



Bethesda Unified Mobility Program (BUMP)

Bethesda TMD Advisory Committee
July 19, 2019

What is BUMP?

- A per-unit fee paid by new development
- Identification of necessary transportation infrastructure for...
 - SSP adequacy
 - A successful master plan
- Estimating costs for this infrastructure
- Dividing these costs equitably across future development
 - Assumes 100% build-out
- Stays local; goes into a lockbox specifically for that UMP
- Handled like Impact Tax

Cost (\$\$\$)

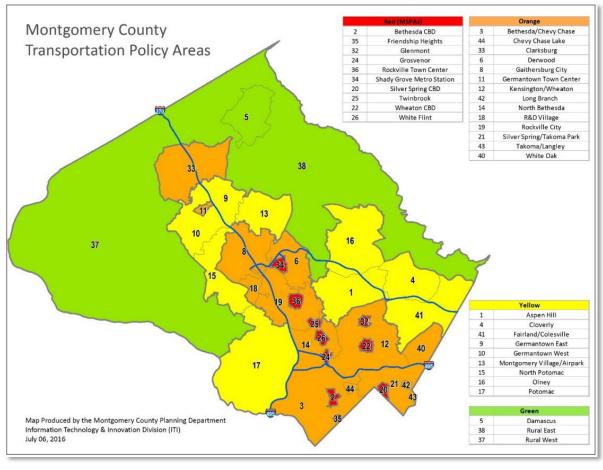
<u>÷ Traffic Generated (Trips)</u>

Fee (\$/trip)

\$101,800,000 White Oak → <u>÷ 20,324 trips</u> \$5010 / trip



Where does BUMP come from?



- Part of the SSP for Red Policy Areas
- Included in the BethesdaDowntown Plan
- Modeled after the White Oak LATIP

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



- Coordination
- Transparency
- Equity
- Time & Fiscal Savings

Coordination

Typically:

Developments do their own things relatively independently of each other.

UMP:

A unified analysis to identify all treatments within a policy area.



- Coordination
- Transparency
- Equity
- Time & Fiscal Savings

Transparency

Typically:

Each project goes before Planning Board, and each may have its own set of transportation projects. Can be difficult for people to monitor multiple development projects.

UMP:

People only have to pay primary attention to the UMP to get an understanding of what major changes can be expected.



- Coordination
- Transparency
- Equity
- Time & Fiscal Savings

Equity

Faster (and often larger & more organized) developments use available capacity, with few mitigation needs.

Later developments tend to be left with mitigation needs. These developments tend to be smaller, and the mitigation may give disproportionate benefit outsizing their individual needs.

UMPs are intended for each developer pays for their equitable share of the cost of the improvements.



- Coordination
- Transparency
- Equity
- Time & Fiscal Savings

Time & Fiscal Savings

Typically:

Developments must each perform sometimes significant analyses, and agencies must expend resources reviewing & negotiating on each. Many times these do not result in any action.

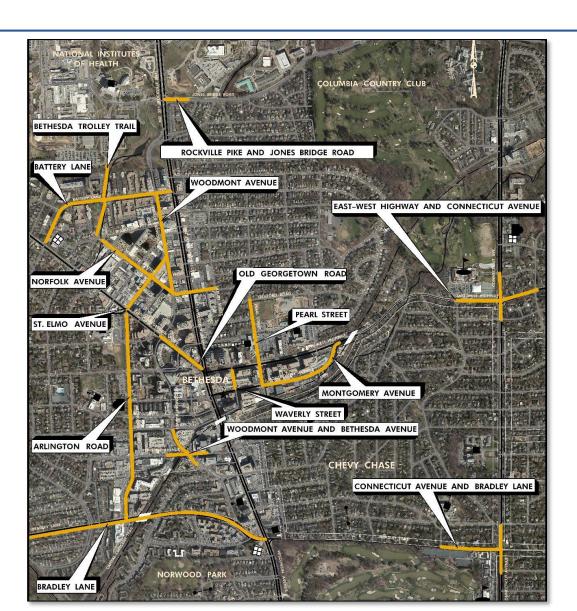
UMP:

A single centralized analysis with a single review process, recurring every 6 years.

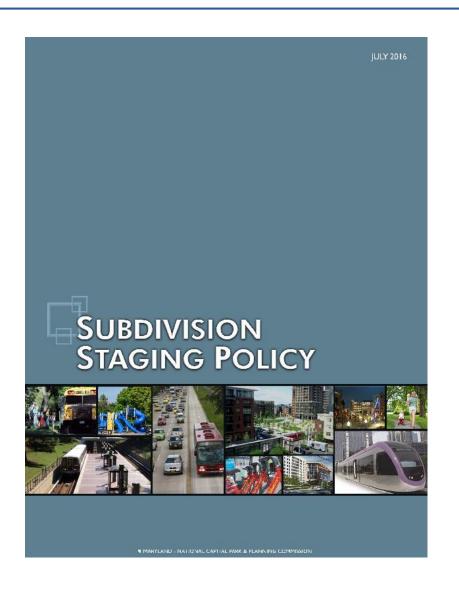


What's in the BUMP?

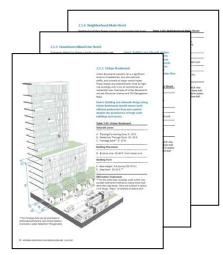
- Intersections
- ADA Upgrades
- Bikeways
- Transit



How were these projects identified?



