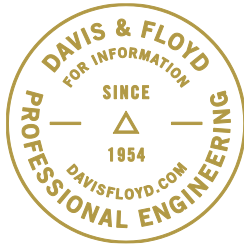


Appendix 6-D: Air Quality Evaluation

Draft Report – February 2016



DRAFT

DRAFT

Page intentionally left blank

Air Quality Carbon Monoxide (CY)		Alt B-1: US 78/Mtg BRT			Alt B-3: US 78/EB BRT			Alt C-1: US 176/Mtg BRT			Alt C-3: US 176/EB BRT			Alt D-1: Dorch/Mtg BRT			Alt D-3: Dorch/EB BRT		
Mode/Technology	Conversion Factor: Emissions (kg)/VMT	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement
Automobile	0.01677	6847855	114838.5284	\$9,187.08	6,626,481	111126.0864	\$8,890.09	3,665,676	61473.38652	\$4,917.87	3,477,537	58318.29549	\$4,665.46	5,629,431	94405.55787	\$7,552.44	5,518,744	92549.33688	\$7,403.95
Diesel Bus	0.00583	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Hybrid Bus	0.00583	-1096830.86	-6394.523914	(\$511.56)	-1,137,759	-6633.135786	(\$530.65)	-1,017,562	-5932.384828	(\$474.59)	-1,058,490	-6170.9967	(\$493.68)	-1,201,504	-7004.766921	(\$560.38)	-1,242,432	-7243.378793	(\$579.47)
CNG Bus	0.03962	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Electric Bus	0.00645	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Heavy Rail	0.00706	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Light Rail/Street Car (CART Miles)	0.01051	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Commuter Rail (Diesel Locomotive or DMU)	0.01680	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Commuter Rail (Used Diesel Locomotive)	0.01680	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Commuter Rail (Electric or EMU)	0.01281	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Total Change	---	5751024.14	108444.0044	\$8,675.52	5488721.86	104492.9506	\$8,359.44	2,648,114	55541.00169	\$4,443.28	2,419,047	52147.29879	\$4,171.78	4,427,927	87400.79095	\$6,992.06	4,276,312	85305.95809	\$6,824.48

Air Quality Carbon Monoxide (CY)		Alt B-2: US 78/Mtg LRT			Alt B-4: US 78/EB LRT			Alt C-2: US 176/Mtg LRT			Alt C-4: US 176/EB LRT			Alt D-2: Dorch/Mtg LRT			Alt D-4: Dorch/EB LRT		
Mode/Technology	Conversion Factor: Emissions (kg)/VMT	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement
Automobile	0.01677	11,689,472	196032.4454	\$15,682.60	11,196,727	187769.1118	\$15,021.53	6,873,865	115274.7161	\$9,221.98	6,641,509	111378.1059	\$8,910.25	9,223,435	154677.005	\$12,374.16	8,898,021	149219.8122	\$11,937.58
Diesel Bus	0.00583	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Hybrid Bus	0.00583	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
CNG Bus	0.03962	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Electric Bus	0.00645	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Heavy Rail	0.00706	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Light Rail/Street Car (CART Miles)	0.01051	-2,193,662	-23055.38468	(\$1,844.43)	-2,275,518	-23915.69712	(\$1,913.26)	-2,035,123	-21389.14735	(\$1,711.13)	-2,116,980	-22249.4598	(\$1,779.96)	-2,403,006	-25255.59306	(\$2,020.45)	-2,485,008	-26117.42904	(\$2,089.39)
Commuter Rail (Diesel Locomotive or DMU)	0.01680	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Commuter Rail (Used Diesel Locomotive)	0.01680	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Commuter Rail (Electric or EMU)	0.01281	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Total Change	---	9495810.28	172977.0608	\$13,838.16	8,921,209	163853.4147	\$13,108.27	4,838,742	93885.5687	\$7,510.85	4,524,529	89128.64613	\$7,130.29	6,820,429	129421.4119	\$10,353.71	6,413,013	123102.3831	\$9,848.19



Air Quality: Mono-Nitrogen Oxides (NOx)		Alt B-1: US 78/Mtg BRT			Alt B-3: US 78/EB BRT			Alt C-1: US 176/Mtg BRT			Alt C-3: US 176/EB BRT			Alt D-1: Dorch/Mtg BRT			Alt D-3: Dorch/EB BRT		
Mode/Technology	Conversion Factor: Emissions (kg)/VMT	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement
Automobile	0.00091	6847855	6231.54805	\$80,760.86	6,626,481	6030.09771	\$78,150.07	3,665,676	3335.76516	\$43,231.52	3,477,537	3164.55867	\$41,012.68	5,629,431	5122.78221	\$66,391.26	5,518,744	5022.05704	\$65,085.86
Diesel Bus	0.00867	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Hybrid Bus	0.00867	-1096830.86	-9509.523556	(\$123,243.43)	-1,137,759	-9864.371744	(\$127,842.26)	-1,017,562	-8822.260112	(\$114,336.49)	-1,058,490	-9177.1083	(\$118,935.32)	-1,201,504	-10417.0376	(\$135,004.81)	-1,242,432	-10771.88579	(\$139,603.64)
CNG Bus	0.00384	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Electric Bus	0.00583	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Heavy Rail	0.00638	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Light Rail/Street Car (CART Miles)	0.00950	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Commuter Rail (Diesel Locomotive or DMU)	0.01320	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Commuter Rail (Used Diesel Locomotive)	0.09300	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Commuter Rail (Electric or EMU)	0.01157	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Total Change	---	5751024.14	-3277.975506	(\$42,482.56)	5488721.86	-3834.274034	(\$49,692.19)	2,648,114	-5486.494952	(\$71,104.97)	2,419,047	-6012.54963	(\$77,922.64)	4,427,927	-5294.255389	(\$68,613.55)	4,276,312	-5749.828747	(\$74,517.78)

