

County-wide Transit Corridors
Function Master Plan
Long-Range Planning Cost Estimate
Technical Appendix
Prepared by: VHB, Inc.
September 20, 2013

Capital Cost Summary Sheets

Countywide Transit Corridors Functional Master Plan
Capital Cost Estimates
CCTC-RTS Update 9/4/13

		Guideway Treatments (PLF)																	
		Total Route Length Miles	2 Lane Side \$1,000	Curb Lanes \$20	Managed Lanes \$20	2 Lane Median \$900	1 Lane Median \$800	Mixed Traffic \$20	Median Cycle Track \$340	Relocate Utility Poles \$350	1 Lane Road Widen \$530	2 Lane Road Widen \$750	10' high ret wall (PLF) \$2,500	Bridges (SF) \$650	Route Length feet	Route Length miles	Contingency	Total Guideway Cost	
BRT Corridor	Georgia Ave North	9.64	-	-	-	-	30,663	5,521	34,082	22,787	4,975	2,218	-	6,000	36,184	7	50%	\$78,607,000	
	Georgia Ave South	3.92	-	9,090	-	-	-	11,628	-	-	-	-	-	-	20,718	4	50%	\$622,000	
	MD 355 North	14.13	-	-	-	37,895	-	18,493	-	58,671	1,079	22,270	1,750	40,800	56,388	11	50%	\$154,769,000	
	MD 355 South	9.35	-	6,152	-	29,196	-	-	-	59,538	3,256	19,794	7,050	10,200	35,348	7	50%	\$132,096,000	
	New Hampshire Ave	8.46	-	-	-	8,314	11,873	14,663	16,108	-	-	6,654	3,200	-	34,850	7	50%	\$53,854,000	
	North Bethesda Transitway	2.72	4,114	-	-	-	4,591	1,476	-	13,545	-	-	1,000	20,400	10,181	2	50%	\$42,476,000	
	Randolph Road	10.08	-	-	-	-	-	53,199	-	-	-	-	-	-	53,199	10	50%	\$1,596,000	
	University Boulevard	5.8	-	-	-	-	8,483	16,539	-	1,013	312	-	-	-	25,022	5	50%	\$11,456,000	
	US 29 (Columbia Pike/Colesville Road)	11.02	-	6,013	4,874	25,170	-	17,930	-	-	-	-	-	-	81,600	53,987	10	50%	\$114,404,000
	Veirs Mill Road	6.16	-	-	-	-	19,912	-	-	32,298	10,074	-	-	5,100	24,000	19,912	4	50%	\$91,385,000
Total Cost Entire Network		81.28	1	4	1	19	14	26	6	39	4	10	-	-	65.5	65	-	\$681,265,000	

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		Traffic Signal Improvements (EACH) (in thousands)								
	BRT Corridor	Unit Cost (PLF)	Total Route Length <i>Miles</i>	Queue Jump \$623	TSP Per Int \$75	Sig LT Turn Lane \$1,051	Sig 2 LT Turn Lane \$1,987	Total # Sig Inter	Contingency	Total Signalized Int. Cost
	Georgia Ave North		9.64	2.0	13.0	13.0	3.0	16	50%	\$32,767,500
	Georgia Ave South		3.92	-	9.0	-	-	-	50%	\$1,012,500
	MD 355 North		14.13	-	7.0	23.0	2.0	25	50%	\$43,008,000
	MD 355 South		9.35	-	16.0	27.0	1.0	28	50%	\$47,346,000
	New Hampshire Ave		8.46	-	-	17.0	2.0	19	50%	\$32,761,500
	North Bethesda Transitway		2.72	-	-	3.0	1.0	4	50%	\$7,710,000
	Randolph Road		10.08	-	3.0	-	-	-	50%	\$337,500
	University Boulevard		5.8	-	1.0	5.0	-	5	50%	\$7,995,000
	US 29 (Columbia Pike/Colesville Road)		11.02	-	6.0	5.0	1.0	6	50%	\$11,538,000
	Veirs Mill Road		6.16	-	8.0	10.0	-	10	50%	\$16,665,000
	Total Cost Entire Network		81.28	2	63	103	10	113		\$201,141,000

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		Stations (EACH)											
		Total Route Length <i>Miles</i>	2 Lane Side \$2,263,000	Curb/ Manage/ Mixed \$872,000	2 Lane Median (4 Lanes) \$3,356,000	2 Lane Median (6 Lanes) \$3,831,000	Rev 1 Lane Median \$3,434,000	Rev 1 Lane (4 Median Lane) \$3,739,000	BIDirect 1 Lane Median (4 Lane) \$2,976,000	BIDirect 1 Lane Median (6 Lane) \$3,281,000	Total # Stations	Continge ncy	Total Station Cost
BRT Corridor	Unit Cost (PLF)												
Georgia Ave North		9.64		2			2	9			13	50%	\$63,394,500
Georgia Ave South		3.92		7							7	50%	\$9,156,000
MD 355 North		14.13		6	6	8					20	50%	\$84,024,000
MD 355 South		9.35		1	6	7					14	50%	\$71,737,500
New Hampshire Ave		8.46		4	2			6			12	50%	\$48,951,000
North Bethesda Transitway		2.72	3	1				3			7	50%	\$28,317,000
Randolph Road		10.08		10							10	50%	\$13,080,000
University Boulevard		5.8		4				5			9	50%	\$33,274,500
US 29 (Columbia Pike/Colesville Road)		11.02		7		4					11	50%	\$32,142,000
Veirs Mill Road		6.16		0					5	6	11	50%	\$51,849,000
Total Cost Entire Network		81.28	3	42	14	19	2	23	5	6	114		\$435,925,500

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BRT Corridor	Unit Cost (P/LF)	Buses		Maintenance Facility			Land Acquisition			MOT 20%	Mobilization 10%	Soft Costs 23%	Total Corridor Cost	Cost/Mile
		Total Route Length Miles	60' Artic \$1,200,000	Total Vehicle Cost	Maint- Facility (Per Bus)	Continge ncy	Total MF Cost	Subtotal Corridor Cost	Land Acquisition	Land Acquisition Contingency	Total Land Acquisition			
Georgia Ave North		9.64	17	\$20,400,000	\$6,885,000	50%	\$10,327,500	\$205,497,000	\$15,646,040	50%	\$23,469,060	\$41,099,400	\$337,879,470	\$35,049,738
Georgia Ave South		3.92	16	\$19,200,000	\$6,480,000	50%	\$9,720,000	\$39,711,000	\$7,350,561	50%	\$11,025,842	\$7,942,200	\$67,265,142	\$17,159,000
MD 355 North		14.13	57	\$68,400,000	\$23,085,000	50%	\$34,627,500	\$384,829,000	\$38,810,024	50%	\$58,215,036	\$76,965,800	\$629,688,786	\$44,564,000
MD 355 South		9.35	47	\$56,400,000	\$19,035,000	50%	\$28,552,500	\$336,132,000	\$48,893,836	50%	\$73,340,753	\$67,226,400	\$573,252,353	\$61,310,000
New Hampshire Ave		8.46	24	\$28,800,000	\$9,720,000	50%	\$14,580,000	\$178,947,000	\$13,306,196	50%	\$19,599,293	\$35,789,400	\$286,373,393	\$33,850,000
North Bethesda Transitway		2.72	8	\$9,600,000	\$3,240,000	50%	\$4,860,000	\$92,563,000	\$3,840,195	50%	\$5,760,292	\$18,592,600	\$145,369,192	\$53,445,000
Randolph Road		10.08	29	\$34,800,000	\$11,745,000	50%	\$17,617,500	\$67,431,000	\$4,891,285	50%	\$7,336,927	\$13,486,200	\$102,339,227	\$10,153,000
University Boulevard		5.8	15	\$18,000,000	\$6,075,000	50%	\$9,112,500	\$79,838,000	\$12,683,618	50%	\$19,025,427	\$15,967,600	\$136,728,827	\$23,574,000
US 29 (Columbia Pike/Colesville Road)		11.02	40	\$48,000,000	\$16,200,000	50%	\$24,300,000	\$230,384,000	\$7,076,200	50%	\$10,614,300	\$46,076,800	\$351,149,500	\$31,865,000
Veirs Mill Road		6.16	9	\$10,800,000	\$3,645,000	50%	\$5,467,500	\$176,167,000	\$11,457,037	50%	\$17,185,556	\$36,233,400	\$383,409,556	\$46,008,000
Total Cost Entire Network		81.28	262	\$314,400,000	\$106,110,000		\$159,165,000	\$1,791,899,000	\$163,954,991		\$245,932,466	\$356,379,800	\$2,913,455,496	\$35,845,000

Operating Cost Summary Sheet

Montgomery County Rapid Transit System - Operational Cost Estimate

	Georgia North	Georgia South	355 North	355 South	New Hampshire	North Bethesda	Randolph	University	US 29	Veirs Mill	System Results	CCT Phase 1	CCT Full Build
Weekday Assumptions (min)													
Peak Service	5.0	5.0	2.6	2.2	4.0	4.3	5.5	5.0	3.3	7.5		4.3	4.3
Shoulder/Midday Service	7.6	7.6	4.0	3.4	6.1	6.5	8.3	7.6	5.1	11.4		6.0	6.0
Early/Late Service	20.0	20.0	15.0	15.0	20.0	20.0	20.0	20.0	20.0	20.0		6.0	6.0
Frequency (veh/hr)													
Build 2 Estimate													
Peak Service	1150	1325	2325	2100	1600	1525	1125	1275	1325	850			
Shoulder/Midday Service	900	970	1900	2225	1240	1150	890	1070	1475	640			
Early/Late Service	30.0	30.0	22.0	22.0	30.0	30.0	30.0	30.0	30.0	30.0			
CCTFMP (peak per peak dir, peak segment ridership)	12.0	12.0	12.0	12.0	15.0	14.0	11.0	12.0	18.0	8.0		14.0	14.0
Peak Service	8.0	8.0	16.0	18.0	10.0	10.0	8.0	8.0	12.0	6.0		10.0	10.0
Shoulder/Midday Service	3.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0		10.0	10.0
Early/Late Service													
Speed (mph)													
Median Buway	16	18	10	13	20	22	15	18	21	24			
Curb Lane	11	16	11	15	18	17	13	17	20				
Mixed Traffic	9	13											
Corridor Proportions													
Buway	0.89	0.00	0.75	0.88	0.67	0.90	0.00	0.46	0.50	1.00		1.00	1.00
Median Buway	0.10	0.14	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10		0.10	0.10
Mixed Traffic	0.11	0.56	0.35	0.20	0.33	0.10	1.00	0.58	0.39	0.00		0.00	0.00
Total	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0
Corridor Speed													
Peak Service	19	9	16	15	15	17	11	14	14	18		18	18
Shoulder/Midday Service	21	13	18	17	18	19	15	17	17	20		18	18
Early/Late Service	23	16	21	19	20	21	18	19	20	22		18	18
Cycle Time (min/foundtrip)													
Peak Service	60	61	122	86	78	23	127	58	109	48		71	119
Shoulder/Midday Service	74	42	109	76	65	20	95	48	90	43		71	119
Early/Late Service	58	34	93	68	59	18	78	43	77	39		71	119
Fleet in Service													
Shoulder/Midday Service	14	13	47	39	20	6	24	12	33	7	215	17	38
Early/Late Service	9	6	28	23	11	4	12	7	18	4	122	12	20
Fleet Required by Corridor (peak*1.3 spare ratio)	3	2	7	5	3	1	4	3	4	2	34	12	20
	17	16	57	47	24	8	29	15	40	9	262	21	34
Hours Per Period													
Peak Service	6	6	6	6	6	6	6	6	6	6		6	6
Shoulder/Midday Service	7	7	7	7	7	7	7	7	7	7		7	7
Early/Late Service	4	4	4	4	4	4	4	4	4	4		4	4
Vehicle Hours Per Period													
Peak Service	84	78	282	234	120	36	144	72	198	42	1290	102	168
Shoulder/Midday Service	90	60	280	230	110	40	120	70	180	40	1220	120	200
Early/Late Service	12	8	28	20	12	4	16	12	16	8	116	48	80
Vehicle Service Hours Per Weekday	186	146	590	484	242	80	280	154	394	90	2446	270	448
Vehicle Service Hours Per Weekend/Holiday (.75)	140	110	443	363	182	60	210	116	296	68	1988	203	336
Annual Weekdays (52 wk/5 days - 10 holiday)	250	250	250	250	250	250	250	250	250	250	661,500	250	250
Annual Weekday Hours of Service	46,500	36,500	147,500	121,000	60,500	20,000	70,000	35,500	98,500	22,500	67,500	112,000	112,000
Annual Weekends/Holiday (52 wk/2 days + 10 holiday)	114	114	114	114	114	114	114	114	114	114	226,632	114	114
Annual Weekend/Holiday Hours of Service	15,960	12,340	50,902	41,982	20,748	6,840	23,940	13,224	33,744	7,752	23,142	23,142	38,304
Annual Hours of Service	62,460	49,040	198,002	162,982	81,248	26,840	93,940	51,724	132,244	30,252	888,132	90,642	150,304
"Deadhead" Factor	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.041,385	1.15	1.15
Cost-Basis Hours	71,879	56,396	227,703	186,740	93,436	30,866	108,031	59,483	152,081	34,790	1,001,385	104,239	172,850
Bus Operations (\$220/hr)	\$ 4,619,480	\$ 6,767,520	\$ 27,324,960	\$ 22,408,800	\$ 11,212,320	\$ 3,703,920	\$ 12,865,720	\$ 7,117,960	\$ 18,240,720	\$ 4,174,800	\$ 123,560,600	\$ 12,508,680	\$ 20,742,000
Miles of Service													
Corridor Length	9.64	3.92	14.13	9.35	8.46	2.72	10.08	5.80	11.02	6.16	81.3	9.00	15.00
Peak Service	1188	566	3900	3029	1523	458	1330	836	2381	592	16,003	1512	2520
Shoulder/Midday Service	1543	628	4521	3365	1692	545	1613	928	2645	739	18,219	1800	3000
Early/Late Service	232	95	453	300	203	66	242	140	265	148	2,144	720	1200
Total	3,163	1,289	8,874	6,694	3,418	1,069	3,185	1,904	5,291	1,479	36,366	4,032	6,720
Weekdays (52 wk/5 days - 10 holiday)	250	250	250	250	250	250	250	250	250	250	9,091,500	1,098,000	1,680,000
Weekday Miles of Service	790,750	322,250	2,218,500	1,673,500	864,500	267,250	796,250	476,000	1,322,750	369,750	60,911,500	1,098,000	1,680,000
Weekends/Holiday (52 wk/2 days + 10 holiday)	114	114	114	114	114	114	114	114	114	114	3,109,298	114	114
Weekend/Holiday Miles of Service (calculated *.75)	270,437	110,210	755,727	592,239	292,239	91,400	277,318	162,792	452,381	126,655	3,447,26	114	114
Annual Vehicle Miles of Service	1,061,197	432,460	2,977,227	2,245,837	1,146,738	358,650	1,068,568	638,792	1,775,131	496,205	12,200,798	1,352,736	2,254,560
Additional Annual O&M Costs													
Lane Miles of Buway	8.6		21.3	16.4	7.6	3.4	0	2.7	11.2	6.2	77.4	18	30
Maintenance of Way (\$10,900/mile from SHA) see §15K	\$ 129,000	\$ 0	\$ 318,500	\$ 246,000	\$ 114,000	\$ 51,000	\$ 0	\$ 40,500	\$ 168,000	\$ 91,000	\$ 1,161,000	\$ 270,000	\$ 450,000
Stations (no double counting see sheet 3)	13	7	20	13	12	7	9	8	9	108	108	14	18
Station Maintenance (Assume \$12,000/year, MFTA)	\$ 256,800	\$ 84,000	\$ 240,000	\$ 156,000	\$ 144,000	\$ 84,000	\$ 120,000	\$ 96,000	\$ 108,000	\$ 129,600	\$ 1,286,000	\$ 168,000	\$ 216,000
Station Maintenance (Assume \$12,000/year, MFTA)	\$ 256,800	\$ 84,000	\$ 240,000	\$ 156,000	\$ 144,000	\$ 84,000	\$ 120,000	\$ 96,000	\$ 108,000	\$ 129,600	\$ 1,286,000	\$ 168,000	\$ 216,000
Operations Center Increment (Ride-On Provided)	\$ 129,000	\$ 60,352	\$ 217,288	\$ 143,762	\$ 130,073	\$ 41,892	\$ 154,972	\$ 89,206	\$ 169,905	\$ 94,216	\$ 1,260,000	\$ 480,000	\$ 660,000
Corridor Subtotals	\$ 9,033,480	\$ 6,911,872	\$ 28,101,148	\$ 22,954,562	\$ 11,600,393	\$ 3,880,812	\$ 13,338,692	\$ 7,363,666	\$ 18,698,225	\$ 4,470,516	\$ 126,249,600	\$ 12,946,680	\$ 21,408,000
Contingency 20%	\$ 1,806,696	\$ 1,382,374	\$ 5,620,230	\$ 4,590,912	\$ 2,320,079	\$ 776,162	\$ 2,647,738	\$ 1,472,733	\$ 3,739,045	\$ 894,103	\$ 25,253,920	\$ 2,589,336	\$ 4,281,600
Corridor Operating Cost Reporting Value	\$ 10,990,000	\$ 8,300,000	\$ 33,800,000	\$ 27,600,000	\$ 14,000,000	\$ 4,700,000	\$ 15,980,000	\$ 8,890,000	\$ 22,500,000	\$ 5,400,000	\$ 151,600,000	\$ 15,600,000	\$ 25,700,000
Comparison Metrics													
Total Cost Per Revenue Hour (Bus, Guideway, Station, MFT)	\$ 171												
Total Cost Per Revenue Mile	\$ 13												
Annual Cost per System Mile	\$ 1,870,000												