- Master Plan CIP
- Master Plan Goals
- TransportationAnalysis



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Intersections

MD 185 (Connecticut Ave) at MD 410 (East-West Hwy)

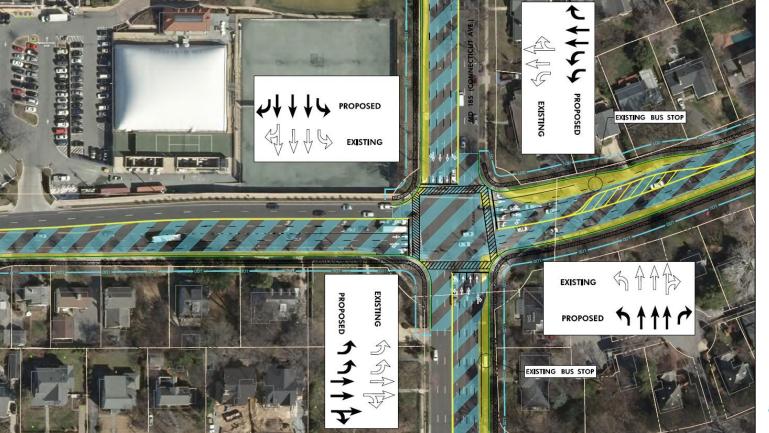
\$4,137,400

MD 185 (Connecticut Ave) at MD 191 (Bradley Lane)

\$4,429,100

MD 355 (Rockville Pike) at Jones Bridge Rd

\$517,700



Delay:

78.8 s/veh

SSP Limit:

80.0 s/veh



Intersections

MD 185 (Connecticut Ave) at MD 410 (East-West Hwy)

\$4,137,400

MD 185 (Connecticut Ave) at MD 191 (Bradley Lane)

\$4,429,100

MD 355 (Rockville Pike) at Jones Bridge Rd

\$517,700



Delay:

52.9 s/veh

SSP Limit:

80.0 s/veh





Intersections

MD 185 (Connecticut Ave) at MD 410 (East-West Hwy)

\$4,137,400

MD 185 (Connecticut Ave) at MD 191 (Bradley Lane)

\$4,429,100

MD 355 (Rockville Pike) at Jones Bridge Rd

\$517,700



Delay:

77.5 s/veh

SSP Limit:

80.0 s/veh





ADA Upgrades

- \$14 per Linear Foot
- 55,000 Linear Feet

\$770,000 for ADA facilities



Under consideration is whether this may be a separate fee, assessed based on how many LF of sidewalk are within 500 ft from site frontage.



Bikeways

Arlington from Old Georgetown to Bradley Battery from Old Georgetown to Wisconsin Bethesda / Willow from Woodmont to 47th Bradley / Capital Crescent Trail Connection Bradley from Glenbrook to Wisconsin Montgomery from Woodmont to East-West Norfolk / Cheltenham from Battery to Tilbury North Bethesda Trail between Rugby and NIH Old Georgetown from Woodmont to Wisconsin Pearl from Montgomery to Sleaford St Elmo from Wilson to Woodmont Waverly from East-West to Montgomery Woodmont / Bethesda Intersection Woodmont from Battery to Wisconsin **Protected Intersections** Bike Parking (Short- & Long-Term) **Bikeshare**

\$1,920,900 \$441,300 \$1,449,000 \$2,307,800 \$5,694,200 \$1,242,000 \$4,500,100 \$2,029,400 \$220,800 \$3,002,200 \$262,400 \$50,000 \$1,121,300 \$2,135,900 \$3,500,000

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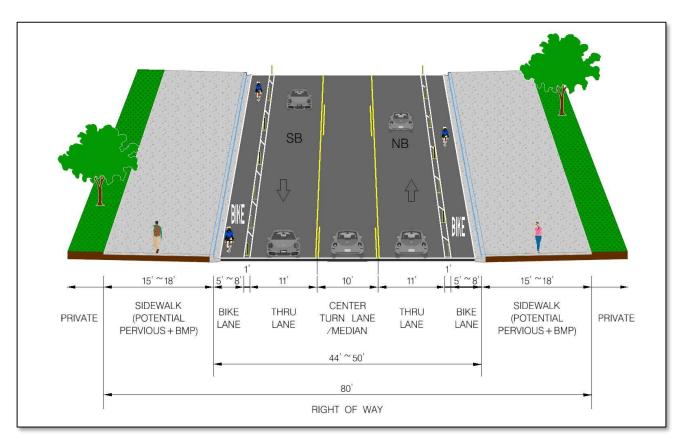
\$4,200,000





