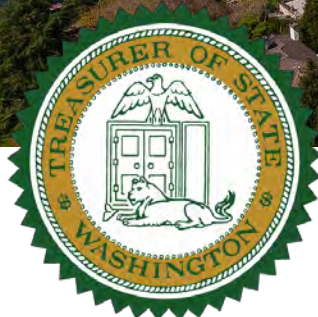


SR-520

Certificate of the Treasurer's Representative



Office of the State Treasurer



April 17, 2018



Certification Process

- **Master Bond Resolution No. 1117 requires a “Certificate of Treasurer Representative” when there is a proposed revision to the 520 Toll Rate Schedule**
 - **Certificate is required to provide assurance that “the adoption of the revised Toll Rate Schedule will not cause the State to fail to comply with its covenants”**

- **At present, there are no proposed revisions to the current 520 Toll Rate Schedule**
 - **Accordingly, a Certificate is not required at this time**

- **OST has provided a Certificate to confirm that updated projections of toll revenues are expected to be sufficient to allow the State to comply with its covenants and commitments**



Source Data

- The Certificate of Treasurer Representative is based upon the information contained in:
 - ✓ **Annual Traffic and Gross Revenue Forecast** - Stantec Traffic Consultant Certificate dated March 6, 2018
 - ✓ **O&M Cost Review** - IBI Group Operations and Maintenance Cost Review Certificate dated February 13, 2018
 - ✓ **T&R Projections** - WSP Net Revenue Review and Certification dated March 7, 2018
 - ✓ **OST's 520 Financial Model**



Executive Summary

- Change in revenue forecast methodology & assumptions (change in traffic & revenue consultant from CDM Smith to Stantec)
 - **\$121 mm decrease** in total net revenues available for debt service (2017-2056)

- Impact of revenue changes
 - Insufficient TIFIA loan coverage in two years (2018-2019)
 - Insufficient aggregate facility coverage in multiple years (2018-2019, 2022-2029)

- Resulting actions
 - Draw from the Revenue Stabilization Account (RSA) in two years (2018-2019)
 - Reductions to R&R Fund deposits in multiple years (2018-2019 & 2022-2029)



Summary of Revenue Changes

Fiscal Year	Revenue Avail. For Debt Service, 2/6/2017	Revenue Avail. For Debt Service, 1/23/2018	Difference
2017	55,749,351	57,129,261	1,379,910
2018	65,329,042	64,321,804	(1,007,237)
2019	65,691,196	64,322,370	(1,368,826)
2020	68,243,668	68,801,870	558,202
2021	71,716,704	71,354,623	(362,081)
2022	75,767,940	72,522,986	(3,244,954)
2023	79,345,298	74,232,809	(5,112,489)
2024	81,149,428	77,078,493	(4,070,936)
2025	82,780,298	78,497,044	(4,283,253)
2026	85,719,999	79,538,238	(6,181,762)
2027	87,286,511	82,321,030	(4,965,481)
2028	88,945,370	83,681,935	(5,263,434)
2029	89,443,030	85,213,144	(4,229,886)
2030	90,526,398	86,447,294	(4,079,104)
2031	91,854,992	87,483,583	(4,371,409)
2032	93,682,967	88,535,938	(5,147,029)
2033	92,890,285	87,979,288	(4,910,997)
2034	93,956,044	88,895,389	(5,060,655)
2035	94,372,299	89,536,352	(4,835,947)
2036	95,379,437	89,990,576	(5,388,861)
2037	95,633,498	90,555,696	(5,077,803)
2038	96,016,528	90,936,239	(5,080,289)
2039	95,835,774	91,140,737	(4,695,037)
2040	95,516,019	91,354,578	(4,161,441)
2041	94,852,468	91,222,131	(3,630,337)
2042	94,740,046	91,134,048	(3,605,998)
2043	94,357,582	91,079,847	(3,277,735)
2044	94,362,776	90,611,440	(3,751,337)
2045	93,561,502	90,156,763	(3,404,738)
2046	92,901,209	90,153,782	(2,747,427)
2047	92,486,884	90,075,018	(2,411,867)
2048	92,811,515	90,097,231	(2,714,285)
2049	91,760,427	90,037,406	(1,723,021)
2050	91,218,745	89,961,944	(1,256,801)
2051	90,654,849	89,873,213	(781,636)
2052	90,069,438	89,723,635	(345,802)
2053	89,600,935	89,323,224	(277,712)
2054	89,038,620	88,734,203	(304,418)
2055	88,372,045	88,488,704	116,660
2056	88,339,016	88,312,680	(26,336)
Total	3,712,952,187	3,591,848,598	(121,103,590)

