

# Congestion + Safety on Portland Highways

Special Subcommittee on  
Transportation Planning – Meeting #2

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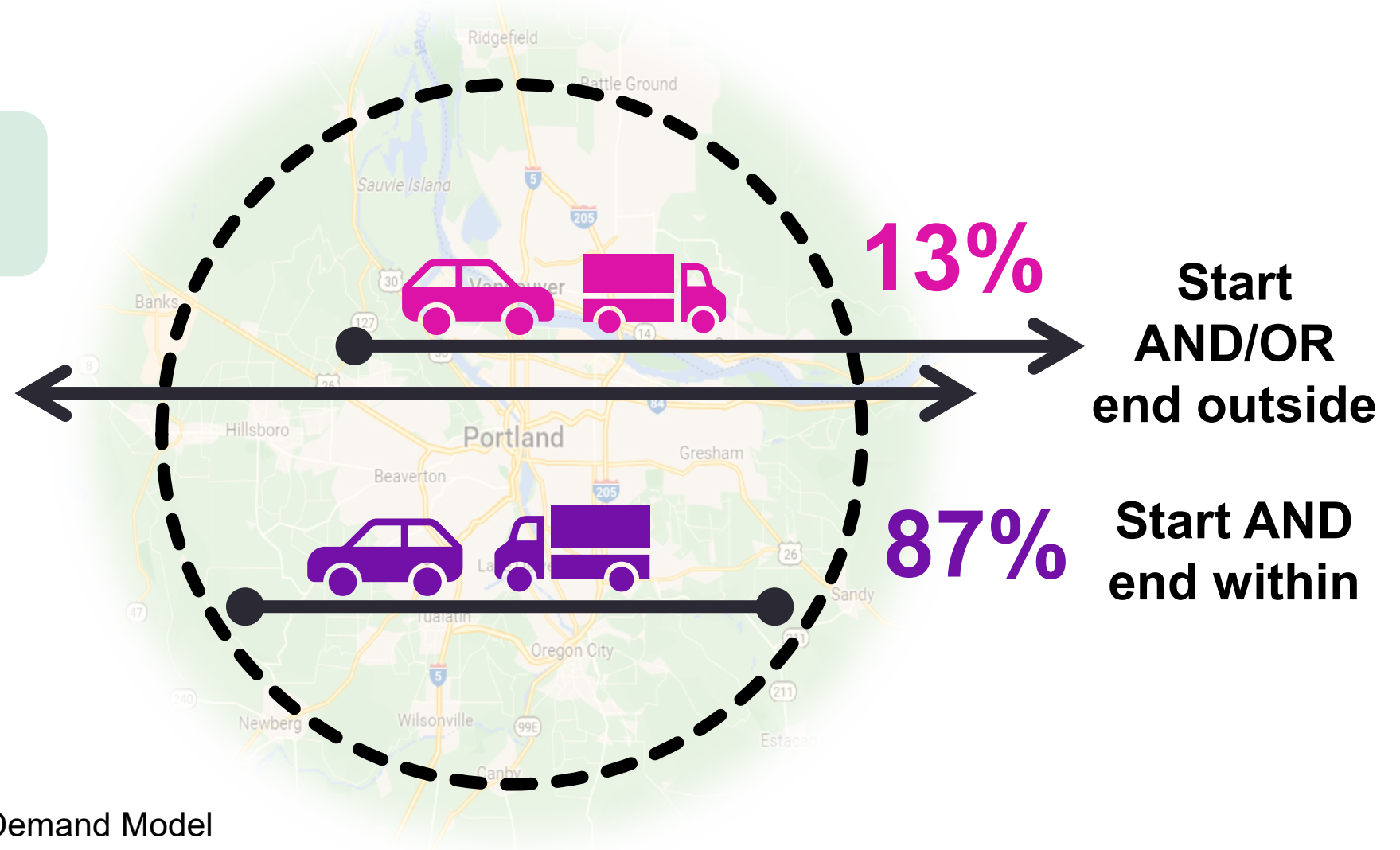
# Agenda

- Congestion in the Portland region, now and in the future
- Freight and congestion
- Urban Mobility Strategy



