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To:

Megan Channell, AICP, ODOT Major Projects Manager
Rose Quarter Freeway Expansion Environmental Assessment Public Comment

Chris Warner, PBOT Interim Director

Mayor Ted Wheeler, Commissioners Eudaly, Fritz, Fish and Hardesty

BikeLoudPDX, a Portland-based grassroots bicycle advocacy group, remains firmly opposed to building the I-5 Rose Quarter Freeway Expansion project after reviewing the Environmental Assessment and its appendices. There is simply no data provided in these documents showing that the freeway widening project will accomplish its goals of relieving congestion, improving safety, or reconnecting the lower Albina neighborhood. As advocates for making Portland a better place to ride a bike, this project is oppositional to our organization's mission. For the following reasons we request that the Oregon Department of Transportation (ODOT) move forward with pursuing an Environmental Impact Statement to better understand the significant impacts to the neighborhood, region and planet.

We have specific concerns about the following:

The need. The need for the project is poorly demonstrated, with misleading claims about its ability to provide congestion relief and safety improvement.

Restorative justice. The project's efforts to connect the lower Albina neighborhood are not substantive, yet the harm that the project will cause is. Acknowledging past harm while proceeding with a project that will further divide and degrade the neighborhood is not restoring or repairing it in a meaningful way.

Surface street improvements. Efforts to improve surface streets are flawed with a coarse methodology that fails to accurately assess existing conditions, and inadequately recognizes the parameters of excellent bikeway networks. The poor proposed infrastructure that is not a material improvement over existing conditions and represents a significant degradation of many existing routes.

BikeLoud joins the numerous transportation advocacy groups in the city in opposing this project and demanding an Environmental Impact Statement.

The I-5 Rose Quarter project will not deliver on the promises made. BikeLoudPDX joins other transportation advocacy groups, such as the City's Pedestrian Advisory Committee, Bicycle Advisory Committee, Oregon Walks, Community Cycling Center, the Portland Bus Lane Project, The Street Trust and No More Freeway Expansions in firmly stating that this project falls demonstrably short of providing meaningful improvements for people biking, walking, or taking transit through the neighborhood. The current proposal, especially for the active transportation surface facilities, is not worth investing \$500 million. BikeLoudPDX cannot support this project without ODOT first addressing the meaningful, significant negative impacts this freeway expansion will have by conducting a more rigorous Environmental Impact Statement that answers our concerns. Future study and proposals for this freeway expansion must significantly improve the proposed active transportation infrastructure plans, demonstrate a more rigorous active transportation design standards methodology, be able to show that delays during the estimated five year construction period not significantly impact active transportation and transit in the project area.

Sincerely,

Emily Guise
Ted Buehler
Catie Gould
BikeLoudPDX co-chairs

1) The need for the project has not been demonstrated

1.a) Freeway expansion does not meaningfully address traffic congestion

Adding lanes to this section of I-5, auxiliary or not, will result in more drivers using it, which means short-term congestion relief, if any, will not last in the long run, a fact known as induced demand. Other organizations and public comment will provide the numerous academic studies and research papers that demonstrate this to be true for freeway projects across the United States, and BikeLoudPDX wishes to echo the letters of the No More Freeway Expansions coalition, the Pedestrian Advisory Committee, the Bicycle Advisory Committee, and Oregon Walks in their citation of these findings. Funneling more vehicles faster towards known bottlenecks will only increase congestion, as can be seen when an auxiliary lane was added to the Interstate Bridge during the Victory Boulevard-Lombard Street project in N. Portland. The highway downstream from the project actually carries 10% less capacity there than it did ten years ago.