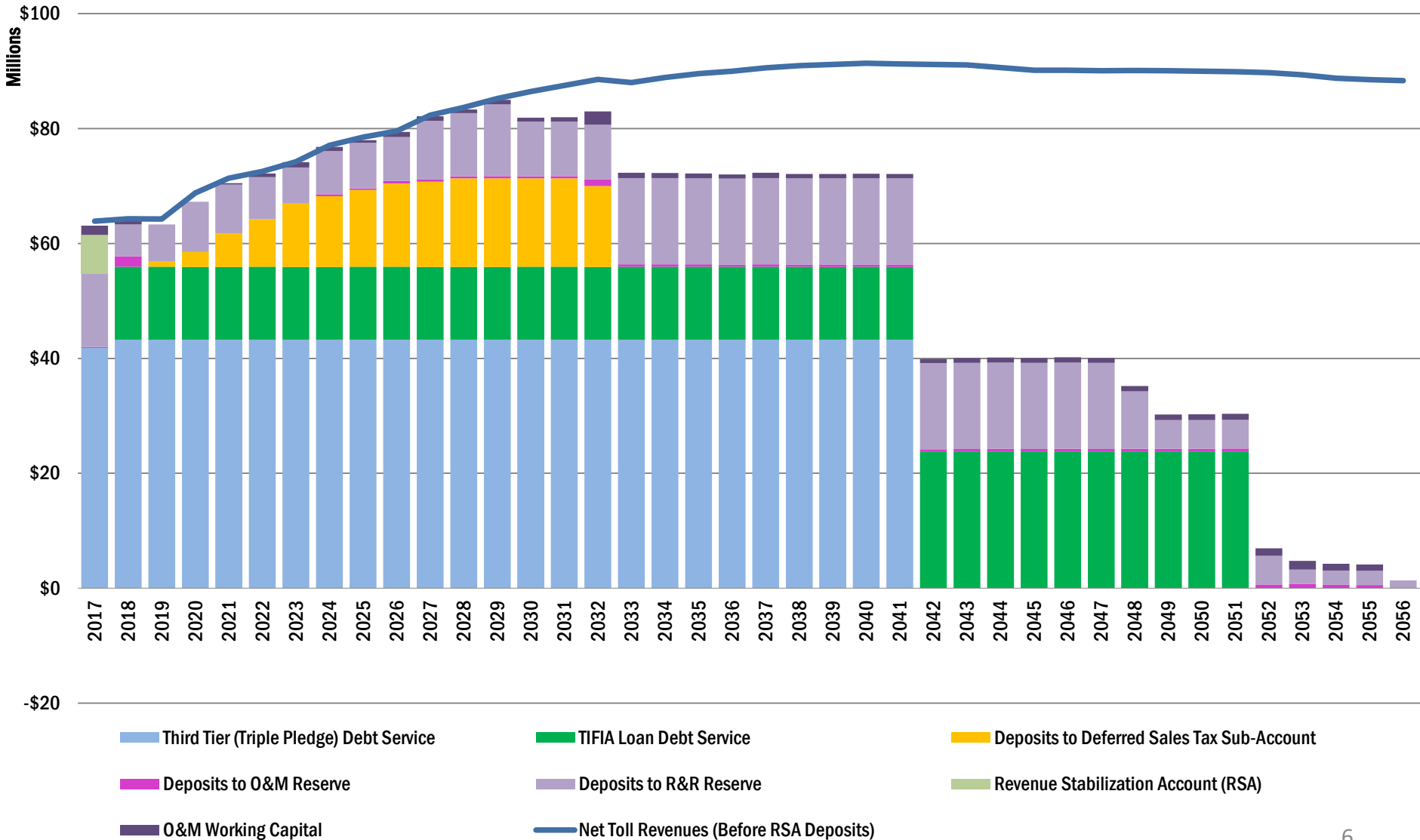


SR-520 Financial Model & Necessary Adjustments

#	1	2	3	4	5	6	7	8	9	10	11	12
Fiscal Year	Gross Rev	O&M	Net (Deposits) to / Draws from RSA	Net RSA Adjusted Toll Revenue Available for Debt Service	3rd Tier Debt Pledge Debt Service Sub-Account	4th Tier TIFIA Debt Service Sub-Account	Total Debt Service (from Tolls)	Net Revenues After Debt Service	O&M Reserve Sub-Account	Deposit to Deferred Sales Tax Sub-Account	Deposit to R&R Reserve Sub-Account	Net Revenues After Required Deposits
2017	81,549,715	(17,684,292)	(6,736,162)	57,129,261	(41,824,970)	-	(41,824,970)	15,304,291	(156,501)	-	(12,767,880)	2,379,910
2018	83,613,234	(19,307,430)	16,000	64,321,804	(43,246,025)	(12,685,912)	(55,931,937)	8,389,867	(1,829,725)	-	(5,560,142)	1,000,000
2019	86,323,527	(22,069,157)	68,000	64,322,370	(43,246,275)	(12,685,912)	(55,932,187)	8,390,183	-	(1,000,000)	(6,390,183)	1,000,000
2020	88,533,631	(19,731,761)	-	68,801,870	(43,243,025)	(12,685,912)	(55,928,937)	12,872,933	-	(2,600,000)	(8,714,731)	1,558,202
2021	91,450,397	(20,095,774)	-	71,354,623	(43,239,775)	(12,685,912)	(55,925,687)	15,428,936	-	(5,800,000)	(8,503,595)	1,125,341
2022	93,096,092	(20,573,106)	-	72,522,986	(43,244,775)	(12,685,912)	(55,930,687)	16,592,299	-	(8,300,000)	(7,292,299)	1,000,000
2023	95,460,773	(21,227,964)	-	74,232,809	(43,240,775)	(12,685,912)	(55,926,687)	18,306,122	(28,081)	(11,000,000)	(6,278,041)	1,000,000
2024	99,203,812	(22,125,319)	-	77,078,493	(43,241,275)	(12,685,912)	(55,927,187)	21,151,306	(361,506)	(12,275,000)	(7,514,800)	1,000,000
2025	101,345,375	(22,848,331)	-	78,497,044	(43,244,025)	(12,685,912)	(55,929,937)	22,567,107	(244,213)	(13,400,000)	(7,922,894)	1,000,000
2026	102,874,995	(23,336,757)	-	79,538,238	(43,245,175)	(12,685,912)	(55,931,087)	23,607,151	(430,184)	(14,500,000)	(7,676,967)	1,000,000
