

PRESENTATIONS OF PFM TO FINANCE WORKING GROUP



Montgomery County, Maryland

Transit Task Force

Finance Working Group Meeting

November 22, 2011

presented by

Scott Trommer and

Linda Ginty

Public Financial Management, Inc.

Objectives



- Review range of public private partnership (“P3”) structures typically utilized for transportation projects
 - Benefits
 - Considerations
- How NJ TRANSIT and Denver RTD identified P3 structures as the preferred solution for their recent rail projects
- Discuss components of a bond issuance for the RTV
- Define rating agency considerations for RTV debt secured by revenues derived from potential tax district(s)



P3 Project Delivery Options Are Varied

Infrastructure Development Models	Description
Traditional 100% Government Owned Model	<ul style="list-style-type: none"> ➤ Government owns asset; contracts design and permitting, and then separately bids construction. ➤ Government finances and operates. ➤ Government has all cost and operational risk.
Design – Build	<ul style="list-style-type: none"> ➤ Government owns asset; private sector designs and builds to meet public specifications often for a fixed price. ➤ Cost risk transferred to private sector; government finances and operates with associated risks.
Design – Build – Operate – Maintain	<ul style="list-style-type: none"> ➤ Government owns asset; private sector designs, builds and operates to meet public specifications. ➤ Cost and operational risk transferred to private sector. ➤ Government finances with associated risks.
Design – Build – Operate – Maintain – Finance	<ul style="list-style-type: none"> ➤ Government owns asset; grants private sector the right to develop asset and receive revenues generated. ➤ Performance standards and rates defined in concession agreement. ➤ Private sector takes cost and operational risk. ➤ Private sector finances.



Typical P3 Benefits

- **Fixed-price construction contracts** transfer the risk of construction cost overruns to the private sector
- **Design-build contracts** transfer design risks to the private sector
- **Combined DBOM contracts** transfer O&M risks to the private sector (whole-life costing)
- **Performance-based contracts** transfer performance risks to the private sector
- **“Concessions” (User Fees)** transfer market/volume risk to private sector
- **Competition** for projects invites private sector innovation
- **Alternative source of financing** if tax-exempt debt unavailable



P3 Considerations

- Need for balanced risk allocation between the public sector sponsor and private sector contractor
- Well marshaled procurement process with clearly defined roles and responsibilities
- Strong contractual and legal framework governing the terms of the P3 transaction—roles, responsibilities, compensation, performance measures, incentives, disincentives, dispute resolution, etc.
- Integrated project delivery where consolidation of a number of project responsibilities places the contractor in an entrepreneurial risk and reward position
- Leverage external incentives—namely Federal or State programs promoting alternative project delivery
- Financing—Highly rated, tax exempt debt provides the lowest cost of capital—P3 structures considered if tax-exempt options are unavailable or capacity constrained



P3 Case Studies

NJ TRANSIT Hudson Bergen LRT



- \$2.2 billion project encompassing 21 mile alignment with 24 stations
- Most segments opened between 2000 and 2006 with recent addition in 2011
- Serves North Jersey communities of Bayonne, Jersey City, Hoboken, Weehawken, Union City and North Bergen
- Implemented utilizing a DBOM contract with a 20 year term

Denver RTD Eagle Project



- \$2.7 billion 35 mile in commuter rail lines
- Connecting Denver Union Station with Denver International Airport, Wheat Ridge and Arvada
- Under construction with opening scheduled for 2017
- Implemented utilizing DBFO concession covering 34 years



NJ TRANSIT Hudson Bergen LRT

Challenges

- Initial need for private sector financing given cash flow constraints facing State's Transportation Trust Fund
- Extended project development time frame under traditional construction approach caused increasing concern for NJT management and elected officials
- NJT needed to ensure reliable funding to support operations

DBOM Solution

- Ability to secure New Starts funding eliminated the need for private financing
- Project financed with debt secured by FTA New Starts ,FTA formula grants and State Transportation Trust Fund
- Innovative project delivery was a factor in FTA support
- Operating contract with requirement for fixed annual payments provided a strong incentive for the State to appropriate funds
- Contract structure insulated NJT from capital and operating cost overruns
- Incentives/disincentives induce contractor performance
- FTA report estimates DBOM approach reduced construction period by 1-2 years
- Fare revenues/fare policy retained by NJT



Denver RTD Eagle Project

Challenges

- Increasing project costs and declining sales tax revenues posed risks for significant project delays
- Amount of debt RTD could issue was capped by voter authorized limits
- FTA funding uncertain given project potentially could not achieve cost effectiveness threshold

DBFO Solution

- FTA Penta P Program encouraged transit agencies to pursue P3 solutions
- Deducting private equity contribution from costs allowed RTD to receive a favorable FTA rating
- Financed from combination of RTD availability payments (derived from sales tax revenues) for pay-as-you-go funding and debt financing, FTA New Starts grants and private equity
- Fixed price contract protects RTD from cost overruns
- Competitive process facilitated bid that was \$300 million less than RTD estimates
- Availability payment structure to finance debt and operations within RTD projected cash flows—allowing for project feasibility
- Contract incentives/disincentives induce contractor performance
- Fare revenues/fare policy retained by RTD



Components of a Bond Issuance

- For large infrastructure projects such as the RTV, debt is issued to align project cash flow needs with resources to facilitate timely and cost effective implementation
- Funding the project's construction needs is of course the primary use of funds
- Other uses include
 - Debt service reserve fund—structured based on typical test of the lesser of 10% proceeds, 125% of average annual debt service or maximum annual debt services
 - Cost of issuance for

• Underwriter's Discount	• Underwriter's Counsel
• Financial Advisor	• Trustee
• Bond Counsel	• Printer

Hypothetical Sources and Uses of Funds



Sources:

Bond Proceeds:	
Par Amount	535,065,000.00
	535,065,000.00

Uses:

Project Fund Deposits:	
Project Fund	500,000,000.00
Other Fund Deposits:	
Debt Service Reserve Fund	32,091,111.00
Delivery Date Expenses:	
Cost of Issuance	2,971,322.96
Other Uses of Funds:	
Additional Proceeds	2,566.04
	535,065,000.00



Debt Structure Considerations

- Term of the debt cannot exceed the useful life of the assets being financed
- IRS requires for tax exempt bonds that the average weighted maturity of debt issued cannot exceed 120% of the weighted average life of the assets being financed
- Debt service payment structures
 - Semi annual interest payments
 - Annual principal payments
 - Level overall debt service payments
 - In the event there is a projected ramp-up in pledged revenues, may also consider
 - Capitalized interest period
 - Deferred principal payments



Security Structure

- Senior and Subordinated lien
- Pledged revenues - Special taxes
- Debt Service Reserve Fund – Funding Level
- Coverage levels

Rating Agency Considerations



- Breadth and stability of revenue stream
 - Diversity of taxpayers
 - Underlying economy
 - Value to debt ratios – high property value to debt ratio
 - The tax authorization must extend past or coincide with the maturity of the bonds
- Method of assessment collection – preferred to coincide with ad valorem tax collection

Rating Agency Considerations



- Bondholder protections in the bond indenture
 - Lien Status – must have first lien on the revenue
 - Additional bonds test – no additional bonds can be issued unless it can be shown that there is sufficient coverage
 - Debt service reserve funds – provides internal liquidity to mitigate leverage and revenue stream is volatile
- Debt service coverage trends and projections
- Sensitivity analysis demonstrating the impact on cash flows if the largest taxpayer drops out
- Self supporting structure means tax district debt should not counted as direct County debt—though may be considered as overlapping debt

Case Study:

Fairfax County, VA's Silver Line Transportation Improvement District



- Transportation Improvement District established to fund \$400 million Silver Line Costs
 - Encompasses Tysons Corner and Wiehle Avenue Corridor
 - Maximum authorized tax rate is \$0.40/\$100, currently set to \$0.22/\$100 on commercial and industrial properties
- District governed by five member Commission—4 from Fairfax County, 1 from Commonwealth Transportation Board
 - County collects TID tax revenues along with general property taxes
 - Key security features:
 - Gross pledge of tax revenues
 - 1.2x rate covenant
 - Projected coverage of 1.8x-2,4x
 - Debt Service Reserve Fund and Rate Stabilization Fund
 - Rated Aa2/AA/AA

Conclusions



- Public Private Partnerships
 - Provide an opportunity to accelerate project implementation with greater budget certainty
 - Requires a well structure framework that clearly defines public and private sector roles and responsibilities and risk sharing
 - Case study examples show NJT and RTD pursued P3 options to address timing and cash flow constraints and to take advantage of Federal funding opportunities
- Tax District debt structure considerations—credit determined by
 - Economic fundamentals of pledged revenues—breadth and stability
 - Protections offered to bond holders—gross pledge of revenues, rate covenant, additional bonds test, reserves and expected debt service coverage ratios



Montgomery County, Maryland

Transit Task Force

Finance Working Group Meeting

*Discussion on Operating Costs and
RTV Corridor Assessed Valuations*

January 10, 2012

presented by

Scott Trommer and

Linda Ginty

Public Financial Management, Inc.

Objectives



- Discuss methodology and results for
 - RTV operating costs—reflecting addition of route segments and phasing adopted by the Transit Task Force
 - Assessed property valuations by route and phase for properties
 - Within ¼ mile and ½ mile of a single RTV route
 - Within two or more RTV routes
- Seek feedback/concurrence on RTV operating cost and assessed valuation analyses



RTV Operating Costs Methodology

- Based on July 2011 PB Study and Transit Task Force Work Group D October 2011 memo
- PB Study defines operating costs based on service plans for initial 148.3 mile network encompassing 16 routes
- Building upon PB's recommendations, the Transit Task Force
 - Extended some routes
 - Added three new routes
 - Defined a three phase implementation plan for the network
 - Route miles increased by 14.2 miles for a total of 162.5 miles

RTV Operating Costs Methodology



- To derive an operating cost estimate for the network, the following steps were taken
 - Calculate the average annual operating costs on a route by route basis for the PB defined network
 - Identify the operating cost per route mile
 - Define the difference in route length between the PB network and the Transit Task Force network on a route by route basis
 - Assume recommended route extensions/modifications will have the same operating plan and cost profile as the PB network
 - Operating costs are defined based on operating cost per route mile x number of route miles
 - Conservative assumption given potential cost efficiencies associated with an expanded route network are not factored into the analysis
 - Operating costs for new routes based on a cost per mile factor for a comparable or connecting route

RTV Route Length Analysis



Route Number	Corridor	From	To	Estimated Route Length in Miles		
				Nov 2011 Task Force	July 2011 PB Report	Difference
Phase 1						
3	Vier Mill Road	Rockville	Wheaton Metro	6.7	6.7	0
4a	Georgia Ave North	Olney	Vier Mill Road	9.8	9.8	0
10b	Rockville Pike	Montgomery Village Ave	Bethesda Metro	12.1	8.8	3.3
14	Randolph Road	355 Rockville Pike	FDA Boulevard	12.5	5.5	7
19	Route 29/Colesville Rd	Burtonsville/198	Silver Spring Metro	10.7	13.5	-2.8
20	ICC	I-270	29/Colesville Road	22.9	22.9	0
SUBTOTAL PHASE 1				74.7	67.2	7.5
Phase 2						
5	Rockville Town Ctr-LSC	Route 28	Life Sciences Center	5.3	5.3	0
8	Connecticut Ave	Georgia Avenue	Rockville Pike/Med Ctr	7.6	9.5	-1.9
11	New Hampshire Ave	ICC	Fort Totten	10.1	8.8	1.3
12	Old Georgetown Rd	Montrose Pkwy	Wisconsin Ave/Bethesda Metro	5.8	6.9	-1.1
18	University Boulevard	Georgia Avenue	New Hampshire Ave	6.4	6.4	0
21	North Bethesda Transitway	Rockville Pike	Montgomery Mall	5.1	5.1	0
NEW	Route 28-ICC	Viers Mill Rd	ICC	5.5	0	5.5
SUBTOTAL PHASE 2				45.8	42	3.8
Phase 3						
4b	Georgia Avenue South	Viers Mill Rd	Silver Spring Transit Center	3.9	3.9	0
7	Lakeforest Mall/Muddy Branch	CCT	Gaithersburg	7.2	7.2	0
10a	Rockville Pike	Montgomery Village Ave	Clarksburg/CCT	14.9	14.6	0.3
23	Mid County Connector	Clarksburg/MD 27	ICC	13.4	13.4	0
NEW	Wisconsin Avenue	Bethesda Metro	Friendship Heights Metro	1.6	0	1.6
NEW	Northwest Connector	CCT	MD 355/Rockville Pike	1	0	1
SUBTOTAL PHASE 3				42.0	39.1	2.9
GRAND TOTAL ALL PHASES				162.5	148.3	14.2

RTV Route Length Based Operating Costs in 2010\$



Route Number	Corridor	From	To	PB Operating Costs \$ Mils		Task Force Adjusted O&M	
				Total	Per Route Length	Based on Route Length	Diff From PB Report
Phase 1							
3	Vier Mill Road	Rockville	Wheaton Metro	\$ 3.9	\$ 0.6	\$ 3.9	\$ -
4a	Georgia Ave North	Olney	Vier Mill Road	\$ 12.5	\$ 1.3	\$ 12.5	\$ -
10b	Rockville Pike	Montgomery Village Ave	Bethesda Metro	\$ 18.6	\$ 2.1	\$ 25.6	\$ 7.0
14	Randolph Road	355 Rockville Pike	FDA Boulevard	\$ 6.6	\$ 1.2	\$ 14.9	\$ 8.4
19	Route 29/Colesville Rd	Burtonsville/198	Silver Spring Metro	\$ 20.6	\$ 1.5	\$ 16.3	\$ (4.3)
20	ICC	I-270	29/Colesville Road	\$ 6.9	\$ 0.3	\$ 6.9	\$ -
SUBTOTAL PHASE 1				\$ 69.1		\$ 80.2	\$ 11.1
Phase 2							
5	Rockville Town Ctr-LSC	Route 28	Life Sciences Center	\$ 3.8	\$ 0.7	\$ 3.8	\$ -
8	Connecticut Ave	Georgia Avenue	Rockville Pike/Med Ctr	\$ 4.7	\$ 0.5	\$ 3.8	\$ (0.9)
11	New Hampshire Ave	ICC	Fort Totten	\$ 10.8	\$ 1.2	\$ 12.4	\$ 1.6
12	Old Georgetown Rd	Montrose Pkwy	Wisconsin Ave/Bethesda Metro	\$ 7.0	\$ 1.0	\$ 5.9	\$ (1.1)
18	University Boulevard	Georgia Avenue	New Hampshire Ave	\$ 8.9	\$ 1.4	\$ 8.9	\$ -
21	North Bethesda Transitway	Rockville Pike	Montgomery Mall	\$ 4.0	\$ 0.8	\$ 4.0	\$ -
NEW	Route 28-ICC	Viers Mill Rd	ICC	\$ -	\$ 1.2	\$ 6.8	\$ 6.8
SUBTOTAL PHASE 2				\$ 39.1		\$ 45.4	\$ 6.3
Phase 3							
4b	Georgia Avenue South	Viers Mill Rd	Silver Spring Transit Center	\$ 6.4	\$ 1.6	\$ 6.4	\$ -
7	Lakeforest Mall/Muddy Branch	CCT	Gaithersburg	\$ 4.4	\$ 0.6	\$ 4.4	\$ -
10a	Rockville Pike	Montgomery Village Ave	Clarksburg/CCT	\$ 38.0	\$ 2.6	\$ 38.8	\$ 0.8
23	Mid County Connector	Clarksburg/MD 27	ICC	\$ 8.6	\$ 0.6	\$ 8.6	\$ -
NEW	Wisconsin Avenue	Bethesda Metro	Friendship Heights Metro	\$ -	\$ 1.0	\$ 1.6	\$ 1.6
NEW	Northwest Connector	CCT	MD 355/Rockville Pike	\$ -	\$ 2.6	\$ 2.6	\$ 2.6
SUBTOTAL PHASE 3				\$ 57.4		\$ 62.4	\$ 5.0
GRAND TOTAL ALL PHASES				\$ 165.6		\$ 188.0	\$ 22.4

<< Based on Route 11 Costs

<< Based on Route 12 Costs

<< Based on Route 10a Costs



RTV Route Length Based Operating Costs



- Task Force recommended network represents an 11% increase in route miles compared to PB analysis
- Total annual operating costs are 14% higher than base PB operating costs—reflects extensions to routes with higher cost per route mile
 - Phase 1 and 2 operating costs are 16% higher
 - Phase 3 costs are 9% greater
- Approach defines a reasonably conservative order of magnitude operating cost estimate for planning purposes
- More refined operating costs can be defined at the time the Task Force and the County wish to proceed with the development of an operating plan for the recommended route network



RTV Route Assessed Valuations

- County assigned corresponding route number(s) to all properties within $\frac{1}{4}$ mile and $\frac{1}{2}$ mile of an RTV route
- Property numbers assigned bus routes compared with County database used for property tax billing to define taxable assessed valuation by RTV route and phase
- As part of the analysis
 - Corrected for properties that are reported more than once in County tax database
 - Eliminated properties not subject to property tax
 - Identified number of properties, assessed valuations and average valuation per property for those properties within
 - A single RTV route
 - More than one RTV route

RTV Route Assessed Valuations: 1/4 Mile Corridor



Phase 1

Route	County Assesment Value	# of Properties	Value per Property
3	1,025,106,256	3,242	316,196
4a	1,425,890,508	3,524	404,623
10b	2,613,681,782	2,153	1,213,972
14	1,851,293,810	4,399	420,844
19	2,035,194,706	4,564	445,923
20	1,956,698,484	4,114	475,619
Phase 1 Total	\$10,907,865,546	21,996	\$495,902

Phase 2

Route	County Assesment Value	# of Properties	Value per Property
5	2,475,287,747	3,323	744,896
8	2,335,668,050	4,589	508,971
11	1,501,578,959	3,577	419,787
12	1,712,436,256	2,633	650,375
18	1,440,718,452	4,219	341,483
21	577,576,108	931	620,383
Phase 2 Total	\$10,043,265,572	19,272	\$521,133

Phase 3

Route	County Assesment Value	# of Properties	Value per Property
4b	1,277,453,719	2,979	428,820
7	615,526,265	1,456	422,752
10a	2,689,052,749	5,366	501,128
23	2,084,475,972	6,763	308,218
Phase 3 Total	\$6,666,508,705	16,564	\$402,470

