

Project History Memorandum

Executive Summary: A Brief History of Bus Rapid Transit on MD 355

As early as 1993, a sequence of plans and studies have confirmed the need for bus rapid transit (BRT) to address congestion on MD 355 and improve travel in the region. The current planning process, which builds on the April 2017 MD 355 Bus Rapid Transit Corridor Planning Study Conceptual Alternatives Report developed by the Maryland Department of Transportation (MDOT), seeks to move BRT forward, given its ability to be a cost-effective, practical transportation solution for communities from Clarksburg to Bethesda. The outcome of this process from June 2017 to December 2018 (Phase 2), which is being led by the Montgomery County Department of Transportation (MCDOT), is for Montgomery County to identify a Recommended Alternative for the MD 355 BRT route and service.

Over time, MD 355 BRT proposals have been refined to incorporate community input, additional technical analysis, and available financial resources.

Table 2 summarizes major developments in the planning of MD 355 BRT, which are elaborated upon in the following pages.

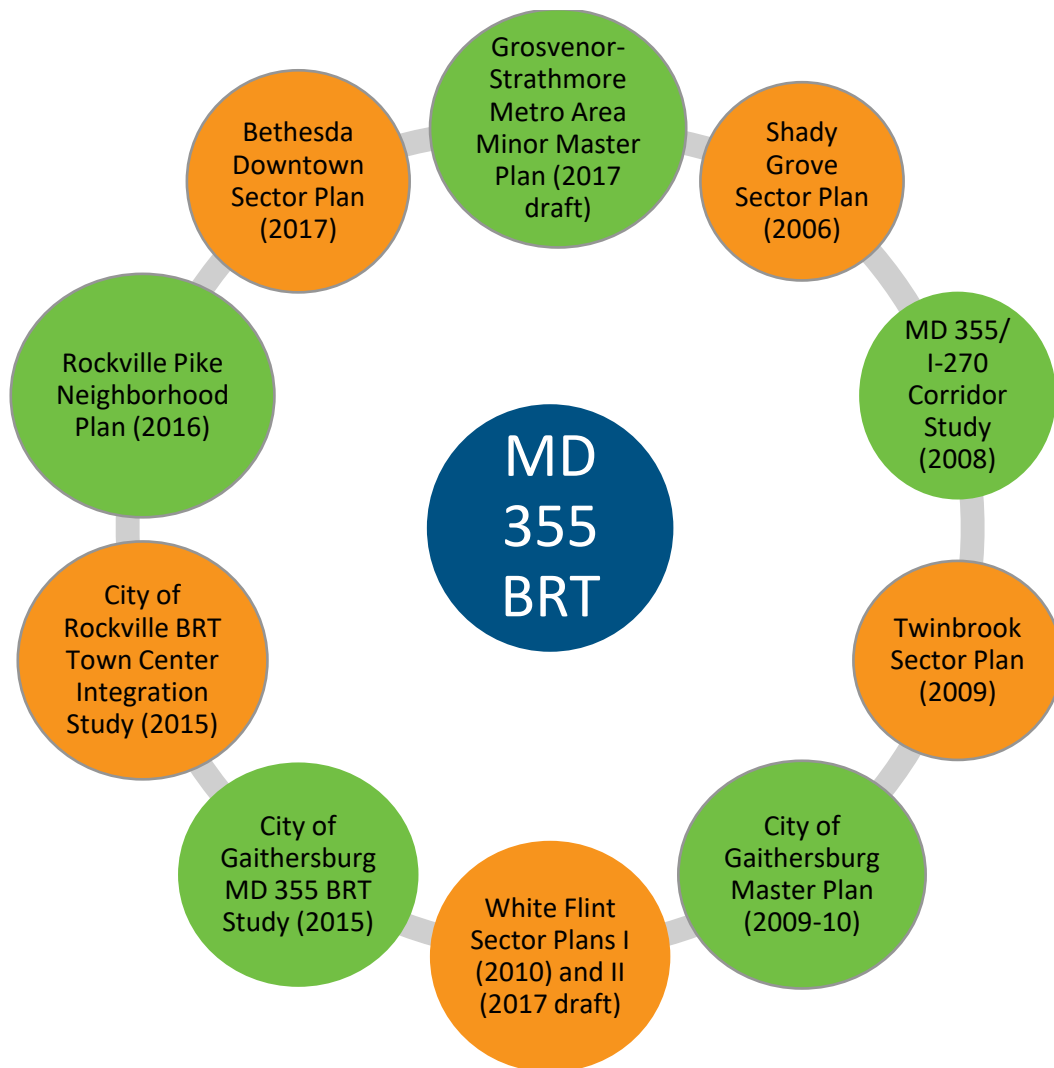
Table 1 | Timeline of MD 355 BRT in Montgomery County Transportation Planning

