

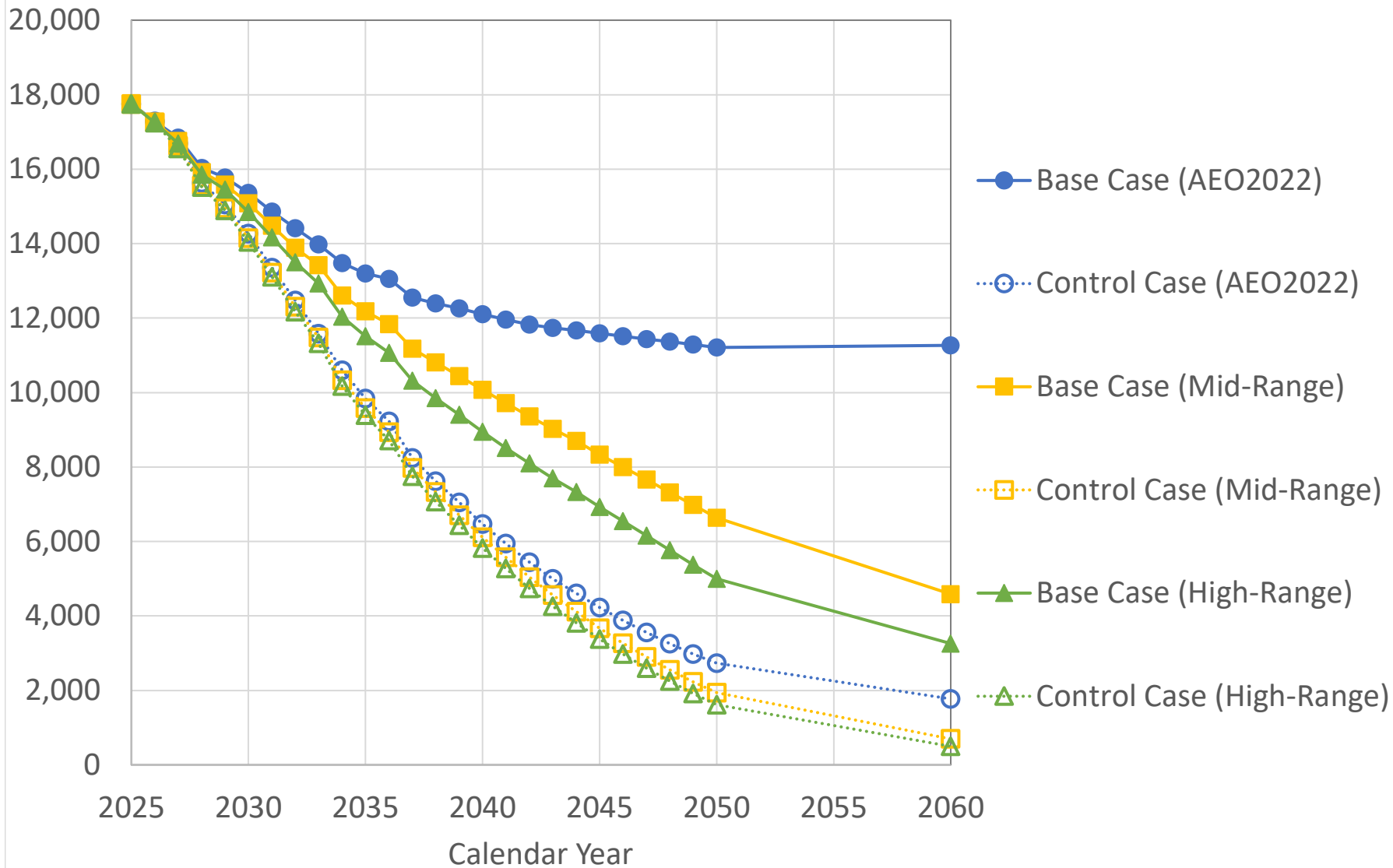
Please Select Inventory "Modeling Domain" from Pulldown List Below (Green-shaded Cell)

