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Prenatal and Childhood Traffic-Related Pollution Exposure and Childhood Cognition in the Project Viva Cohort (Massachusetts, USA)

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Table S1. Neurobehavioral functional domains measured by cognitive assessments.

Table S2. Characteristics of study subjects with and without imputation of covariates, and enrolled subjects excluded from the present study due to missing exposure or outcome data.

Table S3. Spearman correlation coefficients among continuous exposure variables.

Table S4. Third trimester black carbon exposure across levels of covariates.

Table S5. Minimally adjusted model results for mean differences in cognitive assessment scores associated with major roadway proximity and interquartile range increases in near-residence traffic density, black carbon (BC) and fine particulate matter (PM$_{2.5}$) exposure (95% confidence intervals).

Table S6. Mean differences in cognitive assessment scores associated with childhood major roadway proximity, and interquartile range increases in near-residence traffic density, black carbon (BC) and fine particulate matter (PM$_{2.5}$) exposure (95% confidence intervals).

Table S7. Mean differences in cognitive assessment scores associated with major roadway proximity at birth and interquartile range increases in near-residence traffic density at birth, third
trimester BC and third trimester fine PM$_{2.5}$ (95% confidence intervals), adjusted for full set of covariates and potential mediators.

**Figure S1.** Associations (+ 95% confidence intervals) between verbal IQ score$^a$ and black carbon exposure with staged adjustment for influential covariates$^b$. IQR, interquartile range. IQR: third trimester=0.32 µg/m$^3$, birth–age 6=0.22 µg/m$^3$, year before cognitive testing= 0.20 µg/m$^3$. $^a$KBIT-2 score standardized to mean=100, standard deviation=15. $^b$Model 0 adjusted for child sex and age. Model 1 adjusted for characteristics of child (age, sex, breastfeeding duration, early childhood blood lead), mother (age, parity, race/ethnicity, education, IQ, marital/cohabitation status, and blood lead, smoking, secondhand smoke exposure, and alcohol in pregnancy), father (education), household (income, home caretaking environment, gas stove) and neighborhood (census tract median income). All third trimester models also adjusted for seasonal trends.

**References**