

Your Influence Matters: Peer Influence and EV Adoption

Peer Stories



“There is no question that our neighbors definitely put us on the path to full electrification with the introduction to hybrid vehicles.”

Chuck and Beth Huber
Westminster, MD

“I recognize the power of influencing other friends and family. Neighbors have asked me about my new EV, and I share information with work colleagues.”

Chris Jewell
Arlington, VA



“I began going electric in 2017. I started with solar, then added an electric car. It benefits me and my family plus has an impact on the environment - these actions represent me.”

Nica Mendoza
Richmond, VA

Project Team and Contributors



Report Link

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About

Generation180 explores how peer influence plays an important role in accelerating the adoption of electric vehicles across the United States.

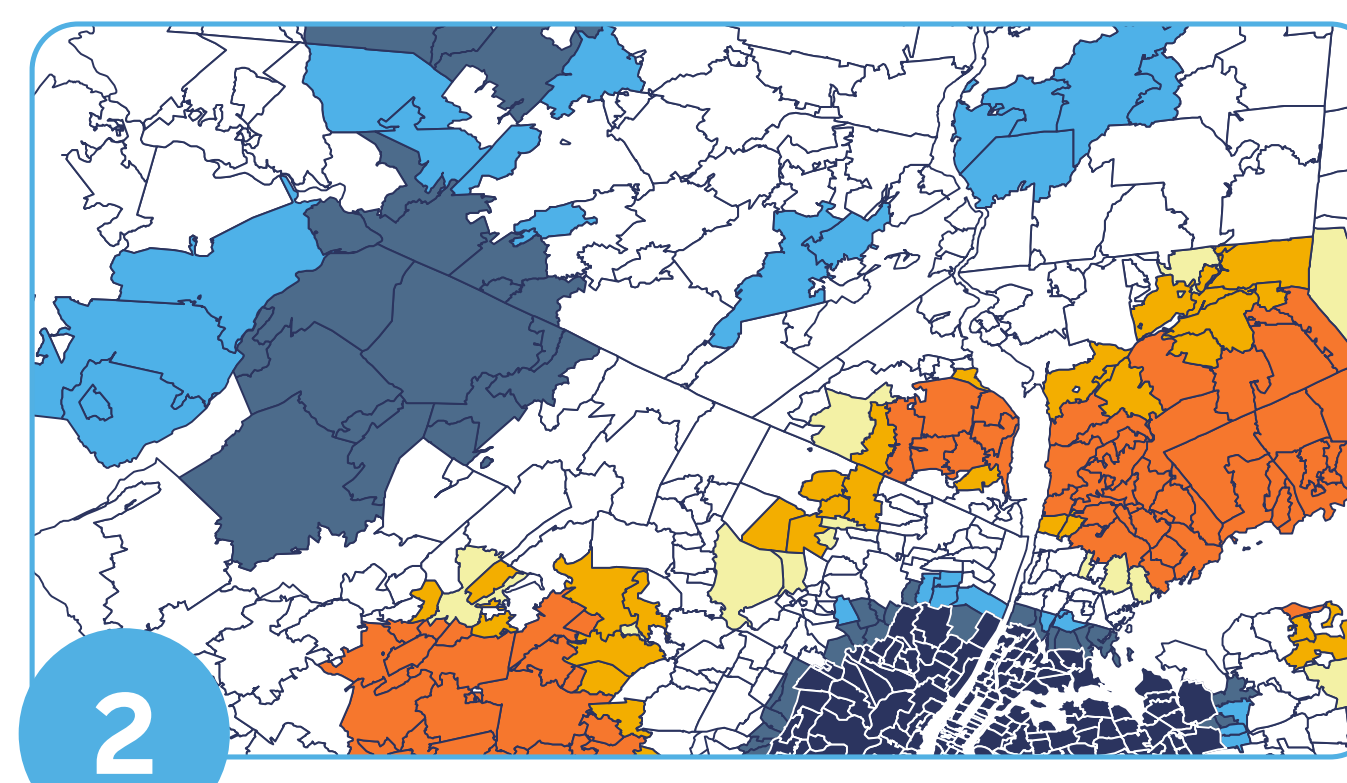
The report first defines the “peer effect” and its role in the uptake of clean energy solutions, including rooftop solar panels and EVs. It then provides background information on EV trends nationwide, summarizing existing data on EV sales and demographics and addressing common barriers to EV adoption, including among low-income consumers and communities of color. This is followed by a first-of-its-kind Generation180 study to understand the impact that peer influence has on EV adoption across the U.S.