1.b) This project will not reduce serious crashes or save lives

Despite ODOT's claims that this section of I-5 has the highest crash rate, the agency's own data¹ shows that in fact, 82nd Ave/OR 213 has the highest crash rate - three times more than the Rose Quarter - and with many more serious injury crashes and fatalities. In Metro's 2040 Regional Transportation Plan, the primary purpose of the I-5 Rose Quarter project is to "Reduce minor or non-injury crashes." While reducing crashes is commendable, these are not serious crashes, like the one that killed Pamela Seidel as she rode her bicycle on Henderson St at SE 82nd Ave in October 2018, or the one that hospitalized Madison High School Student Juana Jiménez Francisco just weeks ago. SE 82nd Avenue and SE Powell Boulevard/US 26, two ODOT-owned facilities, is the second most dangerous intersection in the city of Portland, according to the city's High Crash Network list of intersections². It is incompatible with the City of Portland's Vision Zero policies to allow ODOT to direct hundreds of millions of dollars to a freeway widening project when the agency owns numerous other very dangerous arterials that will inevitably claim more lives without immediate investment.

ODOT needs to look no further than North Portland to see that widening I-5 has not resulted in fewer crashes. In fact, after widening I-5 from N Victory Boulevard to N Lombard Street/US 30 in 2010, the crash rate actually increased³. A similar crash rate increase happened at the Woodburn Interchange of I-5⁴, which was also widened a few years ago.

¹ http://cityobservatory.org/odots_big-lie/

² <https://www.portlandoregon.gov/transportation/59279>

³ http://cityobservatory.org/rose_quarter_congestion/

⁴ <http://cityobservatory.org/safety-last-what-weve-learned-from-widening-the-i-5-freeway/>

To repeat: as *Willamette Week* reported in 2017, there hasn't been a single traffic-related fatality on this stretch of freeway in over a decade⁵. It is untrue that this facility is "unsafe" by this metric, or that spending half a billion dollars on a freeway widening on this stretch of I-5 is a "safety" project. This freeway expansion is not at all in line with the City of Portland's Vision Zero policies, adopted in 2015, to encourage the city to adopting a data-driven approach to direct target infrastructure investments to eliminate traffic fatalities.

2) BikeLoudPDX stands in solidarity with Harriet Tubman community and plans for restorative justice in the lower Albina neighborhood

ODOT's claim of reconnecting the neighborhood through this project is a thin excuse for a project that will increase the division ODOT created when it destroyed the lower Albina neighborhood to build I-5. Both the Environmental Assessment document and ODOT staff, as well as Director Rian Windsheimer, have stated that the proposed lids will not be strong enough to support buildings of any significance, certainly not strong enough to rebuild the businesses and residences that were bulldozed.

Schools are one of the backbones of a community. It is unconscionable that ODOT plans to move the freeway 30 feet closer to Harriet Tubman Middle School, one of Portland's few historically black schools. The current school demographics are 40% identify as black, and 73% are identified as "vulnerable"- meaning they're people of color, with a disability, or low income. The middle school has already had to spend millions of dollars to mitigate the levels of pollution so it's safe for the children to breathe inside the schools, but a recent Portland State University study recommended that the children have their outdoor time limited due to the high levels of pollution from the freeway⁶. The school now known as Harriet Tubman was there years before the freeway, yet it's been the children who attend that school who in the past and present pay the price with their health so that commuters from Clark County may get to their destinations a few minutes faster.

3) The surface street plans are not an improvement for active transportation

For this project to be of any benefit to those not driving on the freeway itself, the active transportation infrastructure needs to be much better than what is currently proposed. We do not find that these projects are a substantial improvement from conditions today, and are not what we would recommend as improvements for the area. Thousands of people walk, bike, and take transit through this area daily, yet ODOT and PBOT's current designs call for removing a popular biking and walking bridge on N. Flint Ave, and replacing it with

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<https://www.wweek.com/news/city/2017/10/11/state-officials-say-i-5-in-the-rose-quarter-poses-a-daily-danger-police-reports-undercut-that-claim>

⁶

<https://www.wweek.com/news/2018/07/04/a-middle-school-prized-by-portlands-black-community-would-see-its-poor-air-quality-worsen-with-a-rose-quarter-highway-expansion>

the Hancock-Dixon bridge that will have a grade of at least 8%. An 8% grade is not ADA compatible and it is too steep for most folks to ride.

