

Agenda



Metro

600 NE Grand Ave.
Portland, OR 97232-2736

Meeting: 82nd Avenue Transit Project Steering Committee #5
Date: June 22, 2023
Time: 4:00 p.m. to 6:00 p.m.
Place: Zoom meeting
<https://us02web.zoom.us/j/86791964648?pwd=bHd4bi9GK1hsamlrcmxIaDdRMWRKUT09>
Passcode: 822410 Webinar ID: 867 9196 4648
Purpose: Discuss updates to the project work and related efforts, review and voting on adopting Goals & Objectives and revised Draft Purpose & Need, presentation and discussion on engagement and technical tools of analysis around travel markets.
Outcome(s): Steering Committee will vote on the revised Draft Purpose & Need and Goals & Objectives, learn about and discuss engagement findings, and understand project next steps.

- 4:00 p.m. Welcome and Introductions
- 4:10 p.m. Approval of February and March meeting minutes
- 4:15 p.m. Updates from partners on related work
- Workplan update
 - Community Coalition Update– Equitable Development Strategy (Zachary Lauritzen)
 - Partner related efforts on and around 82nd Avenue
- 4:25 p.m. Consider adopting Revised Initial Purpose & Need and Draft Goals & Objectives
- Prior meeting comfort with Goals & Objectives, but desire to amend the Purpose and Need to include need to address climate change
 - Walk through revisions (Elizabeth Mros-O'Hara, Metro)
 - **Vote – Green, Yellow, Red (Hwang/Lewis)**
- 4:50 p.m. Public Engagement Update and Summary (Kate Hawkins and Paulina Salgado, Metro/TriMet)
- Review of extensive engagement - focus groups, online open house, transit survey, and in-person events
 - Upcoming engagement
 - Questions and discussion
- 5:20 p.m. Introduce Market Analysis Tools
- On The Map (LEHD) web tool, Jarret Walker access analysis, TriMet electronic payment data (HOP), and on-board origin and destination survey
 - What can this data tell us about where people are travelling now and where they may want to go with changes to the transit system.
- 5:30 p.m. LPA Review- Example (Elizabeth Mros-O'Hara, Metro)
- Organizing tool for us to discuss as we progress to an LPA.
 - 82nd Ave Transit Project draft version will be provided at next meeting
- 5:40 p.m. Public Comment

5:50 p.m. Next steps/Adjourn (Metro Councilors Hwang/Lewis)

Materials:

Draft meeting minutes (February and March 2023)

Revised Initial Draft 82nd Avenue Transit Project Purpose & Need with tracked changes

Draft 82nd Avenue Transit Project Goals and Objectives (no changes)

Meeting Protocols for Decision Making Procedures

Division Transit Project Locally Preferred Alternative document

Meeting minutes

Meeting: **82nd Avenue Steering Committee meeting**
Date/time: Thursday, February 23, 2023 | 4:00 p.m. to 6:00 p.m.
Place: Virtual webinar meeting held via Zoom

Members, Alternates Attending

Councilor Duncan Hwang, Co-chair
Commissioner Mark Shull
Commissioner Diane Rosenbaum
JC Vannatta
Art Pearce
Rian Windsheimer
Representative Khanh Pham
Emerald Bogue
Zachary Lauritzen
Kaitlyn Dey
Leslie Lum
Michael Liu

Affiliation

Metro
Clackamas County
Multnomah County
TriMet
Portland Bureau of Transportation
Oregon Department of Transportation
State of Oregon, House District 46
Port of Portland
Oregon Walks
Clackamas Service Center
Unite Oregon
Fubonn

Panelists Attending

Elizabeth Mros-O'Hara
Malu Wilkinson
Kelly Betteridge
Nubia Milpas Martinez
Yuliya Lee
Mark Dorn
Jamie Snook
Jessie Stemmler
Jonathan Plowman
Michael Kiser
Jonathan Mosteiro
Julia Reed

Panelists Attending

Metro
Metro
Metro
Metro
Metro
TriMet
TriMet
TriMet
TriMet
Nelson/Nygaard
Portland Bureau of Transportation

Welcome and introductions (Councilors Duncan Hwang, Metro)

Co-chair Councilor Duncan Hwang, Metro called the meeting to order at 4:00 p.m. and welcomed the attendees to the meeting. Councilor Hwang provided an update on the 82nd Avenue corridor tour.

Councilor Hwang asked committee members for feedback based on their experience during the tour.

Commissioner Shull stated as investments are made on 82nd, homeless individuals will need to be moved to safe spaces for development to occur in a holistic fashion.

Co-chair Councilor Duncan Hwang, Metro walked through the agenda.

Updates on Project Efforts, Community Coalition Efforts, and Related Partner Work (Elizabeth Mros-O'Hara, Metro)

Elizabeth Mros-O'Hara, Metro, shared the draft project schedule from March to August.

Zachary Lauritzen, Oregon Walks, provided an update on the 82nd Avenue Community Coalition and Equitable Development efforts. Zachary discussed coalition finalization, and the PSU Grad student opportunity analysis for incorporating green spaces along the corridor.

Julia Reed, Portland Bureau of Transportation (PBOT), provided an update on PBOT's regional work. Julia stated that the fall engagement summary and the existing conditions report have been published online. She highlighted that an online open house would launch mid-April and go through the end of May, it will focus on communicating additional information about the project such as alignment, mode, stations, trees, sidewalks, and crossings. She reminded the committee that the Building a Better 82nd Ave program at the city of Portland has two components: Critical fixes and a civic corridor investment strategy.

Kristen Stallman, Oregon Department of Transportation (ODOT), noted that the Foster to Thompson project is moving to the construction phase.

