



WASHINGTON PARK MASTER PLAN UPDATE



PORTLAND PARKS & RECREATION™

Healthy Parks, Healthy Portland

JANUARY 2018

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Kimberly Bown, Royal Rosarians
Sam Barasco, Office of Sustainability, Multnomah County
Shirley Craddick, Metro Council—represented by Ernest Hayes
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PROJECT TEAM

PLACE

JLA Public Involvement
Kittelson & Associates, Inc
Works Progress, LLC
Geotechnical Resources, Inc.
KPFF Consulting Engineers
Equilibrium Engineers LLC
The Bookin Group LLC
DCW Cost Management

In 2014, Portland Parks & Recreation began a pay-to-park program in Washington Park. The program directed parking revenues to much needed projects in the park, including a promise for a new Washington Park Master Plan Update. As such, this project was made possible by funds from that program.

THANK YOU to everyone who participated in the development of this master plan. The support and involvement of so many is essential to ensuring the master plan reflects the environmental, cultural, economic and social aspects of what Washington Park is and can be for future generations.

PORTLAND PARKS & RECREATION

VISION

Portland's parks, public places, natural areas, and recreational opportunities give life and beauty to our city. These essential assets connect people to place, themselves, and others. Portland's residents treasure and care for this legacy, building on the past to provide for future generations.

MISSION

The mission of Portland Parks & Recreation is to help Portlanders play: providing the safe places, facilities, and programs which promote physical, mental, and social activity. We get people - especially kids - outside, active, and connected to the community. As we do this, there will be an increase in the wellness of our residents and the livability of our city. We accomplish this through:

- Establishing, safeguarding and restoring the parks, natural areas, public places, and urban forest of the city, ensuring that these are accessible to all;
- Developing and maintaining excellent facilities and places for public recreation and community building;
- Providing dynamic recreation programs and services that promote health and well-being for all;
- Partnering with the community we serve.

EQUITY STATEMENT

We recognize, understand, and encourage celebration of the differences that surround us. Diversity and equity are vital to Portland Parks & Recreation's ideals and values.

Amanda Fritz, City Commissioner
Mike Abbaté, Director of Parks
Portland Parks & Recreation



WASHINGTON PARK MASTER PLAN UPDATE

PREPARED FOR PORTLAND PARKS & RECREATION

WASHINGTON PARK MASTER PLAN UPDATE - JANUARY 2018



Dear Portlanders,

High astride the east-facing slopes of the west hills, Washington Park has been a civic landmark for Portlanders for nearly 150 years. Known as City Park prior to 1909, it has been a place to escape the hustle and bustle of city life - here you could find solitude as you meander the trails among the tall firs and rhododendrons. It is a place of vibrant color and tranquility amid the multi-colored jewels of the International Rose Test Garden, this year (2017) celebrating its very own Centennial.

And of course, the views, oh...the views! A true urban overlook since 1871, helping Portlanders get a sense of their burgeoning city along the Willamette River. The park contains vantage points where key landmarks such as downtown, Mt. Tabor and Ross Island lead your eyes to the volcanic peaks of the Cascade Range. This bird's-eye perspective is one of the most treasured characteristics of our crowning park perched above the City of Roses.

Today we find it hard to imagine Portland without Washington Park. It has served as a perfect home for unique plant and animal species of our region; a place for food and respite for many generations of Native Americans; a place of discovery for early pioneers; a place of solitude for a burgeoning urban population; a place of wonder for excited children; and a place for family and communities to gather. And always, it is a place of sublime beauty that both calms the heart and inspires the soul.

Now, it is our generation's time to embrace our calling as stewards of Washington Park. As generations have blazed the trail before us, we must now do all that is needed to ensure that this amazing place will be available, accessible, and beautiful for our children's children's children. We must show that this crown jewel of our city is available and welcoming to all who live or visit here. We must learn how to create new means to get to and around this extensive park that are not reliant on private automobiles. We must find new ways to engage youth in the wonder that is nature. We must ensure that the cultural institutions in the Park are successful in helping visitors expand their understanding of the world in which we live. We must use the park wisely to unite Portlanders and visitors from around the region and the world in exciting events and activities. We must ensure that everything we do exhibits the absolute best of our collective efforts in quality, creativity, environmental stewardship, sustainability and beauty. And we must find the funding needed to implement both the visionary and utilitarian aspects of this plan.

With the adoption of this Master Plan, residents, Champions and Council of the City of Portland declare that we recognize the importance of Washington Park, that we are up to the challenge, and that we embrace the coming opportunities to restore, repair and improve this remarkable iconic park of our beloved City.

Sincerely,



Mike Abbaté, Director

The Olmsted Legacy Design Principles

A Genius of Place. The design should take advantage of unique characteristics of the site, even its disadvantages. The design should be developed and refined with intimate knowledge of the site.

Unified Composition. All elements of the landscape design should be made subordinate to an overarching design purpose. The design should avoid decorative treatment of plantings and structures so that the landscape experience will ring organic and true.

Orchestration of Movement. The composition should subtly direct movement through the landscape. There should be separation of ways, as in parks and parkways, for efficiency and amenity of movement, and to avoid collision or the apprehension of collision, between different kinds of traffic.


Orchestration of Use. The composition should artfully insert a variety of uses into logical precincts, ensuring the best possible site for each use and preventing competition between uses.

Sustainable Design and Environmental Conservation.

The design should allow for long-term maintenance and ensure the realization and perpetuation of the design intent. Plant materials should thrive, be non-invasive, and require little maintenance. The design should conserve the natural features of the site to the greatest extent possible and provide for the continued ecological health of the area.

A Comprehensive Approach. The composition should be comprehensive and seek to have a healthful influence beyond its boundaries. In the same way, the design must acknowledge and take into consideration what surrounds it. It should create complimentary effects. When possible, public grounds should be connected by greenways and boulevards so as to extend and maximize park spaces.

-National Association for Olmsted Parks



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WHAT IS A MASTER PLAN?

A master plan provides a comprehensive vision that guides near and long-range use of park lands.

This master plan is about building on Washington Park's strengths and unique assets to ensure its status as a world-class urban park and to position it to meet the challenges that come with growth in the region over the next 20 years.

HOW TO USE THIS PLAN

WHAT WOULD YOU LIKE TO KNOW?

This guide will help you navigate the Washington Park Master Plan Update and find the information you need. Start with what you'd like to know!

I want to know about areas of the park

Go to *Chapter 3. Master Plan*, on page 25.

I want to know about key themes

Go to page 14 of *Chapter 1. Introduction* for an overview of key themes. For more detail, each key theme is explained in its own chapter: turn to *Chapter 4. Create Identity*, on page 35; *Chapter 5. Improve Access*, on page 45; and *Chapter 6. Enhance Visitor Experience*, on page 63.

I want to know about next steps

Go to *Chapter 7. Implementation*, on page 73.

Document links

Look for underlined words or outlined images for links to pages with more detailed information.

Click **WASHINGTON PARK MASTER PLAN UPDATE** at the bottom of the page to go back to the Table of Contents.

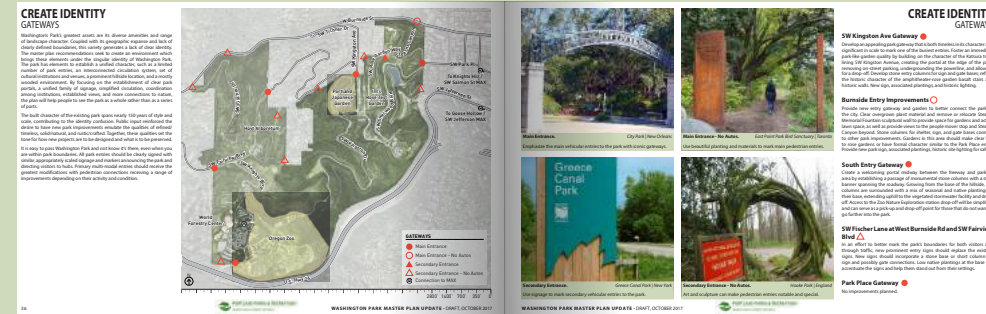
I want to know about areas of the park

Go to *Chapter 3. Master Plan*, on page 25.



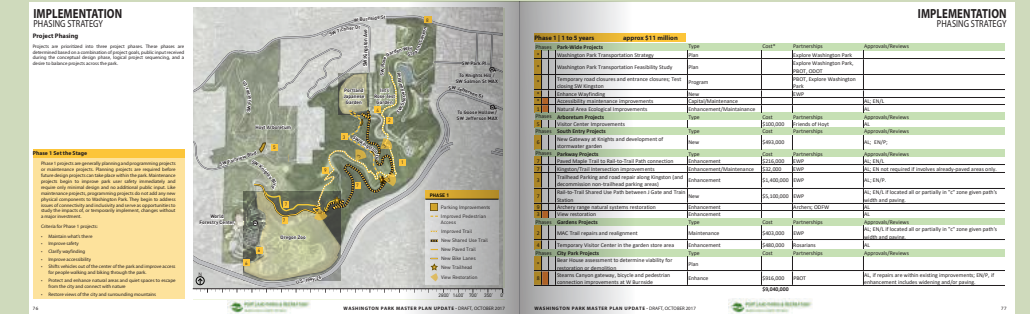
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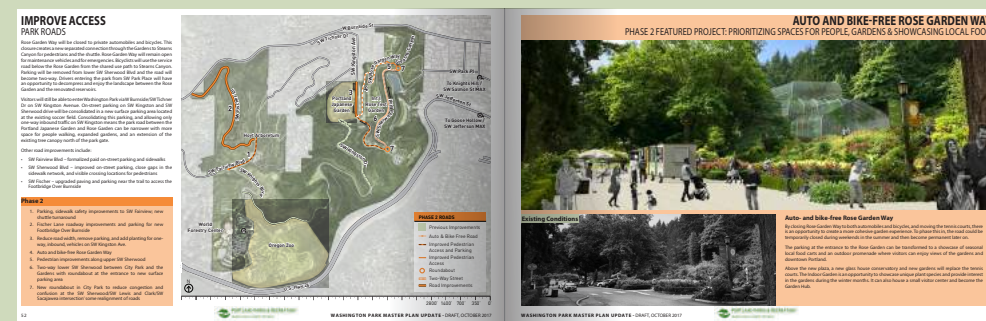


I want to know about next steps

Go to *Chapter 7. Implementation*, on page 73.



This chapter concentrates on five distinct areas in the park: the Arboretum, South Entry, Parkway, Gardens, and City Park. Here you can learn more about the projects recommended by the master plan in each of these focus areas.



This chapter provides a detailed summary of project phasing, project costs, the land use approval process, and the funding strategy for the master plan.



Each theme chapter gives an in-depth explanation of the master plan projects that will create identity, improve access, and enhance visitor experience. These chapters also highlight **Featured Projects** and provide information about **Case Studies** that relate to each theme. To understand how other world class parks have achieved greater success with physical and programmatic improvements, Case Studies have been developed to demonstrate their proven success.

EXECUTIVE SUMMARY

Washington Park Master Plan Update

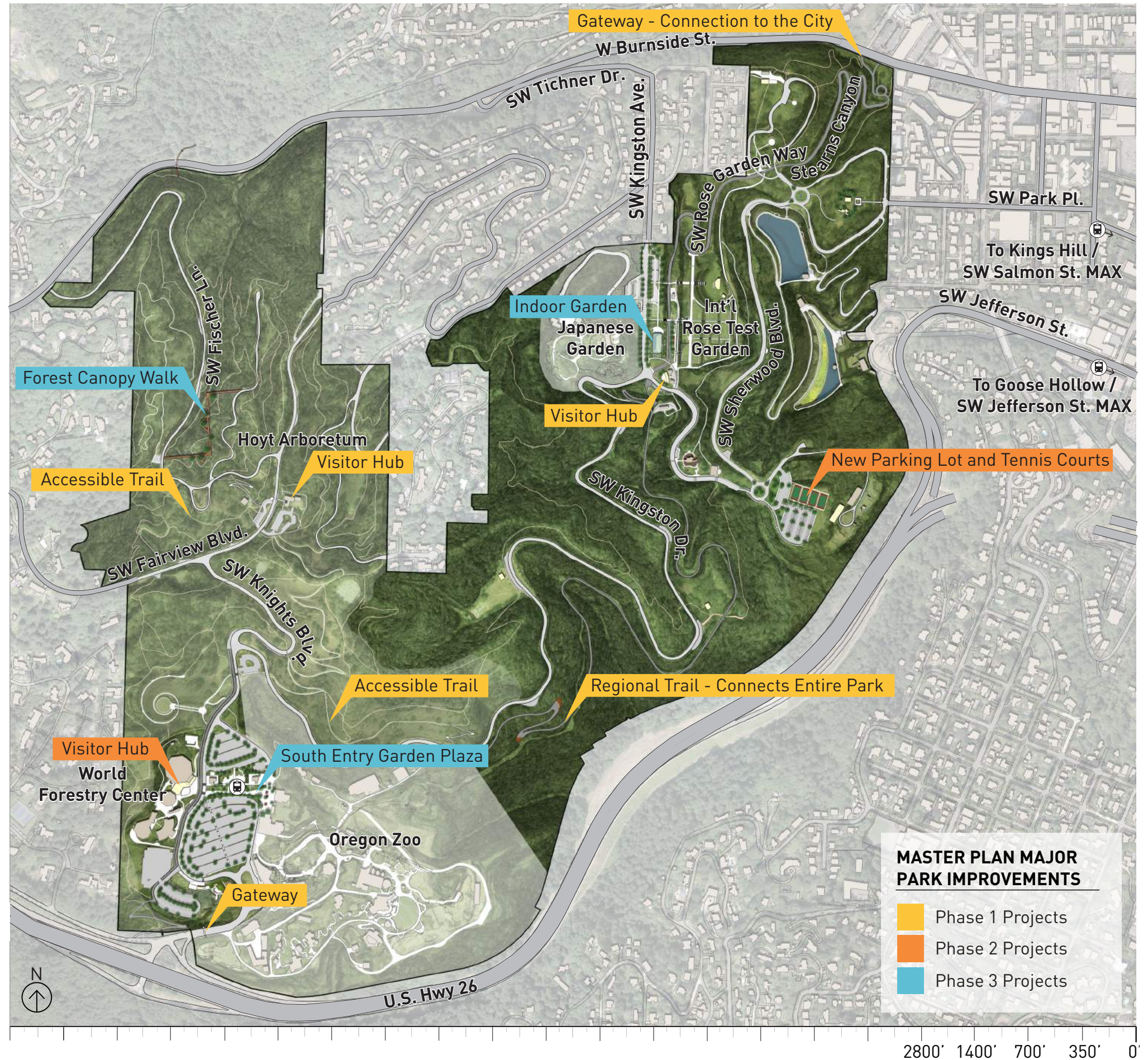
Washington Park is a world-class park and the crown jewel of Portland's city park system. It stands out as one of the region's top destinations because of its physical beauty, diverse offerings of gardens, museums, zoo, arboretum, memorials, natural areas, trails, and topography. Its 481 acres are located less than two miles from downtown on the forested hills overlooking the city. Portland's signature park boasts the most spectacular and oldest continuously operated public rose garden in the US, as well as one of the most authentic Japanese gardens in the world outside of Japan.

This master plan is about building on Washington Park's strengths and unique assets to ensure its benefits to the local community, its status as a world-class urban park, and to position it to meet the challenges that come with growth in the region over the next 20 years.

The proposed improvements will further enhance the park as a cherished destination. The primary goals are to care for Washington Park's treasured assets, to build on its legacy and to make renewed commitments to recreation, access, education, culture, and sustainability for present and future generations.

"The fact that we have this park in our city makes the city more livable and desirable."

-Washington Park Master Plan Update outreach survey results



Implementing the Shared Vision

The master plan recommendations are based on three key themes that emerged through the technical investigation and the public outreach:

Create Identity

Strengthen Washington Park's identity, define its borders, clarify wayfinding; help people to recognize the incredible asset we have in our backyard.

Improve Access

Park improvements will prioritize reducing the dominance of cars in the park while better managing vehicular traffic. These improvements will provide increasing numbers of park visitors with better ways to get to the park using various transportation modes and park entrances, and once in the park, better ways to experience the park by foot, bike and shuttle.

Enhance Visitor Experience

Meet the visitor's basic needs to allow for meaningful, comfortable, and memorable interactions.

Implementing the Master Plan Projects

Phase 1 Set the Stage - 1 to 5 years

Start with upgrades and repairs to existing facilities with a focus on accessibility, restoration and improved circulation. Create gateways to establish identity and improve access. Connect the north and south ends of the park with a regional trail for bikes and pedestrians along the zoo train corridor.

- Washington Park Transportation Management Plan to be completed by Explore Washington Park
- Accessible trails and trail improvements
- Regional trail
- Gateways
- Gardens interim visitor center
- Hoyt Arboretum visitor center, SW Fairview Blvd. and SW Fischer Lane improvements
- View restoration
- Natural Area enhancements
- South Entry parking lot improvements
- Stearns Canyon improvements
- Natural Areas Maintenance Facility

Cost

The estimated total Project Budget for the recommendations in the master plan is \$94 million. This includes construction costs, escalation through all phases of construction, and soft costs, such as design, engineering, permitting fees, and project management.

Phase 1 Projects	\$24.5 million
Phase 2 Projects	\$37.5 million
Phase 3 Projects	\$32.0 million
Total Project Budget	\$94.0 million

Phase 2 Solidify the Vision - 5 to 15 years

These formative projects prepare and establish the framework for improved circulation and allow for new amenities to be built in the park. Modifications to park roadways, transit services, and parking provide incentives for use of diverse modes of travel and reestablish key park areas for active and congruent use.

- Chiming Fountain restoration
- SW Sherwood Drive improvements and roundabout
- South Entry visitor center; begin plaza improvements
- Relocated Tennis & Gardens Lower Parking Lot
- Playground improvements
- Depot cafe
- Trail improvements
- Rose Garden Plaza
- Maintenance facility expansion
- Elephant House and all park restroom facilities upgrades
- Archery Range improvements

Staff

Additional Portland Parks & Recreation staff are projected to be required for operations and maintenance. Phase 1 anticipates seven additional staff. Phase 2 anticipates four additional staff. Phase 3 is to be determined.

Transportation Management Plan

The Access chapter includes projects that represent the best opportunities for new access infrastructure and improvements. The master plan update recommends that PP&R and its partners continue to evaluate these projects for feasibility based on the growth of transit ridership in the park, technology, and visitor trends. These feasibility studies are recommended in the proposed Transportation Management Plan (TMP). Projects with an * will be further evaluated by the TMP. The TMP will be added as an amendment to the plan by 2020.

Phase 3 Enhance the Park - 15 years+

New amenities are built and upgraded to enhance the park experience. Based on community input, these capital projects broaden the recreational opportunities, extend seasonal use, and address the anticipated population growth.

- Forest Canopy Walk
- Indoor Garden
- Amphitheater upgrades
- South Entry Garden Plaza completion
- Regional trail connections at South Entry
- Off-road cycling trail





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14 | Key Themes

1 INTRODUCTION

INTRODUCTION

PROJECT VISION AND GOALS

Introduction

Washington Park, one of Portland's oldest parks, is a 481-acre urban park with international reach. Its hilly topography includes 320 acres of the Hoyt Arboretum, a collection of trees and plants from around the world, a total of 110 acres of natural areas, and over 15 miles of trails. This trail system provides connections to the 40-Mile Loop, which links the region to state and national trail systems, providing access to a wide variety of recreational opportunities. The park itself is prominently positioned within walking distance to downtown and offers views of the city, the river, the natural landscape, and mountains beyond.

Washington Park serves many roles to many people. It offers local park experiences to the adjacent neighborhoods. For all users, including regional, national, and international visitors, they enjoy its unique, world-class offerings and habitats. A distinctive feature of the park is that it contains both extensive native forest habitat and noteworthy examples of international horticultural excellence.

This Washington Park Master Plan Update (master plan) envisions the park for the next 20 years and makes recommendations to build upon and strengthen the park's legacy, beauty, and assets, while working to solve the conflicts and challenges that exist today.

Its creation has been a collaborative and intensive two-year effort between Portland Parks & Recreation (PP&R), the Project Team, and over 2000 members of our community, stakeholders, and park staff through online surveys, open houses, work sessions, technical meetings and investigation. The support and involvement of the broader community is essential for a master plan to truly reflect the environmental, cultural, economic, and social aspects of what Washington Park is and can be for future generations.

The Technical Investigation Report, December 2016, contains the detailed results of the Project Team's studies of Washington Park. Understanding the park's history, development, landforms, geotechnical and stormwater impacts, circulation and access challenges, park landscapes, culture and recreation, and quality of visitor experience clarified the issues and opportunities that are addressed in the master plan.

The Vision for Washington Park and the Master Plan Goals served as a guide for the plan. They were crafted and approved by the Champions Committee, who were assembled to take the mantle of leadership for the park. Their role was to inspire PP&R and the City to be visionary and to hold them accountable for representing all Portlanders. They made sure the decisions being made stayed true to the vision and goals, and they will continue to lead in and advocate for the implementation of the master plan.

The Vision for Washington Park

Washington Park's natural areas, public places, cultural institutions, and recreational opportunities give life and beauty to our city. These essential assets connect people to place, themselves, and others. Portland's residents treasure and care for Washington Park's legacy, building on the past with a commitment to education, sustainability, and safety, to provide for future generations.

Master Plan Goals

- Fulfill the potential for Washington Park to become a world-class park—valued for inspirational beauty, areas of respite, recreation, health, and vitality.
- Washington Park is easy to get to and move through once there.
- Washington Park showcases horticultural excellence and preserves natural area integrity.
- Washington Park clearly connects people of all communities to the identified venues and activities.
- Washington Park is well-funded and supported; it adds economic vitality to the city and the region.
- Washington Park cultivates a rich educational, cultural, and historic vitality, and embraces the cultural diversity of its visitors and the regional community.
- Washington Park is resilient to extreme weather.

Respecting History

Every recommendation for improvement in the Washington Park Master Plan Update addresses the Master Plan Vision and Goals. The plan respects the history of the work that has been done by many over the last century to create and steward a premier park for generations.

It is interesting to note the principles that have persisted since the park was conceived. Many of the recommendations in the 1903 Olmsted Plan and the 1981 Master Plan are relevant today and are addressed in the Washington Park Master Plan Update:

- Define park entrances.
- Create a pedestrian path that links the two ends of the park, separating vehicles and pedestrians.
- Provide better accessibility.
- Improve scenic turnouts along SW Kingston Drive.
- Reopen obscured views of the city and surrounding landscape.
- Solve parking challenges.

Three notable projects, implemented from the 1981 Master Plan, have taken steps toward addressing the congestion problems that stem from a growing population:

- Explore Washington Park operates a free seasonal shuttle from April to October that connects all of the major attractions within the park. This has improved internal park circulation and helped to reduce dependence on cars.
- MAX light rail service connects Washington Park to the regional public transportation network. Three stops serve Washington Park including the Washington Park station located within the park.
- Revenue generated from paid parking provides funding for Explore Washington Park and park maintenance.

Access for All

Washington Park is part of the fabric of our city and an important contributor to our livable, dynamic, and economically vibrant city. Providing equitable access and opportunities are key to sustaining a healthy community.

All of Portland's residents and visitors to Washington Park will have access to, feel safe and welcome in, and will be equitably served by the park's open spaces, natural areas, cultural institutions, facilities, and programs.

Some of the ways the master plan works to remove existing barriers and meet the diverse needs of our community:

- Wayfinding in multiple languages
- Multi-cultural programming
- Variety in food choices and pricing

Planning for the Future

Acquired by PP&R in 1871, Washington Park is almost 150 years old. Olmsted's passion for connecting people to their environment is now our legacy. It is our responsibility to protect and enhance Washington Park as a valuable civic resource for present and future generations. The continued care and health of Washington Park is vital to providing quality experiences to the growing population of the Portland Metro region.

The Washington Park Master Plan Update will guide development of the park for the next 20 years. It includes specific concepts while allowing for design flexibility, and it provides direction for future improvements while allowing latitude in implementation. The plan was created in response to and with the feedback from the community, cultural institutions in the park, and professionals who are experienced, inspired by, and committed to enhancing the user experience at the park. The recommendations in the Washington Park Master Plan Update are concepts, and detailed plans will be developed as specific projects move forward into design and construction.

There is little developable land available in Washington Park. Due to the topography, much of the land is in a landslide or environmental zone or in areas that are too steep to build, all of which have special requirements for new construction. There are few buildable areas: the soccer field, the archery range, a quiet glade off SW Kingston Drive, part of Hoyt Arboretum, the area around the Holocaust Memorial and the Bear House. Quiet areas in nature are precious to park users and will be preserved. Only the soccer field will be built out for new tennis courts and to consolidate parking.

Stewarding the Plan

PP&R will steward the plan and funding for implementation will be both strategic and opportunistic. Advancing the plan will depend on funding, policy decisions, and public and private advocacy. Funding for enhancements may come through parking revenue, grants, private funding, and/or public dollars.

Through the development of this plan, several key partnerships emerged that are essential to PP&R's ability to make progress on these improvements. Explore Washington Park, Metro, the Cultural Institutions within the park, and the Washington Park Champions will be called upon to support the park and push for implementation. Additionally, nonprofit organizations, private entities, public agencies, and community groups will be essential to the implementation and continued stewardship of Washington Park. The roles will vary from pulling ivy to raising millions of dollars.

As PP&R moves forward, the Washington Park Champions will be asked to monitor development of the master plan. Their leadership and advocacy for the Washington Park vision will motivate and encourage others. The Champions framed the goals and objectives for the master plan, monitored public engagement, advised on plan options, and supported the identification of the preferred option for Washington Park. They held PP&R accountable to ensuring that equity and social justice are drivers for the vision. This committee and partners will continue to champion the plan with public officials, PP&R and to fund implementation.

INTRODUCTION

KEY THEMES

The results of the technical investigation and the first phase of public outreach clarified the issues that need to be addressed in the Washington Park Master Plan Update. Three of those issues emerged as overarching, defining all aspects of what is essential for a world class park:

- **Create Identity:** Many people indicated they had visited the Portland Japanese Garden, Oregon Zoo, or International Rose Test Garden, but they had never heard of Washington Park. For them, the park's boundaries are ambiguous and a strong sense of identity is lacking.
- **Improve Access:** Getting to the park and around the park is challenging for visitors, and the public's comments about congestion and confusion were consistent and dominant.
- **Enhance Visitor Experience:** Most people reported that park facilities were high quality; however their experience was diminished or their time spent in the park was decreased due to accessibility challenges, safety, or a lack of affordable food.

As the master planning work progressed, these challenges were re-framed as key themes that informed plan development and project prioritization.

The intent of the master plan is to make soft and impactful touches, and to only add amenities to enhance the experiences.

Washington Park is a special place to many people.

Feedback received throughout the master plan process highlights the importance of Washington Park to local users and out-of-town visitors alike:

“The parks in Portland are really important to our identity. The crown jewel of Portland’s parks system is Washington Park.”

“Washington Park is beautiful for it’s simplicity and natural beauty and the amazing roses!”

“I have lived here all my life, over 50 yrs, & my great, great grandparents came here in 1850’s. I LOVE Washington Park, it’s really beautiful.”

“Access to Washington Park is one of the key reasons I have lived in NW Portland for over 30 years. Having quick/easy access to such wonderful beauty and nature fulfills my soul every time I visit.”

-Washington Park Master Plan Update
outreach survey results

CREATE IDENTITY

Washington Park offers a broad range of experiences

Define its character and boundaries

- Entrances that are welcoming and well-marked
- Respectful cultural and historic connections
- Access to nature, memorials, cultural activities, places to play, and places to learn
- Enhancement and protection of natural areas and views
- Support for the world-class cultural institutions where visitors learn about the world and experience what makes the Portland region great

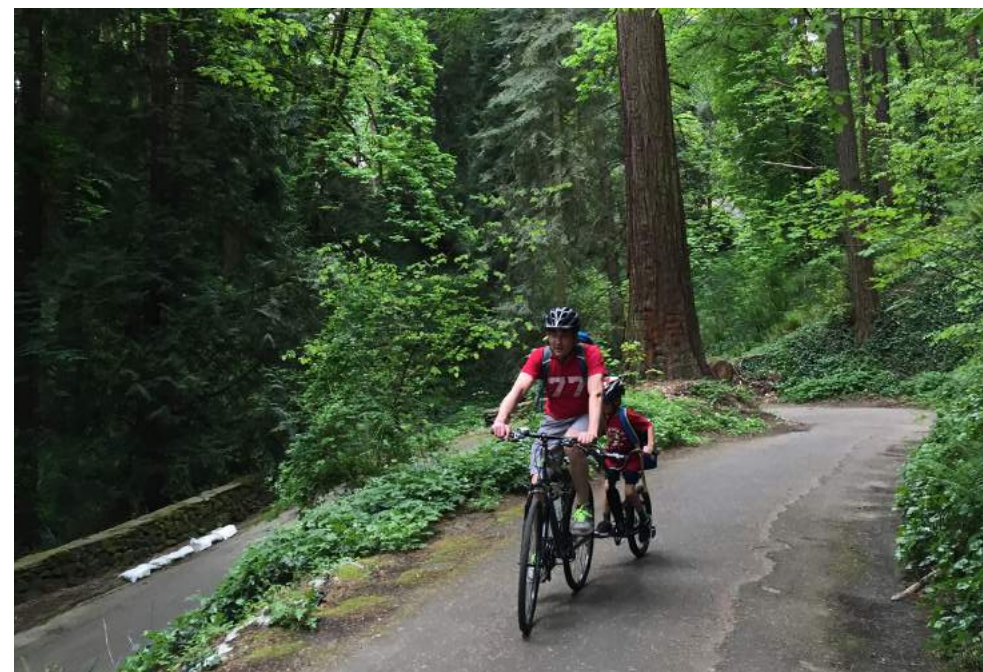


IMPROVE ACCESS

Washington Park is a connected park

Improve circulation to and within the park so you can get out of your car and explore

- Reduce the dominance of cars
- Better transit and active transportation options
- Easy to get from one destination to another
- Well-connected to the region through transit and regional trails
- Clear wayfinding for all visitors in many languages
- Multiple ways to move through the park



ENHANCE VISITOR EXPERIENCE

Washington Park is for everyone every day

Enrich the experience for all visitors

- Amenities meet the needs of diverse groups
- Affordable
- Diverse range of activities and accommodations suitable for Washington Park's natural and cultural context
- Economic vitality of the park and the cultural institutions
- Resiliency and safety for visitors and staff





IN THIS CHAPTER

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- 20 | Concept Design: Single Hub and Multi Hub
- 22 | Public Feedback

2 CONCEPT DESIGN ALTERNATIVES

CONCEPT DESIGN ALTERNATIVES

OUR PROCESS

Evolving the Park Concepts

As a destination for local, regional, national, and international visitors, Washington Park has many great attractions to maintain, improve and enhance. In exploring ways to improve the park we know today, and to address the current automobile-oriented challenges, it became clear that accessing and moving through the park are key to creating a better and more successful park experience.