1993	Montgomery County 1993 Strategic Transit Plan proposed BRT as the most appropriate mode for improving transit on MD 355
2011	Countywide Bus Rapid Transit Study (MCDOT) examined feasibility of several BRT corridors, including MD 355. Screening found MD 355 to be highly supportive of BRT.
2012	The Institute for Transportation & Development Policy (ITDP) developed the MCDOT Demand and Service Planning Report, which examined the feasibility of BRT and identified MD 355 as the County's most promising BRT corridor.
2013	The Countywide Transit Corridors Functional Master Plan (M-NCPPC), adopted by the County Council, amended County's general plan with recommendation for a BRT network, including MD 355 BRT with a combination of median, curb, and mixed traffic transitways.
2014	Montgomery County RTS Service Planning and Integration Report provides a recommended service plan for MD 355 BRT.
2015	Corridor Advisory Committees (CACs) are formed for Montgomery County BRT corridors; the MD 355 North and MD 355 South CACs are established for MD 355 BRT.
2015	The Cities of Gaithersburg and Rockville develop plans for integration of the BRT into their developments and land use plans and identify their preferred alignments and treatments.
2016	A Draft Preliminary Purpose and Need Document for the MD 355 BRT project, developed by Maryland DOT, is released.
2017	MD 355 BRT Conceptual Alternatives Report, developed by Maryland DOT, is completed.
2017	MD 355 BRT alternatives analysis ("Phase 2"), led by Montgomery County, with the objective of identifying a recommended alternative, commences.



Many land use plans in Montgomery County developed over the past decade assume BRT will be introduced on MD 355, to the serve current and future residents. **Figure 1** highlights some plans and policies referencing MD 355 BRT developments, which are further summarized in **Table 4**.

Figure 1 | MD 355 in Montgomery County Land Use/Master Plans and Policies



“The MD 355 corridor has the greatest long-term potential for the County’s BRT network.”
 - 2013 Countywide Transit Corridors Functional Master Plan

A Brief History of Bus Rapid Transit on MD 355

Various plans, studies, reports and county and city initiatives helped create – and are dependent upon – plans for Bus Rapid Transit on MD 355. **Table 2** summarizes these studies, and how plans for MD 355 BRT have evolved in response to community feedback, technical analysis, and funding availability.

Table 2 | Studies and Plans of MD 355 BRT in Montgomery County Transportation Planning

Year	Study	Purpose and Outcome
1993	Montgomery County 1993 Strategic Transit Plan (MCDOT)	<ul style="list-style-type: none"> Recommended BRT as the preferred solution for addressing congestion along MD 355.
2011	Countywide Bus Rapid Transit Study (MCDOT)	<ul style="list-style-type: none"> Estimated demand, possible costs, and feasibility of BRT on 16 Montgomery County corridors, including MD 355. A screening scoring methodology used in the Study found MD 355 to be most supportive of BRT of all the corridors. Based on an initial evaluation, recommends median transitway treatment for MD 355.
2012	MCDOT Demand and Service Planning Report (ITDP)	<ul style="list-style-type: none"> Recommended MD 355 as the County's first BRT corridor despite lower current ridership (compared to US 29) due to "progress toward urbanization and densification along Rockville Pike in the White Flint area." Recommended a spur to serve Lakeforest Mall, another spur to the Shady Grove Metro station, and a detour or a second BRT link through downtown Rockville on North Washington Avenue. Noted that "full BRT infrastructure" ("gold standard" BRT, if possible) will be needed to achieve the maximum ridership and benefits of the BRT. Developed service plan and potential detours for existing local services.
2013	Countywide Transit Corridors Functional Master Plan (M-NCPPC, adopted by Montgomery County Council)	<ul style="list-style-type: none"> Amended the County's general plan with recommendations for a 102-mile bus rapid transit network over 10 corridors, including MD 355, to address congestion and population growth. Noted that MD 355 BRT has the highest forecasted 2040 peak ridership. It recommends extensive facility planning "should begin as soon as possible." Identified 37 potential station locations on MD 355.
2014	Montgomery County RTS Service Planning and Integration Report (MCDOT)	<ul style="list-style-type: none"> Proposed a network of at least 6 rapid transit routes, but did not prescribe specific busway treatments. Provided a recommended service plan for MD 355 BRT. Identified 33 stations (19 north of the Rockville Metro station and 13 south of it). Station locations range from 0.20 to 1.51 miles in distance between each other, with an average distance between stations of 0.72 miles.
2015	City of Gaithersburg MD 355 BRT Study (City of Gaithersburg)	<ul style="list-style-type: none"> The City Council conducted the study to establish a position on the BRT alignment, stating: "The City will advocate for dual-lane median reduced alternative through the study area and continue to support an entire dual-lane median BRT system along MD 355 through the City of Gaithersburg." Delayed adoption by the City of right-of-way limits until publication of the Alternatives Retained for Detailed Study. Evaluated proposed station locations based on (1) existing ridership, (2) land use, (3) connectivity, and (4) existing traffic. It also identified potential alternative stations.
2015	City of Rockville BRT Town Center Integration Study (City of Rockville)	<ul style="list-style-type: none"> Sought to identify possible design solutions for integrating BRT in the Rockville Town Center Area. Studied 12 different concepts for alignments, grade separations, etc. Recommended three concepts for further study: <ul style="list-style-type: none"> Concept 2: Mixed-traffic operations with near side pull-outs (to increase queue jump options), transit signal priority (TSP), and pull-out platform locations.

