View BCA Results

		Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
		Year Index	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
	20	Operations Index	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
Discount Rate:	7.0%		1.000	0.935	0.873	0.816	0.763	0.713	0.666	0.623	0.582	0.544	0.508	0.475	0.444	0.415	0.388	0.362	0.339	0.317	0.296	0.277	0.258	0.242	0.226	0.211	0.197	0.184	0.172	0.161	0.150	0.141	0.131	0.123	0.115
Discount Rate for CO2:	3.0%		1.000	0.971	0.943	0.915	0.888	0.863	0.837	0.813	0.789	0.766	0.744	0.722	0.701	0.681	0.661	0.642	0.623	0.605	0.587	0.570	0.554	0.538	0.522	0.507	0.492	0.478	0.464	0.450	0.437	0.424	0.412	0.400	0.388

KEY ASSUMPTIONS FROM DASHBOARD

Project name Seminole County RAISE - CR 419 Widening
County or district average District 5
Region type Urban
Roadway type Unrestricted
Average vehicle occupancy 1.67

INVESTMENT COSTS

Project Cost Estimates

Total capital costs	$ 20,756,478	$ -	$ 416,724	$ 2,008,336	$ 2,914,468	$ 9,250,164	$ 6,166,786	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total incremental O&M costs	$ 1,049,800	$ -	$ -	$ -	$ -	$ -	$ 17,210	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ -	$ -	$ -	$ -	$ -	$ -	$ -

TRANSPORTATION DATA BY MODE

Roadway Users

from September onwards First Full Year of Operations/Benefits (2027)

Changes in Vehicle Miles Traveled																																			
Automobiles	(39,709,616)	-	-	-	-	-	(282,389)	(937,421)	(1,030,086)	(1,125,213)	(1,222,854)	(1,323,062)	(1,425,889)	(1,531,391)	(1,639,622)	(1,750,641)	(1,864,503)	(1,981,267)	(2,100,995)	(2,223,746)	(2,349,582)	(2,478,567)	(2,610,765)	(2,746,242)	(2,885,064)	(3,027,300)	(3,173,019)	-	-	-	-	-	-	-
Trucks	(4,255,082)	-	-	-	-	-	(29,141)	(97,030)	(106,945)	(117,176)	(127,730)	(138,616)	(149,842)	(161,417)	(173,349)	(185,648)	(198,322)	(211,381)	(224,834)	(238,692)	(252,963)	(267,659)	(282,790)	(298,367)	(314,400)	(330,900)	(347,879)	-	-	-	-	-	-	-
Changes in Vehicle Hours Traveled																																			
Automobiles	(5,998,004)	-	-	-	-	-	(34,788)	(117,360)	(131,058)	(145,490)	(160,686)	(176,681)	(193,509)	(211,207)	(229,811)	(249,362)	(269,900)	(291,467)	(314,107)	(337,865)	(362,790)	(388,930)	(416,337)	(445,063)	(475,165)	(506,700)	(539,727)	-	-	-	-	-	-	-
Trucks	(429,906)	-	-	-	-	-	(2,369)	(8,023)	(8,995)	(10,026)	(11,117)	(12,272)	(13,494)	(14,787)	(16,153)	(17,597)	(19,121)	(20,731)	(22,430)	(24,222)	(26,113)	(28,105)	(30,205)	(32,417)	(34,747)	(37,200)	(39,782)	-	-	-	-	-	-	-

ESTIMATION OF BENEFITS

Select Method for Estimating Roadway Travel Time Savings:
Method 2 - Change in Total Vehicle Hours Traveled

