Council work session agenda

Tuesday, June 14, 2022	**10:30 AM**	**https://zoom.us/j/615079992 (Webinar ID: 615079992) or 929-205-6099 (toll free)**

Call to Order and Roll Call

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Work Session Topics:

10:30	Emerging Transportation Trends: Final Results and Recommendations		22-5726
	Presenter(s):	Eliot Rose (he/him)	
		Margi Bradway (she/her), Metro	
		Briana Calhoun, Fehr and Peers	
	Attachments:	Staff Report	
		Emerging Trends Technical Memo	
		Emerging Trends Summary	
11:00	Tigard UGB Land Exchange Process		22-5727
	Presenter(s):	Elissa Gertler (she/her), Metro	
		Ted Reid (he/him) Metro	
		Tim O'Brien (he/him), Metro	
		Schuler Warren, City of Tigard	
	Attachments:	Staff Report	
		Tigard UGB Memo	

11:45   Update on Parks and Nature Levy Renewal Framework   22-5728

        Presenter(s):   Jon Blasher (he/him), Metro

                           Mychal Tetteh (he/him), Metro

        Attachments: Worksheet

                           Draft Levy Renewal Framework

12:15   Chief Operating Office Communication

12:20   Councilor Communication

12:30   Adjourn

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ការគោរពសិទ្ធិពលរដ្ឋរបស់ ។ សំរាប់ព័ត៌មានអំពីកម្មវិធីសិទ្ធិពលរដ្ឋរបស់ Metro ឬដើម្បីទទួលបានព័ត៌មានរើសអើងសូមចូលទស្សនាគេហទំព័រ www.oregonmetro.gov/civilrights។ បើលោកអ្នកត្រូវការអ្នកបកប្រែភាសានៅពេលធ្វើ ប្រជុំសាធារណៈ សូមទូរស័ព្ទមកលេខ 503-797-1700 (ម៉ោង 8 ព្រឹកដល់ម៉ោង 5 ល្ងាច ថ្ងៃធ្វើការ) ប្រាំថ្ងៃ ថ្ងៃធ្វើការ មុនថ្ងៃប្រជុំដើម្បី-ពង្រៀបwe could respond to your request។

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Emerging Transportation Trends: Final Results and Recommendations

Work Session Topics

Metro Council Work Session
Tuesday, June 14th, 2022

EMERGING TRANSPORTATION TRENDS: FINAL DRAFT REPORT

Date: May 31, 2022
Department: Planning and Development
Meeting Date: June 14, 2022

Prepared by: Eliot Rose,
eliot.rose@oregonmetro.gov,
503.927.9685

Presenter(s): Margi Bradway, Deputy
Director of Planning, Development, and
Research; Eliot Rose, Senior
Transportation Planner
Length: 30 minutes

ISSUE STATEMENT

The COVID-19 pandemic and other recent disruptions significantly changed travel patterns in the Portland region. Metro's Emerging Transportation Trends study seeks to understand how these changes could continue to impact transportation moving forward in order to ensure that the next update to the Regional Transportation Plan meets the shifting needs of people in the region. Staff will present draft findings and discuss how these initial findings should be addressed during the 2023 Regional Transportation Plan (RTP) update.

ACTION REQUESTED

No formal action requested.

Staff seek input from Metro Council at this meeting about how the results of this Study should inform the 2023 RTP update process.

IDENTIFIED POLICY OUTCOMES

POLICY QUESTION(S)

- Does Council have any questions or feedback about the draft findings and recommendations?
- How should the region respond to these trends as we update the Regional Transportation Plan?
- What RTP policy changes might Council be interested in exploring in response to some of these trends?

STRATEGIC CONTEXT & FRAMING COUNCIL DISCUSSION

As the long-term regional planning agency for the Portland region, Metro is currently preparing to update the 2023 Regional Transportation Plan (RTP) and the Regional Growth Concept. Preparation for these updates is taking place amid the COVID-19 pandemic, which

dramatically altered how many in the region traveled, worked, learned and interacted, as well as growing climate instability, ongoing innovations in transportation technology, and other significant changes. These changes force us to question many long-held assumptions about transportation and land use so that we plan for the future that looks most likely today, not one that's based on 20-year-old information.

BACKGROUND

In June 2021, Metro staff shared a new Emerging Trends work program with Council that encompasses several parallel efforts to examine how changes like those above will impact a variety of the areas in which Metro works, including land use, employment, and climate resilience. Emerging Transportation Trends is the first of these efforts to get underway, both because the Regional Transportation Plan will be updated before the Growth Concept that guides Metro's land use work, and because short-term changes in transportation behavior typically precede longer-term changes in land use.

Metro staff signed a contract with the consultant team that is conducting the Emerging Transportation Trends Study in August 2021. The study is organized into three phases:
1. Researching potential trends and determining which ones to focus on
2. Analyzing the impacts of those trends on travel behavior and RTP goals
3. Conducting further research and analysis on how the RTP can address these trends

Metro staff and members of the consultant team presented on the first phase of the project to Metro Council and to transportation policy and technical committees in September-October 2021, and presented on the second phase of the project in February 2022. During the October presentations, the project team received direction to focus on a set of 10 trends including increased teleworking, decreased transit service, and increased online shopping. In February, the project team shared detailed forecasts on the trajectory that each of these trends are expected to take over the next 20 years and the resulting impacts on climate, congestion, safety and equity. These presentations raised many questions about the impacts and suggestions about further work that we have been working to address during the final phase of the project.

The attached Fact Sheets summarize the story, research and data, and impacts associated with each trend. They address input and clarifying questions we received from Metro Council and from agency partners during the last round of presentations. The Fact Sheets are intended to provide concise information on trends that Metro staff and stakeholders can refer back to during the RTP update.

The project team identified three follow-up tasks based on the feedback received in February. Below we describe those tasks, including how they are grounded in feedback from Council and stakeholders and key findings to date. The attached technical memo describes the analysis and draft findings from these tasks in more detail.

Scenario analysis: The prior tasks in this project analyzed each trend on an individual basis, and estimated impacts based on the best research and data available. When we presented the results, stakeholders observed that different trends are inter-related (for

example, higher levels of teleworking could lead to lower levels of transit service and ridership if the transit system continues to focus on serving commuters) and that each trend could potentially have a wide range of impacts depending on how lasting recent changes in travel behavior turn out to be. The analysis examines a range of scenarios that represent different assumptions about how the trends explored in this study will persist into the future – for example, one assumes that current levels of teleworking, online shopping, and other trends continue into the future, while another assumes that people return to their pre-pandemic habits. It then quantifies the impacts on vehicle miles traveled (VMT) per capita and transit ridership for each scenario in order to estimate how VMT per capita and transit ridership – which are important performance measures in the RTP – may vary from the estimates in the RTP depending on how these trends unfold. This can help the region understand whether the RTP is likely to meet its performance targets in the face of uncertainty around what travel behavior will look like in the future.

Arterial traffic analysis: Throughout the Emerging Transportation Trends Study we have shared data about how highway traffic volumes and transit ridership have been changing. These data are consistently collected and reported by ODOT, TriMet, SMART and other agency partners. However, we have not had access to the same high quality of data on how arterial traffic volumes are changing. Metro's agency partners often conduct arterial counts at key points in the planning process, but rarely do so regularly and consistently in a way that would allow us to monitor how traffic is changing over time. Stakeholders have noted the absence of this arterial data and its importance in understanding how travel patterns are changing in the region. Arterial data can be more representative of how people in the region are traveling than highway data, because highways carry a higher proportion of people and goods that are passing through the region on route to other destinations. Arterials are also a key area of focus for the RTP since they are the streets where most transit runs, where most crashes occur, and where many jobs and other destinations are located. The project team collected data from 2019-21 for 20 different arterial locations in the region, and then compared changes in arterial traffic to changes in highway volumes and transit ridership along the same corridor to paint a more complete picture of how transportation has changed on these corridors.

Draft RTP guidance: Based on the draft findings from the Emerging Trends Study and their knowledge of how regional agencies are responding to these trends, the consultant team has identified seven opportunities to respond to these trends for Metro and its partners to pursue during the development of the RTP. For each opportunity, the team identified ways to implement the opportunity during the RTP process.

ATTACHMENTS
Emerging Transportation Trends fact sheets
Emerging Transportation Trends draft technical memo

[For work session:]
- Is legislation required for Council action? ☐ Yes   ✓ No
- If yes, is draft legislation attached? ☐ Yes   ✓ No

- What other materials are you presenting today? Powerpoint presentation

Draft Executive Summary
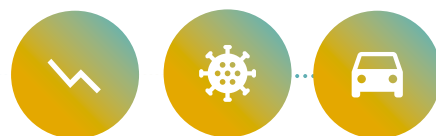
The Emerging Transportation Trends Study identifies major changes in transportation that we expect the region to face during the coming decade following the COVID-19 pandemic and other recent disruptions.

Planning during a time of change

We are living through a time of rapid change, marked by a global pandemic that affected nearly every aspect of life. These changes have challenged the conventional wisdom around how we work, live and travel. Many more people are now teleworking and shopping online than seemed possible a few years ago. Formerly bustling downtowns were empty through most of 2020. Some streets closed to cars and filled up with bicycles, pedestrians, and restaurant seating. Some of these changes are already rolling back as society recovers from the pandemic. Others appear likely to last. The Emerging Transportation Trends Study examines how eight of these trends could continue to impact the greater Portland region. This study forecasts how long each trend will last, how it will affect people's travel behavior and how it will impact progress toward the region's climate, safety, and equity goals.

The goal of this study is to help Metro and its partners account for these trends during the 2023 update to the Regional Transportation Plan (RTP). The study focuses on understanding the impact of external forces and does not account for the impact of actions that agencies are taking to address these trends. Metro and its partners can assess whether current policies and programs are adequate to meet regional goals as travel changes. These fact sheets summarize key trends and their impacts on regional goals.

Measuring how trends impact regional goals and performance measures

EQUITY
The pandemic widened disparities in health, employment and education for people of color and people who earn low incomes. People of color and people who earn low incomes were also less likely to be able to work from home and shop online than white and affluent people. This study qualitatively examines impacts of the trends on equity. The analysis considers whether trends have disproportionate negative impacts on people of color and people who earn low incomes and whether the benefits of these trends are accessible to all.

VEHICLE MILES TRAVELED (VMT) & TRANSIT RIDERSHIP
Vehicle Miles Traveled (VMT) per capita measures how much people drive. It is an important indicator of congestion, safety and greenhouse gas (GHG) emissions. Increasing transit ridership is critical to reducing VMT, congestion and emissions equitably and effectively. People traveled less overall during the pandemic, but transit use fell more sharply than driving. This study forecasts VMT and transit ridership based on national and regional data to assess impacts on climate and congestion.

SAFETY
Fatal crashes increased during the pandemic. People grew concerned about being exposed to COVID. People also grew concerned about encountering racism and threatening behavior from other people when traveling. This study qualitatively examines how these changes are likely to impact crash risks and personal safety over the next decade.

Trends, outlooks and impacts

Trend	Short Term Outlook (5-10 Years)	Long Term Outlook (20 Years)	Equity	Safety	VMT	Transit
Declining transit service & ridership	Transit service is still down 2-4% from pre-pandemic levels. Agencies restructure service to focus on people who are still riding transit. 10-30% of people who stopped using transit during the pandemic don't return.	Transit service increases as envisioned in regional plans. Ridership increases too, but it lags behind service because some people who stopped using transit during the pandemic don't return due to behavior change or health concerns.	⟷	▼	0-2% ▲	10-30% ▼
Increasing remote work/ work from home	14% of workers telework regularly, compared to 8% before the pandemic.	Up to a third of the workforce teleworks, but only 10% of low-income workers do so.	⟷	⟷	0-6% ▼ (positive)	▼
Increasing online shopping	People replace 16-36% of their shopping trips with delivery. This has mixed impacts on VMT. Delivery trips are shorter than in-person shopping trips, but ordering online tends to generate more trips because of frequent returns, rush deliveries, and other factors.	People replace 25-50% of their in-person shopping trips with deliveries. Only 20% of people with low-incomes shop online.	⟷	⟷	1-2% ▼ (positive)	▼
More affordable and efficient electric vehicles	More people will own electric vehicles (EVs), but Oregon is not on track to meet its 2030 EV adoption targets. Electric bicycles are increasingly popular and useful for longer trips.	EVs technology is cheaper, more efficient, and more ubiquitous. EVs make up the majority of the vehicle fleet, can drive farther on a charge, and charge more quickly.	▲ (positive)	⊖	▲	▼
Increasing concerns about personal safety	People are increasingly concerned about health, policing, and other travelers' unsafe or threatening behavior when they are using the transportation system.	*We do not have sufficient information to create a long-term forecast for this trend.*	▼	▼	▲	▼
Increasingly unsafe streets	Fatal crashes in the Portland region increased during the pandemic, while crashes resulting in serious injuries fell. Streets will likely become safer as more people start using them again, but fatal crash rates may remain higher than average.	*We do not have sufficient information to create a long-term forecast for this trend.*	⟷	▼	▲	⊖
Increasing recreational cycling	The number of recreational cyclists will increase slightly, particularly in communities that had lower levels of cycling before the pandemic.	*We do not have sufficient information to create a long-term forecast for this trend.*	▲ (positive)	⊖	▼ (positive)	⊖

Transit ridership will recover slowly.

Transit service will likely not recover to pre-pandemic levels during the next five years, and some people who stopped using transit during the pandemic may never come back. However, increasing transit ridership is critical to meeting regional goals. Agencies need to refocus the transit system around how people now travel while continuing to increase and improve transit service.

BEFORE THE PANDEMIC

Transit ridership was in a slight decline.

Nationally, transit ridership declined by 4% between 2010 and 2019 (8% per capita). TriMet, the region's largest transit agency, also saw its ridership decrease 4% over this time period, even as service increased.

DURING THE PANDEMIC

Ridership fell and agencies reduced service.

Between February and April 2020, regional transit ridership dropped by 69%. TriMet responded by reducing service by 20%. By fall 2021, service returned to 90% of pre-pandemic levels, but ridership was still down by about 50%.

FOLLOWING THE PANDEMIC

Car ownership and driving could increase.

People who started working from home will no longer commute on transit, and others may avoid transit due to public health concerns. This could lead people to buy cars or replace trips they would have taken on transit with driving.

Key assumptions and findings

ASSUMPTIONS

- There will not be resources to increase transit service beyond pre-pandemic levels until 2027. After that, service will increase at the pace envisioned in the 2018 Regional Transportation Plan.
- In 2025, 10-30% of prior transit riders will not have returned, and transit service will still be **2-4%** below pre-pandemic levels.
- Transit fares will increase by **$0.10** every other year.
- Restructuring will make transit service **5-10%** more efficient.

EFFECTS ON TRAVEL

- Reduced service will decrease transit trips by **2-6%**. Some of these trips will shift to personal vehicles—increasing regional VMT per capita by **0-1%** until service levels reach pre-pandemic conditions.
- People will slowly return to transit over the next 20 years, which will increase VMT by **0-2%** and decrease transit ridership by **10-30%** compared to what is expected under the Regional Transportation Plan.

SERVICE AND RIDERSHIP CHANGE

Transit service

Transit ridership

TODAY

20%, 10%, 0%, -10%, -20%, -30%, -40%, -50%, -60%, -70%

2015 2020 2025 2030 2035 2040 2045
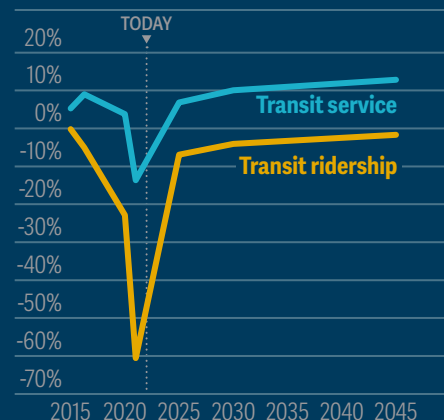
Source: TriMet

Agencies need to continue to refocus service on those who still rely on transit while also increasing transit service.

During the pandemic, ridership held steadier on routes that have more people of color and people with low incomes and routes that serve arterials with a mix of jobs, housing, shops and other destinations. If people continue to work from home, we expect to see fewer commute trips during peak hours and more errands throughout the day.

TriMet prioritized serving those who were still riding during the pandemic, and plans to continue to do so as it updates its service plan. But recovering from the pandemic-era ridership slump and meeting the region's transit ridership goals will require broader action, potentially including rethinking how transit serves the region's centers, finding resources to increase service, and redesigning streets to keep buses moving.

Effects on RTP priorities

CLIMATE & MOBILITY

Lower-than-expected levels of transit service and higher-than-expected vehicle use will likely increase congestion and greenhouse gas emissions.

SAFETY

Transit is one of the safest ways to travel on a per-mile basis. People driving cars are much more likely to die, be injured or harm others while traveling than transit riders. Our streets will likely become less safe if more people shift from taking transit to driving.

EQUITY

Agencies have made efforts to focus service on riders who most rely on transit, but long-term reductions in transit service and ridership could have disproportionate impacts on people of color and people with low incomes, who are more likely to depend upon transit.

Remote work is here to stay.

The pandemic caused a massive surge in working from home and this trend is likely to continue. It may change when and where we travel, but not necessarily how much we travel.

BEFORE THE PANDEMIC

Remote workers were a sliver of the workforce.

Before the pandemic, remote workers accounted for 8% of the workforce in the Portland region and just over 7% statewide.

DURING THE PANDEMIC

Working from home skyrocketed.

By May 2020, over 35% of workers in Oregon were working remotely due to COVID-19. This decreased to 18% of workers by the end of the year, down from the peak but still over double pre-pandemic levels.

FOLLOWING THE PANDEMIC

Work from home will remain common.

Remote work is likely to continue to decline as offices reopen, but will remain much more prevalent than it was before the pandemic, and will continue to increase over time. This could create long-term changes in travel patterns.

Key assumptions and findings

ASSUMPTIONS

- The share of the Oregon workforce that will permanently work from home in 2025 is predicted to be **14%**, up from **8%** before the pandemic
- Remote work is likely to decline from the 2020 peak over the next five years as offices reopen, but will increase over the 20-year horizon as employers allow for more flexibility.

EFFECTS ON TRAVEL

- The increase in remote work will decrease the share of work trips in the peak hours on transit and in personal vehicles, decreasing 2025 VMT and transit ridership by **0-6%**.

OREGON REMOTE WORK LEVELS

TODAY

35%
30% — Max
25%
20%
15%
Work
from
home 10%
5%
Low-income
work from home
0% — Min

2010 2015 2020 2025 2030 2035 2040 2045
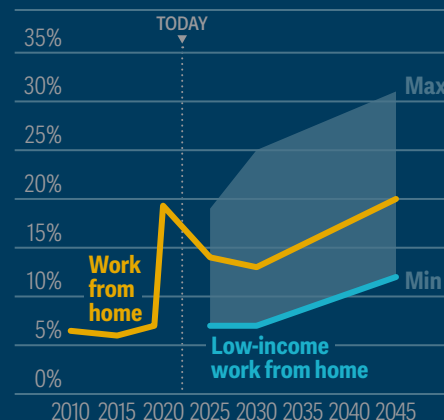
WHAT IT MEANS FOR TRAVEL

More teleworking could mean fewer trips during rush hour and more throughout the day.

People who work from home do not commute, but they run errands and make other trips throughout the workday. Even if the share of people working from home doubles, VMT per capita will likely only decline by less than 6%. Fewer commute

trips could allow transportation agencies to redistribute some of the resources that they had planned to spend on keeping the region moving during rush hour, potentially making more funding available for other projects.

Not all workers are able to telework. Low-income workers are much more likely to do their jobs in person. As agencies plan for more teleworking, they need to maintain access to jobs for those who need it.

Effects on RTP priorities

CLIMATE & MOBILITY

As working from home increases, vehicle trips decrease - particularly during rush hour, when vehicles typically emit more pollution because they are stuck in traffic. This means fewer greenhouse gas emissions and less congestion during peak hours. It also raises the question of how transit might best serve riders who are taking more midday trips and commuting less.

SAFETY

With prolonged working from home, travel may occur at different times of the day. The overall amount of traffic is not likely to change, but if local and arterial streets see more traffic from teleworkers running errands, it could create additional conflicts between vehicles and pedestrians, bicyclists, and transit riders.

EQUITY

Only some people have the option to work remotely. Almost twice as many workers with high incomes say they are able to work from home compared to those with low incomes. Providing access to internet and other services that support teleworking could help workers with low incomes connect to career opportunities in this new environment.

E-commerce means more deliveries.

During the pandemic, people started buying more goods online to avoid the health risk of going to the store. The increase in online shopping is reshaping how goods move through the region.

BEFORE THE PANDEMIC

Online retail sales were climbing.

Between 2015 and 2019, the share of retail goods bought online increased from 7% to 11%, an increase of roughly 1% per year.
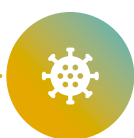
DURING THE PANDEMIC

Online sales spiked.

The share of goods bought online peaked at 15% in 2020, and has since declined a few percentage points as stores reopened and health risks receded.

FOLLOWING THE PANDEMIC

New types of businesses are moving online.

The current dip in online sales is likely temporary. People are now used to shopping online, and more companies are focusing on online sales. This study forecasts that online sales will increase to 20% market share by 2025 and continue to grow thereafter.

Key assumptions and findings

EFFECTS ON TRAVEL

- In-person shopping trips represent less than **10%** of total VMT in the Metro region, and some shopping trips will be replaced by delivery trips.
- An online delivery generates up to 12x fewer VMT than a trip to the store. VMT reductions from delivery are more modest in communities where people can walk, bike, take transit or only drive a short distance to the store.

- Compared to **9%** of in-store purchases, **15%-30%** of online goods are returned.
- Same-day shipping increases VMT, and not all online purchases replace a trip to the store. This offsetts some of the VMT reductions from consolidated delivery trips.
- By 2025, online shopping is projected to reduce VMT by up to **1%** and transit ridership by up to **2%**.

E-COMMERCE AS A PERCENT OF NATIONAL RETAIL SALES
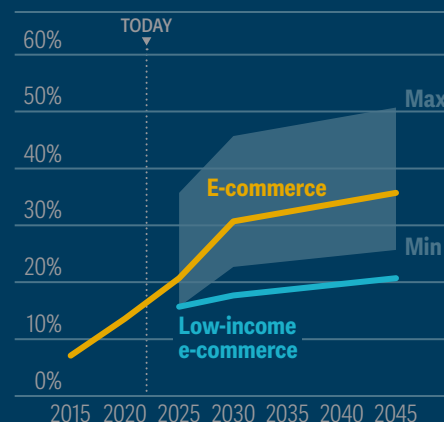
Source: Fehr & Peers

WHAT THIS MEANS FOR TRAVEL

Delivery trips will replace some personal shopping trips, and these new trips have different demands on our roads.

The increase in online shopping has mixed effects on vehicle travel, and it can be hard to distinguish these impacts from the general increase in shopping-related trips due to more consumer spending. On one hand, delivery trips are typically shorter than people's trips to the store, because companies make multiple deliveries in a single trip. On the other hand, people are more likely to return goods that they buy online and make rush orders that require companies to split a single order into multiple deliveries, creating more trips per item purchased. Growth in delivery trips is also altering the ways that retailers, restaurants, and grocery stores use space and resources for parking, pickup, delivery, and stock storage.

Effects on RTP priorities

CLIMATE & MOBILITY

Online delivery trips are usually consolidated and occur outside of peak hours, reducing congestion. Delivery trips are shorter than in-person shopping trips, but many consumers are drawn to online shopping by same-day delivery, easy returns, and the convenience of shopping from home - all of which lead to more trips. Because of these conflicting factors, online shopping produces a modest reduction in VMT and emissions.

SAFETY

Aggressive schedules may encourage delivery drivers to prioritize speed over safety. Deliveries may also bring more large vans and medium-size delivery trucks onto neighborhood streets. Delivery drivers who are independent contractors and not commercially trained may also be less experienced than licensed commercial drivers.

EQUITY

People with higher incomes are more likely to shop online than people with low incomes. Improving access to goods and services can benefit everyone, but people typically pay a premium for the convenience of shopping online. People with low incomes and people of color are also more likely to face technological, financial and cultural barriers to shopping online.

Get ready to plug in.

Oregon has set ambitious targets to increase the number of electric vehicles (EVs) on the road. Whether or not the state meets these targets, we are likely to see many more EVs in the years to come.

BEFORE THE PANDEMIC

EV use was growing exponentially.

Between 2010 and 2020, the number of EVs on Oregon's roads grew from 670 to 33,600. E-bikes and e-scooters also became more popular and widely available, both for purchase and through bike- and scooter-share systems like those in Portland.

DURING THE PANDEMIC

EVs remained popular, and e-bikes boomed.

Between 2019 and 2021, EV sales grew by 3.6%, outperforming sales of gas-powered vehicles. E-bike sales skyrocketed, growing by 240% - almost four times more than regular bike sales grew.

FOLLOWING THE PANDEMIC

EV use will keep growing.

The batteries that power EVs and e-bikes are likely to become more efficient and cheaper to manufacture. EV and e-bike sales will continue to increase as these vehicles become more affordable and efficient.

Key assumptions and findings

- Our forecast is based on historical growth in EV sales and on anticipated changes to EV cost and range. It does not account for the many clean vehicle and fuel policies that support Oregon's EV targets.
- By **2030**, the State of Oregon aims to have **50%** of new vehicles sold and **25%** of all vehicles be EVs.
- EV/ZEV registrations in Oregon have grown by around **30%** each year since 2015.

- After declining at the beginning of the pandemic, shared e-bike and e-scooter use in the City of Portland rebounded to more than **double** pre-pandemic usage.
- Cities with shared e-bike fleets reported that e-bikes were used **twice** as frequently as regular bicycles.

OREGON EVS AS A PERCENT OF CAR OWNERSHIP

Oregon EVs as a percent of car ownership

TODAY

2030 target

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0%

2015 2020 2025 2030 2035
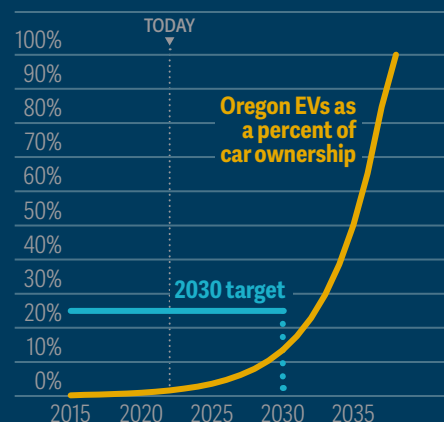
Source: Fehr & Peers

EV adoption is accelerating, but a broader approach to electrification could help meet State goals.

Over the long term, EVs are forecast to become the default choice for many car buyers, but currently their additional cost and limited range restricts their appeal. Cheaper, more efficient batteries should remove these barriers. However, these changes are expected to take 10 to 20 years, and Oregon is aiming for 25% EV adoption by 2030. The State has adopted several clean vehicle and fuel policies in order to meet this target. In the Portland region, expanding chaging - particularly in multifamily buildings - will be critical to providing equitable access to EVs. High levels of bicycle use and successful bike- and scooter-share systems create an opportunity to further electrify transportation using e-bikes and e-scooters.

