

September 2020 BAC Meeting (9/8/20)

Questions from BAC members in advance of the meeting.

Hawthorne Pave and Paint

1. In section 3, under Auto Impacts, there is a statement that “[b]ecause Hawthorne Blvd is a District Collector, this level of diversion onto lower-classified streets would be concerning since it does not align with City policy.” Given this priority on moving people, regardless of mode, why are we continuing to reserve space for storage of private vehicles?
 - a. Was there any analysis performed about the impact of charging for parking in and around Hawthorne?
 - b. If so, what was the impact on travel time and vehicle volumes?

Removing parking does not really have any effect on the level of traffic delay or traffic diversion. The parking is very often framed by curb extensions, and our pinch points are the roughly 40 feet available from one curb extension to the other. Furthermore, nearly all the traffic delay is due to the reduction in capacity at the Cesar Chavez intersection. That’s the critical point where modeling shows complete failure if we continue separated bike lanes through the intersection, causing cascading effects and extremely long queues resulting in the delay we talk about in the report. There is no parking already at Cesar Chavez approaches, so removing parking would not help or hurt the traffic or transit delay we talk about.

Hawthorne is also classified as a Civic Main Street in addition to being a District Collector. The Main Street classification says that access-oriented curb zone uses such as parking, loading, street seats, bike corrals, etc are very important and should be considered high priorities in addition to moving people. So there’s a reason we consider parking and other curb zone uses to be important in this evaluation—because that’s one of the things that our adopted city policies in the Comp Plan and TSP say is important. As we’ve seen in recent months, using the curb zone for outdoor seating can be an especially important use on a busy main street with a lot of restaurants.

2. Throughout the report Alternative 3 scores poorly on equity due to congestion that would delay transit, and likewise Alternatives 1 and 2 are preferred due to the ability to make left turns while allowing at least one lane of travel to continue moving. Why is there no option or analysis of restricting left turns? This would not be unprecedented as evidenced by W Burnside through Downtown and would appear to alleviate the negative travel impacts of those movements.

Perhaps this wasn’t clear in the report, but the issue of left turns is relatively minor and doesn’t factor into the traffic analysis in significant way compared to the reduction in capacity at Cesar Chavez. We mention that having left turning vehicles not block through traffic would surely help with bus *reliability*, but it’s not the cause of the very high increase in travel time predicted by the traffic analysis. There just aren’t enough people turning left onto local streets to make that much of a difference.

We also already restrict left turns at most traffic signals along Hawthorne, and at some point people need to access the neighborhoods on either side, so we keep them open at unsignalized intersections. Forcing people to take three right turns to make a left can work well in the dense

grid downtown, but much of the Hawthorne area does not have that kind of a network (some blocks are long and streets are sometimes disconnected), and people would be circling through residential areas very unlike the downtown environment. Overall, restricting all left turns from Hawthorne would offer little benefit, but would have high neighborhood impacts.

3. On page 16 there is reference to Hawthorne Modal Priorities based on TSP Classification prioritizing Pedestrians, Transit, and Emergency Response on one level while placing Bicycling, Freight, and Traffic on a second tier. There is no corresponding reference to the Transportation Hierarchy enshrined in the TSP and Comprehensive Plan (Policy 9.6), and Climate Action Plan (page 86, https://www.portland.gov/sites/default/files/2019-07/cap-2015_june30-2015_web_0.pdf) which very clearly prioritizes pedestrians, then bicycles, then transit, followed by high capacity or electric vehicles, shared vehicles, and finally single occupant vehicles. There seems to be an incongruity between these pictures and the way all of the analysis is framed. Why is “Traffic” being placed on an even or elevated footing compared to bicycling?

