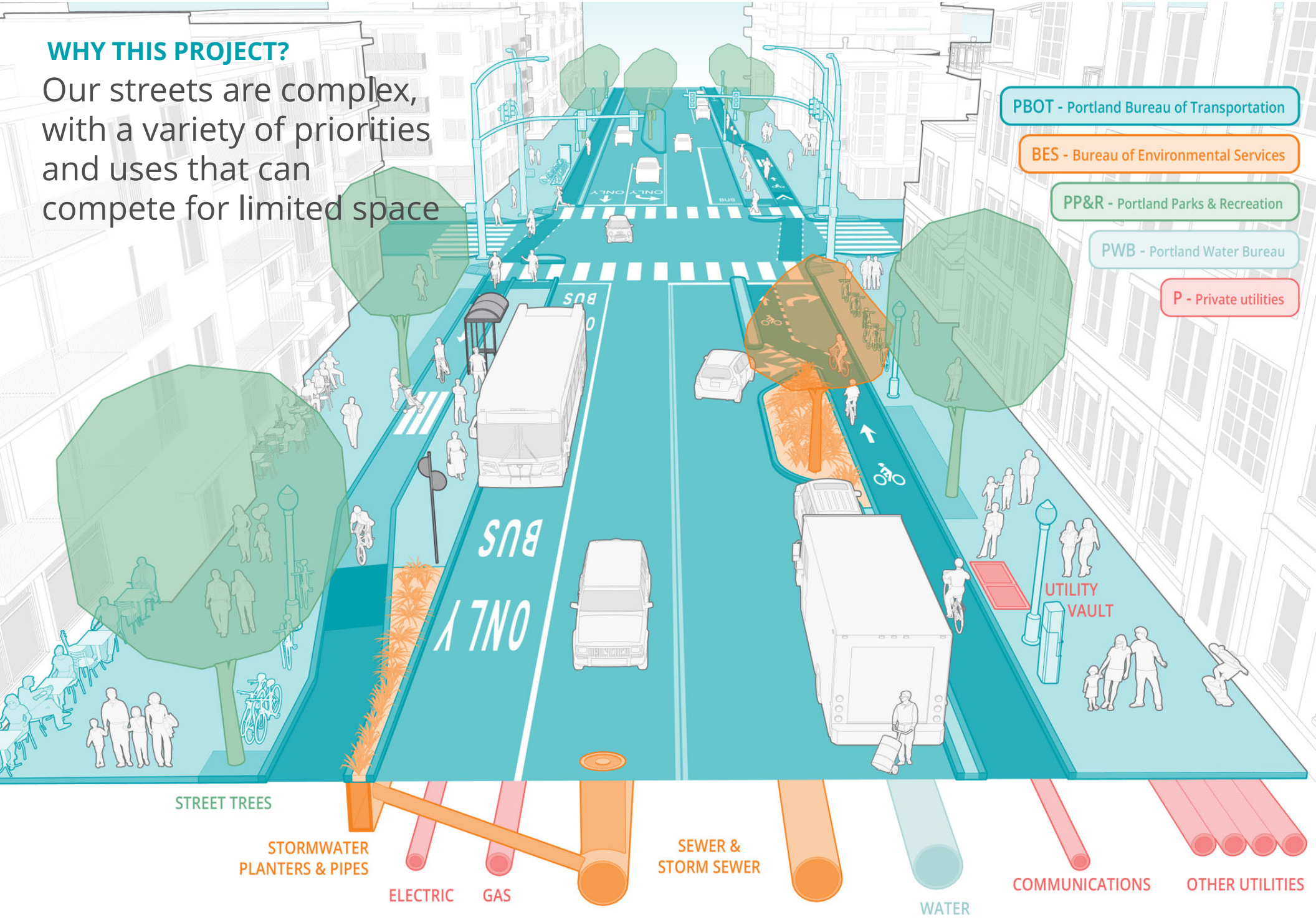
StreetsPDX

Urban Forestry Commission
April 20, 2023

PBOT
PORTLAND BUREAU OF TRANSPORTATION

WHY THIS PROJECT?