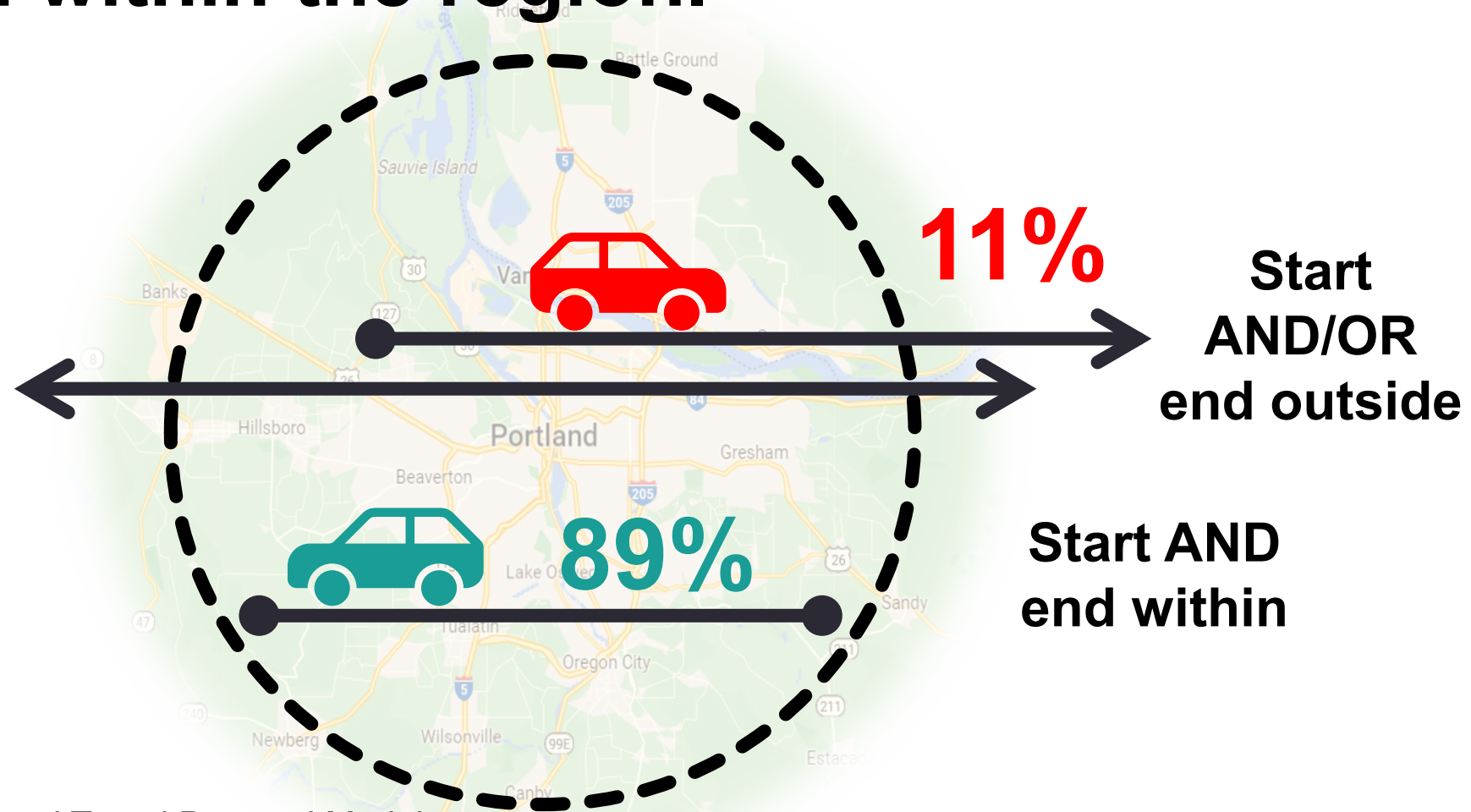
# 87% of all trips on I-5 and I-205 start and end within the region.

We cause our own congestion.



Source: Metro, Regional Travel Demand Model

# 89% of passenger vehicle trips on I-5 and I-205 start and end within the region.



Source: Metro, Regional Travel Demand Model

# Without action, traffic and delay will increase on I-5 and I-205.

## I-5

**13% more traffic**

**30% more delay**

## I-205

**12% more traffic**

**27% more delay**

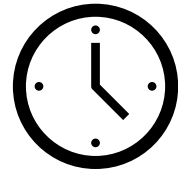
Compares 2022 with 2045 without UMS projects. Traffic is measured in maximum average annual daily traffic. Delay is measured in number of hours per day in the corridor.

