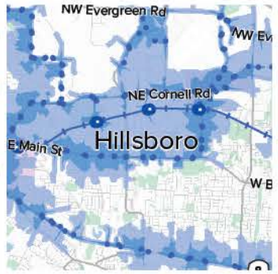

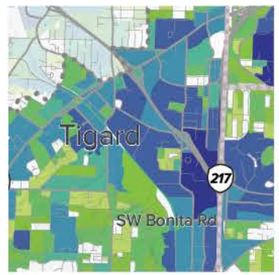

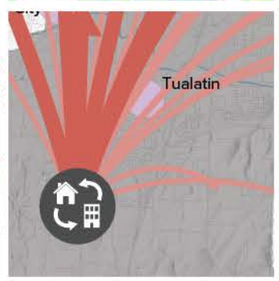

USER GUIDE

Atlas of Mobility Corridors

A foundation for building an integrated mobility strategy in the Portland metropolitan region

Metro

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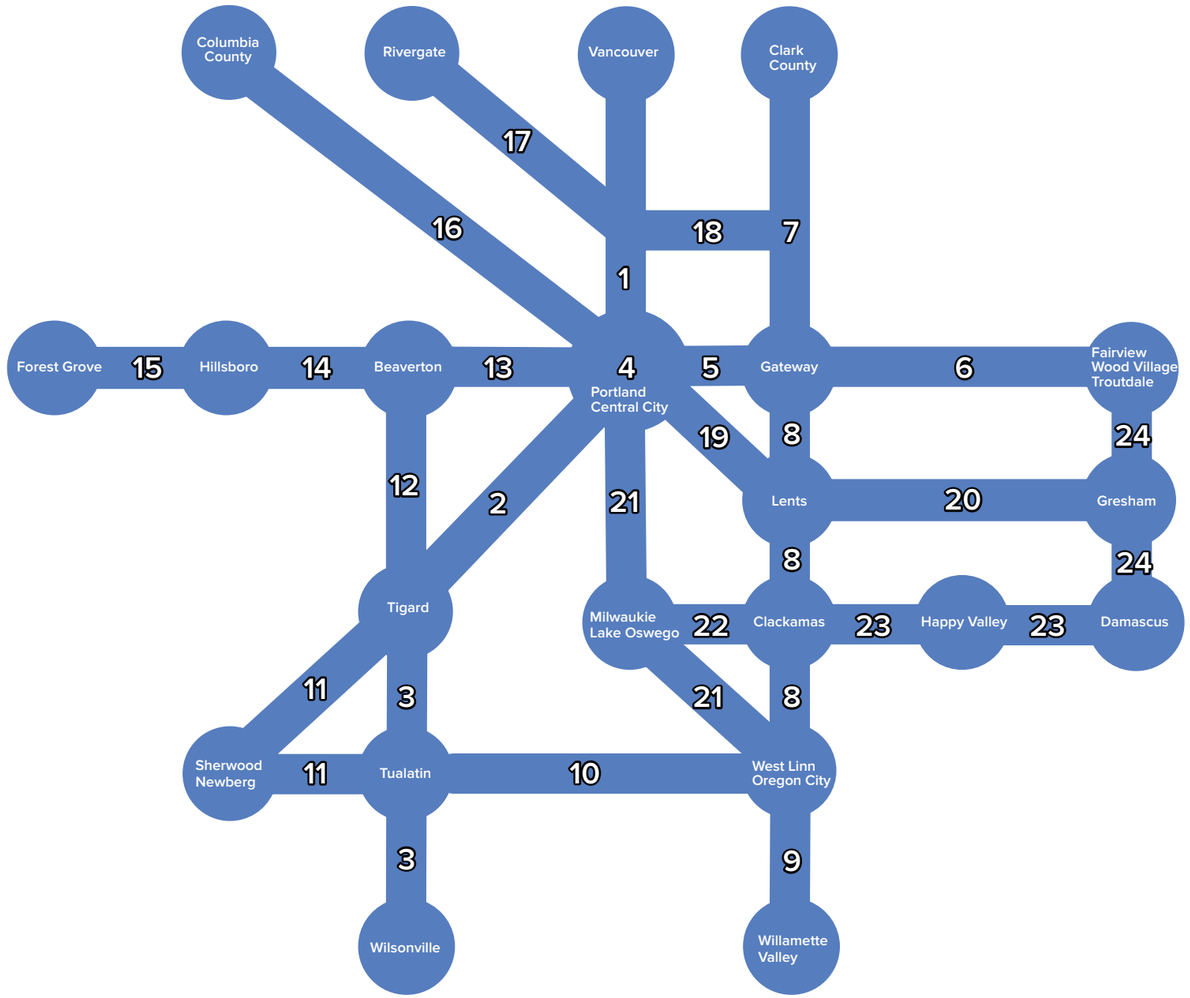


