Supporting Information

Assessing Air Quality and Public Health Benefits of New York City's Climate Action Plans

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Supporting information includes 7 pages, 5 figures, and one table.

Figure S1. Flow chart of project components.

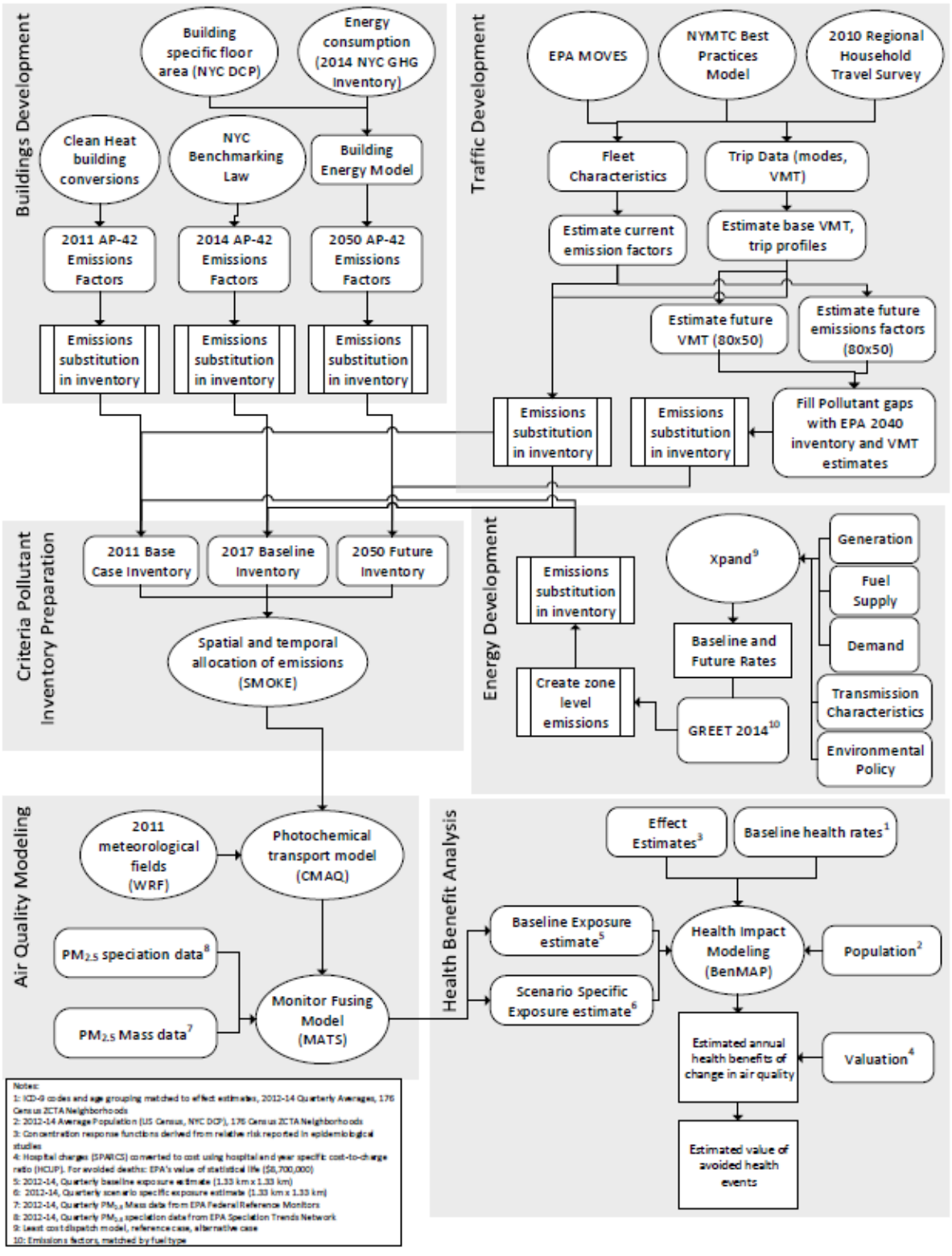

Table S1. Epidemiological studies used in estimating health benefits in BenMAP.