According to data collected in the 2017 PBOT Bike Counts, the closest nearby bike count location - the intersection of N Vancouver and N Russell - is the third busiest in the city. This might actually understate the number of bicyclists that use this route in the project area, as it doesn't include the many bike-riding commuters who take N/NE Tillamook Neighborhood Greenway to access the Flint Avenue Overpass on their way to the Broadway Bridge.

Bicycling routes to and from the Broadway Bridge, a major link in the bike network, to N Vancouver/Williams, N/NE Broadway and Weidler, and NE Clackamas Street must be of very high quality. They should be wider to accommodate future riders, and the crossings and signal timings should ensure the safety of all users, not just drivers using the on and off ramps. Replacing fully functional and highly used bicycle infrastructure with bike routes so steep as to be impassable for folks in a mobility device is hardly a good use of government money if we're serious about achieving our desired mode split goals for transportation.

Active transportation improvements are one of the major selling points of this project and represent an estimated price tag of \$250 million. However, included in that total is the cost of rebuilding all surface street bridges that will be destroyed during construction. Therefore the \$250 million will not be spent solely on active transportation improvements on the surface streets, as the bridges would need to be rebuilt regardless.

4) The EA fails to be compatible with existing plans, or to achieve its own stated goals

The EA states that it will "Improve safety and operations on the adjacent surface streets and around the Broadway/Weidler interchange (Executive Summary, p 1), and includes as a goal and objective to "Enhance bicycle and pedestrian safety and mobility at Broadway and Weidler."

It also states that it follows the objectives of the Portland Comprehensive Plan with regard to bicycling and pedestrians (Active Transportation Technical Report, p. 22 and 23).

While we appreciate and applaud these intentions, the scope of the EA must be expanded if these goals are to be met. Specifically, the EA needs to be revised to include the projected bicycle traffic levels through the corridor with a citywide bicycle mode share of 25%.

In the EA's summary of the Portland Comprehensive Plan, it fails to mention that the Comprehensive Plan includes the **Portland Bicycle Master Plan for 2030**, which calls for a dramatic increase in bicycle commute mode share in the city; from 8% to 25% (Portland Bicycle Master Plan for 2030, as incorporated in the Portland Comp Plan, ATTR 23). This means more people will be riding and will require much wider bicycle facilities than are

currently found on most Portland city streets, particularly on the approaches to the Willamette River bridges such as the Broadway Bridge.

The EA's ATTR is also insufficient because it "kicks problems down the road" with the optimistic hope that the active transportation infrastructure can simply be fine-tuned after the freeway design elements are in place.

"Because people walking and bicycling are sensitive to conditions on a more granular scale, the active transportation network's functionality and attractiveness would largely depend on design details. These design details would be defined in early 2019 and would be informed by the Environmental Analysis and public comment." (EA ATTR, ES7)

We are now in early 2019,, and thus far the exact opposite is true. Severe switchbacks are being added to the Flint Ave corridor and to the Clackamas St. pedestrian bridge to deal with the elevation changes "discovered" after the freeway alignment and elevations were established. These failures indicate that the success of the active transportation system is dependent on larger-scale design elements that are being must be developed in conjunction with the freeway alignment and elevations in the EA phase, rather than in a downstream phase.

The designs presented in the EA and in subsequent iterations by ODOT fail to achieve the objectives of either the EA itself, or of the Portland Comprehensive Plan or Portland Bicycle Master Plan.

5) EA Bikeway design guidance from US sources fails to provide standards for the large volume of bicycle traffic in the project area

Unlike freeway design, bikeway design has relatively few standards. The EA references several design guides, including the AASHTO bikeway design manual, the Oregon Bicycle and Pedestrian Plan, Oregon Highway Design Manual, and others (ATTR, 19-25).

