentally different in how they would affect land-use and traffic patterns in East County for years to come. The Managed Lane Alternative would expand the automobile capacity along US 29, leading to more vehicle traffic along the corridor which is already experiencing some of the worst congestion and automobile dependency in the county. As noted in the Planning Staff report, "the Median Bus Lanes Alternative best addresses historical injustices that have resulted in the heaviest traffic volumes in census tracts that Montgomery County defines as Equity Focus Areas".

The Median Bus Lane Alternative on the other hand, would fulfill a decades-long promise of providing a high-quality transit system. A median bus lane would make the transitway a permanent and prominent element of the corridor, thereby encouraging more compact and walkable transit-oriented development, which in turn creates more favorable conditions for building safer and more cohesive communities, promoting economic growth, and addressing the historic lack of transportation investments in East County.

C) Transit Reliability

As acknowledged by MCDOT, the Median Bus Lane alternative provides the highest level of reliability for transit riders, because the BRT network would be completely separated from general traffic from White Oak into downtown Silver Spring.

In the Managed Lane Alternative, buses must share the lane with automobile traffic and local buses throughout most of the corridor. Notably, the Managed Lane Alternative does not provide any bus priority from Southwood Avenue to Dale Drive, forcing buses to operate in mixed traffic along some of the most congested portions of the corridor.

Transit service in the Managed Lane Alternative will not be consistently reliable because the BRT vehicles would operate in the same lanes as automobiles. In this alternative, any slowdown on Route 29 due to a disabled vehicle, police traffic stop, collision, or lane closure would severely impact the performance of all road users, resulting in unacceptable delays for the transit

service. Additionally, the Managed Lane Alternative offers less protection from unauthorized use of the transit lane, further reducing the potential reliability of transit service (see **Item D** below).

One of the benefits of the Managed Lane Alternative is that local buses could use the HOV/bus lane for travel time savings. However, having local buses stop along a dedicated transitway could result in delays for the BRT service, as the local buses take longer to board.

In order for transit to be truly competitive with driving, it must be consistently reliable, regardless of general traffic conditions. Only the Median Bus Lane Alternative provides this level of reliability, because it provides bus-only lanes along the entire US 29 corridor.

D) Considerations regarding Managed Lane Enforcement on US 29

Although MCDOT's traffic model was based on the assumption that all drivers follow traffic laws, the study team acknowledged that compliance with the HOV restrictions for the Managed Lane Alternative would be challenging, particularly because the restrictions would be in place only during rush hour. There is a concern that drivers of single occupancy vehicles could improperly enter the managed lanes due to confusion, distracted driving, unfamiliarity with the traffic patterns, or a deliberate intention of using the lanes to get around congestion.

The MCDOT study notes that periodic enforcement and monitoring is required to ensure optimal operation of the managed lanes. However, the MCDOT study makes no mention of the potential capital or operating costs required to implement this enforcement.

While automated enforcement of HOV lanes is available and has been used in other jurisdictions, there is no precedent in Montgomery County. Implementing an automated enforcement system would require significant additional capital and recurring operating costs, which were not accounted for in the study. Automated enforcement would also require amending state law.

The other enforcement option is traffic stops, which raises concerns about officer safety, community-police relations, and racial equity. Routine traffic stops will increase the frequency of interactions between the public and law enforcement, which are of particular concern given the racial demographics of East County. Given the current limitations on patrol officer availability, heightened awareness of the impact of police interactions on communities of color, and evolving views on the roles and responsibilities of law enforcement, **a transit system that relies on regular police enforcement to function correctly is not a sustainable long-term solution.** It is also unclear how traffic stops would impact congestion and transit reliability, given that there are limited areas along US 29 to pull over without blocking a travel lane.

It should also be noted that the examples given by MCDOT of an arterial road (i.e., not a controlled access highway) with similar rush-hour lane restrictions face recurring issues with enforcement and compliance. The nearest example of an HOV lane on an arterial road is US Route 1 in Alexandria, Virginia (Figure 1, below), which MCDOT has acknowledged publicly does not function optimally and has persistent challenges due to unauthorized use.

The Median Bus Lane alternative, on the other hand, would not face these concerns, as the bus lanes are physically separated from other road users, practically eliminating

Figure 1. Example of HOV lane on an arterial road. Route 1 in Alexandria, VA.
Note the "LEFT LANE HOV 2+ ONLY 3PM - 7PM MON-FRI" sign next to the traffic signal.