		<ul style="list-style-type: none"> ○ Concept 4: Dedicated lanes in the median – primarily dual lanes, with limited sections of bi-directional single lane operations to accommodate some left-turning lanes. ○ Concept 6: Dedicated BRT lanes in the median and a 0.7-mile, four-lane tunnel for through traffic on MD 355. Existing at-grade travel lanes would be reconfigured to provide two lanes in each direction, turn lanes, and a two-lane buffered BRT guideway in the median. • Reached the following conclusion: Concept 6 would offer the greatest opportunities for transportation and urban design improvement in the central portion of MD 355, as well as redevelopment throughout the area. However, it would be, by far, the most expensive option.
2016	MD 355 BRT Draft Preliminary Purpose and Need Document (Maryland DOT)	<ul style="list-style-type: none"> • Provided a broad overview of corridor conditions, with a focus on how BRT would support those conditions as well as how those conditions support BRT. • Identified five goals for the project (the project purpose) that could be used in Phase 2 to identify goals and objectives.
2017	MD 355 BRT Conceptual Alternatives Report (Maryland DOT)	<ul style="list-style-type: none"> • The report outlined the purpose of the project, background data and information, a description of the analysis conducted in Phase 1, the analysis results, and the identification of alternatives to be carried into Phase 2: <ul style="list-style-type: none"> ○ Alternative 1 – No-Build: No improvements to infrastructure or bus service along the MD 355 Study Corridor beyond those improvements already planned and programmed. ○ Alternative 2 – Transportation System Management (TSM): Enhanced bus service operating in mixed traffic in existing lanes along with minor infrastructure improvements at select intersections. ○ Alternative 3C – Median Option: New BRT service between the Clarksburg Outlets and the Bethesda Metrorail Station, primarily in median lanes. ○ Alternative 4C – Curb Option: New BRT service between the Clarksburg Outlets and the Bethesda Metrorail Station, primarily in curb lanes. • Described some of the key trade-offs between dedicated lane options. For example, median running way sections have up to 20 percent shorter travel times, but 25 percent higher property impacts and 60 percent higher construction costs compared to curb running ways.

Evolution of station locations

There is general consistency across MD 355 BRT studies and land use plans regarding the locations of many BRT stations. However, these plans and studies differ with respect to the locations of stations in less heavily trafficked areas, as well as the possibility of different (or multiple) alignments of the BRT north of Middlebrook Road. The possibility of an alignment of the MD 355 BRT along Observation Drive was identified during the first phase of the MDOT Phase 1 study and was formally adopted as an alternative in the 2017 Conceptual Alternatives Report. **Figure 2**, shows the conceptual MD 355 BRT map from the Conceptual Alternatives Report.

Table 3 summarizes station locations identified in each study and/or alternative listed, with station locations that are similar between plans shown on the same row.