The Strategy for People Movement (purposely *not* called a hierarchy to try to avoid this kind of interpretation) is a broad, citywide strategy that says at a *citywide* level we should prioritize some modes above others. It was never intended to apply to each and every street and did not replace our system of street classifications for each mode in the TSP, which is our guide to how to consider modal priorities on a specific street or corridor. When it comes to Hawthorne, the TSP is pretty clear about these modal priorities. It is “Major” for walking, transit, and emergency response. It has lower classifications (they have different names, but they’re all somewhere in between “Local” and “Major”) for biking, freight, and traffic. In addition to the modal classifications, it has the “highest” street design classification of Civic Main Street, which emphasizes curb zone uses to support main street businesses.

It’s worth noting that the Major Transit Priority Street classification description says: “Carefully consider any street design changes to Major Transit Priority Streets that impact travel time in light of the potential costs and benefits to transit riders, while also taking into account other adopted goals and policies.” That’s what we’re doing when we highlight the impact to transit travel time with Alternative 3, we are being careful in how we consider these changes.

Also worth noting is that the City Bikeway classification explicitly says that we should consider the “essential movement of all modes” before removing lanes for bike lanes, pointing to the need to account for major impacts to other modes such as transit, and it says that “where improvements to the bicycling environment are needed but the ability to reallocate road space is limited, consider alternative approaches that include property acquisition, or dedication, parallel routes and/or less desirable facilities.” So under our adopted policy, if space is limited and there are high trade-offs, potential options to meet our City Bikeway classification include relying on parallel bikeways (such as Salmon or Lincoln) or accepting less desirable facilities such as buffered bike lanes and mixing zones.

4. How many storefronts are on Hawthorne compared to the two greenways on Salmon/Taylor and Harrison Lincoln? A common feature of Portland’s bicycle network is a dearth of destinations. Business districts are routinely avoided in favor of “alternative” routes that are less direct and don’t actually get the user to a final destination.

This is a question of access versus mobility. Salmon/Taylor and Lincoln/Harrison are primarily used for longer-distance “mobility” portions of a journey. Bike lanes on Hawthorne or another main street would be mainly a “last-mile” or “access” portion of a trip, to access a specific destination. However, Hawthorne is fortunate to have an extremely dense network of north-south streets intersecting with it, so some access can be provided by using any local street (or designated neighborhood greenways) to get to Hawthorne. Moreover, we typically expect anyone trying to access a main street, whether by car, bus, or bike, to walk the last block or two from wherever they park their car or bike, or where they get off the bus. With good connecting routes and abundant bike parking, it would still be possible to access destinations on Hawthorne even without bike lanes on Hawthorne itself. That said, it clearly would be less convenient, and we recognize that.

5. Where were Rose or combined Bike/Bus considered to mitigate congestion impacts on transit? If not, why?

We did look at this and found that due to the curb extensions there is only one location along Hawthorne that appears to be feasible for shared bike/bus lanes, which is approaching Cesar Chavez. However, bus lanes approaching a major intersection like this would typically be a shared bus and right turn lane, in which the bus is permitted to continue through the intersection. This is included in Alternative 2 as a Rose Lane element and provides a fair amount of benefit to the bus. Providing this shared bus and right turn lane is also needed to prevent the severe negative impacts to transit that are likely to occur with Alternative 3.

We could add bikes to these lanes as well, but they would be block-long mixing zones with bikes, buses, and right-turning vehicles sharing the space. We did not include this option because we wanted the initial bike lane alternatives to fully meet our design guidelines, which call for fully separated bike lanes in situations like this. That said, we have installed such mixing zones before, for example on Foster Rd approaching 82nd Ave or on 122nd Ave at several busy intersections. So they are a compromised design and not our preference, but they are a possibility.

6. Why is there no consideration for parking removal anywhere in this evaluation report (aside from some removal for 3b)? What benefits to travel efficiency would complete parking removal create for each of the evaluated alternatives?