Three key data sources are used to help understand this phenomenon:



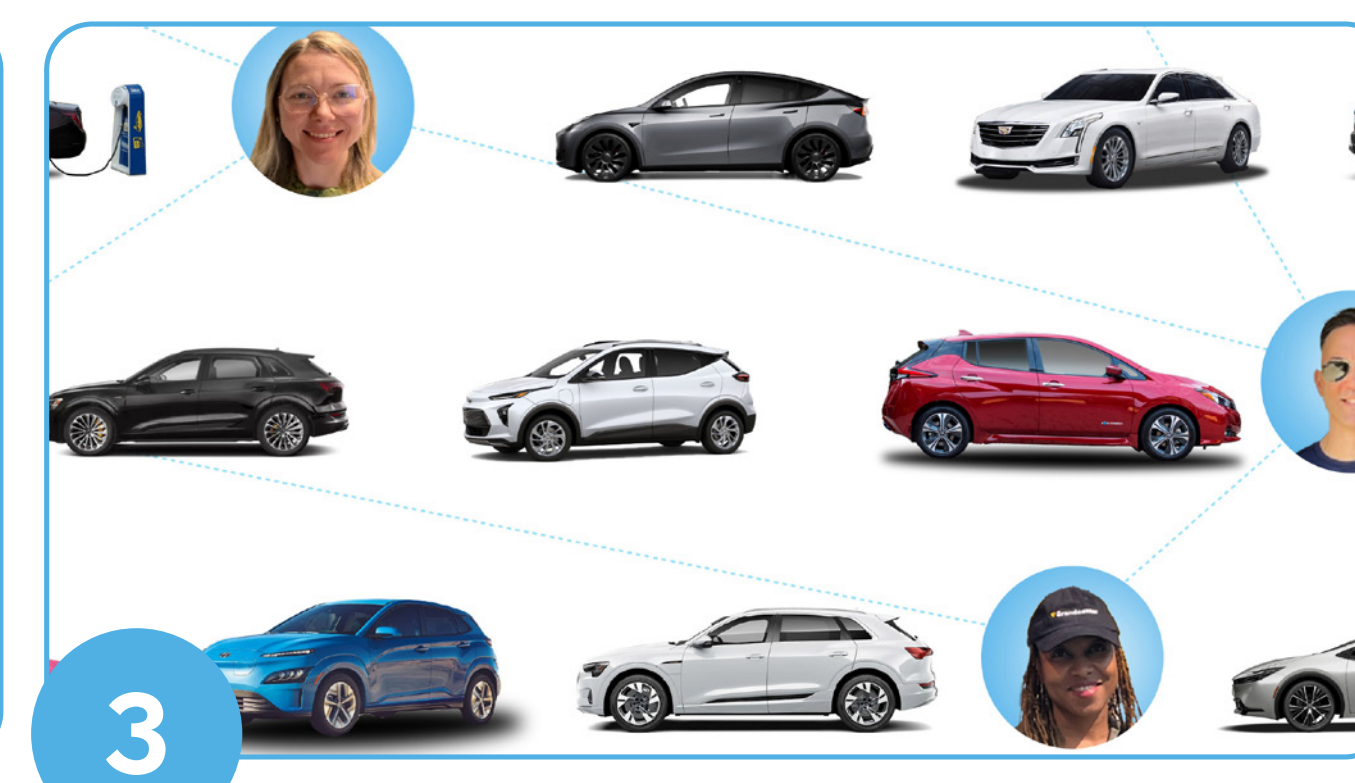
Five years of S&P EV registration data.