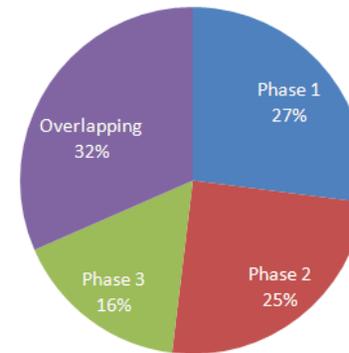
Overlapping Routes

	County Assesment Value	# of Properties	Value per Property
Overlapping Total	\$12,737,518,800	11,428	\$1,114,589

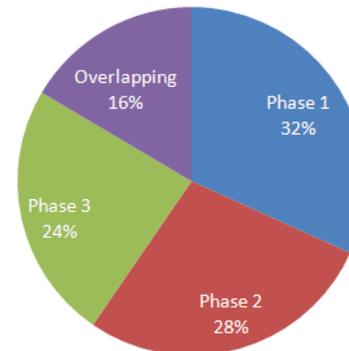
Total 1/4 Mile Corridor

	County Assesment Value	# of Properties	Value per Property
GRAND TOTAL	\$40,355,158,623	69,260	\$582,662

Assessed Valuation Distribution



Property Distribution



RTV Route Assessed Valuations: 1/2 Mile Corridor



Phase 1			
Route	County Assessment Value	# of Properties	Value per Property
3	1,063,068,413	3,219	330,248
4a	1,700,736,560	4,207	404,264
10b	1,980,409,659	2,151	920,693
14	1,760,450,777	4,591	383,457
19	2,169,345,420	5,453	397,826
20	2,928,202,992	6,292	465,385
Phase 1 Total	\$11,602,213,821	25,913	\$447,737

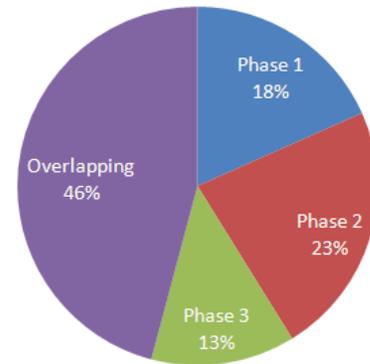
Phase 2			
Route	County Assessment Value	# of Properties	Value per Property
5	4,017,343,818	5,700	704,797
8	3,512,251,839	6,574	534,264
11	1,953,927,490	4,716	414,319
12	2,557,183,923	3,822	669,070
18	1,968,434,130	5,726	343,771
21	418,515,204	660	634,114
Phase 2 Total	\$14,427,656,404	27,198	\$530,468

Phase 3			
Route	County Assessment Value	# of Properties	Value per Property
4b	1,791,680,256	4,607	388,904
7	437,895,138	965	453,777
10a	3,368,713,570	7,102	474,333
23	2,614,636,067	8,181	319,599
Phase 3 Total	\$8,212,925,031	20,855	\$393,811

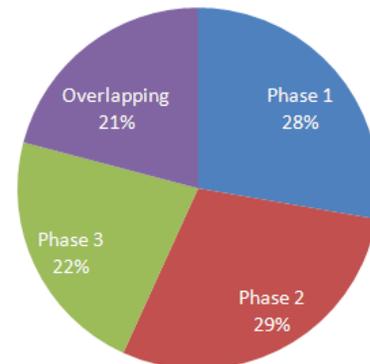
Overlapping Routes			
	County Assessment Value	# of Properties	Value per Property
Overlapping Total	\$29,000,587,561	44,453	\$652,388

Total 1/2 Mile Corridor			
	County Assessment Value	# of Properties	Value per Property
GRAND TOTAL	\$63,243,382,817	118,419	\$534,064

Assessed Valuation Distribution



Property Distribution





RTV Route Assessed Valuations Findings

- Total assessed valuations within the $\frac{1}{4}$ and $\frac{1}{2}$ mile corridors represent 25% and 39% of County taxable assessed valuations, respectively
- Properties within $\frac{1}{4}$ mile of the $\frac{1}{2}$ mile corridor represent 64% of assessed valuations
- On an assessed valuation per property basis—properties within the $\frac{1}{4}$ mile corridor have an assessed value 8% greater than the corridor encompassing $\frac{1}{2}$ mile
- For properties within a single RTV route—valuations are primarily within Phase 1 and Phase 2
- Properties within more the one route represent a significant share of valuations—32% for the $\frac{1}{4}$ mile and 46% for the $\frac{1}{2}$ mile



Follow-up Items

- Operating Costs—incorporate working group feedback
- RTV Route Assessed Valuations
 - Determine allocation methodology for properties within more than one corridor
 - Refine data/findings in concert with Finance
 - Confirm inclusion/treatment of Task Force recommended new routes in assessed valuation database
 - Begin effort to define revenue generating capacity of corridors by phase/route assuming
 - Alternative tax rates
 - Methodology to annually project assessed valuations

Quarter Mile

Phase 1

Route	County Assessment Value	# of Properties	Value per Property
3	1,025,106,256	3,242	316,196
4a	1,425,890,508	3,524	404,623
10b	2,613,681,782	2,153	1,213,972
14	1,851,293,810	4,399	420,844
19	2,035,194,706	4,564	445,923
20	1,956,698,484	4,114	475,619
Phase 1 Total	\$10,907,865,546	21,996	\$495,902

Phase 2

Route	County Assessment Value	# of Properties	Value per Property
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11	1,501,578,959	3,577	419,787
12	1,712,436,256	2,633	650,375
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Phase 3

Route	County Assessment Value	# of Properties	Value per Property
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10a	2,689,052,749	5,366	501,128
23	2,084,475,972	6,763	308,218
Phase 3 Total	\$6,666,508,705	16,564	\$402,470

Overlapping Routes

Route	County Assessment Value	# of Properties	Value per Property
10a,20,2	0	3	0
10a,10b,	348,083,442	257	1,354,410
10a,20	162,292,330	214	756,375
10a,23	55,325,550	129	428,880
10a,23,7	112,689,600	1	112,689,600
10a,5	61,543,524	84	732,661
10a,7	668,049,331	487	1,371,765
10b,12	1,972,142,004	578	3,412,010
10b,12,8	0	1	0
10b,14	543,008,700	97	5,598,028
10b,21	230,474,466	129	1,786,624
10b,3	34,263,791	116	296,378
10b,3,5	179,626,587	266	675,288
10b,8	190,675,261	239	797,804
11,1,4	208,616,624	436	478,478
11,18	166,829,608	328	508,627
11,19	446,924,300	302	1,479,882
11,20	71,453,062	187	382,102
12,21	1,974,498,368	720	2,742,359
14,19	134,237,247	95	1,413,024
14,3	167,057,284	514	325,014
14,3,8	61,900,220	190	325,791
14,4a	258,517,925	556	464,960
14,8	135,525,233	592	228,928
18,19	174,397,640	444	392,787
18,3,4a	481,044,433	506	950,681
18,4a	46,880,166	83	564,821
18,4b	9,964,200	34	293,065
19,20	367,221,004	374	981,874
19,4b	1,619,913,815	369	4,390,010
20,23	181,002,360	458	395,202
20,4a	65,901,854	98	672,468
20,4a,5	13,484,944	29	464,998
20,5	70,821,708	163	434,489
20,5,7	551,151,546	199	2,769,606
20,7	200,855,935	647	310,442
23,7	156,682,282	61	2,568,562
3,4a	8,987,300	37	242,900
3,5	58,995,257	192	307,267
3,8	118,662,437	542	218,934
4a,5	75,955,513	198	383,614
4a,8	351,861,949	473	743,894
Total	\$12,737,518,800	11,428	\$1,114,589

Grand Total	\$40,355,158,623	69,260	\$582,662
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Half Mile

Overlapping Routes

Phase 1				Phase 2				Phase 3			
Route	County Assessment Value	# of Properties	Value per Property	Route	County Assessment Value	# of Properties	Value per Property	Route	County Assessment Value	# of Properties	Value per Property
3	1,063,068,413	3,219	330,248	10a,10b,	891,057,544	1,315	677,610	4b	1,791,680,256	4,607	388,904
4a	1,700,736,560	4,207	404,264	10a,20	708,729,125	922	768,687	7	437,895,138	965	453,777
10b	1,980,409,659	2,151	920,693	10a,20,2	24,020,650	17	1,412,979	10a	3,368,713,570	7,102	474,333
14	1,760,450,777	4,591	383,457	10a,20,7	782,230	3	260,743	23	2,614,636,067	8,181	319,599
19	2,169,345,420	5,453	397,826	10a,23	1,173,976,178	2,849	412,066	Phase 3 Total	\$8,212,925,031	20,855	\$393,811
20	2,928,202,992	6,292	465,385	10a,23,7	358,058,420	169	2,118,689				
Phase 1 Total	\$11,602,213,821	25,913	\$447,737	10a,5	124,474,905	276	450,996				
				10a,7	934,765,525	1,092	856,012				
				10b,12	3,121,886,131	1,811	1,723,847				
				10b,12,2	827,281	2	413,641				
				10b,12,8	704,556,930	476	1,480,162				
				10b,14	1,722,513,361	625	2,756,021				
				10b,14,2	0	1	0				
				10b,14,3	0	1	0				
				10b,21	885,924,005	1,273	695,934				
				10b,3	199,844,055	641	311,769				
				10b,3,5	416,152,399	944	440,839				
				10b,5	1,490,107	4	372,527				
				10b,8	428,587,059	702	610,523				
				11,14	573,659,506	1,353	423,991				
				11,14,20	44,380,885	95	467,167				
				11,18	505,639,111	1,307	386,870				
				11,19	939,168,339	1,464	641,508				
				11,20	229,700,745	554	414,622				
				12,21	2,822,345,092	2,128	1,326,290				
				12,8	5,530,400	10	553,040				
				14,19	582,025,206	1,019	571,173				
				14,19,20	40,411,533	2	20,205,767				
				14,20	21,903,177	11	1,991,198				
				14,3	324,510,385	1,035	313,537				
				14,3,4a	234,900	1	234,900				
				14,3,8	486,889,550	1,971	247,027				
				14,4a	647,124,000	1,857	348,478				
				14,4a,8	35,291,789	149	236,858				
				14,8	159,646,531	650	245,610				
				18,19	917,364,616	2,539	361,309				
				18,3,4a	993,262,106	2,036	487,850				
				18,4a	82,607,500	266	310,555				
				18,4a,4b	343,900	1	343,900				
				18,4b	78,338,870	241	325,058				
				19,20	745,916,550	1,394	535,091				
				19,4b	2,493,269,593	1,529	1,630,654				
				20,23	621,070,355	1,598	388,655				
				20,4a	160,166,935	264	606,693				
				20,4a,5	117,117,862	270	433,770				
				20,5	110,509,257	346	319,391				
				20,5,7	1,073,483,664	590	1,819,464				
				20,7	516,051,045	1,451	355,652				
				23,7	368,954,427	1,151	320,551				
				3,4a	76,118,800	285	267,084				
				3,5	101,869,824	342	297,865				
				3,8	295,244,559	987	299,133				
				4a,5	189,112,819	239	791,267				
				4a,5,8	36,063,133	48	751,315				
				4a,8	907,614,692	2,147	422,736				
				Total	\$29,000,587,561	44,453	\$652,388				
				Grand Total	\$63,243,382,817	118,419	\$534,064				



Montgomery County, Maryland

Transit Task Force

Finance Working Group Meeting

*Discussion on Capital Costs,
VA Transportation Improvement Districts, and
Impact Taxes*

February 8, 2012

presented by

Scott Trommer and

Linda Ginty

Public Financial Management, Inc.

Objectives



- Discuss methodology and results for the annual distribution of RTV capital costs by phase
- Seek feedback/concurrence on capital cost distribution
- Present overview of
 - Virginia Transportation Improvement Districts
 - Montgomery County Impact Taxes



Capital Cost Inputs

- Traffic Group fixed facility costs for 17 route RTV network
- Kittelson and MTA fixed facility costs for CCT
- 350 vehicle fleet for all phases
- Other items include
 - Maintenance facility
 - Technology
 - Branding
 - Parking
 - Operations analysis
- Base Year Costs in 2011\$
- 3% annual inflation assumed for year of expenditure dollars

RTV Routes by Phase



Phase	Route
1	<ul style="list-style-type: none"> • 3 Viers Mill Road • 4a Georgia Avenue North • 10b MD 355 South/Rockville Pike • 14 Randolph Road • 19 Route 29 • CCT Phase 1
2	<ul style="list-style-type: none"> • 5 Key West Avenue-Life Sciences Center-Rockville Metro • 8 MD 185/Connecticut Avenue • 11 MD 650/New Hampshire Avenue • 12 MD 187/Old Georgetown Road • 21 North Bethesda Transitway • New MD 28/Norbeck Road • CCT Phase 2
3	<ul style="list-style-type: none"> • 4b Georgia Avenue South • 7 Muddy Branch-Lakeforest Mall • 10a MD 355 North/Rockville Pike • New MD 355 South/Wisconsin Avenue • New Sam Eig Highway

Conceptual Implementation Schedule



Fiscal Year	Activity
2012	<ul style="list-style-type: none"> • Task Force reports to County Executive • County Executive makes recommendation to Council
2013	<ul style="list-style-type: none"> • Council acts on CIP proposal • Planning Board presents draft Functional Plan to County Council • Council acts on Functional Plan • Council creates special taxing districts • Enabling legislation presented to County delegations
2014	<ul style="list-style-type: none"> • Legislation presented to County delegations to include transit maintenance and operations expenses under SB 828 and allow differential tax rates • Legislation enacted • Special taxing district collections begin • Negotiation with State on right of way and funding contributions • Phase 1 engineering and design begins • Technology and parking construction begins
2015	<ul style="list-style-type: none"> • Phase 1 design/engineering ends • Phase 1 construction begins • Phase 2 design/engineering begins • Technology and parking construction continues • Maintenance facility construction begins

Conceptual Implementation Schedule



Fiscal Year	Activity
2016	<ul style="list-style-type: none"> • Phase 1 construction continues • Phase 1 vehicle acquisition and branding begins • Phase 2 construction begins • Technology and parking construction continues • Maintenance facility construction continues
2017	<ul style="list-style-type: none"> • Phase 1 construction completed • Phase 1 vehicle acquisition and branding completed • Phase 1 service begins • Phase 2 construction continues • Phase 2 vehicle acquisition and branding begins • Technology continues • Maintenance facility and parking construction completed
2018	<ul style="list-style-type: none"> • Phase 2 construction completed • Phase 2 vehicle acquisition and branding completed • Phase 2 service begins • Phase 3 engineering and design begins • Technology continues

Conceptual Implementation Schedule



Fiscal Year	Activity
2019	<ul style="list-style-type: none">• Phase 3 construction continues• Phase 3 vehicle acquisition and branding begins• Technology completed
2020	<ul style="list-style-type: none">• Phase 3 construction completed• Phase 3 vehicle acquisition and branding completed• Phase 3 service begins

Conceptual Construction Spending Schedule



Phasing of Capital Costs													
	Start Date	End Date	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
Phase 1													
Route Cap Costs	2014	2017	0%	0%	3%	17%	50%	30%	0%	0%	0%	0%	100%
Vehicles	2016	2017	0%	0%	0%	0%	50%	50%	0%	0%	0%	0%	100%
Branding	2016	2017	0%	0%	0%	0%	65%	35%	0%	0%	0%	0%	100%
Phase 2													
Route Cap Costs	2015	2018	0%	0%	0%	3%	17%	50%	30%	0%	0%	0%	100%
Vehicles	2017	2018	0%	0%	0%	0%	0%	50%	50%	0%	0%	0%	100%
Branding	2017	2018	0%	0%	0%	0%	0%	65%	35%	0%	0%	0%	100%
Phase 3													
Route Cap Costs	2018	2020	0%	0%	0%	0%	0%	0%	17%	50%	33%	0%	100%
Vehicles	2019	2020	0%	0%	0%	0%	0%	0%	0%	50%	50%	0%	100%
Branding	2019	2020	0%	0%	0%	0%	0%	0%	0%	65%	35%	0%	100%
Technology Costs	2014	2019	0%	0%	17%	17%	17%	17%	17%	17%	0%	0%	100%
Maintenance Facilities	2015	2017	0%	0%	0%	33%	33%	33%	0%	0%	0%	0%	100%
Parking Facilities	2014	2017	0%	0%	17%	33%	33%	17%	0%	0%	0%	0%	100%

Total Capital Costs in Base Year and Year of Expenditure Dollars



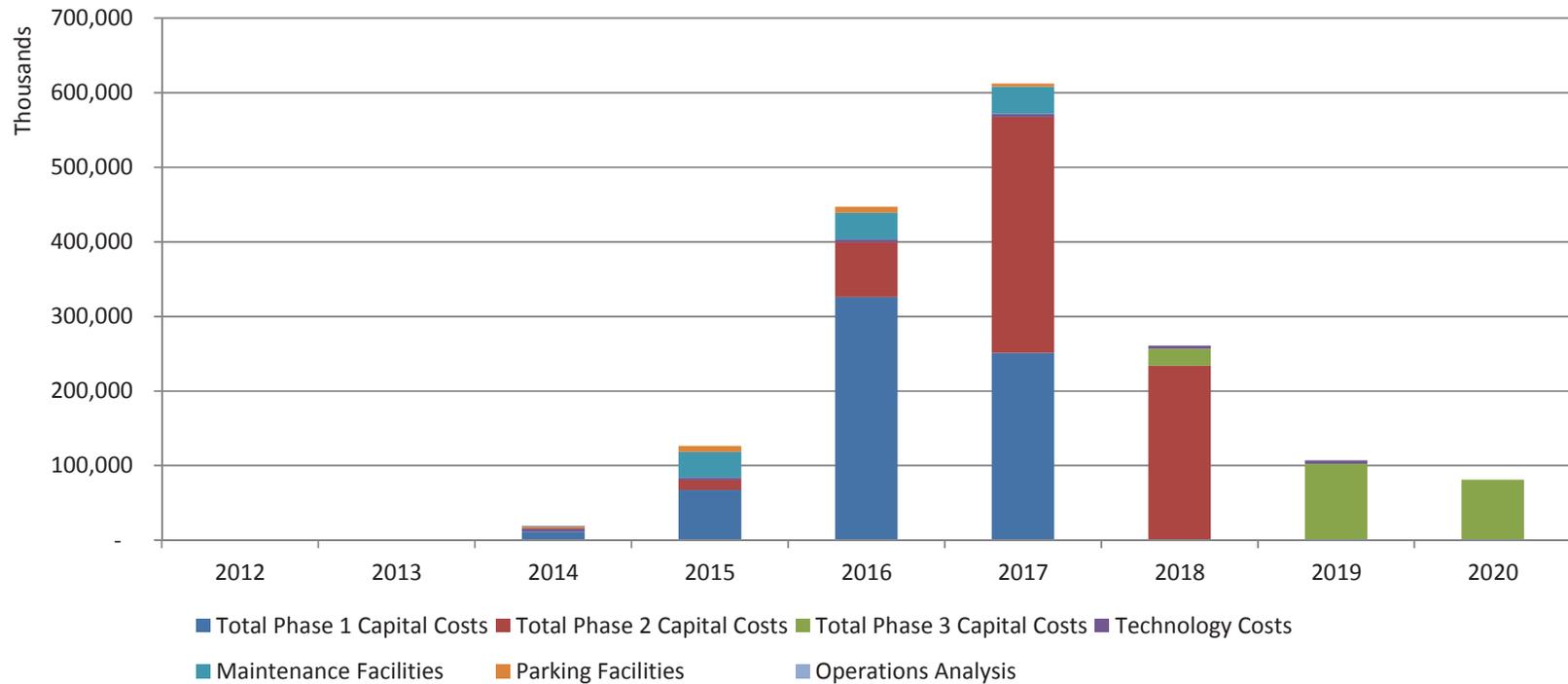
RTV Capital Costs, \$000's

	Base Year \$	Year of Expenditure \$	Cost Distribution
Route Capital Costs	\$886,829	\$996,421	60%
Branding	\$3,000	\$3,448	0%
RTV Vehicles	\$440,000	\$499,158	30%
Technology Costs	\$22,000	\$24,429	1%
Maintenance Facilities	\$97,000	\$106,025	6%
Parking Facilities	\$22,500	\$24,235	1%
Operations Analysis	\$200	\$206	0%
Total	\$1,471,529	\$1,653,923	100%