# Congestion will get worse if we do nothing.



Travel speed through  
bottlenecks will be even **slower**

Rush hour will last **longer**

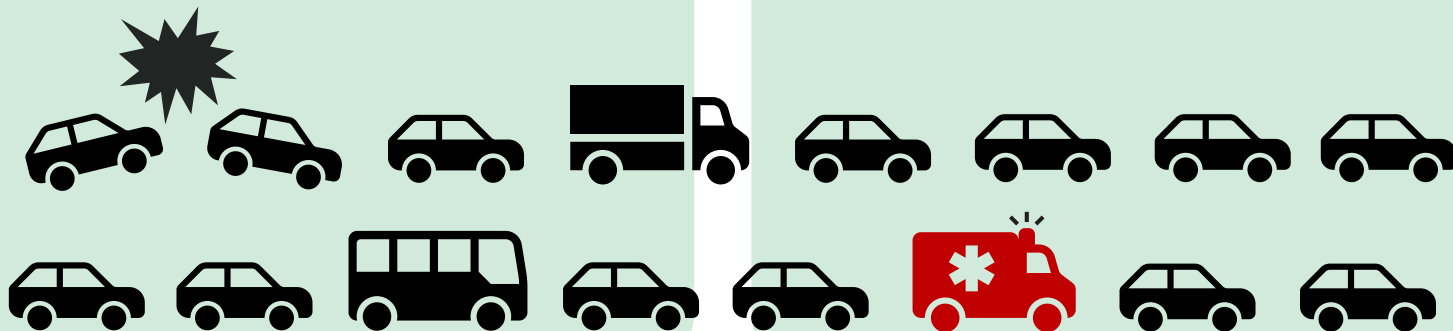


Congested locations will  
**grow** in distance



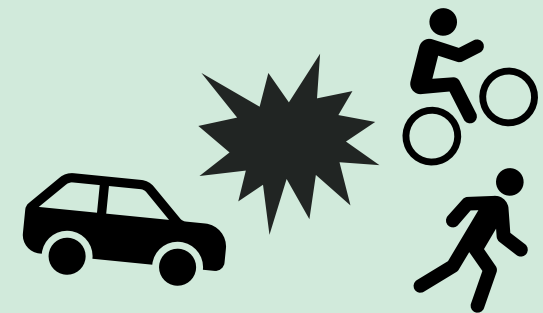
# Congestion increases safety risks on and off the highway.

**Crash frequency** on I-5 and I-205 increases with congestion and stop-and-go traffic.



Congestion means that after a crash, it takes longer for **medical and service vehicles** to get to the scene.

Congestion on highways pushes traffic to arterial and local streets. This can create **safety conflicts**.



Source: [ODOT, Safety Priority Index System Reports](#)