S&P Global Mobility supplied data on new vehicle retail registration and EV retail registration data by ZIP code in 11 “designated market areas” (DMAs) from 2018 to 2022.



A commissioned Generation180 analysis of the neighborhood effect on EV adoption in specific U.S. markets.

Analysis of EV registration data at the ZIP code level indicates the potential presence of the peer (or “neighborhood”) effect. EV registration data was analyzed by the National Renewable Energy Laboratory (NREL) using geospatial hot spot analysis to identify clusters of ZIP codes that are experiencing high EV registration per capita. These results are featured in maps that correspond to each of the 11 DMAs for the years 2018 and 2022.



Stories from individual peer influencers who have played a role in accelerating EV adoption in their communities.

Generation180 worked with its nationwide network of EV owners to obtain first-hand accounts of their role in inspiring their peers to adopt EVs. These and other stories are profiled throughout the report. Interviews with EV owners indicate a strong likelihood of an individual’s ability to inspire others within a peer group to transition to an EV.

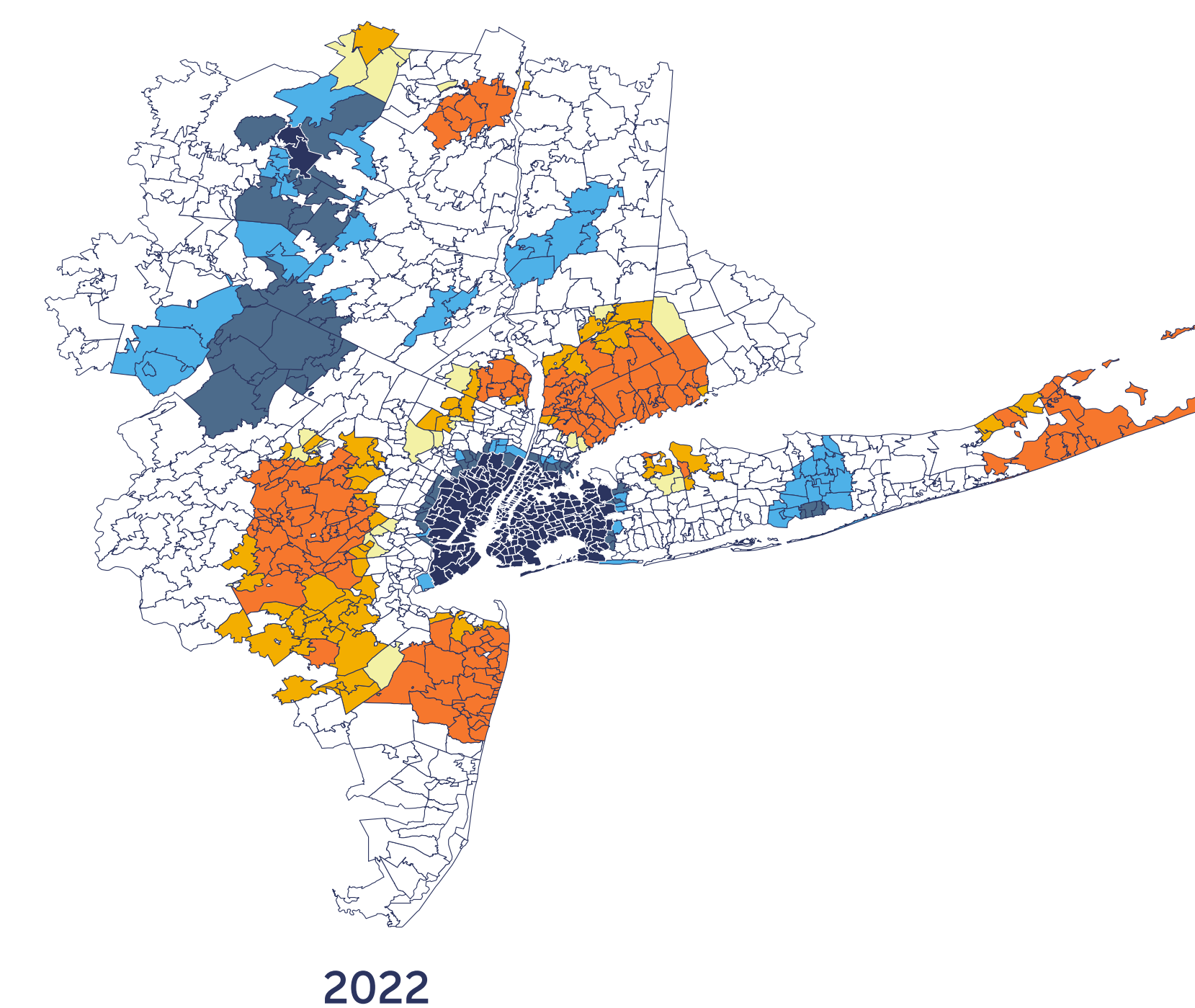
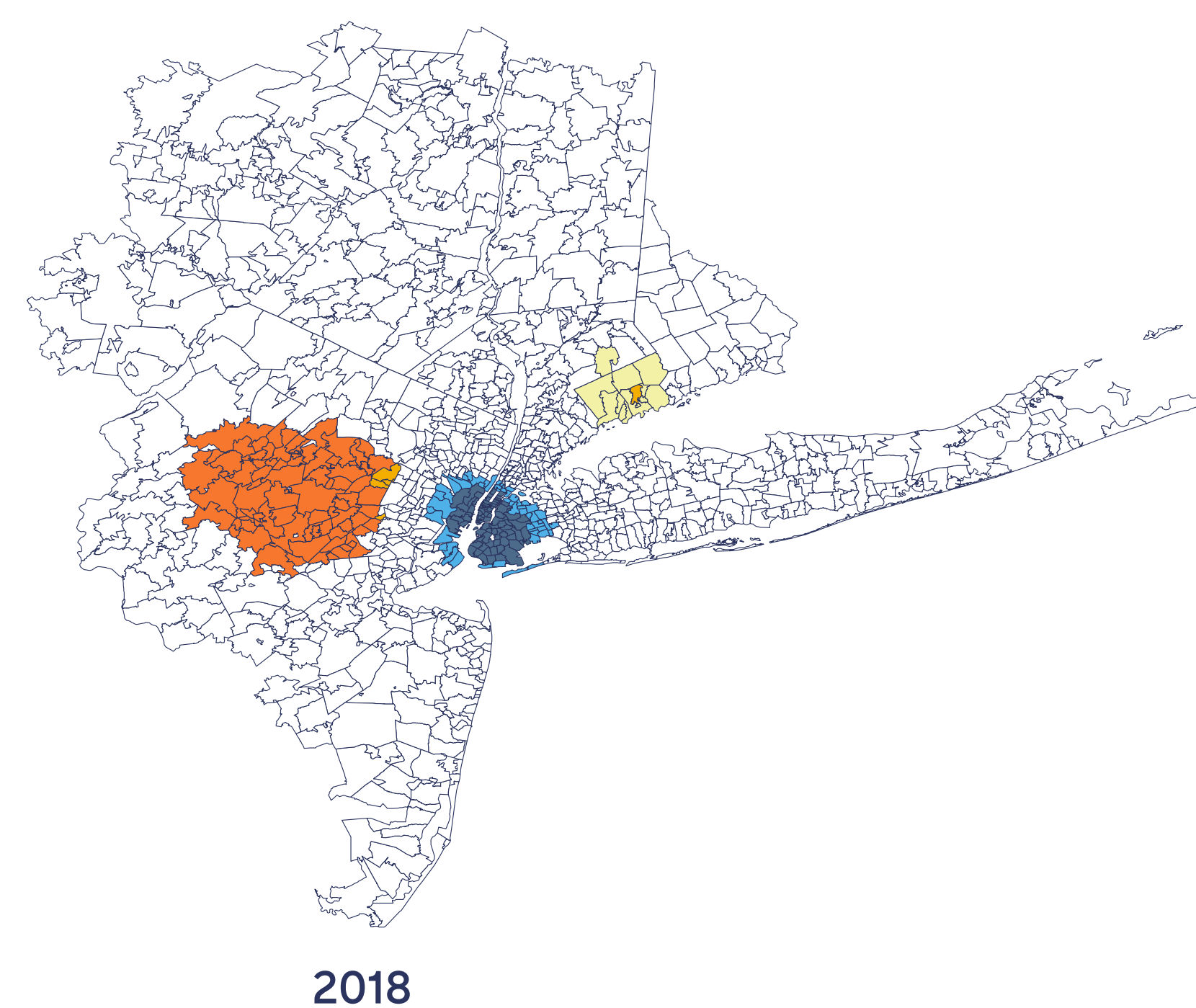
Hot Spot Analysis

