

## US 98 Benefit cost Analysis

### BCA - 20 Years

<b>Benefits</b>	<b>Undiscounted</b>	<b>NPV (3% Discount)</b>	<b>NPV (7% Discount)</b>
Safety Benefits	\$ 199,388,120	\$ 135,733,433	\$ 86,214,140
Driver Travel Time	\$ 350,015,970	\$ 238,273,320	\$ 151,344,654
Environmental	\$ 29,369,253	\$ 19,927,425	\$ 12,603,654
<b>Total Benefit</b>	<b>\$ 578,773,343</b>	<b>\$ 393,934,178</b>	<b>\$ 250,162,449</b>
Deployment Cost	\$ 112,597,000	\$ 105,869,774	\$ 97,797,743
Maintenance Cost	\$ 53,735,200	\$ 36,580,229	\$ 23,234,755
<b>Total Cost</b>	<b>\$ 166,332,200</b>	<b>\$ 142,450,003</b>	<b>\$ 121,032,497</b>
<b>B/C</b>	<b>3.48</b>	<b>2.77</b>	<b>2.07</b>



**US 98 Benefit cost Analysis**

<b>Costs</b>		
Preliminary Engineering	\$	4,832,000
ROW	\$	9,001,000
Construction Cost/ROW	\$	67,169,000
Utility Relocation	\$	8,450,000
Design	\$	747,000
Environment	\$	3,188,000
CEI	\$	9,605,000
O&M %		4%
Annual O&M Cost	\$	2,686,760.00

Year	Undiscounted	NPV (3%)	NPV (7%)
2014			
2015			
2016			
2017			
2018			
2019			
2020	\$ 102,992,000	\$ 97,079,838	\$ 89,957,202
2021	\$ 9,605,000	\$ 8,789,936	\$ 7,840,541
2022	\$ 2,686,760	\$ 2,387,151	\$ 2,049,716
2023	\$ 2,686,760	\$ 2,317,623	\$ 1,915,623
2024	\$ 2,686,760	\$ 2,250,119	\$ 1,790,302
2025	\$ 2,686,760	\$ 2,184,582	\$ 1,673,179
2026	\$ 2,686,760	\$ 2,120,953	\$ 1,563,719
2027	\$ 2,686,760	\$ 2,059,178	\$ 1,461,419
2028	\$ 2,686,760	\$ 1,999,202	\$ 1,365,813
2029	\$ 2,686,760	\$ 1,940,973	\$ 1,276,460
2030	\$ 2,686,760	\$ 1,884,439	\$ 1,192,954
2031	\$ 2,686,760	\$ 1,829,553	\$ 1,114,910
2032	\$ 2,686,760	\$ 1,776,265	\$ 1,041,972
2033	\$ 2,686,760	\$ 1,724,529	\$ 973,805
2034	\$ 2,686,760	\$ 1,674,300	\$ 910,099
2035	\$ 2,686,760	\$ 1,625,534	\$ 850,559
2036	\$ 2,686,760	\$ 1,578,188	\$ 794,915
2037	\$ 2,686,760	\$ 1,532,222	\$ 742,912
2038	\$ 2,686,760	\$ 1,487,594	\$ 694,310
2039	\$ 2,686,760	\$ 1,444,266	\$ 648,888
2040	\$ 2,686,760	\$ 1,402,200	\$ 606,437
2041	\$ 2,686,760	\$ 1,361,359	\$ 566,764
<b>Total</b>	<b>\$ 53,735,200</b>	<b>\$ 36,580,229</b>	<b>\$ 23,234,755</b>



## US 98 Benefit cost Analysis

### **Assumptions**

Car Traffic (%)	96%
Personal	60%
Buisness	20%
All Purpose	20%
Truck Traffic (%)	4%
Daily Time Saved (Hours) during Peak Hours	0.25
Number of Days	260
AADT (2017)	57,200
% Traffic Benefitting from US 98 Widening (Peak Hour Traffic)	20%
Anticipate Speed Increase (MPH)	10
Average Gallons Spent on Delay	0.17
Number of Miles Saved	2.5
Segment Length (miles)	4.2
Full Median Closures	12
Partial Median Closures	9
CRF for Median Closure (FDOT)	30
CRF for Add Lane (FDOT)	22