The Rose Quarter Project area is unusual among US and Oregon bikeways in that it carries a high volume of bicycles at peak period. Hence, the system must be designed not only to the basic cross-section and intersection designs in the handbooks and manuals, but expanded in width and operational features to accommodate significant numbers of bicycle users rare in other parts of the city. At present, 750 people on bicycles per hour use N. Williams Avenue through the project area, and is planned to triple in the next eleven years. Any new facilities must be designed to facilitate and encourage a tripling of bicycle numbers through the corridor.

The onus, then, is on ODOT planners and engineers to develop new cross-sections, new roadway widths, signal timings, etc. that will allow thirty six bicycles per minute, of varying speeds and acceleration rates, to move through the project area on all of the major

corridors.

This has not been done. The widths of the bike lanes is similar to what is currently there, which is 4'-6'. Many of us in BikeLoudPDX ride through the Rose Quarter on bicycles on our daily commute, and we know that it is already congested. Rebuilding the existing infrastructure, or upscaling it one and a half times as is proposed in the technical diagrams, is nowhere near adequate engineering and design for what these routes need.

In Copenhagen, Denmark, many streets see the numbers of bicycle riders per hour forecast for the Rose Quarter routes. Copenhagen's typical route cross section is a 11' - 14' wide cycletrack.⁷ This design has been installed all over the city over the past few decades, and the result is that Copenhagen now has a higher bicycle mode share than any other city in the world: 41% of all work or education trips are made by bicycle⁸.

The EA needs to be revisited, with Copenhagen-based design guidance for the widths of bikeways through the project area. The current design guides listed in the "Resource" section of the ATTR do not have the ability to provide design guidance for this project.

6) EA's Bicycle Compatibility Methodology is flawed and inadequate

The methodology in the EA Active Transportation Technical Report uses a bicycle compatibility methodology called the Level of Traffic Stress (LTS) index. There are several problems with this.

6a) LTS is too coarse a metric to evaluate intersections in the area, a more fine-grained methodology is needed.

The inputs to the LTS are very coarse, such that any signalized intersection will receive a LTS 1 rating. As all of the intersections in the study area are signalized, they received an LTS score of 1 (ATTR, 56, 57). In actual practice, the requirements of a good intersection for bicycle traffic are much more nuanced. Few of the signalized intersections in the area are actually "good" for people bicycling today, as bicyclists are placed in close proximity to heavy car traffic without physical barriers, exposed to right and left hooks, and subject to long delays at traffic signals.

Hence, the LTS methodology is inadequate to assess the actual LTS for intersections in the build scenario, and therefore is unable to ensure design that will "...improve safety and operations on adjacent surface streets and in the Broadway/Weidler interchange."

6b) Bicycle compatibility must be studied between intersections, as well as at intersections.

⁷ Ted Buehler, many personal measurements, unpublished data, 2017

⁸<http://www.cycling-embassy.dk/2017/12/05/new-bicycle-account-bicycles-outnumber-cars-central-copenhagen>

The LTS methodology was only used for intersections. There was no bicycle compatibility evaluation done on approaches or roadway segments (ATTR, p. 56). To adequately assess the impacts on bicycle infrastructure, a methodology must also include intersection approaches and roadway segments. In the existing conditions, some of the segments and approaches are good, and some are poor.

The EA must be revisited to include a methodology for assessing actual levels of performance for the existing conditions that reflect the variability within the existing conditions before it can guide the development of new infrastructure designs in the build scenario.

6c) LTS methodology fails to address the infrastructure needs of large volumes of bicycle users.

The LTS methodology does not address the unique needs of high volumes of bicycle users, such as requiring several lanes of bicycle traffic, allowing overtaking opportunities, and wider lateral shy distances required on turns or upgrades. These requirements are manifest in the observation of peak hour bicycle traffic through the Study Area. For instance, peak period bicycle volumes on both N. Vancouver Avenue and NE Russell Street are over 600 bicycles per hour.⁹ The existing conditions have bicycle congestion at intersections, at the approaches to intersections, and in the segments between intersections.

