Living Streets: A Pathway Toward Inclusive, Equitable, and Accessible Pedestrian Streets

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A pathway toward inclusive, equitable, and accessible pedestrian streets
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Glossary of Terms

**Activation**: The process of attracting people to use a space.

**Ciclovía**: A Spanish term of Colombian origin, in which streets are temporarily closed to cars and transformed into thoroughfares for bicycles, roller skates, skateboards, joggers, and other non-motorized forms of transportation.

**Displacement**: The process in which people or businesses involuntarily move out of an area in response to rising rents or other socioeconomic forces.

**Equity**: An ideal situation in which a person's identity does not determine their life outcomes.

**Mobility device**: A wheelchair, walker, powerchair, cane, crutch, or other device used to help people with mobility impairments get around.

**Mode**: A distinct method of transportation, such as walking, cycling, using transit, or driving.

**Multifamily**: A type of housing with multiple units in one building.

**Multimodal street**: A street that accommodates multiple types of transportation, e.g., cars, transit, trucks, bikes, and pedestrians.

**Naturally occurring affordable housing**: Rental housing that is priced relatively low for its neighborhood or region, but is not protected, subsidized, or regulated.

**Open space**: Areas within the City that provide space for recreation, scenic preservation, environmental preservation, and providing pedestrian and bicycle transportation connections.

**Pedestrian**: A person walking or using a mobility device.

**Pedestrian street**: Public spaces that prioritize pedestrians by investing in pedestrian improvements and restricting motor vehicle access. At their best, they provide equitable access, support local communities, encourage economic activity, and provide relief from the challenges of urban environments.

**Placemaking**: The process of making a physical space unique, interesting, and desirable.

**Right-of-way**: A place where members of the public have the legal right to move.

**Rolling**: Using a wheelchair, powerchair, scooter, Segway, or other small-wheeled device.

**Streets**: For this document, "streets" include public rights-of-way that were designed for or had historically prioritized the movement of motor vehicles. They are part of the broader transportation network.

Abbreviations

**ADA**: Americans with Disabilities Act

**LEP**: Limited English Proficiency

**MURP**: Master of Urban and Regional Planning

**PBA**: Portland Business Alliance

**PBOT**: Portland Bureau of Transportation

**POC**: People of Color

**PSU**: Portland State University
## Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ch I: Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Ch II: Types of Pedestrian Streets</td>
<td>9</td>
</tr>
<tr>
<td>Ch III: Evaluation Framework</td>
<td>37</td>
</tr>
<tr>
<td>Ch IV: Candidate Streets</td>
<td>47</td>
</tr>
<tr>
<td>Ch V: Background</td>
<td>71</td>
</tr>
<tr>
<td>Ch VI: Outreach &amp; Engagement</td>
<td>93</td>
</tr>
<tr>
<td>Ch VII: Conclusion</td>
<td>115</td>
</tr>
<tr>
<td>Appendix A: Research</td>
<td>A1</td>
</tr>
<tr>
<td>Appendix B: Engagement Summary</td>
<td>B1</td>
</tr>
<tr>
<td>Appendix C: Intercept Survey</td>
<td>C1</td>
</tr>
<tr>
<td>Appendix D: Street Selection Process</td>
<td>D1</td>
</tr>
</tbody>
</table>
Streets in the Public Realm

Streets weave the fabric of urban life. They are critical public spaces that encourage social interaction, human health, economic vitality, and urban livability. They are where we come together to celebrate, to rally, to commemorate, and to contemplate. Streets connect us to places we need to go and help form strong communities.

Streets are public rights-of-way used for the movement of people and goods. Yet, city streets can do so much more. By prioritizing pedestrians, streets can support all users, dedicating more space for people to gather, walk, roll, and rest.

Pedestrians First

The moment we step off the bus, park a bicycle, move by wheelchair, or get out of a car — we all become pedestrians. By putting pedestrians first, cities can improve outcomes for all transportation modes and transform streets into welcoming public spaces. Since 2009, the Portland Bureau of Transportation (PBOT) has aimed to prioritize pedestrians above all other transportation modes. Pedestrian streets help achieve this goal by reallocating space that was once dedicated to the movement and storage of cars to social spaces for people to interact and recreate.

This document, informed by extensive academic research (Chapter 5) and stakeholder outreach (Chapter 6) attempts to answer the question, what could pedestrian streets look like in Portland’s Central City?

**Streets** - For this document, streets include public rights-of-way that were designed for or had historically prioritized the movement of motor vehicles. They are part of the broader transportation network.

**Pedestrian Streets** - Public spaces that prioritize people walking by investing in pedestrian improvements and restricting motor vehicle access. At their best, they provide equitable access, support local communities, encourage economic activity, and provide relief from the challenges of urban environments.
The Problem

Portland’s 2035 Transportation System Plan sets an ambitious target for how people travel to the Central City. Portland’s goal is for people to make 85 percent of their daily trips in and out of the Central City by walking, biking, riding transit, or carpooling by 2035.² The Central City contains the region’s most concentrated network of transit and bicycle infrastructure; however, motor vehicles, particularly cars, remain a priority on the streets. Many modern US cities, Portland included, were redesigned and reshaped to make car travel easier and more convenient, often at the expense of other transportation modes. Today, cars often dictate the orientation and overall design of our streets and take up the most space. While the Central City contains just three percent of Portland’s land, the area is expected to contain thirty percent of the city’s population growth by 2035.³ As the city grows in numbers and residences become more compact, new and current residents, workers, and visitors will need safe public spaces. Pedestrian streets transform public space that was historically dedicated to cars, and in turn, create distinct places that primarily serve people.

“A space that can fit thirty people can only fit one car. It’s only fair and efficient to dedicate space to people instead of cars.”

Mo Younis, PSU Student

The Solution? Pedestrian Streets.

A pedestrian street limits motor vehicle access partially or entirely, freeing up this valuable part of the public realm for people walking, toddling, using mobility devices, and bicycling. Pedestrian streets provide inviting public spaces to intermingle, relax, and entertain. They also provide relief from a number of challenges in our increasingly urbanized world.

The Central City also has a variety of pedestrian spaces that are not included in our analysis. Plazas, public stairs, trails, private streets, and other pedestrian rights-of-way that are not integrated into the broader street grid are important for the pedestrian experience, but they fall outside of our definition of “street.”
Environment
Pedestrian streets seek to reverse the past century of prioritizing cars, a leading contributor to air pollution and global greenhouse gas emissions.

Safety
Motor vehicles pose serious threats to pedestrians and bicyclists, particularly when operating at high speeds and volumes. Pedestrian streets provide areas of refuge for people to safely walk, roll, and access transit.

Health
Pedestrian streets provide convenient spaces for human movement. They encourage physical activity and reduce pollution in urban environments, resulting in improved public health outcomes.

Community
Growing urban populations and high demand for housing have resulted in smaller living spaces. With intentional implementation and design, pedestrian streets offer an inviting public space for social interactions and community building.

Culture
Pedestrian streets can provide a space for the mixing of people and cultures, and provide venues to celebrate traditions and events of marginalized communities.

Economy
Street parking and vehicle travel lanes serve a limited number of people and occupy valuable real estate. Pedestrian streets can make better use of this space, increasing foot traffic to businesses and adding value to adjacent properties.
Project Approach

Pedestrian streets can help support the City's transportation and urban design goals. This project creates tools and strategies to guide PBOT in the prioritization of pedestrians and implementation of streets that will serve the city's diverse and growing population.

The goal of our project is to help PBOT achieve the vision of a Central City with human-scaled, accessible streets, complete with connections, open space, and recreation opportunities that offer a range of different experiences for public interaction.

To meet this goal, we established three objectives.

**Identify types of pedestrian streets**
Chapter 2 classifies five different types of pedestrian streets, which PBOT can use to determine how a street can best serve as a public space dedicated to pedestrians. This tool is designed to serve cities of varying size, locations, and demographic makeups.

**Evaluate success**
Chapter 3 incorporates findings from academic research and public engagement to determine the characteristics necessary for a pedestrian street to be successful. This tool can be modified to match the context and priorities of other cities.

**Provide recommendations**
Chapter 4 outlines next steps for PBOT to take to implement pedestrian streets for public use. This strategy relates to specific candidate streets, but includes lessons that can be transferred to any pedestrian street implementation.
Project Process

This plan was developed over the course of six months by a group of MURP students at PSU at the request of PBOT. This timeline provides an overview of the process employed to deliver these objectives within scope and on schedule.
Works Cited


4  Portland Bureau of Planning and Sustainability, *Central City 2035*, 64.

Image Sources


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Arabat Street, Moscow, Russia
Pedestrian streets provide a range of benefits to urban residents and visitors. Around the world, people have enjoyed successful streets for decades. In the US, however, pedestrian streets are sparse. In the late 1900s, a surge of pedestrian malls were built in response to people fleeing city centers for the suburbs. Over time, the majority of these streets saw declining commerce and were given back to cars. A handful of pedestrian malls continue to exist in the US, demonstrating the potential of pedestrian streets in a North American context.
A successful pedestrian street can exist in many different forms. Some pedestrian streets are quiet and secluded, while others are vibrant and alive with activity. Some are designed to increase foot traffic to businesses, while others are dedicated to cultural events and social gatherings. A successful pedestrian street serves the needs of the surrounding neighborhood and the broader city.

This chapter defines five unique visions, or types, for successful pedestrian streets. The types are intended for streets in Portland and other North American cities of similar size and population density. The descriptions and visuals for each type encourage readers to imagine pedestrian streets in their neighborhood.

**The Five Types**

1. **Bustling Commercial Street**
2. **Neighborhood Green Street**
3. **People-Powered Street**
4. **Street to Stay and Play**
5. **Market Street**
Key Ingredients

From academic research (Chapter 5) and stakeholder outreach (Chapter 6), our team identified nine key ingredients, or attributes, for each type of pedestrian street.

1. **Land use along the street.** This attribute explains the uses on the land directly adjacent to the street, such as land used for businesses, housing, or green space.

2. **Land use in the broader neighborhood.** Each type of pedestrian street is situated within a different neighborhood. This attribute explains how the land is used in the street's surrounding neighborhood.

3. **Transportation modes.** This attribute identifies the methods, or modes, of transportation that support the different types of pedestrian streets. It also describes key transportation considerations.
   Note: See glossary for the definition of transportation mode.

4. **Design elements.** Design elements, such as trees and greenery, building height, and public seating, enhance the vision of each type. While all streets are designed primarily for the pedestrian experience, each type consists of different features that support their primary function.

5. **Main users.** Each type is designed and programmed in a way that attracts different users. The users referenced in the chapter include: neighbors, who come from surrounding residences, locals from the region, and tourists from broader US and international locations.

6. **Business mix.** This attribute explains the ideal variety of businesses that exist on the street. Depending on the type, the representation of businesses is specified to support local community members and underrepresented groups.

7. **Anchor(s).** Every pedestrian street must have at least one predominant attraction that draws people to the street. This is the “anchor.” While the key attractor will vary based on the context, this chapter identifies which kinds of anchors are best suited for each type of pedestrian street.

8. **Equity.** In an effort to create equitable urban spaces, this attribute considers how pedestrian streets support marginalized communities, specifically low-income populations, people of color, people with disabilities, and those experiencing houselessness.
   Note: For an emerging concept on how pedestrian streets can serve people experiencing houselessness, see page 104.

9. **Permanence.** Pedestrian streets can be temporary or permanent. They can also be implemented in phases, beginning with a temporary demonstration that leads to a permanent closure. This attribute identifies the level of permanence, temporary, permanent, or phased, that creates the best use of the street.
While other types of car-free spaces share similar qualities as pedestrian streets, they are not included in the scope of this report. Some examples of these other car-free spaces include:

**Trails.** Unlike pedestrian streets, trails are not always part of the transportation network. Trails often diverge into natural settings, while pedestrian streets are direct routes that provide connections throughout urban areas of the city.

**Private neighborhood streets.** Private neighborhood streets are exclusive to one neighborhood or community.

**Private shopping streets.** Private shopping streets are commercial enterprises designed to make a profit by catering to a select groups of customers. They may restrict access with hours of operation and private security guards. Public shopping streets, on the other hand, serve a variety of functions for public use, are open at all hours, and are intended to serve the public good.

**Transit dedicated rights-of-way.** Transit dedicated rights-of-way offer car-free spaces that often allow transit vehicles to operate at higher speeds and frequencies. Typically these streets offer some pedestrian amenities, such as sidewalks or stairways to access the transit system, but they are limited. These streets were not included in our analysis because, while car-free, they do not prioritize pedestrians and placemaking.

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Bridgeport Village, Tigard, Oregon | Outdoor shopping center with private car-free shopping streets
Common Characteristics

Each of the five types of pedestrian streets each serve a different purpose. However, all pedestrian streets, no matter what type they fit into, share the following attributes.

**Caretaker.** Pedestrian streets, like all public areas, require maintenance and management. Each type of street has a caretaker that ensures the street has a healthy business, residential, and visitor environment. The caretaker could be a non-profit organization, a neighborhood association, or an interested business that forms an integral part of the community context. For example, Santa Monica’s Third Street Promenade is managed by a coalition of interested stakeholders.¹

**Mixed land use.** Pedestrian streets attract the most users when they are located in a neighborhood with a dense mix of land uses, especially homes, businesses, and services, which ensure the street will be busy with pedestrians.

**Transportation network.** Every pedestrian street must be integrated into the broader walking, biking, and transit networks, allowing pedestrians to access the space without having to drive.

**Transit.** Every rider that steps off a bus or train instantly becomes a pedestrian. For this reason, transit can support all types of pedestrian streets, whether it operates on the street or on an adjacent street. Transit on pedestrian streets, however, should be quiet, low-emission, and should operate at slow speeds to create a comfortable and safe pedestrian environment.

**Inclusivity.** All pedestrian streets are implemented with ADA-compliant design, public seating, and anti-displacement measures adopted in the 2035 Comprehensive Plan.²

**Pedestrian environment.** Buildings, landscaping, and other features are scaled to enhance the comfort, safety, and enjoyment of people walking, rolling, or relaxing in the space. Trees and greenery provide shade, clean air, and beauty. Public seating encourages people to sit and stay.

**Business support.** The relationship between pedestrians and businesses is mutual and reinforcing. Businesses are vital advocates for their streets and provide services that people want. Pedestrian streets support businesses with increased foot traffic by making it easier for more people to visit.

The next section of this chapter provides a description of each of the five types, an explanation of the defining attributes, and a visual representation of each space.
Types of Pedestrian Streets

Type 1: Bustling Commercial Street

Bustling Commercial Streets are lively pedestrian zones. The space is energetic, visually dynamic, and used by a variety of people for shopping, playing, dining, and relaxing. Trees provide shade, fountains welcome kids on hot sunny days, and street-level sidewalks allow cafe seating to spill onto the street. The streets support businesses by making storefronts easy to see and easy for people to enter. Bustling Commercial Streets are frequently filled with pedestrians, creating a socially-rich environment full of activity. By providing a pleasant, safe area for mingling and shopping, Bustling Commercial Streets have a high tourism value.

Examples of Bustling Commercial Streets

Qianmen Street, Beijing, China

Rua XV Novembro, Curitiba, Brazil
Bustling Commercial Street Attributes

1. **Along the street:** A variety of retail stores, restaurants, and cafes. Small public parks allow children, teens, and older adults to play, rest, and mingle.

2. **Broader neighborhood:** A mix of dense residential, commercial, offices, or other high-intensity uses that allow people to walk to the street from their homes or workplaces.

3. **Transportation:** Primarily pedestrian with flexibility for freight deliveries, transit, bikes, and infrequent car access.

4. **Design:** Shops and restaurants are located close together, allowing people to walk short distances between destinations. Storefronts are varied. Life on the street and indoors blend together with outdoor seating and retail displays, patios, open doors, and plenty of windows. The street has maps and signage that are easy to understand for the wide range of visitors.

5. **Users:** Attracts all varieties of users, including neighbors from surrounding areas, locals from the region, and tourists from further destinations.

6. **Business mix:** The ground floor primarily consists of retail, restaurants, cafes, and bars, with a variety of services and other entertainment (e.g. theaters) to ensure activity at all times of day. Residences and office space are on upper floors.

7. **Anchor:** Business(es) with broad appeal to attract people from the region and beyond.

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**Transit Malls**

Transit malls often prohibit motor vehicle traffic in favor of increasing the speed and efficiency of public transit. These spaces can provide environments that allow pedestrians and bicyclists to move more freely and limit the risk of collision. When transit malls effectively prioritize pedestrians’ experience and bring foot traffic to businesses on the street, transit malls function as Bustling Commercial Streets.

Transit supports pedestrian streets in multiple ways. First, transit provides efficient travel for longer distances, bringing pedestrians to dense areas that are more walkable. Second, transit riders are additional pedestrians on the street as they walk between transit stops and destinations.

8. **Equity:** The street supports a diverse mix of businesses, cultures, and users through accompanying policies that incentivize entrepreneurship and employment opportunities for underrepresented communities. Social services are also mixed in with commercial enterprises.

9. **Permanence:** Permanent implementation provides visitors with the certainty of knowing the street always functions in the same way and provides businesses with a consistent environment. Implementations can vary by time of day, day of week, or season in places with regularly fluctuating levels of pedestrian activity.
Type 1: Bustling Commercial Street

- Dense residential mixed with commercial
- Trees + other landscaping
- Outdoor dining
- Variety of restaurants, cafes, shops, + services
- Pedestrian-friendly buildings + storefronts
- Pedestrian-scale lighting
- Accessible design
CHAPTER II     TYPES OF PEDESTRIAN STREETS

BUSINESSES ACTIVATE THE STREET AT ALL HOURS

CONNECTED TO THE TRANSIT NETWORK

PUBLIC SEATING

DIRECTIONAL SIGNS + MAPS
Type 2: Neighborhood Green Street

Neighborhood Green Streets transform spaces dedicated to cars into community living rooms. Friends share a meal at a picnic table or play a game of chess. Kids safely run around while their parents catch up on work at an outdoor table. These are natural places for celebrating birthdays, holidays, or just a warm evening. Urban dwellers grow their own produce in community gardens. People find solace in the peaceful shade of trees.

Examples of Neighborhood Green Streets

South Park Blocks, Portland

NW 21st Place, Portland
Neighborhood Green Street Attributes

1. **Along the street:** A mix of residences, retail, grocers, restaurants, and services. Food carts and vendors line the sidewalk and street surface where space allows.

2. **Surrounding area:** Mixed, with a large number of residences.

3. **Transportation:** Mostly walking, biking, and rolling, with potential for car access using traffic calming design features. Transit services can exist with clean-fueled vehicles that are appropriately sized for the context.

4. **Design:** The street design supports the community, with elements such as artwork, seating, and playgrounds.

5. **Users:** Primarily neighborhood residents and workers, with some local visitors from the broader region.

6. **Business mix:** Locally-owned businesses frequented by surrounding neighbors.

7. **Anchor:** People visit the street because they live and work nearby. Neighborhood residents and employers support and manage the street.

8. **Equity:** Streets are designed to reflect the surrounding community, serve all people, provide amenities for urban dwellers like gathering spaces and restrooms, and are located near subsidized affordable housing.

9. **Permanence:** The street is a permanent part of the neighborhood.
Type 2: Neighborhood Green Street

- DENSE RESIDENTIAL MIXED WITH COMMERCIAL
- PEDESTRIAN-FRIENDLY BUILDINGS + STOREFRONTS
- TREES + OTHER LANDSCAPING
- PLAY AREAS
- ACCESSIBLE DESIGN
Type 3: People-Powered Street

People-Powered Streets dedicate safe road segments for people to get around by walking, biking, and rolling. They are important parts of the broader transportation network, making preferred connections between other routes and destinations. People-Powered Streets vary in length, acting as short links in the network or as routes that continue for miles.