Our streets are complex, with a variety of priorities and uses that can compete for limited space



How we got here

1 Analyzed existing conditions in the right-of-way

2 Documented spatial needs within the zones of the right-of-way

3 Identified the top issues encountered in the right-of-way

4 Evaluated "street types" as a context-based decision-making framework

1 Existing Conditions in the Right-of-Way

Overall, Portland has relatively narrow streets and rights-of-way. However, conditions vary across the city. The Comprehensive Plan divides Portland into five Pattern Areas based on natural and built patterns. The Streets 2035 existing conditions analysis found the Pattern Areas to be a useful lens to identify trends and understand how streets differ across Portland.

Central City
~ 5% of Portland streets

Curb-to-curb	36 feet (typical)
Sidewalks	More likely to be in the range of existing sidewalk standards (10-12'; 15')
Tree canopy	With limited green space, space for trees relies upon the right-of-way
Stormwater	Combined Sewer Overflow
Other features	Development density and the requirements related to underground wiring districts make this area the most crowded beneath the streets

Western Neighborhoods
~ 20% of Portland streets

Curb-to-curb	22 and 24 feet (typical)
Sidewalks	Many streets were developed without sidewalks
Tree canopy	Highest tree canopy coverage, much of it on private property
Stormwater	MS4 (drains to streams)
Other features	Roads are generally narrow due to topography rather than limited right-of-way

Eastern Neighborhoods
~ 20% of Portland streets

Curb-to-curb	66 and 76 feet (typical)
Sidewalks	Many non-local streets (e.g., collectors and above) have curb-tight sidewalks
Tree canopy	Lower tree canopy coverage
Stormwater	Underground Injection Control
Other features	Low street connectivity makes major streets important for all modes due to a lack of alternate routes

Inner Neighborhoods
~ 50% of Portland streets

Curb-to-curb	36 feet (typical)
Sidewalks	More likely to be in the range of existing sidewalk standards (10-12'; 15')
Tree canopy	Moderate tree canopy
Stormwater	Combined Sewer Overflow
Other features	High level of street connectivity

Industrial & River
~ 5% of Portland streets

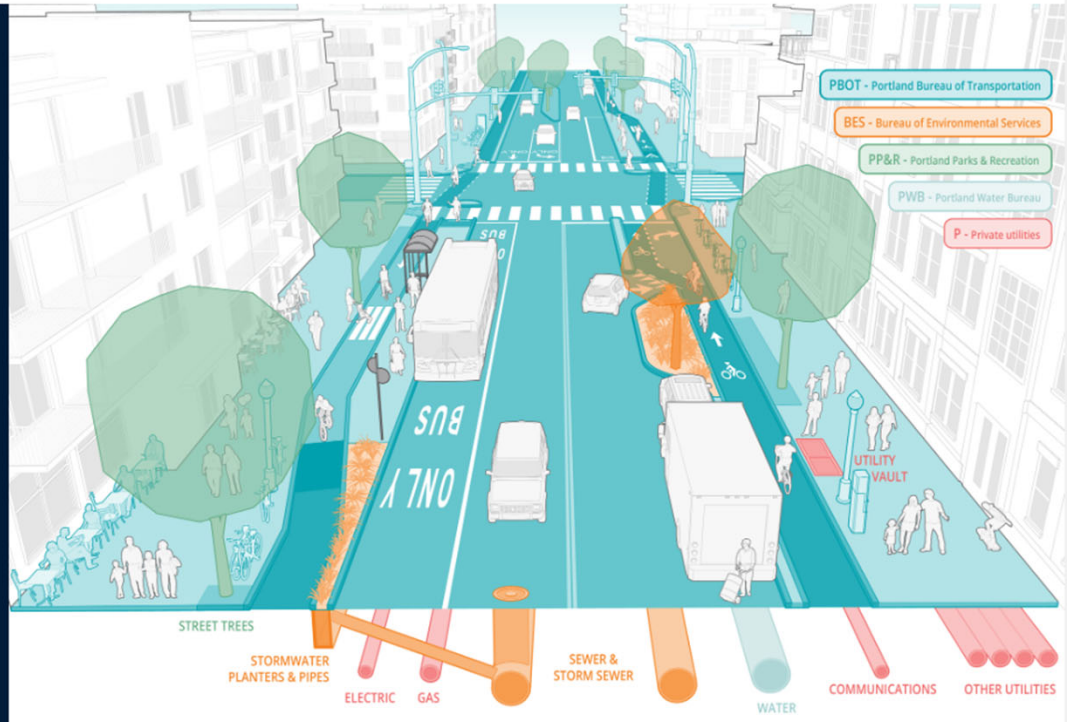
Curb-to-curb	Varies
Sidewalks	A mix of curb-tight and missing sidewalks (with some exceptions)
Tree canopy	Industrial areas have fewer trees, as trees typically do not do well adjacent to lanes with heavy large-truck traffic
Stormwater	MS4 (drains to streams)
Other features	Design needs to consider how freight can safely move through and decrease conflicts with more vulnerable users and without damage to infrastructure