**US 98 Benefit cost Analysis**

<b>Cars</b>		
Average Vehicle Occupancy	\$ 1.39	
Vehicle Operating Cost Per Mile	\$ 0.39	
Trucks Operating Cost Per Mile	\$ 0.90	
<b>Personal</b>	\$ 19.74	57.6%
Hours Saved Per Day	0.25	
Hours Saved Per Year	428,313.60	
<b>Business</b>	\$ 36.84	19.2%
Hours Saved Per Day	0.25	
Hours Saved Per Year	142,771.20	
<b>All Purpose</b>	\$ 20.57	19.2%
Hours Saved Per Day	0.25	
Hours Saved Per Year	142,771.20	
<b>Trucks</b>	\$ 28.60	4.0%
Hours Saved Per Day	0.25	
Hours Saved Per Year	29,744.00	

Year	Hourly Value	Annual TT Hours Saving	Undiscounted Benefits	NPV Benefits (3% Discount)	NPV Benefits (7% Discount)
2014					
2015					
2016					
2017					
2018					
2019					
2020					
2021					
2022	\$ 23.54	743,600.00	\$ 17,500,799	\$ 15,549,233	\$ 13,351,275
2023	\$ 23.54	743,600.00	\$ 17,500,799	\$ 15,096,343	\$ 12,477,827
2024	\$ 23.54	743,600.00	\$ 17,500,799	\$ 14,656,643	\$ 11,661,521
2025	\$ 23.54	743,600.00	\$ 17,500,799	\$ 14,229,751	\$ 10,898,618
2026	\$ 23.54	743,600.00	\$ 17,500,799	\$ 13,815,292	\$ 10,185,624
2027	\$ 23.54	743,600.00	\$ 17,500,799	\$ 13,412,905	\$ 9,519,275
2028	\$ 23.54	743,600.00	\$ 17,500,799	\$ 13,022,238	\$ 8,896,519
2029	\$ 23.54	743,600.00	\$ 17,500,799	\$ 12,642,949	\$ 8,314,503
2030	\$ 23.54	743,600.00	\$ 17,500,799	\$ 12,274,708	\$ 7,770,564
2031	\$ 23.54	743,600.00	\$ 17,500,799	\$ 11,917,192	\$ 7,262,209
2032	\$ 23.54	743,600.00	\$ 17,500,799	\$ 11,570,090	\$ 6,787,111
2033	\$ 23.54	743,600.00	\$ 17,500,799	\$ 11,233,097	\$ 6,343,095
2034	\$ 23.54	743,600.00	\$ 17,500,799	\$ 10,905,919	\$ 5,928,126
2035	\$ 23.54	743,600.00	\$ 17,500,799	\$ 10,588,271	\$ 5,540,305
2036	\$ 23.54	743,600.00	\$ 17,500,799	\$ 10,279,875	\$ 5,177,855
2037	\$ 23.54	743,600.00	\$ 17,500,799	\$ 9,980,461	\$ 4,839,117
2038	\$ 23.54	743,600.00	\$ 17,500,799	\$ 9,689,768	\$ 4,522,539
2039	\$ 23.54	743,600.00	\$ 17,500,799	\$ 9,407,542	\$ 4,226,672
2040	\$ 23.54	743,600.00	\$ 17,500,799	\$ 9,133,536	\$ 3,950,161
2041	\$ 23.54	743,600.00	\$ 17,500,799	\$ 8,867,510	\$ 3,691,739
<b>Total</b>			<b>\$ 350,015,970</b>	<b>\$ 238,273,320</b>	<b>\$ 151,344,654</b>