Effects on Metro's RTP priorities

CLIMATE & MOBILITY

EVs will gain appeal as technology improves, but not enough to meet state targets - and meeting these targets is critical to meeting our regional GHG goals. The region should follow along as the state tracks EV deployment in Oregon so that we can identify whether agency partners need to take additional action to meet our GHG targets.

SAFETY

This trend is not likely to affect safety outcomes.

EQUITY

The higher costs of EVs and lack of charging options in multi-unit dwellings pose additional barriers for people with low incomes. Oregon offers significant rebates for people with low incomes who purchase a new or used EV. The region should monitor whether these rebates are leading to equitable EV adoption.

Personal safety is a growing concern.

People of color are increasingly likely to be concerned for their safety when traveling due to fear of harassment and discrimination, and concerns about health and unsafe behavior are on the rise for many travelers.

BEFORE THE PANDEMIC

Safety was a concern for people of color.

People of color were more likely to be concerned for their personal safety when walking and taking transit.

DURING THE PANDEMIC

Many people felt unsafe, especially people of color.

Black people grew more mistrustful of police in the wake of George Floyd's killing, Asian immigrants experienced more racism in public, and people who continued to rely on transit - who are more likely to be people of color - dealt with new health concerns.

FOLLOWING THE PANDEMIC

Increased safety concerns seem likely to linger.

Recent polling suggests that Oregonians continue to be highly concerned about public safety. Even though much of society is now reopening following the pandemic, people also continue to be concerned about health risks when riding transit.

Key assumptions and findings

We analyzed this trend qualitatively by reviewing existing research. Here are some of the important findings from that research:

- TriMet surveyed riders about safety in 2020. Overall more riders reported feeling safe riding transit than feeling unsafe - but people of color were much more likely than white riders to say they feel unsafe.
- Riders' top safety concerns were other riders' unsafe behavior and a lack of staff presence.
-

- During the pandemic, the biggest factors in determining whether or not someone would choose to ride transit are: occupation, pre-pandemic mode choice, walking time to the nearest station, and health concerns.
- Race, gender and age play major roles in perceptions of safety when traveling.
- Numerous surveys and focus groups from the Portland region have found that people of color are more concerned for their safety than other travelers when

walking, bicycling or taking transit.
- Crashes are disproportionately located in communities of color and communities with lower incomes. In 2020, **60%** of the region's fatal crashes and **66%** of severe injury crashes occurred in the communities with the highest concentrations of people of color and people earning low incomes.
- Focus groups conducted by the City of Portland found that inadequate street lighting was the #1 safety concern for Black pedestrians.

Source: TriMet

WHAT THIS MEANS FOR TRAVEL

We may need to invest more in helping travelers feel safe in order for our investments in climate and equity to pay off.

People are feeling less safe when traveling for reasons including increased crashes, concern about catching COVID, and the behavior of other travelers. These concerns are particularly high among people of color, who are more likely to live in a neighborhood with unsafe streets, work in an in-person job through the pandemic, or to be harassed while traveling. It is hard to estimate how these feelings impact travel due to a lack of research. However, many of our planned investments in climate and equity - like more frequent bus service and better access to transit in communities of color - rely on people feeling safe enough to use them. We may need to invest more in safety for these projects to deliver their intended benefits.

Effects on Metro's RTP priorities

CLIMATE & MOBILITY

Increasing transit ridership is critical to meeting the region's GHG reduction goals. Safety is an important concern for people who already ride transit, but it doesn't seem to be as big of a factor in whether or not people choose to ride. Investing in safety alone may not have a big impact on transit ridership - but improved transit service will likely draw more riders and reduce more emissions if people feel safe.

SAFETY

Transportation agencies in the region have been working to prioritize safety for people of color travelers, and transit agencies have invested extensively in public health measures to keep riders safe during the COVID-19 pandemic. In spite of these measures, safety is a pressing concern for many travelers.

EQUITY

People of color are significantly more likely to be concerned for their safety when walking, bicycling, or taking public transportation. Transportation investments in communities of color may not benefit residents if these safety concerns are not addressed.

Fatal crashes are going up.

More people died in crashes during the pandemic, even though people were driving less.

BEFORE THE PANDEMIC

Traffic deaths and injuries were on the rise.

The number of fatal crashes in the region increased by 76% between 2011 and 2019, and severe injury crashes increased by 13%. In 2018, the region set a goal to eliminate all traffic fatalities and severe injuries by 2035.

DURING THE PANDEMIC

Traffic deaths increased even as people drove less.

Between 2020 and 2021, fatal crashes in the region increased by 20%, even as people were driving less and severe injury crashes fell by 26%. Emptier streets and impaired driving contributed to the rise in deadly crashes.

FOLLOWING THE PANDEMIC

There is reason for both hope and concern.

Vehicles are already speeding less as the streets fill up again, but some of the other trends discussed here - especially lower-than-anticipated transit ridership - could lead to more driving and more crashes in the long term.

Key assumptions and findings

We analyzed this trend qualitatively by reviewing existing research. Here are some of the important findings from that research.
- During the first half of 2021, U.S. crash-related fatalities increased 18%, from 1.06 per 100 million vehicle miles traveled (VMT) to 1.25 per 100 million VMT.
- As of November 2021, fatal crash rates in Oregon were 1.64 fatalities per 100 million VMT, higher than national rates.

- Crashes are disproportionately located in BIPOC and low-income communities. In 2020, 60% of the region's fatal crashes and 66% of severe injury crashes occured in the communities with the highest concentrations of people of color and people earning low incomes.
- Nationally, traffic fatalities reached a 16-year high in 2021. The percent of fatal crashes that involved alcohol increased by 22% between 2019 and 2021, and average speeds increased on almost every type of road.

- Between 2019 and 2021, fatal crashes in U.S. urban areas increased by over 4x as much as in rural areas. Urban local and collector streets saw the biggest increase in fatal crashes, followed by urban interstates and urban arterials.

Source: Portland Police Department

More work will be needed to reduce fatal crashes.

Traffic on the region's roads is still below pre-pandemic levels, but not by much. Unless the region takes more comprehensive action to reduce crashes, we could continue to see high levels of fatal and serious crashes.

During the pandemic, many agencies in the region took steps to make streets safer, such as reducing speed limits, calming traffic and dedicating certain streets for pedestrians and bicyclists. These design changes are important, but

they need to be combined with speed management strategies, advanced vehicle and alcohol detection technologies, and other approaches to address the many factors contributing to high levels of fatal and injury crashes.

Effects on RTP priorities

CLIMATE & MOBILITY

Crashes contribute to congestion and GHG emissions. Estimates suggest that eliminating roadway crashes could translate into 21.4 billion hours in traffic time saved nationally and a 2% reduction in emissions by 2035. High crash rates may also deter people from walking and bicycling, since pedestrians and cyclists are more vulnerable to crashes.

SAFETY

Traffic fatality rates in Oregon have been consistently high over the last 13 months; higher than national averages - in spite of the growing adoption of Vision Zero policies throughout the state and region.

EQUITY

People walking and biking in communities of color and/or lower-income communities face greater risk of injury and death. In the Metro region, risk of dying in a motor-vehicle involved crash is higher for people of color, people over 65 or people with low-incomes. A majority of pedestrian deaths and high-injury corridors are in communities with higher densities of people of color, people with low incomes and people with limited English proficiency.

Bicycling is booming.

More people turned to recreational bicycling and other types of outdoor exercise when gyms and sports clubs closed down during the pandemic.
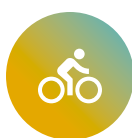
BEFORE THE PANDEMIC

The Portland region was known for bicycling.

In 2015, more people commuted by bicycle in the Portland region than in any other US metro area, which also made bicycling a popular form of recreation.

IN THE PANDEMIC

Recreational biking grew in popularity.

Many of the region's trails saw increased usage during the early days of the pandemic, and across the US bike sales boomed. Some agencies dedicated streets to bicycling and walking to meet the new demand for outdoor recreation.

FOLLOWING THE PANDEMIC

Recreational biking continues to increase.

According to data collected by Strava, an exercise tracking app, total bicycle miles traveled in the Metro region have increased by 51% since before the pandemic, most of those leisure trips.

Key assumptions and findings

- Nationally, bicycles make up a $5.3 billion industry. Between 2019 and 2021, bicycle sales grew by **67%**, and e-bike sales grew by **240%**.
- Users of Strava, an app commonly used to track recreational bike rides, logged close to twice as many trips during summer 2020 as during summer 2019 (see chart).
- In 2020, approximately **10%** of people tried bicycling for the first time or tried riding in a new way, such as using a bike for transportation.

- The City of Portland's Slow Streets program has provided greater opportunity for people to travel safely on low-traffic streets, thus potentially promoting more recreational biking.
- **86%** of cities that have implemented slow street programs intend to make them permanent fixtures of future bike networks.

CHANGE IN STRAVA BIKE TRIPS, 2019-2020

METRO REGION STRAVA TRIPS

TOTAL
Start of Covid Pandemic

1.4M
1.2 M
1M
800k
600k
400k
200k

Jan 2019   Dec 2020
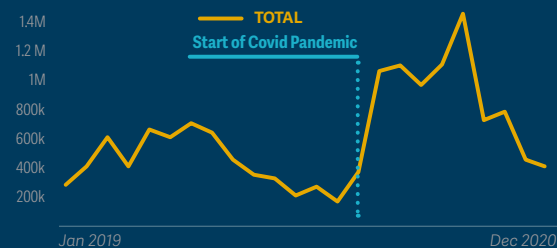
Source: CityLab

Source: Fehr & Peers

More people on bikes instead of in cars can translate to reduced driving and greenhouse gas emissions.

The growth in recreational biking during the pandemic is expected to continue, which can lead to improvements in mobility, climate, and public health. If more people decide to start biking or continue the riding habits that they picked up during the pandemic, there will potentially be more demand for better and safer biking infrastructure. Many jurisdictions across the US, including the Metro region, have already dedicated streets for active transportation. These changes may become permanent fixtures of the transportation system—further incentivizing greener modes of travel.

Effects on RTP priorities

CLIMATE & MOBILITY

People who bicycle for fun and exercise are more likely to try riding to work or for errands, which reduces congestion and emissions. They are also more likely to advocate for improvements to bicycle infrastructure, which can help other travelers feel comfortable bicycling.

SAFETY

The pandemic-era bicycling boom has already led to safety improvements to the region's streets. Portland is installing permanent infrastructure and keeping speeds low on some of the Slow Streets that it created during the pandemic. Research suggests that seeing more cyclists helps non-cyclists feel safe trying bicycling.

EQUITY

Bikes are much cheaper to buy and maintain than cars or trucks. However, gaps in bicycling infrastructure - which often occur in communities where people of color and people with low incomes live - create barriers to bicycling for many people. Safe, comfortable bikeways are benefits that should be shared by everyone.

Emerging Transportation Trends Study: References

American Community Survey (ACS), Census Bureau. (2019). 5-year estimates for Portland MSA.

Anderson, M. (2016). Who relies on public transit in the U.S. Pew Research Center, April 7, 2016.

Arizona State University, & University of Illinois Chicago. (2021, March 23). COVIDFUTURE Survey. Retrieved from COVID-19 and the Future Survey.

Catalyst. (2020). The Detrimental Impact of Covid-19 on Gender and Racial Equality (Quick Take).

CBRE. (2022). How High Will E-Commerce Sales Go? The Definitive Guide to Omnichannel Real Estate.

Cervero, R; Road Expansion, Urban Growth, and Induced Travel, a Path Analysis, APA Journal, 2003

Chaffey, D. (2021). Forecast e-commerce growth in percentage of online retail / e-commerce sales 2017 to 2023. Smart Insights

City of Boston. (2020). Anticipating Post-Pandemic Commute Trends in Metro-Boston.

Cortright, J. (2019). Why Cyber-Monday doesn't mean delivery gridlock Tuesday? City Observatory, November 15, 2019. https://cityobservatory.org/cyber-monday-delivery_gridlock/

Deloitte. (2017). A brave new world: The Retail Profitability Challenge Report.

Deloitte. (2021). Remote Work: The Road to the Future, Transformation of the Global Workforce.

Dingel, J. I. (2020). How many jobs can be done at home? (Rep.). Cambridge, MA: NBER.

Duranton and Turner, The Fundamental Law of Road Congestion: Evidence from US Cities, National Bureau of Economic Research, 2012

Ecola, L., & Wachs, M. (2012, December). Exploring the Relationship between Travel Demand and Economic Growth. Retrieved from https://www.fhwa.dot.gov/policy/otps/pubs/vmt_gdp/

EPA. (n.d.). Carbon Pollution from Transportation. Retrieved from https://www.epa.gov/transportation-air-pollution-and-climate-change/carbon-pollution-transportation

Fuller, G., McGuinness, K., Waitt, G., Buchanann, I., & Lea, T. (2021). The reactivated bike: Self-reported cycling activity during the 2020 COVID-19 pandemic in Australia. Transportation Research Interdisciplinary Perspectives, 10.

Garber, S. (2020). Are Home Deliveries Increasing during the Pandemic? (Rep.). Portland, OR: SGA.

Gitlab. (2021). The Remote Work Report 2021.

Guyot, K. & Sawhill, I. (2020). Teleworking Will Likely Continue Long After the Pandemic. Washington, DC: Brookings Institute, January 2020.

Haslag, P. & Weagley, D. (2021). From L.A. to Boise: How Migration Has Changed During the COVID-19 Pandemic. SSRN.

Hastie, S. & Robins, I. (2022). Hybrid & Remote Work in 2022 and Beyond. InfoQ.

Hoang, J. & Battacharya, J. (2021). ITE 2021 Annual Meeting. Impact of COVID-19 on Contra Costa Transportation System.

Hodges, T. (2010). Public Transportation's Role in Reducing Greenhouse Gas Emissions (Rep.). D.C., Washington: FHWA.

Jaller, M., & Pahwa, A. (2020). Evaluating the environmental impacts of online shopping: A behavioral and transportation approach. Transportation Research Part D: Transport and Environment. Volume 80, March 2020.

JLL. (2020). Workplace experience survey highlights.

KPMG. (2020). Automotive's new reality: Fewer trips, fewer miles, fewer cars?

Kumar, R. R., & Alok, K. (2020). Adoption of electric vehicle: A literature review and prospects for sustainability. Journal of Cleaner Production, 253, 119911. doi:10.1016/j.jclepro.2019.119911

MAPC. (2021). Hidden and in Plain Sight: Impacts of E-Commerce in Massachusetts (Rep.). MA.

MarketWatch. (2021). Global E-commerce Market Growing By 13.5% Size, Future Trends, Current Growth 2021, Emerging Technologies, Global Regions with Industry Share Analysis, Gross Margin, Regional Demand and Forecast to 2030.

MBTA. (2021). Ridership Trends & Projection.

McKinsey & Company. (2021). How e-commerce share of retail soared across the globe: A look at eight countries.

McKinsey Global Institute. (2021 & 2020). The future or work after COVID-19 & What's next for remote work: An analysis of 2,000 tasks, 800 jobs, and nine countries, Reports.

Metro. (2017). RTO Mobility and Technology Survey Report.

Milt, D. (2021). 2030: The Death of the High Street: Why the rise in e-commerce means Britain's town centres will be unrecognizable within 15 years. Parcelhero.

Multnomah County (2020). New numbers show COVID-19 damage to communities of color; leaders call for better data collection

National Bureau of Economic Research. (2020). How Many Jobs Can Be Done At Home?

NHTSA Office of Behavioral Safety Research. (2021). Update to Special Reports on Traffic Safety During the COVID-19 Public Health Emergency, January 2021.

NHTSA. (2021). Early Estimates of Motor Vehicle Traffic Fatalities and Fatality Rate by Sub-Categories in 2020. DOT HS 813 118, June 2021.
https://crashstats.nhtsa.dot.gov/Api/Public/Publication/813118#:~:text=Total%20estimated%20fatali%2D%20ties%20increased,older%20from%202019%20to%202020.

NHTSA. (2022). Early Estimates of Motor Vehicle Traffic Fatalities and Fatality Rate by Sub-Categories in 2021. DOT HS 813 298, May 2022. https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813298.

North Jersey Transportation Planning Authority. (2020). 2050 Freight Industry Level Forecasts Study Final Report.

ODOT. (2019 – 2021). Observed Statewide Traffic Volume Patterns Related to COVID-19 Monitoring.

ODOT. (n.d.). Annual Crash Summary Book. Retrieved from Crash Statistics & Reports.

ODOT (n.d.). ODOT Crash Data, 2007-2021.

ODOT (n.d.). COVID-19 Traffic Reports. https://www.oregon.gov/odot/Data/Pages/Traffic-Counting.aspx

Oregon Driver & Motor Vehicle Services. (2019). Oregon DMV Vehicle Registration Statistics.

Oregon Office of Economic Analysis. (2020). COVID-19: Social Distancing, Isolation, and the Workforce.

Oregon Walks. (2021). Fatal Pedestrian Crash Report Facts and Figures: Portland, 2017-19.

Parker, K., Horowitz, J.M., & Minkin, M. (2020). How the Coronavirus Outbreak Has – and Hasn't – Changed the Way Americans Work. Pew Research Center, December 9, 2020.

Paul, J. & Taylor, B. D. (ITS) (2021). TRB Conference on Advancing Transportation Equity. Analyzing Bus Ridership Changes during the COVID-19 Pandemic: Insights from Boston, Houston and Los Angeles.

PBOT. (2019). E-Commerce and Emerging Logistics Technology Research Report.

PBOT (2021). BIKETOWN System Data. https://www.biketownpdx.com/system-data.

PBOT and Ride Report (2022): Open Data Portal. https://public.ridereport.com/pdx?vehicle=all&time=all

PBOT. (n.d.). COVID-19 traffic and bicycle count and vehicle speed data.

Pedersen, N. (2021). AMPO Annual Meeting. Impacts of COVID-19 on Transportation and Key Considerations for the Future.

RTA. (2020). RTA COVID-19 Lapsed Rider Survey (Rep.). Springfield, IL: IDOT.

Salon, D., Conway, M., Capasso de Silva, D., et al. The potential stickiness of pandemic-induced behavior changes in the United States. National Academy of Sciences of the United States of America.

Samayoa, M. (2020). New Data Show Latinos in Oregon are Still Disproportionately Affected by COVID-19. Oregon Public Broadcasting. April 14, 2020.

Shaheen, S., & Wong, S. (ITS) (2020). Future of Public Transit and Shared Mobility: Scenario Planning for COVID-19 Recovery (Rep.). Los Angeles, CA: UCLA.

Sorin Garber & Associates (2020-2021). Are Home Deliveries Increasing during the Pandemic? Reporting between August 2020 and December 2021.

Spurlock, C. A., Todd-Blick, A., Wong-Parodi, G., & Walker, V. (2020). Children, Income, and the Impact of Home Delivery on Household Shopping Trips. Transportation Research Record: Journal of the Transportation Research Board, 2674(10), 335-350. doi:10.1177/0361198120935113

Statista. (2021). Retail e-commerce revenue in the United States from 2017 to 2025.

Suchan, S. (2021). Telework Transformation: Worker-Centered Change (Rep.). Olympia, WA: WSDOT.

Timmons, M. (2021). Car Ownership Statistics: How Many People Own a Car in the US?

Transloc. (2021). A 2021 poll analyzing Americans' public transportation expectations and behaviors post-pandemic.

TriMet. (2021). Title VI Service Equity Analysis: Covid-19 Service Changes (Rep.). Portland, OR: TriMet.

TriMet. (2021). TriMet Service and Ridership Information. Retrieved from https://trimet.org/about/pdf/trimetridership.pdf.

TriMet. (2020). TriMet Reinagining Security: Executive Summary Report. Portland, OR: TriMet.

U.S. Bureau of Labor Statistics (2021). Projections overview and highlights, 2020–30. Monthly Labor Review.

UBS Wealth Management. (2021). E-commerce growth is here to stay.

University of Oregon. (2021). Urbanism Next: E-commerce and COVID Research

US Census Bureau. (2021). Working From Home During the Pandemic (United States, Census Bureau). Retrieved from https://www.census.gov/library/stories/2021/03/working-from-home-during-the-pandemic.html

US Department of Commerce. (2022). Quarterly Retail E-Commerce Sales.

Whitaker, S. (2021). Migrants from High-Cost, Large Metro Areas during the COVID-19 Pandemic, Their Destinations, and How Many Could Follow (Rep.). Cleveland, OH: Federal Reserve Bank.

Wygonik, E. (2014). Moving Goods to Consumers: Land Use Patterns, Logistics, and Emissions. PhD dissertation, University of Washington School of Civil and Environmental Engineering. http://depts.washington.edu/sctlctr/sites/default/files/research_student_thesis/Wygonik_washington_0250E_13756_.pdf

Zeng, X., Li, M., El-Hady, D. A., Alshitari, W., Al-Bogami, A. S., Lu, J., & Amine, K. (2019). Commercialization of Lithium Battery Technologies for Electric Vehicles (Rep.). Advanced Energy materials.

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Date: May 31st, 2022
To: Metro Council
From: Eliot Rose, Senior Transportation Planner
Subject: Emerging Transportation Trends draft final report: technical memo

Introduction

The COVID-19 pandemic and other recent disruptions significantly changed travel patterns in the Portland region. Metro's Emerging Transportation Trends study seeks to understand how these changes could continue to impact transportation moving forward in order to ensure that the next update to the Regional Transportation Plan meets the shifting needs of people in the region.

Based on feedback from stakeholders during February 2020 presentations on the draft analysis of the impacts of emerging trends, the project team identified three follow-up tasks to complete the project:
1. A scenario analysis that estimates the range of impacts of the trends included in this study could have on vehicle travel and transit ridership.
2. An analysis of arterial traffic data that examines in more detail how travel behavior on some of the region's key mobility corridors changed during the past several years.
3. Guidance how Metro and its agency partners can address emerging trends during the 2023 Regional Transportation Plan update.

Below we describe those tasks, including how they are grounded in feedback from Council and stakeholders and prior results from this study. The findings and recommendations are in preliminary draft form and have not yet been presented to Metro technical committees.

Scenario analysis

The prior tasks in the Emerging Trends Study analyzed each trend that was included in the study individually, and estimated impacts based on the best research and data available (see the Emerging Transportation Trends Study Fact Sheets, which are attached separately with the materials for this item). When we presented the results, stakeholders observed that different trends are inter-related (for example, higher levels of teleworking could lead to lower levels of transit service and ridership if the transit system continues to focus on serving commuters), and that each trend could potentially have a wide range of impacts depending on how lasting recent changes in travel behavior turn out to be.

This scenario analysis estimates how vehicle miles traveled (VMT) and transit ridership – which are two key indicators that we use to measure progress on climate, travel choices, safety and other regional goals – could vary depending upon how emerging trends unfold. It also estimates changes in morning peak congestion since congestion is a consideration for many transportation projects in the region, and research suggests that teleworking and other trends have impacts on peak travel.

Defining scenarios

The analysis quantifies VMT and transit ridership under three different scenarios, each of which represents different assumptions about how the trends explored in this study will persist into the future. Metro staff and the project consultant team, Fehr and Peers, developed three different scenarios that represented a range of different possible futures. We used Fehr and Peers' TrendLab+ scenario planning tool – which applies national and regional research and data to estimate the impact of changing travel behaviors on outcomes including VMT, greenhouse gas emissions, transit ridership, and congestion – to quantify the impacts of each scenario. TrendLab+ uses inputs identified in the underlying research and data to define scenarios. Below we describe each scenario and which values we used when inputting the scenario into TrendLab+.

Return to Pre-pandemic: This scenario treats the pandemic as an anomaly and assumes that people will resume their pre-pandemic behavior as society reopens. Under this scenario, behaviors like teleworking and online shopping return to 2019 levels in the coming year, and continue to grow at pre-pandemic rates (i.e., the same growth as the region was seeing between 2015 and 2019) thereafter. Table 1 summarizes these assumptions.

Table 1: Return to Pre-pandemic scenario assumptions

Trend	Independent Variable	Starting Assumptions		Trend Magnitude		
		2019	2022	2025	2030	2045
Commute Levels	Percent of total workforce who telecommute on an average weekday	8%	9%	10%	11%	15%
	Percent of employees who leave the workforce[1]	2%	2%	2%	2%	2%
On-Line Shopping	Percent of daily shop trips that are online	11%	12%	13%	18%	31%
Car Ownership	Percent of households with cars[1]	92%	92%	92%	92%	92%
Safety Concerns	Percent avoiding transit due to safety and service concerns	0%	50%	15%	7%	3%
Transit Funding and Service Changes	Percent of 2019 service miles	100%	90%	94%	105%	138%

[1] Workforce departure and car ownership rates were held constant at 2019 levels for all scenarios in order to focus the scenario analysis on other factors that were more directly related to the trends that stakeholders had directed the project team to explore.

Transformative Trends: This scenario treats the pandemic as a transformative event that will continue to alter people's behavior. It assumes that the trends observed during the

pandemic will continue into the future. Under this scenario, behaviors like teleworking and online shopping stabilize at current levels in the coming year and continue to grow at current rates (i.e., the rates of change observed between mid-2020 and mid-2022) thereafter. Table 2 summarizes these assumptions.

Table 2: Transformative Trends scenario assumptions

Trend	Independent Variable	Starting Assumptions		Trend Magnitude		
		2019	2022	2025	2030	2045
Commute Levels	Percent of total workforce who telecommute on an average weekday	8%	15%	19%	25%	31%
	Percent of employees who leave the workforce[1]	2%	2%	2%	2%	2%
On-Line Shopping	Percent of daily shop trips that are online	11%	18%	32%	43%	58%
Car Ownership	Percent of households with cars[1]	92%	92%	92%	92%	92%
Safety Concerns	Percent avoiding transit due to safety and service concerns	0%	50%	20%	14%	7%
Transit Funding and Service Changes	Percent of 2019 service miles	100%	90.0%	112%	131%	151%

[1] Workforce departure and car ownership rates were held constant at 2019 levels for all scenarios in order to focus the scenario analysis on other factors that were more directly related to the trends that stakeholders had directed the project team to explore.

New Status Quo: This scenario treats the pandemic as an event that led to significant one-time changes in people's behavior, and assumes that we will not see the same kind of rapid evolution in travel patterns moving forward as we saw during the pandemic. Under this scenario, behaviors like teleworking and online shopping stabilize at current levels in the coming year and continue to grow at pre-pandemic rates thereafter.