The creation of centralized “Hubs” of service, along with improved circulation routes and modes to get around the park, will remove barriers to enjoying the park and will make it easier to move from place to place. The Hubs establish interconnected points of service which do not rely on private automobiles and are a rational way to organize, access, and experience the park while retaining flexibility for the future.

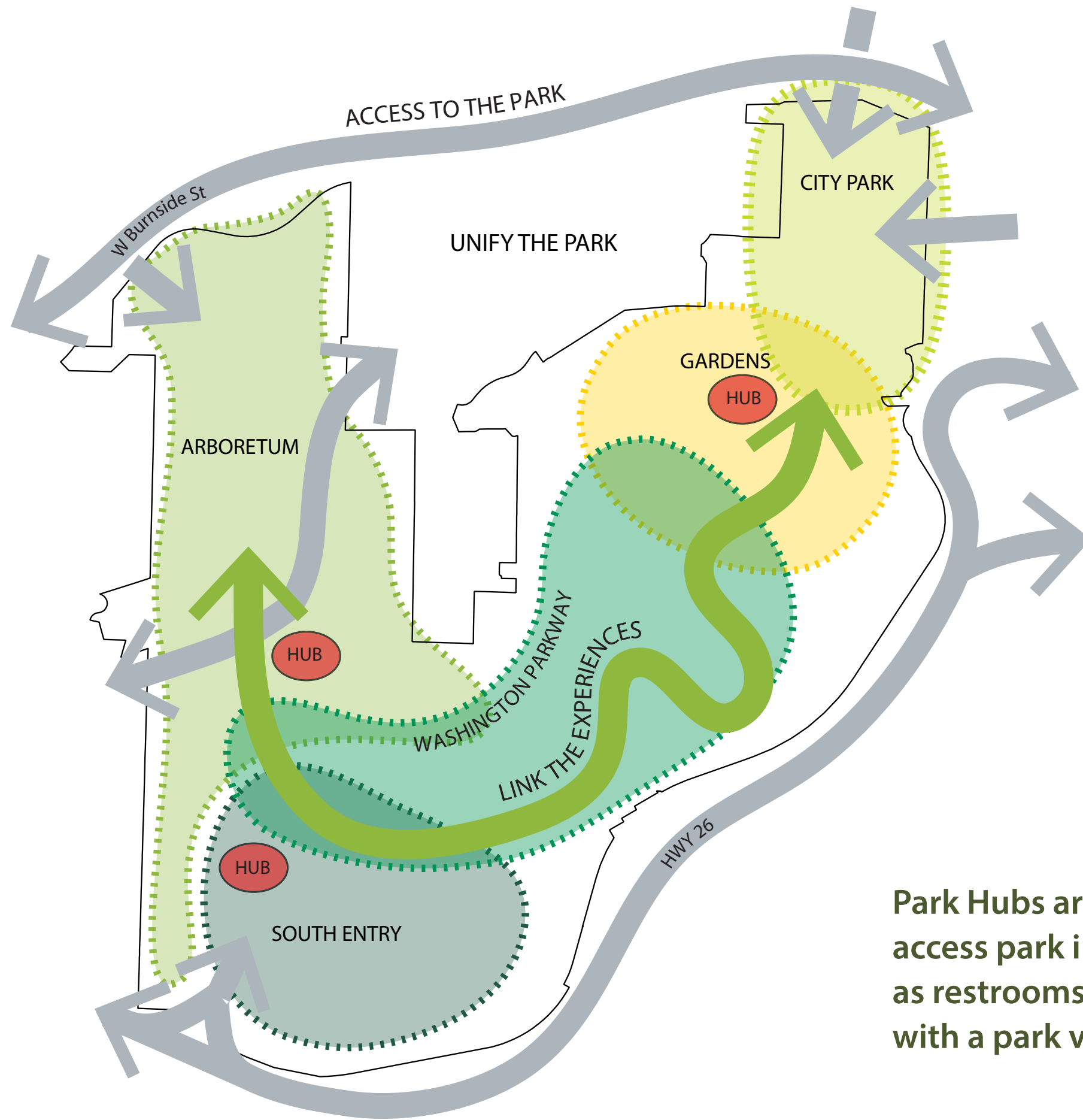
The development of the general “Hubs” concept evolved into an exploration of how to further organize the park. Understood as a single park with many access points and diverse amenities, the concepts pursued order through access and circulation. A single Hub scheme sought to focus access to the park via the South Entry, maximizing access to public transit and the freeway. A multiple Hub scheme utilized a distributed approach, improving access throughout the north and south with a multi-modal focus.

Solving how the visitor arrives at Washington Park became the organizing driver of the master plan.



CONCEPT DESIGN ALTERNATIVES

VISITOR HUBS



Get Oriented

Visitors to the park have immediate and basic needs which are under-served or dispersed throughout an area. By creating Park Hubs as organizing elements for orientation and interaction with a park volunteer or staff, new and returning visitors can start their experience on a positive note. The Hubs are distributed through the park, located at key organizational areas that link visitors to park services. These areas include the Arboretum, South Entry, and Gardens. They are also areas of focus for the park's future evolution.

- Hubs can range from visitor centers within an existing or new structure, to freestanding kiosks where information is distributed. They are located near other services such as restrooms and drinking fountains.
- Hubs are intended to be used by visitors who seek information, and do not require interaction by all visitors.
- Hubs are welcoming spaces which emulate the identity of the park and allow staff to make a personal connection with visitors.

The two concept design alternatives shown on the following pages, the Single Hub Scheme and the Multi Hub Scheme, were developed from these ideas and shared with the public for their input.

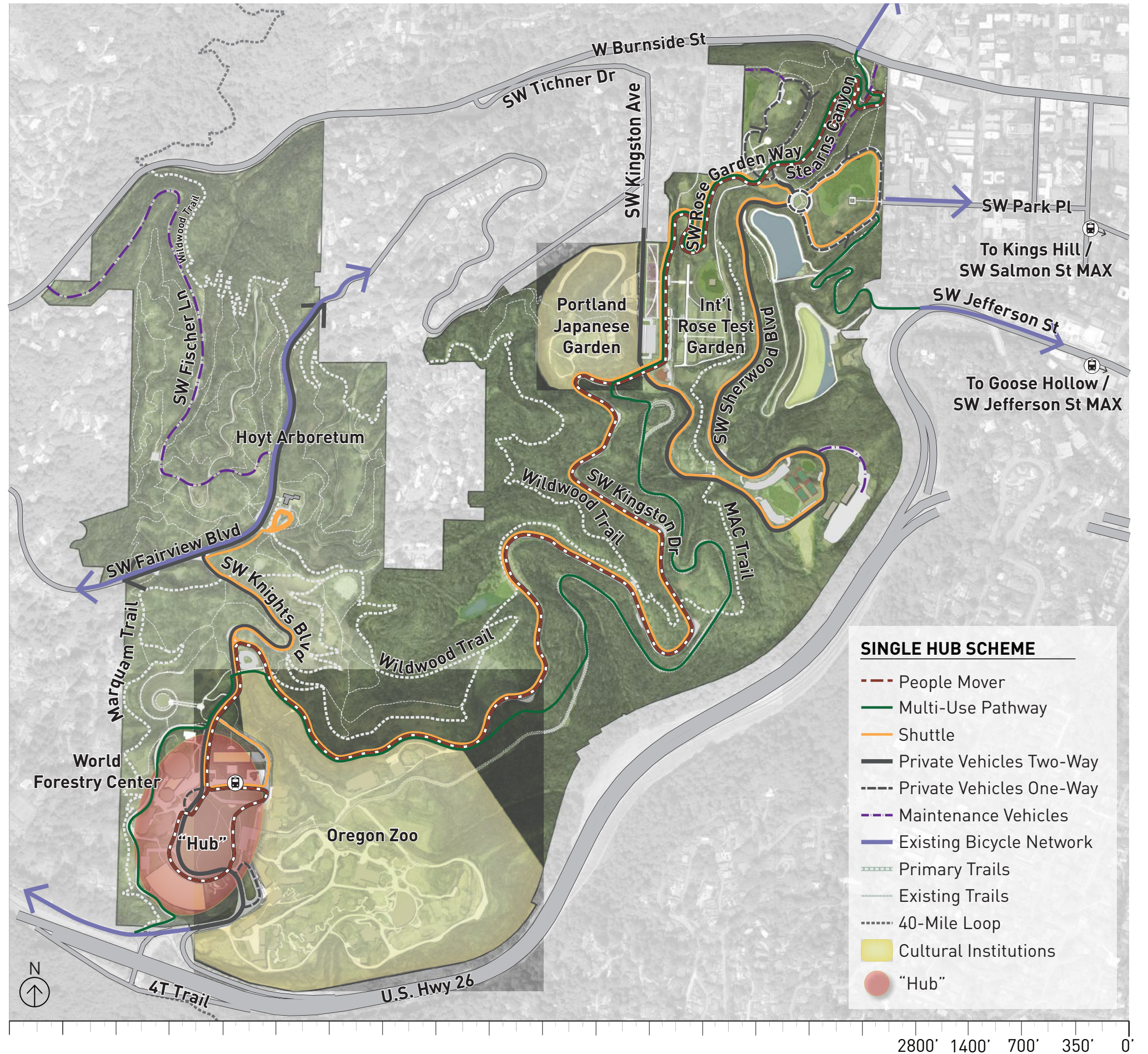
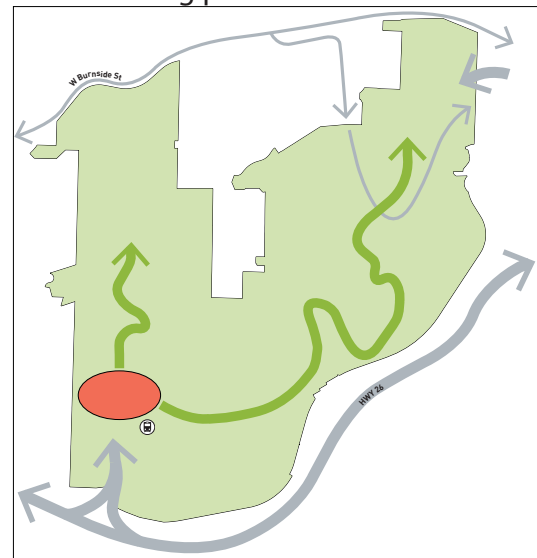
Park Hubs are organizing elements for visitors to orient, access park information, have access to basic services such as restrooms, drinking fountains, and possibly to interact with a park volunteer or staff.

CONCEPT DESIGN ALTERNATIVES

SINGLE HUB SCHEME

Year-round activity is centralized in the “Hub” at the South Entry near the cultural institutions, capitalizing on the fact that the existing Washington Park MAX station is in the center of this area and that a majority of visitors who drive to Washington Park arrive to the south entry from Hwy 26. All of the cultural institutions and gardens will have a presence in the “Single Hub” scheme.

- Indoor garden with a cafe will be located north of the MAX station.
- Hoyt Arboretum visitor center will be relocated near the World Forestry Center.
- New Washington Park Visitor Center will provide park information, transportation choices, restrooms, gift shop, and other visitor amenities.
- SW Fischer Lane will be open only to maintenance vehicles.
- Surface parking at the South Entry will be transformed into a central green park space; Parking gets consolidated in a parking structure.
- SW Kingston Drive will be closed to private vehicles during peak seasons and weekends.
- Interior park circulation will be primarily via the park shuttle, a people mover, a regional trail, and clearly marked trails.
- Entrances adjacent to the gardens and the original City Park at SW Park Place and SW Tichner Drive/SW Kingston Avenue will remain open to private vehicles, but parking near the International Rose Test Garden and Portland Japanese Garden will be reduced to minimize congestion.
- Parking will be relocated to a new recreation loop where the existing recreational soccer field is located currently. Four tennis courts and the archery range will be shifted to the recreation loop.
- Seasonal food carts will be provided near the gardens to offer variety and showcase Portland’s food culture during peak seasons.



CONCEPT DESIGN ALTERNATIVES

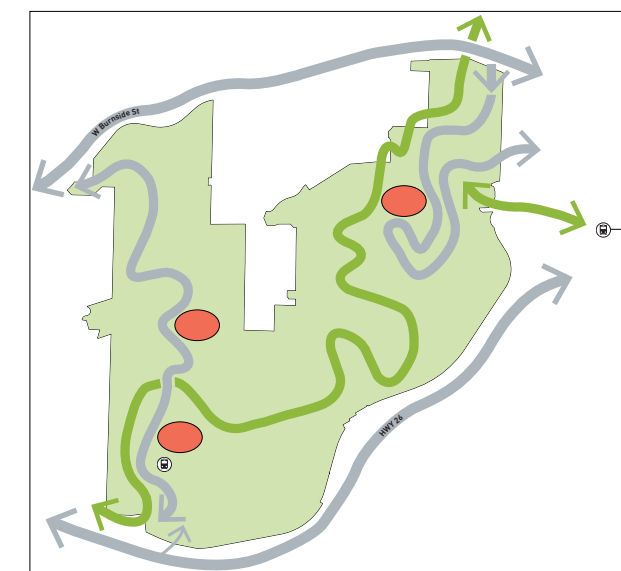
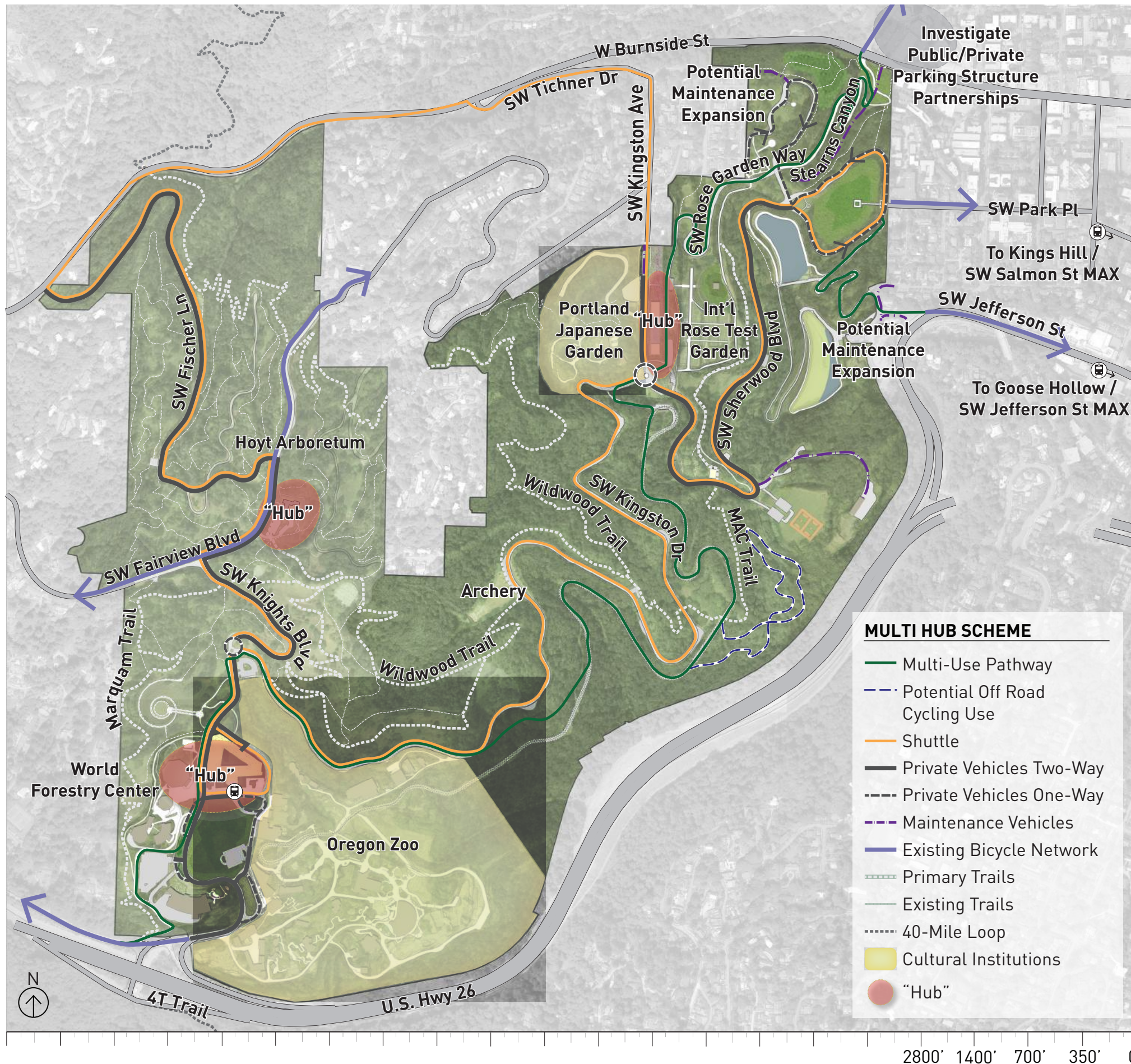
MULTI HUB SCHEME

Year-round activity is spread throughout Washington Park with three "Hubs" characterized by surrounding activities:

- South Entry Hub - adjacent to cultural institutions
- Hoyt Arboretum
- Gardens - adjacent to Portland Japanese Garden and the International Rose Test Garden with a new indoor garden and cafe

All three "Hubs" will include park information and visitor services.

- Connections will be made to the park from two nearby MAX stops: Kings Hill/SW Salmon St. and Goose Hollow/SW Jefferson St.; could be re-branded as "Washington Park North" and "Washington Park Central".
- The original entrance into City Park will be enhanced to draw people in through Stearns Canyon from W Burnside, NW 23rd and NW 21st Streets.
- Other park entrances will be clarified and improved. SW Park Place will remain a main point of park access. SW Tichner/SW Kingston Avenue will be closed to private vehicles, but still open for park shuttle and maintenance vehicle access. SW Fischer Lane will be enhanced with a new gateway from W Burnside St. and an improved road bed.
- Visitors will be encouraged to leave their cars behind and use a new regional trail along the existing train corridor, clearly marked trails, and the park shuttle to circulate throughout Washington Park. Surface parking will be removed from the south entry, moved into a parking structure, and replaced by a central green space.
- Recreation opportunities will be distributed throughout the park. The number of tennis courts will be reduced to accommodate the visitor center. The archery range will stay in place.



CONCEPT DESIGN ALTERNATIVES

PUBLIC FEEDBACK

In April 2017, PP&R and the Project Team conducted a second round of public outreach to gather feedback on the two proposed concept design alternatives for the master plan: the Single Hub Scheme and the Multi Hub Scheme.

Public comments were received through the “Party in the Park” open house and on-line survey, social media, tabling outreach at three local farmer’s markets, focus groups conducted in Spanish, Russian and Vietnamese, and meetings with PP&R staff, the Explore Washington Park board and the Champion Committee. Over 2000 people participated and gave their opinions!

Throughout the planning process, PP&R presented information to Arlington Heights, Sylvan-Highlands and Goose Hollow-Foothills neighborhood associations. They met with the Explore Washington Park board and directors of the cultural institutions in the park.

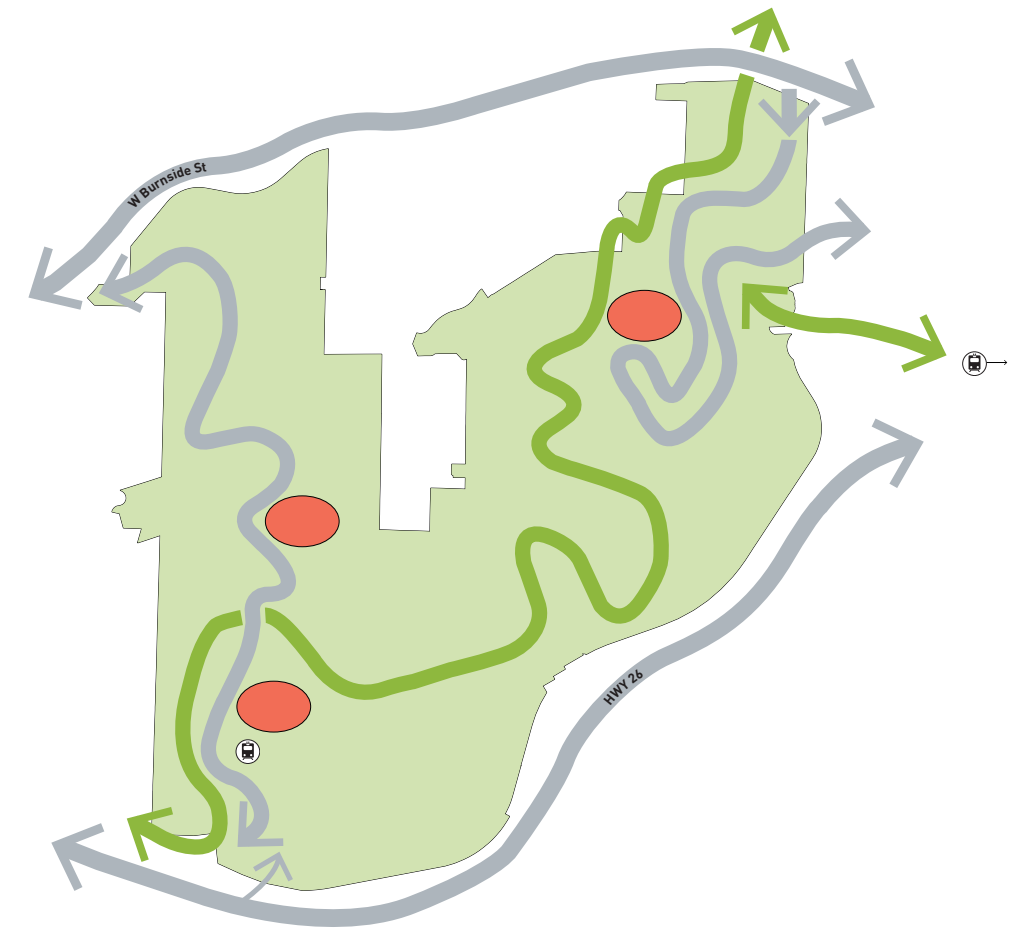
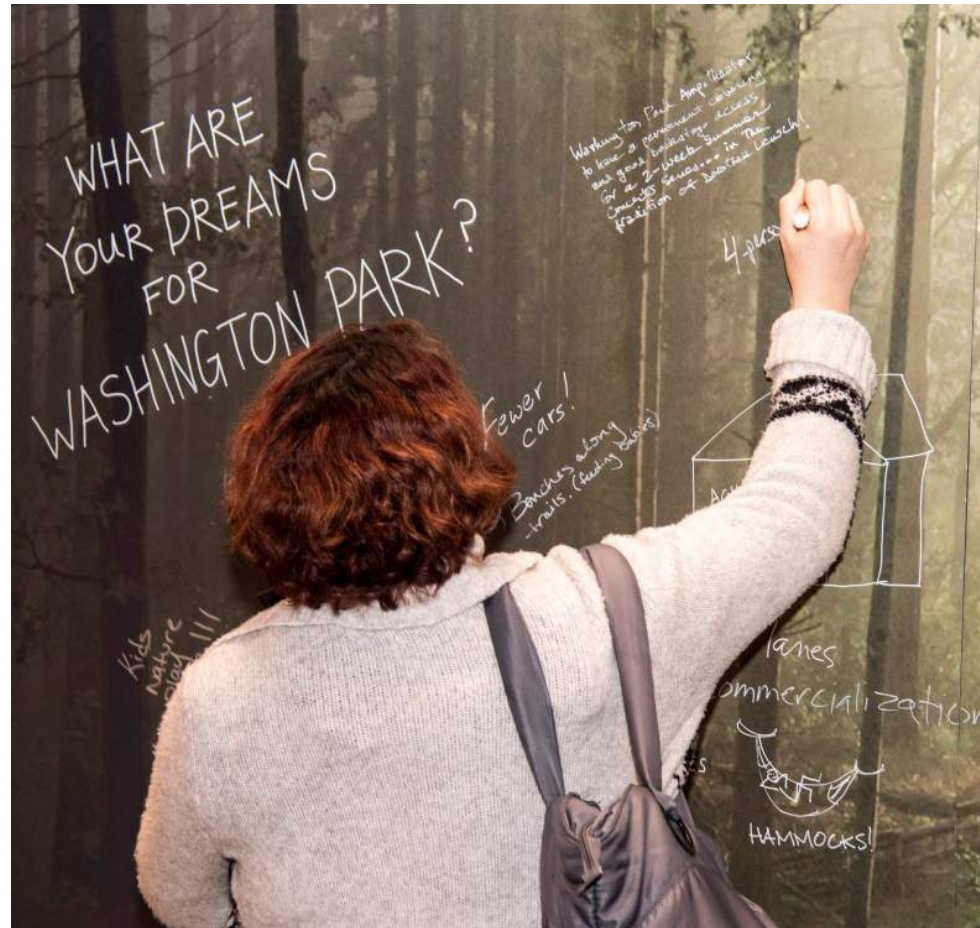
“The only thing that would encourage me to spend more time in Washington Park is ease and simplicity of access.”

“I walk 60+ miles in the city every month. Keep trails that connect with trails to other neighborhoods and features.”

“Really excited about having more options for getting around the park without driving”

“Bike access separated from walking/motorized transport would be fantastic!”

-Washington Park Master Plan Update outreach survey results



Preferred Plan

Participants preferred the **Multi Hub Scheme** with three visitor centers located at the Arboretum, the South Entry and Gardens because the solution creates flexibility and provides multiple locations to get park information and plan the day.

CONCEPT DESIGN PUBLIC FEEDBACK

Final Public Survey Results

In November 2017, the master plan was made available to the public for final feedback and comment. The survey was available online and information about the survey sent to community members via email and Facebook. 329 individuals completed the survey. The responses reflect the opinions of the individuals who participated in the survey and because the survey was not scientific, the responses cannot be interpreted to represent the general public. They are however, valuable input into the perspectives and ideas of individuals who are interested in the future of Washington Park.

In general, more than 50% of respondents indicated that the master plan “very well” or “somewhat reflected” the vision and goals for the park identified by the Champions Committee. The most significant support for the plan was for **Goal C- Showcase horticultural excellence and preserve horticultural integrity**. For the other goals, respondents indicated that about 1/3 of the goals were “very well” reflected, “somewhat reflected” or “not accomplished”. This feedback provides important information for future engagement in the master plan.

Question 3 asked: Tell us what you like best about the plan? What in the plan would inspire you to visit the park? The responses were wide ranging. The most frequently referenced features were:

- Transportation - there was general support for the shuttle, improved access, and solutions to current challenges including congestion and parking.
- Specific amenities - respondents favored the Indoor Garden, wayfinding, and food carts. Almost an equal number of comments were made in favor of and against the food carts.
- Horticulture and environmental restoration - many respondents were in favor of the proposed restoration with strong support for increased maintenance.

Frequently mentioned concerns included:

- Cost of implementation
- Increased use
- The need to invest in the current site



Enhance Visitor Experience. *Morris Arboretum | Philadelphia*

Most participants support the idea of a new forest canopy walk in the Hoyt Arboretum.

Preferred Improvements to Access and Visitor Experience

Participants had the opportunity to respond to and rate a series of images representative of potential improvements to access and visitor experience in Washington Park. Here’s what we heard:

- Reduce the dominance of automobiles in the park.
- Increase the active transportation options with shuttles, a people mover, and more walking and bicycling paths to connect destinations.
- Create a regional trail separated from the road that connects the northern and southern ends of the park for bikes and pedestrians.
- Create better connections to the Kings Hill/SW Salmon St. and Goose Hollow/SW Jefferson St. MAX stations.
- Provide food options, preferably in the northern end of the park.
- Improve wayfinding/signage and make it in multiple languages.
- Add a forest canopy walk.
- Add gardens/indoor garden at the northern end.
- Enhance the views.
- Improve the amphitheater.