Figure 2 | MD 355 Bus Rapid Transit Proposal

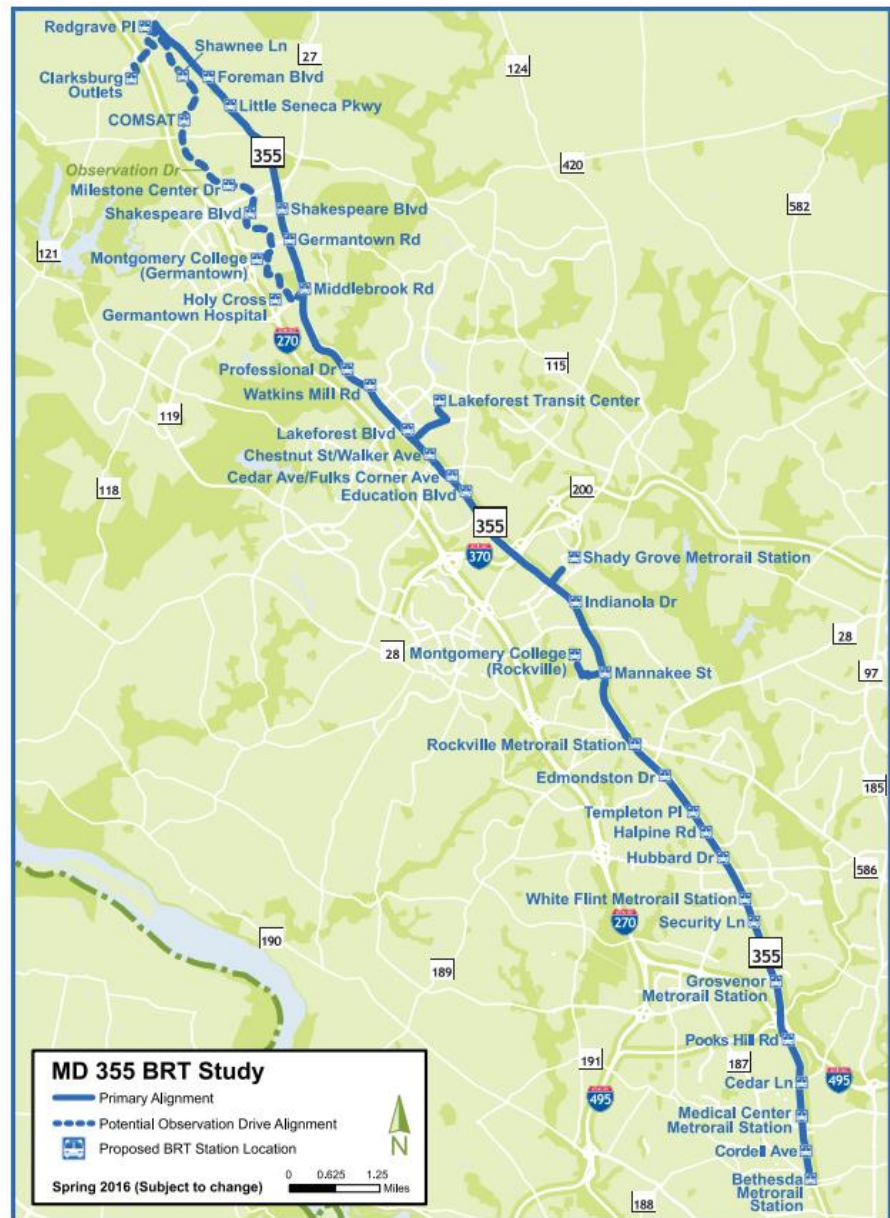


Table 3 | MD 355 Station Locations (North to South) Across Various Plans and Alternatives, 2011 – 2017

Potential Station Location	Countywide Bus Rapid Transit Study (MCDOT)	Countywide Transit Corridors Functional Master Plan (MNCPPC)	Montgomery County RTS Service Planning and Integration Report (MCDOT)	Conceptual Alternatives Report (MDOT) – Alternative 2	Conceptual Alternatives Report (MDOT) – Alternative 3C	Conceptual Alternatives Report (MDOT) – Alternative 4C
	2011	2013	2014	2017	2017	2017
	29 stations	35 stations	33 stations	31 stations	32 stations	32 stations
Clarksburg Outlets				✓	✓	✓
Redgrave Place	✓ (Stringtown Rd)*	✓	✓	✓	✓	✓
Shawnee Lane (and MD 355)	✓	✓	✓			
Shawnee Lane (Observation Drive (OD))					✓	✓
COMSAT (OD)					✓	✓
Milestone Center Drive (OD)					✓	✓
Shakespeare Boulevard (OD)		✓ (Seneca Meadows Shops and Corp. Ctr.)			✓	✓
Montgomery College – Germantown (OD)		✓			✓	✓
Holy Cross Hospital (OD)		✓			✓	✓
Foreman Boulevard		✓	✓	✓		
Little Seneca Parkway	✓	✓	✓	✓		
West Old Baltimore Road		✓	✓			
Ridge Road		✓	✓			
Shakespeare Boulevard	✓	✓	✓	✓		
MD 118 (Germantown Road)	✓	✓	✓	✓		
Middlebrook Road	✓	✓	✓	✓		
Professional Drive*	✓ (Game Preserve Rd)	✓	✓	✓	✓	✓
Watkins Mill Road*		✓	✓	✓	✓	✓
MD 124 (Montgomery Village Avenue)	✓	✓	✓			
Lakeforest Transit Center				✓	✓	✓
Lakeforest Bouelvard*				✓	✓	✓
Odenhal Avenue	✓	✓	✓			

Potential Station Location	Countywide Bus Rapid Transit Study (MCDOT)	Countywide Transit Corridors Functional Master Plan (MNCPPC)	Montgomery County RTS Service Planning and Integration Report (MCDOT)	Conceptual Alternatives Report (MDOT) – Alternative 2	Conceptual Alternatives Report (MDOT) – Alternative 3C	Conceptual Alternatives Report (MDOT) – Alternative 4C
Chestnut Street/ Walker Avenue*				✓	✓	✓
Brookes Avenue	✓	✓	✓			
Cedar Avenue/ Fulks Corner Avenue*				✓	✓	✓
Education Boulevard*	✓	✓	✓	✓	✓	✓
Shady Grove Road	✓	✓	✓			
Shady Grove Metrorail Station	✓ (King Farm Blvd)	✓ (King Farm Blvd)	✓ (King Farm Blvd)	✓	✓	✓
Indianola Drive				✓	✓	✓
West/East Gude Drive	✓	✓	✓			
Montgomery College - Rockville				✓	✓	✓
Mannakee Street	✓	✓	✓	✓	✓	✓
Rockville Metrorail Station	✓	✓	✓	✓	✓	✓
Edmonston Drive	✓ (Wootton Pkwy/ First St)	✓	✓	✓	✓	✓
Templeton Place		✓		✓	✓	✓
Halpine Road	✓	✓	✓	✓	✓	✓
Hubbard Drive	✓	✓	✓	✓	✓	✓
White Flint Metrorail Station	✓	✓	✓	✓	✓	✓
Security Lane	✓ (Edson Ln)	✓	✓	✓	✓	✓
Grosvenor Metrorail Station	✓	✓	✓	✓	✓	✓
Pooks Hill Road	✓	✓	✓	✓	✓	✓
Cedar Lane	✓	✓	✓	✓	✓	✓
Medical Center Metrorail Station	✓	✓	✓	✓	✓	✓
Cordell Avenue		✓	✓	✓	✓	✓
Norfolk Avenue/Cheltenham Drive	✓					
Bethesda Metrorail Station	✓	✓	✓	✓	✓	✓

Potential Station Location	Countywide Bus Rapid Transit Study (MCDOT)	Countywide Transit Corridors Functional Master Plan (MNCPPC)	Montgomery County RTS Service Planning and Integration Report (MCDOT)	Conceptual Alternatives Report (MDOT) – Alternative 2	Conceptual Alternatives Report (MDOT) – Alternative 3C	Conceptual Alternatives Report (MDOT) – Alternative 4C
Norfolk Avenue/Cheltenham Drive (Return for bi-directional station)	✓					
Bradley Boulevard			✓			
Friendship Heights Metro Station			✓**			

Note: Minor (1 block) variations are noted in parentheses.