People-Powered Streets directly advance goals for equity, safety, health, and sustainability. Safe and comfortable transportation routes allow all people to get around without the expense of a car, providing particular value to those with lower incomes. The lack of motor vehicles allows people to travel comfortably without worry of being hit by a car. Reducing the number of trips by car reduces air and noise pollution, creating a quieter and cleaner environment. Since pedestrians and bicycles take up less space than cars, the streets can carry a large number of people, while still providing amenities such as bathrooms, water fountains, public art, and seating.

Examples of People-Powered Streets

Sunday Parkways, Portland

South Park Blocks, Portland
People-Powered Street Attributes

1. **Along the street**: Open space, retail, restaurants, residences, or a combination.

2. **Broader neighborhood**: Part of the bicycle and pedestrian networks, the streets connect people to other pedestrian streets or popular destinations, such as workplaces, schools, parks, and services.

3. **Transportation**: Streets prioritize walking, biking, and rolling and connect users to the larger transportation network. A range of transit services can be incorporated with appropriate separation.

4. **Design**: People-Powered Streets can take many forms, but must provide a preferred route to reach common destinations. Physical separation between modes reduces potential for conflict. Routes include water fountains and toilets. Directional signs and pavement markings are designed for people walking, biking, and rolling.

5. **Users**: People living throughout the region, including nearby residents, use the street as a segment along their route or travel here specifically to enjoy the safe, active space.

6. **Business mix**: Supportive businesses, such as food carts, cafes, bike shops, day cares, or restaurants may be located along the route to serve community needs.

7. **Anchor**: The streets are integrated into a network of pedestrian and bicycle transportation routes, naturally attracting users.

8. **Permanence**: Permanent, temporary as a Ciclovía-type event, or phased.

9. **Equity**: People-Powered Streets prioritize walking and biking, two of the most affordable and accessible transportation modes.
Type 3: People-Powered Street

DISTINCT SPACES FOR SLOW + FAST MOVEMENT

MIX OF RESIDENCES + BUSINESSES

PEDESTRIAN-FRIENDLY BUILDINGS + STOREFRONTS

TREES + OTHER LANDSCAPING

PUBLIC SEATING

DIRECTIONAL SIGNS + PAVEMENT MARKINGS

PEDESTRIAN-FRIENDLY BUILDINGS + STOREFRONTS

MIX OF RESIDENCES + BUSINESSES

DISTINCT SPACES FOR SLOW + FAST MOVEMENT

TREES + OTHER LANDSCAPING

PUBLIC SEATING

DIRECTIONAL SIGNS + PAVEMENT MARKINGS
CHAPTER II

TYPES OF PEDESTRIAN STREETS

EASILY CONNECTS TO FREQUENTED DESTINATIONS

DRINKING WATER + TOILETS

CONNECTED TO THE TRANSIT NETWORK

PEDESTRIAN-SCALE LIGHTING

ACCESSIBLE DESIGN

CONNECTED TO THE TRANSIT NETWORK

ACCESSIBLE DESIGN

CHAPTER II     TYPES OF PEDESTRIAN STREETS 25
Type 4: Street to Stay and Play

Streets to Stay and Play provide spaces for lively activities, including kid-friendly events, concerts, festivals, and celebrations. Concert-goers enjoy a safe path to the stage. People come to play and they stay to enjoy the street’s nearby businesses, parks, or other attractions.

Events are programmed by a management association. The street is open for use by everyone in the community. Permits are issued in a way to encourage diverse programming from a wide variety of communities. Supportive elements, like tents, chairs, security, staff, barricades, and cones, are made available by the street manager, whenever possible.

Examples of Streets to Stay and Play

Sunday Streets, San Francisco

Place Simon-Valois, Montréal, Canada
Street to Stay and Play Attributes

1. **Along the street:** Businesses that complement programmed events mixed with other uses.

2. **Broader neighborhood:** A mix of residential and commercial.

3. **Transportation:** To support a safe space for events and activities, walking is the primary mode served, with options for separated biking zones. While transit does not serve the street during activated hours for safety reasons, the street is adjacent to the transit network for easy access.

4. **Design:** An open space, similar to a plaza, that is designed to be flexible. Features can include natural sunlight, playgrounds, water features, and art.

5. **Users:** Neighbors, locals, and tourists, depending on the scale of the space and the type of event, programming, and marketing.

6. **Business mix:** Restaurants, retail, and entertainment that complement the event space.

7. **Anchor:** Programmed events are the primary draw to the street. Surrounding entertainment uses, such as shops and restaurants, invite people to spend additional time on the street.

8. **Equity:** Streets to Stay and Play prioritize programming and events for underrepresented communities, creating a space where diversity is celebrated and a mix of people interact and socialize. Through this prioritization, the street provides economic opportunities for underrepresented communities.

9. **Permanence:** Permanent or temporary (active during events, but car-access may be available at other times).
Type 4: Street to Stay and Play

- Trees allow sunlight + views
- Food carts
- Performance space
- Mix of residential + commercial
- Pedestrian-friendly buildings + storefronts
Type 5: Market Street

Market Streets host a dynamic mix of performers and merchants. Vendors consist of a variety of food carts, farm stands, coffee carts, craft booths, or other merchants. The environment is similar to traditional bazaars, featuring energetic and diverse businesses, art, and community-building. Streets may include permanent infrastructure, such as tents and heaters during rainy or cold seasons, helping create a dedicated exchange space.

Examples of Market Streets

Mississippi Street Fair, Portland

Jalan Petaling, Kuala Lumpur, Malaysia
Market Street Attributes

1. **Along the street:** Uses that complement vendors, including parks, businesses, and residences.

2. **Broader neighborhood:** A dense mix of uses within walking distance make it easy for people to visit.

3. **Transportation:** Walking, biking, and rolling during operating hours. During non-operating hours, such as weekdays or early mornings, the street can allow access for deliveries and potentially cars and transit, as infrastructure allows.

4. **Design:** Sunlight, greenery, and infrastructure designed at a pedestrian-scale enhance the experience. The street has appropriate spacing between vendors and businesses and includes public seating, tables, and clear directional signs. Streets may be covered for weather protection.

5. **Users:** Visitors are neighbors, locals, or tourists. Local merchants and street performers are prioritized, with opportunities for performers and sellers from outside the region.

6. **Business mix:** Streets do not require brick and mortar businesses to be successful. Where they do exist, they are complementary and support vendors by attracting more users to the area.

7. **Anchor:** Merchants and performers.

8. **Equity:** Like Streets to Stay and Play, Market Streets provide a space to celebrate diversity and invest in underrepresented communities. By allowing people to launch businesses with minimal investment, the street provides opportunities for lower-income entrepreneurs. Incentives are specifically designed to support people of color, women, and low-income vendors.

9. **Permanence:** Market Streets are often temporary, opening once a week, once a month, during summer months, or during working hours. This can allow motor vehicle traffic at other times. They can also be permanent, like a traditional covered bazaar, with permanent infrastructure including tents and protective barricades.
Type 5: Market Street

- Mix of residences + offices on upper floors
- Trees + other landscaping
- Pedestrian-friendly buildings + storefronts
- Vendors
- Accessible design
CHAPTER II 
TYPES OF PEDESTRIAN STREETS

CONNECTED TO THE TRANSIT NETWORK
ADJACENT BUSINESSES COMPLEMENT MARKET
FOOD CARTS
PUBLIC SEATING
PEDESTRIAN-SCALE LIGHTING
Works Cited


Image Sources

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https://www.flickr.com/photos/ikkoskinen/366509459
Sunday Parkways, Portland | Evaluating alignments for the Green Loop
Successful pedestrian streets, as defined in this report, cannot be achieved by simply removing cars from a street. To help create a space that will attract people, support businesses, and promote the new environment, this chapter provides an evaluation framework for candidate pedestrian streets.

This tool identifies characteristics that are vital to the success of each type of pedestrian street. It also allows local jurisdictions to choose the most appropriate locations for pedestrian streets, while minimizing the risk of underutilization.

**Structure**

Based on research and public engagement, our team identified 23 criteria relevant to the success of any pedestrian street. Each criterion supports one of the attributes outlined in Chapter 2.

Because success looks different for each of the five types of pedestrian streets, there are five separate evaluation matrices, each with the criteria weighted appropriately to that type. Each criterion comes with a base rule that details which factors support the successful implementation of that type of pedestrian street. Occasionally, special considerations describe exceptions or alternate routes to success. While some of the criteria are tailored to Portland, users in other cities should be able to transfer the basic concepts to their own context.
How to Use

Activists, planners, engineers, and local decision makers can use the evaluation framework to help respond to the questions, “Where can we implement these streets?”, “Would this street be successful?”, and “What do we need to do to ensure our implementation is successful?” If a street scores poorly in its current form, a helpful next question would be: “Is this low-scoring attribute something that we can change?” The evaluation framework is one tool for answering these questions, but should not be the only method used to understand the street. The framework also requires in-depth stakeholder engagement and a robust planning process to move pedestrian street projects forward.

List of Criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transparency</td>
<td>Places with more doors, windows, patios, and street connections are more transparent, whereas places with tall fences, windowless walls, or streets with otherwise poor visibility are less transparent.</td>
</tr>
<tr>
<td>Population Density</td>
<td>Importance of residential population density to the area surrounding the street.</td>
</tr>
<tr>
<td>Street Classification</td>
<td>Restrictions for pedestrian street types based on a street’s classification in the City of Portland’s Street Classification System.</td>
</tr>
<tr>
<td>Active Transportation Network</td>
<td>Restrictions to street selection based on the City of Portland’s 2035 Transportation System Plan Pedestrian and Bicycle Classification Definitions.</td>
</tr>
<tr>
<td>Transit Access</td>
<td>Restrictions to street selection based on proximity to transit service routes and the City of Portland’s 2035 System Plan Transit Classification Definitions.</td>
</tr>
<tr>
<td>Transit Presence</td>
<td>Impact of transit running directly along the street.</td>
</tr>
<tr>
<td>Criteria</td>
<td>Definition</td>
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<tr>
<td>Emergency Access</td>
<td>Restrictions to street selection based on the City of Portland's 2035 Transportation System Plan Emergency Response Classification Definitions.</td>
</tr>
<tr>
<td>Freight Access</td>
<td>Restrictions to street selection based on the City of Portland's 2035 Transportation System Plan Freight Classification Definitions.</td>
</tr>
<tr>
<td>Street Design Classification</td>
<td>Restrictions to street selection based on the City of Portland's 2035 Transportation System Plan Street Design Classification Definitions.</td>
</tr>
<tr>
<td>Building Form &amp; Height</td>
<td>Building form is often described in the way in which the building is used (retail, residential, etc). Building Height is simplified into &quot;High-rise&quot;, &quot;Mid-rise&quot;, or &quot;Low-rise&quot; categories.</td>
</tr>
<tr>
<td>Building Density</td>
<td>How tightly spaced are the buildings on the street. When discussed in an urban context, tightly clustered buildings with little to no space between is considered to be highly dense, whereas single-family homes with more spacing between one another are less dense.</td>
</tr>
<tr>
<td>Landscaping</td>
<td>Landscaping is often considered in a permanent sense, but for some of the street types temporary landscaping can be considered. Landscaping can include street trees, planter boxes, community gardens, and parks.</td>
</tr>
<tr>
<td>Neighborhood, Regional, International, Tourism</td>
<td>Importance of the type of user(s) that street should serve. Neighborhood users come from the area immediately surrounding the street, regional users come from the broader city and metropolitan region, and “International / Tourism” users hail from parts outside of the Portland metro.</td>
</tr>
<tr>
<td>Criteria</td>
<td>Definition</td>
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<tr>
<td>----------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Industry &amp; Ownership</strong></td>
<td>Industry refers to &quot;what&quot; is on the street - grocery stores, social services, cafes, bars, movie theaters. Ownership refers to &quot;who&quot; is providing it — a small local business, a regional business, a large conglomerate.</td>
</tr>
<tr>
<td><strong>Frequency</strong></td>
<td>Frequency describes how often the users of the street would be expected to visit. Some retail offers more unique experiences that a user would visit monthly or less often, where other uses like a cafe or grocery store might be visited weekly or even daily.</td>
</tr>
<tr>
<td><strong>Champions</strong></td>
<td>Champions are important to all of these implementations. This measure details which types of champions are best suited for each type of street.</td>
</tr>
<tr>
<td><strong>Attractions</strong></td>
<td>Some streets rely heavily on attractions to provide a thriving, car-free experience whereas others do not. This category details whether attractions are important, and if so, which ones are best suited for the given street type.</td>
</tr>
<tr>
<td><strong>Permanent, Temporary</strong></td>
<td>Whether the street can thrive as a temporary or permanent solution, or in some cases, both.</td>
</tr>
<tr>
<td><strong>Accessibility &amp; Mobility</strong></td>
<td>Addresses how people with disabilities or other limitations can access the space.</td>
</tr>
<tr>
<td><strong>Human Health Needs (Sanitation)</strong></td>
<td>How well does the design of the street incorporate sanitation and other needs for all users including houseless or under-housed communities?</td>
</tr>
</tbody>
</table>
| **Improving the Experience for POC & Low-Income People** | Does the space and programming offer opportunity for people of color and cultural groups to feel welcome, safe, and included?  \  
Where is the street proximate to regulated and naturally occurring affordable housing? |
Developing criteria of the evaluation framework
Framework Overview

The following table is an overview of the criteria as they apply to each street type. It allows side-by-side comparison of the street types, and it offers an initial sense of the potential of a given street if there are multiple visions under consideration. For more detail, consult Appendix D, which contains a unique framework for each of the five street types.

### Importance of Characteristics by Type of Street

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Criteria</th>
<th>Bustling Commercial Street</th>
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<tbody>
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<td><strong>Land Use</strong></td>
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<td>Population Density</td>
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<td><strong>Transportation</strong></td>
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<td>Street Design Classification</td>
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<td><strong>Design Elements</strong></td>
<td>Building Form + Height</td>
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<td>Building Density</td>
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<td></td>
<td>Landscaping</td>
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<td><strong>Main Users</strong></td>
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<td>Local</td>
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<td>Regional/Tourism</td>
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<td><strong>Business Mix</strong></td>
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<td></td>
<td>Frequency</td>
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<td>Permanent/Temporary</td>
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### Neighborhood Green Street

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<tr>
<th>Neighborhood Green Street</th>
<th>People-Powered Streets</th>
<th>Street to Stay and Play</th>
<th>Market Street</th>
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</table>
Image Sources

page 36, Sunday Parkways: Greg Raisman, 2018, via Flickr
https://www.flickr.com/photos/gregraisman/30024977418

page 41, Developing criteria: Living Streets Project Team, 2019
The Living Streets project reimagines Portland’s Central City as an urban network of pedestrian-friendly public spaces that enrich social, cultural, and economic interactions. To help PBOT and interested stakeholders understand exactly where and how pedestrian streets can be implemented, our project identifies and evaluates three candidate streets: SW Ankeny, SW Yamhill, and SW Montgomery.

Our team selected three candidate streets through an iterative process based on the characteristics described in the evaluation framework (Chapter 3: Evaluation).

**SW Ankeny**

SW Ankeny balances a variety of uses in its short, two-block stretch. The street serves a diverse group of pedestrians, including locals and tourists accessing shops, restaurants, and nightlife. Additionally, many people rely on this space to access nearby social services and the public park. An ideal champion for SW Ankeny will strike a balance between providing access to supportive services, preserving access to the public space, and bolstering the economic vitality of local businesses and tourism.

**SW Yamhill**

Converting SW Yamhill into a pedestrian street creates an opportunity for a Bustling Commercial Street that increases foot traffic to nearby retail. SW Yamhill is served by high-ridership lines at the hub of Portland’s transit network and connects two popular public spaces, Pioneer Courthouse Square and Director Park. However, the street still needs a champion to reach implementation and address concerns from the business community.

**SW Montgomery**

SW Montgomery is a popular connection for people walking and bicycling on PSU’s campus, is not a transit route, and has low traffic volumes. In its current state, the street is best positioned to become a People-Powered Street. With additional resources, Montgomery would best function as a Street to Stay and Play. In May 2019, the University hosted a demonstration event on the street that illustrates how a dedicated champion can help activate the space with events and programming (Chapter 6: Outreach and Engagement).
Street Selection

We relied on local knowledge of the Central City, feedback from our technical focus group (Chapter 6: Outreach & Engagement), and lessons learned from our research (Chapter 5: Background) to identify promising pedestrian street candidates. This process yielded a list of approximately 30 locations within the Central City that became the focus of the candidate selection process.

Through the process of identifying candidate streets, we also considered where each type of pedestrian street may fit in the Central City (Figure 2).

Locations are based on elements currently in the city, including the presence of residences and businesses, apparent champions, tourist activity, and need for safe biking, walking, and rolling routes. These locations will evolve as the Central City grows.

Determining Factors for Successful Implementation

Through our research and outreach efforts, we learned that successful implementation of a pedestrian street depends on a number of key contributing factors. Our team used the following factors to refine our initial list of streets and gauge the viability of each candidate street. After applying these factors, we narrowed down the list of candidate streets to approximately 12 locations across the Central City (Figure 1).

- Role of the street in the overall transportation network
- Level of existing pedestrian activity
- Nearby land uses and park space
- Residential and commercial densities
- Activities at all times of day
- Impacts to parking and driveways
Figure 1. Candidate Street Results from the Evaluation Framework
This map is meant to inspire a vision for the future of Portland. Actual implementation requires further study, including evaluation based on our framework and robust outreach with local communities, to inform the quantity, quality, and specific locations of future pedestrian transformations.
Figure 2: Central City Areas with Potential to Support Pedestrian Streets, by Type
Developing the evaluation framework
Guiding Street Selection Factors

The following factors, among others, informed our selection process.

- Ensuring our detailed evaluation included a representation of different types of pedestrian streets.
- Identifying locations with strong potential champions.
- Montgomery Street offers a unique opportunity to study the street in parallel with PSU’s planned month-long demonstration in May 2019.
- NW 13th Street is one of the more compelling opportunities on the initial list, however we wanted to refrain from providing potentially duplicative efforts to those already completed and underway in the neighborhood.¹
- Studying Winning Way and Benton Street near the Moda Center is appealing in terms of understanding how these streets could support Albina Vision’s plans for the N/NE Quadrant of the Central City.² We elected not to study these areas because the reimagining of the streets surrounding the Rose Quarter deserves to be led and executed by the leaders of Albina Vision.
SW Ankeny

Location

The first candidate street is SW Ankeny between Broadway and Park Ave. This two-block segment of SW Ankeny is at the northern edge of downtown Portland.

Street Type

When determining the appropriate pedestrian street type for each candidate, we considered how the vision of that type could support existing users of the street. In evaluating SW Ankeny, we found the street serves different purposes for its users at either end.

The west end of this street segment, near SW Park, is adjacent to the North Park Blocks. The park’s proximity to social services providers, such as Central City Concern and the Portland Rescue Mission, make this park a popular location for some of the city’s most underserved populations, serving as a place of congregation and a resting place for some members of Portland’s houseless community.

To the east, near SW Broadway, the street is a destination for dining and nightlife, with attractions like Bailey’s Tap Room, The Upper Lip, Santeria, and Mary’s Club generating the majority of activity.

Our team recommends any transformation of this street works to serve all current and future users of the street. One way to achieve this is through implementation of a Market Street that caters to all types of users.