Endpoint	Age Range	Location	Qualifier	Effect Estimate	Reference
Emergency Room Visits, Asthma	0-99	New York City	Warm/cool seasons	Relative risk of 1.23 (April-September) and 1.04 (October-March) per 25.4 μg/m^3 and 21.7 μg/m^3 respective increase in $PM_{2.5,}$	Ito K, Thurston G, Silverman R. 2007.
Hospitalizations through ED, Chronic Lung Disease	20-64	Los Angeles county	Year-round	2.2% increase in daily chronic respiratory disease hospitalizations per 10 μg/m^3 increase in $PM_{2.5}$	Moolgavkar, S.H. 2000.
Hospitalizations through ED, Respiratory	65-99	26 U.S. Communities	4 seasons	1.79% (Winter), 4.34% (Spring), 1.26% (Summer), 1.52% (Fall) increase in respiratory disease hospitalizations per 10 μg/m3 increase in $PM_{2.5}$	Zanobetti, A., M. Franklin and J. Schwartz. 2009.
Hospitalizations through ED, Cardiovascular	40-99	New York City	Warm/cool seasons	0.8% (April-September) and 1.1% (October-March) increase in daily cardiovascular disease hospitalizations per 10 μg/m^3 increase in $PM_{2.5}$	Ito K, Mathes R, Ross Z, Nadas A, Thurston G, Matte T. 2011.
Mortality, All Cause	30-99	116 US Cities	Year-round	Relative risk of 1.056 per 10 μg/m^3 increase in $PM_{2.5.}$	Krewski, D., Jerrett, M., Burnett, R. T., Ma, R., Hughes, E., Shi, Y., … & Thun, M. J. (2009).
Mortality, All Cause	25-99	6 Eastern Cities	Year-round	Relative risk of 1.14per 10 μg/m^3 increase in $PM_{2.5}$	Lepeule, J., Laden, F., Dockery, D., & Schwartz, J. (2012).

Figure S2. Spatial variation modeled by CMAQ compared to NYCCAS monitored values at intersecting locations and 2-week sampling periods. Spearman correlation coefficient.

