Infrastructure Policies/Regulations Inventory

Goal:
• Obtain regional inventory of bicycle and pedestrian infrastructure policies and regulations.

Benefits:
• Gather information on local active transportation planning and implementation.
• Better support the integration of active transportation into PSRC Regional Transportation Plan and local plans and policies.

Challenges:
• Ensuring inventory is complete and comprehensive.
Work Program

**ACTION PLAN:**

Task 1: Inventory bicycle and pedestrian infrastructure *policies*.

Task 2: Inventory bicycle and pedestrian infrastructure *regulations*.

Task 3: Document regional bicycle and pedestrian infrastructure policies and regulations.
Inventory Elements

- Comprehensive Plan Policies
- ADA Transition Plans
- Safety Plans
- Non-motorized Plans
- Municipal Ordinances and Resolutions
- Municipal Codes
- Design Guidelines
- Capital Programs
Inventory Research Scope

Geographies
- 4 Counties
- 82 Jurisdictions
- WA State

Duration
- Ordinances/Codes: All years
- Resolutions: 2006 or later
- All others: Latest/current versions

Other limitations
- Policies/regulations for building new infrastructure.
- Must cover entire jurisdiction, not just specific pieces of infrastructure.
Infrastructure Types

**Pedestrian**: Sidewalks, curb ramps, crosswalks, flashing beacons, off-street walkways

**Bicycle**: Bicycle lanes, bicycle parking, shoulders used for biking

**Shared**: Shared-use trails, pedestrian/bicyclist-oriented lighting
## Research Challenges

<table>
<thead>
<tr>
<th><strong>Materials that were difficult to find or not available on-line.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data sources that were very large and/or not searchable.</strong></td>
</tr>
<tr>
<td><strong>Lack of background knowledge about jurisdictions’ policies and regulations.</strong></td>
</tr>
<tr>
<td><strong>Wide variety of regulatory structures and naming conventions across jurisdictions.</strong></td>
</tr>
</tbody>
</table>
Findings: Overall

Inventory Overview

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policies</td>
<td>99%</td>
</tr>
<tr>
<td>Capital Programs</td>
<td>97%</td>
</tr>
<tr>
<td>Non-motor Plans</td>
<td>98%</td>
</tr>
<tr>
<td>Codes</td>
<td>93%</td>
</tr>
<tr>
<td>Ordinances</td>
<td>90%</td>
</tr>
<tr>
<td>Design</td>
<td>85%</td>
</tr>
<tr>
<td>Resolutions</td>
<td>26%</td>
</tr>
</tbody>
</table>

Number of Jurisdictions
**Findings: Comprehensive Plan Policies**

**Definition:** Comprehensive Plan priorities and/or requirements.

**Examples**

**Complete Streets:** “Provide complete streets along arterials and arranged as an interconnecting network or grid.”

**Shared:** “Develop, enhance and maintain signature greenways and trails that stretch across the community [...]”
**Findings: Capital Programs**

**Definition:** A spending plan for capital items, such as a Capital Improvement/Investment Plan or Transportation Improvement Plan.

**Findings:**
- Capital Programs
  - Identified in 97% of jurisdictions
  - 84% of jurisdictions included non-motorized projects in their capital programs.
Findings: Non-Motorized Plans

**Definition:** Proposed or planned projects, either included within the Comprehensive Plan or within a stand-alone plan, such as a Master Plan.

### Non-Motorized Plans

<table>
<thead>
<tr>
<th>Number of Jurisdictions</th>
<th>Pedestrian</th>
<th>Bicycle</th>
<th>Shared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stand-Alone</td>
<td>11%</td>
<td>14%</td>
<td>26%</td>
</tr>
<tr>
<td>Incorporated</td>
<td>79%</td>
<td>53%</td>
<td>47%</td>
</tr>
<tr>
<td>None</td>
<td>0%</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>10%</td>
<td>20%</td>
<td>30%</td>
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<td>70%</td>
<td>80%</td>
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<tr>
<td>60%</td>
<td>70%</td>
<td>80%</td>
<td>90%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Existing Trails</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared Use Path</td>
</tr>
<tr>
<td>Protected Bike Lane</td>
</tr>
<tr>
<td>Stripped Bike Lane</td>
</tr>
<tr>
<td>Neighborhood Greenway</td>
</tr>
<tr>
<td>Signed Shared Roadway</td>
</tr>
<tr>
<td>Pedestrian Trail</td>
</tr>
<tr>
<td>Parks &amp; Open Space</td>
</tr>
<tr>
<td>Community Center</td>
</tr>
<tr>
<td>Library</td>
</tr>
<tr>
<td>Potential Transit Hub</td>
</tr>
<tr>
<td>School</td>
</tr>
</tbody>
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<table>
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<td>Library</td>
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<td>School</td>
</tr>
</tbody>
</table>
Findings: Non-Motorized Plans, continued