Table 3: New Status Quo scenario assumptions

Trend	Independent Variable	Starting Assumptions		Trend Magnitude		
		2019	2022	2025	2030	2045
Commute Levels	Percent of total workforce who telecommute on an average weekday	8%	13%	13%	14%	19%
	Percent of employees who leave the workforce[1]	2%	2%	2%	2%	2%
On-Line Shopping	Percent of daily shop trips that are online	11%	16%	25%	30%	45%
Car Ownership	Percent of households with cars[1]	92%	92%	92%	92%	92%
Safety Concerns	Percent avoiding transit due to safety and service concerns	0%	50%	15%	10%	5%
Transit Funding and Service Changes	Percent of 2019 service miles	100%	90%	112%	131%	151%

[1] Workforce departure and car ownership rates were held constant at 2019 levels for all scenarios in order to focus the scenario analysis on other factors that were more directly related to the trends that stakeholders had directed the project team to explore.

Draft results

Figure 1, Figure 2, and Figure 3 below show TrendLab+ estimates of transit ridership and VMT per capita for each of the three scenarios described above. All of these metrics are indexed to pre-pandemic levels; i.e., we show the percent change in each metric compared to 2019 values. It is important to note that these estimates do not account for the many projects and policies under consideration in the region that could influence these outcomes, such as congestion pricing and planned capital projects. We will account for these impacts in more detail during the 2023 RTP update. The Emerging Transportation Trends Study focuses on understanding the impact of external forces so that Metro and its partners can assess whether these projects and policies adequate to meet regional goals during the RTP update.

Figure 1: Forecasted change in transit ridership by scenario
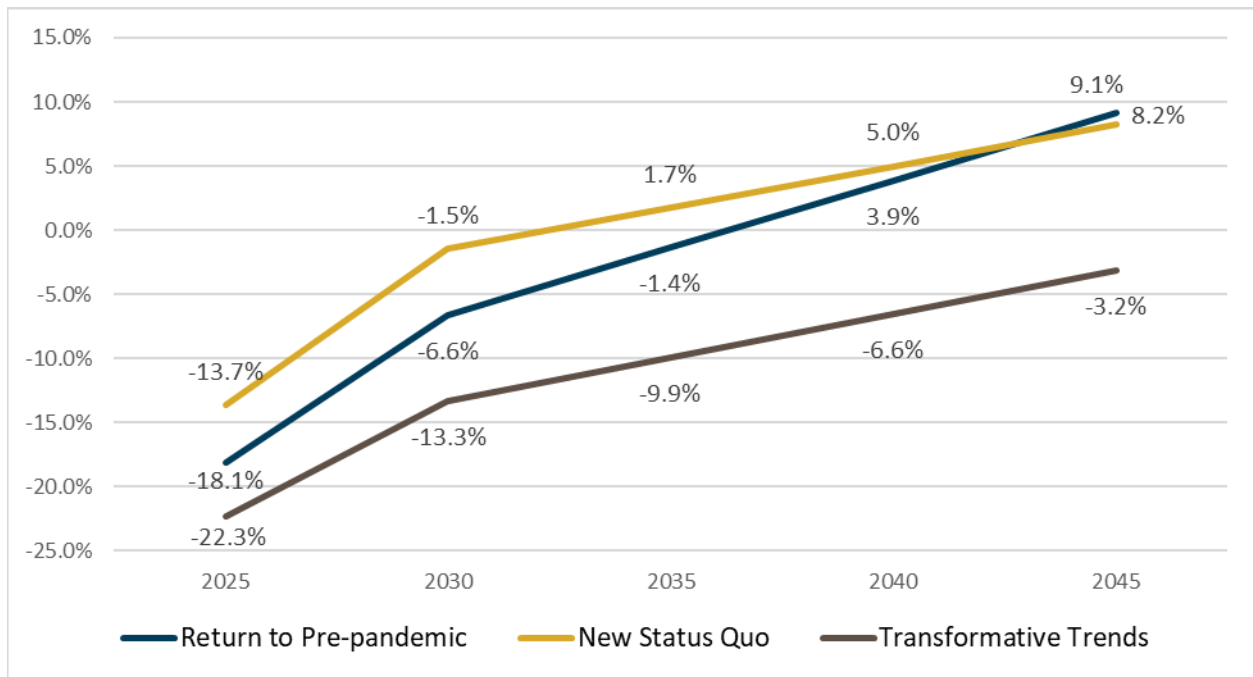
Figure 2: Forecasted change in VMT per capita by scenario
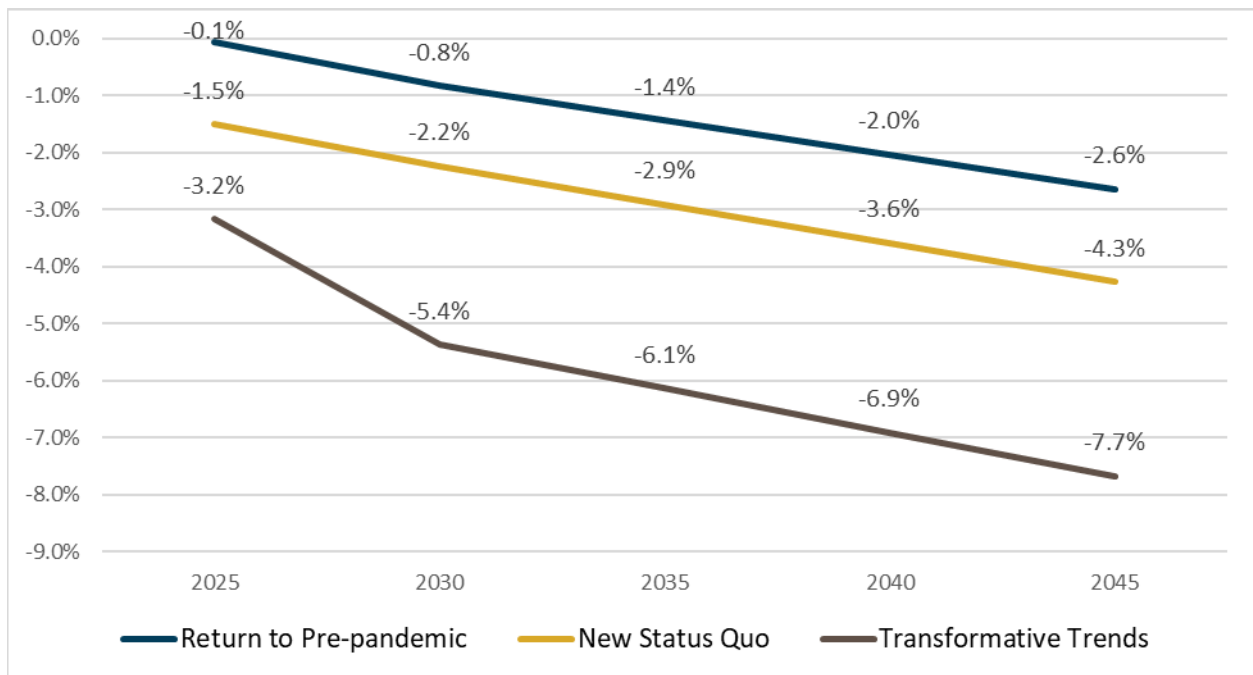
Figure 3: Forecasted change in morning peak congestion by scenario
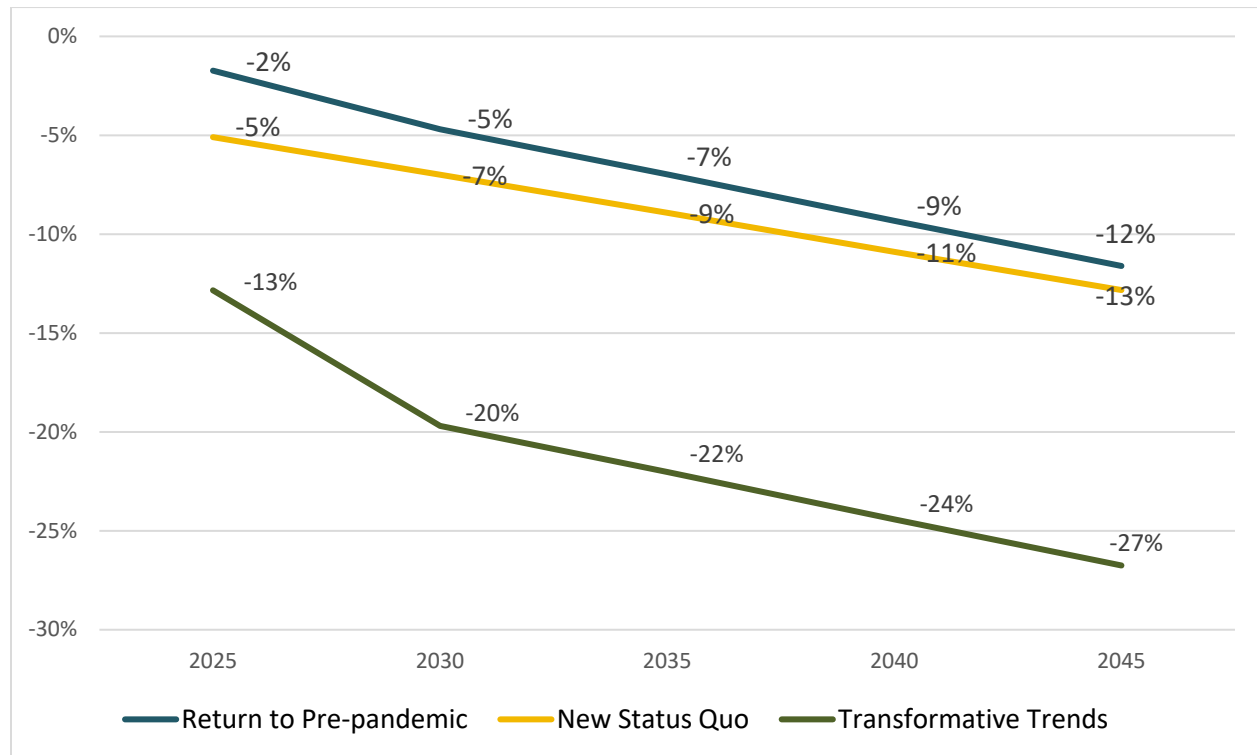
Emerging trends help to reduce VMT per capita. Forecasted VMT per capita decreases under all scenarios, by between 2.6% (Return to Pre-pandemic) and 7.7% (Transformative Trends) in 2045. This represents partial progress toward the region's target to reduce VMT per capita to 35 percent by 2045.[1] The more that current trends – particularly teleworking (see below) – persist, the lower VMT per capita is likely to be.

Emerging trends could reduce or increase transit ridership compared to pre-pandemic levels. Transit ridership is and service is currently below pre-pandemic levels due to challenges hiring drivers and the ongoing impact of the pandemic. As of February 2022, TriMet ridership was at roughly half of pre-pandemic levels.[2] All scenarios project that transit ridership will increase significantly above current levels. Over the short term, all scenarios forecast that ridership will return to between 14 and 22% below pre-pandemic levels between now and 2025 as TriMet restructures service and hires more drivers, and over the long-term all scenarios forecast that transit ridership will continue to increase. However, these increases are not necessarily enough to restore pre-pandemic ridership levels, both because transit service and ridership declined so steeply during the pandemic and because our analysis assumes that some former riders will not return to transit due to health concerns and/or shifting travel needs. Comparing results to 2019 levels, we see transit ridership increasing under some scenarios and decreasing under others, ranging from a 3.2% decrease (Transformative Trends) to a 9.1% increase (Return

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[1] VMT targets can be found at Oregon Department of Land Conservation and Development, Climate-Friendly and Equitable Communities Rulemaking Advisory Committee, RAC 11 item 10: Proposed Amendments to Division 44, January 11, 2022, p. 7. https://www.oregon.gov/lcd/LAR/Documents/2022-01_Div44.pdf. In addition to the 2045 target, the Metro region has a target to reduce VMT per capita by 20 percent by 2035.
[2] http://www.trimet.org/about/performance.htm

to Pre-pandemic) in 2045. The more that current trends persist, the lower transit ridership is likely to be.

Congestion during the morning peak period declines under all scenarios, by between 12% (New Status Quo) and 27% (Transformative Trends). This is due to teleworkers replacing peak period commute trips with errands throughout the day, and declining VMT; small increase in VMT can significantly reduce congestion when roads are operating at or near peak capacity, as was the case many areas of the region prior to the pandemic. As the data in the next section illustrates, travel has declined more during the weekday AM peak period than any other time period.

Teleworking has a significant influence on outcomes. Teleworking reduces VMT, because teleworkers typically replace long commute trips with shorter trips throughout the day, but it leads to even bigger reductions in transit ridership, because currently people are roughly 50% more likely to use transit for commuting than for other trips. Our forecasts assume that the transit system continues to focus on serving commutes; reconfiguring the network to focus on other trips could help maximize both teleworking and transit ridership, as well as the resulting VMT reductions.

Table 4 below summarizes the range of impacts associated with each of the four metrics discussed above. These ranges represent the uncertainty that emerging trends create for these outcomes, which are critical to measuring progress toward regional goals. During the system-level performance analysis of the RTP we can use these factors to identify the range of uncertainty associated with different performance measure and assess how likely the region is to meet its performance targets given the different ways in which emerging trends could continue to unfold.

Table 4: Uncertainty ranges for key transportation metrics

Metric	Range
VMT per capita	-2.6% to -7.7%
Transit ridership	-3.2% to +9.1%
AM peak period congestion	-12% to -27%

Arterial traffic analysis

Throughout the Emerging Transportation Trends Study we have shared data about how highway traffic volumes and transit ridership have been changing. These data are consistently collected and reported by ODOT, TriMet, SMART and other agency partners. However, we have not had access to the same high quality of data on how arterial traffic volumes are changing. Metro's agency partners often conduct arterial counts at key points in the planning process, but rarely do so regularly and consistently in a way that would allow us to monitor how traffic is changing over time. Stakeholders have noted the absence of this arterial data and its importance in understanding how travel patterns are changing in the region. Arterial data can be more representative of how people in the region are traveling than highway data, because highways carry a higher proportion of people and goods that are passing through the region on route to other destinations. Arterials are also a key area of focus for the RTP since they are the streets where most transit runs, where most crashes occur, and where many jobs and other destinations are located.

Arterial locations and data source

The project team purchased data from Streetlight, which estimates traffic volumes based on data from cell phones and other sources, for this analysis. The project budget allowed us to purchase data for 20 arterial count locations. Three factors drove the selection of these locations:

Aligning with ODOT automated traffic recorders: we selected arterial locations that paralleled stretches of highways where ODOT has installed automated traffic recorders (ATRs) that continuously monitor traffic counts; these ATRs have supplied the data on highway volumes that we have previously shared in the Emerging Trends study. Aligning arterial count locations with a subset of ATR locations allows us to validate Streetlight data against the ATR data[3] and ensure the two sources are comparable, and also to compare counts between arterials and highways located along the same corridor.

Representing regional mobility corridors: Metro has defined a set of mobility corridors throughout the region that connect different regional centers, and commonly uses these corridors in transportation analysis. Most of the locations we selected are on a geographically representative set of mobility corridors throughout the region. This enables us to compare highway, arterial, and transit data and paint a more complete picture of how travel is changing along these corridors. For longer arterials that pass through the region, like Powell Boulevard and TV Highway, we selected several count locations along their length in order to examine how traffic changes as they pass through different communities.

Capturing freight routes: One of the trends under study is the increase in online shopping, and some of the data we have reviewed in previous tasks suggests that goods kept moving through the region during the pandemic, even as people took fewer trips. We included several count locations along freight routes so that we could monitor how travel to and from some of the region's growing transportation, warehousing and industrial areas is changing. In particular, we included several freight routes along freight-heavy arterials that do not have parallel ATRs; these are locations where changes in total traffic volume are more likely to be driven by changes in freight trips.

Table 5 summarizes the count locations used in this analysis.

Table 5: Summary of arterial count locations

Count location	Mobility corridor	Parallel ATR	Freight route?
NE Martin Luther King Blvd. @ NE Ainsworth St.	1: Portland to Vancouver	I-5 @ N Ainsworth St.	N
N. Interstate @ N Ainsworth St.	1: Portland to Vancouver	I-5 @ N Ainsworth St.	Y
SW Barbur Blvd. @ SW Capitol Hwy.	2: Portland to Tigard	I-5 @ Capitol Hwy.	N

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[3] In addition to collecting Streetlight data from arterial count locations, we also collected Streetlight data for the same highway count locations captured by the ATRs in the Portland region. We found that the average error between the Streetlight and ATR data was 0% for 2019 and -1% for 2020. Except for 3 outliers, the Streetlight values were within +/- 15% of the ATR values for the 40 observations included in the validation dataset. We repeated this exercise with volume data from INRIX, another private transportation data source that ODOT makes available to transportation agencies in Oregon, and found that INRIX consistently overestimated traffic volumes during 2020, by an average of 15%. This led us to opt to use Streetlight instead.

Count location	Mobility corridor	Parallel ATR	Freight route?
NE Halsey Blvd. @ NE 148th Ave.	6: Gateway to Troutdale	1-84 @ NE 148th Ave.	N
NE Sandy Blvd. @ NE 148th Ave.	6: Gateway to Troutdale	1-84 @ NE 148th Ave.	N
SE Stark St. @ NE 148th Ave.	6: Gateway to Troutdale	1-84 @ NE 148th Ave.	N
NW Marine Dr. @ NW Frontage Rd.	6: Gateway to Troutdale	N/A	Y
NE 82nd Ave. @ NE Halsey St.	7: Gateway to Clark County	I-205 @ SE Washington St.	N
SE 82nd Avenue @ SE Foster Rd	8: Gateway to Oregon City	I-205 @ SE Steele St.	N
SE 122nd Avenue @ SE Foster Rd	8: Gateway to Oregon City	I-205 @ SE Steele St.	N
99W @ SW 124th Ave.	11: Tigard to Sherwood	I-5 @ SW Wilsonville Rd.	Y
NW Cornell Rd. @ 185th Ave.	14: Beaverton to Hillsboro	US-26 @ NW 170th Ave.	N
SW TV Hwy. @ SW 185th Ave.	14: Beaverton to Hillsboro	US-26 @ NW 170th Ave.	Y
SW Farmington Rd. @ SW 185th Ave.	14: Beaverton to Hillsboro	US-26 @ NW 170th Ave.	Y
SW TV Hwy. @ SE Brookwood Ave.	14: Beaverton to Hillsboro	N/A	Y
N Columbia Blvd. @ N Portland Rd.	17: Rivergate to I-5	N/A	Y
SE Powell Blvd. @ E end of Ross Island Br.	19: Portland to Lents	I-405 @ Marquam Br.	Y
W Powell Blvd. @ NE Hogan Dr.	20: Lents to Gresham	N/A	Y
OR 212 @ SE 98th	23: Clackamas to Damascus	OR-224 @ SE Mather Rd.	Y
OR 212 @ SE 172nd	23: Clackamas to Damascus	N/A	Y

For each of the locations listed above, we collected data for October 2019, 2020 and 2021. We focused on the month of October because it was during fall/spring instead of during summer/winter, when vacations influence travel patterns, and because October 2021 was one of the most recent months for which data was available at the time when we made the purchase. However, there are reasons why October may not be representative of normal travel conditions; new COVID-19 cases were high but declining from the peak of the Delta variant in October 2021, and the Labor Day wildfires of 2020 continued to impact travel into October of that year.[4]

Results

Comparing changes during different time periods

We examined how traffic volumes on the arterials studied changed by time of day (AM/PM peak, midday) and by day of week (weekday vs. weekend). Table 6 below summarizes how volumes changed between October 2019 and 2021 for the various time periods studied, by arterial. All values in the table are indexed to October 2019; i.e., they show the percentage change in traffic volumes between October '19 and '21.

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[4]Though it was useful to have 2020 data for performing validation, we focus on comparing 2019 and 2021 data in our analysis, so the impact of the 2020 wildfires does not influence the results shown in this memo.

Table 6: Percent change in study arterial volumes by time period

Segment	Weekday All day 2019 to 2021 Change	Weekday 2019 to 2021 Change			Weekend 2019 to 2021 Change		
		AM Period	Midday Period	PM Period	AM Period	Midday Period	PM Period
NE Martin Luther King Blvd. @ NE Ainsworth St.	-14%	-17%	-7%	-16%	1%	-4%	-7%
N. Interstate @ N Ainsworth St.	-14%	-28%	-18%	14%	-30%	-13%	-20%
SW Barbur Blvd. @ SW Capitol Hwy.	-23%	-36%	-9%	-27%	22%	4%	14%
NE Halsey Blvd. @ NE 148th Ave.	-16%	-30%	-11%	-12%	-21%	-7%	2%
NE Sandy Blvd. @ NE 148th Ave.	-14%	-26%	-6%	-17%	-14%	4%	-9%
SE Stark St. @ NE 148th Ave.	-14%	-23%	-16%	-12%	27%	0%	8%
NW Marine Dr. @ NW Frontage Rd.	-6%	-16%	-2%	-9%	22%	12%	16%
NE 82nd Ave. @ NE Halsey St.	-17%	-25%	-12%	-18%	-17%	-6%	-6%
SE 82nd Avenue @ SE Foster Rd	-13%	-25%	-13%	-3%	-18%	-5%	-6%
SE 122nd Avenue @ SE Foster Rd	-9%	-21%	-8%	-5%	-30%	-19%	-1%
99W @ SW 124th Ave.	-12%	-26%	-4%	-12%	-8%	-1%	3%
NW Cornell Rd. @ 185th Ave.	-18%	-34%	-11%	-13%	1%	-5%	-3%
SW TV Hwy. @ SW 185th Ave.	-10%	-8%	-9%	-10%	-11%	6%	-4%
SW Farmington Rd. @ SW 185th Ave.	-13%	-22%	-6%	-9%	-21%	-7%	2%
SW TV Hwy. @ SE Brookwood Ave.	-14%	-22%	-12%	-16%	-11%	-3%	-1%
N Columbia Blvd. @ N Portland Rd.	-16%	-32%	-6%	-20%	-19%	-15%	-3%
SE Powell Blvd. @ E end of Ross Island Br.	-18%	-28%	-13%	-19%	1%	-4%	-1%
W Powell Blvd. @ NE Hogan Dr.	-9%	-14%	-4%	-5%	-6%	-11%	-2%
OR 212 @ SE 98th	-9%	-12%	-14%	-10%	-4%	-3%	3%
OR 212 @ SE 172nd	-6%	-11%	9%	-13%	-18%	-7%	-2%
Average	**-13%**	**-23%**	**-9%**	**-12%**	**-8%**	**-4%**	**-1%**

As of October 2021, **weekday arterial volumes were below pre-pandemic levels throughout the day at almost every location studied**. Weekend results were more scattered; traffic increased on some arterials and fell on others.

Arterial traffic decreased most significantly (by an average of 23%) during the weekday morning peak, followed by the weekday evening peak (by an average of 12%). This observation is consistent with research finding that teleworkers are more likely to run errands in the afternoon than in the morning. It is significant since many transportation projects and policies in the region focus on managing high levels of travel demand – and the congestion, safety risks, and emissions that come from that demand.

The locations where peak demand fell the least are freight corridors in suburban areas of the region (e.g., Farmington Rd., OR 212, outer Marine Drive and outer Powell). There are several potential explanations for this, including:

- Goods kept moving during the pandemic, so freight traffic may have remained high on these routes.
- Traffic volumes have rebounded more in other parts of Oregon than in the Portland region, and trips through / into / out of the region could be driving up volumes in locations at the edge of the region.
- These corridors serve communities where incomes are lower, and people with low incomes are more likely to have in-person jobs.
- There are fewer travel options in these areas, which makes residents more likely to rely on cars.

Comparing changes in arterial highway, arterial, and transit use

Many of the arterial locations that we studied carry transit and/or are aligned with traffic counters on parallel highways. We combined transit and highway data at these locations to get a more complete picture of how travel is changing along our study corridors. Though we do not have a large enough dataset to examine in detail how regional travel patterns are changing, having consistent data for this set of locations allows us to make an "apples-to-apples" comparison of regional trends in highway, arterial and transit use. Table 7 summarizes arterial, highway, and transit volume changes by corridor, and Figure 3 displays this data on a map.

Table 7: Percent change in weekday highway, arterial, and transit use, 2019-21, by corridor/location

Highway	Parallel Arterial	Highway[1]	Parallel Arterial[2]		Transit Ridership[3]	
		Percent Change	Percent Change	Average of Parallel Routes	Percent Change in Stop Ridership	Average of Parallel Routes
Locations with highway, arterial, and transit data						
OR-224 @ SE Mather Rd.	OR 212 @ SE 98th Ave.	0%	-9%	-9%	-43%	-43%
I-5 @ SW Capitol Hwy.	SW Barbur Blvd. @ SW Capitol Hwy.	-10%	-23%	-23%	-70%	-70%
I-205 @ SE Steele St.	SE 82nd Ave. @ SE Foster Road	-1%	-13%	-11%	-42%	-45%
	SE 122 Ave. @ SE Foster Road		-9%		-48%	
I-84 @ NE 148th Ave.	NE Sandy Blvd. @ NE 148th Ave.	-1%	-14%	-15%	-35%	-41%
	NE Halsey Blvd. @ NE 148th Ave.		-16%		-46%	
	SE Stark St. @ NE 148th Ave.		-14%		-43%	
I-5 @ Hayden Island[4]	NE Martin Luther King Blvd. @ NE Ainsworth St.	-3%	-14%	-14%	N/A[5]	-34%
	N Interstate @ N Ainsworth St.		-14%		-34%	
I-5 @ SW Wilsonville Rd.	99W East of SW 124th Ave.	-7%	-12%	-12%	-21%	-21%
US-26 @ NW 170th Ave.	NW Cornell Rd. @ SW 185th Ave.	-10%	-18%	-14%	-32%	-37%
	SW TV Hwy @ SW 185th Ave.		-10%		-48%	
	SW Farmington Rd. @ SW 185th Ave.		-13%		-32%	
Average		**-5%**	**-14%**		**-41%**	
Locations with arterial and transit data only						
N/A	NE 82nd Ave. @ NE Halsey St.	N/A	-17%	-17%	-40%	-40%
	N Columbia Blvd. @ N Portland Rd.		-16%	-16%	N/A[5]	N/A
	NW Marine Dr. @ NW Frontage Rd.		6%	6%	N/A[5]	N/A
	OR 212 @ SE 172nd Ave.		-6%	-6%	N/A[5]	N/A
	SE Powell Blvd. @ E end of Ross Island Bridge.		-18%	-18%	-84%	-84%
	W Powell Blvd. @ NE Hogan Dr.		-9%	-9%	-17%	-17%

[1] Highway data comes from ODOT's Automatic Traffic Recorders (ATR) and is a comparison of October 2019 and October 2021 volumes.

[2] Arterial data comes from Streetlight, Inc. and is a comparison of October 2019 and October 2021 volumes.

[3] Transit ridership data comes from TriMet quarterly Automatic Passenger Counters (APC) and is a three month average of weekday boardings/alightings from Fall 2019 and Fall 2021.

