



## SW Corridor Light Rail Project Community Advisory Committee (CAC)

Thursday, December 5, 2019, 5:30-7 p.m.  
Tigard Public Works Auditorium  
8777 SW Burnham St., Tigard

### Meeting Summary

#### Present

Calista Fitzgerald – Designer, Former Tigard Planning Commission Chair  
Ethan Frelly – Tigard Chamber of Commerce, business owner  
Michael Harrison – Oregon Health & Sciences University (OHSU)  
Bob Ludlum – Washington County resident, Veteran’s advocate  
Melissa Moncada – Engineer, West Portland Park Neighborhood  
Julia Michel – Portland State University (PSU)  
Elise Shearer – Tigard Transportation Advisory Committee, St. Anthony Parish  
Eric Sporre – PacTrust  
Ramtin Rahmani – Tigard resident, bicycle commuter to OHSU  
Lindsey Wise – Tigard Transportation Committee, transit commuter to PSU

#### Not Present

Chris Carpenter – FocusPoint Communications  
Rachael Duke – Community Partners for Affordable Housing (CPAH)  
Debra Dunn – Synergy Resources Group Business Consultant  
Bill Garyfallou – Property/business owner  
Angela Handran – Tualatin renter Transit commuter to PSU  
Chad Hastings – CenterCal Properties Bridgeport Village  
Rebecca Ocken – Portland Community College (PCC) Sylvania Campus

#### Welcome; introductions; notes/agenda review

Brandy Steffen, Facilitator, JLA

Brandy reviewed the agenda. She asked the public in attendance to address comments/questions during the public comment period or speak with TriMet staff. The CAC introduced themselves. TriMet staff were introduced with a raising of hands and included Kelly Betteridge (SW Corridor Program Manager), Scott Robertson (SW Corridor Design Manager), as well as Libby Winter, Amparo Agosto, and Josh Mahar (Community Affairs Representatives).

#### Public Comment

One member of the public addressed the committee.

**Art** – I’ve been a big supporter and advocate for light rail in Portland since the 1990s and I don’t support this project. I adamantly against it and I consider it unacceptably bad engineering. I’ve threatened lawsuits to Metro and the City of Portland. I don’t believe you are being honest to the public about what is being proposed here and you are keeping information from the public. The public would reject it if they knew the impacts of this project. This is what happened in the ‘90s



with cars and the project called “north/south.” It went on for five years and when the public learned about the impacts, they rejected it. That project would have had less impacts than the SW Corridor. We got a better project out of the “north/south” project when the voters rejected it through the Yellow Line. But this project is so far over the top and we will not see the results. A bus system would see better impacts and studies have shown that. Barbur is my focus, but I take exception to how it runs through the shopping center. The environmental impacts will make it worse. It’s not going to last. There are people who will go to court and will stand to see this project coming to an end.

Brandy asked the CAC members if they had any updates/changes to the November 8 Meeting Summary. There were no updates or changes.

Brandy reviewed outcomes from the last meeting:

- The Committee moved forward with recommendations for the Locally Preferred Alternative (LPA) with current cost-gap to the Steering Committee.
- The Committee’s concerns about scope reductions to bike and sidewalk widths, and uncertainty about Minimum Operating Segment (MOS) were noted in the recommendations.
- Parking was added as a concern after the last CAC meeting.
- The Steering Committee canceled their November 18 meeting, but meet December 16 at 9 a.m. at Tigard City Hall.

The Committee agreed that the group vote still stands.

Brandy noted that the committee is coming up on their one-year anniversary and their packets included their charge, list of names, and conflict of interest policy. She thanked the Committee for their hard work and representation of their boarder community. She reminded the Committee that the process is moving into more detailed work and they are all working together in good faith to move the project forward.

Brandy reviewed the decision-making process.

Brandy introduced 2020 CAC topics discussed in the last meeting and asked the committee for feedback. **The** CAC topic list will remain open to add things later.

## Ridership modeling

Kelly Betteridge, TriMet

Matt Bihn, Metro

Kelly Betteridge introduced Matt Bihn and explained that future conversations about park and ride and infrastructure investments requires an understanding about the modeling tool and what it does for ridership.