**TRADITIONAL
HISTORIC
INTRICATE**

**MODERN
SLEEK
SIMPLE**

**COMFY
LOUNGE
RELAX**

**RUSTIC
NATURAL
CRAFTED**

**REFINED
TIMELESS
SOLID**

Preferred Park Identity

Participants in the public outreach process were asked to rate their preference for adjectives describing the future identity of Washington Park. The preferred descriptors were, unanimously and equally: **Rustic/Natural/Crafted and Refined/Timeless/Solid**. These qualities of character will set the tone for how new projects are to be designed and what is to be preserved.

The support and involvement of the broad community is essential for a master plan to truly reflect the environmental, cultural, economic, and social aspects of what Washington Park is and can be for future generations.



IN THIS CHAPTER

26 | Long Term Vision

27 | Focus Areas

3 MASTER PLAN

MASTER PLAN

LONG TERM VISION

The Washington Park Master Plan Update is a comprehensive road map that guides the preservation and enhancement of the park for present and future generations. It provides a long-term vision with a range of sequential phasing recommendations to enhance the park to meet current and future challenges.

PP&R and Explore Washington Park (EWP) will continue to refine circulation and parking recommendations through an update to the Transportation Management Plan (TMP). They will also continue to work with TriMet on bus circulation and drop-off locations within the park.

The Washington Park Master Plan Update map, right, illustrates the park when all the recommendations presented in this report are implemented.

This report presents the Washington Park Master Plan Update in three parts:

Focus Areas

This plan explores the five parts of the park that have distinct characteristics, topography, features, and destinations. The projects recommended by the master plan are listed in each of these focus areas: the Arboretum, South Entry, Parkway, Gardens, City Park.

Themes

More detail about each of the projects is presented in the next three "Theme" sections. Every project is featured by the theme that defines it most: Create Identity (page 35), Improve Access (page 45), and Enhance Visitor Experience (page 63).

Implementation

This section discusses the cost, the land use approvals needed, partners, and the recommended phasing for each of the projects.

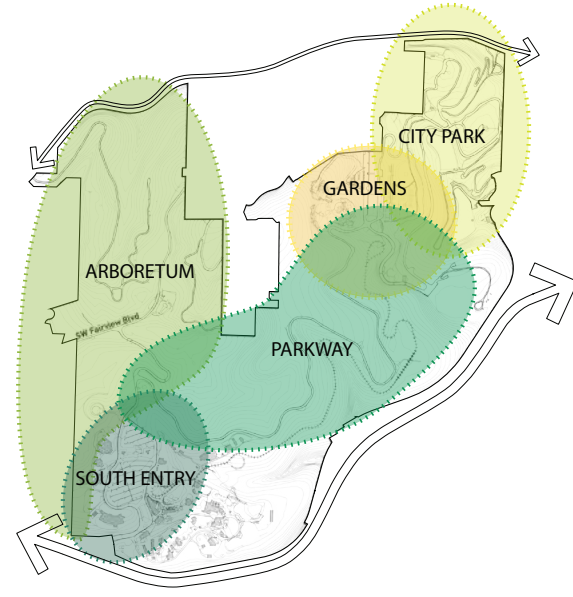
Phasing is shown throughout the document by color:

- Phase 1**
- Phase 2**
- Phase 3**





Arboretum



MASTER PLAN FOCUS AREAS

Because of its topography and historic development, the Washington Park we know today is made up of five distinct zones that define its character.

Arboretum

The northwestern land expanse contains Hoyt Arboretum, extensive trail systems, and the Vietnam Veterans of Oregon Memorial.

South Entry

Defined by the HWY 26 entrance, the MAX station and the expansive parking lots at the south end of the park, this part of Washington Park includes the Portland Children's Museum, the World Forestry Center, and the Oregon Zoo.

Parkway

The forested natural area and SW Kingston Drive connection between the north and south ends of the park includes trails, forest, the archery range, and the zoo train corridor.

Gardens

The Garden area is defined by the display gardens and stonework of the International Rose Test Garden and amphitheater, the Portland Japanese Garden, and open green space for picnics and recreation.

City Park

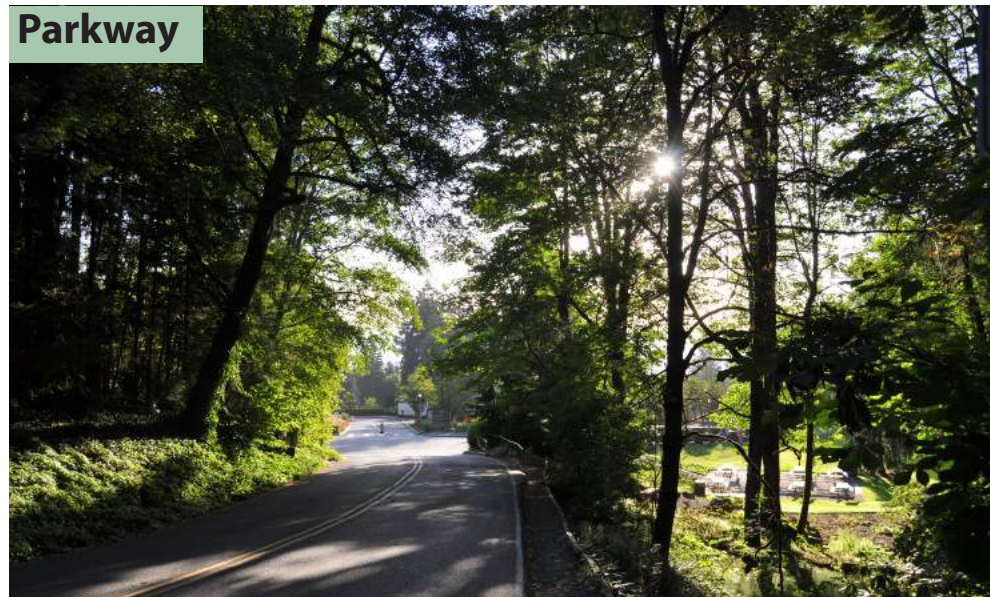
The area of the original City Park is defined by its traditional character consisting of informal and formal entries, statues, the Holocaust Memorial, the Chiming Fountain, reservoirs, natural areas, pathways, and open green space for picnics.



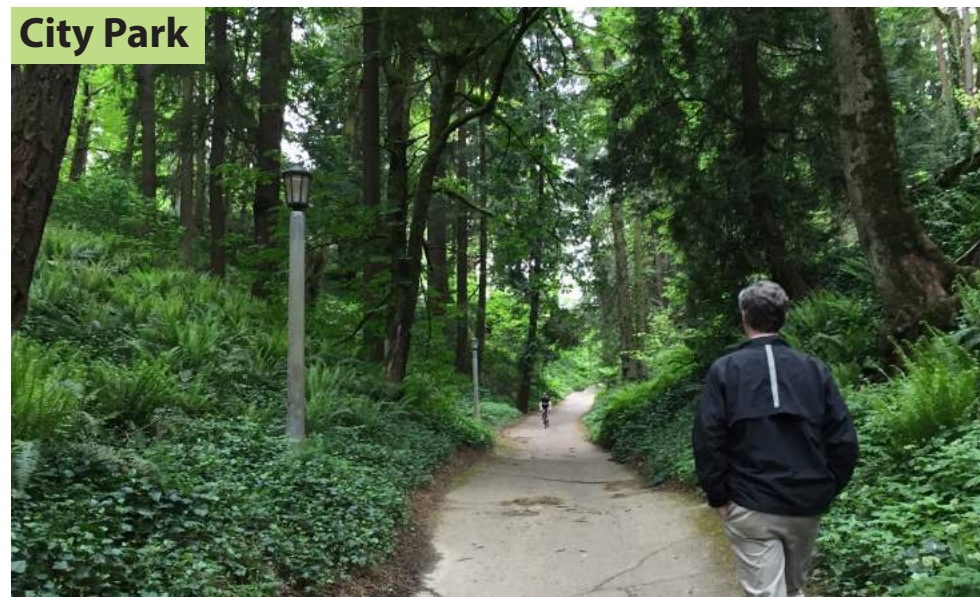
South Entry



Gardens



Parkway



City Park

FOCUS AREAS

ARBORETUM

Projects in Hoyt Arboretum will expand both access and visitor experiences by improving arrival, orientation, trails, vehicular circulation, parking, and adding a focal element in the Forest Canopy Walk.

1. SW Fairview Blvd. Improvements: Provide new park gateway markers, shoulder parking, drainage, sidewalks.
2. Visitor Center: Redevelop the visitor center into a Hub, and add shuttle turnaround. The Natural Area Maintenance Facility will be moved out of this location.
3. Accessible Trail Link: Provide ADA paved link to expand accessible arboretum trail to north.
4. Forest Canopy Walk: Develop a high quality canopy experience to interpret and enjoy the tree tops. Concept shown on map is one option.
5. SW Fischer Lane Improvements and Parking: Improve degraded portions of the road, and provide parking for access to trails and the proposed Footbridge over W Burnside St.
6. SW Fischer Lane Gateway: Establish an entry which clearly identifies the park.

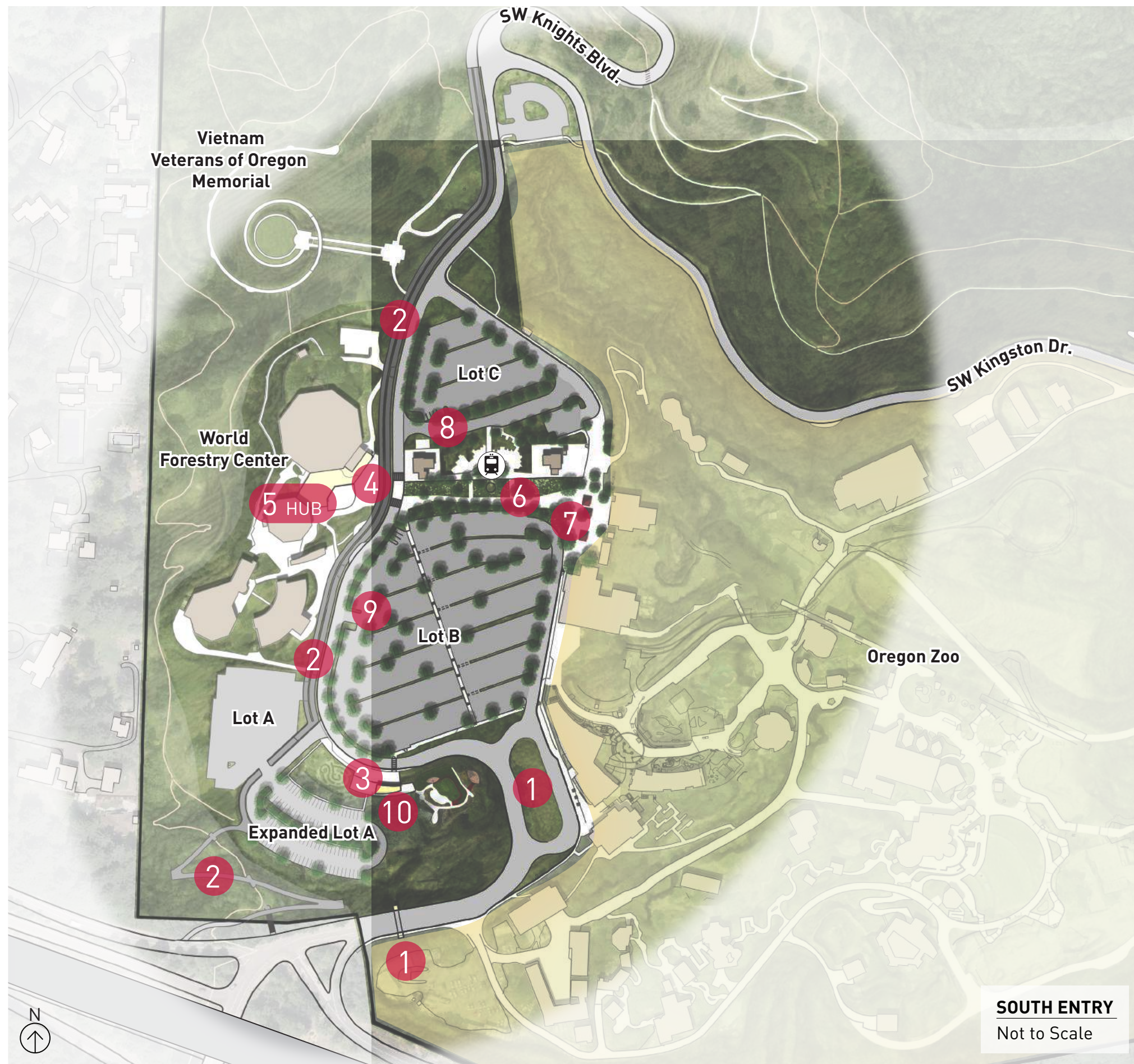


FOCUS AREAS

SOUTH ENTRY

The busiest part of the park by volume, the south entry will undergo a series of significant changes including the circulation system and plaza entrance at the MAX station. Key to this transition is a move away from automobile-dependent infrastructure and toward future reliance on MAX and alternative modes of transportation. The plan recommends that Portland Parks & Recreation, along with Metro and the Oregon Zoo, continue to explore options for a public/private parking structure in the Sylvan area. Circulation and parking in the park will be evaluated as a part of the Washington Park Transportation Management Plan (TMP), which will include more detailed analysis of traffic flow and parking lot configurations. This work will be completed by Explore Washington Park in Phase 1. Improvements to the arrival sequence, drop-off, parking, new gardens, and a visitor center will work together to improve visitor arrival to the park, whether by car, transit, bike or as a pedestrian. The Portland Children's Museum and its Opal School will relocate outside of the park to a building that is accessible, environmentally sustainable, and seismically resilient.

1. South Entry Gateway: Using the framework previously developed in the South Entry Vision (2012), develop a welcoming primary entrance with a garden stormwater swale.
2. Regional Trail Improvements: Provide new separated route to bring bikes and pedestrians into the park from SW Canyon Ct. to SW Knights Blvd/SW Kingston Dr.
3. Portland Children's Museum (PCM) Drop-off: Provide vehicular drop-off to serve PCM. This is an intermediate step while PCM is still in place.
4. World Forestry Center (WFC) Drop-off: Provide vehicular drop-off to serve WFC and visitor center.
5. Visitor Center/Hub: Add visitor center at base of World Forestry Center entry as terminus to the South Entry Garden Plaza.
6. South Entry Garden Plaza: Create linear garden plaza linking transit, Oregon Zoo entry, visitor center, and WFC.
7. Oregon Zoo Entry Court and Drop-off: Create new entry for improved access and wayfinding. Traffic will not cross in front of the zoo.
8. Ride Share Drop-off: New drop-off at **Lot C** to improve access and allow for the South Entry Garden Plaza. The bus and shuttle drop-off locations will be evaluated as part of the TMP.
9. Parking **Lot B**: Adjust access points, layout, and circulation to improve flow and efficiency.
10. Portland Children's Museum: PCM Outdoor Adventure will be maintained as a public nature play area; remove PCM's structure and expand parking **Lot A**.

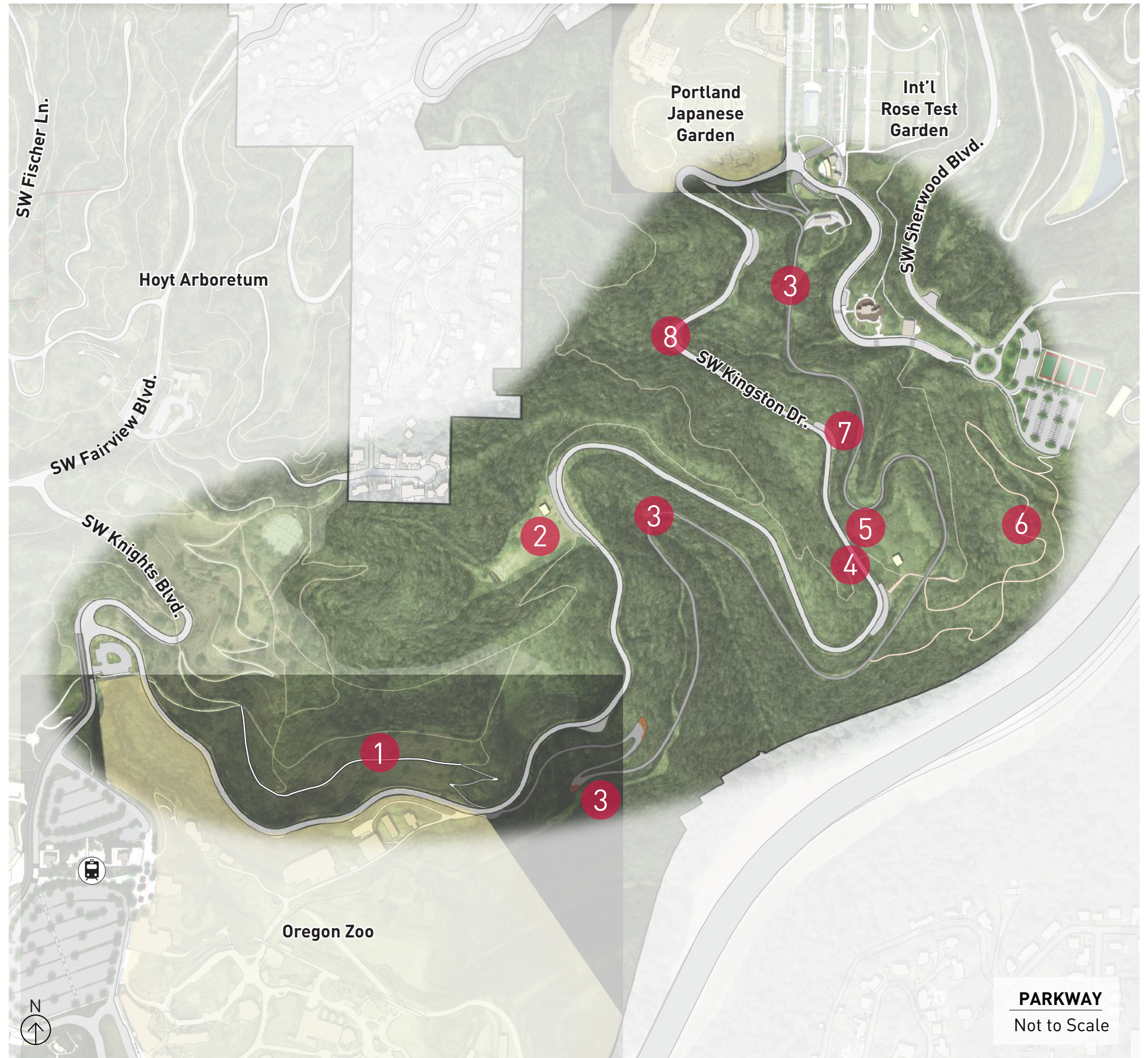


FOCUS AREAS

PARKWAY

As the park's linking landscape and the most significant natural area in the park, the parkway offers visitors opportunities to connect with nature and provides habitat for birds and other animals. The greatest improvements within this area come with the modification of the train rail corridor to add a regional trail, ecological enhancement, and development of the area around the Water Tank. Paid parking spaces will be installed when cell service is improved in the park.

1. Accessible Maple Trail: Pave and widen to 5-6 feet.
2. Archery Area Improvements: Improve drainage, provide picnic area, covered shooting line, restroom, paid parking.
3. Regional trail for pedestrians and bicycles: Add a modified path to the train corridor or replace the train tracks with a full 12 foot paved path and improve drainage.
4. SW Kingston Drive and Wildwood Trail intersection improvements for safety and wayfinding.
5. Nature Play Area.
6. Off-Road Cycling Trail.
7. SW Kingston Drive Pull-outs: Close inadequate parking areas/develop best parking and view points
8. SW Kingston Drive Improvements: Repair/repave roadbed and improve drainage to maintain use for shuttles, buses, automobiles, and bikes.



FOCUS AREAS GARDENS

With some of the most beautiful areas of the park and stunning views, the Gardens area needs to improve pedestrian access and wayfinding, its visitor experience, and garden continuity.

1. SW Kingston Ave. Gateway: Establish an entry which clearly identifies the park. Remove on-street parking within the park.
2. SW Kingston Ave. Improvements and Drop-off: Provide ride share, private vehicle drop-off loop, and accessible short-term parking. Provide bus drop-off on west side of SW Kingston Ave.
3. New Gardens: Replace parking and tennis courts with new horticultural gardens, a water garden and pedestrian paths linking the Portland Japanese Garden and the International Rose Test Garden.
4. Indoor Garden: Expand park offerings by creating an indoor garden with an event space, café, and visitor center. This becomes the permanent Hub location.
5. Rose Garden Plaza: Remove all parking to create a continuous garden space. Allow shuttles, maintenance vehicles, and pedestrians. Create seasonal food cart plaza. Bicycles will not be allowed.
6. Gardens Interim Visitor Center: Improve and expand restrooms; add space for interim visitor center which will become gift shop space when the visitor center moves to the Indoor Garden.
7. Train Station Improvements: Improve station to include a seasonal Depot Café, and restore view point.
8. Playground Improvement: Improve existing children's playground for inclusive play and updates.
9. SW Sherwood Blvd. Improvements: The road will be two-way from the new traffic circle to new lower parking lot (11).
10. Relocated Tennis: Develop four new courts and adjacent group picnic area with shelter and restroom.
11. Gardens Lower Parking Lot: 170 spaces as the primary parking for Gardens, link with shuttle and trail. This is an ideal location for the people mover to travel between the parking lot and the Gardens area. Cell service needs to be improved in this area.
12. Maintenance Yard Expansion: Double the yard and the building area to consolidate services. Add storage space for the Rose Garden Store.
13. Elephant House upgrades: Perform a detailed seismic analysis for possible upgrades, and upgrade restrooms.
14. Amphitheater Upgrades: New bandshell or roof structure, backstage room and restroom for performers, and improved lawn drainage.
15. MAC Trail improvements: Realign to reduce slopes greater than 15% and fix switchbacks.



FOCUS AREAS

CITY PARK

With direct connections to the city at W Burnside St., the original park area has the most potential to increase the park's visibility and non-motorized visits. Establish it as a primary entrance which clearly identifies the park and improves pedestrian and bike access from W Burnside St. up through Stearns Canyon. Preserve and enhance the natural areas in Stearns Canyon with a focus on improving the quality of the habitat.

Improve pedestrian and bike access from SW Jefferson St. and the renovated reservoirs. Reinforce SW Park Place as the formal primary park entrance.

1. W Burnside St. Entrance Improvements: Create new primary entry gateway and garden for pedestrians and bicyclists, and possibly a people-mover stop to bring visitors up from the city.
2. Stearns Canyon Trail Improvements: Repair existing stairs and trails. Create a trail plan for Stearns Canyon to determine necessary improvements and closures.
3. Chiming Fountain Circle: Realign roadway to create traffic circle, restore and relocate fountain within the circle.
4. SW Park Place Playground: Remove parking and road to allow expanded group picnic area. Develop playground near Lewis and Clark Obelisk-themes: art and history.
5. SW Jefferson St. Gateway: Create a secondary entrance for pedestrians and bicyclists, and make improvements along the SW Madison Trail.
6. SW Wright Ave. and SW Park Place: Revise and clarify roadway connection from neighborhood streets into park; provide gate to close after hours.
7. Natural Area Maintenance Facility: Construct a new maintenance facility for Natural Areas staff. Complete a feasibility study of the Bear House to determine if it should be demolished or restored.
8. Trail Connection to Reservoirs: Extend connection from reservoirs to Rose Garden.
9. Restrooms near the Holocaust Memorial: Provide seismic and restroom upgrades.



Master Plan Goals

Every one of the recommendations and implementation projects meet the Master Plan Goals in multiple ways.

- A** Fulfill the potential for Washington Park to become a world class park - valued for inspirational beauty, areas of respite, recreation, health, and vitality.
- B** Washington Park is easy to get to and move through once there.
- C** Washington Park showcases horticultural excellence and preserves natural area integrity.
- D** Washington Park clearly connects people of all communities to the identified venues and activities.
- E** Washington Park is well funded and supported; it adds economic vitality to the city and the region.
- F** Washington Park cultivates a rich educational, cultural, and historic vitality, and embraces the cultural diversity of its visitors and the regional community.
- G** Washington Park is resilient to extreme weather.

FOCUS AREAS HOW WE MEET OUR GOALS

Washington Park Master Plan - Implementation Projects and Master Plan Goals

Phases	Park-Wide Projects	A	B	C	D	E	F	G
Phase 1	Washington Park Transportation Management Plan		B					
Phase 1	Temporary road closures and entrance closures; Test closing SW Kingston Dr.	A					F	
Phase 2	Maintenance facilities expansion	A				E		
Phase 1 & 2	Connection to Goose Hollow/SW Jefferson St. & Kings Hill/SW Salmon St. MAX stations via shuttle and/or ride share or bike share		B			E		G
Phase 1 & 2	Enhance Wayfinding	A	B		D		F	G
Phase 1	Dark Sky Plan	A		C				
Phase 1 & 2	Natural Area Ecological Improvements	A		C	D	E	F	G
Phases	Arboretum Projects	A	B	C	D	E	F	G
Phase 1	Accessible Trail from Hoyt Visitor Center to Bristlecone Pine Trail		B		D			
Phase 1	Pedestrian safety improvements to SW Fairview Blvd.		B			E		
Phase 2	Shift shuttle route to be entirely within park; new turnaround at Stevens Pavillion parking area		B		D			
Phase 1	Park Gateway at SW Fairview Blvd.		B		D			
Phase 1	SW Fischer Lane parking for new Footbridge Over Burnside		B		D			
Phase 1 & 2	Forest Canopy Walk	A			D		F	
Phase 1	SW Fischer Lane roadway improvements and W Burnside St. gateway		B		D			
Phase 1	Visitor Center Improvements	A	B		D		F	
Phases	South Entry Projects	A	B	C	D	E	F	G
Phase 1	New Gateway at SW Knights Blvd. and development of stormwater garden		B	C	D			
Phase 2	Visitor Center	A	B		D		F	
Phase 2	Drop off zone and new parking lot layout for Lot C		B					
Phase 1 & 2	New parking and nature play on repurposed Portland Children's Museum site		B					
Phase 1 & 2	South Entry Garden Plaza	A	B	C	D		F	
Phase 1 & 2	Lot B parking adjustments and Zoo entry court		B		D			
Phase 1 & 2	Regional Trail connection SW Kingston Dr./SW Knights Blvd. intersection to SW Canyon Ct.	A	B		D			
Phases	Parkway Projects	A	B	C	D	E	F	G
Phase 1	Pave Maple Trail to Regional Trail connection	A	B		D			
Phase 1	SW Kingston Dr./Wildwood Trail Intersection improvements	A	B		D			
Phase 1	Trailhead Parking and road repair along SW Kingston Dr.	A	B		D			
Phase 1	Regional Trail between J Gate and Train Station	A	B		D			

Phase 1 Phase 2 Phase 3

Phases	Parkway Projects (continued)	A	B	C	D	E	F	G
Phase 2	Depot Cafe	A		C			F	
Phase 2	Archery range picnic area and restroom, covered shooting line, natural areas restoration	A		C		E	F	
Phase 3	Off road cycling trail	A			D			
Phase 1	View restoration	A					F	G
Phase 2	Nature Play Area	A		C			F	
Phases	Gardens Projects	A	B	C	D	E	F	G
Phase 1	MAC Trail repairs and realignment		B		D			G
Phase 1	Gardens Interim Visitor Center	A		C	D		F	
Phase 1	Water Garden	A		C			F	
Phase 1	Rose Garden Restrooms & Curators office upgrade	A						G
Phase 1	Upper SW Sherwood Dr. accessibility improvements and parking improvements		B					
Phase 1	Lower SW Sherwood Dr. two-way and roundabout		B					
Phase 1	Relocated Tennis (remove existing) & Gardens Lower Parking Lot	A	B					
Phase 1	SW Kingston Ave. one-way conversion, new accessible and short-term parking, and entry improvements		B		D			
Phase 1	Rose Garden Plaza	A		C	D	E	F	
Phase 1 & 2	Indoor garden	A		C	D	E	F	
Phase 1 & 2	Amphitheater upgrades	A			D	E	F	
Phase 1	Children's playground improvements	A					F	
Phase 1	Elephant House improvement/upgrades	A					F	
Phases	City Park Projects	A	B	C	D	E	F	G
Phase 1	Bear House assessment to determine viability for restoration or demolition	A					F	
Phase 1	Natural Areas Maintenance Facility			C				
Phase 1	Improved trail access from SW Jefferson St. and new gateway at Madison Trail		B		D			
Phase 1	W Burnside gateway, bicycle trail, stair and pedestrian connection improvements at W Burnside St.	A	B	C	D		F	G
Phase 1	Restroom restoration, near Holocaust Memorial	A					F	
Phase 1	Roundabout with moved & restored Chiming Fountain, realigned roadways	A	B				F	
Phase 1	City Park Playground, replace	A					F	



IN THIS CHAPTER

- 36 Gateways
- 39 History
- 40 Views
- 41 Natural Areas
- 43 Additional Actions

4 CREATE IDENTITY

CREATE IDENTITY

INTRODUCTION

Washington's Park's greatest assets are its diverse amenities and range of landscape character. These characteristics, however, coupled with the park's geographic expanse and lack of clearly defined boundaries, pose a challenge to fostering a consistent sense of identity throughout the park. The master plan recommendations seek to create an environment which brings these elements under the singular identity of Washington Park. The park has elements to establish a unified character, such as a limited number of park entries, an interconnected circulation system, set of cultural institutions and venues, a prominent hillside location, and a mostly wooded environment. By focusing on the establishment of clear park portals, a unified family of signage, simplified circulation, coordination among institutions, established views, and more connections to nature, the plan will help people to see the park as a whole rather than as a series of parts.