Travel Time Savings

Travel Time Savings in Hours																																			
Method 1 - Change in Consumer Surplus																																			
Existing auto, hours	4,476,686	-	-	-	-	-	-	88,105	98,389	109,222	120,631	132,638	145,271	158,557	172,524	187,201	202,619	218,810	235,805	253,641	272,352	291,976	312,550	334,115	356,713	380,386	405,180	-	-	-	-	-	-	-
New auto, hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Existing truck, hours	280,108	-	-	-	-	-	-	5,257	5,894	6,569	7,283	8,040	8,841	9,688	10,583	11,529	12,528	13,582	14,696	15,870	17,108	18,414	19,789	21,239	22,765	24,372	26,064	-	-	-	-	-	-	-
New truck, hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Method 2 - Change in Total Vehicle Hours Traveled																																			
Auto, VHT per day	5,998,004	-	-	-	-	-	34,788	117,360	131,058	145,490	160,686	176,681	193,509	211,207	229,811	249,362	269,900	291,467	314,107	337,865	362,790	388,930	416,337	445,063	475,165	506,700	539,727	-	-	-	-	-	-	-
Truck, VHT per day	429,906	-	-	-	-	-	2,369	8,023	8,995	10,026	11,117	12,272	13,494	14,787	16,153	17,597	19,121	20,731	22,430	24,222	26,113	28,105	30,205	32,417	34,747	37,200	39,782	-	-	-	-	-	-	-
Method in Use																																			
Auto, VHT per day	5,998,004	-	-	-	-	-	34,788	117,360	131,058	145,490	160,686	176,681	193,509	211,207	229,811	249,362	269,900	291,467	314,107	337,865	362,790	388,930	416,337	445,063	475,165	506,700	539,727	-	-	-	-	-	-	-
Truck, VHT per day	429,906	-	-	-	-	-	2,369	8,023	8,995	10,026	11,117	12,272	13,494	14,787	16,153	17,597	19,121	20,731	22,430	24,222	26,113	28,105	30,205	32,417	34,747	37,200	39,782	-	-	-	-	-	-	-
Travel Time Savings in Dollars	$ 191,990,531																																		
Existing auto, $	$ 178,749,426	$ -	$ -	$ -	$ -	$ -	$ 1,036,727	$ 3,497,496	$ 3,905,730	$ 4,335,805	$ 4,788,680	$ 5,265,352	$ 5,766,857	$ 6,294,274	$ 6,848,723	$ 7,431,370	$ 8,043,426	$ 8,686,150	$ 9,360,851	$ 10,068,890	$ 10,811,681	$ 11,590,694	$ 12,407,455	$ 13,263,552	$ 14,160,633	$ 15,100,412	$ 16,084,668	$ -	$ -	$ -	$ -	$ -	$ -	$ -
New auto, $	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Existing truck, $	$ 12,241,105	$ -	$ -	$ -	$ -	$ -	$ 72,962	$ 247,122	$ 277,061	$ 308,790	$ 342,396	$ 377,972	$ 415,614	$ 455,425	$ 497,508	$ 541,974	$ 588,939	$ 638,522	$ 690,850	$ 746,053	$ 804,268	$ 865,638	$ 930,313	$ 998,449	$ 1,070,208	$ 1,145,760	$ 1,225,283	$ -	$ -	$ -	$ -	$ -	$ -	$ -
New truck, $	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Auto in PV	$ 57,268,204	$ -	$ -	$ -	$ -	$ -	$ 739,172	$ 2,330,529	$ 2,432,292	$ 2,523,470	$ 2,604,725	$ 2,676,638	$ 2,739,792	$ 2,794,733	$ 2,841,977	$ 2,882,013	$ 2,915,308	$ 2,942,299	$ 2,963,406	$ 2,979,021	$ 2,989,520	$ 2,995,216	$ 2,996,563	$ 2,993,758	$ 2,987,141	$ 2,976,995	$ 2,963,587	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Out-of-Pocket Cost Savings

Total Project Costs	Before Discounting																																		
Capital costs	$ 20,756,478	$ -	$ 416,724	$ 2,008,336	$ 2,914,468	$ 9,250,164	$ 6,166,786	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
O&M costs	$ 1,049,800	$ -	$ -	$ -	$ -	$ -	$ 17,210	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total project costs	$ 21,806,278	$ -	$ 416,724	$ 2,008,336	$ 2,914,468	$ 9,250,164	$ 6,183,996	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total project costs in PV	$ 16,378,681	$ -	$ 389,462	$ 1,754,158	$ 2,379,074	$ 7,056,906	$ 4,409,104	$ 34,403	$ 32,152	$ 30,049	$ 28,083	$ 26,246	$ 24,529	$ 22,924	$ 21,424	$ 20,023	$ 18,713	$ 17,489	$ 16,345	$ 15,275	$ 14,276	$ 13,342	$ 12,469	$ 11,653	$ 10,891	$ 10,179	$ 9,513	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Vehicle Operating Cost Savings

