

Appendix H. Brattle Economic Variables

Table 88. Brattle Economic Variables

Variable Name	Variable Type	Description
Dependent Variable: EV sales per capita	Continuous	Defined as the total incremental sales of EV (BEV or PHEV) per million residents
State incentives	Continuous	The maximum incentive (rebate, tax credit or tax exemption) offered by a state upon purchase of a BEV or PHEV, in \$/vehicle
Clean Vehicle Credit	Continuous	A federal tax credit (FTC) offered by the federal government upon purchase of a BEV or PHEV, in \$/vehicle
Total Incentive	Continuous	Sum of the state incentives and FTC
Battery price	Continuous	Lithium-ion battery cost index in \$/kWh, as a proxy of electric vehicle cost (BNEF)
Vehicle miles travelled (VMT)	Continuous	Average vehicles miles travelled annually, per capita
EV-ICE fuel cost ratio	Continuous	Ratio of operating costs of an EV (\$/100 miles) to that of an ICEV (\$/100 miles)
Tesla Cap dummy	Binary	A dummy variable to indicate a period of spike in EV sales after Tesla hit the cap for the FTC Q3'18 and Jan'19
Model availability	Continuous	Number of EV models available across a state by year
Green views score	Continuous (0-100)	Average environmental voting score of state House and Senate reps (League of Conservation Voters Annual Environmental Scorecard)
High Occupancy Vehicle (HOV) lane exemption	Binary	Indicates the presence of an HOV lane exemption for EVs
Traffic density	Continuous	Weighted average daily traffic per lane for all principal arterials
Zero Emission Vehicle (ZEV) mandate	Binary	Indicates the presence of a ZEV mandate enacted by the government
EV charging rate	Binary	Indicates whether or not at least one utility offers an EV rate for charging in a given state