What we heard last time (UFC)

- Have 6 tree inspectors for large amount of development
- Misperception of root depth; concerns of having to remove a tree later
- Impacts of vaults on tree planting locations
- How to make holistic: it's not their infrastructure it's our infrastructure
- Trees are infrastructure that impact stormwater, urban heat island, safety
- Equity issues such as tree density, lighting and safety

Welcome to StreetsPDX

StreetsPDX is a design framework intended to support policy implementation and decision-making in the right-of-way consistent with the City's 2035 Comprehensive Plan. It brings together the various policies and corresponding design standards that influence space in the right-of-way as part of private development and with city led capital projects. Because individual sites and projects in constrained urban environments can vary in their challenges and opportunities, the framework also identifies the deviation processes that provide flexibility when it is not possible to meet all applicable standards.



This site is a tool for helping users navigate the framework. It has several informational sections to help users understand the StreetsPDX framework.

STREET TYPES

All streets in Portland have a role in fostering, absorbing, and sustaining the impacts of a growing city. Portland's Transportation System Plan (TSP) includes a "Street Design" classification which assigns each street a "type" based on a combination of the transportation function and the adjacent land use context. These "Street Types" are a foundational element of the StreetsPDX decision-making framework.

Read about street types

DEVELOPMENT IMPROVEMENTS

This tool allows users to visualize the different standards that may apply to their development project, with links to available deviation processes and a more detailed page of city standards, guidelines and requirements that impact space in right-of-way.

Read about development improvements

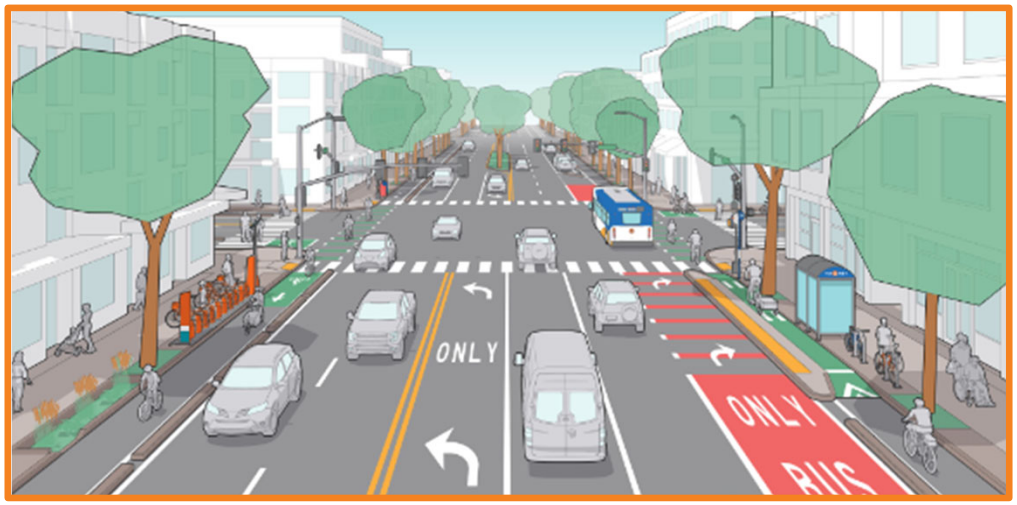
CITY PROJECTS

When a road is re-designed as part of a city project or road reconstruction, PBOT needs to determine the appropriate cross-section for the street. StreetsPDX developed a decision-making process that provides PBOT with an organized and rational process for considering a roadway's context, the trade-offs between different right-of-way uses, and guidance for what to do when there is not sufficient space to accommodate all policy-specified uses to their preferred dimensions.