*Indicates the station location was proposed by the City of Gaithersburg in its 2015 MD 355 BRT Study. This study also recommended a station at MD 355 and North Westland Drive.

** The Countywide Transit Corridors Functional Master Plan, adopted by the Montgomery County Council, called for the termination of the MD 355 BRT at the Bethesda Metro station, rather than at the Friendship Heights Metro station, which was previously considered as a potential southern terminus. However, it left open the possibility for an extension of the line to the Maryland border with D.C. (Western Avenue – near the Friendship Heights Metro station) if the District of Columbia government incorporates into its master plan (or equivalent) dedicated BRT lanes from Friendship Heights to the National Cathedral and Georgetown areas in the District.

The Phase 2 study will conduct more in-depth analysis to provide final station recommendations based on consideration of factors such as: available right-of-way; forecasted ridership; existing ridership; current and future land use; proximity to pedestrian and bicycle infrastructure; connections to other transit services/transfer opportunities; horizontal curvatures; elevation grade changes; available space for a station (and the type of station); traffic signals; presence of another major arterial(s); and safety.

Evolution of Road Treatment Options

A key component of Phase 2 of the MD 355 BRT project is determining the treatments and features of the MD 355 BRT throughout the alignment. Alternatives 3C and 4C from the 2017 Conceptual Alternatives Report included dedicated median and curb treatments, respectively, where available right-of-way or repurposing options could accommodate them (which, generally, is on MD 355 between Middlebrook Road and the Grosvenor Metro station). Regardless of the treatment option selected in this phase of the project, any of the Build Alternatives identified in Phase 2 for the MD 355 BRT would include features that improve upon the reliability and speed of BRT services by featuring transit signal priority, limited stops, level boarding, and off-board fare collection (local buses will not have off-board fare collection or limited stops). In this way, Montgomery County will provide cost-effective bus rapid transit while minimizing potential impacts on adjacent properties.

Treatment options under consideration for this Phase 2 include the following:

- **Mixed traffic:** Similar to existing conditions, buses travel with general traffic; there are no lanes dedicated to the BRT.
- **Two median BRT lanes:** Two lanes located in the center of the roadway would be dedicated for use by the BRT, and may be physically separated from traffic by a raised curb or median. Median BRT lanes would minimize conflicts with general traffic and allow the BRT to operate faster and more reliably. However, the BRT lanes would interact with other traffic at intersecting cross streets. To avoid conflicts, general traffic could only make left turns at signalized intersections.
- **One median BRT lane (bi-directional):** BRT vehicles traveling in both directions would share a single dedicated lane in the center of the roadway. Since the BRT travels within this one lane in both directions, passing zones would be created so BRT vehicles moving in opposite directions would not conflict with each other.
- **One median BRT lane (fixed or reversible):** Two types of BRT operations are being considered in these locations: fixed- and reversible-direction operations. In fixed-direction operations, a single median BRT lane would be used solely by the southbound BRT. The northbound BRT would travel in mixed traffic. In reversible-direction operations, the direction of the BRT in the one median lane would vary depending on the time of day. BRT vehicles traveling in the peak direction would use the median BRT lane and BRT vehicles traveling in the non-peak direction would be in mixed traffic.
- **One curb BRT lane (fixed southbound):** The lane adjacent to the curb along southbound MD 355 would be used exclusively by the BRT, local buses and right-turning vehicles. BRT vehicles heading northbound on MD 355 would travel with general traffic.
- **One curb BRT lane (peak direction only):** A curb BRT lane would be created by repurposing the peak direction curb lane to accommodate BRT buses, local buses, and right-turning vehicles. The two center general traffic lanes would have a reversible operation with different AM/PM lane configurations. BRT vehicles heading in the off-peak direction would travel with general traffic.
- **Two curb BRT lanes:** The two lanes adjacent to the curb (one on each side of the roadway) would be used exclusively by the BRT, local buses, and right-turning vehicles.
- **Transit signal priority (TSP):** Transit Signal Priority (TSP) would give priority to BRT vehicles when certain conditions are met by either extending a green light or shortening a red light to allow an approaching BRT to pass through the intersection. TSP was

implemented on the MD 355 corridor between the Lakeforest Transit Center and Medical Center as part of the new Ride On Extra service in October 2017.

- **Queue jump:** A queue jump is a short section of roadway widening on an approach to an intersection designated for exclusive use of the BRT. A queue jump allows BRT vehicles to bypass congestion or delays at intersections. In most applications, queue jumps are used in conjunction with TSP to allow vehicles to enter an intersection with a special signal ahead of other vehicles.

The current availability of right-of-way to dedicate lanes exclusively to BRT varies significantly along the corridor. It may be possible to acquire additional property to accommodate expansion of the right-of-way for the BRT. It is also possible that the Recommended Alternative will have a combination of treatments along the corridor.