Emerald Bogue, Port of Portland, explained that return to travel post pandemic has remained steady.

Diane Rosenbaum, Multnomah County, provided an update on the Holgate Library remodeling project breaking ground on January 6th.

Review initial Goals & Objectives and Purpose & Need (Elizabeth Mros-O'Hara, Metro)

Elizabeth discussed the draft project purpose and need statement. The draft needs which were—transit-dependent communities, safety, transit speed and reliability, and constrained corridor. Elizabeth explained the study area findings around current and future demographics of the project area. She then discussed the much higher number of equity populations that live along the corridor than in the region as a whole. The corridor has poverty rates much higher than the region, some of the most diverse census tracts in Oregon, many people with Limited English proficiency, and households without access to vehicles. These groups are much more likely to rely on transit. She discussed how the current state of 82nd Ave affects rider's daily lives, and why transit travel times are projected to increase. She continued to explain why 82nd Ave is considered a constrained corridor, the high demand for auto and transit riders along 82nd Ave, and how limited space along the corridor requires context-sensitive designs to physically fit and meet the needs of the communities and businesses there. She then spoke about how 82nd Ave is both a Metro's High Injury Corridor network (including Clackamas Co segment) and City of Portland High Crash Network Street, and about high number pedestrian injuries and fatalities along the corridor.

Discussion

Councilor Hwang asked why population growth along the corridor is predicted to grow faster than the rest of the region.

Emerald Bogue, Port of Portland, asked if there is data on rider destination and trip purpose.

Elizabeth explained there is a lot of data of where riders get on and off transit and more analysis is being done.

Leslie Lum, Unite Oregon, stated that ½ a mile is a long way for disabled individuals to move in order to access transit.

Kaitlyn Dey, Clackamas service center, highlighted that the analysis missed the high number of services located on 82nd Ave.

Mark Dorn, TriMet, stated that connectivity to the regional high-capacity transit system is an important element that should be addressed. Mark also mentioned worrying about the metric of a trip between

Alberta and Clackamas rather than the whole corridor.

Commissioner Rosenbaum stated that longer walking distances to stops could create barriers of access for elderly and disabled community members.

Zachary Lauritzen, Oregon Walks, asked if the corridor is considered a major freight route or just a delivery route, and what conclusions have been drawn based on the frequency of non-commuter transit travel in terms of stop consolidation. Zachary also highlighted a missing component of environment and in particular, climate change, in the purpose and need section.

Elizabeth stated that the corridor has been identified as very important for freight due to the high number of destinations.

Councilor Hwang highlighted environmental justice concerns mentioning green infrastructure and health impacts.

Michael Liu stated that businesses along the corridor rely on the ability to receive goods and services. He highlighted that other modes of transportation outside of transit need to be considered.

Commissioner Shull, Clackamas County, stated that public engagement for the project needs to be early, extensive, and deep. He asked if users are satisfied with the FX2-Division project and how it relates to 82nd Ave.

Elizabeth shared the 82nd Ave draft goals and objectives. Councilors did not have any comments or concerns about that document.

LPA component – FX Mode (Michael Kiser, TriMet)

Michael discussed issues FX helps to solve, TriMet's standard transit tools, including – Adaptive stop placement, shelter placement 40' buses, service frequency and line variation, and the limitations of these tools. He then explained how FX works as a system, why 82nd is ready for FX, tools in the FX system including – dedicated bus lanes, bus stop balancing and consolidation, in lane stopping, high capacity 60' buses, and transit signal priority. Michael highlighted improved pedestrian environments as a major piece of the project, and improved station environments.

Discussion

Due to time constraints discussion on this item will continue during the 3/23 meeting.

Station Siting Analysis and Findings (Jesse Stemmler, TriMet and Jonathan Mosteiro, Nelson/Nygaard)

Jessie described the high ridership of line 72 and its regular bus delays. He then identified existing stop spacing on the corridor that includes 115 stops between Clackamas Town center and Cully, and how transit can be improved through station investments. Jessie then explained what improved station features and amenities means, how these investments benefit the corridor, key criteria used for station location investment, and timeline and protocol for investment.

Jonathan explained stop access today compared to proposed station access, and that with the proposed stations they would be serving 85% of existing boardings on the same block as today. He stated that station placement must consider environmental constraints, and that they want to leverage partner investments such as ODOT and Portland funded safer pedestrian crossings.

Jesse stated that 66 station platforms have been identified between Sandy and Clackamas town center. He explained that station placement is a work in progress with further study and refinement to come.

Discussion

Due to time constraints discussion on this item will continue during the 3/23 meeting.

Public Comment

There were none.

Next Steps/Adjourn (Councilor Duncan Hwang, Metro)

Councilor Hwang described next steps for the committee.

Respectfully submitted,

Brianna Dolbin, 82nd Avenue Steering Committee Recorder

Attachments to the Public Record, 82nd Avenue Steering Committee meeting, February 23, 2023

Item	DOCUMENT TYPE	DOCUMENT DATE	DOCUMENT DESCRIPTION	DOCUMENT No.
1	Agenda	02/23/2023	02/23/2023 82 nd Avenue Steering Committee meeting agenda	02232382ASC-01
2	Document	02/16/2023	82nd Avenue Transit Project – Draft Initial Purpose and Need Statement	02232382ASC-02
3	Document	02/15/2023	82 nd Avenue Transit Project – Draft Goals and Objectives	02232382ASC-03
4	Document	09/14/2022	82nd Avenue Transit Improvements	02232382ASC-04
5	Document	09/12/2022	82 nd Avenue Transit Project Map	02232382ASC-05
6	Document	02/23/2023	PBOT Building a Better 82 nd Ave.	02232382ASC-06

Meeting minutes

Meeting: **82nd Avenue Steering Committee meeting**

Date/time: Thursday, March 23, 2023 | 4:00 p.m. to 6:00 p.m.