Removing parking does not provide any benefit to travel efficiency because of existing curb extensions creating pinch points along the corridor. Without removing curb extensions (which is beyond the scope of this project and would negatively impact pedestrians anyway), there is nothing to be gained by fully removing parking on one or both sides. There would also be negative impacts from losing the flexible curb zone, and it would go against our Civic Main Street policies as well as what we’ve heard from the business community about the need for street seating, freight loading, pick-up/drop-off, and on-street parking.

7. Why are there tradeoffs between transit and bicycles in these alternatives, while auto parking remains?

Because those are the actual trade-offs involved. Removing parking does not help resolve any of the trade-offs we identified.

8. Could you explain why Alternative 1 measures less impactful (according to the summary matrix) than Alternatives 3a or 3b with regards to reducing carbon emissions?

Because Alternative 1 does not negatively impact transit service in the way that Alternative 3 does. It does not meaningfully improve things for climate, but nor does it negatively impact it.

9. Clearly 8 to 16 minutes of delay to TriMet is an unacceptable impact, and yet the parallel bus routes on Belmont on Division run on 2-lanes streets and have similar timings between 50th and 12th. Belmont and Division have lower traffic volumes, and also are used less by drivers as a way to access Cesar Chavez. So from a traffic perspective these are not comparable streets. Our TSP also classifies Hawthorne as a District Collector, whereas Belmont and Division are Neighborhood Collectors. So Hawthorne is meant to serve longer automobile trips according to adopted policy.

- a. Are we assuming that the current vehicular traffic volumes on Hawthorne are fixed, and that we therefore cannot meet the mode share goals of our Comprehensive Plan?

No, we assumed a 25% volume reduction on Hawthorne, based on an optimistic reading of the travel demand model. Even with a 25% reduction in traffic, there is a predicted 8 minutes of added travel time, mainly due to the reduction in capacity at Cesar Chavez.

- b. Alternatives 2 and 3A/3B both have two through lanes. If the lack of center turn lanes in options 3A/B is creating the delay to transit, what options have or can be studied that might allow for bike lanes *and* turn lanes where needed, for instance by selectively removing parking on one side of the street?

The lack of a center turn lane does not have much effect on transit delay. It does have some impact on transit *reliability*, due to random blockage by left turning vehicles, but this is not able to be modeled. The 8 to 16 minutes of delay is primarily due to the reduction of capacity at Cesar Chavez. Removing parking does not have any impact on the transit delay. The place where turn lanes are needed is at Cesar Chavez, where there is already no parking.

10. Slide 9 - Evaluation

- a. Matrix Line: Safety

- i. Alternative 2 - "Does the most to address safety for all users"

1. This does not seem to address cyclist safety at all. Are cyclists not considered users in this alternative?

Most bicyclist crash exposure and crash history on Hawthorne is related by bicyclists crossing Hawthorne, not riding along Hawthorne. So the center turn lane and crossing improvements do improve safety for bicyclists. Center turn lanes also reduce left-turn crashes against bikes and pedestrians traveling along the street.

2. It seems to be misleading to mark this square of the matrix dark green if they are not We do not think this is misleading, because Alternative 2 has high safety benefits for bicyclists. See above.

- ii. Alternative 3 "Addresses safety for cyclists on Hawthorn

1. How does this option put any other user category at risk? *It does not put other users at risk necessarily, but it also does not address existing ped and car crashes in the way that Alternative 2 does.*
 2. What are the other user categories? (Pedestrians, drivers, transit users, freight, cyclists?) *Vision Zero prioritizes reducing/eliminating all crashes for pedestrians and bicyclists, and serious injury and fatal crashes for people in motor vehicles.*
- b. Matrix Line: Travel Time
- i. Alternative 3
 1. Is there any way to have a bus/bike mixing zone at lights where the bus could have a lead light to jump ahead of the vehicle traffic?
We could have bus/bike mixing zones at Cesar Chavez, but they would have to also be shared with right-turning cars. Queue jump signals as you describe are not feasible or beneficial at this location, instead the bus would simply use the right turn lane but continue forward into its own short bus lane at the far side of the intersection to serve a stop. At other signals, there is not enough space for this type of treatment.
- c. Matrix Line: Bike Lanes
- i. Hawthorn has so many shops and restaurants that if the bike lane is only buffered with paint and not with wands/cars/something more substantial it is going to be the Uber drop off lane post pandemic.
This is certainly a valid concern with our design options. We do not have the option with this project to put in a higher level of protection. This is a “pave and paint” improvement.