**US 98 Benefit cost Analysis**

S.No.	Description		
1	Total Number of Crashes	Fatal Crashes	3
		Injury Crashes	185
		PDO Crashes	300
		Total Crashes	488
2	Number of Years of Crash Data (2015 - 2017)		3
3	Number of Crahes Per Year	Fatal Crashes	1.00
		Injury Crashes	61.67
		PDO Crashes	100.00
		Total Crashes	162.67
4	Cost per Crash	Fatal Crash Costs	\$9,600,000
		Injury Crash Costs	\$28,311,167
		PDO Crash Costs	\$432,700
		Total Annual Cost	\$38,343,867
5	Crash Reduction Factor (%)		26%
6	Total Annual Benefit		\$9,969,406

Notes:

- 1) Combined Crash Reduction Factor (CRF) =  $CRF1 + ((1 - CRF1) * CRF2) + ((1 - CRF1) * (1 - CRF2) * CRF3) + \dots + (1 - CRF1) * (1 - CRF2) * (1 - CRF3) * \dots * CRFn$
- 2) Capital Recovery Interest Rate = 4%, Capital Recovery Period = 10 years
- 3) (A/P, 4%, 10 years) = 0.1233

<b>Fatal Crash Cost</b>	<b>\$9,600,000.00</b>
<b>Injury Crash Cost (average)</b>	<b>\$459,100.00</b>
<b>PDO Crash Cost</b>	<b>\$4,327.00</b>

Source: USDOT - transportation.gov

Crashes

Year	Fatalities	Injuries	PDO
	3	185	300

Year	Undiscounted Benefit	NPV Benefits (3% Discount)	NPV Benefits (7% Discount)
2014			
2015			
2016			
2017			
2018			
2019			
2020			
2021			
2022	\$ 9,969,406	\$ 8,857,688	\$ 7,605,612
2023	\$ 9,969,406	\$ 8,599,697	\$ 7,108,049
2024	\$ 9,969,406	\$ 8,349,221	\$ 6,643,036
2025	\$ 9,969,406	\$ 8,106,039	\$ 6,208,445
2026	\$ 9,969,406	\$ 7,869,941	\$ 5,802,285
2027	\$ 9,969,406	\$ 7,640,720	\$ 5,422,696
2028	\$ 9,969,406	\$ 7,418,174	\$ 5,067,940
2029	\$ 9,969,406	\$ 7,202,111	\$ 4,736,393
2030	\$ 9,969,406	\$ 6,992,341	\$ 4,426,535
2031	\$ 9,969,406	\$ 6,788,680	\$ 4,136,949
2032	\$ 9,969,406	\$ 6,590,952	\$ 3,866,308
2033	\$ 9,969,406	\$ 6,398,982	\$ 3,613,372
2034	\$ 9,969,406	\$ 6,212,604	\$ 3,376,983
2035	\$ 9,969,406	\$ 6,031,655	\$ 3,156,059
2036	\$ 9,969,406	\$ 5,855,975	\$ 2,949,588
2037	\$ 9,969,406	\$ 5,685,413	\$ 2,756,624
2038	\$ 9,969,406	\$ 5,519,818	\$ 2,576,284
2039	\$ 9,969,406	\$ 5,359,047	\$ 2,407,742
2040	\$ 9,969,406	\$ 5,202,958	\$ 2,250,226
2041	\$ 9,969,406	\$ 5,051,416	\$ 2,103,015
<b>Total</b>	<b>\$199,388,120</b>	<b>\$135,733,433</b>	<b>\$86,214,140</b>



