What did we learn from Viadoom?

The closure of the Alaskan Way Viaduct was hyped as a potential traffic disaster that Seattle would have to endure for three weeks. Instead we saw more people on transit and bikes, and a blessedly quiet downtown. The twenty buses Metro added turned out to be much nicer than the 90,000 cars that formerly streamed across our waterfront and up Aurora Ave.

We could take this all as a pleasant surprise, and not look back. But that would mean missing critical insights about what our policy-makers often fail to consider. Viadoom turned out to be a wildly successful experiment in how to reduce emissions, improve mobility, and better our quality of life. Understanding why Viadoom didn't happen can help us make future transportation policy decisions with equally happy results.

Let's start with the facts:

1. Ninety thousand cars “disappeared”¹. Those disappearing cars represent real people who chose to change their behavior— not just for a couple of days, but for the full duration of the viaduct closure.

2. Overall traffic volumes throughout the region fell 1-6%². The regional reduction suggests that reductions in traffic volumes downtown adjacent to the viaduct were even more significant.

3. News outlets reported that area freeway travel³ was not substantially delayed. While more analysis is needed, this is consistent with overall reductions in regional traffic.

4. More people appear to have taken buses⁴ (although Metro has not yet released the numbers). This was facilitated in part by temporary bus lanes, additional bus service, and extra water-taxi service from West Seattle, where use tripled⁵.

5. While more information is needed, given the reduction in overall and downtown vehicle volumes, it is likely that bus delays remained relatively stable or may even have improved on certain routes (e.g. southbound on Aurora).


⁵ [https://www.seattlemet.com/articles/2019/1/25/rides-on-king-county-water-taxi-tripled-last-week](https://www.seattlemet.com/articles/2019/1/25/rides-on-king-county-water-taxi-tripled-last-week)
6. More people rode their bikes to work, with bike counts nearly doubling across the Spokane Street Bridge\(^6\) and increasing by 32% across the Fremont Bridge\(^7\). Other popular walking and biking routes were anecdotally busier, but are not currently counted by SDOT.

7. WSDOT predicts traffic will increase when the tunnel is opened.\(^8\)

**Why were WSDOT’s predictions of Viadoom\(^9\) so far off?**

Mostly, it was the unjustified belief that the number of cars using our roadways is fixed, and that we must have sufficient lanes to accommodate those cars (not to mention adding lanes to accommodate predicted increases in the number of cars). The viaduct closure proved that the number of cars using the system is variable. Regional traffic volumes went down, and ninety thousand cars disappeared, because people have the capacity to make choices about if or when to take trips and what mode to use. People are more flexible in their choices than WSDOT assumed. Not every person in every circumstance, but enough people in enough circumstances to make a visible difference.

Viadoom demonstrated that people will use the infrastructure that they are provided. Specifically, more highway lanes means more cars on the road and conversely, fewer highway lanes means fewer cars. The same phenomenon is true for other modes. System-wide improvements to transit\(^10\) and biking\(^11\) infrastructure lead directly to more transit use and biking... and less car traffic.

Viadoom also demonstrated that lanes can be removed without appreciable increases in congestion. Indeed, reducing the overall amount of highway capacity into downtown can reduce the load on the downtown street grid. That can ease mobility for all users, whether driving, using transit, biking, walking or rolling. As the advocacy group Rooted in Rights demonstrated, blocking the box downtown has particularly negative effects for people with

\(^6\) [https://www.seattle.gov/transportation/projects-and-programs/programs/bike-program/bike-counters/spokane-bike-counters](https://www.seattle.gov/transportation/projects-and-programs/programs/bike-program/bike-counters/spokane-bike-counters)

\(^7\) [https://www.seattle.gov/transportation/projects-and-programs/programs/bike-program/bike-counters/fremont-bike-counters](https://www.seattle.gov/transportation/projects-and-programs/programs/bike-program/bike-counters/fremont-bike-counters)


\(^10\) [https://usa.streetsblog.org/2018/03/23/only-a-few-american-cities-are-growing-transit-ridership-heres-what-theyre-doing-right/](https://usa.streetsblog.org/2018/03/23/only-a-few-american-cities-are-growing-transit-ridership-heres-what-theyre-doing-right/)

disabilities. The more we can stop overwhelming downtown with cars delivered by freeways, the more we’ll open transportation options for people of all ages and abilities.

All of this well known to transportation experts. This includes the concept of “induced demand”: the idea that increasing the supply of something (like car traffic lanes) increases consumption, and the converse, that decreasing supply makes people more likely to choose other options. Seattle was just given a real-time demonstration of this principle of traffic, as have many other cities that have experienced highway closures or simply removed major highways. When elected leaders fail to acknowledge this principle, they waste money on freeway expansion, limit funding for other modes, and frustrate our ability to meet climate goals.

What does this mean for future transportation policy?

First and most important, Viadoom just gave us the blueprint on how to reduce climate emissions from transportation. Right now, emissions from transportation account for more than half of Seattle’s greenhouse gas emissions, and those emissions are growing. Although Seattle’s transit use has grown dramatically, overall traffic volumes have been increasing over the last few years. With this highway shutdown, we saw a real reduction in regional traffic, which translates into a real reduction in greenhouse gas emissions. And, as discussed above, people adjusted. Expanding transit, biking, walking and rolling infrastructure while reducing the number of traffic lanes is not only necessary, but also viable.

But the major lesson of Viadoom is that we should not fear making dramatic changes. People are flexible and will use the infrastructure provided, even on short notice. Seattle should not hesitate to implement bus lanes, even at the expense of parking or travel lanes. Similarly, the dramatic boost in biking demonstrates that there is a demand for this alternative that will only grow if we provide safe, comfortable infrastructure. Imagine how many people we could get to work efficiently if downtown commuters all knew they had fast, dedicated bus lanes and safe and complete bike routes to work. Viadoom showed us that—if policy-makers can muster the will to lead us there—we can have cleaner air, quieter and more pleasant streets, a safe climate, and also all get where we are going.

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12 https://rootedinrights.org/video/dontblockthebox/


14 Speck, Jeff. *Walkable City*, Ch 8. (includes studies and examples of both sides of induced demand — adding road infrastructure increases congestion, but removing it does not.)