Title: Optimizing New Dealer Partnership
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Edmunds helps customers across the country purchase their dream car for a fair price. By looking at Edmunds'
customer data, we seek to provide a unique insight to make car shopping easier.

Edmunds currently partners with approximately 50% of car dealerships nationwide. The distance that a customer would
have to travel to purchase a car is likely a factor in their decision to purchase. Therefore, we focused our investigation
more narrowly into the following question: If Edmunds wants to make car-shopping easier for its customers and
maximize its return on partnership investment, where should Edmunds partner with new dealerships?

To answer this question, we developed an algorithm incorporating many diverse factors involved in this decision
making process. We began by creating a proprietary index, the Customer Quality Index (CQI). The CQI represents the
quality of any given customer, weighting customer attributes and observables including customer age, income, credit,
time spent on Edmunds' website, and time spent analyzing and comparing cars among others. For each zip code, we
calculated the average CQI, average distance travelled to follow up leads, and linked the population density based on
U.S. census data. Our algorithm mapped each zip code to a Dealership Impact Score (DIS), which measures the
marginal benefit to ease of car shopping for partnering with an additional dealership in that zip code. Ranking zip codes
by DIS determines the optimal places for new dealership partners, as displayed in spatial map below.
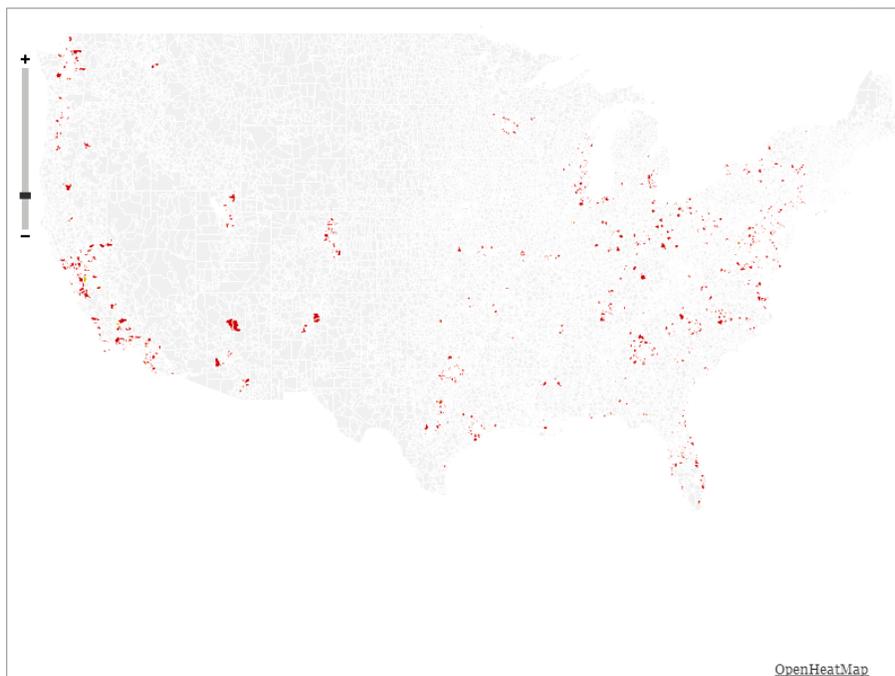
We find select locations across the U.S. in which there are high numbers of High-Quality customers forced to travel large distances to purchase their desired cars. Using our analysis, Edmunds can efficiently determine ideal locations to expand their dealership partnerships. Reducing customers' car-purchasing hurdles leads to increased sales. Partnering with dealerships in locations with highly-hindered, high quality customers can reduce the drag from the last hurdle: going to the buy the car. Lawrence, MA, Lakeworth, FL, and Madison, WI are three locations among hundreds our algorithm indicates would have the highest benefit of an additional dealership partner. Following the roadmap provided by our ranking analysis, Edmunds can make car shopping easier for the most people while getting the highest revenue return on their investment.