Place: Virtual webinar meeting held via Zoom

Members, Alternates Attending

Councilor Duncan Hwang, Co-chair
Commissioner Mark Shull
Commissioner Diane Rosenbaum
JC Vannatta
Kristen Hull
Rian Windsheimer
Emerald Bogue
Zachary Lauritzen
Kaitlyn Dey
Leslie Lum
Michael Liu

Affiliation

Metro
Clackamas County
Multnomah County
TriMet
Portland Bureau of Transportation
Oregon Department of Transportation
Port of Portland
Oregon Walks
Clackamas Service Center
Unite Oregon
Fubonn

Panelists Attending

Elizabeth Mros-O'Hara
Malu Wilkinson
Kelly Betteridge
Nubia Milpas Martinez
Yuliya Lee
Brianna Dolbin
Mark Dorn
Jamie Snook
Jessie Stemmler
Jonathan Plowman
Michael Kiser
Jonathan Mosteiro
Julia Reed

Panelists Attending

Metro
Metro
Metro
Metro
Metro
Metro
TriMet
TriMet
TriMet
TriMet
Nelson/Nygaard
Portland Bureau of Transportation

Welcome and introductions (Councilor Christine Lewis, Metro)

Co-chair Councilor Lewis, Metro called the meeting to order at 4:00 p.m. and welcomed the attendees to the meeting. She asked steering committee members to provide any relevant updates.

Diane Rosenbaum, Multnomah County, provided an update on the Multnomah County Access Shuttle.

Kristen Hull, PBOT, provided an update on the Civic Corridor team convening their community advisory group and presenting on their Civic Corridor bike strategy to their bike and pedestrian advisory groups. She explained that they have released the 30% design for the critical fixes piece of the project.

Approval of September and December Meeting Minutes

Moved by JC Vannatta, seconded by Commissioner Shull, with all in favor the minutes are approved.

Updates on Project Engagement and Analysis (Kelly Betteridge, Metro)

Kelly Betteridge, Metro, shared that the transit team attended the Citizen Advisory Group meeting for Building a Better 82nd and engaged in a in depth discussion about the project on March 22nd Avenue. The CAG learned about the project and also participated in a voting exercise where they shared priorities when there were competing choices. One question was with limited space should the project team 1. Prioritize vehicles and access more delay for transit or prioritize transit speed and reliability and accept more traffic delay and diversion. The CAG overwhelmingly prioritized transit speed and reliability with 11 votes, to 1 vote right in the middle, and two votes to prioritize vehicles.

Kelly also shared that early analysis of different transit configurations in the roadway has shown that the most promising location for transit is right running with transit priority treatments that could include BAT lane and queue jump treatments.

Steering Committee Feedback on Purpose and Need in February (Elizabeth Mros-O'Hara, Metro)

Elizabeth discussed how staff intends to tie the Climate Smart Strategy into the projects purpose and need. She explained they plan to look at other local plans, policies, and research how other projects, like 82nd Ave, that have incorporated climate as part of their purpose and need.

Discussion

Rian Windsheimer expressed concern of unattended consequences due to adding climate into the purpose and need section last minute.

Elizabeth explained that climate was already incorporated into the project's goals and objectives, and it reflects local and regional plans. She highlighted that transit rises to the top to reduce GHG (greenhouse gas emissions) in the region and local plans. Consequently, improving the transit on 82nd Avenue would be seen as one way of addressing the need.

Leslie Lum stated that the document needs to incorporate and highlight the importance of the Columbia Corridor.

Engagement and Station Siting Presentation and Discussion (Paulina Salgado, TriMet)

Paulina explained the community engagement timeline, terminus location options, and online open house engagement.

Jesse explained the analysis of 82nd Ave is used to answer key questions, existing conditions of 82nd Ave, line 72 bus delay, existing stop spacing, station features and amenities, station location criteria, existing high ridership stops and important places, and station access.

Discussion

Zachary asked if engagement with McDaniel's High school is on their radar.

Councilor Lewis asked how number of stops affect reliability in terms of dependable arrival time.

Jesse explained making frequent stops and pulling back into traffic has a deep impact on bus time.

Zachary asked how much time additional stops delay the bus and what lane allocation is going to look

like.

Jesse explained staff is working on modeling now to show how all the tools will work together.

Elizabeth explained delay varies for example if the bus has a lift for riders with mobility devices or those with a stroller. It adds time- up to two minutes. This is frustrating for those with mobility devices and for those riders already on the bus. She stated that for this project they are looking at near-level boarding to minimize the need for lifts. It also depends on traffic, as the bus needs to safely merge.

Elizabeth explained the work being done on lane allocation.

Zachary asked when the modeling will be completed and when the committee will be asked to make a recommendation. He stated that this information is essential for the steering committee to be able to endorse an LPA.

Commissioner Rosenbaum asked how the analysis considers stations that are the most critical for the elderly and disabled community members.

Jesse explained they start with data which the bus collects showing where there are lifts today and are also looking for input from community members.

Leslie Lum asked for a comparison of efficiency and effectiveness of the old Division bus line vs the new one.

Michael Liu asked where delivery trucks will be expected to pull over with a dedicated bus lane and medians along 82nd.

Leslie Lum asked if a continuous median is being considered.

Kristen Hull explained that Portland is looking at including medians along 82nd for safety reasons as part of Building a Better 82nd Avenue.

Zachary stated that we need to understand the travel data and how people are affected before the Steering Committee can select and LPA.

Zachary asked how the criteria for evaluating terminus locations are weighted.