Read about capital projects

STREET TYPES

STREET TYPES



CIVIC MAIN STREETS

Civic Main Streets are generally Portland's busiest, widest streets that pass through compact, pedestrian-oriented centers that anchor neighborhoods with retail and businesses, schools and libraries, housing options, employment centers, and gathering places.

Land Use Intensity	Roadway Width	Multimodal Mobility Demand	Loading/ Business Access
●●●	●●●	●●●	●●●

CIVIC CORRIDOR

NEIGHBORHOOD MAIN STREET

NEIGHBORHOOD CORRIDOR

COMMUNITY CORRIDOR

LOCAL

INDUSTRIAL

STREET TYPES

Learn details about the specific needs and requirements of **CIVIC MAIN STREETS:**

- Typical Street Classification
- Typical Travel-Way Width
- Travel Lanes
- Pedestrian Needs
- Greening Needs
- Bicycle Needs
- Transit Needs
- Freight Needs
- Curbside Access Needs
- Place Creation Needs
- Emergency Response Needs

An interactive map gets you to the information you need quickly

Example streets

- SE MARTIN LUTHER KING JR BLVD
- SE 122ND AVE
- E BURNSIDE ST
- SW CANYON RD
- NE 122ND AVE

DEVELOPMENT IMPROVEMENTS IN THE RIGHT OF WAY

DEVELOPMENT IMPROVEMENTS RESOURCES: PAGE

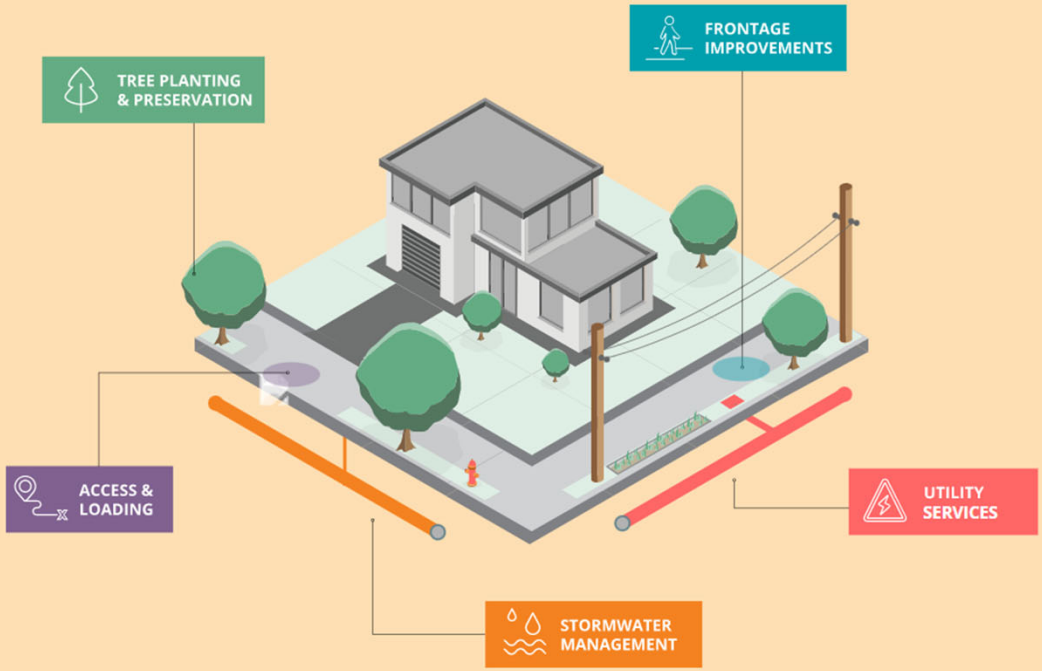
Organized and created a point of entry to access the information you need

Development-Related Public Improvements in the Right-of-Way

This page identifies policies and requirements that may apply to a development project and influence the allocation of space in the right-of-way. It also identifies the different paths for seeking approval to deviate from a standard requirement.