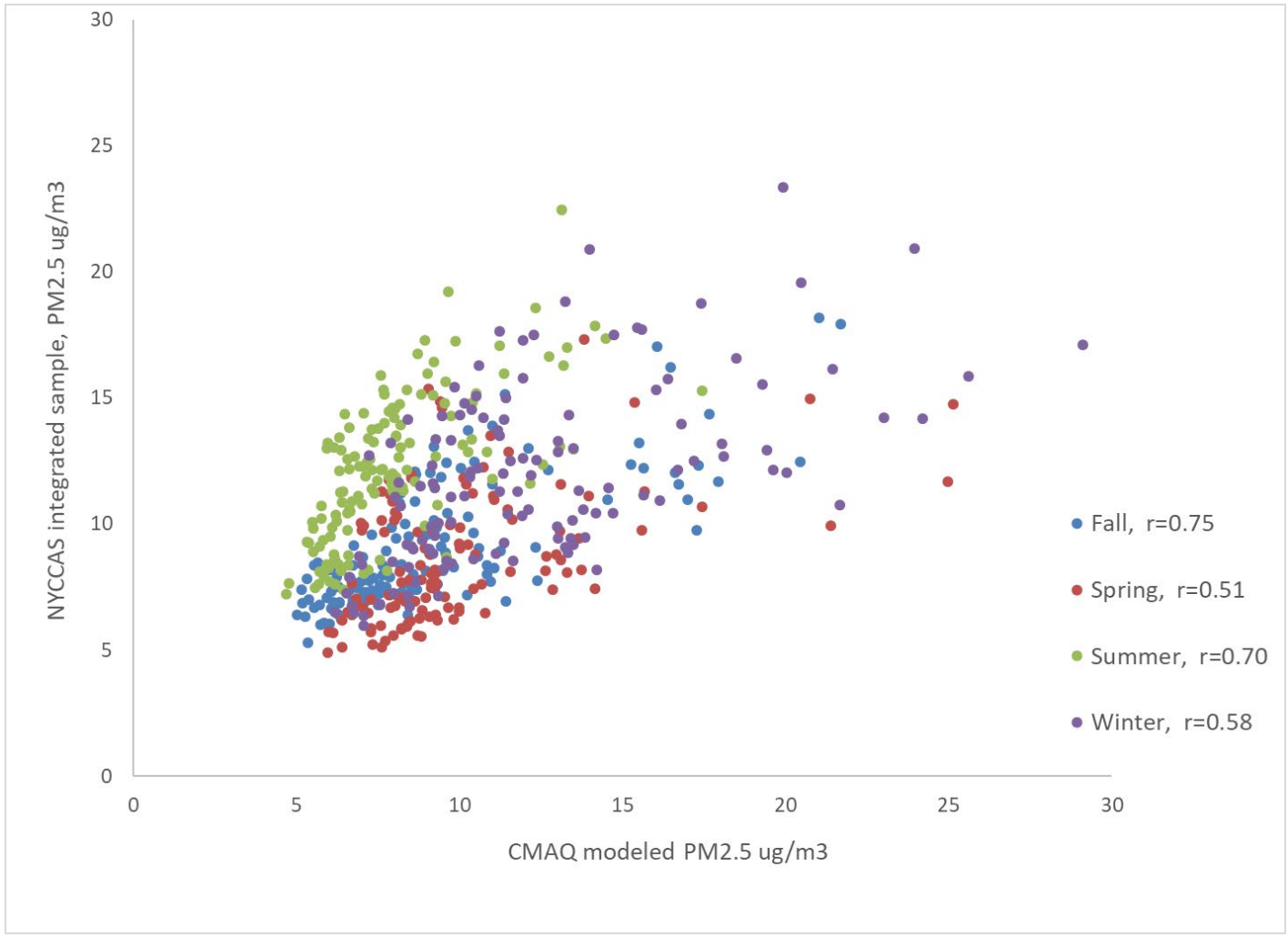

Figure S3. Census Tract counts of buildings burning No. 4 fuel oil as of 2019, NYC DEP permit data.

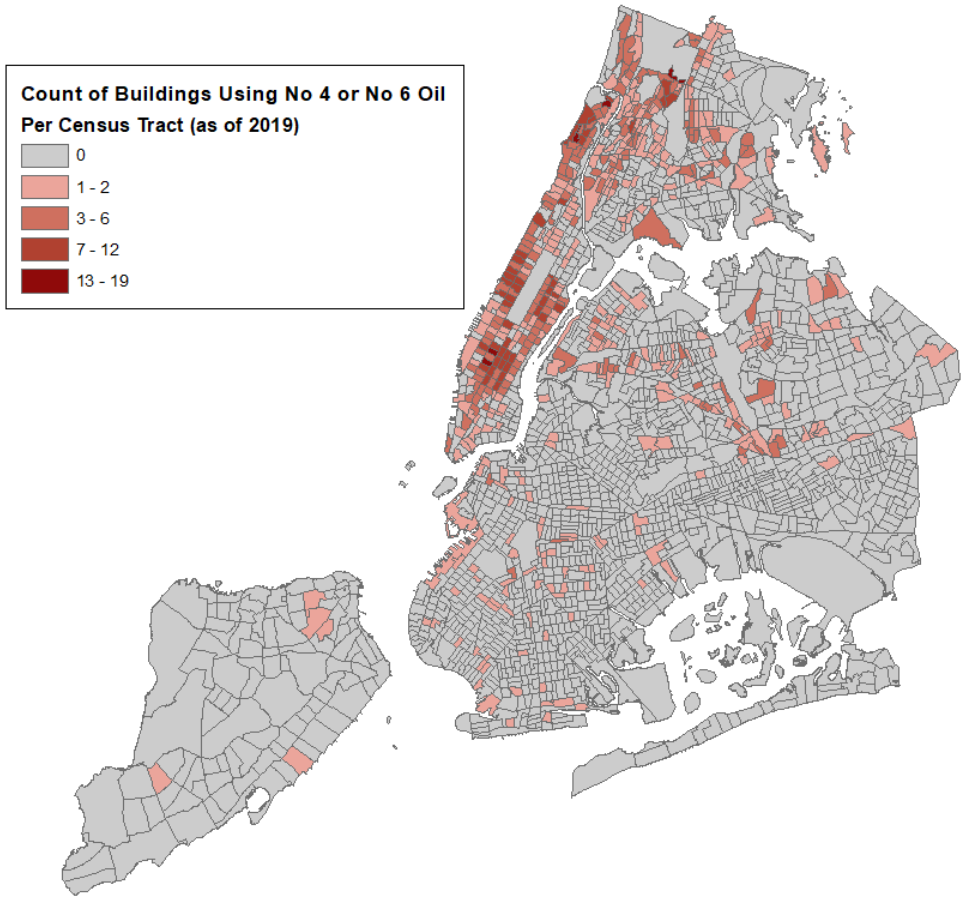

Figure S4. Baseline health outcome rates by ZCTA, 2012-2014 annual average.