The built character of the existing park spans nearly 150 years of style and scale, contributing to the identity confusion. Public input reinforced the desire to have new park improvements emulate the qualities of refined/timeless, solid/natural, and rustic/crafted. Together, these qualities set the tone for how new projects are to be designed and what is to be preserved.

Gateways

It is easy to pass Washington Park and not know it's there, even when you are within park boundaries. All park entries should be clearly signed with similar, appropriately scaled signage and markers announcing the park and directing visitors to Hubs. Primary multi-modal entries should receive the greatest modifications with pedestrian connections receiving a range of improvements depending on their activity and condition.





Primary Entrance. 🚗 *City Park | New Orleans*
Emphasize the primary vehicular entries to the park with iconic gateways.



W Burnside St. Entry Improvements ○

Secondary Entrance - No Automobiles. ▲ *Hooke Park | England*
Art and sculpture can make pedestrian entries notable and special.

CREATE IDENTITY GATEWAYS

SW Kingston Ave. Gateway 🚗

Develop an appealing park gateway that is both timeless in its character and significant in scale to mark this primary entry. Foster an immediate park-like garden quality by building on the character of the Katsura trees lining SW Kingston Avenue, creating the portal at the edge of the park, removing on-street parking **in the park**, under-grounding the powerline, and allowing for a drop-off zone. Develop an entry that reflects the historic character of the amphitheater-rose garden basalt stairs and historic walls. Provide new sign, associated plantings, and historic site lighting for safety.

W Burnside Entry Improvements ○

Provide a new entry gateway and garden to better connect the park to the city. Clear overgrown plant material and remove or relocate Stearns Memorial Fountain sculptural wall to provide space for gardens and active lawn space, as well as provide views to the people mover stop and Stearns Canyon beyond. Improvements should reflect the historic character of the original park. Gardens in this area should make clear link to rose gardens or have formal character similar to the SW Park Place entry. Provide new park sign, associated plantings, and historic site lighting for safety.

South Entry Gateway 🚗

Create a welcoming portal between the Hwy 26 exit and parking area by establishing a passage that announces this as a primary entrance to Washington Park. Access to the Oregon Zoo Education Center will be simplified and can serve as a pick-up and drop-off point for those that do not want to go further into the park.

SW Fischer Lane at W Burnside St. and SW Fairview Blvd. 🚗

In an effort to better mark the park's boundaries for both visitors and through traffic, new prominent entry signs should replace the existing signs. New signs should be part of the signage and branding program for Washington Park, and be consistent with other secondary park entry signage. Low native plantings at the base will accentuate the signs and help them stand out from their settings.



Secondary Entrance. ▲ *Greece Canal Park | New York*
Use signage to mark secondary vehicular entries to the park.



W BURNSIDE ST. GATEWAY

PHASE 1 FEATURED PROJECT



Existing Conditions



W Burnside St. Gateway

The original entrance to City Park was located along W Burnside St. and has become an overgrown and little-used point of access. The paths and trails that lead to this point present the most direct connection to the City's urban core and the thousands of people living within a 15-minute walk. This revived entry is envisioned to bring a flash of the gardens to the city and to create a vibrant pocket park leading into Stearns Canyon. Views into the park and garden will require the removal of overgrown vegetation and relocation of the Stearns Memorial Fountain to the base of the canyon. A possibility for this enhanced entry is the northern stop for the people mover, an autonomous shuttle which will utilize the original meandering entry drive alignment to bring visitors through the cloud forest of Stearns Canyon and up to the Gardens Hub. The entry is served by multiple bus routes and presents the opportunity to create a relationship with future private parking garage options outside the park, which also serves visitors to the Pittock Mansion.

Historic Building | International Rose Test Garden



Stonework | International Rose Test Garden



Significant Trees | Hoyt Arboretum



City Park Entrance | 1910



CREATE IDENTITY HISTORY

Connections to the Past

Maintain, respect, and preserve the original historic and aesthetic character of the site-defining features and the design intent of historic structures. While the entire park does not reflect a historic character, the original City Park and Gardens areas are clearly identified by their historical elements.

There are six key districts that reflect the most significant cultural resources with the park. Any improvement in these areas will respect their historic contribution to the park.

- City Park, the original park, was established in 1871 in what is now Stearns Canyon.
- Reservoirs, 1893, are listed in the National Register of Historic Places.
- International Rose Test Garden was originally established in 1917 to safely store European hybrid roses during WWI.
- Hoyt Arboretum, 1922, contains over 200 plant families and 2068 species, 63 of which are listed globally vulnerable or endangered.
- SW Kingston Drive was built in 1967 to connect the two ends of the park.
- Portland Japanese Garden, 1962, is the most authentic Japanese garden outside of Japan.

Within the Gardens and City Park are historic buildings and structures, which need repairs or upgrades. These include:

- Bear House is the remaining building from the original zoo but has many structural deficiencies. A feasibility study needs to be conducted to determine if it will be restored for a new use, or demolished.
- Elephant House needs seismic repairs and restroom upgrades.
- Rose Garden restroom and curator's office need seismic repairs, and restroom upgrades.
- Restroom/concession building near the Holocaust Memorial needs seismic repairs and restroom upgrades.
- The 1891 Chiming Fountain will need to be fully restored when moved to its new home inside the traffic circle.

CREATE IDENTITY VIEWS

Established during the City Beautiful movement when the hillsides had been logged, views to Mt. Hood, Mt. St. Helens and Mt. Adams connected the park to the regional landscape. Through breaks in the trees, the park retains some commanding views of the city and surrounding mountains. There are five designated viewpoints in the 2035 Portland Comprehensive Plan within the International Rose Test Garden Area. Maintaining and reestablishing these iconic views is important to the park's identity as a link to the larger landscape and Portland's local scenic beauty. Actions to maintain the views are to:

- Develop a formal viewpoint with a bench and marker, and manage vegetation on SW Sherwood Blvd. above Reservoir 4 to restore the view of Vista Bridge and the city skyline.
- Restore the views of Mt. St. Helens, Mt. Hood and the downtown skyline at the Washington Park Train Station. The setting is ideal for a seasonal outdoor cafe.
- Restore view of Mt. Hood from the Vietnam Veterans of Oregon Memorial.
- Restore the historic views from SW Kingston Drive.
- Maintain the view of Mt. St. Helens from the Wildwood Trail in Hoyt Arboretum.
- Manage vegetation to maintain view of Mt. Hood from the Portland Japanese Garden.

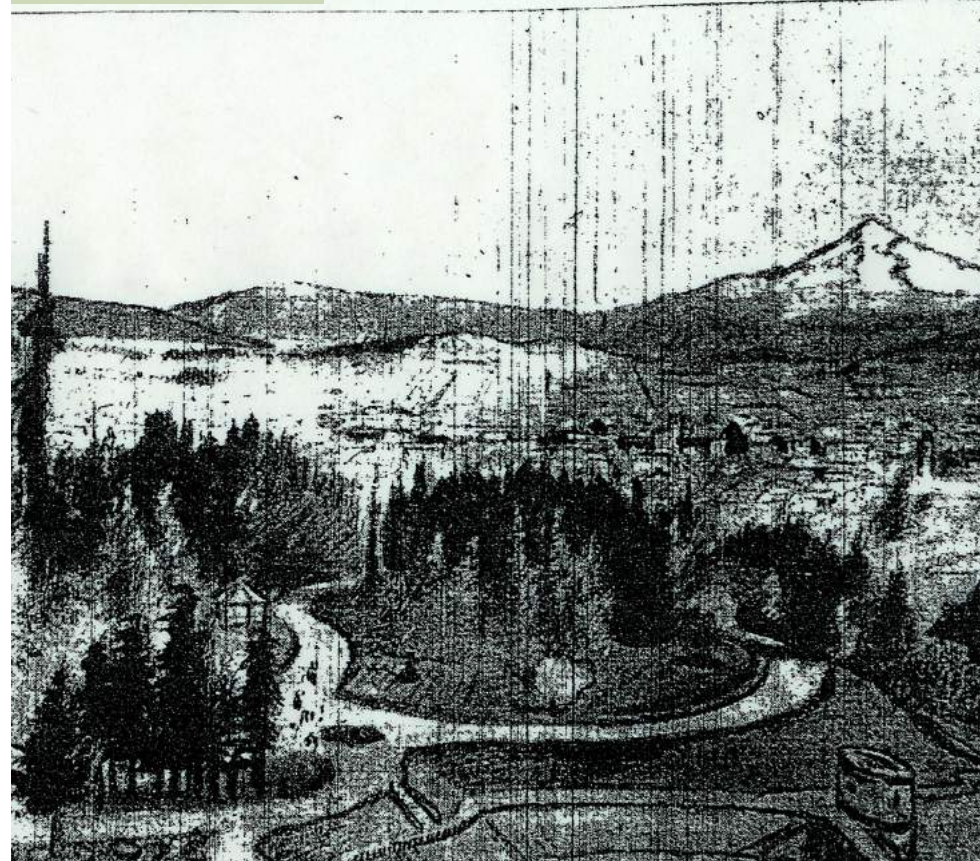
View of Mt. St. Helens from Hoyt Arboretum



View from Vietnam Veterans of Oregon Memorial



City Park | 1902



Restore views at Depot Cafe



CREATE IDENTITY NATURAL AREAS



Northwest native planting.

Native Plants

Preserve the character of the park's natural areas through the use of native planting.

Washington Park's natural areas are enjoyed by many visitors, allowing access to nature close to the City. Preserving and enhancing the existing natural areas throughout the park is a foundation of the master plan. Many park users come to the natural areas of the park for quiet moments away from the city. These areas are very important habitats for birds and animals.

Washington Park's natural areas have a role in the larger landscape. As a part of the Westside Wildlife Corridor that connects Forest Park to Tryon Creek State Natural Area, Washington Park is an integral green link in Portland's habitat web. This corridor serves as a near continuous wildlife migration passage from Forest Park south along the west hills, providing neighborhood access to trails, and protecting headwater streams (refer to Technical Investigation).

The natural areas are composed of forested ravines north and south of SW Kingston Dr. and large swaths of the northern part of the Hoyt Arboretum. Though these areas are green, they are in poor ecological health due to the large amount of invasive species. The master plan preserves these areas by only recommending trail improvements, and enhances the habitat by removing invasive species and planting native understory vegetation to increase biological diversity.

The park contains valuable tracts of upland prairie with tall grasses that provide habitat for ground dwelling birds. These areas will be retained and managed to promote habitat value while suppressing fire danger.

Additionally, blending natural landscapes with more managed areas can help integrate the diverse park landscapes. An example of this is the creation of new pollinator gardens, infusing the park with winter blooming flowers, and expanding interest and habitat throughout the park.

PP&R completed an ecological inventory of the park. They have identified specific natural resource challenges facing Washington Park (invasive species, erosion, water quality, fragmentation) and the plan recommends funding for improving the ecological health of these areas.

PP&R will identify areas to minimize noise and light pollution, meeting best practices in exterior lighting design to address and minimize light pollution, reduce wasted energy, minimize impacts wildlife and birds, minimize impacts to human health, and preserve night skies, making Washington Park a Dark Sky Park.



Invasive species removal.

Vine Removal

Protect important habitat through the removal of invasive species.



Habitat for native wildlife.

Pileated Woodpecker

Protect wildlife habitats in the Westside Wildlife Corridor.

SOUTH ENTRY GARDEN PLAZA

PHASE 2 FEATURED PROJECT



Existing Conditions



South Entry Garden Plaza

The South Entry Garden Plaza welcomes visitors into the park with beautiful gardens and arrival courts. A new linear garden that links the Oregon Zoo entry to the World Forestry Center, a new visitor center, and TriMet's Les AuCoin Plaza create a welcoming feature. The bus transit zone is relocated. With the public's increased reliance on public transit, the garden becomes a central feature of the South Entry. Visitors emerge from the Washington Park MAX Station elevators and walk into the linear garden. Garden plantings along the south edge screen the extents of the central parking lot, yet retain views to the west hills. Walkways lead directly to the expanded Oregon Zoo entry forecourt and drop-off to the east, and to the new visitor's center drop-off and World Forestry Center to the west.

Commonly Used Light Fixture | Washington Park



Typical Bench | Washington Park



Stevens Pavilion | Washington Park



Sculpture by Lee Kelly | Washington Park



“I love the idea of a sculpture garden. The Lee Kelly sculpture in the Rose Garden is a favorite spot in the park.”

-Washington Park Master Plan Update outreach survey results

CREATE IDENTITY ADDITIONAL ACTIONS

Establish a set of consistent park improvements to create a unified identity. Consider the public’s unified voice that asked that Washington Park’s identity and character be defined as refined, timeless, solid, and rustic, natural, and crafted in all improvements. Building and auxiliary feature design guidelines will be created to ensure that new structures have a similar design compatible to their use and surroundings.

Branding

Branding helps create a clear, unified message that reflects Washington Park’s character and strengthens its sense of place. In Phase 1, create a signage plan that brands Washington Park - establish a tagline, image, and consistent signage and mapping. Branding strategies might include: all road and highway signs will direct visitors to Washington Park, as the primary destination; cultural institutions within the park will refer to themselves not only name, but also as “in Washington Park”.

Structures

For any new construction, consider timeless structures that respect the park’s heritage and are subordinate to the surrounding landscape and gardens. Strive to include basalt stone bases and wood construction as a means of connecting to the park’s heritage, existing cultural institutions, and the developing family of gateway signs. All structures will meet current building codes and will adhere to bird-friendly building guidelines from the City’s Green Building Policy.

Lighting

Washington Park will strive to become a Dark Sky Park. In Phase 1, PP&R will develop a lighting plan to meet the criteria established by the International Dark Sky Association. Best management practices in lighting design include: proper shielding to keep light focused where it is needed; careful establishment of lighting levels; and thoughtful consideration of the spectral composition of bulbs. All lights not associated with parking or safety should match current traditional masonry poles and globes.

Site Furnishings

The family of site furnishings include benches, trash and recycling cans, bike racks, and bollards. Select fixtures that respect the park’s heritage, are durable, perpetuate the park identity, and are low maintenance.

Memorials, Monuments and Sculpture

Washington Park is home to eight memorials and public art works that enrich the cultural landscape and have become destinations themselves. Implement a program to install public art strategically in the park for added educational benefit from Park Place to the Rose Gardens as a sculpture walk.

Washington Park is great today. However, getting to the park and getting around the park are the biggest barriers for most visitors.

The park's position high in the west hills provides an opportunity for unique views of surrounding mountains and the city, but for many, the topography and terrain are a barrier for walking or bicycling to or through the park.

Navigating the maze of trails within the park is confusing and many people do not attempt the hike from the Washington Park MAX Station to the Rose Garden, because they do not know how to find their way or think it will take too long to get there.

Families frequently come to Washington Park to visit the Oregon Zoo or Portland Children's Museum with young children and grandparents. Taking public transportation takes too long, and they arrive only to find all available parking is full in the South Entry. They are faced with circling the lot, finding the off-site lot and taking a school bus shuttle, or they leave and decide to go elsewhere with the intention of returning to Washington Park another day.

Moving cars to the edges of Washington Park, creating a pedestrian and bicycle path separate from cars, and increasing active transportation options ranked as the highest priorities from those who participated in both the in-person and online open houses.

Enhancing Washington Park means improving access for all park visitors. The park should be a place where arriving without a car is easy. If you do drive, you park your car and explore the park by people mover, shuttle, on foot, or by bicycle. This chapter outlines the opportunities to improve Washington Park access.

IN THIS CHAPTER

46	Trails
50	Park Roads
56	Parking
58	Park Shuttles and People Mover
60	Wayfinding
61	Additional Actions

5 IMPROVE ACCESS

IMPROVE ACCESS TRAILS

Trails within Washington Park are already a major attraction for visitors. A robust network of over 15 miles of trails create a unique opportunity to connect with nature, exercise, explore, and decompress. However, the existing trail network is confusing and sometimes disconnected from park attractions.

In public outreach surveys, park users rate the trails as excellent and well maintained. However, the park's terrain and distributed amenities create challenges for accessible connections, especially in natural areas. The master plan calls for the addition of accessible trail connections in the Arboretum and Parkway focus areas to enhance the trail network.



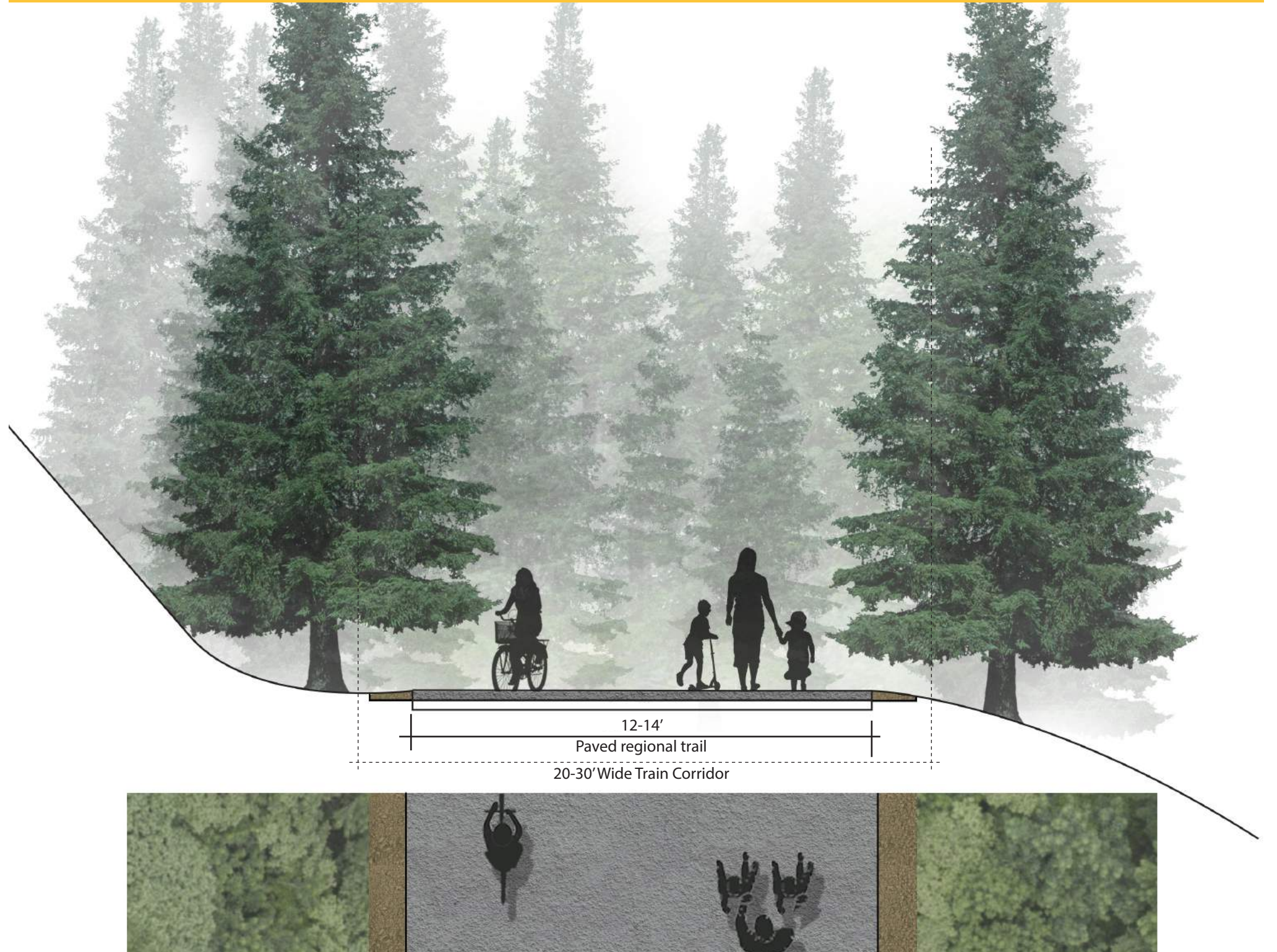
Beginning in 1960, park visitors could travel between the Oregon Zoo and International Rose Test Garden by train. The two-mile round trip took about 35-40 minutes. The corridor has been quiet since September 2013. Unstable conditions and cost to repair the tracks outside of the Oregon Zoo have silenced the clack of the rails, but the corridor offers an unique experience and vantage point in Washington Park. Portland Parks & Recreation is coordinating with Metro to determine how to best utilize the corridor and train station.

A regional trail built within this corridor would improve safety for pedestrians and bicyclists in Washington Park. If the Zoo Train remains in operation, a narrower version of the regional trail should be explored. The tracks are never steeper than 4.5%, and a paved regional trail is an opportunity to reconnect the north and south ends of Washington Park.

“I have trouble recognizing existing trails running through the park, especially their access points, their routes, and their destinations or options. I’d like more attention to walking trails and to information about where each of them will take me.”

-Washington Park Master Plan Update outreach survey results

5. Regional trail



IMPROVE ACCESS TRAILS

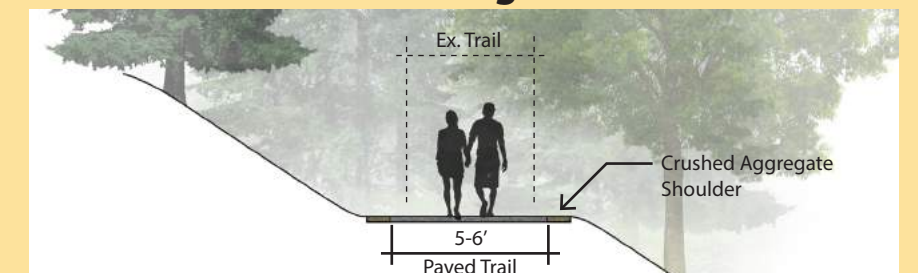


Phase 1

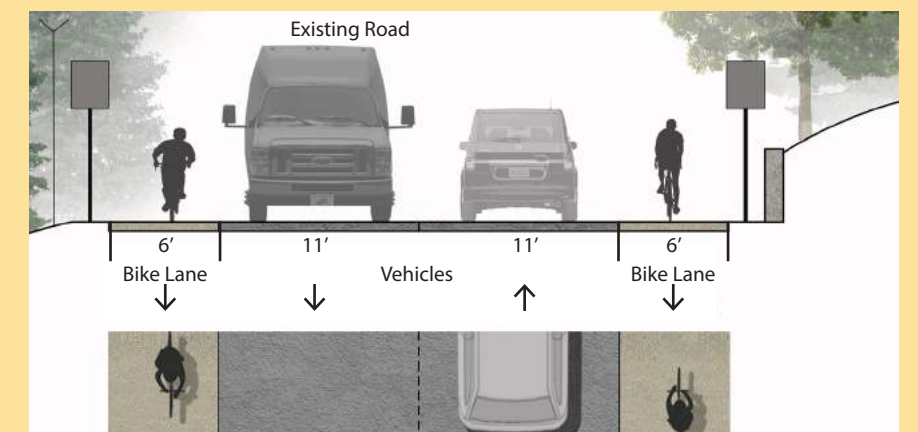
Phase 1 trail improvements add an accessible regional trail between the north and south ends of Washington Park along the existing train corridor. Visitors will be able to bicycle and walk from one end of the park separated from vehicle traffic. This provides an immediate enhancement to the accessibility within Washington Park. Trail projects include:

1. MAC trail between the Rose Garden and Wildwood Trail needs to be realigned to reduce sustained trail grades greater than 15% and to fix switchbacks.
2. Wayfinding, safety, and surfacing improvements to the Wildwood Trail adjacent to SW Kingston Drive.
3. Trail plan for Stearns Canyon need to be completed. Repair soft surface trails, drainage, and stairs per the plan. Upgrades to Stearns Canyon people mover path.
- 4*. Bike lanes and paved accessible Maple Trail from SW Knights Blvd./SW Kingston Dr. to the start of the regional trail just east of the Zoo's J gate.
5. New regional trail within the train corridor right of way.
6. Accessible trail between Hoyt Visitor Center and Bristlecone Pine Trail.
7. Improvements to the Wildwood Trail and a new parking area on SW Fischer Lane to connect to the Footbridge Over Burnside.

4. Connections to new regional trail



- Paved accessible Maple Trail



- Bike Lanes on SW Kingston Drive

IMPROVE ACCESS TRAILS

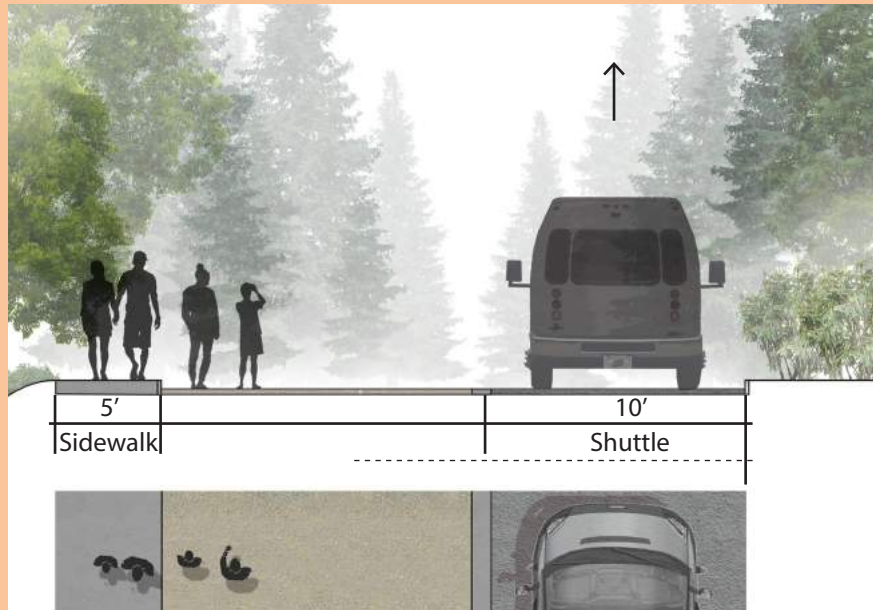
Phase 2

Phase 2 improvements to the trail network focus on existing trails that will close gaps or connect to park destinations. **SW Rose Garden Way will be for pedestrians, shuttles, and maintenance vehicles.** The bike route will be on the service road below the Rose Garden. Since Stearns Canyon is already closed to vehicles, this will complete a route for pedestrians and bicyclists that is separate from vehicles between the W Burnside St. Gateway and the SW Knights Blvd./SW Kingston Dr. intersection.