Air Quality: Mono-Nitrogen Oxides (NOx)		Alt B-2: US 78/Mtg LRT			Alt B-4: US 78/EB LRT			Alt C-2: US 176/Mtg LRT			Alt C-4: US 176/EB LRT			Alt D-2: Dorch/Mtg LRT			Alt D-4: Dorch/EB LRT		
Mode/Technology	Conversion Factor: Emissions (kg)/VMT	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement
Automobile	0.00091	11,689,472	10637.41952	\$137,860.96	11,196,727	10189.02157	\$132,049.72	6,873,865	6255.21715	\$81,067.61	6,641,509	6043.77319	\$78,327.30	9,223,435	8393.32585	\$108,777.50	8,898,021	8097.19911	\$104,939.70
Diesel Bus	0.00867	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Hybrid Bus	0.00867	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
CNG Bus	0.00384	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Electric Bus	0.00583	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Heavy Rail	0.00638	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Light Rail/Street Car (CART Miles)	0.00950	-2,193,662	-20839.78634	(\$382,618.48)	-2,275,518	-21617.42366	(\$396,895.90)	-2,035,123	-19333.67268	(\$354,966.23)	-2,116,980	-20111.31	(\$369,243.65)	-2,403,006	-22828.557	(\$419,132.31)	-2,485,008	-23607.57144	(\$433,435.01)
Commuter Rail (Diesel Locomotive or DMU)	0.01320	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Commuter Rail (Used Diesel Locomotive)	0.09300	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Commuter Rail (Electric or EMU)	0.01157	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Total Change	---	9495810.28	-10202.36682	(\$244,757.52)	8,921,209	-11428.40209	(\$264,846.18)	4,838,742	-13078.45553	(\$273,898.62)	4,524,529	-14067.53681	(\$290,916.35)	6,820,429	-14435.23115	(\$310,354.80)	6,413,013	-15510.37233	(\$328,495.31)

Air Quality: Particulate Matter (PM _{2.5})		Alt B-1: US 78/Mtg BRT			Alt B-3: US 78/EB BRT			Alt C-1: US 176/Mtg BRT			Alt C-3: US 176/EB BRT			Alt D-1: Dorch/Mtg BRT			Alt D-3: Dorch/EB BRT		
Mode/Technology	Conversion Factor: Emissions (kg)/VMT	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement
Automobile	0.00010	6847855	68.47855	\$46,592.81	6,626,481	66.26481	\$45,086.58	3,665,676	36.65676	\$24,941.26	3,477,537	34.77537	\$23,661.16	5,629,431	56.29431	\$38,302.65	5,518,744	55.18744	\$37,549.53
Diesel Bus	0.00480	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Hybrid Bus	0.00480	-1096830.86	-526.4788128	(\$358,216.18)	-1,137,759	-546.1243872	(\$371,583.03)	-1,017,562	-488.4296256	(\$332,327.52)	-1,058,490	-508.0752	(\$345,694.37)	-1,201,504	-576.7218048	(\$392,401.52)	-1,242,432	-596.3673792	(\$405,768.36)
CNG Bus	0.00010	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Electric Bus	0.000378	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Heavy Rail	0.000413	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Light Rail/Street Car (CART Miles)	0.000615	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Commuter Rail (Diesel Locomotive or DMU)	0.000190	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Commuter Rail (Used Diesel Locomotive)	0.004600	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Commuter Rail (Electric or EMU)	0.000750	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Total Change	---	5751024.14	-458.0002628	(\$311,623.38)	5488721.86	-479.8595772	(\$326,496.46)	2,648,114	-451.7728656	(\$307,386.26)	2,419,047	-473.29983	(\$322,033.20)	4,427,927	-520.4274948	(\$354,098.87)	4,276,312	-541.1799392	(\$368,218.83)