Annual RTV Capital Costs



**Annual RTV Capital Costs
in Year of Expenditure Dollars**



Virginia Transportation Improvement Districts



- Established by majority vote of property owners and local government ordinance
- Tax levied on commercial and industrial properties
- Separate impact fee/tax may be levied
- District administered by Commission that establishes tax rate and approves projects
- Local government, through contract with Commission, collects tax and determines valuation
- Northern Virginia has established two districts
 - Western Fairfax County/Eastern Loudon County for Route 28 improvements
 - Tysons Corner, Reston and Herndon for Metro Silver Line

Silver Line Transportation District



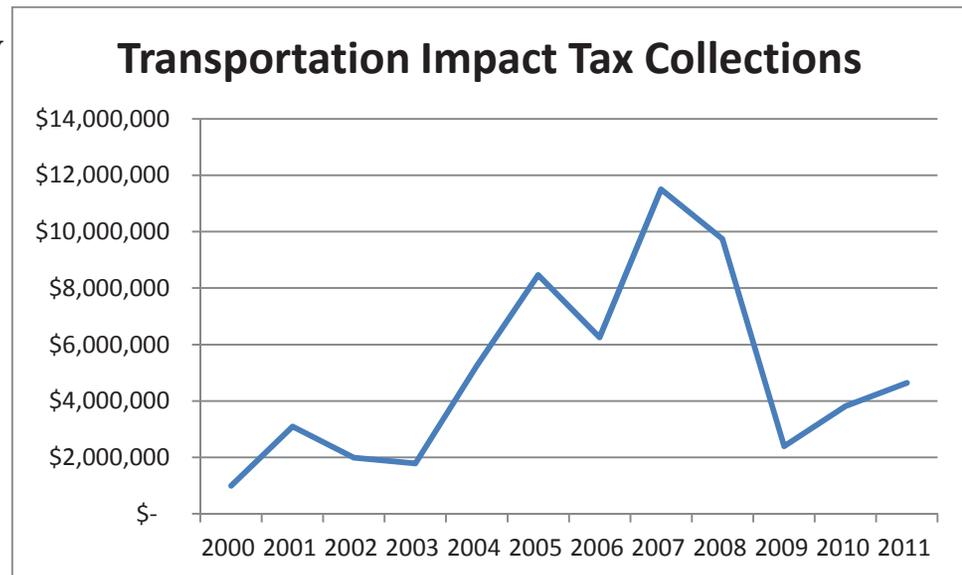
- Encompasses commercial and industrial properties in Tysons Corner and Reston/Herndon located along the Dulles Toll Road
- \$10.1 billion assessed valuation
- Rated 'Aa2'/'AA'/'AA'
- Authorized tax rate of \$0.40/\$100 on commercial and industrial properties
- Initial tax rate of \$0.22/\$100
- \$206 million issued; total funding commitment of \$400 million
- Bonds secured by District revenues, no back-up pledge from the County
- Additional security provided by a debt service reserve fund and revenue stabilization fund

Tax	Rate
Base Rate Countywide	\$1.07/\$100
Commercial and Industrial Transportation Tax Countywide	\$0.11/\$100
Silver Line District	\$0.22/\$100
Total within District	\$1.40/\$100

Development Impact Tax



- Set by Council and assessed on new residential and commercial buildings and additions to commercial buildings in the county
- Funds, in part, the improvements necessary to increase transportation or public school systems capacity
- The Department of Permitting Services collects Development Impact taxes
- Taxes must be paid before a building permit is issued
- Revenue collections are highly cyclical and dependent upon annual development activity





Follow-up Items

- Incorporate Working Group feedback on RTV cost phasing and spending schedule
- Develop capital cost funding and financing options based on
 - RTV phasing and implementation plan
 - Assessed valuations based on ½ mile districts
 - County projections for county-wide annual assessed valuations through Fiscal 2018 plus a conservative growth rate thereafter
 - Alternative tax rates
 - Options for pay-go and debt financing

Montgomery County RTV
Detailed Route Capital Costs

Base Year \$\$

Phase I

Route 3	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	233,363	1,322,388	3,889,375
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	93,975	532,525	1,566,250
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	178,539	1,011,723	2,975,656
50 SYSTEMS	-	-	254,363	1,441,388	4,239,375
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	2,892	16,386	48,195
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	763,131	4,324,409	12,718,851

Route 4a	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	341,670	1,936,130	5,694,500
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	107,704	610,321	1,795,063
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	183,971	1,042,500	3,066,175
50 SYSTEMS	-	-	702,356	3,980,015	11,705,925
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	3,470	19,664	57,834
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	1,339,170	7,588,629	22,319,497

Route 10b	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	591,675	3,352,825	9,861,250
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	297,386	1,685,189	4,956,438
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	2,517,149	14,263,846	41,952,488
50 SYSTEMS	-	-	407,584	2,309,641	6,793,063
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	231,336	1,310,904	3,855,600
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	4,045,130	22,922,405	67,418,838

Route 14	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	467,775	2,650,725	7,796,250
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	149,468	846,983	2,491,125
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	345,104	1,955,587	5,751,725
50 SYSTEMS	-	-	523,688	2,967,563	8,728,125
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	1,486,034	8,420,857	24,767,225

Montgomery County RTV
Detailed Route Capital Costs

Base Year \$\$

Phase I

Route 3	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	2,333,625	-	-	-	7,778,750
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	939,750	-	-	-	3,132,500
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	1,785,394	-	-	-	5,951,313
50 SYSTEMS	2,543,625	-	-	-	8,478,750
60 ROW, LAND, EXISTING IMPROVEMENTS	28,917	-	-	-	96,390
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	7,631,311	-	-	-	25,437,703

Route 4a	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	3,416,700	-	-	-	11,389,000
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	1,077,038	-	-	-	3,590,125
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	1,839,705	-	-	-	6,132,350
50 SYSTEMS	7,023,555	-	-	-	23,411,850
60 ROW, LAND, EXISTING IMPROVEMENTS	34,700	-	-	-	115,668
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	13,391,698	-	-	-	44,638,993

Route 10b	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	5,916,750	-	-	-	19,722,500
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	2,973,863	-	-	-	9,912,875
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	25,171,493	-	-	-	83,904,975
50 SYSTEMS	4,075,838	-	-	-	13,586,125
60 ROW, LAND, EXISTING IMPROVEMENTS	2,313,360	-	-	-	7,711,200
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	40,451,303	-	-	-	134,837,675

Route 14	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	4,677,750	-	-	-	15,592,500
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	1,494,675	-	-	-	4,982,250
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	3,451,035	-	-	-	11,503,450
50 SYSTEMS	5,236,875	-	-	-	17,456,250
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	14,860,335	-	-	-	49,534,450

Montgomery County RTV
Detailed Route Capital Costs

Base Year \$\$

Phase I

Route 19	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	506,126	2,868,049	8,435,438
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	252,656	1,431,719	4,210,938
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	376,338	2,132,584	6,272,306
50 SYSTEMS	-	-	461,428	2,614,757	7,690,463
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	2,100	11,900	35,000
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	1,598,649	9,059,009	26,644,144

CCT Phase 1	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	1,020,000	5,780,000	17,000,000
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	180,000	1,020,000	3,000,000
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	96,000	544,000	1,600,000
40 SITEWORK & SPECIAL CONDITIONS	-	-	225,390	1,277,210	3,756,500
50 SYSTEMS	-	-	114,420	648,380	1,907,000
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	30,000	170,000	500,000
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	275,598	1,561,723	4,593,304
90 UNALLOCATED CONTINGENCY	-	-	84,470	478,664	1,407,836
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	2,025,878	11,479,978	33,764,640

Phase 1 Summary by Category	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	3,160,609	17,910,116	52,676,813
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	1,081,189	6,126,736	18,019,813
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	96,000	544,000	1,600,000
40 SITEWORK & SPECIAL CONDITIONS	-	-	3,826,491	21,683,449	63,774,850
50 SYSTEMS	-	-	2,463,837	13,961,743	41,063,950
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	269,798	1,528,854	4,496,629
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	275,598	1,561,723	4,593,304
90 UNALLOCATED CONTINGENCY	-	-	84,470	478,664	1,407,836
100 FINANCE CHARGES	-	-	-	-	-
Phase 1 Total	-	-	11,257,992	63,795,286	187,633,194

Montgomery County RTV
Detailed Route Capital Costs

Base Year \$\$

Phase I

Route 19	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	5,061,263	-	-	-	16,870,875
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	2,526,563	-	-	-	8,421,875
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	3,763,384	-	-	-	12,544,613
50 SYSTEMS	4,614,278	-	-	-	15,380,925
60 ROW, LAND, EXISTING IMPROVEMENTS	21,000	-	-	-	70,000
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	15,986,486	-	-	-	53,288,288

CCT Phase 1	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	10,200,000	-	-	-	34,000,000
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	1,800,000	-	-	-	6,000,000
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	960,000	-	-	-	3,200,000
40 SITEWORK & SPECIAL CONDITIONS	2,253,900	-	-	-	7,513,000
50 SYSTEMS	1,144,200	-	-	-	3,814,000
60 ROW, LAND, EXISTING IMPROVEMENTS	300,000	-	-	-	1,000,000
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	2,755,982	-	-	-	9,186,608
90 UNALLOCATED CONTINGENCY	844,702	-	-	-	2,815,672
100 FINANCE CHARGES	-	-	-	-	-
Route Total	20,258,784	-	-	-	67,529,280

Phase 1 Summary by Category	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	31,606,088	-	-	-	105,353,625
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	10,811,888	-	-	-	36,039,625
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	960,000	-	-	-	3,200,000
40 SITEWORK & SPECIAL CONDITIONS	38,264,910	-	-	-	127,549,700
50 SYSTEMS	24,638,370	-	-	-	82,127,900
60 ROW, LAND, EXISTING IMPROVEMENTS	2,697,977	-	-	-	8,993,258
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	2,755,982	-	-	-	9,186,608
90 UNALLOCATED CONTINGENCY	844,702	-	-	-	2,815,672
100 FINANCE CHARGES	-	-	-	-	-
Phase 1 Total	112,579,916	-	-	-	375,266,388

Montgomery County RTV
Detailed Route Capital Costs

Base Year \$\$

Phase 2

Route 8	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	260,925	1,478,575
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	115,815	656,285
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	175,387	993,858
50 SYSTEMS	-	-	-	276,058	1,564,329
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	3,470	19,664
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	831,655	4,712,711

Route 11	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	328,913	1,863,838
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	180,075	1,020,425
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	158,125	896,040
50 SYSTEMS	-	-	-	233,116	1,320,989
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	5,783	32,773
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	906,011	5,134,065

Route 12	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	244,650	1,386,350
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	150,203	851,148
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	129,675	734,825
50 SYSTEMS	-	-	-	254,363	1,441,388
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	4,627	26,218
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	783,517	4,439,928

Route 18	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	351,068	1,989,383
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	94,133	533,418
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	192,486	1,090,754
50 SYSTEMS	-	-	-	347,729	1,970,462
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	2,603	14,748
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	988,017	5,598,763

Montgomery County RTV
Detailed Route Capital Costs

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Phase 2

Route 8	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	4,348,750	2,609,250	-	-	8,697,500
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	1,930,250	1,158,150	-	-	3,860,500
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	2,923,113	1,753,868	-	-	5,846,225
50 SYSTEMS	4,600,969	2,760,581	-	-	9,201,938
60 ROW, LAND, EXISTING IMPROVEMENTS	57,834	34,700	-	-	115,668
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	13,860,915	8,316,549	-	-	27,721,831

Route 11	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	5,481,875	3,289,125	-	-	10,963,750
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	3,001,250	1,800,750	-	-	6,002,500
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	2,635,413	1,581,248	-	-	5,270,825
50 SYSTEMS	3,885,263	2,331,158	-	-	7,770,525
60 ROW, LAND, EXISTING IMPROVEMENTS	96,390	57,834	-	-	192,780
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	15,100,190	9,060,114	-	-	30,200,380

Route 12	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	4,077,500	2,446,500	-	-	8,155,000
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	2,503,375	1,502,025	-	-	5,006,750
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	2,161,250	1,296,750	-	-	4,322,500
50 SYSTEMS	4,239,375	2,543,625	-	-	8,478,750
60 ROW, LAND, EXISTING IMPROVEMENTS	77,112	46,267	-	-	154,224
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	13,058,612	7,835,167	-	-	26,117,224

Route 18	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	5,851,125	3,510,675	-	-	11,702,250
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	1,568,875	941,325	-	-	3,137,750
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	3,208,100	1,924,860	-	-	6,416,200
50 SYSTEMS	5,795,475	3,477,285	-	-	11,590,950
60 ROW, LAND, EXISTING IMPROVEMENTS	43,376	26,025	-	-	86,751
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	16,466,951	9,880,170	-	-	32,933,901

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Route 21	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	83,948	475,703
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	6,300	35,700
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	52,442	297,173
50 SYSTEMS	-	-	-	209,475	1,187,025
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	352,165	1,995,600

Route 5	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	73,395	415,905
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	19,425	110,075
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	33,650	190,683
50 SYSTEMS	-	-	-	209,475	1,187,025
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	335,945	1,903,688

Route 12 (NEW)	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	200,970	1,138,830
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	19,950	113,050
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	63,021	357,119
50 SYSTEMS	-	-	-	119,700	678,300
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	403,641	2,287,299

CCT Phase 2	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	2,030,100	11,503,900
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	218,700	1,239,300
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	481,200	2,726,800
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	1,943,700	11,014,300
50 SYSTEMS	-	-	-	229,200	1,298,800
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	502,500	2,847,500
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	1,569,000	8,891,000
90 UNALLOCATED CONTINGENCY	-	-	-	306,900	1,739,100
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	7,281,300	41,260,700

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Phase 2

Route 21	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	1,399,125	839,475	-	-	2,798,250
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	105,000	63,000	-	-	210,000
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	874,038	524,423	-	-	1,748,075
50 SYSTEMS	3,491,250	2,094,750	-	-	6,982,500
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	5,869,413	3,521,648	-	-	11,738,825

Route 5	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	1,223,250	733,950	-	-	2,446,500
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	323,750	194,250	-	-	647,500
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	560,831	336,499	-	-	1,121,663
50 SYSTEMS	3,491,250	2,094,750	-	-	6,982,500
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	5,599,081	3,359,449	-	-	11,198,163

Route 12 (NEW)	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	3,349,500	2,009,700	-	-	6,699,000
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	332,500	199,500	-	-	665,000
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	1,050,350	630,210	-	-	2,100,700
50 SYSTEMS	1,995,000	1,197,000	-	-	3,990,000
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	6,727,350	4,036,410	-	-	13,454,700

CCT Phase 2	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	33,835,000	20,301,000	-	-	67,670,000
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	3,645,000	2,187,000	-	-	7,290,000
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	8,020,000	4,812,000	-	-	16,040,000
40 SITEWORK & SPECIAL CONDITIONS	32,395,000	19,437,000	-	-	64,790,000
50 SYSTEMS	3,820,000	2,292,000	-	-	7,640,000
60 ROW, LAND, EXISTING IMPROVEMENTS	8,375,000	5,025,000	-	-	16,750,000
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	26,150,000	15,690,000	-	-	52,300,000
90 UNALLOCATED CONTINGENCY	5,115,000	3,069,000	-	-	10,230,000
100 FINANCE CHARGES	-	-	-	-	-
Route Total	121,355,000	72,813,000	-	-	242,710,000

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Detailed Route Capital Costs

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Phase 2

Phase 2 Summary by Category	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	3,573,968	20,252,483
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	804,600	4,559,400
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	481,200	2,726,800
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	2,748,486	15,574,752
50 SYSTEMS	-	-	-	1,879,115	10,648,318
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	518,983	2,940,902
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	1,569,000	8,891,000
90 UNALLOCATED CONTINGENCY	-	-	-	306,900	1,739,100
100 FINANCE CHARGES	-	-	-	-	-
Phase 2 Total	-	-	-	11,882,251	67,332,754

Phase 3

Route 4b	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	-	-
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	-	-
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	-	-
50 SYSTEMS	-	-	-	-	-
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	-	-

Route 7	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	-	-
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	-	-
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	-	-
50 SYSTEMS	-	-	-	-	-
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	-	-

Route 10a	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	-	-
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	-	-
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	-	-
50 SYSTEMS	-	-	-	-	-
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	-	-