Elizabeth explained that the criteria need to be balanced and that how the different locations perform for travel time and access to important destinations will be shared with the steering committee.

Zachary stated his number one criteria is serve people who rely on transit.

Commissioner Shull ask if the purpose and need of constrained corridor includes the consideration of travel lane requirements integrated into mass transit needs to achieve a balance of transportation forms, if vehicular access to 82nd will affect businesses, if vehicular lane travel can be diverted to I205, and if overhead trolleys have been considered.

Elizabeth explained that analysis is being done to understand vehicular traffic.

JC Vanatta explained that the infrastructure to implement trolleys along 82nd Ave would be very expensive and require lots of overhead wires and structures, so it is not being considered for this corridor. However, an explanation of why the corridor improvements are focused on bus improvements will need to be explained with documentation.

Station Siting Analysis and Findings (Jesse Stemmler, TriMet and Jonathan Mosteiro, Nelson/Nygaard)

Jesse described the proposed station locations and asked the committee to weigh in on important station locations and the methodology to identify station locations.

Michael Liu asked how long it will take the bus to complete a route given the proposed station locations.

Jesse stated that stop location is only one tool and they need to understand how the tools interact with each other in order to get a clear picture of time saved.

Jonathan Mosteiro said that early analysis shows potential savings of 8 to 10 minutes, but we need to look more closely and will look for upcoming modeling data to get a better sense.

Councilor Hwang asked what community engagement process looks like for areas where stop placement is flexible.

Paulina explained that initially the online open house will gather data from residents and there will be a interactive map where people can place comments about where their preferred stops would be.

Public Comment

There were none.

Next Steps/Adjourn (Councilor Duncan Hwang, Metro)

Councilor Hwang described next steps for the committee.

Respectfully submitted,

Brianna Dolbin, 82nd Avenue Steering Committee Recorder

Attachments to the Public Record, 82nd Avenue Steering Committee meeting, February 23, 2023

Item	DOCUMENT TYPE	DOCUMENT DATE	DOCUMENT DESCRIPTION	DOCUMENT No.
1	Agenda	02/23/2023	02/23/2023 82 nd Avenue Steering Committee meeting agenda	02232382ASC-01
2	Document	02/16/2023	82nd Avenue Transit Project – Draft Initial Purpose and Need Statement	02232382ASC-02
3	Document	02/15/2023	82 nd Avenue Transit Project – Draft Goals and Objectives	02232382ASC-03
4	Document	09/14/2022	82nd Avenue Transit Improvements	02232382ASC-04
5	Document	09/12/2022	82 nd Avenue Transit Project Map	02232382ASC-05
6	Document	02/23/2023	PBOT Building a Better 82 nd Ave.	02232382ASC-06

82nd Avenue Transit Project

Revised DRAFT Initial Purpose and Need Statement - May 25, 2023

BACKGROUND

The 82nd Avenue corridor is a major route for the region connecting key destinations and communities in Clackamas County and Portland, Oregon (See Figure X) and supporting the movement of people and goods in a diverse and growing area. The corridor disproportionately serves BIPOC, limited English proficiency, and low-income communities. 82nd Avenue was once the primary north-south highway for the area before the Interstate 205 was opened in 1983. Since then, the primary function of 82nd Avenue as a regional throughway has diminished, but its importance as a transit and pedestrian corridor has grown. The roadway continues to carry a substantial amount of freight, auto, and bus traffic.

TriMet's Line 72 Killingsworth/82 serves the 82nd Avenue corridor and is the highest ridership bus line in TriMet's system¹, exceeding that of the Orange or Yellow Max light rail lines. However, unlike light rail transit, the bus runs in mixed traffic and is often delayed. Line 72 is a frequent service route connecting riders to major destinations, high-capacity transit lines (the new Division FX2 and the MAX Green, Blue, and Red Lines), and over 20 bus routes just in the corridor. It is a workhorse with high ridership all day and weekends and saw relatively high retention of riders during the pandemic.

The 2010 High Capacity Transit (HCT) System Plan, the 2018 Regional Transportation Plan (RTP), and the 2018 Regional Transit Strategy all call for a major transit investment in the corridor. The 2018 RTP identified the corridor for transit. In 2019, Metro's Transportation Funding Task Force selected 82nd Avenue as a Tier 1 priority to include a bus rapid transit project.

The need is urgent with an unprecedented opportunity for an 82nd Avenue bus rapid transit project to leverage and complement a \$185 million investment that the City of Portland, the State of Oregon, and regional partners are making as part of the 82nd Avenue jurisdictional transfer. These investments provide the opportunity to transform and reimagine the corridor to improve safety and pedestrian facilities in conjunction with high-quality, frequent, reliable Bus Rapid Transit service. The City of Portland and ODOT are already making near-term safety, paving, and maintenance fixes that will improve access to transit. A second phase of that work is underway through the City's Building a Better 82nd Avenue program to identify additional improvements within Portland for the corridor that are being coordinated closely with the transit project.

¹ The Line 72 continues west of 82nd Avenue to Swan Island. However, the 82nd Avenue segment accounts for 77 percent of rides (2022) and 82 percent of the passenger delay (2019).

PURPOSE

The purpose of the 82nd Avenue Transit Project is to improve transit speed, reliability, capacity, safety, comfort, and access on 82nd Avenue, which is one of the most important transit corridors in the region. The project seeks to address the needs of people who live, work, learn, shop, and travel within the corridor both today and in the future – in particular, BIPOC and low-income individuals – through context-sensitive transit improvements in a constrained corridor.