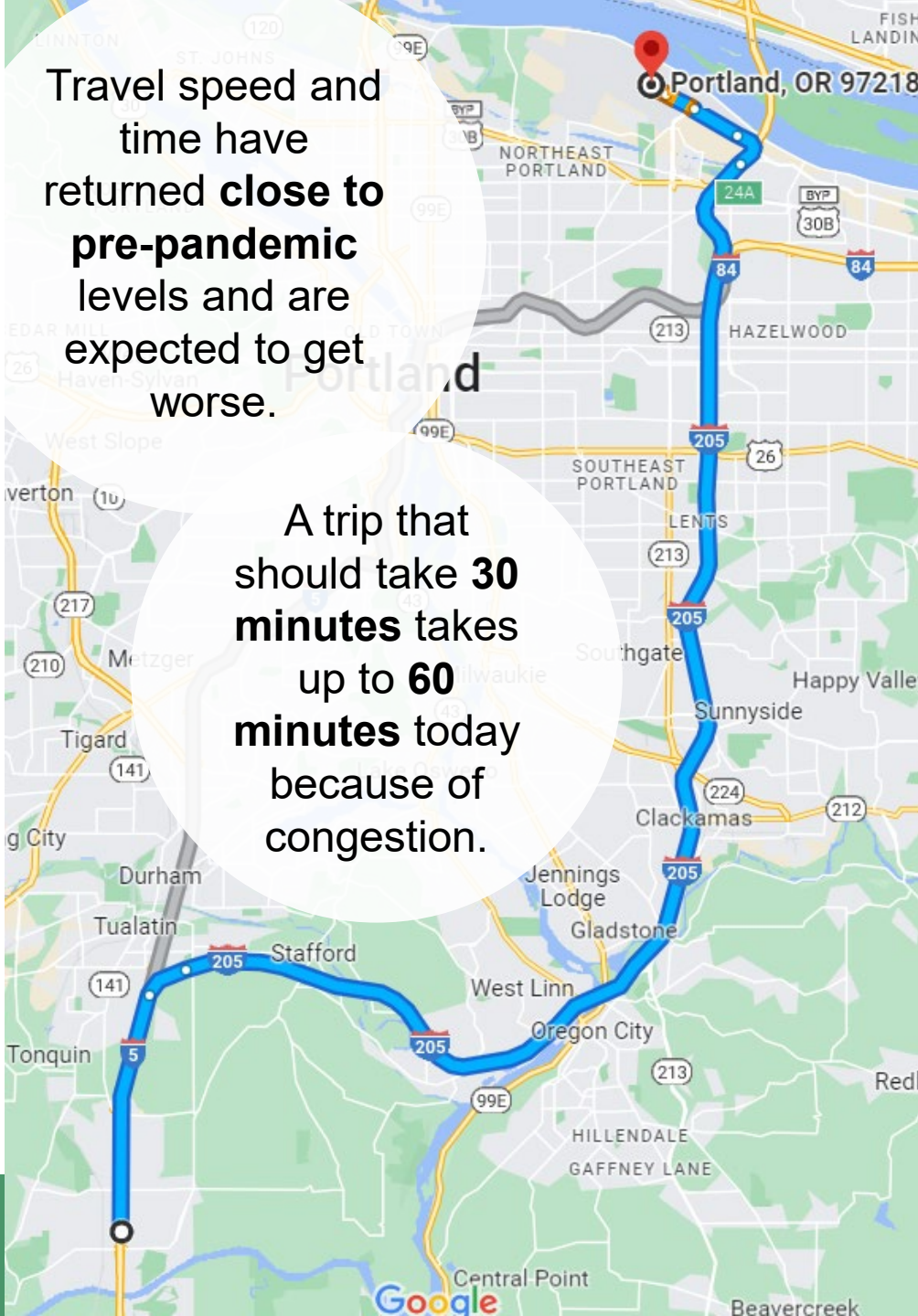


We build **buffer time** into our trips because our travel time is **unpredictable**. That's time wasted.

**Example: Wilsonville to the Portland Airport (I-205)**

Year	Average peak-hour speed	Average travel time range
2019	30 mph	29-62 min
2023 to-date	30 mph	29-61 min
2040	24 mph	29-76 min

Sources: [ODOT Statewide Integrated Model](#), Regional Integrated Transportation Information System (RITIS)



Travel speed and time have returned **close to pre-pandemic** levels and are expected to get worse.