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Phase 2

Phase 2 Summary by Category	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	59,566,125	35,739,675	-	-	119,132,250
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	13,410,000	8,046,000	-	-	26,820,000
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	8,020,000	4,812,000	-	-	16,040,000
40 SITEWORK & SPECIAL CONDITIONS	45,808,094	27,484,856	-	-	91,616,188
50 SYSTEMS	31,318,581	18,791,149	-	-	62,637,163
60 ROW, LAND, EXISTING IMPROVEMENTS	8,649,712	5,189,827	-	-	17,299,423
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	26,150,000	15,690,000	-	-	52,300,000
90 UNALLOCATED CONTINGENCY	5,115,000	3,069,000	-	-	10,230,000
100 FINANCE CHARGES	-	-	-	-	-
Phase 2 Total	198,037,512	118,822,507	-	-	396,075,023

Phase 3

Route 4b	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	1,335,180	3,927,000	2,591,820	7,854,000
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	463,356	1,362,813	899,456	2,725,625
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	1,491,183	4,385,833	2,894,649	8,771,665
50 SYSTEMS	-	2,344,776	6,896,400	4,551,624	13,792,800
60 ROW, LAND, EXISTING IMPROVEMENTS	-	13,109	38,556	25,447	77,112
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	5,647,604	16,610,601	10,962,997	33,221,202

Route 7	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	886,253	2,606,625	1,720,373	5,213,250
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	226,100	665,000	438,900	1,330,000
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	300,832	884,800	583,968	1,769,600
50 SYSTEMS	-	1,017,450	2,992,500	1,975,050	5,985,000
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	2,430,635	7,148,925	4,718,291	14,297,850

Route 10a	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	2,933,350	8,627,500	5,694,150	17,255,000
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	1,355,708	3,987,375	2,631,668	7,974,750
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	1,531,500	4,504,413	2,972,912	9,008,825
50 SYSTEMS	-	3,391,500	9,975,000	6,583,500	19,950,000
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	9,212,058	27,094,288	17,882,230	54,188,575

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Route 16 (NEW)	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	-	-
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	-	-
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	-	-
50 SYSTEMS	-	-	-	-	-
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	-	-

Route 17 (NEW)	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	-	-
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	-	-
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	-	-
50 SYSTEMS	-	-	-	-	-
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	-	-

Phase 3 Summary by Category	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	-	-
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	-	-
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	-	-
50 SYSTEMS	-	-	-	-	-
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Phase 3 Total	-	-	-	-	-

Montgomery County RTV
Detailed Route Capital Costs

Base Year \$\$

Phase 3

Route 16 (NEW)	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	431,970	1,270,500	838,530	2,541,000
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	241,273	709,625	468,353	1,419,250
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	199,206	585,900	386,694	1,171,800
50 SYSTEMS	-	764,444	2,248,365	1,483,921	4,496,730
60 ROW, LAND, EXISTING IMPROVEMENTS	-	13,109	38,556	25,447	77,112
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	1,650,002	4,852,946	3,202,944	9,705,892

Route 17 (NEW)	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	321,003	944,125	623,123	1,888,250
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	-	-
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	117,185	344,663	227,477	689,325
50 SYSTEMS	-	254,363	748,125	493,763	1,496,250
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	692,550	2,036,913	1,344,362	4,073,825

Phase 3 Summary by Category	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	5,907,755	17,375,750	11,467,995	34,751,500
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	2,286,436	6,724,813	4,438,376	13,449,625
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	3,639,907	10,705,608	7,065,701	21,411,215
50 SYSTEMS	-	7,772,533	22,860,390	15,087,857	45,720,780
60 ROW, LAND, EXISTING IMPROVEMENTS	-	26,218	77,112	50,894	154,224
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Phase 3 Total	-	19,632,848	57,743,672	38,110,824	115,487,344

Montgomery County RTV
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Phase I

Route 3	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	240,363	1,402,921	4,250,025
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	96,794	564,956	1,711,484
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	183,896	1,073,337	3,251,580
50 SYSTEMS	-	-	261,993	1,529,168	4,632,480
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	2,978	17,384	52,664
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	786,025	4,587,766	13,898,232

Route 4a	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	351,920	2,054,040	6,222,534
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	110,935	647,490	1,961,513
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	189,490	1,105,988	3,350,492
50 SYSTEMS	-	-	723,426	4,222,397	12,791,380
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	3,574	20,861	63,197
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	1,379,345	8,050,776	24,389,116

Route 10b	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	609,425	3,557,012	10,775,654
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	306,308	1,787,817	5,416,033
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	2,592,664	15,132,514	45,842,616
50 SYSTEMS	-	-	419,811	2,450,298	7,422,963
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	238,276	1,390,738	4,213,118
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	4,166,484	24,318,379	73,670,384

Route 14	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	481,808	2,812,154	8,519,173
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	153,952	898,564	2,722,120
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	355,457	2,074,682	6,285,065
50 SYSTEMS	-	-	539,398	3,148,287	9,537,458
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	1,530,615	8,933,687	27,063,815

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Phase I

Route 3	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	2,626,515	-	-	-	8,519,825
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	1,057,697	-	-	-	3,430,931
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	2,009,476	-	-	-	6,518,289
50 SYSTEMS	2,862,872	-	-	-	9,286,513
60 ROW, LAND, EXISTING IMPROVEMENTS	32,546	-	-	-	105,573
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	8,589,107	-	-	-	27,861,131

Route 4a	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	3,845,526	-	-	-	12,474,020
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	1,212,215	-	-	1,212,215	3,932,153
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	2,070,604	-	-	-	6,716,574
50 SYSTEMS	7,905,073	-	-	-	25,642,277
60 ROW, LAND, EXISTING IMPROVEMENTS	39,056	-	-	-	126,688
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	15,072,474	-	-	-	48,891,712

Route 10b	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	6,659,354	-	-	-	21,601,446
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	3,347,108	-	-	-	10,857,266
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	28,330,737	-	-	-	91,898,530
50 SYSTEMS	4,587,391	-	-	-	14,880,463
60 ROW, LAND, EXISTING IMPROVEMENTS	2,603,707	-	-	-	8,445,839
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	45,528,297	-	-	-	147,683,545

Route 14	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	5,264,849	-	-	-	17,077,984
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	1,682,270	-	-	-	5,456,905
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	3,884,170	-	-	-	12,599,374
50 SYSTEMS	5,894,149	-	-	-	19,119,292
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	16,725,438	-	-	-	54,253,555

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Phase I

Route 19	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	521,310	3,042,713	9,217,630
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	260,236	1,518,910	4,601,405
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	387,629	2,262,458	6,853,918
50 SYSTEMS	-	-	475,271	2,773,996	8,403,576
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	2,163	12,625	38,245
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	1,646,608	9,610,703	29,114,775

CCT Phase 1	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	1,050,600	6,132,002	18,576,359
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	185,400	1,082,118	3,278,181
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	98,880	577,130	1,748,363
40 SITEWORK & SPECIAL CONDITIONS	-	-	232,152	1,354,992	4,104,829
50 SYSTEMS	-	-	117,853	687,866	2,083,830
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	30,900	180,353	546,364
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	283,866	1,656,832	5,019,227
90 UNALLOCATED CONTINGENCY	-	-	87,004	507,815	1,538,380
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	2,086,655	12,179,108	36,895,534

Phase 1 Summary by Category	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	3,255,427	19,000,842	57,561,375
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	1,113,624	6,499,854	19,690,736
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	98,880	577,130	1,748,363
40 SITEWORK & SPECIAL CONDITIONS	-	-	3,941,286	23,003,971	69,688,501
50 SYSTEMS	-	-	2,537,752	14,812,013	44,871,687
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	277,892	1,621,961	4,913,588
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	283,866	1,656,832	5,019,227
90 UNALLOCATED CONTINGENCY	-	-	87,004	507,815	1,538,380
100 FINANCE CHARGES	-	-	-	-	-
Phase 1 Total	-	-	11,595,731	67,680,419	205,031,857

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Phase I

Route 19	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	5,696,496	-	-	-	18,478,149
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	2,843,668	-	-	-	9,224,220
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	4,235,722	-	-	-	13,739,727
50 SYSTEMS	5,193,410	-	-	-	16,846,253
60 ROW, LAND, EXISTING IMPROVEMENTS	23,636	-	-	-	76,669
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	17,992,931	-	-	-	58,365,017

CCT Phase 1	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	11,480,190	-	-	-	37,239,151
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	2,025,916	-	-	-	6,571,615
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	1,080,488	-	-	-	3,504,861
40 SITEWORK & SPECIAL CONDITIONS	2,536,784	-	-	-	8,228,757
50 SYSTEMS	1,287,807	-	-	-	4,177,357
60 ROW, LAND, EXISTING IMPROVEMENTS	337,653	-	-	-	1,095,269
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	3,101,882	-	-	-	10,061,808
90 UNALLOCATED CONTINGENCY	950,719	-	-	-	3,083,919
100 FINANCE CHARGES	-	-	-	-	-
Route Total	22,801,440	-	-	-	73,962,737

Phase 1 Summary by Category	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	35,572,930	-	-	-	115,390,575
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	12,168,875	-	-	-	39,473,089
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	1,080,488	-	-	-	3,504,861
40 SITEWORK & SPECIAL CONDITIONS	43,067,493	-	-	-	139,701,251
50 SYSTEMS	27,730,702	-	-	-	89,952,155
60 ROW, LAND, EXISTING IMPROVEMENTS	3,036,597	-	-	-	9,850,038
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	3,101,882	-	-	-	10,061,808
90 UNALLOCATED CONTINGENCY	950,719	-	-	-	3,083,919
100 FINANCE CHARGES	-	-	-	-	-
Phase 1 Total	126,709,688	-	-	-	411,017,695

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Phase 2

Route 8	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	276,815	1,615,679
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	122,868	717,140
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	186,068	1,086,016
50 SYSTEMS	-	-	-	292,870	1,709,385
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	3,681	21,487
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	882,303	5,149,707

Route 11	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	348,943	2,036,666
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	191,042	1,115,046
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	167,755	979,127
50 SYSTEMS	-	-	-	247,312	1,443,481
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	6,136	35,812
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	961,187	5,610,131

Route 12	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	259,549	1,514,902
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	159,350	930,072
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	137,572	802,963
50 SYSTEMS	-	-	-	269,853	1,575,043
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	4,908	28,649
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	831,233	4,851,629

Route 18	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	372,448	2,173,852
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	99,865	582,880
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	204,208	1,191,896
50 SYSTEMS	-	-	-	368,905	2,153,176
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	2,761	16,115
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	1,048,187	6,117,920

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Phase 2

Route 8	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	4,894,556	3,024,836	-	-	9,811,886
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	2,172,513	1,342,613	-	-	4,355,135
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	3,289,989	2,033,213	-	-	6,595,286
50 SYSTEMS	5,178,431	3,200,270	-	-	10,380,956
60 ROW, LAND, EXISTING IMPROVEMENTS	65,093	40,227	-	-	130,488
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	15,600,582	9,641,160	-	-	31,273,752

Route 11	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	6,169,899	3,812,997	-	-	12,368,505
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	3,377,933	2,087,563	-	-	6,771,584
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	2,966,180	1,833,099	-	-	5,946,161
50 SYSTEMS	4,372,897	2,702,450	-	-	8,766,141
60 ROW, LAND, EXISTING IMPROVEMENTS	108,488	67,045	-	-	217,480
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	16,995,397	10,503,155	-	-	34,069,871

Route 12	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	4,589,262	2,836,164	-	-	9,199,877
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	2,817,571	1,741,259	-	-	5,648,251
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	2,432,506	1,503,289	-	-	4,876,330
50 SYSTEMS	4,771,454	2,948,759	-	-	9,565,109
60 ROW, LAND, EXISTING IMPROVEMENTS	86,790	53,636	-	-	173,984
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	14,697,583	9,083,106	-	-	29,463,551

Route 18	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	6,585,493	4,069,835	-	-	13,201,627
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	1,765,783	1,091,254	-	-	3,539,781
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	3,610,745	2,231,440	-	-	7,238,290
50 SYSTEMS	6,522,858	4,031,126	-	-	13,076,066
60 ROW, LAND, EXISTING IMPROVEMENTS	48,820	30,170	-	-	97,866
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	18,533,698	11,453,825	-	-	37,153,630

Montgomery County RTV
Detailed Route Capital Costs

Year of Expenditure \$\$

Phase 2

Route 21	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	89,060	519,813
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	6,684	39,010
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	55,636	324,729
50 SYSTEMS	-	-	-	222,232	1,297,094
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	373,612	2,180,646

Route 5	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	77,865	454,471
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	20,608	120,282
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	35,699	208,364
50 SYSTEMS	-	-	-	222,232	1,297,094
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	356,404	2,080,211

Route 12 (NEW)	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	213,209	1,244,430
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	21,165	123,533
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	66,859	390,234
50 SYSTEMS	-	-	-	126,990	741,197
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	428,223	2,499,393

CCT Phase 2	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	2,153,733	12,570,622
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	232,019	1,354,217
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	510,505	2,979,648
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	2,062,071	12,035,623
50 SYSTEMS	-	-	-	243,158	1,419,234
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	533,102	3,111,540
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	1,664,552	9,715,436
90 UNALLOCATED CONTINGENCY	-	-	-	325,590	1,900,362
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	7,724,731	45,086,681

Montgomery County RTV
Detailed Route Capital Costs

Year of Expenditure \$\$

Phase 2

Route 21	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	1,574,728	973,182	-	-	3,156,782
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	118,178	73,034	-	-	236,907
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	983,737	607,949	-	-	1,972,051
50 SYSTEMS	3,929,433	2,428,389	-	-	7,877,148
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	6,606,075	4,082,555	-	-	13,242,888

Route 5	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	1,376,779	850,849	-	-	2,759,963
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	364,383	225,189	-	-	730,462
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	631,221	390,094	-	-	1,265,378
50 SYSTEMS	3,929,433	2,428,389	-	-	7,877,148
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	6,301,815	3,894,522	-	-	12,632,952

Route 12 (NEW)	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	3,769,892	2,329,793	-	-	7,557,324
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	374,232	231,275	-	-	750,205
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	1,182,178	730,586	-	-	2,369,857
50 SYSTEMS	2,245,390	1,387,651	-	-	4,501,228
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	7,571,692	4,679,305	-	-	15,178,613

CCT Phase 2	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	38,081,591	23,534,423	-	-	76,340,369
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	4,102,480	2,535,332	-	-	8,224,047
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	9,026,581	5,578,427	-	-	18,095,161
40 SITEWORK & SPECIAL CONDITIONS	36,460,858	22,532,810	-	-	73,091,362
50 SYSTEMS	4,299,444	2,657,056	-	-	8,618,892
60 ROW, LAND, EXISTING IMPROVEMENTS	9,426,136	5,825,352	-	-	18,896,131
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	29,432,055	18,189,010	-	-	59,001,053
90 UNALLOCATED CONTINGENCY	5,756,978	3,557,812	-	-	11,540,741
100 FINANCE CHARGES	-	-	-	-	-
Route Total	136,586,122	84,410,223	-	-	273,807,757

Montgomery County RTV
Detailed Route Capital Costs

Year of Expenditure \$\$

Phase 2

Phase 2 Summary by Category	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	3,791,622	22,130,434
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	853,600	4,982,179
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	510,505	2,979,648
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	2,915,868	17,018,952
50 SYSTEMS	-	-	-	1,993,553	11,635,704
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	550,589	3,213,603
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	1,664,552	9,715,436
90 UNALLOCATED CONTINGENCY	-	-	-	325,590	1,900,362
100 FINANCE CHARGES	-	-	-	-	-
Phase 2 Total	-	-	-	12,605,880	73,576,318

Phase 3

Route 4b	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	-	-
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	-	-
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	-	-
50 SYSTEMS	-	-	-	-	-
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	-	-

Route 7	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	-	-
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	-	-
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	-	-
50 SYSTEMS	-	-	-	-	-
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	-	-

Route 10a	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	-	-
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	-	-
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	-	-
50 SYSTEMS	-	-	-	-	-
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	-	-

Montgomery County RTV
Detailed Route Capital Costs

Year of Expenditure \$\$

Phase 2

Phase 2 Summary by Category	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	67,042,198	41,432,079	-	-	134,396,334
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	15,093,073	9,327,519	-	-	30,256,372
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	9,026,581	5,578,427	-	-	18,095,161
40 SITEWORK & SPECIAL CONDITIONS	51,557,413	31,862,481	-	-	103,354,715
50 SYSTEMS	35,249,339	21,784,092	-	-	70,662,688
60 ROW, LAND, EXISTING IMPROVEMENTS	9,735,326	6,016,432	-	-	19,515,950
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	29,432,055	18,189,010	-	-	59,001,053
90 UNALLOCATED CONTINGENCY	5,756,978	3,557,812	-	-	11,540,741
100 FINANCE CHARGES	-	-	-	-	-
Phase 2 Total	222,892,964	137,747,852	-	-	446,823,014

Phase 3

Route 4b	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	1,547,840	4,689,043	3,187,612	9,424,495
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	537,157	1,627,269	1,106,218	3,270,644
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	1,728,690	5,236,913	3,560,054	10,525,657
50 SYSTEMS	-	2,718,238	8,234,662	5,597,923	16,550,824
60 ROW, LAND, EXISTING IMPROVEMENTS	-	15,197	46,038	31,297	92,531
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	6,547,121	19,833,926	13,483,103	39,864,151

Route 7	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	1,027,410	3,112,447	2,115,841	6,255,697
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	262,112	794,045	539,792	1,595,948
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	348,747	1,056,497	718,207	2,123,451
50 SYSTEMS	-	1,179,503	3,573,201	2,429,062	7,181,767
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	2,817,772	8,536,190	5,802,902	17,156,864

Route 10a	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	3,400,557	10,301,686	7,003,086	20,705,329
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	1,571,637	4,761,134	3,236,619	9,569,390
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	1,775,429	5,378,504	3,656,307	10,810,240
50 SYSTEMS	-	3,931,678	11,910,672	8,096,875	23,939,224
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	10,679,300	32,351,996	21,992,887	65,024,183

Montgomery County RTV
Detailed Route Capital Costs

Year of Expenditure \$\$

Phase 3

Route 16 (NEW)	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	-	-
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	-	-
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	-	-
50 SYSTEMS	-	-	-	-	-
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	-	-

Route 17 (NEW)	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	-	-
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	-	-
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	-	-
50 SYSTEMS	-	-	-	-	-
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	-	-	-	-

Phase 3 Summary by Category	2012	2013	2014	2015	2016
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	-	-	-	-
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	-	-
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	-	-	-	-
50 SYSTEMS	-	-	-	-	-
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Phase 3 Total	-	-	-	-	-

Montgomery County RTV
Detailed Route Capital Costs

Year of Expenditure \$\$

Phase 3

Route 16 (NEW)	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	500,772	1,517,043	1,031,286	3,049,101
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	279,701	847,329	576,014	1,703,045
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	230,934	699,595	475,585	1,406,114
50 SYSTEMS	-	886,200	2,684,665	1,825,036	5,395,901
60 ROW, LAND, EXISTING IMPROVEMENTS	-	15,197	46,038	31,297	92,531
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	1,912,804	5,794,671	3,939,218	11,646,693

Route 17 (NEW)	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	372,130	1,127,335	766,362	2,265,827
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	-	-	-	-
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	135,850	411,545	279,768	827,163
50 SYSTEMS	-	294,876	893,300	607,266	1,795,442
60 ROW, LAND, EXISTING IMPROVEMENTS	-	-	-	-	-
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Route Total	-	802,856	2,432,180	1,653,396	4,888,432

Phase 3 Summary by Category	2017	2018	2019	2020	Total
10 GUIDEWAY & TRACK ELEMENTS (route miles)	-	6,848,707	20,747,554	14,104,187	41,700,449
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	-	2,650,606	8,029,778	5,458,643	16,139,027
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-	-	-	-
40 SITEWORK & SPECIAL CONDITIONS	-	4,219,649	12,783,055	8,689,921	25,692,625
50 SYSTEMS	-	9,010,496	27,296,501	18,556,162	54,863,158
60 ROW, LAND, EXISTING IMPROVEMENTS	-	30,394	92,076	62,593	185,063
70 VEHICLES (number)	-	-	-	-	-
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-	-	-	-
90 UNALLOCATED CONTINGENCY	-	-	-	-	-
100 FINANCE CHARGES	-	-	-	-	-
Phase 3 Total	-	22,759,852	68,948,964	46,871,506	138,580,322



Montgomery County, Maryland

Transit Task Force

Finance Working Group Meeting

*Discussion on
Revised Capital Costs and Implementation Schedules
Conceptual Capital Financing Scenarios*

February 15, 2012

presented by

Scott Trommer and

Linda Ginty

Public Financial Management, Inc.