Evaluation

The evaluation framework for a Market Street places high importance on Human Health and Sanitation needs, which would be beneficial for all of Ankeny’s current users. This type also suggests supporting culturally-specific and POC-run businesses to align with the Improving the Experience for POC criterion. Survey respondents described the importance of finding a balance between keeping a place clean and safe and over-policing. The recognition and practice of this mindset is crucial to ensuring an equitable implementation. Like all pedestrian streets, it is important to find a appropriate champions for this effort. On SW Ankeny, an ideal champion will be conscious of the street’s significance to underserved communities, including people with low incomes and those experiencing houselessness. The champion will understand the value of creating an environment to support businesses and tourism while also maintaining access to social services and public space.
Opportunities

Turning this segment of SW Ankeny into a Market Street is an opportunity to support two distinct groups of users in the Central City. By activating the street between Broadway and the park with food carts and other vendors, the City could use revenue from vendor fees to make improvements that will create a more inviting space. Recommended improvements such as public restrooms, improved lighting, and electrical outlets for charging devices at the park will benefit everyone.

Challenges

For this implementation to be successful, the champion will ensure SW Ankeny serves all of its users. As we learned in interviews with local business interests, many businesses consider the low-income and houseless street users to be barriers to their success. From our interviews with accessibility experts we heard that food cart designs are typically incompatible with people using wheelchairs or other mobility devices. This implementation will only be successful when those interests are offset with the ideals of preserving access to public space for all users, regardless of their ability and socioeconomic status.

Moving Forward

Creating a Market Street here will help activate this space for existing users by improving the amenities available to the public. Food carts can increase opportunities for small business owners, as local users will have more reasons to stop by and grab a bite to eat. The City will have an opportunity to invest in services at a park that serves some of its most underserved residents. By improving the public space on this street for vulnerable populations, while also enhancing the experience for people who come to Ankeny for shopping, dining, and nightlife, PBOT can show its commitment to finding solutions that serve all residents.

There is a fine line between monitoring the space to keep it clean and safe, and police harassing people who are on the street for minor infractions.

Anonymous Survey Respondent
CHAPTER IV
CANDIDATE STREETS

Bailey's Tap Room, SW Broadway & Ankeny

Looking west on SW Ankeny from 8th

Looking west on SW Ankeny from Broadway

Bailey's Tap Room, SW Broadway & Ankeny
SW Yamhill

Location

SW Yamhill extending from SW 6th to SW 9th is a street lined with trees and retail space. It includes one travel lane for vehicles and one lane dedicated to TriMet’s Blue and Red Lines. This segment connects the popular urban plazas of Pioneer Square to the east and Director Park on the west end.

Street Type

Given the density of pedestrians, transit connections, and high-quality retail spaces, this stretch of Yamhill most clearly fits the Bustling Commercial type of pedestrian street. With public plazas bookending this strip, shopping and dining options provide an abundance of attractions throughout the street. This space is centered at the hub of Portland’s transit network, as Pioneer Square borders the Portland Transit Mall and is directly accessible from all of the MAX light rail lines.

Evaluation

Yamhill’s Transparency and Population Density score well, due to the street’s location in a rich retail area in Portland’s downtown. Yamhill is also highly attractive to Local and Regional users alike, with Attractions including flagship retail opportunities at Nordstrom and year-round programming at Pioneer Square. The Active Transportation Network is highly walkable and the location is at the center of the city’s transit system. However, we have yet to identify a clear Champion for this space, which is a critical component for implementation.

Opportunities

By repurposing the street space that is currently dedicated to one auto-lane on Yamhill, PBOT has the opportunity to create a true Bustling Commercial Street. The space that was once dedicated to cars can offer up more amenities to pedestrians and encourage people to spend even more time in one of Portland’s popular destinations. A reimagined Yamhill solidifies the connection between two great public spaces, enhancing the pedestrian experience.

Challenges

Some retail institutions on this street might be logical champions for this effort. These retailers have incentive to activate the space with programming that caters to a lifestyle experience for their shoppers. However, we found retailers on this strip of Yamhill to be reluctant to make changes that may affect access for their customers.

The biggest challenges moving forward are recruiting the appropriate champion and working with the business community to ensure the street will have beneficial effects. Our survey results indicate that PBOT may also have to address concerns about pedestrian streets causing congestion and confusion for downtown drivers.
Moving Forward

To move forward as a pedestrian street, Yamhill needs a champion. Retailers like Nordstrom or Pioneer Place Mall would need convincing to get on board as a champion. Another opportunity is to connect with a group such as The Square PDX, a non-profit working to activate and enrich Pioneer Square.

If implemented, Yamhill has the opportunity to improve the experiences of people with mobility limitations by including appropriate design considerations such as tactile and audible wayfinding and drop off points for vehicle-dependent populations. With year-round programming for locals and tourists alike, creating a Bustling Commercial Street between Director Park and Pioneer Square has the potential to increase the number of visitors to one of Portland’s popular destinations.
CHAPTER IV
CANDIDATE STREETS

Looking west on SW Yamhill from Broadway

Looking east on SW Yamhill from Broadway

Pioneer Square on SW Yamhill
SW Montgomery

Location

Ten years ago, the SW Montgomery Green Street plan proposed a continuous, pedestrian-friendly path through the PSU campus. This plan remains largely unrealized, but PSU is now revisiting the concept at a single block between SW 6th and SW Broadway. This tree-lined stretch of Montgomery links the amenity-rich Urban Center Plaza with a pedestrian trail leading to the South Park Blocks. The newly rebuilt business school has installed window-rich classrooms, retail, and landscaping on the south side, further advancing visions of a lively, auto-optional environment.

Street Type

We recommend that Montgomery proceed in a phased approach, first as a People-Powered Street — a vision that can be achieved with relative ease — and later as a Street to Stay and Play. Montgomery’s central location on campus makes it a popular connection for university students walking and biking. The lunchtime rush on Montgomery can see more than a thousand people per hour walking down this block. It is an ideal location for public events and lively social exchanges characteristic of a well-used college plaza.

Evaluation

Montgomery would support the Active Transportation Network by tying into existing pedestrian and bicycle friendly facilities on either end. Car-free Montgomery could provide an improved crossing experience for active users at Broadway as well. With PSU as the clear Champion for this effort and its student and faculty population coming from across the Portland metro area, the street would continue to serve primarily Neighborhood and Local users. The design of the street can influence the it’s contributions to measures of equity including Accessibility & Mobility and Human Health Needs. Additionally, our survey responses indicate that Montgomery would benefit from more Landscaping.

Opportunities

PSU’s campus is divided in two distinct halves. The western side is anchored by the Park Blocks and some of the school’s oldest buildings. As the campus expanded to the east over time, it failed to build with it a consistent spine that bridges the new to the old. Montgomery Street has the potential to fill that gap and to connect the two halves. The new Montgomery will provide a space for users to stop and socialize, to sit and study, and most importantly to move safely through campus. The potential for the street to provide a safe, low-stress connection between car-free campus
attractions of Park Blocks and Urban Center Plaza makes Montgomery an ideal pedestrian street candidate.

**Challenges**

The biggest challenge to this project will be communicating the benefits derived from additional pedestrian spaces on a university campus. Detractors might argue the existing sidewalks are adequate or the existing public spaces on PSU’s campus provide sufficient outdoor communal space.

Another potential challenge is the loss of parking. Survey respondents worry removing parking might impact their commutes. PSU and PBOT are also aware of the loss of revenue from removing these 10 spaces. Champions of the project may need to communicate that these spaces are a very small fraction of the 1100+ spaces within 2 blocks of the street and reaffirm their priorities of creating a safer and healthier campus if this project moves forward.

**Moving Forward**

Of the three streets our team studied, Montgomery has the clearest path forward to becoming a pedestrian street. The street offers minimal support to the existing motor vehicle network and the project has traction with university staff who look to be eager champions. The biggest challenge for PSU is to navigate an unfamiliar process and understand what kinds of support it can expect from PBOT.

Implementation on Montgomery could take a two-step approach. A People-Powered Street would be relatively easy to put in place and would serve immediate needs for safe, sustainable transportation. In the longer term, Montgomery as a Street to Stay and Play would require more resources but would add more possibilities for campus life.

The biggest hurdle for PBOT to implement this project on a permanent basis might be PBOT itself. Permanently removing vehicle access to Montgomery will remove a consistent source of parking revenue for the Bureau. PBOT relies on revenue streams to help fund various programs and projects throughout the city, but ultimately it needs to reconcile its reliance on parking revenue with its desire to create more livable, pedestrian-friendly spaces in the Central City.
Looking east on SW Montgomery from Broadway

Looking west on SW Montgomery from 6th

Parking on SW Montgomery
Our findings show that many streets around the city have the capacity to make great pedestrian streets. The requirements for successful pedestrian streets are a dedicated champion, a stable anchor, and thoughtful implementation. Streets with the most momentum, including SW Montgomery and NW 13th Streets, are being driven by community stakeholders and not PBOT. Not only do projects like these require the community’s support if they are to reach fruition, they also require an investment of time and energy by people committed to the street’s vision.

The utmost important step is for PBOT to engage closely with local stakeholders, including potential champions, to identify streets and gain a better understanding of the street-specific requirements. To help navigate this process, PBOT can leverage its “Portland in the Streets” program, which helps to manage all active uses of public space in the city.

As PBOT works with pedestrian street partners and stakeholders, it also must identify each candidate street’s Anchor. When the conversion to pedestrian street occurs, this Anchor should be strong enough to continue attracting people to the street. PBOT’s role is to help identify and support the anchor after implementation occurs.

In addition, PBOT must work closely with the champion to identify implementation measures that will most effectively serve the pedestrian street. This might include permitting, such as concert event or food truck licensing, or constructing permanent infrastructure, such as tents or public toilets.

A primary concern for underrepresented groups is their general health and safety using public streets. Implementation with street designs and policies that mitigate the loss of curb-to-curb service, provide audio and visual navigation assistance, and preserve affordable housing help ensure the benefits of pedestrian streets are equitably distributed. It is very important to make these considerations deciding factors, rather than afterthoughts to an already greenlit project.

Conversations with survey respondents suggested strong local support for these concepts. The passion and creativity of these people can help drive the creation of the next pedestrian street. If PBOT can find ways to reduce barriers for community members to become champions, Portland can realize its vision of an even more pedestrian-friendly Central City.

Our efforts in identifying five types of pedestrian streets, developing the evaluation framework, and recommending candidate streets have all been largely informed by our research (Chapter 5: Background) and outreach efforts (Chapter 6: Outreach and Engagement). The methods and findings from these efforts are outlined in more detail in the following chapters.
CHAPTER IV
CANDIDATE STREETS
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After decades of prioritizing motor vehicle movement, Portland is taking strides to make its streets better for people. In this chapter, we explore the conditions of Portland’s Central City and look to inspiration from other cities.

The types of pedestrian streets, evaluation framework, and candidate streets described in the previous chapters were all built from a foundation of research and public outreach. This chapter shares the background context and key findings of research. See Appendix A for more detailed background research.
Portland’s Central City

The Central City packs over 30,000 households and 130,000 jobs into just 5 square miles, giving it the highest concentration of housing, jobs, and social services in Oregon. In the next two decades, the Central City is expected to see a disproportionate share of the city’s total employment and population growth. The area is projected to experience a 40 percent increase in jobs and a 160 percent increase in residences.¹

Central City residents, workers, and visitors alike are in need of safe and welcoming spaces to spend time. Trends of decreasing household size and increased demand for multifamily and apartment-style dwellings mean that Portlanders increasingly rely on public space for recreational and social needs.² Opportunities are limited, though, when a mere three percent of the Central City is public open space. Streets offer a unique opportunity to create welcoming public spaces in the compact urban core. Combined with sidewalks, streets make up 40 percent of Central City land.

The Central City also needs safe and affordable transportation options. Almost one-quarter of residents have incomes below the poverty line, compared to 14 percent citywide.³ The number of Central City residents in affordable housing continues to grow, with 40 percent of Portland’s new affordable units to be located in the Central City. Over a third of Central City residents do not have access to a car.
Additionally, many people of various backgrounds and economic means must travel to the Central City for employment and services.

Portland’s 2035 Transportation System Plan aims to improve walking, biking, and transit in the city to reduce the need and desire to drive. The Comprehensive Plan sets a goal for the overall city to reduce the proportion of car trips from 72 percent in 2017 to 42 percent in 2035. The Plan sets an even higher bar for the Central City, where there are higher densities, more mixed uses, and strong integration to other transportation options.

These goals are ambitious. US cities, Portland included, prioritize the movement of cars. This is seen in space allocation, where a typical downtown street dedicates twice as much space for cars than pedestrians. And, while the space for cars is unimpeded, much of the pedestrian space is shared with light poles, landscaping, fire hydrants, bus stops, garbage cans, signs, cafe seating, and parking meters, effectively leaving a small fraction of space for pedestrian movement.

The prioritization of cars is also evident from other qualities of the transportation system, like signal priority, street sign design, zoning, and the enforcement of traffic laws.
Existing Plans

Though Portland is still automobile-dominated, it has become one of the most pedestrian-friendly cities in the US. Deliberate planning, beginning with the 1972 Downtown Plan, brought pedestrian-friendly features to the Central City and throughout the region. A dense framework of plans has been constructed over the past 45 years to develop a clear vision for Portland’s future. Many of these plans are relevant to our study of pedestrian streets, as demonstrated in the following section.

2035 Comprehensive Plan

The 2035 Comprehensive Plan (adopted 2016) is a long-range plan that provides guiding policies and goals for Portland planning efforts. Growth management is an important component and key theme. Relevant policies support green infrastructure, pedestrian street environments, access, active gathering places, and environmental considerations such as noise and air quality.

Transportation System Plan

Portland’s Transportation System Plan (adopted 2018) helps to implement the Comprehensive Plan through transportation-specific goals and policies, street classifications, and projects. To accommodate projected growth without further congestion, the plan aims for walking, biking, using transit, and carpooling to account for 85 percent of the trips taken in the Central City by 2035.

Climate Action Plan

The Climate Action Plan (adopted 2015) is a strategy to cut carbon emissions in Portland and Multnomah County. It seeks to “create vibrant neighborhoods where 80 percent of residents can easily walk or bicycle to meet all basic, daily, non-work needs.”
Portland in the Streets

Portland in the Streets® (adopted 2018) is a city-sponsored grant program that helps Portlanders use their streets to celebrate community, connect with neighbors, promote safety, and support innovative ideas. It provides a straightforward implementation pathway for residents interested in championing pedestrian streets.

Central City in Motion

Central City in Motion³ (adopted 2018) is Portland’s plan for strategic investments that will increase the people-moving capacity of Central City streets by creating bike facilities, bus lanes, and other supportive environments for efficient non-auto travel patterns.

Portland Economic Development Strategy

The Portland Economic Development Strategy⁹ (adopted 2009) aims to build the most sustainable economy in the world, in part by leveraging years of recognized leadership in all facets of sustainable living — green building, transit, land use, recycling, and bicycle use.

PedPDX

PedPDX¹⁰ (draft released 2019) is Portland’s citywide pedestrian plan. It states that pedestrian improvements serve equity, health, environment, and livability goals, while helping to manage growth and congestion. Informed by Vision Zero, a commitment to eliminating transportation-related serious injuries and fatalities, PedPDX identifies key sidewalk and crossing improvements and other investments to make walking safer and more comfortable across the city.
Steps Toward a Better Portland

Portland is re-prioritizing public space through intentional planning. The 2035 Comprehensive Plan sets policies to encourage walking as “the most attractive mode of transportation for most short trips” and to “improve the quality of the pedestrian environment.” The plan also commits to creating conditions that make “bicycling more attractive than driving for most trips of approximately three miles or less” and to “make transit the preferred mode of travel for trips that are not made by walking or bicycling.” 11

Improvements based on these plans are making a difference, especially in the Central City. Art and brick sidewalks bring texture to the pedestrian experience. Timed signals make intersection crossings more predictable. Reductions to parking requirements open up valuable real estate. Transit service and bicycle facilities allow people to travel without cars. Mixed land use and activated ground floors make the downtown experience more interesting and reduce trip lengths. In addition to these pedestrian-friendly improvements, Portland has implemented a variety of fully pedestrianized streets.

Trees, brick sidewalks, timed crossing signals, and transit improve the pedestrian experience in downtown Portland.

Small plazas and activated ground floors make the city more interesting and invite people to enjoy the street.
Portland’s Central City has a variety of pedestrian streets. Some are permanent, like Ankeny Alley in Old Town and a portion of the South Park Blocks near PSU (Figure 3). Most, however, are temporary, like First Thursday art walks in the Pearl District, the Entertainment District on weekend nights in Chinatown, and Sunday Parkways along various routes throughout the city in summer. Although the number of pedestrian streets may seem large, their physical extent is limited. There is opportunity for more, especially in the Central City, as described in Chapter 4: Candidate Streets. The following section provides a sample of five permanent pedestrian streets in Portland’s Central City. In addition to these, recent developments include numerous privately-owned streets that are open to the public.
Figure 3: Existing Permanent Pedestrian Streets

* SW Main has permanent infrastructure to temporarily allow or restrict car access.
This one-block segment of SW Ankeny is a bustling summer spot to eat and drink. Its primary draw is Voodoo Doughnut, a popular tourist attraction, and the street has seven other bars and restaurants. Pedestrian-friendly 19th Century architecture lines the street. Business owners led the push for opening the street to pedestrians as a means to improve access on a narrow street with cramped sidewalks. Since implementation in 2011, Ankeny Alley businesses continue to draw large crowds. Business owners we interviewed remain enthusiastic about the transformation.
This narrow street connects four high-profile parks along a quarter-mile stretch lined by residential, office, and university buildings. It was designed in the 1960s and reflects the “towers in the park” style popular at the time. Few buildings have ground floor activation along the street. Instead, many buildings use the first few floors for parking. Where businesses exist, their entrances are oriented toward surface parking lots instead of the pedestrian area. Local opinions of this street are mixed. While the Halprin Sequence succeeds at giving nearby residents and workers a quiet, shady place to walk, its seclusion and lack of activity can make users feel unsafe and vulnerable.
These streets benefit from being on a university campus and along a popular park. They are surrounded by a mix of residences, school buildings, and businesses. They are often busy, especially when school is session. Food carts and other vendors serve the street. On Saturday mornings, the South Park Blocks are transformed into a large and popular farmers market. The streets were closed to cars following protests of the Vietnam War in 1970.\textsuperscript{13, 14}
NW and SW First Avenue runs through Old Town Portland, with historic architecture and brick street surfaces. It serves MAX light rail and is car-free in some stretches. Pedestrian segments of the street are short and discontinuous. They do not integrate with a larger bike or pedestrian network, nor do they connect to popular destinations. First Avenue is not heavily used by people walking or rolling.
This two-block segment of SW Yamhill Street between First and Third Avenues serves MAX light rail and is lined by ground-floor storefronts. The street has potential to become a popular destination. It is surrounded by dense commercial and office buildings, is near Waterfront Park, and is only a few blocks from the downtown retail core at Pioneer Place. Currently, however, it serves relatively few pedestrians.
North American Context

Like Portland, other cities across the world have implemented pedestrian streets as a way to provide welcoming public spaces and safely move people who are walking, biking, rolling, or riding transit. The next two sections summarize some of the pedestrian streets implemented in cities similar to Portland over the past few decades. Many other pedestrian streets exist across the globe in towns and cities with diverse contexts.

North America has had mixed success with pedestrian streets. Montréal is leading the way with a city-wide program to allocate street space to pedestrians and cyclists. The City of Montréal created an implementation guide that includes strategies for activating the right-of-way. Between 2014 and 2018, Montréal has implemented 15 pedestrian street projects through this program. One of the guiding principles is a phased approach that begins with a temporary demonstration project.