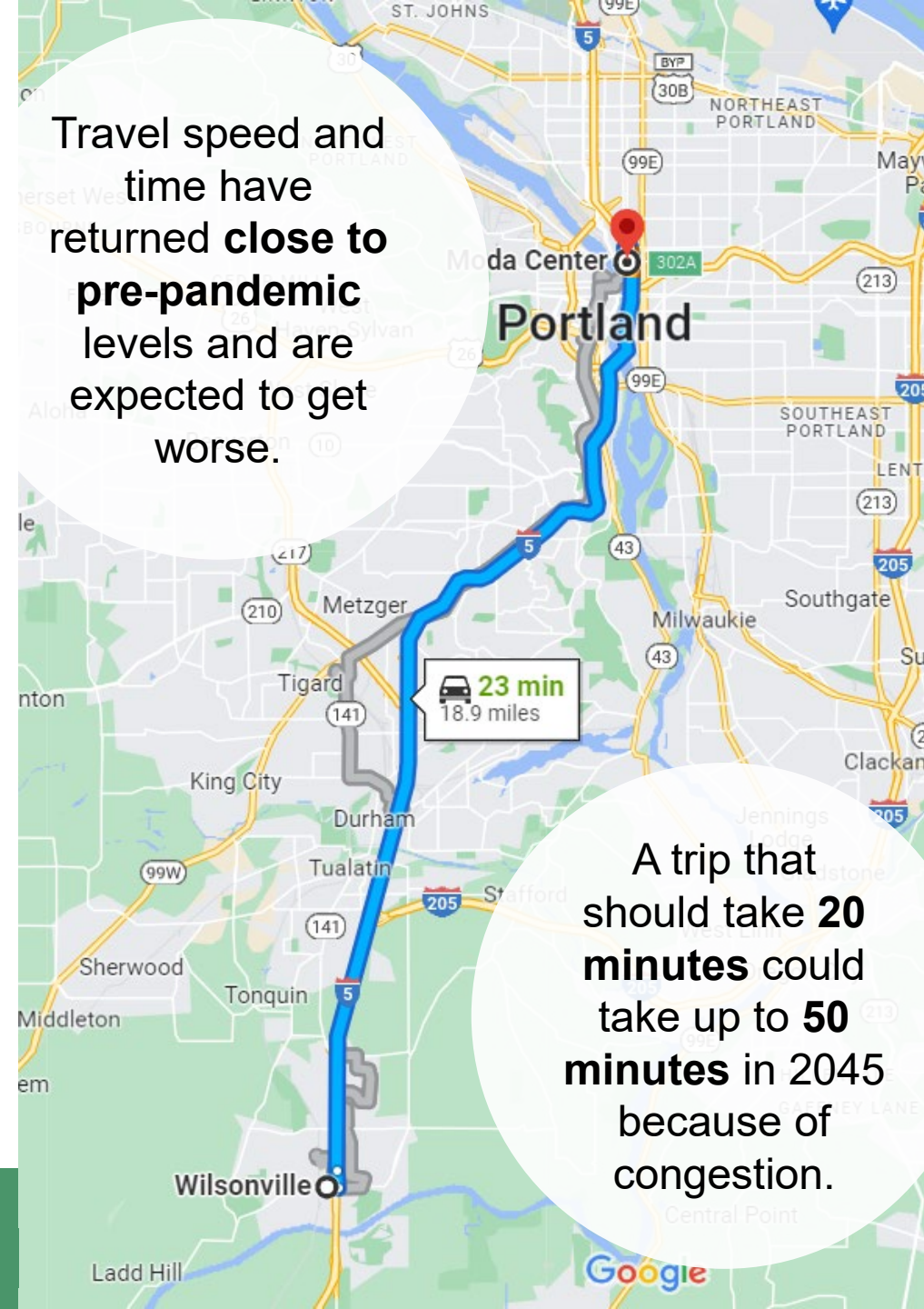
A trip that should take **30 minutes** takes up to **60 minutes** today because of congestion.

We build **buffer time** into our trips because our travel time is **unpredictable**. That's time wasted.

**Example: Wilsonville to Moda Center (I-5)**

Year	Average peak-hour speed	Average travel time range
2019	29 mph	19-38 min
2023 to-date	37 mph	19-29 min
2040	22 mph	19-50 min

Sources: [ODOT Statewide Integrated Model](#), Regional Integrated Transportation Information System (RITIS)



# We rely on freight trucks, and our demand for them is increasing.

## Today,

- 70% of daily truck miles traveled occurs on highways
- Trucks carry ~70% of all goods transported from, to, and within Oregon