2027	106,518,155	(24,197,125)	-	82,321,030	(43,239,713)	(12,685,912)	(55,925,625)	26,395,406	(400,865)	(14,800,000)	(10,194,541)	1,000,000
2028	108,680,789	(24,998,854)	-	83,681,935	(43,242,750)	(12,685,912)	(55,928,662)	27,753,273	(317,928)	(15,415,000)	(11,020,345)	1,000,000
2029	110,847,855	(25,634,711)	-	85,213,144	(43,240,750)	(12,685,912)	(55,926,662)	29,286,482	(387,186)	(15,415,000)	(12,484,296)	1,000,000
2030	112,856,377	(26,409,083)	-	86,447,294	(43,244,250)	(12,685,912)	(55,930,162)	30,517,132	(344,273)	(15,415,000)	(9,500,000)	5,257,859
2031	114,581,211	(27,097,629)	-	87,483,583	(43,245,250)	(12,685,912)	(55,931,162)	31,552,421	(369,948)	(15,415,000)	(9,500,000)	6,267,473
2032	116,373,463	(27,837,525)	-	88,535,938	(43,241,000)	(12,685,912)	(55,926,912)	32,609,026	(1,158,686)	(14,065,000)	(9,500,000)	7,885,341
2033	118,134,184	(30,154,896)	-	87,979,288	(43,243,750)	(12,685,912)	(55,929,662)	32,049,626	(450,479)	-	(15,000,000)	16,599,148
2034	119,951,242	(31,055,853)	-	88,895,389	(43,245,000)	(12,685,912)	(55,930,912)	32,964,477	(442,892)	-	(15,000,000)	17,521,585
2035	121,477,989	(31,941,637)	-	89,536,352	(43,246,500)	(12,685,912)	(55,932,412)	33,603,940	(417,915)	-	(15,000,000)	18,186,025
2036	122,768,043	(32,777,466)	-	89,990,576	(43,244,750)	(12,685,912)	(55,930,662)	34,059,914	(354,864)	-	(15,000,000)	18,705,050
2037	124,042,890	(33,487,194)	-	90,555,696	(43,246,250)	(12,685,912)	(55,932,162)	34,623,534	(456,074)	-	(15,000,000)	19,167,460
2038	125,335,582	(34,399,342)	-	90,936,239	(43,247,000)	(12,685,912)	(55,932,912)	35,003,327	(387,780)	-	(15,000,000)	19,615,547
2039	126,315,639	(35,174,902)	-	91,140,737	(43,243,000)	(12,685,912)	(55,928,912)	35,211,825	(392,450)	-	(15,000,000)	19,819,375
2040	127,314,381	(35,959,803)	-	91,354,578	(43,245,250)	(12,685,912)	(55,931,162)	35,423,416	(398,172)	-	(15,000,000)	20,025,245
