

# Supplemental Material: The Joint Modification of the PM<sub>2.5</sub> and Mortality Association by Neighborhood Land-Use and Sociodemographic Characteristics

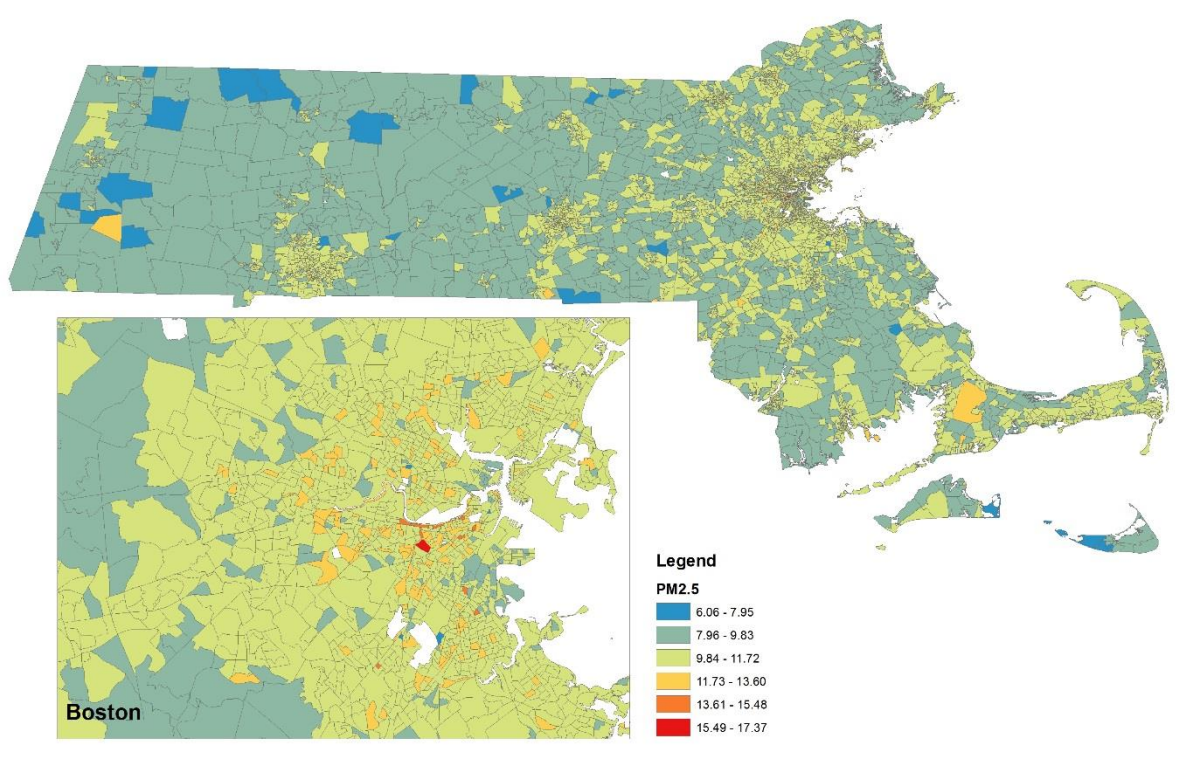
**Table S1.** The joint modification of the PM<sub>2.5</sub> effect by NDVI, walkability and neighborhood sociodemographic characteristics.

Sociodemographic Characteristics	<sup>1</sup> PM <sub>2.5</sub> :NDVI:SC β (p value)	<sup>2</sup> PM <sub>2.5</sub> :walkability:SC β (p value)
Population density	-2.20 (0.001)	0.01 (0.838)
Percent 65 and older	0.03 (0.201)	0.01 (0.415)
Percent white	0.03 (0.019)	-0.01 (0.953)
Percent less than high school	-0.06 (0.043)	-0.01 (0.845)
Percent poverty	-0.11 (0.186)	-0.02 (0.173)
Median household income	0.01 (0.106)	-0.01 (0.857)

