

Health Impact Assessment of New York State Adoption of California's Heavy Duty Low NOx Omnibus and Phase 2 GHG Regulations



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Health Impact Assessment

- COBRA version 4.0
- Geography: New York State and adjacent states
- One emission reduction scenario (Scenario 4: HD Low NOx Omnibus + Phase 2 GHG)
- Model years: 2026 through 2050

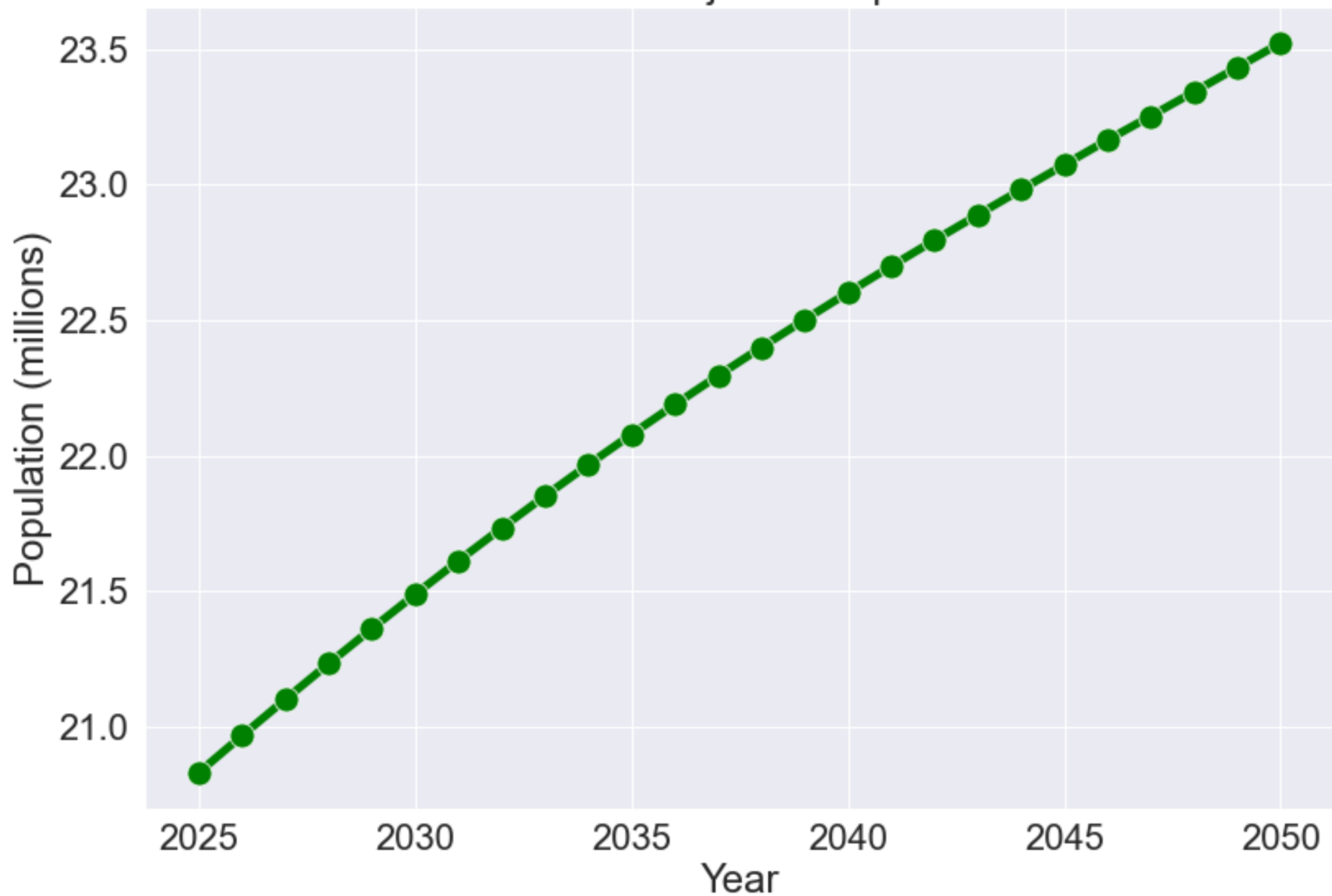
COBRA Input and Settings

- Emission baseline year and S-R matrix and adjustment factors: 2023
- Incidence and Health effect functions: 2023
- Population and Valuation functions: projected
- Discount rate: 3%
- Share of the emission reductions for each county equal to its share in the baseline emissions in each emissions tier