2041	127,978,276	(36,756,146)	-	91,222,131	(43,239,000)	(12,685,912)	(55,924,912)	35,297,219	(390,267)	-	(15,000,000)	19,906,952
2042	128,670,728	(37,536,680)	-	91,134,048	-	(23,790,745)	(23,790,745)	67,343,303	(372,158)	-	(15,000,000)	51,971,145
2043	129,360,842	(38,280,996)	-	91,079,847	-	(23,790,745)	(23,790,745)	67,289,102	(425,009)	-	(15,000,000)	51,864,093
2044	129,742,454	(39,131,014)	-	90,611,440	-	(23,790,745)	(23,790,745)	66,820,695	(455,921)	-	(15,000,000)	51,364,773
2045	130,199,620	(40,042,857)	-	90,156,763	-	(23,790,745)	(23,790,745)	66,366,018	(426,075)	-	(15,000,000)	50,939,943
2046	131,048,789	(40,895,006)	-	90,153,782	-	(23,790,745)	(23,790,745)	66,363,037	(468,166)	-	(15,000,000)	50,894,871
2047	131,906,357	(41,831,339)	-	90,075,018	-	(23,790,745)	(23,790,745)	66,284,272	(423,862)	-	(15,000,000)	50,860,410
2048	132,776,295	(42,679,064)	-	90,097,231	-	(23,790,745)	(23,790,745)	66,306,486	(465,157)	-	(10,000,000)	55,841,329
2049	133,646,785	(43,609,379)	-	90,037,406	-	(23,790,745)	(23,790,745)	66,246,661	(478,652)	-	(5,000,000)	60,768,009
2050	134,528,626	(44,566,682)	-	89,961,944	-	(23,790,745)	(23,790,745)	66,171,199	(486,679)	-	(5,000,000)	60,684,520
2051	135,413,252	(45,540,039)	-	89,873,213	-	(23,790,745)	(23,790,745)	66,082,468	(521,907)	-	(5,000,000)	60,560,561
2052	136,307,489	(46,583,853)	-	89,723,635	-	-	-	89,723,635	(649,195)	-	(5,000,000)	84,074,441
2053	137,205,467	(47,882,243)	-	89,323,224	-	-	-	89,323,224	(749,251)	-	(2,500,000)	86,073,972
2054	138,114,948	(49,380,746)	-	88,734,203	-	-	-	88,734,203	(578,864)	-	(2,500,000)	85,655,339
2055	139,027,178	(50,538,473)	-	88,488,704	-	-	-	88,488,704	(549,136)	-	(2,500,000)	85,439,568
2056	139,949,426	(51,636,746)	-	88,312,680	-	-	-	88,312,680	-	-	(1,358,195)	86,954,485