Transit

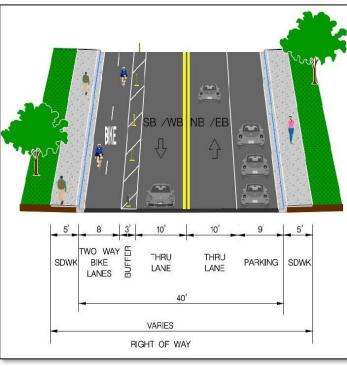
Bikeways



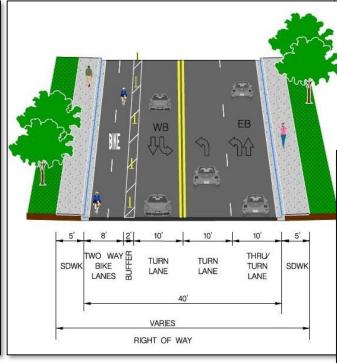




Bikeways







↑ Woodmont Ave to Wisconsin Ave↑







Bikeways

Transit

Bikeways









Bethesda / Willow from Woodmont to 47th



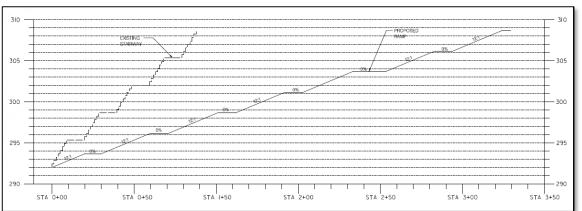
Bikeways

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Bikeways







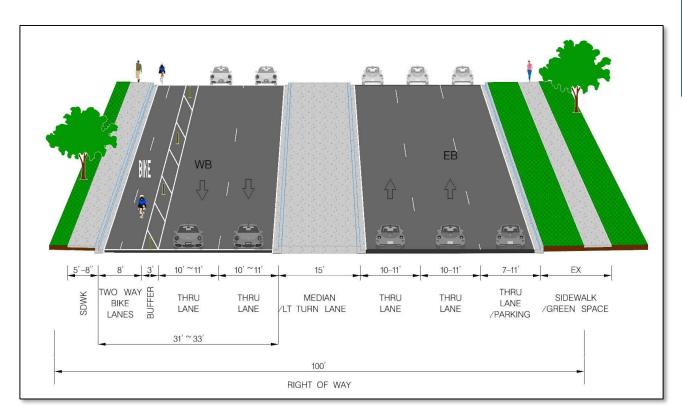
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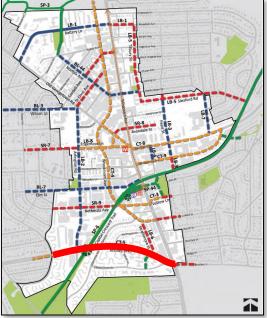




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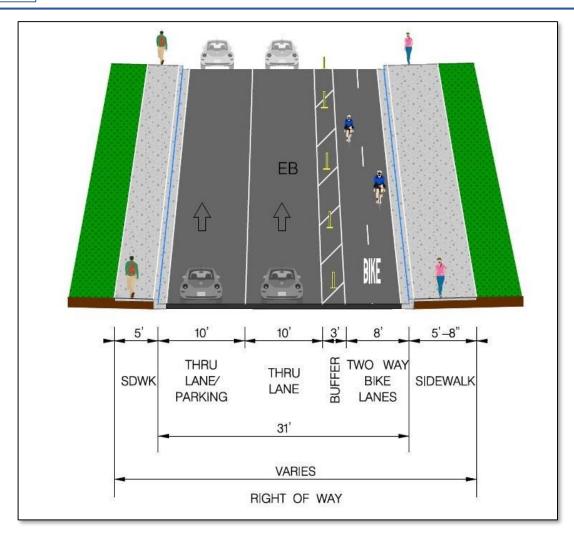
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Bikeways

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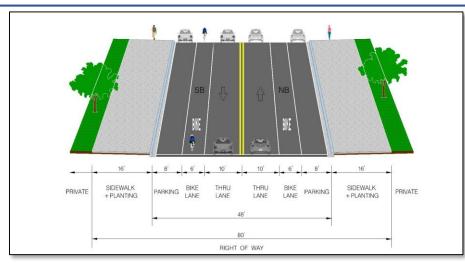
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Bikeways



PRIVATE

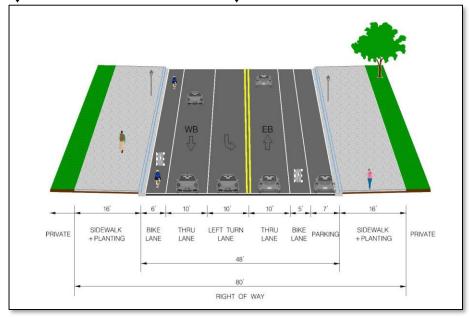
SIDEWALK PARKING SHARED PARKING SIDEWALK PLANTING TRAVEL WAY + BMP + PLANTING PRIVATE

80'
RIGHT OF WAY

← Norfolk Short-Term

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↓ Cheltenham Short-Term ↓



← Norfolk Long-Term

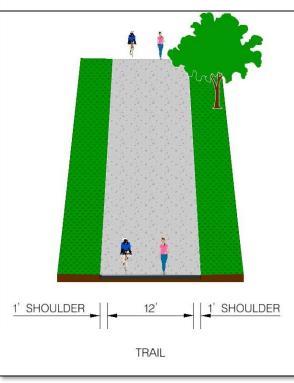


Bikeways

Transit

Bikeways

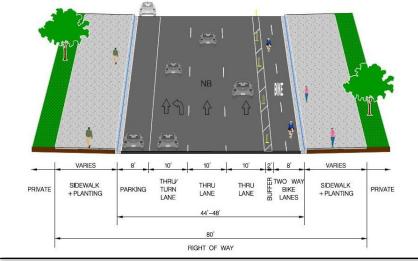




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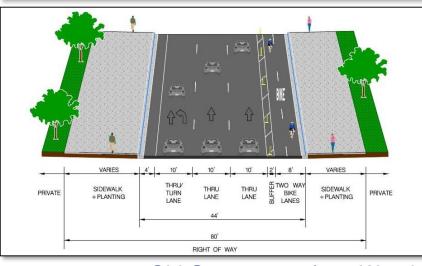
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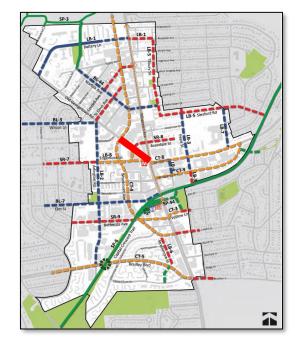
← Woodmont Ave to Commerce Lane

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Arlington from Old Georgetown to Bradley