NEED

The 82nd Avenue Transit Project would address ~~four~~five major needs in the corridor:

1. **Transit speed and reliability:** need to provide faster and more reliable transit service to improve access to destinations and the ability for people to rely on transit to meet their needs
2. **Constrained corridor:** need to serve the high travel demand in a constrained corridor
3. **Safety:** need to improve safe access to transit and bus stop amenities in a high injury corridor
4. **Transit-dependent communities:** need to provide safe, accessible, efficient, and reliable transit service to meet the needs of the high concentration of communities who rely on transit
5. **Climate change:** need to increase transit ridership to help reduce reliance on single-occupant vehicles, vehicle miles traveled, energy consumption and greenhouse gas emissions in our region.

The following subsections provide more information on each need.

Transit speed and reliability

Line 72 has slow travel times and reliability issues which reduce travelers' ability to access destinations, make transit transfers, and plan trips. Travel times and reliability are cited as key reasons people choose not to ride transit².

82nd Avenue is extremely busy with high volumes of cars³, freight, and bus traffic on weekdays and weekends. The Line 72 runs in mixed traffic with little transit priority and is subject to daily congestion, which is worst in the midday and evenings. Line 72 travel time variability and lengths are increased by the many signals, frequent bus stops, and long bus dwell times. Current bus stop spacing is very close together (every 850 feet on average) which is closer than TriMet's current spacing standards (1,000-1,600 feet apart depending on context). Consequently, average bus travel time is 12 miles per hour and run times vary significantly by time of day. A northbound trip from Clackamas Town Center to Cully Boulevard takes 53 percent longer (21 minutes) during the evening rush hour compared to early morning (see Table 1). In addition, transit travel times are approximately twice as long as driving during the evening peak hour (see Table 2).

² <https://www.ecolane.com/blog/7-reasons-why-people-stop-using-public-transit>

³ Average daily traffic counts in 2019 ranged between 14,000 and 31,000 vehicles in different segments

Table 1. Bus travel time by time of day, in minutes (Fall 2019 average weekday)

Direction	Early AM	AM peak	Midday	PM peak	PM peak delay (vs. early AM)
Northbound (CTC > Cully)	40	48	54	61	21
Southbound (Cully > CTC)	46	51	57	59	13

CTC = Clackamas Town Center

Source: TriMet 2019

Table 2. PM peak travel time difference between driving and bus*

Direction	Car travel time	Bus travel time	Difference (minutes)	Difference (%)
Northbound	31	61	30	97%
Southbound	30	59	29	97%

Source: Based on Regional Integrated Transportation Information System/INRIX travel time data from 2019 PM peak period compared with 2019 Line 72 travel times.

Line 72 has the highest cumulative passenger travel delay⁴ of any bus route in the TriMet system. The 82nd Avenue portion of the line accounts for 82 percent of the delay. The average delay per bus trip is approximately 15 minutes resulting in an average of 22 hours of cumulative passenger delay per trip. Cumulative passenger delay accounts for the number of passengers subject to the delay.

Transit travel times are projected to increase by 2040, especially in the evening peak period with increased traffic congestion. Comparing 2022 to 2040 between Alberta Street and 82nd Avenue in the northern part of the terminus and Clackamas Town Center bus travel times are expected to increase between 22 and 24 percent in the PM peak period.

Table 1. Projected growth in bus travel time (2021 versus 2040)

Direction	2021 Travel Times		2040 Travel Times		Difference minutes (%)	Difference Minutes (%)
	AM peak	PM peak	AM Peak	PM peak	AM peak	PM peak
Northbound (CTC > Alberta)	40	49	44	61	4.4 (11%)	12 (24%)
Southbound (Alberta > CTC)	38	47	41	57	3.2 (9%)	10 (22%)

Source: DKS calculated based on Synchro/SimTraffic models and validated with existing Line 72 travel times

Note: travel times are rounded

Constrained corridor

82nd Avenue is a high-demand corridor for all travel modes but is constrained by limited right-of-way and development adjacent to the roadway. This condition makes adding travel lanes for car traffic an unlikely option. To accommodate future growth and meet the region's climate change goals, more trips will need to be made on transit, which can carry more people than cars in the

⁴ Delay is defined as the difference between the 80th percentile and 20th percentile run time. These numbers are based on TriMet 2019 data.

same space. The corridor study area includes approximately 70,000 people and 65,000 jobs in 2015 which is anticipated to grow to 94,000 people and 92,000 jobs in 2040.⁵

Today, there is insufficient capacity to accommodate anticipated growth in travel demand. The MAX Green Line operates parallel to 82nd Avenue but serves regional trips and would not be able to support local trips and destinations directly along 82nd Avenue. Increased frequency of service, faster travel times and larger vehicles are all strategies that would increase the transit carrying capacity.

Safety

The 2018 Regional Transportation Safety Strategy (RTSS) identified 82nd Avenue as a regional high injury corridor⁶, and the City of Portland identified 82nd Avenue as part of its high-crash network. According to the RTSS, 82nd Avenue had the tenth highest rate of serious crashes⁷ per mile out of the 181 corridors identified. Crash data for the six-year period from 2015 through 2020 for the full length of the corridor showed 2,698 injury crashes, of which 15 resulted in a fatality.⁸ Pedestrian and bicycle crashes are over-represented in more serious crashes, making up two-thirds of fatal crashes and approximately one-quarter of serious injury crashes. Many pedestrian crashes are happening near transit stops.

All transit riders are pedestrians for some part of their trip. Infrastructure is essential for a safe pedestrian environment. The corridor has many missing and substandard sidewalks, limited safe crossing locations and no continuous, protected bicycle facilities. Signalized pedestrian crossings are spaced on average over 1,000 feet apart. Within the City of Portland over half of the sidewalk ramps are not Americans with Disabilities Act compliant. In addition, the lighting along the corridor is inconsistent making pedestrians less visible to drivers.