## US 98 Benefit cost Analysis

### Environmental Benefits

Year	Undiscounted Benefits	NPV Benefits (3% Discount)	NPV Benefits (7% Discount)
2014			
2015			
2016			
2017			
2018			
2019			
2020			
2021			
2022	\$ 1,413,743	\$ 1,256,092	\$ 1,078,538
2023	\$ 1,419,723	\$ 1,224,666	\$ 1,012,243
2024	\$ 1,425,704	\$ 1,194,004	\$ 950,007
2025	\$ 1,431,684	\$ 1,164,090	\$ 891,581
2026	\$ 1,437,664	\$ 1,134,905	\$ 836,734
2027	\$ 1,449,625	\$ 1,111,017	\$ 788,500
2028	\$ 1,455,605	\$ 1,083,107	\$ 739,956
2029	\$ 1,461,585	\$ 1,055,880	\$ 694,389
2030	\$ 1,467,566	\$ 1,029,321	\$ 651,617
2031	\$ 1,467,566	\$ 999,341	\$ 608,988
2032	\$ 1,479,526	\$ 978,141	\$ 573,786
2033	\$ 1,485,506	\$ 953,490	\$ 538,416
2034	\$ 1,491,487	\$ 929,445	\$ 505,218
2035	\$ 1,497,467	\$ 905,992	\$ 474,060
2036	\$ 1,497,467	\$ 879,604	\$ 443,046
2037	\$ 1,497,467	\$ 853,984	\$ 414,062
2038	\$ 1,497,467	\$ 829,111	\$ 386,974
2039	\$ 1,497,467	\$ 804,962	\$ 361,658
2040	\$ 1,497,467	\$ 781,517	\$ 337,998
2041	\$ 1,497,467	\$ 758,754	\$ 315,886
<b>Total</b>	<b>\$29,369,253</b>	<b>\$19,927,425</b>	<b>\$12,603,654</b>



## US 98 Benefit cost Analysis

### GHG Benefits

Miles Saved Per Day	28,600
Gallon of Fuel Saved (gal)	1,906.67
CO2 Emission (lb CO2/gal Diesel)	20
CO2 Saved (lb)	37,371
CO2 Saved (metric tons)	16.95
CO2 Saved (metric tons/year)	4,406.52

Year	3% SCC	CO2 Reduction (metric tons)	Undiscounted Benefits	NPV Benefits (3%)	NPV Benefits (7%)
2014	\$ 44.00				
2015	\$ 45.00				
2016	\$ 46.00				
2017	\$ 47.00				
2018	\$ 49.00				
2019	\$ 51.00				
2020	\$ 52.00				
2021	\$ 52.00				
2022	\$ 54.00	4,406.52	\$ 237,952	\$ 211,417	\$ 181,532
2023	\$ 55.00	4,406.52	\$ 242,359	\$ 209,061	\$ 172,798
2024	\$ 56.00	4,406.52	\$ 246,765	\$ 206,662	\$ 164,430
2025	\$ 57.00	4,406.52	\$ 251,172	\$ 204,225	\$ 156,417
2026	\$ 58.00	4,406.52	\$ 255,578	\$ 201,756	\$ 148,749
2027	\$ 60.00	4,406.52	\$ 264,391	\$ 202,634	\$ 143,811
2028	\$ 61.00	4,406.52	\$ 268,798	\$ 200,011	\$ 136,643
2029	\$ 62.00	4,406.52	\$ 273,204	\$ 197,368	\$ 129,797
2030	\$ 63.00	4,406.52	\$ 277,611	\$ 194,711	\$ 123,262
2031	\$ 63.00	4,406.52	\$ 277,611	\$ 189,039	\$ 115,199
2032	\$ 65.00	4,406.52	\$ 286,424	\$ 189,360	\$ 111,080
2033	\$ 66.00	4,406.52	\$ 290,830	\$ 186,673	\$ 105,410
2034	\$ 67.00	4,406.52	\$ 295,237	\$ 183,982	\$ 100,007
2035	\$ 68.00	4,406.52	\$ 299,643	\$ 181,289	\$ 94,859
2036	\$ 68.00	4,406.52	\$ 299,643	\$ 176,009	\$ 88,654
2037	\$ 68.00	4,406.52	\$ 299,643	\$ 170,882	\$ 82,854
2038	\$ 68.00	4,406.52	\$ 299,643	\$ 165,905	\$ 77,434
2039	\$ 68.00	4,406.52	\$ 299,643	\$ 161,073	\$ 72,368
2040	\$ 68.00	4,406.52	\$ 299,643	\$ 156,382	\$ 67,633
2041	\$ 68.00	4,406.52	\$ 299,643	\$ 151,827	\$ 63,209
<b>Total</b>			<b>\$ 5,565,433</b>	<b>\$ 3,740,265</b>	<b>\$ 2,336,147</b>