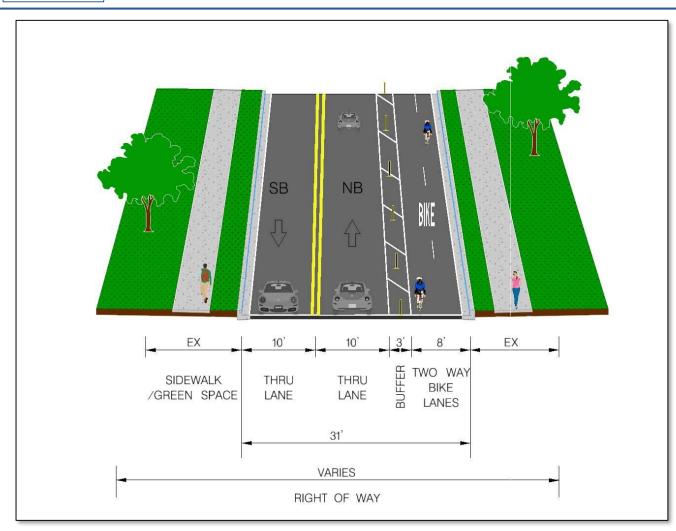
← Commerce Lane to Wisconsin Ave



Bikeways

Transit

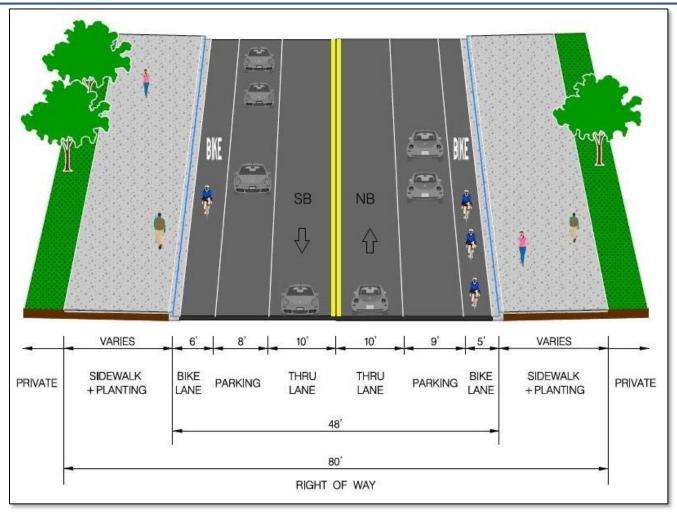
Bikeways



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Bikeways

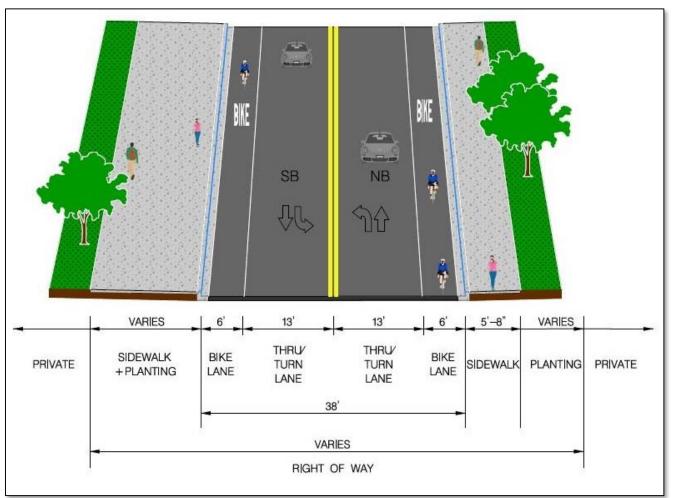


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Bikeways

Bikeways Transit



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Bikeways

Transit

Bikeways



CAPITAL CRESCENT SURFACE TRAIL Bethesda Avenue and Woodmont Avenue

NOT FOR CONSTRUCTION





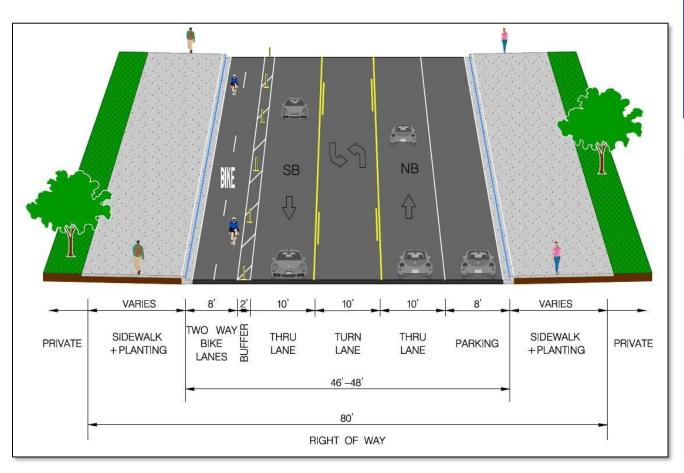


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Woodmont from Battery to Wisconsin \$2,135,900