MD 355 Bus Rapid Transit in the Context of Land Use Planning and Policy


As Montgomery County has grown to become the most populous jurisdiction in Maryland, and as many activity centers along the MD 355 corridor have grown to become regional employment and retail centers, the County has sought to match changes in land use with appropriate transportation improvements. Land use plans and policies over the last 30 years, summarized in **Table 4**, support the type of improvements proposed by the MD 355 Bus Rapid Transit Project. BRT will be an essential element in supporting the increased residential and employment densities recommended in many of the plans. Moreover, enhancements to pedestrian crossings along MD 355 as a result of the BRT project would support recommendations related to pedestrian safety and accessibility across nearly all of these plans.

Table 4 | Land Use Plans and Policies Related to MD 355 Transit¹

Plan/Policy	Plan/Policy Transit Recommendation Highlights
<i>Rockville Pike Corridor Neighborhood Plan (City of Rockville, 1989)</i>	<ul style="list-style-type: none"> • Called for enhanced corridor capacity by “encouraging the use of alternate means of transportation for local use of the Pike,” including “increased public transit use and pedestrian activity.” • Identified pedestrian areas of concern, which were at nearly every intersection in the study area.
<i>Bethesda-Chevy Chase Master Plan (1990)</i>	<ul style="list-style-type: none"> • Called for limiting the construction of new highways to “maintain the quality of life” and a “moderate level of development.” • Recommended a “vigorous program of transit and other mobility services” due to expansion limitations to “achieve a significant shift of new travel from auto to transit...” and location of “new employment and residential development in existing centers, near Metro stations.” • Called for increases to the level of feeder bus services, park & rides, rideshare programs, developer contributions to traffic reduction, and expanded bicycle and pedestrian paths to link residential areas to commercial and public facilities.

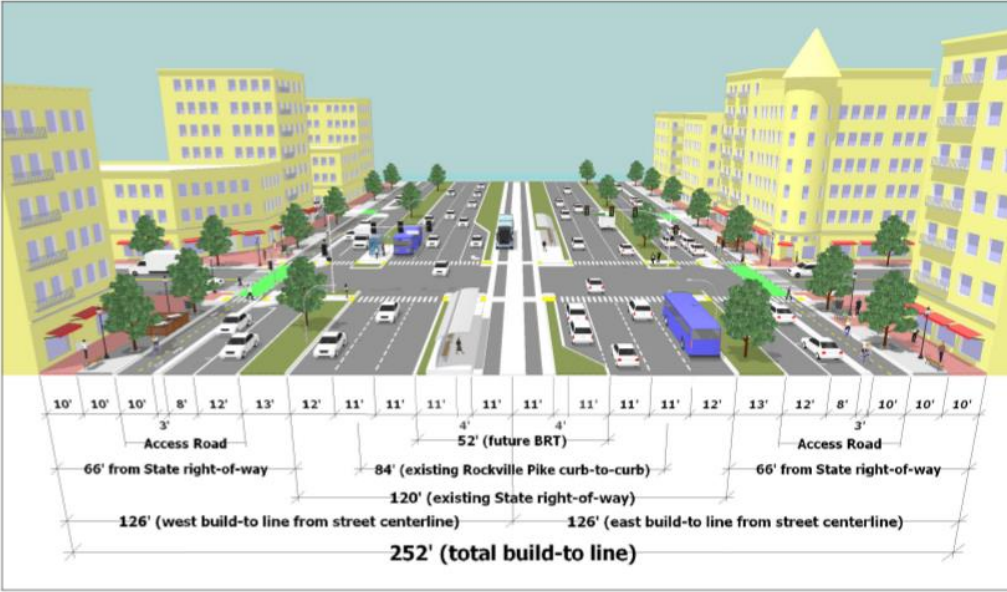
¹ Unless otherwise noted in the parentheses with the year under each plan title, plans were completed by the Montgomery County Planning Department, which is part of the Maryland-National Capital Park and Planning Commission (M-NCPPC).