Change in VMT																																			
Automobiles	(39,709,616)	0	0	0	0	0	(282,389)	(937,421)	(1,030,086)	(1,125,213)	(1,222,854)	(1,323,062)	(1,425,889)	(1,531,391)	(1,639,622)	(1,750,641)	(1,864,503)	(1,981,267)	(2,100,995)	(2,223,746)	(2,349,582)	(2,478,567)	(2,610,765)	(2,746,242)	(2,885,064)	(3,027,300)	(3,173,019)	0	0	0	0	0	0	0
Trucks	(4,255,082)	0	0	0	0	0	(29,141)	(97,030)	(106,945)	(117,176)	(127,730)	(138,616)	(149,842)	(161,417)	(173,349)	(185,648)	(198,322)	(211,381)	(224,834)	(238,692)	(252,963)	(267,659)	(282,790)	(298,367)	(314,400)	(330,900)	(347,879)	0	0	0	0	0	0	0

Vehicle Operating Cost Savings in Dollars

Automobiles $ 0.43	$ 17,075,135	$ -	$ -	$ -	$ -	$ -	$ 121,427	$ 403,091	$ 442,937	$ 483,842	$ 525,827	$ 568,917	$ 613,132	$ 658,498	$ 705,038	$ 752,775	$ 801,736	$ 851,945	$ 903,428	$ 956,211	$ 1,010,320	$ 1,065,784	$ 1,122,629	$ 1,180,884	$ 1,240,578	$ 1,301,739	$ 1,364,398	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Trucks $ 0.93	$ 3,957,226	$ -	$ -	$ -	$ -	$ -	$ 27,101	$ 90,238	$ 99,459	$ 108,974	$ 118,789	$ 128,913	$ 139,353	$ 150,118	$ 161,215	$ 172,652	$ 184,439	$ 196,584	$ 209,096	$ 221,983	$ 235,256	$ 248,923	$ 262,995	$ 277,481	$ 292,392	$ 307,737	$ 323,528	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Vehicle Operating Cost Savings	$ 21,032,361	$ -	$ -	$ -	$ -	$ -	$ 148,529	$ 493,329	$ 542,396	$ 592,815	$ 644,616	$ 697,829	$ 752,485	$ 808,616	$ 866,252	$ 925,428	$ 986,175	$ 1,048,529	$ 1,112,524	$ 1,178,194	$ 1,245,576	$ 1,314,707	$ 1,385,624	$ 1,458,365	$ 1,532,969	$ 1,609,476	$ 1,687,926	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Automobiles in PV	$ 14,664,262	$ -	$ -	$ -	$ -	$ -	$ 88,578	$ 268,506	$ 275,839	$ 281,600	$ 286,055	$ 289,208	$ 291,295	$ 292,581	$ 292,566	$ 291,939	$ 290,586	$ 288,583	$ 286,002	$ 282,908	$ 279,392	$ 275,419	$ 271,130	$ 266,541	$ 261,696	$ 256,633	$ 251,389	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Emission Cost Savings