Bikeways

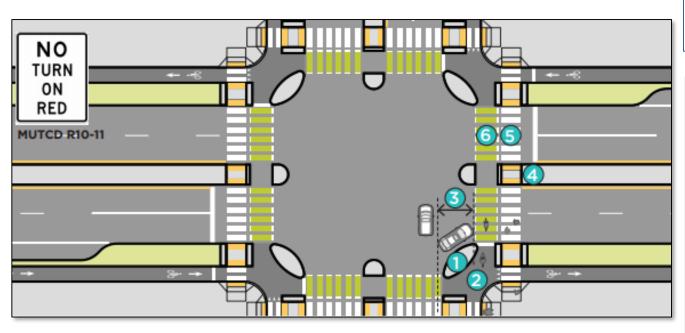


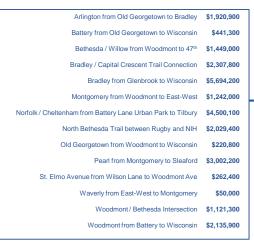
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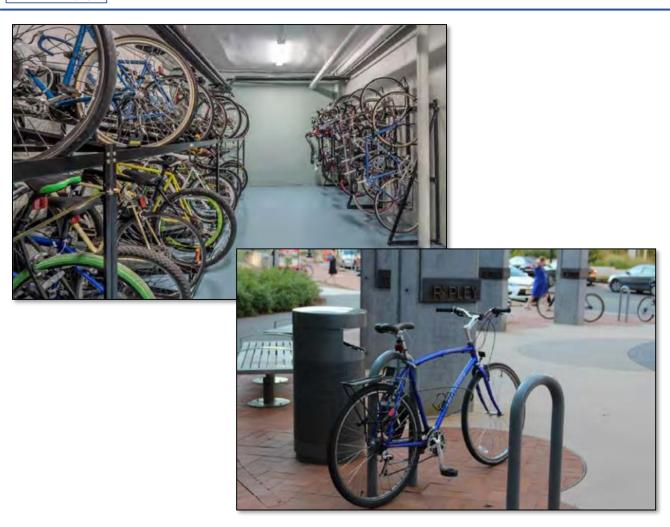




Bikeways

Transit

Bikeways

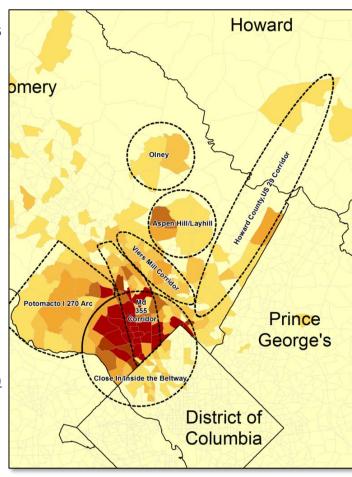


Arlington from Old Georgetown to Bradley Battery from Old Georgetown to Wisconsin \$441,300 Bethesda / Willow from Woodmont to 47th \$1,449,000 Bradley / Capital Crescent Trail Connection \$2,307,800 Bradley from Glenbrook to Wisconsin \$5,694,200 Montgomery from Woodmont to East-West \$1,242,000 Norfolk / Cheltenham from Battery Lane Urban Park to Tilbury \$4,500,100 North Bethesda Trail between Rugby and NIH \$2,029,400 Old Georgetown from Woodmont to Wisconsin \$220,800 Pearl from Montgomery to Sleaford \$3.002.200 St. Elmo Avenue from Wilson Lane to Woodmont Ave \$262,400 Waverly from East-West to Montgomery \$50,000 Woodmont/Bethesda Intersection \$1,121,300 Woodmont from Battery to Wisconsin \$2,135,900

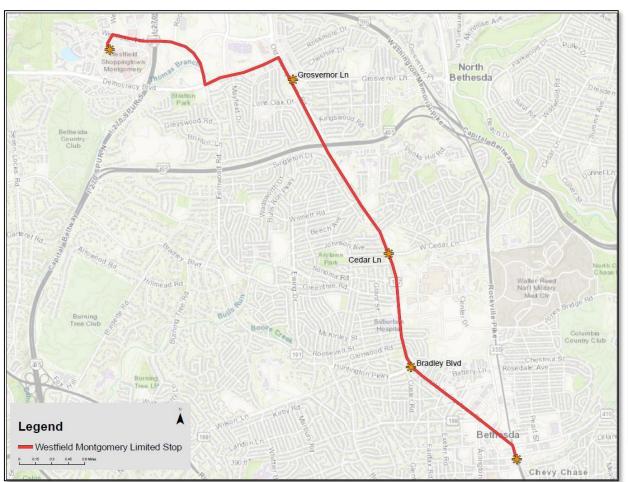




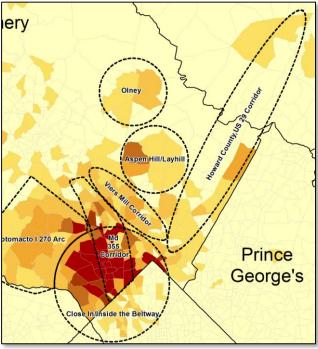
- Need to achieve a 55% NADMS goal, providing for +3,058 transit trips
- 1,839 Rock Spring Park & Ride and Express Service
- 1,536 Greater Bethesda Micro-Transit
- 869* MD 355 FLASH service
- 747 Layhill/Wheaton Express to White Flint Red Line
- 530 Extend Metrobus 30 Routes from Friendship Hghts to Bethesda
- 342 Howard County via US 29 FLASH Service to Purple Line
- 264 Other Ride-On Improvements (29, 30, 32, 34, 36, 47)
- 200 Olney / Aspen Hill Express to Shady Grove Red Line
- 0 Bethesda Circulator Extension (already included in background NADMS)
- 6,327 Total from New Transit Strategies
- Full implementation could achieve 62% NADMS













Nat'l Military Wilson Lane Bradley Lane Legend Micro Transit Route 1 --- Micro Transit Route 2 Micro Transit Route 3 Micro Transit Route 4 Micro Transit Route 5

Rock Spring Park & Ride and Express Service 1,839

Greater Bethesda Micro-Transit 1,536

MD 355 FLASH service 869

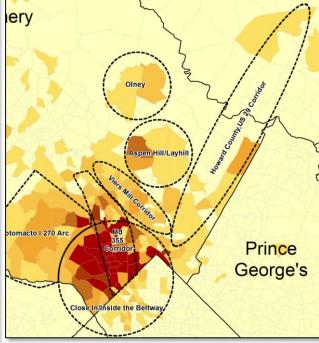
Layhill/Wheaton Express to White Flint Red Line 747

