Transportation Planning

Atlas of Mobility Corridors for the Portland Metro Region

version 1.1

Purpose

The Atlas of Mobility Corridors helps to visualize the dynamic spatial relationships between transportation and land use across the region.

Overview

What is the Atlas of Mobility Corridors?

The Atlas of Mobility Corridors visually presents the integrated mobility corridor concept developed for the Portland, Oregon metropolitan region. Mobility corridors encompass the network of freeways, arterials, high capacity transit lines, frequent service bus routes, freight/passenger rail lines, multi-use paths and the land uses they service. These corridors facilitate multimodal travel for people and goods between different parts of the region.

The Atlas displays current land use and multi-modal transportation data for each of the region's 24 mobility corridors. It is a tool for decision-makers and planners to easily understand existing system conditions and identify needs for different parts of the region. For each corridor, the atlas displays location in the region, primary transportation facilities, land use patterns, and an assessment of gaps and deficiencies for different modes of the travel. The atlas includes a user's guide that describes each map in order to facilitate usability. The atlas structure allows comparison of data between mobility corridors and the ability to merge multiple corridors for a broader analysis. It also serves as a tool for monitoring the effectiveness of different land use and transportation strategies in achieving desired outcomes over time.

Atlas data comes from the Oregon Department of Transportation (ODOT), Metro's Regional Land Inventory System (RLIS), the Regional Travel Forecast Model and the 2035 Regional Transportation Plan.

For more information, contact:

Deena Platman | Principal Transportation Planner
deena.platman@oregonmetro.gov | 503-797-1754

Matthew Hampton | Senior Cartographer
matthew.hampton@oregonmetro.gov | 503-797-1748

Process

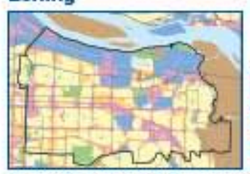
Transit

These density maps and transit data help you visualize the spatial relationship between jobs, households, transit ridership, capacity and different service levels in this corridor. Viewing the transit system within the context of land use also provides for meaningful understanding.

Households

Jobs

Zoning



Corridor analysis zone (CAZ)

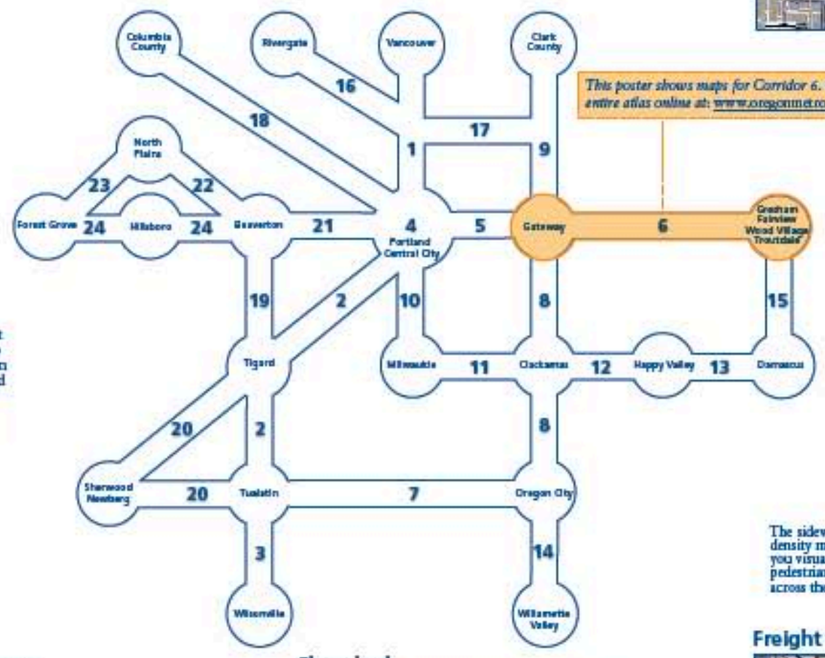
<1%	Commercial
14%	Mixed-use commercial
17%	Industrial
42%	Single-family residential
12%	Multi-family residential
7%	Parks and open spaces
5%	Rural

Land use has a big impact on transportation, just as transportation has a big impact on land use. The understanding of this interplay is crucial for building an integrated mobility strategy.

Biking

Bike travel has become an increasingly popular mode of travel in the Portland region. This map helps you visualize where the bicycle network exists and where there are gaps in the planned system. In some instances, existing bike lanes closely parallel planned bike lanes and this map can help guide new policy decisions.

This poster shows maps for Corridor 6. Check out the entire atlas online at: www.oregonmetro.gov/mobilityatlas



Walking

Every trip requires a pedestrian component. The ability to see where the sidewalk network is complete and where it needs improvement is important for planning an efficient system. This map shows where the sidewalk network is incomplete along 30-minute-or-better transit service and within designated pedestrian districts.

The sidewalk density map helps you visualize pedestrian gaps across the corridor.

Motor Vehicle

Traffic, congestion, delay, pollution are all symptoms of an inadequate transportation system. These graphics help spatially visualize elements of volume, direction, speed, and congestion level at a certain time of the day and location.

The chart below serves as a way to visualize how different roads perform with respect to the volume, level of congestion (volume-to-capacity ratio) and the average speed. This data shows the most congested location during the evening peak travel period in the outflow direction.

These symbols help you visualize the volume and volume-to-capacity ratio of motor vehicles traveling in either direction during the evening peak travel period for select locations in this corridor.

Level of service

This level-of-service (LOS) map allows you to visualize the volume and volume-to-capacity ratio of motor vehicles traveling in either direction during the evening peak travel period for both directions. It's the same information as the map above, but presented in the context of interchange areas and LOS guidelines.

Flowshed

The flowshed map helps you visualize the traffic volume and extent of influence on the whole motor vehicle system for all trips that pass through the gateway location in the specific flowshed direction.

Freight

The efficient movement of goods and services is important for a sustainable economy. This map helps you visualize truck mobility in this corridor during the mid-day peak travel period. It is important to understand freight-related employment, land use, and the networks that connect them when targeting investments for future improvements.

Page layout and design - The spatial dynamic of each corridor-area defines itself by a different scale and extent, necessitating a page layout that not only accommodates both a 'portrait' and 'landscape' orientation, but also a variety of other content (charts, legends and misc. mobility errata). Below are functional examples of each page style for both orientations.