Peak hour, Peak Direction, Peak Segment
Peak Service: 15 minutes from Phase 1 travel time
Shoulder/Midday Service: 31 minutes from MTA CCT project descriptor
Early/Late Service: Others based on corridor proportion and speed by treatment

Frequency (veh/hr)
Build 2 Estimate
Peak Service: calculated from row 11
Shoulder/Midday Service: assume peak/60
Early/Late Service: assume 20 min, 15 for 355

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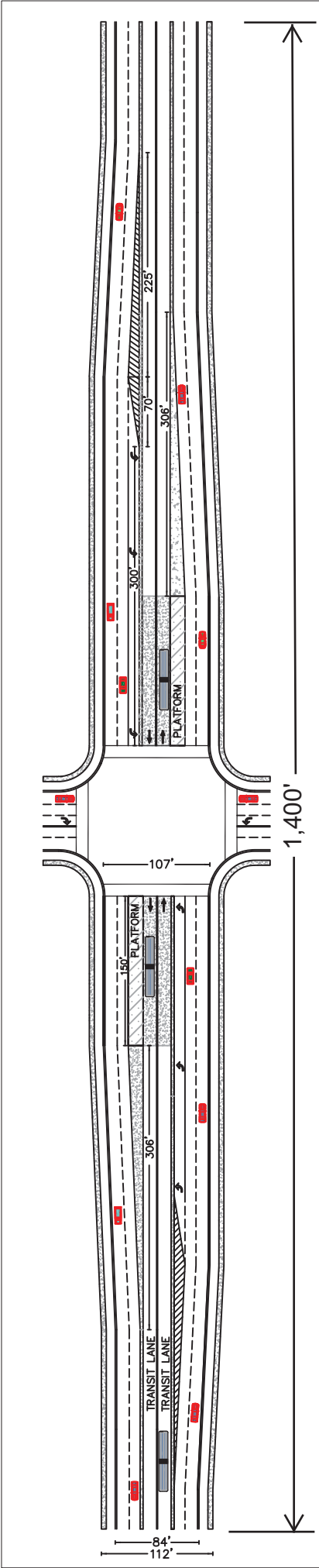
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Station Layouts and Quantities

Layout 1: 2-LANE MEDIAN STATION (1 of 2)



Scale: 1"=150'

(Sheet Size 8 1/2" X 11")

QUANTITIES:

TRAVEL LANES:

1. Curb and Gutter - 2,499.06 l.f.
2. Asphalt (4 lanes) - 69,306.8 s.f.
3. Asphalt (6 lanes) - 96,796.2 s.f.

TRANSIT LANES:

1. Curb and Gutter - 5,032.5 l.f.
2. Platforms (2) - 4,500 s.f.
3. Concrete Stopping Pad - 8,400 s.f.
4. Concrete Taper and Median - 8,386 s.f.
5. Asphalt - 26,572 s.f.

OTHER:

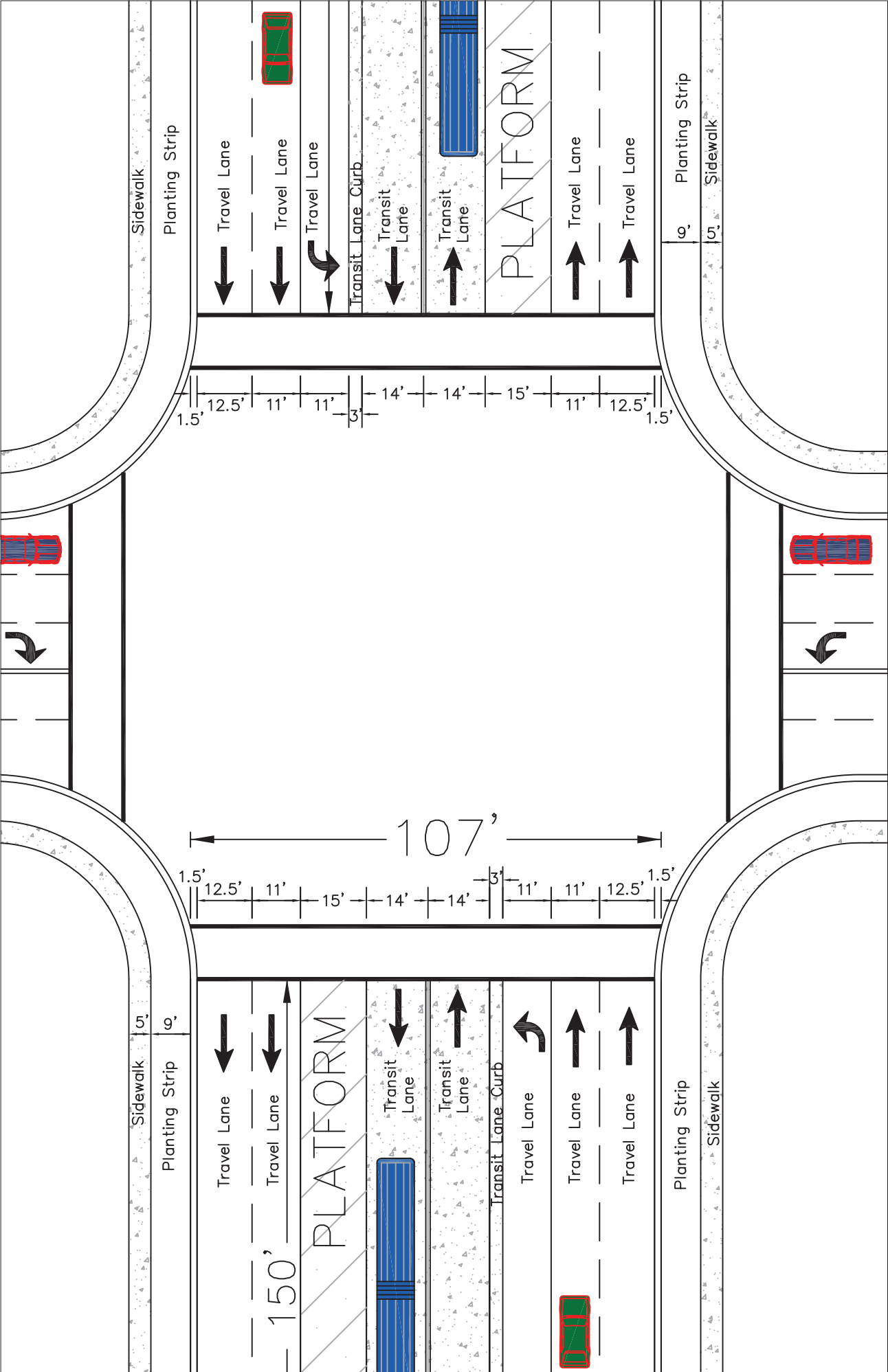
1. Sidewalk (5' width) - 2,499.06 l.f.

INTERSECTION:

1. Curb and Gutter - 302 l.f.
2. Asphalt - 15,704 s.f.

Station Layouts and Quantities

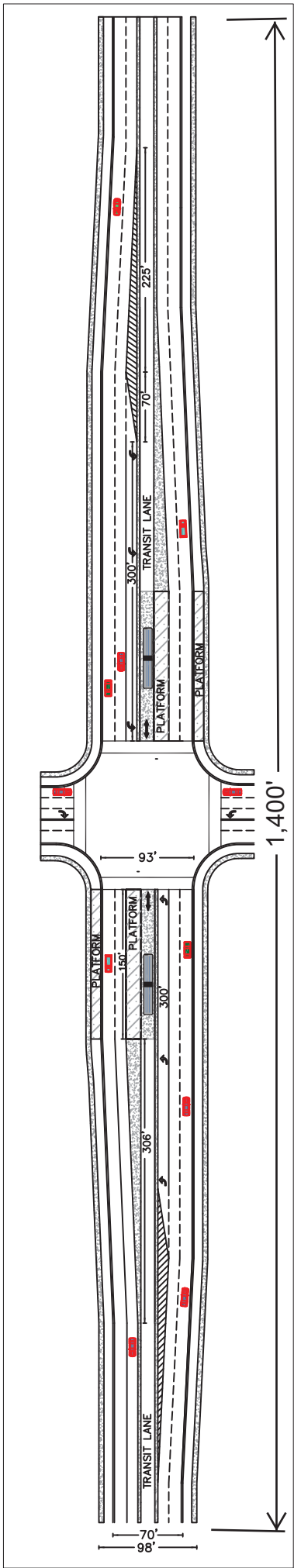
Layout 1: 2-LANE MEDIAN STATION (2 of 2)



Scale: 1"=30' (Sheet Size 8 1/2" X 11")

Station Layouts and Quantities

Layout 2: ONE-LANE REVERSIBLE MEDIAN STATION (1 of 2)



Scale: 1"=150'

(Sheet Size 8 1/2" X 11")

QUANTITIES:

TRAVEL LANES:

1. Curb and Gutter - 2,499.06 l.f.
2. Asphalt (4 lanes) - 69,306.8 s.f.
3. Asphalt (6 lanes) - 96,796.5 s.f.

TRANSIT LANES:

1. Curb and Gutter - 5,032.5 l.f.
2. Platforms (2) - 7,500 s.f.
3. Concrete Stopping Pad - 4,200 s.f.
4. Concrete Taper and Median - 8,386 s.f.
5. Asphalt - 13,286 s.f.

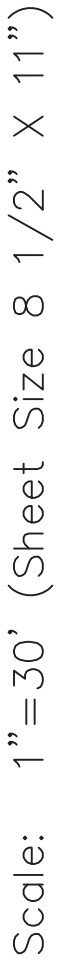
OTHER:

1. Sidewalk (5' width) - 2,499.2 l.f.

INTERSECTION:

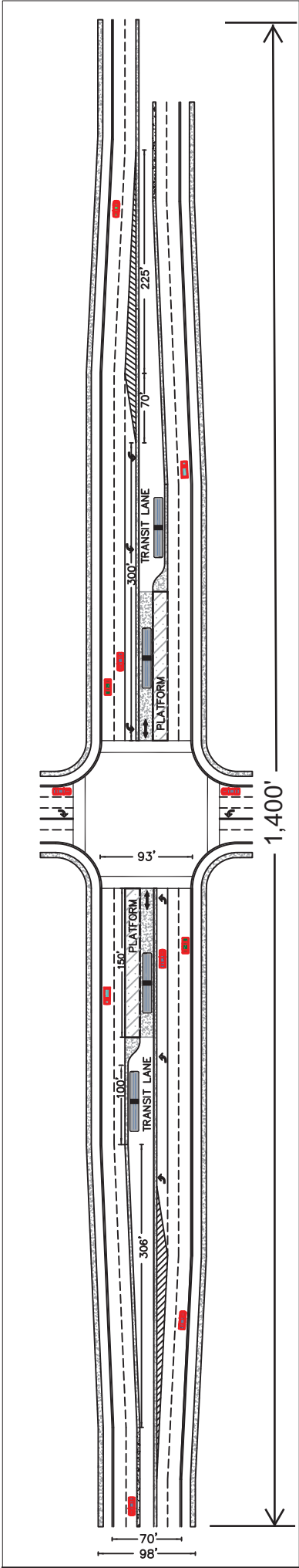
1. Curb and Gutter - 302 l.f.
2. Asphalt - 13,590 s.f.

Layout 2: ONE-LANE REVERSIBLE MEDIAN STATION (2 of 2)



Station Layouts and Quantities

Layout 3: ONE-LANE BI-DIRECTIONAL MEDIAN STATION (1 of 2)



Scale: 1"=150'
(Sheet Size 8 1/2" X 11")

QUANTITIES:

TRAVEL LANES:

1. Curb and Gutter - 2,499.06 l.f.
2. Asphalt (4 lanes) - 69,306.8 s.f.
3. Asphalt (6 lanes) - 96,796.5 s.f.

TRANSIT LANES:

1. Curb and Gutter - 5,003.2 l.f.
2. Platforms (2) - 4,500 s.f.
3. Concrete Stopping Pad - 4,200 s.f.
4. Concrete Taper and Median - 4,996.6 s.f.
5. Asphalt - 18,918.02 s.f.

OTHER:

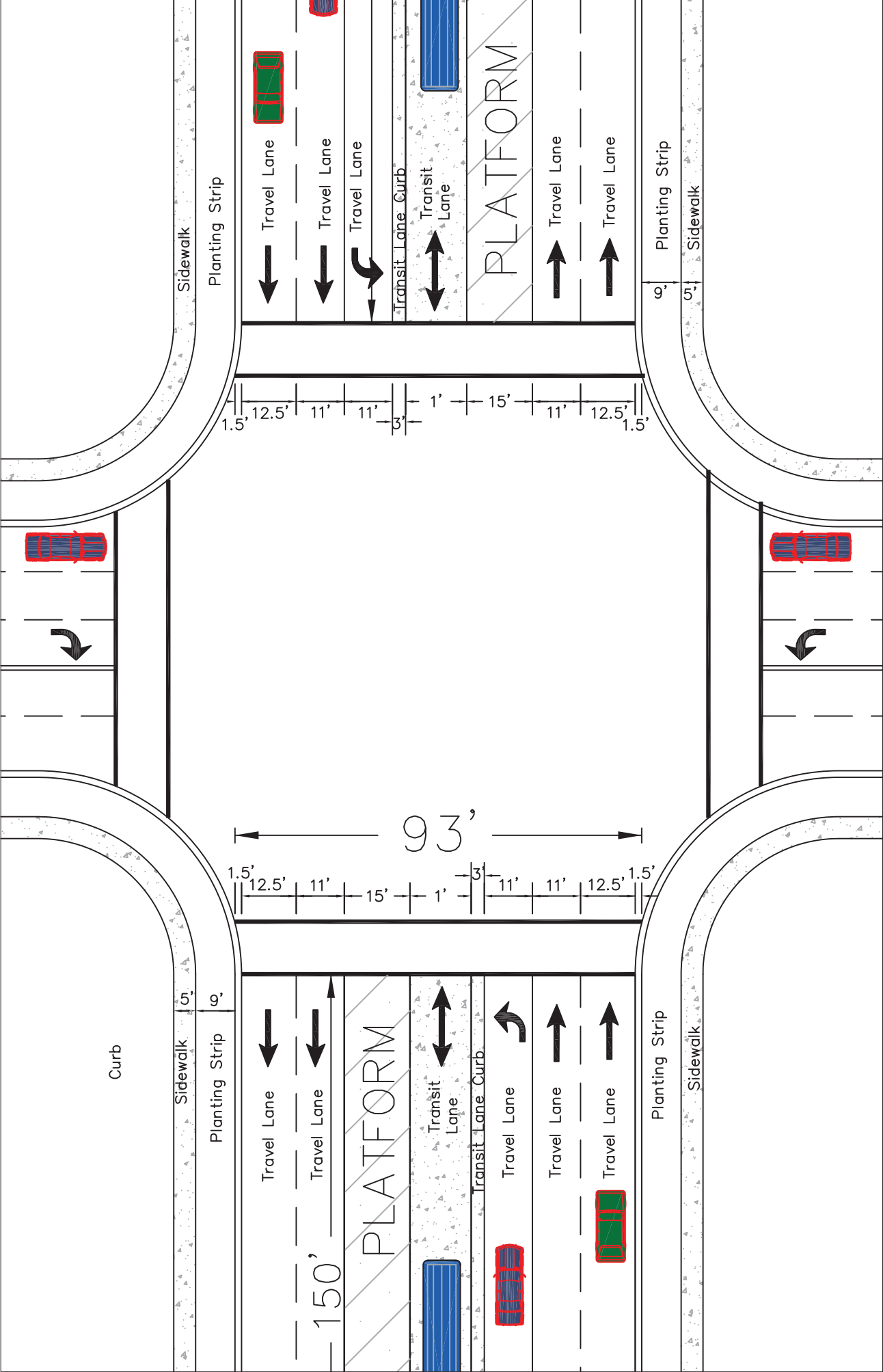
1. Sidewalk (5' width) - 2,499.06 l.f.