The goal of this report is to demonstrate – through both analyses of new vehicle registration data and case studies of actual EV owners – that individuals and their influence on peers play a significant role in the wider adoption of electric vehicles. The analysis leverages “hot spot” analysis to indicate changes in EV registrations from 2018 to 2022. This is the first time that this type of cluster analysis has been conducted broadly across key U.S. markets to identify ZIP codes experiencing high EV retail registration per capita, while accounting for the neighborhood effect.

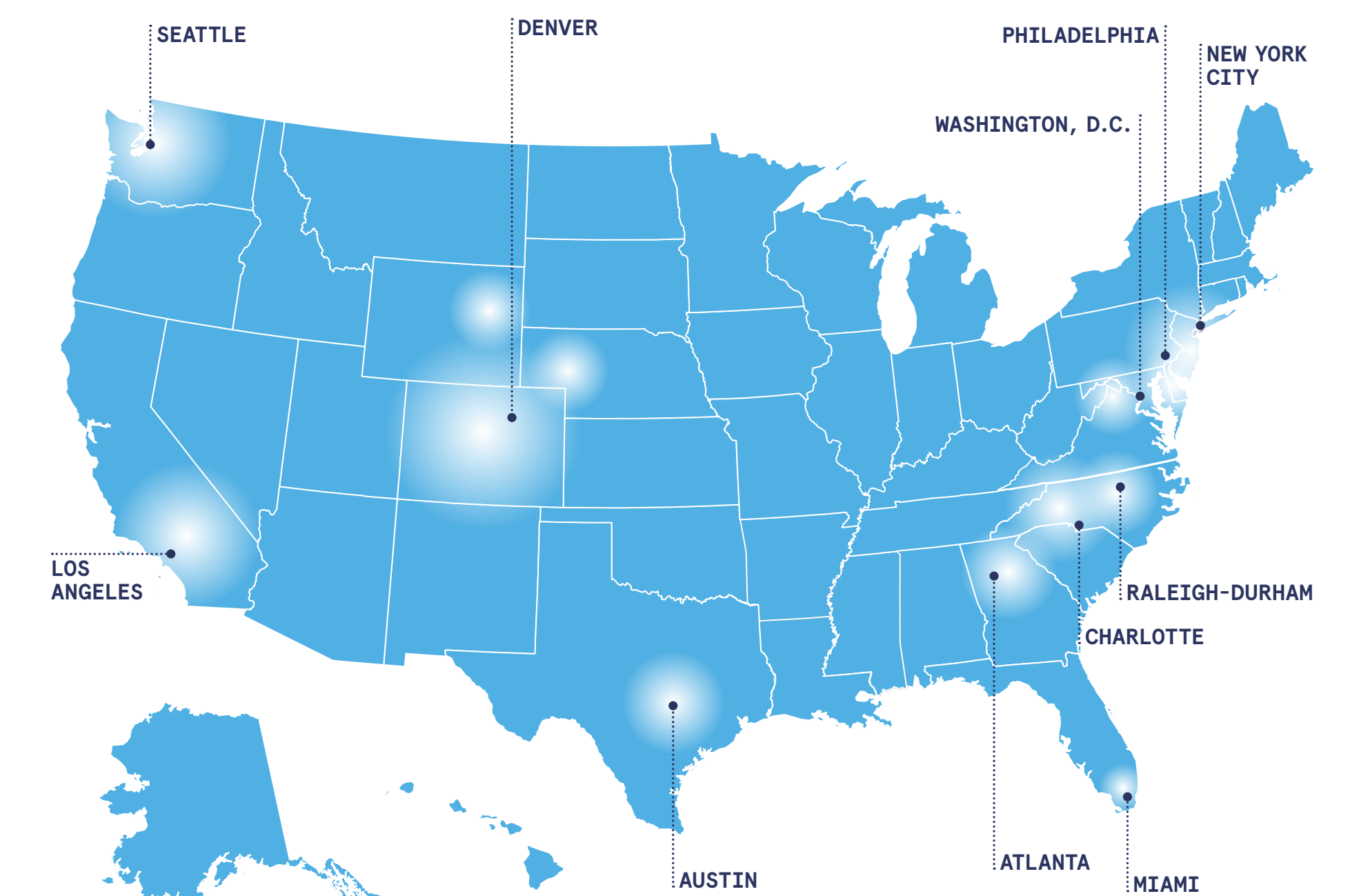
The analysis of new retail electric vehicle registrations over a five-year period (2018-2022) allows us to identify which ZIP codes in each DMA have the highest share of adoption. The “hot spot” analysis highlights a clustering of concentrated EV adoption in each DMA, indicating the neighborhood effect.