SCC

Standards Council of Canada

\*[https://www.eia.gov/environment/emissions/co2\\_vol\\_mass.php](https://www.eia.gov/environment/emissions/co2_vol_mass.php)

<http://www.eia.gov/tools/faqs/faq.cfm?id=307&t=11>



**US 98 Benefit cost Analysis**

**VOC Benefits**

Miles Saved Per Day	28,600
VOC Emission (g/miles)*	0.48
VOC Saved (g)	13,642
VOC Saved (Oz)	477
VOC Saved (lb)	29.84
VOC Saved (metric tons)	0.01
VOC Saved (metric tons/year)	3.52
Value/short ton	\$1,905
Value/metric ton	\$2,098
VOC Savings Per Year (metric ton)	\$ 7,384

Year	Value/ Metric Ton	NOx Reduction (Metric Tons)	Undiscounted Benefits	NPV Benefits (3% Discount)	NPV Benefits (7% Discount)
2014					
2015					
2016					
2017					
2018					
2019					
2020					
2021					
2022	\$ 2,098	3.52	\$ 7,384	\$ 6,560	\$ 5,633
2023	\$ 2,098	3.52	\$ 7,384	\$ 6,369	\$ 5,265
2024	\$ 2,098	3.52	\$ 7,384	\$ 6,184	\$ 4,920
2025	\$ 2,098	3.52	\$ 7,384	\$ 6,004	\$ 4,598
2026	\$ 2,098	3.52	\$ 7,384	\$ 5,829	\$ 4,297
2027	\$ 2,098	3.52	\$ 7,384	\$ 5,659	\$ 4,016
2028	\$ 2,098	3.52	\$ 7,384	\$ 5,494	\$ 3,754
2029	\$ 2,098	3.52	\$ 7,384	\$ 5,334	\$ 3,508
2030	\$ 2,098	3.52	\$ 7,384	\$ 5,179	\$ 3,278
2031	\$ 2,098	3.52	\$ 7,384	\$ 5,028	\$ 3,064
2032	\$ 2,098	3.52	\$ 7,384	\$ 4,882	\$ 2,864
2033	\$ 2,098	3.52	\$ 7,384	\$ 4,739	\$ 2,676
2034	\$ 2,098	3.52	\$ 7,384	\$ 4,601	\$ 2,501
2035	\$ 2,098	3.52	\$ 7,384	\$ 4,467	\$ 2,338
2036	\$ 2,098	3.52	\$ 7,384	\$ 4,337	\$ 2,185
2037	\$ 2,098	3.52	\$ 7,384	\$ 4,211	\$ 2,042
2038	\$ 2,098	3.52	\$ 7,384	\$ 4,088	\$ 1,908
2039	\$ 2,098	3.52	\$ 7,384	\$ 3,969	\$ 1,783
2040	\$ 2,098	3.52	\$ 7,384	\$ 3,854	\$ 1,667
2041	\$ 2,098	3.52	\$ 7,384	\$ 3,741	\$ 1,558
<b>Total</b>			<b>\$ 147,675</b>	<b>\$ 100,530</b>	<b>\$ 63,854</b>

\*GHG Emission Factor: <http://www.epa.gov/otaq/consumer/420f08027.pdf>





**US 98 Benefit cost Analysis**

**Nox Benefits**

Miles Saved Per Day	28,600
Nox Emission (g/mile)*	9
Nox Saved (g)	246,246
Nox Saved (Oz)	8,619
Nox Saved (lb)	538.66
Nox Saved (metric tons)	0.24
Nox Saved (metric tons/year)	63.52
Value/short ton	\$7,508
Value/metric ton	\$8,270
Nox Savings Per Year (metric ton)	\$ 525,280