All Required Expenditures/Deposits Coverage (4/10/2018)





SR-520 Coverage Ratio Results

#	1	2	3	4	5	6	7	8	9	10	11
Fiscal Year	Net Revenues	Deposits to RSA	Draws From RSA	Net Revenues for Coverage Calculations	3rd Tier (3x Pledge) Debt Coverage	4th Tier (TIFIA) Debt Coverage	Deferred Sales Tax Coverage	Sufficiency Coverage	Aggregate Coverage*	Days Cash on Hand -- Toll Facilities Account	Days Cash on Hand -- w/O&M Reserve & RSA
2017	63,865,423	(6,736,162)	-	57,129,261	1.366	1.366	1.366	1.043	1.043	563	1,299
2018	64,305,804	-	16,000	64,321,804	1.487	1.150	1.150	1.016	1.016	568	1,393
2019	64,254,370	-	68,000	64,322,370	1.487	1.150	1.130	1.016	1.016	509	1,253
2020	68,801,870	-	-	68,801,870	1.591	1.230	1.176	1.023	1.023	601	1,447
2021	71,354,623	-	-	71,354,623	1.650	1.276	1.156	1.016	1.016	623	1,455
2022	72,522,986	-	-	72,522,986	1.677	1.297	1.129	1.014	1.014	631	1,442
2023	74,232,809	-	-	74,232,809	1.717	1.327	1.109	1.014	1.014	630	1,416
2024	77,078,493	-	-	77,078,493	1.783	1.378	1.130	1.013	1.013	623	1,377
2025	78,497,044	-	-	78,497,044	1.815	1.403	1.132	1.013	1.013	621	1,357
2026	79,538,238	-	-	79,538,238	1.839	1.422	1.129	1.013	1.013	625	1,349
2027	82,321,030	-	-	82,321,030	1.904	1.472	1.164	1.012	1.012	620	1,326
2028	83,681,935	-	-	83,681,935	1.935	1.496	1.173	1.012	1.012	616	1,304
2029	85,213,144	-	-	85,213,144	1.971	1.524	1.194	1.012	1.012	616	1,292
2030	86,447,294	-	-	86,447,294	1.999	1.546	1.212	1.065	1.065	613	1,274
2031	87,483,583	-	-	87,483,583	2.023	1.564	1.226	1.077	1.077	677	1,326
2032	88,535,938	-	-	88,535,938	2.047	1.583	1.265	1.098	1.098	752	1,387
2033	87,979,288	-	-	87,979,288	2.034	1.573	1.573	1.233	1.233	795	1,393
2034	88,895,389	-	-	88,895,389	2.056	1.589	1.589	1.245	1.245	990	1,576
2035	89,536,352	-	-	89,536,352	2.070	1.601	1.601	1.255	1.255	1,186	1,760
2036	89,990,576	-	-	89,990,576	2.081	1.609	1.609	1.262	1.262	1,381	1,944
2037	90,555,696	-	-	90,555,696	2.094	1.619	1.619	1.268	1.268	1,578	2,132
2038	90,936,239	-	-	90,936,239	2.103	1.626	1.626	1.275	1.275	1,760	2,304
2039	91,140,737	-	-	91,140,737	2.108	1.630	1.630	1.278	1.278	1,945	2,481
2040	91,354,578	-	-	91,354,578	2.112	1.633	1.633	1.281	1.281	2,123	2,651
2041	91,222,131	-	-	91,222,131	2.110	1.631	1.631	1.279	1.279	2,294	2,814
2042	91,134,048	-	-	91,134,048	-	3.831	3.831	2.327	2.327	2,458	2,970
2043	91,079,847	-	-	91,079,847	-	3.828	3.828	2.323	2.323	2,955	3,460
2044	90,611,440	-	-	90,611,440	-	3.809	3.809	2.309	2.309	3,419	3,917
2045	90,156,763	-	-	90,156,763	-	3.790	3.790	2.299	2.299	3,851	4,341
2046	90,153,782	-	-	90,153,782	-	3.789	3.789	2.296	2.296	4,265	4,749
2047	90,075,018	-	-	90,075,018	-	3.786	3.786	2.297	2.297	4,651	5,127
2048	90,097,231	-	-	90,097,231	-	3.787	3.787	2.630	2.630	5,030	5,500
2049	90,037,406	-	-	90,037,406	-	3.785	3.785	3.076	3.076	5,428	5,891
2050	89,961,944	-	-	89,961,944	-	3.781	3.781	3.073	3.073	5,848	6,305
2051	89,873,213	-	-	89,873,213	-	3.778	3.778	3.066	3.066	6,246	6,698