You should use this page in combination with **our guide to city standards, guidelines, and requirements.** Use the image or scroll down to navigate to the standards that you are interested in learning more about. Each section has a link to read the specific section of our guide.

Neither page is an exhaustive list and additional information may be available. Refer to the city's **Public Works Permitting page** for information related to public works projects, including permit, fee and **technical resources**. For more information on the development review process, refer to **Development Review and Permit Process (BDS)** and **Transportation Development Review and Early Assistance.**



Frontage Improvements

Requirements and standards

Sidewalk standards are defined in the Pedestrian Design Guide and are applied based on the Street Design Classification of the street. Private development projects that meet the triggers in 17.88.020 are required to bring their frontage up to current standards.

Read more about sidewalk requirements and standards

DEVELOPMENT IMPROVEMENTS RESOURCES: ROW POLICIES

Highlights requirements and deviation processes

Frontage Improvements

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Read more about sidewalk requirements and standards

How to deviate from standard improvements

PBOT's Public Works Alternative (PWA) review process allows an applicant to submit an alternative to the standard sidewalk cross sections required to meet current standards, codes, and policies. Alternatives to construct or maintain a less than standard width sidewalk for the entire frontage or at a particular point are eligible for this process.

Criteria for accessing the Public Works Alternative process to request a reduction in frontage improvements to meet other policies requirements (e.g., to preserve a tree) or respond to site constraints (e.g., topography and/or complexity in conveying stormwater) are listed in TRN 1.27.

Sidewalks and Pedestrian Crossings

Sidewalk standards are defined in the Pedestrian Design Guide and are applied based on the Street Design Classification of the street. Private development projects that meet the triggers in 17.88.020 are required bring their frontage up to current standards.

- Pedestrian Design Guide
  - Sidewalk standards by zone of the sidewalk
  - Minimum dimensions for constrained situations
  - When furnishing zones are required to be landscaped vs. hardscaped
  - Alternate walkways and criteria for use in capital projects
- TRN 1.22 - Infill Development on Streets with an Existing Sidewalk Corridor
  - Establishes the situations in which the City will accept the existing sidewalk configuration as the standard for the block length.
- TRN 1.29 Sidewalk Corridor Widths within Historic Resource Overlay Zones
  - Identifies Main Streets in historic districts where the sidewalk corridor may be less than the 15' standard to honor the historic building line.

DEVELOPMENT IMPROVEMENTS: SEE OTHER RESOURCES

These pages do not replace other technical resources.
They help put information people need in a central place.

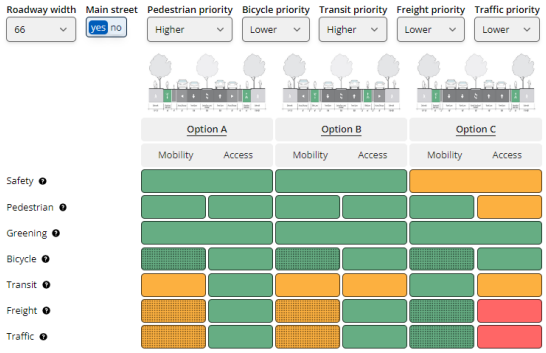
Neither page is an exhaustive list and additional information may be available. Refer to the city's **Public Works Permitting page** for information related to public works projects, including permit, fee and **technical resources**. For more information on the development review process, refer to **Development Review and Permit Process (BDS)** and **Transportation Development Review and Early Assistance.**

CITY PROJECTS

CITY PROJECTS RESOURCES

The framework for City Projects is designed to help staff and the public find relevant information quickly and support the evaluation of tradeoffs