INTERSECTION:

1. Curb and Gutter - 302 l.f.
2. Asphalt - 13,590 s.f.

Station Layouts and Quantities

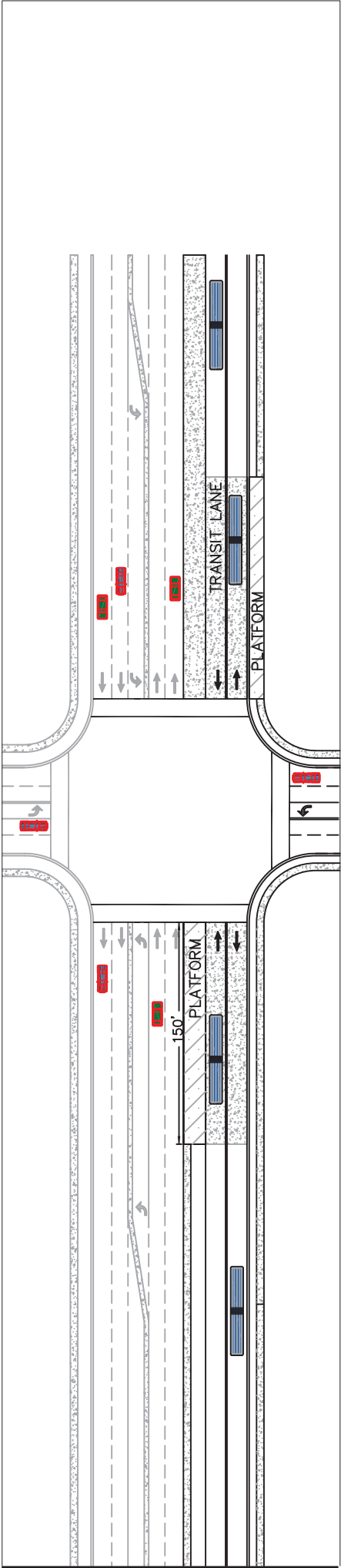
Layout 3: ONE-LANE BI-DIRECTIONAL MEDIAN STATION (2 of 2)



Scale: 1"=30' (Sheet Size 8 1/2" X 11")

Station Layouts and Quantities

Layout 4: TWO-LANE SIDE RUNNING STATION (1 of 2)



Scale: 1"=100'
(Sheet Size 8 1/2" X 11")

QUANTITIES:

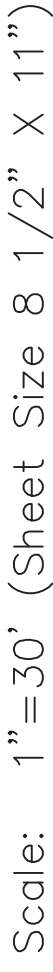
TRANSIT LANES:

1. Curb and Gutter - 3,747 l.f.
2. Platforms (2) - 4,500 s.f.
3. Concrete Stopping Pad - 8,400 s.f.
4. Asphalt - 26,572 s.f.

OTHER:

1. Sidewalk - 28,000 s.f.
2. Median - 12,337 s.f.

Layout 4: TWO-LANE SIDE RUNNING STATION (2 of 2)



Scale: 1"=30' (Sheet Size 8 1/2" X 11")

Corridor Details

Georgia Avenue North

CORRIDOR:													
Georgia Avenue North													
Road	Segment Start	Segment End	Guideway Treatment	Recommended Number of Travel Lanes	Lane Repurposing (Y/N)	Length (miles)	Width of Roadway Widening (feet)	Two-lane Median Stations	One-lane Median Stations	Curbside Stations	Terminus Stations	Median Guideway Length, excluding Station Areas (miles)	Above Ground Utilities
				4	No	0.3992					1		
Prince Phillip Drive	Brooke Farm Dr	MD 108	Mixed Traffic	4	No								
Olney Sandy Spring Road	Prince Phillip Drive	Spartan Road	Mixed Traffic	4	No	0.3026						0.1700	
Olney Sandy Spring Road	Spartan Road	Georgia Avenue	Mixed Traffic	4	No	0.1943	0		1			0.0617	Both sides
Georgia Avenue	MD 108	Spartan Road	Reversible One-Lane Median	4	No	0.1816	0					0.1816	
Georgia Avenue	200 ft south of Queen Mary Drive	200 ft south of Queen Mary Drive	Reversible One-Lane Median	4	No	0.7513	0		1			0.4861	
Georgia Avenue	Old Baltimore Road	Old Baltimore Road	Reversible One-Lane Median	4	No	0.7744	0					0.7744	
Georgia Avenue	Old Baltimore Road	Emory Lane	Reversible One-Lane Median	4	No	1.1715	0		2			0.6411	
Georgia Avenue	Emory Lane	MD 28	Reversible One-Lane Median	6	No	2.4074	0		4			1.3466	
Georgia Avenue	Matthew Henson State Park	Matthew Henson State Park	Reversible One-Lane Median	6	No	0.9537	0					0.9537	Both sides
Georgia Avenue	Weller Road	Weller Road	Reversible One-Lane Median	6	No	0.2413	5					0.2413	Both sides
Georgia Avenue	Densley Road	Densley Road	Reversible One-Lane Median	6	No	0.3937	7		1			0.1285	Both sides
Georgia Avenue	Layhill Road	Layhill Road	Reversible One-Lane Median	6	No	0.1681	15		1			0.0355	Both sides
Georgia Avenue	Randolph Road	Randolph Road	Reversible One-Lane Median	6	No	0.1093	15					0.0000	Both sides
Georgia Avenue	500 ft south of Randolph Road	500 ft south of Randolph Road	Reversible One-Lane Median	6	No	0.0831	10					0.0597	Both sides
Georgia Avenue	Mason Street	400 ft north of Blueridge Avenue	Reversible One-Lane Median	6	No	0.7779	10		1			0.5127	Both sides
Georgia Avenue	400 ft north of Blueridge Avenue	Reedle Road	Reversible One-Lane Median	6	No	0.3846	15					0.3846	Both sides at Univ. Blvd
Reedle Road	Georgia Avenue	Veirs Mill Road	Mixed Traffic	2	No	0.1037		0	11	0	1		
Total						9.6376		0	11	0	2	5.9774	

1 lane median
Mixed

Median Station Area - 2 sides of intx:
Median Station Area - 1 side of intx:

0.2652
0.1326

1 Lane Widen
2 Lane Widen

1 lane med less sta

154.00
813120

Corridor Details

CORRIDOR: Georgia Avenue North

Road	Segment Start	Segment End	Total Signalized Intersections (Median Guideway Only)	Signals w/o Left Lane (Median Guideway Only)	Signals w/ Left Lane (Median Guideway Only)	Signals w/ 2+ Left Lane (Median Guideway Only)	Signal at Median Station Site (0-1 Left Lanes)	Signal at Median Station Site (2+ Left Lanes)	TSP Treatment	Queue Jump Treatment	Bridges	Underpasses	Earthwork - Retaining Wall or Fill Wall (linear ft)	Length of Managed Lanes (miles)	Length of Median Cycle Truck (miles)
Prince Philip Drive	Brooke Farm Dr	MD 108													
Olney Sandy Spring Road	Prince Phillip Drive	Spartan Road								1					
Olney Sandy Spring Road	Spartan Road	Georgia Avenue							1	1					
Georgia Avenue	MD 108	Spartan Road	2	0	1	1		1	1						
Georgia Avenue	200 ft south of Queen Mary Drive	200 ft south of Queen Mary Drive	0	0	0	0									
Georgia Avenue	Old Baltimore Road	Old Baltimore Road	3	0	3	0	1		3						0.037878788
Georgia Avenue	Emory Lane	Emory Lane	3	0	3	0									0.751257711
Georgia Avenue	MD 28	MD 28	3	0	1	2	1	1	1		1				0.774356639
Georgia Avenue	Matthew Henson State Park	Matthew Henson State Park	6	0	4	2	2	3	3						1.171510436
Georgia Avenue	Weller Road	Weller Road	1	0	1	0		1							2.407414821
Georgia Avenue	Denley Road	Denley Road	0	0	0	0									0.953748235
Georgia Avenue	Layhill Road	Layhill Road	3	0	2	1	1								0.241307017
Georgia Avenue	Randolph Road	Randolph Road	1	0	1	0	1		1						0.117528
Georgia Avenue	500 ft south of Randolph Road	500 ft south of Randolph Road	0												0
Georgia Avenue	Mason Street	Mason Street	0												0
Georgia Avenue	400 ft north of Blueridge Avenue	400 ft north of Blueridge Avenue	2	0	2		1		2						0
Georgia Avenue	Reedle Road	Reedle Road	3	0	3										0
Georgia Avenue	Veirs Mill Road	Veirs Mill Road													0
Total			27	0	21	6	8	3	13	2	1	0	0	0.00	6.46

Number of Signals with 0-1 Left Lane, excluding Station locations: 13
Number of Signals with 2+ Left Lanes, excluding Station locations: 3

Final Bridge/Underpass Area (sf) 6000
Final Earthwork Length (ft) 0

34082

Corridor Details

Corridor: Georgia Avenue South

Road	Segment Start	Segment End	Guideway Treatment	Recommended Number of Travel Lanes	Lane Repurposing (V/N)	Length (miles)	Width of Roadway Widening (feet)	Two-lane Median Stations	One-lane Median Stations	Curbside Stations	Terminus Stations	Median Guideway Length, excluding Station Areas (miles)	Above Ground Utilities
Georgia Avenue	Veers Mill Road	Windham Lane	Mixed Traffic	6	No	0.2897					1		
Georgia Avenue	Windham Lane	Dennis Avenue	Mixed Traffic	6	No	0.4758							
Georgia Avenue	Dennis Avenue	Forest Glen Road I-495	Mixed Traffic	6	No	0.6892				2			
Georgia Avenue	Forest Glen Road I-495	Flora Lane	Mixed Traffic	6	No	0.1692							
Georgia Avenue	Flora Lane	16th Street	Mixed Traffic	7	No	0.1509							
Georgia Avenue	16th Street	Spring Street	Mixed Traffic	7	No	0.2433				1			
Georgia Avenue	Spring Street	Colesville Road	Curb Lanes	4	Yes	0.7203							Both sides
Wayne Avenue	Colesville Rd	Georgia Avenue	Curb Lanes	4	Yes	0.3097				1			
Georgia Avenue	Wayne Avenue	Blair Mill Road	Mixed Traffic	4	No	0.1842							
Georgia Avenue	Blair Mill Road	DC Line	Curb Lanes	4	Yes	0.4037							
Total			Curb Lanes	4	Yes	0.2879		0	0	1	2	0.0000	
					Mixed Curb	3.9238							
						2.20	11628						
						1.7216	9090						
							20718						

Corridor Details

Corridor: Georgia Avenue South

Road	Segment Start	Segment End	Total Signalized Intersections (Median Guideway Only)	Signals w/o Left Lane (Median Guideway Only)	Signals w/ Left Lane (Median Guideway Only)	Signals w/ 2+ Left Lanes (Median Guideway Only)	Signal at Median Station Site (0-1 Left Lanes)	Signal at Median Station Site (2+ Left Lanes)	TSP Treatment	Queue Jump Treatment	Bridges	Underpasses	Earthwork - Retaining Wall or Fill Wall (linear ft)	Length of Managed Lanes (miles)	Length of Median Cycle Track (miles)
Georgia Avenue	Veers Mill Road	Windham Lane	0						2				0	0	0
Georgia Avenue	Windham Lane	Dennis Avenue	0						1				0	0	0
Georgia Avenue	Dennis Avenue	Forest Glen Road	0						2				0	0	0
Georgia Avenue	Forest Glen Road	I-495	0						1				0	0	0
Georgia Avenue	I-495	Flora Lane	0										0	0.0923775914	0
Georgia Avenue	Flora Lane	16th Street	0						1				0	0.243327597	0
Georgia Avenue	16th Street	Spring Street	0						2				0	0.048047	0
Georgia Avenue	Spring Street	Colesville Road	0										0	0	0
Wayne Avenue	Colesville Rd	Georgia Avenue	0										0	0	0
Georgia Avenue	Wayne Avenue	Blair Mill Road	0									1	0	0	0
Georgia Avenue	Blair Mill Road	DC Line	0										0	0	0
Total			0	0	0	0	0	0	9	0	0	1	0	0.38	0.00

Number of Signals with 0-1 Left Lane, excluding Station locations: 0

Number of Signals with 2+ Left Lanes, excluding Station locations: 0

Final Bridge/Underpass Area (sf)

Final Earthwork Length (ft)

Corridor Details

CORRIDOR:		MD 355 North											
Road	Segment Start	Segment End	Guideway Treatment	Recommended Number of Travel Lanes	Lane Repurposing (Y/N)	Length (miles)	Width of Roadway Widening (feet)	Two-lane Median Stations	One-lane Median Stations	Curbside Stations	Terminus Stations	Median Guideway Length, excluding Station Areas (miles)	Above Ground Utilities
MD 355 North	Redgrave Pl	Little Seneca Creek	Mixed Traffic	4	No	1.6188				3	1		
MD 355 North	Little Seneca Creek	Shakespeare Blvd	Mixed Traffic	6	No	1.8836				2			
Seneca Meadows Parkw Corridor Cities Transitway	Shakespeare Drive	Observation Drive	Two-Lane Median	4	No	0.2044	5					0.2044	
	MD 355	MD 355	Two-Lane Median	4	No	0.5181	18					0.5181	Buried
MD 355	Shakespeare Boulevard	Game Preserve Road	Two-Lane Median	4	Yes	2.6200	2	3				1.8244	
MD 355	Game Preserve Road	Just south of O'Neil Drive	Two-Lane Median (Gaithersburg)	6	No	3.8369	18	6				2.2457	Both sides
MD 355	Just south of O'Neil Drive	1250 ft south of Shady Grove Road	Two-Lane Median	4	Yes	0.3893	0	1				0.1241	
MD 355	1250 ft south of Shady Grove Road	Ridgemont Avenue	Two-Lane Median (Rockville)	6	No	0.1522	19					0.1522	Both sides
MD 355	Ridgemont Avenue	Indianola Road	Two-Lane Median	4	Yes	0.7198	0	1				0.4546	Both sides
MD 355	Indianola Road	1000 ft south of Indianola Road	Two-Lane Median (Rockville)	6	No	0.1966	17					0.1966	Both sides
MD 355	1000 ft south of Indianola R	270 ft north of North Campus Drive	Two-Lane Median	4	Yes	0.6171	0	1				0.3519	
MD 355	270 ft north of North Campus Church Street		Two-Lane Median (Rockville)	6	No	1.3703	22	1			1	1.1051	Both sides
Total						14.1272		13	0	5	2	7.1772	
						2 Lane	37895						Util
						Mixed	3,5024					0.2652	11.11
						1 lane widening	1079					0.1326	58671
						2 lane widening	22270					37895	