In the United States, Janette Sadik-Khan took a similar approach while Commissioner of the New York City Department of Transportation. She used demonstration projects that led to successfully improving spaces across New York City, notably the large pedestrian plaza at Times Square.

Many other cities in the US have also tried to transform streets into pedestrian spaces, with less success. Cities began building downtown pedestrian malls in the late 1950s in response to concerns about the environment and urban disinvestment from suburbanization. By the early 1980s, nearly 200 pedestrian malls were built. All but a few of these saw social troubles and declining retail sales within five years of implementation. Cities eventually restored automotive access on nearly 90 percent of them. Those that remain include the 16th Street Mall in Denver, Colorado; Church Street in Burlington, Vermont; and the Third Street Promenade in Santa Monica, California.
16th Street Mall, Denver

Times Square, New York

Third Street Promenade, Santa Monica
International Context

International implementations of pedestrian streets have gained momentum in recent years. Downtown Oslo, Norway, is on track to become car-free by 2020 through an ambitious four-year program.19 Barcelona is transforming its streets to a system of “superblocks,” where the city grid has two pedestrian streets for each street that allows car traffic.20 Santiago, Chile, created a four block-long pedestrian-oriented art installation through its downtown, funded by a partnership with private companies featured in the art.21

Many cities started implementing pedestrian streets decades ago. As in the US, the environmental movement of the 1960s propelled many cities to remove car access from areas of their downtowns. Copenhagen, Amsterdam, and Curitiba all have pedestrian streets that began with planning in the late 1960s. Germany began making their urban streets car-free after World War II. These were so popular with residents and businesses that they expanded to over 800 pedestrian spaces by the mid-1980s.22 Ghent, Belgium, started removing cars from its city center in the late 1990s. Though opposition was initially loud, the car-free area proved popular and in 2016 nearly three-quarters of residents approved expanding it.23 In cities where car ownership has remained low, such as Kolkata, India, streets are filled with a kaleidoscope of activities. People walking mix with people biking, pulling carts, and kids playing. The occasional car driving through knows to yield to other users.
Key Findings

Much can be learned from the many pedestrian streets across the globe. Here, we compile key findings from studies of successful and failed pedestrian streets, emerging lessons from recent news reports, and recommendations from those with implementation experience. These findings are tailored to Portland’s urban context: a city primarily built for cars, but aspiring and progressing toward a more walkable, bikeable, and transit-friendly future.

Locate where there is already a high number of pedestrians. Successful pedestrian streets were located in areas that naturally attracted a high number of pedestrians: near urban centers, universities, beaches, or tourist destinations.\(^{17,18,24}\)

The surrounding land use must be mixed. This results in larger numbers of residents and workers in the area, who are then more likely to walk in the pedestrian area.\(^{17}\)

Integrate with existing transit, bicycle, and pedestrian networks. This naturally brings people to the street as they travel elsewhere. It supports people traveling by these modes by removing traffic congestion and improving safety. It also makes it easy for people to go to the street without driving, which reduces parking needs and traffic congestion on neighboring streets.

Curate a mix of uses that activates the street at all hours. Businesses and other features should bring people to the space at all hours of day and into the night. This attracts a wider variety of people and makes the street feel safer.\(^{17}\)

Have an anchor. This is a destination at the street that people are willing to go out of their way to visit. This could be a popular retailer, restaurant, or tourist attraction.\(^{17,18}\)

Establish a singular caretaker. The caretaker is responsible for steering the street in a successful direction by keeping a complementary mix of businesses and residents, maintaining the upkeep, as well as advocating for and marketing the street. A source of funding is necessary.\(^{17}\)

Ground floor spaces should be predominantly dining and retail. Smaller, varied storefronts are more interesting to walk by. Commercial and residential spaces can be located on upper floors.\(^{17}\)

Make the street attractive for pedestrians. Make it feel safe and populated. Use signage and lighting designed for pedestrians. Allow for a natural diversity of businesses and buildings. Unify the street experience with consistent and easy to use wayfinding.\(^{17}\)
Wide sidewalks are preferable. This allows for outdoor dining and improves window shopping. Even better: place the sidewalk and street at the same level, creating a fluid pedestrian experience and improving access for people with mobility impairments.¹⁷

Implement in small, reversible steps. An initial temporary demonstration project is more likely to get public approval and receive funding. This also provides a chance to evaluate the impacts and make adjustments before a more expensive, permanent installation. Carefully study the area and solicit public concerns before and during the demonstration project.¹⁶,²⁵,²⁶

Avoid impacting the car network. Pedestrian streets have been more successful when implemented on streets that carry small amounts of traffic and for relatively short segments. This avoids redirecting traffic to other streets that are less able to accommodate it.¹⁷

Be flexible with access for deliveries and other infrequent motor vehicle access. Businesses sometimes require trucks to access the street for deliveries. Residents sometimes need access for moving or furniture delivery. Allowing flexible vehicle access can help build support for the project and can be achieved while maintaining a strong pedestrian environment.

Do not attempt to replicate a suburban shopping mall. This style of pedestrian street is designed to attract suburbanites back to the city. Past implementations have not been successful. Instead, cities can focus on enhancing streets for the residents and visitors that already use them.¹⁷,²⁴

Things to watch out for

A commercial focus does not benefit everyone. It is important to remember that streets are public and should be designed to be used by all people. Economic interests are important, but may cater to wealthier users at the expense of those less privileged, or can dilute the cultural diversity of a place. Economic interests must be balanced with cultural and social interests.²²

Gentrification. Improvements to the street are likely to increase adjacent property values. It is necessary to take steps to secure current businesses and residents from displacement. It is also important to create a mechanism to capture new wealth created by the improvement and apply it to current businesses and residents.²⁷
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Building on our research and lessons learned from existing pedestrian streets, this chapter summarizes the outreach and engagement conducted throughout the course of this project. See Appendix B for a list of interviews and key takeaways.

Our team used interviews and surveys to discern the current level of support for pedestrian streets and how these spaces can best serve users’ diverse needs. We reached out to a wide variety of stakeholders, advocacy organizations, and technical advisors, seeking both professional expertise and lived experience. This feedback helped us identify the critical stakeholders for each candidate street, the level of change people are willing to tolerate, and the major opportunities and challenges this project presents.

Methods

Our project used three forms of public engagement. From February to May, we conducted 25 interviews with stakeholders and experts; these included pedestrian-focused groups, members of the business community, accessibility advocates, and people working on houselessness.

In March, a one-hour focus group at PBOT convened public employees representing fire and rescue, urban design, transit, freight, parking, active transportation, street permitting, and capital project planning.

In April, our team surveyed a total of 222 people on the three candidate streets: SW Montgomery, SW Yamhill, and SW Ankeny. The purpose of this survey was to narrow down implementation ideas, gauge how current users would be impacted by proposed changes, and help inform future targeted outreach.

In May, our team partnered with PSU’s Campus Planning Office to learn directly from their Montgomery Pop-Up Plaza demonstration. This opportunity allowed us to better understand the process of creating a pedestrian street and how people might use car-free Montgomery.

For clarity, the key findings from engagement are categorized by topic: general pedestrian streets expertise, technical, business, accessibility, houselessness, and the Montgomery demonstration event.
Montgomery Street Sidewalk
Pedestrian Streets Expertise

Better Block PDX, the Street Trust, and Oregon Walks are local organizations with experience in imagining and implementing pedestrian streets. Their feedback was particularly helpful in refining the types of pedestrian streets (Chapter 2: Types of Pedestrian Streets). Our interviews with staff at these groups included the following insights.

• Look for opportunities to strengthen pedestrian connections and build on existing parks and plazas, linking “pearls on a string.”
• To ensure that communities of color, people with disabilities, and other often-excluded groups are welcomed and benefited by a pedestrian street, involve them in activating the space.
• New uses must not impede mobility. There is already inadequate enforcement when it comes to a-frame signs, patio seating, and other business uses of sidewalk space.
• Multiple points of interest, multi-seasonal shade, and ample seating are all attractive to pedestrians.

“With so many people of color being killed as pedestrians at night, our biggest issue should be obvious—we need to light our roads better.”
Marisa DeMull

“Get community of color-led groups involved in activating the space”
Izzy Armenta, Oregon Walks
Technical Advice

Public rights-of-way are more complicated than they appear, packed with competing uses and overseen by multiple regulatory entities. Comments from the technical focus group helped prioritize our criteria in the evaluation framework (Chapter 3: Evaluation) and refine our implementation recommendations (Chapter 4: Candidate Streets). We gathered the following findings from this group’s perspective.

- Pedestrian streets are best concentrated on streets with low vehicle traffic, including those identified in PBOT’s Transportation System Plan as Unclassified and District Collector streets. Primary auto routes, such as Traffic Auto Streets, should be excluded from pedestrian street implementation unless adequate consideration is given to the greater transportation network.

- Street design and traffic-calming tactics should accommodate deliveries to businesses and residences. Offering a specific truck-accessible delivery area either at peak morning hours or all day may be helpful. In the future, on-street truck parking may give way to loading areas built into new developments.

- Pedestrian street implementation must allow quick emergency vehicle access when necessary and ensure that fire trucks can reach both hydrants and buildings.

- Transit lines have the ability to draw many people to a pedestrian street. Active uses, such as ground-floor retail, will provide eyes on the street and help create safe transit spaces.

- It may be possible to widen sidewalks or increase building setbacks to improve the pedestrian environment without dramatically changing the transportation network. Gradual implementation could begin with pedestrian placemaking.

- Portland has pursued sidewalk cafes and Street Seat installations at a cost: these projects privatize public space rather than creating seats open to all.

- On a retail-centered pedestrian street, a large anchor business with vigorous programming will draw a critical mass of visitors. The biggest determinant of success seems to be a partnership with a business association or other anchor.

- Mixed results from the Festival Streets in Chinatown taught PBOT that it should only build spaces when a dedicated community champion is in place to use and maintain them.
Supporting Portland’s Business Community

Pedestrian streets offer an opportunity to generate high volumes of visitors and support the business community. They also demand important considerations, such as how business customers will access storefronts in a car-free environment. Through a series of interviews, we reached out to small business owners and the Portland Business Alliance (PBA) for comments from a retail perspective. We found that Portland’s business community holds distinct and varying perspectives on pedestrian streets.

Businesses along pedestrian-only Ankeny Alley and NW 13th, a stretch that is pedestrian-only during First Thursday events, reap the benefits of increased foot traffic. A store owner on SW Ankeny, one of our candidate streets, expressed enthusiasm for implementing a pedestrian street near his business. Business owners also provided creative solutions for deliveries, such as using alternative building entrances or underground parking facilities. One business owner provides ramps to help disabled customers transition from the street to the raised sidewalk.

The PBA, which represents nearly 1,900 businesses throughout the region, expressed concern that removing car lanes would harm downtown streets that are already vibrant. In cases where businesses self-organize to create a pedestrian street, like Ankeny Alley, the PBA would lend its support.

Overall, our conversations with the business community helped us develop five different types of pedestrian streets, with each type designed to support business activity (Chapter 2: Types of Pedestrian Streets).

“With leadership, other people will follow...somebody has to speak up and somebody has to be in charge and say, ‘I get it, I’m listening.’ You have to say, ‘I see a vision and we’re going to get there’.”

Ed Ariniello, US Outdoor Store
Antwerp, Belgium
All Ages and Abilities

Projects that transform physical street design can have dramatic impacts on children, older adults, and people with disabilities. In an effort to learn more about the perspectives and needs of people with varying abilities, we conducted interviews with researchers, policy experts, orientation and mobility specialists, and people with disabilities who were willing to share their experiences navigating urban environments. We also spoke with advocates for children and older adults to understand the essential components of age-friendly spaces. This outreach affirmed the need for close consideration of accessibility needs and placemaking opportunities in the design and implementation of pedestrian streets. We gathered the following findings, which particularly influenced Chapter 2: Types of Pedestrian Streets.

- Pedestrian streets open up possibilities for placemaking and inclusive spaces for multi-age communities to interact, converse, and exchange. Greenery, chairs, tables, benches, and children's artwork can facilitate this interaction.
- A pedestrian street allows children to experience their community in a non-commodified space, as children in other parts of the world might experience in a piazza or town square.
- Leveling the curb with the street and providing a smooth street surface is ideal for wheelchair users. Non-level hard services are challenging for people who rely on ramps.
- For people with vision disabilities, major changes to the streetscape must be announced in advance through enhanced public outreach campaigns.
- Standardized implementation and design of pedestrian streets is essential, allowing street users to know what to expect and understand how to best navigate the space.
- Wheelchair users need access to amenities at sitting height. Street activation strategies, such as food carts, should allow for inclusive interactions at seat height.
- On streets where motor vehicles, transit, or bikes share the right-of-way with pedestrians, it is critical to incorporate clearly delineated zones where pedestrians can move freely and safely.
- Consistent application of design elements such as detectable warning surfaces and defined crossings can assist users by providing orientation and wayfinding cues. Multilingual signs are recommended in communities with high numbers of Limited English Proficiency (LEP) residents, visitors, or tourists.

"Both visual and audible cues for high-danger areas are important."

Alan DeLaTorre, Institute on Aging
Portland Rescue Mission

Giving Hope. Restoring Life.
Houselessness

Portland continues to experience high numbers of people experiencing houselessness. Streets in the Central City serve myriad functions, and sometimes they include spaces where people seek shelter and spend time. Undoubtedly, changes to the streetscape in Portland’s urban core will impact people experiencing houselessness. In an effort to understand how pedestrian streets can improve conditions for all street users and Portland’s community, our team sought feedback from organizations and service providers that work directly with the houseless community. Through conversations with outreach workers, community advocates, and people experiencing houselessness, we identified the following ways in which Portland’s streets can better serve houseless users by design.

• When pedestrian streets are in close proximity to social service providers, recipients of those services are in frequent need of public restrooms, washing stations, public phones, and charging stations.

• People experiencing houselessness often need a place to simply spend time during waking hours, as housing shelters are predominantly focused on overnight accommodations.

• Using design considerations such as open sight lines and “eyes on the street,” pedestrian streets provide an opportunity to create safe and welcoming spaces where housed and houseless communities can coexist harmoniously.

“Traffic is a social determinant of health that we don’t talk about for people experiencing houselessness.”

Gary Cobb, Central City Concern
Sanctuary Street Concept

The Sanctuary Street concept grew out of feedback from public outreach; specifically, conversations with people and businesses along SW Ankeny Street. Through this concept, our team seeks to understand how pedestrian streets advocates can provide inclusive solutions for those experiencing houselessness.

The purpose of this concept is to spark conversations about pedestrian street implementation and impacts to the houseless community. We hope these findings help lead toward more inclusive urban spaces.

Sanctuary Streets welcome all people and are designed to benefit the most vulnerable individuals. While they are specifically focused on serving those experiencing houselessness, Sanctuary Streets are intended to provide services to anyone in need. A wide range of services may be available, depending on local need and community support. The street may also be mobile, bringing services and public amenities to people who need them the most.

The Sanctuary Street concept is one solution to a very complex problem.

“Kelly Sills (PBOT) indicated equity was a core city value, and dedicating public space to exclusive street seats and sidewalk cafes means that space is not freely available to the general public.”
Potential Amenities

Stakeholders and survey respondents suggested amenities to support marginalized communities, especially those experiencing houselessness.

- Drinking fountains
- Toilets
- Recycling and trash cans
- Power outlets to charge phones and other devices
- WiFi to connect people with broader resources
- Sinks and areas to prepare food
- Personal mailboxes
- Lockers to store items

- Seating and tables to congregate
- Stewardship roles and employment opportunities
- Educational, personal, and workforce development programs
- Addiction treatment programs
- Dropboxes for safe disposal of hypodermic needles
- Space for mobile support services, such as medical or dental clinics
Survey Results

Intercept surveys conducted along the three candidate streets (Figure 4) provide insights into how community members currently use each street and how they envision future use of the right-of-way. Participants shared ideas for programming and placemaking along the street, such as an overall preference for public seating, trees, and greenery.

Responses to demographic questions hint at the use patterns for these streets. They also show which populations are underrepresented in surveys and require more targeted outreach (Figure 5). We followed up with people who could speak to the needs of children, older adults, and people with disabilities; unfortunately, our engagement results still underrepresent African-Americans and teenagers. See Appendix C for detailed survey statistics and survey instruments.

Figure 4. Intercept Survey Locations

The Central City is 3% of Portland's land area.
The Central City will contain 30% of Portland's growth in 2035.
Central City growth will outpace the rest of the city.

3% Central City growth
97% Growth outside the Central City

Sources: Central City in Motion Implementation Plan & American Community Survey 5-Year Estimate 2017.
Figure 5. Intercept Survey Statistics

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* Non-Hispanic

Note: Subtotals may not add up to the total number of responses, as some participants did not respond to all questions.
Montgomery Pop-Up Plaza

During May 2019, PSU organized a trial run of SW Montgomery as a pedestrian street. Using programming ideas initially developed by undergraduate planning classes, the Montgomery Pop-Up Plaza fits the vision of a Street to Stay and Play, (Chapter 2: Types of Pedestrian Streets).

Five months of focused work produced this temporary implementation. The Campus Planning Office convened stakeholders at weekly meetings and managed daily logistics. PSU Transportation and Parking Services played an important role in coordinating with PBOT and planning for successful biking and walking on the reconfigured street. Professor Ellen Shoshkes recruited campus entities from all corners to sign up to help activate the space with preplanned activities, including musical performances, cooking demonstrations, children’s playtime, swap meets, and picnics.

The pop-up plaza had three goals:

• Explore the street’s potential as an active community space.
• Create a successful precedent that would support efforts to permanently close the street to motor vehicles.
• Gather feedback from the PSU community during and after the closure to evaluate the feasibility of and desire for a permanent street closure.

In the first week of May, our team set up a public engagement table in the pop-up plaza to help out with the third goal of gathering feedback. In a dot-sticker vote, the overwhelming majority favored making Montgomery a permanent pedestrian street. Open-ended feedback stressed the environmental and social aspects of the street. The number and diversity of street users made for an equally diverse, and not always compatible, set of preferences. However, the desire for greenery and inclusivity was a very strong, emerging theme. We shared the outcome of this event and earlier surveys done in April with PSU faculty and staff to consider as they move forward with efforts to turn the demonstration into a permanent pedestrian street.

Our team recommends engagement for future pedestrian street projects, whenever possible, include an on-site component that allows users to provide feedback while visiting the candidate street. On-site engagement informs users of the level of work required to transform a street into a pedestrian street.

Even on an already supportive and busy campus, our engagement on SW Montgomery resulted in conversations with users about the process to create the demonstration. Not every champion or anchor will have the same level of structure, staffing, and resources as SW Montgomery.
Three weeks into the event, the Campus Planning Office judged its pilot project a success, based on positive comments from community members and minimal disruptions to traffic flows. The next steps were to gather formal feedback, research ways to make this pedestrian street permanent, and prepare an official report.

Most importantly, PBOT should focus its efforts on lowering this barrier to entry for future pedestrian street initiatives.
Outreach and Engagement Key Findings

The following findings are the salient takeaways from the focus group, interviews, and surveys conducted throughout our outreach and engagement process.

Seek out design amenities and placemaking opportunities to create an inclusive space for all users. To ensure that communities of color, older adults, people with disabilities, and other often-excluded groups are welcomed and benefited by a pedestrian street, involve them in activating the space. Public art, benches, tables, greenery, restrooms, washing stations, telephones, lighting, and charging stations can help create welcoming spaces for all community members.

Street design should allow for deliveries and emergency vehicle access. Implementation should allow emergency vehicle access when necessary and offer a specific truck-accessible delivery area at appropriate times.