01 → **02** → **03**



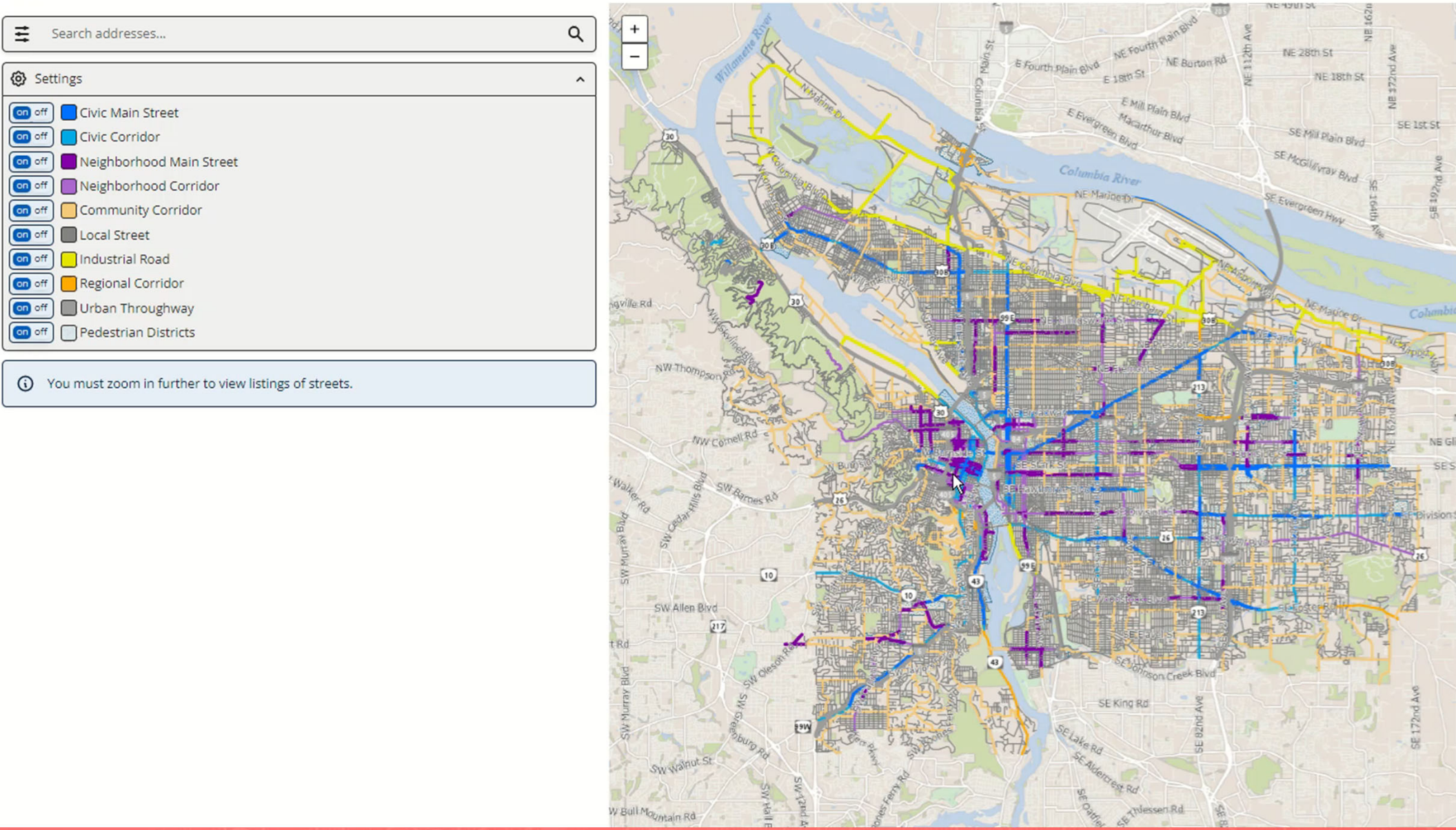
- Select a street
- Resulting classifications (policy scan)