Changes in Emissions from Automobiles*																																			
NOX, tons (short)	(1.1)	-	-	-	-	-	(0.02)	(0.05)	(0.04)	(0.04)	(0.03)	(0.03)	(0.04)	(0.04)	(0.04)	(0.05)	(0.05)	(0.05)	(0.06)	(0.06)	(0.06)	(0.06)	(0.07)	(0.07)	(0.08)	(0.08)	(0.08)	-	-	-	-	-	-	-
CO2, tons (short)	(9,758)	-	-	-	-	-	(76.66)	(248.16)	(265.75)	(284.22)	(299.02)	(323.52)	(348.67)	(374.47)	(400.93)	(428.08)	(455.92)	(484.47)	(513.75)	(543.77)	(574.54)	(606.08)	(638.40)	(671.53)	(705.48)	(740.26)	(775.89)	-	-	-	-	-	-	-
PM, tons (short)	(0.1)	-	-	-	-	-	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	-	-	-	-	-	-	-
SO2, tons (short)	(0.1)	-	-	-	-	-	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	-	-	-	-	-	-	-
Changes in Emissions from Trucks*																																			
NOX, tons (short)	(9.7)	-	-	-	-	-	(0.10)	(0.29)	(0.30)	(0.29)	(0.28)	(0.31)	(0.33)	(0.36)	(0.39)	(0.41)	(0.44)	(0.47)	(0.50)	(0.53)	(0.56)	(0.59)	(0.63)	(0.66)	(0.70)	(0.74)	(0.77)	-	-	-	-	-	-	-
CO2, tons (short)	(9,529)	-	-	-	-	-	(61.58)	(208.25)	(233.06)	(259.22)	(286.78)	(311.22)	(336.42)	(362.41)	(389.20)	(416.81)	(445.27)	(474.59)	(504.79)	(535.91)	(567.91)	(600.94)	(634.92)	(669.89)	(705.88)	(742.93)	(781.05)	-	-	-	-	-	-	-
PM, tons (short)	(0.4)	-	-	-	-	-	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	-	-	-	-	-	-	-
SO2, tons (short)	(0.1)	-	-	-	-	-	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	-	-	-	-	-	-	-
Total Emission Cost Savings	In PV																																		
NOX, $ 54,870	$ 174,967	$ -	$ -	$ -	$ -	$ -	$ 1,741	$ 5,363	$ 5,385	$ 5,309	$ 5,156	$ 5,594	$ 6,045	$ 6,510	$ 6,989	$ 7,482	$ 7,991	$ 8,514	$ 9,054	$ 9,609	$ 10,180	$ 10,768	$ 11,374	$ 11,997	$ 12,637	$ 13,297	$ 13,975	$ -	$ -	$ -	$ -	$ -	$ -	$ -
CO2, $ 736,740	$ 1,234,726	$ -	$ -	$ -	$ -	$ -	$ 7,148	$ 24,015	$ 26,698	$ 29,498	$ 32,417	$ 35,701	$ 39,155	$ 42,783	$ 47,309	$ 51,354	$ 55,593	$ 60,033	$ 64,680	$ 69,542	$ 74,624	$ 79,934	$ 86,635	$ 92,485	$ 98,588	$ 104,951	$ 111,582	$ -	$ -	$ -	$ -	$ -	$ -	$ -
PM, $ 722,248	$ 363,154	$ -	$ -	$ -	$ -	$ -	$ 3,659	$ 11,217	$ 11,267	$ 11,109	$ 10,723	$ 11,630	$ 12,564	$ 13,526	$ 14,517	$ 15,537	$ 16,587	$ 17,668	$ 18,781	$ 19,927	$ 21,105	$ 22,317	$ 23,565	$ 24,847	$ 26,167	$ 27,523	$ 28,918	$ -	$ -	$ -	$ -	$ -	$ -	$ -
SO2, $ 2,122	$ 6,424	$ -	$ -	$ -	$ -	$ -	$ 43	$ 145	$ 161	$ 178	$ 195	$ 212	$ 229	$ 246	$ 264	$ 282	$ 301	$ 320	$ 340	$ 361	$ 382	$ 403	$ 426	$ 448	$ 472	$ 496	$ 521	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total 920,080	$ 1,779,271	$ -	$ -	$ -	$ -	$ -	$ 12,591	$ 40,740	$ 43,511	$ 46,094	$ 48,491	$ 53,136	$ 57,992	$ 63,064	$ 69,078	$ 74,655	$ 80,472	$ 86,536	$ 92,855	$ 99,438	$ 106,291	$ 113,423	$ 121,999	$ 129,778	$ 137,864	$ 146,267	$ 154,996	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Use simplified approach (1) or speed-bins (0) >>> 1																																			

Crash Cost Savings

From External SAFETY ANALYSIS

Number of Fatalities/Injuries/PDO AVOIDED																																			
PDO	281	-	-	-	-	-	5	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	-	-	-	-	-	-	-
Fatality	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Injured (Severity Unknown)	43	-	-	-	-	-	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-	-	-
Injury/Fatality/PDO Cost Savings in Dollars																																			
PDO $ 4,500	$ 1,266,269	$ -	$ -	$ -	$ -	$ -	$ 20,759	$ 62,276	$ 62,276	$ 62,276	$ 62,276	$ 62,276	$ 62,276	$ 62,276	$ 62,276	$ 62,276	$ 62,276	$ 62,276	$ 62,276	$ 62,276	$ 62,276	$ 62,276	$ 62,276	$ 62,276	$ 62,276	$ 62,276	$ 62,276	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Fatality $ 10,900,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Injured (Severity Unknown) $ 197,600	$ 8,472,877	$ -	$ -	$ -	$ -	$ -	$ 138,900	$ 416,699	$ 416,699	$ 416,699	$ 416,699	$ 416,699	$ 416,699	$ 416,699	$ 416,699	$ 416,699	$ 416,699	$ 416,699	$ 416,699	$ 416,699	$ 416,699	$ 416,699	$ 416,699	$ 416,699	$ 416,699	$ 416,699	$ 416,699	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total	$ 9,739,146	$ -	$ -	$ -	$ -	$ -	$ 159,658	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Crash Cost Savings	$ 9,739,146	$ -	$ -	$ -	$ -	$ -	$ 159,658	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ 478,974	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Investment Residual Value