Table of Contents

HOW TO USE THIS ATLAS

Introduction

The communities of the Portland metropolitan region take a collaborative approach to planning that helps make our region one of the most livable in the country. Over the last two decades of the 20th Century, we worked together to address the challenges to metropolitan mobility brought about by exceedingly rapid population growth. With the 21st Century came a new set of challenges through the Great Recession. Although population growth slowed during this time, it has steadily increased over the past few years. In addition, climate change, rising energy costs, aging infrastructure, and other economic concerns demand that our region pro-actively plan to preserve metropolitan mobility. The goal is to provide the goods and services that people need and protect what they value—a strong economy, a healthy environment, and livable communities. Achieving these goals requires an integrated approach to metropolitan mobility.

In 2009 the mobility corridor concept emerged as a new way to think about an integrated transportation system. This concept focuses on the region's network of freeways and highways and includes parallel networks of arterial streets, regional multi-use paths, high capacity transit and frequent bus service. The function of this network of integrated transportation corridors is metropolitan mobility – moving people and goods between different parts of the region and, in some corridors, connecting the region with the rest of the state and beyond. These transportation corridors also have a significant influence on the development and function of the land uses they serve.

Purpose of the mobility corridor atlas

For the 2009 Atlas, regional partners identified 24 mobility corridors across the region in an effort to better understand the unique land use and transportation characteristics of each corridor. This edition of the Atlas also identifies 24 mobility corridors, although the corridors have been refined to better reflect current mobility patterns.

The mobility atlas, a feature unique to this region, was conceived as a way to visually present current land use and multi-modal transportation data for each of the region's major travel corridors. It is designed primarily to help planners and decision-makers understand existing system conditions, identify needs and prioritize mobility investments. Cities and counties will find the atlas useful when updating their transportation system plans. In addition, freight movers, community development interests and members of the interested public will benefit from a better understanding of the region's interconnected transportation system.

For each corridor, the atlas provides a general overview that includes location in the region, primary transportation facilities and land use patterns, commute and safety data and an assessment of gaps and deficiencies by travel mode. This information will be used to help identify the most cost-effective strategies and investment priorities for each corridor and serve as a framework for monitoring how well different strategies are working in each corridor over time. The atlas also provides for the comparison of data between corridors and the ability to merge multiple corridors for analysis of broader travel areas.

Content of the mobility corridor atlas

This mobility atlas presents a series of maps for each corridor analysis zone (CAZ) that are accompanied by charts, flow diagrams and other data visualizations. Data for the atlas include 2010 modeled data derived from Metro's regional travel demand model, land use and transportation Geographic Information System (GIS) data from Metro's Regional Land Inventory System (RLIS), data from the Oregon Department of Transportation, policy data from the federal component of the 2035 RTP as well as federal Census data. This atlas is draft 2.0; it will be updated as part of the 2018 Regional Transportation Plan Update.

Definition of terms

Mobility means the movement of people, freight, goods and services by any travel mode.

