

Appendix C

Financial Analysis

Federal regulations require WILMAPCO to identify sources of revenue that are reasonably expected to be made available and allow implementation of its RTP. Fiscal realities in the WILMAPCO Region, particularly New Castle County, have had a dramatic impact in determining what is financially reasonable. WILMAPCO forecasts funding shortfalls for capital projects in Delaware well before 2040. Simply put, not enough revenue will be available to build all the projects the current RTP. For both Cecil County and New Castle County, WILMAPCO recommends sets of projects with total costs less than the amounts forecasted as available for capital projects.

New Castle County

Methodology and Assumptions:

WILMAPCO staff developed financial projections for Delaware to determine how much would be available for capital projects. Projections were based on the Base Financial Plan presented as part of the June 2010 Bond Bill. Historical averages from the 2000 to 2010 were used to determine the rates of increase for various types of revenues and costs from 2011 to 2040. They are as follows:

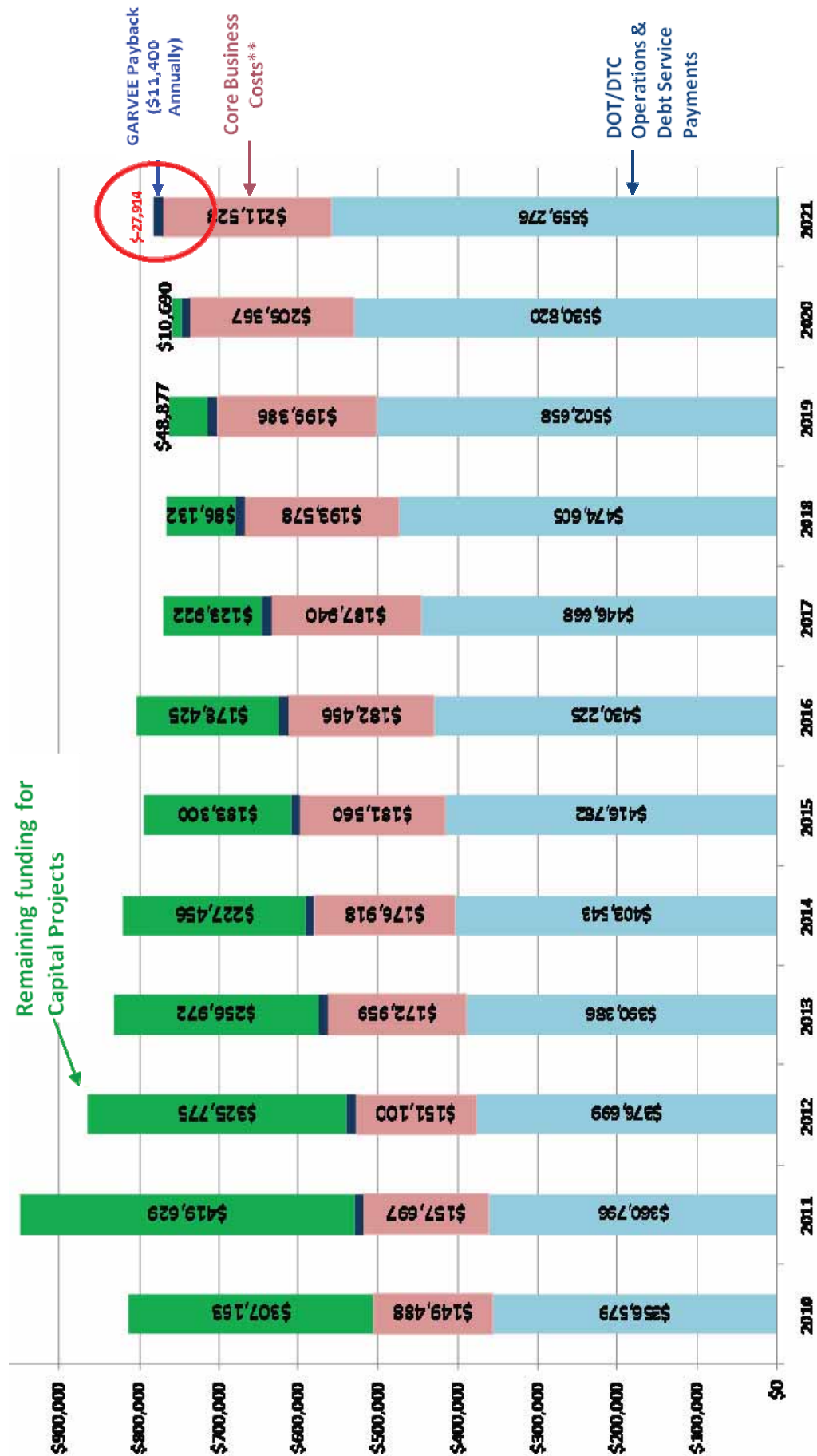
- Pledged and non-pledged state revenues increase 2.5% a year.
- Assumes continued practice of a 50/50 Pay-Go borrowing.
- Operating costs for DelDOT: 3% annual increase.
- Operating costs for DTC : 5% annual increase.
- Federal capital spending projected to increase 2% a year.