Residual Value, $	$ 5,426,896	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,426,896	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Residual Value in PV	$ 999,901	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	999,901	$ -	$ -	$ -	$ -	$ -	$ -	$ -

BENEFIT-COST ANALYSIS RESULTS

Total Project Costs	Before Discounting																																		
Capital costs	$ 20,756,478	$ -	$ 416,724	$ 2,008,336	$ 2,914,468	$ 9,250,164	$ 6,166,786	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
O&M costs	$ 1,049,800	$ -	$ -	$ -	$ -	$ -	$ 17,210	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total project costs	$ 21,806,278	$ -	$ 416,724	$ 2,008,336	$ 2,914,468	$ 9,250,164	$ 6,183,996	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ 51,630	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total project costs in PV	$ 16,378,681	$ -	$ 389,462	$ 1,754,158	$ 2,379,074	$ 7,056,906	$ 4,409,104	$ 34,403	$ 32,152	$ 30,049	$ 28,083	$ 26,246	$ 24,529	$ 22,924	$ 21,424	$ 20,023	$ 18,713	$ 17,489	$ 16,345	$ 15,275	$ 14,276	$ 13,342	$ 12,469	$ 11,653	$ 10,891	$ 10,179	$ 9,513	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Total Project Costs	Discounted at 7%																																		
Capital costs	$ 15,976,433	$ -	$ 389,462	$ 1,754,158	$ 2,379,074	$ 7,056,906	$ 4,396,833	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
O&M costs	$ 402,248	$ -	$ -	$ -	$ -	$ -	$ 12,270	$ 34,403	$ 32,152	$ 30,049	$ 28,083	$ 26,246	$ 24,529	$ 22,924	$ 21,424	$ 20,023	$ 18,713	$ 17,489	$ 16,345	$ 15,275	$ 14,276	$ 13,342	$ 12,469	$ 11,653	$ 10,891	$ 10,179	$ 9,513	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total project costs in PV	$ 16,378,681	$ -	$ 389,462	$ 1,754,158	$ 2,379,074	$ 7,056,906	$ 4,409,104	$ 34,403	$ 32,152	$ 30,049	$ 28,083	$ 26,246	$ 24,529	$ 22,924	$ 21,424	$ 20,023	$ 18,713	$ 17,489	$ 16,345	$ 15,275	$ 14,276	$ 13,342	$ 12,469	$ 11,653	$ 10,891	$ 10,179	$ 9,513	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Total Project Benefits	Before Discounting																																		
Travel time savings	$ 191,990,531	$ -	$ -	$ -	$ -	$ -	$ 1,109,690	$ 3,744,618	$ 4,182,791	$ 4,644,594	$ 5,131,076	$ 5,643,324	$ 6,182,472	$ 6,749,699	$ 7,346,231	$ 7,973,344	$ 8,632,365	$ 9,324,672	$ 10,051,701	$ 10,814,942	$ 11,615,949	$ 12,456,332	$ 13,337,768	$ 14,262,000	$ 15,230,841	$ 16,246,172	$ 17,309,951	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Vehicle Operating Cost Savings	$ 21,032,361	$ -	$ -	$ -	$ -	$ -	$ 148,529	$ 493,329	$ 542,396	$ 592,815	$ 644,616	$ 697,829	$ 752,485	$ 808,616	$ 866,252	$ 925,428	$ 986,175	$ 1,048,529	$ 1,112,524	$ 1,178,194	$ 1,245,576	$ 1,314,707	$ 1,385,624	$ 1,458,365	$ 1,532,969	$ 1,609,476	$ 1,687,926	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Emission cost savings, Carbon Dioxide	$ 1,234,726	$