Population and Valuation

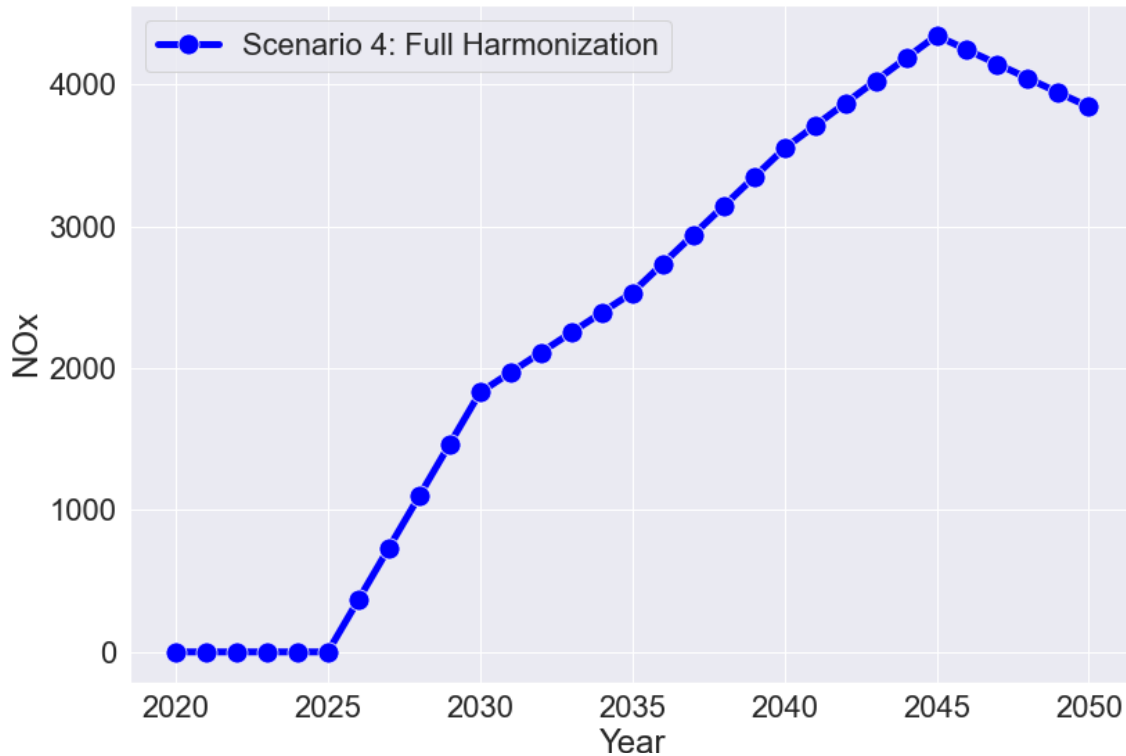
- NY population projection for 2025-2050:
 - [2017 US Census Bureau National Population Projections](#) as the baseline
 - Baseline population was adjusted at the state and county levels using COBRA population inventory database
- Valuation functions projected for 2025-2050 using a linear model based on the COBRA valuation inventory database

New York Projected Population



Annual Emission Reductions Relative to BAU

Scenario 4: Full Harmonization



annual (ton relative to BAU)

Year	NOx	PM2.5
2025	0.0	0.0
2030	1,830	0.0
2035	2,533	0.0
2040	3,550	0.0
2045	4,345	0.0
2050	3,845	0.0
<i>Cumulative Total</i>	<i>72,812</i>	<i>0.0</i>