Transit-dependent communities

The 82nd Avenue corridor is one of the most diverse parts of our region. It serves many BIPOC communities, limited English proficiency speakers, and low-income communities. It contains seven census tracts identified as areas of persistent poverty by the U.S. Department of Transportation and car ownership is lower than the regional average through much of the corridor. In addition, most of the corridor has been identified as being Equity Focus Areas due to high concentrations of people of color, low-income people, and and/or people with limited English proficiency. There are census tracts with some of the highest BIPOC concentrations in the state. Thirty-two percent of the population is low income compared to 24 percent for the regional average; and 11 percent of the population has limited English proficiency compared to 8 percent of the region⁹. In addition, there is a higher percentage of zero car households and people living with a disability in the corridor than

⁵ Study area is half-mile from 82nd Avenue and includes the area around Clackamas Town Center in the south and the four potential termini in the north. Source: MetroScope, Metro Oregon.

⁶ Metro. [High Injury Corridors & Intersections Report](#). April 2017.

⁷ Serious injuries = fatalities and incapacitating injuries

⁸ ODOT. 2015-2020.

⁹ Source: 2016-2020 American Community Survey

in the region as a whole. These groups are more likely to depend on transit for their daily needs than the general population.

Transit travel time and reliability are equity issues for people that need to be at work or other places on time. BIPOC, low-income people, and women are more likely to fill “essential worker” jobs requiring workers to be in-person with a fixed start time. Consequently, these groups are more likely to have a longer commute and often need to take an early bus to avoid being late. In addition, ridership on the Line 72 is higher mid-day than in the morning peak hour. This generally indicates that a lot of trips are for other needs than a typical “8 to 5” commute rather being used by people trying to get to appointments, school, and essential jobs that have later start times. In addition, the Line 72 had the third highest ridership retention rate among TriMet’s frequent service lines in Spring 2022 relative to Fall 2019 (pandemic drop), demonstrating its importance as an essential transit service line.

Bus stop area infrastructure and amenities are lacking in the corridor making it less safe and comfortable to access transit. The stop area infrastructure includes narrow, aging, or missing sidewalks in many places; poor and inconsistent lighting; and bus stops closer than TriMet’s standards. Along 82nd Avenue, 36 percent of bus stops have shelters, 57 percent have seating, 65% have signalized crossings nearby, and only 83% have lighting which is inconsistent and often does not meet standards. Respondents to the City of Portland’s Building a Better 82nd Avenue survey conducted in 2022, stated desire for improved bus stop quality, access to bus stops, better transfers, and shorter wait times.

Climate Change

In Oregon, the transportation sector is a significant contributor to statewide greenhouse gas (GHG) emissions. According to the Oregon Global Warming Commission's 2022 Biennial Report, the transportation sector accounts for 40 percent of the state's total GHG emissions, making it the largest source of emissions in Oregon.¹⁰ In 2010, the Oregon Legislature passed Senate Bill 1059, requiring the Oregon Transportation Commission (OTC) to adopt a statewide transportation strategy to reduce GHG emissions from transportation to 75 percent below 1990 levels by 2050. The existing transportation strategy requires the OTC to coordinate with Metro, state agencies, local governments, and stakeholders to achieve the state's emissions reduction goals.¹¹ Each agency involved in the 82nd Avenue Transit Project has developed a climate action plan supporting this priority.

The climate plans and policies for the metro region, City of Portland, Clackamas County, Multnomah County, and TriMet all recognize public transit as a primary tool to reduce energy consumption and greenhouse gas emissions in our region. These plans call for increased transit mode share and active transportation to help address the climate crisis. Metro’s Climate Smart Strategy which was adopted by all the regional partners¹² also aims to reduce the region’s per capita greenhouse gas

¹⁰ Oregon Department of Energy. 2022 Biennial Energy Report

¹¹ Oregon Department of Transportation. Statewide Transportation Strategy

¹² Joint Policy Advisory Committee on Transportation (JPACT) members Multnomah County, Washington County, Clackamas County, City of Portland, Cities of Multnomah County, Cities of Washington County, Cities of

emissions from 2010 by at least 20 percent by 2035 by making transit convenient, frequent, accessible and affordable. The City of Portland's Council adopted ambitious goals for reducing carbon emissions, much of which depends on a large reduction in vehicle miles traveled. PBOT's Transportation System Plan aims to achieve these reductions through a significant shift in modes traveled by 2035, including a 25% commute transit mode split.¹³ Multnomah County's target is also a 25% transit mode share for work trips but by 2030.¹⁴ The first strategy in the TriMet Climate Action Plan is to reduce regional traffic-related emissions by increasing transit ridership and supporting nondriving travel options.¹⁵ Clackamas County calls for increasing transit use as a key tool to meet its goal of being carbon neutral by 2050.¹⁶

Marginalized and vulnerable populations, such as BIPOC communities and low-income people, are often disproportionately affected by the adverse effects of climate change. In greater Portland, communities of color and low-income communities are disproportionately exposed to extreme heat because they are more likely to live in areas with less tree canopy cover and more pavement while also having less access to air conditioning or community shelters.¹⁷ Throughout the region, BIPOC communities and low-income individuals are also disproportionately exposed to pollutants from diesel exhaust and live in the highest flooding risk areas.¹⁸ Reducing GHG emissions is critical to addressing the effects of climate change and ensuring a viable, sustainable future for the region.

Providing a reliable bus rapid transit line with safe pedestrian access on 82nd Avenue promotes transit ridership consistent with the region's goals to decrease single occupancy vehicles trips and reduce emissions.