Partnerships with an anchor and a community caretaker are major determinants of success. On a retail-centered pedestrian street, a large anchor business with vigorous programming will draw a critical mass of visitors. Mixed results from the Festival Streets in Chinatown taught PBOT that it should only build spaces when a dedicated community caretaker is in place to use and maintain them.

Standardized and consistent application of design elements is essential, allowing street users to know what to expect and understand how to best navigate the space. Major changes to the streetscape must be announced in advance through enhanced public outreach campaigns, consistent signage, and navigation services can assist users by providing orientation and wayfinding cues. On streets where motor vehicles, transit, or bikes share the right-of-way with pedestrians, incorporate clearly delineated zones where pedestrians can find refuge.

Open sight lines and “eyes on the street” create safe and welcoming spaces. Active uses, such as ground-floor retail, wide sidewalks, and increased building setbacks can improve the pedestrian environment without dramatically changing the transportation network.

Survey respondents were overwhelmingly supportive of pedestrian streets as a concept, despite potential challenges and complications.
Image Sources

page 92, Montgomery St: Living Streets Project Team, 2019
page 94, Montgomery St: Living Streets Project Team, 2019
page 96, Technical Focus Group: Living Streets Project Team, 2019
page 98, Jack London Sq: Living Streets Project Team, 2019
page 100, Antwerp: VISITFLANDERS, 2015, via Flickr
https://www.flickr.com/photos/visitflanders/20552525842
page 102, Portland Rescue Mission: Living Streets Project Team, 2019
page 109, All photos: Living Streets Project Team, 2019
page 111, Technical Focus Group: Living Streets Project Team, 2019
Everyone is a pedestrian.

People of all ages, abilities, incomes, and races use streets for a variety of reasons every day. Children running and playing. Neighbors socializing and building community. Shoppers walking from store to store. Every one of these people is a pedestrian who relies on our streets to keep them safe and healthy.

Pedestrian streets encourage more pedestrian activity.

Pedestrianization transforms streets into public spaces that encourage all of the activities of pedestrian life. They promote healthy and sustainable lifestyles by providing safer and more welcoming environments to travel through the city and in turn, help to advance the City of Portland’s goals.

The Living Streets plan envisions, evaluates, and prioritizes pedestrian streets.

Our chapters outline the types of pedestrian street (Chapter 2: Types of Pedestrian Streets), how to measure the success of pedestrian streets (Chapter 3: Evaluation), and how to take pedestrian streets from concept to reality (Chapter 4: Candidate Streets).

PBOT can use this plan to make a better Portland.

PBOT should use this plan as a tool to build excitement for pedestrian streets and to build relationships with their potential champions. We hope this plan inspires people to consider pedestrian streets as an option when they are looking for innovative, equitable approaches to transforming their communities.
Image Sources

page 114, Conclusion: Greg Raisman, 2015, via Flickr
https://www.flickr.com/photos/gregraisman/18091301965

page 116, Full spread: Greg Raisman, 2015, via Flickr
https://www.flickr.com/photos/gregraisman/18581469572
Appendices

Appendix A: Research

Appendix B: Engagement Summary

Appendix C: Intercept Survey

Appendix D: Street Selection Process
Our research draws from a variety of sources. Academic literature focuses primarily on the motivations and effects of car-free urban spaces. Government reports also consider the effects of car-free spaces, investigate the successes and failures of previous implementations, and establish best practices from case studies. News articles describe recent developments of car-free streets across the world.

Benefits of pedestrian spaces

Cars and trucks discharge substantial amounts of harmful pollution to the air, with concentrations highest near traffic sources (Karner et al. 2010). The transportation system contributes nearly a third of U.S. greenhouse gas emissions, most of which are from cars and trucks (United States Environmental Protection Agency n.d.). The act of driving has been shown to be detrimental to one’s health (Antoun 2017) and creates serious safety hazards for everyone (WHO 2018). Driving displaces opportunities for active modes of travel, like biking and walking, which provide sizable health benefits (Mueller et al. 2015). High-traffic streets impede social interaction, disconnecting social networks and reducing community capacity (Hart and Parkhurst 2011). An automobile-based transportation system creates broad negative social impacts that perpetuate inequities against the “most socially excluded members of society” (Markovich and Lucas 2011, 41).

There are clear benefits to car-free spaces. Removing motor vehicles from certain streets creates more peaceful areas with cleaner air. It creates spaces for interaction and community-building. It can be implemented as part of a broader strategy to reduce overall driving, lower greenhouse gas emissions, improve road safety, and enhance accessibility for people walking, biking, and using transit. Better pedestrian infrastructure may improve public health outcomes for lower income residents (Turrell 2013). Transit users perceive their wait times as shorter when traffic is less intrusive (Lagune-Reutler et al 2016). Improving walking and biking access to a street can also bring economic benefits, including increased sales and higher property values (Litman 2018, Liu 2016).

Things to watch out for

Despite the many positive impacts of creating pedestrian spaces, it is important to consider how they may also create negative impacts. Increased property values can lead to gentrification, necessitating equitable strategies to bolster existing businesses and residents while also maintaining affordable housing (Bates 2013). Implementing a pedestrian street may displace people experiencing houselessness, further exacerbating an already difficult situation (Hall and Smith 2013). Public streets can be the last refuge for people who have no other place to go. An economic focus for the street also does not benefit everyone and can
dilute the cultural significance of the public space (Hajdu 1988).

**International examples**

With varying degrees of success, cities across the world have transitioned away from the automobile. Germany began implementing pedestrian areas in city centers after World War II, leading to over 800 pedestrian-oriented spaces by the mid-1980s (Hajdu 1988). Other places, like Copenhagen, Amsterdam, and Bogotá, have empowered non-motorized transportation by creating car-free spaces (Kemp and Stefani 2015). Oslo, Norway, adopted a four-year plan to make its city center car-free by 2019 (Clugston 2019). Barcelona is transforming its streets to a system of “superblocks,” where the street grid has two pedestrian streets for each street that allows car traffic (Bausells 2016). Hamburg, Helsinki, and Madrid are also implementing plans to remove cars from substantial areas of their cities (Nieuwenhuijsen et al. 2016).

Many cities have car-free spaces to support the downtown experience with comfortable access to art, shopping, and park space. Santiago, Chile, created a high-profile four-block long pedestrian-oriented art installation through its downtown, funded by a partnership with private companies featured in the art (Taggart 2018). Cat Street in Tokyo is a hip shopping destination (Naho_B_M 2016) and Ararat Street in Moscow mixes shopping, dining, and museums in rich historical architecture (Grigoryeva n.d.).

**North American examples**

Montréal is a leader in North America with a city-wide program to allocate street space to pedestrians and cyclists. The City of Montréal created an implementation guide that includes strategies for activating the space. Between 2014 and 2018, Montréal implemented 15 pedestrian-oriented projects through this program (Ville de Montréal 2018).

In the U.S., however, pedestrian streets have had mixed success. Cities began building pedestrian malls on downtown streets in the late 1950s in response to concerns about the environment and urban disinvestment from suburbanization. By the early 1980s, nearly 200 pedestrian malls were built (Schmidt 2010). The vast majority of these saw social troubles and declining retail sales within a few years of implementation and eventually restored car access (Judge 2013). Those that remain are popular destinations.

Many case studies have explored the successes and failures of U.S. pedestrian malls (Hack 2013). The overarching theme is: there must be pedestrians nearby to use the street. U.S. cities do not necessarily have many pedestrians, due to a host of planning and policy decisions that have subsidized driving, suburban development, and isolated land uses (Kushner 2004). In addition to pulling people and tax dollars out of cities, this also allowed people to drive from door-to-door without having to set foot on a sidewalk. Without pedestrians, a pedestrian street is doomed to fail. For this reason, current practice recommends implementing a “complete street” that is still automobile-focused but has enhanced pedestrian and bicycle facilities instead of a pedestrian street (Judge 2013).
Remaining pedestrian streets include:

- 16th Street Mall in Denver, Colorado
- East Main Street in Charlottesville, Virginia
- Chestnut Street in Philadelphia, Pennsylvania
- Church Street in Burlington, Vermont
- Fourth Street in Louisville, Kentucky
- Lincoln Road Mall in Miami Beach, Florida
- Nicollet Mall in Minneapolis, Minnesota
- Old State Capitol Plaza in Springfield, Illinois
- Pearl Street in Boulder, Colorado
- Third Street Promenade in Santa Monica, California (Hack 2013; Judge 2013)

Portland’s future

Portland is evolving toward a more pedestrian-friendly future. Higher Central City density and increasingly mixed land uses mean more people in the city who are within walking or biking distance of destinations. It also means better access to transit in Portland’s hub-and-spoke system. Investing in a multimodal transportation system further increases the number of people on the street, either as they walk to their transit stop or as they ride their bikes to their destinations. This progress suggests that Portland may be on its way to being able to support more pedestrian-oriented streets.
Works Cited


APPENDIX B: ENGAGEMENT SUMMARY

Name: Jillian Detweiler  
Date: 2/5/19  
Affiliation: The Street Trust  
Key Takeaway: Consider users of nearby services.

Name: Ben Chaney; Ryan Hashagen  
Date: 2/7/19  
Affiliation: Better Block PDX  
Key Takeaway: Tourism-focused street; Use "foot traffic" when talking to business community; Consider street caretakers.

Name: Leah Fisher  
Date: 2/13/19  
Affiliation: SE Uplift  
Key Takeaway: Leah suggested we reach out to Oregon Walks & Bike Loud PDX and offered to connect us with specific neighborhood associations as we refined our geographic scope.

Name: Laura Becker  
Date: 2/13/19  
Affiliation: Northeast Coalition of Neighborhoods  
Key Takeaway: Sullivan's Gulch & Eliot neighborhood associations will be enthusiastic.

Name: Orlando Lopez  
Date: 2/15/19  
Affiliation: OPAL Environmental Justice  
Key Takeaway: Supportive of decongesting bus corridors; Division should go car-free; Look at bridges; Prioritize transit getting out of downtown; Prioritize based on bus capacity. Broadway Corridor is a chance to start fresh. Contact Oregon Walks and Community Cycling Center.

Name: Rachael Hoy; Troy Doss  
Date: 2/20/19  
Affiliation: Central City Liaisons, Bureau of Planning & Sustainability  
Key Takeaway: Look into C40 work on car-free streets as related to climate efforts. Central City 2035’s red, blue, and green (flexible) designations.

Name: Rich Eisenhauer  
Date: 3/8/19  
Affiliation: Portland Bureau of Transportation  
Key Takeaway: Rich talked about how the Portland in the Streets program relates to our project, provided insight on what makes a successful implementation, how to gauge when they have a "champion," and some potential locations for our project to further investigate.

Name: Josh Mahar  
Date: 2/20/19  
Affiliation: Unaffiliated  
Former student, PSU Traffic & Transportation course  
Key Takeaway: The Pearl District lacks a central commercial street; NW 13th could give the neighborhood a main street (Pearl Promenade). Instead of focusing on lost parking, think about how many are in that area/adjacent parking. Artwalk is
successful; that's what people imagine; setting expectations. Successful ped-streets have programs in place to activate space.

**Name:** Midpoint presentation  
**Date:** 2/20/19  
**Affiliation:** Initial MURP Workshop Presentations  
**Key Takeaway:**  
The Midpoint presentation was our first opportunity to present our project idea to a broad audience. The short presentation was followed by time that was programmed similar to an open house where our team collected information on where people thought we should study and what they envisioned when they thought about car-free streets.

**Name:** Marisa DeMull  
**Date:** 4/12/19  
**Affiliation:** Alta Planning + Design  
**Key Takeaway:**  
Design idea: waist-height lights on bollards to illuminate people for safety from cars.

**Name:** Dr. Amy Parker  
**Date:** 4/16/19  
**Affiliation:** Orientation and Mobility Program, Portland State University  
**Key Takeaway:**  
Stressed the importance of reaching out to practitioners and activists with lived experiences. Provided us with a number of contacts to do further engagement with. Emphasized the importance of making it a place that potentially improves the experience for people with disabilities rather than just making it a place that is no more difficult to navigate than any other street.

**Name:** Gary Cobb  
**Date:** 4/16/19  
**Affiliation:** Central City Concern  
**Key Takeaway:**  
CCC’s health clinic at Broadway & Burnside is important stakeholder for a car-free SW Ankeny. Worthwhile to do focus group with CCC residents, as PBOT did for CCIM. Many CCC residents, clients, and patients use mobility devices and have difficulty crossing streets safely within the allotted time.

**Name:** Lisa Frisch  
**Date:** 4/18/19  
**Affiliation:** Portland Business Alliance  
**Key Takeaway:**  
Opposed to the project in principle and in specifics, particularly on Yamhill. Won't stand in the way of business-led initiatives.

**Name:** Keoni Wachsmuth  
**Date:** 4/19/19  
**Affiliation:** Dan & Louis Oyster Bar  
**Key Takeaway:**  
Keys to success: activate spaces that already draw people. Make the space inviting with fencing, lighting, nice seating. Enthusiastic about car-free Ankeny Alley.

**Name:** Izzy Armenta  
**Date:** 4/22/19  
**Affiliation:** Oregon Walks  
**Key Takeaway:**  
Great project. Be thoughtful about how and by whom space is activated.

**Name:** Keith Jones  
**Date:** 4/23/19  
**Affiliation:** Friends of the Green Loop  
**Key Takeaway:**  
If we are serious, talk to groups that already serve houseless populations.
**Name:** Denise Snow; Liz Schaller  
**Date:** 4/24/19  
**Affiliation:** American Printing House  
**Key Takeaway:**  
Be consistent in our recommendations. Getting the word out is very important to people with vision loss - to alert them that changes are being made to a particular street. Pedestrian signal crossing times are often not long enough for people with mobility limitations. When considering pedestrian mixed with low-volume vehicle traffic or transit streets, think about textured striping, chirping sounds, etc to notify users that they are crossing into a new territory.

**Name:** West Livaudais  
**Date:** 4/25/19  
**Affiliation:** Oregon Office on Disability & Health  
**Key Takeaway:**  
Supportive of car-free idea. Small, clearly signaled stretch is good; larger pedestrian district can also be good. Popular places like NW 23rd, NW 13th and food carts are wheelchair-inaccessible. Crowds are difficult to navigate. Avoid making it harder to reach essential services because of spillover congestion or clutter. Inaccessibility leads to isolation which leads to mental health problems. Disability community is so good at coping, sometimes even they forget to bring up areas for improvement.

**Name:** George Stern  
**Date:** 4/26/19  
**Affiliation:** Unaffiliated  
**Key Takeaway:**  
Concerned about vehicle dependent populations & blind populations that rely on soundscape. Suggested including multiple entrances with dedicated drop off points and consistent tactile and audible markers for car-free navigation.

**Name:** Patricia Kepler  
**Date:** 4/26/19  
**Affiliation:** Portland Community College  
**Key Takeaway:**  
Consistency is important. Transit service can't replace curb-to-curb transportation.

**Name:** Grant O’Connell  
**Date:** 5/1/19  
**Affiliation:** TriMet  
**Key Takeaway:**  
MAX trains in the Central City operate at reduced speeds, between 12-15 mph. Currently TriMet relies on audible bells to announce a train's presence. Design guidelines for tactile strips or physical delineation barriers have not been implemented. Per NACTO, “Across a wide range of cities and land use contexts, arrival-mode surveys show that transit delivers many times more people to streets and businesses than do private cars.” Our project could dovetail nicely with the proposed MAX closures downtown, which includes SW Yamhill at 4th. TriMet could not champion our project, but perhaps could partner in a coalition in collaboration with another entity such as Pioneer Square.
**Name:** Alan DeLaTorre  
**Date:** 5/3/19  
**Affiliation:** Institute on Aging, Portland State University; Age Friendly Portland  
**Key Takeaway:**  
Parking is helpful for elderly people. Disability community's advice has been/shouldn't be ignored, e.g. grey tactile strips instead of yellow at Director Park. Both audible and visible warnings are helpful. Safety considerations for blind/deaf people also apply to pedestrians distracted by cell phones. However, car-free areas are generally safer, particular concern for elders for whom a simple fall can have dire health consequences. Look at Pearl District near Jamison Square for great examples of elder-friendly benches, signage, etc.

**Name:** Ed Ariniello  
**Date:** 5/10/19  
**Affiliation:** US Outdoor Store  
**Key Takeaway:**  
Ariniello and several other business owners are very enthusiastic about pedestrianizing SW Ankeny, but need more city support. He does not support implementations that would include people experiencing houselessness.

**Name:** Sam Purvis  
**Date:** 5/10/19  
**Affiliation:** Good Coffee  
**Key Takeaway:**  
Good Coffee opened a fourth location on a new pedestrian street at NW 21st and Raleigh. Business has done well, due to existing densities, NW Portland's propensity for walking, "beautiful" environment, and developers' selection of New Seasons and other business operators. Deliveries are no problem.

**Name:** Angela Molloy Murphy  
**Date:** 5/15/19  
**Affiliation:** Portland State University  
**Key Takeaway:**  
Pedestrian streets open up possibilities for placemaking and inclusive spaces for multi-age communities to interact, converse, and exchange. A pedestrian street allows children to be exposed to their community in a non-commodified space, as children in other parts of the world might experience in a piazza or town square. More greenery, chairs, tables, benches, and children's artwork are recommended to welcome community members of all ages.

**Name:** Chris Pangilinan  
**Date:** 5/22/19  
**Affiliation:** Uber  
**Key Takeaway:**  
San Francisco has some compelling examples of pedestrian streets that are car-free, but allow buses and paratransit. TNCs can be accommodating by implementing designated pick-up and drop-off locations along side streets. For permanent car-free streets, leveling the curb with the street and providing a smooth street surface is ideal for wheelchair users. Make sure that GPS and other navigation tools understand it as a pedestrian street and route traffic away accordingly.
APPENDIX C:
INTERCEPT SURVEY

Data Cleaning & Methodology

This Appendix section lists the steps that were taken to transform the raw survey data files downloaded from Qualtrics into data that could be used to analyze our survey responses. The purpose of documenting this process is to allow for replicability in the event that any of the data is lost or contaminated.

Steps to clean the raw data:

1. Save copies of the raw data files from Qualtrics, allowing access to the original data files should any problems or questions arise down the road. Proceed with the following steps using the copies, not the raw data files.

2. Remove incomplete or preview survey results.
   a. Only a few surveys were listed as incomplete. None of these surveys were started, as there was not even partial data attributed to them. These surveys were identified by finding any surveys that read as “False” under the “Finished” column. It appears these surveys were opened in a browser and then not used, so the results are safe to discard.
   b. Similarly, surveys that were listed as “Survey Preview” under the “Response Type” column were removed from the data set.

3. Columns that do not provide any data or that provided data that was redundant or superseded by other columns (i.e. Qualtrics recorded date and time vs. Surveyor input date and time) were removed from the spreadsheet. Columns that were removed are:
   a. Start Date
   b. End Date
   c. Response Type
   d. IP Address
   e. Progress
   f. Duration
   g. Finished
   h. Recorded Date
   i. Recipient Last Name
   j. Recipient First Name
   k. Recipient Email
   l. External Data Reference
   m. Location Latitude
   n. Location Longitude
   o. Distribution Channel
   p. User Language
   q. Q06 - Topics
   r. Q14_1_TEXT - Topics
   s. Q11 - Topics

4. Responses were then examined to determine the survey was recorded at the proper location.
   a. One response was moved from the Montgomery data set to the Ankeny data set because Q35 made it clear the survey was conducted at the Ankeny location.
5. The first few responses on the Montgomery data set did not include responses to Q36 (day) or Q37 (time) because these questions were added to the survey after the surveys were recorded. For the first five responses to the Montgomery data set, the following adjustments were made:
   
a. Q36 was entered as Tue, 4/2 to reflect the day the surveys were taken
b. Q37 was entered in ten minute increments starting from the start of the survey shift (11:30) until 12:10, to approximate the time period during which the surveys were administered.