**49 State + DC**

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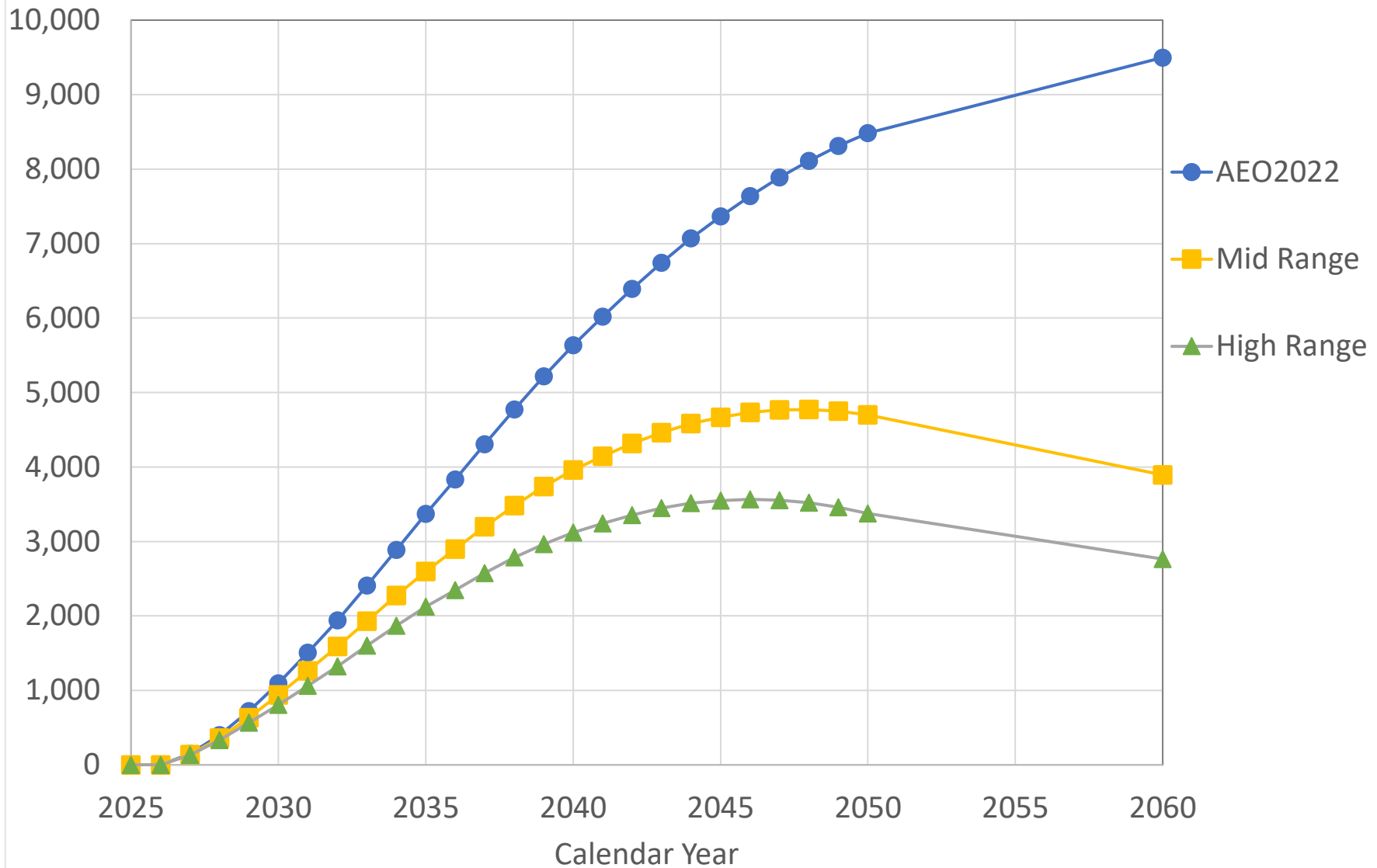
# Exhaust PM2.5 Inventory (Tons/Year), ICE Vehicles $\leq$ 14,000 lbs. GVWR

## 49 State + DC



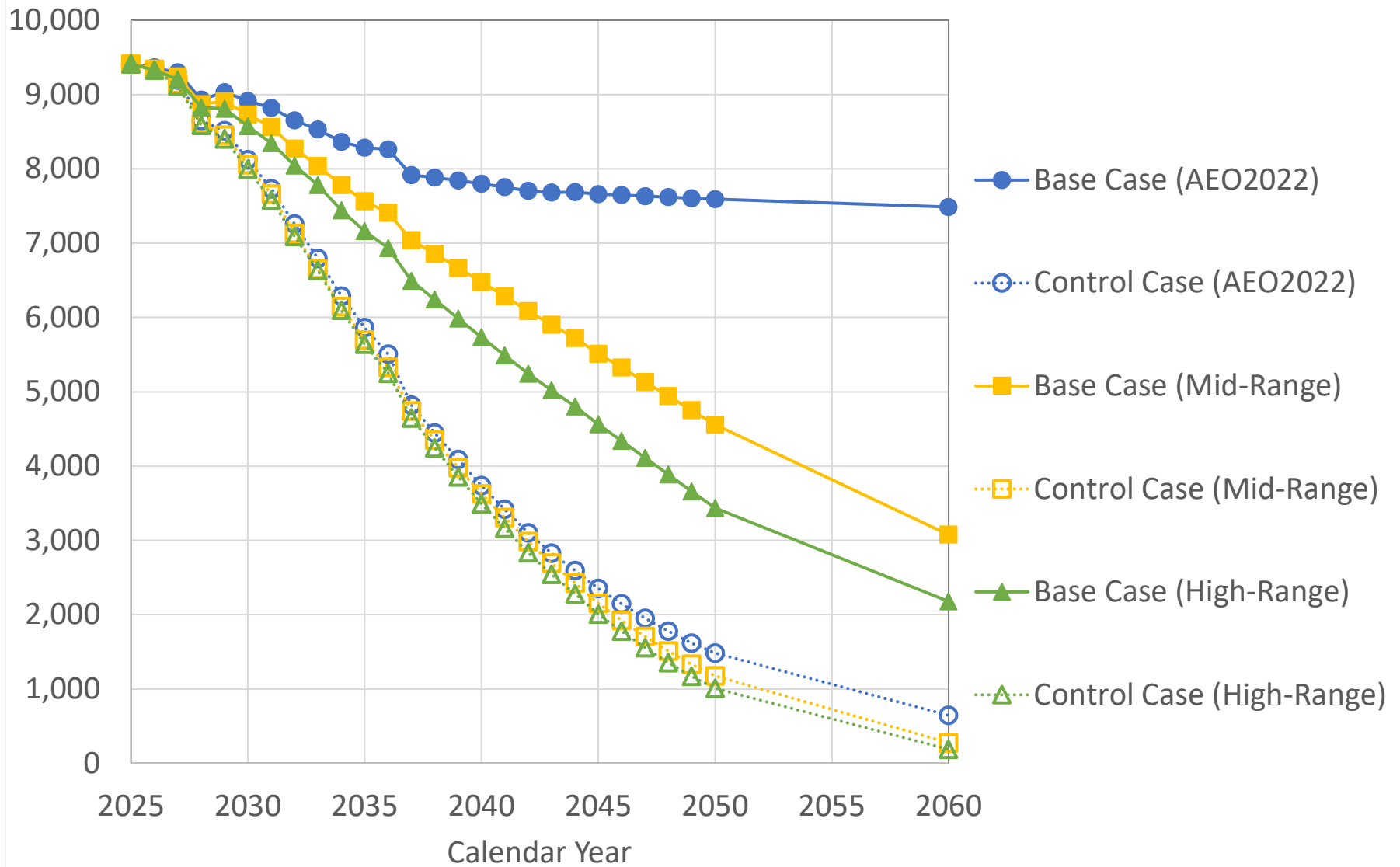
# PM2.5 Benefit from ICE Vehicles (Tons/Year) by Electrification Scenario