- View cross sections
- Identify potential tradeoffs

- Evaluate tradeoffs

CITY PROJECTS RESOURCES: MAP

PBOT StreetsPDX

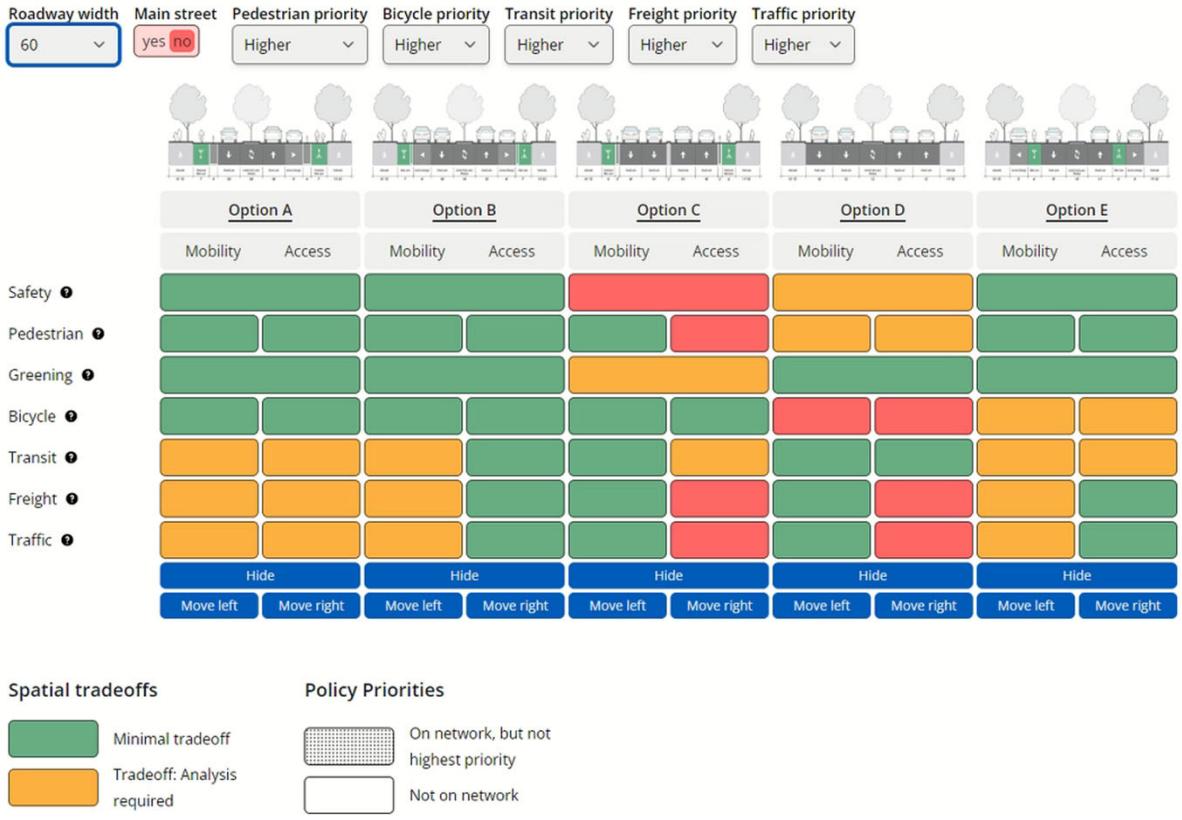


CITY PROJECTS RESOURCES: CROSS SECTIONS

Street types | City Projects | Development Improvements | Right-of-way Policies | Street Map | Cross-Sections

60 Foot Cross Sections

The StreetsPDX Cross-Section tool visualizes options for use of the right-of-way, focused on the space between the curbs. It allows you to set various priorities (which populate automatically when you reach this page from the Street Map) and evaluate potential cross sections to meet capital projects goals. This tool makes clear that there are always tradeoffs between potential cross sections. Priority designations, project goals, and analyses of tradeoffs inform which section(s) are advanced. To get started, review the City Projects page which describes how to use this tool for a given project.



CITY PROJECTS RESOURCES: HANDBOOK

A Right-of-way Tradeoff Handbook supports consistent analyses to inform whether a tradeoff is acceptable, and identifies options to mitigate impacts to a use not accommodated or provided at less than preferred dimensions

TRANSIT

A street's Transit designation identifies its role in the city's transit network. Transit priority treatments from the ETC Toolbox such as transit stop curb extensions or islands to allow transit to stop in lane, transit signal priority, queue bypasses, and Business Access and Transit lanes are aim make transit a rapid and reliable choice for daily transportation. A variety of data are available to identify the extent and location of delay for transit vehicles.