[4] I-5 @ N Ainsworth St. was one of 3 ATR locations used in this analysis that did not have complete data for October 2019, 2020, and 2021; we were able to use these locations in validation but not in the results. (The other two locations were I-205 @ SE Washington St. and I-405 @ Marquam Br.) Since I-5 from Portland to Vancouver is a high-volume corridor with several future projects planned and we had two parallel arterial count locations we prioritized collecting ATR data for this location. After comparing data from the I-5 @ N Ainsworth ATR with data from the Hayden Island ATR, roughly 3 miles to the north, we determined that the Hayden Island ATR was a valid proxy for the I-5 @ N Ainsworth ATR.

[5] N/A (not applicable) indicates that no transit routes serve the arterial count location in question.

Figure 4: Percent change in highway, arterial, and transit use (average all-day travel volumes), 2019-21, by location

Figure 4

Weekday Traffic and Transit Volume Changes from 2019 to 2021
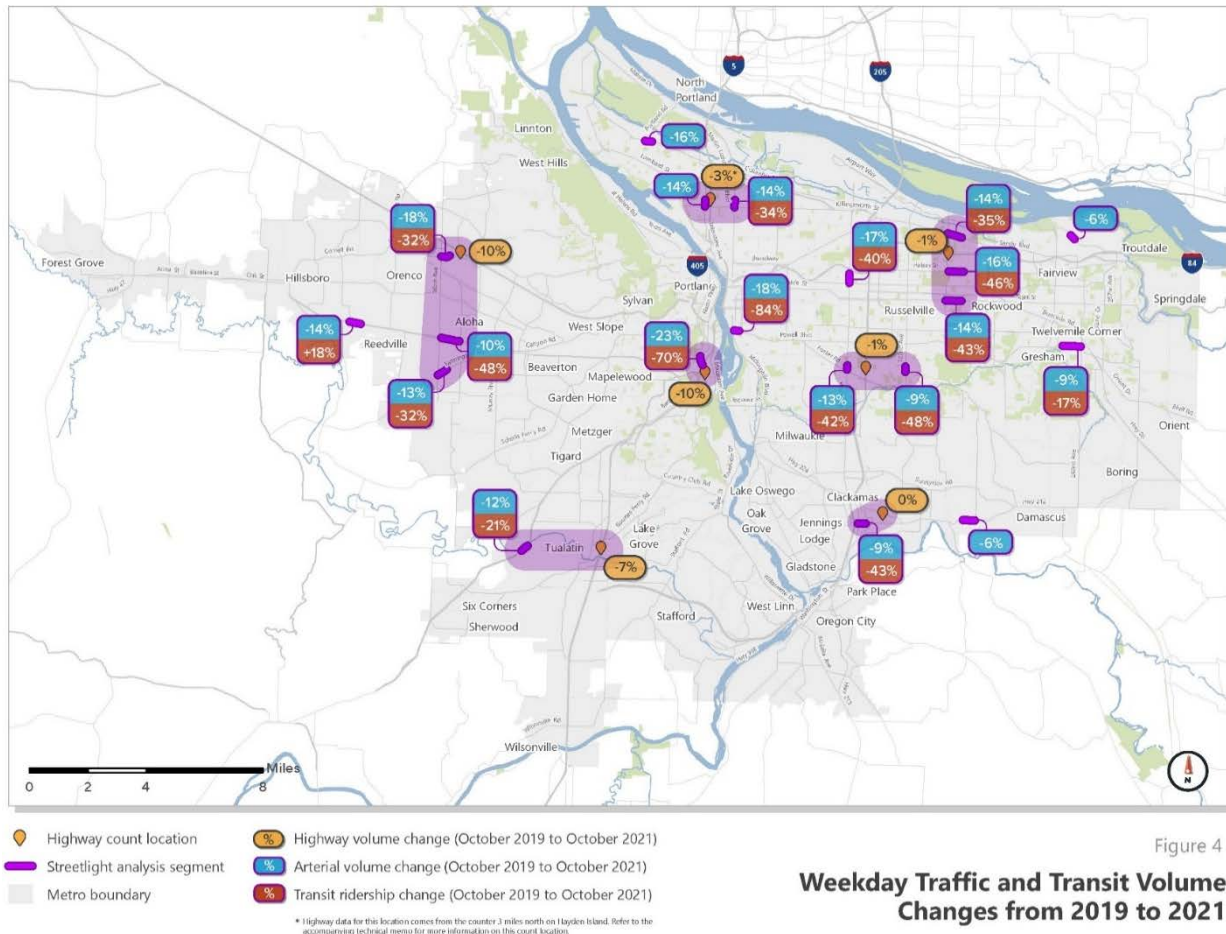
On average, across the study corridors:
- **Daily highway trips decreased by five percent.**
- **Daily arterial trips decreased by 14 percent.**
- **Daily transit ridership decreased by 41 percent.**

In almost every location studied, **arterial volumes have decreased more significantly from pre-pandemic levels than highway volumes have**. Potential explanations for this include:
- Highways carry more freight trips (which have held steady during the pandemic) and trips through the region (which have fallen less than trips within the region).[5]
- Traffic is flowing more freely on highways due to below-normal volumes, which means that fewer drivers divert off of the freeway onto arterials to avoid traffic.

Transit volumes are further below pre-pandemic levels in locations closer to the center of the region. Potential explanations for this include:

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[5] According to ODOT's COVID-19 traffic reports, highway volumes in other areas of Oregon have returned to, and in some cases exceeded, pre-pandemic levels, while they are still slightly below normal in the Portland region.

- Transit ridership and service levels are generally lower in suburban areas of the region, and a higher proportion of riders in these areas could be transit-dependent riders who continued to rely on transit throughout the pandemic.
- Commutes fell throughout the region, and some data suggests that trips to Downtown Portland fell more precipitously than in other regional downtowns. The two study locations where transit ridership declined the most – at SW Barbur and Capitol Highway and SE Powell at the Ross Island Bridge – involve transit routes that carry people into downtown.
- Incomes are generally higher toward the center of the region, and workers with higher incomes are more likely to be able to telework, so teleworking may be competing more with transit in communities at the center of the region.

Draft RTP guidance

Based on the draft findings from the Emerging Trends Study and their knowledge of how regional agencies are responding to these trends, the consultant team has identified seven opportunities to respond to these trends for Metro and its partners to pursue during the development of the RTP. For each of these opportunities, the team has identified *why* the opportunity is important to consider (based on findings from this study) and *how* the region might address the opportunity, both during the short term (through the process of developing the RTP in 2022-23) and the long term (when implementing the RTP in 2024 and beyond). Table 8 below summarizes this draft guidance.

Table 8: Summary of draft RTP guidance

Opportunity	Why	How
Prioritize transit ridership recovery	• Increasing transit service is critical to meeting the region's climate and equity goals. • Transit service and ridership fell dramatically during the pandemic. • Lingering health concerns and changing patterns of behavior (e.g., teleworking replacing transit commutes) make some former riders unlikely to return to transit.	In the short term: • Reconfigure the transit network to serve changing travel patterns (more midday errands, fewer peak commute trips, continued demand on routes that serve people of color and people with low incomes). • Explore new service options to expand coverage in selected areas. • Communicate with the public about measures that are underway to keep people safe and healthy when riding transit. • If arterial traffic volumes remain low, consider redesigning certain streets to prioritize transit. Over the long term: • Seek funding to expand the transportation system. • Expand the availability and depth of discounts for low income riders.
Confirm that previously planned high-priority/high cost auto and transit projects meet changing travel demand patterns	• Many major projects in the region aim to address peak levels of demand. As of the latest data, peak-period trips on the region's highway, arterial and transit networks are all still below pre-pandemic levels. • Teleworking seems likely to remain popular, and teleworkers make fewer trips, particularly during the morning peak. • Transportation projects often seek to address peak-period conditions, which is when demand and congestion are the highest.	Over the short term: • Continue to monitor traffic volumes in the region until conditions stabilize. • Identify major capital projects in the RTP that are intended to address peak period demand and/or congestion, and review assumptions to ensure that they are consistent with how peak period traffic levels are changing. Over the long term: • Consider more frequent updates to transportation data sources and Metro's travel model to keep pace with changing behavior. • Increase the focus on managing demand – including accounting for new opportunities like congestion pricing and teleworking – before investing in system expansions.
Provide more diverse travel options to support changing travel patterns	• As teleworking increases, travel patterns are less driven by long-distance commutes and more by short-distance errands, school drop-offs and other trips. • E-bikes are gaining popularity, and workplace shuttles, and bike/scooter-share are thriving in some parts of the region.	Over the short term: • Develop consistent, comparable information on the benefits and cost-effectiveness of fixed-route transit, shuttles/vanpools, bike/scooter share, and other emerging modes to help identify the best type of service for different communities. • Prioritize closing gaps in bike/ped access to transit stations. Over the long term: • Seek stable funding for shuttles/vanpools, shared mobility, and other emerging travel options.
Maximize potential VMT reductions from teleworking	• Teleworkers are more likely to run errands by car throughout the day, potentially offsetting reductions in commute VMT. • Employers' teleworking policies and employees' reaction to office reopenings both vary widely.	Over the short term: • Consider the potential for mode shifts to teleworking when developing pricing and demand management programs. • Consider reallocating transit service to better serve short trips to commercial centers and corridors. Over the long term: • Coordinate with employers in job centers to balance day-to-day travel using hybrid work schedules. • Support innovations that enable more teleworking at employers with a high number of in-person jobs.

Opportunity	Why	How
Prioritize safe access to transit	• Personal safety is a growing concern for many travelers. • Safety is a particular concern for people of color, who are less likely to feel safe while using a variety of modes, including walking and transit. • People feel especially vulnerable when walking to / waiting for transit. Most transit riders report feeling safe when on the bus or train.	• Support equitable and innovative approaches to transportation safety, such as creating response teams trained in mental health and de-escalation. • Identify opportunities for travel options programs to fund lighting and other safety measures. • Improve transit reliability, frequency, and coordination to minimize the time riders spend waiting for transit.
Plan for the changing role of freight	• Freight played an increased role in shaping travel demand during the pandemic; goods continued to move even as people traveled less. • Increased online shopping is changing how goods move through our region. • Delivery trips have been concentrated in central cities. Some cities have used curb and parking management to manage conflicts between delivery vehicles and other modes.	Over the short term: • Increase data collection on freight, goods movement, and delivery activity. • Improve freight models and analysis tools. Over the long term: • Expand the use of parking management in regional centers.
Accelerate the adoption of electric bicycles, scooters, and shared vehicles.	• Electric bicycles and scooters are becoming more popular, more affordable, and more efficient for longer trips. • Shared e-bike and scooter systems can be effective in providing affordable access to these modes • Oregon's current transportation electrification programs focus overwhelmingly on electric cars and trucks. EV buyers are eligible for State rebates; e-bike buyers are not.	Over the short term: • Explore whether recent changes to federal funding sources enable regional programs to subsidize shared EV, bike, and scooter systems. • Advocate for the expansion of state and federal electric vehicle rebate programs to also provide rebates for electric bicycles. Over the long term: • Explore the potential to fund larger-scale deployment of shared EVs, bikes, and scooters through discretionary grants. • Coordinate investments in shared mobility with affordable housing investments. • Support transportation system plan updates in addressing shared and electric transportation. • Fund completion of the regional bicycle network.
Consider digital approaches to providing equitable access to opportunities.	• The pandemic both highlighted and elevated the importance of technology in connecting people to jobs, school, and goods. • Low-income people are significantly less likely to be able to telework or shop online. • Low-income people are more likely to face barriers to accessing technology, such as lack of affordable internet access and lack of bank accounts. • It seems likely that teleworking will continue to increase in the future, and that people who are able to telework will be able to apply for more job openings in a broader variety of locations.	Over the short term: • Explore opportunities to fund digital access (e.g., laptops and internet hotspots) or education programs that can help people shop, work, book transportation services, and meet other needs online. Over the long term: • Support investments in publicly-owned broadband networks or public-private partnerships that create low- or no-cost plans for low-income households.

Tigard UGB Land Exchange Process
Work Session Topics

Metro Council Work Session
Tuesday, June 14th, 2022

CITY OF TIGARD UGB EXPANSION PROPOSAL: METRO CHIEF OPERATING OFFICER RECOMMENDATION

Date: 5/26/22
Departments: Planning, Development and Research
Meeting Date: 6/14/22

Prepared by: Ted Reid, Principal Regional Planner ted.reid@oregonmetro.gov
Presenter(s): Elissa Gertler, Ted Reid, Tim O'Brien, Schuyler Warren (City of Tigard)
Length: 45 minutes

ISSUE STATEMENT
The City of Tigard submitted a proposal for a residential urban growth boundary (UGB) proposal under Metro's mid-cycle UGB amendment process. As required, Metro's Chief Operating Officer (COO) has issued a recommendation to the Metro Council. In summary, the COO's recommendation is to add the River Terrace 2.0 area to the UGB in a UGB exchange process rather than a mid-cycle UGB amendment.

ACTION REQUESTED
Provide staff with direction regarding the proposed approach to identifying possible UGB exchange candidates.

IDENTIFIED POLICY OUTCOMES
The intended outcome of the COO's recommendation is that Metro fulfills its regional urban growth management responsibilities with a continued focus on efficient land use and readiness for urbanization.

POLICY QUESTION(S)
Does the Council have any questions for Tigard staff about the River Terrace 2.0 concept plan?

Does the Council have any direction to staff about engagement or other considerations that should be addressed in the proposed UGB exchange approach as described in the attached memo?

Does Council have any advice on the proposed exchange approach that it would like from the Metro Policy Advisory Committee (MPAC) at its June 22, 2022 meeting?

How would the Council like to be involved in engagement activities in the UGB exchange process?

POLICY OPTIONS FOR COUNCIL TO CONSIDER
The Council may provide staff with additional direction on the characteristics of lands that it would like to consider in a UGB exchange.

The Council may provide staff with initial direction on conditions of approval that it wishes to consider for the addition of River Terrace 2.0 to the UGB. Those conditions could, for instance, specify planning requirements for Tigard to implement.

STAFF RECOMMENDATIONS
The attached memo provides a detailed approach to identifying possible UGB exchange candidates.

STRATEGIC CONTEXT & FRAMING COUNCIL DISCUSSION
Background on Tigard expansion proposal
The City of Tigard is a consistent and dependable regional partner in its forward-looking approach to housing planning. Tigard has been at the vanguard of allowing middle housing that serves residents and the region so well. Now, Tigard has proposed a well-planned UGB expansion that includes middle housing under Metro's new mid-cycle UGB amendment process. For the reasons described below, the Metro COO recommends that the Council approve this expansion, but through a UGB exchange instead of the mid-cycle process.

Overview of the UGB exchange process
The UGB exchange process is different than a mid-cycle UGB expansion as it would entail adding the River Terrace 2.0 area to the UGB and removing a comparable amount of land elsewhere in the region. This approach is consistent with Metro's focus on city readiness in its growth management decisions. It recognizes that Tigard is ready for growth while some other areas that were added to the UGB in the past have not resulted in housing and may not for decades to come. Ultimately, adding land to the UGB can only help the region address our housing shortage if it is accomplished in a thoughtful, predictable way. Tigard has demonstrated that it is ready to develop River Terrace with a mix of middle housing types that makes efficient use of land.

This UGB exchange approach also upholds the core principle of only adding to the overall size of the UGB when there is a regional need for additional 20-year land supply. This highlights an important distinction that guides our work: the difference between a present day housing shortage and long-term land shortages. State law requires us to focus on the latter when considering whether to add more land to the UGB. Given the trends of the last few years – most notably a slowing population growth rate and additional allowances for middle housing in existing neighborhoods – it is difficult to conclude that more land is needed now. What we need is to make more land inside the existing UGB ready for housing.

The exchange process is allowed under state laws, but Metro has never used this process. The UGB exchange process has been used in a few other jurisdictions around the state, most recently by the City of Sutherlin, OR in 2018.

Staff has begun outreach to jurisdictional partners and advisory committees, including the Metro Technical Advisory Committee (MTAC). At the May 18, 2022 MTAC meeting, staff presented its initial thinking regarding a process for identifying possible exchange candidates. That proposed process along with MTAC's suggestions is described in the attached memo to Council.

<u>Continuation of the readiness theme in the 2024 urban growth management decision</u>
The proposed process continues Metro's focus on land readiness. This theme will be core to Metro's technical and policy approach to the 2024 urban growth management decision. Staff have recently initiated contracting with consultant teams to assist with background work on readiness to advance that approach. For instance, consultants will develop methods for estimating the likelihood of development of a variety of housing types through vacant land development, redevelopment, and infill. On the employment side, consultants will be helping to identify the actions and investments that are needed to make employment lands development ready. Staff will return to Council in early fall 2022 to describe this work program.

BACKGROUND
This is the second opportunity that the Council has had to discuss the UGB exchange. At an April 28, 2022 work session, COO Madrigal presented her recommendation. At that work session, Council directed staff to return with a proposed approach to identifying UGB exchange candidates.

ATTACHMENTS
Memo to Council on proposed approach to identifying UGB exchange candidates.

[For work session:]
- Is legislation required for Council action? ☒ Yes   ☐ No
- If yes, is draft legislation attached? ☐ Yes   ☒ No
- What other materials are you presenting today? PowerPoint

Memo

Date: Tuesday, May 31, 2022
To: Metro Council President Peterson
           Metro Councilors
From: Tim O'Brien, Principal Regional Planner
           Ted Reid, Principal Regional Planner
           Roger Alfred, Senior Assistant Attorney
Subject: Tigard's mid-cycle UGB proposal/COO recommendation/exchange process

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Introduction

The City of Tigard is a consistent and dependable regional partner in its forward-looking approach to housing planning. Tigard has been at the vanguard of allowing middle housing that serves residents and the region so well. Now, Tigard has proposed a well-planned UGB expansion that includes middle housing under Metro's new mid-cycle UGB amendment process. The Metro Chief Operating Officer has recommended that the Council approve this expansion, but through a UGB exchange instead of the mid-cycle process. At an April 28 work session, the Metro Council directed staff to develop a work program that will allow the Council to consider a UGB exchange by this fall.

The UGB exchange process, while already enabled under state law, has not been used in the Metro region. It would entail adding the River Terrace 2.0 area to the UGB and removing a comparable amount of buildable land elsewhere in the region. This approach is consistent with Metro's focus on city readiness in its growth management decisions. It recognizes that Tigard is ready for growth while some other areas that were added to the UGB in the past have not resulted in housing and may not for decades to come. Ultimately, adding land to the UGB can only help us address our housing shortage if it develops in a thoughtful, predictable way. Tigard has demonstrated that it is ready to develop River Terrace with a mix of middle housing types that makes efficient use of land.

The Council has asked staff to return to a June 14 work session with a proposed work program that describes, among other things, the characteristics of land that could be exchanged. This memo lays out staff's initial suggestions.

UGB Exchange Process

The UGB exchange process is codified in Oregon Administrative Rule Chapter 660, Division 24. Specifically OAR 660-024-0070 provides the requirements for exchanging land inside the UGB for land outside the UGB. A local government may remove land from a UGB provided it determines:

a) The removal of land would not violate applicable statewide planning goals and rules;
b) The UGB would provide roughly the same supply of buildable land after the exchange;
c) Existing public facilities agreements do not provide for urban services in the area to be removed from the UGB, unless the public facilities provider agrees to removal and concurrent modification of the agreement;
d) Removal of the land does not preclude the efficient provision of urban services to any other buildable land that remains inside the UGB; and
e) The land removed from the UGB is planned and zoned for rural use consistent with all applicable laws.

The rule does not provide any additional criteria or factors to consider when removing land from the UGB. Metro staff is suggesting the following two step process for determining areas to consider for the UGB exchange.

GIS Mapping Exercise Competed by Metro Research Center/Planning Dept.

- Identify lands within and adjacent to the UGB that are not developed to urban levels using aerial photos and the 2018 buildable land inventory as a starting point
- Identify larger blocks of land using natural features, roadways, development patterns etc. to help define the areas
- Document when the land was added to the UGB and the level of planning (concept/comprehensive) that has been completed for the identified blocks of land

Consultations with City/County Planning Staff/Service Providers

- Confirm status of planning for the areas
- Document why the land has not been developed such as infrastructure deficiencies, lack of property owner interest, inability to annex, or other reasons
- Identify public facility agreements, planning area agreements and other conditions/moratoriums that are holding up or limiting development
- Identify any development proposals pending for the areas
- Identify local plans or programs intended to help accelerate the development process (CIP, funding of major infrastructure)
- Ensure that removal of the area from the UGB does not preclude the ability to provide public infrastructure to other areas within the UGB
- Refine potential land areas if necessary based on conversations with local government and service provider staff

Report Products

- Series of maps for each potential exchange area that shows:
    - ✓ General area
    - ✓ Buildable land
    - ✓ Natural resources, topography or other constraints
    - ✓ Local zoning
- A matrix of readiness characteristics that could include the following:
    - ✓ Total acreage
    - ✓ Buildable land acreage and description of spatial distribution of buildable land
    - ✓ Number of parcels and average size
    - ✓ Status of local adopted plans for the area
    - ✓ Infrastructure limitations – sanitary sewer, water, storm water and transportation
    - ✓ Risk of potential takings claim
    - ✓ Other development barriers or considerations

MTAC Review

Staff presented the proposed exchange process to MTAC on May 18th. In general MTAC members supported the idea of an UGB exchange as well as Metro's focus on land readiness and Tigard's River Terrace 2.0 concept plan. No changes to the proposed process were recommended by MTAC. There were a few questions regarding the timing and the extent of public engagement and whether this is a one-time use of the exchange process or a longer-term direction for managing the UGB.

Update on Parks and Nature Levy Renewal Framework
Work Session Topics

Metro Council Work Session
Tuesday, June 14th, 2022

Date: May 24, 2022

Department: Parks and Nature

Meeting Date: June 14, 2022

Prepared by: Beth Cohen, Parks and Nature (beth.cohen@oregonmetro.gov); Scotty Ellis, Parks and Nature (scotty.ellis@oregonmentro.gov)

Presenters; MG Devereux, Deputy Director of Parks and Nature; Mychal Tetteh, Parks and Nature Community Services Director

Length: 25 minutes

ISSUE STATEMENT

A quarter-century of voter investments have allowed Metro – on behalf of the public – to protect clean water, restore fish and wildlife habitat and help communities experience nature close to home.

As greater Portland grapples with hotter summers and extreme weather, the parks and nature local option levy helps build resilience by planting more native trees and shrubs to provide shade, protecting cool rivers and streams, and restoring critical wildlife habitat. Levy funding helps connect people with the health benefits of nature by keeping Metro parks safe and accessible for millions of annual visitors and enabling community-led projects that make nature more welcoming for communities of color and families with lower incomes.

Metro's parks and nature levy and bond measures work together. By law, bond measures can only support capital expenditures like land acquisition, park development and major construction. The levy enables Metro to restore, maintain, and operate the parks, trails, natural areas and cemeteries purchased and developed through the bond measures and ensures that these destinations are safe and welcoming for all across our region

The current levy will expire in June 2023. Renewal by the voters before that date would extend levy funding to June 2028, without raising taxes, ensuring Metro can continue protecting the region's special places for current residents as well as future generations, build climate resilience on a regional scale, and connect more people to nature.

ACTION REQUESTED

In May 2021, Council directed staff to prepare a potential local option levy renewal for Council to consider referring to voters in 2022. At the June 14 work session, staff will share a proposed framework for a potential renewal, and seek Metro Council guidance on how it meets Council expectations.

Council guidance at the June 14 work session will also help staff further shape the proposed approach to a future Council referral by launching a series of Council and partner discussions expected to take place through June and July 2022 including:

- Outreach on the proposed levy framework to local governments, community and conservation leaders, MPAC, parks directors and so on.
- Return to Council work session on July 14 to share information gleaned from partner outreach and propose a recommended framework for Council direction.
- By the end of July, if Council directs, staff will be ready to bring to Council a finalized levy renewal package for Council consideration and potential referral to voters.

IDENTIFIED POLICY OUTCOMES

The parks and nature levy is a fundamental part of Metro's efforts to advance racial equity and enhance climate resilience in greater Portland by supporting natural area restoration and maintenance, park operations and community-led programming.

In alignment with Council direction, staff have refined a proposed levy renewal framework that

- Continues the same rate without raising taxes
- Advances racial equity and climate resilience
- Meets the current operational needs of Metro's system;
- Continues alignment with the 2019 parks and nature bond.

QUESTIONS FOR COUNCIL

Does the proposed framework for levy renewal align with Council expectations?

What other information can staff provide to help Council discuss and advance a conversation about potential renewal?

Does the proposed approach to levy renewal this summer align with Council expectations?

STRATEGIC CONTEXT & FRAMING COUNCIL DISCUSSION

Impacts of the regional system—The levy helps Metro care for over 18,000 acres of parks, trails and natural areas that touch each part of the region. Metro's portfolio includes 19 developed parks, boat launches and the golf course that serve some of the most diverse communities in the region. Annually, more than 2.5 million people visit Blue Lake and Oxbow regional parks, Broughton Beach, Chinook Landing, M. James Gleason Memorial Boat Ramp, and Mount Talbert, Graham Oaks and Scouters Mountain nature parks. Metro recently opened Newell Creek Canyon and Chehalem Ridge nature parks.

Metro staff, funded by the levy, help visitors enjoy hiking, bird watching, canoeing, golfing, camping, boating, fishing, picnicking, weddings and special events. The levy funds ongoing maintenance and improvements to restrooms, picnic areas, trails, play areas and other important amenities in these parks are vital to extending the life span of these beloved places while also continuing to make them more welcoming and inclusive for more people.

The benefits of the levy reach beyond Metro's sites to support regional climate resilience, benefiting people, plants, and wildlife, support sites we co-manage with the region's park providers, like Cooper Mountain with Tualatin Hills Park and Recreation District.

Bond and levy maximize climate and health benefits—The parks and nature bond and levy work together to maximize impact across the regional system of parks, trails and natural areas. The levy is essential to restoring priority habitat purchased by the parks and nature bond as well as to the collaborative planning and opening of Chehalem Ridge and Newell Creek Canyon Nature Parks. Staff are working to align the desired outcomes in the draft levy framework with the bond criteria and related outcomes framework to articulate the impacts of bond and levy investments on advancing racial equity and climate resilience. Once approved by Council, the desired outcomes in the levy renewal framework will allow for annual reporting that speaks clearly to bond and levy benefits working in tandem.

Stakeholder engagement—The proposed levy renewal framework reflects and is built upon nearly a decade of community partnerships, engagement and input and has been updated from the 2016 levy framework to address input from more recent engagement efforts, including the extensive engagement that shaped the 2019 parks and nature bond. In recent months, the region's park providers, the urban Indigenous community and Metro's Committee on Racial Equity have reviewed the draft framework and confirmed it still aligns with and meets community need.

One important example of this is that the proposed levy framework language emphasizes Metro's intentions of building partnerships, providing assistance and funding projects that support and/or are led by tribal governments and Indigenous communities, which is in response to feedback from urban Indigenous community members.

Beginning in June, staff will continue outreach to build awareness about the potential levy renewal with jurisdictional, community and conservation partners through a series of presentations, site visits and other activities. Feedback from these conversations can help shape a recommended framework as well as next steps for Council consideration.

