

Countywide Transit Corridors Functional Master Plan

Appendix 4

Analysis of Corridors Not Recommended for Inclusion in the Functional Plan

Connecticut Avenue

The Connecticut Avenue corridor was not included in the Countywide Transit Corridors Functional Master Plan because even under the most ambitious scenario (Build 1) the 2040 daily ridership forecast of 6,400 passengers is among the lowest of the corridors evaluated and the link level ridership was far below the 1,000 pphpd threshold.

Like many of the other, parallel north-south corridors in the County, the Connecticut Avenue corridor currently and in the future will experience heavy congestion. But unlike some of the parallel corridors, such as Georgia Avenue, Wisconsin Avenue/Rockville Pike, and Old Georgetown Road, this corridor has lower density existing and planned land use. Land use intensity is a key ingredient for a successful BRT corridor. So while Connecticut Avenue will continue to experience a significant amount of travel demand, BRT will not be the appropriate service for this corridor until there are substantial changes to the land use patterns.

Table 4-1: Link Ridership Forecast by Peak Hour/Peak Direction (2040) for Connecticut Avenue Corridor

From	To	Build 1	Build 2	Build 2A
MD 97 and Bel Pre Rd	MD 97 and MD 185	25	125	Not Tested
MD 97 and MD 185	MD 185 and Weller Rd	225	250	
MD 185 and Weller Rd	MD 185 and Randolph Rd	275	300	
MD 185 and Randolph Rd	MD 586 and MD 185	400	425	
MD 586 and MD 185	MD 185 and Howard Ave	425	450	
MD 185 and Howard Ave	MD 185 and Saul Rd	425	450	
MD 185 and Saul Rd	Jones Bridge Rd and Platt Ridge Rd	475	525	
Jones Bridge Rd and Platt Ridge Rd	Jones Bridge Rd and Glenbrook Pkwy	400	425	
Jones Bridge Rd and Glenbrook Pkwy	Medical Center Metro Station	350	375	
Average Daily Ridership (entire corridor)		6,325	6,550	

Red = two-way median busway speeds

Blue = curb lane speeds

Yellow = mixed traffic speeds

Intercounty Connector

The Intercounty Connector (ICC) corridor was not included in the *Countywide Transit Corridors Functional Master Plan* because even under the most ambitious scenario (Build 1) the 2040 daily ridership forecast of 6,300 passengers is among the lowest of the corridors evaluated and the link level ridership was far below the 1,000 passengers per peak hour threshold. Second, the ICC is intended to operate congestion free and additional right-of-way is not needed, so its inclusion in the functional plan is not needed.

Table 4-2: Link Ridership Forecast by Peak Hour / Peak Direction (2040) for ICC Corridor

From	To	Build 1	Build 2	Build 2A
Life Sciences Center	ICC Park and Ride	700	675	Not Tested
ICC Park and Ride	Briggs Chaney Park and Ride	400	400	
Average Daily Ridership (entire corridor)		6,275	6,150	0

Red = two-way median busway speeds

Blue = curb lane speeds

Yellow = mixed traffic speeds

Muddy Branch Road

The Muddy Branch Road corridor was not included in the *Countywide Transit Corridors Functional Master Plan* because even under the most ambitious scenario (Build 1) the 2040 daily ridership forecast of 7,500 passengers is among the lowest of the corridors evaluated and the link level ridership was far below the 1,000 pphpd threshold.

Table 4-3: Link Ridership Forecast by Peak Hour/Peak Direction (2040) for Muddy Branch Road Corridor

From	To	Build 1	Build 2	Build 2A
Lakeforest Mall Transit Center	MD 355 and Brookes Ave	475	475	Not included
MD 355 and Brookes Ave	Muddy Branch Rd and MD 117	550	550	
Muddy Branch Rd and MD 117	Muddy Branch Rd and West Side Dr	600	600	
Muddy Branch Rd and West Side Dr	Muddy Branch Rd and Diamondback Dr	550	550	
Muddy Branch Rd and Diamondback Dr	MD 119 and Discoverly Dr	550	575	
MD 119 and Discoverly Dr	Life Sciences Center	325	325	
Average Daily Ridership (entire corridor)		7,525	7,550	0

Red = two-way median busway speeds

Blue = curb lane speeds

Yellow = mixed traffic speeds

Norbeck Road

The Norbeck Road corridor was not included in the *Countywide Transit Corridors Functional Master Plan* because even under the most ambitious scenario (Build 1) the 2040 daily ridership forecast of 5,500 passengers is among the lowest of the corridors evaluated and the link level ridership was far below the 1,000 passengers per peak hour threshold.

