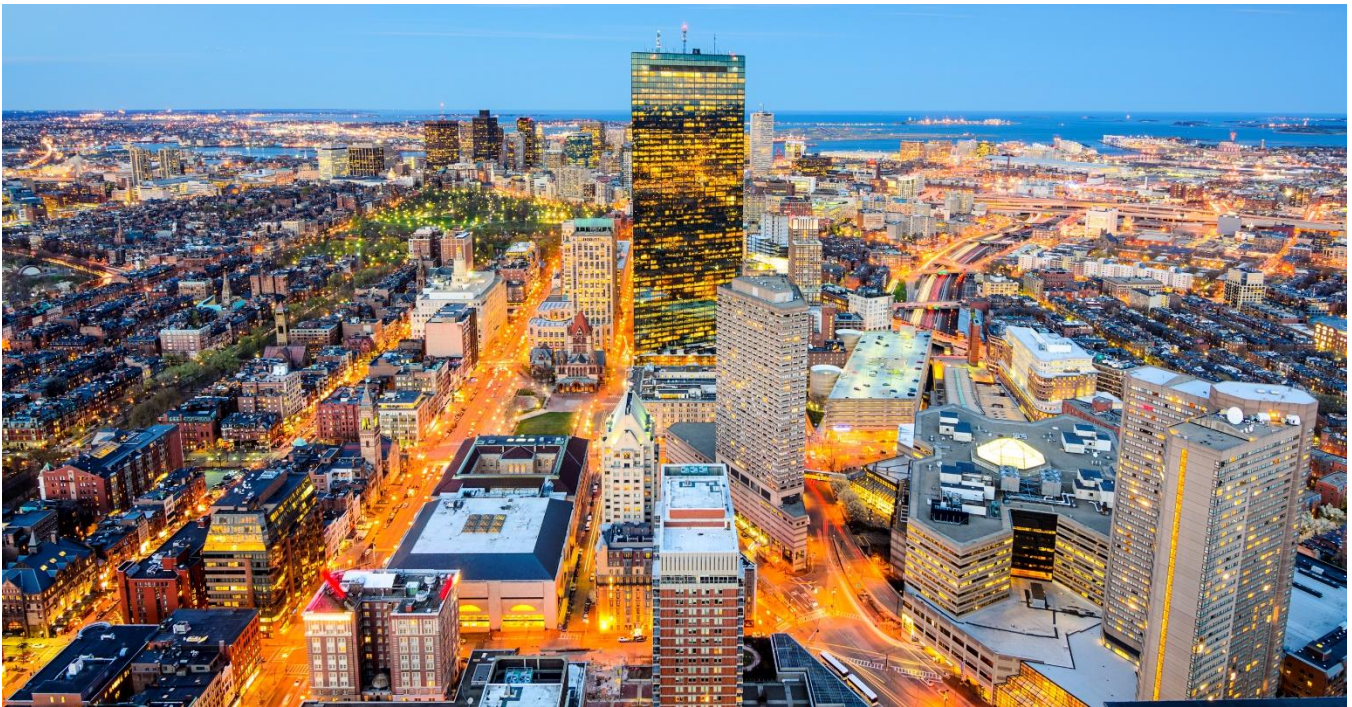


# Decarbonizing Transportation

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The Benefits and Costs of a Clean Transportation System in the Northeast and Mid-Atlantic Region

APPENDIX F State Level Cost and Benefit Estimates



## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>CT</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>5.4%</b>	<b>4.2%</b>

### Costs and Benefits - MID Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.11)	(\$1.33)	(\$3.62)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.00)	(\$0.19)	(\$1.13)
	<b>Transportation Electrification</b>	LDV	(\$0.07)	(\$0.74)	(\$1.84)	(\$2.45)
		M/HDV	(\$0.03)	(\$0.31)	(\$1.02)	(\$2.22)
<b>PEV Charging Infrastructure</b>	LDV - home chargers		(\$0.01)	(\$0.13)	(\$0.91)	(\$2.47)
	LDV - Public Chargers		(\$0.02)	(\$0.24)	(\$1.14)	(\$2.36)
	M/HDV		(\$0.01)	(\$0.11)	(\$0.39)	(\$0.90)
<b>Incremental Electricity Cost</b>	LDV		(\$0.10)	(\$1.35)	(\$6.56)	(\$16.33)
	M/HDV		(\$0.01)	(\$0.16)	(\$0.61)	(\$1.44)
<b>Low Carbon Fuel Standard</b>			(\$0.09)	(\$0.76)	(\$1.73)	(\$2.55)
<b>Low Carbon Grid</b>			\$0.00	\$0.00	\$0.00	\$0.00
<i>Sub-total Costs</i>			<b>(\$0.33)</b>	<b>(\$3.91)</b>	<b>(\$15.72)</b>	<b>(\$35.46)</b>
Gasoline Savings			\$0.19	\$2.94	\$15.12	\$35.71
Diesel Fuel Savings			(\$0.00)	\$0.11	\$1.39	\$4.43
Utility Net Revenue from PEV Charging	LDV		\$0.03	\$0.43	\$1.96	\$4.44
	M/HDV		\$0.00	\$0.05	\$0.18	\$0.39
<i>Sub-total Financial Savings</i>			<b>\$0.22</b>	<b>\$3.52</b>	<b>\$18.65</b>	<b>\$44.97</b>
<b>NET FINANCIAL BENEFITS</b>			<b>(\$0.11)</b>	<b>(\$0.39)</b>	<b>\$2.93</b>	<b>\$9.51</b>
Monetized GHG Benefits (3% AVG)			\$0.05	\$0.64	\$2.85	\$6.69
Monetized NOx Benefits (AVG)			\$0.00	\$0.02	\$0.11	\$0.30
Monetized PM2.5 Benefits (AVG)			\$0.00	\$0.04	\$0.21	\$0.56
<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>			<b>(\$0.05)</b>	<b>\$0.31</b>	<b>\$6.09</b>	<b>\$17.06</b>
GHG Reduction	LDV	Million MT	1.2	11.5	42.3	86.8
	MHDV	Million MT	0.0	0.4	4.0	11.4
	TOTAL			1.1	11.9	46.3
NOx Reduction	LDV	1000 MT	0.1	0.7	3.6	9.6
	MHDV	1000 MT	0.0	0.6	2.6	6.9
	TOTAL			0.1	1.3	6.3
PM <sub>2.5</sub> Reduction	LDV	1000 MT	0.0	0.0	0.2	0.6
	MHDV	1000 MT	0.0	0.0	0.0	0.1
	TOTAL			0.0	0.0	0.2
Gasoline Savings	TOTAL	Million gallons	74.4	937.1	4,522.5	10,330.2
Diesel Savings	TOTAL	Million gallons	-0.4	31.9	386.1	1,198.2

## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>CT</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>5.4%</b>	<b>4.2%</b>

### Costs and Benefits - HIGH Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.09)	(\$1.02)	(\$2.52)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.00)	(\$0.12)	(\$0.57)
	<b>Transportation Electrification</b>	LDV	(\$0.20)	(\$2.01)	(\$3.85)	(\$4.49)
		M/HDV	(\$0.07)	(\$0.81)	(\$2.43)	(\$5.01)
<b>PEV Charging Infrastructure</b>		LDV - home chargers	(\$0.02)	(\$0.32)	(\$1.44)	(\$3.48)
		LDV - Public Chargers	(\$0.06)	(\$0.57)	(\$1.87)	(\$3.45)
		M/HDV	(\$0.02)	(\$0.31)	(\$1.00)	(\$2.27)
<b>Incremental Electricity Cost</b>		LDV	(\$0.28)	(\$3.16)	(\$10.67)	(\$23.35)
		M/HDV	(\$0.03)	(\$0.48)	(\$1.71)	(\$3.93)
<b>Low Carbon Fuel Standard</b>			(\$0.17)	(\$1.09)	(\$2.17)	(\$3.06)
<b>Low Carbon Grid</b>			(\$0.00)	\$0.02	\$0.20	\$0.69
<i>Sub-total Costs</i>			<b>(\$0.86)</b>	<b>(\$8.81)</b>	<b>(\$26.09)</b>	<b>(\$51.46)</b>

Gasoline Savings		\$0.52	\$6.04	\$21.46	\$45.59
Diesel Fuel Savings		\$0.02	\$0.62	\$3.15	\$8.18
Utility Net Revenue from PEV Charging	LDV	\$0.08	\$0.99	\$3.15	\$6.15
	M/HDV	\$0.01	\$0.15	\$0.51	\$1.04
<i>Sub-total Financial Savings</i>		<b>\$0.63</b>	<b>\$7.80</b>	<b>\$28.27</b>	<b>\$60.97</b>

<b>NET FINANCIAL BENEFITS</b>	<b>(\$0.23)</b>	<b>(\$1.01)</b>	<b>\$2.18</b>	<b>\$9.51</b>
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Monetized GHG Benefits (3% AVG)	\$0.12	\$1.29	\$4.57	\$10.09
Monetized NOx Benefits (AVG)	\$0.01	\$0.06	\$0.24	\$0.60
Monetized PM2.5 Benefits (AVG)	\$0.01	\$0.10	\$0.38	\$0.90

<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>	<b>(\$0.09)</b>	<b>\$0.44</b>	<b>\$7.37</b>	<b>\$21.10</b>
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GHG Reduction	LDV	Million MT	2.5	21.7	65.1	125.4
	MHDV	Million MT	0.1	2.5	10.4	24.5
	TOTAL		2.6	24.2	75.4	149.9
NOx Reduction	LDV	1000 MT	0.2	1.8	6.6	15.2
	MHDV	1000 MT	0.1	1.8	7.3	18.6
	TOTAL		0.3	3.6	13.9	33.9
PM <sub>2.5</sub> Reduction	LDV	1000 MT	0.0	0.1	0.4	0.8
	MHDV	1000 MT	0.0	0.0	0.1	0.2
	TOTAL		0.0	0.1	0.4	1.1
Gasoline Savings	TOTAL	Million gallons	204.8	1,945.4	6,490.2	13,295.2
Diesel Savings	TOTAL	Million gallons	5.8	188.9	889.4	2,234.3

## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>DC</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>0.6%</b>	<b>0.3%</b>