## 49 State + DC



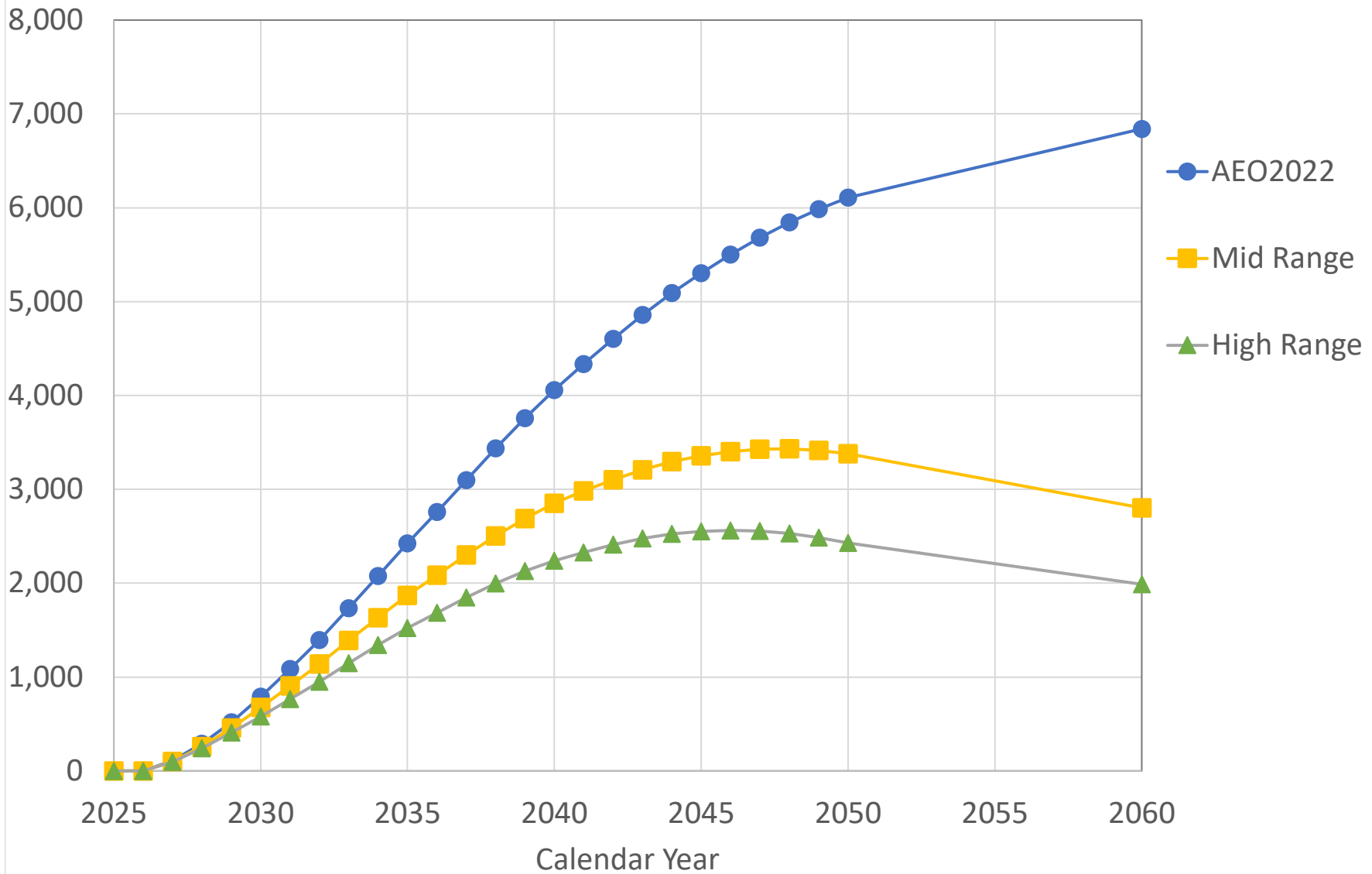
# Exhaust BC (Tons/Year), ICE Vehicles $\leq$ 14,000 lbs. GVWR