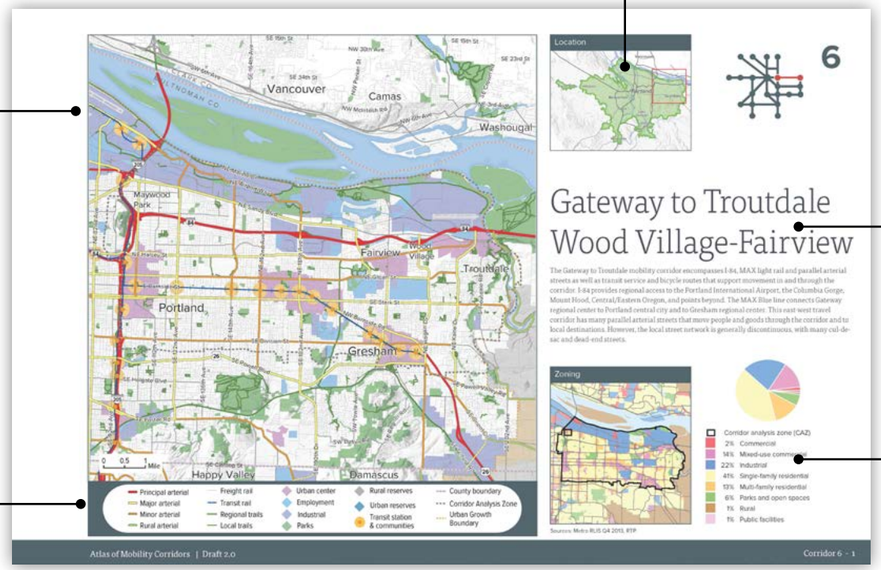
Mobility corridor means a segment of the regional network of freeways and highways that also has parallel facilities including arterial and collector streets, high capacity and regional transit routes, and regional multi-use paths.

High capacity transit means all public mass transit that moves in a dedicated right of way or designated lane and operates with a minimum of stops. Examples include commuter rail, light rail, bus rapid transit, and some express bus routes.

2040 target areas are identified in the 2040 Growth Concepts as priorities for the transportation system to support growth. These 2040 target areas include central city, regional centers, industrial areas, freight and passenger inter-modal facilities, employment areas, town centers, station communities, corridors, and main streets.

This map shows the general location of the transportation corridor within the region.

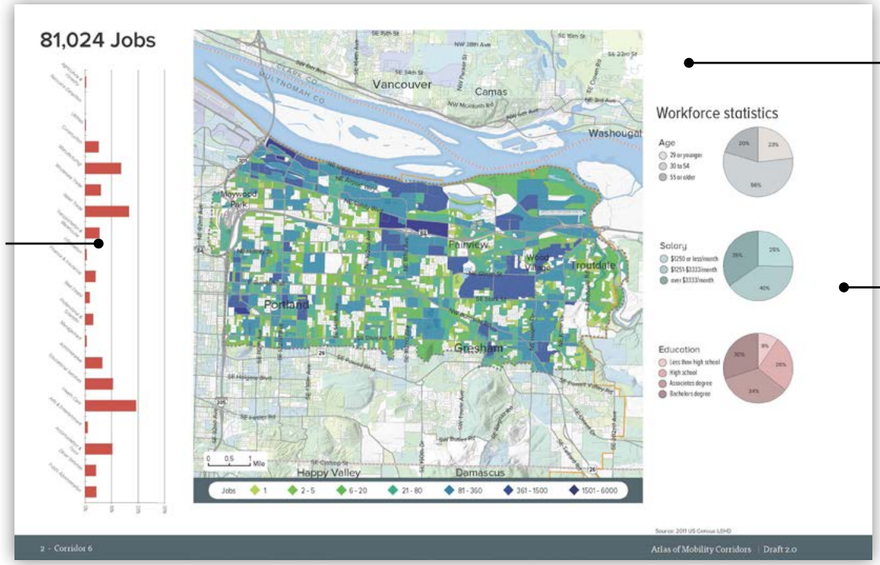
This map highlights the **Regional Transportation Plan** (RTP) functional classifications for the Arterial and Throughway Network concept. It is designed to provide well-connected roadway system that provides adequate capacity and supports all modes of travel.



This identifies the beginning section of a specific transportation corridor. 24 mobility corridors have been designated throughout the region.

This is the legend for the RTP Arterial and Throughway Network map.

The **Zoning** map and associated Zoning chart show the extent and breakdown of zoning designations based on local ordinances. The map also shows the extent of the **Corridor Analysis Zone (CAZ)**.



The **Job Sector** chart visualizes the percentage of jobs within each mobility corridor's analysis zone by employment categories.