### Costs and Benefits - MID Scenario

2015 \$ billions			CUMULATIVE THROUGH				
			2020	2030	2040	2050	
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.01)	(\$0.16)	(\$0.43)	
		M/HDV (EPA Phase 3)	\$0.00	(\$0.00)	(\$0.02)	(\$0.09)	
	<b>Transportation Electrification</b>	LDV	(\$0.01)	(\$0.09)	(\$0.22)	(\$0.29)	
		M/HDV	(\$0.00)	(\$0.02)	(\$0.08)	(\$0.18)	
<b>PEV Charging Infrastructure</b>		LDV - home chargers	(\$0.00)	(\$0.02)	(\$0.11)	(\$0.29)	
		LDV - Public Chargers	(\$0.00)	(\$0.03)	(\$0.14)	(\$0.28)	
		M/HDV	(\$0.00)	(\$0.01)	(\$0.03)	(\$0.07)	
<b>Incremental Electricity Cost</b>		LDV	(\$0.01)	(\$0.16)	(\$0.78)	(\$1.95)	
		M/HDV	(\$0.00)	(\$0.01)	(\$0.05)	(\$0.11)	
<b>Low Carbon Fuel Standard</b>			(\$0.01)	(\$0.09)	(\$0.19)	(\$0.28)	
<b>Low Carbon Grid</b>			\$0.00	\$0.00	\$0.00	\$0.00	
<i>Sub-total Costs</i>			<b>(\$0.04)</b>	<b>(\$0.44)</b>	<b>(\$1.77)</b>	<b>(\$3.98)</b>	
Gasoline Savings			\$0.02	\$0.35	\$1.80	\$4.25	
Diesel Fuel Savings			(\$0.00)	\$0.01	\$0.11	\$0.35	
Utility Net Revenue from PEV Charging		LDV	\$0.00	\$0.05	\$0.23	\$0.53	
		M/HDV	\$0.00	\$0.00	\$0.01	\$0.03	
<i>Sub-total Financial Savings</i>			<b>\$0.03</b>	<b>\$0.41</b>	<b>\$2.16</b>	<b>\$5.17</b>	
<b>NET FINANCIAL BENEFITS</b>			<b>(\$0.01)</b>	<b>(\$0.02)</b>	<b>\$0.39</b>	<b>\$1.19</b>	
Monetized GHG Benefits (3% AVG)			\$0.01	\$0.08	\$0.33	\$0.77	
Monetized NOx Benefits (AVG)			\$0.00	\$0.00	\$0.01	\$0.03	
Monetized PM2.5 Benefits (AVG)			\$0.00	\$0.00	\$0.02	\$0.06	
<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>			<b>(\$0.00)</b>	<b>\$0.06</b>	<b>\$0.75</b>	<b>\$2.05</b>	
GHG Reduction		LDV	Million MT	0.1	1.4	5.0	10.3
		MHDV	Million MT	0.0	0.0	0.3	0.9
		TOTAL		0.1	1.4	5.4	11.2
NOx Reduction		LDV	1000 MT	0.0	0.1	0.4	1.1
		MHDV	1000 MT	0.0	0.0	0.2	0.5
		TOTAL		0.0	0.1	0.6	1.7
PM <sub>2.5</sub> Reduction		LDV	1000 MT	0.0	0.0	0.0	0.1
		MHDV	1000 MT	0.0	0.0	0.0	0.0
		TOTAL		0.0	0.0	0.0	0.1
Gasoline Savings	TOTAL	Million gallons	8.9	111.6	538.6	1,230.2	
Diesel Savings	TOTAL	Million gallons	0.0	2.5	30.7	95.4	

## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>DC</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>0.6%</b>	<b>0.3%</b>

### Costs and Benefits - HIGH Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.01)	(\$0.12)	(\$0.30)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.00)	(\$0.01)	(\$0.05)
	<b>Transportation Electrification</b>	LDV	(\$0.02)	(\$0.24)	(\$0.46)	(\$0.54)
		M/HDV	(\$0.01)	(\$0.06)	(\$0.19)	(\$0.40)
<b>PEV Charging Infrastructure</b>		LDV - home chargers	(\$0.00)	(\$0.04)	(\$0.17)	(\$0.41)
		LDV - Public Chargers	(\$0.01)	(\$0.07)	(\$0.22)	(\$0.41)
		M/HDV	(\$0.00)	(\$0.02)	(\$0.08)	(\$0.18)
<b>Incremental Electricity Cost</b>		LDV	(\$0.03)	(\$0.38)	(\$1.27)	(\$2.78)
		M/HDV	(\$0.00)	(\$0.04)	(\$0.14)	(\$0.31)
<b>Low Carbon Fuel Standard</b>			(\$0.02)	(\$0.12)	(\$0.24)	(\$0.34)
<b>Low Carbon Grid</b>			(\$0.00)	\$0.00	\$0.02	\$0.08
<i>Sub-total Costs</i>			<b>(\$0.10)</b>	<b>(\$0.98)</b>	<b>(\$2.89)</b>	<b>(\$5.65)</b>

Gasoline Savings		\$0.06	\$0.72	\$2.56	\$5.43
Diesel Fuel Savings		\$0.00	\$0.05	\$0.25	\$0.65
Utility Net Revenue from PEV Charging	LDV	\$0.01	\$0.12	\$0.37	\$0.73
	M/HDV	\$0.00	\$0.01	\$0.04	\$0.08
<i>Sub-total Financial Savings</i>		<b>\$0.07</b>	<b>\$0.90</b>	<b>\$3.22</b>	<b>\$6.90</b>

<b>NET FINANCIAL BENEFITS</b>	<b>(\$0.02)</b>	<b>(\$0.08)</b>	<b>\$0.34</b>	<b>\$1.25</b>
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Monetized GHG Benefits (3% AVG)	\$0.01	\$0.15	\$0.52	\$1.14
Monetized NOx Benefits (AVG)	\$0.00	\$0.01	\$0.02	\$0.06
Monetized PM2.5 Benefits (AVG)	\$0.00	\$0.01	\$0.04	\$0.10

<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>	<b>(\$0.01)</b>	<b>\$0.08</b>	<b>\$0.92</b>	<b>\$2.55</b>
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GHG Reduction	LDV	Million MT	0.3	2.6	7.7	14.9
	MHDV	Million MT	0.0	0.2	0.8	2.0
	TOTAL		0.3	2.8	8.6	16.9
NOx Reduction	LDV	1000 MT	0.0	0.2	0.8	1.8
	MHDV	1000 MT	0.0	0.1	0.6	1.5
	TOTAL		0.0	0.4	1.4	3.3
PM <sub>2.5</sub> Reduction	LDV	1000 MT	0.0	0.0	0.0	0.1
	MHDV	1000 MT	0.0	0.0	0.0	0.0
	TOTAL		0.0	0.0	0.0	0.1
Gasoline Savings	TOTAL	Million gallons	24.4	231.7	772.9	1,583.3
Diesel Savings	TOTAL	Million gallons	0.5	15.0	70.8	177.9

## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>DE</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>1.7%</b>	<b>1.9%</b>

### Costs and Benefits - MID Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.03)	(\$0.42)	(\$1.15)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.00)	(\$0.09)	(\$0.51)
	<b>Transportation Electrification</b>	LDV	(\$0.02)	(\$0.24)	(\$0.59)	(\$0.78)
		M/HDV	(\$0.01)	(\$0.14)	(\$0.46)	(\$1.01)
<b>PEV Charging Infrastructure</b>		LDV - home chargers	(\$0.00)	(\$0.04)	(\$0.29)	(\$0.79)
		LDV - Public Chargers	(\$0.01)	(\$0.08)	(\$0.36)	(\$0.75)
		M/HDV	(\$0.00)	(\$0.05)	(\$0.18)	(\$0.41)
<b>Incremental Electricity Cost</b>		LDV	(\$0.03)	(\$0.43)	(\$2.09)	(\$5.20)
		M/HDV	(\$0.01)	(\$0.07)	(\$0.28)	(\$0.65)
<b>Low Carbon Fuel Standard</b>			(\$0.03)	(\$0.26)	(\$0.59)	(\$0.88)
<b>Low Carbon Grid</b>			\$0.00	\$0.00	\$0.00	\$0.00
<i>Sub-total Costs</i>			<b>(\$0.11)</b>	<b>(\$1.34)</b>	<b>(\$5.35)</b>	<b>(\$12.12)</b>
Gasoline Savings			\$0.06	\$0.93	\$4.81	\$11.37
Diesel Fuel Savings			(\$0.00)	\$0.05	\$0.63	\$2.01
Utility Net Revenue from PEV Charging		LDV	\$0.01	\$0.14	\$0.62	\$1.41
		M/HDV	\$0.00	\$0.02	\$0.08	\$0.18
<i>Sub-total Financial Savings</i>			<b>\$0.07</b>	<b>\$1.14</b>	<b>\$6.15</b>	<b>\$14.97</b>

<b>NET FINANCIAL BENEFITS</b>	<b>(\$0.04)</b>	<b>(\$0.20)</b>	<b>\$0.80</b>	<b>\$2.85</b>
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Monetized GHG Benefits (3% AVG)	\$0.02	\$0.21	\$0.94	\$2.24
Monetized NOx Benefits (AVG)	\$0.00	\$0.01	\$0.04	\$0.11
Monetized PM2.5 Benefits (AVG)	\$0.00	\$0.01	\$0.07	\$0.19

<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>	<b>(\$0.03)</b>	<b>\$0.03</b>	<b>\$1.85</b>	<b>\$5.38</b>
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GHG Reduction	LDV	Million MT	0.4	3.7	13.5	27.6
	MHDV	Million MT	0.0	0.2	1.8	5.1
	TOTAL		0.4	3.9	15.3	32.8
NOx Reduction	LDV	1000 MT	0.0	0.2	1.2	3.1
	MHDV	1000 MT	0.0	0.3	1.2	3.1
	TOTAL		0.0	0.5	2.4	6.2
PM <sub>2.5</sub> Reduction	LDV	1000 MT	0.0	0.0	0.1	0.2
	MHDV	1000 MT	0.0	0.0	0.0	0.0
	TOTAL		0.0	0.0	0.1	0.2
Gasoline Savings	TOTAL	Million gallons	23.7	298.4	1,440.1	3,289.5
Diesel Savings	TOTAL	Million gallons	-0.2	14.4	175.0	543.1

## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>DE</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>1.7%</b>	<b>1.9%</b>

### Costs and Benefits - HIGH Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.03)	(\$0.33)	(\$0.80)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.00)	(\$0.06)	(\$0.26)
	<b>Transportation Electrification</b>	LDV	(\$0.07)	(\$0.64)	(\$1.23)	(\$1.43)
		M/HDV	(\$0.03)	(\$0.37)	(\$1.10)	(\$2.27)
<b>PEV Charging Infrastructure</b>	LDV - home chargers		(\$0.01)	(\$0.10)	(\$0.46)	(\$1.11)
	LDV - Public Chargers		(\$0.02)	(\$0.18)	(\$0.60)	(\$1.10)
	M/HDV		(\$0.01)	(\$0.14)	(\$0.45)	(\$1.03)
<b>Incremental Electricity Cost</b>	LDV		(\$0.09)	(\$1.01)	(\$3.40)	(\$7.44)
	M/HDV		(\$0.01)	(\$0.22)	(\$0.78)	(\$1.78)
<b>Low Carbon Fuel Standard</b>			(\$0.06)	(\$0.37)	(\$0.74)	(\$1.05)
<b>Low Carbon Grid</b>			(\$0.00)	\$0.01	\$0.07	\$0.23
<b>Sub-total Costs</b>			<b>(\$0.29)</b>	<b>(\$3.05)</b>	<b>(\$9.06)</b>	<b>(\$18.03)</b>

Gasoline Savings		\$0.16	\$1.92	\$6.83	\$14.52
Diesel Fuel Savings		\$0.01	\$0.28	\$1.43	\$3.71
Utility Net Revenue from PEV Charging	LDV	\$0.03	\$0.32	\$1.00	\$1.96
	M/HDV	\$0.00	\$0.07	\$0.23	\$0.47
<b>Sub-total Financial Savings</b>		<b>\$0.20</b>	<b>\$2.59</b>	<b>\$9.49</b>	<b>\$20.66</b>

<b>NET FINANCIAL BENEFITS</b>	<b>(\$0.09)</b>	<b>(\$0.46)</b>	<b>\$0.43</b>	<b>\$2.62</b>
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Monetized GHG Benefits (3% AVG)	\$0.04	\$0.43	\$1.54	\$3.44
Monetized NOx Benefits (AVG)	\$0.00	\$0.02	\$0.09	\$0.23
Monetized PM2.5 Benefits (AVG)	\$0.00	\$0.03	\$0.13	\$0.31