Extend Metrobus 30 Routes from Friendship Hghts to Bethesda 530

Howard County via US 29 FLASH Service to Purple Line 342

Other Ride-On Improvements (29, 30, 32, 34, 36, 47) 264

Olney / Aspen Hill Express to Shady Grove Red Line 200



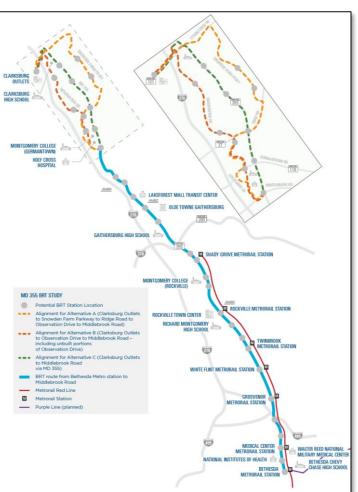


https://www.ridetheflash.com/









Ack Spring Park & Ride and Express Service 1,839

Greater Bethesda Micro-Transit 1,536

MD 355 FLASH Service 869

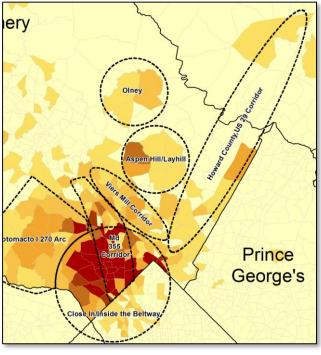
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Olney / Aspen Hill Express to Shady Grove Red Line 200

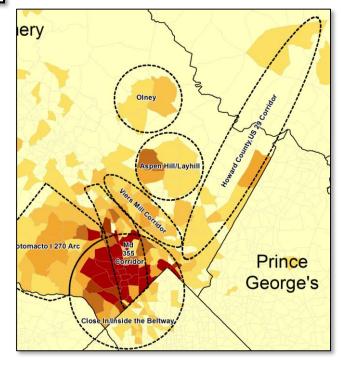




Route Pattern	One Way Bus Travel Time	Time on Rail	Transfer Time (bus to rail)	Bus Dwell Time at each Park and Ride	Total Time
Layhill – White Flint	30	11	5	5	56
Station – Dwntn Bethesda				(10 min total)	

O luval	Ten Con	intry Club	
Welsh Park 28	The land of the la	Layhill Branch Stream	BON HOLE TO SHE
Park Rockville B Civic Center S	Bel Pre Road	Park	Dink
Park Calvin @Street	Gate	MD:200=10f	Branch Part
Rockville Park	of Heaven Gemetery		Notley Rd
Ave and a second	Asper Hill Hewitt Ass Dr		Fairland Rg
	D REO	O ON PLE CLOOK	Colesville
Mooting of the state of the sta	Connec		and the second
The state of the s	Connecticut		
Woodmont S Parklawn S60 Country Club S Cemetery	ic ut	Vheaton Rd lenmont Rason Rd	E knude
Rock Creek Stream Valley	Nellet Ra Gleamont Park	Ownallan Ave	
Park 1		Wheaton	Martin Luther King
Montrose Rg Randolph R	oad 5	Regional Park	Jr Park 29
Montrose PkW		Re Barrer	
		Arcola Ave	White Oak
White Flint	fer Volco Million	age Ave Sligo Cr. James V	X
Old Metro Trans	fer "%	Kemp Mill Loxford	
Twkermanin		Kemp Mill	
Regional		Virginian Line (5)	And the second
Park Washington Me	Piyers Mill		1 10 ha
		Dennis Ave	eanAve d
Grosvenor Ln a North	Franklin St	of and and	9
	S S S S S S S S S S S S S S S S S S S	Argyle Argyle	1
Bethe sda Country Club		Forest-Glen 1955	193 Cakyew Bi
Poor, Ma	Rock and A	97 Ségo Creek Park	Long
Red Red	Crook Park	300	and described the second
E Mal	ter Reed Chevy		Add
Burning Greenwee Ry Q M	Military Chase ed Ctr Park Columbia	Silver Silver	No.
Tree & Boots Creek	Country Club Country Run	Spring Spring	
The state of the s	Nest Huy	LANT A	
Legend ▲ 150 ft		The Sale	KAN KAN
	nesda 🕌		
Beth	esda 🖁 🖟	TO STATE OF THE ST	Takoma Park 650 /
		Rock Cataly	Mary Control of the C









Rock Spring Park & Ride and Express Service 1,839

Greater Bethesda Micro-Transit 1,536

MD 355 FLASH service 869

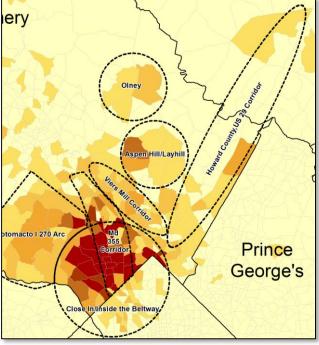
Layhill/Wheaton Express to White Flint Red Line 747

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Olney / Aspen Hill Express to Shady Grove Red Line 200



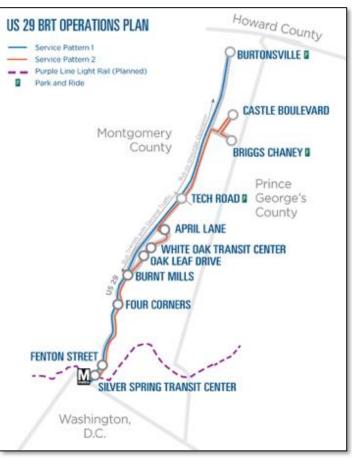


https://www.ridetheflash.com/









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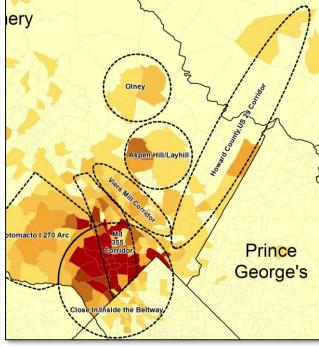
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0 Jones Bridge Rd Greentree Rd Medical Center M National Institutes Suburban Hospital of Health 47 70 Huntington Pkwy Wilson Ln County Service Bethesda M **BETHESDA** L8 1 Bradley Blvd Willard Ave Friendship He Rock Spring Park & Ride and Express Service 1,839