6. Q05 prompts the respondent to provide up to 3 responses in one question. The data was recorded with up to three responses delineated by a comma within one column. Each individual response to this question was moved into a separate column using the “text to columns” function within Excel. The responses can be found in columns Q05_01, Q05_02, and Q05_03. Similar efforts were also completed for Q01, Q02, Q07, and Q15.

7. “Prefer not to say” and “outside the US” responses to Q12 were relocated to the Q12_1_TEXT column and the Q12 column was deleted.

8. “Prefer not to say” responses to Q14 were moved into the Q14_1_TEXT column, allowing the Q14 column to be deleted.

Coding “Select All that Apply” and Open-Ended Text Responses:

9. Q14_1_Text “What is your gender” was recoded into “Male, Female, Non-binary, and Prefer not to say” and entered into a new column “Q14s”. Q14_1_Text column was hidden. All responses could be classified into one of these four categories without difficulty. For example, some responses were changed from “masc” to Male, or “F” to female, but none that required any arbitrary decision making.

10. For questions that fall within the “select all that apply” type, each option was given a dedicated column and the selection of that choice is marked with a “1”. A “0” cell indicates that the respondent did not select that option. A row with only “0” indicates a respondent did not answer the question. This applies to all questions Q1, Q2, Q5, Q7, and Q15.

11. Coding of other open-ended text in other questions (Q02, Q5, Q6, Q7, and Q11) required a bit more finesse to code. Each spreadsheet was duplicated on a tab where the coding work could be done, while allowing easily reference to the base material. The tabs are differentiated by a leading “Coded” or “Uncoded.”

12. Q02_Text responses were then evaluated for a common trend. Within the Montgomery sample, it became clear that a lot of the write-ins could be described as social/recreational visits. Two responses did not fall into this category and were left as “Other.” Some responses were recorded as “Other” when they could also have been included in the existing categories. For example, someone who reported as “catching the MAX” could be counted as “just passing through,” similarly to a response of “Airport”. People who “sell papers nearby” and whose “work
1. Routed them nearby today” are there for work and can be counted as “work nearby.” The adjustments can all be reviewed by comparing Coded and Uncoded tabs.

2. When applicable, a new column was introduced into the Q05 array of responses to capture open-ended responses from participants from Q05_Text, Q06, Q07_Text, and Q11. If the text responses included opinions that were not captured under the Q05 options, they were recorded. Sometimes the responses belonged under one of the existing (9) options. If so, the responses were recorded under the appropriate column. If there were a number of new ideas that were recorded at a location, a new column was created and called Coded, “Insert New Option.” If the text responses did not provide new information or ideas, they were largely left alone.
### Survey Summary Statistics

#### Total Responses

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<th>Montgomery</th>
<th>Yamhill</th>
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#### Gender

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#### Race / Ethnicity

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<th>Yamhill</th>
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<td>American Indian or Alaskan Native*</td>
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<td>Hispanic or Latino (any race)</td>
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<td>White*</td>
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<td>Multi-Racial or Other</td>
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#### Disability Status

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#### Income

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<tr>
<td>$150,000 &amp; up</td>
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</table>

* Non-Hispanic

Note: Subtotals may not add up to the total number of responses, as some participants did not respond to all questions.
## Survey Total Responses

<table>
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<tr>
<th></th>
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<th>Ankeny</th>
<th>Yamhill</th>
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<tbody>
<tr>
<td>Public seating</td>
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<td>18 (9%)</td>
<td>34 (20%)</td>
</tr>
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<td>Performance spaces</td>
<td>22 (8%)</td>
<td>16 (8%)</td>
<td>13 (8%)</td>
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<tr>
<td>Playgrounds</td>
<td>12 (4%)</td>
<td>3 (2%)</td>
<td>7 (4%)</td>
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<tr>
<td>Cafes/Rest</td>
<td>26 (9%)</td>
<td>27 (14%)</td>
<td>23 (14%)</td>
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<td>6 (3%)</td>
<td>8 (5%)</td>
</tr>
<tr>
<td>Art</td>
<td>29 (10%)</td>
<td>19 (10%)</td>
<td>25 (15%)</td>
</tr>
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</tr>
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<td>5 (3%)</td>
<td>5 (3%)</td>
</tr>
<tr>
<td>Lighting - Coded</td>
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</tr>
<tr>
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<td>0 (0%)</td>
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</tr>
<tr>
<td>General Opposition - Coded</td>
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</tr>
<tr>
<td>Recreational Space - Coded</td>
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<td>0 (0%)</td>
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</table>

Subtotal: Montgomery 284 (100%), Ankeny 193 (100%), Yamhill 170 (100%)

## Public Seating Correlation

<table>
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<th>Ankeny</th>
<th>Yamhill</th>
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<tbody>
<tr>
<td>Public seating</td>
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<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Performance spaces</td>
<td>6 (7%)</td>
<td>7 (18%)</td>
<td>8 (12%)</td>
</tr>
<tr>
<td>Playgrounds</td>
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<td>1 (3%)</td>
<td>3 (5%)</td>
</tr>
<tr>
<td>Cafes/Rest</td>
<td>10 (11%)</td>
<td>9 (24%)</td>
<td>10 (15%)</td>
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<tr>
<td>Food Carts</td>
<td>11 (13%)</td>
<td>2 (5%)</td>
<td>6 (9%)</td>
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<tr>
<td>Retail vendors</td>
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<td>2 (5%)</td>
<td>4 (6%)</td>
</tr>
<tr>
<td>Art</td>
<td>5 (6%)</td>
<td>2 (5%)</td>
<td>15 (23%)</td>
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<tr>
<td>Trees and green</td>
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<td>Safety - Coded</td>
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<td>0 (0%)</td>
</tr>
<tr>
<td>General Opposition - Coded</td>
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<td>0 (0%)</td>
</tr>
<tr>
<td>Recreational Space - Coded</td>
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Subtotal: Montgomery 87 (100%), Ankeny 38 (100%), Yamhill 65 (100%)
### Landscape Greenery Correlation

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<th>Montgomery</th>
<th>Ankeny</th>
<th>Yamhill</th>
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<tbody>
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<td>Public seating</td>
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<tr>
<td>Performance spaces</td>
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<tr>
<td>Playgrounds</td>
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<tr>
<td>Cafes/Rest</td>
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### Cafe + Restaurant Correlation

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<tr>
<td>Cafes/Rest</td>
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<td>0 (0%)</td>
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<td>9 (14%)</td>
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<td>Trees and green</td>
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<td>64 (100%)</td>
<td>48 (100%)</td>
</tr>
</tbody>
</table>
Living Streets Intercept Survey

Purpose:
Portland’s Central City is an expansive geographic area that attracts a wide variety of people. As the Living Streets team evaluates the potential of different pedestrian streets, it is important to assess the types of users that frequent any given streets and evaluate their unique needs. By conducting a series of intercept (in-person) surveys on our candidate streets, surveyors will engage directly with street users at varying times of day and days of the week. Survey results will allow the Living Streets team to better understand the behaviors of people living, visiting, and working near potential pedestrian streets.

Objectives:
- Determine the key reasons that people visit a particular street
- Evaluate the general frequency and length of stay of visitors
- Understand how people travel to/from a given street
- Investigate how users would respond to a street becoming car-free
- Identify types of pedestrian street amenities and programming that would attract visitors
- Quantify the demographic characteristics of visitors to the area

Surveyor Instructions:
- Wear professional attire
- Note the date, time, and block of the street where you are located
- Communicate with your fellow surveyor ahead of time to agree on meeting location and who is responsible for bringing materials (printed surveys, pens clipboards, tablets, etc)
- Spread yourselves out across the block(s) in order to maximize survey responses

What to bring:
- A Clipboard
- Pens and pencils
- Blank paper surveys: 75 per survey period
- Plastic sheets to protect paper surveys, if possible
- Tablet(s) if you will be administering the survey electronically
- Folder(s) for storing completed and blank surveys
- A smile and positive attitude!

Who to approach:
- People who are walking, biking, parking, etc.
- People who look over the age of 15
- If you notice you are speaking predominantly with the same type of person, try to diversify the people you approach
Surveyor Dialogue

*Initial Greeting:* “Hello! Are you willing to take a 5 minute student survey?”
*If yes:* “Great! We will start with questions about your visit to this street today.”

*Before Question #5:*

“Now imagine that this street were open to pedestrians and closed to cars. This would be from __________ to __________ street, with traffic coming through at cross-streets.”

**Street Locations:**
- SW Ankeny — from SW Broadway to SW Park Ave
- SW Montgomery St — from SW 6th Ave to SW Broadway
- SW Yamhill — from SW 6th Ave to SW Park Ave

**General Notes**

- If answer is straightforward, give participant time to think and answer on their own. If they are confused, you can offer examples or show them the tablet.
- If participant provides additional information beyond the prompt, you may document this in the “other” box. Keep time constraints in mind.
- If participant’s response differs from the options available, choose the option that best addresses the intent of the question.

**When You Finish:**

- Upon completion, divide the completed paper surveys between the two surveyors.
- Make sure to store completed surveys in a safe and secure space.
- Enter all completed paper surveys into Qualtrics by Sunday, April 7th.
- Shred completed surveys once they are entered into Qualtrics.
Street User Survey

Time: 
Date: 
Street: 

1. **How did you get to this street today?** (Choose all that apply.)  
   - □ Walked  
   - □ Biked  
   - □ Rode a skateboard, scooter, or similar  
   - □ Took transit  
   - □ Drove  
   - □ Other: ________________________________

2. **Why did you decide to come here?** (Choose all that apply.)  
   - □ I live nearby  
   - □ I work nearby  
   - □ I go to school nearby  
   - □ For shopping, entertainment, or services  
   - □ To eat or drink  
   - □ I’m just passing through  
   - □ Other: ________________________________

3. **How often do you come to this street?**  
   - □ Daily  
   - □ A few times per week  
   - □ A few times per month  
   - □ A few times per year  
   - □ Rarely/This is my first time here

4. **Do you expect to come back soon?**  
   - □ Yes, within a week  
   - □ Yes, within a month  
   - □ Yes, eventually  
   - □ No  
   - Why do you expect to come back then?  
     __________________________________________
Now imagine this street were to become open to pedestrians and closed to cars.

5. **What would you like to see here if this street became car-free?**
   Please select your top 3 choices.

   - [ ] Public seating
   - [ ] Performance spaces
   - [ ] Playgrounds
   - [ ] Cafés/restaurants with outdoor seating
   - [ ] Food carts
   - [ ] Retail vendors
   - [ ] Art
   - [ ] Trees and greenery
   - [ ] Community gardens

   □ Other: _________________________________________________________________
6. Would you like to elaborate on your choices?

7. What kinds of events would attract you to this street? (Choose all that apply.)
   - Outdoor concerts or other entertainment
   - Craft or food markets
   - Special car-free days
   - Physical activities (like skating or dancing)
   - Kid-specific events (like kid-friendly concerts or play activities)
   - Other: ____________________________

8. If the street had these qualities and offered these events, do you think you would visit more or less often?
   - More often
   - Less often
   - About the same

9. If cars were not allowed on this street, would you change the way you travel here?
   - Yes
   - No
   - Unsure

10. Would this make traveling here easier, more difficult, or about the same?
    - Easier
    - More difficult
    - About the same

11. Please tell us how this would affect the way you travel here:
The next questions will help us understand the demographics of the people we have surveyed. This information will be kept confidential and will be used for data analysis purposes only. You can skip any questions you prefer not to answer.

12. What is your home zip code?
   □ ____________________
   □ From outside the US
   □ Prefer not to say

13. How old are you?
   □ Under 18
   □ 18-24
   □ 25-34
   □ 35-44
   □ 45-54
   □ 55-64
   □ 65-74
   □ 75 or older
   □ Prefer not to say

14. What is your gender?
   □ ____________________
   □ Prefer not to say

15. What is your race/ethnicity? Please select all that apply:
   □ American Indian or Alaska Native
   □ Asian
   □ Black or African-American
   □ Latino or Hispanic
   □ Middle Eastern or North African
   □ Native Hawaiian or Pacific Islander
   □ White
   □ Other: __________________________
   □ Prefer not to say

16. Do you have a disability?
   □ No, I do not have a disability
   □ Yes, cognitive
   □ Yes, hearing
   □ Yes, mobility or dexterity (e.g. walking or climbing stairs)
   □ Yes, visual
   □ Other: __________________________
   □ Prefer not to say

17. What is your annual household income?
   □ $0 - $14,999
   □ $15,000 - $29,999
   □ $30,000 - $49,999
   □ $50,000 - $74,999
   □ $75,000 - $149,999
   □ $150,000 +
   □ Prefer not to say
Encuesta de usuario

Tiempo:
Fecha:
Calle:

1. ¿Cómo llegó usted esta calle hoy día? (Elija todo lo que corresponda.)
   □ Caminando
   □ En bicicleta
   □ En patineta, scooter, o similar
   □ En tránsito público
   □ En coche compartido, Uber/Lyft
   □ En auto personal
   □ Otro: _______________________________________

2. ¿Por qué decidió venir aquí? (Elija todo lo que corresponda.)
   □ Vivo cerca
   □ Trabajo cerca
   □ Asisto a una escuela cercana
   □ Para ir de compras
   □ Para entretenimiento (teatro, concierto, actividades)
   □ Para servicios communes (banco, corte de pelo, y otros servicios)
   □ Para comer o beber
   □ Solo estoy pasando por aquí
   □ Otro: _______________________________________

3. ¿Con qué frecuencia viene a esta calle?
   □ Diario
   □ Un par de veces por semana
   □ Un par de veces por mes
   □ Un par de veces por año
   □ Casi nunca/ Esta es mi primera vez aquí

4. ¿Tiene la intención de volver pronto?
   □ Sí, dentro de una semana
   □ Sí, dentro de un mes
   □ Sí, eventualmente
   □ No
   □
¿Por cual razón piensa volver?
Ahora imagine que esta calle se abriera a los peatones y se cerrara a los coches.

5. ¿Qué le gustaría ver aquí si esta calle no tuviese coches?
   Por favor seleccione sus 3 opciones favoritas.

□ Asientos públicos
□ Espacio para actividades
□ Parques infantiles

□ Cafeterías u restaurantes con mesas al aire libre
□ Carritos de comida
□ Vendedores al por menor

□ Arte
□ Árboles y vegetación
□ Jardines communitarios

□ Otro : ____________________________________________
6. ¿Le gustaría contarnos más sobre sus selecciones previas?

7. ¿Qué tipo de eventos le atraería a usted a esta calle? (Elija todo lo que corresponda.)
   □ Conciertos al aire libre u otros entretenimientos
   □ Mercados artesanales o de alimentos
   □ Días especiales sin coches
   □ Actividades físicas (como patinar o bailar)
   □ Eventos específicos para niños (como conciertos para niños o actividades de juego)
   □ Otro: ____________________________________________

8. Si la calle tuviera estas cualidades y ofreciera estos eventos, ¿cree usted que visitaría con más o menos frecuencia?
   □ Con más frecuencia
   □ Con menos frecuencia
   □ Con la misma frecuencia

9. Si los coches no estuvieran permitidos en esta calle, ¿cambiaría la forma en que usted viajaría aquí?
   □ Sí
   □ No
   □ No estoy seguro(a)

10. ¿Esto haría que su viaje aquí sea más fácil, más difícil o casi igual?
    □ Más fácil
    □ Más difícil
    □ Casi igual

11. Por favor, cuentenos cómo afectaría esto la forma en que usted viajaría aquí:
Creating the initial list of streets

The initial list of streets was created as a first step toward a final list of candidate streets. Attempting to analyze every block of every street in the Central City would be overwhelming and infeasible for our short timeline and limited resources. The initial list included a manageable amount of roughly 30 streets of varying lengths in various contexts. The intent of this list was to guide discussions with potential stakeholders, with the goal of ultimately selecting one to three streets to study in more detail after outreach efforts and qualitative analysis.

We chose streets where we thought a pedestrian-oriented transformation would enhance the area, perhaps by making it easier and more inviting for people to patronize businesses, or by giving residents and visitors places to relax and recreate, or by creating safe and convenient connections for people to move through. This is based on our own understanding of the Central City and on a variety of factors derived from academic studies, background research, and outreach with stakeholder groups. Past implementations of pedestrian streets in the U.S. have been largely unsuccessful; the few that have succeeded have been the focus of many studies. Factors we considered include (not in order of priority):

- The role of the street in the transportation network. Streets with lower volumes of automobile traffic are preferred because implementation will have less impact on the larger transportation system and less potential negative impact on the surrounding land uses.
- Existing pedestrian activity. Streets that are already busy with pedestrians are preferred because this demonstrates that people want to walk in these places.
- Connections in the pedestrian and bicycle network. Many areas in the Central City lack safe and comfortable accessibility for pedestrians and people on bikes. Streets that improve this connectivity are preferred.
- Proximity to transit. Transit supports pedestrian streets by improving access, adding more eyes on the street, and adding activity. Streets directly served by transit or only a block away from transit stops are preferred.
- Impacts to parking. Removing on-street parking or impeding off-street parking may negatively affect existing businesses and is likely to create opposition. Streets with fewer existing parking spots and driveways are preferred.
- Nearby land uses. Areas with mixed uses, including residences, commercial, and attractions, support walkability. Streets in these areas are preferred.
• **Nearby park space.** A pedestrian street can provide park space for areas that are lacking.

• **Residential and commercial densities.** Streets with more people living, working, and visiting nearby are preferred because they are more likely to support pedestrian activity.

• **Activity at all times of day.** A variety of commercial activity that attracts users at all times of day, including cafes, shops, restaurants, bars, theaters, and gyms, maintain continuous activity on the street. Areas that already have this mix are preferred.

• **The existing streetscape.** Streets with a pedestrian-friendly streetscape, including human-scale details, vegetation, art, small and multiple storefronts, doors and windows, patios and balconies, are preferred.

• **Tourism.** Streets near to existing tourist destinations and hotels are preferred. Existing pedestrian streets have had success when in a popular tourist area, likely because people on vacation are willing to walk and to patronize businesses. This also reinforces Portland's identity as a tourist destination. Streets that connected multiple tourist destinations were highly preferred.

### Narrowing Down the List

In an effort to analyze a more manageable number of streets, we narrowed down our initial list of roughly 30 streets (Initial List of Candidate Streets). Our first attempt at narrowing down the streets included the use of a combination of quantitative and qualitative measures to de-prioritize certain streets.

We used the following factors to help rule out certain streets for additional study during this project. However, it should be noted that these factors do not disqualify these streets from becoming pedestrian streets in the future.

• **Emergency Access.** For our analysis, we determined that none of our streets should be on a primary or secondary emergency access route as determined by the City of Portland’s Street Classification.

• **Freight Access.** We also determined that none of our streets should be on a freight access route as determined by the City of Portland’s Street Classification.

• **Variety of Place.** Some of the street segments on our initial list were in close proximity to one another (e.g. NW 11th and NW 10th, or NW Davis and NW Couch). We tried to identify which street was the most likely to be successful or more interesting to study more and decided to table the other.

• **Potential Champions.** Our team tried to identify potential champions for each of the locations. If no potential champion emerged after outreach and internal review, the street was tabled from consideration.

• **Driveway Access.** Some streets we evaluated seemed to contain just
one long driveway, providing access to parking lots, truck bays, or other auto-oriented services. We were able to rule out a street if the amount and/or frequency of driveways on the segment looked to provide too logistically challenging for the street to be considered in our initial study.