Non-motorized plan elements include:
- Non-motorized goals, objectives, or strategies beyond those included in the Comprehensive Plan
- Maps of existing non-motorized facilities
- Maps of planned/proposed non-motorized facilities
- Lists of planned/proposed non-motorized projects
Findings: Municipal Codes

**Definition:** Municipal laws.

**Examples**

**Pedestrian:** A code requiring sidewalks along both sides of streets:

a) 12-feet wide along pedestrian-oriented streets.

b) 8-feet wide along non-pedestrian-oriented streets.
Findings: Ordinances

**Definition:** Local law prescribing general, uniform, and permanent rules of conduct for a municipality.

**Examples**

**Pedestrian:** An ordinance providing design objectives and standards for pedestrian zones.

**Bike:** An ordinance establishing bicycle parking standards for multifamily, commercial, and all other uses.
Findings: Design Guidelines

**Definition:** Documented design standards and/or principles.

**Examples**

**Pedestrian:** "Sidewalks shall accommodate...a minimum 9-foot wide clear passageway for walking."

![Diagram showing different types of streets with percentages for Pedestrian, Bicycle, Shared, and Complete Streets]
Findings: Resolutions

**Definition:** A formal expression of opinion, will, or intent by an official body, often addressing a special or temporary matter.

**Examples**

**Bike:** A state resolution describing the benefits of bicycling.

**Complete Streets:** A resolution stating support for and intent to further the principles of “Complete Streets” in their city.
Top Issues for Exploration

- Number of jurisdictions with each policy/regulation type.
- **Common elements** of regional infrastructure policies/regulations.
- Compilation of **best practices** and use of **performance metrics**.
- Nexus between infrastructure policies/regulations and access to transit.
- **Funding mechanisms** for new infrastructure at different organizations.
Key Takeaways

- **Majority of regional jurisdictions** have non-motorized infrastructures policies/regulations.
- **Many policies/regulations beyond** ones using Complete Streets terminology.
- Longstanding commitment to infrastructure in region that has **evolved over time**.
- **Other research sources** may be needed for further exploration.
Goal: Obtain **regionally consistent** bicycle and pedestrian facility and count data sets.
Regional Pedestrian & Bicycle Facilities

**Goal:** Obtain *regionally consistent* pedestrian and bicycle facility data sets.

**Benefits**
- Improve analysis of pedestrian and bicycle travel in the region.
- Consistent evaluation of region-wide sidewalk and bicycle facility connectivity needs.
- Learn more about local active transportation planning and implementation.

**Challenges**
- Inconsistency in data format and years collected.
- Unclear definitions of facilities.
- Lack of data in some areas.
Bicycle & Pedestrian Facility Data Collection

**Bicycle Facility Data**
- Jurisdictions with Data: 74% (63)
- Jurisdictions without Data: 26%
- Total answered: 85
*Data as of July 2020

56 Jurisdictions provided data (87%)

**Pedestrian Facility Data**
- Jurisdictions with Data: 75% (64)
- Jurisdictions without Data: 25%
- Total answered: 85
*Data as of July 2020

55 Jurisdictions provided data (86%)
Regional Facilities Work Program

ACTION PLAN:

Task 1: Collect jurisdictions’ bicycle and pedestrian facility data.

Task 2: Complete coding of bicycle and pedestrian facility data.