Year	Value/ Metric Ton	NOx Reduction (metric tons)	Undiscounted Benefits	NPV Benefits (3% Discount)	NPV Benefits (7% Discount)
2014					
2015					
2016					
2017					
2018					
2019					
2020					
2021					
2022	\$ 8,270	63.52	\$ 525,280	\$ 466,704	\$ 400,734
2023	\$ 8,270	63.52	\$ 525,280	\$ 453,111	\$ 374,517
2024	\$ 8,270	63.52	\$ 525,280	\$ 439,914	\$ 350,016
2025	\$ 8,270	63.52	\$ 525,280	\$ 427,101	\$ 327,118
2026	\$ 8,270	63.52	\$ 525,280	\$ 414,661	\$ 305,718
2027	\$ 8,270	63.52	\$ 525,280	\$ 402,583	\$ 285,717
2028	\$ 8,270	63.52	\$ 525,280	\$ 390,858	\$ 267,026
2029	\$ 8,270	63.52	\$ 525,280	\$ 379,473	\$ 249,557
2030	\$ 8,270	63.52	\$ 525,280	\$ 368,421	\$ 233,231
2031	\$ 8,270	63.52	\$ 525,280	\$ 357,690	\$ 217,972
2032	\$ 8,270	63.52	\$ 525,280	\$ 347,272	\$ 203,713
2033	\$ 8,270	63.52	\$ 525,280	\$ 337,157	\$ 190,386
2034	\$ 8,270	63.52	\$ 525,280	\$ 327,337	\$ 177,930
2035	\$ 8,270	63.52	\$ 525,280	\$ 317,803	\$ 166,290
2036	\$ 8,270	63.52	\$ 525,280	\$ 308,547	\$ 155,411
2037	\$ 8,270	63.52	\$ 525,280	\$ 299,560	\$ 145,244
2038	\$ 8,270	63.52	\$ 525,280	\$ 290,835	\$ 135,742
2039	\$ 8,270	63.52	\$ 525,280	\$ 282,364	\$ 126,862
2040	\$ 8,270	63.52	\$ 525,280	\$ 274,140	\$ 118,563
2041	\$ 8,270	63.52	\$ 525,280	\$ 266,155	\$ 110,806
<b>Total</b>			<b>\$ 10,505,598</b>	<b>\$ 7,151,684</b>	<b>\$ 4,542,553</b>

\*GHG Emission Factor: <http://www.epa.gov/otaq/consumer/420f08027.pdf>



## US 98 Benefit cost Analysis

### PM2.5 Benefits

Miles Saved Per Day	28,600
PM2.5 Emission (g/mile)*	0.20
PM2.5 Saved (g)	5,720
PM2.5 Saved (Oz)	200
PM2.5 Saved (lb)	12.51
PM2.5 Saved (metric tons)	0.01
PM2.5 Saved (metric tons/year)	1.48
Value/short ton	\$343,442
Value/metric ton	\$378,301
PM2.5 Savings Per Year (metric ton)	\$ 558,145

Year	Value/ Metric Ton	NOx reduction (Metric Tons)	Undiscounted Benefits	NPV Benefits (3% Discount)	NPV Benefits (7% Discount)
2014					
2015					
2016					
2017					
2018					
2019					
2020					
2021					
2022	\$378,301	1.48	\$ 558,145	\$ 495,904	\$425,806
2023	\$378,301	1.48	\$ 558,145	\$ 481,460	\$397,949
2024	\$378,301	1.48	\$ 558,145	\$ 467,437	\$371,915
2025	\$378,301	1.48	\$ 558,145	\$ 453,823	\$347,584
2026	\$378,301	1.48	\$ 558,145	\$ 440,605	\$324,845
2027	\$378,301	1.48	\$ 558,145	\$ 427,771	\$303,594
2028	\$378,301	1.48	\$ 558,145	\$ 415,312	\$283,732
2029	\$378,301	1.48	\$ 558,145	\$ 403,216	\$265,170
2030	\$378,301	1.48	\$ 558,145	\$ 391,471	\$247,823
2031	\$378,301	1.48	\$ 558,145	\$ 380,069	\$231,610
2032	\$378,301	1.48	\$ 558,145	\$ 368,999	\$216,458
2033	\$378,301	1.48	\$ 558,145	\$ 358,252	\$202,297
2034	\$378,301	1.48	\$ 558,145	\$ 347,817	\$189,063
2035	\$378,301	1.48	\$ 558,145	\$ 337,687	\$176,694
2036	\$378,301	1.48	\$ 558,145	\$ 327,851	\$165,135
2037	\$378,301	1.48	\$ 558,145	\$ 318,302	\$154,332
2038	\$378,301	1.48	\$ 558,145	\$ 309,031	\$144,235
2039	\$378,301	1.48	\$ 558,145	\$ 300,030	\$134,799
2040	\$378,301	1.48	\$ 558,145	\$ 291,291	\$125,981
2041	\$378,301	1.48	\$ 558,145	\$ 282,807	\$117,739
<b>Total</b>			<b>\$11,162,893</b>	<b>\$7,599,137</b>	<b>\$4,826,763</b>

