Planning for complete streets

This factsheet is intended to assist cities and counties in updating their local transportation system plans to align with the Regional Transportation Plan.

Complete streets balance the needs of all users and street functions.

Complete streets are designed to ensure safe, convenient and comfortable travel for all users, regardless of their mode of transportation or ability. Complete streets are achieved through performance-based planning and design.
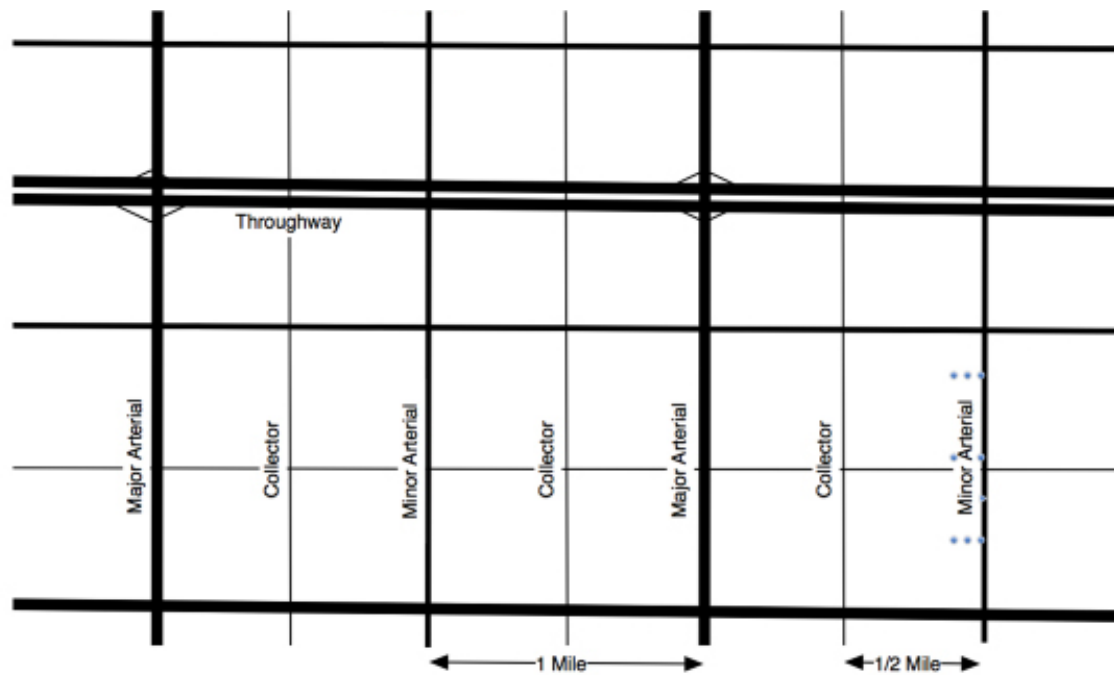
Regional street design classifications further this vision by promoting community livability and reliable travel, which is achieved by balancing all modes of transportation and aligning the function and character of streets with adjacent land uses. This integration helps to limit reliance on driving and encourages increased use of walking, bicycling and public transit.

Defining a complete system – regional street functional classifications

Section 3.3.3 of the Regional Transportation Plan (RTP) defines the function of the regional street and throughway system. Rather than relying on levels of congestion to direct how and where to address motor vehicle capacity needs, the plan calls for creating a well-connected network that better serves all forms of travel.

Design and complete streets policies
RTP section 3.3.2.1

Policy 1 Design the transportation system to implement the planned land uses and regional urban form envisioned in the 2040 Growth Concept.

Policy 2 Design a well-connected transportation system that serves all modes of travel.

Policy 3 Use regional street design classifications to guide development of streets that balance the needs of all users and functions of streets according to planned land use and desired outcomes.

Policy 4 Use transportation network and street design to help achieve regional goals and desired outcomes, including environmental and human health, climate action and resilience, a safe system, equitable transportation, mobility options, vibrant communities and a thriving economy.

Policy 5 Avoid, minimize and mitigate environmental impacts of the transportation system using green infrastructure design, street trees, wildlife habitat or waterway crossing improvements and other approaches.

Policy 6 Use a performance-based approach and decision-making framework to plan and design transportation projects and networks.

Throughway

Major Arterial · Collector · Minor Arterial · Collector · Major Arterial · Collector · Minor Arterial

←1 Mile→   ←1/2 Mile→

Regional Transportation Plan (RTP) Figure 3.19: A conceptual network of streets, illustrating multimodal transportation corridors and showing ideal spacing of arterial streets.

In general, the roadway network should be designed to provide for trips through or across the region on throughways, shorter trips within communities on arterial streets and the shortest trips on collector and local streets.

This approach results in a hierarchy of streets:

- Throughways (such as Interstate 84, U.S. Route 26 and Interstate 5)
- Arterial streets (e.g. Cornell Road, Powell Boulevard and Sunnyside Road)
- Collector and local streets

Building a regional motor vehicle network to accommodate all motor vehicle traffic during peak travel periods is not feasible or practical nor would it be desirable considering the environmental, climate and community impacts.

By developing a well-connected network of streets of different classifications, traffic is distributed across the entire network. This helps reduce congestion, decreasing the need to widen roads and intersections beyond their planned design.

Connectivity also supports transit, biking and walking by making trip distances shorter, more direct and more convenient.

Throughways are planned for up to six through lanes, sometimes with auxiliary lanes, and grade-separated interchanges. These facilities serve regional, statewide and interstate vehicular travel. Nonmotorized travel is served on parallel multi-use paths.

Arterials have up to four travel lanes with turn lanes and/or medians and are spaced about one mile apart. Arterials serve all modes of travel and are typically important transit routes.

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Local and collector streets provide community and neighborhood circulation.

Regional street design classifications

RTP Figure 3.16 identifies regional street design classifications, which are assigned to all throughways and major and minor arterials in the regional transportation system.

Freeways and signalized highways is a design classification that is applied to throughways and prioritizes long-distance and higher speed freight, motor vehicle and transit mobility. Freeways are grade separated expressways, while signalized highways have a mix of grade-separated and signalized at-grade intersections. Freeways and signalized highways cross all types of land uses, and buildings are not typically oriented to these facilities.

Regional and community boulevards is a design classification that prioritizes pedestrian, bicycle and transit travel. Boulevards serve the multimodal travel needs of the region's most intensely developed and developing activity centers, including the central city, regional centers, station communities, town centers and some main streets. Adjacent land uses and buildings should orient directly to the boulevard with ground-floor commercial activity, contributing to a pedestrian and bicycle-friendly environment.

Regional and community streets is a design classification that balances multimodal travel and access needs of corridors, neighborhoods and some main streets, along with employment and industrial areas. Regional and community streets can be located within residential neighborhoods as well as more densely developed corridors and employment centers. Development can be set back from the street. Regional and community

The Metro Designing Livable Streets and Trails Guide assists in designing, constructing and maintaining complete streets.

Overview of local plan requirements

Street and trail design directly affects greater Portland's quality of life, significantly impacting people's ability to walk, bike and access public transit.

Metro's Designing Livable Streets and Trails Guide provides best practices and preferred designs for the regional design classifications. The guide is a resource for transportation agencies responsible for designing, constructing and maintaining the region's transportation system. The design guidance is intended to assist in designing new and reconstructed streets and trails but may also be applied to maintenance projects that preserve and extend the service life of existing streets and structures when minor retrofits are needed.

For complete language, refer to the Regional Transportation Functional Plan section 3.08.110 Street System Design.

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