Task 3: Request facility data feedback from jurisdictions using webmap tool.
Regional Sidewalk Inventory

**Thresholds**
- All jurisdictions in PSRC region.
- All sidewalks that are on minor arterials and above.

**Data Points**
- Presence of sidewalks (Yes, No, or Partial)
- Direction of sidewalks
### Sidewalk Facilities

#### Initial Data Summary

<table>
<thead>
<tr>
<th>Sidewalk Presence</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete Sidewalks</td>
<td>42%</td>
</tr>
<tr>
<td>Partial Sidewalks</td>
<td>13%</td>
</tr>
<tr>
<td>No Sidewalks</td>
<td>45%</td>
</tr>
</tbody>
</table>
Thresholds

- All jurisdictions in PSRC region.
- All bicycle facilities that are on minor arterials and above.

Data Points

- Presence of bicycle facilities (Yes, No, or Partial)
- Direction of bicycle facilities
- Type of bicycle facilities
  - Marked bicycle lanes
  - Protected bicycle lanes
  - Buffered bicycle lanes
  - Neighborhood greenways
  - Marked shared lanes
  - Paved/striped shoulders
  - Sidepaths
  - Shared use paths
Bicycle Facilities

Initial Data Summary

<table>
<thead>
<tr>
<th>Bicycle Facility Presence</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete Bicycle Facilities</td>
<td>34%</td>
</tr>
<tr>
<td>Partial Bicycle Facilities</td>
<td>12%</td>
</tr>
<tr>
<td>No Bicycle Facilities</td>
<td>54%</td>
</tr>
</tbody>
</table>

About half of the facilities included are paved or striped shoulders, followed next by striped bike lanes, sharrows (marked shared lanes), protected bike lanes, and shared use paths running adjacent to roadways.
Initial Data Summary

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Total Mileage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared-Use Paths</td>
<td>592.7</td>
</tr>
</tbody>
</table>

- Major updates to the regional Shared-Use Paths layer were last made in 2018
Beta Visualizations

Bicycle and Pedestrian Facilities
Example Visualization
ACTION PLAN:

Task 1: Collect jurisdictions’ bicycle and pedestrian facility data.

Task 2: Complete coding of bicycle and pedestrian facility data.

Task 3: Request facility data feedback from jurisdictions using webmap tool.
Regional Bicycle & Pedestrian Counts Inventory

**Goal:** Collect available bicycle and pedestrian count data for use in PSRC travel modeling.

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**Benefits**

- Improve analysis of pedestrian and bicycle travel in the region.
- Learn more about local active transportation planning and implementation.

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**Challenges**

- Inconsistency in data format and years collected.
- Large quantity of data received.
PSRC completed count data collection for 31 jurisdictions by June 2020, including both jurisdictional and WSDOT count data:

### Bicycle Counts
- **Jurisdictions with Data:** 21, 25%
- **Jurisdictions without Data:** 75%
- Total Answered: 85
  *Data as of May 2020
- WSDOT provided permanent and manual count data for 14 additional cities

### Pedestrian Counts
- **Jurisdictions with Data:** 23, 27%
- **Jurisdictions without Data:** 73%
- Total Answered: 85
  *Data as of May 2020
- WSDOT provided permanent and manual count data for 14 additional cities

**17 Jurisdictions provided their own data (81%)**

**17 Jurisdictions provided their own data (74%)**
Initial Analysis

- 31 of 82 cities have count data, either via their own jurisdictional counts or via WSDOT permanent and manual count data (2015-2019)
- Each jurisdiction with count data has data counting pedestrians and bicyclists
- Count data was collected from ~950 locations between 2015-2019
Regional Bicycle & Pedestrian Counts Inventory

Modeling Thresholds
• Count data collected on minor and principal arterials, and shared-use paths
• Count data from 2018 or later

Data Points
• Locations of count data
• Dates count data collected
• Average pedestrian and bicycle counts on weekdays from 6-8AM, 4-6PM, and/or daily
• Directionality of count data
Counts Inventory Work Program

ACTION PLAN:

Task 1: Collect jurisdictions’ bicycle and pedestrian count data.

Task 2: Initial coding of bicycle and pedestrian count data.

Task 3: Use count data to validate PSRC travel models.
Work Program Next Steps

**Summer 2020:**
- Finalize regional bicycle and pedestrian facilities inventory
- Create webmap of bicycle and pedestrian facility data; request feedback from jurisdictions
- Initial bicycle and pedestrian count data inventory

**Fall 2020 & Beyond:**
- Finalize bicycle and pedestrian facilities inventory data
- Update shared-use paths inventory
- Work on planned facilities inventory
Thank you