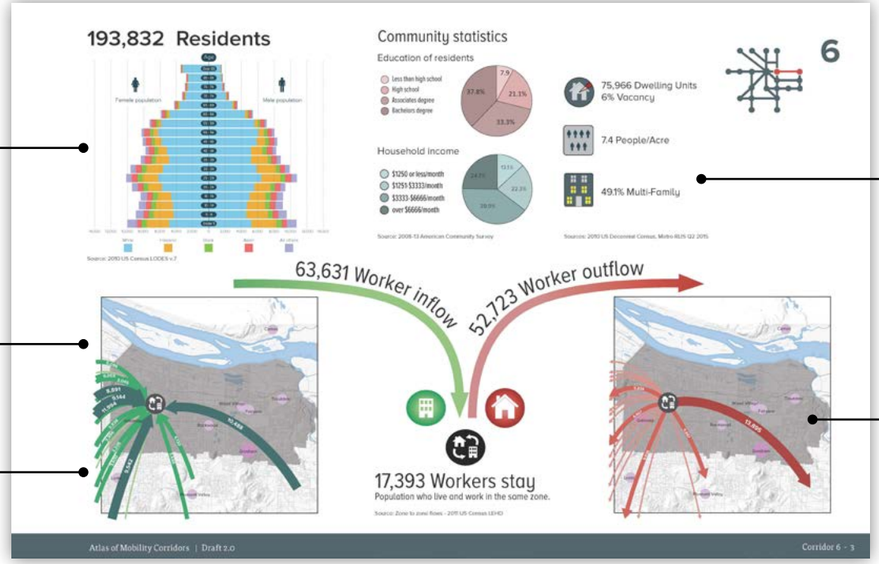
The **Employment Density** map displays the geographic concentration of jobs based on census blocks.

Workforce Statistics represent age, salary and education data that have been aggregated based upon the CAZ for the specific corridor.

The **Resident Ethnographic Pyramid** highlights demographic distribution based on gender, age and race as they pertain to individuals living in the mobility corridor.

The **Employment Flow** maps analyze the workforce distribution of commute flows to, from and within the CAZ.

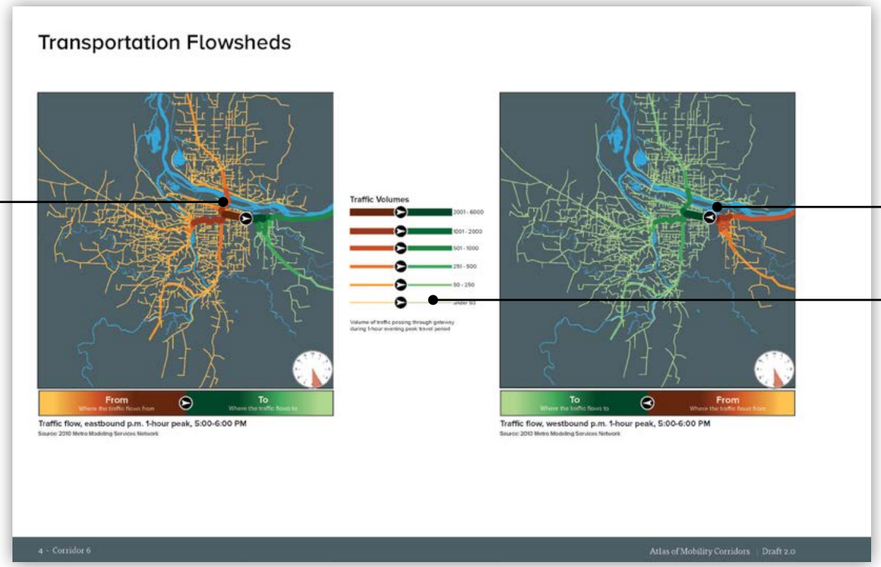
The **Inflow** map shows the volume and flow of workers from other corridors into the corridor of analysis.



Community Statistics represent aggregated community, housing and census data that have been analyzed within the CAZ.

The **Outflow** map displays the flow of workers who live within the corridor but work in a different corridor.

The **Flowshed** maps display the modeled travel patterns of motor vehicle traffic that pass through the flowshed gateway of the primary road facility during the 2-hour p.m. peak period. They indicate travel origins and destinations along with traffic volumes on the roadways.



The travel direction is indicated by the arrow on the flowshed gateway symbol.