<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>	<b>(\$0.04)</b>	<b>\$0.03</b>	<b>\$2.19</b>	<b>\$6.61</b>
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GHG Reduction	LDV	Million MT	0.8	6.9	20.7	39.9
	MHDV	Million MT	0.0	1.1	4.7	11.1
	TOTAL		0.9	8.0	25.4	51.0
NOx Reduction	LDV	1000 MT	0.1	0.6	2.1	4.8
	MHDV	1000 MT	0.1	0.8	3.3	8.5
	TOTAL		0.1	1.4	5.4	13.3
PM <sub>2.5</sub> Reduction	LDV	1000 MT	0.0	0.0	0.1	0.3
	MHDV	1000 MT	0.0	0.0	0.0	0.1
	TOTAL		0.0	0.0	0.2	0.4
Gasoline Savings	TOTAL	Million gallons	65.2	619.5	2,066.7	4,233.6
Diesel Savings	TOTAL	Million gallons	2.7	85.6	403.1	1,012.7

## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>MA</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>10.2%</b>	<b>7.0%</b>

### Costs and Benefits - MID Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.20)	(\$2.50)	(\$6.81)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.01)	(\$0.32)	(\$1.88)
	<b>Transportation Electrification</b>	LDV	(\$0.13)	(\$1.40)	(\$3.47)	(\$4.60)
		M/HDV	(\$0.05)	(\$0.52)	(\$1.70)	(\$3.71)
<b>PEV Charging Infrastructure</b>		LDV - home chargers	(\$0.01)	(\$0.25)	(\$1.70)	(\$4.64)
		LDV - Public Chargers	(\$0.04)	(\$0.45)	(\$2.15)	(\$4.44)
		M/HDV	(\$0.02)	(\$0.18)	(\$0.65)	(\$1.50)
<b>Incremental Electricity Cost</b>		LDV	(\$0.18)	(\$2.53)	(\$12.34)	(\$30.73)
		M/HDV	(\$0.02)	(\$0.26)	(\$1.02)	(\$2.40)
<b>Low Carbon Fuel Standard</b>			(\$0.17)	(\$1.41)	(\$3.19)	(\$4.69)
<b>Low Carbon Grid</b>			\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total Costs</b>			<b>(\$0.61)</b>	<b>(\$7.21)</b>	<b>(\$29.04)</b>	<b>(\$65.40)</b>
Gasoline Savings			\$0.35	\$5.52	\$28.44	\$67.20
Diesel Fuel Savings			(\$0.00)	\$0.18	\$2.32	\$7.39
Utility Net Revenue from PEV Charging		LDV	\$0.05	\$0.80	\$3.69	\$8.35
		M/HDV	\$0.01	\$0.08	\$0.30	\$0.65
<b>Sub-total Financial Savings</b>			<b>\$0.41</b>	<b>\$6.59</b>	<b>\$34.75</b>	<b>\$83.59</b>
<b>NET FINANCIAL BENEFITS</b>			<b>(\$0.20)</b>	<b>(\$0.62)</b>	<b>\$5.71</b>	<b>\$18.19</b>
Monetized GHG Benefits (3% AVG)			\$0.10	\$1.20	\$5.30	\$12.43
Monetized NOx Benefits (AVG)			\$0.00	\$0.04	\$0.20	\$0.53
Monetized PM2.5 Benefits (AVG)			\$0.00	\$0.07	\$0.39	\$1.04
<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>			<b>(\$0.09)</b>	<b>\$0.69</b>	<b>\$11.60</b>	<b>\$32.18</b>
GHG Reduction		LDV	2.2	21.7	79.7	163.3
		MHDV	0.0	0.7	6.7	18.9
		TOTAL	2.2	22.4	86.3	182.3
NOx Reduction		LDV	0.1	1.3	6.8	18.0
		MHDV	0.1	1.0	4.4	11.5
		TOTAL	0.2	2.3	11.2	29.5
PM <sub>2.5</sub> Reduction		LDV	0.0	0.1	0.4	1.1
		MHDV	0.0	0.0	0.1	0.1
		TOTAL	0.0	0.1	0.5	1.2
Gasoline Savings	TOTAL	Million gallons	140.1	1,763.2	8,509.3	19,436.8
Diesel Savings	TOTAL	Million gallons	-0.7	53.1	644.2	1,999.1



## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>MA</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>10.2%</b>	<b>7.0%</b>

### Costs and Benefits - HIGH Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.16)	(\$1.92)	(\$4.75)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.01)	(\$0.21)	(\$0.96)
	<b>Transportation Electrification</b>	LDV	(\$0.38)	(\$3.78)	(\$7.25)	(\$8.45)
		M/HDV	(\$0.12)	(\$1.36)	(\$4.05)	(\$8.35)
<b>PEV Charging Infrastructure</b>	LDV - home chargers		(\$0.04)	(\$0.59)	(\$2.71)	(\$6.55)
	LDV - Public Chargers		(\$0.11)	(\$1.07)	(\$3.52)	(\$6.49)
	M/HDV		(\$0.04)	(\$0.51)	(\$1.66)	(\$3.79)
<b>Incremental Electricity Cost</b>	LDV		(\$0.53)	(\$5.94)	(\$20.07)	(\$43.94)
	M/HDV		(\$0.05)	(\$0.80)	(\$2.86)	(\$6.55)
<b>Low Carbon Fuel Standard</b>			(\$0.31)	(\$2.01)	(\$4.01)	(\$5.65)
<b>Low Carbon Grid</b>			(\$0.00)	\$0.03	\$0.36	\$1.27
<b>Sub-total Costs</b>			<b>(\$1.58)</b>	<b>(\$16.20)</b>	<b>(\$47.89)</b>	<b>(\$94.22)</b>

Gasoline Savings		\$0.97	\$11.36	\$40.38	\$85.79
Diesel Fuel Savings		\$0.03	\$1.04	\$5.26	\$13.65
Utility Net Revenue from PEV Charging	LDV	\$0.16	\$1.87	\$5.92	\$11.58
	M/HDV	\$0.02	\$0.25	\$0.84	\$1.73
<b>Sub-total Financial Savings</b>		<b>\$1.17</b>	<b>\$14.52</b>	<b>\$52.41</b>	<b>\$112.75</b>

<b>NET FINANCIAL BENEFITS</b>	<b>(\$0.40)</b>	<b>(\$1.68)</b>	<b>\$4.51</b>	<b>\$18.53</b>
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Monetized GHG Benefits (3% AVG)	\$0.23	\$2.39	\$8.46	\$18.64
Monetized NOx Benefits (AVG)	\$0.01	\$0.11	\$0.43	\$1.05
Monetized PM2.5 Benefits (AVG)	\$0.01	\$0.18	\$0.69	\$1.65

<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>	<b>(\$0.15)</b>	<b>\$1.00</b>	<b>\$14.10</b>	<b>\$39.88</b>
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GHG Reduction	LDV	Million MT	4.8	40.9	122.4	236.0
	MHDV	Million MT	0.1	4.1	17.3	40.9
	TOTAL		4.9	45.0	139.7	276.8
NOx Reduction	LDV	1000 MT	0.4	3.4	12.5	28.6
	MHDV	1000 MT	0.2	3.0	12.2	31.1
	TOTAL		0.6	6.5	24.7	59.8
PM <sub>2.5</sub> Reduction	LDV	1000 MT	0.0	0.2	0.7	1.6
	MHDV	1000 MT	0.0	0.0	0.2	0.4
	TOTAL		0.0	0.2	0.8	1.9
Gasoline Savings	TOTAL	Million gallons	385.3	3,660.3	12,211.7	25,015.7
Diesel Savings	TOTAL	Million gallons	9.8	315.2	1,483.9	3,727.7

## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>MD</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>10.2%</b>	<b>9.1%</b>

### Costs and Benefits - MID Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.20)	(\$2.49)	(\$6.78)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.01)	(\$0.42)	(\$2.46)
	<b>Transportation Electrification</b>	LDV	(\$0.12)	(\$1.40)	(\$3.46)	(\$4.59)
		M/HDV	(\$0.06)	(\$0.68)	(\$2.23)	(\$4.85)
<b>PEV Charging Infrastructure</b>		LDV - home chargers	(\$0.01)	(\$0.25)	(\$1.70)	(\$4.62)
		LDV - Public Chargers	(\$0.04)	(\$0.45)	(\$2.14)	(\$4.43)
		M/HDV	(\$0.02)	(\$0.23)	(\$0.85)	(\$1.96)
<b>Incremental Electricity Cost</b>		LDV	(\$0.18)	(\$2.52)	(\$12.29)	(\$30.61)
		M/HDV	(\$0.03)	(\$0.34)	(\$1.34)	(\$3.14)
<b>Low Carbon Fuel Standard</b>			(\$0.18)	(\$1.47)	(\$3.34)	(\$4.94)
<b>Low Carbon Grid</b>			\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total Costs</b>			<b>(\$0.64)</b>	<b>(\$7.55)</b>	<b>(\$30.26)</b>	<b>(\$68.38)</b>
Gasoline Savings			\$0.35	\$5.50	\$28.33	\$66.94
Diesel Fuel Savings			(\$0.00)	\$0.24	\$3.04	\$9.67
Utility Net Revenue from PEV Charging		LDV	\$0.05	\$0.80	\$3.67	\$8.32
		M/HDV	\$0.01	\$0.11	\$0.40	\$0.85
<b>Sub-total Financial Savings</b>			<b>\$0.41</b>	<b>\$6.65</b>	<b>\$35.44</b>	<b>\$85.78</b>
<b>NET FINANCIAL BENEFITS</b>			<b>(\$0.23)</b>	<b>(\$0.91)</b>	<b>\$5.18</b>	<b>\$17.40</b>
Monetized GHG Benefits (3% AVG)			\$0.10	\$1.20	\$5.41	\$12.78
Monetized NOx Benefits (AVG)			\$0.00	\$0.04	\$0.23	\$0.59
Monetized PM2.5 Benefits (AVG)			\$0.01	\$0.07	\$0.40	\$1.07
<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>			<b>(\$0.12)</b>	<b>\$0.41</b>	<b>\$11.22</b>	<b>\$31.85</b>
GHG Reduction		LDV	2.2	21.6	79.3	162.7
		MHDV	0.0	0.9	8.7	24.8
		TOTAL	2.1	22.5	88.1	187.5
NOx Reduction		LDV	0.1	1.3	6.8	18.0
		MHDV	0.1	1.3	5.8	15.0
		TOTAL	0.2	2.6	12.6	33.0
PM <sub>2.5</sub> Reduction		LDV	0.0	0.1	0.4	1.0
		MHDV	0.0	0.0	0.1	0.2
		TOTAL	0.0	0.1	0.5	1.2
Gasoline Savings	TOTAL	Million gallons	139.5	1,756.4	8,476.5	19,361.8
Diesel Savings	TOTAL	Million gallons	-0.9	69.6	843.4	2,617.5

## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>MD</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>10.2%</b>	<b>9.1%</b>

### Costs and Benefits - HIGH Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.16)	(\$1.92)	(\$4.73)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.01)	(\$0.27)	(\$1.26)
	<b>Transportation Electrification</b>	LDV	(\$0.38)	(\$3.76)	(\$7.22)	(\$8.42)
		M/HDV	(\$0.15)	(\$1.78)	(\$5.30)	(\$10.94)
<b>PEV Charging Infrastructure</b>		LDV - home chargers	(\$0.04)	(\$0.59)	(\$2.70)	(\$6.52)
		LDV - Public Chargers	(\$0.11)	(\$1.06)	(\$3.51)	(\$6.47)
		M/HDV	(\$0.05)	(\$0.67)	(\$2.17)	(\$4.97)
<b>Incremental Electricity Cost</b>		LDV	(\$0.53)	(\$5.92)	(\$19.99)	(\$43.77)
		M/HDV	(\$0.07)	(\$1.05)	(\$3.74)	(\$8.58)
<b>Low Carbon Fuel Standard</b>			(\$0.32)	(\$2.10)	(\$4.19)	(\$5.91)
<b>Low Carbon Grid</b>			(\$0.00)	\$0.03	\$0.38	\$1.32
<i>Sub-total Costs</i>			<b>(\$1.65)</b>	<b>(\$17.07)</b>	<b>(\$50.64)</b>	<b>(\$100.24)</b>