Plan/Policy	Plan/Policy Transit Recommendation Highlights
<i>North Bethesda-Garrett Park Master Plan (1992)</i>	<ul style="list-style-type: none"> • Called for increased bus services in the area, as well as Metrorail and MARC frequency increases (“major expansions to the public transportation system”). Increase transit ridership and concentrate development around Metro stations, with emphasis on housing. • “Reinforce[d] the concept of Rockville Pike as the “Main Street” of North Bethesda-Garrett Park and reduce block sizes near Metro stations. • Recommended improved circulation of keep cars off Rockville Pike for short trips. • Advised the County and other public agencies to raise parking costs and hold transit fare increases to a minimum due to price sensitivity.
<i>Clarksburg Master Plan & Hyattstown Special Study Area (1994)</i>	<ul style="list-style-type: none"> • Called for “a high quality public transportation system on exclusive and shared rights-of-way to reduce dependence on SOV commuting and which can be implemented in stages.” • Recommended exclusive transitway(s) linking the study area to Shady Grove Metro station, noting that Observation Drive was proposed to be wide enough for BRT or light rail. • Called for widening of MD 355 near Stringtown Road and Shawnee Lane. • Urged against widening of MD 355 through the Clarksburg Historic District.
<i>Rockville Town Center Master Plan (City of Rockville, 2001)</i>	<ul style="list-style-type: none"> • Recommended a complete redesign and redevelopment of the Rockville Metro station, which would incorporate parking and bus stations under a pedestrian promenade, and improved pedestrian connections to the Town Center, including an MD 355 “Linear Green.” • Called for additional mixed use development at the Metro station and new multi-story buildings south of the station. • Recommended various planning actions to “encourage increased use of mass transit.”
<i>City of Rockville Comprehensive Master Plan (City of Rockville, 2002)</i>	<ul style="list-style-type: none"> • Noted that heavy traffic congestion will continue to worsen, as will overcrowding at the Metrorail Red Line stations. • Recommended studying all major intersections on MD 355 for potential traffic capacity improvements that are sensitive to the needs of pedestrian and bicyclists. • Noted the importance of the Corridor Cities Transitway to enhance alternatives to automobile travel and clustering of activity centers around transit stations. • Stated a preference for light rail rather than BRT. • Noted that noise issues are a significant concern. • Recommended grade separations at MD 355 and: Gude Drive, Middle Lane, Veirs Mill Road, MD 28 (Jefferson Street), First Street, King Farm Boulevard, and Montrose Road. • Acknowledged that many retail buildings are strip malls “with little aesthetic amenities or design appeal” and recommended application of design standards in redevelopment, as well as review of design standards to make sure they work and “are still desired.” • Noted that the County has established MD 355 as a “roadway for a change in character to a boulevard with attractive landscaping and other streetscape improvements.”

Plan/Policy	Plan/Policy Transit Recommendation Highlights
<p><i>Shady Grove Sector Plan (2006)</i></p>	<ul style="list-style-type: none"> • Envisioned mixed use redevelopment surrounding the Shady Grove Metro station with a “new residential focus at the station” and relocation of industrial uses to “more efficient sites.” • Called for redevelopment along MD 355 South in the long term to achieve mixed use development with components of employment, technology, and housing. • Recommended designating MD 355 within the Metro station area as an “urban boulevard with short blocks and crosswalks to improve pedestrian access.” • Called for a grade-separated crossing to bring the CCT into the Shady Grove Metro station area and up to 8-story buildings on interior blocks. • Included the following rendering of MD 355 looking south: <p style="text-align: center;">View of MD 355 Looking South</p> 
<p><i>MD 355/I-270 Corridor Study (2008)</i></p>	<ul style="list-style-type: none"> • Recommended enhanced bus service along MD 355 with connections to NIH and Bethesda Naval Medical Center. • Called for improvements to the character of MD 355 between I-370 and Gude Drive by incorporating a green landscaped median and changing the classification of MD 355 from an arterial to a business district street. • Recommended a space for dedicated bus lanes “as part of the shared use of streets” and planning for MD 355 as a “grand avenue” or “boulevard” with “a green character.”
<p><i>Germantown Forward Employment Area Sector Plan (2009)</i></p>	<ul style="list-style-type: none"> • Called for a right-of-way of up to 250 feet on MD 355 in certain areas pending completion of other studies. • Recommended grade-separated crossings of MD 355 at MD 27 (Ridge Road), MD 118 (Germantown Road), and Middlebrook Road due to anticipated severe traffic congestion. • Envisioned redevelopment of sites along MD 355 with street-oriented commercial development and rear parking and service areas, maximum building heights of 60 feet, 8-foot sidewalks, and streetscaping.
<p><i>Twinbrook Sector Plan (2009)</i></p>	<ul style="list-style-type: none"> • Planned for mixed use redevelopment surrounding Twinbrook Metro station, noting that Twinbrook will be one of several transit-oriented communities along the corridor.

Plan/Policy	Plan/Policy Transit Recommendation Highlights
<p><i>City of Gaithersburg Master Plan (City of Gaithersburg, 2009-10)</i></p>	<ul style="list-style-type: none"> Recommended studying the feasibility of BRT on MD 355 as the “eastern counterpart” to the CCT and reviewing the right-of-way standard to facilitate a future BRT corridor lane. Identified “lack of public transit alternatives” as a key transportation issue, particularly along MD 355 from Travis Avenue south to Montgomery Village Avenue (MD 124). Identified concerns related to historic resources within the potential MD 355 right-of-way and potential for vehicle-bicycle-pedestrian conflicts. Recommended siting redevelopment projects further from the street edge to allow increased right-of-way for installation of improved sidewalks and street tree planting.
<p><i>White Flint Sector Plan (2010)</i></p>	<ul style="list-style-type: none"> Identified MD 355 BRT as “desirable to supplement Metrorail” and recommends keeping all BRT barrier-separated busway options on the table. Called for reconstruction of Rockville Pike (MD 355) as an urban boulevard, providing bus priority lanes, placing utilities underground, and adding a median wide enough to accommodate turn lanes and street trees; set aside ROW for the BRT. Emphasized pedestrian comfort and on-road bicyclist accommodations. Showed a potential promenade design of Rockville Pike and a potential BRT cross section: <div data-bbox="527 667 1312 1003" data-label="Image"> </div> <p data-bbox="527 1003 1015 1029">Figure 1: Rockville Pike Boulevard and Promenade Cross Section</p> <div data-bbox="527 1054 1312 1390" data-label="Figure"> </div> <p data-bbox="527 1396 925 1421">Figure 2: Alternative Rockville Pike BRT Cross Section</p> <ul style="list-style-type: none"> Subsequent infrastructure plan implemented a phased staging plan to promote coordination with the ongoing planning for the MD 355 BRT.
<p><i>City of Rockville BRT Town Center Integration Study (City of Rockville, 2015)</i></p>	<p>See Table 2 Studies and Plans of MD 355 BRT in Montgomery County Transportation Planning</p>
<p><i>Clarksburg Town Center Staff Report (2015)</i></p>	<ul style="list-style-type: none"> Designated Frederick Road as the “MD 355 North Corridor,” with a future BRT station at the intersection of MD 355 and Clarksburg Square Road.