The financial analysis defines core business needs as including paving and rehabilitation, heavy equipment, technology, community transportation program, municipal street aid, material and minor contracts, bridge rehabilitation, transit vehicle replacement, planning, transportation enhancements, transit facilities, and transportation facilities.

Using the Delaware Economic Forecast Advisory Committee's FY 2010-2016 forecast, in addition to other assumptions provided by DelDOT, a reasonable revenue forecast can be established for New Castle County. By taking the forecasted revenue (state and federal) and subtracting the operating costs, debt service payments, core business needs and GARVEE payback), the remaining amount can be used to develop a sense of funding through 2040.

As shown on the graph on the following page, Delaware cannot demonstrate that revenue will be available for capital improvements beyond FY 2020. This means projects beyond 2020 cannot be expected to be completed based on current forecasts.

Delaware Capital Transportation Funding Outlook FY 2010-2021



Base Financial Plan - Capital June DEFAC 2010																					
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Revenue	362,200	372,100	382,300	391,500	400,100	408,800	417,700	428,114	437,755	447,631	457,746	468,107	478,720	488,592	500,729	512,139	523,827	535,802	548,070	560,638	573,517
Total Pledged Revenue	72,843	90,002	102,515	104,568	106,729	108,897	111,173	115,963	118,019	120,133	122,306	124,540	126,838	129,200	131,628	134,125	136,693	139,333	142,029	144,770	146,000
Total Non-Pledged Revenue	435,043	462,102	484,815	496,068	506,829	517,697	528,873	544,077	555,774	567,763	580,052	592,647	605,588	618,792	632,358	646,264	660,520	675,134	688,499	703,889	719,607
Operations																					
Total Debt Service	121,455	128,746	135,880	140,444	144,109	147,472	150,638	147,511	154,506	160,152	164,339	167,141	168,562	168,595	167,952	165,616	209,081	150,690	142,051	130,946	117,146
Total Operations (DOT & DTC)	235,124	232,050	240,819	249,942	259,434	269,310	279,587	299,158	320,099	342,506	366,481	392,135	419,584	448,955	480,382	514,009	549,990	588,489	629,683	673,761	720,924
Total Operations	356,579	360,796	376,699	390,386	403,543	416,782	430,225	446,668	474,605	502,658	530,820	559,276	588,147	617,551	648,334	679,625	759,071	739,179	771,734	804,707	838,070
State Resources Available for Capital	78,464	101,306	108,116	105,682	103,286	100,915	98,648	97,408	81,170	65,105	49,232	33,371	17,411	1,241	-15,977	-33,361	-98,551	-64,045	-83,235	-100,848	-118,463
Beginning Capital Cash Balance	142,587	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,097	20,423	21,105	20,646	19,924	19,924	19,067	18,208	32,834	30,303	21,522	4,101	(24,424)
Balance	0	20,651	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Federal Funds	235,600	345,463	252,043	209,969	189,202	154,430	154,995	108,346	108,346	108,346	108,346	108,346	108,346	108,346	108,346	108,346	108,346	108,346	108,346	108,346	108,346
Bond Proceeds	0	101,306	108,116	105,681	103,286	100,915	98,649	97,508	81,498	65,788	48,775	32,651	16,557	384	(7,494)	(27,214)	(101,080)	(72,824)	(100,654)	(129,371)	(160,786)
Total Funds Available for Capital Expenditures	456,651	588,726	488,275	441,332	415,773	376,260	372,292	323,262	291,111	259,663	227,457	195,014	162,238	129,039	103,084	74,460	-58,450	1,781	-54,021	-117,772	-195,326
Core Business (See list below)	149,488	157,697	151,100	172,959	176,918	181,560	182,466	187,940	193,578	199,386	205,367	211,528	217,874	224,410	231,142	238,077	245,219	252,576	260,153	267,957	275,996
GARVEE Bond Payback	11,400	11,400	11,400	11,400	11,400	11,400	11,400	11,400	11,400	11,400	11,400	11,400	11,400	11,400	11,400	11,400					
Remaining Funds for other capital	307,163	431,029	325,775	256,972	227,455	183,300	178,426	123,922	86,132	48,877	10,690	-27,914	-67,036	-106,772	-139,459	-175,017	-303,669	-250,795	-314,173	-385,729	-471,323
Less:																					
State Capital Expenditures	180,400	202,612	216,232	211,363	206,572	201,830	197,297	194,818	162,341	130,212	98,466	66,744	34,824	2,484	-31,951	-66,721	-197,100	-128,087	-166,468	-201,694	-236,923
Federal Capital Expenditures	235,600	345,463	252,043	209,969	189,202	154,430	154,995	108,346	108,346	108,346	108,346	108,346	108,346	108,346	108,346	108,346	108,346	108,346	108,346	108,346	108,346
Total Capital Spending	416,000	568,726	468,275	421,332	395,774	356,260	352,292	303,164	270,687	238,558	206,812	175,090	143,170	110,830	76,395	41,625	(88,754)	(19,741)	(58,122)	(93,348)	(128,577)
Sub-total	40,651	20,000	20,000	20,000	20,000	20,000	20,000	20,097	20,423	21,105	20,646	19,924	19,067	18,208	26,689	32,834	30,303	21,522	4,101	-24,424	-66,749
Pay Go Revenue	78,464	101,306	108,116	105,682	103,286	100,915	98,648	97,408	81,170	65,105	49,232	33,371	17,411	1,241	-15,977	-33,361	-98,551	-64,045	-83,235	-100,848	-118,463
State Capital	180,400	202,612	216,232	211,363	206,572	201,830	197,297	194,818	162,341	130,212	98,466	66,744	34,824	2,484	-31,951	-66,721	-197,100	-128,087	-166,468	-201,694	-236,923
Pay Go Percentage	43.5%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Additional Senior Bond Test	2.97	2.87	2.77	2.73	2.72	2.72	2.72	2.84	2.78	2.74	2.73	2.75	2.79	2.85	2.93	3.04	3.28	3.50	3.79	4.21	4.82