Gasoline Savings		\$0.97	\$11.32	\$40.22	\$85.46
Diesel Fuel Savings		\$0.04	\$1.36	\$6.89	\$17.88
Utility Net Revenue from PEV Charging	LDV	\$0.16	\$1.86	\$5.90	\$11.53
	M/HDV	\$0.02	\$0.33	\$1.10	\$2.26
<i>Sub-total Financial Savings</i>		<b>\$1.18</b>	<b>\$14.87</b>	<b>\$54.11</b>	<b>\$117.13</b>

<b>NET FINANCIAL BENEFITS</b>	<b>(\$0.47)</b>	<b>(\$2.20)</b>	<b>\$3.48</b>	<b>\$16.89</b>
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Monetized GHG Benefits (3% AVG)	\$0.23	\$2.45	\$8.75	\$19.43
Monetized NOx Benefits (AVG)	\$0.01	\$0.12	\$0.50	\$1.22
Monetized PM2.5 Benefits (AVG)	\$0.02	\$0.18	\$0.73	\$1.75

<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>	<b>(\$0.21)</b>	<b>\$0.56</b>	<b>\$13.46</b>	<b>\$39.29</b>
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GHG Reduction	LDV	Million MT	4.8	40.8	121.9	235.0
	MHDV	Million MT	0.2	5.4	22.6	53.5
	TOTAL		5.0	46.2	144.6	288.5
NOx Reduction	LDV	1000 MT	0.4	3.4	12.5	28.5
	MHDV	1000 MT	0.3	4.0	15.9	40.7
	TOTAL		0.7	7.4	28.4	69.3
PM <sub>2.5</sub> Reduction	LDV	1000 MT	0.0	0.2	0.7	1.5
	MHDV	1000 MT	0.0	0.1	0.2	0.5
	TOTAL		0.0	0.2	0.9	2.1
Gasoline Savings	TOTAL	Million gallons	383.9	3,646.2	12,164.6	24,919.2
Diesel Savings	TOTAL	Million gallons	12.8	412.6	1,942.9	4,880.7

## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>ME</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>2.4%</b>	<b>3.1%</b>

### Costs and Benefits - MID Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.05)	(\$0.59)	(\$1.61)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.00)	(\$0.14)	(\$0.85)
	<b>Transportation Electrification</b>	LDV	(\$0.03)	(\$0.33)	(\$0.82)	(\$1.09)
		M/HDV	(\$0.02)	(\$0.24)	(\$0.77)	(\$1.67)
<b>PEV Charging Infrastructure</b>	LDV - home chargers		(\$0.00)	(\$0.06)	(\$0.40)	(\$1.09)
	LDV - Public Chargers		(\$0.01)	(\$0.11)	(\$0.51)	(\$1.05)
	M/HDV		(\$0.01)	(\$0.08)	(\$0.29)	(\$0.68)
<b>Incremental Electricity Cost</b>	LDV		(\$0.04)	(\$0.60)	(\$2.91)	(\$7.25)
	M/HDV		(\$0.01)	(\$0.12)	(\$0.46)	(\$1.08)
<b>Low Carbon Fuel Standard</b>			(\$0.05)	(\$0.38)	(\$0.87)	(\$1.29)
<b>Low Carbon Grid</b>			\$0.00	\$0.00	\$0.00	\$0.00
<i>Sub-total Costs</i>			<b>(\$0.17)</b>	<b>(\$1.96)</b>	<b>(\$7.76)</b>	<b>(\$17.65)</b>
Gasoline Savings			\$0.08	\$1.30	\$6.71	\$15.85
Diesel Fuel Savings			(\$0.00)	\$0.08	\$1.05	\$3.33
Utility Net Revenue from PEV Charging	LDV		\$0.01	\$0.19	\$0.87	\$1.97
	M/HDV		\$0.00	\$0.04	\$0.14	\$0.29
<i>Sub-total Financial Savings</i>			<b>\$0.10</b>	<b>\$1.61</b>	<b>\$8.76</b>	<b>\$21.45</b>

<b>NET FINANCIAL BENEFITS</b>	<b>(\$0.07)</b>	<b>(\$0.35)</b>	<b>\$1.00</b>	<b>\$3.80</b>
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Monetized GHG Benefits (3% AVG)	\$0.02	\$0.29	\$1.34	\$3.21
Monetized NOx Benefits (AVG)	\$0.00	\$0.01	\$0.06	\$0.17
Monetized PM2.5 Benefits (AVG)	\$0.00	\$0.02	\$0.10	\$0.27

<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>	<b>(\$0.04)</b>	<b>(\$0.02)</b>	<b>\$2.51</b>	<b>\$7.45</b>
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GHG Reduction	LDV	Million MT	0.5	5.1	18.8	38.5
	MHDV	Million MT	0.0	0.3	3.0	8.5
	TOTAL		0.5	5.4	21.8	47.1
NOx Reduction	LDV	1000 MT	0.0	0.3	1.6	4.3
	MHDV	1000 MT	0.0	0.5	2.0	5.2
	TOTAL		0.1	0.8	3.6	9.4
PM <sub>2.5</sub> Reduction	LDV	1000 MT	0.0	0.0	0.1	0.2
	MHDV	1000 MT	0.0	0.0	0.0	0.1
	TOTAL		0.0	0.0	0.1	0.3
Gasoline Savings	TOTAL	Million gallons	33.0	416.0	2,007.6	4,585.6
Diesel Savings	TOTAL	Million gallons	-0.3	24.0	290.6	901.9

## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>ME</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>2.4%</b>	<b>3.1%</b>

### Costs and Benefits - HIGH Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.04)	(\$0.45)	(\$1.12)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.00)	(\$0.09)	(\$0.43)
	<b>Transportation Electrification</b>	LDV	(\$0.09)	(\$0.89)	(\$1.71)	(\$1.99)
		M/HDV	(\$0.05)	(\$0.61)	(\$1.83)	(\$3.77)
<b>PEV Charging Infrastructure</b>	LDV - home chargers		(\$0.01)	(\$0.14)	(\$0.64)	(\$1.55)
	LDV - Public Chargers		(\$0.03)	(\$0.25)	(\$0.83)	(\$1.53)
	M/HDV		(\$0.02)	(\$0.23)	(\$0.75)	(\$1.71)
<b>Incremental Electricity Cost</b>	LDV		(\$0.13)	(\$1.40)	(\$4.74)	(\$10.37)
	M/HDV		(\$0.02)	(\$0.36)	(\$1.29)	(\$2.96)
<b>Low Carbon Fuel Standard</b>			(\$0.08)	(\$0.54)	(\$1.08)	(\$1.53)
<b>Low Carbon Grid</b>			(\$0.00)	\$0.01	\$0.10	\$0.34
<b>Sub-total Costs</b>			<b>(\$0.43)</b>	<b>(\$4.46)</b>	<b>(\$13.31)</b>	<b>(\$26.62)</b>

Gasoline Savings		\$0.23	\$2.68	\$9.53	\$20.24
Diesel Fuel Savings		\$0.01	\$0.47	\$2.37	\$6.16
Utility Net Revenue from PEV Charging	LDV	\$0.04	\$0.44	\$1.40	\$2.73
	M/HDV	\$0.01	\$0.11	\$0.38	\$0.78
<b>Sub-total Financial Savings</b>		<b>\$0.29</b>	<b>\$3.70</b>	<b>\$13.68</b>	<b>\$29.91</b>

<b>NET FINANCIAL BENEFITS</b>	<b>(\$0.14)</b>	<b>(\$0.76)</b>	<b>\$0.37</b>	<b>\$3.29</b>
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Monetized GHG Benefits (3% AVG)	\$0.06	\$0.61	\$2.22	\$4.99
Monetized NOx Benefits (AVG)	\$0.00	\$0.04	\$0.15	\$0.37
Monetized PM2.5 Benefits (AVG)	\$0.00	\$0.05	\$0.19	\$0.46

<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>	<b>(\$0.08)</b>	<b>(\$0.06)</b>	<b>\$2.92</b>	<b>\$9.11</b>
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GHG Reduction	LDV	Million MT	1.1	9.7	28.9	55.7
	MHDV	Million MT	0.1	1.9	7.8	18.4
	TOTAL		1.2	11.5	36.7	74.1
NOx Reduction	LDV	1000 MT	0.1	0.8	3.0	6.8
	MHDV	1000 MT	0.1	1.4	5.5	14.0
	TOTAL		0.2	2.2	8.4	20.8
PM <sub>2.5</sub> Reduction	LDV	1000 MT	0.0	0.0	0.2	0.4
	MHDV	1000 MT	0.0	0.0	0.1	0.2
	TOTAL		0.0	0.1	0.2	0.5
Gasoline Savings	TOTAL	Million gallons	90.9	863.6	2,881.0	5,901.8
Diesel Savings	TOTAL	Million gallons	4.4	142.2	669.5	1,681.8

## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>NH</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>2.2%</b>	<b>2.0%</b>

### Costs and Benefits - MID Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.04)	(\$0.54)	(\$1.48)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.00)	(\$0.09)	(\$0.54)
	<b>Transportation Electrification</b>	LDV	(\$0.03)	(\$0.30)	(\$0.75)	(\$1.00)
		M/HDV	(\$0.01)	(\$0.15)	(\$0.49)	(\$1.07)
<b>PEV Charging Infrastructure</b>		LDV - home chargers	(\$0.00)	(\$0.05)	(\$0.37)	(\$1.01)
		LDV - Public Chargers	(\$0.01)	(\$0.10)	(\$0.47)	(\$0.96)
		M/HDV	(\$0.00)	(\$0.05)	(\$0.19)	(\$0.43)
<b>Incremental Electricity Cost</b>		LDV	(\$0.04)	(\$0.55)	(\$2.68)	(\$6.67)
		M/HDV	(\$0.01)	(\$0.08)	(\$0.30)	(\$0.69)
<b>Low Carbon Fuel Standard</b>			(\$0.04)	(\$0.32)	(\$0.73)	(\$1.08)
<b>Low Carbon Grid</b>			\$0.00	\$0.00	\$0.00	\$0.00
<i>Sub-total Costs</i>			<b>(\$0.14)</b>	<b>(\$1.65)</b>	<b>(\$6.61)</b>	<b>(\$14.95)</b>
Gasoline Savings			\$0.08	\$1.20	\$6.17	\$14.59
Diesel Fuel Savings			(\$0.00)	\$0.05	\$0.67	\$2.14
Utility Net Revenue from PEV Charging		LDV	\$0.01	\$0.17	\$0.80	\$1.81
		M/HDV	\$0.00	\$0.02	\$0.09	\$0.19
<i>Sub-total Financial Savings</i>			<b>\$0.09</b>	<b>\$1.45</b>	<b>\$7.73</b>	<b>\$18.73</b>