\*GHG Emission Factor: <http://www.epa.gov/otaq/consumer/420f08027.pdf>



## US 98 Benefit cost Analysis

### GHG Benefits

Miles Saved Per Day	28,600
Gallon of Fuel Saved (gal)	1,906.67
S02 Emission (lb C02/gal Diesel)	7
S02 Saved (lb)	13,347
S02 Saved (metric tons)	6.05
S02 Saved (metric tons/year)	1,573.76

Year	3% SCC	S02 Reduction (metric tons)	Undiscounted Benefits	NPV Benefits (3%)	NPV Benefits (7%)
2014	\$ 44.00				
2015	\$ 45.00				
2016	\$ 46.00				
2017	\$ 47.00				
2018	\$ 49.00				
2019	\$ 51.00				
2020	\$ 52.00				
2021	\$ 52.00				
2022	\$ 54.00	1,573.76	\$ 84,983	\$ 75,506	\$ 64,833
2023	\$ 55.00	1,573.76	\$ 86,557	\$ 74,664	\$ 61,714
2024	\$ 56.00	1,573.76	\$ 88,130	\$ 73,808	\$ 58,725
2025	\$ 57.00	1,573.76	\$ 89,704	\$ 72,938	\$ 55,863
2026	\$ 58.00	1,573.76	\$ 91,278	\$ 72,056	\$ 53,125
2027	\$ 60.00	1,573.76	\$ 94,425	\$ 72,369	\$ 51,361
2028	\$ 61.00	1,573.76	\$ 95,999	\$ 71,432	\$ 48,801
2029	\$ 62.00	1,573.76	\$ 97,573	\$ 70,489	\$ 46,356
2030	\$ 63.00	1,573.76	\$ 99,147	\$ 69,539	\$ 44,022
2031	\$ 63.00	1,573.76	\$ 99,147	\$ 67,514	\$ 41,142
2032	\$ 65.00	1,573.76	\$ 102,294	\$ 67,629	\$ 39,671
2033	\$ 66.00	1,573.76	\$ 103,868	\$ 66,669	\$ 37,647
2034	\$ 67.00	1,573.76	\$ 105,442	\$ 65,708	\$ 35,717
2035	\$ 68.00	1,573.76	\$ 107,015	\$ 64,746	\$ 33,878
2036	\$ 68.00	1,573.76	\$ 107,015	\$ 62,860	\$ 31,662
2037	\$ 68.00	1,573.76	\$ 107,015	\$ 61,029	\$ 29,591
2038	\$ 68.00	1,573.76	\$ 107,015	\$ 59,252	\$ 27,655
2039	\$ 68.00	1,573.76	\$ 107,015	\$ 57,526	\$ 25,846
2040	\$ 68.00	1,573.76	\$ 107,015	\$ 55,851	\$ 24,155
2041	\$ 68.00	1,573.76	\$ 107,015	\$ 54,224	\$ 22,575
<b>Total</b>			<b>\$ 1,987,655</b>	<b>\$ 1,335,809</b>	<b>\$ 834,338</b>

SCC Standards Council of Canada

\* <http://www.eia.gov/tools/faqs/faq.cfm?id=307&t=11>

\* [https://www.epa.gov/sites/production/files/2015-03/documents/10242001mstrs\\_diesel\\_sulfur\\_w97\\_0.pdf](https://www.epa.gov/sites/production/files/2015-03/documents/10242001mstrs_diesel_sulfur_w97_0.pdf)