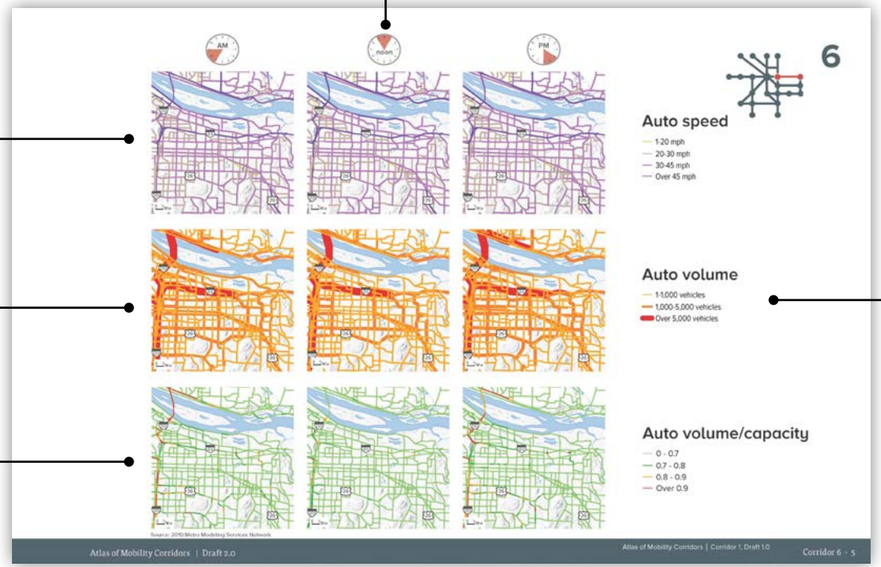
This legend shows the various size classes used to represent volume of traffic, and the colors that represent directionality in the **Flowshed** maps.

Each column represents a different time-of-day.

The **Auto Speed** maps represent the modeled average speed along collector-level and above roads throughout the corridor.

The **Auto Volume** maps show the modeled volume of automobiles traveling over collector-level and above roads.

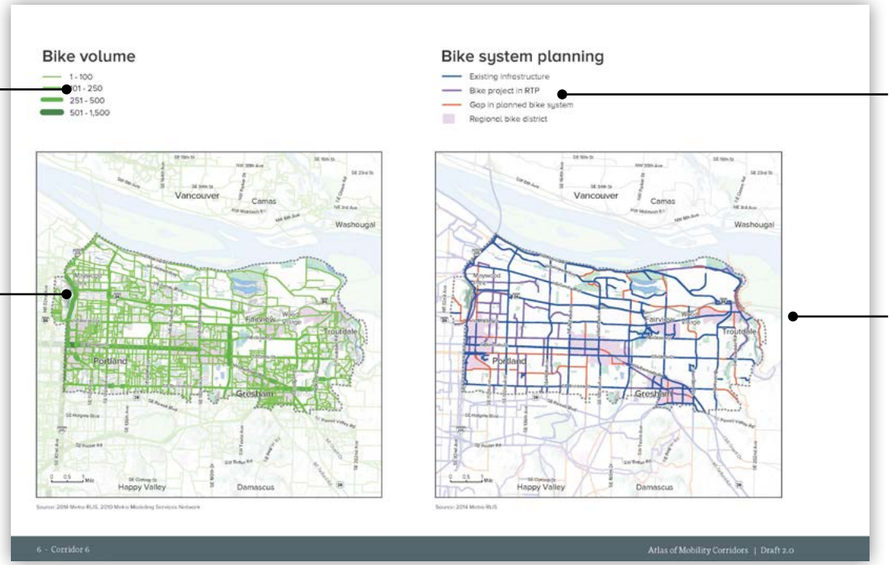
The **Auto Volume/Capacity** maps show the modeled volume-to-capacity ratio on collector-level and above roads.



These legends identify the categories of auto speed, volume and volume/capacity used in the associated maps.

This legend categorizes the various number of bicyclists in the **Bike volume** map.

The **Bike volume** map displays the modeled daily volume of bike ridership on streets and trails throughout the corridor.