Rate Covenant Requirements:

Triple Pledge: 1.25X

TIFIA: 1.10x

Sufficiency Ratio: 1.00x

Rate Policy Requirements:

Triple Pledge: 1.30X

TIFIA: 1.15x

Sufficiency Ratio: 1.00x

Other:

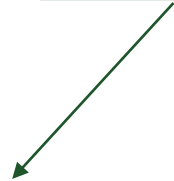
RSA Draws: Max 25% of annual debt service



SR-520 RSA Results

#	1	2	3	4	5	6
Net Toll Revenue						
Fiscal Year	Available for Debt Service	Beginning Bal in RSA	Deposits to RSA	Draws from RSA	Ending Bal in RSA	RSA / Net Revenue
2017	63,865,423	22,068,796	6,736,162	-	28,804,958	45.1%
2018	64,305,804	28,804,958	-	(16,000)	28,788,958	44.8%
2019	64,254,370	28,788,958	-	(68,000)	28,720,958	44.7%
2020	68,801,870	28,720,958	-	-	28,720,958	41.7%
2021	71,354,623	28,720,958	-	-	28,720,958	40.3%
2022	72,522,986	28,720,958	-	-	28,720,958	39.6%
2023	74,232,809	28,720,958	-	-	28,720,958	38.7%
2024	77,078,493	28,720,958	-	-	28,720,958	37.3%
2025	78,497,044	28,720,958	-	-	28,720,958	36.6%
2026	79,538,238	28,720,958	-	-	28,720,958	36.1%
2027	82,321,030	28,720,958	-	-	28,720,958	34.9%
2028	83,681,935	28,720,958	-	-	28,720,958	34.3%
2029	85,213,144	28,720,958	-	-	28,720,958	33.7%
2030	86,447,294	28,720,958	-	-	28,720,958	33.2%
2031	87,483,583	28,720,958	-	-	28,720,958	32.8%
2032	88,535,938	28,720,958	-	-	28,720,958	32.4%
2033	87,979,288	28,720,958	-	-	28,720,958	32.6%
2034	88,895,389	28,720,958	-	-	28,720,958	32.3%
2035	89,536,352	28,720,958	-	-	28,720,958	32.1%
2036	89,990,576	28,720,958	-	-	28,720,958	31.9%
2037	90,555,696	28,720,958	-	-	28,720,958	31.7%
2038	90,936,239	28,720,958	-	-	28,720,958	31.6%
2039	91,140,737	28,720,958	-	-	28,720,958	31.5%
2040	91,354,578	28,720,958	-	-	28,720,958	31.4%
2041	91,222,131	28,720,958	-	-	28,720,958	31.5%
2042	91,134,048	28,720,958	-	-	28,720,958	31.5%
2043	91,079,847	28,720,958	-	-	28,720,958	31.5%
2044	90,611,440	28,720,958	-	-	28,720,958	31.7%
2045	90,156,763	28,720,958	-	-	28,720,958	31.9%
2046	90,153,782	28,720,958	-	-	28,720,958	31.9%
2047	90,075,018	28,720,958	-	-	28,720,958	31.9%
2048	90,097,231	28,720,958	-	-	28,720,958	31.9%
2049	90,037,406	28,720,958	-	-	28,720,958	31.9%
2050	89,961,944	28,720,958	-	-	28,720,958	31.9%
2051	89,873,213	28,720,958	-	-	28,720,958	32.0%