## 49 State + DC



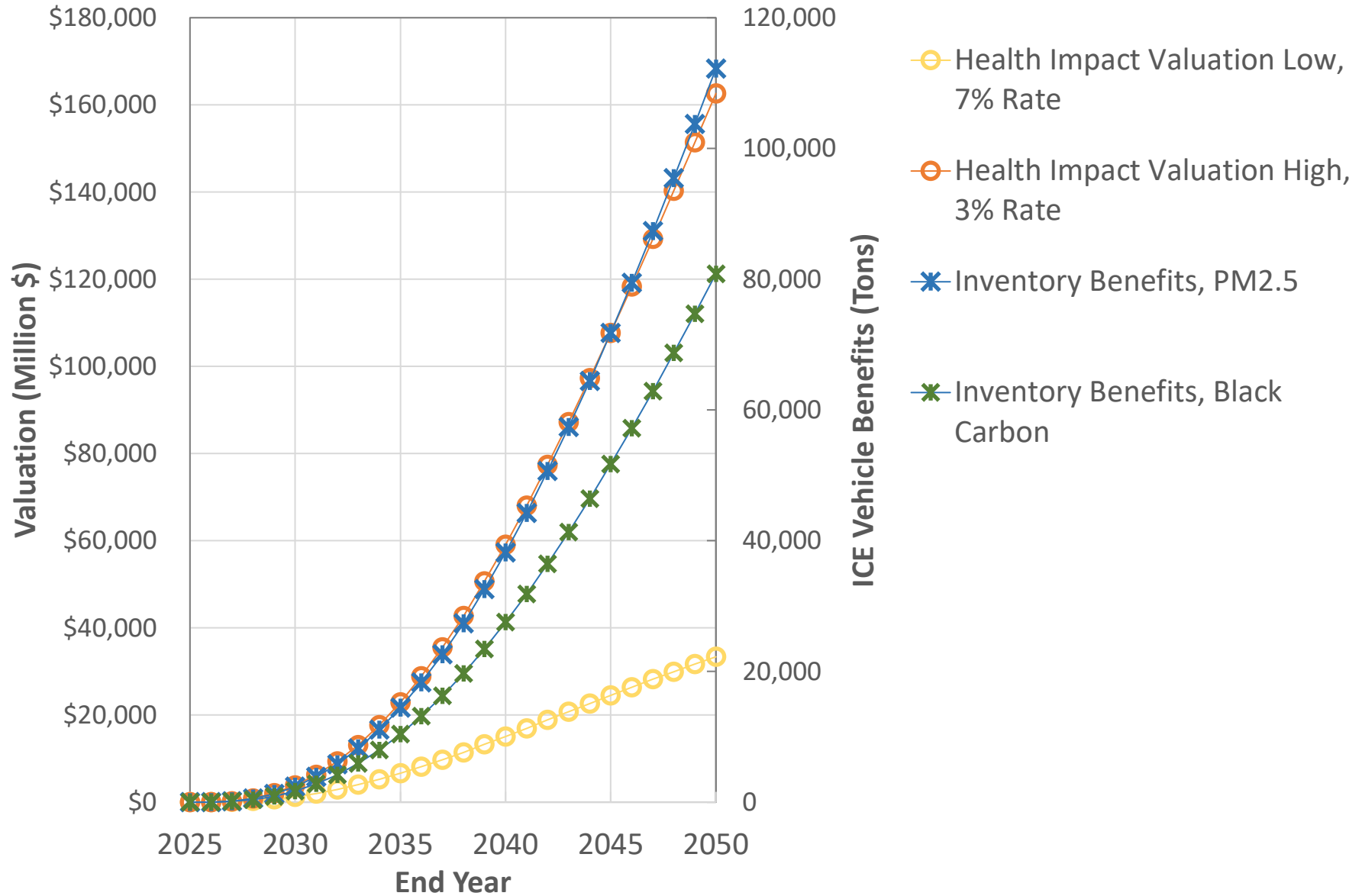
# BC Benefit from ICE Vehicles (Tons/Year) by Electrification Scenario

49 State + DC



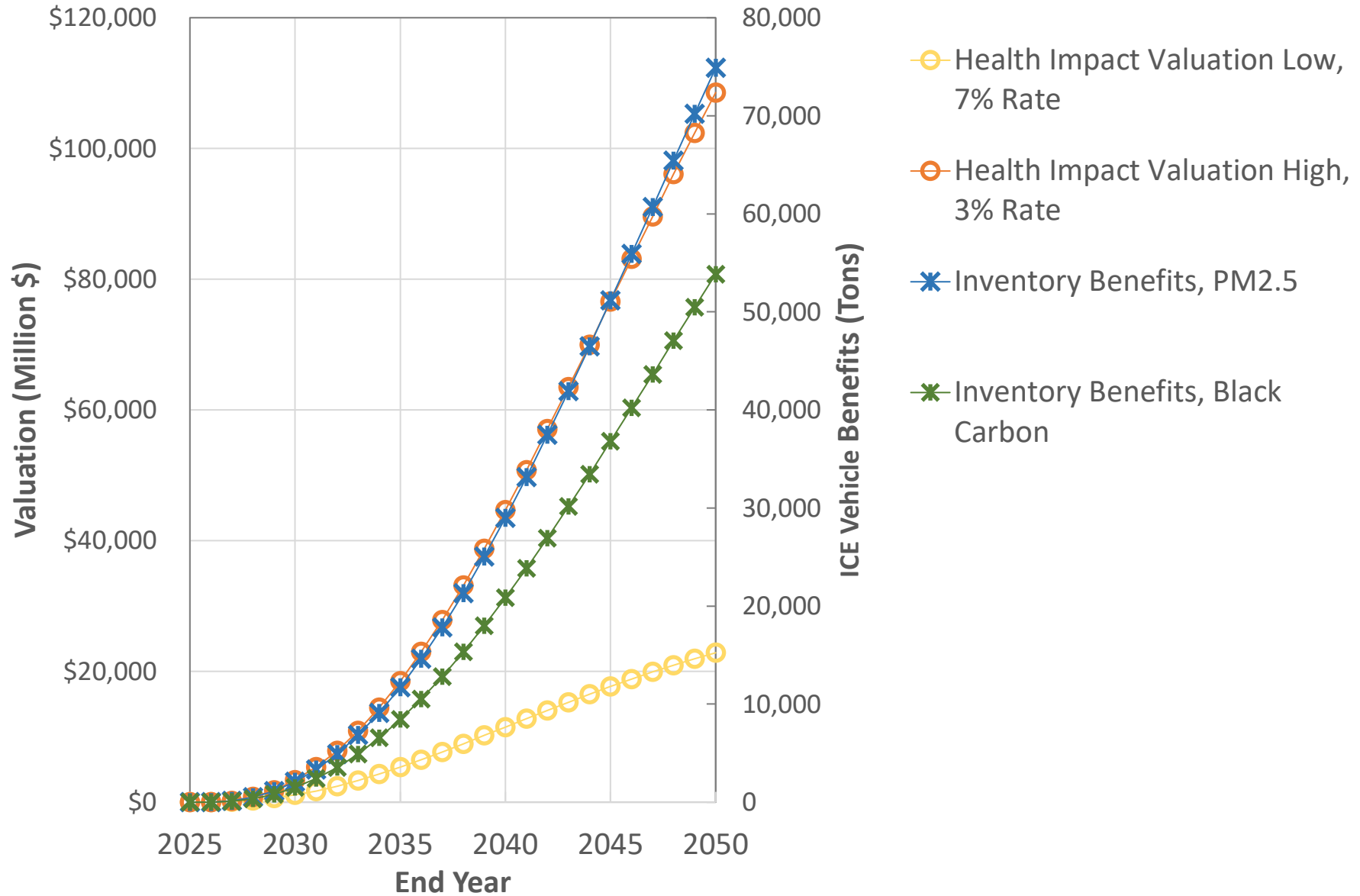
# Cumulative Impact Through 2050, 49 State + DC