<b>NET FINANCIAL BENEFITS</b>	<b>(\$0.05)</b>	<b>(\$0.20)</b>	<b>\$1.12</b>	<b>\$3.78</b>
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Monetized GHG Benefits (3% AVG)	\$0.02	\$0.26	\$1.18	\$2.79
Monetized NOx Benefits (AVG)	\$0.00	\$0.01	\$0.05	\$0.13
Monetized PM2.5 Benefits (AVG)	\$0.00	\$0.02	\$0.09	\$0.23

<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>	<b>(\$0.03)</b>	<b>\$0.09</b>	<b>\$2.44</b>	<b>\$6.94</b>
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GHG Reduction	LDV	Million MT	0.5	4.7	17.3	35.5
	MHDV	Million MT	0.0	0.2	1.9	5.5
	TOTAL		0.5	4.9	19.2	40.9
NOx Reduction	LDV	1000 MT	0.0	0.3	1.5	3.9
	MHDV	1000 MT	0.0	0.3	1.3	3.3
	TOTAL		0.1	0.6	2.8	7.2
PM <sub>2.5</sub> Reduction	LDV	1000 MT	0.0	0.0	0.1	0.2
	MHDV	1000 MT	0.0	0.0	0.0	0.0
	TOTAL		0.0	0.0	0.1	0.3
Gasoline Savings	TOTAL	Million gallons	30.4	382.7	1,847.1	4,219.1
Diesel Savings	TOTAL	Million gallons	-0.2	15.4	186.8	579.6

## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>NH</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>2.2%</b>	<b>2.0%</b>

### Costs and Benefits - HIGH Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.04)	(\$0.42)	(\$1.03)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.00)	(\$0.06)	(\$0.28)
	<b>Transportation Electrification</b>	LDV	(\$0.08)	(\$0.82)	(\$1.57)	(\$1.84)
		M/HDV	(\$0.03)	(\$0.39)	(\$1.17)	(\$2.42)
<b>PEV Charging Infrastructure</b>	LDV - home chargers		(\$0.01)	(\$0.13)	(\$0.59)	(\$1.42)
	LDV - Public Chargers		(\$0.02)	(\$0.23)	(\$0.76)	(\$1.41)
	M/HDV		(\$0.01)	(\$0.15)	(\$0.48)	(\$1.10)
<b>Incremental Electricity Cost</b>	LDV		(\$0.12)	(\$1.29)	(\$4.36)	(\$9.54)
	M/HDV		(\$0.02)	(\$0.23)	(\$0.83)	(\$1.90)
<b>Low Carbon Fuel Standard</b>			(\$0.07)	(\$0.46)	(\$0.92)	(\$1.29)
<b>Low Carbon Grid</b>			(\$0.00)	\$0.01	\$0.08	\$0.29
<b>Sub-total Costs</b>			<b>(\$0.36)</b>	<b>(\$3.73)</b>	<b>(\$11.08)</b>	<b>(\$21.94)</b>

Gasoline Savings		\$0.21	\$2.47	\$8.76	\$18.62
Diesel Fuel Savings		\$0.01	\$0.30	\$1.53	\$3.96
Utility Net Revenue from PEV Charging	LDV	\$0.03	\$0.41	\$1.29	\$2.51
	M/HDV	\$0.00	\$0.07	\$0.24	\$0.50
<b>Sub-total Financial Savings</b>		<b>\$0.26</b>	<b>\$3.25</b>	<b>\$11.82</b>	<b>\$25.59</b>

<b>NET FINANCIAL BENEFITS</b>	<b>(\$0.10)</b>	<b>(\$0.49)</b>	<b>\$0.74</b>	<b>\$3.66</b>
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Monetized GHG Benefits (3% AVG)	\$0.05	\$0.54	\$1.91	\$4.25
Monetized NOx Benefits (AVG)	\$0.00	\$0.03	\$0.11	\$0.27
Monetized PM2.5 Benefits (AVG)	\$0.00	\$0.04	\$0.16	\$0.38

<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>	<b>(\$0.05)</b>	<b>\$0.12</b>	<b>\$2.92</b>	<b>\$8.56</b>
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GHG Reduction	LDV	Million MT	1.0	8.9	26.6	51.2
	MHDV	Million MT	0.0	1.2	5.0	11.8
	TOTAL		1.1	10.1	31.6	63.1
NOx Reduction	LDV	1000 MT	0.1	0.7	2.7	6.2
	MHDV	1000 MT	0.1	0.9	3.5	9.0
	TOTAL		0.1	1.6	6.2	15.2
PM <sub>2.5</sub> Reduction	LDV	1000 MT	0.0	0.0	0.1	0.3
	MHDV	1000 MT	0.0	0.0	0.0	0.1
	TOTAL		0.0	0.1	0.2	0.4
Gasoline Savings	TOTAL	Million gallons	83.6	794.5	2,650.7	5,430.0
Diesel Savings	TOTAL	Million gallons	2.8	91.4	430.3	1,080.8

## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>NJ</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>12.8%</b>	<b>10.0%</b>

### Costs and Benefits - MID Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.25)	(\$3.12)	(\$8.51)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.01)	(\$0.46)	(\$2.70)
	<b>Transportation Electrification</b>	LDV	(\$0.16)	(\$1.75)	(\$4.34)	(\$5.75)
		M/HDV	(\$0.07)	(\$0.75)	(\$2.45)	(\$5.32)
<b>PEV Charging Infrastructure</b>		LDV - home chargers	(\$0.02)	(\$0.32)	(\$2.13)	(\$5.80)
		LDV - Public Chargers	(\$0.05)	(\$0.56)	(\$2.69)	(\$5.55)
		M/HDV	(\$0.02)	(\$0.25)	(\$0.93)	(\$2.15)
<b>Incremental Electricity Cost</b>		LDV	(\$0.22)	(\$3.16)	(\$15.43)	(\$38.41)
		M/HDV	(\$0.03)	(\$0.37)	(\$1.47)	(\$3.44)
<b>Low Carbon Fuel Standard</b>			(\$0.22)	(\$1.80)	(\$4.08)	(\$6.02)
<b>Low Carbon Grid</b>			\$0.00	\$0.00	\$0.00	\$0.00
<i>Sub-total Costs</i>			<b>(\$0.78)</b>	<b>(\$9.23)</b>	<b>(\$37.09)</b>	<b>(\$83.66)</b>
Gasoline Savings			\$0.44	\$6.90	\$35.54	\$83.98
Diesel Fuel Savings			(\$0.00)	\$0.26	\$3.33	\$10.61
Utility Net Revenue from PEV Charging		LDV	\$0.07	\$1.01	\$4.61	\$10.44
		M/HDV	\$0.01	\$0.12	\$0.44	\$0.93
<i>Sub-total Financial Savings</i>			<b>\$0.52</b>	<b>\$8.28</b>	<b>\$43.92</b>	<b>\$105.97</b>

<b>NET FINANCIAL BENEFITS</b>	<b>(\$0.27)</b>	<b>(\$0.95)</b>	<b>\$6.84</b>	<b>\$22.31</b>
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Monetized GHG Benefits (3% AVG)	\$0.13	\$1.50	\$6.70	\$15.77
Monetized NOx Benefits (AVG)	\$0.00	\$0.05	\$0.27	\$0.70
Monetized PM2.5 Benefits (AVG)	\$0.01	\$0.09	\$0.50	\$1.32

<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>	<b>(\$0.13)</b>	<b>\$0.70</b>	<b>\$14.30</b>	<b>\$40.10</b>
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GHG Reduction	LDV	Million MT	2.7	27.1	99.6	204.1
	MHDV	Million MT	0.0	1.0	9.6	27.2
	TOTAL		2.7	28.1	109.1	231.3
NOx Reduction	LDV	1000 MT	0.2	1.6	8.6	22.5
	MHDV	1000 MT	0.1	1.4	6.3	16.5
	TOTAL		0.3	3.0	14.9	39.0
PM <sub>2.5</sub> Reduction	LDV	1000 MT	0.0	0.1	0.5	1.3
	MHDV	1000 MT	0.0	0.0	0.1	0.2
	TOTAL		0.0	0.1	0.6	1.5
Gasoline Savings	TOTAL	Million gallons	175.1	2,203.7	10,635.0	24,292.2
Diesel Savings	TOTAL	Million gallons	-1.0	76.3	925.1	2,871.0



## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>NJ</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>12.8%</b>	<b>10.0%</b>

### Costs and Benefits - HIGH Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.21)	(\$2.40)	(\$5.93)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.01)	(\$0.30)	(\$1.38)
	<b>Transportation Electrification</b>	LDV	(\$0.48)	(\$4.72)	(\$9.06)	(\$10.57)
		M/HDV	(\$0.17)	(\$1.95)	(\$5.81)	(\$12.00)
<b>PEV Charging Infrastructure</b>	LDV - home chargers		(\$0.05)	(\$0.74)	(\$3.39)	(\$8.18)
	LDV - Public Chargers		(\$0.13)	(\$1.34)	(\$4.40)	(\$8.11)
	M/HDV		(\$0.06)	(\$0.73)	(\$2.38)	(\$5.45)
<b>Incremental Electricity Cost</b>	LDV		(\$0.67)	(\$7.42)	(\$25.09)	(\$54.91)
	M/HDV		(\$0.07)	(\$1.15)	(\$4.10)	(\$9.41)
<b>Low Carbon Fuel Standard</b>			(\$0.39)	(\$2.57)	(\$5.12)	(\$7.23)
<b>Low Carbon Grid</b>			(\$0.00)	\$0.04	\$0.46	\$1.62
<i>Sub-total Costs</i>			<b>(\$2.02)</b>	<b>(\$20.80)</b>	<b>(\$61.60)</b>	<b>(\$121.55)</b>

Gasoline Savings		\$1.22	\$14.20	\$50.47	\$107.22
Diesel Fuel Savings		\$0.04	\$1.49	\$7.56	\$19.61
Utility Net Revenue from PEV Charging	LDV	\$0.20	\$2.34	\$7.40	\$14.47
	M/HDV	\$0.02	\$0.36	\$1.21	\$2.48
<i>Sub-total Financial Savings</i>		<b>\$1.48</b>	<b>\$18.39</b>	<b>\$66.63</b>	<b>\$143.78</b>

<b>NET FINANCIAL BENEFITS</b>	<b>(\$0.54)</b>	<b>(\$2.41)</b>	<b>\$5.04</b>	<b>\$22.23</b>
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Monetized GHG Benefits (3% AVG)	\$0.29	\$3.03	\$10.76	\$23.81
Monetized NOx Benefits (AVG)	\$0.01	\$0.15	\$0.58	\$1.42
Monetized PM2.5 Benefits (AVG)	\$0.02	\$0.22	\$0.89	\$2.12

<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>	<b>(\$0.22)</b>	<b>\$0.99</b>	<b>\$17.27</b>	<b>\$49.58</b>
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GHG Reduction	LDV	Million MT	6.0	51.1	153.0	294.9
	MHDV	Million MT	0.2	5.9	24.8	58.7
	TOTAL		6.2	57.1	177.8	353.6
NOx Reduction	LDV	1000 MT	0.5	4.3	15.6	35.8
	MHDV	1000 MT	0.3	4.4	17.5	44.7
	TOTAL		0.8	8.7	33.1	80.5
PM <sub>2.5</sub> Reduction	LDV	1000 MT	0.0	0.2	0.8	1.9
	MHDV	1000 MT	0.0	0.1	0.2	0.6
	TOTAL		0.0	0.3	1.1	2.5
Gasoline Savings	TOTAL	Million gallons	481.6	4,574.7	15,262.2	31,264.7
Diesel Savings	TOTAL	Million gallons	14.0	452.6	2,131.1	5,353.4

## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>NY</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>21.0%</b>	<b>22.5%</b>

### Costs and Benefits - MID Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.41)	(\$5.14)	(\$14.01)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.02)	(\$1.03)	(\$6.05)
	<b>Transportation Electrification</b>	LDV	(\$0.26)	(\$2.88)	(\$7.15)	(\$9.48)
		M/HDV	(\$0.15)	(\$1.68)	(\$5.48)	(\$11.93)
<b>PEV Charging Infrastructure</b>		LDV - home chargers	(\$0.02)	(\$0.52)	(\$3.51)	(\$9.55)
		LDV - Public Chargers	(\$0.07)	(\$0.93)	(\$4.43)	(\$9.14)
		M/HDV	(\$0.05)	(\$0.57)	(\$2.08)	(\$4.82)
<b>Incremental Electricity Cost</b>		LDV	(\$0.37)	(\$5.21)	(\$25.41)	(\$63.26)
		M/HDV	(\$0.07)	(\$0.84)	(\$3.28)	(\$7.71)
<b>Low Carbon Fuel Standard</b>			(\$0.38)	(\$3.15)	(\$7.18)	(\$10.63)
<b>Low Carbon Grid</b>			\$0.00	\$0.00	\$0.00	\$0.00
<i>Sub-total Costs</i>			<b>(\$1.38)</b>	<b>(\$16.22)</b>	<b>(\$64.68)</b>	<b>(\$146.58)</b>
Gasoline Savings			\$0.73	\$11.37	\$58.54	\$138.32
Diesel Fuel Savings			(\$0.01)	\$0.58	\$7.47	\$23.78
Utility Net Revenue from PEV Charging		LDV	\$0.11	\$1.66	\$7.59	\$17.19
		M/HDV	\$0.02	\$0.27	\$0.98	\$2.09
<i>Sub-total Financial Savings</i>			<b>\$0.85</b>	<b>\$13.87</b>	<b>\$74.58</b>	<b>\$181.38</b>

<b>NET FINANCIAL BENEFITS</b>	<b>(\$0.53)</b>	<b>(\$2.35)</b>	<b>\$9.89</b>	<b>\$34.80</b>
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Monetized GHG Benefits (3% AVG)	\$0.21	\$2.50	\$11.39	\$27.08
Monetized NOx Benefits (AVG)	\$0.01	\$0.10	\$0.51	\$1.33
Monetized PM2.5 Benefits (AVG)	\$0.01	\$0.16	\$0.86	\$2.27

<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>	<b>(\$0.30)</b>	<b>\$0.41</b>	<b>\$22.64</b>	<b>\$65.48</b>
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GHG Reduction	LDV	Million MT	4.5	44.6	164.0	336.2
	MHDV	Million MT	0.0	2.2	21.4	61.0
	TOTAL		4.4	46.8	185.4	397.1
NOx Reduction	LDV	1000 MT	0.3	2.6	14.1	37.1
	MHDV	1000 MT	0.3	3.2	14.2	36.9
	TOTAL		0.5	5.9	28.2	74.0
PM <sub>2.5</sub> Reduction	LDV	1000 MT	0.0	0.1	0.8	2.2
	MHDV	1000 MT	0.0	0.0	0.2	0.5
	TOTAL		0.0	0.2	1.0	2.6
Gasoline Savings	TOTAL	Million gallons	288.3	3,629.5	17,515.6	40,008.9
Diesel Savings	TOTAL	Million gallons	-2.2	171.0	2,072.7	6,432.3

## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>NY</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>21.0%</b>	<b>22.5%</b>

### Costs and Benefits - HIGH Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.34)	(\$3.96)	(\$9.77)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.02)	(\$0.67)	(\$3.09)
	<b>Transportation Electrification</b>	LDV	(\$0.79)	(\$7.77)	(\$14.92)	(\$17.40)
		M/HDV	(\$0.37)	(\$4.37)	(\$13.02)	(\$26.88)
<b>PEV Charging Infrastructure</b>		LDV - home chargers	(\$0.08)	(\$1.22)	(\$5.58)	(\$13.48)
		LDV - Public Chargers	(\$0.22)	(\$2.20)	(\$7.24)	(\$13.36)
		M/HDV	(\$0.12)	(\$1.65)	(\$5.34)	(\$12.20)
<b>Incremental Electricity Cost</b>		LDV	(\$1.10)	(\$12.23)	(\$41.32)	(\$90.44)
		M/HDV	(\$0.17)	(\$2.58)	(\$9.19)	(\$21.09)
<b>Low Carbon Fuel Standard</b>			(\$0.68)	(\$4.49)	(\$8.97)	(\$12.67)
<b>Low Carbon Grid</b>			(\$0.00)	\$0.07	\$0.80	\$2.81
<i>Sub-total Costs</i>			<b>(\$3.54)</b>	<b>(\$36.79)</b>	<b>(\$109.42)</b>	<b>(\$217.57)</b>

Gasoline Savings		\$2.01	\$23.38	\$83.12	\$176.59
Diesel Fuel Savings		\$0.09	\$3.34	\$16.93	\$43.94
Utility Net Revenue from PEV Charging	LDV	\$0.33	\$3.85	\$12.19	\$23.83
	M/HDV	\$0.05	\$0.81	\$2.71	\$5.56
<i>Sub-total Financial Savings</i>		<b>\$2.47</b>	<b>\$31.38</b>	<b>\$114.95</b>	<b>\$249.91</b>

<b>NET FINANCIAL BENEFITS</b>	<b>(\$1.07)</b>	<b>(\$5.41)</b>	<b>\$5.53</b>	<b>\$32.34</b>
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Monetized GHG Benefits (3% AVG)	\$0.48	\$5.18	\$18.62	\$41.56
Monetized NOx Benefits (AVG)	\$0.02	\$0.28	\$1.13	\$2.81
Monetized PM2.5 Benefits (AVG)	\$0.03	\$0.40	\$1.58	\$3.78

<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>	<b>(\$0.53)</b>	<b>\$0.45</b>	<b>\$26.86</b>	<b>\$80.49</b>
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GHG Reduction	LDV	Million MT	9.9	84.2	252.0	485.7
	MHDV	Million MT	0.5	13.3	55.6	131.5
	TOTAL		10.3	97.5	307.6	617.2
NOx Reduction	LDV	1000 MT	0.9	7.1	25.7	58.9
	MHDV	1000 MT	0.6	9.8	39.1	100.1
	TOTAL		1.5	16.9	64.9	159.1
PM <sub>2.5</sub> Reduction	LDV	1000 MT	0.0	0.4	1.4	3.2
	MHDV	1000 MT	0.0	0.1	0.5	1.3
	TOTAL		0.0	0.5	1.9	4.4
Gasoline Savings	TOTAL	Million gallons	793.2	7,534.4	25,136.7	51,492.5
Diesel Savings	TOTAL	Million gallons	31.4	1,014.1	4,774.7	11,994.2

## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>PA</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>16.1%</b>	<b>24.4%</b>

### Costs and Benefits - MID Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.32)	(\$3.94)	(\$10.75)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.02)	(\$1.12)	(\$6.57)
	<b>Transportation Electrification</b>	LDV	(\$0.20)	(\$2.21)	(\$5.48)	(\$7.27)
		M/HDV	(\$0.17)	(\$1.83)	(\$5.95)	(\$12.95)
<b>PEV Charging Infrastructure</b>		LDV - home chargers	(\$0.02)	(\$0.40)	(\$2.69)	(\$7.33)
		LDV - Public Chargers	(\$0.06)	(\$0.71)	(\$3.40)	(\$7.02)
		M/HDV	(\$0.06)	(\$0.62)	(\$2.26)	(\$5.24)
<b>Incremental Electricity Cost</b>		LDV	(\$0.28)	(\$4.00)	(\$19.49)	(\$48.54)
		M/HDV	(\$0.08)	(\$0.91)	(\$3.57)	(\$8.37)
<b>Low Carbon Fuel Standard</b>			(\$0.31)	(\$2.65)	(\$6.06)	(\$9.01)
<b>Low Carbon Grid</b>			\$0.00	\$0.00	\$0.00	\$0.00
<i>Sub-total Costs</i>			<b>(\$1.17)</b>	<b>(\$13.66)</b>	<b>(\$53.97)</b>	<b>(\$123.04)</b>
Gasoline Savings			\$0.56	\$8.72	\$44.92	\$106.12
Diesel Fuel Savings			(\$0.01)	\$0.63	\$8.11	\$25.82
Utility Net Revenue from PEV Charging		LDV	\$0.08	\$1.27	\$5.82	\$13.19
		M/HDV	\$0.02	\$0.29	\$1.07	\$2.27
<i>Sub-total Financial Savings</i>			<b>\$0.66</b>	<b>\$10.91</b>	<b>\$59.91</b>	<b>\$147.41</b>

<b>NET FINANCIAL BENEFITS</b>	<b>(\$0.51)</b>	<b>(\$2.75)</b>	<b>\$5.95</b>	<b>\$24.37</b>
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Monetized GHG Benefits (3% AVG)	\$0.16	\$1.96	\$9.16	\$22.10
Monetized NOx Benefits (AVG)	\$0.01	\$0.09	\$0.47	\$1.23
Monetized PM2.5 Benefits (AVG)	\$0.01	\$0.13	\$0.71	\$1.87

<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>	<b>(\$0.34)</b>	<b>(\$0.57)</b>	<b>\$16.28</b>	<b>\$49.57</b>
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GHG Reduction	LDV	Million MT	3.4	34.2	125.8	257.9
	MHDV	Million MT	0.0	2.4	23.3	66.2
	TOTAL		3.4	36.6	149.1	324.1
NOx Reduction	LDV	1000 MT	0.2	2.0	10.8	28.5
	MHDV	1000 MT	0.3	3.5	15.4	40.0
	TOTAL		0.5	5.5	26.2	68.5
PM <sub>2.5</sub> Reduction	LDV	1000 MT	0.0	0.1	0.6	1.7
	MHDV	1000 MT	0.0	0.0	0.2	0.5
	TOTAL		0.0	0.2	0.8	2.2
Gasoline Savings	TOTAL	Million gallons	221.2	2,784.7	13,438.8	30,696.7
Diesel Savings	TOTAL	Million gallons	-2.4	185.7	2,251.2	6,986.3

## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>PA</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>16.1%</b>	<b>24.4%</b>

### Costs and Benefits - HIGH Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.26)	(\$3.04)	(\$7.50)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.02)	(\$0.72)	(\$3.35)
	<b>Transportation Electrification</b>	LDV	(\$0.61)	(\$5.96)	(\$11.45)	(\$13.35)
		M/HDV	(\$0.40)	(\$4.74)	(\$14.14)	(\$29.19)
<b>PEV Charging Infrastructure</b>		LDV - home chargers	(\$0.06)	(\$0.94)	(\$4.28)	(\$10.34)
		LDV - Public Chargers	(\$0.17)	(\$1.69)	(\$5.56)	(\$10.25)
		M/HDV	(\$0.13)	(\$1.79)	(\$5.80)	(\$13.25)
<b>Incremental Electricity Cost</b>		LDV	(\$0.84)	(\$9.38)	(\$31.70)	(\$69.39)
		M/HDV	(\$0.18)	(\$2.80)	(\$9.98)	(\$22.90)
<b>Low Carbon Fuel Standard</b>			(\$0.56)	(\$3.76)	(\$7.53)	(\$10.64)
<b>Low Carbon Grid</b>			(\$0.00)	\$0.06	\$0.66	\$2.33
<i>Sub-total Costs</i>			<b>(\$2.96)</b>	<b>(\$31.28)</b>	<b>(\$93.55)</b>	<b>(\$187.85)</b>