Statewide estimated cumulative health impacts*

2026-2050

ACT EVs

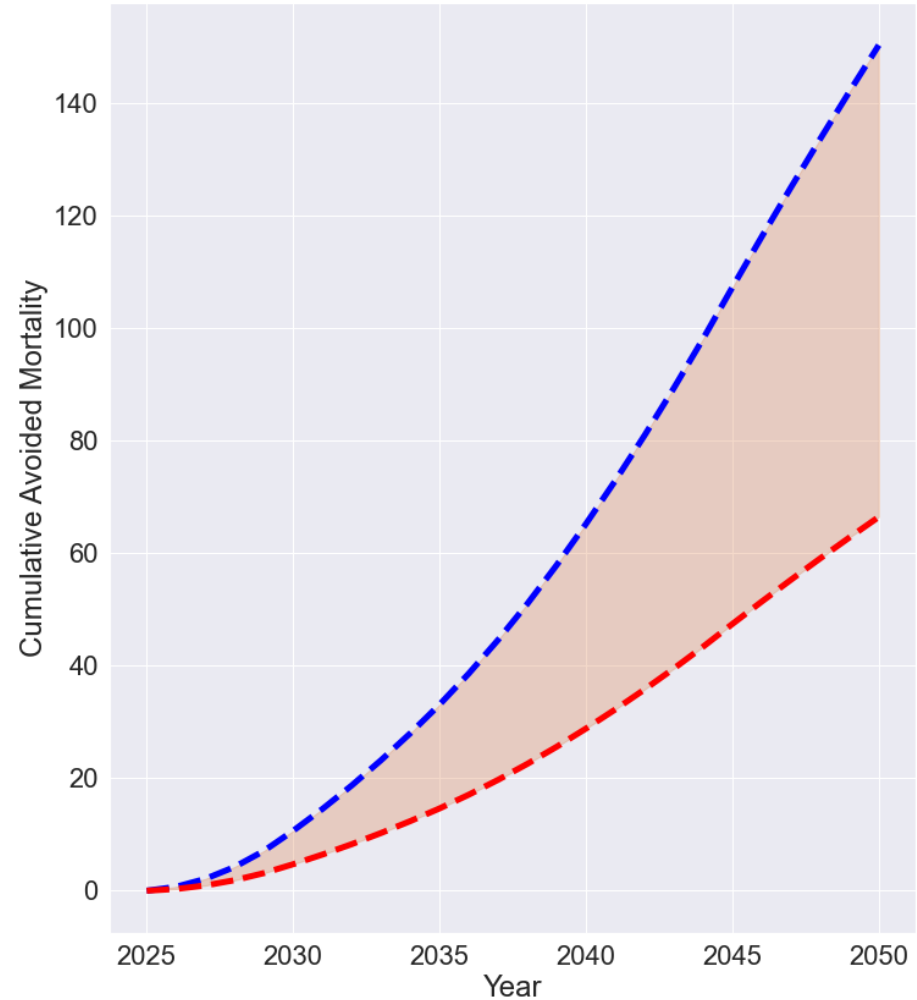
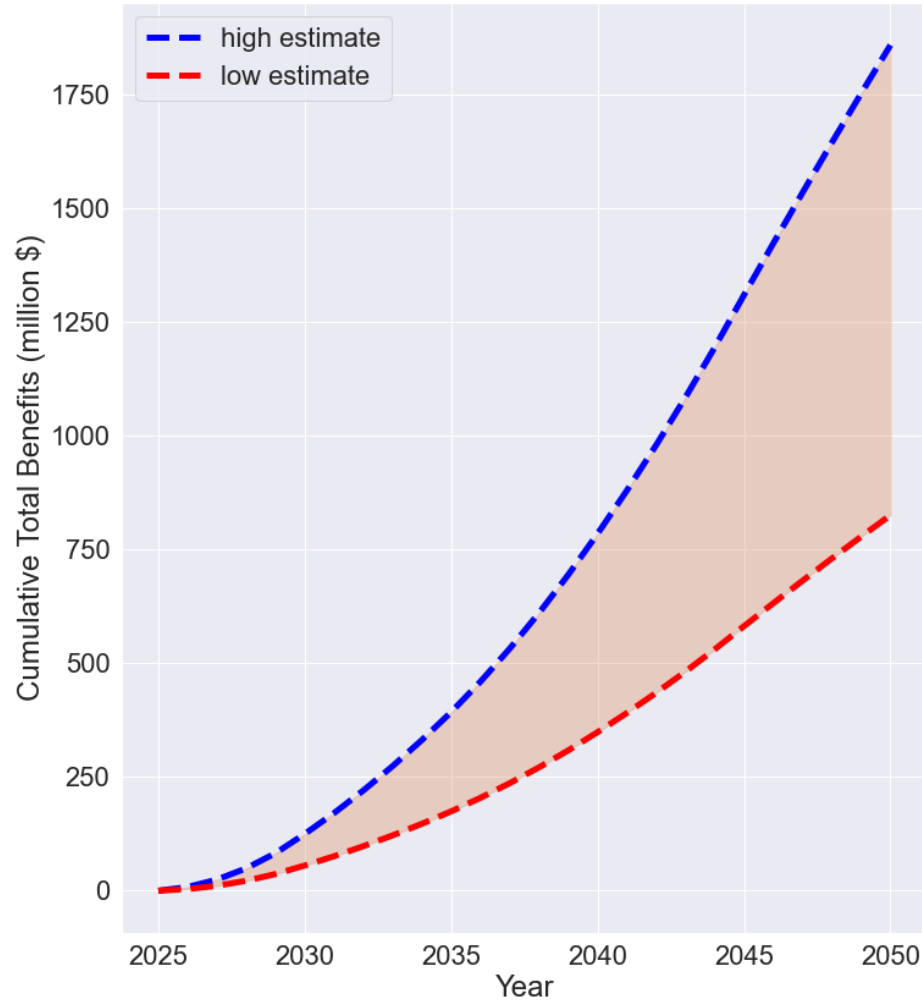
Scenario 4: Full Harmonization

Item	Avoided Premature Deaths	Avoided Hospitalizations for Cardiovascular Illness	Avoided Hospitalizations for Respiratory Illness	Avoided ER Visits	Total
# Incidents	66 - 150	17	11	35	-
Valuation	\$811 - \$1,834	\$0.86	\$0.58	\$0.020	\$825 - \$1,859

* Valuations are in million \$2018

Cumulative Benefits and Avoided Mortality

Scenario 4: Full Harmonization



* Valuations are in \$2018