## AEO2022 Electrification Forecast



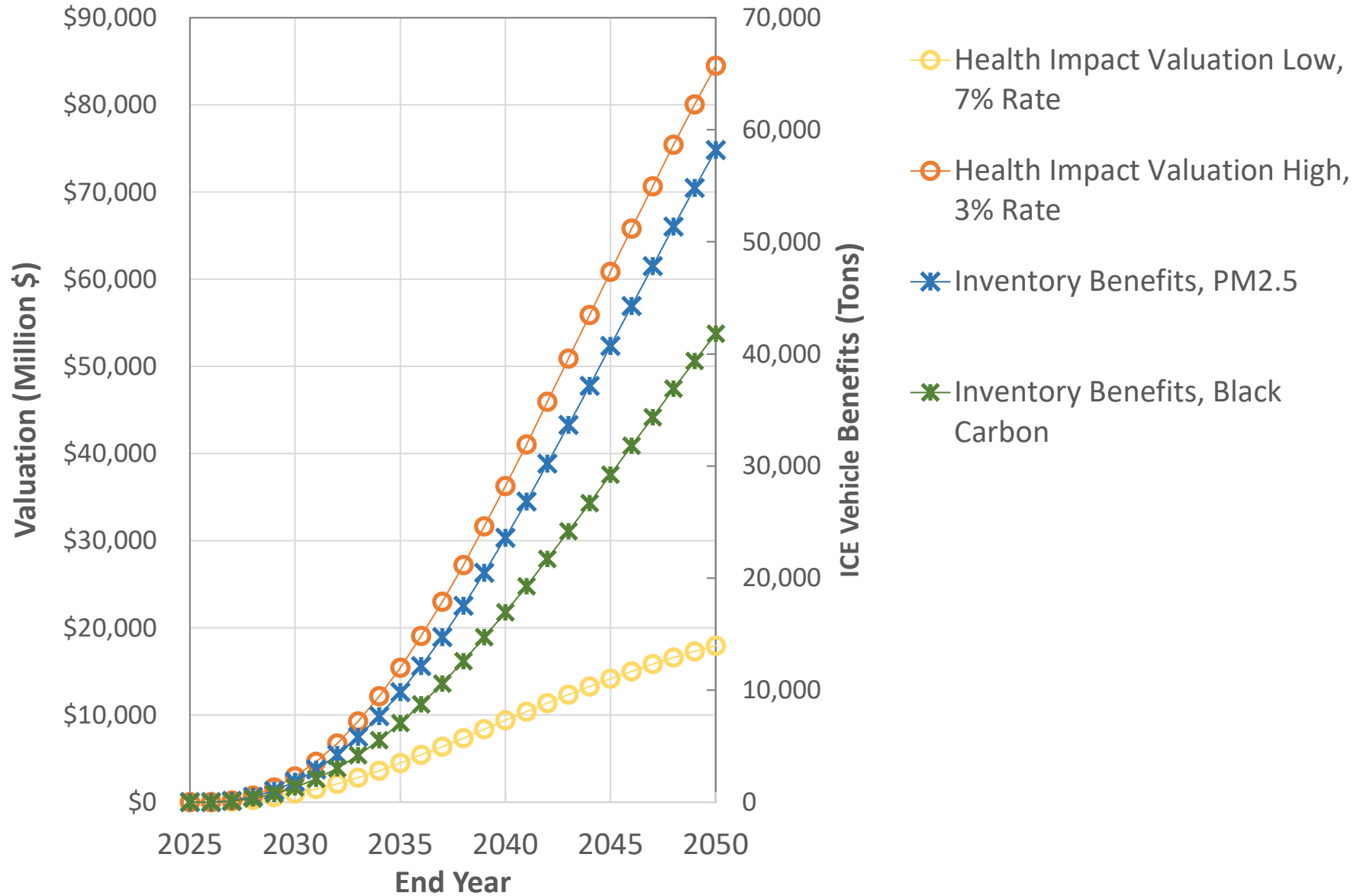
# Cumulative Impact Through 2050, 49 State + DC