The LTS is taken from the Oregon Multimodal Analysis chapter in the analysis handbook.¹⁰ It provides two other types of methodology that can be used to assess bicycle compatibility: *Qualitative Multimodal Assessment* and *Multimodal Level of Service*. Neither of these appear to be bicycle-specific, which is what is needed to accurately and effectively assess the existing bicycle compatibility of the bikeway system, and to guide and evaluate proposed designs. ODOT must reach outside of its own limited handbooks to find a bicycle compatibility methodology to re-assess conditions in the EA.

The EA must be revised to use a robust bicycle compatibility methodology that evaluates the system performance for large volumes of bicycles to ensure that the stated objective to improve performance of surface streets is met.

7) Impact of flawed LTS methodology on proposed infrastructure design

The LTS intersection-only coarse-grained methodology is not only incapable of assessing the quality of the existing bicycle infrastructure, it is also unable to assess the quality of the

⁹ Interpolated from Portland, Oregon manual 2-hour bike counts, 2000-2018

¹⁰ https://www.oregon.gov/ODOT/Planning/Documents/APMv2_Ch14.pdf (Accessed March 28, 2019)

proposed infrastructure in the build alternative. And, as a result, the build scenario replaces some excellent bicycle infrastructure with poor bicycle infrastructure.

The failure to use a robust methodology is manifest in uniformly poor design proposals in the build scenario. Primarily, bicycle routes are too narrow, do not provide a continuous, physically protected barrier from vehicle traffic, are located too close to traffic on and off the freeway, encounter intersections with unnecessary long delays, and follow indirect routes. With a robust compatibility methodology, these errors would not have been propagated into the current design.

This is important because, as stated throughout the Portland Bicycle Plan for 2030, the quality of the bicycle infrastructure dictates how many people are willing to ride their bikes to work. If the quality deteriorates, fewer people will ride. And if the quality improves, more people will ride. See, for detailed guidance:

“Make bicycling more attractive than driving” (Section 2.2.2, p. 25)

“Build it and they will come” (Section 3.1.1, p. 41)

“Principles for Bikeway Design (Section 3.2.2, p. 64), including:

- Safety, Comfort, Attractiveness, Direct routes, and Cohesive system discussions

8) Example of current excellent infrastructure, unrecognized in the EA

As an example of an excellent segment of infrastructure in the existing conditions that was not recognized in the EA, we consider the N. Flint Street approach to the Broadway Bridge.

Currently, southbound bicycle traffic from North Portland has a generally pleasant, favorable route through the Rose Quarter Project Area.

- It's wide and can easily accommodate the existing traffic levels, and it is wide enough to accommodate the tripled increase Portland is planning for.
- It's straight, so people can travel fast or slow, as they please, with no slowing curves.
- It bypasses the Williams/Vancouver/Weider/Broadway freeway traffic areas, so it is relatively quiet, free of immediate tailpipe toxins, and free of collision risk from freeway-ramp terminii traffic.
- It takes advantage of a gentle downgrade, so people can either rest for a minute and coast at a comfortable speed, or gear up and accelerate to 30 mph for a few blocks to make up time.

This is an impressive set of attributes for a bicycle route segment. But, because the EA fails to use a robust bicycle compatibility methodology, these attributes are not recognized, nor attempted to be retained or replicated in the “build” scenario.

N. Flint Avenue, in its present conditions is a “showcase” piece of bicycle infrastructure, a segment that meets all the needs of current and future users. It is an example of what all of the bicycle routes through the Rose Quarter to and from the Broadway Bridge should be.

9) Example of current poor bicycling infrastructure, unrecognized in the EA

In comparison to the Flint Avenue. segment, the existing conditions have poor bicycle compatibility at the intersection of eastbound NE Weidler Avenue at N. Vancouver Avenue.