Corridor Details

CORRIDOR:		MD 355 North													
Road	Segment Start	Segment End	Total Signalized Intersections (Median Guideway Only)	Signals w/o Left Lane (Median Guideway Only)	Signals w/ Left Lane (Median Guideway Only)	Signals w/ 2+ Left Lanes (Median Guideway Only)	Signal at Median Station Site (0-1 Left Lanes)	Signal at Median Station Site (2+ Left Lanes)	TSP Treatment	Queue Jump Treatment	Bridges	Underpasses	Earthwork - Retaining Wall or Fill Wall (linear ft)	Length of Managed Lanes (miles)	Length of Median Cycle Track (miles)
MD 355 North	Redgrave Pl	Little Seneca Creek	0											0	0
MD 355 North	Little Seneca Creek	Shakespeare Blvd	0											0	0
Seneca Meadows Parkw	Corridor Cities Transitway	Observation Drive	2	0	2	0								0	0
Shakespeare Drive	Observation Drive	MD 355	2	0	2	0								0	0
MD 355	Shakespeare Boulevard	Game Preserve Road	5	0	3	2	1	2			1		242.5	0	0
MD 355	Game Preserve Road	Just south of O'Neil Drive	14	0	11	3	3	2			1	0	1750	0	0
MD 355	Just south of O'Neil Drive	1250 ft south of Shady Grove Road	1	0	1	0	1				0	1		0	0
MD 355	1250 ft south of Shady Grove Road	Ridgemont Avenue	1	0	1	0								0	0
MD 355	Ridgemont Avenue	Indianola Road	3	0	3	0	1		4					0	0
MD 355	Indianola Road	1000 ft south of Indianola Road	0											0	0
MD 355	1000 ft south of Indianola R	270 ft north of North Campus Drive	3	0	2	1		1			0	0		0	0
MD 355	270 ft north of North Campus Drive	270 ft north of North Campus Street	9	0	8	1	2		3		0	1		0	0
Total			38	0	31	7	8	5	7	0	2	2	4175	0.00	0.00
			Number of Signals with 0-1 Left Lane, excluding Station locations: 23												
			Number of Signals with 2+ Left Lanes, excluding Station locations: 2												
			Final Bridge/Underpass Area (sf) 40800												
			Final Earthwork Length (ft) 1750												

Corridor Details

MD 355 South

Road	Segment Start	Segment End	Guideway Treatment	Recommended Number of Travel Lanes	Lane Repurposing (Y/N)	Length (miles)	Width of Roadway Widening (feet)	Two-lane Median Stations	One-lane Median Stations	Curbside Stations	Terminus Stations	Median Length, excluding Station Areas (miles)	Above Ground Utilities
MD 355	Church Street	Halpine Road	Two-Lane Median (Rockville)	6	No	1.959	18	2			1	1.4286	Both sides
MD 355	Halpine Road	Twinbrook Parkway	Two-Lane Median (Rockville)	6	No	0.2531	18					0.2531	Both sides
MD 355	Twinbrook Parkway	250 ft south of Twinbrook Parkway	Two-Lane Median	6	No	0.0465	29					0.0465	Both sides
MD 355	250 ft south of Twinbrook Parkway	Bou Avenue	Two-Lane Median	6	No	0.1675	29					0.1675	Both sides
MD 355	Bou Avenue	200 ft south of Hoya St	Two-Lane Median	6	No	0.1555	29	1				0.0000	Both sides
MD 355	200 ft south of Hoya St	Edson Lane	Two-Lane Median	6	No	1.0566	18	2				0.9470	Both sides
MD 355	Edson Lane	Hillery Way	Two-Lane Median	6	No	0.1134	18					0.1134	Both sides
MD 355	Hillery Way	600 ft north of Tuckerman Lane	Two-Lane Median	6	No	0.4927	18					0.4927	Both sides
MD 355	600 ft north of Tuckerman Lane (north)	Tuckerman Lane (south)	Two-Lane Median	6	No	0.5652	18	1				0.3000	Both sides
MD 355	Tuckerman Lane (south)	Grosvenor Lane	Two-Lane Median	6	No	0.1255	14					0.1255	Both sides
MD 355	Grosvenor Lane	I-495	Two-Lane Median	6	No	0.381	0					0.3810	Both sides
MD 355	I-495	Cedar Lane	Two-Lane Median	4	Yes	0.7984	0	2				0.5680	
MD 355	Woodmont Avenue	Woodmont Avenue	Two-Lane Median	4	Yes	0.7804	0	1				0.5152	Both sides
MD 355	Cedar Lane	Chestnut Street	Two-Lane Median	4	Yes	0.1192	7					0.1192	Both sides
MD 355	Chestnut Street	Bradley Boulevard	Two-Lane Median	4	Yes	1.1675	7*	3				0.3719	1 side
MD 355	Bradley Boulevard	Nottingham Drive	Curb Lanes	4	Yes	0.0579							Both sides
MD 355	Nottingham Drive	Drummond Avenue	Curb Lanes	4	Yes	0.4748							
MD 355	Drummond Avenue	Oliver Street	Curb Lanes	4	Yes	0.2004							
MD 355	Oliver Street	Somerset Terrace	Curb Lanes	4	Yes	0.0895							Both sides
MD 355	Somerset Terrace	Western Avenue	Curb Lanes	4	Yes	0.3427					1		Mostly buried
Total						9.3468	216	12	0	0	2	5.5296	

2 lane	5.53	29196	Util
Curb	1.17	6152	11.28
			59538
Median Station Area - 2 sides of intrc			0.852
Median Station Area - 1 side of intrc			0.1326
			29196

1 lane widening	3256
2 lane widening	19794

Corridor Details

CORRIDOR:		MD 355 South													
Road	Segment Start	Segment End	Total Signalized Intersections (Median Guideway Only)	Signals w/o Left Lane (Median Guideway Only)	Signals w/ Left Lane (Median Guideway Only)	Signals w/ 2+ Left Lane (Median Guideway Only)	Signal at Median Station Site (0-1 Left Lanes)	Signal at Median Station Site (2+ Left Lanes)	TSP Treatment	Queue Jump Treatment	Bridges	Underpasses	Earthwork - Retaining Wall or Fill Wall (linear ft)	Length of Managed Lanes (miles)	Length of Median Cycle Track (miles)
MD 355	Church Street	Halpine Road	8		7	1	3		4					0	0
MD 355	Twinbrook Parkway	Twinbrook Parkway	1	0	1				1					0	0
MD 355	250 ft south of Twinbrook Parkway	250 ft south of Twinbrook Parkway	0						1					0	0
MD 355	Bou Avenue	Bou Avenue	2	0	2				1					0	0
MD 355	200 ft south of Hoya St	200 ft south of Hoya St	1	0	1		1		1					0	0
MD 355	Edson Lane	Edson Lane	6	0	6		2		3		1		400	0	0
MD 355	Hillery Way	Hillery Way	0						1					0	0
MD 355	600 ft north of Tucker Lane	600 ft north of Tucker Lane	1	0	1				1				3200	0	0
MD 355	Tucker Lane (north)	Tucker Lane (north)	2	0	2				1				2650	0	0
MD 355	Tucker Lane (south)	Tucker Lane (south)	1	1	0				1		1		800	0	0
MD 355	Grosvenor Lane	Grosvenor Lane	0	0	0						2		650	0	0
MD 355	I-495	Cedar Lane	4	1	3		2		1					0	0
MD 355	Woodmont Avenue	Woodmont Avenue	5	1	4		1							0	0
MD 355	Chestnut Street	Chestnut Street	0											0	0
MD 355	Bradley Boulevard	Bradley Boulevard	10	5	5		3							0	0
MD 355	Nottingham Drive	Nottingham Drive	0											0	0
MD 355	Drummond Avenue	Drummond Avenue	0											0	0
MD 355	Oliver Street	Oliver Street	0											0	0
MD 355	Somerses Terrace	Somerses Terrace	0											0	0
MD 355	Western Avenue	Western Avenue	0											0	0
Total			41	8	32	1	12	0	16	0	4	0	7700	0	0

Number of Signals with 0-1 Left Lane, excluding Station locations: 28
Number of Signals with 2+ Left Lanes, excluding Station locations: 1

Final Bridge/Underpass Area (sf) 10200
Final Earthwork Length (ft) 7050

Corridor Details

CORRIDOR: New Hampshire Avenue

Road	Segment Start	Segment End	Guideway Treatment	Recommended Number of Travel Lanes	Lane Repurposing (V/N)	Length (miles)	Width of Roadway Widening (feet)	Two-lane Median Stations	One-lane Median Stations	Curbside Stations	Terminus Stations	Median Guideway Length, excluding Station Areas (miles)	Above Ground Utilities
New Hampshire Avenue	Colesville Park & Ride	Randolph Road	Mixed Traffic	6	No	0.15					1		
New Hampshire Avenue	Randolph Road	Lockwood Drive	Mixed Traffic	6	No	2.6271				3			
New Hampshire Avenue	Lockwood Drive	Oaklawn Dr	Reversible One-Lane Median	6	No	1.13	3		2			0.5966	Both sides
New Hampshire Avenue	Oaklawn Dr	Powder Mill Rd	Reversible One-Lane Median	6	No	0.2893	3		1			0.0241	Both sides
New Hampshire Avenue	Powder Mill Rd	I-495	Reversible One-Lane Median	6	No	0.2309	12					0.2309	Both sides
New Hampshire Avenue	I-495	Northampton Drive	Reversible One-Lane Median	6	No	0.8952	1		2			0.3648	Both sides
New Hampshire Ave	Northampton Drive	University Boulevard	Reversible One-Lane Median (PG County)	6	No	1.2944	14		1			1.0292	Both sides
New Hampshire Avenue	University Boulevard	East-West Highway	Two-Lane Median	4	Yes	1.0378	0	1				0.7726	
New Hampshire Avenue	East-West Highway	DC Line	Two-Lane Median (MoCo / PG)	4	Yes	0.8021	0				1	0.8021	
Total						8.4568	33	1	6	3	2	3.8234	

Mixed
1 Lane
2 Lane

2.78
2.25
1.57

14663
11873
8314

Median Station Area - 2 sides of intx:
Median Station Area - 1 side of intx:

0.2652
0.1326

Util
3.05
16108

2 lane widening
6654

1 Lane
2 Lane

Corridor Details

CORRIDOR: New Hampshire Avenue

Road	Segment Start	Segment End	Total Signalized Intersections (Median Guideway Only)	Signals w/o Left Lane (Median Guideway Only)	Signals w/ Left Lane (Median Guideway Only)	Signals w/ 2+ Left Lanes (Median Guideway Only)	Signal at Median Station Site (0-1 Left Lanes)	Signal at Median Station Site (2+ Left Lanes)	TSP Treatment	Queue Jump Treatment	Bridges	Underpasses	Earthwork - Retaining Wall or Fill Wall (linear ft)	Length of Managed Lanes (miles)	Length of Median Cycle Track (miles)
New Hampshire Avenue	Colesville Park & Ride	Randolph Road	0											0	0
New Hampshire Avenue	Randolph Road	Lockwood Drive	4									1		0	0
New Hampshire Avenue	Lockwood Drive	Oaklawn Dr		0	2	2	1	1						0	0
New Hampshire Avenue	Oaklawn Dr	Powder Mill Rd	1	0	1	0	1							0	0
New Hampshire Avenue	Powder Mill Rd	I-495	1	0	1	0						1		0	0
New Hampshire Avenue	I-495	Northampton Drive	3	0	2	1	2						1250	0	0
New Hampshire Ave	Northampton Drive	University Boulevard	7	0	6	1		1					3200	0	0
New Hampshire Avenue	University Boulevard	East-West Highway	7	0	7	0	1							0	0
New Hampshire Avenue	East-West Highway	DC Line	4	0	4	0	1							0	0
Total			27	0	23	4	6	2	0	0	0	2	4450	0.00	0.00

Number of Signals with 0-1 Left Lane, excluding Station locations: 17

Number of Signals with 2+ Left Lanes, excluding Station locations: 2

Final Bridge/Underpass Area (sf)

0

Final Earthwork Length (ft)

3200

Corridor Details

CORRIDOR: North Bethesda Transitway

Road	Segment Start	Segment End	Guideway Treatment	Recommended Number of Travel Lanes	Lane Repurposing (V/N)	Length (miles)	Width of Roadway Widening (feet)	Two-lane Median Stations	One-lane Median Stations	Curbside Stations	Terminus Stations	Median Guideway Length, excluding Station Areas (miles)	Above Ground Utilities
Old Georgetown Road	Rockville Pike	Executive Boulevard	Mixed Traffic	4	No	0.2795					1		
Old Georgetown Road	Executive Boulevard	Nicholson Lane	Reversible One-Lane Median	6	No	0.2498	2					0.2498	
Old Georgetown Road	Nicholson Lane	Tuckerman Lane	Reversible One-Lane Median	6	No	0.749	2		1			0.4838	Both sides
Old Georgetown Road	Tuckerman Lane	I-270	Reversible One-Lane Median	6	No	0.2761	0		1			0.0109	Both sides
Old Georgetown Road	I-270	Rock Spring Drive	Reversible One-Lane Median	6	No	0.2576	2		1			0.1250	Both sides
Rock Spring Drive	Old Georgetown Road	Fernwood Road	Two-Lane Side Running	4	No	0.6358	0			2		0.5032	
Fernwood Road	Rock Spring Drive	Rockledge Drive	Two-Lane Side Running	4	No	0.1403	0						
Westlake Terrace	Rockledge Drive	I-270	Two-Lane Side Running	4	No	0.1355	0				1		
Total						2.7237	6	0	3	2	2	1.3727	

Mixed	0.28	1476	
1 Lane	0.87	4591	
2 Lane Side	0.91	4814	
			Median Station Area - 2 sides of intc:
			Median Station Area - 1 side of intc:
			1 Lane
			2 Lane side
			Util
			2.57
			13545
			0.50

Corridor Details

CORRIDOR: North Bethesda Transitway

Road	Segment Start	Segment End	Total Signalized Intersections (Median Guideway Only)	Signals w/o Left Lane (Median Guideway Only)	Signals w/ Left Lane (Median Guideway Only)	Signals w/ 2+ Left Lanes (Median Guideway Only)	Signal at Median Station Site (0-1 Left Lanes)	Signal at Median Station Site (2+ Left Lanes)	TSP Treatment	Queue Jump Treatment	Bridges	Underpasses	Earthwork - Retaining Wall or Fill Wall (linear ft)	Length of Managed Lanes (miles)	Length of Median Cycle Track (miles)
Old Georgetown Road	Rockville Pike	Executive Boulevard	0											0	0
Old Georgetown Road	Executive Boulevard	Nicholson Lane	2	0	2									0	0
Old Georgetown Road	Nicholson Lane	Tuckerman Lane	2	0	2		1						2300	0	0
Old Georgetown Road	Tuckerman Lane	I-270	1	0	0	1	1							0	0
Old Georgetown Road	I-270	Rock Spring Drive	2	0	1	1		1			1		800	0	0
Rock Spring Drive	Old Georgetown Road	Fernwood Road	0										500	0	0
Fernwood Road	Rock Spring Drive	Rockledge Drive	0											0	0
Westlake Terrace	Rockledge Drive	I-270	0								1		500	0	0
Total			7	0	5	2	2	1	0	0	2	0	4100	0	0.00

Number of Signals with 0-1 Left Lane, excluding Station locations: 3
Number of Signals with 2+ Left Lanes, excluding Station locations: 1