Objectives



- Review revised capital costs and implementation schedule based on Finance Working Group's feedback
- Discuss first round of conceptual capital financing scenarios



Capital Cost Revisions

- Added two years onto Phase 1 and Phase 2 construction
- Added one year onto Phase 3 construction
- Contingency unchanged at 35% plus 20% utilities and 10% maintenance of traffic
- Professional services equals 27.5% of fixed construction costs (excluding ROW)
- \$75 million in right of way costs
- \$40 million pre-development costs over ten years
- \$3 million in branding costs
- \$1 million operations analysis

Capital Cost Revisions



- 300 vehicle fleet
- 6 year vehicle delivery schedule assumed for Phases 1 and 2
- 4 years assumed for Phase 3
- Costs shown by FTA standard cost category
- Professional services and contingency separately tracked

RTV Schedule and Cost Distributions



	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
Phase 1										
10 GUIDEWAY & TRACK ELEMENTS (route miles)	0%	0%	10%	15%	25%	25%	15%	10%	0%	0%
20 STATIONS, STOPS, TERMINALS, INTERMODAL (num	0%	0%	10%	15%	25%	25%	15%	10%	0%	0%
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLI	0%	0%	10%	15%	25%	25%	15%	10%	0%	0%
40 SITEWORK & SPECIAL CONDITIONS	0%	0%	10%	15%	25%	25%	15%	10%	0%	0%
50 SYSTEMS	0%	0%	10%	15%	25%	25%	15%	10%	0%	0%
60 ROW, LAND, EXISTING IMPROVEMENTS	0%	0%	10%	15%	25%	25%	15%	10%	0%	0%
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	0%	0%	40%	30%	20%	10%	0%	0%	0%	0%
90 UNALLOCATED CONTINGENCY	0%	0%	10%	15%	25%	25%	15%	10%	0%	0%
100 FINANCE CHARGES	0%	0%	10%	15%	25%	25%	15%	10%	0%	0%
Vehicles	0%	0%	10%	0%	20%	25%	25%	20%	0%	0%
Phase 2										
10 GUIDEWAY & TRACK ELEMENTS (route miles)	0%	0%	0%	10%	15%	25%	25%	15%	10%	0%
20 STATIONS, STOPS, TERMINALS, INTERMODAL (num	0%	0%	0%	10%	15%	25%	25%	15%	10%	0%
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLI	0%	0%	0%	10%	15%	25%	25%	15%	10%	0%
40 SITEWORK & SPECIAL CONDITIONS	0%	0%	0%	10%	15%	25%	25%	15%	10%	0%
50 SYSTEMS	0%	0%	0%	10%	15%	25%	25%	15%	10%	0%
60 ROW, LAND, EXISTING IMPROVEMENTS	0%	0%	0%	10%	15%	25%	25%	15%	10%	0%
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	0%	0%	0%	40%	30%	20%	10%	0%	0%	0%
90 UNALLOCATED CONTINGENCY	0%	0%	0%	10%	15%	25%	25%	15%	10%	0%
100 FINANCE CHARGES	0%	0%	0%	10%	15%	25%	25%	15%	10%	0%
Vehicles	0%	0%	0%	10%	0%	20%	25%	25%	20%	0%
Phase 3										
10 GUIDEWAY & TRACK ELEMENTS (route miles)	0%	0%	0%	0%	0%	0%	20%	30%	30%	20%
20 STATIONS, STOPS, TERMINALS, INTERMODAL (num	0%	0%	0%	0%	0%	0%	20%	30%	30%	20%
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLI	0%	0%	0%	0%	0%	0%	20%	30%	30%	20%
40 SITEWORK & SPECIAL CONDITIONS	0%	0%	0%	0%	0%	0%	20%	30%	30%	20%
50 SYSTEMS	0%	0%	0%	0%	0%	0%	20%	30%	30%	20%
60 ROW, LAND, EXISTING IMPROVEMENTS	0%	0%	0%	0%	0%	0%	20%	30%	30%	20%
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	0%	0%	0%	0%	0%	0%	40%	40%	20%	0%
90 UNALLOCATED CONTINGENCY	0%	0%	0%	0%	0%	0%	20%	30%	30%	20%
100 FINANCE CHARGES	0%	0%	0%	0%	0%	0%	20%	30%	30%	20%
Vehicles	0%	0%	0%	0%	0%	0%	13%	27%	27%	33%
Pre-Development Expenses	0%	11%	11%	11%	11%	11%	11%	11%	11%	11%
Branding	0%	50%	50%	0%	0%	0%	0%	0%	0%	0%
Route Operations Analysis	0%	50%	50%	0%	0%	0%	0%	0%	0%	0%
Technology Costs	0%	0%	17%	17%	17%	17%	17%	17%	0%	0%
Maintenance Facilities	0%	0%	0%	33%	33%	33%	0%	0%	0%	0%
Parking Facilities	0%	0%	11%	22%	22%	22%	11%	11%	0%	0%



Total Capital Costs

	Base Year \$	Year of Exp \$
Phase 1		
10 GUIDEWAY & TRACK ELEMENTS (route miles)	73,244,494	86,251,888
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number of stations)	22,521,794	26,521,410
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDG	3,200,000	3,768,284
40 SITEWORK & SPECIAL CONDITIONS	73,533,185	86,591,848
50 SYSTEMS	46,886,645	55,213,183
60 ROW, LAND, EXISTING IMPROVEMENTS	31,736,656	37,372,728
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-
90 UNALLOCATED CONTINGENCY	97,424,484	114,725,971
100 FINANCE CHARGES	107,726,020	126,856,943
Buses	165,000,000	198,076,407
Phase 1 Total	\$ 621,273,277	\$ 735,378,663

	Base Year \$	Year of Exp \$
Phase 2		
10 GUIDEWAY & TRACK ELEMENTS (route miles)	95,974,238	116,408,723
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number of stations)	18,031,500	21,870,701
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDG	16,040,000	19,455,178
40 SITEWORK & SPECIAL CONDITIONS	79,544,403	96,480,708
50 SYSTEMS	37,888,439	45,955,508
60 ROW, LAND, EXISTING IMPROVEMENTS	33,496,463	40,628,408
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-
90 UNALLOCATED CONTINGENCY	86,967,540	105,484,352
100 FINANCE CHARGES	63,715,460	77,281,524
Buses	110,000,000	136,012,466
Phase 2 Total	\$ 541,658,043	\$ 659,577,570



Total Capital Costs

Phase 3	Base Year \$	Year of Exp \$
10 GUIDEWAY & TRACK ELEMENTS (route miles)	19,113,325	24,583,961
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number of stations)	7,397,294	9,514,555
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDG	-	-
40 SITEWORK & SPECIAL CONDITIONS	11,776,168	15,146,755
50 SYSTEMS	25,146,429	32,343,866
60 ROW, LAND, EXISTING IMPROVEMENTS	9,766,881	12,562,368
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	-	-
90 UNALLOCATED CONTINGENCY	31,716,608	40,794,568
100 FINANCE CHARGES	40,366,592	51,920,359
Buses	55,000,000	71,373,469
Phase 3 Total	\$ 200,283,297	\$ 258,239,900
	Base Year \$	Year of Exp \$
Pre-Development Expenses	40,000,000	47,901,314
Branding	3,000,000	3,230,441
Technology Costs	22,000,000	25,916,756
Maintenance Facilities	97,000,000	112,482,338
Parking Facilities	22,500,000	26,367,603
Route Operations Analysis	1,000,000	1,076,814
GRAND TOTAL	\$ 1,548,714,617	\$ 1,870,171,397



Conceptual Capital Financing Scenarios

- Five scenarios tested
 - 1/4 mile district tax assessed *on all properties, 1.50x minimum coverage*
 - 1/4 mile district tax assessed *on non-residential properties, 1.50x minimum coverage*
 - 1/2 mile district tax assessed *on all properties, 1.50x minimum coverage*
 - 1/2 mile district tax assessed *on non-residential properties, 1.50x minimum coverage*
 - 1/2 mile district tax assessed *on non-residential properties, 1.40x minimum coverage*

- Yield—1/4 Mile District

Property Type	\$0.01/\$100	\$0.10/\$100
Residential	\$2.5 million	\$24.9 million
Non-Residential	\$2.0 million	\$20.3 million
Total	\$4.5 million	\$45.2 million

Conceptual Capital Financing Scenarios



- Yield – 1/2 Mile District

Property Type	\$0.01/\$100	\$0.10/\$100
Residential	\$4.6 million	\$45.7 million
Non-Residential	\$2.6 million	\$26.0 million
Total	\$7.2 million	\$71.7 million

- Property Tax projected growth rates – based on Countywide projections

	2013	2014	2015	2016	2017	2018	2019 and After
Growth Rate	0.9%	2.1%	2.1%	4.4%	5.6%	6.3%	3.0%

Conceptual Capital Financing Scenarios



■ Financing Assumptions

- County grant funds Fiscal 2013 costs of \$6.4 million—subsequent analysis will examine reimbursing County most of these costs in 2014
- Tax district implemented in Fiscal 2014—encompassing properties with ¼ mile of ½ mile corridors for all three phases
- Debt issued in a given year to fill the gap between revenues and capital expenses
- 'AA' category credit—secured by first lien on tax district revenues
 - Interest rates based on ten year historical average of 'AAA' index plus a spread of 18-38 basis points
 - Debt service reserve fund equal to lesser of maximum annual debt service, 10% of par or 125% of average annual debt service
 - 20 year level debt service
 - Underwriter take down \$5.00/\$1,000
 - Cost of issuance \$1.50/\$1,000

Conceptual Capital Financing Scenarios



- Flow of Funds
 - Debt service
 - Debt service reserve, in the event of deficiency
 - Pay-as-you-go capital expenses
 - Capital Reserve Fund

Tax Rates



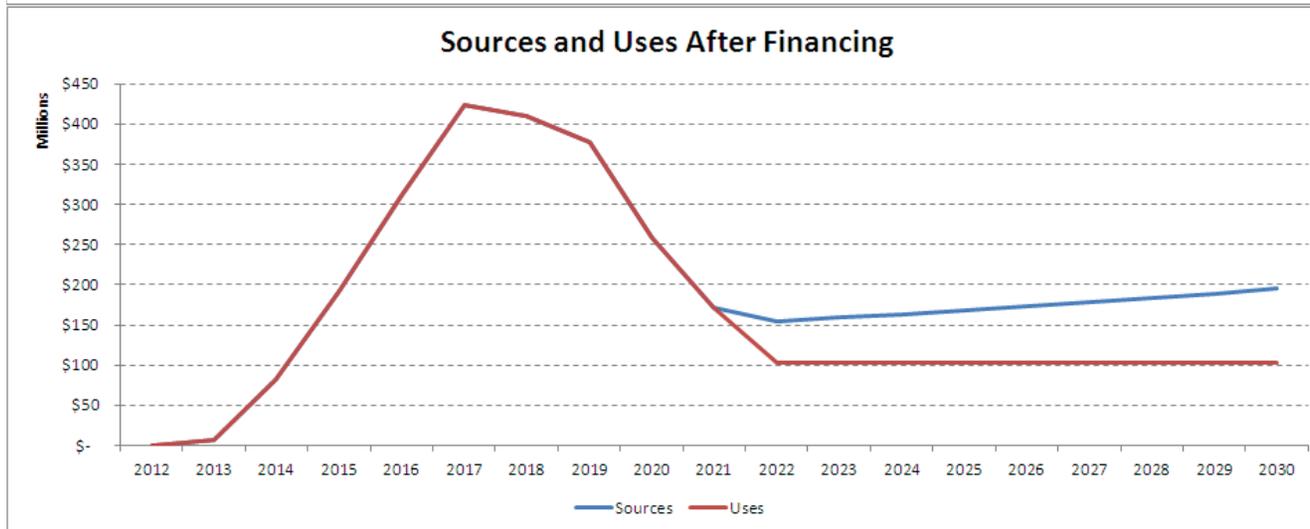
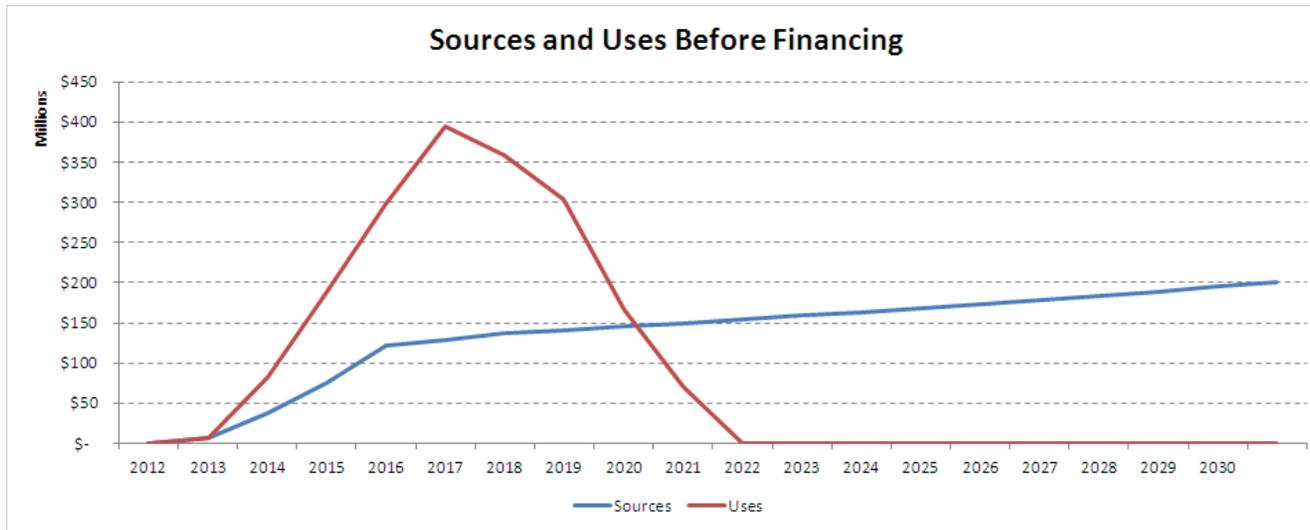
	¼ Mile District 1.50x Min Coverage	½ Mile District 1.50x Min Coverage	½ Mile District 1.40x Min Coverage
All Properties	\$0.07/\$100 in 2014 \$0.24/\$100 Thereafter	\$0.05/\$100 in 2014 \$0.10/\$100 in 2015 \$0.16/\$100 Thereafter	N/A
Non-Residential	\$0.15/\$100 in 2014 \$0.54/\$100 Thereafter	\$0.10/\$100 in 2014 \$0.20/\$100 in 2015 \$0.44/\$100 Thereafter	\$0.10/\$100 in 2014 \$0.20/\$100 in 2015 \$0.42/\$100 Thereafter