## By 2040, daily truck miles traveled will grow by...

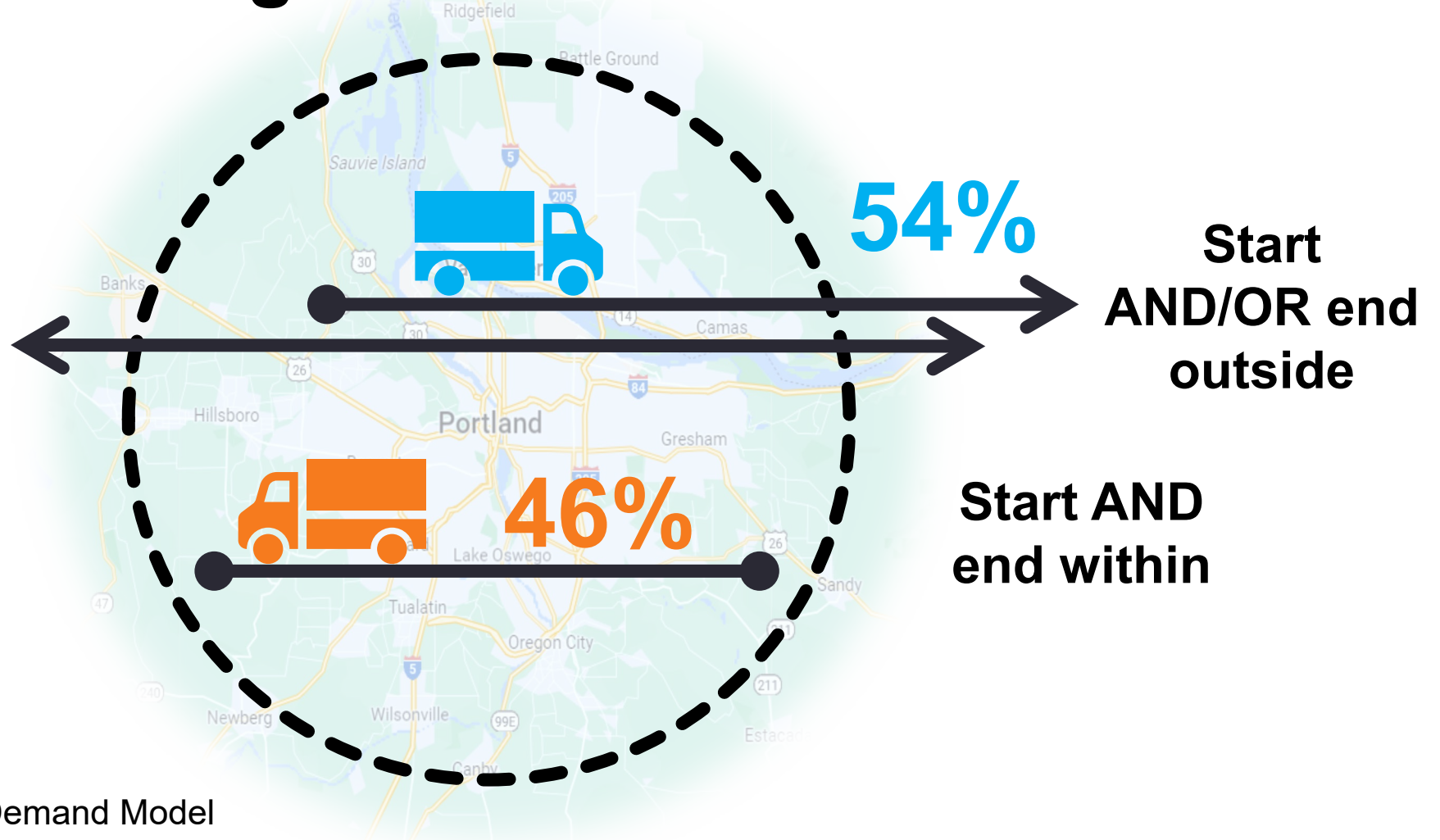
- 57% on highways
- ~75% on collector and local roads

Source: [ODOT, 2022 Statewide Congestion Overview](#)  
[PBOT, 2040 Freight Future Conditions Report](#)