- There is a vehicle/bike conflict point in a lane-weave on the approach to the signal.
- Bike infrastructure is unprotected and very close to fast-moving vehicles, as the bike lane is sandwiched between three through lanes and one turn lane, with no physical protection.
- It has a long signal delay.
- It has poor air quality from multiple lanes of gridlocked vehicles all around the active transportation users.

This is clearly not an All Ages and Abilities (AAA) intersection. We think it is unlikely that any of the ODOT staff or consultants that wrote the EA would recommend this route to their 8-year old nieces or 80 year old uncles. Yet the LTS methodology rates this intersection as LTS 1.

LTS 1 is summarized by ODOT as having the following properties:

LTS 1 – Represents little traffic stress and requires less attention, so is suitable for all cyclists. This includes children that are trained to safely cross intersections (around 10 yrs. old/5th grade) alone and supervising riding parents of younger children. Generally, the age of 10 is the earliest age that children can adequately understand traffic and make safe decisions which is also the reason that many youth bike safety programs target this age level. Traffic speeds are low and there is no more than one lane in each direction. Intersections are easy to cross by children and adults. Typical locations include residential local streets and separated bike paths/cycle tracks.¹¹

Clearly, the intersection is not currently functioning at LTS 1, as it has multiple lanes of traffic, complex turn hazards, and certainly couldn't be safely navigated by a child.

This bicycle compatibility evaluation failure indicates that the methodology is simply inaccurate, and cannot be relied upon to evaluate the framework for the new bicycle network as proposed in the EA. Instead, the only "good" way to move bicycle users through this area is to separate them from the many lanes of idling car traffic and high-turn volume intersections. Simply applying the *PBOT Protected Bicycle Lane Planning and Design Guide* (ATTR 23) to a busy street is not enough to achieve the stated goals of the project – in cases like this the bicycle route must be moved onto a separate routing from the freeway access surface streets, such as currently exists on N Flint Avenue, allowing bicycle users to bypass congested roadway areas altogether.

¹¹ Oregon "Multimodal Analysis" chapter in the analysis handbook.
https://www.oregon.gov/ODOT/Planning/Documents/APMy2_Ch14.pdf Accessed March 28, 2019

The Rose Quarter freeway project, to achieve its goals to “improve safety and operations of surface streets” and to “Enhance bicycle safety and mobility” needs to upgrade the other bicycle routes through the project area so that they are as good as Flint Avenue, and have intersections located separately from freeway on/off ramp intersections.

9) Poor bicycle routing proposals in the EA Build scenario as a result of faulty compatibility methodology

By using faulty compatibility methodology, the build scenario has mostly poor to average bicycle infrastructure, rather than the improved infrastructure sought by ODOT, and much less than the excellent infrastructure sought by Portland Commissioner and head of PBOT Chloe Eudaly.

Instead, the plans take away the Flint Avenue route, and make only minor improvements to most other routes. The only possible showcase element is the center, two-way bike lane on N Williams Avenue between N. Broadway and N. Weidler, and this is in the middle of six lanes of motorized traffic. So while it looks good in the renderings, in reality it will not be a showcase project.

10) Specific problems with the build alternative infrastructure

Below are our responses to the multimodal benefits described on page 70 of the Environmental Assessment. Each is an example of how the failure to use adequate design guidelines and to use a genuine bicycle compatibility methodology has resulted in a design failure.

Claim 1:

“The new roadway crossing and associated multi-use path would directly connect Lower Albina, Lloyd, and the N/NE communities and provide multimodal route alternatives over I-5. The removal of Flint would also reduce cut-through auto traffic in this area.”

We find the removal of Flint Avenue Bridge a major negative of this project. N. Flint Avenue is a popular bicycle route, carrying over 3,000 people per day. Cut-through auto traffic could easily be eliminated through inexpensive methods like diverters or creating a dead-end to the street for vehicles.