Clackamas County, Oregon Department of Transportation, TriMet, Oregon Department of Environmental Quality, Metro Council, Washington State Department of Transportation, City of Vancouver, and Clark County,

¹³ PBOT. Strategic Plan 2019-2022

¹⁴ Multnomah County. 2015 Climate Action Plan

¹⁵ TriMet. 2022 Climate Action Plan

¹⁶ Clackamas County. Draft Clackamas County Climate Action Report

¹⁷ Lidar, Metro Research Center

¹⁸ US EPA National Air Toxics Assessment

82nd Avenue Transit Project

DRAFT Goals and Objectives

Goals	Objectives
The project improves the travel experience for transit riders, in particular BIPOC and low-income communities	<ul style="list-style-type: none">• Reduce transit travel time• Improve transit reliability today and in the future• Improve physical safety and access to stations• Improve amenities and comfort at stations
The project improves transit mobility in a congested and constrained corridor	<ul style="list-style-type: none">• Improve transit passenger capacity• Improve transit reliability and travel times• Provide transit access to key destinations and the broader transit network
The project advances adopted state, regional, and local goals and objectives related to land use, transportation, equity, and climate	<ul style="list-style-type: none">• Increase transit ridership• Support land use and transportation objectives• Support equity objectives• Support climate objectives• Support efficient movement of people and access to services• Supports regional and local Vision Zero objectives
The project supports the community, in particular transit riders and BIPOC communities	<ul style="list-style-type: none">• Community members serve on the decision-making body for the transit concept• Community members, in particular BIPOC and historically-disadvantaged communities, provide input on project design outcomes• Provide transparent, balanced, and objective information about project analyses, tradeoffs, and community opportunities to influence decision making
The project is feasible to fund, construct and operate	<ul style="list-style-type: none">• Cost-effective transit operations• Competitive for FTA capital grant funding• Project cost is supported by project partners and documented in a financing plan• Project design can meet necessary approval requirements
The project is coordinated with other planned investments in the corridor	<ul style="list-style-type: none">• Leverage opportunities to efficiently fund improvements in the corridor• Compatible with other investments to improve access and safety in the corridor• Context-sensitive design improves transit while supporting other community priorities
The project is able to move into the next phase, Project Development	<ul style="list-style-type: none">• Identify funding for Project Development phase

The Draft Goals and Objectives have been reviewed for racial equity and other equity considerations. Comments focused on the need for project performance measures being designed demonstrate the potential benefits and harms that may impact BIPOC, low income, and other vulnerable groups. The project team will incorporate this feedback as we develop performance measures tied to the objectives. An example comment was to recognize different groups have different perspectives on what increases physical safety with many BIPOC groups feeling less safe with police presence. The performance measures for physical safety would recognize this and focus on implementing countermeasures for crashes such as lighting, crossings, and sidewalks.

These 82nd Avenue Transit Project goals and objectives are the focused on the development of a high-quality transit project. As the project alternatives are developed and evaluated, the project team must be cognizant of community values and the special need not to conflict with the Building a Better 82nd Avenue program while working in the same geography (between Clatsop and Lombard streets in Portland). Therefore, specific considerations and objectives that are important for the Building a Better 82nd Avenue program related to the area will be fleshed out and included for consideration as we move forward. In addition, the community values adopted by the 82nd Avenue Community Coalition will be considered and are attached.

Building a Better 82nd Objectives to consider will be provided by the City of Portland in the future.

- Discussions have centered around a safe and comfortable walking environment, urban forestry, travel to North Portland, and the transit project fitting with a holistic set of street improvements.

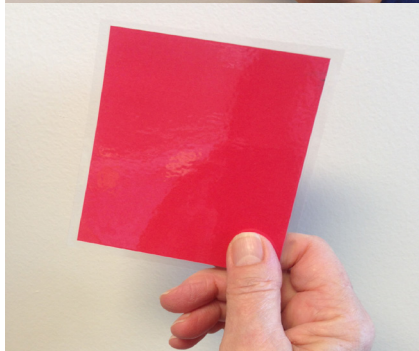
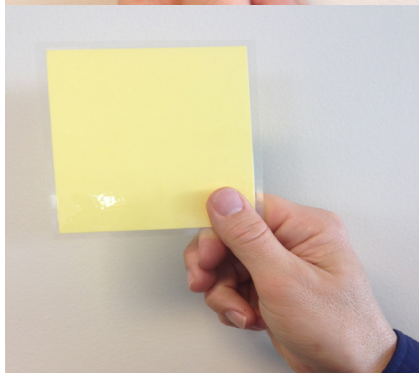
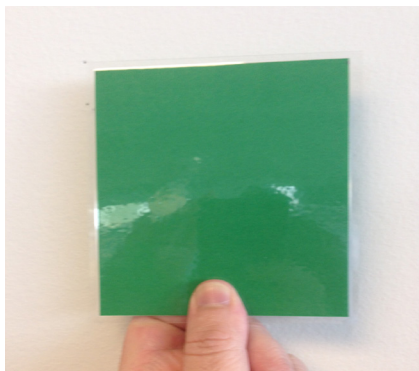
Attachment: 82nd Avenue Coalition's Values Statements

-

MEETING PROTOCOLS AND PROPOSED DECISION MAKING PROCEDURES

MEETING PROTOCOLS

- ☐ Arrive on time
- ☐ Actively listen to public comments
- ☐ Actively listen to each other
- ☐ When you want to speak, stand your name tent up on end
- ☐ Be mindful of how long you speak
- ☐ After the meeting, let staff know if there is anything that would help you feel more comfortable participating



DECISION MAKING

The Steering Committee will use a consensus-based approach for decision making, meaning decisions move forward because they are supported by members but are not necessarily the favorite choice of each individual member.