## Mid Range Electrification Forecast



# Cumulative Impact Through 2050, 49 State + DC

## High Range Electrification Forecast







2048	3,805.05	4,306.31	8,111.36	2,046.19	2,724.40	4,770.59	1,521.85	1,999.17	3,521.02	76.0%	67.8%	71.4%	69.0%	62.6%	65.2%	65.0%	58.4%	61.1%
2049	3,903.33	4,406.13	8,309.46	2,035.88	2,712.36	4,748.24	1,499.81	1,960.78	3,460.59	77.6%	70.4%	73.6%	71.2%	65.9%	68.1%	67.4%	62.2%	64.3%
2050	3,987.46	4,494.54	8,482.01	2,011.36	2,686.38	4,697.74	1,465.12	1,909.61	3,374.73	79.0%	72.9%	75.7%	73.0%	69.2%	70.8%	69.6%	66.2%	67.6%
2060	4,538.76	4,958.95	9,497.72	1,762.05	2,128.61	3,890.66	1,291.66	1,470.40	2,762.06	87.3%	81.7%	84.3%	87.1%	83.0%	84.8%	86.9%	83.0%	84.8%



2048	2,776.85	3,066.27	5,843.12	1,492.54	1,938.95	3,431.48	1,109.03	1,421.99	2,531.03	80.2%	73.7%	76.7%	73.2%	66.8%	69.4%	68.9%	62.5%	65.1%
2049	2,848.36	3,137.29	5,985.66	1,485.03	1,930.32	3,415.35	1,093.15	1,394.72	2,487.88	81.7%	76.2%	78.7%	75.3%	69.5%	71.9%	71.2%	65.7%	68.0%
2050	2,909.54	3,200.19	6,109.73	1,467.15	1,911.77	3,378.92	1,068.07	1,358.39	2,426.46	82.9%	78.4%	80.5%	76.9%	72.1%	74.1%	73.1%	68.9%	70.7%
2060	3,310.11	3,530.69	6,840.80	1,285.88	1,514.80	2,800.68	943.55	1,046.71	1,990.26	92.1%	90.7%	91.4%	92.0%	90.3%	91.1%	91.9%	91.0%	91.4%



2044	\$5,232.09	\$11,767.67	\$4,719.67	\$10,610.70	410.59	925.98	46.56	431.99	108.25	112.04	205.31	517.10	12,866.31	47,363.89	279,921.21	6,587.41	9,406.08
2045	\$5,423.50	\$12,198.04	\$4,892.25	\$10,998.66	423.61	955.27	48.03	445.58	111.64	115.56	210.52	528.97	13,165.61	48,665.39	287,651.41	6,738.68	9,622.26
2046	\$5,587.66	\$12,567.12	\$5,040.26	\$11,331.35	434.43	979.62	49.24	456.87	114.45	118.49	214.61	537.95	13,393.27	49,708.38	293,854.73	6,853.21	9,786.00
2047	\$5,719.99	\$12,864.62	\$5,159.55	\$11,599.49	442.74	998.30	50.17	465.50	116.59	120.73	217.43	543.73	13,541.18	50,459.36	298,332.55	6,926.90	9,891.42
2048	\$5,818.84	\$13,086.82	\$5,248.65	\$11,799.75	448.44	1,011.09	50.81	471.39	118.05	122.25	218.96	546.27	13,608.46	50,911.40	301,043.20	6,959.33	9,937.92
2049	\$5,882.57	\$13,230.03	\$5,306.06	\$11,928.77	451.44	1,017.80	51.14	474.45	118.79	123.04	219.17	545.53	13,594.22	51,057.56	301,944.97	6,950.07	9,924.89
2050	\$5,909.53	\$13,290.54	\$5,330.30	\$11,983.24	451.65	1,018.21	51.15	474.56	118.81	123.07	218.05	541.50	13,497.56	50,890.91	300,996.20	6,898.72	9,851.73