Matt explained that modeling is required to get Federal Transit Administration (FTA) funding and is a big part of what is reported in the Environmental Impact Statement (EIS). It informs plans such as:

- Regional transportation plan (RTP)
- Local transportation plans
- Corridor plans (like SW corridor) – grants, EIS, etc.



Modeling is done in the “R” statistical language and proprietary travel demand assignment software. Inputs that go into the model include:

- Land use: This process is required by state law and has oversight from jurisdictional partners. Land use forecasts include households and employment distributed throughout the region.
- Travel propensity: What type of trips are people likely to make?
- Transportation supply: Available roadway for automobiles.
- Costs

Matt explained that the modeling is not an estimate or a guess, but a projection of what we know into various future scenarios.

Land Use is based on federal projections for the region; with 64 household profiles based on age, number of people, and income. The nine employment types include things like service, retail, manufacturing jobs – this is important because household type will match up with employment type.

**Bob** asked where existing projection is located on Metro’s website?

<https://www.oregonmetro.gov/2040-distributed-forecast>

Modeling for SW Corridor used a base year 2015 and 2035 horizon year. FTA requires a forecast year as close to the application year as possible. The years might be able to switch to 2020 and 2040 for grants, but we will not have a 2020 base year forecast in time for the Final EIS process.

**Ramtin** asked if the 2035 horizon year is based on potential?

**Matt** responded that is it based on federal forecast for the greater region, which Metro allocates to a finer geography based on local zoning and plans.

**Ramtin** asked if the West Portland Town Center wants to up-zone on Barbur in three years, would that be included in the potential?

**Matt** The land use reflects the current zoning, but jurisdictions may reallocate jobs and households between TAZs in the jurisdiction (keeping the same control).

The model uses 64 household types and nine employment types to distribute people and jobs across 2,162 Transportation Analysis Zones (TAZ).

**Melissa** asked if the 2,162 zones include the entire metro area.

**Matt** responded yes, all four counties (Clackamas, Clark, Multnomah, and Washington) are included in the zone coverage area. Matt further explained that the model includes trips from areas outside of the region, which is important when planning for the SW Corridor.

Matt explained the travel propensity input asks, “What kind of trips are people likely to make?” In 2011, Metro surveyed over 6,000 households in a Travel Behavior Study. Surveys are time and resource intensive projects and Metro would like to do them more frequently, but the next study isn’t anticipated to be done until 2021. Households kept a transportation diary on trip destinations, frequency, activities, etc. Metro can ask more detailed information about the household profiles which allows Metro to match with land use projections.

**Elise** asked if businesses, freight travel, business delivery and trucks are included in the survey?

**Matt** Trucks trips are included in the model, but are not based on the household survey. There is a separate truck model that forecasts freight trips. The model is based on a commodity flow database that forecasts annual tonnage flows of 44 commodity groups by mode, origin and destination regions.

Transportation supply is the roadway network. It is a graphical representation of the Regional Transportation Plan (RTP), which is produced every four years. It doesn't include all local roads, but major roads are included. When applying for federal funding, the project is required to use the Financially Constrained Roadway Network – this network includes projects we are reasonably confident will get done. Other aspirational projects are not included.

The Transit Network uses the RTP transit network with updates. Metro works closely with TriMet at the corridor level to more closely reflect what will be there in 2035. Transit network includes light rail, commuter rail, streetcar, bus, tram, stations and stops, service frequency, and park and ride capacity.

Costs include short- and long-term parking costs, since people in the model and real life take parking into consideration when making trips.

**Ramtin** asked if the SW Service Enhancement Plan is complete?

**Matt** responded that the plan is complete, but implementation is in process. For example, Line 97 is in the plan and complete.

**Kelly** also explained that it is intended to be a 10-year plan. So, all those investments have been made in the model, but in reality, the plan is rolled out incrementally.

**Ramtin** asked if they were able to include PBOT's bus line project, like the Sandy line?

**Kelly** responded that it's a good question, and those are not currently included in the RTP, but they will be.

**Matt** The line 12 operates on Sandy in the model, consistent with what is in the current RTP.

Matt introduced the four-step model:

- Trip generation: How many and what type?
- Trip distribution: Where do these trips go? Matching household origins to the destinations.
- Mode choice: Bus, car or carpool, for example.
- Trip Assignment: Assumes people have perfect knowledge of the routes around them. For example, if you drive the same commute every day, you know what the fastest route is likely to be.