CITY OF PORTLAND | STREETS PDX

ANALYSIS OF TRADEOFFS

MOBILITY

- Transit delay / passenger delay / run-time variability
- Frequency / headway / # of transit lines (per hour or all day)
- Application of Enhanced Transit Corridors toolkit
- Bus/bike lane interaction
- Considerations for shared transit and freight priority lanes

ACCESS

- Transit access to the curb at stops
- Sidewalk meets ADA standards and supports ramp deployment
- Bus/bike/pedestrian interaction at transit stops
- Consider additional space for people to wait without blocking sidewalk, stop amenities, or when bicycle facilities ramp to sidewalk level at stops

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POTENTIAL REASONS FOR ACCEPTING TRADEOFFS

MOBILITY

- Transit priority lanes infeasible due to existing infrastructure in curb zone
- Traffic analysis indicates repurposing lanes for transit priority would lead to significant diversion or secondary safety issues
- Impacts to transit delay due to lane reduction can be mitigated (see next column) or benefits of lane reduction outweigh impact to transit

ACCESS

- Topography or other constraints to providing sidewalks at stops

OPTIONS TO MITIGATE TRADEOFFS

MOBILITY

- Transit signal priority, turn lanes at intersections, or transit stops in lane when transit only lanes or queue bypasses are infeasible due to space constraints
- Pro-time/peak hour transit priority lanes with on-street parking allowed off-peak
- Shared bus/bike facilities when considerations can be met

ACCESS

- Provide accessible transit stops through parking removal at stops, bus length curb extensions or floating transit stops

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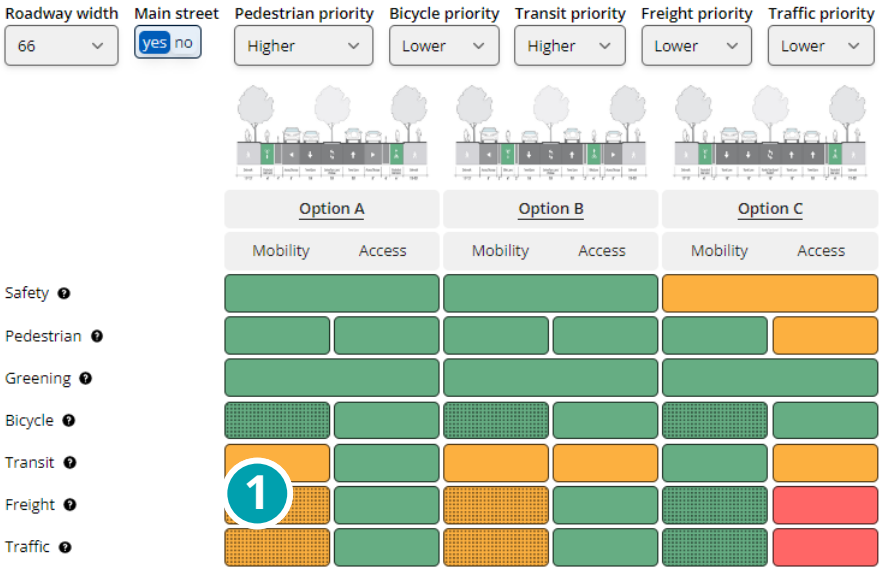
CITY PROJECTS RESOURCES: CROSS SECTIONS/HANDBOOK

The matrix identifies potential tradeoffs (yellow & red); analysis of whether a tradeoff is acceptable is guided by the Right-of-Way Tradeoff Handbook



1 'Tradeoff Analyses & Mitigations' is guided by the

2 Right-of-Way Tradeoff Analysis Handbook

Discussion and Next Steps

- Review web page
- Questions on the content and tools?
- StreetsPDX website estimated to go live June 2023
- Will share link when ready
- Streets2035@portlandoregon.gov