Phase 2 projects include:

1. Madison Trail just east of the reservoir improvements
- 2*. Rose Garden Way Plaza

5. Rose Garden Way Plaza



- No change to road width
- Uphill shuttles
- Pedestrians
- Bike route on service road below Rose Garden



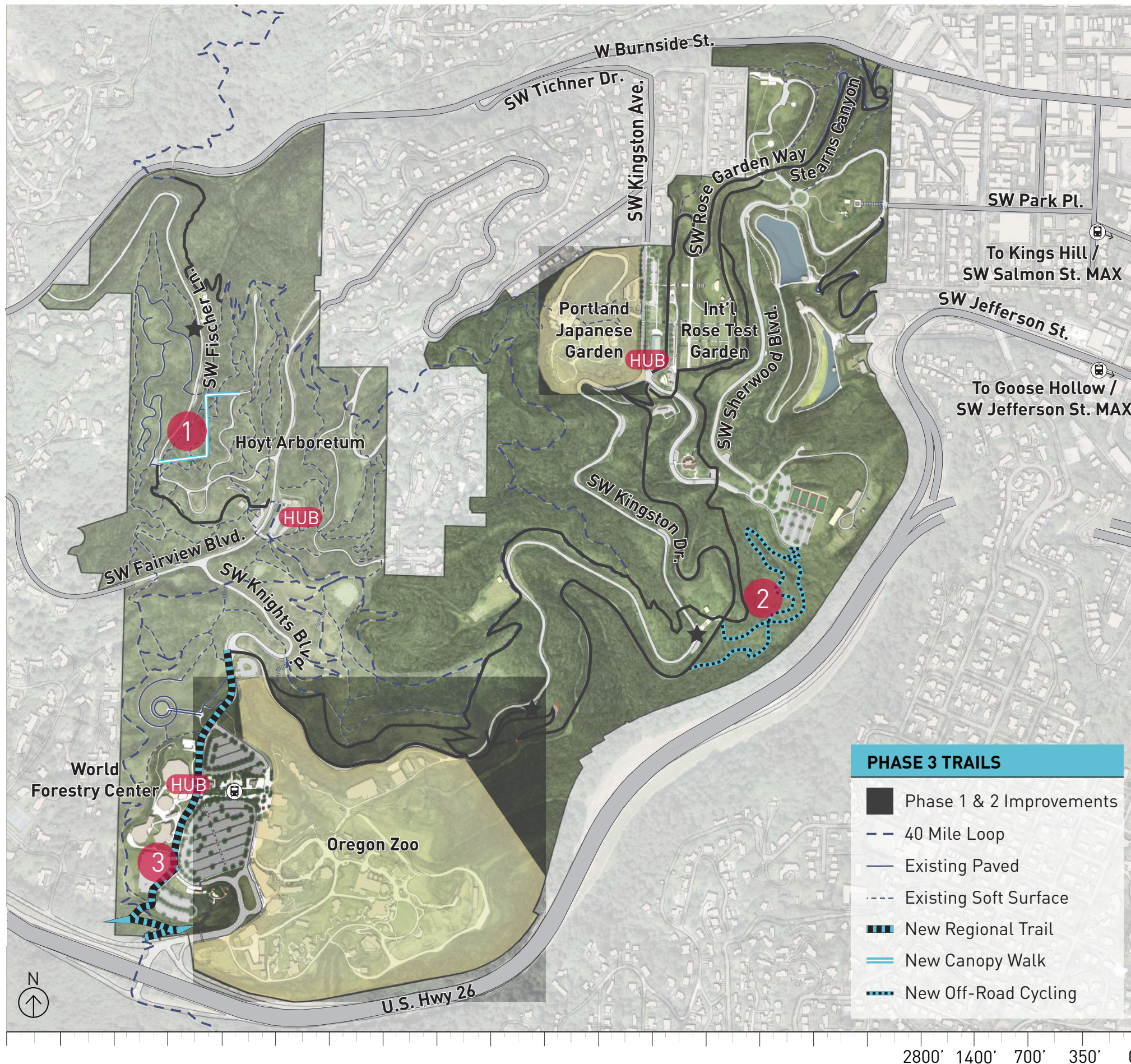
IMPROVE ACCESS TRAILS

Phase 3

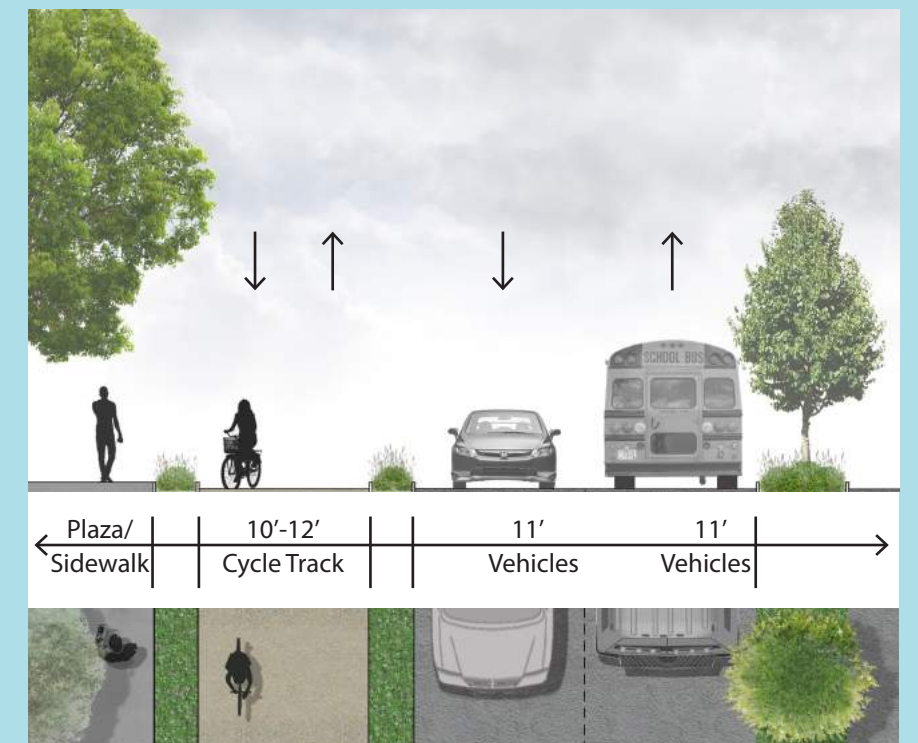
As the South Entry parking area is reconfigured, there is an opportunity to extend a **separated route for pedestrians and bicyclists from Knights Blvd./Kingston Dr. to SW Canyon Ct.** This improvement closes a gap in the regional trail network between Washington County and downtown Portland, and improves the experience for those hiking the 4T Trail.

Phase 3 projects include:

1. Forest Canopy Walk in Hoyt Arboretum - The Forest Canopy Walk will only be implemented if the concept proves to be a sound, prudent action based on experience and lessons learned at Leach Botanical Garden or other canopy walks at Northwest locations.
2. Off-road cycling opportunity (could also be constructed in Phase 2 with the Gardens parking lot).
3. Regional trail/cycle track connection from Knights Blvd./Kingston Dr. to SW Canyon Ct.



3. Cycle Track on SW Knights Blvd.



- Improved safety and wayfinding
- Pedestrians separated from bicyclists
- Clear connection to the new regional trail to the Rose Garden

IMPROVE ACCESS

PARK ROADS

Transportation improvements will be refined through the Transportation Management Plan. Detailed parking, traffic, growth analysis, and studies will be necessary as a next step to determine project feasibility. Projects marked with an * will be included in the TMP. The transportation systems and vehicles used to move people within the park will be done with technology that reflects the most efficient methods at the time. The systems will be fuel/energy efficient, reduce greenhouse gases in the park, and quiet.

Park roads play a major role in how visitors experience Washington Park. This master plan envisions a future for Washington Park where more visitors arrive at the park by taking transit, walking, or biking. For all users, the experience of traveling on park roads is a special experience, not unlike a pleasure drive on the Historic Columbia River Gorge Highway.

Most park roads, having been built to suit the needs of the time, are typically narrow, curving, and underbuilt for today's automobiles. While these characteristics contribute to an immersive experience, they can be difficult to navigate and are suffering serious wear. With the park's evolving access plans to simplify competing routes, improve intersections, and reduce travel, the winding narrow roads can continue to be a delightful experience of visiting Washington Park.

Sidewalks

Sidewalks are missing along several of the main roads within Washington Park. Safety will be improved for pedestrians by adding sidewalks as other projects are built.

Benefits include:

- Increased numbers of pedestrians
- Reduced "walking along roadway" conflicts
- Improved wayfinding and predictability



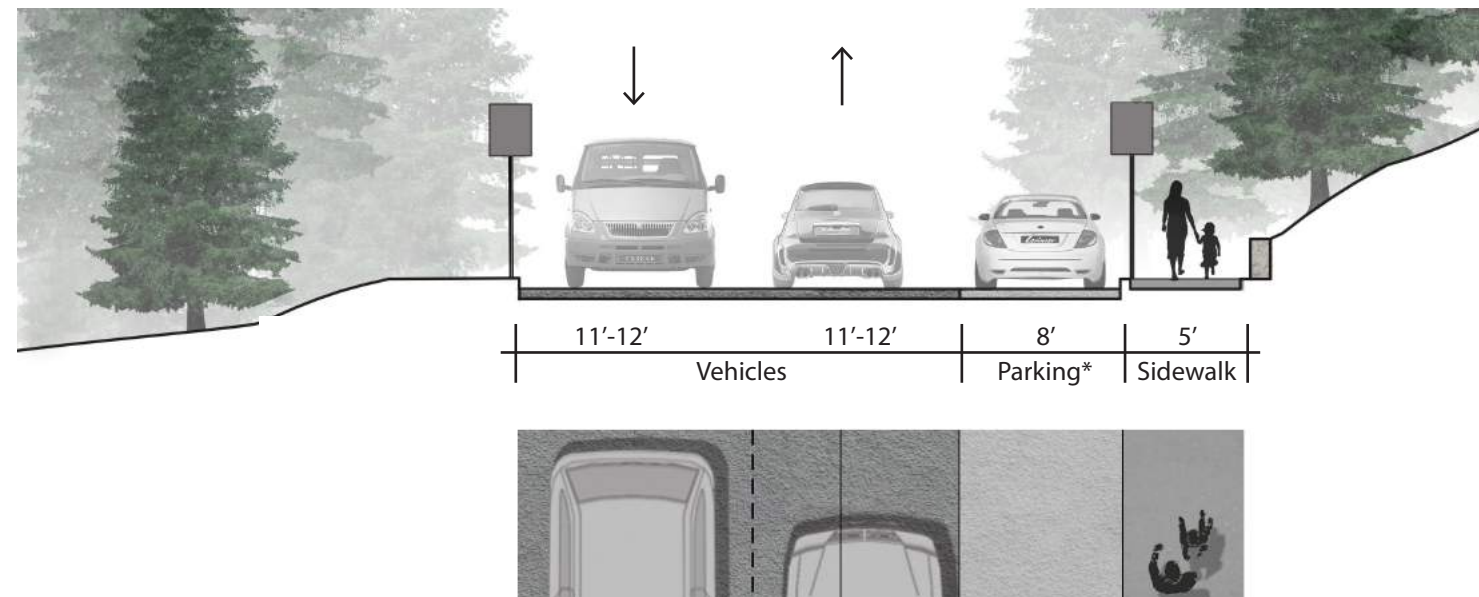
Existing SW Fairview Blvd

- Demand for on-street parking is high as park users attempt to avoid paying for parking within Washington Park or when lots fill
- Gaps in the sidewalk network forces people to walk on the road
- Bikes and vehicles share the road



Existing SW Kingston Dr

- No sidewalks or nearby parallel pedestrian facilities
- Bikes and vehicles share road
- Narrow, curving road



Improving Safety on SW Fairview

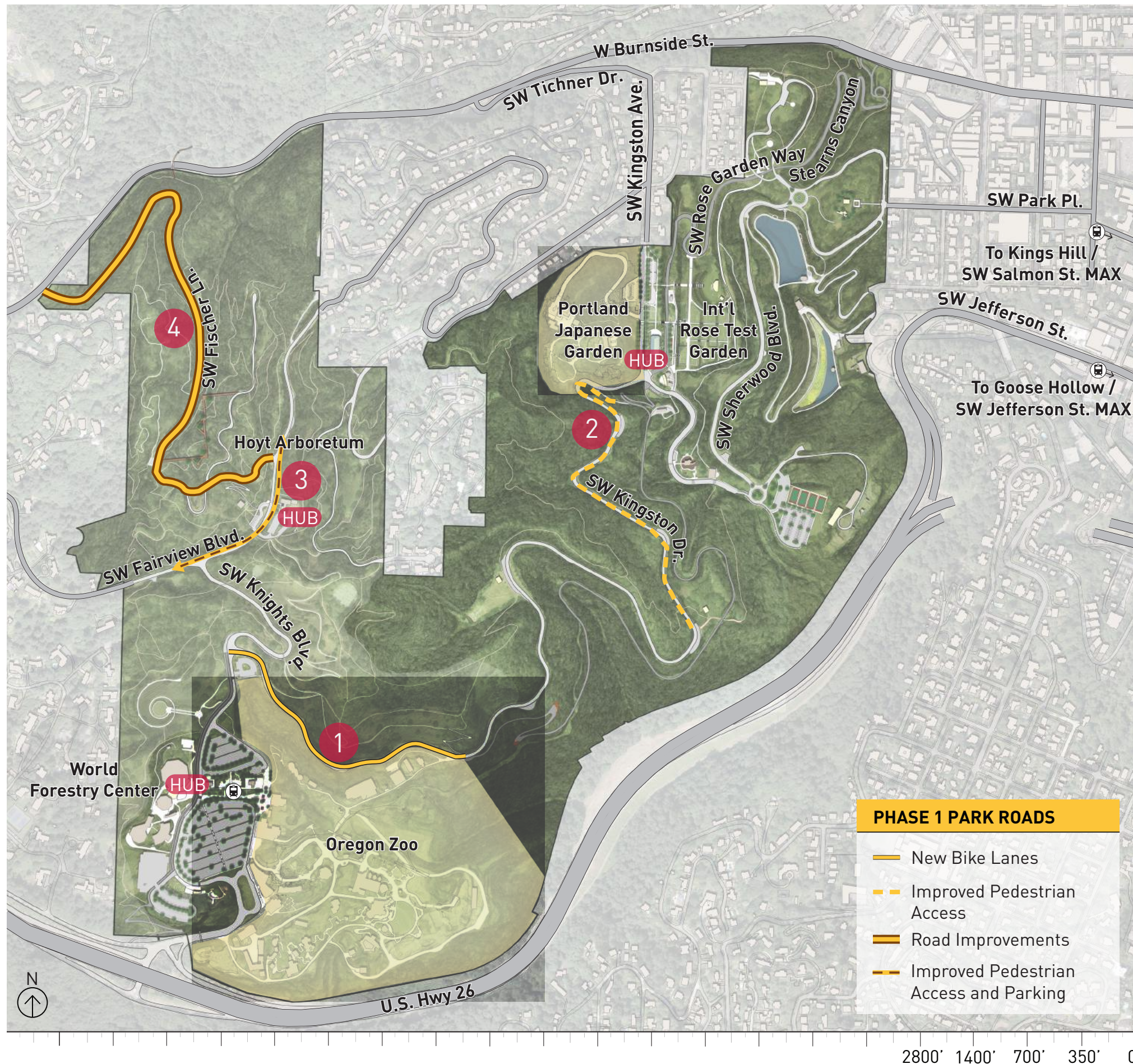
- Sidewalks to improve pedestrian safety
- Bike lanes to improve bicyclist safety (shared downhill lane, possibly)
- Paved and paid parking to reduce demand for on-street parking
*Parking may shift sides of the street depending on need/space.
- Partnership with the Portland Bureau of Transportation

IMPROVE ACCESS PARK ROADS

To improve the experience on park roads within Washington Park, the master plan recommends:

- Park roads should include scenic pull-offs to enjoy the views.
- Connected sidewalks. Currently, there are gaps in the sidewalk network within the park. Provide sidewalks adjacent to park roads to encourage walking through the park and to improve safety. Sidewalks should be physically separated from the road by a curb or planted buffer.
- Dedicated spaces for bicyclists. Some bicyclists are commuting through Washington Park while others are biking within the park for recreation. Cycle tracks or regional trail where bicyclists can be separate from vehicles are most comfortable. Bicycle lanes are recommended to provide key connections where space for a cycle track is not available. See cycle track diagram on page 49.
- Park roads should remain narrow to encourage slow vehicle speeds. Narrow park roads help visitors feel connected to nature and to focus on the journey rather than how long it takes to travel between destinations within the park. Narrow roads also help calm traffic and improve safety for people walking and bicycling.

Most of the transformation to the park roads network are expected during Phase 2. These changes require additional transportation engineering studies and testing of road closures, but also naturally follow once the Phase 1 improvements, such as the regional trail, are implemented.



Phase 1

1. Bicycle lanes added to SW Kingston Dr. (see Trails, Phase 1).
2. Sidewalks or separated, widened soft surface trails for pedestrians walking along SW Kingston Dr. from parking areas to the Gardens; upgraded roadbed; paid parking and improvements to existing trailhead parking areas
3. Parking and sidewalk safety improvements to SW Fairview Blvd.; new shuttle turnaround
4. SW Fischer Lane roadway improvements and parking for new Footbridge Over Burnside

IMPROVE ACCESS PARK ROADS

SW Rose Garden Way will be closed to private automobiles and bicycles. This closure creates a new plaza and connection through the Gardens for pedestrians and the shuttle. SW Rose Garden Way will remain open for maintenance vehicles and for emergencies. Bicyclists will use the service road below the Rose Garden from the regional trail to Stearns Canyon. Parking will be removed from lower SW Sherwood Blvd. and will become a two-way road. Drivers entering the park from SW Park Place will have an opportunity to decompress and enjoy the landscape between the Rose Garden and the renovated reservoirs.

Visitors will still be able to enter Washington Park via W Burnside St./SW Tichner Dr. on SW Kingston Ave. Most of the existing on-street parking on SW Kingston Ave. and SW Sherwood Dr. will be relocated to a new surface parking area sited at the existing soccer field. Consolidating this parking, and allowing only one-way inbound traffic on SW Kingston Ave. means the park road between the Portland Japanese Garden and Gardens can be narrower with more space for pedestrians, expanded gardens, and an extension of the existing tree canopy north of the park gateway.

Other road improvements include:

- SW Fairview Blvd. – formalized paid on-street parking and sidewalks
- SW Sherwood Blvd. – improved on-street parking, close gaps in the sidewalk network, and visible crossing locations for pedestrians
- SW Fischer Ln. – upgraded paving and parking near the trail to access the Footbridge Over Burnside

Phase 2

- 1*. Road width reduced, parking removed, and planting added for one-way, inbound, vehicles on SW Kingston Ave
- 2*. Rose Garden Plaza
3. Pedestrian improvements along upper SW Sherwood Dr
- 4*. Two-way lower SW Sherwood Dr. between City Park and the Gardens with new roundabout at the entrance to new surface parking area
5. New roundabout in City Park to reduce congestion and confusion and provide better traffic flow in and out of the park



ROSE GARDEN PLAZA

PHASE 2 FEATURED PROJECT: PRIORITIZING SPACES FOR PEOPLE, GARDENS & SHOWCASING LOCAL FOOD



Existing Conditions



Rose Garden Plaza

By closing SW Rose Garden Way to both automobiles and bicycles, and moving the tennis courts, there is an opportunity to create a more cohesive garden experience. To phase this in, the road will be temporarily closed during weekends in the summer and then become permanent later on.

The parking at the entrance to the Rose Garden will be transformed to a showcase of seasonal local food carts and an outdoor promenade where visitors enjoy views of the gardens and downtown Portland.

Above the new plaza, a new glass house conservatory and new gardens, including a water garden, will replace the tennis courts. This Indoor Garden is an opportunity to showcase unique plant species and provide interest in the gardens during the winter months. It will also house a small visitor center and become the Garden Hub.



Water Garden.

Denver Botanic Garden | Colorado

A water garden creates an opportunity for unique planting.

IMPROVE ACCESS

PARK ROADS

Creative Crosswalks

Austin, Texas is using colorful crosswalks to break-up the visual monotony of asphalt and to highlight crosswalks as an extension of the pedestrian realm. Creative crosswalks showcase the cultural history of a place, and serve as gateway and wayfinding tools.

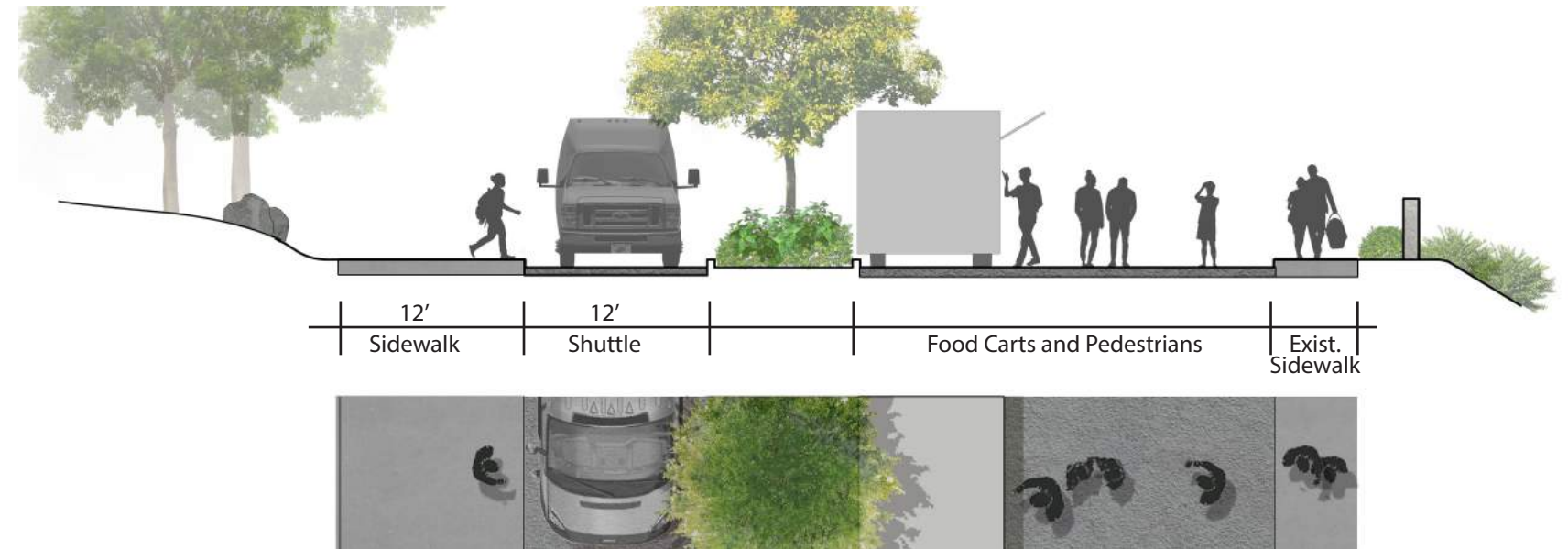


Roundabouts

Two new single-lane roundabouts are proposed within Washington Park—near the Chiming Fountain and at the SW Sherwood Road entrance to the new surface parking area.

Benefits of roundabouts include:

- Eases decision-making for drivers
- Reduces the number of conflict points in an intersection
- Improves safety for pedestrians and bicyclists; there is only one lane of traffic to cross at a time



SW Rose Garden Way Plaza

- Expanded space for pedestrians and gathering in the Gardens
- One way shuttle route
- Clear connection between the regional trail and Stearns Canyon
- Bicycle route on service road below Rose Garden



One-Way SW Kingston Ave.

- Expanded space for pedestrians and gathering in the Gardens
- No parking on SW Kingston Ave. reduces congestion
- Rows of trees creates a more welcoming arrival
- Improved safety

IMPROVE ACCESS

CASE STUDY

Central Park | New York, New York



Separate people from moving vehicles.

Improve safety by adding sidewalks and bike lanes along traditional streets while still allowing vehicular circulation.

Despite the strong topographical contrast between New York City's Central Park and Portland's Washington Park, there is merit in considering Central Park's response to its urban condition.

By utilizing different types of circulation patterns and paths, Central Park allows people to both quickly navigate the park's boundaries, a necessity given its bustling urban location, and still allow access to calmer, less busy modes of moving throughout the park.

- Circumnavigating the park's urban edge are streets that allow for safe, multi-modal forms of transit.
- Further into the park's interior are car-free paths with ample space for both pedestrians and bikes.
- At the circulation's finest grain lies soft, narrow trails for city-goers to escape into the park's green interior spaces.



Regional trail.

Removing car traffic creates ample space for both pedestrians and bicycles.



Soft surface trails.

Surface textures and trail width can accommodate pedestrians and deter bicycles.

IMPROVE ACCESS PARKING

The master plan envisions a robust transportation system that prioritizes pedestrians, bicyclists, and shuttles, while maintaining 1,400 on-site paid parking spaces for visitors.

Updates on how people arrive and move through Washington Park offer an opportunity to reduce the size of existing parking lots if the number of parked automobiles in the park reduces in the future. A Transportation Management Plan (TMP) will be completed as one of the first steps to improving circulation and parking. The plan will examine the near-term and long-term configuration of the South Entry's large lots. Once this plan is complete, strategies to improve the existing parking experience will be implemented.

- Design welcoming parking areas that are well-landscaped, beautiful arrival points for visitors.
- Consolidate dispersed on-street parking to encourage visitors to “park once” and walk or use the free shuttle to get around.
- Develop clear drop-off zones near park amenities, venues, and cultural institutions.
- Simplify the parking layout for efficiency and safety.
- Implement short-term parking zones.
- Improve safety for people by separating pedestrians from moving vehicles.
- Treat stormwater runoff.

As part of the TMP, PP&R, Metro, and the Oregon Zoo will work with Explore Washington Park to explore the potential of a public/private partnership parking garage near the Sylvan Pass. PP&R will also explore opportunities for a public/private partnership parking garage at the Uptown lot in NW Portland, which can also be used by visitors to the Pittock Mansion.

Explore Washington Park will continue to manage parking demand. As the need for parking is reduced, lots can be downsized and converted to park use. Fewer cars within the park mean more efficient shuttles, improved safety for bicyclists and walkers, and more opportunities for play and connecting with nature.

Ride share services like Uber and Lyft mean fewer vehicles need to park. However, these services have an unintended side effect of increasing the number of vehicles circulating in the park. Drop-off zones that clarify where ride share pick-up and drop-off will help reduce confusion. These zones should be comfortable with benches and shelter, and be in each of the Hubs.

New technologies are an opportunity to rethink how we get places. Creating tech-based tools like phone applications to better manage parking and help visitors find available parking is one possibility. Autonomous vehicles are likely to replace traditional automobiles. The future will reveal whether driverless vehicles are parked in remote garages when they're not in use, or if they are shared by someone else during the time they would otherwise be parked.



Create a sense of arrival. *Hospital Hautepierre | France*
Even in the parking lot, visitors should know they are in a park.



Shuttle Stops and Drop-off Zones. *Toyota Motor Sales Campus | California*
Locate near park activity areas, with spaces for people to wait.

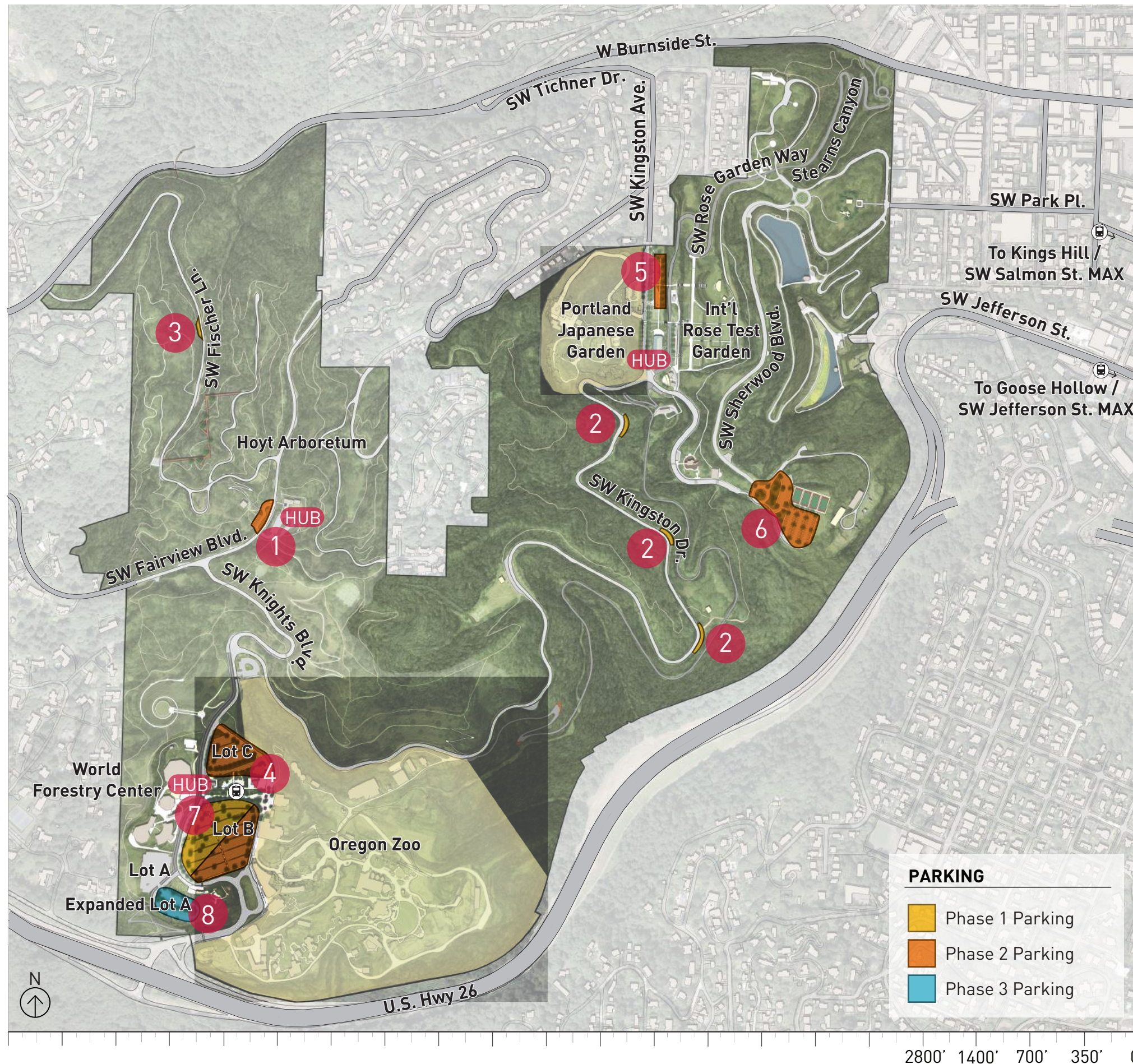


Separate people from automobiles. *Cornell University Botanic Gardens | New York*
Improve safety by adding sidewalks for people through the parking areas.



Treat stormwater runoff. *Herman Miller Factory | Georgia*
Clean rain water and reduce runoff by treating water close to where it falls.

IMPROVE ACCESS PARKING



Projects*

1. Parking and shuttle turnaround at Stevens Pavilion for Hoyt Arboretum
2. Paid parking and improvements to existing trailhead parking areas on SW Kingston Ave; close informal parking areas not associated with trails or connected to sidewalks
3. New trailhead parking on SW Fischer Lane for Footbridge Over Burnside
4. Shuttle, school bus, ride share, and passenger drop-off moved to Lot C; requires a new entrance just north of the TriMet MAX Station and new layout for the existing parking lot
5. Short-term accessible parking and drop-off in the Gardens to replace the existing tennis courts
6. Surface parking lot at soccer field to replace on-street parking on lower SW Sherwood and SW Kingston Ave; approximately 170 spaces
7. South Entry Garden Plaza, and automobile and ride share drop-off zone in Lot B
8. When Portland Children's Museum relocates, a new parking lot adjacent to Lot A will allow the number of existing spaces in the South Entry Zone to be maintained, and will provide access to the Museum's nature play area, Outdoor Adventure, which will remain and become a public amenity.