Final Bridge/Underpass Area (sf) 20400
Final Earthwork Length (ft) 1000

Corridor Details

CORRIDOR:		Randolph Road											
Road	Segment Start	Segment End	Guideway Treatment	Recommended Number of Travel Lanes	Lane Repurposing (V/N)	Length (miles)	Width of Roadway Widening (feet)	Two-lane Median Stations	One-lane Median Stations	Curbside Stations	Terminus Stations	Median Guideway Length, excluding Station Areas (miles)	Above Ground Utilities
Randolph Road	US 29	Paint Branch	Mixed Traffic	4	No	0.7833					1		
Randolph Road	Paint Branch	Paint Road	Mixed Traffic	4	No	1.2738				1			
Randolph Road	Fairland Road	Glenallen Avenue	Mixed Traffic	6	No	3.0838				1			
Glenallen Avenue	Randolph Road	Layhill Road	Mixed Traffic	2	No	0.3468				1			
Glenallen Avenue	Layhill Road	Georgia Avenue	Mixed Traffic	2	No	0.279							
Randolph Road	Georgia Avenue	Judson Road	Mixed Traffic	6	No	0.1164				1			
Randolph Road	Judson Road	Lindell Street	Mixed Traffic	6	No	0.5626							
Randolph Road	Lindell Street	Veirs Mill Road	Mixed Traffic	6	No	1.1816				2			
Randolph Road	Veirs Mill Road	Dewey Road	Mixed Traffic	6	No	0.433				1			
Randolph Road	Dewey Road	Parklawn Drive	Mixed Traffic	4	No	0.7933				1			
Parklawn Drive	Randolph Road	Nebel Street	Mixed Traffic	4	No	0.8492							
Nicholson Lane	Nebel Street	Rockville Pike	Mixed Traffic	4	No	0.3727					1		
Total						10.0756	0	0	0	8	2	0.0000	
						Mixed							
						53199							

Corridor Details

CORRIDOR: Randolph Road

Road	Segment Start	Segment End	Total Signalized Intersections (Median Guideway Only)	Signals w/o Left Lane (Median Guideway Only)	Signals w/ Left Lane (Median Guideway Only)	Signals w/ 2+ Left Lanes (Median Guideway Only)	Signal at Median Station Site (0-1 Left Lanes)	Signal at Median Station Site (2+ Left Lanes)	TSP Treatment	Queue Jump Treatment	Bridges	Underpasses	Earthwork - Retaining Wall or Fill Wall (linear ft)	Length of Managed Lanes (miles)	Length of Median Cycle Track (miles)
Randolph Road	US 29	Paint Branch	0										0	0	0
Randolph Road	Paint Branch	Fairland Road	0								1		0	0	0
Randolph Road	Fairland Road	Glenallen Avenue	0										0	0	0
Glenallen Avenue	Randolph Road	Layhill Road	0										0	0	0
Glenallen Avenue	Layhill Road	Georgia Avenue	0										0	0	0
Randolph Road	Georgia Avenue	Judson Road	0										0	0	0
Randolph Road	Judson Road	Lindell Street	0										0	0	0
Randolph Road	Lindell Street	Veirs Mill Road	0										0	0	0
Randolph Road	Veirs Mill Road	Dewey Road	0						1				0	0	0
Randolph Road	Dewey Road	Parklawn Drive	0						1		1		0	0	0
Parklawn Drive	Randolph Road	Nebel Street	0						1				0	0	0
Nicholson Lane	Nebel Street	Rockville Pike	0								1		0	0	0
Total			0	0	0	0	0	0	3	0	3	0	0	0.00	0.00

Number of Signals with 0-1 Left Lane, excluding Station locations: 0

Number of Signals with 2+ Left Lanes, excluding Station locations: 0

Final Bridge/Underpass Area (sf)

Final Earthwork Length (ft)

Corridor Details

CORRIDOR: University Boulevard

Road	Segment Start	Segment End	Guideway Treatment	Recommended Number of Travel Lanes	Lane Repurposing (V/N)	Length (miles)	Width of Roadway Widening (feet)	Two-lane Median Stations	One-lane Median Stations	Curbside Stations	Terminus Stations	Median Guideway Length, excluding Station Areas (miles)	Above Ground Utilities
University Boulevard	Georgia Avenue	Amherst Avenue	Reversible One-Lane Median	6	No	0.1918	10		1		1	0.0592	1 side
University Boulevard	Amherst Avenue	Dayton Street	Reversible One-Lane Median	6	No	0.4056	4					0.2730	
University Boulevard	Dayton Street	Easecrest Drive	Reversible One-Lane Median	6	No	0.0978	4					0.0978	Both sides
University Boulevard	Easecrest Drive	Lorain Ave	Reversible One-Lane Median	6	No	1.9722	4		3			1.1766	Both sides
University Boulevard	Lorain Ave	US 29	Mixed Traffic	6	No	0.1641				1			
University Boulevard	US 29	Piney Branch Road	Mixed Traffic	6	No	1.8029				1			
University Boulevard	University Boulevard e/b	University Boulevard bi	Mixed Traffic	6	No	0.314							
University Boulevard	Piney Branch Road	Gilbert St	Mixed Traffic	5	No	0.1061							
University Boulevard	Gilbert St	Seek Ln	Mixed Traffic	4	No	0.0855				1			Both sides
University Boulevard	Seek Ln	Bayfield St	Mixed Traffic	4	No	0.1022							Both sides
University Boulevard	Bayfield St	Carroll Ave	Mixed Traffic	4	No	0.1277							Both sides
University Boulevard	Carroll Ave	New Hampshire Avenue	Mixed Traffic	4	No	0.4299					1		Both sides
Total						5.7998	22	0	4	3	2	1.6066	

1 Lane
 Mixed
 1 lane widening
 312
 8483
 16539
 312
 Median Station Area - 2 sides of intx:
 Median Station Area - 1 side of intx:
 1 Lane
 8483
 0.19
 1013
 Util

Corridor Details

CORRIDOR: University Boulevard

Road	Segment Start	Segment End	Total Signalized Intersections (Median Guideway Only)	Signals w/o Left Lane (Median Guideway Only)	Signals w/ Left Lane (Median Guideway Only)	Signals w/ 2+ Left Lanes (Median Guideway Only)	Signal at Median Station Site (0-1 Left Lanes)	Signal at Median Station Site (2+ Left Lanes)	TSP Treatment	Queue Jump Treatment	Bridges	Underpasses	Earthwork - Retaining Wall or Fill Wall (linear ft)	Length of Managed Lanes (miles)	Length of Median Cycle Track (miles)
University Boulevard	Georgia Avenue	Aniherst Avenue	2	1	1		1		1					0	0
University Boulevard	Aniherst Avenue	Dayton Street	1	0	1									0	0
University Boulevard	Dayton Street	Easecrest Drive												0	0
University Boulevard	Easecrest Drive	Lorain Ave	6	0	6		3						2750	0	0
University Boulevard	Lorain Ave	US 29	0											0	0
University Boulevard	US 29	Piney Branch Road	0								1			0	0
University Boulevard	University Boulevard e/b	University Boulevard bi	0											0	0
University Boulevard	Piney Branch Road	Gilbert St	0												
University Boulevard	Gilbert St	Seek Ln	0												
University Boulevard	Seek Ln	Bayfield St	0												
University Boulevard	Bayfield St	Carroll Ave	0												
University Boulevard	Carroll Ave	New Hampshire Avenue	0												
Total			9	1	8	0	4	0	1	0	1	0	2750	0	0.00

Number of Signals with 0-1 Left Lane, excluding Station locations: 5

Number of Signals with 2+ Left Lanes, excluding Station locations: 0

Final Bridge/Underpass Area (sf)

Final Earthwork Length (ft)

Corridor Details

CORRIDOR: US 29 (Columbia Pike/Colesville Road)													
Road	Segment Start	Segment End	Guideway Treatment	Recommended Number of Travel Lanes	Lane Repurposing (V/N)	Length (miles)	Width of Roadway Widening (feet)	Two-Lane Median Stations	One-lane Median Stations	Curbside Stations	Terminus Stations	Median Guideway Length, excluding Station Areas (miles)	Above Ground Utilities
US 29	MD 198	Stewart Lane	Two-Lane Median	6	No	5.5627	0	3			1	4.7671	
Stewart Lane	US 29	Lockwood Drive	Mixed Traffic	2	No	0.4487							
Lockwood Drive	US 29	New Hampshire Ave	Mixed Traffic	2	No	0.6973				1			
Lockwood Drive	US 29	Lockwood Drive	Mixed Traffic	2	No	0.8378				1			
US 29	US 29	Southwood Avenue	Curb Lanes	4	Yes	0.6379				1			Both sides
US 29	US 29	Southwood Avenue	Mixed Traffic	6	No	0.4098							
US 29	US 29	University Boulevard (WB)	Mixed Traffic	6	No	0.0494				1			
US 29	US 29	University Boulevard (EB)	Mixed Traffic	6	No	0.3289							
US 29	US 29	I-495	Mixed Traffic	6	No	0.624				1			
US 29	US 29	Sligo Creek Parkway	Managed Lanes	6	Yes	0.6915							
US 29	US 29	Spring Street	Managed Lanes	6	Yes	0.1034							
US 29	US 29	Fenton Street	Managed Lanes	6	Yes	0.1283							
US 29	US 29	Georgia Avenue	Managed Lanes	6	Yes	0.1283				1			
US 29	US 29	East-West Highway	Curb Lanes	4	Yes	0.2798					1		Buried
US 29	US 29	East-West Highway	Curb Lanes	4	Yes	0.221							
Total						11.0205	0	3	0	6	2	4.7671	

Curb	1.14	6013
Mixed	3.3959	17930
Managed	0.9231	4874
2 Lane Med	4.7671	25170
		25170
		Util
		0.00
		0

Corridor Details

CORRIDOR: US 29 (Columbia Pike/Colesville Road)

Road	Segment Start	Segment End	Total Signalized Intersections (Median Guideway Only)	Signals w/o Left Lane (Median Guideway Only)	Signals w/ Left Lane (Median Guideway Only)	Signals w/ 2+ Left Lanes (Median Guideway Only)	Signal at Median Station Site (0-1 Left Lanes)	Signal at Median Station Site (2+ Left Lanes)	TSP Treatment	Queue Jump Treatment	Bridges	Underpasses	Earthwork - Retaining Wall or Fill Wall (linear ft)	Length of Managed Lanes (miles)	Length of Median Cycle Track (miles)
US 29	MD 198	Stewart Lane	8	2	4	2	1	1	3		2	6	0	0	0
Stewart Lane	US 29	Lockwood Drive	0										0	0	0
Lockwood Drive	Stewart Lane	New Hampshire Ave	0										0	0	0
Lockwood Drive	US 29	US 29	0						1				0	0	0
US 29	Lockwood Drive	Southwood Avenue	0								1		0	0	0
US 29	Southwood Avenue	University Boulevard (WB)	0										0	0	0
US 29	University Boulevard (WB)	University Boulevard (EB)	0						1				0	0	0
US 29	I-495	I-495	0								1		0	0	0
US 29	Sligo Creek Parkway	Sligo Creek Parkway	0						1				0	0	0
US 29	Spring Street	Spring Street	0										0	0.660324586	0
US 29	Fenton Street	Fenton Street	0										0	0.103359889	0
US 29	Georgia Avenue	Georgia Avenue	0										0	0.128281931	0
US 29	East-West Highway	East-West Highway	0									1	0	0	0
US 29	16th Street	16th Street	0										0	0	0
Total			8	2	4	2	1	1	6	0	4	7	0	0.89	0.00

Number of Signals with 0-1 Left Lane, excluding Station locations: 5

Number of Signals with 2+ Left Lanes, excluding Station locations: 1

Final Bridge/Underpass Area (sf) 81600

Final Earthwork Length (ft) 0

Corridor Details

CORRIDOR:		Veirs Mill Road											
Road	Segment Start	Segment End	Guideway Treatment	Recommended Number of Travel Lanes	Lane Repurposing (Y/N)	Length (miles)	Width of Roadway Widening (feet)	Two-lane Median Stations	One-lane Median Stations	Curbside Stations	Terminus Stations	Median Guideway Length, excluding Station Areas (miles)	Above Ground Utilities
Veirs Mill Road	MD 355	Meadow Hall Drive	Bi-directional One-Lane Median (Rockville)	4	No	1.7996	7		2		1	1.2692	Both sides
Veirs Mill Road	Meadow Hall Drive	Twinbrook Parkway	Bi-directional One-Lane Median	6	No	0.1184	0		1			0.0000	
Veirs Mill Road	Twinbrook Parkway	Aspen Hill Road	Bi-directional One-Lane Median	4	No	0.4789	14					0.3321	Both sides
Veirs Mill Road	Aspen Hill Road	Parkland Drive	Bi-directional One-Lane Median	4	No	0.8741	4		2			0.3437	
Veirs Mill Road	Parkland Drive	Turkey Branch	Bi-directional One-Lane Median	4	No	0.1782	3					0.1782	
Veirs Mill Road	Turkey Branch	Gridley Road	Bi-directional One-Lane Median	6	No	0.3262	3					0.3262	
Veirs Mill Road	Gridley Road	Randolph Road	Bi-directional One-Lane Median	6	No	0.1195	14		1			0.0000	Both sides
Veirs Mill Road	Randolph Road	Sampson Road	Bi-directional One-Lane Median	6	No	0.2896	10					0.1440	Both sides
Veirs Mill Road	Sampson Road	Ferrara Avenue	Bi-directional One-Lane Median	6	No	0.0819	10					0.0819	Both sides
Veirs Mill Road	Ferrara Avenue	Connecticut Avenue	Bi-directional One-Lane Median	6	No	0.1513	5		1			0.0187	Both sides
Veirs Mill Road	Connecticut Avenue	Gail Street	Bi-directional One-Lane Median	6	No	0.2722	4					0.1396	
Veirs Mill Road	Gail Street	Newport Mill Road	Bi-directional One-Lane Median	6	No	0.4283	3		1			0.1631	
Veirs Mill Road	Newport Mill Road	Monterrey Drive	Bi-directional One-Lane Median	6	No	0.3056	4					0.3056	
Veirs Mill Road	Monterrey Drive	Sherrie Lane	Bi-directional One-Lane Median	6	No	0.0739	4					0.0739	
Veirs Mill Road	Sherrie Lane	Galt Avenue	Bi-directional One-Lane Median	6	No	0.0619	13					0.0619	Both sides
Veirs Mill Road	Galt Avenue	University Boulevard	Bi-directional One-Lane Median	6	No	0.1843	4		1			0.0517	Both sides
Veirs Mill Road	University Boulevard	Ennalls Avenue	Bi-directional One-Lane Median	6	No	0.0757	14					0.0000	Both sides
Veirs Mill Road	Ennalls Avenue	Wheaton Bus Station	Bi-directional One-Lane Median	6	No	0.3383	4				1	0.2814	Mostly 1 side
Total						6.1580		0	9	0	2	3.7712	

1 lane median

1 lane widening

Median Station Area - 2 sides of intx:

0.2652

0.1326

1.9912

Util

6.12

32298

Corridor Details

CORRIDOR: Veirs Mill Road

Road	Segment Start	Segment End	Total Signalized Intersections (Median Guideway Only)	Signals w/o Left Lane (Median Guideway Only)	Signals w/ Left Lane (Median Guideway Only)	Signals w/ 2+ Left Lanes (Median Guideway Only)	Signal at Median Station Site (0-1 Left Lanes)	Signal at Median Station Site (2+ Left Lanes)	TSP Treatment	Queue Jump Treatment	Bridges	Underpasses	Earthwork - Retaining Wall or Fill Wall (linear ft)	Length of Managed Lanes (miles)	Length of Median Cycle Track (miles)
Veirs Mill Road	MD 355	Meadow Hall Drive	7	1	4	2	1	1	1		1		2400	0	0
Veirs Mill Road		Twinbrook Parkway	1	0	0	1		1	1					0	0
Veirs Mill Road		Aspen Hill Road	0								1	1	2200	0	0
Veirs Mill Road		Parkland Drive	3	0	2	1	1	1	2				150	0	0
Veirs Mill Road		Turkey Branch	0											0	0
Veirs Mill Road		Gridley Road	1	0	1									0	0
Veirs Mill Road		Randolph Road	1	0	0	1		1	1					0	0
Veirs Mill Road		Sampson Road	0	0	0	0			1					0	0
Veirs Mill Road		Ferrara Avenue	1	0	1									0	0
Veirs Mill Road		Connecticut Avenue	1	0	1			1					350	0	0
Veirs Mill Road		Gail Street	0	0	0	0							550	0	0
Veirs Mill Road		Newport Mill Road	2	0	2		1						700	0	0
Veirs Mill Road		Monterrey Drive	0						1					0	0
Veirs Mill Road		Sherrie Lane	0											0	0
Veirs Mill Road		Galt Avenue	0										150	0	0
Veirs Mill Road		University Boulevard	1	0	0	1		1						0	0
Veirs Mill Road		Ennalls Avenue	0	0	0	0			1					0	0
Veirs Mill Road		Wheaton Bus Station	2	0	1	1		1				1		0	0
Total			20	1	12	7	3	7	8	0	2	2	6500	0	0.00