11. Slide 12 - Improve Traffic Safety - Crashes

- a. Please explain how alternative 3 would only help reduce bicycle crashes? In slide 11 crashes are likely to be moderately benefited, high end speeding would be highly benefited, and pedestrian crossings will be moderately benefited.
Good point, that does seem confusing. There would probably be some crash reduction due to the pedestrian crossings and reduction in high end speeding. We were focused in this slide on the effect of the cross-section itself, using national transportation safety research indicating that center turn lanes by themselves provide crash reduction for all modes and reduces turning movement crashes, whereas bike lanes alone only reduce crashes for bikes and do not address turning crashes.

12. Slide 22 - Equity

- a. Is the sole equity concern for Alternative 3 an increase in transit travel time?
This is the primary concern, yes. There could also be some negative impact to people of color who drive along Hawthorne, but that is not the main concern because we are more focused on improving and promoting transit use for longer-distance trips.

13. How do we achieve our emissions reductions and mode share goals as a city, which we are not on track for, if the current number of cars on the street is used as justification to not implement bike lanes?

We assumed a 25% volume reduction, so it's not true that we used the current number of cars as the justification for the transit delay caused by bike lanes in Alternative 3.

14. Was the traffic volume data on surrounding neighborhood greenways from before or after the recent Lincoln/Harrison upgrades?

They are from after the recent upgrades. There are still volume issues between 26th and 30th, and westbound approaching 30th.

15. How does PBOT plan to increase the capacity of Hawthorne to grow with population growth without adding bike lanes? Options 1 & 2 do not seem to accommodate more people on the corridor than today.

The primary way to increase the capacity of Hawthorne with Alternative 2 would be to increase the frequency, speed, and reliability of transit service, and potentially use longer buses that can fit more people. Parallel bike routes like Salmon/Taylor and Lincoln/Harrison can also accommodate a much higher number of bicycles than they do today.

Questions and comments from BAC members and attendees during and following the meeting.

1. The parking lane should be usable for a floating bus stop i.e. like the snap-together ones. Most of the bus stops on Hawthorne are already curb extension stops from the previous streetscape project, but there are a few locations that are pull-outs where we can consider new platforms.
2. How do bike lanes increase transit time?

If separated bike lanes are carried through the Cesar Chavez intersection, the resulting very long traffic queues would cause delay to buses along the corridor, without any way for the bus to get around the queue.

3. If transit time is so important, was a transit-only street explored as an option, at the exclusion of cars?

That's a very interesting idea, but would go against current City policy that designates Hawthorne as a District Collector street for traffic. It would also be a major change that would require significant alterations to traffic patterns and business operations given the way land uses along Hawthorne have come to rely on vehicle access. That said, we have heard a lot of interest in the idea of car-free streets in various places around the city, and probably the best time to explore that idea would be during the next update of the Transportation System Plan in a couple years.

4. We have a chance to make a stand for climate change and a move away from cars. It seems that every time we build like the past we extend the time frame to make meaningful changes. My opinion is that we need to make it harder to move around by car and to prioritize other modes of transportation. In terms of parking, there needs to be a better approach. A parked vehicle is not comparable to providing bike infrastructure in terms of value. I also agree with Clint on speeds. I feel that cars travel too fast and forcing them to go slower is a very good thing to do. The neighborhood greenways can be managed to keep extra traffic off them. Thanks for the comments! Both Alternatives 2 and 3, while they would still allow car traffic on Hawthorne, would certainly reduce car capacity car speeds, and would encourage other modes of travel.

