

Where does the traffic go?

On Friday, January 11, 2019, the City of Seattle began the process of dismantling the elevated Alaskan Way Viaduct, which had long separated much of the city’s downtown from its waterfront. Yet the tunnel slated to replace it wouldn’t open until February 4th. What happened in the meanwhile to the 90,000 vehicles the highway carried each day?

The traffic simply disappeared. Commute times were slightly above average, but nowhere near the catastrophe predicted. City data showed a modest uptick in walking, biking, and transit rides, but not nearly enough to account for all 90,000 vehicles. It appeared that the traffic of the Alaskan Way Viaduct had followed the example set by other highway removal precedents, like the Embarcadero and Central Freeways in San Francisco, each of which carried 90,000-100,000 vehicles per day before their demolition. In all three cases, the predicted ‘carmageddon’ failed to manifest.

The power of the street network

Because limited-access highways attract motorists (a phenomenon known to economists as induced demand), the street networks next to them are typically underutilized and have excess capacity, even if they follow the same route as the highway. This means they are particularly well-suited to absorb traffic from a closed highway. A robust street network offers several different routes to reach the same destination, thus dispersing traffic across its grid, rather than concentrating it like a highway. Supplemented by a well-designed urban boulevard, which can often handle a capacity of 40,000-50,000 vehicles daily, street networks are more than capable of managing a highway’s former traffic with negligible differences in travel times, often no longer than a couple of minutes.

Additional opportunities exist to reduce the number of vehicles on the road and further alleviate traffic congestion once a limited-access highway is removed. The



The Embarcadero, the boulevard that replaced the Embarcadero Freeway in San Francisco

streets and/or boulevard replacing the highway can provide an alternative to automobile travel in the form of public transportation, connected to a transit network serving the region. The removal of a highway is a divestment from expensive automobile infrastructure. It presents a chance to capture and convert trips taken by private automobile into ridership for public transit, which lessens the need to design a street with excessive traffic lanes. Furthermore, the new street or boulevard can incorporate relatively inexpensive forms of public transportation into its design, such as bus rapid transit with dedicated lanes. Many of the communities around highway corridors lack effective public transit; highway removal is an opportunity to remedy this.

For more resources on the effects of highway removal on traffic, visit cnu.org/our-projects/highways-boulevards/resources.