49 State + DC

High Range Electrification Forecast

Year	Health Impact Valuation, Annual (Million \$, 2022 Currency Year)				Annual Reduction of Health Incidences Under Control Case												
	Low Range, 3% Discount Rate	High Range, 3% Discount Rate	Low Range, 7% Discount Rate	High Range, 7% Discount Rate	Mortality (Low Range)	Mortality (High Range)	Acute Myocardial Infarction (Low Range)	Acute Myocardial Infarction (High Range)	Hospital Admissions, Respiratory	Hospital Admissions, Cardiovascular	Emergency Room Visits, Respiratory	Acute Bronchitis	Asthma Exacerbation	Work Loss Days	Acute Respiratory Symptoms	Upper Respiratory Symptoms	Lower Respiratory Symptoms
	2025	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2026	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2027	\$104.61	\$235.61	\$94.40	\$212.49	8.91	20.14	1.01	9.40	2.31	2.41	5.17	13.31	325.97	1,203.37	7,064.12	169.27	241.11
2028	\$271.35	\$611.08	\$244.87	\$551.12	22.99	51.99	2.62	24.33	5.99	6.26	13.24	34.30	836.92	3,071.31	18,027.11	436.47	622.13
2029	\$470.96	\$1,060.45	\$424.98	\$956.37	39.72	89.81	4.54	42.17	10.41	10.85	22.70	59.16	1,438.16	5,246.88	30,792.57	753.17	1,074.27
2030	\$684.66	\$1,541.45	\$617.80	\$1,390.15	57.50	129.96	6.60	61.21	15.15	15.76	32.62	85.49	2,070.65	7,510.84	44,073.36	1,088.85	1,554.06
2031	\$923.04	\$2,077.94	\$832.88	\$1,873.95	77.12	174.27	8.84	82.01	20.34	21.14	43.26	112.99	2,749.70	9,938.21	58,345.27	1,439.02	2,053.95
2032	\$1,177.03	\$2,649.49	\$1,062.03	\$2,389.35	97.86	221.09	11.20	103.96	25.83	26.82	54.28	141.32	3,455.49	12,445.11	73,097.58	1,799.88	2,569.13
2033	\$1,454.80	\$3,274.45	\$1,312.62	\$2,952.91	120.38	271.93	13.77	127.76	31.81	32.99	66.05	171.41	4,211.07	15,113.94	88,815.00	2,183.28	3,116.52
2034	\$1,736.16	\$3,907.41	\$1,566.44	\$3,523.65	143.02	322.99	16.34	151.63	37.83	39.19	77.65	200.86	4,957.34	17,732.08	104,248.58	2,558.43	3,652.20
2035	\$2,020.09	\$4,546.05	\$1,822.57	\$4,099.51	165.68	374.11	18.92	175.50	43.88	45.40	89.03	229.59	5,692.31	20,293.61	119,362.98	2,924.49	4,174.94
2036	\$2,285.45	\$5,142.64	\$2,061.93	\$4,637.44	186.49	421.01	21.27	197.30	49.36	51.06	99.25	255.21	6,330.53	22,638.05	133,268.45	3,250.89	4,641.03
2037	\$2,561.25	\$5,762.60	\$2,310.70	\$5,196.42	207.96	469.40	23.69	219.75	55.01	56.90	109.64	281.14	6,976.81	25,025.03	147,446.79	3,581.14	5,112.62
2038	\$2,832.03	\$6,371.17	\$2,554.94	\$5,745.13	228.86	516.46	26.03	241.55	60.50	62.58	119.54	305.69	7,589.58	27,304.89	161,015.62	3,893.92	5,559.30
2039	\$3,083.00	\$6,935.08	\$2,781.30	\$6,253.55	248.00	559.56	28.18	261.45	65.53	67.77	128.37	327.37	8,131.63	29,342.11	173,173.07	4,170.15	5,953.83
2040	\$3,312.01	\$7,449.51	\$2,987.83	\$6,717.36	265.24	598.36	30.11	279.32	70.05	72.44	136.09	346.10	8,600.90	31,126.49	183,854.79	4,408.85	6,294.77
2041	\$3,504.77	\$7,882.96	\$3,161.67	\$7,108.13	279.19	629.79	31.68	293.95	73.70	76.23	142.30	361.02	8,974.49	32,619.71	192,702.41	4,598.97	6,566.36
2042	\$3,694.08	\$8,308.66	\$3,332.39	\$7,491.92	292.76	660.35	33.21	308.16	77.25	79.92	148.25	375.21	9,329.97	34,057.56	201,225.05	4,779.70	6,824.56
2043	\$3,864.93	\$8,692.83	\$3,486.45	\$7,838.25	304.78	687.39	34.57	320.73	80.39	83.18	153.36	387.18	9,630.76	35,304.72	208,622.72	4,932.32	7,042.63
2044	\$4,009.73	\$9,018.42	\$3,617.02	\$8,131.75	314.66	709.65	35.68	331.06	82.96	85.86	157.35	396.30	9,860.49	36,298.21	214,522.70	5,048.48	7,208.65
2045	\$4,123.14	\$9,273.39	\$3,719.27	\$8,361.58	322.04	726.23	36.51	338.75	84.87	87.85	160.05	402.14	10,009.01	36,997.14	218,682.60	5,123.01	7,315.22
2046	\$4,211.90	\$9,472.92	\$3,799.28	\$8,541.41	327.47	738.42	37.12	344.38	86.27	89.31	161.77	405.50	10,095.61	37,469.50	221,503.79	5,165.83	7,376.51
2047	\$4,270.44	\$9,604.49	\$3,852.03	\$8,659.97	330.54	745.31	37.46	347.54	87.05	90.13	162.32	405.93	10,109.44	37,672.04	222,729.86	5,171.40	7,384.63
2048	\$4,297.28	\$9,664.75	\$3,876.18	\$8,714.23	331.18	746.70	37.52	348.13	87.18	90.29	161.69	403.41	10,049.69	37,598.48	222,323.21	5,139.36	7,339.02
2049	\$4,290.92	\$9,650.36	\$3,870.39	\$8,701.19	329.30	742.41	37.30	346.08	86.65	89.75	159.86	397.91	9,915.57	37,242.58	220,246.22	5,069.33	7,239.15
2050	\$4,249.89	\$9,558.00	\$3,833.33	\$8,617.84	324.81	732.25	36.79	341.29	85.44	88.51	156.80	389.39	9,706.26	36,598.07	216,461.28	4,960.91	7,084.47