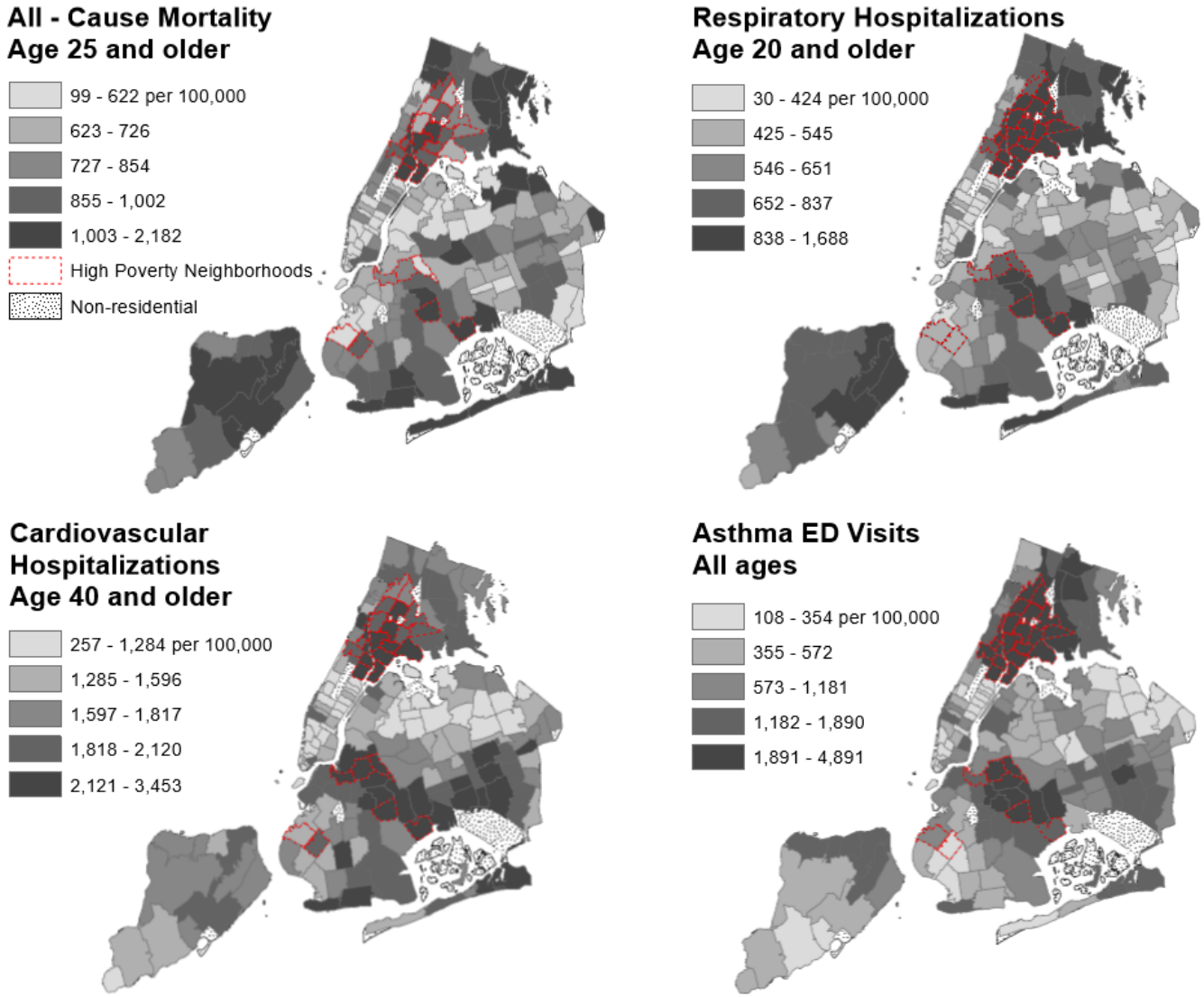

Figure S5. Spatial Pattern of avoided asthma ED visits by scenario.