Table 4-4: Link Ridership Forecast by Peak Hour / Peak Direction (2040) for Norbeck Road Corridor

From	To	Build 1	Build 2	Build 2A
Rockville Metro Station (west entrance)	Baltimore Rd and MD 28	625	625	0
Baltimore Rd and MD 28	MD 28 and Bauer Dr	625	600	0
MD 28 and Bauer Dr	MD 28 and Bel Pre	525	525	0
MD 28 and Bel Pre	Park and Ride Lot - MD28 and MD 97	475	450	0
Park and Ride Lot - MD28 and MD 97	ICC Park and Ride	150	150	0
Average Daily Ridership (entire corridor)		5,525	5,400	0

Red = two-way median busway speeds

Blue = curb lane speeds

Yellow = mixed traffic speeds

Old Georgetown Road North

In the Build 1 and Build 2 scenarios, the Old Georgetown Road North corridor was evaluated with the speeds of a two-way median busway. The ridership did not reach the 1,000 pphpd threshold and therefore this corridor was not evaluated in Build 2A.

Table 4-5: Link Ridership Forecast by Peak Hour/Peak Direction (2040) for Old Georgetown Rd North Corridor

From	To	Build 1	Build 2	Build 2A
Montgomery Mall Transit Center	Rockledge Dr and Rockledge Center	175	175	Not Tested
Rockledge Dr and Rockledge Center	Rockledge Dr and Rock Spring Dr	175	175	
Rockledge Dr and Rock Spring Dr	Rock Spring Dr and MD 187	850	825	
Rock Spring Dr and MD 187	MD 187 and Tuckerman Ln	850	850	
MD 187 and Tuckerman Ln	MD 187 and Edson Ln/Poindexter Ln	825	825	
MD 187 and Edson Ln/Poindexter Ln	White Flint Metro Station	900	900	
Average Daily Ridership (entire corridor)		7,775	7,700	0

Red = two-way median busway speeds

Blue = curb lane speeds

Yellow = mixed traffic speeds

However, a subsequent analysis included in the discussion of the North Bethesda Transitway determined that the Old Georgetown Road North corridor was a preferable link between the Red Line and Rock Spring than the North Bethesda Transitway. Therefore, Phase 1 of the Countywide Transit Corridors Functional Master Plan recommends including the Old Georgetown Road North corridor as part of the new North Bethesda Transitway alignment.

Old Georgetown Road South

In the Build 1 and Build 2 scenarios, the Old Georgetown Road South busway was evaluated with the speeds of a two-way median busway. While the corridor was forecast to carry nearly 11,000 riders per day, much of this ridership is between the Bethesda to NIH/Suburban Hospital link. Overall, the ridership did not reach the 1,000 pphpd threshold and north of NIH/Suburban Hospital, the link ridership was under 600 pphpd. Therefore, this corridor was not evaluated in Build 2A.

Table 4-6: Link Ridership Forecast by Peak Hour/Peak Direction (2040) for Old Georgetown Rd South Corridor

From	To	Build 1	Build 2	Build 2A
Montgomery Mall Transit Center	Rockledge Dr and Rockledge Center	175	175	Not Tested
Rockledge Dr and Rockledge Center	Rockledge Dr and Rock Spring Dr	175	175	
Rockledge Dr and Rock Spring Dr	MD 187 and Democracy Blvd	400	400	
MD 187 and Democracy Blvd	MD 187 and Ryland Dr	425	425	
MD 187 and Ryland Dr	MD 187 and W Cedar Ln	575	575	
MD 187 and W Cedar Ln	MD 187 and Lincoln St	575	575	
MD 187 and Lincoln St	MD 187 and Del Ray Ave/Cordell Ave	850	850	
MD 187 and Del Ray Ave/Cordell Ave	Bethesda Metro Station	850	850	
Average Daily Ridership (entire corridor)		10,750	10,775	0

Red = two-way median busway speeds

Blue = curb lane speeds

Yellow = mixed traffic speeds

A subsequent analysis included in the North Bethesda Transitway section considered shifting the North Bethesda Transitway alignment from Grosvenor to Bethesda, via Old Georgetown Road, but this was dropped as the Old Georgetown Road North segment has more potential as part of a future connection to Tysons Corner, VA, as discussed above.