Figures in GREEN are from June 2010 DEFAC projections. Sources: WILMAPCO, DelDOT, DEFAC June 2010

WILMAPCO
2040 Regional Transportation Plan

Financial Projections
for
Cecil County

Prepared by
Maryland Department of Transportation
June 2010

DOCUMENTATION OF ASSUMPTIONS

Date: June 2010

Subject: Methodology and assumptions used to derive the
FY 2040 Constrained Long-range Transportation Plan.

Total Program Revenues/Expenditures (operating and capital):

- FY 1981 to FY 2009 figures are actual expenditures from historical records. FY 2010 to FY 2015 are from the FY 2010 Trust Fund Forecast and Consolidated Transportation Plan (CTP).
- The federal funds received directly by WMATA are **not** included in this exercise.
- FY 2016 to FY 2040 projections of state funds use a historical annual average growth rate of 3.5%. Federal fund projections for the same period are based on an average growth rate of 5.3% for Highway and 4.7% for Transit program funds.

Operating Expenditures:

- FY 1981 to FY 2009 are actual expenditures from historical records. Expenditures for FY 2010 to FY 2015 are the operating budget projections contained in the current Trust Fund Forecast.
- FY 2016 to FY 2040 projections are derived by inflating the previous year with an estimate for the percentage change in CPI-U plus 2%. The Consumer Price Index is a generally accepted measure of inflation. The projected annual change in index figures is based on information received from two economic forecasting firms. Two percent (2%) is added to the forecasted rate to account for the additional operating costs associated with new capital expansions.

Capital - Systems Preservation:

- Department records were used to determine the split between systems preservation and expansion for FY 1981 to FY 2009. FY 2010 to FY 2015 represents the current version of the capital program.
- An annual growth rate of 2.5% is assumed for systems preservation for the FY 2016 – FY 2040 period.

Capital - Expansion:

- Expenditures for capital expansion were derived by subtracting both operating and systems preservation expenditures from the total program expenditures for each year.

Cecil County - Percentage of Capital Expansion:

- Total capital figures from FY 1981 to Present were split into surface and non-surface. Surface included highway (SHA) and transit (MTA, MARC, & WMATA) costs. Non-surface included port, aviation, and motor vehicle administrations, and the Secretary's Office expenses.
- The surface / non-surface data and the system preservation / expansion data were combined, analyzed, and evaluated to produce estimates of the percentage of Maryland expansion associated with surface transportation for the various time periods.
- Surface capital in Cecil County was derived from historical records and used with the above-mentioned projections to produce the estimates shown for Cecil County as a percent of Total Surface Expansion and as a percent of Total Maryland Expansion.