• **Density of Developed Land.** Streets with too many parking lots or abandoned lots were removed from our initial list as these places provide a challenge to attract and retain a safe and dense pedestrian environment.

### Identifying Streets to Survey

Part of our public engagement process involved conducting intercept surveys on street segments that could feasibly be on our list of candidate streets. The team decided that we would survey multiple locations during different hours of the day throughout the first week in April. Given time and logistical constraints, we agreed that we needed to concentrate our survey efforts to three locations. This required us to narrow down our list of possible streets to three locations.

We used a few factors for evaluating streets to help narrow down our list for surveying purposes.

• **Representation of different pedestrian street types:** Some of the streets we identified could fit into more than one of the types identified in our typology document, however, we wanted our surveys to capture responses from users of streets with varying characteristics. We tried not to duplicate any types of streets in our survey locations to the extent that this was possible.

• **Unique Opportunities:** Our team decided to survey on SW Montgomery St on Portland State University’s campus because it aligns with an opportunity to gather “before” data for a demonstration event planned for the month of May. Campus Planning and other university stakeholders are planning a month long closure of Montgomery Street and our team wanted to collect data before and during this event.

• **Proximity to NW 13th St:** We decided to not include NW 13th St in our initial rounds of surveys because of duplicative efforts from members of the Pearl District. We also decided to not survey on NW 10th St for similar reasons. While the implementation on NW 10th would be different from that of NW 13th, we were concerned that the locational proximity to NW 13th might cause people to conflate the two projects.

• **Location Specific Equity Concerns:** Studying N Winning Way and N Benton Avenue near the Moda Center is appealing in terms of understanding how these streets could support Albina Vision’s plans for the larger North/Northeast Central City. However, we elected not to study these areas because we believe the reimagining of the streets surrounding the Rose Quarter deserves to be led and executed by the leaders driving Albina Vision.
## Initial List of Candidate Streets

<table>
<thead>
<tr>
<th>Street</th>
<th>Boundary</th>
<th>Opportunities</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW Harvey Milk St</td>
<td>SW 13th to Naito</td>
<td>Low car traffic could be delivery/low-traffic/bike space</td>
<td>Lots of deliveries</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Already Active: Ace Hotel, bars, cafes</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Potential champions: Timbuktu, west end bikes</td>
<td></td>
</tr>
<tr>
<td>SW Oak</td>
<td>SW 9th to 10th</td>
<td>Active with sizzle pie, courier coffee, Movement space</td>
<td>Not many active uses</td>
</tr>
<tr>
<td>SE Taylor</td>
<td>SE Water Ave to SE MLK</td>
<td>Current bike route lots of parking on water ave Access to Esplanade Active uses: Water Ave Coffee, restaurants</td>
<td>Need to know more about traffic volume</td>
</tr>
<tr>
<td>SW 10th and/or SW 11th</td>
<td>W Burnside to SW Columbia</td>
<td>Will see more loading uses w/ PAM expansion</td>
<td>Little car traffic now, but will have more when green loop is implemented There are parking lots and garages that would find it hard to function, probably</td>
</tr>
<tr>
<td>Street</td>
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<tr>
<td>NW 13th St [North]</td>
<td>North of Everett</td>
<td>Active programming: 1st Thursdays that have great community support. Existing research - Rethink 13th St MURP project Mix of active uses: retail, cafes, employers, residents Tourism: proximity to Powell’s, shopping, Jamison, Good transit access Benefits to ADA access Dense walkable area Adds north/south bike connection</td>
<td>Equity - Mostly affluent neighborhood with areas that are still not well developed into the transportation network. Some areas with industrial character of raised loading docks. This industrial character makes it hard for accessibility and street visibility. Previous studies have been done for this street to be converted to a pedestrian street.</td>
</tr>
<tr>
<td>NW 13th St [South]</td>
<td>Burnside to Everett</td>
<td>See &quot;NW 13th St [North]&quot;</td>
<td>See &quot;NW 13th St [North]&quot;</td>
</tr>
<tr>
<td>NW Irving</td>
<td>NW 9th to NW 14th</td>
<td>Some portions are already car-free Could be ped oriented with car-light commercial opportunities Post office development could carry over/connect to union station Good connection to 13th</td>
<td>Some driveways/truck places Some land uses (parking lots/loading docks) don't support car-free</td>
</tr>
<tr>
<td>NW Davis [West]</td>
<td>NW 4th to Broadway</td>
<td>Busy during tourist season: potential for temporary/phased project Doesn't have loading doors, parking lots, or garages Access to waterfront Society Hotel, new Starbucks, museum, tea house, Chinese garden</td>
<td>Requires major programming/economic stimulation in surrounding area</td>
</tr>
<tr>
<td>NW Davis [East]</td>
<td>Naito to NW 4th</td>
<td>See &quot;NW Davis [West]&quot;</td>
<td>See &quot;NW Davis [West]&quot;</td>
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</tr>
<tr>
<td>NW Couch [West]</td>
<td>NW 4th to Broadway</td>
<td>Busy during tourist season: potential for temporary/phased project</td>
<td>Requires major programming/economic stimulation in surrounding area</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Doesn't have loading doors, parking lots, or garages</td>
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<tr>
<td></td>
<td></td>
<td>Access to waterfront</td>
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<tr>
<td></td>
<td></td>
<td>Society Hotel, new Starbucks, museum, tea house, Chinese garden</td>
<td></td>
</tr>
<tr>
<td>NW Couch [East]</td>
<td>Naito to NW 4th</td>
<td>See &quot;NW Couch [West]&quot;</td>
<td>See &quot;NW Couch [West]&quot;</td>
</tr>
<tr>
<td>NW Couch [Powell’s]</td>
<td>NW Broadway to 11th</td>
<td>Connects waterfront at Japanese American historical plaza all the way to Powell’s, etc.</td>
<td>Drivers who cross the Burnside Bridge and want to turn left as soon as they can currently have to turn up 2nd, over one block on Couch, and then down on 3rd Avenue. Making Couch ped-only would mean anyone who wanted to enter downtown via the Burnside Bridge would have to drive several blocks more further on Burnside before they had the opportunity to turn.</td>
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<td></td>
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<td>Lined by businesses</td>
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<td></td>
<td>Similar to Davis, more activated moving West</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Better connection to waterfront</td>
<td></td>
</tr>
<tr>
<td>Park Blocks North</td>
<td>W Burnside to NW Glisan</td>
<td>Supports/aligns with Green Loop Parks! Benches, green space</td>
<td>How to deal w/ couplet? Taking away lots of parking</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Culinary Corridor - food carts, etc</td>
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<tr>
<td></td>
<td></td>
<td>Good transit access</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Continuation of PSU park blocks, Director &amp; Bryant Parks</td>
<td></td>
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<tr>
<td></td>
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<td>Active programming: PSU farmers market</td>
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<tr>
<td></td>
<td></td>
<td>Builds off history of PSU closure during Vietnam War</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Tourism: Schnitz, PSU, Art Museum, OR Historical Society</td>
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</tbody>
</table>
| Park Blocks South | SW Montgomery to SW Salmon        | Supports/aligns with Green Loop  
Parks! Benches, green space  
Culinary Corridor - food carts, etc  
Good transit access  
Continuation of PSU park blocks, Director & Bryant Parks  
Active programming: PSU farmers market  
Builds off history of PSU closure during Vietnam War  
Tourism: Schnitz, PSU, Art Museum, OR Historical Society | How to deal w/ couplet?  
Taking away lots of parking |
| SW Ankeny       | Naito to 5th & Broadway to Park   | Connects to existing Ankeny Alley  
Activates dead space - esp behind chevron  
Create connections between tourist locations: Voodoo to Powell's | Currently dead space  
Lots of inactive land uses  
How to activate at night? |
| SE 2nd          | SE Oak to Ash                     | Wayfinder  
No sidewalks: people already walk on street | Lots of cars  
Inactive |
| SE 6th          | SE Alder to Morrison             | "Paris of the eastside"  
Festival type programing: Portland flea on weekends |                                                   |
| N Winning Way   | North of Rose Quarter            | Close down during games/events  
Potential pickups for rideshare, activate the space with food carts, etc. | Getting cars out of there is complete madness  
Converting garages into |
| N Benton Ave    | N Winning to N Broadway           | Close down during games/events  
Potential pickups for rideshare, activate the space with food carts, etc. | Getting cars out of there is complete madness  
Converting garages into |
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</table>
| SW Morrison         | SW 18th to 19th   | In front of Timbers stadium  
Temporary closure during events                                                  | Few active uses on the street                                               |
| SW Yamhill          | SW 3rd to 4th     | Should be ped shopping area but isn't because it's a mall  
Pioneer square storefronts don't open to the streets  
Not car-friendly because max is there.  
Extend pedestrian-friendly area farther east.  
Would make great bike connection.  
Already closed from 1st to 3rd  
Max provides eyes/feet on street |                                                                              |
| SW Yamhill [Corridor]| SW 1st to SW 17th |                                                                               |                                                                             |
| SE Ankeny           | SE Grand to SE 12th| Adjacent to active restaurants, bars & venues  
Aligns with bike access on Ankeny Greenway  
Trees                                                                       | Potential opposition from CEID  
Parking constraints in this area                                               |
| SW Montgomery St    | SW 6th to SW Broadway| Has an organized champion!  
More ped traffic than cars  
Creates more connected PSU campus  
No car-dependent uses  
Pilot program happening in May                                                     | Land uses do not face street (campus safety, business school)  
Not inviting                                                                 |
| SW 3rd              | SW Clay to SW Market| Little traffic  
Connects to Halprin sequence  
Potential for activities to spill into Keller fountain/park area               | More traffic on SW 3rd  
dropoff/pickup to Keller is challenge  
Auto connection to Naito is critical                                             |
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<tr>
<td>NW 10th [North]</td>
<td>North of Glisan</td>
<td>Making 10th &amp; 11th only streetcar and bikes Connects dense residential on north side to businesses on south side Has 3 popular parks and grocery store Already not popular for driving bc of streetcar South end: Powell's, Deschutes. Streetcar will bring people in.</td>
<td>Lots of garages: would be probably car-light, not car-free How to implement on a couplet? Potential pushback. Question about whether it would active or deactivate the street to remove cars. Lots of on-street parking right now.</td>
</tr>
<tr>
<td>NW 10th [South]</td>
<td>W Burnside to NW Glisan</td>
<td>See &quot;NW 10th [North]&quot;</td>
<td>See &quot;NW 10th [North]&quot;</td>
</tr>
<tr>
<td>NW 11th [North]</td>
<td>North of Glisan</td>
<td>Making 10th &amp; 11th only streetcar and bikes Connects dense residential on north side to businesses on south side Has 3 popular parks and grocery store Already not popular for driving bc of streetcar South end: Powell's, Deschutes. Streetcar will bring people in.</td>
<td>Lots of garages: would be probably car-light, not car-free How to implement on a couplet? Potential pushback. Question about whether it would active or deactivate the street to remove cars. Lots of on-street parking right now.</td>
</tr>
<tr>
<td>NW 11th [South]</td>
<td>W Burnside to NW Glisan</td>
<td>See &quot;NW 11th [North]&quot;</td>
<td>See &quot;NW 11th [North]&quot;</td>
</tr>
<tr>
<td>SW 9th</td>
<td>Salmon to Yamhill</td>
<td>Connects S park blocks to Director Park (Fox Tower Cinema) Hotels, South Park outdoor seating, Movable furniture, trees More active than southern part of park blocks</td>
<td>Businesses, Parking</td>
</tr>
</tbody>
</table>
### Evaluation Framework - Bustling Commercial

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Criteria</th>
<th>Importance by Type</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Land Use</strong></td>
<td>Transparency</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Population Density</td>
<td>High</td>
</tr>
<tr>
<td><strong>Transportation</strong></td>
<td>Street Classification</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Active Transportation Network</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Transit Access</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Transit Presence</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Emergency Access</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Freight Access</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Street Design Classification</td>
<td>Medium</td>
</tr>
<tr>
<td><strong>Design Elements</strong></td>
<td>Building Form + Height</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Building Density</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Landscaping</td>
<td>Low</td>
</tr>
<tr>
<td>Attributes</td>
<td>Base Rule</td>
<td>Special Considerations</td>
</tr>
<tr>
<td>------------</td>
<td>-----------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Land Use</td>
<td>Bustling Commercial Streets should have significant number of storefronts on the route to increase ‘eyes on the street’ and provide a safe, welcoming environment.</td>
<td>The success of a Bustling Commercial Street is highly correlated with being located in a dense urban area.</td>
</tr>
<tr>
<td>Population Density</td>
<td>Streets may occur on Unclassified and District Collector Streets.</td>
<td>These streets may occur on streets with higher volume if there is adequate consideration for alternative traffic routes</td>
</tr>
<tr>
<td>Transportation</td>
<td>Streets may support the connection of existing active transportation routes but the lack of connection does not deter their consideration. • Pedestrian Classification: Pedestrian Districts, Pedestrian-Transit Streets, City Walkways • Bicycle Classification: Major City Bikeways, City Bikeways, Bicycle Districts</td>
<td>• Pedestrian: streets may occur on Local Service Walkways, but these streets are unlikely to have the appropriate levels of activity and density • Bicycle: may occur on Local Service Bikeways, depending on level of activity and density • Bicycles may need to proceed with caution depending on right of way and pedestrian density</td>
</tr>
<tr>
<td>Transit Access</td>
<td>Street should be at most 500 feet away from Regional Transitways, Major Transit Priority Streets, or Transit Access Streets.</td>
<td></td>
</tr>
<tr>
<td>Transit Presence</td>
<td>High-capacity transit encourages car-free users from throughout the region and provides transportation along longer car-free streets.</td>
<td></td>
</tr>
<tr>
<td>Emergency Access</td>
<td>Streets cannot be on Major or Secondary Emergency Response Routes.</td>
<td></td>
</tr>
<tr>
<td>Freight Access</td>
<td>Bustling Commercial Streets should be planned off of the regional freight access routes.</td>
<td>Local freight access on the street will be dependent upon site-specific conditions.</td>
</tr>
<tr>
<td>Street Design Classification</td>
<td>Civic Main Streets and Neighborhood Main Streets would perform best in this setting.</td>
<td>Neighborhood Corridors, Civic Corridors, Community Corridors, and Regional Corridors might also work given appropriate land use and traffic patterns.</td>
</tr>
<tr>
<td>Design Elements</td>
<td>Streets can be supported on a street with mid-rise to tall buildings.</td>
<td></td>
</tr>
<tr>
<td>Building Form + Height</td>
<td>Buildings, in particular retail spaces, should be tightly packed together, keeping pedestrians from having to walk too far to the next destination.</td>
<td></td>
</tr>
<tr>
<td>Building Density</td>
<td>Landscaping is likely to be limited on streets, but places that provide shade to street users are an asset.</td>
<td></td>
</tr>
<tr>
<td>Main Users</td>
<td>Neighborhood</td>
<td>Medium</td>
</tr>
<tr>
<td>--------------------------</td>
<td>--------------</td>
<td>--------</td>
</tr>
<tr>
<td></td>
<td>Local</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Regional / Tourism</td>
<td>High</td>
</tr>
<tr>
<td>Business Mix</td>
<td>Industry &amp; Ownership</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Frequency</td>
<td>Low</td>
</tr>
<tr>
<td>Anchor(s)</td>
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<tr>
<td></td>
<td>Attractions</td>
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<tr>
<td></td>
<td>Human Health Needs (Sanitation)</td>
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<tr>
<td></td>
<td>Improving the Experience for POC &amp; Low-Income People</td>
<td>Medium</td>
</tr>
<tr>
<td>Streets should help to support local businesses and services that serve the immediate neighborhood.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Street should also serve the local community by providing a mix of uses.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Streets should be attractive for visitors from across and outside the region. Bustling Commercial Streets are destinations for all.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| In an ideal setting, the street provides opportunities for locally owned businesses to make their mark. |
| Larger, supportive retail corporations would be welcome in these spaces as well. |

| Streets should support weekly trips for local residents, but also are located where people from the surrounding region and tourists will come less frequently. Businesses do not rely on regulars. |

| Having a strong commercial / retail champion will be one of the most critical elements supporting a bustling commercial street. |

| Unique retail opportunities. |

| Streets should be permanent installations. Consistency is important in attracting new and returning street users. |

| Street considers design elements, including tactile and audible wayfinding and ADA accessibility throughout. |

| Will the design of the street consider uses such as clean water, Portland Loo, public phones, charging stations, and welcoming, non-aggressive architectural features? |

| Promote Streets near regulated affordable housing; Take additional precautions for sites near "naturally occurring" affordable housing. |
## Evaluation Framework - Neighborhood Green Street

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<tr>
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<td>Population Density</td>
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<td><strong>Transportation</strong></td>
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<td>Freight Access</td>
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<tr>
<td></td>
<td>Street Design Classification</td>
<td>High</td>
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<tr>
<td><strong>Design Elements</strong></td>
<td>Building Form + Height</td>
<td>Medium</td>
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<tr>
<td></td>
<td>Building Density</td>
<td>Low</td>
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<tr>
<td></td>
<td>Landscaping</td>
<td>High</td>
</tr>
<tr>
<td><strong>Main Users</strong></td>
<td>Neighborhood</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Local</td>
<td>High</td>
</tr>
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<td></td>
<td>Regional / Tourism</td>
<td>Low</td>
</tr>
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</table>

