From: Christopher Eykamp [mailto:chris@eykamp.com]

Sent: Tuesday, September 26, 2017 5:27 PM

To: Planning and Sustainability Commission <psc@portlandoregon.gov>

Subject: TSP Comments

I am concerned about PBOT's proposal in the TSP to designate SE 21st from Division to Powell as a Secondary Emergency Route, and the impact such a designation will have on existing speed bumps and the funded SE 21st Avenue Bikeway Project [TSP 70081].

Bumps v. Cushions

I have spoken with two engineers at PBOT, who have told me that speed cushions are not as effective as speed bumps at slowing vehicles, especially at lower speeds. The reason is simple. A speed cushion is simply a speed bump with ruts that permit a fire truck to pass unimpeded, but these ruts work just as well for other large vehicles such as tow trucks and garbage trucks, and auto drivers are able to position their vehicle such that one pair of wheels passes through the rut, reducing the cushion's slowing power. Furthermore, depending on its geometry, drivers may be tempted to leave their lane to minimize the impact of the device, becoming focused on positioning themselves to minimize slowing rather than other aspects of safe driving.

The Portland Comprehensive Plan Policy 9.40 calls for "a network of accessible emergency response streets to facilitate safe and expedient emergency response and evacuation... without negatively impacting traffic calming and other measures intended to reduce crashes and improve safety."

However, TSP Policy 6.10 (which lays out Emergency Response classifications) requires speed bumps to be replaced with speed cushions on Emergency Response Routes (allowing PBOT no discretion): "Existing speed bumps on Secondary Emergency Response Streets may remain temporarily, and shall be replaced with speed cushions when streets are repaved or undergo other major modifications." Because of the problems associated with speed cushions, this requirement would have a clear negative impact on traffic calming measures, and therefore conflicts with the Comp Plan.

One way to make 6.10 compatible with the Comp Plan is to use the same language:

"Existing speed bumps on Secondary Emergency Response Streets may be replaced with speed cushions when streets are repaved or undergo other major modifications where doing so would not negatively impact traffic calming and other measures intended to reduce crashes and improve safety."

SE 21st Avenue Bikeway Project

SE 21st has high traffic volumes, and a large number of cyclists (nearly 15% according to recent counts). The number of cyclists is expected to jump when bike lanes are removed from SE 26th. The SE 21st Avenue Bikeway Project is needed, but it will be complex: there are many factors restricting the ability to add bike lanes, so it is likely motorists and cyclists will have to

continue to use a shared space, and given the traffic volumes in question, and the large number of trucks, speed cushions might not be up to the task.

SE 21st is only rarely used as an emergency response route, and the question of replacing the existing speed bumps with speed cushions is still decades in the future. It would make sense to delay applying the Secondary Emergency Response designation until the next TSP process. That would allow PBOT and the neighborhood to consider a wider range of solutions when designing the bikeway project. If, in 10 years, it still made sense to make 21st an emergency route, it could be done then, and nothing would be lost.

Summary

In conclusion, I would ask that you:

* Make TSP 6.10 compatible with the Comp Plan by changing:

"Existing speed bumps on Secondary Emergency Response Streets may remain temporarily, and shall be replaced with speed cushions when streets are repaved or undergo other major modifications."

to

"Existing speed bumps on Secondary Emergency Response Streets may be replaced with speed cushions when streets are repaved or undergo other major modifications where doing so would not negatively impact traffic calming and other measures intended to reduce crashes and improve safety."

If that is unworkable, please at least replace the word "shall" in the existing language with "may" would give PBOT some discretion when deciding what traffic calming devices are appropriate for a given section of street.

- * Change "Speed cushions should be designed to achieve a similar level of traffic speed reduction as speed bumps." to "Speed cushions shall be required to achieve an equivalent level of traffic speed reduction as speed bumps." in TSP 6.10.
- * Remove or delay the Secondary Emergency Response Route designation from SE 21st until after the SE 21st Avenue Bikeway Project has been implemented.

Thank you for your consideration,

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