Greater Bethesda Micro-Transit 1,536

MD 355 FLASH service 869

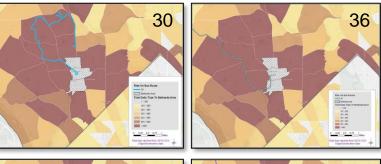
Layhill/Wheaton Express to White Flint Red Line 747

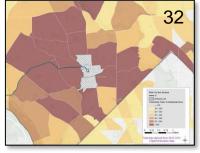
Extend Metrobus 30 Routes from Friendship Hghts to Bethesda 530

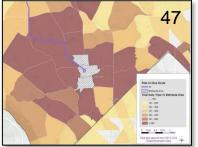
Howard County via US 29 FLASH Service to Purple Line 342

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Olney / Aspen Hill Express to Shady Grove Red Line 200



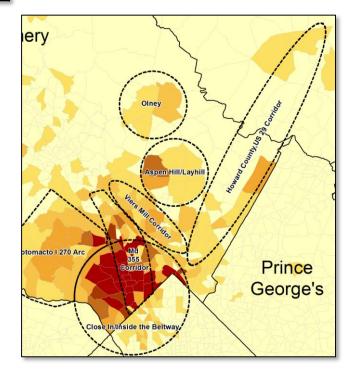




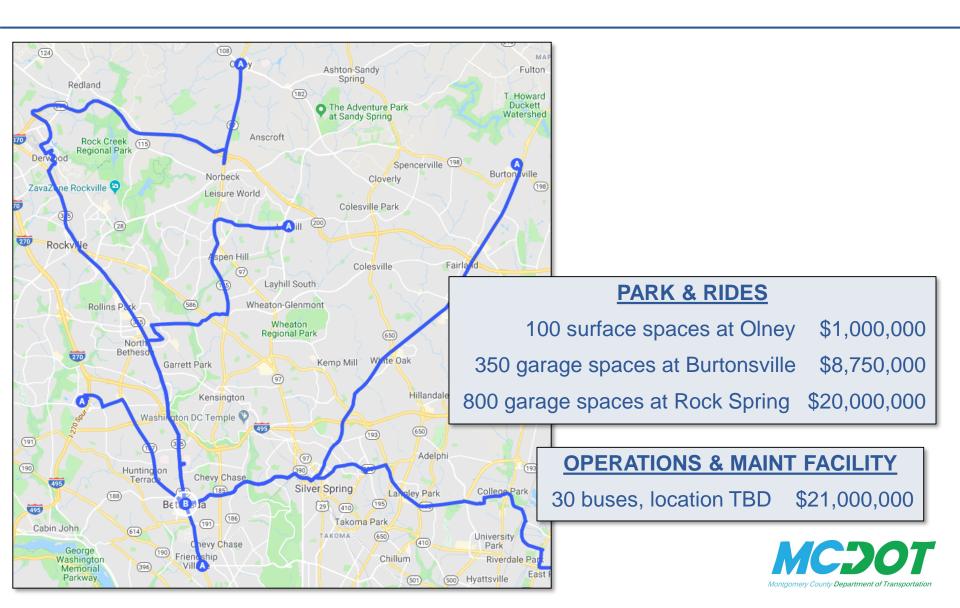
Route Pattern	One Way Bus Travel Time	Time on Rail	Transfer Time (bus to rail)	Bus Dwell Time at each Park and Ride	Total Time
Olney – Shady Grove Metro	20	19	5	5	54
Station – Downtown Bethesda				(10 minutes total)	

Gaithersburg Redland Gaithersburg Roc Creek Pagional Metro Transfer Fair Shady Grove Fair Metro Transfer	Olney Olney	ampahire eens Goil Club
Potomac Rokville	Northwest Course Laisure World Golf Course As pen Hill	Pain Branch Paik Colesville Fairland
Woodmont Country Club Regional Regional Park Park	Wheaton Glenmont Wheaton Regional Park	White Oak Calver
Potomac Legend No Beth	silver Spi	Adelphi

Rock Spring Park & Ride and Express Service		
Greater Bethesda Micro-Transit	1,536	
MD 355 FLASH service	869	
Layhill/Wheaton Express to White Flint Red Line	747	
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Olney / Aspen Hill Express to Shady Grove Red Line	200	







CAPITAL COSTS (VEHICLE + PARK & RIDE)

Rock Spring Park & Ride and Express Service

Greater Bethesda Micro-Transit

MD 355 FLASH service

Layhill/Wheaton Express to White Flint Red Line

Extend Metrobus 30s from Friendship Hghts to Bethesda

Howard County via US 29 FLASH Service to Purple Line

Other Ride-On Improvements (29, 32, 47)

Other Ride-On Improvements (30, 36)

Other Ride-On Improvements (34)