Air Quality: Particulate Matter (PM _{2.5})		Alt B-2: US 78/Mtg LRT			Alt B-4: US 78/EB LRT			Alt C-2: US 176/Mtg LRT			Alt C-4: US 176/EB LRT			Alt D-2: Dorch/Mtg LRT			Alt D-4: Dorch/EB LRT		
Mode/Technology	Conversion Factor: Emissions (kg)/VMT	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement
Automobile	0.00010	11,689,472	116.89472	\$79,535.17	11,196,727	111.96727	\$76,182.53	6,873,865	68.73865	\$46,769.78	6,641,509	66.41509	\$45,188.83	9,223,435	92.23435	\$62,756.25	8,898,021	88.98021	\$60,542.13
Diesel Bus	0.00480	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Hybrid Bus	0.00480	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
CNG Bus	0.00010	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Electric Bus	0.000378	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Heavy Rail	0.000413	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Light Rail/Street Car (CART Miles)	0.000615	-2,193,662	-1349.101958	(\$757,655.66)	-2,275,518	-1399.443742	(\$785,927.61)	-2,035,123	-1251.600916	(\$702,899.07)	-2,116,980	-1301.9427	(\$731,171.02)	-2,403,006	-1477.84869	(\$829,959.82)	-2,485,008	-1528.279625	(\$858,281.84)
Commuter Rail (Diesel Locomotive or DMU)	0.000190	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Commuter Rail (Used Diesel Locomotive)	0.004600	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Commuter Rail (Electric or EMU)	0.000750	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Total Change	---	9495810.28	-1232.207238	(\$678,120.49)	8,921,209	-1287.476472	(\$709,745.08)	4,838,742	-1182.862266	(\$656,129.30)	4,524,529	-1235.52761	(\$685,982.19)	6,820,429	-1385.61434	(\$767,203.57)	6,413,013	-1439.299415	(\$797,739.70)

Air Quality: Volatile Organic Compounds (VOCs)		Alt B-1: US 78/Mtg BRT			Alt B-3: US 78/EB BRT			Alt C-1: US 176/Mtg BRT			Alt C-3: US 176/EB BRT			Alt D-1: Dorch/Mtg BRT			Alt D-3: Dorch/EB BRT		
Mode/Technology	Conversion Factor: Emissions (kg)/VMT	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement
Automobile	0.000600	6847855	4108.713	\$12,408.31	6,626,481	3975.8886	\$12,007.18	3,665,676	2199.4056	\$6,642.20	3,477,537	2086.5222	\$6,301.30	5,629,431	3377.6586	\$10,200.53	5,518,744	3311.2464	\$9,999.96
Diesel Bus	0.000730	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Hybrid Bus	0.000730	-1096830.86	-800.6865278	(\$2,418.07)	-1,137,759	-830.5641722	(\$2,508.30)	-1,017,562	-742.8200556	(\$2,243.32)	-1,058,490	-772.6977	(\$2,333.55)	-1,201,504	-877.0977448	(\$2,648.84)	-1,242,432	-906.9753892	(\$2,739.07)
CNG Bus	0.000146	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Electric Bus	0.000120	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Heavy Rail	0.000130	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Light Rail/Street Car (CART Miles)	0.000190	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Commuter Rail (Diesel Locomotive or DMU)	0.000550	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Commuter Rail (Used Diesel Locomotive)	0.004360	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Commuter Rail (Electric or EMU)	0.000240	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Total Change	---	5751024.14	3308.026472	\$9,990.24	5488721.86	3145.324428	\$9,498.88	2,648,114	1456.585544	\$4,398.89	2,419,047	1313.8245	\$3,967.75	4,427,927	2500.560855	\$7,551.69	4,276,312	2404.271011	\$7,260.90

Air Quality: Volatile Organic Compounds (VOCs)		Alt B-2: US 78/Mtg LRT			Alt B-4: US 78/EB LRT			Alt C-2: US 176/Mtg LRT			Alt C-4: US 176/EB LRT			Alt D-2: Dorch/Mtg LRT			Alt D-4: Dorch/EB LRT		
Mode/Technology	Conversion Factor: Emissions (kg)/VMT	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement	VMT Decrease (Increase)	Emissions Decrease (Increase) (kg)	Value of Improvement
Automobile	0.000600	11,689,472	7013.6832	\$21,181.32	11,196,727	6718.0362	\$20,288.47	6,873,865	4124.319	\$12,455.44	6,641,509	3984.9054	\$12,034.41	9,223,435	5534.061	\$16,712.86	8,898,021	5338.8126	\$16,123.21
Diesel Bus	0.000730	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Hybrid Bus	0.000730	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
CNG Bus	0.000146	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Electric Bus	0.000120	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Heavy Rail	0.000130	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Light Rail/Street Car (CART Miles)	0.000190	-2,193,662	-416.7957268	(\$1,258.72)	-2,275,518	-432.3484732	(\$1,305.69)	-2,035,123	-386.6734536	(\$1,167.75)	-2,116,980	-402.2262	(\$1,214.72)	-2,403,006	-456.57114	(\$1,378.84)	-2,485,008	-472.1514288	(\$1,425.90)
Commuter Rail (Diesel Locomotive or DMU)	0.000550	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Commuter Rail (Used Diesel Locomotive)	0.004360	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Commuter Rail (Electric or EMU)	0.000240	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00	0	0	\$0.00
Total Change	---	9495810.28	6596.887473	\$19,922.60	8,921,209	6285.687727	\$18,982.78	4,838,742	3737.645546	\$11,287.69	4,524,529	3582.6792	\$10,819.69	6,820,429	5077.48986	\$15,334.02	6,413,013	4866.661171	\$14,697.32

DRAFT