Legal antecedents—In 2016, the Metro Council approved Resolution No. 16-4690, which referred Measure 26-178, the levy renewal measure, to the voters. This renewal will expire in June 2023 without further action by voters.

Anticipated effects—The current levy raises over $16 million a year based on a rate of 9.6 cents per $1,000 in assessed home value – about $20 a year for the owner of a home at $200,000 in assessed value. Metro staff have confirmed that compression impacts on current levy revenues due to other parks measures in the region have been minimal.

BACKGROUND

The levy was originally approved by the voters in 2013 to restore Metro's natural areas, maintain and operate parks, and improve opportunities for people to safely enjoy parks and natural areas. It was renewed in 2016 for an additional five years, with support from

more than 74 percent of voters across greater Portland. The levy currently makes up the majority of the Parks and Nature department's operating budget. Without it, Metro would be unable to continue many essential Parks and Nature services and programs.

ATTACHMENTS

2022 Levy renewal – Proposed Framework

Draft

Metro's parks and nature local-option levy protects clean water, restores fish and wildlife habitat, and provides access to nature close to home.

No matter where you are in the greater Portland region, nature is never far. Metro cares for more than 18,000 acres of parks, trails and natural areas across greater Portland – from Chehalem Ridge in the west to the Sandy River Gorge in the east, from Blue Lake and Broughton Beach in the north to Graham Oaks in the south. This portfolio of land represents both a big opportunity and a big responsibility. For more than a quarter-century, voters have repeatedly asked Metro to protect clean water, restore fish and wildlife habitat and provide opportunities to connect with nature close to home. Voters also trust and expect Metro to wisely care for these special places over the long term, while creating opportunities for people to enjoy them.

Metro's parks and nature work depends on continued voter support for a five-year local-option levy, first approved by voters in 2013. The levy is a critical source of ongoing operating funding that complements voter-approved parks and nature bonds, which by law must focus on capital spending such as land acquisition and major construction projects.

The levy allows Metro to improve water quality, protect culturally significant plant communities, restore and enhance fish and wildlife habitat, control invasive weeds, and plant native trees and shrubs. Levy funding has also made Metro parks and natural areas more safe and welcoming by supporting park operations and improving visitor amenities at popular destinations across greater Portland, planning for public access improvements, expanding community programming, and supporting community-led projects that protect and enhance important habitat, improve water quality and strengthen people's connection to nature close to home.

Current levy funding expires in June 2023. If voters renew the levy for another five years, Metro would continue to preserve the greater Portland region's legacy of natural beauty, clean rivers and access to nature, ensuring that future generations enjoy the same benefits of nature that we do today. Levy renewal would not raise taxes.

LEVY PROGRAM AREAS

If a five-year levy renewal is approved by voters, costs related to the following programs and activities would be eligible for levy funding beginning in July 2023.

Program area	Program area activities	Annual minimum funding allocation
Habitat restoration and land management	<u>Habitat restoration</u> – Restore fish and wildlife habitat, improve habitat quality for priority species, and improve water quality and quantity at Metro's parks and natural areas. <u>Land management</u> – Manage Metro's parks and natural areas to maintain ecological health, restore culturally significant plant communities, and reduce the long-term costs of maintenance.	40%

May 31, 2022

Regional park operations	Support visitor services, maintenance, and amenity improvements at Metro's parks, trails, natural areas, and cemeteries so that they are welcoming, safe and inclusive, and meet or exceed standards for accessibility.	35%
Community-led investments and education	Co-create culturally specific interpretive programs, materials, and events, and provide resources (financial and programmatic) to support communities in their efforts to strengthen connections with nature. Includes, but not limited to, grant funding for community projects that advance climate resilience and racial equity, and culturally relevant nature education opportunities.	15%

ACCOUNTABILITY AND IMPACT ANALYSIS

The program allocations reflect regional priorities and ensure transparency and accountability to taxpayers. These allocations form the foundation of the annual operations budgets for the Parks and Nature department that Council considers and adopts each year as part of the Metro budget process.

The Parks and Nature Annual Report shares with the public how levy spending compares to the allocations in the levy framework. An annual financial audit that covers the local-option levy expenditures will be conducted by an independent public accounting firm, and the results published on the Metro website.

The Natural Areas and Capital Program Performance Oversight Committee will also review progress in the implementation of any levy-funded capital projects. This committee provides the Metro Council and the people of the region with an independent review of Metro's bond- and levy-funded capital projects and provides an annual report to the Metro Council.

DESIRED LEVY OUTCOMES

The parks and nature levy is a fundamental part of Metro's proactive efforts to advance racial equity and enhance climate resilience in greater Portland.

Based on community and partner engagement and input from stakeholders, the following desired outcomes articulate the long-lasting impacts that levy investments will have and will act as prioritization guidance, ensuring that racial equity and climate resilience remain the central focus of levy investments.

These desired outcomes are also coordinated with the outcomes established within the 2019 parks and nature bond measure, as the levy is instrumental to operate and maintain bond-funded investments in parks, trails and natural areas. This alignment is essential to ensure that the bond measure and the levy work together to protect clean water, restore fish and wildlife habitat and connect people with nature close to home.

Habitat: Improve habitat and habitat connectivity for plants, fish, and wildlife at Metro's parks and natural areas.

An objective of the levy is to ensure that priority habitat for plants and animals (as identified by Indigenous communities, tribes and regional conservation strategies) is restored and protected, and invasive plant species are removed. This results in the outcomes of new anchor sites and

improved habitat connectivity for native plants, fish, and wildlife, all of which contribute to climate resilience on a site and regional scale.

Water quality and quantity: Improve hydrologic function, and water quality and water quantity at Metro's parks and natural areas.

An objective of the levy is to ensure that priority habitat for plants and animals (as identified by Indigenous communities, tribes and regional conservation strategies) is restored and protected, and invasive plant species are removed. This results in the outcomes of improved water quality and quantity - meaning reduction of negative impacts of flooding, improved floodplain connectivity, increased late-season flow, healthier water temperatures, all of which contribute to climate resilience on a site and regional scale.

Native plants: Protect and restore culturally significant native plants in partnership with Tribal Nations and greater Portland's Indigenous community.

An objective of the levy is to ensure that culturally significant and keystone native plants, as identified by Tribal nations and Indigenous communities, are restored and protected and cared for collaboratively. This results in the outcomes of new anchor sites and improved habitat connectivity for native plants, fish and wildlife, all of which contribute to climate resilience on a site and regional scale.

Resilience: Execute land management plans at Metro's parks and natural areas to reduce risk from extreme weather.

An objective of the levy is to ensure that land management plans are implemented at Metro's parks and natural areas. This results in the outcome of more resilient habitat for plants, fish and wildlife to the effects of extreme weather.

Engagement and accountability: Serve communities through inclusive, transparent and accountable engagement.

An objective of the levy is to ensure that communities know how their guidance was utilized, historically marginalized communities see themselves represented through levy-funded work and know that Metro's engagement practices uplift their expertise and knowledge. This results in the outcomes of levy investments that prioritize the needs of historically marginalized communities, advance racial equity and have broader community impact, help Metro natural spaces and programming become critical community assets and increase community confidence and trust in Metro.

Education: Design collaborative and culturally relevant education that lifts up multiple ways of knowing by centering work with educators from historically marginalized communities.

An objective of the levy is to ensure educators, centering those from historically marginalized communities, actively participate in and are financially supported to develop culturally relevant and participatory education. This results in the outcomes of increased knowledge of the cultural and regional significance of Metro parks and natural areas and of practices to protect and steward regional lands and water, and in creating career pathways for community educators.

Accessibility: Improve the accessibility of Metro destinations for people of all ages and abilities.

An objective of the levy is to ensure that Metro visitors of all ages and abilities continue to have their immediate needs met through well-maintained and accessible amenities and signage (e.g. restrooms, areas for picnics, clear wayfinding). This results in the outcome of more universally designed, sensory-rich environments where visitors can physically, socially and emotionally connect with nature at parks, boat ramps, trails and cemeteries.

Inclusion: Ensure that Metro visitors of all backgrounds can access a variety of nature experiences to strengthen their relationship to the natural world.

An objective of the levy is to ensure that the amenities (e.g. park recreation types, signage, interpretation, access points, art), services and programming at Metro destinations enable all visitors to enhance their relationship with nature in a personalized way and enjoy the full benefits of nature. This results in the outcomes of increased community health and wellbeing, sense of belonging, and stewardship at Metro sites.

Climate leadership: Collaborate with local, state, federal, Tribal and nonprofit partners to plan for and make strategic decisions related to conservation priorities across the region for broader, more effective action for climate adaptation and resilience.

An objective of the levy is to ensure that Metro serves as a convener and an anchor organization for complex restoration and climate resilience projects involving multiple partners. This results in the outcomes of implementation of regionally significant projects, the development and strengthening of region-wide strategies for climate resilience, and supporting conservation investments made by partners.

Workforce equity: Increase the prosperity of historically marginalized workers and communities through levy investments.

An objective of the levy is to ensure that historically marginalized members of the workforce experience more opportunities to enter and build careers at all levels in the parks and natural area industry. This results in the outcomes of increased prosperity for historically marginalized workers and greater representation within the workforce.

Contractor equity: Build capacity and experience of historically marginalized contractors through projects at/with Metro.

An objective of the levy is to ensure that Certification Office for Business Inclusion and Diversity (COBID) certified businesses experience more opportunities to work with Metro through a streamlined contracting process, and are prioritized in the process of soliciting proposals. This results in the outcome of increased benefits from the economic opportunities of gaining entry to and experience in the parks and natural area industry for historically marginalized communities.

PROGRAM DESCRIPTIONS

HABITAT RESTORATION AND LAND MANAGEMENT

At least 40 percent of the proposed levy funding will pay for Metro's continued work to restore and maintain habitat on land that has been acquired over the course of three decades and through three voter-approved bond measures. These property stewardship activities ensure that Metro's parks and

natural areas provide clean water, healthy fish and wildlife habitat and high-quality opportunities for people to experience nature.

Levy funding will be invested throughout Metro's portfolio of high-priority habitats (wetlands, prairies, savannas, rivers and forests) and projects informed by science and engagement with stakeholders and community members.

Levy-funded restoration and management projects will be prioritized based on their clear contribution to the protection of water quality and species or habitats identified in federal, state or regional conservation plans, including The Intertwine Alliance's Regional Conservation Strategy for the Greater Portland-Vancouver Metropolitan Area and the Oregon State Conservation Strategy, which document and offer guidance for the region's highest value habitat areas.

If approved, the levy would fund three main types of restoration and land management activities:

Habitat restoration projects

The levy will fund restoration of fish and wildlife habitat at Metro's sites to significantly improve quality and function, such as improved wildlife connections and hydrologic function of rivers and streams, which are key contributors to building healthy habitat and resilience to climate change. Large-scale projects will typically involve one or more complex actions, such as reconnecting floodplains to rivers, constructing or removing structures that direct hydrology, planting or thinning large tracts of forest or establish prairie and savanna habitat to develop healthy, functional native plant communities. Metro also conducts many small-scale projects, such as removing noxious and invasive weeds to be replaced with native trees and shrubs, or strategically thinning Douglas fir trees that compete for resources with slower-growing Oregon white oaks. Both types of projects can include activities such as replacing or removing failing culverts and modifying or removing roads to prevent erosion from reaching streams and water sources.

Metro will continue to seek diverse partners in planning and implementing restoration projects and create opportunities for state-certified business enterprises, including minority- and women-owned businesses, to perform work on Metro-owned properties.

Land management

The levy will fund management of Metro sites to maintain ecological health and increase their resilience to extreme weather and other impacts of climate change. Management and maintenance includes suppressing weeds, reestablishing native vegetation, restoring culturally significant native plant communities, identifying and quickly treating threats from invasive species, and protecting infrastructure such as roads, trails, fences and signage. Timely management of Metro parks and natural areas will also reduce long-term costs. In the same way that addressing weed problems early is most efficient, timely action to protect infrastructure prevents sites from deteriorating and extends the useful life of the investments. The levy will ensure that Metro's sites are maintained and operated at their current high quality standard.

Regional conservation leadership

With its unique role in the region, Metro serves as an anchor organization by convening multiple partners and funding sources to undertake complex and critical conservation projects, such as the

restoration of River Island Natural Area along the Clackamas River and development of regional data sets that empower better conservation and infrastructure planning. Metro is dedicated to convening and collaboration with local, state, federal, Tribal and nonprofit partners to make strategic decisions, in particular those related to climate adaptation and resilience.

Levy funding will enable Metro to continue to serve in this leadership role, ensuring coordination and advancement of regional conservation projects and decisions.

REGIONAL PARK OPERATIONS

Metro's parks and nature destinations offer important access to nature for people and support regionally important habitats. More than 2.5 million visitors enjoy Metro's developed parks each year for walking, hiking, bird watching, canoeing, camping, boating, fishing and picnicking, in addition to family and community events.

At least 35 percent of levy funding will support operations and maintenance to keep Metro's parks and nature destinations safe, welcoming and accessible to all members of our community. Funds from a levy renewal will continue to allow Metro to develop low-impact access to Metro sites, focusing on safety improvements and hiking, cycling and walking opportunities. These access investments support the physical, mental and emotional health and well-being of our community, by enabling people to experience some of the region's unique habitats, learn more about nature and become better stewards of the environment.

Levy funding will also allow Metro to continue making improvements and investments in operations that help knit together Metro's parks, trails, natural areas and cemeteries into an integrated system that is welcoming, safe and inclusive, and to meet or exceed standards for accessibility. Investments in operations include guest services, park rangers, cemetery services, and park maintenance and repairs on amenities such as picnic areas, signage, restrooms, public art and staff facilities.

Metro will continue to prioritize projects that make parks safe, welcoming, inclusive, and more accessible for visitors, reduce impacts on natural resources and improve the longevity of park infrastructure. Improvements for visitors at Metro's destinations are integrated with Metro's nature programs and restoration projects.

COMMUNITY-LED INVESTMENTS AND EDUCATION

Metro is committed to furthering people's relationship with nature, whether that means a family becoming a regular at a Metro nature park, an elementary school class stewarding a local natural area, a group of youth leaders co-creating culturally relevant nature education, or a community group creating a project that helps meet a need to better connect people with nature.

At least 15 percent of levy funding will continue to support community-led partnerships, education and stewardship programs to offer hands-on experiences that allow people to strengthen their relationship to the natural world while also fostering the next generation of leaders. These programs are a critical portion of the region's conservation efforts because they create opportunities for everyone to grow their understanding of how to become better stewards of nature. They also increase the region's collective knowledge, whether that is by increasing the cultural relevance of restoration activity,

accurately sharing the natural and cultural history of a natural area, or learning from people who have been stewards of nature since time immemorial.

These programs aim to work with communities to understand what resources can best support their relationship with nature, which may look different for various partners. People connect with nature in different ways and experience different barriers and opportunities to that connection. Through community-led programming, meaningful engagement and partnerships, these programs will directly support people of color and other marginalized communities.

Metro staff and partners will use levy funding to continue investing in efforts to engage both new and returning visitors to Metro's destinations and ensure that all visitors have the opportunity to learn and share about a site's history, restoration activities, and regional and cultural significance. These efforts include the development of a diverse set of culturally specific interpretive programs, materials, events, and resources to support communities in their effort to further their connection with nature, such as grant funding for community projects that advance climate resilience and racial equity, nature education opportunities and student field trips.

Levy funding will also continue fostering deep partnerships between Metro staff and community leaders to strengthen connections between their communities and Metro parks and natural areas. These partnerships are critically important to foster trust and create opportunities for Metro staff to learn from community partners, integrating lessons learned into Metro's programs, staff training and services. This reciprocal learning relationship with community will strengthen programs and materials and improve and increase the collective resources that Metro can provide for everyone to become better stewards of nature.

Date: May 24, 2022

Department: Parks and Nature

Meeting Date: June 14, 2022

Prepared by: Beth Cohen, Parks and Nature
(beth.cohen@oregonmetro.gov);
Scotty Ellis, Parks and Nature
(scotty.ellis@oregonmentro.gov)

Presenters; MG Devereux, Deputy Director of Parks and Nature; Mychal Tetteh, Parks and Nature Community Services Director

Length: 25 minutes

ISSUE STATEMENT

A quarter-century of voter investments have allowed Metro – on behalf of the public – to protect clean water, restore fish and wildlife habitat and help communities experience nature close to home.

As greater Portland grapples with hotter summers and extreme weather, the parks and nature local option levy helps build resilience by planting more native trees and shrubs to provide shade, protecting cool rivers and streams, and restoring critical wildlife habitat. Levy funding helps connect people with the health benefits of nature by keeping Metro parks safe and accessible for millions of annual visitors and enabling community-led projects that make nature more welcoming for communities of color and families with lower incomes.

Metro's parks and nature levy and bond measures work together. By law, bond measures can only support capital expenditures like land acquisition, park development and major construction. The levy enables Metro to restore, maintain, and operate the parks, trails, natural areas and cemeteries purchased and developed through the bond measures and ensures that these destinations are safe and welcoming for all across our region

The current levy will expire in June 2023. Renewal by the voters before that date would extend levy funding to June 2028, without raising taxes, ensuring Metro can continue protecting the region's special places for current residents as well as future generations, build climate resilience on a regional scale, and connect more people to nature.

ACTION REQUESTED

In May 2021, Council directed staff to prepare a potential local option levy renewal for Council to consider referring to voters in 2022. At the June 14 work session, staff will share a proposed framework for a potential renewal, and seek Metro Council guidance on how it meets Council expectations.

Council guidance at the June 14 work session will also help staff further shape the proposed approach to a future Council referral by launching a series of Council and partner discussions expected to take place through June and July 2022 including:

- Outreach on the proposed levy framework to local governments, community and conservation leaders, MPAC, parks directors and so on.
- Return to Council work session on July 14 to share information gleaned from partner outreach and propose a recommended framework for Council direction.
- By the end of July, if Council directs, staff will be ready to bring to Council a finalized levy renewal package for Council consideration and potential referral to voters.

IDENTIFIED POLICY OUTCOMES

The parks and nature levy is a fundamental part of Metro's efforts to advance racial equity and enhance climate resilience in greater Portland by supporting natural area restoration and maintenance, park operations and community-led programming.

In alignment with Council direction, staff have refined a proposed levy renewal framework that
- Continues the same rate without raising taxes
- Advances racial equity and climate resilience
- Meets the current operational needs of Metro's system;
- Continues alignment with the 2019 parks and nature bond.

QUESTIONS FOR COUNCIL

Does the proposed framework for levy renewal align with Council expectations?

What other information can staff provide to help Council discuss and advance a conversation about potential renewal?

Does the proposed approach to levy renewal this summer align with Council expectations?

STRATEGIC CONTEXT & FRAMING COUNCIL DISCUSSION

Impacts of the regional system—The levy helps Metro care for over 18,000 acres of parks, trails and natural areas that touch each part of the region. Metro's portfolio includes 19 developed parks, boat launches and the golf course that serve some of the most diverse communities in the region. Annually, more than 2.5 million people visit Blue Lake and Oxbow regional parks, Broughton Beach, Chinook Landing, M. James Gleason Memorial Boat Ramp, and Mount Talbert, Graham Oaks and Scouters Mountain nature parks. Metro recently opened Newell Creek Canyon and Chehalem Ridge nature parks.

Metro staff, funded by the levy, help visitors enjoy hiking, bird watching, canoeing, golfing, camping, boating, fishing, picnicking, weddings and special events. The levy funds ongoing maintenance and improvements to restrooms, picnic areas, trails, play areas and other important amenities in these parks are vital to extending the life span of these beloved places while also continuing to make them more welcoming and inclusive for more people.

The benefits of the levy reach beyond Metro's sites to support regional climate resilience, benefiting people, plants, and wildlife, support sites we co-manage with the region's park providers, like Cooper Mountain with Tualatin Hills Park and Recreation District.

Bond and levy maximize climate and health benefits—The parks and nature bond and levy work together to maximize impact across the regional system of parks, trails and natural areas. The levy is essential to restoring priority habitat purchased by the parks and nature bond as well as to the collaborative planning and opening of Chehalem Ridge and Newell Creek Canyon Nature Parks. Staff are working to align the desired outcomes in the draft levy framework with the bond criteria and related outcomes framework to articulate the impacts of bond and levy investments on advancing racial equity and climate resilience. Once approved by Council, the desired outcomes in the levy renewal framework will allow for annual reporting that speaks clearly to bond and levy benefits working in tandem.

Stakeholder engagement—The proposed levy renewal framework reflects and is built upon nearly a decade of community partnerships, engagement and input and has been updated from the 2016 levy framework to address input from more recent engagement efforts, including the extensive engagement that shaped the 2019 parks and nature bond. In recent months, the region's park providers, the urban Indigenous community and Metro's Committee on Racial Equity have reviewed the draft framework and confirmed it still aligns with and meets community need.

One important example of this is that the proposed levy framework language emphasizes Metro's intentions of building partnerships, providing assistance and funding projects that support and/or are led by tribal governments and Indigenous communities, which is in response to feedback from urban Indigenous community members.

Beginning in June, staff will continue outreach to build awareness about the potential levy renewal with jurisdictional, community and conservation partners through a series of presentations, site visits and other activities. Feedback from these conversations can help shape a recommended framework as well as next steps for Council consideration.

Legal antecedents—In 2016, the Metro Council approved Resolution No. 16-4690, which referred Measure 26-178, the levy renewal measure, to the voters. This renewal will expire in June 2023 without further action by voters.

Anticipated effects—The current levy raises over $16 million a year based on a rate of 9.6 cents per $1,000 in assessed home value – about $20 a year for the owner of a home at $200,000 in assessed value. Metro staff have confirmed that compression impacts on current levy revenues due to other parks measures in the region have been minimal.

BACKGROUND

The levy was originally approved by the voters in 2013 to restore Metro's natural areas, maintain and operate parks, and improve opportunities for people to safely enjoy parks and natural areas. It was renewed in 2016 for an additional five years, with support from

more than 74 percent of voters across greater Portland. The levy currently makes up the majority of the Parks and Nature department's operating budget. Without it, Metro would be unable to continue many essential Parks and Nature services and programs.

ATTACHMENTS

Materials following this page were distributed at the meeting.

Emerging transportation trends: draft final results

Metro Council

June 14, 2022

Study purpose

Scope: Major transportation trends due to the pandemic and other recent disruptions

Time frame: Aug '21 - June '22

Goals:

- Develop common understanding of changes that we've all been experiencing individually
- Understand potential risks of "business as usual"
- Identify potential changes to policy and analysis to consider during the 2023 RTP update
- Will be followed by other Emerging Trends work

Study timeline

Emerging trends

Research / select trends
Aug-Oct '21

Analyze trends individually
Oct '21-Feb '22

Analyze scenarios and add'l data / RTP guidance
Mar '22 – Jun '22

(we are here)

2023 Regional Transportation Plan (RTP) update

Scoping
Oct '21 – Mar '22

Data and policy analysis
May – Aug '22

Data and policy analysis
May – Aug '22

3

Study focus

Based on feedback from technical and policy committees, we focus on the following trends:

- **Declining transit service and ridership**
- **Increasing remote work / work from home**
- **Increasing online shopping**
- More affordable and efficient electric vehicles
- Increasing concerns about personal safety
- Increasingly unsafe streets
- Increasing recreational cycling

For trends shown in **bold**, there is enough data and research to forecast their impacts on travel and on our regional goals.

Final draft work products

- **Scenario analysis** of how emerging trends impact future vehicle travel and transit ridership
- **Corridor analysis** of changes in arterial traffic versus changes in highway traffic and transit ridership
- **Regional transportation plan** guidance on potential RTP responses to trends and their impacts
- **Fact sheets** summarizing the background, current understanding, and impacts of each trend

Scenario analysis: overview

Goal: understand how trends collectively impact driving and transit ridership.

What we did: forecasted vehicle miles traveled and transit ridership under three different scenarios.