The Hancock-Dixon Bridge would add an additional 450 feet for people travelling to the Broadway Bridge compared to Flint Avenue. This new bridge is expected to be a 9% grade. ODOT acknowledges this negative in the Active Transportation Technical Report, saying “The new roadway connection via Hancock/Dixon would follow substantially steeper grades compared with the existing Flint structure, however, the new multi-use path would be designed to be ADA compliant....While this new connection would enhance bicycle/pedestrian connectivity, the street’s relatively steep grade could limit its utility, particularly for less confident bicyclists and for people with disabilities.”

Claim 2:

"The 36-foot-wide multi-use path on N Williams between Broadway and NE Weidler would provide enhanced physical separation of people walking, biking, and rolling from motor vehicle travel lanes."

Today N. Vancouver Avenue and N. Williams Avenue are the most popular bicycle routes in the city, carrying a respective 4,700 and 4,100 people on bikes a day according to PBOT's 2018 Summer Bike Count.

We are concerned that the thirty-six feet of space for a multi-use path is not enough to accommodate all of these road users. According to PBOT's design standards, the current volumes of bicycle and pedestrians would require this facility to be thirty feet wide. Adding space for planters, this corridor will already be at capacity or narrower than it is today. Portland's Transportation System Plan (TSP) calls for a 25% bicycle mode share by 2030 from the current 6%. New facilities need to be able to accommodate long-term growth, which this design does not.

For people travelling south on N. Vancouver Avenue, they will no longer be able to continue straight, but need to transition from the west to east side of the street, and head east one block to continue south. In this movement people biking will encounter an additional two traffic signals and 180 feet of travel. With the elimination of N. Flint Avenue, this is the only remaining southbound route in the area, and the signal timing and space allotted for queuing at them could limit the growth of this corridor as a bicycle thoroughfare.

Claim 3

"Improved bicycle and pedestrian facilities on the local street system would include the new jug-handle at the N Vancouver and N Broadway, upgraded and separated bicycle facilities on N/NE Broadway and N/NE Weidler, and new bicycle and pedestrian connections between the N Flint/N Tillamook intersection and the new Hancock-Dixon crossing."

Protected bike lane improvements for NE Broadway and NE Weidler Street was one of the projects included in Central City in Motion (CCIM) plan, which was unanimously passed by City Council in 2018. This is not dependent on the Rose Quarter project for implementation.

The additional pedestrian facilities are also meager, filling in a fraction of current sidewalk gaps. From the Active Transportation Technical Report, page 71: *Existing sidewalk gaps along portions of N Wheeler and N Williams (formerly NE Wheeler segment) would be filled (approximately 800 feet). Other existing gaps, as listed in Section 5.1.1, would remain (approximately 2,600 feet)*

ODOT acknowledges these active transportation facilities are not world class. Further in the report, ODOT says, *"Despite the multimodal enhancements throughout the API, pedestrians and*

bicyclists would continue to encounter complex intersection geometry at and near ramp termini. Challenging crossing conditions would include double turn lanes, broad turning radii, prohibited crossings, left-side bike lanes transitioning to right-side bike lanes, and major bicycle movements requiring two-stage crossings of a single intersection."

We agree with ODOT that these are indeed challenging conditions, and all of these design elements make the proposed travel patterns through the area overall worse than existing conditions.

Claim 4

"The Clackamas bicycle and pedestrian bridge would improve conditions for both pedestrians and bicyclists with a lower stress, physically separated option to cross I-5."

The Clackamas Bridge has several different designs presented, with different lengths and numbers of switchbacks on the west end to combat the steep incline of this crossing. In all of the examples, it fails to provide a direct, seamless connection from the Lloyd District to the Rose Quarter, but instead requires users to make out-of-direction travel adjacent to the freeway.