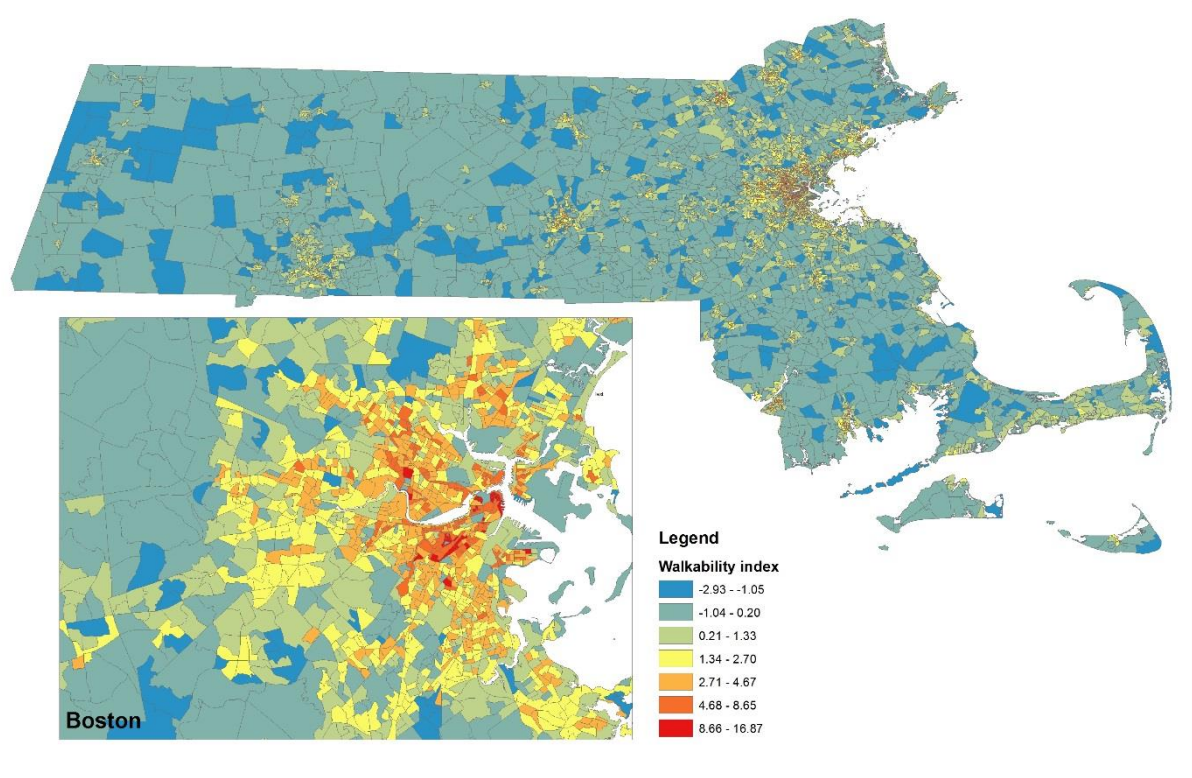
<sup>1</sup> The interaction p value of the joint interaction between PM<sub>2.5</sub>, NDVI and each of the neighborhood sociodemographic characteristics (SC). <sup>2</sup> The interaction p value of the joint interaction between PM<sub>2.5</sub>, walkability and each of the neighborhood sociodemographic characteristics (SC).

**Table S2.** Percent increase in mortality for 10μg/m<sup>3</sup> of average PM<sub>2.5</sub> in the same and previous day: modification by NDVI within strata of low and high SES.

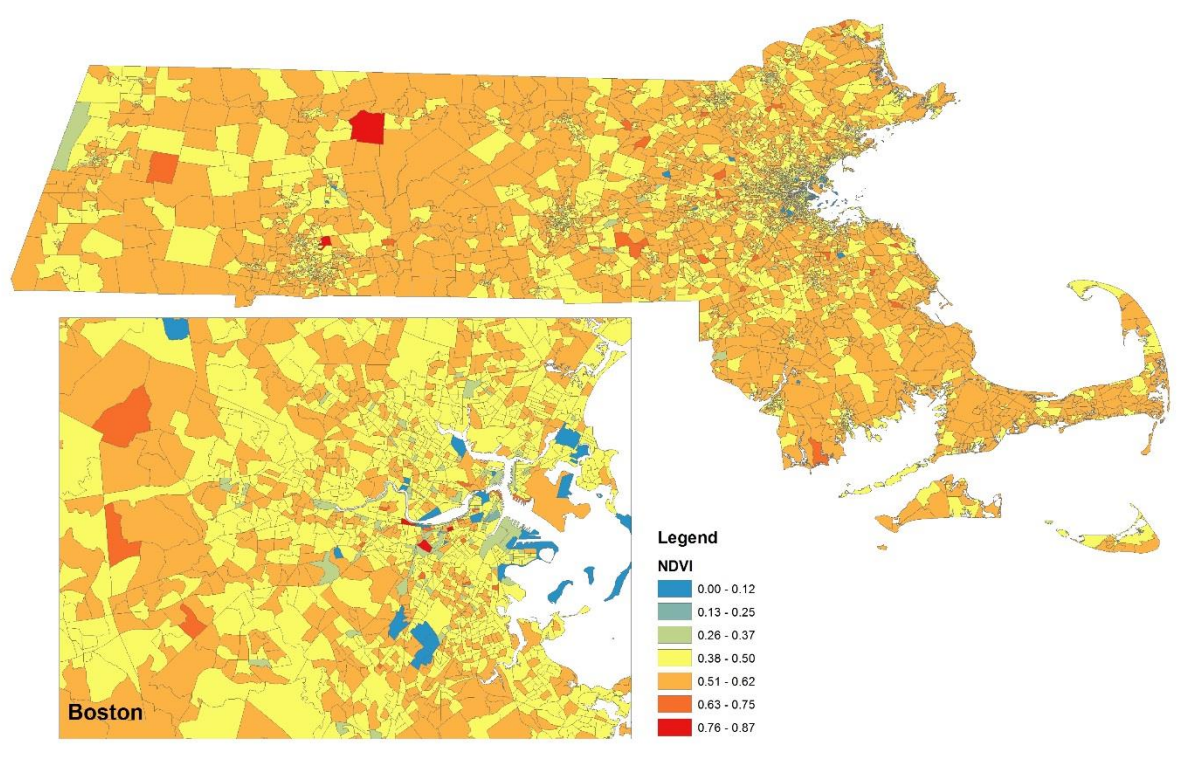
SES strata	NDVI percentile	Percent	Lower CI	Higher CI
Low population density	25 <sup>th</sup>	0.34%	-1.84%	2.56%
	75 <sup>th</sup>	3.58%	1.33%	5.88%
High population density	25 <sup>th</sup>	4.03%	2.00%	6.10%
	75 <sup>th</sup>	1.46%	-0.52%	3.47%
Low % white	25 <sup>th</sup>	3.55%	1.49%	5.65%
	75 <sup>th</sup>	2.47%	0.43%	4.56%
High % white	25 <sup>th</sup>	1.14%	-1.00%	3.33%
	75 <sup>th</sup>	2.80%	0.62%	5.02%
Low % no high school diploma	25 <sup>th</sup>	1.42%	-0.72%	3.62%
	75 <sup>th</sup>	2.64%	0.46%	4.86%
High % no high school diploma	25 <sup>th</sup>	3.31%	1.26%	5.41%
	75 <sup>th</sup>	2.64%	0.60%	4.72%