Why we did it:
- To capture the interrelationships between different trends
- To better understand the uncertainty that trends create around future travel in the region

Defining scenarios

Assumptions about current and future teleworking rates, by scenario

7
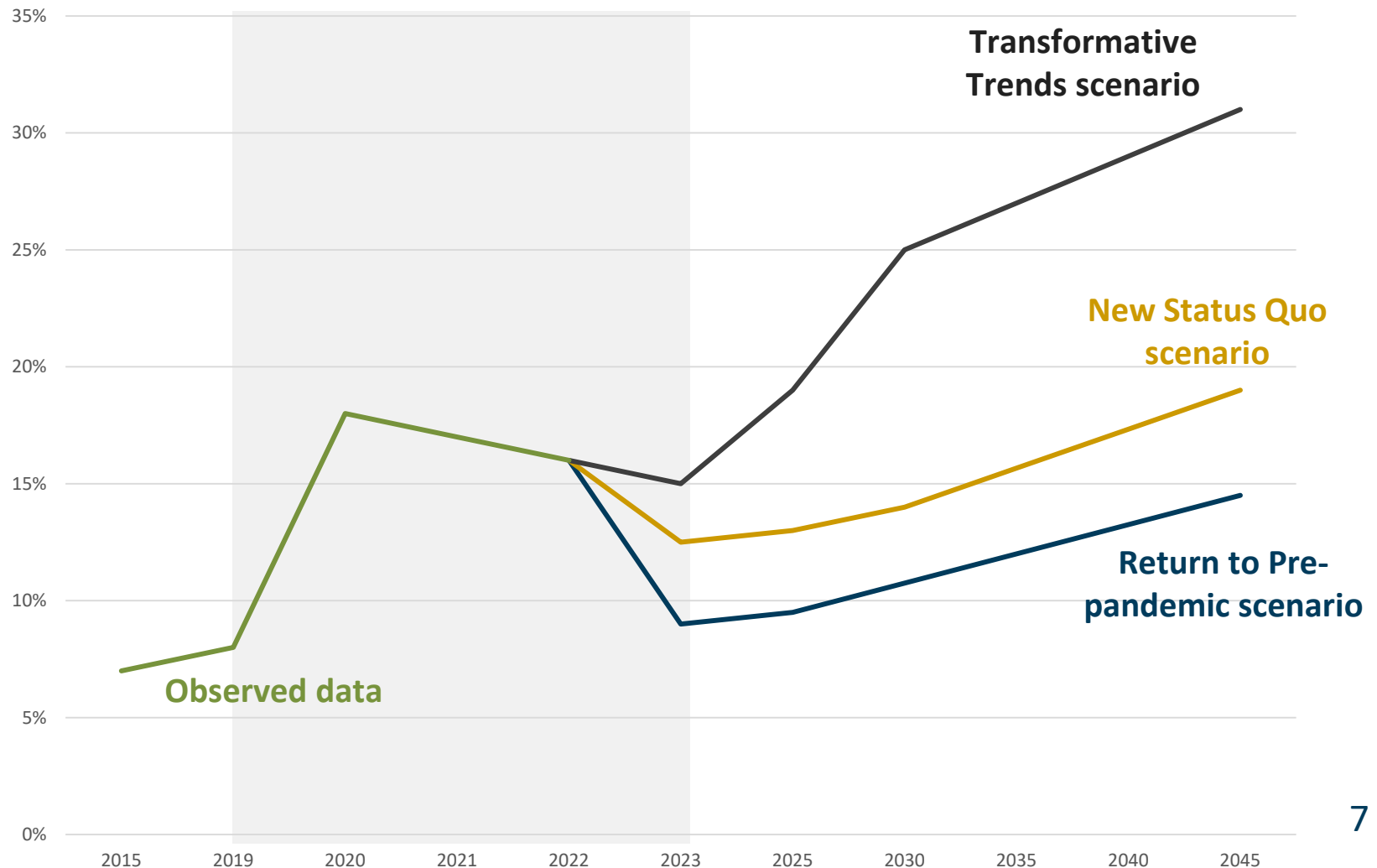
Defining scenarios: transit service

Assumptions about current and future transit service, by scenario

New Status Quo and Transformative Trends scenarios

Return to Pre-pandemic scenario

Observed data
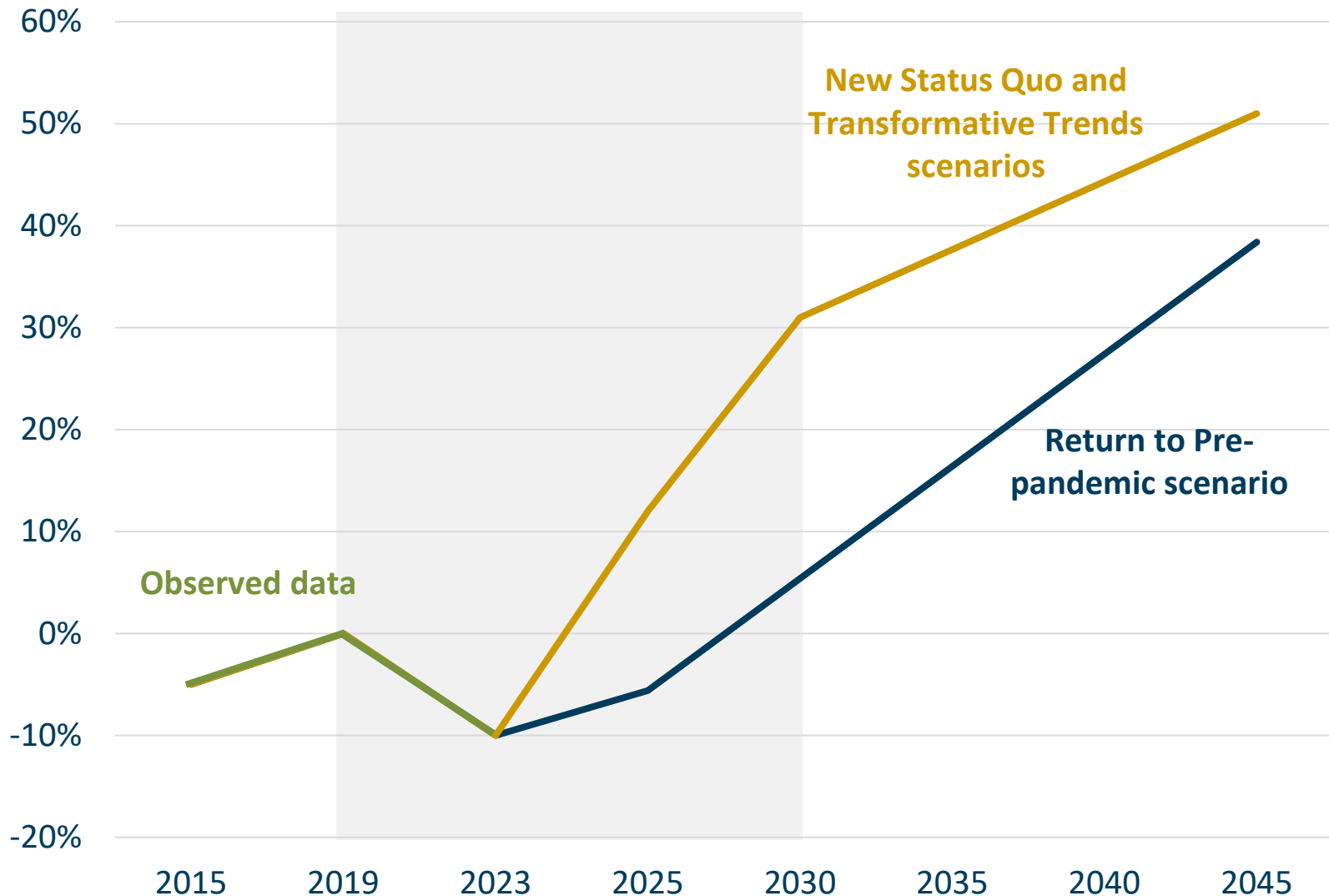
Vehicle miles traveled results

Forecasted change in vehicle miles traveled per capita, by scenario

	2025	2030	2035	2040	2045
Return to Pre-pandemic	-0.1%	-0.8%	-1.4%	-2.0%	-2.6%
New Status Quo	-1.5%	-2.2%	-2.9%	-3.6%	-4.3%
Transformative Trends	-3.2%	-5.4%	-6.1%	-6.9%	-7.7%
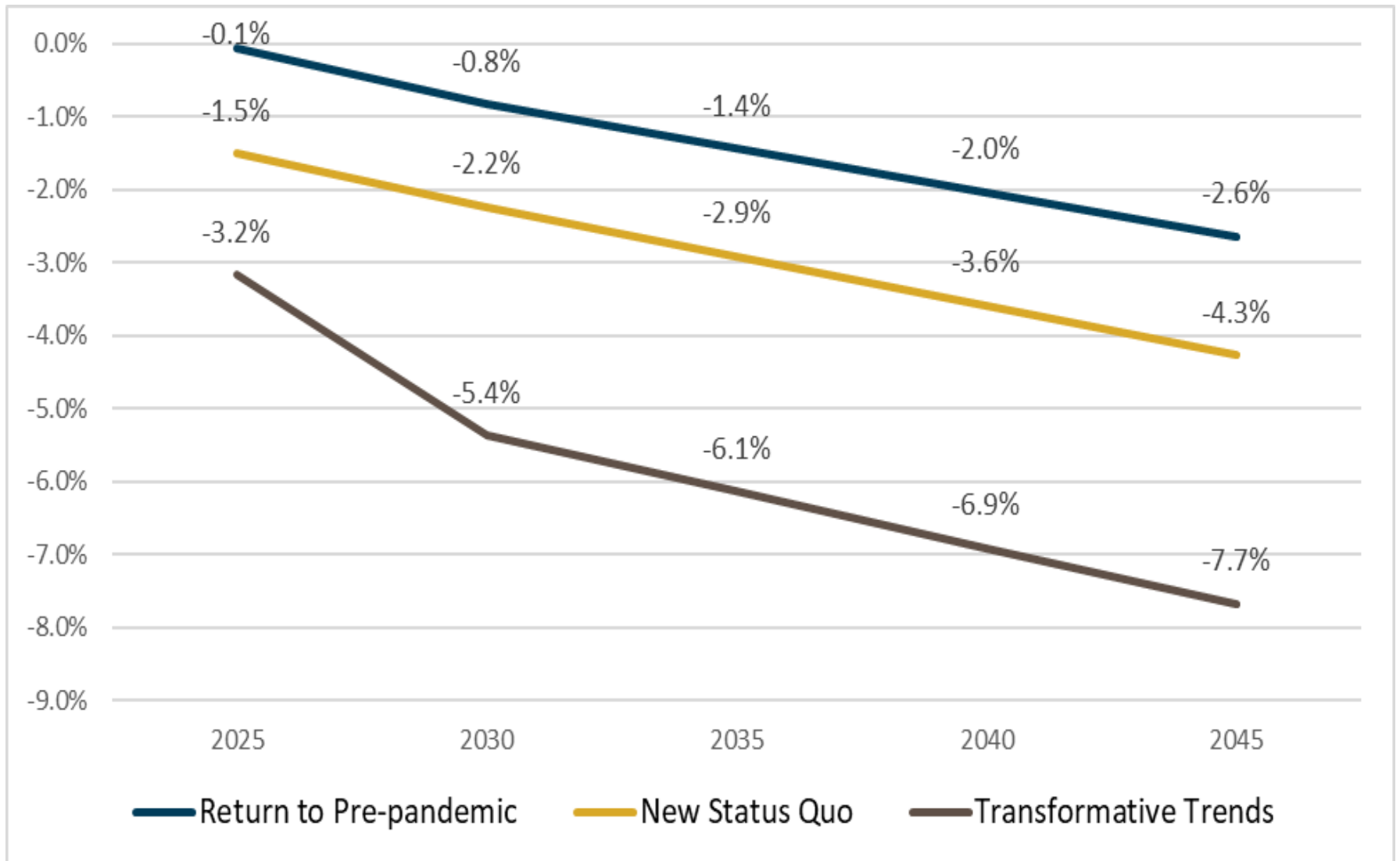
Transit ridership results

Forecasted change in transit ridership, by scenario

| | Return to Pre-pandemic | New Status Quo | Transformative Trends |
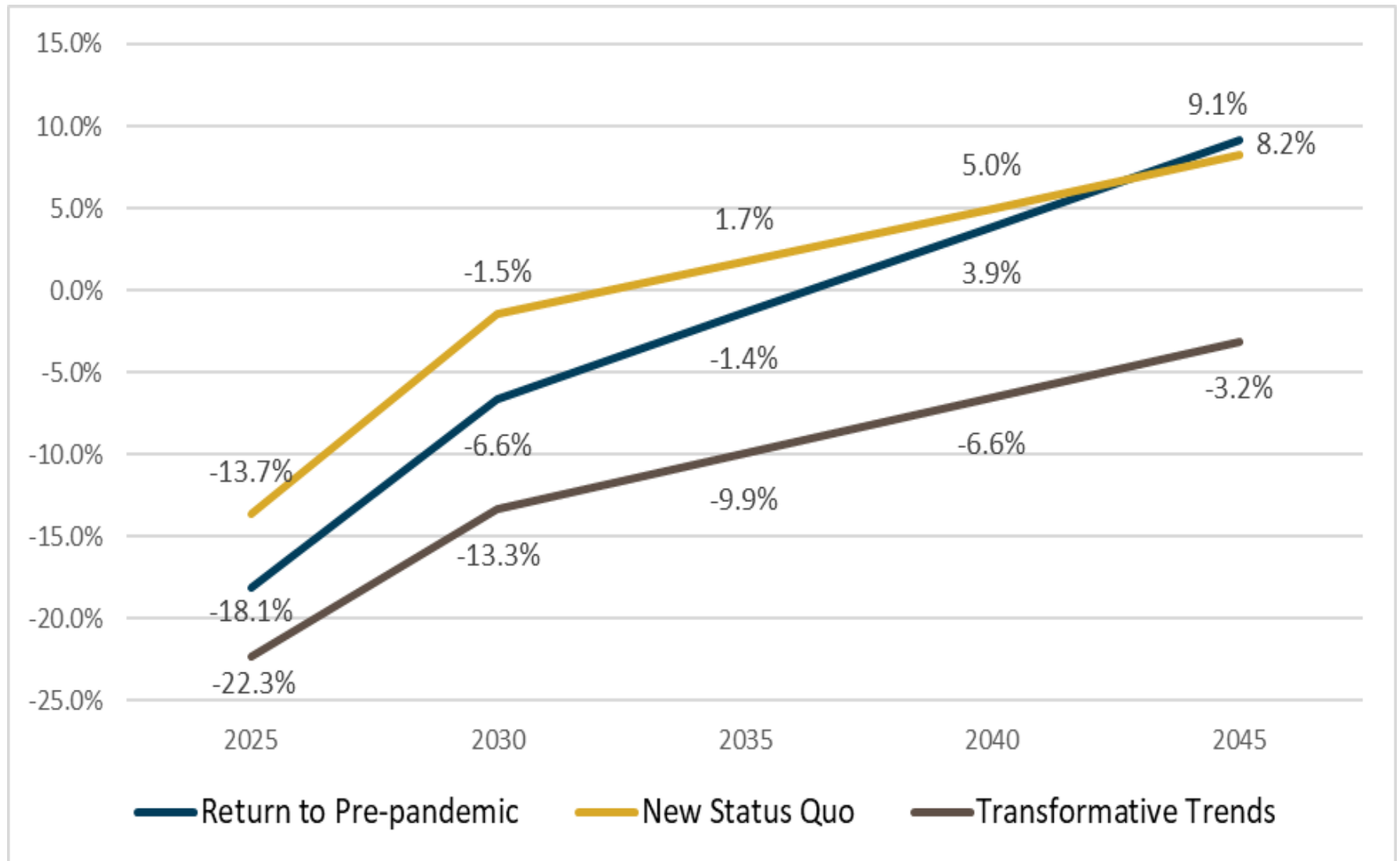
Scenario analysis: findings

Emerging trends help to **reduce VMT per capita** by between 2.6% and 7.7% below current levels.

Emerging trends could **reduce or increase transit ridership** by between a 3.2% decrease and a 9.1% increase from current levels.

Teleworking has a big influence on these outcomes, and on congestion during the morning peak.

Even if we return to pre-pandemic conditions, we can still expect to see a **significant long-term increase in teleworking and online shopping**.

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Corridor analysis: overview

Goal: understand how travel patterns have changed on the region's mobility corridors, particularly on arterial streets.

What we did: collected data for selected locations, analyzed changes in traffic volumes and speeds, and compared arterial, highway, and transit results

Why we did it:
- Arterials are the streets where transit runs, where crashes occur, and destinations are located.
- Metro's agency partners collect high-quality data on highways and transit, but not on arterials.

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Corridor analysis: about the data
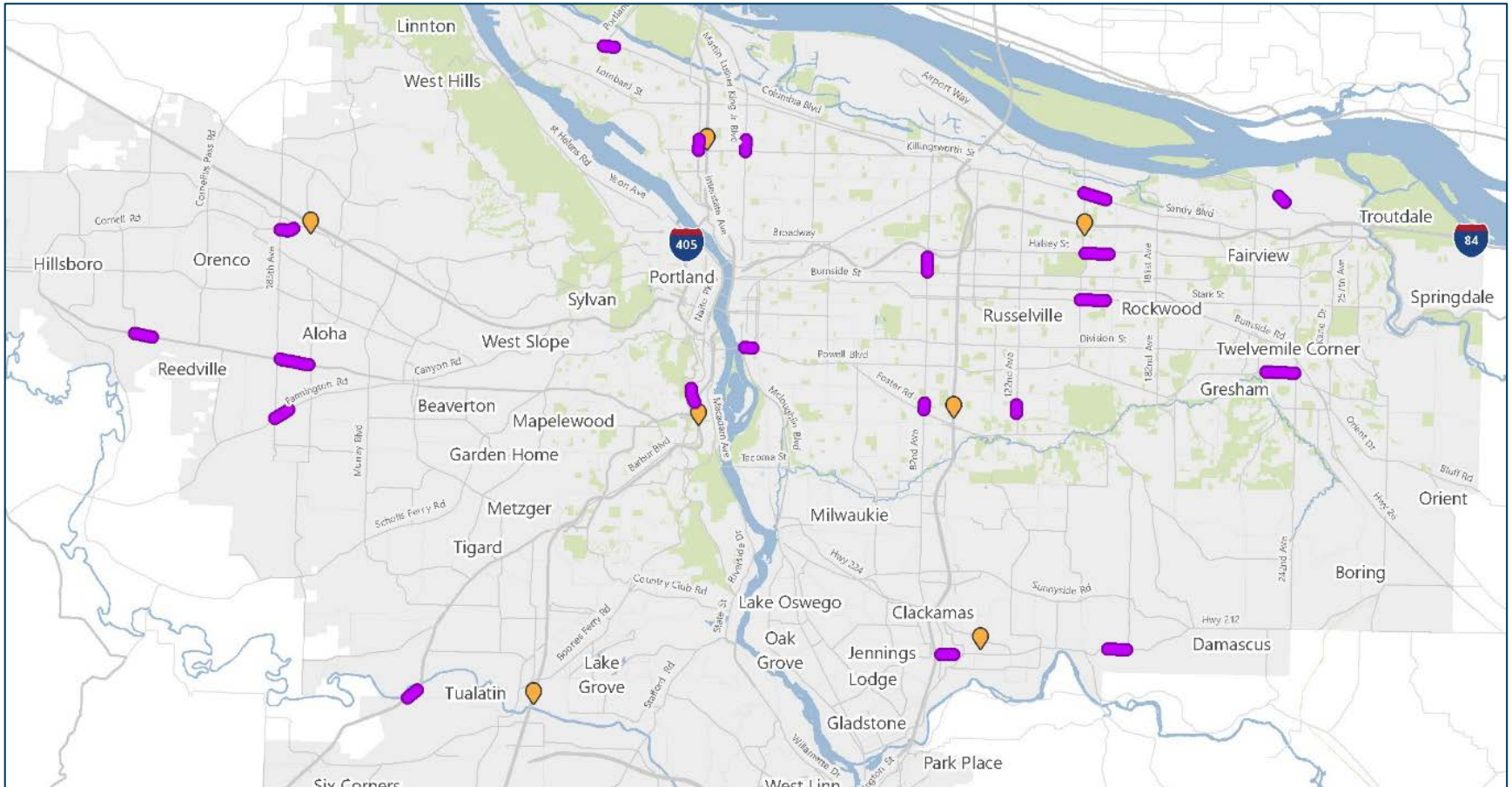
We collected data on **arterial locations** throughout the region, aiming to capture corridors throughout the region, freight routes, and alignment with **highway traffic count locations**.

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Volumes were down and speeds were up at most locations & times studied

Time period	% change in arterial volumes	% change in arterial speeds
Weekdays		
Morning peak	**-23%**	+9%
Midday	-9%	+6%
Evening peak	**-12%**	+11%
All day	-13%	+10%
Weekends		
Morning peak	-8%	+7%
Midday	-4%	+6%
Evening peak	-1%	+6%

Arterial trips are down more than highway trips, but less than transit trips

Location	% change in highway trips	% change in arterial trips	% change in transit rides
I-5 @ NE Ainsworth	-3%	-14%	-37%
I-5 @ SW Capitol	-10%	-23%	-70%
I-5 @ SW Wilsonville	-7%	-12%	-21%
I-205 @ SE Steele	-1%	-11%	-45%
I-84 @ NE 148th	-1%	-15%	-41%
OR-224 @ SE Mather	0%	-9%	-43%
US-26 @ NW 170th	-10%	-14%	-37%
Average	**-5%**	**-14%**	**-41%**

Changes by location

Highway count location

Streetlight analysis segment

Metro boundary

% Highway volume change (October 2019 to October 2021)

% Arterial volume change (October 2019 to October 2021)

% Transit ridership change (October 2019 to October 2021)
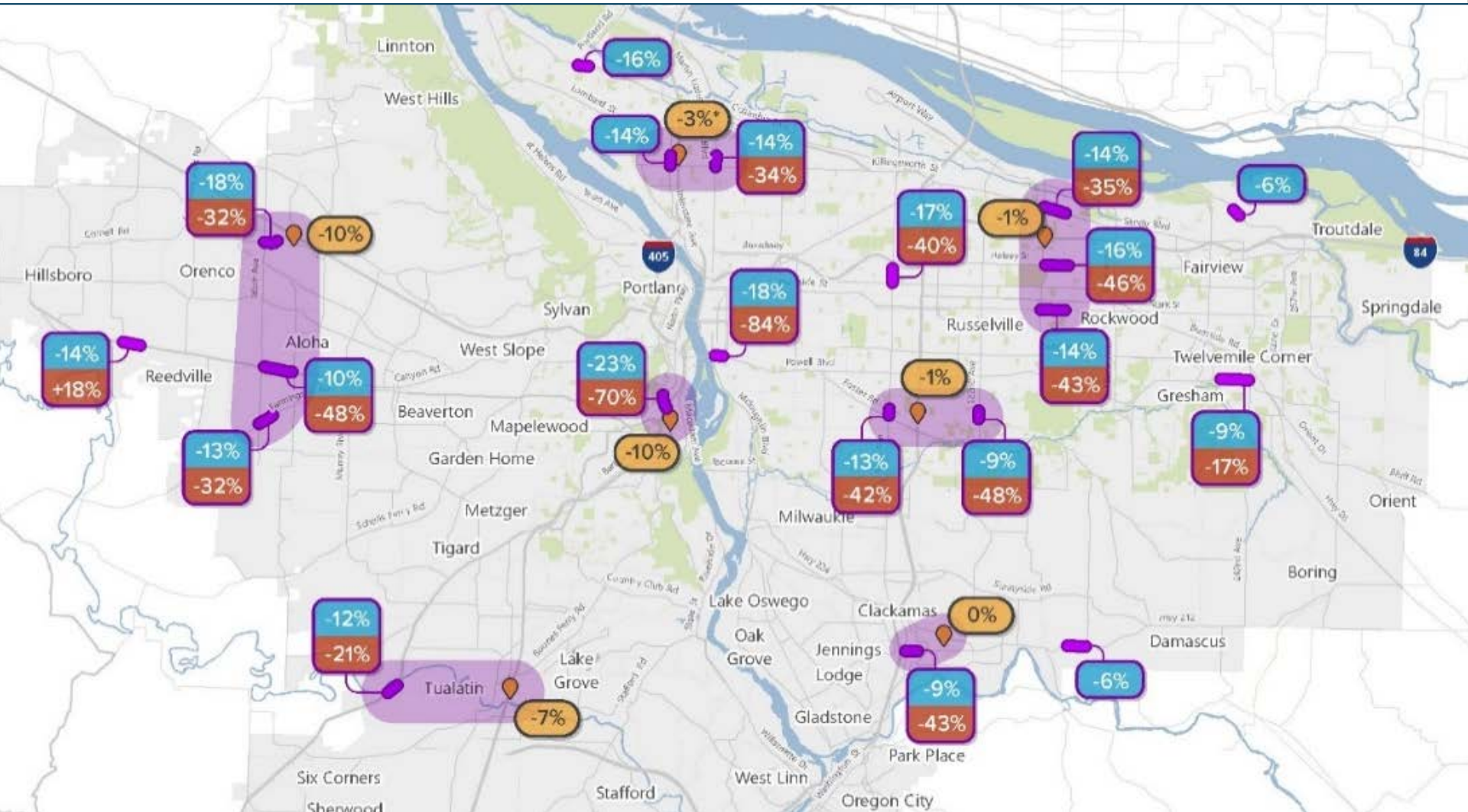
Corridor analysis: findings

As of October 2021, travel in many parts of our region was not "back to normal."

Arterial traffic fell farther and remains lower than highway traffic.

Arterial volumes fell significantly in many locations where transit ridership also fell.

Corridor analysis: findings (con't.)

Arterial traffic and transit use fell more in the center of the region, and less at the edges of the region. Potential explanations for this include:

- Many locations where demand remained high are in low-income communities and/or near industrial centers where people continue to work in person.
- More people and goods enter and exit the region in these locations.

RTP guidance: summary of draft recommendations

- Prioritize transit ridership recovery.
- Confirm that previously planned high-priority/cost projects meet changing travel demand patterns.
- Provide more diverse travel options to support diversifying travel patterns.
- Maximize opportunities to reduce VMT through teleworking.
- Prioritize safe access to transit.
- Plan for the changing role of freight.
- Accelerate the adoption of electric bicycles, scooters, and shared vehicles.
- Consider digital approaches to providing equitable access to opportunities.

Discussion and feedback

- Do you have any questions or feedback about the draft findings and recommendations?
- How should the region respond to these trends as we update the Regional Transportation Plan?

You can also email me comments or edits to the draft deliverables at eliot.rose@oregonmetro.gov

eliot.rose@oregonmetro.gov
oregonmetro.gov

Tigard UGB Exchange
Metro Council work session

June 14, 2022

A continued focus on land readiness for housing and job growth

The land use winding road...