5. If the traffic is coming from Hawthorne bridge, it's because we put it there with car capacity on SW 4th and also Naito, letting cars off of the freeway to cut through on surface streets. Thanks for the comment, that's definitely something to consider, how the network downtown affects the rest of Hawthorne.

6. How are we going to push traffic back to the freeways when congestion pricing is in effect but we've provided all of this free capacity on surface streets?

This is a tricky issue that is being looked at through a separate process called Pricing for Equitable Mobility.

7. Zef mentioned that the team is wary of the bike/BAT lane because of conflicts (fair point), but also that loading/unloading space is a significant issue for the area. I'm wondering what that volume looks like and whether there might be significant conflicts due to loading/unloading in alternative 3b or even 3a in actuality (thinking particularly with Uber/Lyft, but also noting that the buses will be stopping in the lane anyway plus increased traffic due to all types of deliveries - especially as these have increased lately).

- a. Did the team consider those conflicts as well compared to a bus/bike option and in that case is there a way to bring an alternative including that option that brings that back to the table with some thought to additional solutions (e.g., can we restrict some right turns to reduce conflicts, use queue jumping for bikes/buses- is there a package of solutions or best practice we can look to in order to make that safer)?

It's true that with any of the bike lane options there is potential for intermittent blockages by buses serving stops and vehicles stopping to pick up or drop off passengers or to parallel park. While not ideal, these incidents are relatively infrequent and typically do not significantly degrade the facility in terms of safety or comfort. Williams and Vancouver are the most-used bike lanes in Portland despite occasionally experiencing these kinds of issues. Under the constraints of this project, we are not able to install cycle-tracks or other types of protected bikeways that would be immune to these issues.

8. Hawthorne may have only moderate segment delay per mile, but it does have significant passenger delay per mile (from Rose Lane analysis) that would make this solution even more pertinent to pursue now in order to avoid future delay. Honestly, with the designs proposed it feels like we are not likely to get concerned riders here, so it would make sense to pursue a bus/bike option that at least many (rather than almost no) riders are interested in using and then pursue diversion or traffic calming improvements on the greenways to make sure that traffic does not shift there.

Thanks for your comment, that's a good point about the passenger delay and if there is enough interest in the bus/bike lane option we can certainly explore that option.

9. There was a lot of discussion regarding the topic of parking, how much parking is currently impacted by the (at least) 15 businesses that are utilizing the Healthy Businesses program as part of the Covid-19 response and how do those reallocated spaces align to parking spots that could be removed as part of Alternative 3?

We have not yet done that kind of analysis, and it may be difficult to predict with accuracy which businesses will have street seats by the time the Pave & Paint project happens. As we move to project implementation, we will need to consider what to do if parking-space street seating is impacted by the need for parking removal based on the street redesign.

10. Given that much of the projected transit delays would be isolated to the intersection at Hawthorne and Cesar Chavez can you elaborate on the work that was done by traffic and signal engineers to alleviate that delay and the solutions that were evaluated and rejected?

- a. Was an interim mixing zone proposed as an option given the right-of-way limitations?

The Cesar Chavez & Hawthorne traffic signal is an aging signal that does not have the capability for complex signal phasing. It also does not have any spare green time available for additional

phases due to time provided for pedestrians and to serve the protected left turn phases. This means we are very limited in what we can do in terms of signal improvements. A bus/bike/right-turn mixing zone is an option as an interim solution, but we did not evaluate it because we wanted to see what the effect of separated bike lanes would be. The purpose of the evaluation was to see what the benefits and impacts would be of having consistent separated bike lanes versus having a consistent 3-lane cross-section versus keeping things mostly the same. Now that we've done the evaluation and are getting feedback, we can consider hybrid options and compromises in the design to balance trade-offs.