Number of Signals with 0-1 Left Lane, excluding Station locations: 10

Number of Signals with 2+ Left Lanes, excluding Station locations: 0

Final Bridge/Underpass Area (sf) 24000

Final Earthwork Length (ft) 5100

ROW Calculations

SUMMARY OF ROW ACQUISITION FOR COUNTYWIDE TRANSIT CORRIDORS FUNCTIONAL MASTER PLAN RTS CORRIDORS

Corridor	Approved Master Plan vs. Recommended CTCFMP ROW (sq ft)	Existing ROW vs. Recommended CTCFMP ROW (sq ft)	Intersection ROW Acquisition: Median Station Platforms (sq ft)	Intersection ROW Acquisition: Signalized Left Turn Lanes (sq ft)	Intersection ROW Acquisition: Queue Jump Lanes (sq ft)	Total Required ROW Acquisition (sq ft)*	Total Cost of Recommended RTS ROW Acquisition	Total Cost Including 50% Contingency
1 Georgia Avenue North (MD 97)	28,001.80	522,054.64	224,400.00	272,640.00	27,000.00	1,046,094.64	\$ 15,646,040.00	\$ 23,469,060.00
2 Georgia Avenue South (MD 97)	4,372.84	228,226.91	0.00	0.00	0.00	228,226.91	\$ 7,350,561.00	\$ 11,025,841.50
3 Route 355 North	42,142.65	3,616,411.89	265,200.00	426,000.00	0.00	4,307,611.89	\$ 38,810,024.08	\$ 58,215,036.12
4 Route 355 South	50,648.62	865,241.37	244,800.00	494,160.00	0.00	1,604,201.37	\$ 48,893,835.61	\$ 73,340,753.41
5 New Hampshire Avenue (MD 650)	42,389.90	386,356.42	142,800.00	323,760.00	0.00	852,916.42	\$ 13,306,195.62	\$ 19,959,293.43
6 North Bethesda Transitway	17,493.11	170,742.34	61,200.00	68,160.00	0.00	300,102.34	\$ 3,840,194.50	\$ 5,760,291.75
7 Randolph Road	1,132.43	343,762.00	0.00	0.00	0.00	343,762.00	\$ 4,891,284.60	\$ 7,336,926.89
8 University Boulevard (MD 193)	32,378.51	461,370.08	81,600.00	85,200.00	0.00	628,170.08	\$ 12,683,618.03	\$ 19,025,427.05
9 US 29	114,570.57	320,631.99	61,200.00	102,240.00	0.00	484,071.99	\$ 7,076,200.12	\$ 10,614,300.18
10 Veirs Mill Road (MD 586)	18,035.24	499,333.65	183,600.00	170,400.00	0.00	853,333.65	\$ 11,457,037.02	\$ 17,185,555.52
Total (sq ft)	351,165.66	7,414,131.30	1,264,800.00	1,942,560.00	27,000.00	10,648,491.30	\$ 163,954,990.58	\$ 245,932,485.87
Total (acres)	8.06	170.21	29.04	44.60	0.62	244.46		

Note: * Total Required ROW Acquisition values use the difference between the Existing available ROW (as measured using County parcel data) and the Planning Board Draft Recommended ROW as the basis for determining the amount of land needed.

ROW Calculations

SUMMARY OF ROW ACQUISITION FOR COUNTYWIDE TRANSIT CORRIDORS FUNCTIONAL MASTER PLAN RTS CORRIDORS

Corridor		Approved Master Plan vs. Recommended CTCFMP ROW (acres)	Existing ROW vs. Recommended CTCFMP ROW (acres)	Intersection ROW Acquisition: Median Station Platforms (acres)	Intersection ROW Acquisition: Signalized Left Turn Lanes (acres)	Intersection ROW Acquisition: Queue Jump Lanes (acres)	Total Land Acquisition (acres)
1	Georgia Avenue North (MD 97)	0.64	11.98	5.15	6.26	0.62	24.66
2	Georgia Avenue South (MD 97)	0.10	5.24	0.00	0.00	0.00	5.34
3	Route 355 North	0.97	83.02	6.09	9.78	0.00	99.86
4	Route 355 South	1.16	19.86	5.62	11.34	0.00	37.99
5	New Hampshire Avenue (MD 650)	0.97	8.87	3.28	7.43	0.00	20.55
6	North Bethesda Transitway	0.40	3.92	1.40	1.56	0.00	7.29
7	Randolph Road	0.03	7.89	0.00	0.00	0.00	7.92
8	University Boulevard (MD 193)	0.74	10.59	1.87	1.96	0.00	15.16
9	US 29	2.63	7.36	1.40	2.35	0.00	13.74
10	Veirs Mill Road (MD 586)	0.41	11.46	4.21	3.91	0.00	20.00
Total (acres)		8.06	170.21	29.04	44.60	0.62	252.52

Note: * Total Required ROW Acquisition values use the difference between the Existing available ROW (as measured using County parcel data) and the Planning Board Draft Recommended ROW as the basis for determining the amount of land needed.

ROW Calculations

Georgia Avenue North

CORRIDOR:

Road	Segment Start	Segment End	Guideway Treatment	Existing FMP (ft)	CTCFMP ROW (ft)	Approved Master Plan vs. Recommended CTCFMP ROW (sq ft)	Existing ROW vs. Recommended CTCFMP ROW (sq ft)	Intersection ROW Acquisition: Median Station Platforms (sq ft)	Intersection ROW Acquisition: Signalized Left Turn Lanes (sq ft)	Intersection ROW Acquisition: Queue Jump Lanes (sq ft)	Total Required ROW Acquisition (sq ft) *	Total Cost of Recommended RTS ROW Acquisition per Database Analysis	Cost of Private Property (\$ per sq. ft.)	Total Cost of Recommended RTS ROW Acquisition
Prince Phillip Drive	Broolie Farm Dr	MD 108	Mixed Traffic	80	80						5106.13	\$90,618	\$17.75	\$90,618
Oliney Sandy Spring Road	Prince Phillip Drive	Spartan Road	Mixed Traffic	150	150						44521.59	\$36,445	1.17	\$52,306
Oliney Sandy Spring Road	Spartan Road	Georgia Avenue	Mixed Traffic	150	150						28825.71	\$332,534	21.70	\$625,454
Georgia Avenue	MD 108	Spartan Road	Reversible One-Lane Median	120	121	568.64	9323.16	20400.00	0.00	0.00	46763.16	\$291,165	31.23	\$1,460,424
Georgia Avenue	200 ft south of Queen Mary Drive	200 ft south of Queen Mary Drive	Reversible One-Lane Median	150	150		28497.95	0.00	0.00	0.00	28497.95	\$183,366	6.43	\$183,366
Georgia Avenue	200 ft south of Queen Mary Drive	Old Baltimore Road	Reversible One-Lane Median	150	150		53986.72	20400.00	0.00	0.00	108078.72	\$321,295	5.99	\$647,873
Georgia Avenue	Old Baltimore Road	Emory Lane	Reversible One-Lane Median	150	150		42102.97	0.00	51120.00	0.00	93222.97	\$168,599	4.00	\$373,306
Georgia Avenue	Emory Lane	MD 28	Reversible One-Lane Median	150	150		2047.97	40800.00	0.00	0.00	59887.97	50	-	\$-
Georgia Avenue	MD 28	Matthew Henson State Park	Reversible One-Lane Median	150	150		17933.08	81600.00	0.00	0.00	133613.08	\$53,875	19.73	\$2,636,597
Georgia Avenue	Matthew Henson State Park	Weller Road	Reversible One-Lane Median	120	130	14432.54	84798.44	0.00	0.00	0.00	101838.44	\$199,876	2.36	\$240,041
Georgia Avenue	Weller Road	Denley Road	Reversible One-Lane Median	135	135		25568.39	0.00	0.00	0.00	25568.39	\$375,632	14.69	\$375,632
Georgia Avenue	Denley Road	Layhill Road	Reversible One-Lane Median	145	145		34341.75	20400.00	0.00	0.00	88821.75	\$711,990	20.73	\$1,841,496
Georgia Avenue	Layhill Road	Randolph Road	Reversible One-Lane Median	170	170		48116.81	20400.00	0.00	0.00	68516.81	\$932,749	19.39	\$1,328,206
Georgia Avenue	500 ft south of Randolph Road	500 ft south of Randolph Road	Reversible One-Lane Median	170	170		13022.19	0.00	0.00	0.00	13022.19	\$268,120	20.59	\$268,120
Georgia Avenue	Mason Street	Mason Street	Reversible One-Lane Median	120	124	886.89	19475.72	0.00	0.00	0.00	19475.72	\$595,875	4.92	\$95,875
Georgia Avenue	400 ft north of Blueridge Avenue	Reedle Road	Reversible One-Lane Median	120	120	546.63	51566.54	20400.00	0.00	0.00	89006.54	\$925,738	17.95	\$1,597,873
Georgia Avenue	Reedle Road	Veers Mill Road	Reversible One-Lane Median	120	129	10435.42	36119.10	0.00	51120.00	0.00	87239.10	\$1,484,602	41.10	\$3,585,787
Georgia Avenue	Veers Mill Road		Mixed Traffic	70	70	1131.67	4088.42	0.00	0.00	0.00	4088.42	\$243,066	59.45	\$243,066
Total						28,001.80	522,054.64	224,400.00	272,640.00	27,000.00	1,046,094.64	\$7,015,546		\$15,646,040

Typical Median Station Platform Land Acquisition Area: s.f.
Typical Signalized Left Turn Land Acquisition Area: s.f.
Typical Queue Jump Lane Land Acquisition Area: s.f.

Note: * Total Required ROW Acquisition values use the difference between the Existing available ROW (as measured using County parcel data) and the Planning Board Draft Recommended ROW as the basis for determining the amount of land needed.

ROW Calculations

CORRIDOR: Georgia Avenue South																
Road	Segment Start	Segment End	Guideway Treatment	Existing FMP (ft)	CTCFMP ROW (ft)	Approved Master Plan vs. Recommended CTCFMP ROW (sq ft)	Existing ROW vs. Recommended CTCFMP ROW (sq ft)	Intersection ROW Acquisition: Median Station Platforms (sq ft)	Intersection ROW Acquisition: Signalized Left Turn Lanes (sq ft)	Intersection ROW Acquisition: Queue Jump Lanes (sq ft)	Total Required ROW Acquisition (sq ft) *	Total Cost of Recommended RTS ROW Acquisition per Database Analysis	Cost of Private Property (\$ per sq. ft.)	Recommended RTS ROW Acquisition	Total Cost of ROW Acquisition	
Georgia Avenue	Veirs Mill Road	Windham Lane	Mixed Traffic	120	120		7480.92	0.00	0.00	0.00	7480.92	\$323,276	\$	43.21	\$	\$323,276
Georgia Avenue	Windham Lane	Dennis Avenue	Mixed Traffic	120	120		31387.60	0.00	0.00	0.00	31387.60	\$665,095	\$	21.19	\$	\$665,095
Georgia Avenue	Dennis Avenue	Forest Glen Road	Mixed Traffic	110	110		30687.39	0.00	0.00	0.00	30687.39	\$613,458	\$	19.99	\$	\$613,458
Georgia Avenue	Forest Glen Road	I-495	Mixed Traffic	110	110		861.34	0.00	0.00	0.00	861.34	\$19,645	\$	22.81	\$	\$19,645
Georgia Avenue	I-495	Flora Lane	Mixed Traffic	120	120		2116.55	0.00	0.00	0.00	2116.55	\$13,266	\$	6.27	\$	\$13,266
Georgia Avenue	Flora Lane	16th Street	Mixed Traffic	120	120		14238.94	0.00	0.00	0.00	14238.94	\$617,698	\$	43.38	\$	\$617,698
Georgia Avenue	16th Street	Spring Street	Curb Lanes	120	122	4372.84	40709.15	0.00	0.00	0.00	40709.15	\$689,037	\$	16.93	\$	\$689,037
Georgia Avenue	Spring Street	Colesville Road	Curb Lanes	126	126		23641.52	0.00	0.00	0.00	23641.52	\$1,396,112	\$	59.05	\$	\$1,396,112
Wayne Avenue	Colesville Rd	Georgia Avenue	Mixed Traffic	120	120		14839.21	0.00	0.00	0.00	14839.21	\$51,279	\$	3.46	\$	\$51,279
Georgia Avenue	Wayne Avenue	Blair Mill Road	Curb Lanes	140	140		34230.65	0.00	0.00	0.00	34230.65	\$1,932,751	\$	56.46	\$	\$1,932,751
Georgia Avenue	Blair Mill Road	DC Line	Curb Lanes	125	125		28033.64	0.00	0.00	0.00	28033.64	\$1,028,944	\$	36.70	\$	\$1,028,944
Total						4,372.84	228,226.91	0.00	0.00	0.00	228,226.91	\$7,350,560	\$			\$7,350,560

Typical Median Station Platform Land Acquisition Area: 20,400 s.f.
Typical Signalized Left Turn Land Acquisition Area: 17,040 s.f.
Typical Queue Jump Lane Land Acquisition Area: 13,500 s.f.

Note: * Total Required ROW Acquisition values use the difference between the Existing available ROW (as measured using County parcel data) and the Planning Board Draft Recommended ROW as the basis for determining the amount of land needed.