**Ramtin** asked if the model is based on the different possibilities versus what they do now?

**Matt** responded that we are modeling for the future year 2035. First, a 2015 model is run and validated against actual counts to make sure the volumes are close. The model assumes behaviors in 2035 will be similar to 2015 behaviors, but the number of people and jobs, and the roadway and transit network all change.

**Ramtin** asked how households choose different professions.

**Matt** responded that based on the survey information, types of trips are matched with types of incomes and destination.

**Ramtin** clarified that projection is broken out by income categories, so the model guesses how many people will move here by 2035.

**Matt** responded that is correct.

Each model takes several hours to run and provides information on ridership, travel times, vehicle hours, and transit vehicle miles for various scenarios. Some are used to determine what headways are run and others inform TriMet of service assumptions.

- Daily line riders: how many people are on the light rail line; the current estimate is 39,000. Trip distance does not matter in this calculation.
- Daily system riders: All transit riders in the entire network. This is important because it reveals how many riders shift from car or bike to light rail, for example. Comparing the build versus no-build shows new ridership.
- Peak load point: The busiest one-hour location of the light rail line.
- Station usage: How many riders walk to the station, transfer from a bus or use park and ride?
- Corridor transit trips: What percentage of riders are using transit to get to the central business district (CBD) and how does that change with the project?

**Elise** asked about comparing no-build concept to build out. Does that include added bus lines for additional capacity and change to bus lines - lowered or lessened – that would be transporting to light rail?

**Matt** responded that the no-build assumes the RTP plus the SW Enhancement Plan changes. In the build version, light rail is introduced and there are modifications made to the bus lines. For example, we remove the line #12 because it would duplicate light rail service, and there are other routes that we change to provide connections to light rail. TriMet does this work as service providers. When it comes to implementing these changes to bus lines/frequency, there is another public engagement effort to discuss and refine the changes. The model assumes one set of operations, but it is a “best guess” at this point without public engagement input.

**Ramtin** asked which bus lines are cut in the model?

**Matt** responded just the #12. The #96 Express (currently on the freeway) is converted to local service because the light rail will provide the same service time. The model assumes it travels from Wilsonville to downtown Portland via Boones Ferry and Barbur.

**Ramtin** asked about the status on the #8 line.

**Matt** responded that service was reduced at one point in the model and then TriMet asked them to bump it back up to no-build frequencies.

**Michael** asked for more clarification on transportation analysis zones (TAZs); if there are 6,000 household surveys and their rate of more than 2,000 TAZs.

**Matt** responded that the survey helps us understand what types of trips certain types of households will make and then the model distributes those trips over the 2,000 TAZ over the region.

**Melissa** asked if that uses census data to create zones.

**Matt** responded that census data might have originally been used, but it doesn't match up exactly. Every time the model is updated, zones that feel too large are divided up and the number of zones increases.

**Bob** asked if by the successful completion day, will the project factor in changes in transportation like autonomous cars?

**Matt** responded that autonomous cars are not in the model because we have no data on how they would operate, and we don't know when there will be enough autonomous vehicles on the road to change how cars operate. . Impact is interesting, many people thought autonomous vehicles could make travel more efficient because they can drive closer together with narrower lanes and travel faster, but a lot of other people now they think AV's will result in more cars on the road. There's a study at UC Berkeley that tracked 13 families that were provided a chauffeur for a week. After a week, the vehicle miles traveled increase by 83%. Autonomous vehicles can probably run faster and closer together if all vehicles are autonomous, but there may be more cars on the road overall. We know that Lyft and Uber increased vehicle traffic by 12% in places like San Francisco. This is important for future transportation because more congestion will make buses slow down.

**Ramtin** asked what's the frequency of the headways you are projecting?

**Matt** responded 7.5 minutes in the peak. Light rail can carry more than a bus, so you can run less frequently.

**Ramtin** asked if you would cut the #94 bus line?

**Matt** responded that in the model it operates between Sherwood and the Barbur Transit Center

Matt explained another output which shows transit trips produced by TAZ. This compares build versus no build and shows which TAZs gain and lose trips. He further explained the dots on the graphic in the presentation are randomly distributed in each TAZ, but a lot of dots equals an projection in ridership growth. The red section is in Portland where the model had previously reduced the frequency of the #8 bus. The reduction in the #8 was because riders who are coming from the north would choose light rail and take the connector up to OSHU instead of the bus, but TriMet asked Metro to bump up the #8 back to its original frequency. The next time the model is run for the Final EIS, there will not be a red area.