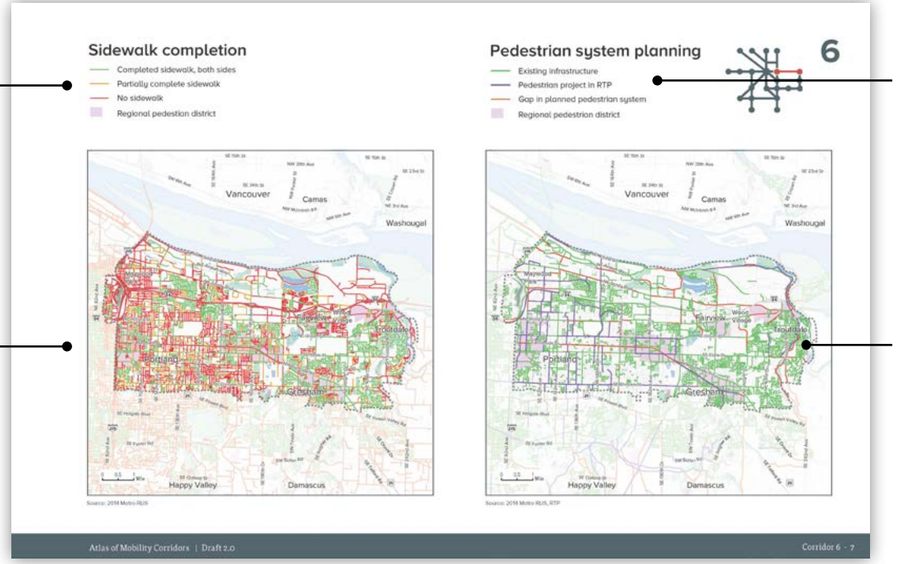


This legend designates bike infrastructure classifications.

The **Bike System Planning** map shows the different elements of the bike system. It shows existing bike lanes and planned expansion of bike infrastructure, while also highlighting gaps in the RTP designated bicycle system.

This legend shows the symbols used to classify sidewalk status and gaps.

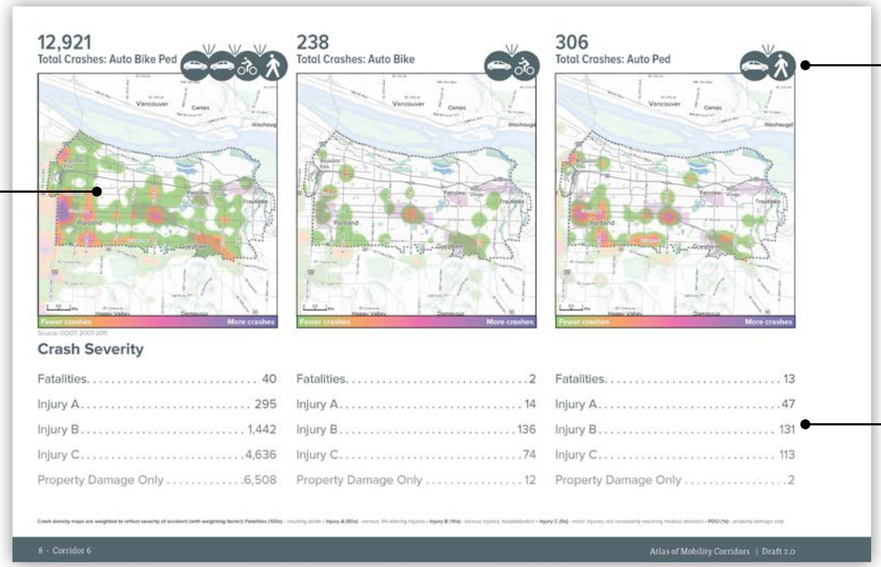
The **Sidewalk Completion** map exhibits the corridor analysis zone sidewalk system, noting where sidewalks exist, are partially complete or are absent.



This legend symbolizes the pedestrian infrastructure system.

The **Pedestrian System Planning** map focuses on pedestrian infrastructure, showing where infrastructure is present or planned, and where no current plans or infrastructure exist.

The **Crash** maps highlight the geographic distribution of weighted crash densities across several categorical designations. Total crashes, auto/bike crashes, and auto/pedestrian crashes are included.