1973 Legislature
SB 100

2002 UGB Decision
Damascus

2009 Legislature
HB 2001 (Climate Smart)

2010-2012 Urban and Rural Reserves

2011 UGB Decision
approx. 2,000 acres for residential and industrial

2014 Legislature
HB 4078 (Grand Bargain)

2015 UGB Decision
no expansion

2016 City Readiness

2018 UGB Decision
2,200 acres

2019 Legislature
HB 2001 and 2003

2019: OR Court of Appeals
affirms urban and rural reserves

2021: OR Court of Appeals
affirms 2018 Growth Management Decision

2021 Mid Cycle Review
(as needed)

2024 UGB Decision

Growth is happening where intended

Housing permits in the Portland Metro area, 2009-2017 - units per square mile
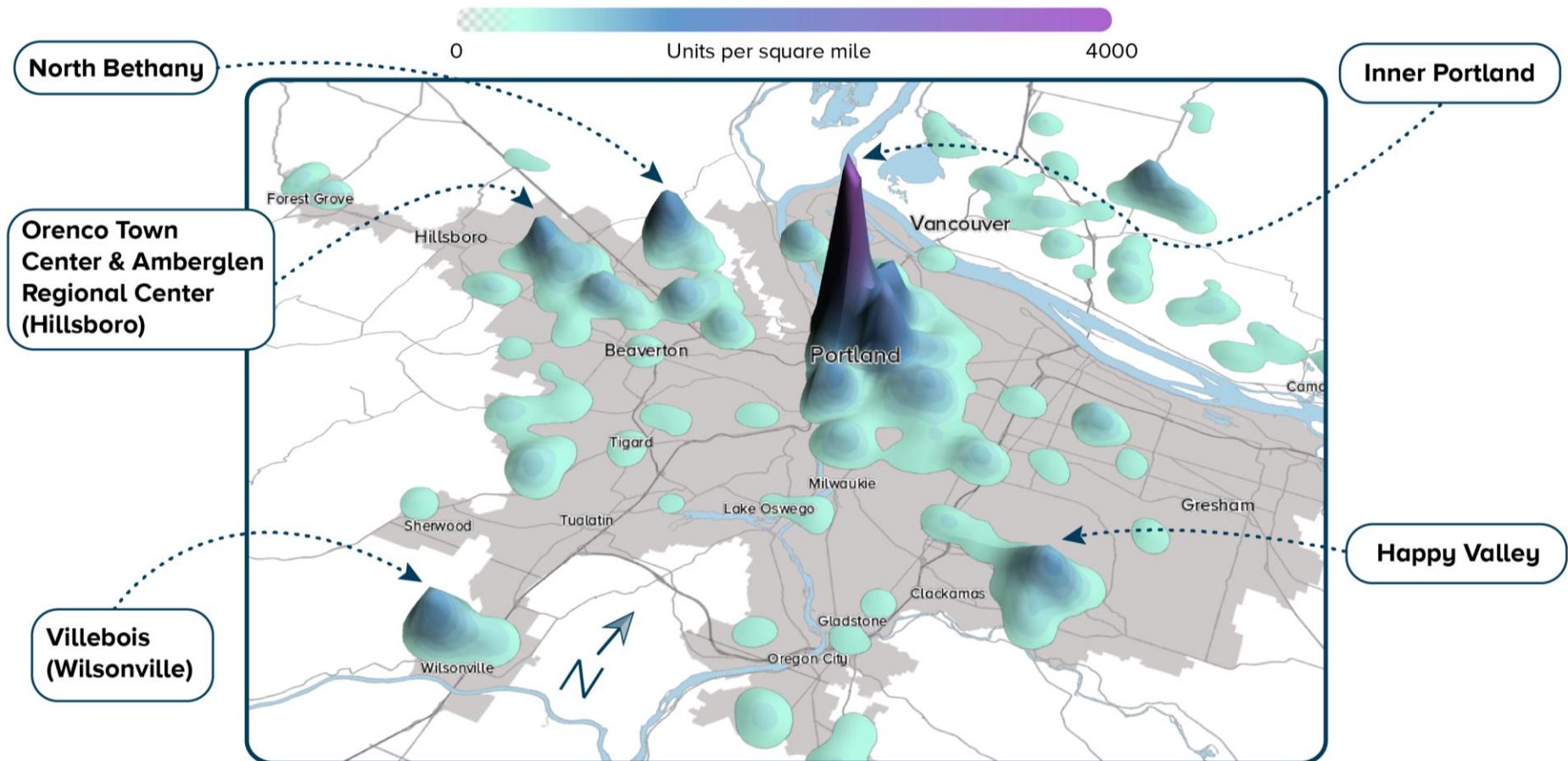
Source: Construction Monitor data report Q1 2009 - Q2 2017. Created October 2017

Urban Growth Boundary Expansion History

YEAR - ACRES

2018 - 2,200	1997 - 17
2017 - 82	1996 - 2
2014 - 1,180	1995 - 7
2013 - 42	1993 - 71
2012 - 10	1992 - 396
2011 - 2,017	1991 - 13
2008 - 14	1990 - 7
2007 - 4	1989 - 24
2006 - 16	1988 - 127
2005 - 630	1987 - 527
2004 - 1,750	1986 - 87
2003 - 1	1985 - 49
2002 - 17,756	1984 - 43
2001 - 139	1983 - 1,499
2000 - 333	1982 - 46
1999 - 323	1981 - 112
1998 - 2,374	1980 - 1,818
	1979 - 227,403

- - - - County lines
——— Highways
——— Arterial streets
City limits

Miles
0   1.5   3

N

Metro

Readiness timeline

	Summer 2022	Fall 2022	First half 2023	Second half 2023	First half 2024	Second half 2024
UGB exchange	-ID exchange candidates	Exchange decision				
Ongoing readiness program	Start readiness analyses	-Engagement and interim analyses on readiness topics -Advance legislative concepts on readiness			Incorporation of readiness into growth management process and decisions	
2024 Growth Management Decision			-Technical engagement -Cities complete concept plans for proposed expansions		Draft 2024 UGR	UGB decision

Proposed UGB exchange:
350 buildable acres in /350 buildable acres out
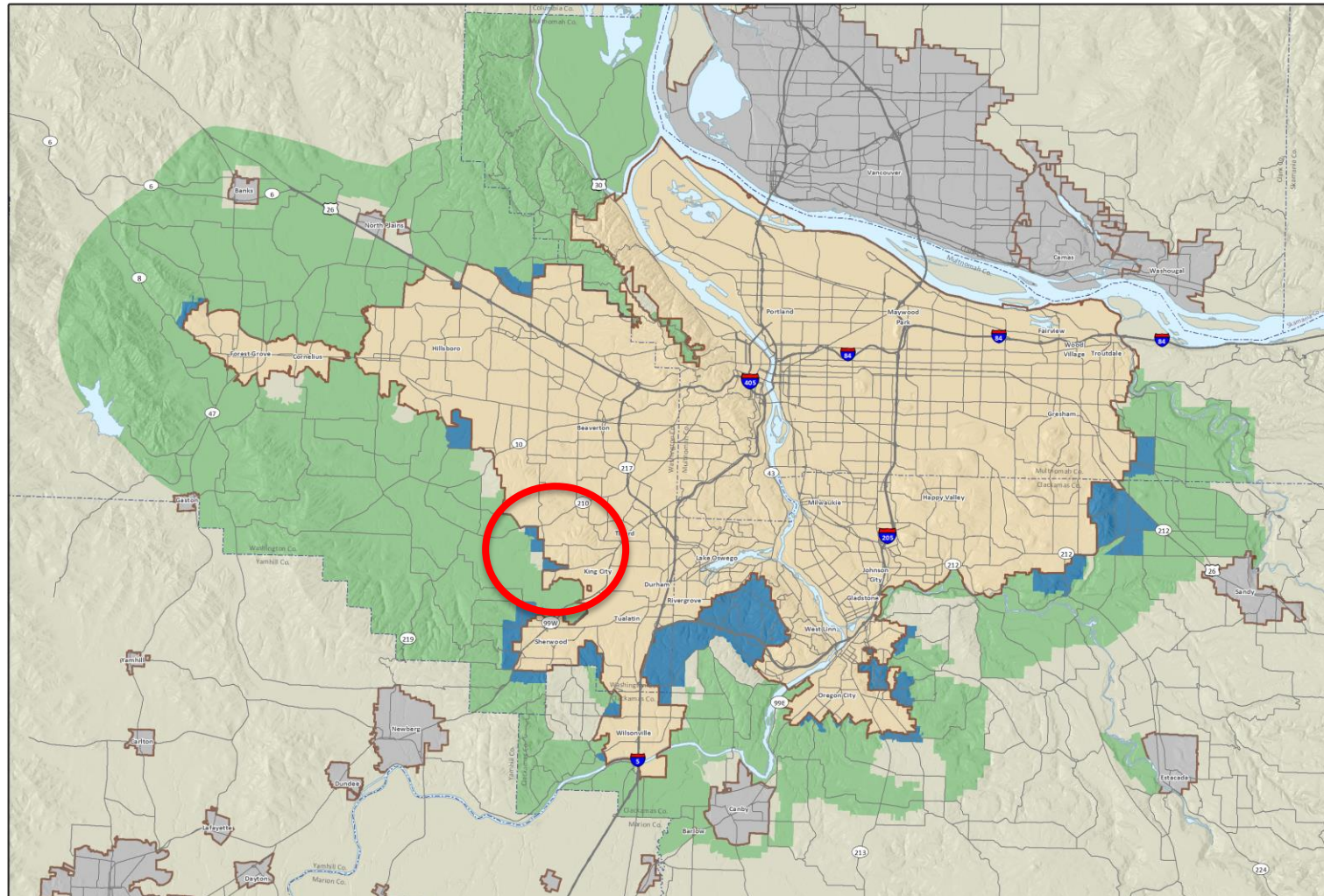
Candidates for removal from UGB

- Buildable land (accounting for environmental constraints)

- Inside UGB and near edge

- Has not demonstrated housing readiness

- Removal wouldn't preclude efficient urban services to buildable land remaining in UGB

Readiness: working definition

- Governance
  - A 'willing & able' local jurisdiction
  - Adopted plan or consistent progress towards one

- Infrastructure
  - Funding sources to accompany plans

- Market
  - Private market interest
  - Property owner willingness

Proposed next steps

1. Mapping exercise

   - Rough cut of possible candidates using aerial photos and buildable land inventory

2. Fact checking

   - Consultation with local governments and service districts to confirm planning status

Past successes

Metro continues to lead and support on legislative efforts to facilitate needed housing production and job creation

- Industrial Site Readiness Program

- Brownfields Coalition

- Improvements to our own urban growth management process

- Critical investments in affordable housing

- Missing middle housing

Current efforts

- Economic development and industrial lands legislative concepts

- HB 2003: Housing Production Strategies

- Housing supply legislative concepts

- Ongoing Industrial Site Readiness

- Housing Readiness

Next Steps

- Does Council have any questions about the UGB land exchange?

- Does Council have any questions about current programmatic or legislative efforts?

- Does the Council have any additional considerations or questions about the land exchange process?

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Metro Council

June 14, 2022

River Terrace | Tigard

SW Scholls Ferry

SW Roy Rogers

River Terrace 2.0 | Tigard

SW Scholls Ferry

SW 150th

SW Roy Rogers

SW Beef Bend

Project Focus Statement

This work is focused through two lenses that are centrally linked - equity and climate change. This project seeks to center the voices of communities of color, immigrants, and people with low incomes. These communities are among those most affected by the impacts of environmental inequities, climate change, and systemic racism. When we meet the needs of the most vulnerable communities, the health and wellbeing of all community members improves.

Project Vision

River Terrace 2.0 is a neighborhood for everyone and a complete community.

Housing: Full matrix of housing types intermixed throughout, 20 du/ac
Affordability: Policy options to incent and support affordable housing
Commerce: Walkable options for work, destinations
Transportation: Genuinely multi-modal, transit-supportive patterns
Parks: Focused on community gathering places distributed equitably
Natural areas: Ecological function, connectivity preserved and enhanced
Infrastructure: Cost-efficient and sustainable, serve housing goals

Community Engagement

Survey – What Makes a Great Neighborhood?

- Online survey with 20 questions related to housing, commerce, and transportation

Community Advisory Committee

- Twelve members
- 5 bilingual meetings (three members prefer Spanish)

Public Open Houses (English and Spanish)

- Two events – held online
- Consider vision, alternatives

Open Office Hours

- Three events

Spanish Language Focus Group

- 12 participants

Online Story Map

- Track project progress

Community Meetings

- St. Anthony's Church
- CPO4

Project Website

- Engage Tigard
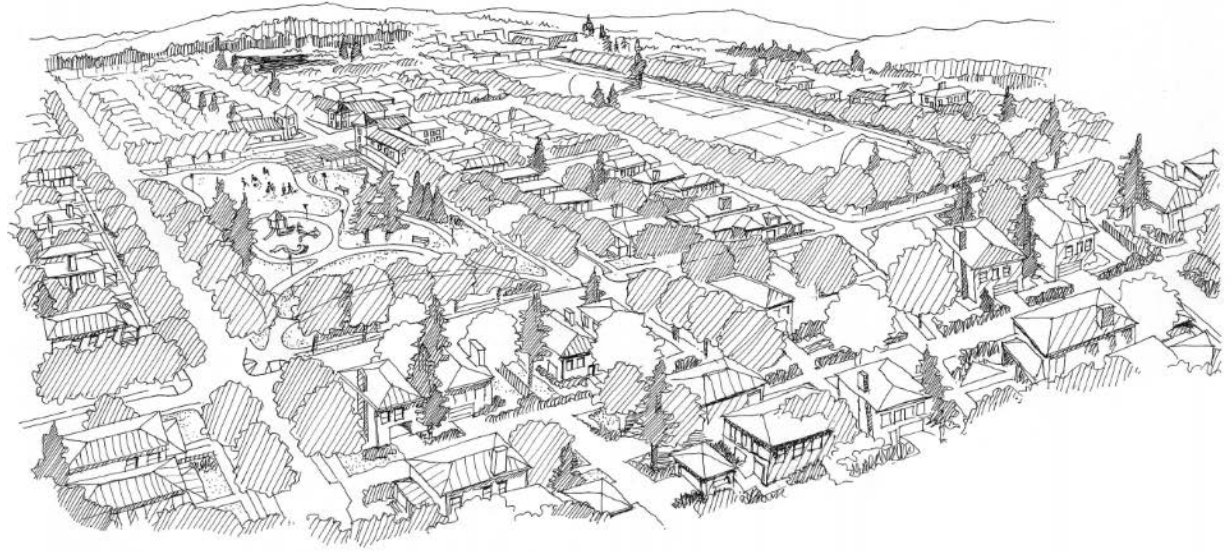
Concept A

Concept B

Concept C

PROFILE Housing is similar in size and form throughout

Arterial edge

Neighborhood edge

Housing Typologies

Main Street

- Commerce-centered
- Taller Forms

Even Mix

- Diversity block-by-block

Feathered Edge

- Lower-profile forms
- Integrates natural edges
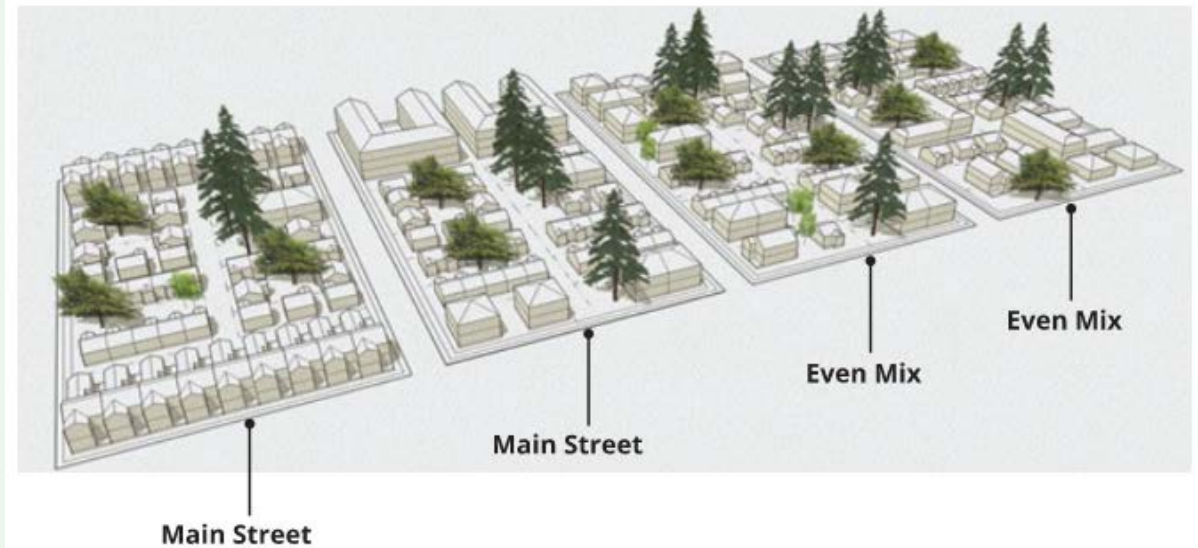
Feathered Edge Over Three Blocks

Recommended Housing Policies

- Tiered SCD structure – lower SDC for smaller housing types
- City-supported loan program
- Incentives for second and third units
- Land acquisition and banking
- Education and information
- Community land trust partnership

Affordable Housing Plan

Development of Resources

- Construction Excise Tax
- CDBG Entitlement Election

Contributions

- SDC Exemptions
- Tax Exemptions
- TIF Contributions
- Land Donations

Housing Options Project (2018)

Policy Changes

- Legalized middle housing in all residential zones
- Reduced parking requirements for housing
- Allowed up to 2 Accessory Dwelling Units per lot
- Clear and objective standards for housing
- Removed housing tenure and familial status from code
- Removed disparate treatment of group living

Housing Options Project (2018)

Subsequent Policies

- SDC exemptions for ADUs

- SDC reductions for middle housing (lowest rate)

- CET reduction for middle housing

HB2001+

- No land use for most housing other than apartments

- Improved standards based on experience

- Consolidated 1-3 unit housing types

Affordable Homeownership

Proud Ground Community Land Trust

- Down payment assistance from CET

Middle Housing Revolving Loan Fund

- $1.5 million from ARPA allocation
- Leveraging $4.5 million in construction lending
- Building capacity, moving the market
- Targeting quads, cottage clusters, courtyard units
- Requiring option to Proud Ground buyers, other DPAs

Tigard Strategic Vision

- Tigard: an equitable community that is walkable, healthy, and accessible for everyone.

Our Strategic Priorities

- Set the standard for excellence in public service and customer experience.

- Create a well-connected, attractive and accessible pedestrian network.

- Ensure development and growth supports the vision.
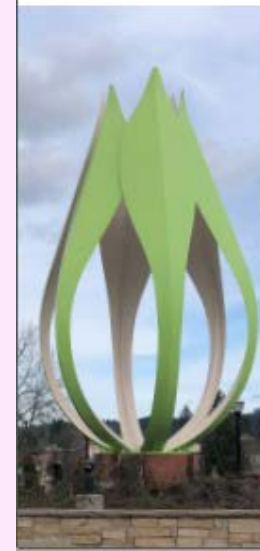
Parks and Nature local-option levy
Renewal framework

Council Work Session
June 14, 2022

Outcomes for today

1. Direction to staff to proceed forward with Parks and Nature levy renewal development.

2. Guidance about what would help Council with their decisions regarding the potential levy renewal.

Metro Parks and Nature's role in the region
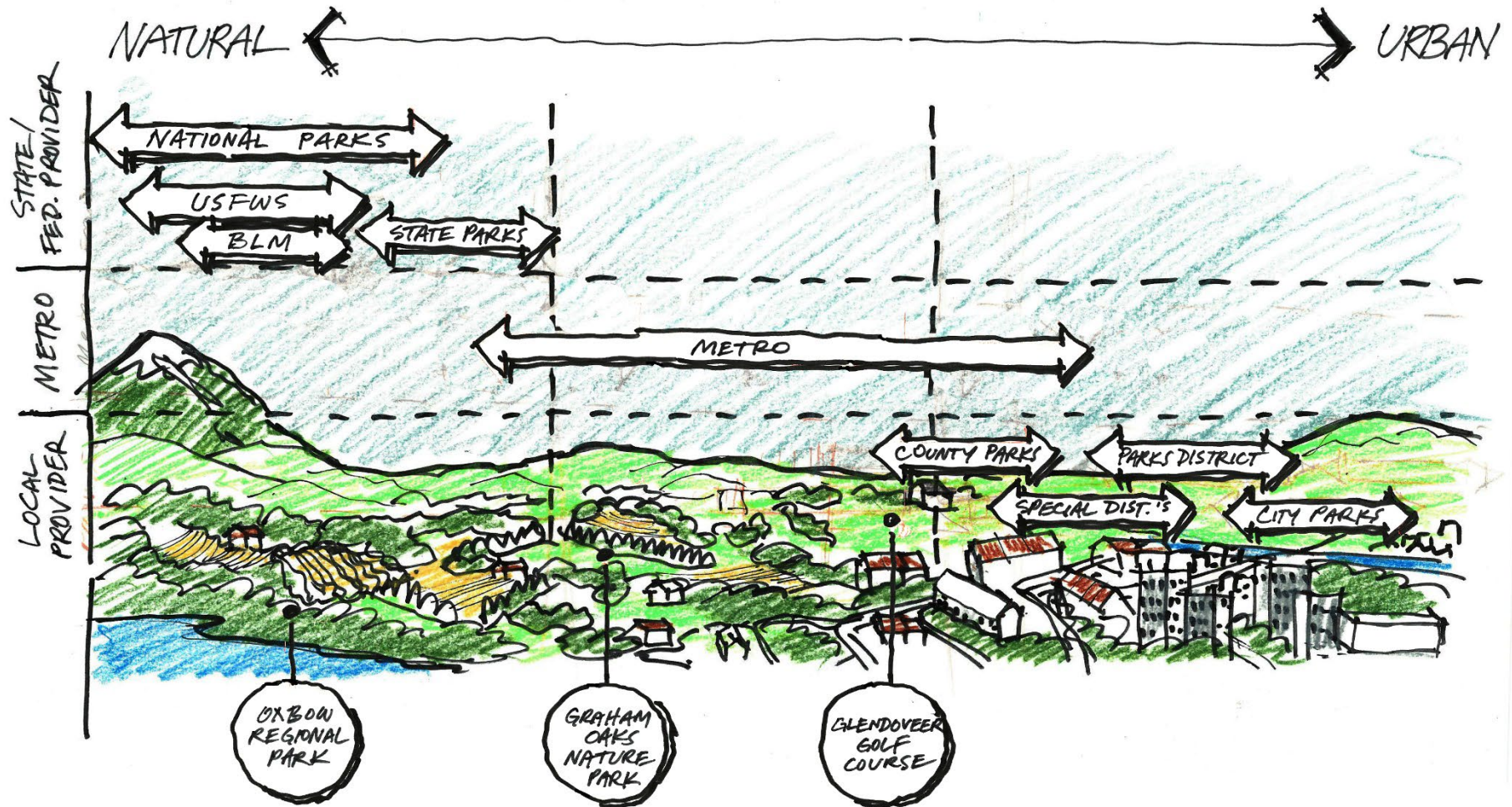
Voter support for nature benefits

Metro

In 2013, voters across greater Portland approved a 5-year levy to care for and operate healthy, safe regional parks, trails and natural areas.

In 2016, over 74% of regional voters supported a 5-year extension.

The levy is now set to expire in June 2023.

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Bond and Levy working together for nature and people

Critical role of the Metro and the levy

The work supported by the levy is foundational to the success

- Advancing regional climate resilience

- Advancing racial equity

Metro

6

Parks and Nature
Levy spending with geography FY2016 - FY2020

Urban growth boundary

Metro Parks and Nature site

Metro sites with restoration or maintenance projects
81 sites - $9.9 million

| < $20k | $20k - 80k | $80k - 200k | $200k - 1mil | > $1mil |

Metro sites with public access or park improvement projects
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Nature in Neighborhoods levy grants
over 80 grants awarded - $3.8 million

Seven cycles of grants awarded:
- Restoration and community stewardship (3)
- Conservation education (3)
- Trails (1)

| < $20k | $20k - 80k | $80k - 200k |

Map date: 9/1/2021

7

Metro

Levy snapshot - Impact across the region

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Levy spending with geography FY2016 - FY2020

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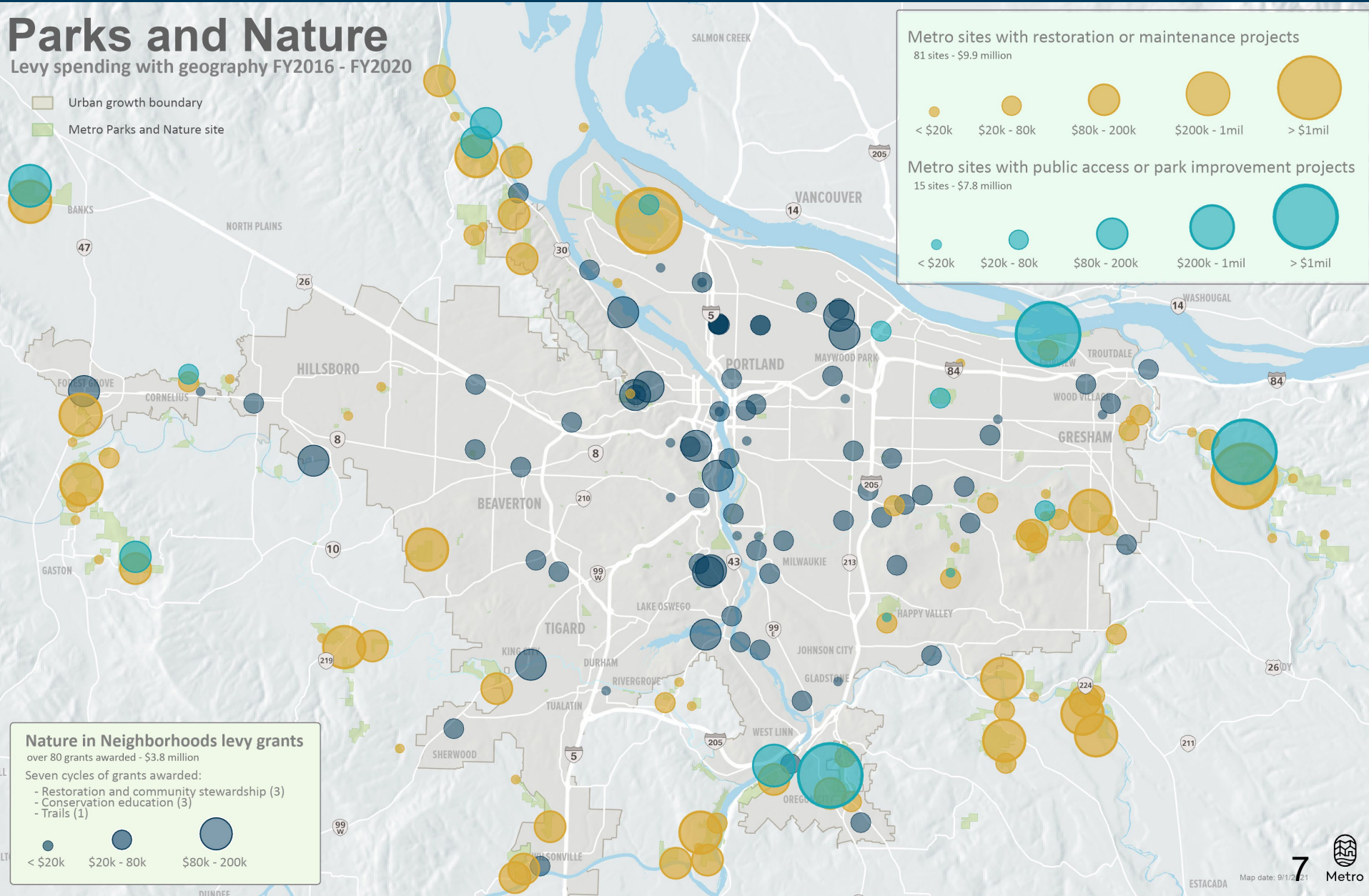
8
Metro