New York City provides a strong example of neighborhood effect at work.

- Hot Spot 99% Confidence
- Hot Spot 95% Confidence
- Hot Spot 90% Confidence
- Not Significant
- Cold Spot 90% Confidence
- Cold Spot 95% Confidence
- Cold Spot 99% Confidence



Designated Market Areas from Across the U.S. selected for the study



Percentage growth in EV retail registrations from 2018-2022 in the 11 selected DMAs (and US overall)

	2018	2019	2020	2021	2022	EV SHARE PERCENTAGE CHANGE 2018-2022
ATLANTA	1.5%	1.4%	1.7%	3.2%	5.8%	295%
AUSTIN	1.8%	2.4%	2.4%	4.6%	8.4%	377%
CHARLOTTE	0.8%	1.0%	1.2%	2.5%	4.4%	476%
DENVER	2.7%	3.4%	4.0%	5.9%	9.4%	253%
LOS ANGELES	3.9%	4.8%	6.0%	10.1%	17.7%	357%
MIAMI	1.0%	1.4%	1.9%	3.7%	6.5%	571%
NEW YORK CITY	1.0%	1.2%	2.2%	3.6%	5.9%	479%
PHILADELPHIA	1.0%	1.1%	1.8%	3.0%	5.2%	426%
RALEIGH-DURHAM	1.3%	1.5%	1.7%	3.2%	5.5%	316%
SEATTLE	4.2%	5.0%	5.7%	8.4%	13.7%	226%
WASHINGTON, D.C.	2.0%	2.4%	2.7%	4.9%	8.3%	319%
UNITED STATES	1.4%	1.7%	2.0%	3.6%	6.2%	328%