The *Countywide Transit Corridors Functional Master Plan* does not recommend the Old Georgetown Road South corridor.

Rockville-Life Sciences Center (LSC)

The Rockville-LSC corridor was initially evaluated with speeds associated with two-way median busways in the Build 1 and Build 2 scenarios. The Build 2A scenario reduced the speed to mixed traffic to reflect:

1. smaller roads (2 – 4 lanes) east of the I-270 ramps, and
2. recommended routing along Research Blvd (a four lane road) to better serve land use in the Life Sciences area.

For the Build 1 and Build 2 scenarios, the ridership was about 14,500 per weekday, but dropped to about 7,000 in the Build 2A scenario. While the link ridership exceeded the 1,000 pphpd threshold in the Build 1 and Build 2 scenarios, this drops well below the threshold in the Build 2A scenario.

Table 4-7: Link Ridership Forecast by Peak Hour/Peak Direction (2040) for Rockville – LSC Corridor

From	To	Build 1	Build 2	Build 2A
Rockville Metro Station (west entrance)	E Middle Ln and Gibbs St	1,225	1,225	650
E Middle Ln and Gibbs St	MD 28 and Laird St	1,250	1,250	625
MD 28 and Laird St	MD 28 and Research Blvd	1,150	1,150	550
MD 28 and Research Blvd	MD 28 and Gude Dr	1,125	1,100	475
MD 28 and Gude Dr	Research Blvd and Shady Grove Rd	775	775	350
Research Blvd and Shady Grove Rd	MD 28 and Broschart Rd	675	675	250
MD 28 and Broschart Rd	Life Sciences Center	525	550	75
Average Daily Ridership (entire corridor)		14,450	14,475	6,950

Red = two-way median busway speeds

Blue = curb lane speeds

Yellow = mixed traffic speeds

In addition, each of the Build scenarios reflects a sizable reduction in the ridership along the Corridor Cities Transitway (CCT), ranging from 13 percent in the Build 2A scenario to about one-third in the Build 1 and Build 2 scenarios. Of this reduction, it is likely about two-thirds is attributable to BRT network. Since the only other corridor that duplicates the CCT is the MD 355 North corridor, and only the portion of that corridor north of Shakespeare Blvd is duplicative, it is likely that most of the Rockville-LSC ridership draws from the CCT.

Table 4-8: Rockville-LSC Corridor Impact on the Corridor Cities Transitway

	No Build	Build 1	Build 2	Build 2A
Entire BRT (including CCT)	39,200	283,000	276,100	184,400
BRT (no CCT)	0	254,000	247,100	149,800
BRT (CCT Only)	39,200	29,000	29,000	34,600
Reduction in CCT from No Build	0	10,200	10,200	4,600
Percent Reduction in CCT	0%	26%	26%	12%
Corridor 5: Rockville-LSC	0	14,400	14,500	7,000
<u>Maximum</u> Reduction in CCT attributable to Rockville-LSC Corridor		71%	70%	66%

Therefore, because the link ridership is low and could adversely affect the Corridor Cities Transitway, the *Countywide Transit Corridors Functional Master Plan* does not recommend this corridor.

University Boulevard-Grosvenor Connector

The University Boulevard-Grosvenor corridor was added for evaluation in an effort to facilitate east-west travel but not included in the Countywide Transit Corridors Functional Master Plan because even under the most ambitious scenario (Build 1) the 2040 daily ridership forecast of 2,400 passengers is among the lowest of the corridors evaluated and the link level ridership was far below the 1,000 passengers per peak hour threshold.

Table 4-9: Link Ridership Forecast by Peak Hour/Peak Direction (2040) for University Boulevard-Grosvenor Corridor

From	To	Build 1	Build 2	Build 2A
Wheaton Metro Station	MD 193 and East Ave	175	175	Not Tested
MD 193 and East Ave	MD 193 and Newport Mill Rd	200	200	
MD 193 and Newport Mill Rd	MD 185 and Howard Ave	175	175	
MD 185 and Howard Ave	Grosvenor Metro Station	175	150	
Average Daily Ridership (entire corridor)		2,400	2,350	0

Red = two-way median busway speeds

Blue = curb lane speeds

Yellow = mixed traffic speeds