* projects will be included in the Transportation Management Plan

South Entry Sequencing



- | | | |
|---|---|---|
| <p>1</p> <ul style="list-style-type: none"> • SW Knights Blvd. Gateway • Oregon Zoo Entry Court • Improved Lot B access | <p>2</p> <ul style="list-style-type: none"> • Visitor Center/Hub • Crossing at SW Knights Blvd. improvements • Garden spaces along Les AuCoin Plaza | <p>3</p> <ul style="list-style-type: none"> • South Entry Garden Plaza • Bus drop-off at Lot C • Lot A expansion and regional trail |
|---|---|---|

IMPROVE ACCESS

TRIMET BUS, PARK SHUTTLES, PEOPLE MOVER

Moving through the Park is an experience

Taking the shuttle or the people mover to get around the park is part of the experience. As public perception changes and technology advances, there is an opportunity to better connect the park to the city and connect the Hubs with autonomous people movers.

The Washington Park Shuttle reroute, the people mover and the multi-modal connections from the Goose Hollow/SW Jefferson St. and Kings Hill/SW Salmon St. MAX stations are anticipated to be Phase 2 projects. Some testing of road closures, a turnaround at Hoyt Arboretum, and discussions with TriMet are first steps in achieving these improvements for more automobile-free circulation options to and within the park.

TriMet Bus Line 63 will continue to operate in the park. This bus route is an important connection from downtown, to the park and through the surrounding neighborhoods. The bus route will be determined in the Transportation Management Plan.



People mover.

Olli | Washington, D.C.

The “Olli” driver-less mini bus goes for a test drive in Washington, D.C.

People Mover

Driver-less mini buses are closer to reality than people think. Several companies have been testing electric-powered people movers that carry 10 to 14 people per car and can be linked to form a chain. Greece is testing “CityMobil2”, China has been testing “Connexion”, pictured below, in the province of Henan, and Local Motors has tested “Olli”, pictured above right, in downtown Washington, D.C.



TriMet Bus | Washington Park

TriMet Bus Line 63 will continue to operate in the park



Free Shuttle | Washington Park

Keep the shuttle route within the park





IMPROVE ACCESS

TRIMET BUS, PARK SHUTTLES, PEOPLE MOVER

Washington Park Shuttle

Ridership on the Explore Washington Park Free Shuttle will continue to increase. Revisions to the current shuttle route will keep the shuttle in the park. Currently, the shuttle travels in a clockwise loop leaving the park at Hoyt Arboretum Visitor Center and re-entering the park near the Portland Japanese Garden. This plan keeps the free shuttle within Washington Park, providing two-way services along SW Kingston Dr. between the South Entry and the Gardens. To further improve shuttle efficiency, parts of the shuttle route include segments of travel through vehicle-free zones, such as SW Rose Garden Way. The shuttle will loop counter-clockwise, transporting visitors between the Gardens and the new surface parking lot and tennis courts. Frequency of shuttle loops in this area can increase as demand warrants and will be studied as part of the Washington Park Transportation Management Plan.

People Mover

To provide additional connectivity with Northwest Portland, a people mover is envisioned to transport park visitors between the W Burnside St. Gateway and the Gardens area. An autonomous electric minibus people mover through Stearns Canyon improves accessibility for all park users and re-establishes the original entrance to Washington Park. An expanded people mover route may transport visitors up to the Gardens from the new parking lot and tennis courts, and as technology progresses, may eventually replace the gas-powered shuttle completely.

Connections from MAX

Two MAX stations, Goose Hollow/SW Jefferson St. and Kings Hill/SW Salmon St. are closer to the Rose Garden than the Washington Park MAX Station. Steep hills and a lack of wayfinding mean that most park visitors do not consider accessing the park via MAX from these stations. Working with TriMet, these connections should be strengthened by:

- Branding Washington Park MAX stations.
- Improving wayfinding between MAX stations and Washington Park.
- Offering a combination of shuttle or people mover, ride-share, and bike-share to be available and advertised at each stop.

TriMet bus routes and connections

Explore Washington Park will continue to work with TriMet on the rerouting of the bus lines through the park to meet the circulation pattern shown in the plan, including limiting SW Rose Garden Way to the shuttle and maintenance vehicles.

IMPROVE ACCESS

WAYFINDING

How Do You Get Where You Want To Go?

Improved wayfinding guides visitors through the park and encourages exploration. More than a family of signs, wayfinding increases visitors' comfort and builds confidence. Developing a "brand" is essential for a successful wayfinding program. In preparation for the first big capital development campaign, a comprehensive wayfinding plan should be completed to create hierarchy of park-wide signs and wayfinding design features for Washington Park. Wayfinding extends beyond the boundaries of Washington Park and should also provide guidance about destinations outside of the park.

- Make wayfinding information for the entire park available at each Hub in many languages.
- Make use of signs and materials that help visitors navigate the park intuitively, with a minimum of three languages on signage.
- Create a wayfinding plan to standardize signs and directions.
- Provide consistent signs, colors, and visual cues.
- Communicate where to park, locate transit connections, and trail entries.
- Encourage people to walk by introducing trail system navigation tools (maps, GPS-based applications, signage).
- Inform visitors about park attractions, restroom locations, and other points of interest.
- Interpret the place, views, plants, animals, and historic significance.
- Increase accessibility with tech-based tools (with improved cell service in the park) to introduce multi-lingual and interactive map opportunities.
- Promote community and cultural engagement.
- Strengthen the Washington Park brand and increase awareness about the park boundaries.



Signage. Tehala Residential Development | Washington
Provide clear consistent wayfinding.



Multi-Lingual Signage. City of Brisbane | Australia
Signage through the park should be in a minimum of three languages.



Signage. Hoyt Arboretum | Portland
Provide consistent signs, colors and visual cues.

IMPROVE ACCESS

ADDITIONAL ACTIONS

Phase 1

- Washington Park Transportation Management Plan** Physical changes to the transportation and parking system within Washington Park will take time to design and implement, and changes to the road and parking system within the park requires additional transportation engineering studies. This will be completed through an update to the Washington Park Transportation Management Plan. The plan will focus on two areas:
 - Transportation Strategy** – This will be an operations-focused framework for what can happen within the park immediately and into the next 5 or 10 years to improve circulation and parking. The transportation strategy will develop a near-term approach to reach park and cultural institution attendance goals while improving the mode share balance.
 - Traffic & Parking Engineering Study** – A traffic engineering and parking analysis will be completed for the entire park. It will include a refined look at the number and layout of parking spaces and the opportunities for parking garages around Sylvan and off W Burnside, both outside the park.
- Bicycle Parking** Continue to improve short- and long-term bike parking at all cultural institutions and park amenities.
- Bike Rental** Add bike share stations and explore opportunities for bike rental within the park.
- Develop short-term and long-term parking areas, and **charge for parking** everywhere within the park and immediately adjacent to park entrances.
- Explore Washington Park may lead development of smartphone visitor applications, simplifying outreach for park visitors before their visit, and **real-time traveler information**, maps, shuttle pick-up times, and connectivity to TriMet, ride-share, and bike-share stations.



Bike rental.

Biketown | Portland

Explore opportunities for bike rental in the park.



Shuttle stops.

Zion National Park | Utah

Visitors find comfort when routes and stops are clearly signed and mapped.

Pay Station | Washington Park





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6 ENHANCE VISITOR EXPERIENCE

ENHANCE VISITOR EXPERIENCE

CASE STUDY

St. Landry Visitor Center | Opelousas, Louisiana

A quality park experience often starts with feeling welcome, being comfortable and having access to basic information. These qualities are found in successful visitor centers and visitor information kiosks. They need to be both conveniently located and provide a wide range of functions. The St. Landry Visitor Center is a great case study.

- Built with sustainable materials reflecting its region
- Designed to show sustainable practices to the community
- Provides interpretive information about the ecology of the region
- Provides visitor information about the surrounding natural areas and wildlife, including historic and cultural traditions

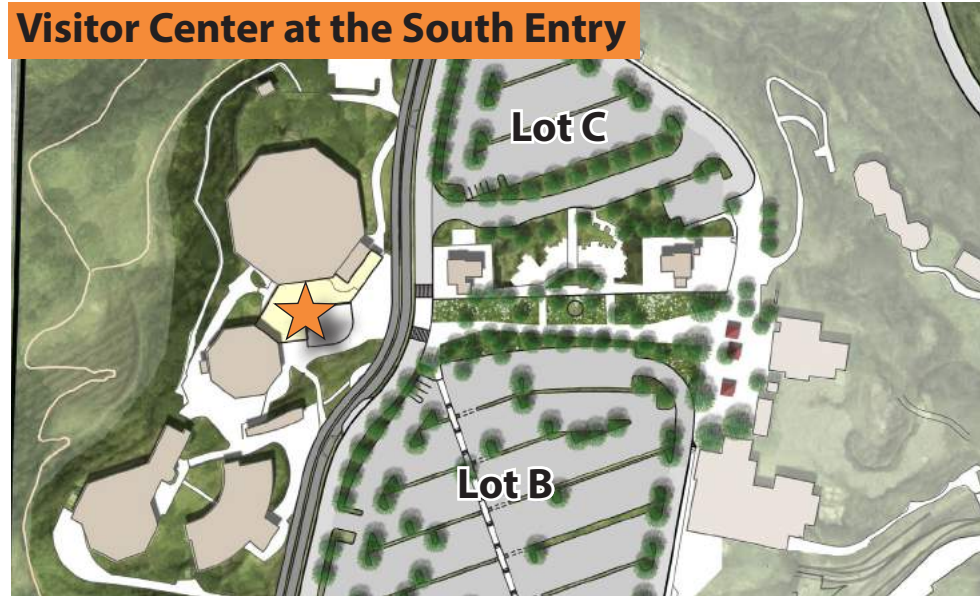


Visitor Center at the South Entry



Timeless architecture and materials. Phil Harderger Park | San Antonio
The visitor center plays an important part in creating identity.

Visitor Center at the South Entry



Visitor Center at the Gardens



Visitor Center at Hoyt Arboretum



ENHANCE VISITOR EXPERIENCE

VISITOR INFORMATION

Park visitors have diverse needs for information and services based on their familiarity with the park and intentions for their visit. Whether arriving by public transportation, foot, bike or by car, everyone will be directed to a visitor center in Washington Park. The visitor centers are planned for three locations, and will provide much needed services and park-wide information to allow park visitors to have a better experience and extend their stay. They are the Hubs for each area of the park.

South Entry

The new South Entry Garden Plaza in front of TriMet's Les AuCoin Plaza brings visitors to a welcoming, central park arrival point. These gardens and paths replace the existing road and bus lanes, and screen the parking lot below (Lot B). Visitors are directed to the new visitor center in front of the World Forestry Center. This new visitor center is the Hub and will include information and maps about park destinations, special events and activities, options for getting around the park, restrooms, and drinking fountain.

Gardens

New space will be built adjacent to the Rose Garden Store for additional restrooms and an interim visitor center. This interim Hub will provide a central spot for visitors to get information and services, such as information and maps about park destinations, special events and activities, and options for getting around the park.

When the Indoor Garden is built, visitors will have a garden experience year-round. The Hub and visitor center services will be moved to this new facility. Additional programming might include a small café used as a rental space for special events. The Rose Garden Store will expand into the vacated space.

Arboretum

The Hoyt Arboretum visitor center will receive upgrades when the Natural Areas Maintenance staff relocates. It will become a Hub and will include arboretum and park-wide information and maps.

“Indoor garden would be great with Portland’s rain.”

“I think a glasshouse indoor garden would be amazing as it is at so many other renowned gardens in the world.

Glasshouses open up so many more varieties of enjoyment.”

-Washington Park Master Plan Update outreach survey results

DEPOT CAFE

PHASE 2 FEATURED PROJECT



Existing Conditions



Depot Cafe

With the proposed addition of a regional trail to the train corridor, the train station depot becomes an incredible redevelopment opportunity to add amenities. The train station's perch overlooking the future indoor garden, Rose Garden, and city beyond will act as a trailhead overlook and seasonal café. Historically, this point afforded sweeping panoramic views from Mt. St. Helens to Mt. Hood. Since the train depot's development in 1960, the reforested hillside plantings have grown tall, eclipsing most distant views. Selective thinning and pruning of trees directly east of the depot landing will reopen dramatic views to the city and Mt. Hood, presenting a stunning place to meet after a hike and enjoy the sunset. The depot can be redeveloped to provide a café setting with the focus on outdoor, open and covered seating. A restroom facility will be added.



Food carts *Portland Mercado | Portland*
Visitors will be able to enjoy seasonal and diverse food offerings in the Gardens.



Picnic shelter *Rock Ridge Park | North Carolina*
Provide families and groups with options for picnics.



Indoor garden *Babel Restaurant | South Africa*
A cafe can enhance visitors' year-round park experiences.

SW Rose Garden Way Plaza seasonal food carts



ENHANCE VISITOR EXPERIENCE

FOOD

There is a need for more varied and affordable food offerings in the park.

Currently food is available in the Oregon Zoo and the Portland Children's Museum, without admission, at the South Entry area. Food is available in the Portland Japanese Garden, with admission, and from one food cart near the Rose Garden Store.

- The train station location presents an opportunity to create a seasonal café with outdoor terraces and views across the park, and to the city and Mt. Hood.
- Seasonal food carts will provide affordable, diverse, and healthy food options to visitors, located on the former road/parking area above the Rose Garden.
- Year-round, the Indoor Garden will include a café and host events.
- Currently there are two picnic shelters available, Stevens Pavilion in Hoyt Arboretum and the Elephant House in the Gardens area. Uncovered picnic areas are scattered through the park and many of the tables are worn and need to be replaced. Picnic areas for families and groups will be enhanced and more created in a variety of settings in the park. Sites for additional picnic tables are near the SW Park Place entrance and playground, the archery range, adjacent to the nature play area off SW Kingston Drive, and at the new tennis courts site. Shelters may be considered at one or more of these sites.

“I like the idea of many food options and Portland is known for their food carts.”

-Washington Park Master Plan Update outreach survey results

ENHANCE VISITOR EXPERIENCE PLAY

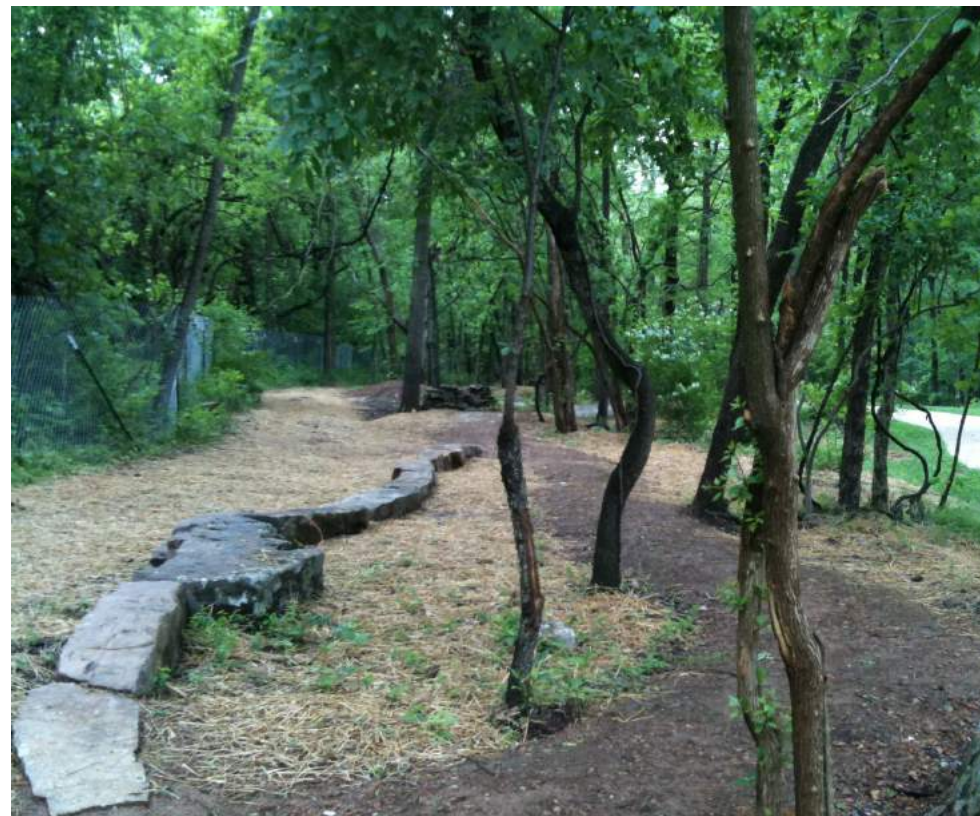
Play happens all through the park

- Four tennis courts will be built on the site of the soccer field, near the new parking area. Restrooms and picnic tables will also be provided in this area.
- The archery range is beautifully located in a natural canyon off SW Kingston Drive. To provide a more comfortable experience, ground drainage will be corrected and building a roof structure to cover the shooting line is a consideration. Accessibility and parking will be improved, and composting toilets or a Loo will be added.
- Off-road cycling can be accommodated in the area southwest of the MAC Trail and the new regional trail. A descending flow trail and uphill skill trail are proposed.
- Playgrounds
 - The existing accessible children’s playground near the Elephant House will be updated for more inclusive play.
 - The playground near SW Park Place will be replaced with a new playground addressing the themes of art and history. Restrooms and picnic tables will be nearby.
 - Off SW Kingston Drive, close to the regional trail, is a beautiful natural area that can be enhanced with nature play and picnic area for families.
 - Portland Children’s Museum’s Outdoor Adventure will be repurposed as a public nature play and picnic area when PCM relocates.

Outdoor Adventure | Portland Children’s Museum



Tennis Courts | Washington Park, Portland



Off road cycling. *Crystal Bridges Trail | Arkansas*

Provide space in the park for visitors to enjoy off road cycling.

Archery | Washington Park, Portland



Washington Park Amphitheater



ENHANCE VISITOR EXPERIENCE PROGRAMMING

Ways to produce instant results

PP&R has the opportunity create new partnerships to provide enhanced programming in Washington Park to improve the visitor experience.

SW Kingston Drive. The community liked the idea of reducing dependence on cars in the park. The Master Plan recommends closing SW Kingston Drive to private automobile use like other major parks do on Sundays or weekends. The best way to see how such a road closure impacts users and adjacent roadway systems is to test it. An event can be organized in association with Sunday Parkways, or created as a special Washington Park event to let visitors walk, run or bicycle the 1.5-mile parkway, car-free. Survey participants to learn about their experiences and event popularity.

Amphitheater. The community asked for additional free concerts and cultural events at the amphitheater to attract a variety of communities to the park to share cultural knowledge and experiences. The amphitheater, a unique and beautiful setting for concerts, will receive a new bandshell or roof structure, for improved acoustics and sun and rain protection for the musicians and performers. A support building, located behind the hedge, will give musicians and performers a backstage room, restroom and storage. The hedge will be trimmed to restore the views to downtown and Mt. Hood. The flat lawn around the stage will be improved for drainage to keep that area dry. Accessibility improvements were recently made to provide direct access to the upper level of the amphitheater through the Rose Garden.



Bandshell. Frost Amphitheater | Stanford

A covered stage extends seasonal usage and improves acoustics.



Bike Sunday. Lake Washington Blvd. | Seattle

Temporarily closing roads to automobiles creates a fun new way to experience the park.

“The Amphitheater is a gloriously beautiful setting. I can’t imagine a more beautiful setting for concerts.”

-Washington Park Master Plan Update outreach survey results

ENHANCE VISITOR EXPERIENCE

ADDITIONAL ACTIONS

Viewpoints and Destinations

- Phases 1 and 2: Re-open historic and iconic views of the city and the mountains.
- Phases 1 and 2: Preserve quiet spaces throughout the park so visitors can enjoy nature, be outdoors, escape from the city, and enjoy time alone.
- Phase 2: Washington Park is home to eight memorials and public art, which in themselves are destinations. Consider implementing a program to install public art strategically in the park for added educational benefit. A potential location is from SW Park Place to the Gardens.

Natural Areas

- Natural Area maintenance staff will relocate to a new facility at the Bear House location. A feasibility study needs to be conducted to determine if the Bear House will be restored or demolished. The facility will need 2300 square feet (SF), parking for 10-12 PP&R vehicles and 1500 SF of storage.
- Park natural areas and maintenance
 - General forest restoration and care should be increased to enhance its ecological health throughout the park by removing invasive species and planting native species.
 - Repair drainage infrastructure to provide slope stability and prevent further erosion.
 - Stabilize natural drainage ways.

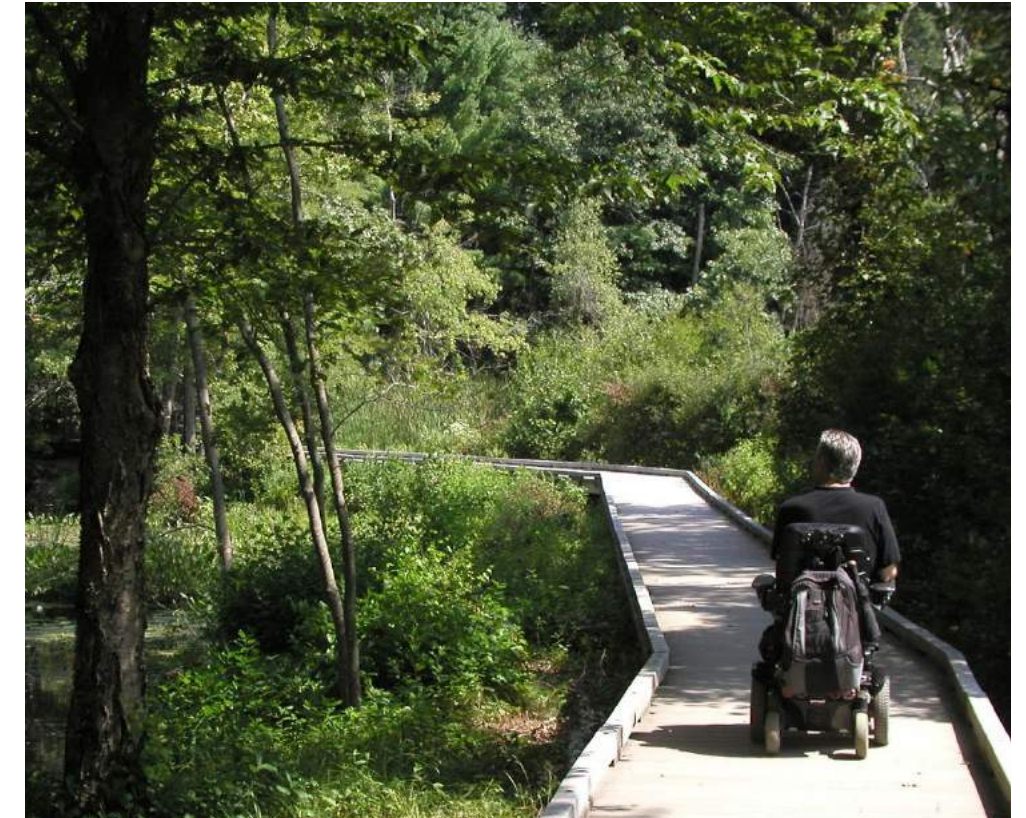
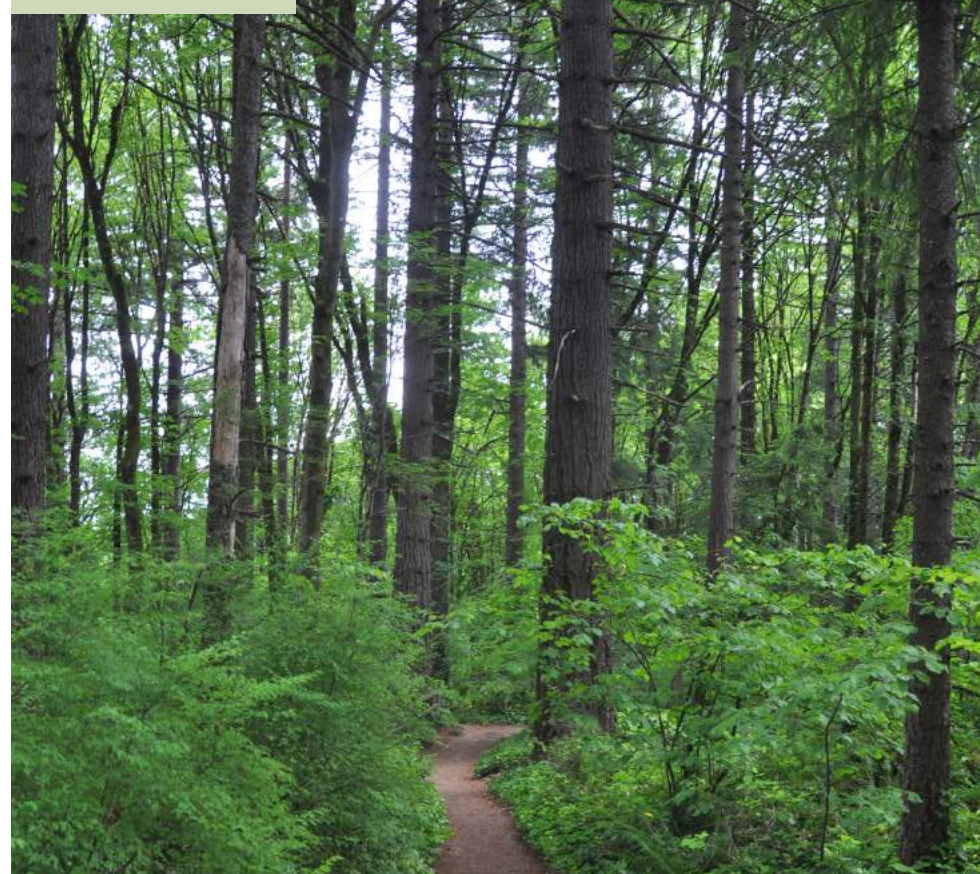
Accessibility

- Phase 1: The accessible route along the Overlook Trail will be expanded to join a newly paved Maple Trail as it moves to the east, crosses SW Kingston Dr. and connects with the new paved, accessible regional trail along the old train bed alignment all the way to the Rose Garden area.
- Phase 1: A new paved accessible trail will be built from Hoyt Visitor Center to the existing accessible Bristlecone Pine Trail.
- Phases 1 and 2: PP&R recently constructed accessible path to and in the International Rose Test Garden. Their 2014 Parks Facility Report points out additional accessibility improvements related to parking, paths of travel, ramps, stairways and handrails, trip hazards, doors and gates, restrooms, drinking fountains, picnic tables, and clear floor areas. Many will be corrected in the master plan improvement projects. The remainder are maintenance items and will be corrected over time as funding becomes available.

Viewpoints and Destinations



Natural Areas



Accessibility. *Bradley Palmer State Park | Massachusetts*

Accessible trail improvements will happen in Phase 1.



Education. *Cuyahoga Valley National Park | Ohio*

Improve educational opportunities through interpretive signage and tours.

Well-Maintained Planting | Washington Park



Well-Maintained Planting | Washington Park



ENHANCE VISITOR EXPERIENCE

ADDITIONAL ACTIONS

Make fun ways to learn

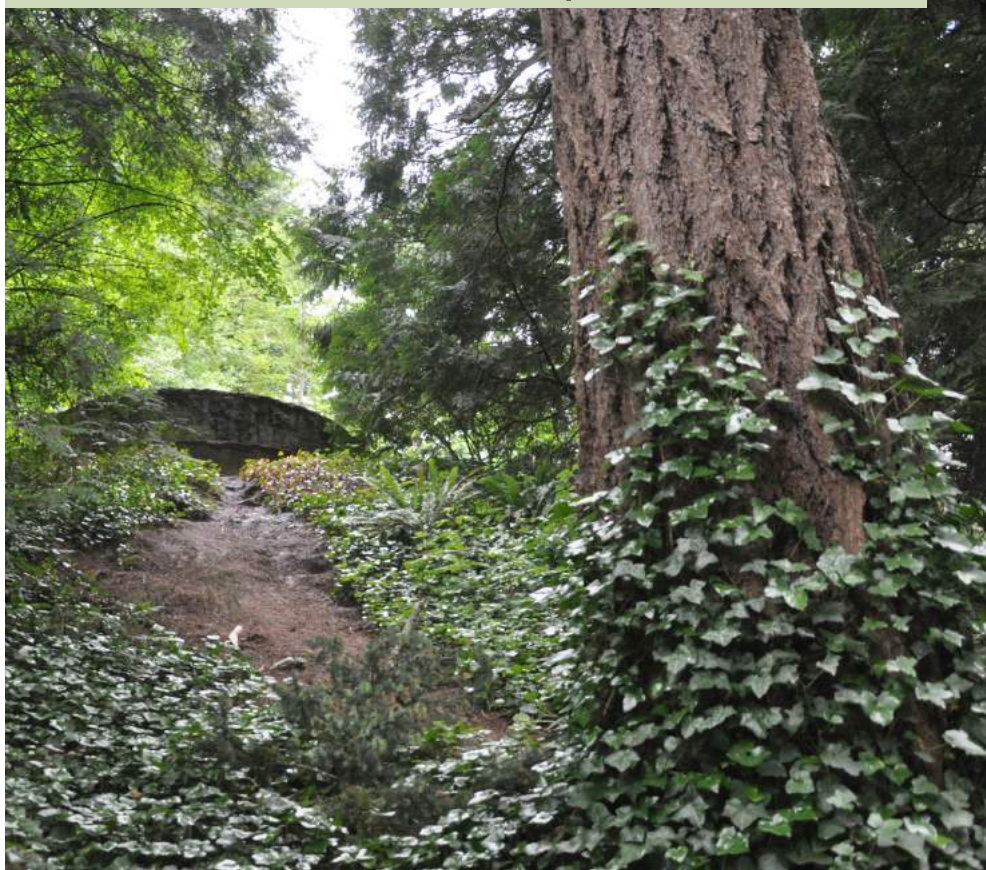
The park is full of ways to increase the educational opportunities around ecological planting and sustainable practices:

- Provide interpretive signage on trails.
- Plant a pollinator garden.
- Increase native plantings.
- Maintain, respect, and preserve the historic naturalistic aesthetic of the overall site defining features, and original design and character of the historic parts of the park.