ROW Calculations

CORRIDOR:																
MD 355 North																
Road	Segment Start	Segment End	Guideway Treatment	Existing FMP (ft)	CTCFMP ROW (ft)	Approved Master Plan vs. Recommended CTCFMP ROW (sq ft)	Existing ROW vs. Recommended CTCFMP ROW (sq ft)	Intersection ROW vs. Recommended CTCFMP ROW (sq ft)	Intersection ROW Acquisition: Median Station Platforms (sq ft)	Intersection ROW Acquisition: Signalized Left Turn Lanes (sq ft)	Intersection ROW Acquisition: Queue Jump Lanes (sq ft)	Total Required ROW Acquisition (sq ft) *	Total Cost of ROW Acquisition per Database Analysis (\$ per sq. ft.)	Cost of Private Property Acquisition (\$ per sq. ft.)	Recommended RTS ROW Acquisition	Total Cost of ROW Acquisition
MD 355 North	Redgrave Pl	Little Seneca Creek	Mixed Traffic	120	120		336499.46	0.00	0.00	0.00	0.00	336499.46	\$1,706,672	\$	5.07	\$ 1,706,672
MD 355 North	Shakespeare Blvd	Shakespeare Blvd	Mixed Traffic	250	250		1061961.18	0.00	0.00	0.00	0.00	1061961.18	\$3,200,868	\$	3.01	\$ 3,200,868.11
Seneca Meadows Parkw Corridor Cites Transitway	Observation Drive	Observation Drive	Two-Lane Median	130	130		2359.64	0.00	0.00	0.00	0.00	2359.64	\$15,708	\$	6.66	\$ 15,707.69
Shakespeare Drive	MD 355	MD 355	Two-Lane Median	100	123	24711.86	15424.44	0.00	34080.00	0.00	0.00	49504.44	\$114,909	\$	7.44	\$ 368,475.88
MD 355	Shakespeare Boulevard	Game Preserve Road	Two-Lane Median	250	250		1310049.78	61200.00	34080.00	0.00	0.00	1405329.78	\$13,957,483	\$	10.65	\$ 14,972,611.74
MD 355	Game Preserve Road	Just south of O'Neil Drive	Two-Lane Median (Gaithersburg)	150	150		503546.27	122400.00	153360.00	0.00	0.00	779306.27	\$5,786,090	\$	11.49	\$ 8,954,699.12
MD 355	Just south of O'Neil Drive	1250 ft south of Shady Grove Road	Two-Lane Median	150	150		15714.97	20400.00	0.00	0.00	0.00	36114.97	\$213,881	\$	13.61	\$ 491,524.85
MD 355	1250 ft south of Shady Grove Road	Ridgmont Avenue	Two-Lane Median (Rockville)	150	150		8995.12	0.00	17040.00	0.00	0.00	26005.12	\$2,671	\$	0.30	\$ 7,747.92
MD 355	Ridgmont Avenue	Indanola Road	Two-Lane Median	120	123	2610.47	24701.88	20400.00	34080.00	0.00	0.00	79181.88	\$210,120	\$	8.51	\$ 673,559.11
MD 355	Indanola Road	1000 ft south of Indanola Road	Two-Lane Median	120	137	14620.32	15000.48	0.00	0.00	0.00	0.00	15000.48	\$765,573	\$	13.84	\$ 1,386,618.86
MD 355	1000 ft south of Indanola Road	270 ft north of North Campus Drive	Two-Lane Median (Rockville)	150	150		1774.85	20400.00	34080.00	0.00	0.00	32768.85	\$495,343	\$	11.40	\$ 6,849,618.24
MD 355	270 ft north of North Campus Drive	Church Street	Two-Lane Median	150	150		261465.083	20400.00	119360.00	0.00	0.00	397221.189	\$6,499,173	\$	17.29	\$ 6,823,982.34
MD 355	270 ft north of North Campus Drive	Church Street	Two-Lane Median (Rockville)	150	150		255040.1083	20400.00	119360.00	0.00	0.00	394720.11	\$6,258,544	\$	17.29	\$ 6,823,982.34
Total						42,142.65	3,616,411.89	265,200.00	426,000.00	0.00	0.00	4,307,611.89	\$30,390,534	\$		\$ 38,810,024.08

* diff b/w 123/150

*diff 1hw 123/150

Property located in City of Rockville or City of Gaithersburg Jurisdictions

Typical Median Station Platform Land Acquisition Area: 20,400 s.f.
Typical Signalized Left Turn Land Acquisition Area: 17,040 s.f.
Typical Queue Jump Lane Land Acquisition Area: 13,500 s.f.

Note: * Total Required ROW Acquisition values use the difference between the Existing available ROW (as measured using County parcel data) and the Planning Board Draft Recommended ROW as the basis for determining the amount of land needed.

ROW Calculations

CORRIDOR: MD 355 South

Road	Segment Start	Segment End	Guideway Treatment	Existing RMP (ft)	CTCFMP ROW (ft)	Approved Master Plan vs. Recommended CTCFMP ROW (sq ft)	Existing ROW vs. Recommended CTCFMP ROW (sq ft)	Intersection ROW Acquisition: Median Station Platforms (sq ft)	Intersection ROW Acquisition: Signalized Left Turn Lanes (sq ft)	Intersection ROW Acquisition: Queue Jump Lanes (sq ft)	Total Required ROW Acquisition (sq ft) *	RTS ROW Acquisition per Database Analysis	Cost of Private Property (\$ per sq. ft.)	Recommended RTS ROW Acquisition	Total Cost of
MD 355	Church Street	Holpine Road	Two-Lane Median (Rockville)	150	150	25,095.70	25,095.70	204,00.00	85,200.00	0.00	358,996.70	\$6,078,550	24.02	\$	8,634,715
MD 355	Halpine Road	Twinbrook Parkway	Two-Lane Median (Rockville)	150	150	25,813.64	25,813.64	204,00.00	1,704,00.00	0.00	632,533.64	\$843,310	32.68	\$	2,066,932.73
MD 355	250 ft south of Twinbrook Parkway	250 ft south of Twinbrook Parkway	Two-Lane Median	150	150	10,691.86	10,691.86	0.00	0.00	0.00	10,691.86	\$176,156	16.48	\$	176,156.40
MD 355	250 ft south of Twinbrook Parkway	Bou Avenue	Two-Lane Median	134	162	18,793.52	32,728.50	0.00	34,080.00	0.00	66,804.50	\$397,256	12.37	\$	834,693.61
MD 355	250 ft south of Hoya St	250 ft south of Hoya St	Two-Lane Median	150	150	5,143.55	5,143.55	204,00.00	0.00	0.00	6,690.50	\$107,800	7.73	\$	943,149.09
MD 355	200 ft south of Hoya St	Edson Lane	Two-Lane Median	150	162	0.00	0.00	408,00.00	68,160.00	0.00	108,860.00	\$1,551,422	-	\$	-
MD 355	Hillery Way	Hillery Way	Two-Lane Median	150	162	0.00	0.00	0.00	0.00	0.00	0.00	\$0	-	\$	-
MD 355	600 ft north of Tuckerman Lane (north)	600 ft north of Tuckerman Lane (south)	Two-Lane Median	150	150	46,057.86	46,057.86	204,00.00	1,704,00.00	0.00	63,097.86	\$565,553	12.28	\$	774,789.98
MD 355	Tuckerman Lane (south)	Tuckerman Lane (south)	Two-Lane Median	150	150	90,433.64	90,433.64	204,00.00	34,080.00	0.00	144,723.64	\$376,878	4.18	\$	604,399.19
MD 355	Grosvonor Lane	Grosvonor Lane	Two-Lane Median	150	150	5,288.41	5,288.41	0.00	17,040.00	0.00	22,328.41	\$304,401	58.57	\$	1,302,589.66
MD 355	1-495	1-495	Two-Lane Median	150	150	3,228.41	3,228.41	0.00	0.00	0.00	3,228.41	\$4,608	10.50	\$	33,816.68
MD 355	Cedar Lane	Woodmont Avenue	Two-Lane Median	120	120	2,107.63	2,107.63	408,00.00	34,080.00	0.00	95,956.13	\$211,599	10.50	\$	1,007,539.30
MD 355	Woodmont Avenue	Chestnut Street	Two-Lane Median	120	123	14,743.25	8,952.78	408,00.00	68,160.00	0.00	178,92.78	\$950,203	10.50	\$	1,889,034.32
MD 355	Chestnut Street	Bradley Boulevard	Two-Lane Median	120	122	1,737.04	1,737.04	0.00	0.00	0.00	1,737.05	\$60,878	36.20	\$	62,878.14
MD 355	Bradley Boulevard	Bradley Boulevard	Two-Lane Median	120	122	9,548.89	9,548.89	612,00.00	112,800.00	0.00	309,121.78	\$11,860,990	92.20	\$	28,501,551.15
MD 355	Drummond Avenue	Drummond Avenue	Two-Lane Median	120	120	44,017.25	44,017.25	0.00	0.00	0.00	44,017.25	\$1,256,887	23.46	\$	1,256,887.01
MD 355	Drummond Avenue	Oliver Street	Two-Lane Median	120	120	5,120.67	5,120.67	0.00	0.00	0.00	5,120.67	\$1,256,887	23.46	\$	1,256,887.01
MD 355	Oliver Street	Oliver Street	Two-Lane Median	120	120	1,162.25	1,162.25	0.00	0.00	0.00	1,162.25	\$775,845	66.73	\$	775,845.24
MD 355	Somersset Terrace	Somersset Terrace	Two-Lane Median	120	122	9,793.85	9,793.85	0.00	0.00	0.00	9,793.85	\$662,960	25.27	\$	662,959.60
MD 355	Western Avenue	Western Avenue	Two-Lane Median	120	122	26,231.29	26,231.29	0.00	0.00	0.00	26,231.29	\$662,960	25.27	\$	662,959.60
Total						50,648.62	865,241.37	244,300.00	494,160.00	0.00	1,604,201.37	\$26,305,737			48,893,935.61

Property located in City of Rockville or City of Gaithersburg jurisdictions

ROW differences are not reported because due to planned ROW dedication by White Flint redevelopment

Typical Median Station Platform Land Acquisition Area:

Typical Signalized Left Turn Land Acquisition Area:

Typical Queue Jump Lane Land Acquisition Area:

Note: * Total Required ROW Acquisition values use the difference between the existing available ROW (as measured using County parcel data) and the Planning Board Draft Recommended ROW as the basis for determining the amount of land needed.

** THE ELIZABETH CODM*

ROW Calculations

CORRIDOR: New Hampshire Avenue

Road	Segment Start	Segment End	Guideway Treatment	Existing FMP (ft)	CTCFMP ROW (ft)	Approved Master Plan vs. Recommended CTCFMP ROW (sq ft)	Existing ROW vs. Recommended CTCFMP ROW (sq ft)	Intersection ROW Acquisition: Median Station Platforms (sq ft)	Intersection ROW Acquisition: Signalized Left Turn Lanes (sq ft)	Intersection ROW Acquisition: Queue Jump Lanes (sq ft)	Total Required ROW Acquisition (sq ft) *	Total Cost of Recommended ROW Acquisition per Database Analysis	Cost of Private Property (\$ per sq. ft.)	Recommended ROW Acquisition	Total Cost of ROW Acquisition	
New Hampshire Avenue	Coleville Park & Ride	Randolph Road	Mixed Traffic	120	120		1879.76	0.00	0.00	0.00	1879.76	\$50,174	\$	26.69	\$	50,174
New Hampshire Avenue	Lockwood Drive	Lockwood Drive	Mixed Traffic	120	120		79026.01	0.00	0.00	0.00	79026.01	\$737,619	\$	9.33	\$	737,618.97
New Hampshire Avenue	Lockwood Drive	Lockwood Drive	Reversible One-Lane Median	120	130	27107.51	28827.20	40800.00	34080.00	0.00	10707.20	\$160,112	\$	5.55	\$	576,009.26
New Hampshire Avenue	Oaklawn Dr	Powder Mill Rd	Reversible One-Lane Median	120	130	13146.70	15627.33	20400.00	0.00	0.00	36027.33	\$239,320	\$	15.35	\$	593,112.25
New Hampshire Avenue	Powder Mill Rd	Powder Mill Rd	Reversible One-Lane Median	120	130	2135.68	461.82	0.00	17040.00	0.00	17501.82	\$6,927	\$	15.00	\$	262,524.51
New Hampshire Avenue	I-495	Northampton Drive	Reversible One-Lane Median	150	150	70534.82	40800.00	0.00	17040.00	0.00	22837.82	\$1,130,323	\$	16.03	\$	2,057,211.89
New Hampshire Ave	Northampton Drive	University Boulevard	Reversible One-Lane Median (PG County)	150	150		0	20400.00	10240.00	0.00	12640.00	\$	\$	-	\$	-
New Hampshire Avenue	University Boulevard	East-West Highway	Two-Lane Median	150	150	117,755.4	20400.00	0.00	10240.00	0.00	238846.54	\$3,017,522	\$	25.75	\$	6,174,931.21
New Hampshire Avenue	East-West Highway	DC Line	Two-Lane Median (McGo / PG)	150	150	27,792.94	386,356.42	0.00	5113.00	0.00	12919.94	\$1,700,443	\$	23.36	\$	2,894,613.54
Total						42,389.90	386,356.42	142,800.00	323,760.00	0.00	852,916.42	\$7,043,045	\$		\$	13,306,195.62

Segment located in Prince George's County (no parcel data available)

Typical Median Station Platform Land Acquisition Area: 20,400 s.f.

Typical Signalized Left Turn Land Acquisition Area: 17,040 s.f.

Typical Queue Jump Lane Land Acquisition Area: 13,500 s.f.

Note: * Total Required ROW Acquisition values use the difference between the Existing available ROW (as measured using County parcel data) and the Planning Board Draft Recommended ROW as the basis for determining the amount of land needed.
** Note Found

ROW Calculations

Corridor: North Bethesda Transitway

Road	Segment Start	Segment End	Guideway Treatment	Existing FMP (ft)	CTCFMP ROW (ft)	Approved Master Plan vs. Recommended CTCFMP ROW (sq ft)	Existing ROW vs. Recommended CTCFMP ROW (sq ft)	Intersection ROW Acquisition: Median Station Platforms (sq ft)	Intersection ROW Acquisition: Signalized Left Turn Lanes (sq ft)	Intersection ROW Acquisition: Queue Jump Lanes (sq ft)	Total Required ROW Acquisition (sq ft) *	Total Cost of Recommended RTS ROW Acquisition per Database Analysis	Cost of Private Property (\$ per sq. ft.)	Total Cost of Recommended RTS ROW Acquisition
Old Georgetown Road	Rockville Pike	Executive Boulevard	Mixed Traffic	120	120		25,607.76	0.00	0.00	0.00	25,607.76	\$871,426	\$	\$71,426
Old Georgetown Road	Executive Boulevard	Nicholson Lane	Reversible One-Lane Median	150	150		50,628.95	0.00	34,080.00	0.00	84,708.95	\$522,633	\$	\$74,834.22
Old Georgetown Road	Nicholson Lane	Tuckerman Lane	Reversible One-Lane Median	120	126	15,830.81	78,055.45	20,400.00	17,040.00	0.00	115,495.45	\$434,189	\$	\$62,452.00
Old Georgetown Road	Tuckerman Lane	I-270	Reversible One-Lane Median	120	130	735.39	346.36	20,400.00	0.00	0.00	207,46.36	\$8,188	\$	\$40,444.99
Old Georgetown Road	I-270	Rock Spring Drive	Reversible One-Lane Median	120	126	926.91	0**	20,400.00	17,040.00	0.00	37,440.00		\$	\$69,145.60
Rock Spring Drive	Old Georgetown Road	Fernwood Road	Two-Lane Side Running	80***	80***		1,686.45	0.00	0.00	0.00	1,686.45		\$	\$23,116.96
Fernwood Road	Rock Spring Drive	Rockledge Drive	Two-Lane Side Running	80***	80***		4,192.41	0.00	0.00	0.00	4,192.41		\$	\$4,536.06
Westlake Terrace	Rockledge Drive	I-270	Two-Lane Side Running	80***	80***		102,24.97	0.00	0.00	0.00	102,24.97		\$	\$7,458.67
Total						17,493.11	**1,70,742.34	61,200.00	68,160.00	0.00	300,102.34	\$1,836,437	\$	\$3,840,194.50

**1 parcel in segment on corner of Old Georgetown Rd and Rock Spring Dr. Segment is counted in Fernwood-Old Georgetown segment only

Typical Median Station Platform Land Acquisition Area: 20,400 s.f.
Typical Signalized Left Turn Land Acquisition Area: 17,040 s.f.
Typical Queue Jump Lane Land Acquisition Area: 13,500 s.f.

Red Values are averages of nearest other segments
Blue values represent costs calculated by MCDOT and applied to re-sized land areas

Note: * Total Required ROW Acquisition values use the difference between the Existing available ROW (as measured using County parcel data) and the Planning Board Draft Recommended ROW as the basis for determining the amount of land needed.

