



**BIKE LOUD PDX**  
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Date: 12/20/2016  
To: Mayor Hales, Commissioner Novick, Commissioner Fritz, Commissioner Fish, Commissioner Saltzman, Mayor-Elect Wheeler, Commissioner-Elect Eudaly  
Re: High-Crash Corridors and Snowpocalypse 2016: Portland traffic safety, congestion, and disaster preparedness  
From: BikeLoudPDX

Dear City Council Members (current and incoming),

The events of Wednesday, December 14th (colloquially known as “Snowpocalypse 2016”) revealed an intriguing lesson in transportation planning: in times of trouble, the people of the Portland region instinctively get in their personal vehicles and attempt to drive home or to places of safety. Under normal road and psychological conditions, the action of everyone getting in their vehicles and attempting to drive home at the same time creates the congestion phenomenon known as “rush hour.” When you add in poor road conditions, blocked roadways, and a panicked/unprepared public, you get complete and utter gridlock, to a point where on December 14th, some people felt obligated to abandon their vehicles and walk because that had become the most efficient and practical means of transportation, even in sub-freezing temperatures.

This behavior creates three issues. The first is that, as we saw on during the Snowpocalypse, personal vehicles are a horribly inefficient means of evacuation. Besides the inconvenience of a 6+ hour trip just to leave city limits, we saw that extreme congestion and the resulting lengthy travel times also put people at substantial risk of dehydration and exhaustion from being trapped in a vehicle for an extended period unprepared. When citizens attempt to abandon their vehicle and walk (due to frustration or due to an empty gas tank), they are put at risk of exposure and further exhaustion. This last-ditch effort is not even an option for vulnerable citizens who are not physically able to forgo their vehicles and walk (the elderly, the handicapped, the very young, etc) or have medical needs (those with compromised immune systems, etc), thus trapping them in their vehicles if they attempt to drive, or at their point of origin if they do not. Over-reliance on personal vehicles also puts at risk those who are ill-equipped for unusual circumstances; it turns out that not all Portland citizens are fully prepared with cars with full gas tanks, snow tires or chains, all-wheel drives, an emergency stock of water and food, winter-weather jackets and other gear, nor are they all fully experienced in driving in sub-optimal conditions. Our transportation network is already buckling under normal rush hour demand; we certainly cannot expect to move any substantial portion of the populace by private vehicle during a natural or man-made disaster.

The second issue is that the congestion caused by personal vehicles prevented the movement of higher-capacity and better-prepared public buses. TriMet’s buses were on the whole better prepared for the poor

road conditions than the average personal vehicle, and (as always) were able to transport a larger number of people per foot of roadway than personal vehicles. However in Snowpocalypse 2016 the buses proved extremely ineffective at transporting people because they were stuck in the exact same congestion as the personal vehicles. School buses found themselves in the same situation, resulting in thousands of school children stuck on the roadways late into the night. If we as a city found ourselves in a situation where we needed to move as many people as possible (and reunite children with their families) in response to a disaster, even if we had the bus capacity to do so, they would prove useless when stuck on the same congested roadway as personal vehicles.

The third issue raised by Snowpocalypse 2016 is why we are writing you today. Along with the transportation of regular citizens, the transportation of emergency vehicles and critical personnel was also at a near-standstill due to extreme congestion. Ambulances, police, fire and rescue, snow plows, utility crews, tow trucks, all of the vehicles necessary for ensuring safety and calm in times of trouble were stuck in the same roadways-turned-parking lots as private vehicles. No matter how loudly they crank up their sirens, if there is nowhere for drivers to pull over, emergency vehicles are not going to get through. This is a reality during normal rush hour as well, however in the case of a disaster, there are sure to be significantly more calls that emergency services need to take, and more bottlenecks due to road blockages or bridge collapses, therefore ensuring for the free and unimpeded movement of emergency vehicles is imperative. Then there are all the individual doctors, firefighters, police officers, utility workers, and other individuals of critical importance in crisis situations who would be unable to get to their places of work in the case of a transportation network standstill. "All hands on deck" is a meaningless declaration if those hands are unable to get from their homes to work due to extreme congestion.

Meanwhile, we as a city are suffering from a traffic safety crisis. On a regular day, with regular traffic, we are seeing too many crashes, fatalities, and serious injuries. Most of these happen on a small number of streets--our high-crash corridors--most of which feature more than one lane of motor vehicle traffic in a single direction. While especially dangerous to vulnerable road users, these overbuilt streets present a danger to everyone on them as they impair visibility, encourage dangerous passing behaviors and speeding, and promote a "highway style driving" mental state, where drivers surrounded on all sides by other motor vehicles zone out and forget about the presence of other modes of travel (including that the vehicle in front of them may unexpectedly stop to yield to a crossing pedestrian). Roads with more than two standard motor vehicle lanes in one direction also create the "driver in one lane stops, but the driver in the neighboring lane doesn't" scenario that has claimed many pedestrian lives on our streets.

While these wide, multi-lane roads are a curse for road safety, they are an incredible boon for disaster preparedness and everyday congestion relief. We as a city urgently need to redesign streets that have more than one lane of traffic in a single direction (including couplets and one-way streets in the Central City) so as to permanently designate the excess lanes either as bus-only lanes or wide buffered/protected bike lanes. In normal situations, these repurposed lanes will allow for modes of transportation that accommodate more people per foot of roadway space than single-occupancy vehicles (i.e. public transportation and bicycles) to move faster and more efficiently, thereby providing the roads with greater overall capacity. In times of natural or man-made disaster, emergency and other critical vehicles can utilize these bus and wide bike lanes to travel through the city relatively unimpeded, even in times of otherwise extreme congestion.

By utilizing this lane reallocation technique, we can accomplish many goals at once:

- We can improve the overall safety on our streets and be better prepared to achieve our Vision Zero by 2025 goal.
- We can alleviate congestion and better accommodate future growth by supporting higher-capacity modes of travel such as public transportation and bicycling.
- We can get closer to achieving our “25/25/25/25: cycling/single-occupancy-vehicle/public transit/other” mode split by 2035 goal, as outlined in the Comprehensive Plan.
- We can begin laying the framework for a more equitable society by supporting the efficacy of low-cost means of transportation and by improving street safety in historically neglected neighborhoods.
- We can move closer to our Climate Action Goals by incentivizing more sustainable modes of transportation.
- We can become a more physically active and healthier population by encouraging active transportation.
- We can obtain a world-class transportation network ready to quickly and efficiently move citizens and first-responders in the case of a man-made/natural disaster or other emergency.

The truth is that we as a city have not needed to overcome a major disaster since the days when our population--and our congestion--were but a fraction of what they are today. We barely have the transportation network needed to support day-to-day travel needs; mere inches of gradually-falling snow that we were warned about days in advance literally shut down our transportation network and crippled our emergency services. What will happen in the case of a worse disaster that strikes without warning, such as an earthquake or terrorist attack?

Let's solve our immediate congestion and road-safety crises, prepare for the inevitable population increases and climate change that are coming, and ready ourselves against unexpected disasters. All it would take is roadway allocation on our arterial roads away from inefficient and dangerous private vehicle use, and toward more efficient and safer modes of travel. This is literally the cheapest and most practical disaster preparedness method we have at our disposal, would solve many of our day-to-day transportation woes, and could be accomplished quickly with sufficient political backing. Will you be that political backing?

Sincerely,

Jessica Engelman, Emily Guise, and Ted Buehler  
BikeLoudPDX Co-Chairs