Step 1: A committee discussion will follow the presentation of technical information and community input. After questions are answered and concerns are discussed, there will be a call for consensus and you will be asked to indicate your level of support for a proposed decision by raising a color card.

Green I support this.

Yellow I have concerns that will need to be addressed or am skeptical, but I will not block this.

Red I do not support this.

Step 2: People who raised yellow cards will share their concerns. These will be recorded and may include:

- Considerations that should be addressed as the project moves forward
- Modifications or additions to the decision
- General statements you want included in the meeting record

Step 3: People who raised red cards will share:

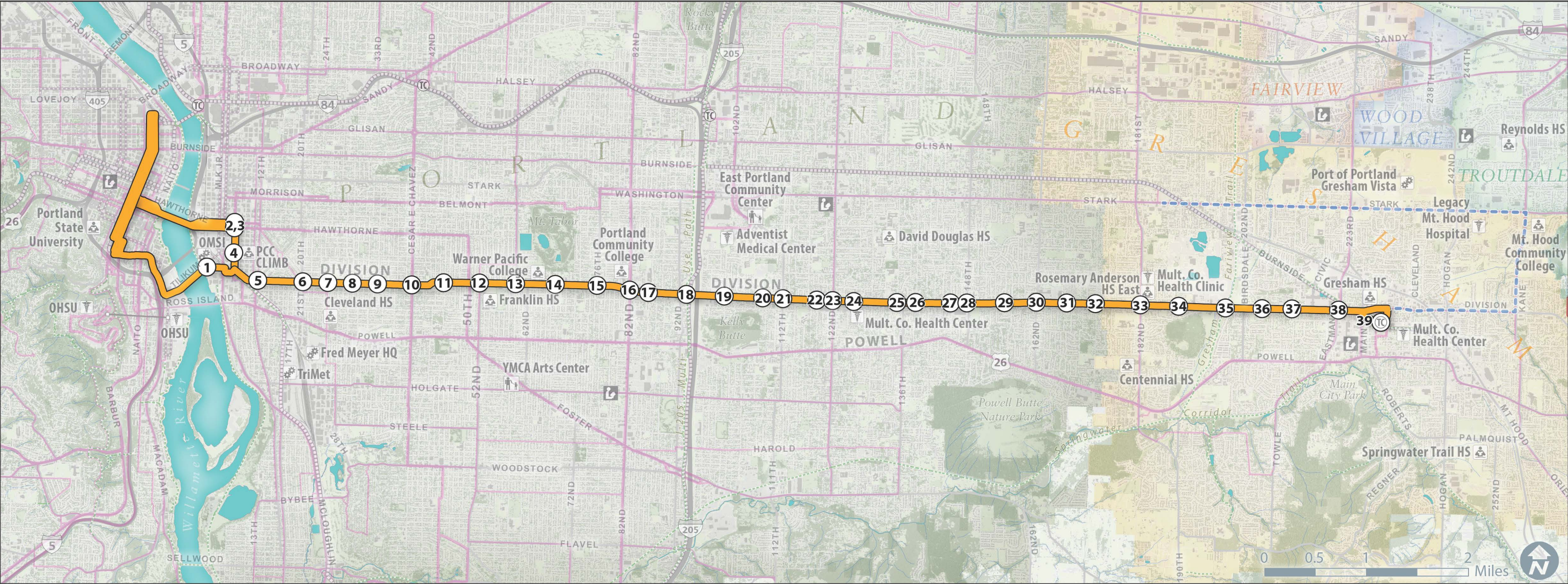
- Based on the yellow card discussion, whether they would still raise a red card
- Considerations that should be addressed or modifications to the decision that would move them from a red card to a yellow card

Step 4: If the proposed decision has substantively changed, you will be asked to indicate your level of support by raising a color card.

Reaching consensus: A proposed decision with modifications or additions will be confirmed upon reaching consensus, as indicated by green and yellow cards.

Consensus is not the same as unanimity. Following a good faith discussion, the committee may choose to move forward with red cards remaining. Red card concerns will be addressed moving forward to the greatest extent possible.

Should the committee be fundamentally divided, alternatives will be developed based on the issues raised and new proposals will be brought back to the committee for consideration. If the committee remains divided, the proposals will be separated into elements; those with support will move forward. For the unresolved elements, the co-chairs will answer the question: Can the project move forward with uncertainty on this element? If certainty is needed, the committee will use a simple majority vote.



Map Key	Station Location	Map Key	Station Location	Map Key	Station Location	Map Key	Station Location
1	OMSI	11	Division & 45th	21	Division & 112th	31	Division & 167th
2	Madison & 7th	12	Division & 51st	22	Division & 119th	32	Division & 174th
3	Hawthorne & 7th	13	Division & 60th	23	Division & 122nd	33	Division & 182nd
4	Harrison & 7th	14	Division & 68th	24	Division & 127th	34	Division & 190th
5	Division & 12th	15	Division & 76th	25	Division & 135th	35	Division & Gresham-Fairview Trail
6	Division & 20th	16	Division & 82nd	26	Division & 139th	36	Division & Bella Vista
7	Division & 26th	17	Division & 85th	27	Division & 145th	37	Division & Wallula/212th
8	Division & 30th	18	Division & MAX	28	Division & 148th	38	Division & Eastman
9	Division & 34th	19	Division & 101st	29	Division & 156th	39	Gresham Transit Center
10	Division & Chavez	20	Division & 109th	30	Division & 162nd		

Elements of the Recommended Locally Preferred Alternative*

Bus Rapid Transit Alignment (River crossing to be determined)

Approximate station location

Line 20 connection to Mount Hood Community College

Light rail

Streetcar

Aerial tram

Frequent bus

Standard bus

Regional trail

*Recommended by project Steering Committee on November 7, 2016

November 8, 2016