Debt Statistics



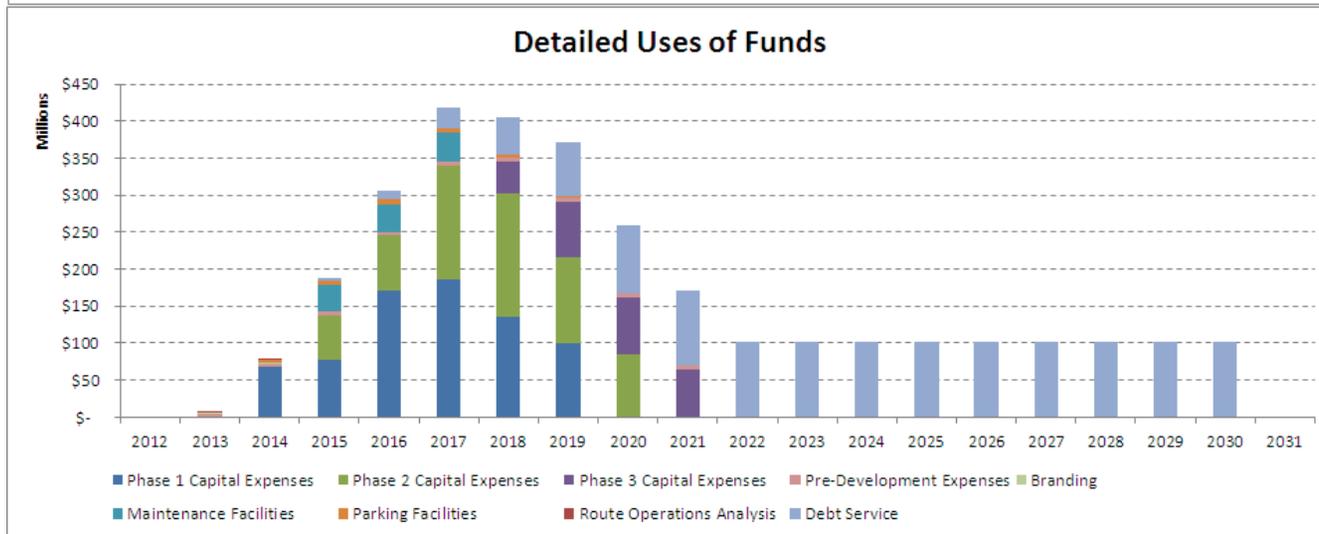
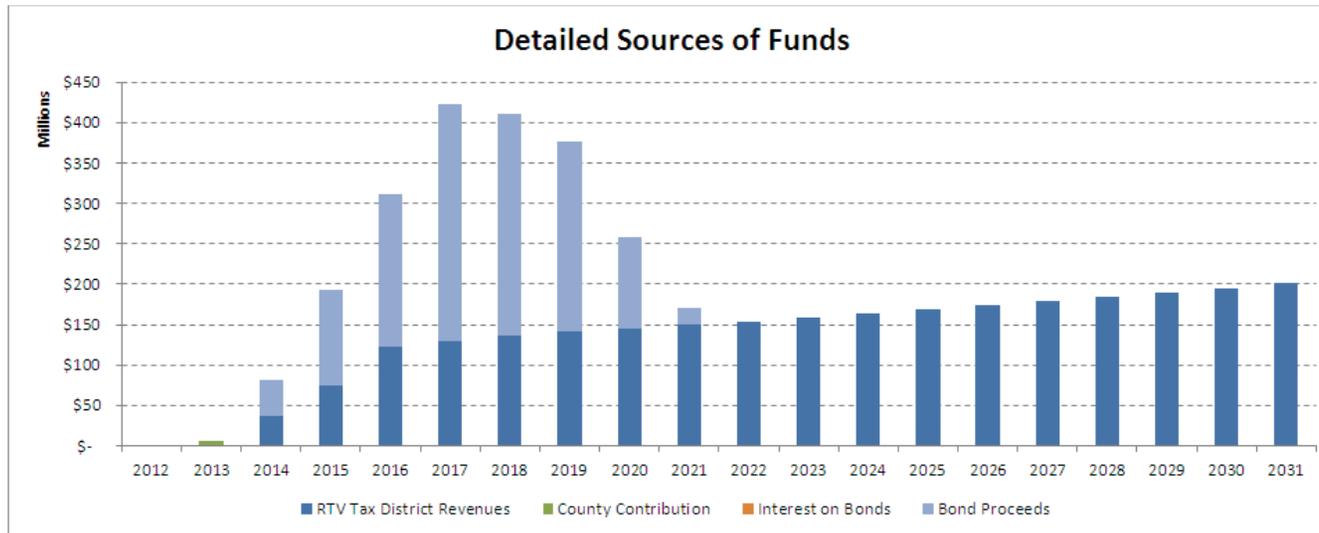
	¼ Mile All Min 1.50x	¼ Mile Non- Residential Min 1.50x	½ Mile All Min 1.50x	½ Mile Non- Residential Min 1.50x	½ Mile Non- Residential Min 1.40x
Debt Issued	\$1.4 billion	\$1.4 billion	\$1.4 billion	\$1.4 billion	\$1.5billion
Min DS Coverage	1.46x	1.51x	1.48x	1.49x	1.38x
Avg DS Coverage 2018-2031	1.75x	1.80x	1.76x	1.76x	1.63x

Sources and Uses Before and After Financing—1/2 Mile District All Properties



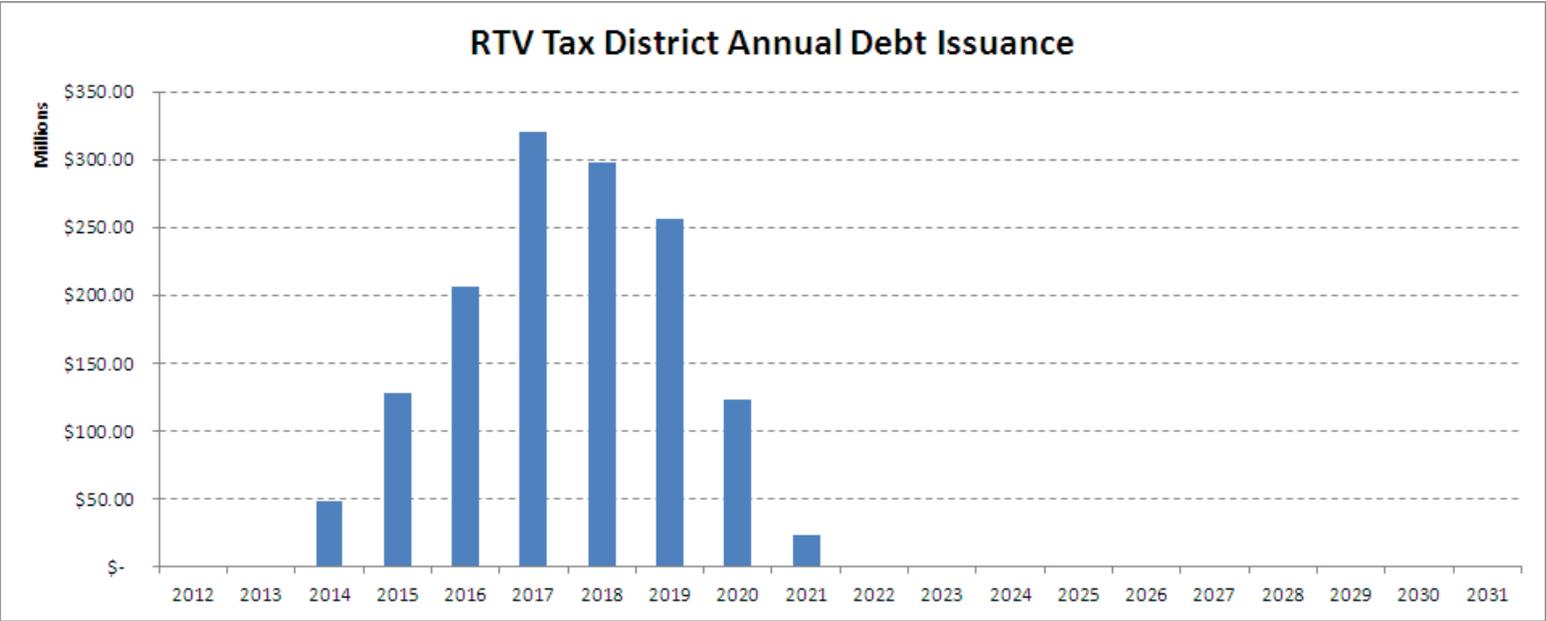
Detailed Sources and Uses of Funds

1/2 Mile District All Properties



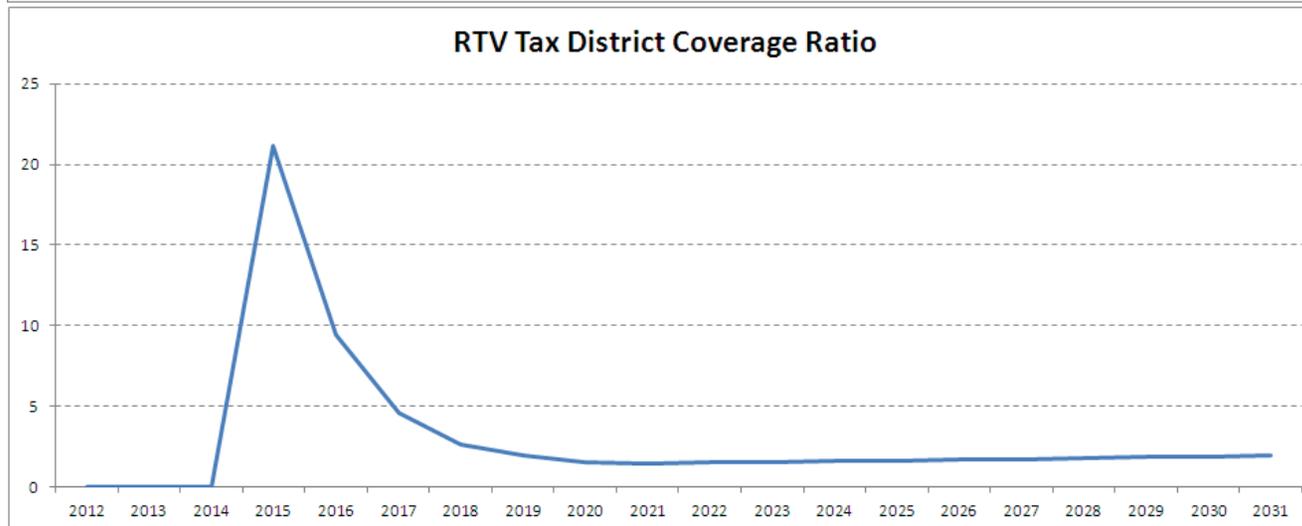
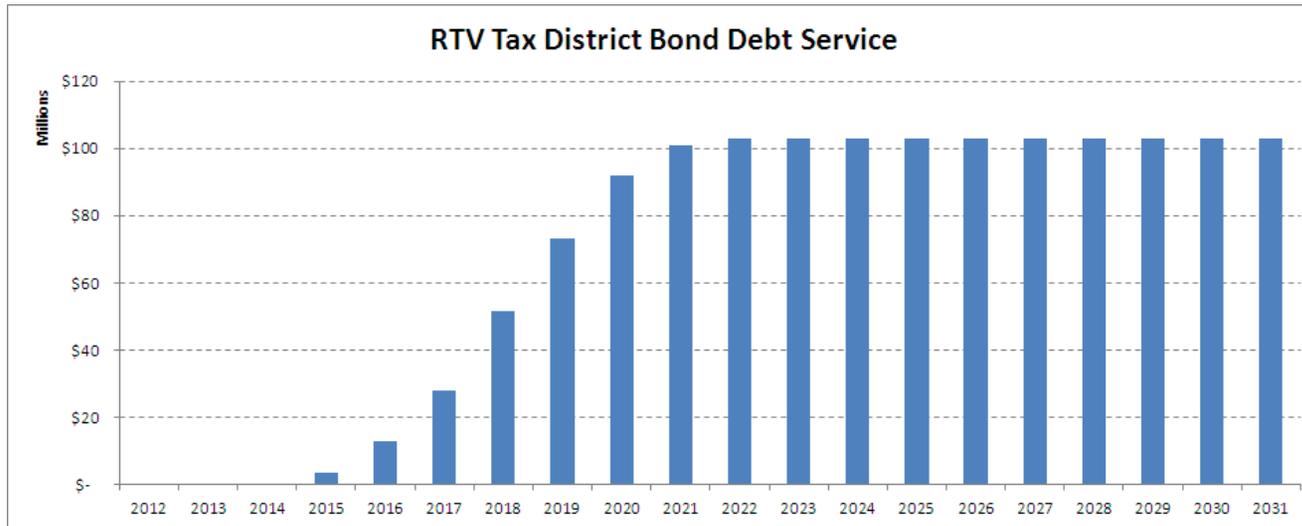
Debt Issuance

1/2 Mile District All Properties



Debt Service

1/2 Mile District All Properties



Note

- Cash Flows are projected through 2031 for presentation purposes
- All debt in this scenario fully paid by 2041



Next Steps

- Incorporate Working Group feedback—develop/test additional capital financing scenarios—including assessing how State contributions could reduce tax rates
- Begin developing operating funding scenarios



Montgomery County, Maryland

Transit Task Force

Finance Working Group Meeting

*Discussion on
Revised Capital Costs
Conceptual Capital Financing Scenarios
Operating Funding Scenario*

February 23, 2012

presented by

Scott Trommer and

Linda Ginty

Public Financial Management, Inc.



Objectives

- Review revised capital costs
- Discuss second round of capital financing scenarios
- Discuss operating funding scenario



Capital Cost Revisions

- Assume 186 stations at \$350,000 each
- 14 CCT stations—no change to Kittelson and MTA assumptions
- Assume Kittleson cost estimate for all segments for Phase 1 of CCT
- Escalate Kittelson and MTA CCT cost estimates to 2011\$ consistent with Traffic Group base estimate
- Increases costs by 18%



Total Capital Costs--\$000's

	Base Year \$	Year of Exp \$
Phase 1		
10 GUIDEWAY & TRACK ELEMENTS (route miles)	101,573	119,612
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	65,304	76,901
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	18,008	21,206
40 SITEWORK & SPECIAL CONDITIONS	158,189	186,281
50 SYSTEMS	66,214	77,973
60 ROW, LAND, EXISTING IMPROVEMENTS	33,750	39,744
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	121,836	143,472
90 UNALLOCATED CONTINGENCY	93,776	110,430
Buses	165,000	198,076
Phase 1 Total	\$823,651	\$973,696
Phase 2		
10 GUIDEWAY & TRACK ELEMENTS (route miles)	99,107	120,209
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	32,619	39,564
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	16,521	20,039
40 SITEWORK & SPECIAL CONDITIONS	112,539	136,501
50 SYSTEMS	39,296	47,663
60 ROW, LAND, EXISTING IMPROVEMENTS	30,000	36,387
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	90,773	110,100
90 UNALLOCATED CONTINGENCY	56,585	68,633
Buses	110,000	136,012
Phase 2 Total	\$587,440	\$715,107



Total Capital Costs--\$000's

	Base Year \$	Year of Exp \$
Phase 3		
10 GUIDEWAY & TRACK ELEMENTS (route miles)	19,858	25,542
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	17,136	22,040
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN, BLDGS	-	-
40 SITEWORK & SPECIAL CONDITIONS	34,868	44,848
50 SYSTEMS	26,126	33,604
60 ROW, LAND, EXISTING IMPROVEMENTS	11,250	14,470
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	30,040	38,638
90 UNALLOCATED CONTINGENCY	34,854	44,830
Buses	55,000	71,373
Phase 3 Total	\$229,132	\$295,346
	-	-
Pre-Development Expenses	40,000	47,901
Branding	3,000	3,230
Technology Costs	22,000	25,917
Maintenance Facilities	97,000	112,482
Parking Facilities	22,500	26,368
Route Operations Analysis	1,000	1,077
Total	\$1,825,722	\$2,201,124



Weighted Average Useful Life

- Federal tax law requires that the weighted average maturity of debt issued cannot exceed 120% of the weighted average life of the assets being financed
- Based on the 120% rule, average maturity of debt issued for the RTV cannot exceed 29.58 years
- Well within the average maturity for 25 year debt— (about 15 years with a level debt structure)

	Estimated Useful Life	Total Costs (\$000's)
Guideway and Tack Elements	50	265,362
Stations, Stops and Terminals	30	138,505
Support Facilities	30	41,245
Sitework and Special Conditions	30	367,630
Systems	15	159,240
Right of Way	50	90,601
Professional Services	2	292,210
Unallocated Contingency	30	223,893
Buses	15	405,462
Pre-Development Expenses	2	47,901
Branding	2	3,230
Technology Costs	5	25,917
Maintenance Facilities	30	112,482
Parking Facilities	25	26,368
Route Operations Analysis	2	1,077
Grand Total		2,201,124
Weighted Average Life>>	24.65	
120% of Weighted Average Life	29.58	



Debt Structure/Issuance Assumption

- Mix of 2 year bond anticipation notes and 25 year bonds
- Bond Anticipation Notes issued in
 - 2014 and taken out in 2016
 - 2015 and taken out in 2017
 - 2018 and taken out in 2020
- Long Term Bonds issued in
 - 2016 to take out 2014 bond anticipation note and finance capital costs
 - 2017 to take out 2015 bond anticipation note and finance capital costs
 - 2019 to finance capital costs
 - 2020 to take out 2018 bond anticipation note and finance capital costs
 - 2021 to finance capital costs



Conceptual Capital Financing Scenarios

- ¼ Mile District
 - 1. All properties taxed, 1.50x minimum debt service coverage, 25 year debt and bond anticipation notes
 - 2. Non-residential properties taxed, 1.50x minimum debt service coverage, 25 year debt and bond anticipation notes
- ½ Mile District
 - 3. All properties taxed, 1.50x minimum debt service coverage, 25 year debt and bond anticipation notes
 - 4. Non-residential properties taxed, 1.50x minimum debt service coverage, 25 year debt and bond anticipation notes
 - 5. Non-residential properties taxed, 1.50x minimum debt service coverage, 20 year debt
 - 6. Non-residential properties taxed, 1.40x minimum debt service coverage, 25 year debt and bond anticipation notes



Conceptual Capital Financing Scenarios

- 1/2 Mile District Construction Extended Two Years for Phase 2 and 3
 - 7. Non-residential properties taxed, 1.50x minimum debt service coverage, 25 year debt and bond anticipation notes
 - 8. Non-residential properties taxed, 1.40x minimum debt service coverage, 25 year debt and bond anticipation notes
- 1/2 Mile District Plus State Funding
 - 9. Non-residential properties taxed, \$20 million in annual state funding, 1.50x minimum debt service coverage, 25 year debt and bond anticipation notes
 - 10. Non-residential properties taxed, state funding equals 35%-50% of debt service, 1.50x minimum debt service coverage, 25 year debt and bond anticipation notes

Conceptual Capital Financing Scenario Results



	Scenario 1 1/4 Mile District All Properties 1.50x Min Coverage 25 Year Debt/2 Year BANs	Scenario 2 1/4 Mile District Non-Residential Properties 1.50x Min Coverage 25 Year Debt/2 Year BANs	Scenario 3 1/2 Mile District All Properties 1.50x Min Coverage 25 Year Debt/2 Year BANs	Scenario 4 1/2 Mile District Non-Residential Properties 1.50x Min Coverage 25 Year Debt/2 Year BANs	Scenario 5 1/2 Mile District Non-Residential Properties 1.50x Min Coverage 20 Year Debt
Tax Rate	\$0.05 2014-2015 \$0.10/2016 \$0.25 2017-2018 \$0.30 2019 and After	\$0.30 2014-2015 \$0.55 2016 \$0.59 2017 and After	\$0.02 2014-2015 \$0.05 2016 \$0.15 2017-2018 \$0.19 2019 and After	\$0.15 2014 \$0.45 2015 and After	\$0.20 2014 \$0.50 2015 and After
Debt Issued	\$1.85 billion	\$1.67 billion	\$1.90 billion	\$1.60 billion	\$1.60 billion
Min DS Coverage	1.49x	1.48x	1.47x	1.48x	1.50x
Average DS Coverage 2018-2031	1.78x	1.82x	1.75x	1.82x	1.80x
Max Annual Tax Burden Per Property (*)					
Residential	\$1,099	\$0	\$727	\$0	\$0
Commercial	\$11,786	\$23,178	\$6,886	\$16,308	\$18,120