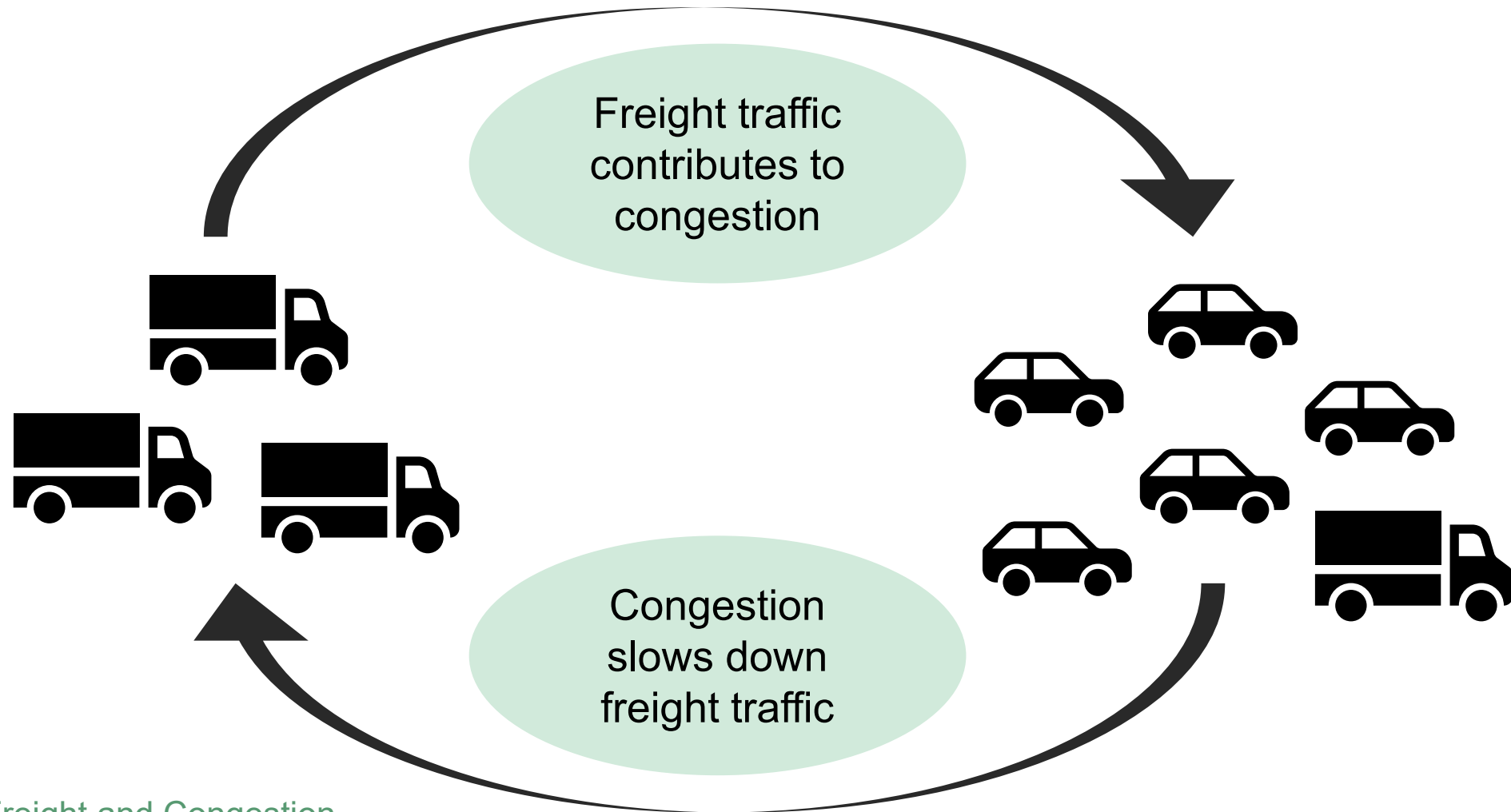
# 46% of freight trips on I-5 and I-205 start and end within the region.

These trips deliver our packages and help move our export goods.



