Memo



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To: Metro Joint Policy Advisory Committee on Transportation (JPACT)

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Transportation Planner, Fehr and Peers

Subject: Emerging Transportation Trends Study – Summary of initial results

Introduction

The Emerging Transportation Trends Study will identify the major transportation trends that are expected to change how people travel in the Portland region over the coming decade. Its goal is to identify potential changes to policies, projects, and assumptions about how people travel for Metro to consider during the 2023 Regional Transportation Plan (RTP) update.

In October 2021, staff and the consultant team supporting this study presented to JPACT on the initial set of trends that we were considering focusing on in this study, and shared information on the extent of the impacts and of our knowledge with respect to each trend. Subsequently, we held similar discussions with other Metro technical and policy transportation committees and with community leaders. Based on the feedback received during these discussions, the consultant team proceeded to analyze the following trends:

- Transit ridership will take several years longer than automobile traffic to return to prepandemic levels due to service cuts, changing travel patterns, and lingering health concerns.
- People of color will feel less safe traveling in public than before because of increased concerns about racist policing and pandemic-era anti-Asian racism.
- A significant share of workers will continue teleworking after the pandemic is over.
- Electric vehicles and e-bikes will be increasingly affordable, have longer ranges, and be easier to use.
- People will buy an increasing share of goods online.
- The boom in recreational bicycling during the pandemic could create an opportunity to further increase bicycle trips.
- Agencies will face the challenges of pandemic recovery (as well as other unanticipated changes) with limited resources and outdated processes.
- The increase in traffic deaths seen during the pandemic will continue into recovery.

The consultant team from Fehr and Peers used TrendLab+, an in-house analytical tool that allows for quick-response testing the impacts of a variety of transportation scenarios, to assess the impact of each trend on two key indicators: vehicle miles traveled and transit ridership, both of which are important factors in how Metro analyzes the climate, safety, mobility, and equity impacts of transportation decisions. The Fehr and Peers team conducted additional research to develop key assumptions (for example, what percentage of people telework in the future, anticipated future transit service changes) and identify impacts, particularly on equity, that are not well-captured by TrendLab+. The table below summarizes key assumptions behind each trend and impacts on equity, VMT, and transit ridership.

Trend	Assumptions about 2025	Impacts on equity	Impacts on VMT	Impacts on transit ridership
Declining transit service and ridership	Service is still down 2-4% from prepandemic levels. Agencies restructure service to focus on people who are still traveling. 10-30% of people who stopped using transit during the pandemic don't return to it.	Reductions in service have a disproportionate impact on low-income people and people of color. We assume agencies will prioritize serving these communities as they restructure service.	+0-2%	-10-30%
Increasing telework	~14% of people telework regularly, compared to 5% before the pandemic. People continue to telework at this rate into the future.	Low-income people are less likely to have access to jobs where they can telework.	-1-3%	-2-4%
Increasing online shopping	People buy 15-30% of goods online, compared to 10% before the pandemic. Sometimes these purchases reduce VMT because goods reach people efficiently; other times they increase it because people demand goods quickly, return them frequently, and continue to shop in person.	Higher-income people are more frequent online shoppers, but the impacts of delivery trips on safety and other issues are distributed throughout the region.	Unknown	0-2%
More affordable and efficient electric vehicles	EVs, which currently account for 1% of vehicles in Oregon, are more popular, but adoption is not on track to meet Oregon's targets. Electric bicycles will be increasingly popular and useful for longer trips. EV adoption continues to increase as vehicles become cheaper and more efficient.	Even with EV prices declining, current rebates for low-income people may not be enough to cover the additional cost of an EV.	0%	0%
Increasing concerns about personal safety	People are still concerned about contagion – in addition to pre-existing concerns about safety – when taking public transportation.	Health and safety concerns are most pressing for BIPOC and low-income people, who are also more likely to depend on transit. These people continue to ride transit, but it feels increasingly unsafe compared to driving alone.	0%	0%
Increasingly unsafe streets	It has hard to say whether fatal crash rates, which have gone up during the pandemic, will level off by 2025. Current trends are undermining progress toward our region's Vision Zero target.	Fatal crashes are concentrated in BIPOC and low-income communities.	0%	0%

Trend	Assumptions about 2025	Impacts on equity	Impacts on VMT	Impacts on transit ridership
Increasing recreational cycling	The number of recreational cyclists will increase slightly, particularly in communities that had lower levels of cycling prior to the pandemic.	Absent a significant increase in investment, bicycling infrastructure continues to be inadequate in many BIPOC and low-income communities.	0%	0%
Lagging transportation funds	Most transportation agency budgets recover to pre-pandemic levels. However, transit fare revenue continues to be lower than normal, and funding for transit and other modes continues to be less than needed to meet regional goals.	The lack of transit revenues disproportionately impacts BIPOC and low-income people who rely on transit.	0%	0%

The results above suggest some important findings about the region's future:

Emerging trends stand to reverse progress toward on the region's climate, equity and safety goals. Most trends are likely to have relatively minor individual impacts on vehicle miles traveled, transit ridership, and crashes. However, meeting our regional goals requires a significant increase in transit service and ridership and a dramatic decrease in VMT and crashes, and the trends discussed above have set our region back in meeting these goals. Restoring transit service and ridership, as well as confidence in the transit system, is critical to keeping our region on the right track.

Emerging trends are pushing our region toward a two-tiered transportation system. During the pandemic, essential workers and Black, Indigenous and people of color and low-income people continued to rely on transit. However, given the increase in public incidents of racism, the dangers of walking to and waiting at a transit stop, reduced service, and increased public health concerns, transit feels less safe and convenient to many people than it did before the pandemic. Transit cannot provide a truly equitable and sustainable alternative to driving until these issues are addressed.

Responding proactively to these trends could require a shift in our policies and practices. Metro and our agency partners' efforts have traditionally focused on personal trips in passenger vehicles, which account for the majority of total trips, and on commute trips during the morning and evening peak, which account for a significant share of VMT and congestion and which provide access to jobs. These trips are still important, but the trends above have created some important changes in how people travel – along with opportunities to meet our region's goals by addressing these changes.

- As teleworking increases, people commute less and take more errands throughout the day.
- For some workers and students, access to a computer and the internet could now have more of an impact on their job opportunities than access to transportation options does.
- As more goods are delivered online, delivery vans are making more trips.