(*) Based on Fiscal 2012 Assessed Valuation Data

Conceptual Capital Financing Scenario Results



	Scenario 6 1/2 Mile District Non-Residential Properties 1.40x Min Coverage 25 Year Debt/2 Year BANs	Scenario 7 1/2 Mile District Non-Residential Properties 1.50x Min Coverage 25 Year Debt/2 Year BANs Phase 2 and 3 Two Years Added	Scenario 8 1/2 Mile District Non-Residential Properties 1.40x Min Coverage 25 Year Debt/2 Year BANs Phase 2 and 3 Two Years Added	Scenario 9 1/2 Mile District Non-Residential Properties 1.50x Min Coverage 25 Year Debt/2 Year BANs \$20 Mil Annual State Funding	Scenario 10 1/2 Mile District Non-Residential Properties 1.50x Min Coverage 25 Year Debt/2 Year BANs State Funds 35-50% Debt Service
Tax Rate	\$0.20 2014 \$0.43 2015 and After	\$0.20 2014 \$0.43 2015 and After	\$0.20 2014 \$0.41 2015 and After	\$0.15 2014 \$0.42 2015 and After	\$0.15 2014 \$0.33 2015 and After
Debt Issued	\$1.66 billion	\$1.56 billion	\$1.62 billion	\$1.50 billion	\$1.76 billion
Min DS Coverage	1.39x	1.51x	1.39x	1.48x	1.50x
Average DS Coverage 2018-2031	1.71x	1.85x	1.70x	1.84x	1.72x
Max Annual Tax Burden Per Property					
Residential	\$0	\$0	\$0	\$0	\$0
Commercial	\$15,583	\$15,583	\$14,859	\$15,221	\$11,959

(*) Based on Fiscal 2012 Assessed Valuation Data

Conceptual Capital Financing Scenarios Results



- Application of 2 year bond anticipation notes and 25 year debt reduces projected tax rates--\$0.05/\$100 for example comparing Scenario 4 and 5
- Lowering minimum debt service coverage from 1.50x to 1.40x or extending Phase 2 and Phase 3 construction by two years reduces maximum tax rate by \$0.02/\$100
- State funding scenarios, not unsurprisingly show greatest reduction in maximum tax rates



Operating Funding Scenario—Approach

- Operating costs
 - Based on Parsons Brinckerhoff (PB) average operating costs per route mile
 - PB defined operating costs adjusted based on Traffic Group revised route lengths
 - Proxies used to define operating costs for new routes
 - Assumed \$1.1 million per mile applied to CCT—9.1 miles for Phase 1 and 5.9 miles for Phase 2
 - Escalated assuming 3% annual inflation
- Ridership
 - Based on PB average daily boarding per route mile for each route
 - Daily boarding per route mile multiplied by route length to determine daily boardings
 - For CCT and new routes utilized a system average of 1,450 daily boarding per mile
 - Daily boardings multiplied by 302 to arrive at annual boardings—(annualization factor based on ratio of annual Ride On riders to average weekday riders)



Operating Funding Scenario—Approach

- Fare Revenue
 - Fare of \$0.80 cents per boarding in 2010 dollars based on Parsons Brinckerhoff
 - Escalated assuming 3% annual inflation
 - Fares increased every five years, capturing the cumulative effects of inflation
- Service Implementation
 - ½ service implemented in last year of construction
 - Full service implemented year following construction
- Countywide Property Tax
 - Funds operating deficit and operating reserve equal to at least two months of operating expenses



Operating Funding Scenario—Results

- Fares cover 25-30% of operating costs
- Property tax starts at \$0.03/\$100 in 2019
- Maximum rate of \$0.085/\$100 by 2025

Montgomery County RTV System
Projected Operating Cash Flow (\$ 000's)

	2019	2020	2021	2025	2030	2035	2040
Fare Revenues							
Phase 1	15,045	30,091	35,232	36,663	44,670	54,427	66,314
Phase 2	-	8,266	19,356	20,142	24,541	29,901	36,431
Phase 3	-	-	6,129	12,756	15,542	18,937	23,073
Total	15,045	38,356	60,717	69,561	84,753	103,264	125,818
Operating Costs							
Phase 1	57,139	117,707	121,238	136,455	158,188	183,384	212,592
Phase 2	-	30,051	61,904	69,674	80,771	93,636	108,550
Phase 3	-	-	29,049	65,389	75,804	87,878	101,875
Total	57,139	147,758	212,191	271,518	314,764	364,897	423,016
Operating Deficit	(42,094)	(109,401)	(151,474)	(201,957)	(230,010)	(261,633)	(297,198)
County Property Tax Subsidy	61,135	125,939	172,956	206,830	239,773	277,962	322,235
Net Cash Flow	19,042	16,538	21,482	4,873	9,762	16,329	25,036
Operating Reserve							
Beginning Balance	-	19,042	35,674	45,335	103,829	196,832	335,697
Deposit/Withdraw	19,042	16,538	21,482	4,873	9,762	16,329	25,036
Interest Earnings	-	95	178	227	519	984	1,678
Ending Balance	19,042	35,674	57,335	50,435	114,110	214,145	362,412
Fare Box Recovery	26%	26%	29%	26%	27%	28%	30%
Op Reserve >= 2 Months Op Ex	Yes						
Countywide Assessed Valuation	205,635,380	211,804,441	218,158,575	245,539,398	284,647,458	329,984,418	382,542,381
Tax Rate	0.030	0.060	0.080	0.085	0.085	0.085	0.085



Next Steps

- Incorporate Working Group feedback
- Develop/test additional capital financing scenarios
- Examine/consider additional phasing scenarios



Montgomery County, Maryland

Transit Task Force

Finance Working Group Meeting

*Discussion on
Capital and Operating Financing Scenarios*

March 1, 2012

presented by

Scott Trommer and

Linda Ginty

Public Financial Management, Inc.



Capital Cost Revisions

- Right of Way Costs reduced from \$75 million to \$50 million
- Two Implementation Scenarios Tested

Base Nine Year	Extended Twenty Year
Phase 1 Construction Begin: 2014 End: 2019	Phase 1 Construction Begin: 2014 End: 2021
Phase 2 Construction Begin: 2015 End: 2020	Phase 2 Construction Begin: 2020 End: 2027
Phase 3 Construction Begin 2018 End: 2021	Phase 3 Construction Begin 2025 End: 2032

Capital Costs



2/23/2012 Base Year Est.	3/01/2012 Base Year Est.	Base Implementation YOES	Extended Implementation YOES
\$1.83 Billion	\$1.79 Billion	\$2.16 Billion	\$2.41 Billion



Baseline Financing Assumptions

- Mix of 2 year bond anticipation notes (“BANs”) and 30 year bonds
- BANs issued in
 - 2014-2015
 - 2018-2019
 - 2022-2023
 - 2026-2027
 - 2030-2031
- Long Term Bonds issued in interim years to takeout BANs and finance capital costs
- Ratings
 - BANs—highest short term ratings
 - Bonds—‘AA’ category



Baseline Financing Assumptions

- Interest Rates
 - Ten year average of 'AAA' index
 - 30 year bonds include an additional of 18-40 basis points—based on 'AA' rating
- Debt service coverage
 - Minimum 1.40x
 - Increases to and remains around 1.50x
- Property tax growth rates adjusted to reflect County's revised assumptions for new construction and reassessments—no change through 2018, generally assumes 6.0% annual growth for 2019 and thereafter
- One-third of costs of right-of-way assumed to be funded by private sector contributions



Conceptual Capital Financing Scenarios

- 1. ½ mile corridor, non-residential properties
- 1a. ½ mile corridor, non-residential properties, State funding of \$20 million starting in 2014, increasing to \$35 million in 2017 and \$45 million in 2019, continuing thereafter
- 2. ½ mile corridor, all properties
- 2a. ½ mile corridor, all properties and State funding
- 3. ½ mile corridor, residential taxed at ¼ of the amount charged to non-residential
- 3a. ½ mile corridor, residential taxed at ¼ of the amount charged to non-residential, State funding
- 4. 90% of County assessable base taxed
- 4a 90% of County assessable base taxed, State funding

Base Implementation Tax Rates



	1 Non-Residential	1a Non-Residential	2 Residential	2 Non-Residential	2a Residential	2a Non-Residential	3 Residential	3 Non-Residential	3a Residential	3a Non-Residential	4 Countywide	4a Countywide
2014	\$0.02	\$0.02	\$0.02	\$0.02	\$0.02	\$0.02	\$0.01	\$0.02	\$0.01	\$0.02	\$0.01	\$0.01
2015	\$0.02	\$0.02	\$0.02	\$0.02	\$0.02	\$0.02	\$0.01	\$0.02	\$0.01	\$0.02	\$0.01	\$0.01
2016	\$0.03	\$0.02	\$0.02	\$0.02	\$0.02	\$0.02	\$0.01	\$0.02	\$0.01	\$0.02	\$0.01	\$0.01
2017	\$0.16	\$0.02	\$0.06	\$0.06	\$0.02	\$0.02	\$0.03	\$0.11	\$0.01	\$0.02	\$0.03	\$0.01
2018	\$0.32	\$0.17	\$0.12	\$0.12	\$0.06	\$0.06	\$0.06	\$0.22	\$0.03	\$0.12	\$0.06	\$0.03
2019	\$0.33	\$0.18	\$0.12	\$0.12	\$0.06	\$0.06	\$0.06	\$0.23	\$0.03	\$0.12	\$0.06	\$0.03
2020	\$0.33	\$0.19	\$0.12	\$0.12	\$0.07	\$0.07	\$0.06	\$0.23	\$0.03	\$0.13	\$0.06	\$0.04
2021	\$0.41	\$0.28	\$0.15	\$0.15	\$0.10	\$0.10	\$0.07	\$0.29	\$0.05	\$0.19	\$0.08	\$0.05
2022	\$0.48	\$0.35	\$0.17	\$0.17	\$0.13	\$0.13	\$0.08	\$0.33	\$0.06	\$0.24	\$0.09	\$0.07
2023	\$0.45	\$0.33	\$0.16	\$0.16	\$0.12	\$0.12	\$0.08	\$0.31	\$0.06	\$0.23	\$0.09	\$0.06
2024	\$0.43	\$0.31	\$0.15	\$0.15	\$0.11	\$0.11	\$0.07	\$0.30	\$0.05	\$0.22	\$0.08	\$0.06
2025	\$0.40	\$0.29	\$0.15	\$0.15	\$0.11	\$0.11	\$0.07	\$0.28	\$0.05	\$0.20	\$0.08	\$0.06
2026	\$0.38	\$0.28	\$0.14	\$0.14	\$0.10	\$0.10	\$0.07	\$0.26	\$0.05	\$0.19	\$0.07	\$0.05
2027	\$0.36	\$0.26	\$0.13	\$0.13	\$0.10	\$0.10	\$0.06	\$0.25	\$0.05	\$0.18	\$0.07	\$0.05
2028	\$0.34	\$0.25	\$0.12	\$0.12	\$0.09	\$0.09	\$0.06	\$0.24	\$0.04	\$0.17	\$0.07	\$0.05
2029	\$0.32	\$0.23	\$0.12	\$0.12	\$0.09	\$0.09	\$0.06	\$0.22	\$0.04	\$0.16	\$0.06	\$0.05
2030	\$0.30	\$0.22	\$0.11	\$0.11	\$0.08	\$0.08	\$0.05	\$0.21	\$0.04	\$0.15	\$0.06	\$0.04
2031	\$0.29	\$0.21	\$0.10	\$0.10	\$0.08	\$0.08	\$0.05	\$0.20	\$0.04	\$0.15	\$0.06	\$0.04
2032	\$0.27	\$0.20	\$0.10	\$0.10	\$0.07	\$0.07	\$0.05	\$0.19	\$0.03	\$0.14	\$0.05	\$0.04
2033	\$0.26	\$0.19	\$0.09	\$0.09	\$0.07	\$0.07	\$0.04	\$0.18	\$0.03	\$0.13	\$0.05	\$0.04
2034	\$0.24	\$0.18	\$0.09	\$0.09	\$0.07	\$0.07	\$0.04	\$0.17	\$0.03	\$0.12	\$0.05	\$0.04
2035	\$0.23	\$0.17	\$0.08	\$0.08	\$0.06	\$0.06	\$0.04	\$0.16	\$0.03	\$0.12	\$0.05	\$0.03



Findings

- Scenario 1 and 1a—State funding reduces tax rate on average by \$0.09
- Scenario 2 and 2a—As expected broadening the tax base significantly reduces the tax rate—maximum of \$0.17 for Scenario 2 and \$0.13 for 2a
- Scenario 3 and 3a—Commercial tax rates are about \$0.10 less than Scenarios 1 and 1a
- Scenario 4 and 4a—Maximum rates are \$0.09 for 4 and \$0.07 for 4a
- Debt issuance and coverages effectively the same across the scenarios given defined parameters

	1	1a	2	2a	3	3a	4	4a
Debt Issued(*)	\$2.1 billion	\$2.0 billion	\$2.0 billion	\$1.9 billion	\$2.1 billion	\$2.0 billion	\$2.0 billion	\$1.9 billion
Min DS Coverage	1.40x	1.40x	1.40x	1.40x	1.40x	1.41x	1.42x	1.41x
Avg DS Coverage 18-35	1.49x	1.48x	1.51x	1.52x	1.49x	1.49x	1.56x	1.54x

(*) Long Term Debt Issued, Including BAN Take-Out



Extended Implementation Tax Rates

	1 Non-Residential	1a Non-Residential	2 Residential	2 Non-Residential	2a Residential	2a Non-Residential	3 Residential	3 Non-Residential	3a Residential	3a Non-Residential	4 Countywide	4a Countywide
2014	\$0.02	\$0.02	\$0.02	\$0.02	\$0.01	\$0.01	\$0.01	\$0.02	\$0.01	\$0.02	\$0.01	\$0.01
2015	\$0.02	\$0.02	\$0.02	\$0.02	\$0.01	\$0.01	\$0.01	\$0.02	\$0.01	\$0.02	\$0.01	\$0.01
2016	\$0.02	\$0.02	\$0.02	\$0.02	\$0.01	\$0.01	\$0.01	\$0.02	\$0.01	\$0.02	\$0.01	\$0.01
2017	\$0.10	\$0.02	\$0.04	\$0.04	\$0.01	\$0.01	\$0.02	\$0.07	\$0.01	\$0.02	\$0.02	\$0.01
2018	\$0.17	\$0.02	\$0.06	\$0.06	\$0.01	\$0.01	\$0.03	\$0.12	\$0.01	\$0.02	\$0.03	\$0.01
2019	\$0.17	\$0.02	\$0.06	\$0.06	\$0.01	\$0.01	\$0.03	\$0.12	\$0.01	\$0.02	\$0.03	\$0.01
2020	\$0.18	\$0.03	\$0.06	\$0.06	\$0.01	\$0.01	\$0.03	\$0.12	\$0.01	\$0.02	\$0.03	\$0.01
2021	\$0.23	\$0.09	\$0.08	\$0.08	\$0.03	\$0.03	\$0.04	\$0.16	\$0.01	\$0.06	\$0.04	\$0.02
2022	\$0.29	\$0.16	\$0.11	\$0.11	\$0.06	\$0.06	\$0.05	\$0.20	\$0.03	\$0.11	\$0.06	\$0.03
2023	\$0.28	\$0.16	\$0.10	\$0.10	\$0.06	\$0.06	\$0.05	\$0.20	\$0.03	\$0.11	\$0.05	\$0.03
2024	\$0.27	\$0.15	\$0.10	\$0.10	\$0.06	\$0.06	\$0.05	\$0.19	\$0.03	\$0.11	\$0.05	\$0.03
2025	\$0.29	\$0.18	\$0.11	\$0.11	\$0.07	\$0.07	\$0.05	\$0.20	\$0.03	\$0.12	\$0.06	\$0.03
2026	\$0.31	\$0.21	\$0.11	\$0.11	\$0.08	\$0.08	\$0.05	\$0.22	\$0.04	\$0.14	\$0.06	\$0.04
2027	\$0.30	\$0.20	\$0.11	\$0.11	\$0.07	\$0.07	\$0.05	\$0.21	\$0.03	\$0.14	\$0.06	\$0.04
2028	\$0.29	\$0.19	\$0.10	\$0.10	\$0.07	\$0.07	\$0.05	\$0.20	\$0.03	\$0.13	\$0.06	\$0.04
2029	\$0.28	\$0.19	\$0.10	\$0.10	\$0.07	\$0.07	\$0.05	\$0.19	\$0.03	\$0.13	\$0.05	\$0.04
2030	\$0.27	\$0.19	\$0.10	\$0.10	\$0.07	\$0.07	\$0.05	\$0.19	\$0.03	\$0.13	\$0.05	\$0.04
2031	\$0.26	\$0.18	\$0.09	\$0.09	\$0.07	\$0.07	\$0.05	\$0.18	\$0.03	\$0.13	\$0.05	\$0.04
2032	\$0.24	\$0.17	\$0.09	\$0.09	\$0.06	\$0.06	\$0.04	\$0.17	\$0.03	\$0.12	\$0.05	\$0.03
2033	\$0.23	\$0.16	\$0.08	\$0.08	\$0.06	\$0.06	\$0.04	\$0.16	\$0.03	\$0.11	\$0.04	\$0.03
2034	\$0.22	\$0.15	\$0.08	\$0.08	\$0.06	\$0.06	\$0.04	\$0.15	\$0.03	\$0.11	\$0.04	\$0.03
2035	\$0.21	\$0.15	\$0.08	\$0.08	\$0.05	\$0.05	\$0.04	\$0.14	\$0.03	\$0.10	\$0.04	\$0.03



Findings

- Scenario 1 and 1a—On average extended implementation schedule reduces the tax rate by \$0.07
- Scenario 2 and 2a—Residential/Non-residential tax rate reduced on average from \$0.02-\$0.03
- Scenario 3 and 3a—Residential/Non-residential tax rate reduced on average from \$0.01-\$0.05
- Scenario 4 and 4a—tax rates reduced on average by \$0.01
- Debt service coverages and debt issuance consistent among scenarios—slightly reduced issuance compared to Base Implementation