**Cumulative Impact Through 2050, 49 State + DC**  
 Health Impact Valuation (\$ Million); Inventory Benefits (Tons)

End Year	AEO2022 Electrification Forecast				Mid Range Electrification Forecast				High Range Electrification Forecast			
	Health Impact Valuation		Inventory Benefits,		Health Impact Valuation		Inventory Benefits,		Health Impact Valuation		Inventory Benefits,	
	Low, 7% Rate	High, 3% Rate	PM2.5	Black Carbon	Low, 7% Rate	High, 3% Rate	PM2.5	Black Carbon	Low, 7% Rate	High, 3% Rate	PM2.5	Black Carbon
2025	\$0.00	\$0.00	0.00	0.00	\$0.00	\$0.00	0.00	0.00	\$0.00	\$0.00	0.00	0.00
2026	\$0.00	\$0.00	0.00	0.00	\$0.00	\$0.00	0.00	0.00	\$0.00	\$0.00	0.00	0.00
2027	\$87.33	\$244.36	148.23	106.73	\$80.81	\$226.12	137.36	98.87	\$77.06	\$215.62	131.03	94.33
2028	\$311.83	\$896.84	547.12	393.99	\$283.25	\$814.49	497.74	358.27	\$263.87	\$758.56	464.02	334.00
2029	\$699.15	\$2,066.12	1,267.78	913.03	\$623.50	\$1,841.65	1,132.38	815.08	\$566.87	\$1,673.31	1,030.50	741.65
2030	\$1,261.42	\$3,829.30	2,363.86	1,702.56	\$1,104.21	\$3,349.10	2,072.37	1,491.66	\$978.54	\$2,964.25	1,838.23	1,322.75
2031	\$2,002.66	\$6,243.83	3,871.52	2,788.16	\$1,721.45	\$5,359.70	3,332.49	2,398.07	\$1,497.22	\$4,653.80	2,901.37	2,086.90
2032	\$2,915.42	\$9,332.33	5,810.83	4,184.16	\$2,465.20	\$7,876.36	4,919.42	3,539.04	\$2,115.33	\$6,745.33	4,225.67	3,038.16
2033	\$3,998.60	\$13,139.58	8,216.33	5,915.86	\$3,330.62	\$10,918.22	6,850.52	4,927.42	\$2,829.31	\$9,254.93	5,825.09	4,186.92
2034	\$5,240.84	\$17,675.25	11,101.16	7,992.75	\$4,303.58	\$14,470.72	9,121.90	6,560.43	\$3,625.61	\$12,162.41	7,690.67	5,526.73
2035	\$6,627.18	\$22,933.32	14,468.46	10,417.15	\$5,367.48	\$18,505.88	11,720.72	8,428.89	\$4,491.50	\$15,446.57	9,812.26	7,050.37
2036	\$8,133.81	\$28,869.03	18,298.52	13,174.76	\$6,500.92	\$22,971.38	14,619.26	10,512.76	\$5,407.02	\$19,053.52	12,159.63	8,736.04
2037	\$9,750.69	\$35,485.92	22,601.46	16,272.98	\$7,695.30	\$27,859.25	17,817.26	12,811.97	\$6,365.88	\$22,977.56	14,732.67	10,583.75
2038	\$11,462.86	\$42,764.28	27,373.07	19,708.89	\$8,937.57	\$33,140.12	21,300.85	15,316.65	\$7,356.73	\$27,189.66	17,516.42	12,582.86
2039	\$13,249.45	\$50,653.33	32,588.63	23,464.82	\$10,209.81	\$38,757.98	25,038.36	18,004.11	\$8,364.80	\$31,641.02	20,482.55	14,713.11
2040	\$15,091.78	\$59,103.81	38,224.99	27,524.14	\$11,496.74	\$44,660.95	29,000.80	20,853.54	\$9,376.89	\$36,283.30	23,603.01	16,954.38
2041	\$16,964.91	\$68,029.27	44,243.44	31,858.95	\$12,778.50	\$50,768.53	33,146.15	23,834.66	\$10,377.79	\$41,052.63	26,843.75	19,282.22
2042	\$18,858.11	\$77,400.73	50,634.16	36,462.21	\$14,048.61	\$57,055.73	37,462.09	26,938.68	\$11,363.72	\$45,933.09	30,196.95	21,691.10
2043	\$20,758.31	\$87,172.16	57,375.84	41,318.52	\$15,297.97	\$63,480.37	41,924.53	30,148.24	\$12,327.76	\$50,890.49	33,642.34	24,166.46
2044	\$22,652.80	\$97,292.61	64,443.31	46,409.66	\$16,517.62	\$69,995.84	46,505.58	33,443.24	\$13,262.46	\$55,883.77	37,154.34	26,689.94
2045	\$24,529.31	\$107,706.37	71,807.03	51,714.30	\$17,699.17	\$76,552.89	51,174.31	36,801.40	\$14,160.71	\$60,868.68	40,704.12	29,240.80
2046	\$26,379.11	\$118,370.65	79,445.51	57,216.91	\$18,836.82	\$83,111.58	55,905.15	40,204.29	\$15,018.26	\$65,812.52	44,269.74	31,803.33
2047	\$28,193.75	\$129,238.47	87,333.22	62,899.00	\$19,925.21	\$89,629.97	60,669.94	43,631.63	\$15,830.83	\$70,679.04	47,825.78	34,359.24
2048	\$29,965.96	\$140,264.43	95,444.57	68,742.12	\$20,959.96	\$96,067.82	65,440.54	47,063.11	\$16,595.01	\$75,433.45	51,346.80	36,890.26
2049	\$31,689.59	\$151,404.67	103,754.04	74,727.78	\$21,937.60	\$102,386.55	70,188.78	50,478.46	\$17,308.13	\$80,042.52	54,807.39	39,378.14
2050	\$33,359.50	\$162,616.94	112,236.04	80,837.51	\$22,855.46	\$108,549.31	74,886.52	53,857.37	\$17,968.21	\$84,474.51	58,182.12	41,804.60