Source: Metro, Regional Travel Demand Model

# We need to prepare the interstates for more freight traffic



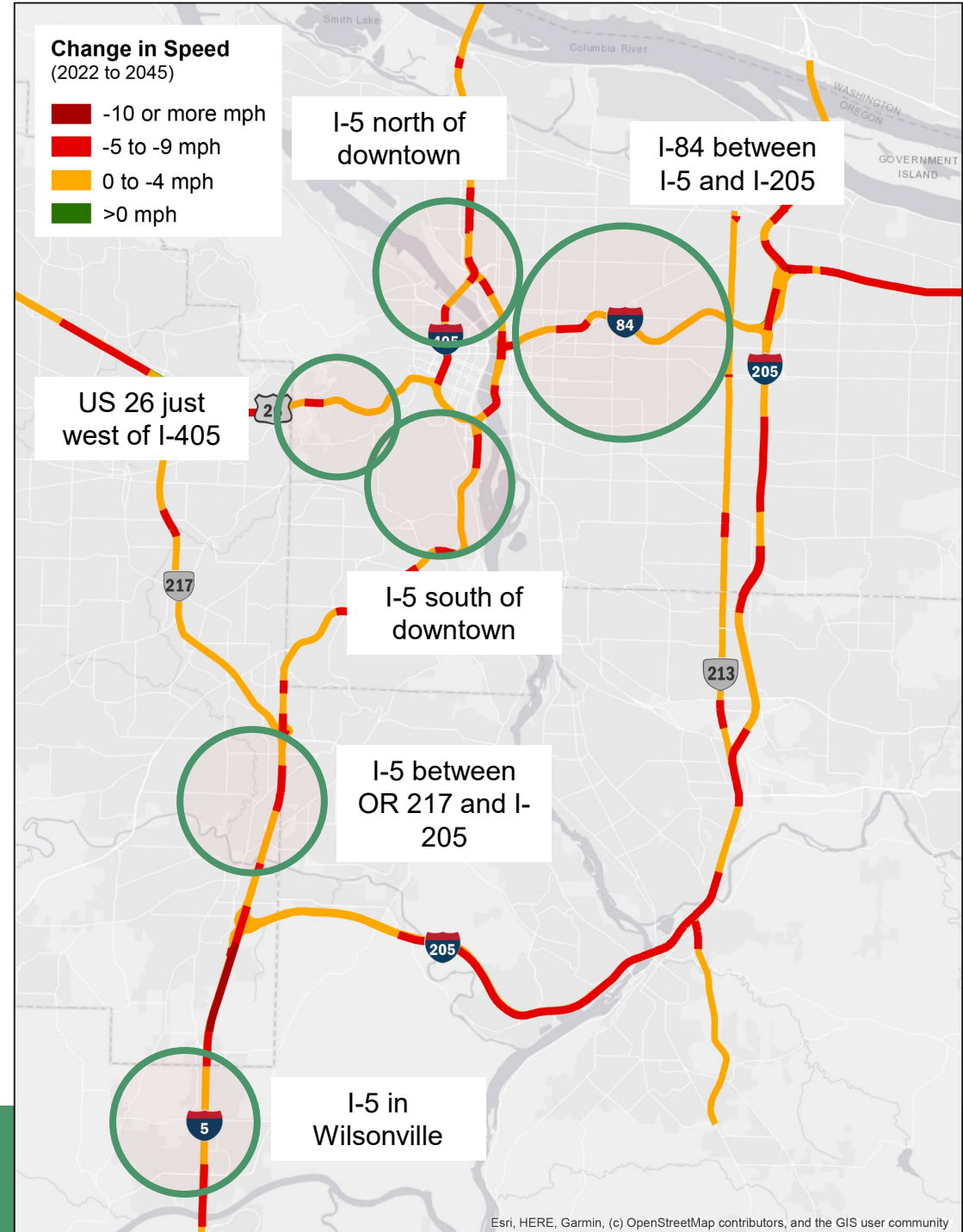
Source: [FHWA, Freight and Congestion](#)

# By 2045, peak hour travel speed will decrease on almost all parts of the ODOT system.

Some locations are **so congested already** that they can't get much worse.

More congestion will spill over onto local streets – this means **more diversion**.

Source: [ODOT Statewide Integrated Model](#)







# The Urban Mobility Strategy projects work together to improve safety, resiliency, and congestion.

Example: the I-5 Rose Quarter project alone will not eliminate congestion, but combined with regional tolling, travel will be more reliable in the corridor.








# Urban Mobility Strategy Map

## ODOT Projects

-  System Improvement Project
-  Bike/Ped Crossing Project
-  Regional Mobility Pricing Project
-  I-205 Toll Project

## Partner Project with ODOT Support

-  System Improvement Project
-  Bike/Ped Crossing Project
-  Bus on Shoulder Pilot
-  TriMet Project
-  Multimodal/Community Study

Note: Core project names are boxed





The **Urban Mobility Strategy** is a cohesive approach to make everyday travel safer and more efficient in the Portland metropolitan region.

## **Reduce traffic jams**

using congestion pricing with variable-rate tolls

## **Alleviate highway bottlenecks**

with improvement projects

## **Create new sustainable funding**

to preserve and improve the transportation system

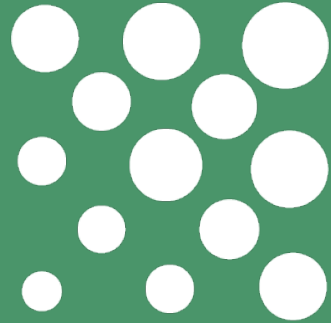
## **Invest**

in strategic multimodal transportation improvements

## **Modernize bridges**

to withstand a Cascadia-level earthquake

Thank you!



**Urban Mobility**  
STRATEGY