	Twenty Year Implementation Option							
	1	1a	2	2a	3	3a	4	4a
Debt Issued(*)	\$1.9 billion	\$1.8 billion	\$1.8 billion	\$1.8 billion	\$1.9 billion	\$1.8 billion	\$1.8 billion	\$1.7 billion
Min DS Coverage	1.40x	1.42x	1.43x	1.43x	1.41x	1.41x	1.41x	1.51x
Avg DS Coverage 18-35	1.49x	1.51x	1.51x	1.54x	1.50x	1.53x	1.55x	1.64x

(*) Long Term Debt Issued, Including BAN Take-Out



Operating Assumptions

- Three scenarios tested
 - Base Operating costs
 - Operating costs at \$990,000 per mile
 - Operating costs at \$880,000 per mile
- Fares \$1.00 in 2016—increased every five years with inflation
- Tested under Base and Extend Implementation schedules

Base Nine Year	Extended Twenty Year
Phase 1 Ramp-up Initial: 2016 Full Service: 2020	Phase 1 Ramp-up Initial: 2016 Full Service: 2022
Phase 2 Ramp-up Initial: 2017 Full Service: 2021	Phase 2 Ramp-up Initial: 2022 Full Service: 2028
Phase 3 Ramp-up Initial: 2020 Full Service: 2022	Phase 3 Ramp-up Initial: 2027 Full Service: 2033

Operating Funding Tax Rates



	1 Base Case	1a Base Case Extended Implementation	2 \$990,000 per Mile	2a \$990,000 per Mile Extended Implementation	3 \$880,000 per Mile	3a \$880,000 per Mile Extended Implementation
2016	\$0.02	\$0.01	\$0.02	\$0.01	\$0.01	\$0.01
2017	\$0.02	\$0.02	\$0.02	\$0.01	\$0.02	\$0.01
2018	\$0.05	\$0.02	\$0.05	\$0.02	\$0.03	\$0.02
2019	\$0.05	\$0.02	\$0.05	\$0.02	\$0.05	\$0.02
2020	\$0.07	\$0.04	\$0.07	\$0.03	\$0.05	\$0.02
2021	\$0.07	\$0.04	\$0.07	\$0.03	\$0.05	\$0.03
2022	\$0.07	\$0.04	\$0.07	\$0.04	\$0.05	\$0.03
2023	\$0.07	\$0.05	\$0.07	\$0.04	\$0.05	\$0.03
2024	\$0.08	\$0.05	\$0.07	\$0.04	\$0.06	\$0.03
2025	\$0.08	\$0.05	\$0.07	\$0.04	\$0.06	\$0.04
2026	\$0.07	\$0.05	\$0.05	\$0.04	\$0.06	\$0.04
2027	\$0.07	\$0.05	\$0.05	\$0.04	\$0.05	\$0.04
2028	\$0.07	\$0.05	\$0.05	\$0.05	\$0.05	\$0.04
2029	\$0.06	\$0.06	\$0.05	\$0.05	\$0.05	\$0.04
2030	\$0.06	\$0.06	\$0.05	\$0.05	\$0.05	\$0.04
2031	\$0.06	\$0.06	\$0.05	\$0.05	\$0.05	\$0.04
2032	\$0.05	\$0.06	\$0.05	\$0.05	\$0.04	\$0.04
2033	\$0.05	\$0.06	\$0.04	\$0.05	\$0.03	\$0.04
2034	\$0.05	\$0.05	\$0.04	\$0.05	\$0.03	\$0.04
2035	\$0.05	\$0.05	\$0.04	\$0.05	\$0.03	\$0.04



Findings

- Lower operating cost assumptions reduce tax rates by \$0.01 to \$0.02
- Extended implementation requires lower tax rates in the near to medium term – with full service implementation tax rates are effectively equivalent

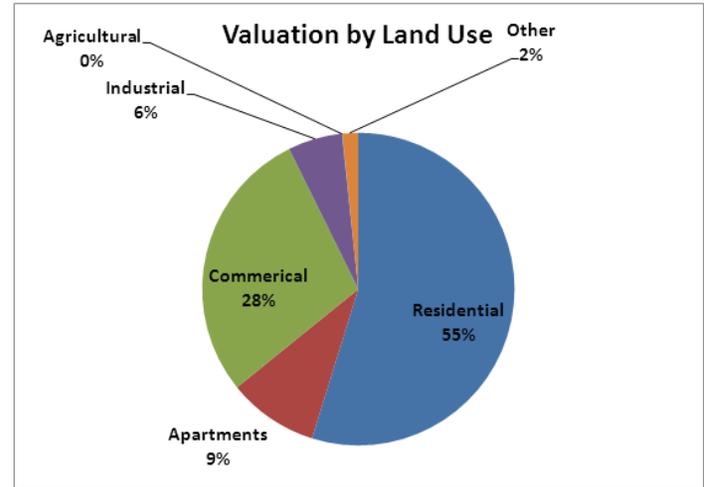


Next Steps

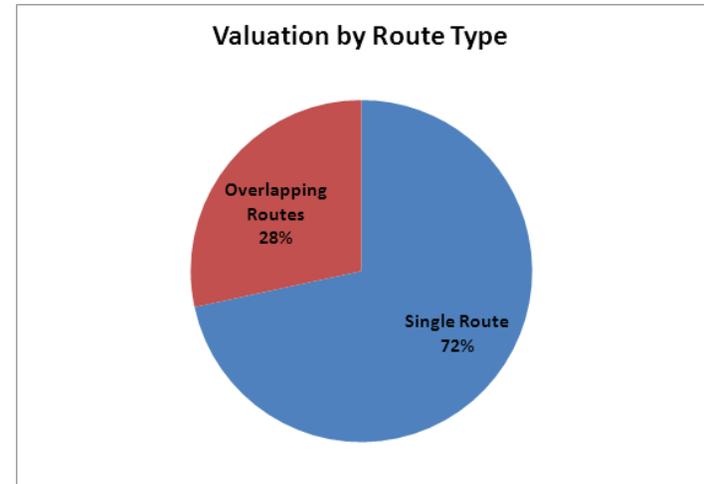
- Define short list of scenarios
- Present findings to Transit Task Force

Quarter Mile

Assessed Valuation							
	Residential	Apartments	Commerical	Industrial	Agricultural	Other	Total
Single Route	\$6,009,926,999	\$688,429,813	\$1,773,715,566	\$394,515,266	\$2,735,720	\$81,843,698	\$8,951,167,062
Overlapping Routes	\$2,701,491,694	\$1,494,395,878	\$5,083,373,843	\$224,022,499	\$1,292,790	\$27,359,633	\$9,531,936,337
Phase 1 Total	\$8,711,418,693	\$2,182,825,691	\$6,857,089,409	\$618,537,765	\$4,028,510	\$109,203,331	\$18,483,103,399
Single Route	\$7,984,503,021	\$545,743,277	\$961,667,640	\$492,047,533	\$2,089,701	\$57,214,400	\$10,043,265,572
Overlapping Routes	\$508,324,854	\$120,988,146	\$1,032,311,500	\$544,308,100	\$0	\$6,903,100	\$2,212,835,700
Phase 2 Total	\$8,492,827,875	\$666,731,423	\$1,993,979,140	\$1,036,355,633	\$2,089,701	\$64,117,500	\$12,256,101,272
Single Route	\$5,020,207,660	\$603,094,299	\$673,924,826	\$359,913,300	\$3,458,260	\$5,910,360	\$6,666,508,705
Overlapping Routes	\$132,972,263	\$188,950,500	\$578,961,800	\$88,280,600	\$0	\$3,581,600	\$992,746,763
Phase 3 Total	\$5,153,179,923	\$792,044,799	\$1,252,886,626	\$448,193,900	\$3,458,260	\$9,491,960	\$7,659,255,468
Single Route	\$19,014,637,680	\$1,837,267,389	\$3,409,308,032	\$1,246,476,099	\$8,283,681	\$144,968,458	\$25,660,941,339
Overlapping Routes	\$3,342,788,811	\$1,804,334,524	\$6,694,647,143	\$856,611,199	\$1,292,790	\$37,844,333	\$12,737,518,800
CCT Route	\$2,232,476,490	\$564,618,107	\$2,691,202,459	\$420,308,200	\$7,681,880	\$553,774,346	\$6,470,061,482
GRAND TOTAL	\$24,589,902,981	\$4,206,220,020	\$12,795,157,634	\$2,523,395,498	\$17,258,351	\$736,587,137	\$44,868,521,621



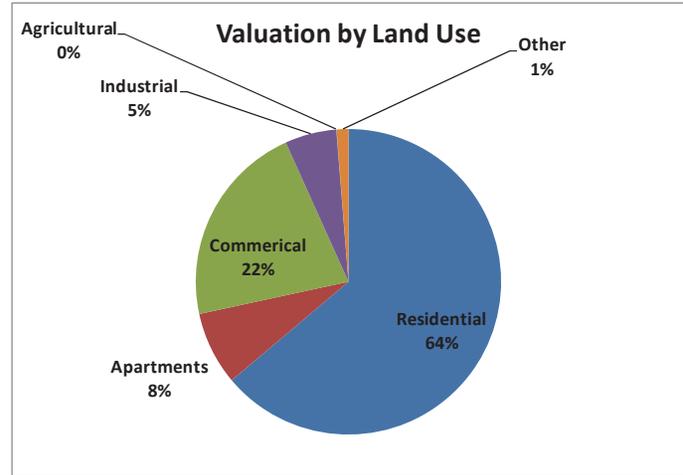
Number of Properties							
	Residential	Apartments	Commerical	Industrial	Agricultural	Other	Total
Single Route	17,286	69	362	134	7	24	17,882
Overlapping Routes	8,143	128	1,204	76	4	29	9,584
Phase 1 Total	25,429	197	1,566	210	11	53	27,466
Single Route	18,648	125	419	51	4	25	19,272
Overlapping Routes	987	32	131	14	0	2	1,166
Phase 2 Total	19,635	157	550	65	4	27	20,438
Single Route	16,013	87	319	116	15	13	16,563
Overlapping Routes	450	27	173	25	0	3	678
Phase 3 Total	16,463	114	492	141	15	16	17,241
Single Route	51,947	281	1,100	301	26	62	53,717
Overlapping Routes	9,580	187	1,508	115	4	34	11,428
CCT Route	5,608	25	649	51	4	995	7,332
GRAND TOTAL	67,135	493	3,257	467	34	1,091	72,477



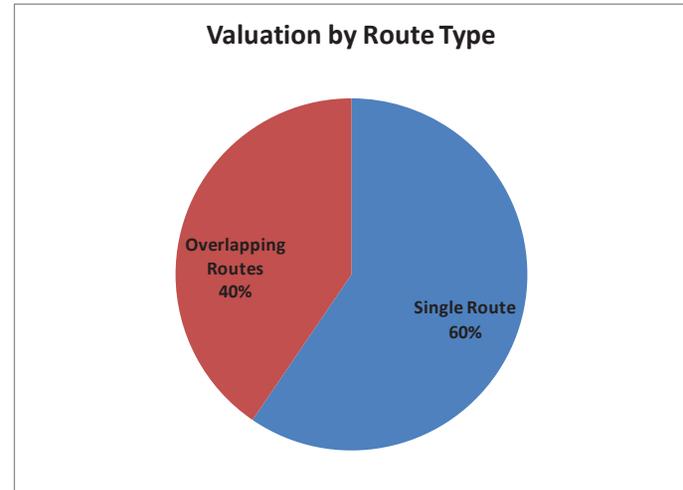
Value per Property							
	Residential	Apartments	Commerical	Industrial	Agricultural	Other	Total
Single Route	\$347,676	\$9,977,244	\$4,899,767	\$2,944,144	\$390,817	\$3,410,154	\$500,569
Overlapping Routes	\$331,756	\$11,674,968	\$4,222,071	\$2,947,664	\$323,198	\$943,436	\$994,568
Phase 1 Total	\$342,578	\$11,080,333	\$4,378,729	\$2,945,418	\$366,228	\$2,060,440	\$672,945
Single Route	\$428,169	\$4,365,946	\$2,295,149	\$9,647,991	\$522,425	\$2,288,576	\$521,133
Overlapping Routes	\$515,020	\$3,780,880	\$7,880,240	\$38,879,150	N/A	\$3,451,550	\$1,897,801
Phase 2 Total	\$432,535	\$4,246,697	\$3,625,417	\$15,943,933	\$522,425	\$2,374,722	\$599,672
Single Route	\$313,508	\$6,932,118	\$2,112,617	\$3,102,701	\$230,551	\$454,643	\$402,494
Overlapping Routes	\$295,494	\$6,998,167	\$3,346,600	\$3,531,224	N/A	\$1,193,867	\$1,464,228
Phase 3 Total	\$313,016	\$6,947,761	\$2,546,518	\$3,178,680	\$230,551	\$593,248	\$444,247
Single Route	\$366,039	\$6,538,318	\$3,099,371	\$4,141,117	\$318,603	\$2,338,201	\$477,706
Overlapping Routes	\$348,934	\$9,648,848	\$4,439,421	\$7,448,793	\$323,198	\$1,113,069	\$1,114,589
CCT Route	\$398,088	\$22,584,724	\$4,146,691	\$8,241,337	\$1,920,470	\$556,557	\$882,442
GRAND TOTAL	\$366,275	\$8,531,886	\$3,928,510	\$5,403,416	\$507,599	\$675,149	\$619,073

Half Mile

Assessed Valuation							
	Residential	Apartments	Commerical	Industrial	Agricultural	Other	Total
Single Route	\$6,962,276,171	\$396,596,400	\$919,430,467	\$339,497,465	\$4,756,760	\$51,453,566	\$8,674,010,829
Overlapping Routes	\$12,115,677,279	\$2,444,391,904	\$7,042,086,032	\$924,050,733	\$2,314,520	\$99,984,165	\$22,628,504,633
Phase 1 Total	\$19,077,953,450	\$2,840,988,304	\$7,961,516,499	\$1,263,548,198	\$7,071,280	\$151,437,731	\$31,302,515,462
Single Route	\$11,892,225,544	\$654,464,088	\$1,019,767,157	\$800,143,234	\$2,106,981	\$58,949,400	\$14,427,656,404
Overlapping Routes	\$1,767,404,520	\$195,743,825	\$1,026,122,333	\$540,315,400	\$0	\$6,742,300	\$3,536,328,378
Phase 2 Total	\$13,659,630,064	\$850,207,913	\$2,045,889,490	\$1,340,458,634	\$2,106,981	\$65,691,700	\$17,963,984,782
Single Route	\$6,858,128,415	\$320,397,001	\$518,033,085	\$502,174,900	\$4,481,810	\$9,709,820	\$8,212,925,031
Overlapping Routes	\$1,372,828,538	\$499,055,432	\$781,442,900	\$173,673,060	\$1,166,060	\$7,588,560	\$2,835,754,550
Phase 3 Total	\$8,230,956,953	\$819,452,433	\$1,299,475,985	\$675,847,960	\$5,647,870	\$17,298,380	\$11,048,679,581
Single Route	\$25,712,630,130	\$1,371,457,489	\$2,457,230,709	\$1,641,815,599	\$11,345,551	\$120,112,786	\$31,314,592,264
Overlapping Routes	\$15,255,910,337	\$3,139,191,161	\$8,849,651,265	\$1,638,039,193	\$3,480,580	\$114,315,025	\$29,000,587,561
CCT Route	\$4,766,254,280	\$1,047,654,840	\$4,200,438,599	\$638,755,600	\$7,748,580	\$653,343,386	\$11,314,195,285
GRAND TOTAL	\$45,734,794,747	\$5,558,303,490	\$15,507,320,573	\$3,918,610,392	\$22,574,711	\$887,771,197	\$71,629,375,110



Number of Properties							
	Residential	Apartments	Commerical	Industrial	Agricultural	Other	Total
Single Route	19,193	44	248	98	15	23	19,621
Overlapping Routes	32,764	265	1,824	313	8	56	35,230
Phase 1 Total	51,957	309	2,072	411	23	79	54,851
Single Route	26,399	191	423	157	4	24	27,198
Overlapping Routes	3,753	102	93	11	0	3	3,962
Phase 2 Total	30,152	293	516	168	4	27	31,160
Single Route	20,427	49	219	131	16	13	20,855
Overlapping Routes	4,852	73	259	59	6	12	5,261
Phase 3 Total	25,279	122	478	190	22	25	26,116
Single Route	66,019	284	890	386	35	60	67,674
Overlapping Routes	41,369	440	2,176	383	14	71	44,453
CCT Route	12,130	44	1,213	94	6	1,407	14,894
GRAND TOTAL	119,518	768	4,279	863	55	1,538	127,021



Value per Property							
	Residential	Apartments	Commerical	Industrial	Agricultural	Other	Total
Single Route	\$362,751	\$9,013,555	\$3,707,381	\$3,464,260	\$317,117	\$2,237,112	\$442,078
Overlapping Routes	\$369,786	\$9,224,120	\$3,860,793	\$2,952,239	\$289,315	\$1,785,432	\$642,308
Phase 1 Total	\$367,187	\$9,194,137	\$3,842,431	\$3,074,327	\$307,447	\$1,916,933	\$570,683
Single Route	\$450,480	\$3,426,514	\$2,410,797	\$5,096,454	\$526,745	\$2,456,225	\$530,468
Overlapping Routes	\$470,931	\$1,919,057	\$11,033,573	\$49,119,582	N/A	\$2,247,433	\$892,561
Phase 2 Total	\$453,026	\$2,901,733	\$3,964,902	\$7,978,920	\$526,745	\$2,433,026	\$576,508
Single Route	\$335,738	\$6,538,714	\$2,365,448	\$3,833,396	\$280,113	\$746,909	\$393,811
Overlapping Routes	\$282,941	\$6,836,376	\$3,017,154	\$2,943,611	N/A	\$632,380	\$539,014
Phase 3 Total	\$325,605	\$6,716,823	\$2,718,569	\$3,557,095	\$256,721	\$691,935	\$423,062
Single Route	\$389,473	\$4,829,076	\$2,760,933	\$4,253,408	\$324,159	\$2,001,880	\$462,727
Overlapping Routes	\$368,776	\$7,134,525	\$4,066,935	\$4,276,865	\$248,613	\$1,610,071	\$652,388
CCT Route	\$392,931	\$23,810,337	\$3,462,851	\$6,795,272	\$1,291,430	\$464,352	\$759,648
GRAND TOTAL	\$382,660	\$7,237,374	\$3,624,052	\$4,540,684	\$410,449	\$577,224	\$563,918