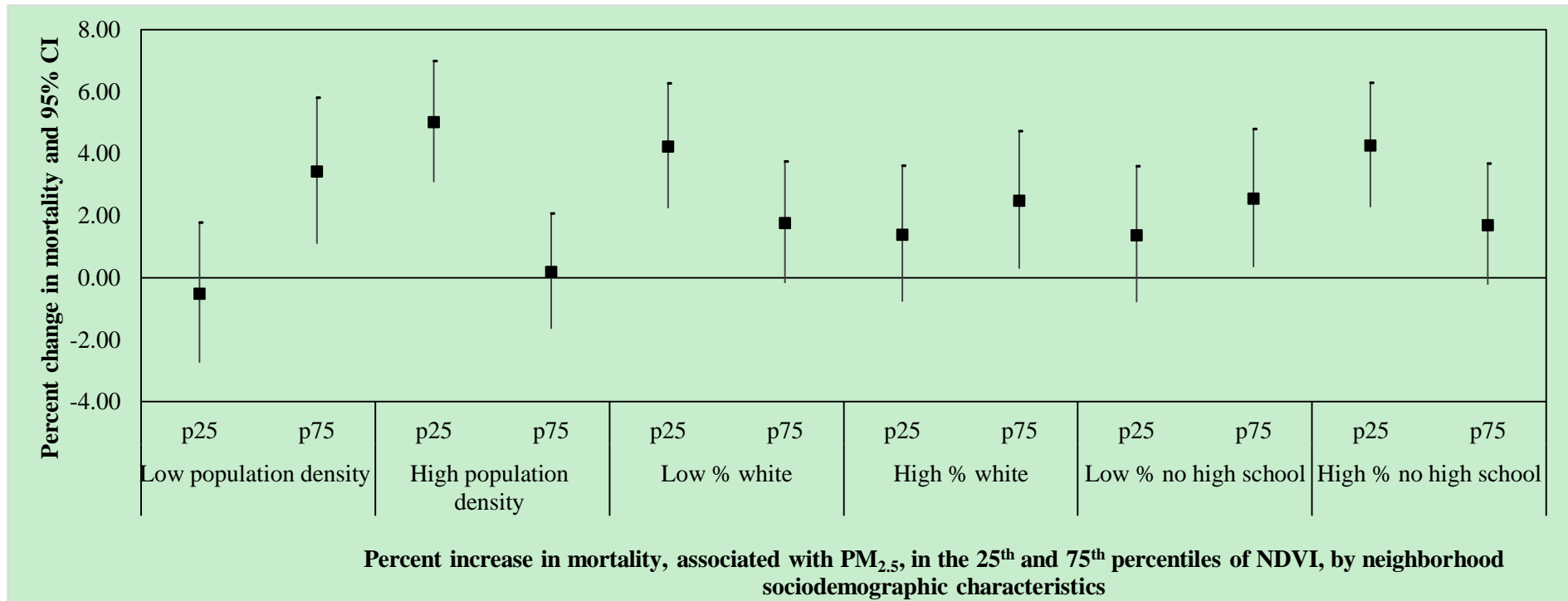
**Figure S1.** Block group average concentrations of PM<sub>2.5</sub> in the study area across Massachusetts (2001-2011).



**Figure S2.** Block group average walkability index in the study area across Massachusetts (2001-2011).



**Figure S3.** Block group average NDVI in the study area across Massachusetts (2001-2011).



**Figure S4.** The Percent increase and 95% confidence intervals in cardiovascular mortality, associated with PM<sub>2.5</sub>, in the 25<sup>th</sup> and 75<sup>th</sup> percentiles of NDVI, by neighborhood sociodemographic characteristics. P25 and p75 refer to percentiles of annual NDVI.