MDOT Operating & Capital Expenditures - Statewide
History, Program & Forecast
(Millions of Dollars)

Fiscal Year	Operating	Systems Preservation	Operating & Systems Pres.	Expansion	Statewide Total
1981	265	111	376	248	624
1982	287	136	423	236	659
1983	322	164	486	284	770
1984	352	167	519	246	765
1985	385	204	589	319	908
1986	428	234	662	403	1,065
1987	441	264	705	506	1,211
1988	478	260	738	615	1,353
1989	508	227	735	677	1,412
1990	551	270	821	760	1,581
1991	591	268	859	773	1,632
1992	577	187	764	542	1,306
1993	638	254	892	418	1,310
1994	689	279	968	393	1,361
1995	709	400	1,109	497	1,606
1996	784	391	1,175	465	1,640
1997	770	417	1,187	493	1,680
1998	808	451	1,259	411	1,670
1999	868	515	1,383	420	1,803
2000	913	476	1,389	455	1,844
2001	979	439	1,418	771	2,189
2002	1,045	453	1,498	931	2,429
2003	1,158	441	1,599	951	2,550
2004	1,178	472	1,650	909	2,559
2005	1,237	518	1,755	976	2,731
2006	1,303	669	1,972	853	2,825
2007	1,396	613	2,009	812	2,821
2008	1,488	693	2,181	753	2,934
2009	1,561	678	2,239	724	2,963
2010	1,546	896	2,442	775	3,217
2011	1,606	583	2,189	619	2,808
2012	1,667	806	2,473	604	3,077
2013	1,737	887	2,624	401	3,025
2014	1,799	774	2,573	383	2,956
2015	1,863	759	2,622	400	3,022
2016	1,938	888	2,826	809	3,635
2017	2,017	910	2,927	850	3,777
2018	2,099	932	3,031	894	3,925
2019	2,184	955	3,139	940	4,079
2020	2,271	978	3,249	990	4,239
2021	2,361	1,002	3,363	1,044	4,407
2022	2,455	1,027	3,482	1,099	4,581
2023	2,552	1,052	3,604	1,157	4,761
2024	2,654	1,078	3,732	1,218	4,950
2025	2,760	1,105	3,865	1,281	5,146
2026	2,871	1,132	4,003	1,348	5,351
2027	2,986	1,159	4,145	1,419	5,564
2028	3,106	1,188	4,294	1,492	5,786
2029	3,232	1,217	4,449	1,567	6,016
2030	3,363	1,247	4,610	1,647	6,257
2031	3,499	1,277	4,776	1,732	6,508
2032	3,640	1,309	4,949	1,820	6,769
2033	3,786	1,341	5,127	1,914	7,041
2034	3,938	1,374	5,312	2,012	7,324
2035	4,096	1,407	5,503	2,116	7,619
2036	4,260	1,442	5,702	2,226	7,928
2037	4,430	1,477	5,907	2,341	8,248
2038	4,607	1,514	6,121	2,461	8,582
2039	4,791	1,551	6,342	2,588	8,930
2040	4,983	1,589	6,572	2,721	9,293

CECIL COUNTY

Percentage of Capital Expansion

(Millions of Dollars)

Surface Enhancement % of Maryland Enhancement	
1981 - 2009	87.7%

Cecil County Expansion % of Surface Expansion	
1981 - 2009	0.5%



Fiscal Year	Statewide Enhancement Funds	Surface Percentage	Private Funds	Total Surface Available	Cecil Co Percentage	Total Cecil Expansion Funds
2010	775					2.1
2011	619					0.1
2012	604					0.1
2013	401					0.1
2014	383					0.1
2015	400					0.1
2016	809	709	23	732	3.5	3.5
2017	850	745	23	768	3.7	3.7
2018	894	784	23	807	3.9	3.9
2019	940	824	24	848	4.1	4.1
2020	990	868	24	892	4.3	4.3
2021	1,044	915	24	939	4.5	4.5
2022	1,099	964	24	988	4.7	4.7
2023	1,157	1,015	25	1,040	5.0	5.0
2024	1,218	1,068	25	1,093	5.2	5.2
2025	1,281	1,123	25	1,148	5.5	5.5
2026	1,348	1,182	25	1,207	5.8	5.8
2027	1,419	1,244	25	1,269	6.1	6.1
2028	1,492	1,308	25	1,333	6.4	6.4
2029	1,567	1,374	25	1,399	6.7	6.7
2030	1,647	1,444	25	1,469	7.1	7.1
2031	1,732	1,519	25	1,544	7.4	7.4
2032	1,820	1,596	25	1,621	7.8	7.8
2033	1,914	1,678	25	1,703	8.2	8.2
2034	2,012	1,764	25	1,789	8.6	8.6
2035	2,116	1,856	25	1,881	9.0	9.0
2036	2,226	1,952	25	1,977	9.5	9.5
2037	2,341	2,053	25	2,078	10.0	10.0
2038	2,461	2,158	25	2,183	10.5	10.5
2039	2,588	2,269	25	2,294	11.0	11.0
2040	2,721	2,386	25	2,411	11.6	11.6
Total '16-'40	39,686	34,801	615	35,416	170.0	170.0
Total '10-'40	42,868					172.6