- Transparency Low: Storefronts interspersed with residential buildings provide a balance of visibility and privacy.
- Population Density Medium: Density is less crucial for Neighborhood Green Streets than Bustling Commercial; however, this application is still best suited to relatively dense, urban settings.
- Street Classification High: Neighborhood Green Streets are best suited to unclassified, low-volume streets. These streets can exist on District Collectors as well, so long as the community supports modifying their connections.
- Active Transportation Network Medium: Pedestrian Classification: Pedestrian Districts and Local Service Walkways are the most appropriate streets for this implementation. Bicycle Classification: City Bikeways, Local Service Bikeways, and Bicycle Districts. These streets can benefit from being tied into the area’s broader active transportation network, but this implementation can be successful without those connections.
- Transit Access High: Streets should be at most 500 feet away from Regional Transitways, Major Transit Priority Streets, or Transit Access Streets.
- Transit Presence High: Clean, quiet transit technologies are appropriate for Neighborhood Green Streets, while diesel buses and other vehicles that create noise and air pollution are not.
- Emergency Access High: Streets cannot be on Major or Secondary Emergency Response Routes.
- Freight Access Medium: Streets should be planned off of the regional freight access routes.
- Street Design Classification High: Neighborhood Corridors, Community Corridors, Neighborhood Main Streets, Local Streets, and Enhanced Greenway Corridors would perform best in this setting.
- Building Form + Height Medium: The buildings in this area are more neighborhood-scale than the bustling commercial street. A combination of low- to mid-rise buildings is an appropriate scale.
- Building Density Low: Buildings here should be relatively dense, typical for that of a quieter urban neighborhood. This implementation can work in highly dense or lower densities as well.
- Landscaping High: Ideally, these streets already have a lot of green infrastructure that provides the neighborhood natural shade and exchange spaces. Neighborhood Green Streets might act as a solution in neighborhoods where there is not very much existing greenery in a particular neighborhood. Additional work may be needed to consider how to add greenery.
- Neighborhood High: Streets should primarily serve neighborhood and local users.
- Local High: Streets should primarily serve neighborhood and local users.
- Regional / Tourism Low: Neighborhood Green Streets may serve a secondary function as more regional, tourist attractions.
<table>
<thead>
<tr>
<th><strong>Attributes</strong></th>
<th><strong>Criteria Importance by Type</strong></th>
<th><strong>Base Rule</strong></th>
<th><strong>Special Considerations</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Land Use</strong></td>
<td><strong>Transparency Low</strong></td>
<td>Storefronts interspersed with residential buildings provide a balance of visibility and privacy.</td>
<td>Density is less crucial for Neighborhood Green Streets than Bustling Commercial; however, this application is still best suited to relatively dense, urban settings.</td>
</tr>
<tr>
<td><strong>Population Density</strong></td>
<td><strong>Medium</strong></td>
<td>Neighborhood Green Streets are best suited to unclassified, low-volume streets.</td>
<td>These streets can exist on District Collectors as well, so long as the community supports modifying their connections.</td>
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</tbody>
</table>
| **Transportation** | **Street Classification** | • Pedestrian Classification: Pedestrian Districts and Local Service Walkways are the most appropriate streets for this implementation  
• Bicycle Classification: City Bikeways, Local Service Bikeways, and Bicycle Districts | These streets can benefit from being tied into the area's broader active transportation network, but this implementation can be successful without those connections. |
<p>| <strong>Active Transportation Network</strong> | <strong>Medium</strong> | Street should be at most 500 feet away from Regional Transitways, Major Transit Priority Streets, or Transit Access Streets. | “Clean, quiet transit technologies are appropriate for Neighborhood Green Streets, while diesel buses and other vehicles that create noise and air pollution are not. |
| <strong>Transit Access</strong> | <strong>High</strong> | Streets cannot be on Major or Secondary Emergency Response Routes. | Streets should be planned off of the regional freight access routes. |
| <strong>Transit Presence</strong> | <strong>High</strong> | Neighborhood Corridors, Community Corridors, Neighborhood Main Streets, Local Streets, and Enhanced Greenway Corridors would perform best in this setting. | Neighborhood Green Streets might act as a solution in neighborhoods where there is not very much existing greenery in a particular neighborhood. This is okay! Additional work may be needed to consider how to add greenery. |
| <strong>Emergency Access</strong> | <strong>High</strong> | The buildings in this area are more neighborhood-scale than the bustling commercial street. A combination of low- to mid-rise buildings is an appropriate scale. | Buildings here should be relatively dense, typical for that of a quieter urban neighborhood. This implementation can work in highly dense or lower densities as well. |
| <strong>Freight Access</strong> | <strong>Medium</strong> | Ideally, these streets already have a lot of green infrastructure that provides the neighborhood natural shade and exchange spaces | Streets should primarily serve neighborhood and local users. |
| <strong>Street Design Classification</strong> | <strong>High</strong> | Neighborhood Green Streets might serve a secondary function as more regional, tourist attractions. | Streets should primarily serve neighborhood and local users. |</p>
<table>
<thead>
<tr>
<th>Business Mix</th>
<th>Industry &amp; Ownership</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>High</td>
</tr>
<tr>
<td>Anchor(s)</td>
<td>Champions</td>
<td>Medium</td>
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<td></td>
<td>Attractions</td>
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<tr>
<td>Permanence</td>
<td>Permanent / Temporary</td>
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<tr>
<td>Equity</td>
<td>Accessibility &amp; Mobility</td>
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</tr>
<tr>
<td></td>
<td>Human Health Needs (Sanitation)</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Improving the Experience for POC &amp; Low-Income People</td>
<td>High</td>
</tr>
</tbody>
</table>
| **Business Mix** | **Industry & Ownership** High  
Neighborhood scale, locally-owned businesses are primary business services available on the street.  
Businesses should support weekly and daily trips by local residents.  
The promise of ongoing support from local residents is crucial in implementing Neighborhood Green Streets.  
Communal places to gather as a neighborhood.  
Neighborhood Green Streets should be permanent installations that allow community members to truly take ownership of the space.  
Street considers design elements, including tactile and audible wayfinding and ADA accessibility throughout.  
Will the design of the street consider uses such as clean water, Portland Loo, public phones, charging stations, and welcoming, non-aggressive architectural features?  
Streets should emphasize and prioritize the cultural significance of a place.  
Promote streets near regulated affordable housing; take additional precautions for sites near "naturally occurring" affordable housing. |
| **Frequency** | High  
Businesses should support weekly and daily trips by local residents. |
| **Anchor(s)** | Champions Medium  
The promise of ongoing support from local residents is crucial in implementing Neighborhood Green Streets. |
| **Attractions** | Medium  
Communal places to gather as a neighborhood. |
| **Permanence** | Permanent / Temporary High  
Neighborhood Green Streets should be permanent installations that allow community members to truly take ownership of the space. |
| **Equity** | Accessibility & Mobility High  
Street considers design elements, including tactile and audible wayfinding and ADA accessibility throughout.  
Will the design of the street consider uses such as clean water, Portland Loo, public phones, charging stations, and welcoming, non-aggressive architectural features?  
Streets should emphasize and prioritize the cultural significance of a place.  
Promote streets near regulated affordable housing; take additional precautions for sites near "naturally occurring" affordable housing. |
| **Human Health Needs (Sanitation)** | Medium  
Will the design of the street consider uses such as clean water, Portland Loo, public phones, charging stations, and welcoming, non-aggressive architectural features?  
Streets should emphasize and prioritize the cultural significance of a place.  
Promote streets near regulated affordable housing; take additional precautions for sites near "naturally occurring" affordable housing. |
| **Improving the Experience for POC & Low-Income People** | High  
Streets should emphasize and prioritize the cultural significance of a place.  
Promote streets near regulated affordable housing; take additional precautions for sites near "naturally occurring" affordable housing. |
## Evaluation Framework - People-Powered Street

<table>
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<tr>
<th>Attributes</th>
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</tr>
</thead>
<tbody>
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<td><strong>Land Use</strong></td>
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<tr>
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<td>Population Density</td>
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</tr>
<tr>
<td><strong>Transportation</strong></td>
<td>Street Classification</td>
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</tr>
<tr>
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<td>Active Transportation Network</td>
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<tr>
<td></td>
<td>Transit Access</td>
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<tr>
<td></td>
<td>Transit Presence</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Emergency Access</td>
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</tr>
<tr>
<td></td>
<td>Freight Access</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Street Design Classification</td>
<td>Medium</td>
</tr>
<tr>
<td><strong>Design Elements</strong></td>
<td>Building Form + Height</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Building Density</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Landscaping</td>
<td>Medium</td>
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</table>
## Attributes Criteria Importance by Type

<table>
<thead>
<tr>
<th>Base Rule</th>
<th>Special Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storefronts interspersed with residential buildings provide a balance of visibility and privacy.</td>
<td></td>
</tr>
<tr>
<td>Density is less crucial for People-Powered Streets than Bustling Commercial; however, this application is still best suited to relatively dense, urban settings.</td>
<td></td>
</tr>
<tr>
<td>People-Powered Streets may occur on Unclassified and District Collector Streets.</td>
<td>These streets may occur on streets with higher volume if there is adequate consideration for alternative traffic routes.</td>
</tr>
</tbody>
</table>
| • Pedestrian Classification: Pedestrian-Transit Streets, City Walkways, Local Service Walkways are appropriate for this implementation.  
  • Bicycle Classification: Major City Bikeways, City Bikeways, Local Service Bikeways, or Bicycle Districts | People-Powered Streets should be carefully considered in a way that adds to a city's dedicated and safe active transportation network. |
| Street should be near Regional Transitways, Major Transit Priority Streets, or Transit Access Streets. | Transit access is less important than active transportation, but would support non-car use. |
| Transit Classification: Local Service Transit Streets. | These streets may accommodate higher frequencies of transit service if infrastructure is able to appropriately separate transit vehicles from people-powered modes. |
| Streets cannot be on Major or Secondary Emergency Response Routes.         |                                                                                        |
| Streets should be planned off of the regional freight access routes.      |                                                                                        |
| Streets can be Neighborhood Corridors, Civic Corridor Streets, Community Corridors, Enhanced Greenway Corridors, and Greenscape Streets. |                                                                                        |

### Design Elements

<table>
<thead>
<tr>
<th>Building Form + Height Low</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buildings on these streets can range from neighborhood-scale to high-rise buildings</td>
<td>Buildings here should be relatively dense, but gaps in retail are more acceptable here than other types.</td>
</tr>
<tr>
<td>Street trees and planters should provide shade to people walking and rolling through.</td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Main Users</td>
</tr>
<tr>
<td>---------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Neighborhood High</td>
</tr>
<tr>
<td></td>
<td>Local High</td>
</tr>
<tr>
<td></td>
<td>Regional / Tourism Low</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Street Selection Process</td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td></td>
</tr>
<tr>
<td>Businesses on these streets support those who would seek out safe, dedicated active transportation infrastructure. Neighborhood scale, locally-owned businesses are primary business services available on the street.</td>
<td></td>
</tr>
<tr>
<td>Businesses should support weekly and daily trips by local residents.</td>
<td></td>
</tr>
<tr>
<td>Regional active transportation advocates and neighborhood residents would need to support this implementation.</td>
<td></td>
</tr>
<tr>
<td>The primary attraction is the opportunity to pass through and spend time in a quieter, comfortable urban setting. Local businesses may also be attractions in their own right.</td>
<td></td>
</tr>
<tr>
<td>Permanent implementations can fill critical gaps in the region's active transportation network.</td>
<td></td>
</tr>
<tr>
<td>Street considers design elements, including tactile and audible wayfinding and ADA accessibility throughout.</td>
<td></td>
</tr>
<tr>
<td>Will the design of the street consider uses such as clean water, Portland Loo, public phones, charging stations, and welcoming, non-aggressive architectural features?</td>
<td></td>
</tr>
<tr>
<td>Neighborhood Green Streets should be permanent installations that allow community members to truly take ownership of the space.</td>
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<tr>
<td>Streets should emphasize and prioritize the cultural significance of a place. Promote streets near regulated affordable housing; take additional precautions for sites near &quot;naturally occurring&quot; affordable housing.</td>
<td></td>
</tr>
<tr>
<td>Temporary implementations can provide special event closures, or can act as a phased approach to a more permanent implementation.</td>
<td></td>
</tr>
</tbody>
</table>
## Evaluation Framework - Street to Stay and Play

<table>
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<td>Landscaping</td>
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</tr>
</tbody>
</table>
### Attributes

<table>
<thead>
<tr>
<th>Base Rule</th>
<th>Special Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active ground floor uses and substantial window frontage encourage people to linger and make streets comfortable.</td>
<td>Areas with medium to high population densities should consider expanding these streets to accommodate the greater needs that might exist in larger populous areas.</td>
</tr>
<tr>
<td>These streets should be able to support low, medium and high population densities in the local area.</td>
<td>These streets may occur on streets with higher volume if there is adequate consideration for alternative traffic routes.</td>
</tr>
<tr>
<td>These streets can occur on Unclassified and District Collector Streets</td>
<td>This type of street can support the connection of existing active transportation routes, but the lack of connection does not deter their consideration.</td>
</tr>
</tbody>
</table>
| • Pedestrian Classification: Streets can be Pedestrian Districts, Pedestrian-Transit Streets, City Walkways, or Local Service Walkways  
• Bicycle Classification: Streets can be Local Service Bikeways or Bicycle Districts | Streets should be at most 500 feet away from Regional Transitways, Major Transit Priority Streets, or Transit Access Streets. |
<p>| Streets should be at most 500 feet away from Regional Transitways, Major Transit Priority Streets, or Transit Access Streets. | For safety reasons, public transit is incompatible with Streets to Stay and Play. |
| Streets cannot be on Major or Secondary Emergency Response Routes.       | Streets should be planned off of the regional freight access routes.                     |
| Streets should be planned off of the regional freight access routes.     | Civic Main Streets, Neighborhood Main Streets, Community Corridors, and Local Streets would perform best in this setting. |
| These Streets are often lined with mid-rise or low-rise buildings of a more modest scale than the tall buildings found on Bustling Commercial Streets. | |
| Buildings in close proximity to one another can offer a variety of attractions and commercial opportunities for users. | |
| Street trees and other plantings are important for pedestrian amenities that make a street vibrant comfortable and appealing. | |</p>
<table>
<thead>
<tr>
<th></th>
<th>Main Users</th>
<th>Business Mix</th>
<th>Anchor(s)</th>
<th>Permanence</th>
<th>Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Users</strong></td>
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<td></td>
<td>Neighborhood</td>
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<td></td>
<td>Local</td>
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<td></td>
<td>Regional / Tourism</td>
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<tr>
<td><strong>Business Mix</strong></td>
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<td></td>
<td>Industry &amp; Ownership</td>
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<td></td>
<td>Frequency</td>
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<tr>
<td><strong>Anchor(s)</strong></td>
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<tr>
<td></td>
<td>Champions</td>
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<td></td>
<td>Attractions</td>
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<tr>
<td><strong>Permanence</strong></td>
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<td><strong>Equity</strong></td>
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<td>Accessibility &amp; Mobility</td>
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<td></td>
<td>Human Health Needs (Sanitation)</td>
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<tr>
<td></td>
<td>Improving the Experience for POC &amp; Low-Income People</td>
<td></td>
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</tr>
</tbody>
</table>

- **Neighborhood** High
- **Local** High
- **Regional / Tourism** Medium
- **Industry & Ownership** Medium
- **Frequency** Medium
- **Champions** High
- **Attractions** High
- **Permanent / Temporary** High
- **Accessibility & Mobility** High
- **Human Health Needs (Sanitation)** High
- **Improving the Experience for POC & Low-Income People** High
<table>
<thead>
<tr>
<th>Street</th>
<th>Main Users</th>
<th>Business Mix</th>
<th>Frequency</th>
<th>Anchor(s)</th>
<th>Attractions</th>
<th>Permanence</th>
<th>Equity</th>
<th>Improving the Experience for POC &amp; Low-Income People</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local High</td>
<td>These streets often support local businesses and services that serve the immediate neighborhood but can also attract visitors from outside the area.</td>
<td>Industry &amp; Ownership Medium</td>
<td>Medium</td>
<td></td>
<td></td>
<td>Permanent / Temporary High</td>
<td>Accessibility &amp; Mobility High</td>
<td>Improving the Experience for POC &amp; Low-Income People</td>
</tr>
<tr>
<td>Regional / Tourism Medium</td>
<td>These streets should support weekly trips and activities for local residents in the immediate neighborhood but also are located where people from the surrounding region and tourists will come less frequently.</td>
<td>Will the design of the street consider uses such as clean water, Portland Loo, public phones, charging stations, and welcoming, non-aggressive architectural features?</td>
<td>Permanent installation of these streets can provide much needed amenities that the area is missing that will benefit all residents.</td>
<td>Street considers design elements, including tactile and audible wayfinding and ADA accessibility throughout.</td>
<td></td>
<td></td>
<td>Will the design of the street consider uses such as clean water, Portland Loo, public phones, charging stations, and welcoming, non-aggressive architectural features?</td>
<td>Temporary installation of these streets can be catalyst for a phased approach that can become permanent streets.</td>
</tr>
<tr>
<td>Local residents will have a higher level of support of these streets if activities and design elements fulfill their needs and vision for vibrant and fun streets.</td>
<td></td>
<td></td>
<td></td>
<td>Street considers design elements, including tactile and audible wayfinding and ADA accessibility throughout.</td>
<td></td>
<td></td>
<td></td>
<td>Streets should emphasize and prioritize the cultural significance of a place. Promote streets near regulated affordable housing; take additional precautions for sites near &quot;naturally occurring&quot; affordable housing.</td>
</tr>
</tbody>
</table>
## Evaluation Framework - Market Streets

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Criteria</th>
<th>Importance by Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Use</td>
<td>Transparency</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Population Density</td>
<td>High</td>
</tr>
<tr>
<td>Transportation</td>
<td>Street Classification</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Active Transportation Network</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Transit Access</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Transit Presence</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Emergency Access</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Freight Access</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Street Design Classification</td>
<td>Medium</td>
</tr>
<tr>
<td>Design Elements</td>
<td>Building Form + Height</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Building Density</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Landscaping</td>
<td>Medium</td>
</tr>
</tbody>
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### Attributes

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<th>Criteria</th>
<th>Importance</th>
<th>Base Rule</th>
<th>Special Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Use</td>
<td>Low</td>
<td>Active ground floor uses and window frontage is of low importance in these streets as lingering will still be encouraged by the diversity of street vendors.</td>
<td>These streets should be able to support medium and high population densities in the local area.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>These streets can occur on Unclassified and District Collector Streets</td>
<td>These streets can complement dense commercial and employment centers where there will be a high need for street vendors.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• These streets can benefit from being tied into the area’s broader active transportation network, but this implementation can be successful without those connections • Pedestrian Classification: Pedestrian Districts, Pedestrian-Transit Streets, City Walkways • Bicycle Classification: Major City Bikeways, City Bikeways, Bicycle Districts</td>
<td>Active transportation connections to other major destinations could help bring in visitors from outside the area and region.</td>
</tr>
<tr>
<td>Transportation</td>
<td>Medium</td>
<td>Street should be at most 500 feet away from Regional Transitways, Major Transit Priority Streets, or Transit Access Streets.</td>
<td>For safety reasons, public transit is incompatible with Market Streets.</td>
</tr>
<tr>
<td></td>
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<td>Streets cannot be on Major or Secondary Emergency Response Routes.</td>
<td>Streets should be planned off of the regional freight access routes.</td>
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<td></td>
<td></td>
<td>Neighborhood Corridors, Civic Corridors, Community Corridors, Civic Main Streets and Neighborhood Main Streets would perform best in this setting.</td>
<td>These Streets are often lined with mid-rise or high-rise buildings similar to conditions of Bustling Commercial Streets.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Buildings should be densely packed together to compliment attractions and commercial opportunities on the street.</td>
<td>Street trees and other plantings are important for pedestrian amenities that make a street vibrant and comfortable to linger and sit down.</td>
</tr>
</tbody>
</table>

### Design Elements

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</tr>
</thead>
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<tr>
<td>Building Form + Height</td>
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<td>Main Users</td>
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</tr>
<tr>
<td></td>
<td>Local</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regional / Tourism</td>
<td>Medium</td>
<td></td>
</tr>
</tbody>
</table>

| Business Mix  | Industry & Ownership | High |
|               | Frequency            | Medium |

| Anchor(s)     | Champions            | High |
|               | Attractions          | High |

| Permanence    | Permanent / Temporary | Medium |

<p>| Equity        | Accessibility &amp; Mobility | High |
|               | Human Health Needs (Sanitation) | High |
|               | Improving the Experience for POC &amp; Low-Income People | High |</p>
<table>
<thead>
<tr>
<th>Main Users</th>
<th>Local</th>
<th>Regional / Tourism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streets provide services to the immediate neighborhood, but may encompass needs of the larger city.</td>
<td>Neighborhood Medium</td>
<td>Streets can attract visitors from outside the area and help support small business entrepreneurship.</td>
</tr>
<tr>
<td>These streets should be important places in the local community, helping to support local businesses and services.</td>
<td>High</td>
<td>These streets can attract visitors from outside the area and help support small business entrepreneurship.</td>
</tr>
<tr>
<td>These streets mostly support the small vendors; therefore, these streets should be placed where there is other minimal retail and local businesses to reduce business competition.</td>
<td>Medium</td>
<td>These streets should support daily trips of locals, employees and visitors alike.</td>
</tr>
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<td></td>
<td>Street vendors and business associations would be the main champions of these streets to help promote small-scale entrepreneurship.</td>
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<td></td>
<td>The street vendors and diversity of cuisine would be the main attraction of these streets.</td>
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<td>Permanence of these streets would help garner tourism and draw visitors from outside the area.</td>
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<td>Street considers design elements, including tactile and audible wayfinding and ADA accessibility throughout.</td>
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