RSA policy requirement equal to 30% of maximum net toll revenues available for debt service





SR-520 R&R Results

#	1	2	3	4	5
Fiscal Year	Beginning Balance in R&R	Deposits to R&R	Draws from R&R	Interest on R&R	Ending Balance in R&R
2017	2,925,162	12,767,880	(1,008,177)	-	14,684,866
2018	14,684,866	5,560,142	(3,631,647)	-	16,613,361
2019	16,613,361	6,390,183	(8,384,750)	-	14,618,794
2020	14,618,794	8,714,731	(402,413)	-	22,931,112
2021	22,931,112	8,503,595	(141,627)	-	31,293,079
2022	31,293,079	7,292,299	(145,165)	-	38,440,214
2023	38,440,214	6,278,041	(148,791)	-	44,569,464
2024	44,569,464	7,514,800	(673,651)	-	51,410,613
2025	51,410,613	7,922,894	(1,323,873)	-	58,009,635
2026	58,009,635	7,676,967	(923,775)	-	64,762,827
2027	64,762,827	10,194,541	(2,975,102)	-	71,982,265
2028	71,982,265	11,020,345	(7,481,809)	-	75,520,801
2029	75,520,801	12,484,296	(9,354,988)	-	78,650,109
2030	78,650,109	9,500,000	(515,087)	-	87,635,022
2031	87,635,022	9,500,000	(21,104,994)	-	76,030,027
2032	76,030,027	9,500,000	(185,787)	-	85,344,240
2033	85,344,240	15,000,000	(12,260,574)	-	88,083,666
2034	88,083,666	15,000,000	(1,850,235)	-	101,233,432
2035	101,233,432	15,000,000	(1,266,544)	-	114,966,888
2036	114,966,888	15,000,000	(6,695,217)	-	123,271,670
2037	123,271,670	15,000,000	(3,808,346)	-	134,463,324
2038	134,463,324	15,000,000	(10,765,909)	-	138,697,415
2039	138,697,415	15,000,000	(13,100,694)	-	140,596,721
2040	140,596,721	15,000,000	(659,320)	-	154,937,402
2041	154,937,402	15,000,000	(58,144,938)	-	111,792,464
2042	111,792,464	15,000,000	(1,415,606)	-	125,376,858
2043	125,376,858	15,000,000	(243,729)	-	140,133,129
2044	140,133,129	15,000,000	(1,103,775)	-	154,029,354
2045	154,029,354	15,000,000	(1,621,247)	-	167,408,107
2046	167,408,107	15,000,000	(146,381,877)	-	36,026,230
2047	36,026,230	15,000,000	(4,874,969)	-	46,151,260
2048	46,151,260	10,000,000	(42,159,550)	-	13,991,710
2049	13,991,710	5,000,000	(16,827,262)	-	2,164,448
2050	2,164,448	5,000,000	(2,237,661)	-	4,926,788
2051	4,926,788	5,000,000	(296,932)	-	9,629,856

Reductions to the R&R deposit schedule were made in 2018-2019 and 2022-2029



Summary

- **\$121 mm decrease in total net revenues available for debt service**
 - ✓ **Conservative assumptions in the financing model helped mitigate the decrease in revenues**

- **To reach coverage and sufficiency requirements, \$84,000 was withdrawn from the RSA and multiple adjustments were made to R&R fund deposits**

- **No changes to existing Toll Rates are necessary at this time**

- **However, the \$121 mm decrease in net revenues and the deferred R&R deposits leave the system less able to respond to future revenue declines**