Olney / Aspen Hill Express to Shady Grove Red Line

Bethesda Circulator Expansion

Operations & Maintenance Facility Expansion

\$24,375,000

\$5,400,000 pmery

* \$535,000

\$6,125,000

\$1,070,000

\$8,750,000

\$4,280,000

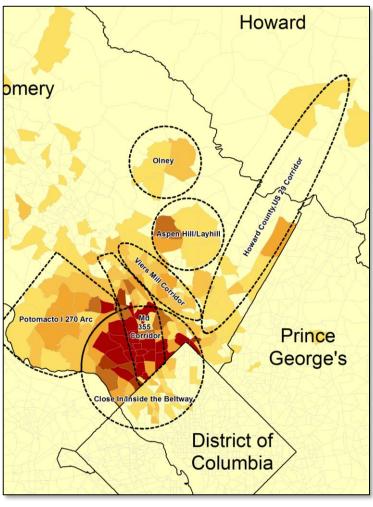
\$2,675,000

\$535,000

\$2,605,000

\$2,200,000

\$21,000,000





^{*} based on an evaluation of extending extRa service

Development & Estimated Fee

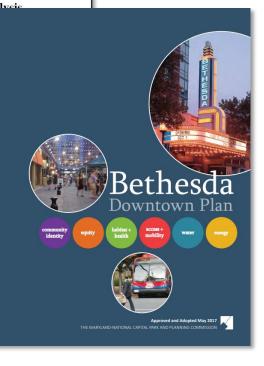
MCDOT

Montgomery County Department of Transportation

White Oak Science Gateway LATR/LATIP

Cost Estimating Apolycic White Paper

> December 2016 Updated May 201



Intersections \$9,084,200

ADA Compliance \$770,000

Bikeways \$36,416,550

Transit Vehicles \$28,800,000

Park & Ride Expansion \$29,750,000

O&M Facility Expansion \$21,000,000

6-yr Reanalyses \$400,000

TOTAL \$126,220,750

White Oak \$101,800,000



Development & Estimated Fee

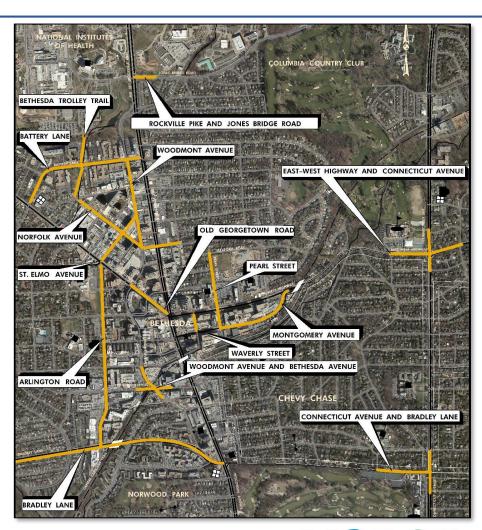
Estimated Cost \$126,220,750

Estimated Development 8,800,000 SF

Estimated UMP Fee \$14.34/SF

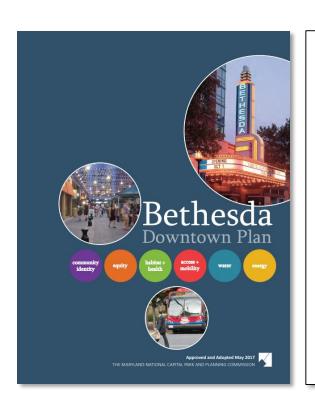
White Oak Approx \$5.50/SF

Bethesda UMP Estimate does not include costs of Transit Operations





Developer Obligations





White Oak Science Gateway
LATR / LATIP
Cost Estimating Analysis
White Paper

December 2016 Updated May 2019

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

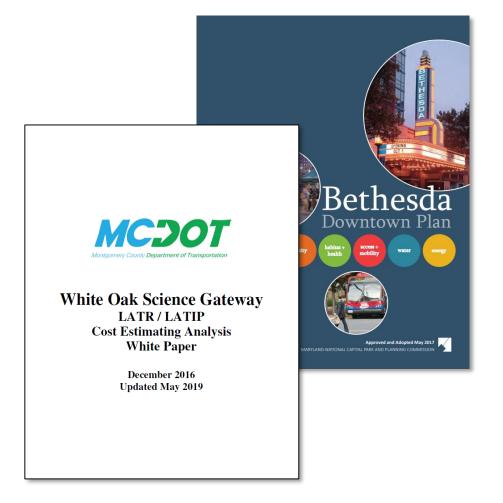
- Still required to evaluate site access
 & construct frontage requirements
- Developments outside of Policy Area are unaffected by BUMP
- May construct UMP projects for credit
- See p14 of the WhiteOak LATIP WhitePaper

Upkeep

Update costs every 2 years

Reanalyze every 6 years

Forward funding





Next Steps



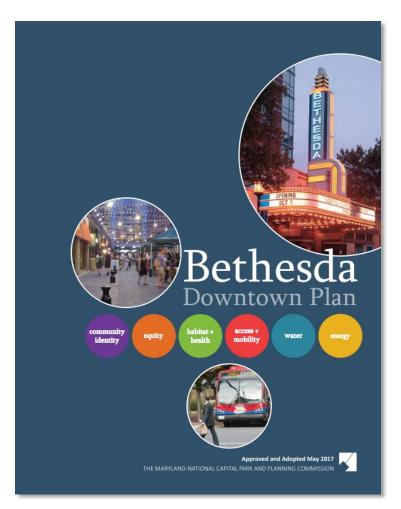
- Other Presentations
- Open House, late July / Aug
- Council, late Summer-Fall



Next Steps

 We prepare technical information in coordination with County Executive

 Council ultimately determines what is in or out of the program





Questions

- Questions?
- What do you love?
- What do you loathe?
- Is anything missing?
- What information do you want so that you can be prepared to share input with Council?

Andrew Bossi, P.E.

Senior Engineer for Transportation Policy

Office of the Director

Montgomery County Department of Transportation

andrew.bossi@montgomerycountymd.gov