Major Maintenance and Safety

- The Westside Maintenance Facility building and yard will double in size to meet the need of staff, equipment, materials, and supplies that serve Washington Park and other westside parks. Space will be provided for storage needs of the Rose Garden store. Seismic deficiencies will be corrected in the existing building. The need is for an additional 6500 square footage (SF) of building, and 60,000 SF of yard space.
- Upgrade the MAC trail, and maintain existing trails to continue to meet PP&R's Trail Design Guidelines and to minimize degradation over time.
- Upgrade park road sub-bases and repair stormwater facilities, and provide sidewalks to make them safer for park users.
- A public safety strategy should be undertaken to better understand the needs and responsibilities for life safety plans and services in the park.
- Show visitors how the park is addressing resiliency issues by correcting drainage issues to increase the soil stability of the parks hills, slopes and trails.
- PP&R is working with Portland Fire and Rescue (PFR) on an update of the Forested and Wildland Interface Areas Fire Protection Annex. The purpose of this plan is to establish PP&R's responsibilities and to delineate its manner of operation in the City of Portland's Forested and Wildland Interface Areas Fire Protection Annex. While PP&R staff are not first responders, staff plays an important role in supporting PFR and other city bureaus in all phases of an emergency – preparedness, response, recovery, and mitigation. Moreover, at the request of the City's Emergency Coordination Center (ECC) and in conjunction with the ECC, PP&R may need to provide direct support by coordinating staging areas, responder rest and recovery sites, points of distribution for food and medicine, areas for potential mass care points, or a place for communities to meet. Also PP&R is working with a citywide resiliency planning effort. Both efforts include Washington Park.

Invasive Species and Erosion | Washington Park



Overgrown Trail | Washington Park





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7 IMPLEMENTATION

IMPLEMENTATION PHASING STRATEGY

The implementation section includes access-related projects that will be included in the Transportation Management Plan (TMP) to be completed before access improvements begin. Using the Master Plan as the framework, PP&R will do a comprehensive analysis, of the concepts using traffic studies, growth projections, venue programming plans, near- and long-term transit opportunities, and off-site parking feasibility.

This section provides the phasing strategy for implementation of the master plan, including project budgets for each project. The projects are prioritized into three phases, based on a combination of project goals, logical project sequencing, and a desire to balance projects across the park.

Additional PP&R operations and maintenance staff will be needed and are anticipated as follows:

Phase 1 –

- 2 New Horticulturists – 1 for the Rose Garden and 1 for the enhanced garden areas
- 1 Park Technician
- 2 Trail Technicians (Botanical Technician I)
- 1 Utility Worker
- 1 Botanical Specialist – Hoyt Arboretum Curator

Phase 2 –

- 1 person to manage the visitor centers and volunteers
- 1 Park Technician
- 2 Horticulturists

Phase 3 - To be determined

Phase 1 Set the Stage

Many of the Phase 1 projects are planning, programming studies, or maintenance projects. These plans and studies are required before future design projects will be implemented. They address issues of connectivity, inclusivity and serve as opportunities to study the impacts of, or temporarily implement, changes with minor investment. Maintenance projects improve park user safety immediately and require only minimal design.

Criteria for Phase 1 projects:

- Maintain what's there.
- Improve safety.
- Clarify wayfinding.
- Improve accessibility.
- Shift vehicles out of the center and improve access for people walking and biking through the park.
- Protect and enhance natural areas and quiet spaces to allow people to escape from the city and connect with nature
- Restore views of the city and surrounding mountains



IMPLEMENTATION PHASING STRATEGY

Phase 1 | 1 to 5 years approx \$24.5 million

Phases	Park-Wide Projects	Type	Total Project Cost	Partnerships	Approvals/Reviews
	Washington Park Transportation Management Plan, including a traffic and parking feasibility study	Plan	\$100,000	Explore Washington Park, with PBOT, ODOT, TriMet	
	Enhance Wayfinding	Plan/Implementation	\$100,000	EWP	AL
	Design Guidelines	Plan	\$10,000		
	Natural Area Ecological Improvements	Enhancement/Maintenance	\$150,000		AL
Phases	Arboretum Projects	Type	Total Project Cost	Partnerships	Approvals/Reviews
3	Accessible Trail from Hoyt Visitor Center to Bristlecone Pine Trail	Enhancement	\$280,000	FHA; EWP	AL; EN/L
4*	Pedestrian safety improvements to SW Fairview Blvd.	Enhancement, Capital	\$2,120,000	PBOT	AL; PBOT in SW Fairview Boulevard ROW.
4	Park Gateway at SW Fairview Blvd.	New	\$80,000		AL; EN/P; PBOT if in SW Fairview Blvd ROW.
2	SW Fischer Lane parking for new Footbridge Over Burnside	New	\$266,000	PP&R	AL; EN/L, PBOT if parking improvements in the ROW.
1*	SW Fischer Lane roadway improvements and W Burnside St. gateway	Enhancement	\$620,000		AL; EN/P; Signs subject to Title 33 regulations
5	Visitor Center Improvements		\$200,000	Hoyt Arboretum Friends	AL
Phases	South Entry Projects	Type	Total Project Cost	Partnerships	Approvals/Reviews
6	New Gateway at SW Knights Blvd. and development of stormwater garden	New	\$784,000		AL; EN/P;
7*	Lot B parking adjustments and Zoo entry court	Enhancement/New	\$1,500,000	EWP, Metro, TriMet	CU/L; ideal to combine with Lot A (S2) and Lot C (S4) improvements to minimize total number of new spaces.
Phases	Parkway Projects	Type	Total Project Cost	Partnerships	Approvals/Reviews
9	Pave Maple Trail to Regional Trail connection	Enhancement	\$532,000	EWP	AL; EN/L
8	SW Kingston Dr./Wildwood Trail Intersection improvements	Enhancement/Maintenance	\$64,000	EWP	AL; EN not required if involves already-paved areas only.
12	Trailhead Parking and road repair along SW Kingston Dr. (and decommission non-trailhead parking areas)	Enhancement	\$2,800,000	EWP	AL; EN/P.
11*	Regional Trail between J Gate and Train Station	New	\$10,200,000	EWP, Metro	AL; EN/L if located all or partially in "c" zone given path's width and paving.
10	View restoration	Maintenance	\$30,000	Urban Forestry	AL
Phases	Gardens Projects	Type	Total Project Cost	Partnerships	Approvals/Reviews
13	MAC Trail repairs and realignment	Maintenance	\$806,000	EWP	AL; EN/L if located all or partially in "c" zone given path's width and paving.
14	Gardens Interim Visitor Center	Enhancement	\$960,000	Rosarians, Rose Festival Foundation	AL
Phases	City Park Projects	Type	Total Project Cost	Partnerships	Approvals/Reviews
	Bear House assessment to determine viability for restoration or demolition	Plan	\$20,000		
15	Natural Areas Maintenance Facility	New	\$2,652,000		AL
16*	W Burnside gateway, bicycle trail, stair and pedestrian connection improvements at W Burnside St.	Enhancement/Maintenance	\$1,832,000	PBOT, TriMet	AL, if repairs are within existing improvements; EN/P, if enhancement includes widening and/or paving.
	Stearns Canyon Trail Plan	Plan	\$10,000		

Numbers in 'Phases' column indicate location within the park, see map.
* Project to be studied as part of Transportation Management Plan.

EWP: Explore Washington Park, FHA: Hoyt Arboretum Friends, CI: Cultural Institutions

AL Allowed by right - assumes that no soil disturbance will take place in the Environmental Zones (c or p)

EN/P Environmental Review Possible: if this project is located in the c or p zone an EN review could be triggered

PBOT Portland Bureau of Transportation will have a major role in this approval and should be consulted prior to any land use applications

CU Conditional Use Required

EN/L Environmental Review Likely, but more specifics on the size, location and materials of project is required to make a determination

N/A Not a land use matter

CU/L Conditional Use Likely, but should be confirmed by City of Portland, Bureau of Development Services

HR/P Historic Review possible

PROJECT COSTS

The project lists show the phased implementation and budgets for each of the recommendations discussed in previous chapters. Listed by park area, each project includes a planning-level project budget, possible land use permitting review and approval requirements, project partners, and recommended phase. The total Project Cost estimated for all the Master Plan projects is \$94,000,000.

The project budget per phase is:

- Phase 1 \$24.5 million
- Phase 2 \$37.5 million
- Phase 3 \$32.0 million

The cost report containing construction cost estimates can be found in the appendix. For each project, the costs in the report include the following mark-ups:

- Contingency - 20% for construction and design based upon level of design completion
- General Conditions - 10% management staff, trailers, etc.
- General Requirements - 15% cranes and other project specific equipment
- Overhead and Profit - 4% contractor's fee
- Bonds and insurance - 2% as required for the contract
- Escalation - 9% (3% per annum) This is estimated from initial pricing to the mid-point of the project. The unit rates within each section of the cost report are burdened to mitigate (as much as possible) escalation over the term of the master plan. As each project is developed, considerations will be given to phasing and timing to further manage the risk of cost increases.

The project budgets presented here include all costs including construction, permitting and project management. In the appendix, only construction costs are shown.

Phase 2 Solidify the Vision

Phase 2 projects begin to change the structure and framework of Washington Park and solidify the vision of the master plan. These are capital improvement projects that alter park circulation patterns and set the stage for any future development within the park.



IMPLEMENTATION PHASING STRATEGY

Phase 2 | 5 to 15 years approx \$37.5 million

Phases	Park-Wide Projects	Type	Total Project Cost	Partnerships	Approvals/Reviews
6	Maintenance facilities expansion	Enhancement	\$9,090,000		AL; EN/L if located all or partially in "c" zone.
	Enhance Wayfinding	Implementation	\$50,000	EWP	
	Natural Area Ecological Improvements	Enhancement/Maintenance	\$150,000		AL
Phases	Arboretum Projects	Type	Total Project Cost	Partnerships	Approvals/Reviews
1*	Shift shuttle route within park; new turnaround at Stevens Pavilion parking area	Enhancement	\$1,140,000	EWP	AL: EN/L
Phases	South Entry Projects	Type	Total Project Cost	Partnerships	Approvals/Reviews
3	Visitor Center	New	\$800,000	CI, EWP	AL, as serves existing/future park visitors
2*	Drop off zone and new parking lot layout for Lot C	Enhancement	\$968,000	EWP, Metro, TriMet	CU/L; combine with Lot A (S2) & Lot B (S4) to minimize number of new spaces.
	Lot B parking adjustments and Zoo entry court	Enhancement	\$1,500,000	EWP, Metro, TriMet	AL; EN/P.
Phases	Parkway Projects	Type	Total Project Cost	Partnerships	Approvals/Reviews
10	Depot Cafe	Enhancement	\$1,400,000	Rose Festival Foundation	CU/L, food service and rental space are CUs in OS zone.
4	Archery range picnic area and restroom, covered shooting line, natural areas restoration	Enhancement	\$626,000	Archers; ODFW	AL, for all improvements but parking lot (CU); EN/P. Parking lot in "c" zone not likely to be approved.
5	Nature Play Area	New	\$930,000		AL
Phases	Gardens Projects	Type	Total Project Cost	Partnerships	Approvals/Reviews
11	Rose Garden Restrooms & Curators office upgrade	Enhancement	\$96,000		AL
15*	Upper SW Sherwood Dr. accessibility improvements and parking improvements	Enhancement	\$107,500		Parking: CU; combining R3/R4 to minimize new parking spaces
8*	Lower SW Sherwood Dr. two-way and roundabout		\$900,000		EN/P
7*	Relocated Tennis (remove existing) & Gardens Lower Parking Lot	New	\$6,400,000		CU, triggered by new parking; EN/L
13*	SW Kingston Ave. one-way conversion, new accessible and short-term parking, and entry improvements	Enhancement	\$904,000		CU; EN/P unlikely if new parking is on already-paved area.
9	Children's playground improvements	Enhancement	\$3,000,000		AL
	Elephant House improvement/upgrades	Enhancement	\$536,000	Rotary Club	AL; HR/P
12*	Rose Garden Plaza	New	\$2,700,000	Food vendors/private	CU
Phases	City Park Projects	Type	Total Project Cost	Partnerships	Approvals/Reviews
17	Improved trail access from SW Jefferson St. and new gateway at Madison Trail	Enhance	\$80,000	PBOT	AL, if work undertaken; EN/P; PBOT required if in SW Madison Street ROW.
18	Restroom restoration, near Holocaust Memorial	Maintenance	\$160,000		AL
14	Roundabout with moved & restored Chiming Fountain, realigned roadways	Enhance	\$2,600,000		AL
16	City Park Playground, replace	New	\$1,500,000		AL

Numbers in 'Phases' column indicate location within the park, see map.

* Project to be studied as part of Transportation Management Plan.

EWP: Explore Washington Park, FHA: Hoyt Arboretum Friends, CI: Cultural Institutions

AL Allowed by right - assumes that no soil disturbance will take place in the Environmental Zones (c or p)

EN/P Environmental Review Possible: if this project is located in the c or p zone an EN review could be triggered

PBOT Portland Bureau of Transportation will have a major role in this approval and should be consulted prior to any land use applications

CU Conditional Use Required

EN/L Environmental Review Likely, but more specifics on the size, location and materials of project is required to make a determination

N/A Not a land use matter

CU/L Conditional Use Likely, but should be confirmed by City of Portland, Bureau of Development Services

HR/P Historic Review possible

LAND USE APPROVALS

Before implementing many of the recommended improvements, PP&R will meet with the Bureau of Development Services (BDS) to finalize level of review and needed permits.

Washington Park is located in the Open Space (OS) Zone where park-related uses, such as a visitor center or new gardens are allowed by right. Other uses, such as parking and new food service, are Conditional Uses (CU). Much of the park also lies in either the Environmental Conservation ("c") or Preservation ("p") overlay zones, which may also trigger a Type II or Type III Environmental Review (EN) either concurrent with a CU or independently in cases where a proposed project is allowed by right.

AL Allowed by right - assumes that no soil disturbance will take place in the Environmental Zones (c or p)

CU Conditional Use Required

CU/L Conditional Use Likely, but should be confirmed by City of Portland, Bureau of Development Services

EN/P Environmental Review Possible: if this project is located in the c or p zone an EN review could be triggered

EN/L Environmental Review Likely, but more specifics on the size, location and materials of project is required to make a determination

HR/P Historic Review possible

PBOT Portland Bureau of Transportation will have a major role in this approval and should be consulted prior to any land use applications

N/A Not a land use matter

FUNDING

PP&R will steward the plan. Funding for implementation will be both strategic and opportunistic. Opportunities to advance the plan depend on funding, policy decisions, and public and private advocacy. Funding for enhancements may come through parking revenue, grants, private funding, and/or public dollars.

Phase 3 Enhance the Park

Phase 3 projects add new amenities and facilities to Washington Park.



IMPLEMENTATION PHASING STRATEGY

Phase 3 | 15 years + approx \$32 million

Phases	Park-Wide Projects	Type	Total Project Cost	Partnerships	Approvals/Reviews
	Enhance Wayfinding	Implementation	\$50,000	EWP	
Phases	Arboretum Projects	Type	Total Project Cost	Partnerships	Approvals/Reviews
1	Forest Canopy Walk	New	\$7,000,000	Hoyt Arboretum Friends	AL: EN/L
Phases	South Entry Projects	Type	Total Project Cost	Partnerships	Approvals/Reviews
4*	New parking and nature play on repurposed Portland Children's Museum site	New	\$4,010,000	WFC; Zoo; EWP	CU (as parking is CU in OS zone); EN/L
2	Regional Trail connection SW Kingston Dr./SW Knights Blvd. intersection to SW Canyon Ct.	New	\$702,000	EWP: Metro	AL, as SW Knight Boulevard is private park road; EN/P
3*	South Entry Garden Plaza	Enhancement	\$9,400,000	EWP, Metro, TriMet; CI	AL; EN/P.
Phases	Parkway Projects	Type	Total Project Cost	Partnerships	Approvals/Reviews
5	Off road cycling trail (could be moved to Phase 2 with the construction of the Garden parking lot).	New	\$771,000	NWTA; IMBA	AL; EN/L if located all or partially in "c" zone given path's width and paving.
Phases	Gardens Projects	Type	Total Project Cost	Partnerships	Approvals/Reviews
6	Indoor garden	New	\$7,400,000	Public/Private Partnership	AL, as outdoor/indoor gardens are outright use in OS zone. CU if adding capacity for events.
7	Amphitheater upgrades	Enhancement	\$1,960,000		AL, especially if improvements do not increase patron capacity.
Phases	City Park Projects	Type	Total Project Cost	Partnerships	Approvals/Reviews
	None this phase				

Numbers in 'Phases' column indicate location within the park, see map.
* Project to be studied as part of Transportation Management Plan.

EWP: Explore Washington Park, FHA: Hoyt Arboretum Friends, CI: Cultural Institutions

- AL** Allowed by right - assumes that no soil disturbance will take place in the Environmental Zones (c or p)
- CU** Conditional Use Required
- CU/L** Conditional Use Likely, but should be confirmed by City of Portland, Bureau of Development Services

- EN/P** Environmental Review Possible: if this project is located in the c or p zone an EN review could be triggered
- EN/L** Environmental Review Likely, but more specifics on the size, location and materials of project is required to make a determination

- PBOT** Portland Bureau of Transportation will have a major role in this approval and should be consulted prior to any land use applications
- N/A** Not a land use matter
- HR/P** Historic Review possible



IN THIS CHAPTER

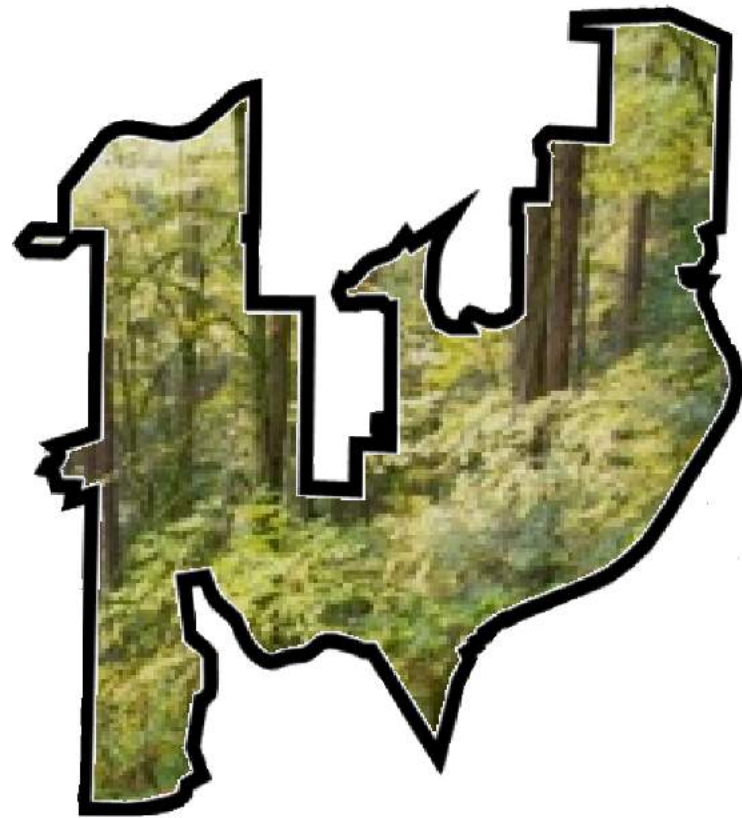
82	DCW Cost Report
96	Kittelson Circulation Narrative
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104	Example: Forest Canopy Walk

APPENDIX

Prepared for:

PLACE

Washington Park Master Plan Update Master Plan Cost Report DRAFT



Washington Park Master Plan Update Master Plan Cost Plan

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Washington Park Master Plan Update Master Plan Cost Plan

Scope of Work

Project Scope Description

The scope of work includes the development of 5 core areas of Washington Park in Portland, Oregon. Included is a pre-concept cost model for Hoyt Arboretum, Kingston Drive, Old City Park, Rose Garden, and the South Entry. The cost study provided for the five distinct areas includes key use features identified in the Washington Park Pre-Concept and Master Planning documents.

Project Design

This Master Plan cost plan is based upon the WPMP Designated Projects Matrix, dated July 26th, 2017, and corroborating in-progress master plan documents, KPFF Cost Considerations narrative, dated July 24th, 2017. GRI Geotechnical Cost Consideration, dated July 25th, 2017.

Cost Development Means and Methods

In preparing this cost study, multiple sources were used. The source information includes a current perspective on codes, technology, energy and water conservation, specific site elements, local general and sub construction markets and labor agreements, material costs and availability and labor efficiencies. These factors are applied to unit cost rate adjustments, considering gross square footage, constructability, access, and all construction related impacts.

Washington Park Master Plan Update Master Plan Cost Plan

Basis of Estimate

Assumptions and Clarifications

Project Assumptions: It is assumed that in the future, similar scoped projects will be combined to reduce mobilizations, and limit general conditions and requirements due to efficiencies including shortened construction schedule and labor and equipment optimization.

Remediation: Hazardous material remediation is not included in this study. Further investigation may be required to evaluate soils, and other potential elements that may require abatement. It is recommended that the owner conduct studies to evaluate these conditions as required.

Utilities: Complete utility resizing and relocation is anticipated in this cost study. Trenching and conduit will be provided for power and technology. Wiring and site transformers will be provided by the utility franchise and are not included.

Code: All new structures and historical reuse elements will be code compliant as required for this site.

Planting: Natural vegetative restoration cost are included as required, including temporary irrigation.

Washington Park Master Plan Update Master Plan Cost Plan

Basis of Estimate

Mark ups

In addition to the cost of labor and materials (Direct Costs) needed to construct the various projects identified in the Pre-Concept Matrix, Mark ups are applied to cover the multitude of other related costs. Below we have included Mark Up categories with line items that are traditionally included within these groups.

Construction Cost Mark Ups

Also known as "Hard Costs" these costs are included in the Contractor's Cost estimate. Typically, these cost include:

- Contingency- 20% For construction and design based upon level of design completion.
- General Conditions- 10% Management staff, trailers, etc.
- General Requirements- 15% Cranes and other project specific equipment
- Overhead and Profit- 4% Contractor's fee
- Bonds and insurance- 2% As required for the contract
- Escalation- 9% (3% per annum) Anticipated construction cost increases from one date to another. Typically, this is provided from initial pricing to the mid-point of the project.

In this exercise the Markups are 60% as a compilation of the percentages listed above.

Additional Owner costs to consider:

Typically, there are additional costs imposed on the total project budget that are not included in the costs as noted above but are necessary to provide a complete project cost perspective. These costs can include:

- Project Management
- Staff relocation expenses
- Site maintenance equipment
- Furniture, fixture and Equipment (FF&E)
- Security Costs
- Utility Service improvements -other than what is noted
- IT Equipment and connections
- Contingency reserve
- Management reserves

Washington Park Master Plan Update Master Plan Cost Plan

Basis of Estimate

Soft Costs

Soft costs are not included in the cost plan. These cost are typically paid for by the owner and are in addition to the Contractor's costs. These costs can include:

- A/E fees- Architect and consultants under the Architects Contract.
- Engineering fees and studies - Other project specific consultants not under the Architect's contract (Ex: Environmental impact, location work, etc.)
- Permits and Fees- Includes MUP, building permits, Fire Department review, etc.
- Commissioning- Third Party System Commissioning
- GC Pre-construction Only if using CM GC (Construction Manager/General Contractor) contract
- Jurisdictional costs

Typically, these costs, when applied, add approximately 30% to the project, after full scope of the project has been determined.

Operations & Maintenance Costs

Cost of operations and maintenance are not included. Operations and Maintenance costs typically include the following:

- Staff: dedicated on-site staff, home-office staff, and volunteer coordination.
- Maintenance Operations: daily facility and trash cleanup, work order maintenance, and annual operations.
- Utility Costs: operational costs of the public facilities.

Washington Park Master Plan Update
Master Plan Cost Plan

Overall Summary		DIRECT COST
		TOTAL
Area 1 - Hoyt Arboretum		
Recommended Budget		\$ 6,041,681
Area 2 - South Entry		
Recommended Budget		\$ 8,836,095
Area 3 - Historic City Park		
Recommended Budget		\$ 4,642,309
Area 4 - Kingston Drive		
Recommended Budget		\$ 7,960,391
Area 5 - Rose Garden		
Recommended Budget		\$ 18,288,532
TOTAL RECOMMENDED BUDGET		\$ 45,769,008

Washington Park Master Plan Update
Master Plan Cost Plan

Area 1 - Hoyt Arboretum				
	Quantity	Unit	Rate	Total
*Costs below are derived from the elemental sections detailed after the Area summaries				
(H1) Visitor Hub				
Visitor Center remodel	500	SF	200.00	\$ 100,000
(H2) Parking Lot Enhancement				
New Construction - Shuttle Turnaround	3,900	SF	29.44	\$ 114,816
Existing Condition - Topcoat	11,700	SF	5.46	\$ 63,835
Added fill required at grade	15,600	SF	17.58	\$ 274,310
Retaining Wall	277	LF	400.00	\$ 110,800
(H3) ADA Trail				
Visitor Center to Hoyt	1,000	LF	70.39	\$ 70,392
(H4) Forest Canopy Walk				
8' W Canopy Walk and Covered Platform	1,600	LF	2,193.28	\$ 3,509,248
(H5) Fischer Lane - New Sign & Gateway				
Stone Columns, Gates, and Lighting	1	EA	63,792.00	\$ 63,792
(H6) Fischer Lane - Small Gateway (Burnside)				
Stone Columns, and Gate	1	EA	39,392.00	\$ 39,392
(H7) Fischer Lane - Pocket parking				
Parking incl. Drainage modifications	10	EA	13,299.20	\$ 132,992
(H7) Fischer Lane - Road Rebuild				
Repair Option	8,000	SF	25.73	\$ 205,824
(H9) Fairview - Gateway Improvements				
Stone Columns, and Lighting	2	EA	39,792.00	\$ 79,584
(H10) Fairview - Road Shoulder Improvements				
Asphalt Pull-off Parking	22,500	SF	47.15	\$ 1,060,920
(H11) Trails - Shared-Use Path				
New Construction - Paved	1,190	LF	175.41	\$ 208,736
Existing Condition - Enhanced	100	LF	70.39	\$ 7,039
				\$ 6,041,681

Washington Park Master Plan Update Master Plan Cost Plan

Area 2 - South Entry

	Quantity	Unit	Rate	Total
*Costs below are derived from the elemental sections detailed after the Area summaries				
(S1) Entry Gateway				\$ 224,288
Stone Columns, Lighting, and Banner over Roadway	1	LS	224,288.00	224,288
(S2) Parking Lot A	36,612	SF		\$ 2,005,441
New Driveway Ramp and Parking	960	SF	62.30	\$ 59,804
New 113 Space Lot	35,652	SF	31.62	\$ 1,127,237
Demo - Children's Museum	33,000	SF	24.80	\$ 818,400
(S3) Trail - Shared Use Path	815	LF		\$ 305,501
12' W Path with Drainage	815	LF	374.85	\$ 305,501
(S4a) Parking Lot B	3,600	SF		\$ 27,482
Existing Condition - Topcoat	3,600	SF	5.46	\$ 19,642
New Concrete Curb	3,600	SF	2.18	\$ 7,840
(S4b) Parking Lot B	220,000	SF		\$ 2,822,551
Select Modifications to Entire Lot	220,000	SF	12.83	\$ 2,822,551
(S5) Parking Lot C	10,260	SF		\$ 483,780
Driveway Modification	10,260	SF	47.15	\$ 483,780
(S6) Parking Lot Pathway	2,300	SF		\$ 44,970
Raised Sidewalk/Grass Zone	2,300	SF	19.55	\$ 44,970
(S7) Visitor Center	800	SF		\$ 393,920
Visitor Information Building	800	SF	492.40	\$ 393,920
(S8) Plaza Green	35,000	SF		\$ 2,359,778
Pedestrian Area	35,000	SF	67.42	\$ 2,359,778
Site Utilities				\$ 168,385
Stormwater Management	1	LS	168,384.00	\$ 168,384
				\$ 8,836,095

Washington Park Master Plan Update Master Plan Cost Plan

Area 3 - Historic City Park

	Quantity	Unit	Rate	Total
*Costs below are derived from the elemental sections detailed after the Area summaries				
(C1) Stearns Gateway	1	EA		\$ 563,792
Stone Columns, Gates, and Lighting	1	EA	63,792.00	63,792.00
Art Fountain relocation - by others				NIC
Plaze entry, drop-off, and garden - allow	1	LS	500,000.00	\$ 500,000
(C2) Stearns Canyon Trails - Repair	2,000	LF		\$ 350,816
Trail and Stair Repair	2,000	LF	175.41	\$ 350,816
(C3) Park Place Gateway - TBD				TBD
(C4) Madison Gateway	1	EA		\$ 39,392
Stone Columns, Gates, and Lighting	1	EA	39,392.00	\$ 39,392
(C5) Bear House - Restoration	2,300	SF		\$ 1,325,888
Renovation Option	2,300	SF	339.52	\$ 780,896
(New Construction Option - Add)	2,300	SF	120.00	\$ 276,000
Maintenance Facility	1,500	SF	144.00	\$ 216,000
Site Work	1,800	SF	29.44	\$ 52,992
(C6) Stearns Restroom - Seismic Upgrade	400	SF		\$ 40,640
Seismic Upgrade and Interior Improvements	400	SF	101.60	\$ 40,640
(C7) Traffic Circle	16,500	SF		\$ 1,234,328
New Paved Circle	16,500	SF	26.64	\$ 439,512
Fountain Restoration - Allow	1	LS	150,000.00	\$ 150,000
Road Replacement - Demo	9,130	SF	9.60	\$ 87,648
Road Replacement - New construction	15,290	SF	36.44	\$ 557,168
(C8) City Park Playground	5,500	SF		\$ 1,087,454
Play Area and (1) Loo	5,500	SF	197.72	\$ 1,087,453
				\$ 4,642,309