Auto performance outputs are an important part of model because it shows where volumes exceed capacity. Modeling for traffic goes to a consultant who run their own micro simulation or traffic analysis.

**Ramtin** asked what intersection is used in the PPT graphic (page 23/28)?

**Matt** responded that the larger graphic is from the Metro's travel demand model and shows Barbur and Terwilliger. The smaller graphic is just a sample of an intersection in the Vissim, a microsimulation model. It's not an intersection in our network.



## Terminus and Interim Terminus

Scott Robertson, TriMet

Scott introduced the Bridgeport terminus concept. The project started with many different options, but this concept was decided on after receiving public feedback. He explained that the terminus will have three tracks, two platforms, a system building, a communications building, substation, and a breakroom for operators, as well as a pedestrian bridge to the existing park and ride.

The current park and ride concept plans for around 710 spaces, though the Final EIS will run a model with 900 spaces. There might be some impacts to parking lots to the Village Inn, Men's Warehouse, and Bed Bath and Beyond, but we don't expect any impact to the buildings.

**Elise** asked how will it reduce I-5 traffic to have 900 cars off the road if they come in and leave at staggered hours?

**Scott** responded that the problem is the vast majority arrive between 7-9 a.m. and leave between 4-6 p.m. You are correct that we are reducing traffic on I-5, but then we will be overloading the current intersection. If we run the model at 930 parking spaces and look at the impacts, we would need to add a turn lane. Because the intersection is already large, we would like to avoid further increase to its size.

**Calista** asked for clarity about Scott mentioning working with the City of Tualatin, but isn't it Tigard?

**Scott** answered that it's both, right on the line between both Cities.

**Ethan** asked what's are the red dotted lines?

**Scott** responded that the red dotted lines are for future extensions of light rail without having to rebuild parking garage.

**Ethan** asked what are the minimum parking spots in the concept?

**Scott** responded that 710 is minimum.

**Ethan** asked how many spots are existing now and if it is currently full?

**Scott** responded somewhere around 350 and yes, it's currently usually full.

**Ethan** asked what is a mobility plaza?

**Scott** responded that the mobility plaza is a way to provide a space for different uses. Examples are carshare, Uber, Lyft, scooters, etc.

**Ethan** thanked TriMet for not bulldozing Village Inn. His concern is all of the traffic that comes down and onto 72<sup>nd</sup> Avenue. He commented that it is nice to have two separate parking lots because I-5 north is constantly backed up.

**Scott** responded that TriMet is looking into that issue and it will be address in the Final EIS.

**Lindsey** asked if the crosswalk with an "x" in it is a scramble?

**Scott** responded that it could be, but the design is still conceptual. The project goal is to make sure that intersection is as safe as possible, but TriMet would have to look at the traffic signal to provide enough time for pedestrian crossing without causing more congestion.

Scott introduced the interim terminus (previously called Minimum Operating Segment – MOS) concept and thanked the Committee for their questions in the last meeting. TriMet is moving forward with the recommendation to list the MOS as the Upper Boones Ferry location as required by the Final EIS. He reminded the Committee that if the project has to move forward with the MOS, they will bring it to the public and committee for feedback. TriMet met with the one affected property owner, who suggested 72<sup>nd</sup> Avenue as a better MOS than Upper Boones Ferry Road.

**Ramtin** commented that Tigard is planning to fully rebuild 72<sup>nd</sup> Avenue. He asked that TriMet consider suggesting to the City of Tigard to design the rebuild to match the rest of 72<sup>nd</sup> Avenue.

**Scott** responded that is correct, 72<sup>nd</sup> Avenue will be rebuilt by 2027 and is included in RTP.

Bob announced there is a Transportation Task Force meeting on December 11 from 5:30-7:30 p.m. at the World Trade Center if people are interested.

Brandy thanks the group. January's meeting is Thursday, January 9 from 5:30 – 7:30 p.m., but noted the goal is to finish at 7 p.m. She wished the Committee a great holiday.