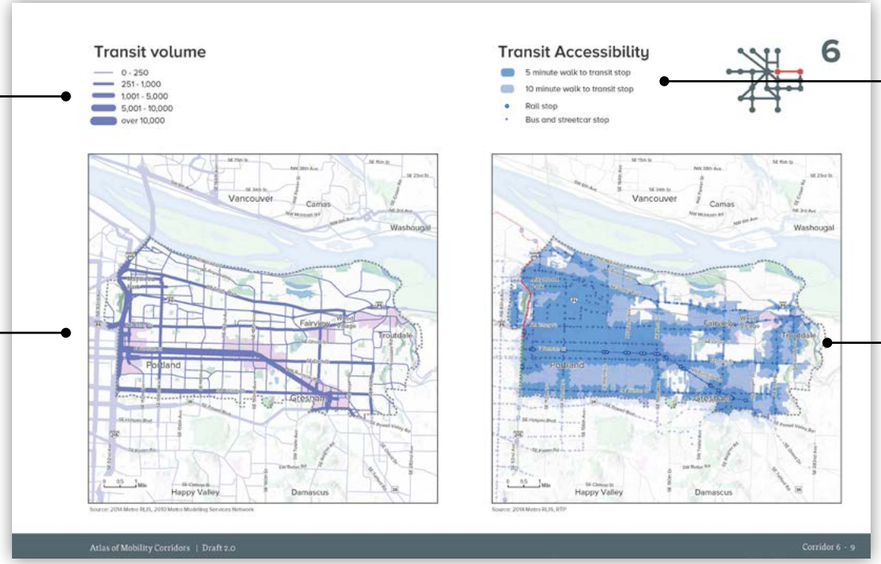


The symbols at the top of each **Crash** map represent different crash categories.

The **Crash Severity** tables provide a breakdown of injury classification frequency for every crash severity category.

This legend displays the categories used in the **Transit Volume** map.

The **Transit Volume** map shows modeled daily transit ridership volume along collector-level and above roads.

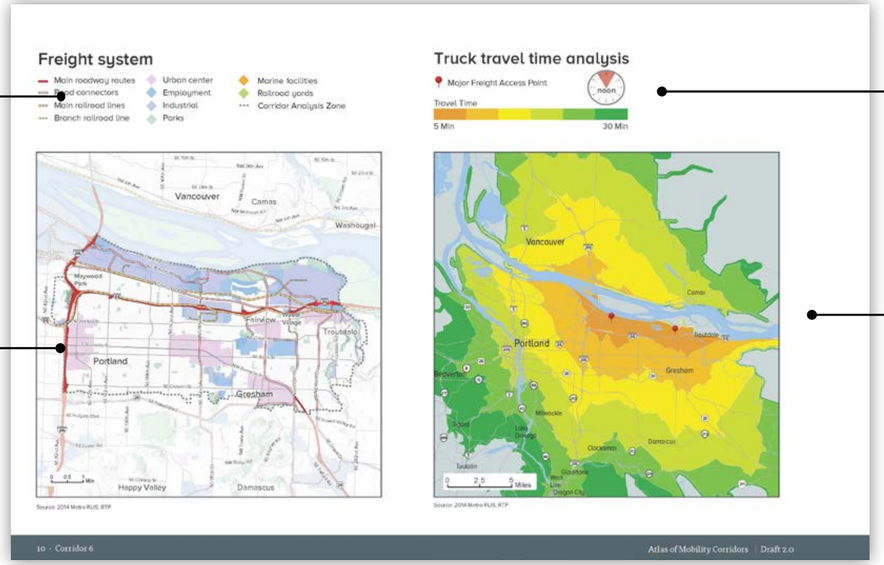


This legend shows the symbols used for rail and bus/streetcar stops, in addition to potential walking time to transit stops.

The **Transit Accessibility** map shows transit stops and stations for bus, streetcar and rail, as well as potential the walkable accessibility to each station in 5 and 10 minute increments.

This legend indicates the symbols used to designate the various classes of the RTP freight system.

The **Freight System** map highlights the RTP freight system within the corridor.



This legend displays the symbol for major freight access points within each CAZ, and the colors used to describe travel times.

The **Truck Travel Time Analysis** map shows the average modeled travel time surrounding one or several major freight access points in 5 minute increments during the 2-hour mid-day travel time.