E) Reduction of Lanes in Burnt Mills

Between New Hampshire Avenue (MD 650) and Southwood Avenue, the Managed Lane Alternative will repurpose three general purpose lanes to two GP lanes plus one HOV/bus lane in the peak hour direction (Figures 2 and 3). While MCDOT's traffic models predict that this modification will result in less congestion, one can also anticipate that reducing the number of lanes available to drivers in this congested segment of US 29 would create some level of disruption and confusion. We urge the County Council to carefully consider how this change would be perceived and experienced by the people that live in and commute through this area.

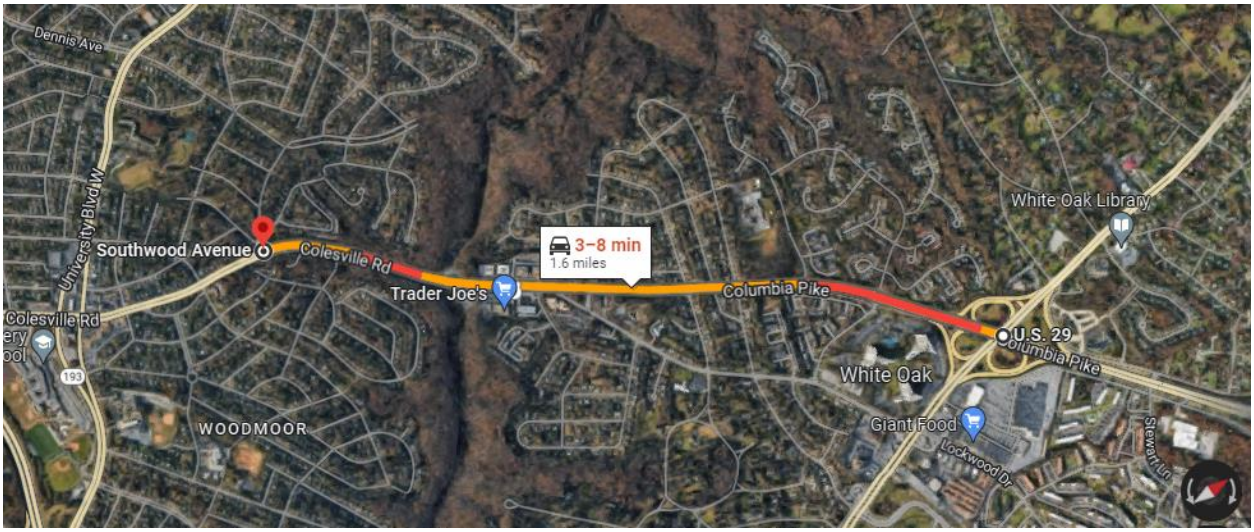

Figure 2. Segment of Managed Lane Alternative without bus lanes.

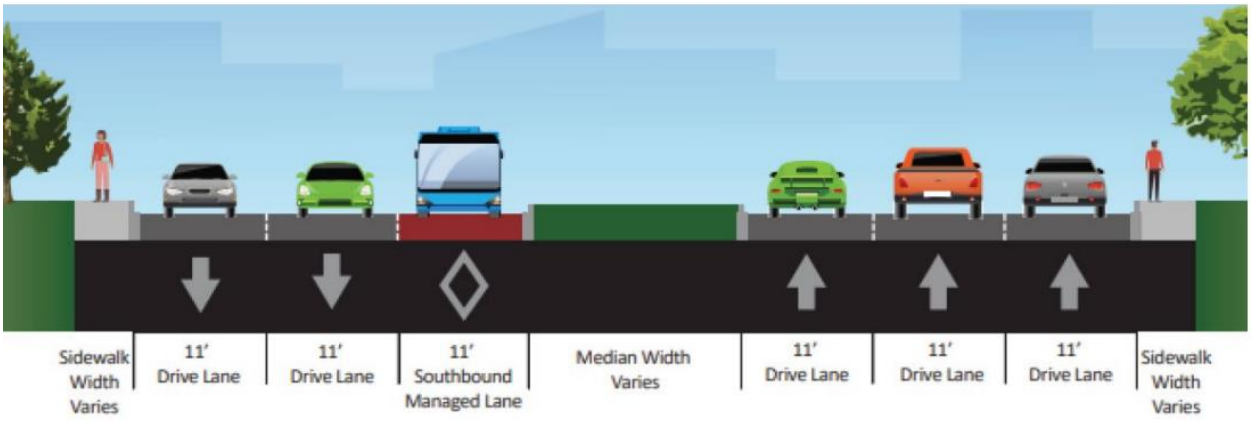

Figure 1. Managed Lane Alternative Cross Section, from New Hampshire Ave (MD 650) to Southwood Avenue (AM Peak Period).