Map date: 9/1/

Levy snapshot - Impact across the region

Parks and Nature
Levy spending with geography FY2016 - FY2020

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Metro

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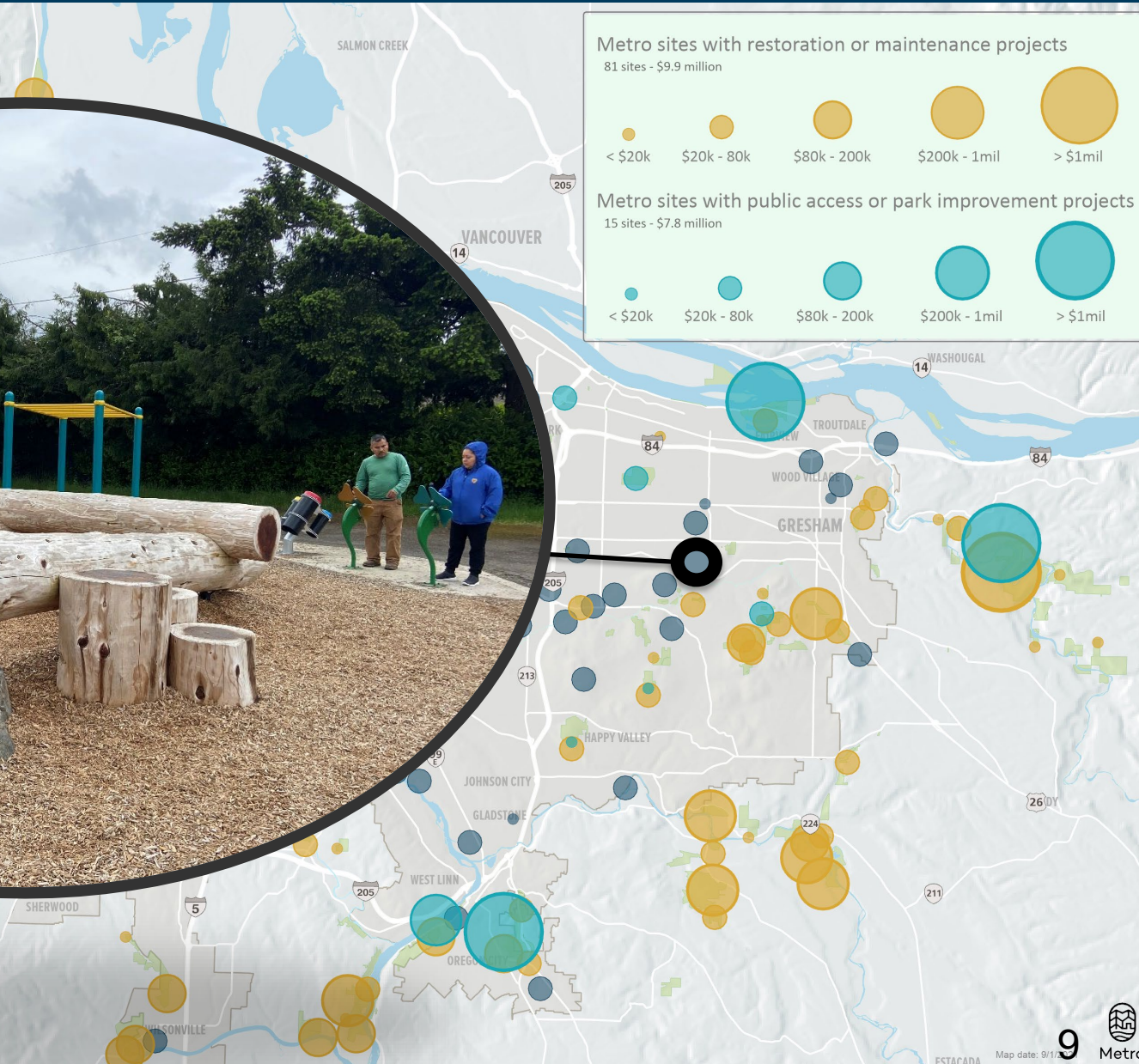| < $20k | $20k - 80k | $80k - 200k | $200k - 1mil | > $1mil |

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Map date: 9/1/20

10

Metro

Parks and Nature

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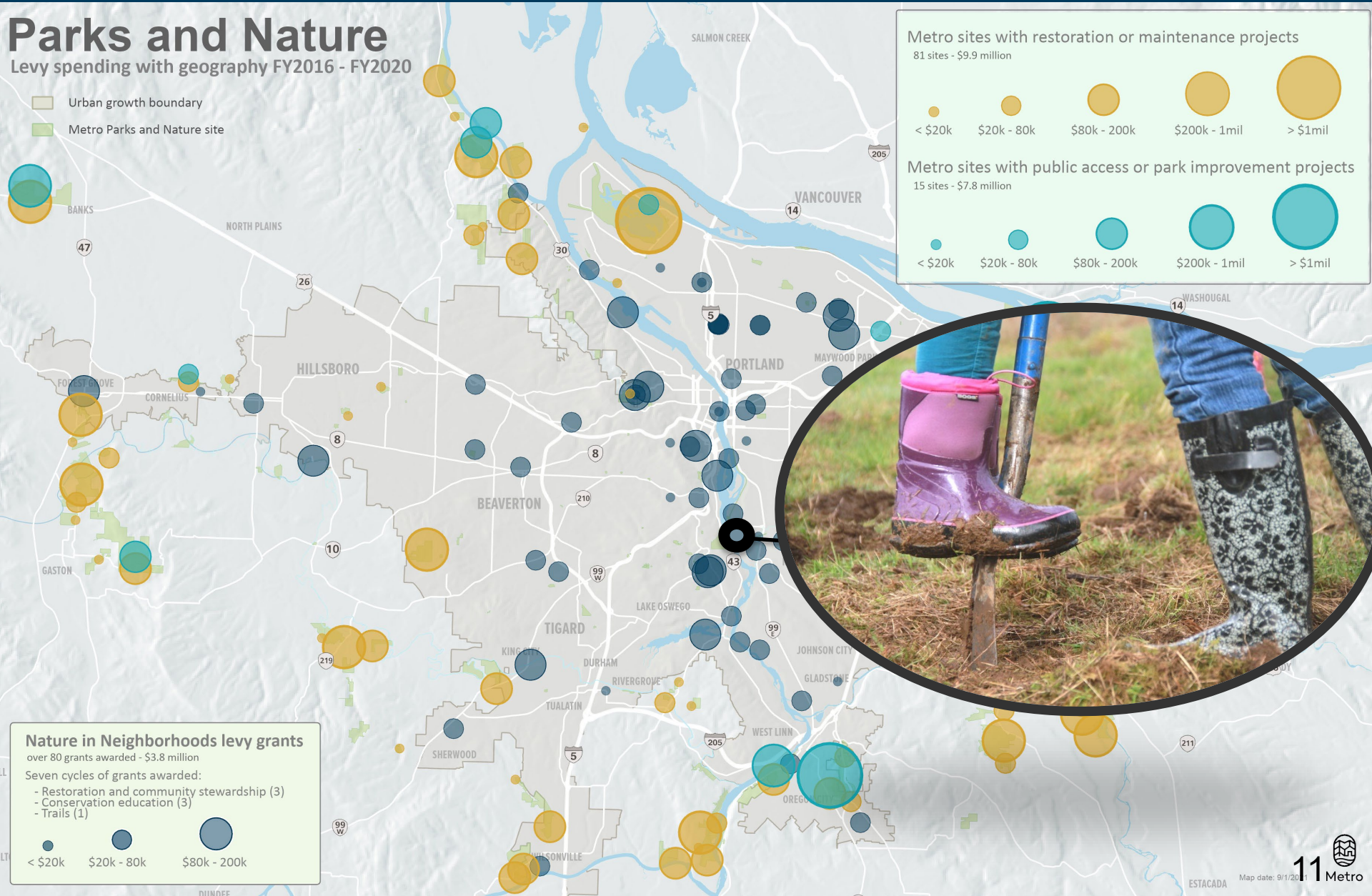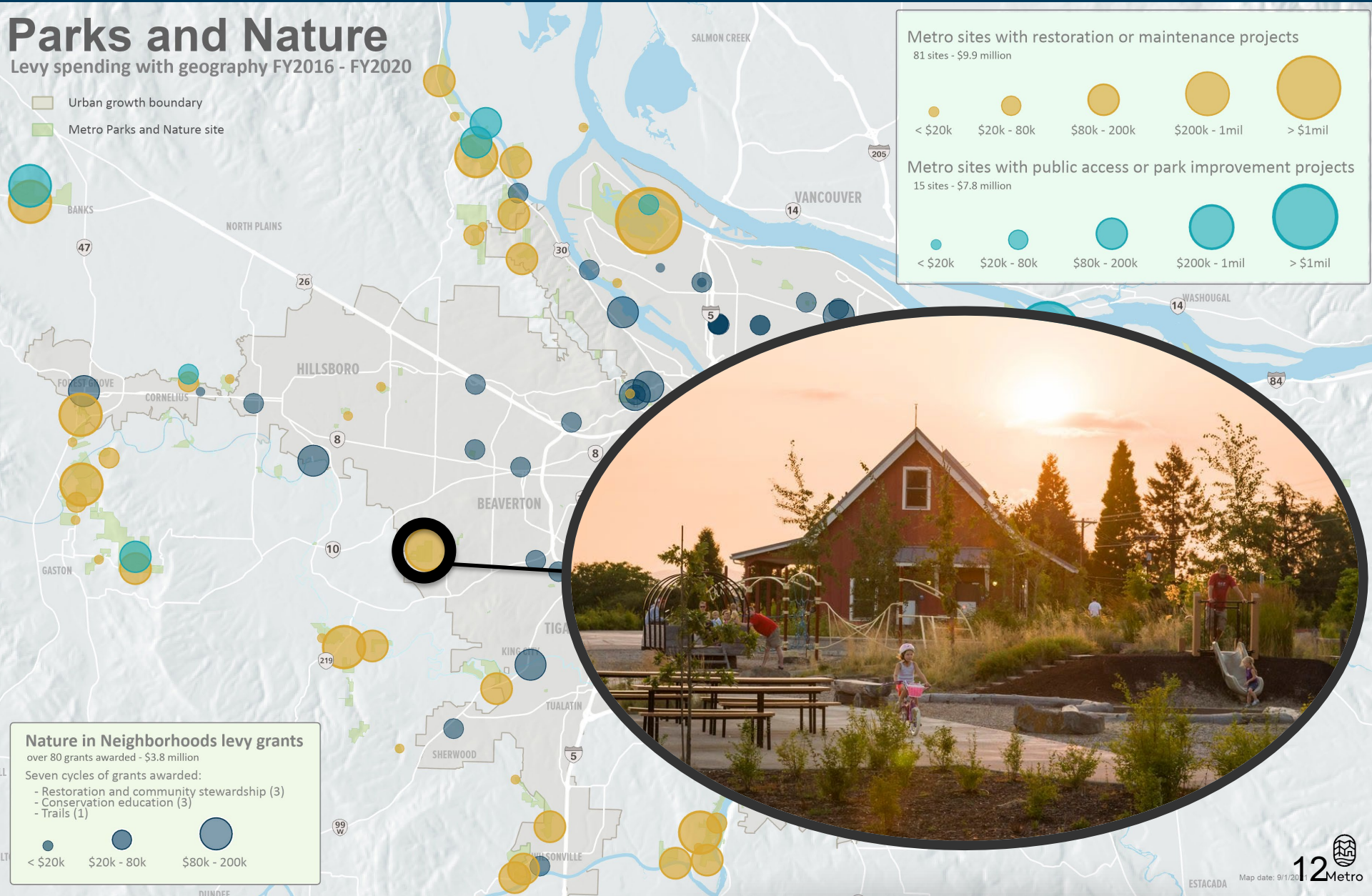- Conservation education (3)
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Map date: 9/1/2011

11 Metro

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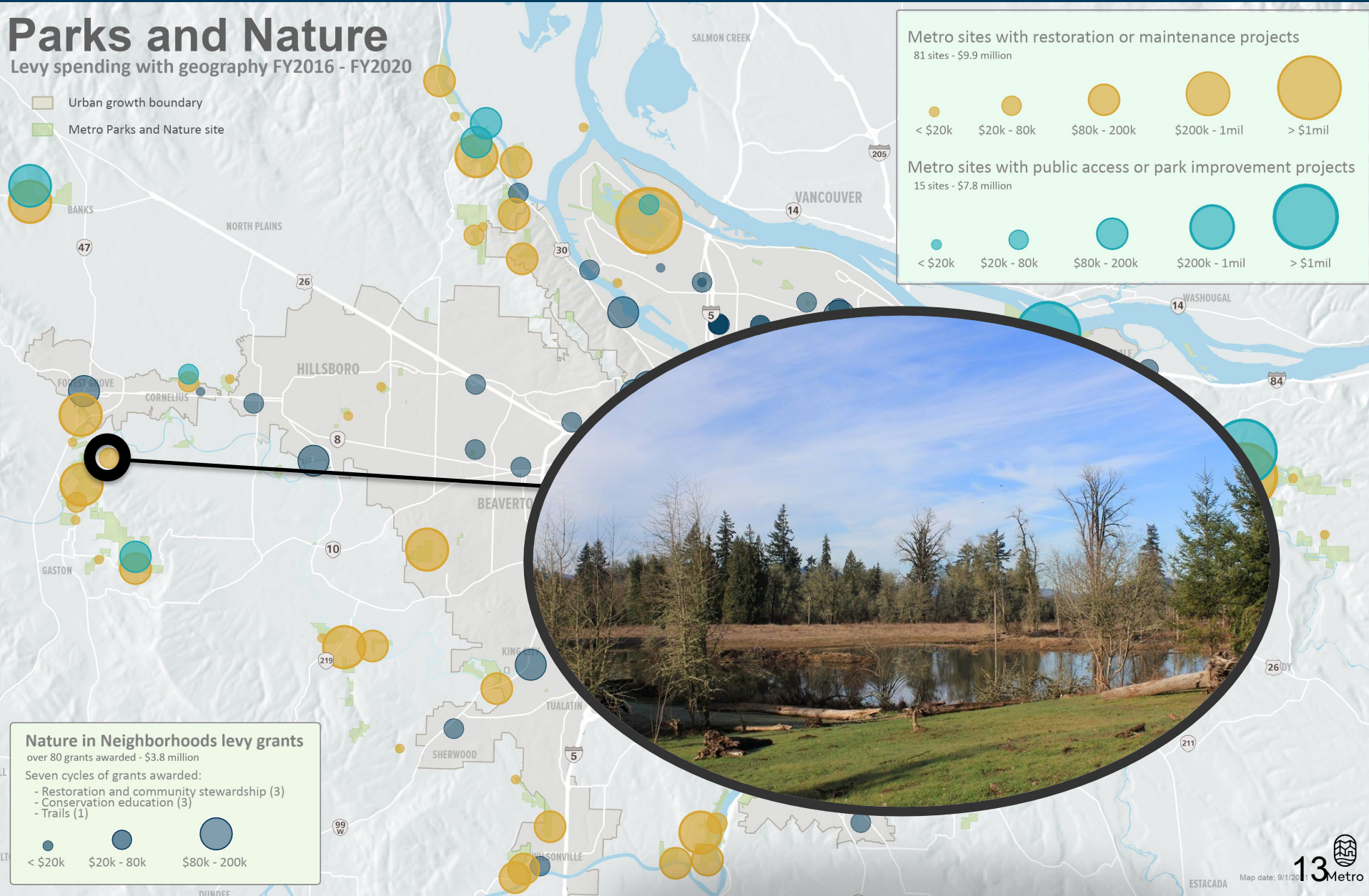| < $20k | $20k - 80k | $80k - 200k |

Map date: 9/1/20

12 Metro

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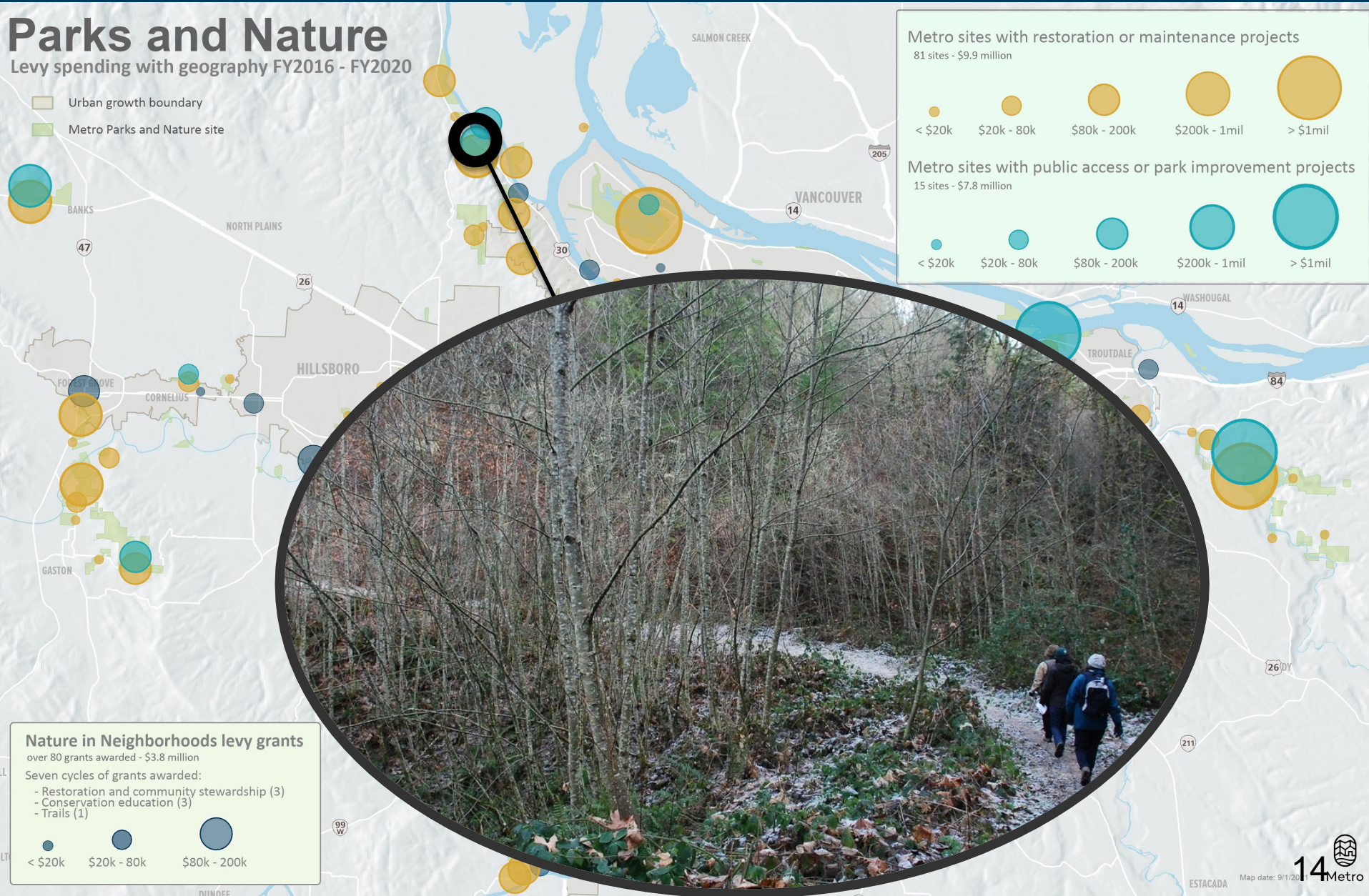- Conservation education (3)
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Map date: 9/1/20

13 Metro

Council direction to date

Potential levy renewal framework:

- Do not raise taxes; use same rate (9.6 cents/$1000 assessed value).

- Continue success of current program areas.

- Strengthen ability to advance racial equity, climate resilience and other Metro-wide priorites.

- Build responsiveness to emerging conditions and needs.

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Proposed levy framework

Metro

Continuity

Continue what works

+

Adaptability

Respond to changing needs

+

Accountability

Show our impact

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Community, partner & staff guidance

Metro

Continuity

- The levy works well. Keep what's working and make minor tweaks to strengthen overall impact.

- Broad and strong support for continued restoration activities with a priority focus on habitat for native fish and wildlife including salmon, trout, steelhead and lamprey.

Adaptability

- Increase adaptability to address rapidly changing climate-related conditions and needs, including hotter summers, extreme weather, wildfire.

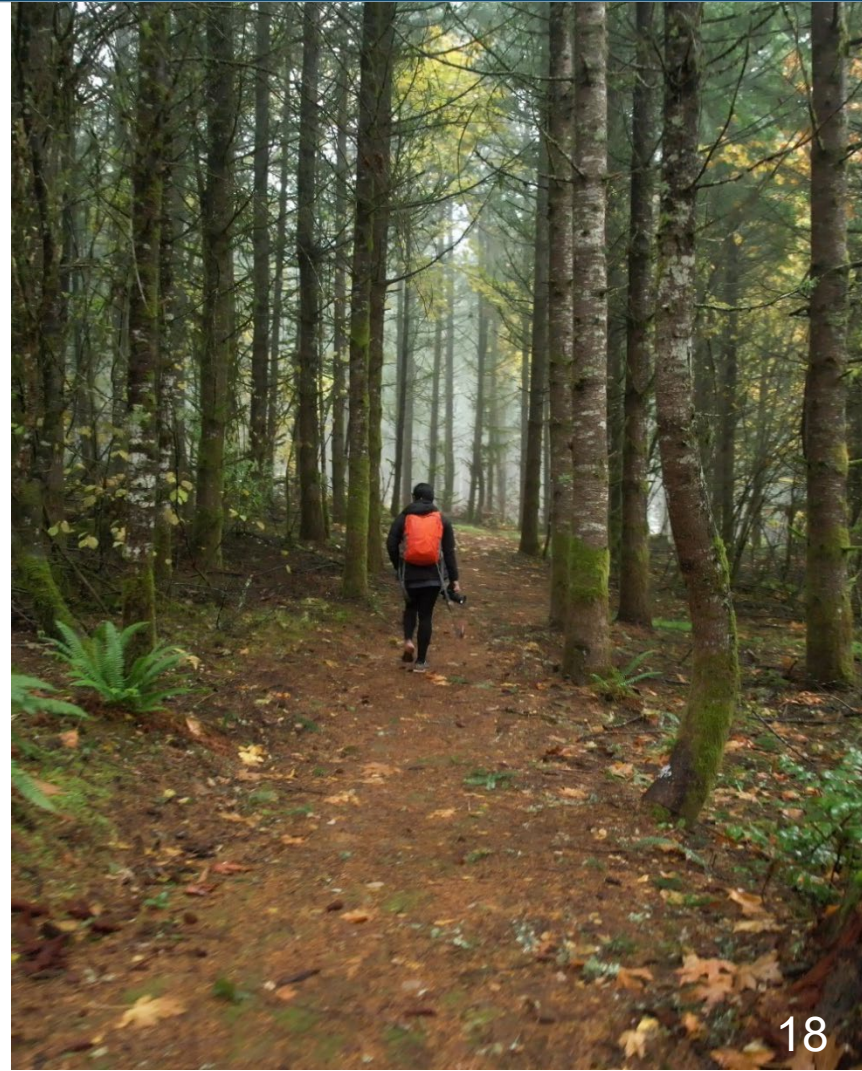- Increase adaptability of community programming to meet specific community need.

Accountability

- Increase ability for community to evaluate and track progress on levy outcomes and impacts.

Proposed levy framework: Continue what works

1. Maintain investment areas of the levy:
   - Habitat restoration and land management
   - Welcoming, safe parks operations
   - Community-led programs and education

2. Maintain priorities for investment areas:
   - Habitat for native fish and wildlife
   - Take care of what we have
   - Focus on communities of color and other historically marginalized

3. Maintain overall funding levels
   - Set % allocation minimums to ensure continued levels of funding.

Metro

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Proposed levy framework: Respond to changing needs

1. Increase <u>budget</u> adaptability to advance racial equity, climate resilience and meet community need:

   • Establish program allocation minimums.

2. Increase <u>program</u> adaptability to advance racial equity, climate resilience and meet community need:

   • Focus on outcomes.

   • Streamline to three primary program areas

19

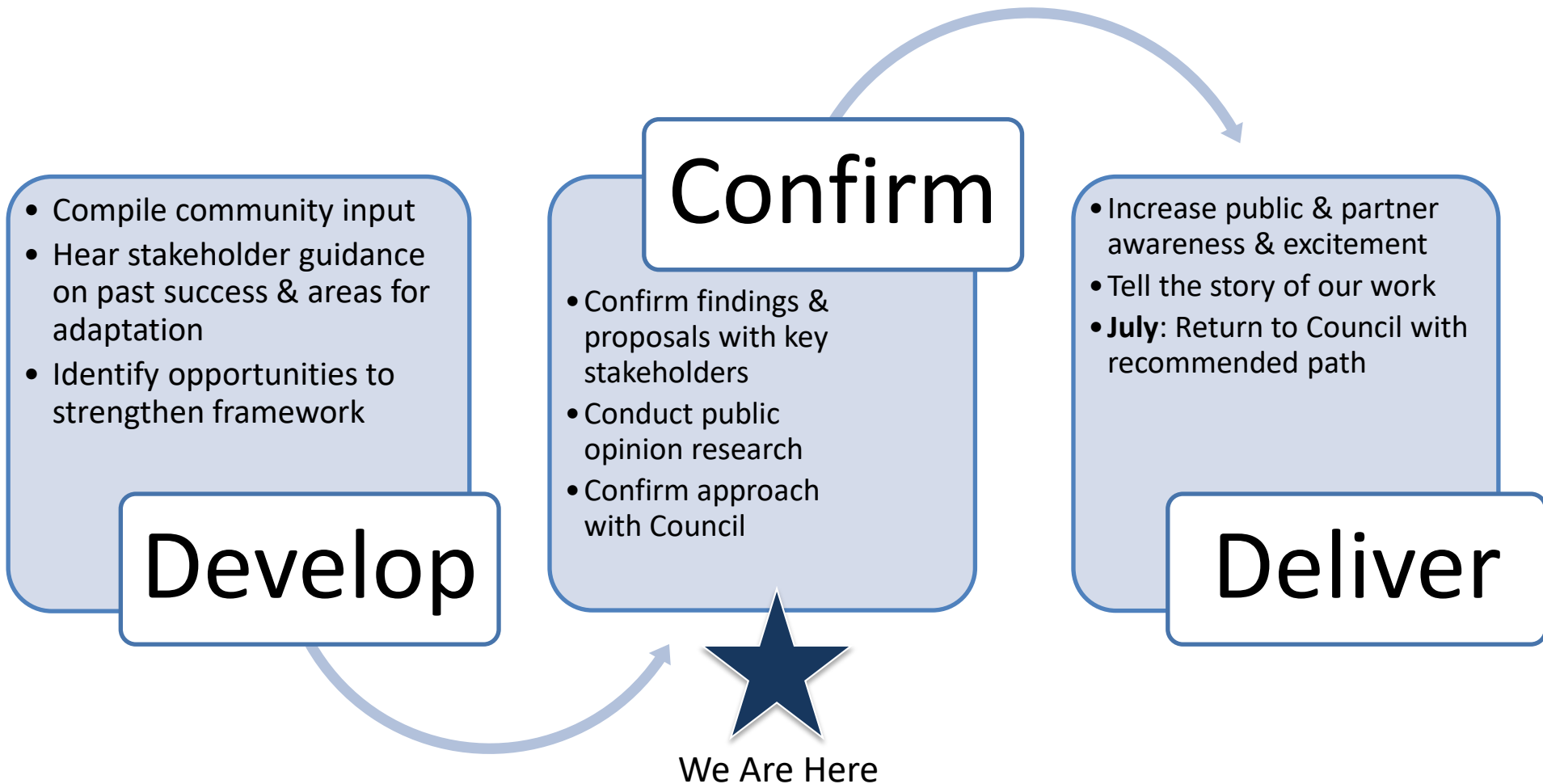# Proposed levy framework: Show our impact

Metro

1. Set clear outcomes for accountability

   - Provide evaluative foundation to track impact and progress

   - Align levy outcomes with the 2019 Bond outcomes

   - Provide long-term direction for prioritization

2. Align levy language with Metro-wide policies

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Process and outcomes

Metro

Develop
- Compile community input
- Hear stakeholder guidance on past success & areas for adaptation
- Identify opportunities to strengthen framework

Confirm
- Confirm findings & proposals with key stakeholders
- Conduct public opinion research
- Confirm approach with Council

We Are Here

Deliver
- Increase public & partner awareness & excitement
- Tell the story of our work
- **July**: Return to Council with recommended path

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Questions

1. How well does the proposed Parks & Nature levy renewal framework align with Council expectations?

   - Continuity

   - Adaptability

   - Accountability

2. What additional information would support Council decision-making on a potential levy renewal?

   - Outreach to key partners and stakeholders

   - Information about current levy successes