Plan/Policy	Plan/Policy Transit Recommendation Highlights
<i>City of Gaithersburg MD 355 BRT Study (City of Gaithersburg 2015)</i>	See Table 2 Studies and Plans of MD 355 BRT in Montgomery County Transportation Planning
<i>Montgomery County Subdivision Staging Policy (2016-2020)</i>	<ul style="list-style-type: none"> • Bethesda: In the Bethesda Transportation Management District, the goal is 37% non-driver mode share for workers [<i>which has since been amended and increased, as described in the Bethesda Downtown Sector Plan section below</i>]. • North Bethesda: In the North Bethesda Transportation Management District, the goal is 39% non-driver mode share for workers in the peak hour. • White Flint: Any proposed development located in [area] is exempt from Local Area Transportation Review if the development will be required to provide substantial funds to the Special Tax District created to finance master planned public • Shady Grove: The goal is a transit ridership goal of 35 % for residents in the Shady Grove Policy Area, 25% for residents elsewhere in the Sector Plan, and 12.5% for employees of office development.... Each development that receives preliminary plan approval... and generates at least 100 additional peak-hour vehicle trips..., must enter a Traffic Mitigation Agreement (TMA). The trip mitigation requirement ... is 50% of the residential-related vehicle trips and 65% of the non-residential- related vehicle trips that would otherwise be expected..."
<i>Bicycle Master Plan Framework Report (M-NCPPC, 2016)</i>	<ul style="list-style-type: none"> • Identified MD 355 in the White Flint area as "the quintessential example of a street that is well-suited to a two-way bikeway on both sides of the street," due to long distances between crossings and the wide street cross section. • Called for two-way bikeways on both sides of the road where the following conditions are met: <ul style="list-style-type: none"> ○ Long distances between safe, comfortable crossings (typically 800 to 1,000 feet). ○ Wide automobile travel way cross section (four or more lanes). ○ Presence of destinations/active land uses on both sides of the street. • Used data to show that relatively few activity centers in the County are connected to residential areas via a "low-stress bicycling network."

Plan/Policy	Plan/Policy Transit Recommendation Highlights
<p><i>Rockville Pike Neighborhood Plan (City of Rockville, 2016)</i></p>	<ul style="list-style-type: none"> Updated the City of Rockville's 2002 Comprehensive Master Plan and replaced the 1989 Rockville Pike Neighborhood Corridor Plan; covers a two-mile stretch of the Pike from the city limits (a few blocks south of the Twinbrook Metro station) to a few blocks south of the Town Center. Recommended a “multi-way boulevard” approach with local access lanes parallel to MD 355 to separate regional and local trips and resolution of other pedestrian, bicycle, and scale issues to support greater use of the BRT and transit and more walkable, mixed use development. Introduced a “Rockville Champion Project” category of projects subject to a different set of requirements for access roads and easements. Provided the following conceptual design for this two-mile segment of MD 355: 
<p><i>Bethesda Downtown [Sector] Plan (2017)</i></p>	<ul style="list-style-type: none"> Called for construction of a southern entrance to the Bethesda Metro station at Elm Street and Wisconsin Avenue, and to extend the MD 355 BRT corridor to that “South Station” to connect it to the Purple Line. Identified various potential BRT street sections for the Downtown Bethesda area. Expanded the existing Non-Auto Driver Mode Share (NADMS) goal to include residents and increased it from 37 percent to 55 percent.
<p><i>Grosvenor-Strathmore Metro Area Minor Master Plan (2017 – DRAFT only)</i></p>	<ul style="list-style-type: none"> Developed the following vision: “The area will have improved mobility through BRT along Rockville Pike. New and improved bike and pedestrian connections will link the existing and new community to adjacent neighborhoods and resources such as Strathmore Hall and the nearby trails and parks.” Called for completion of a sidewalk from Grosvenor Lane to Pooks Hill Road (across the Capital Beltway), as well as various other sidewalks and foot and bike paths.
<p><i>White Flint 2 Sector Plan (2017 – DRAFT only)</i></p>	<ul style="list-style-type: none"> Intended to “fill in the gaps” between the areas covered by the 2010 White Flint Sector Plan, 2009 Twinbrook Sector Plan and the 2016 Rockville Pike Neighborhood Plan, it complements the White Flint Sector Plan by identifying opportunities for infill and transitional development at key locations. Current draft does not recommend access lanes, given the lack of existing easements to convert into access lanes. Current draft recommends funding ongoing study of the MD 355 BRT and leaves open the possibility for different treatments and lane configurations.

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