F) Demographics of US 29 Corridor

One of the benefits of the Managed Lane Alternative is that it would reduce travel times for drivers. The ECCAB would like to take this opportunity to point out that approximately half of households on the US 29 Flash corridor live in car-free or car-lite households. According to MCDOT[1]12% percent of households do not have access to a car, and an additional 38% of households on the corridor only have access to one car. While incentivizing carpooling is a worthy objective for any transportation project, it makes more sense to prioritize investments in transit reliability, given the lower-than-average rates of car ownership in East County.

G) Emergency Vehicle Response Time

US 29 is heavily congested during rush hour, impairing the ability of emergency services to travel along the corridor. The Median Bus Lane Alternative provides more reliability for emergency responders, as the bus lane could be used by fire trucks, ambulances, and police cruisers if the automobile lanes are congested. In the Managed Lane Alternative, emergency vehicles would have to travel in the same lanes as general traffic, which could result in delayed response times if the HOV lanes are congested.

H) Viability of Carpool Assumptions

The mode share assumptions used by MCDOT for the traffic modeling were considered by some board members to be overly optimistic. According to MCDOT, 15% (one out of seven) of current US 29 rush hour commuters are carpoolers, and adding an HOV priority lane would encourage more people to switch from driving alone to carpooling. MCDOT's study suggests that implementing the Managed Lane Alternative would result in an equal mode share for single-occupancy vehicles and HOV commuters, meaning that there would be approximately one carpooler for every solo driver on US 29 (Figure 4).

[1] Source of data: "Montgomery County US-29 BRT TIGER Discretionary Grant Application". MCDOT, 2016. page 6. https://www.montgomerycountymd.gov/brt/Resources/Files/narrative_US29_TIGER_final.pdf

The success of the Managed Lane Alternative relies on these carpool mode share assumptions, which may or may not come to fruition. For reference, MWCOG's 2019 State of the Commute Survey Report indicates a 3% carpool mode share on US 29. If the carpooling mode share is less than what was assumed in the study, the automobile travel time savings for the Managed Lane Alternative will be less than predicted by the MCDOT model.

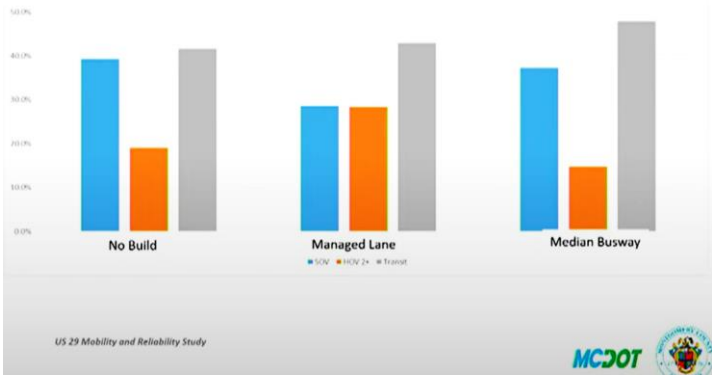

Figure 4. Estimated Mode Share.

Source: MCDOT presentation to Montgomery County Planning Board, 11/10/2022.
Left: No Build Alternative
Middle: Managed Lane Alternative
Right: Median Bus Lane Alternative

- Blue: percent of road users in single occupancy vehicles
- Orange: percent of road users in high occupancy vehicles (HOV 2+)
- Gray: percent of road users on transit

Conclusions

Based upon our review of the two alternatives, the East County Citizens Advisory Board recommends the Median Bus Lane Alternative over the Managed Lane Alternative.

As described in this letter, the Median Bus Lane Alternative is preferred because it is more aligned with the policy objectives of Thrive 2050, provides superior transit reliability, better addresses historical inequities in East County, and is better suited to the unique geometry and demographics of the US 29 corridor.

Our recommendations are consistent with letters submitted by the ECCAB in previous years as well as the analysis performed by staff at the Montgomery County Planning Department[2]. The Planning Board voted unanimously on November 10, 2022 to recommend the Median Bus Lane over the Managed Lane Alternative, for many of the same reasons outlined in this letter.

We thank you again for your thoughtful consideration of the Board's comments regarding the US 29 Mobility & Reliability Study.

[2] Montgomery County Planning Department Staff Report. "US 29 Mobility and Reliability Study, Part 2 Alternatives Selection" November 3, 2022. Available online at https://montgomeryplanningboard.org/wp-content/uploads/2022/10/US-29-BRT-Alternatives-Staff-Report-2022-11-02_Final_Rev.pdf