11) Larger-scale deficiencies in the "build" scenario proposed in the EA

As a result of the failure to use design principles that route active transportation users away from freeway ramp termini, there are larger-scale deficiencies in the proposed bicycle network.

Specifically, people on bicycles are routed through the intersection "box" area, on some routes where they could be routed around it. A meaningful redesign for bicycles would make Flint Ave a through street from Tillamook to Weidler, allowing northbound traffic to bypass the freeway interchange altogether, just like southbound traffic can do today.

Complicating this is that in the designs produced in spring, 2019 when "design refinement" is to occur, the bicycle routes are being made *more* circuitous, rather than less, as the Flint Ave corridor is now given a series of tight switchbacks for bicycle traffic instead of the clean, straight line shown in the EA. This confounds the time and distance calculations in the EA.

12) The bicycle and pedestrian goals in the Project Goals and Objectives are weak in scope and must be strengthened

The Project Goals And Objectives (section 1.4, ATTR p. 5) should be expanded in three aspects with regard to bicycling. In the EA it reads:

Enhance pedestrian and bicycle safety and mobility in the vicinity of the Broadway/Weidler interchange

(First bullet point, p.5)

12.a) *Enhance and maximizing performance* to the six parameters used to evaluate bicycle compatibility on p. 31 and 32:

12.b) Change the geographic scope from *"in the vicinity of the Broadway/Weidler interchange*
" to "the entire project area."

12.c) Add a seventh criterion to the six parameters on P. 31 and 32:

Route travel time and travel energy: *relative degree to which the route follows the minimal travel time and travel energy, relative to an idealized route without long intersection delays, sharp lateral curves, moderate grades, and stop/signal control flow on downgrades.*

These additions would require engineers to maximize enhancements to the bicycle and pedestrian infrastructure throughout the project area with regard to route directness, intersection quality, ramp terminus avoidance, degree of separation from motor traffic, grades, and bicycle delay.

By only mentioning "enhancing" without listing the specific parameters to be enhanced, and to list the goal of "enhancing" without stipulating "maximizing enhancements to", the resulting design and enhancements are much weaker than they need to be, and have resulted in the poor to merely mediocre design proposals found throughout the EA.

Our requests

Overall:

- Redesign the bicycle infrastructure so bicycles have a direct route can travel around the perimeter of the Broadway/Weidler intersection. Clogged freeway on/off ramp intersections are simply not compatible with excellent bicycle routes. This could include:
 - Retain the Flint Ave or redesign the Hancock overpass to allow southbound bicycles the existing excellent southbound conditions they now enjoy.
 - Connect Flint Ave to Weidler, via Wheeler, for northbound bicycle traffic from the Broadway Bridge, so it can completely bypass the "box" area of the freeway intersection.
 - Connect the Clackamas Pedestrian Bridge to the Moda Center area on Winning Way near Flint Ave, rather than curving north to Williams or squiggling down to Winning at Williams. This would create a direct east-west route for bicycle traffic to and from the Broadway Bridge that would avoid the "box" area entirely.
- These redesigns would create two new 2-way bicycle thoroughfares for Broadway Bridge traffic to access N and NE Portland neighborhoods without dealing with the delays and poor air quality in the Broadway/Weidler/I-5 box area.

We request ODOT use the basic design parameters below:

- at least 12 foot width for all bike lanes
- no direct interactions with cars getting on and off freeways
- gradual grades
- straight routes
- some enjoyable sections, where you can comfortably coast or go fast, and think “I’m so glad I chose to ride a bicycle today”
- no long delays at traffic signals.

The Rose Quarter freeway project, to achieve its goals to “improve safety and operations of surface streets” and to “Enhance bicycle safety and mobility” needs to upgrade the other bicycle routes through the project area. Redesign this project in accordance with a more rigorous bicycle compatibility methodology, more robust bicycle route design principles, and deliver the Rose Quarter some true, substantive improvements in the bicycle arterials that cross it to provide access to downtown Portland.