*** Land areas for these segments were revised to reflect 80' ROW instead of 120' ROW after MCDOT provided land costs; VHB used MCDOT unit land costs and applied them to the revised land areas

ROW Calcaultions

Randolph Road

Road	Segment Start	Segment End	Guideway Treatment	Existing FMP (ft)	CTCFMP ROW (ft)	Approved Master Plan vs. Recommended CTCFMP ROW (sq ft)	Existing ROW vs. Recommended CTCFMP ROW (sq ft)	Intersection ROW Acquisition: Median Station Platforms (sq ft)	Intersection ROW Acquisition: Signalized Left Turn Lanes (sq ft)	Intersection ROW Acquisition: Queue Jump Lanes (sq ft)	Total Required ROW Acquisition (sq ft) *	Total Cost of Recommended RTS ROW Acquisition per Database Analysis	Cost of Private Property (\$ per sq. ft.)	Total Cost of Recommended RTS ROW Acquisition
Randolph Road	US 29	Paint Branch	Mixed Traffic	80	80		11105.37	0.00	0.00	0.00	11105.37	\$45,195	\$ 4.07	\$ 45,195
Randolph Road	Paint Branch	Fairland Road	Mixed Traffic	80	80		37971.70	0.00	0.00	0.00	37971.70	\$502,406	\$ 13.23	\$ 502,406.42
Randolph Road	Fairland Road	Glenallen Avenue	Mixed Traffic	120	120		48918.91	0.00	0.00	0.00	48918.91	\$344,466	\$ 7.04	\$ 344,465.95
Glenallen Avenue	Randolph Road	Layhill Road	Mixed Traffic	80	80		1575.97	0.00	0.00	0.00	1575.97	\$16,564	\$ 10.51	\$ 16,563.72
Glenallen Avenue	Layhill Road	Georgia Avenue	Mixed Traffic	90	90		27794.20	0.00	0.00	0.00	27794.20	\$626,259	\$ 22.53	\$ 626,259.18
Randolph Road	Georgia Avenue	Judson Road	Mixed Traffic	140	140		13535.12	0.00	0.00	0.00	13535.12	\$129,384	\$ 9.56	\$ 129,383.84
Randolph Road	Judson Road	Lindell Street	Mixed Traffic	120	120		51190.57	0.00	0.00	0.00	51190.57	\$961,424	\$ 18.78	\$ 961,423.85
Randolph Road	Lindell Street	Veirs Mill Road	Mixed Traffic	120	120		78907.62	0.00	0.00	0.00	78907.62	\$1,337,494	\$ 16.95	\$ 1,337,494.29
Randolph Road	Veirs Mill Road	Dewey Road	Mixed Traffic	120	120		27645.34	0.00	0.00	0.00	27645.34	\$465,475	\$ 16.84	\$ 465,475.26
Randolph Road	Dewey Road	Parklawn Drive	Mixed Traffic	100	100		23831.01	0.00	0.00	0.00	23831.01	\$174,588	\$ 7.33	\$ 174,587.57
Parklawn Drive	Nebel Street		Mixed Traffic	80	80		21037.57	0.00	0.00	0.00	21037.57	\$281,032	\$ 13.36	\$ 281,032.13
Nicholson Lane	Nebel Street	Rockville Pike	Mixed Traffic	90	90		248.63	0.00	0.00	0.00	248.63	\$6,997	\$ 28.14	\$ 6,997.40
Total						1,132.43	343,762.00	0.00	0.00	0.00	343,762.00	\$4,891,285		\$ 4,891,284.60

* these are parcel elements associated with 355, but closer to this section of Nicholson Lane, which is why they're associated here

Typical Median Station Platform Land Acquisition Area: 20,400 s.f.
Typical Signalized Left Turn Land Acquisition Area: 17,040 s.f.
Typical Queue Jump Lane Land Acquisition Area: 13,500.00 s.f.

Note: * Total Required ROW Acquisition values use the difference between the Existing available ROW (as measured using County parcel data) and the Planning Board Draft Recommended ROW as the basis for determining the amount of land needed.

ROW Calculations

CORRIDOR: University Boulevard

Road	Segment Start	Segment End	Guideway Treatment	Existing FMP (ft)	CTCFMP ROW (ft)	Approved Master Plan vs. Recommended CTCFMP ROW (sq ft)	Existing ROW vs. Recommended CTCFMP ROW (sq ft)	Intersection ROW Acquisition: Median Station Platforms (sq ft)	Intersection ROW Acquisition: Left Turn Lanes (sq ft)	Intersection ROW Acquisition: Queue Jump Lanes (sq ft)	Total Required ROW Acquisition (sq ft) *	Total Cost of Recommended RTS ROW Acquisition per Database Analysis	Cost of Private Property (\$ per sq. ft.)	Recommended RTS ROW Acquisition	Total Cost of
University Boulevard	Georgia Avenue	Amherst Avenue	Reversible One-Lane Median	120	129	5115.37	18379.15	20400.00	17040.00	0.00	55819.15	\$1,033,280	\$6.23	\$	\$ 3,139,165
University Boulevard	Amherst Avenue	Dayton Street	Reversible One-Lane Median	150	150		78116.22	0.00	17040.00	0.00	9316.22	\$1,035,763	\$1.26	\$	\$ 1,261,700.40
University Boulevard	Dayton Street	Eascrest Drive	Reversible One-Lane Median	120	124	981.38	8580.26	0.00	0.00	0.00	8580.26	\$196,104	\$2.06	\$	\$ 196,103.85
University Boulevard	Eascrest Drive	Lorain Ave	Reversible One-Lane Median	120	124	26281.77	147695.04	61200.00	51120.00	0.00	266019.04	\$1,374,953	\$13.37	\$	\$ 3,476,635.74
University Boulevard	Lorain Ave	US 29	Mixed Traffic	120	120		17866.08	0.00	0.00	0.00	37866.08	\$1,351,026	\$11.61	\$	\$ 1,195,026.48
University Boulevard	US 29	Priney Branch Road	Mixed Traffic	120	120		111516.56	0.00	0.00	0.00	111516.56	\$2,426,074	\$21.76	\$	\$ 2,426,073.94
University Boulevard	University Boulevard e/b	University Boulevard bl	Mixed Traffic	120	120		58572.77	0.00	0.00	0.00	58572.77	\$87,713	\$6.78	\$	\$ 87,712.62
University Boulevard	Priney Branch Road	Gilbert St	Mixed Traffic	130	163	0.00	0.00	0.00	0.00	0.00	0.00	\$314,843	-	\$	\$ -
University Boulevard	Gilbert St	Seek Ln	Mixed Traffic	130	150	0.00	0.00	0.00	0.00	0.00	0.00	\$219,871	-	\$	\$ -
University Boulevard	Seek Ln	Bayfield St	Mixed Traffic	130	141	0.00	0.00	0.00	0.00	0.00	0.00	\$87,270	-	\$	\$ -
University Boulevard	Bayfield St	Carroll Ave	Mixed Traffic	130	142	0.00	0.00	0.00	0.00	0.00	0.00	\$134,418	-	\$	\$ -
University Boulevard	Carroll Ave	New Hampshire Avenue	Mixed Traffic	120	120	0.00	0.00	0.00	0.00	0.00	0.00	\$	-	\$	\$ -
Total						32,378.51	461,370.08	81,600.00	85,200.00	0.00	628,170.08	\$9,607,314	\$	\$	12,685,618.03

Segment partially located in Prince George's County (no parcel data available)

ROW differences are not reported because Purple Line project to acquire all necessary ROW

Typical Median Station Platform Land Acquisition Area:

20,400

s.f.

Typical Signalized Left Turn Land Acquisition Area:

17,040

s.f.

Typical Queue Jump Lane Land Acquisition Area:

13,500

s.f.

Note: * Total Required ROW Acquisition values use the difference between the Existing available ROW (as measured using County parcel data) and the Planning Board Draft Recommended ROW as the basis for determining the amount of land needed.

ROW Calculations

US 29 (Columbia Pike/Colesville Road)

CORRIDOR:

Road	Segment Start	Segment End	Guideway Treatment	Existing FMP (ft)	CTCFMP ROW (ft)	Approved Master Plan vs. Recommended CTCFMP ROW (sq ft)	Existing ROW vs. Recommended CTCFMP ROW (sq ft)	Intersection ROW Acquisition: Median Station Platforms (sq ft)	Intersection ROW Acquisition: Signalized Left Turn Lanes (sq ft)	Intersection ROW Acquisition: Queue Jump Lanes (sq ft)	Total Required ROW Acquisition (sq ft) *	Total Cost of ROW Acquisition per Database Analysis	Cost of Private Property (\$ per sq. ft.)	Recommended RTS ROW Acquisition	Total Cost of ROW Acquisition
US 29	MD 198	Stewart Lane	Two-Lane Median	100	161	109548.84	14460.02	61200.00	102240.00	0.00	179900.02	\$11,748	\$ 0.81	\$	144,538
US 29	US 29	Lockwood Drive	Mixed Traffic	80	80		11923.48	0.00	0.00	0.00	11923.48	\$85,059	\$ 7.13	\$	85,058.99
US 29	US 29	New Hampshire Ave	Mixed Traffic	80	80		17665.16	0.00	0.00	0.00	17665.16	\$215,443	\$ 12.20	\$	215,443.07
US 29	US 29	Lockwood Drive	Mixed Traffic	80	80		32422.34	0.00	0.00	0.00	32422.34	\$436,478	\$ 13.46	\$	436,478.24
US 29	US 29	Southwood Avenue	Curb Lanes	120	122	5021.72	50796.89	0.00	0.00	0.00	50796.89	\$328,177	\$ 6.46	\$	328,176.94
US 29	US 29	University Boulevard (WB)	Mixed Traffic	120	120		27076.86	0.00	0.00	0.00	27076.86	\$588,367	\$ 31.70	\$	858,367.33
US 29	US 29	University Boulevard (EB)	Mixed Traffic	120	120		0**	0.00	0.00	0.00	0.00	***	\$ -	\$	-
US 29	US 29	I-495	Mixed Traffic	120	120		12071.40	0.00	0.00	0.00	12071.40	\$86,944	\$ 40.34	\$	486,943.87
US 29	US 29	Sligo Creek Parkway	Mixed Traffic	120	120		26292.18	0.00	0.00	0.00	26292.18	\$74,192	\$ 21.84	\$	574,191.97
US 29	US 29	Spring Street	Managed Lanes	120	120		73714.28	0.00	0.00	0.00	73714.28	\$2,025,800	\$ 27.48	\$	2,025,800.92
US 29	US 29	Fenton Street	Managed Lanes	120	120		10299.03	0.00	0.00	0.00	10299.03	\$472,403	\$ 45.87	\$	472,402.70
US 29	US 29	Georgia Avenue	Managed Lanes	100	100		5974.186284	0.00	0.00	0.00	5974.19	\$783,608	\$ 131.17	\$	783,607.55
US 29	US 29	East-West Highway	Curb Lanes	124	125		20204.21226	0.00	0.00	0.00	20204.21	\$393,458	\$ 19.47	\$	393,457.74
US 29	US 29	16th Street	Curb Lanes	125	125		17731.94829	0.00	0.00	0.00	17731.95	\$271,733	\$ 15.32	\$	271,732.80
Total						114,570.57	320,631.99	61,200.00	102,240.00	0.00	484,071.99	\$6,943,410	\$	\$	7,076,200.12

**2 parcels affected. Both have greater area associated with other segments, and are captured there.

A wide range of Existing Master Plan and Recommended ROW values are cited in Functional Master Plan. The lower values were used for this calculation.

Typical Median Station Platform Land Acquisition Area:

Typical Signalized Left Turn Land Acquisition Area:

Typical Queue Jump Lane Land Acquisition Area:

Note: * Total Required ROW Acquisition values use the difference between the Existing available ROW (as measured using County parcel data) and the Planning Board Draft Recommended ROW as the basis for determining the amount of land needed.

*** None Found

ROW Calculations

CORRIDOR: Veirs Mill Road															
Road	Segment Start	Segment End	Guideway Treatment	Existing FMP (ft)	CTCFMP ROW (ft)	Approved Master Plan vs. Recommended CTCFMP ROW (sq ft)	Existing ROW vs. Recommended CTCFMP ROW (sq ft)	Intersection ROW Station Platforms (sq ft)	Intersection ROW Acquisition: Signalized Left Turn Lanes (sq ft)	Intersection ROW Acquisition: Queue Jump Lanes (sq ft)	Total Required ROW Acquisition (sq ft) *	Total Cost of Recommended RTS ROW Acquisition per Database Analysis	Cost of Private Property (\$ per sq. ft.)	Recommended RTS ROW Acquisition	Total Cost of Recommended RTS ROW Acquisition
Veirs Mill Road	MD 355	Meadow Hall Drive	Bi-directional One-Lane Median (Rockville)	120	120		98776.41	40800.00	85200.00	0.00	224776.41	\$825,965	\$	8.36	\$ 1,879,572
Veirs Mill Road		Twimbrook Parkway	Bi-directional One-Lane Median	150	150		433.39	20400.00	0.00	0.00	20833.39	\$974	\$	2.25	\$ 46,815.14
Veirs Mill Road		Twimbrook Parkway	Bi-directional One-Lane Median	150	150		98713.12	0.00	0.00	0.00	98713.12	\$379,885	\$	3.85	\$ 379,884.59
Veirs Mill Road		Aspen Hill Road	Bi-directional One-Lane Median	150	150		187259.81	40800.00	17040.00	0.00	245099.81	\$1,685,110	\$	9.00	\$ 2,205,599.93
Veirs Mill Road		Parkland Drive	Bi-directional One-Lane Median	150	150		0.00	0.00	0.00	0.00	0.00	\$0	\$	-	\$ -
Veirs Mill Road		Turkey Branch	Bi-directional One-Lane Median	120	120		1093.88	0.00	17040.00	0.00	18133.88	\$13,812	\$	12.63	\$ 228,963.16
Veirs Mill Road		Gridley Road	Bi-directional One-Lane Median	120	120		0.00	20400.00	0.00	0.00	20400.00	\$	\$	38.10	\$ 777,273.50
Veirs Mill Road		Randolph Road	Bi-directional One-Lane Median	120	120		2145.21	0.00	0.00	0.00	2145.21	\$136,386	\$	63.58	\$ 136,385.79
Veirs Mill Road		Sampson Road	Bi-directional One-Lane Median	120	120		0.00	0.00	17040.00	0.00	17040.00	\$	\$	40.65	\$ 692,627.64
Veirs Mill Road		Ferrara Avenue	Bi-directional One-Lane Median	120	120		426.16	20400.00	0.00	0.00	20826.16	\$7,550	\$	17.72	\$ 368,983.36
Veirs Mill Road		Connecticut Avenue	Bi-directional One-Lane Median	120	120		2853.02	0.00	0.00	0.00	2853.02	\$35,093	\$	12.46	\$ 35,094.91
Veirs Mill Road		Gall Street	Bi-directional One-Lane Median	120	120		28669.92761	20400.00	17040.00	0.00	66109.93	\$518,751	\$	18.09	\$ 1,196,186.78
Veirs Mill Road		Newport Mill Road	Bi-directional One-Lane Median	120	120		13045.85042	0.00	0.00	0.00	13045.85	\$142,475	\$	10.92	\$ 142,474.45
Veirs Mill Road		Mersey Drive	Bi-directional One-Lane Median	120	120		6575.849744	0.00	0.00	0.00	6575.85	\$79,911	\$	20.61	\$ 136,971.72
Veirs Mill Road		Sherris Lane	Bi-directional One-Lane Median	120	120		2406.922903	0.00	0.00	0.00	2406.92	\$79,911	\$	30.71	\$ 78,910.52
Veirs Mill Road		Galt Avenue	Bi-directional One-Lane Median	120	129		4743.853712	20400.00	0.00	0.00	34681.49	\$673,613	\$	47.17	\$ 1,635,817.78
Veirs Mill Road		University Boulevard	Bi-directional One-Lane Median	120	129		3140.305919	1881.307547	17040.00	0.00	1881.31	\$127,648	\$	67.85	\$ 127,647.78
Veirs Mill Road		Emalls Avenue	Bi-directional One-Lane Median	120	129		10151.08321	0.00	0.00	0.00	5801.28	\$985,215	\$	24.05	\$ 1,394,966.97
Total						18,035.24	499,333.65	183,600.00	170,400.00	0.00	853,333.65	\$5,604,349	\$		\$ 11,457,037.02

Property located in City of Rockville Jurisdiction

Typical Median Station Platform Land Acquisition Area: 20,400 s.f.

Typical Signalized Left Turn Land Acquisition Area: 17,040 s.f.

Typical Queue Jump Lane Land Acquisition Area: 13,500 s.f.

Note: * Total Required ROW Acquisition values use the difference between the Existing available ROW (as measured using County parcel data) and the Planning Board Draft Recommended ROW as the basis for determining the amount of land needed.

** Land Assessment \$0

Red Values are averages of nearest other segments