Gasoline Savings		\$1.54	\$17.94	\$63.77	\$135.49
Diesel Fuel Savings		\$0.09	\$3.63	\$18.39	\$47.72
Utility Net Revenue from PEV Charging	LDV	\$0.25	\$2.95	\$9.35	\$18.28
	M/HDV	\$0.05	\$0.88	\$2.95	\$6.04
<i>Sub-total Financial Savings</i>		<b>\$1.94</b>	<b>\$25.40</b>	<b>\$94.46</b>	<b>\$207.53</b>

<b>NET FINANCIAL BENEFITS</b>	<b>(\$1.03)</b>	<b>(\$5.88)</b>	<b>\$0.90</b>	<b>\$19.68</b>
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Monetized GHG Benefits (3% AVG)	\$0.38	\$4.20	\$15.36	\$34.71
Monetized NOx Benefits (AVG)	\$0.02	\$0.27	\$1.09	\$2.72
Monetized PM2.5 Benefits (AVG)	\$0.03	\$0.34	\$1.34	\$3.24

<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>	<b>(\$0.60)</b>	<b>(\$1.08)</b>	<b>\$18.69</b>	<b>\$60.34</b>
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GHG Reduction	LDV	Million MT	7.6	64.6	193.3	372.6
	MHDV	Million MT	0.5	14.4	60.4	142.8
	TOTAL		8.1	79.0	253.7	515.4
NOx Reduction	LDV	1000 MT	0.7	5.4	19.8	45.2
	MHDV	1000 MT	0.7	10.7	42.5	108.7
	TOTAL		1.3	16.1	62.3	154.0
PM <sub>2.5</sub> Reduction	LDV	1000 MT	0.0	0.3	1.1	2.5
	MHDV	1000 MT	0.0	0.1	0.5	1.4
	TOTAL		0.0	0.4	1.6	3.8
Gasoline Savings	TOTAL	Million gallons	608.6	5,780.7	19,286.0	39,507.4
Diesel Savings	TOTAL	Million gallons	34.1	1,101.4	5,185.9	13,027.2

## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>RI</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>1.3%</b>	<b>1.4%</b>

### Costs and Benefits - MID Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.03)	(\$0.32)	(\$0.88)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.00)	(\$0.06)	(\$0.37)
	<b>Transportation Electrification</b>	LDV	(\$0.02)	(\$0.18)	(\$0.45)	(\$0.60)
		M/HDV	(\$0.01)	(\$0.10)	(\$0.34)	(\$0.73)
<b>PEV Charging Infrastructure</b>	LDV - home chargers		(\$0.00)	(\$0.03)	(\$0.22)	(\$0.60)
	LDV - Public Chargers		(\$0.00)	(\$0.06)	(\$0.28)	(\$0.58)
	M/HDV		(\$0.00)	(\$0.03)	(\$0.13)	(\$0.30)
<b>Incremental Electricity Cost</b>	LDV		(\$0.02)	(\$0.33)	(\$1.60)	(\$3.98)
	M/HDV		(\$0.00)	(\$0.05)	(\$0.20)	(\$0.47)
<b>Low Carbon Fuel Standard</b>			(\$0.02)	(\$0.20)	(\$0.45)	(\$0.67)
<b>Low Carbon Grid</b>			\$0.00	\$0.00	\$0.00	\$0.00
<i>Sub-total Costs</i>			<b>(\$0.09)</b>	<b>(\$1.02)</b>	<b>(\$4.05)</b>	<b>(\$9.18)</b>
Gasoline Savings			\$0.05	\$0.72	\$3.69	\$8.71
Diesel Fuel Savings			(\$0.00)	\$0.04	\$0.46	\$1.46
Utility Net Revenue from PEV Charging	LDV		\$0.01	\$0.10	\$0.48	\$1.08
	M/HDV		\$0.00	\$0.02	\$0.06	\$0.13
<i>Sub-total Financial Savings</i>			<b>\$0.05</b>	<b>\$0.87</b>	<b>\$4.68</b>	<b>\$11.38</b>

<b>NET FINANCIAL BENEFITS</b>	<b>(\$0.03)</b>	<b>(\$0.14)</b>	<b>\$0.63</b>	<b>\$2.20</b>
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Monetized GHG Benefits (3% AVG)	\$0.01	\$0.16	\$0.71	\$1.70
Monetized NOx Benefits (AVG)	\$0.00	\$0.01	\$0.03	\$0.08
Monetized PM2.5 Benefits (AVG)	\$0.00	\$0.01	\$0.05	\$0.14

<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>	<b>(\$0.02)</b>	<b>\$0.03</b>	<b>\$1.43</b>	<b>\$4.13</b>
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GHG Reduction	LDV	Million MT	0.3	2.8	10.3	21.2
	MHDV	Million MT	0.0	0.1	1.3	3.7
	TOTAL		0.3	2.9	11.6	24.9
NOx Reduction	LDV	1000 MT	0.0	0.2	0.9	2.3
	MHDV	1000 MT	0.0	0.2	0.9	2.3
	TOTAL		0.0	0.4	1.8	4.6
PM <sub>2.5</sub> Reduction	LDV	1000 MT	0.0	0.0	0.1	0.1
	MHDV	1000 MT	0.0	0.0	0.0	0.0
	TOTAL		0.0	0.0	0.1	0.2
Gasoline Savings	TOTAL	Million gallons	18.2	228.6	1,103.1	2,519.7
Diesel Savings	TOTAL	Million gallons	-0.1	10.5	127.2	394.7

## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>RI</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>1.3%</b>	<b>1.4%</b>

### Costs and Benefits - HIGH Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.02)	(\$0.25)	(\$0.62)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.00)	(\$0.04)	(\$0.19)
	<b>Transportation Electrification</b>	LDV	(\$0.05)	(\$0.49)	(\$0.94)	(\$1.10)
		M/HDV	(\$0.02)	(\$0.27)	(\$0.80)	(\$1.65)
<b>PEV Charging Infrastructure</b>	LDV - home chargers		(\$0.00)	(\$0.08)	(\$0.35)	(\$0.85)
	LDV - Public Chargers		(\$0.01)	(\$0.14)	(\$0.46)	(\$0.84)
	M/HDV		(\$0.01)	(\$0.10)	(\$0.33)	(\$0.75)
<b>Incremental Electricity Cost</b>	LDV		(\$0.07)	(\$0.77)	(\$2.60)	(\$5.70)
	M/HDV		(\$0.01)	(\$0.16)	(\$0.56)	(\$1.29)
<b>Low Carbon Fuel Standard</b>			(\$0.04)	(\$0.28)	(\$0.56)	(\$0.79)
<b>Low Carbon Grid</b>			(\$0.00)	\$0.00	\$0.05	\$0.18
<i>Sub-total Costs</i>			<i>(\$0.22)</i>	<i>(\$2.30)</i>	<i>(\$6.84)</i>	<i>(\$13.60)</i>

Gasoline Savings		\$0.13	\$1.47	\$5.23	\$11.12
Diesel Fuel Savings		\$0.01	\$0.20	\$1.04	\$2.70
Utility Net Revenue from PEV Charging	LDV	\$0.02	\$0.24	\$0.77	\$1.50
	M/HDV	\$0.00	\$0.05	\$0.17	\$0.34
<i>Sub-total Financial Savings</i>		<i>\$0.16</i>	<i>\$1.97</i>	<i>\$7.21</i>	<i>\$15.66</i>

<b>NET FINANCIAL BENEFITS</b>	<b>(\$0.07)</b>	<b>(\$0.33)</b>	<b>\$0.36</b>	<b>\$2.06</b>
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Monetized GHG Benefits (3% AVG)	\$0.03	\$0.32	\$1.17	\$2.60
Monetized NOx Benefits (AVG)	\$0.00	\$0.02	\$0.07	\$0.17
Monetized PM2.5 Benefits (AVG)	\$0.00	\$0.02	\$0.10	\$0.24

<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>	<b>(\$0.03)</b>	<b>\$0.04</b>	<b>\$1.70</b>	<b>\$5.08</b>
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GHG Reduction	LDV	Million MT	0.6	5.3	15.9	30.6
	MHDV	Million MT	0.0	0.8	3.4	8.1
	TOTAL		0.6	6.1	19.3	38.7
NOx Reduction	LDV	1000 MT	0.1	0.4	1.6	3.7
	MHDV	1000 MT	0.0	0.6	2.4	6.1
	TOTAL		0.1	1.0	4.0	9.9
PM <sub>2.5</sub> Reduction	LDV	1000 MT	0.0	0.0	0.1	0.2
	MHDV	1000 MT	0.0	0.0	0.0	0.1
	TOTAL		0.0	0.0	0.1	0.3
Gasoline Savings	TOTAL	Million gallons	50.0	474.5	1,583.0	3,242.9
Diesel Savings	TOTAL	Million gallons	1.9	62.2	293.0	735.9

## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>VA</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>14.7%</b>	<b>12.4%</b>

### Costs and Benefits - MID Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.29)	(\$3.59)	(\$9.79)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.01)	(\$0.57)	(\$3.35)
	<b>Transportation Electrification</b>	LDV	(\$0.18)	(\$2.02)	(\$4.99)	(\$6.62)
		M/HDV	(\$0.09)	(\$0.93)	(\$3.03)	(\$6.60)
<b>PEV Charging Infrastructure</b>		LDV - home chargers	(\$0.02)	(\$0.36)	(\$2.45)	(\$6.67)
		LDV - Public Chargers	(\$0.05)	(\$0.65)	(\$3.10)	(\$6.39)
		M/HDV	(\$0.03)	(\$0.31)	(\$1.15)	(\$2.67)
<b>Incremental Electricity Cost</b>		LDV	(\$0.26)	(\$3.64)	(\$17.75)	(\$44.20)
		M/HDV	(\$0.04)	(\$0.46)	(\$1.82)	(\$4.27)
<b>Low Carbon Fuel Standard</b>			(\$0.26)	(\$2.10)	(\$4.77)	(\$7.04)
<b>Low Carbon Grid</b>			\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total Costs</b>			<b>(\$0.92)</b>	<b>(\$10.78)</b>	<b>(\$43.22)</b>	<b>(\$97.60)</b>
Gasoline Savings			\$0.51	\$7.94	\$40.90	\$96.64
Diesel Fuel Savings			(\$0.00)	\$0.32	\$4.13	\$13.17
Utility Net Revenue from PEV Charging		LDV	\$0.08	\$1.16	\$5.30	\$12.01
		M/HDV	\$0.01	\$0.15	\$0.54	\$1.16
<b>Sub-total Financial Savings</b>			<b>\$0.59</b>	<b>\$9.57</b>	<b>\$50.88</b>	<b>\$122.98</b>
<b>NET FINANCIAL BENEFITS</b>			<b>(\$0.32)</b>	<b>(\$1.21)</b>	<b>\$7.66</b>	<b>\$25.38</b>
Monetized GHG Benefits (3% AVG)			\$0.14	\$1.73	\$7.76	\$18.32
Monetized NOx Benefits (AVG)			\$0.01	\$0.06	\$0.32	\$0.83
Monetized PM2.5 Benefits (AVG)			\$0.01	\$0.10	\$0.58	\$1.53
<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>			<b>(\$0.16)</b>	<b>\$0.69</b>	<b>\$16.32</b>	<b>\$46.06</b>
GHG Reduction		LDV	3.1	31.2	114.6	234.9
		MHDV	0.0	1.2	11.9	33.8
		TOTAL	3.1	32.4	126.4	268.6
NOx Reduction		LDV	0.2	1.8	9.8	25.9
		MHDV	0.1	1.8	7.8	20.4
		TOTAL	0.3	3.6	17.7	46.4
PM <sub>2.5</sub> Reduction		LDV	0.0	0.1	0.6	1.5
		MHDV	0.0	0.0	0.1	0.3
		TOTAL	0.0	0.1	0.7	1.8
Gasoline Savings	TOTAL	Million gallons	201.5	2,535.9	12,238.0	27,953.8
Diesel Savings	TOTAL	Million gallons	-1.2	94.7	1,147.7	3,561.8



## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>VA</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>14.7%</b>	<b>12.4%</b>

### Costs and Benefits - HIGH Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.24)	(\$2.77)	(\$6.83)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.01)	(\$0.37)	(\$1.71)
	<b>Transportation Electrification</b>	LDV	(\$0.55)	(\$5.43)	(\$10.43)	(\$12.16)
		M/HDV	(\$0.21)	(\$2.42)	(\$7.21)	(\$14.88)
<b>PEV Charging Infrastructure</b>		LDV - home chargers	(\$0.05)	(\$0.85)	(\$3.90)	(\$9.42)
		LDV - Public Chargers	(\$0.15)	(\$1.54)	(\$5.06)	(\$9.33)
		M/HDV	(\$0.07)	(\$0.91)	(\$2.96)	(\$6.76)
<b>Incremental Electricity Cost</b>		LDV	(\$0.77)	(\$8.54)	(\$28.87)	(\$63.19)
		M/HDV	(\$0.09)	(\$1.43)	(\$5.09)	(\$11.68)
<b>Low Carbon Fuel Standard</b>			(\$0.46)	(\$3.00)	(\$5.98)	(\$8.44)
<b>Low Carbon Grid</b>			(\$0.00)	\$0.05	\$0.54	\$1.89
<b>Sub-total Costs</b>			<b>(\$2.36)</b>	<b>(\$24.32)</b>	<b>(\$72.09)</b>	<b>(\$142.50)</b>

Gasoline Savings		\$1.40	\$16.34	\$58.07	\$123.38
Diesel Fuel Savings		\$0.05	\$1.85	\$9.37	\$24.33
Utility Net Revenue from PEV Charging	LDV	\$0.23	\$2.69	\$8.52	\$16.65
	M/HDV	\$0.03	\$0.45	\$1.50	\$3.08
<b>Sub-total Financial Savings</b>		<b>\$1.70</b>	<b>\$21.33</b>	<b>\$77.47</b>	<b>\$167.44</b>

<b>NET FINANCIAL BENEFITS</b>	<b>(\$0.65)</b>	<b>(\$2.99)</b>	<b>\$5.38</b>	<b>\$24.93</b>
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Monetized GHG Benefits (3% AVG)	\$0.33	\$3.52	\$12.52	\$27.76
Monetized NOx Benefits (AVG)	\$0.01	\$0.17	\$0.69	\$1.70
Monetized PM2.5 Benefits (AVG)	\$0.02	\$0.26	\$1.04	\$2.48

<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>	<b>(\$0.28)</b>	<b>\$0.96</b>	<b>\$19.63</b>	<b>\$56.88</b>
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GHG Reduction	LDV	Million MT	6.9	58.9	176.0	339.3
	MHDV	Million MT	0.3	7.3	30.8	72.8
	TOTAL		7.2	66.2	206.8	412.1
NOx Reduction	LDV	1000 MT	0.6	4.9	18.0	41.2
	MHDV	1000 MT	0.3	5.4	21.7	55.4
	TOTAL		0.9	10.4	39.7	96.6
PM <sub>2.5</sub> Reduction	LDV	1000 MT	0.0	0.3	1.0	2.2
	MHDV	1000 MT	0.0	0.1	0.3	0.7
	TOTAL		0.0	0.3	1.2	2.9
Gasoline Savings	TOTAL	Million gallons	554.2	5,264.2	17,562.7	35,977.3
Diesel Savings	TOTAL	Million gallons	17.4	561.5	2,643.9	6,641.6

## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>VT</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>1.2%</b>	<b>1.6%</b>

### Costs and Benefits - MID Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.02)	(\$0.29)	(\$0.80)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.00)	(\$0.07)	(\$0.44)
	<b>Transportation Electrification</b>	LDV	(\$0.01)	(\$0.16)	(\$0.41)	(\$0.54)
		M/HDV	(\$0.01)	(\$0.12)	(\$0.40)	(\$0.86)
<b>PEV Charging Infrastructure</b>		LDV - home chargers	(\$0.00)	(\$0.03)	(\$0.20)	(\$0.54)
		LDV - Public Chargers	(\$0.00)	(\$0.05)	(\$0.25)	(\$0.52)
		M/HDV	(\$0.00)	(\$0.04)	(\$0.15)	(\$0.35)
<b>Incremental Electricity Cost</b>		LDV	(\$0.02)	(\$0.30)	(\$1.45)	(\$3.60)
		M/HDV	(\$0.01)	(\$0.06)	(\$0.24)	(\$0.56)
<b>Low Carbon Fuel Standard</b>			(\$0.02)	(\$0.19)	(\$0.44)	(\$0.65)
<b>Low Carbon Grid</b>			\$0.00	\$0.00	\$0.00	\$0.00
<i>Sub-total Costs</i>			<b>(\$0.08)</b>	<b>(\$0.98)</b>	<b>(\$3.89)</b>	<b>(\$8.85)</b>
Gasoline Savings			\$0.04	\$0.65	\$3.33	\$7.87
Diesel Fuel Savings			(\$0.00)	\$0.04	\$0.54	\$1.72
Utility Net Revenue from PEV Charging		LDV	\$0.01	\$0.09	\$0.43	\$0.98
		M/HDV	\$0.00	\$0.02	\$0.07	\$0.15
<i>Sub-total Financial Savings</i>			<b>\$0.05</b>	<b>\$0.80</b>	<b>\$4.37</b>	<b>\$10.72</b>

<b>NET FINANCIAL BENEFITS</b>	<b>(\$0.04)</b>	<b>(\$0.18)</b>	<b>\$0.48</b>	<b>\$1.87</b>
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Monetized GHG Benefits (3% AVG)	\$0.01	\$0.14	\$0.67	\$1.60
Monetized NOx Benefits (AVG)	\$0.00	\$0.01	\$0.03	\$0.09
Monetized PM2.5 Benefits (AVG)	\$0.00	\$0.01	\$0.05	\$0.14

<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>	<b>(\$0.02)</b>	<b>(\$0.02)</b>	<b>\$1.24</b>	<b>\$3.70</b>
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GHG Reduction	LDV	Million MT	0.3	2.5	9.3	19.1
	MHDV	Million MT	0.0	0.2	1.5	4.4
	TOTAL		0.3	2.7	10.9	23.5
NOx Reduction	LDV	1000 MT	0.0	0.1	0.8	2.1
	MHDV	1000 MT	0.0	0.2	1.0	2.7
	TOTAL		0.0	0.4	1.8	4.8
PM <sub>2.5</sub> Reduction	LDV	1000 MT	0.0	0.0	0.0	0.1
	MHDV	1000 MT	0.0	0.0	0.0	0.0
	TOTAL		0.0	0.0	0.1	0.2
Gasoline Savings	TOTAL	Million gallons	16.4	206.6	997.1	2,277.6
Diesel Savings	TOTAL	Million gallons	-0.2	12.3	149.6	464.2

## APPENDIX F – State Level Cost and Benefit Estimates

<b>STATE:</b>	<b>VT</b>	<b>REGIONAL VMT SHARE</b>	<b>LDV</b>	<b>MHDV</b>
			<b>1.2%</b>	<b>1.6%</b>

### Costs and Benefits - HIGH Scenario

2015 \$ billions			CUMULATIVE THROUGH			
			2020	2030	2040	2050
<b>Incremental Vehicle Costs</b>	<b>Vehicle Efficiency</b>	LDV (CAFE+)	\$0.00	(\$0.02)	(\$0.23)	(\$0.56)
		M/HDV (EPA Phase 3)	\$0.00	(\$0.00)	(\$0.05)	(\$0.22)
	<b>Transportation Electrification</b>	LDV	(\$0.05)	(\$0.44)	(\$0.85)	(\$0.99)
		M/HDV	(\$0.03)	(\$0.32)	(\$0.94)	(\$1.94)
<b>PEV Charging Infrastructure</b>		LDV - home chargers	(\$0.00)	(\$0.07)	(\$0.32)	(\$0.77)
		LDV - Public Chargers	(\$0.01)	(\$0.13)	(\$0.41)	(\$0.76)
		M/HDV	(\$0.01)	(\$0.12)	(\$0.39)	(\$0.88)
<b>Incremental Electricity Cost</b>		LDV	(\$0.06)	(\$0.70)	(\$2.35)	(\$5.15)
		M/HDV	(\$0.01)	(\$0.19)	(\$0.66)	(\$1.52)
<b>Low Carbon Fuel Standard</b>			(\$0.04)	(\$0.27)	(\$0.54)	(\$0.77)
<b>Low Carbon Grid</b>			(\$0.00)	\$0.00	\$0.05	\$0.17
<b>Sub-total Costs</b>			<b>(\$0.21)</b>	<b>(\$2.24)</b>	<b>(\$6.69)</b>	<b>(\$13.39)</b>

Gasoline Savings		\$0.11	\$1.33	\$4.73	\$10.05
Diesel Fuel Savings		\$0.01	\$0.24	\$1.22	\$3.17
Utility Net Revenue from PEV Charging	LDV	\$0.02	\$0.22	\$0.69	\$1.36
	M/HDV	\$0.00	\$0.06	\$0.20	\$0.40
<b>Sub-total Financial Savings</b>		<b>\$0.14</b>	<b>\$1.85</b>	<b>\$6.84</b>	<b>\$14.98</b>

<b>NET FINANCIAL BENEFITS</b>	<b>(\$0.07)</b>	<b>(\$0.39)</b>	<b>\$0.16</b>	<b>\$1.60</b>
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Monetized GHG Benefits (3% AVG)	\$0.03	\$0.31	\$1.11	\$2.50
Monetized NOx Benefits (AVG)	\$0.00	\$0.02	\$0.08	\$0.19
Monetized PM2.5 Benefits (AVG)	\$0.00	\$0.02	\$0.10	\$0.23

<b>NET FINANCIAL + ENVIRONMENTAL BENEFITS</b>	<b>(\$0.04)</b>	<b>(\$0.04)</b>	<b>\$1.44</b>	<b>\$4.51</b>
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GHG Reduction	LDV	Million MT	0.6	4.8	14.3	27.6
	MHDV	Million MT	0.0	1.0	4.0	9.5
	TOTAL		0.6	5.8	18.4	37.1
NOx Reduction	LDV	1000 MT	0.0	0.4	1.5	3.4
	MHDV	1000 MT	0.0	0.7	2.8	7.2
	TOTAL		0.1	1.1	4.3	10.6
PM <sub>2.5</sub> Reduction	LDV	1000 MT	0.0	0.0	0.1	0.2
	MHDV	1000 MT	0.0	0.0	0.0	0.1
	TOTAL		0.0	0.0	0.1	0.3
Gasoline Savings	TOTAL	Million gallons	45.2	428.9	1,431.0	2,931.3
Diesel Savings	TOTAL	Million gallons	2.3	73.2	344.6	865.6