Washington Park Master Plan Update Master Plan Cost Plan

Area 4 - Kingston Drive

	Quantity	Unit	Rate	Total
*Costs below are derived from the elemental sections detailed after the Area summaries				
(K1) Road Repair	24,000	SF		\$ 788,864
Grade and Pave for Drainage	24,000	SF	32.87	788,864
(K2) Roadway Enhancement	24,000	SF		\$ 617,472
Grade and Pave for Drainage	24,000	SF	25.73	617,472
(K3) Train Station Trail - Shared-Use Path	66,000	SF		\$ 4,865,872
Grade, Widen and Pave for Drainage	66,000	SF	73.73	4,865,872
(K4) Train Bed - Shared-Use Path	500	LF		\$ 87,704
New Standard Pathway	500	LF	175.41	87,704
(K5) Nature Play Area	6,000	SF		\$ 464,839
New Nature Play Area	6,000	SF	77.47	464,839
(K6) Archery Range Enhancement	400	SF		\$ 323,075
Drainage Repair, Parking, Toilets, and Roof	400	SF	807.69	323,075
(K7) Trail Head Improvements				\$ 32,000
Trail Access	1	LS	32,000.00	32,000
(K8) Off road cycling track				\$ 770,965
Standard pathway - bicycle track	3,100	LF	87.41	270,965
Bicycle track - features, and ancillary construction requirements	1	ALW	500,000.00	500,000
(K9) Power service				\$ 9,600
Power service line - trenching and pipe only	120	LF	80.00	9,600
				\$ 7,960,391

Washington Park Master Plan Update Master Plan Cost Plan

Area 5 - Rose Garden

	Quantity	Unit	Rate	Total
*Costs below are derived from the elemental sections detailed after the Area summaries				
(R1) Kingston Ave Gateway				\$ 63,792
Stone Columns, Gates, and Lighting	1	EA	63,792.00	63,792
(R2) Kingston Ave Parking Improvements	15,000	SF		\$ 101,040
Restriping and Crossing	15,000	SF	6.74	101,040
(R3) New Parking Lot, Demo Tennis Courts	7,254	SF		\$ 283,196
Demo Tennis Courts	7,254	SF	9.60	69,638
Parking Lot - Add 31 Spaces	7,254	SF	29.44	213,558
(R4) Pedestrian Plaza	20,000	SF		\$ 1,349,571
Ped Zone and Share-Use	20,000	SF	67.48	1,349,570
(R5) Restroom - Seismic Upgrade	450	SF		\$ 45,720
Seismic and Finish Enhancements	450	SF	101.60	45,720
(R6) Indoor Garden	7,500	SF		\$ 3,693,000
Conservatory	7,500	SF	492.40	3,693,000
(R7) Amphitheatre Improvements	4,320	SF		\$ 796,072
Bandshell and Stage Improvements	4,320	SF	184.28	796,072
(R8) Elephant House Improvements	1,600	SF		\$ 217,600
Seismic Upgrade for New Construction	1,600	SF	136.00	217,600
(R9) Children's Playground	7,500	SF		\$ 1,482,890
Play Surface and Equipment	7,500	SF	197.72	1,482,890
(R10) Train Station Remodel	1,125	SF		\$ 700,991
New Café and Event Space	1,125	SF	443.16	498,555
New Café - Ped Plaza	3,000	SF	67.48	202,436
(R11) Trail - Shared-Use Path	500	LF		\$ 191,132
New 12' W Trail	500	LF	291.65	145,824
New parking	1,539	SF	29.44	45,308
(R12) MAC Trail	3,200	LF		\$ 402,637
Enhance and Align Existing Trail	3,200	LF	125.82	402,637

Washington Park Master Plan Update Master Plan Cost Plan

Washington Park Master Plan Update Master Plan Cost Plan

Area 5 - Rose Garden

Core Project Components Roadwork and Parking Lots

	Quantity	Unit	Rate	Total
(R13) Sherwood - Roadway Improvements				\$ 8,184
Repave and Contour for Drainage	1	LS	8,184.00	\$ 8,184
(R14) Recreation Area - Tennis Courts and Parking				\$ 3,747,766
New Facilities at old Soccer Field	1	LS	2,935,254	\$ 2,935,254
New traffic circle, incl. road signs	1	LS	439,512.00	\$ 439,512
Site features: Portland Loo, benches	1	LS	373,000.00	\$ 373,000
(R15) Maintenance Facility				\$ 4,545,280
Seismic Improvements to Existing Facility	6,500	SF	43.20	\$ 280,800
New Maintenance Building	6,500	SF	384.32	\$ 2,498,080
Maintenance Yard	60,000	SF	29.44	\$ 1,766,400
(R16) Restroom Expansion and Visitor Center				\$ 478,221
Visitor Center - New Construction	1,600	SF	377.92	\$ 423,270
Restroom	1,120	SF	114.48	\$ 54,950
Site Utilities				\$ 181,440
Stormwater Management	1	LS	181,440.00	\$ 181,440
				\$ 18,288,532



Construction Components	QTY	U/M	Unit Rate	Cost	Markup	Cost/LF
60.0%						
Road Replacement						
Demo and Haul	1	SF	\$ 6.00	\$ 6.00	\$ 3.60	\$ 9.60
Base Material	1	SF	\$ 3.92	\$ 3.92	\$ 2.35	\$ 6.27
Asphalt Paving, 3" depth	1	SF	\$ 6.00	\$ 6.00	\$ 3.60	\$ 9.60
Striping	1	SF	\$ 0.16	\$ 0.16	\$ 0.10	\$ 0.26
				\$ 16.08	\$ 9.65	\$ 25.73
Road widening						
Demo and Haul	1	SF	\$ 6.00	\$ 6.00	\$ 3.60	\$ 9.60
Base Prep	1	SF	\$ 0.99	\$ 0.99	\$ 0.59	\$ 1.58
Structural Fill	1	SF	\$ 10.99	\$ 10.99	\$ 6.59	\$ 17.58
Base Material	1	SF	\$ 5.33	\$ 5.33	\$ 3.20	\$ 8.53
Asphalt paving, 3" depth	1	SF	\$ 6.00	\$ 6.00	\$ 3.60	\$ 9.60
Striping	1	SF	\$ 0.16	\$ 0.16	\$ 0.10	\$ 0.26
				\$ 29.47	\$ 17.68	\$ 47.15
Parking Lot						
Demo and Haul	1	SF	\$ 6.00	\$ 6.00	\$ 3.60	\$ 9.60
Base Prep	1	SF	\$ 0.99	\$ 0.99	\$ 0.59	\$ 1.58
Base Material	1	SF	\$ 5.33	\$ 5.33	\$ 3.20	\$ 8.53
Striping	1	SF	\$ 0.08	\$ 0.08	\$ 0.05	\$ 0.13
Asphalt Paving, 3" depth	1	SF	\$ 6.00	\$ 6.00	\$ 3.60	\$ 9.60
				\$ 18.40	\$ 11.04	\$ 29.44

Washington Park Master Plan Update Master Plan Cost Plan

Core Project Components Roadwork and Parking Lots

ADD	Concrete Curb	1 SF	\$ 1.36	\$ 1.36	\$ 0.82	\$ 2.18
ADD	Raised Crosswalk	1 LS	\$ 12,000	\$ 12,000	\$ 7,200	\$ 19,200.00
Parking Lot - Driveway Ramp						
	Demo and Haul	1 SF	\$ 6.00	\$ 6.00	\$ 3.60	\$ 9.60
	Structural Fill	1 SF	\$ 10.99	\$ 10.99	\$ 6.59	\$ 17.58
	Base Material	1 SF	\$ 5.33	\$ 5.33	\$ 3.20	\$ 8.53
	Paving	1 SF	\$ 8.33	\$ 8.33	\$ 5.00	\$ 13.33
	Striping	1 SF	\$ 0.16	\$ 0.16	\$ 0.10	\$ 0.26
	Ramp Rail	1 SF	\$ 6.88	\$ 6.88	\$ 4.13	\$ 11.00
	Top Dress - HMA	1 SF	\$ 1.25	\$ 1.25	\$ 0.75	\$ 2.00
			\$ 38.94	\$ 23.36	\$	\$ 62.30
Parking Lot - Improve Existing						
	Area Prep	1 SF	\$ 1.00	\$ 1.00	\$ 0.60	\$ 1.60
	Overlay	1 SF	\$ 2.25	\$ 2.25	\$ 1.35	\$ 3.60
	Striping	1 SF	\$ 0.16	\$ 0.16	\$ 0.10	\$ 0.26
			\$ 3.41	\$ 2.05	\$	\$ 5.46
ADD	Landscape improvement	1 SF	12.99	\$ 12.99	\$ 7.79	\$ 20.78
ADD	Demo and Storm W Mod.	1 SF	20.00	\$ 20.00	\$ 12.00	\$ 32.00
ADD	Site Demo	1 SF	\$ 6.00	\$ 6.00	\$ 3.60	\$ 9.60
ADD	Retaining Wall/Stall	1 EA	\$ 5,000.00	\$ 5,000.00	\$ 3,000.00	\$ 8,000.00

Washington Park Master Plan Update Master Plan Cost Plan

Core Project Components Paths, Walkways & Biking Trails



Construction Components	QTY	U/M	Unit Rate	Cost	Markup	Cost/LF
Standard Pathway						
Excavation and prep	9 SF		\$ 2.96	\$ 26.64	\$ 15.98	\$ 42.62
Base Material	5 SF		\$ 3.11	\$ 15.55	\$ 9.33	\$ 24.88
Trail Edge	4 SF		\$ 3.11	\$ 12.44	\$ 7.46	\$ 19.90
Asphalt Paving, 3" Depth	5 SF		\$ 6.00	\$ 30.00	\$ 18.00	\$ 48.00
				\$ 84.63	\$ 50.78	\$ 135.41
12' Pathway						
Excavation and prep	12 SF		\$ 2.96	\$ 35.52	\$ 21.31	\$ 56.83
Base Material	12 SF		\$ 3.11	\$ 37.32	\$ 22.39	\$ 59.71
Trail Edge	4 SF		\$ 3.11	\$ 12.44	\$ 7.46	\$ 19.90
Asphalt Paving, 3" Depth	12 SF		\$ 6.00	\$ 72.00	\$ 43	\$ 115
				\$ 157.28	\$ 94.37	\$ 251.65
Modification to Existing Trails						
Base Material	5 SF		\$ 1.56	\$ 7.78	\$ 5	\$ 12.44
Trail Edge	4 SF		\$ 1.56	\$ 6.22	\$ 4	\$ 9.95
Asphalt Paving, 3" Depth	5 SF		\$ 6.00	\$ 30.00	\$ 18	\$ 48.00
				\$ 44.00	\$ 26.40	\$ 70.39
Trail Repair						
Base Materials	1 LF		\$ 2.41	\$ 2.41	\$ 1.44	\$ 3.85
Misc. Labor	1 LF		\$ 1.30	\$ 1.30	\$ 0.78	\$ 2.08
				\$ 3.71	\$ 2	\$ 5.93
ADD	Stair Repair	1 SF	\$ 175.00	\$ 175.00	\$ 105.00	\$ 280.00
ADD	Retaining Wall	1 LF	\$ 250.00	\$ 250.00	\$ 150.00	\$ 400.00
ADD	Wayfinding	1 LS	\$ 20,000	\$ 20,000	\$ 12,000	\$ 32,000
ADD	Drainage	1 LF	\$ 52.00	\$ 52.00	\$ 31	\$ 83

Washington Park Master Plan Update Master Plan Cost Plan

Washington Park Master Plan Update Master Plan Cost Plan

Core Project Components Forest Canopy Walk



Construction Components	QTY	U/M	Unit Rate	Cost	Markup 60.0%	Cost/LF
Suspended Pedestrian Bridges						
Elevated Structure	8 SF		\$ 92.00	\$ 736.00	\$ 441.60	\$ 1,177.60
Site preservation	10 SF		\$ 7.88	\$ 78.80	\$ 47.28	\$ 126.08
Railing (2 Sides)	1 LF		\$ 411.00	\$ 411.00	\$ 246.60	\$ 657.60
				<u>\$1,225.80</u>	<u>\$ 735.48</u>	<u>\$ 1,961.28</u>
ADD Structure (500 SF)	1 LS		\$ 232,000	\$ 232,000	\$ 139,200	\$ 371,200

Core Project Components Park Gateway



Construction Components	QTY	U/M	Unit Rate	Cost	Markup 60.0%	Budget
Gateway - Monumental						
Concrete column incl. foundation	21 CY		\$ 650.00	\$ 13,650.00	\$ 8,190.00	\$ 21,840
Stone veneer	576 SF		\$ 55.00	\$ 31,680.00	\$ 19,008.00	\$ 50,688
Entry sign	1 ALW		\$ 75,000.00	\$ 75,000.00	\$ 45,000.00	\$ 120,000
Planting	1 ALW		\$ 10,000.00	\$ 10,000.00	\$ 6,000.00	\$ 16,000
Site light fixture	2 EA		\$ 4,000.00	\$ 8,000.00	\$ 4,800.00	\$ 12,800
PV Panel	1 LS		\$ 1,850.00	\$ 1,850.00	\$ 1,110.00	\$ 2,960
				<u>\$ 140,180.00</u>	<u>\$ 84,108.00</u>	<u>\$ 224,288</u>
Gateway - Large						
Concrete column	4 CY		\$ 650.00	\$ 2,600.00	\$ 1,560.00	\$ 4,160
Stone veneer	144 SF		\$ 55.00	\$ 7,920.00	\$ 4,752.00	\$ 12,672
Gate, aluminum	1 EA		\$ 15,000.00	\$ 15,000.00	\$ 9,000.00	\$ 24,000
Entry sign	1 ALW		\$ 5,000.00	\$ 5,000.00	\$ 3,000.00	\$ 8,000
Planting	1 ALW		\$ 3,500.00	\$ 3,500.00	\$ 2,100.00	\$ 5,600
Site light fixture	2 EA		\$ 2,000.00	\$ 4,000.00	\$ 2,400.00	\$ 6,400
PV Panel	1 LS		\$ 1,850.00	\$ 1,850.00	\$ 1,110.00	\$ 2,960
				<u>\$ 39,870.00</u>	<u>\$ 23,922.00</u>	<u>\$ 63,792</u>
Gateway - Small						
Concrete column	4 CY		\$ 650.00	\$ 2,600.00	\$ 1,560.00	\$ 4,160
Stone veneer	144 SF		\$ 55.00	\$ 7,920.00	\$ 4,752.00	\$ 12,672
Gate, aluminum	1 EA		\$ 12,600.00	\$ 12,600.00	\$ 7,560.00	\$ 20,160
Entry sign	1 ALW		\$ 1,500.00	\$ 1,500.00	\$ 900.00	\$ 2,400
				<u>\$ 24,620.00</u>	<u>\$ 14,772.00</u>	<u>\$ 39,392</u>
DEDUCT Remove gate	1 EA		\$ (15,000.00)	\$ (15,000.00)	\$ (9,000)	\$ (24,000)

Washington Park Master Plan Update Master Plan Cost Plan

Core Project Components Maintenance Facilities



Construction Components	QTY	U/M	Unit Rate	Cost	Markup	Cost/LF
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Maintenance Facility

Clear and prep area	1 SF		\$ 9.20	\$ 9.20	\$ 5.52	\$ 14.72
Utilities and connections	1 SF		\$ 6.50	\$ 6.50	\$ 3.90	\$ 10.40
Foundations and Structure	1 SF		\$ 168.00	\$ 168.00	\$ 100.80	\$ 268.80
MEP	1 SF		\$ 56.50	\$ 56.50	\$ 33.90	\$ 90.40
				<u>\$ 240.20</u>	<u>\$ 144.12</u>	<u>\$ 384.32</u>

Unconditioned Space

Storage structure	1 SF		\$ 90.00	\$ 90.00	\$ 54.00	\$ 144.00
				<u>\$ 90.00</u>	<u>\$ 54.00</u>	<u>\$ 144.00</u>

Washington Park Master Plan Update Master Plan Cost Plan

Core Project Components Program Facilities



Construction Components	QTY	U/M	Unit Rate	Cost	Markup	Cost/LF
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Visitor Center - New Construction

Site prep	1 SF		\$ 9.20	\$ 9.20	\$ 5.52	\$ 14.72
Utilities and connections	1 SF		\$ 7.00	\$ 7.00	\$ 4.20	\$ 11.20
Structure	1 SF		\$ 220.00	\$ 220.00	\$ 132.00	\$ 352.00
Restroom and fit out	1 SF		\$ 71.55	\$ 71.55	\$ 42.93	\$ 114.48
				<u>\$ 307.75</u>	<u>\$ 184.65</u>	<u>\$ 492.40</u>

Bear House - New Construction

Site prep	1 SF		\$ 9.20	\$ 9.20	\$ 5.52	\$ 14.72
Utilities and connections	1 SF		\$ 7.00	\$ 7.00	\$ 4.20	\$ 11.20
Structure	1 SF		\$ 154.00	\$ 154.00	\$ 92.40	\$ 246.40
Kitchen/break fit out	1 SF		\$ 55.00	\$ 55.00	\$ 33.00	\$ 88.00
Shower and locker fit out	1 SF		\$ 62.00	\$ 62.00	\$ 37.20	\$ 99.20
				<u>\$ 287.20</u>	<u>\$ 172.32</u>	<u>\$ 459.52</u>

Archery Range Roof

Site prep	1 SF		\$ 8.00	\$ 8.00	\$ 4.80	\$ 12.80
Structure	1 SF		\$ 73.33	\$ 73.33	\$ 44.00	\$ 117.33
				<u>\$ 81.33</u>	<u>\$ 48.80</u>	<u>\$ 130.13</u>

Washington Park Master Plan Update Master Plan Cost Plan

Core Project Components Program Facilities

Conservatory New Construction

Site prep	1 SF	\$ 9.20	\$ 9.20	\$ 5.52	\$ 14.72
Utilities and connections	1 SF	\$ 6.50	\$ 6.50	\$ 3.90	\$ 10.40
Structure	1 SF	\$ 295.00	\$ 295.00	\$ 177.00	\$ 472.00
Irrigation/Air Quality	1 SF	\$ 60.00	\$ 60.00	\$ 36.00	\$ 96.00
Restroom and fit out	1 SF	\$ 70.00	\$ 70.00	\$ 42.00	\$ 112.00
Information kiosk	1 SF	\$ 80.00	\$ 80.00	\$ 48.00	\$ 128.00
Café fit out	1 SF	\$ 102.00	\$ 102.00	\$ 61.20	\$ 163.20
		\$ 622.70	\$ 373.62		\$ 996.32

Washington Park Master Plan Update Master Plan Cost Plan

Core Project Components Event Space



Construction Components	QTY	U/M	Unit Rate	Cost	Markup	Cost/SF
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60.0%

Band Shell - Enhance existing

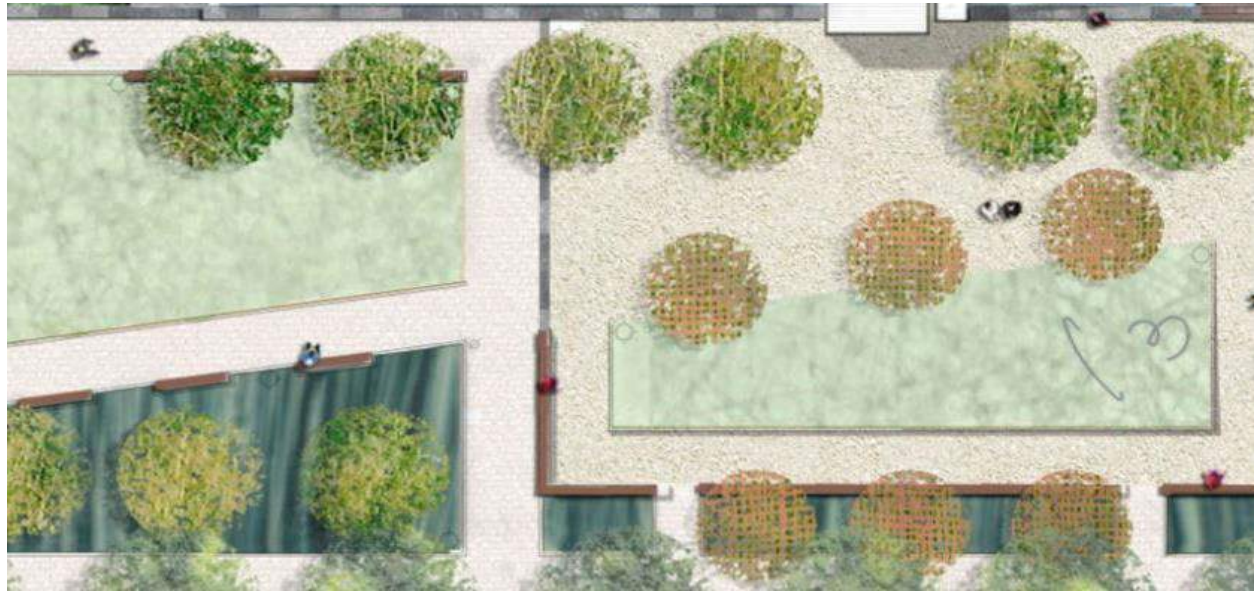
Site prep	1 SF	\$ 9.20	\$ 9.20	\$ 5.52	\$ 14.72
Concrete Paving	1 SF	\$ 14.44	\$ 14.44	\$ 8.66	\$ 23.10
Enlarge stage	0.77 SF	\$ 2.50	\$ 1.93	\$ 1.16	\$ 3.08
Roof structure	1 SF	\$ 68.00	\$ 68.00	\$ 40.80	\$ 108.80
Back of house	0.12 SF	\$ 55.00	\$ 6.37	\$ 3.82	\$ 10.19
Restroom fit out	0.05 SF	\$ 70.00	\$ 3.24	\$ 1.94	\$ 5.19
Event Power, Vault & Lighting	1 SF	\$ 12.00	\$ 12.00	\$ 7.20	\$ 19.20
			\$ 115.17	\$ 69.10	\$ 184.28

Train station- Renovation

Renovation	1 SF	\$ 90.00	\$ 90.00	\$ 54.00	\$ 144.00
Café fit-out	1 SF	\$ 102.00	\$ 102.00	\$ 61.20	\$ 163.20
Warming kitchen area	1 SF	\$ 65.00	\$ 32.50	\$ 19.50	\$ 52.00
Event Power & Lighting	1 SF	\$ 15.00	\$ 15.00	\$ 9.00	\$ 24.00
			\$ 239.50	\$ 143.70	\$ 383.20

Washington Park Master Plan Update Master Plan Cost Plan

Core Project Components Collective Gathering & Event Spaces



Construction Components	QTY	U/M	Unit Rate	Cost	Markup	Cost/SF
						60.0%
South Entry Plaza						
Demo	1.00	SF	\$ 5.55	\$ 5.55	\$ 3.33	\$ 8.88
Earthwork	1.00	SF	\$ 0.90	\$ 0.90	\$ 0.54	\$ 1.44
Concrete Paving	0.60	SF	\$ 18.50	\$ 11.10	\$ 6.66	\$ 17.76
Base Material	0.02	CY	\$ 85.00	\$ 1.89	\$ 1.13	\$ 3.02
Lawn Area	0.20	SF	\$ 1.50	\$ 0.30	\$ 0.18	\$ 0.48
Planting	1.00	SF	\$ 20.00	\$ 20.00	\$ 12.00	\$ 32.00
Irrigation	1.20	SF	\$ 2.00	\$ 2.40	\$ 1.44	\$ 3.84
				\$ 42.14	\$ 25.28	\$ 67.42
Rose Garden Plaza						
Demo	1.00	SF	\$ 5.55	\$ 5.55	\$ 3.33	\$ 8.88
Earthwork	1.00	SF	\$ 0.90	\$ 0.90	\$ 0.54	\$ 1.44
Concrete Paving	0.50	SF	\$ 18.50	\$ 9.25	\$ 5.55	\$ 14.80
Base Material	0.02	CY	\$ 85.00	\$ 1.57	\$ 0.94	\$ 2.52
Picnic Benches	1.00	SF	\$ 1.50	\$ 1.50	\$ 0.90	\$ 2.40
Lawn Area	0.40	SF	\$ 1.50	\$ 0.60	\$ 0.36	\$ 0.96
Planting	1.00	SF	\$ 20.00	\$ 20.00	\$ 12.00	\$ 32.00
Irrigation	1.40	SF	\$ 2.00	\$ 2.80	\$ 1.68	\$ 4.48
				\$ 42.17	\$ 25.30	\$ 67.48

Washington Park Master Plan Update Master Plan Cost Plan

Core Project Components Seismic Retrofit



Construction Components	QTY	U/M	Unit Rate	Cost	Markup	Cost/LF
						60.0%
Seismic Retrofit						
Seismic reinforcement	1	SF	\$ 22.00	\$ 22.00	\$ 13.20	\$ 35.20
<i>* Assume 8LB per SF</i>						
Misc. trade demolition	1	SF	\$ 5.00	\$ 5.00	\$ 3.00	\$ 8.00
				\$ 27.00	\$ 16.20	\$ 43.20

Washington Park Master Plan Update Master Plan Cost Plan

Core Project Components Interior enhancements



Construction Components	QTY	U/M	Unit Rate	Cost	Markup	Cost/LF
60.0%						
Existing Structure Enhancements						
Restroom retrofit	1 SF	\$	58.00	\$ 58.00	\$ 34.80	\$ 92.80
Finish retrofit	1 SF	\$	18.50	\$ 18.50	\$ 11.10	\$ 29.60
Lighting retrofit	1 SF	\$	18.00	\$ 18.00	\$ 10.80	\$ 28.80
Event space retrofit	1 SF	\$	106.00	\$ 106.00	\$ 63.60	\$ 169.60
			\$ 106.00	\$ 63.60	\$	\$ 169.60
ADD Restroom Facility	1 EA	\$	275,000	\$ 275,000	\$ 165,000	\$ 440,000
Existing Structure Demolition						
Children's Museum	1 SF	\$	15.50	\$ 15.50	\$ 9.30	\$ 24.80

Washington Park Master Plan Update Master Plan Cost Plan

Core Project Components Playgrounds



Construction Components	QTY	U/M	Unit Rate	Cost	Markup	Cost/SF
60.0%						
Playground						
Earthwork	1.00 SF	\$	1.68	\$ 1.68	\$ 1.01	\$ 2.69
Playsurface incl. border	1.00 SF	\$	24.50	\$ 24.50	\$ 14.70	\$ 39.20
Circulation Surfacing	1.00 SF	\$	16.67	\$ 16.67	\$ 10.00	\$ 26.67
Base Material	1.00 SF	\$	3.91	\$ 3.91	\$ 2.35	\$ 6.26
			\$ 46.76	\$ 28.05	\$	\$ 74.81
ADD Play Structure	1 LS	\$	185,000	\$ 185,000	\$ 111,000	\$ 296,000
ADD Portland Loo	1 LS	\$	115,000	\$ 115,000	\$ 69,000	\$ 184,000
ADD Landscape	1 LS	\$	30,000	\$ 30,000	\$ 18,000	\$ 48,000
Nature Play Area						
Earthwork	1.00 SF	\$	1.68	\$ 1.68	\$ 1.01	\$ 2.69
Playsurface incl. border	1.00 SF	\$	18.50	\$ 18.50	\$ 11.10	\$ 29.60
Base Material	1.00 SF	\$	2.41	\$ 2.41	\$ 1.44	\$ 3.85
			\$ 22.59	\$ 13.55	\$	\$ 36.14
ADD Natural Elements & Boulders	1 LS	\$	125,000	\$ 125,000	\$ 75,000	\$ 200,000
ADD Landscape	1 LS	\$	30,000	\$ 30,000	\$ 18,000	\$ 48,000
Tennis Court						
Site Prep	2900.00 SF	\$	2.85	\$ 8,265.00	\$ 4,959	\$ 13,224.00
Surface, incl. base	2900.00 SF	\$	18.00	\$ 52,200	\$ 31,320	\$ 83,520.00
Lighting, not included						NIC
Fencing	126.00 LF	\$	22.50	\$ 2,835.00	\$ 1,701.00	\$ 4,536.00
			\$ 63,300	\$ 37,980	\$	\$ 101,280.00

Washington Park Master Plan Update Master Plan Cost Plan

Core Project Components *Utilities and Stormwater Management*



Construction Components		QTY	U/M	Unit Rate	Cost	Markup	Cost/LF
						60.0%	
Stormwater Management							
ADD	Drainage improvements	1 SF		\$ 3.55	\$ 3.55	\$ 2.13	\$ 5.68
ADD	Detention Basin, incl. excv.	1 SF		\$ 6.18	\$ 6.18	\$ 3.71	\$ 9.89
ADD	Storm Water Piping	1 LF		\$ 75.00	\$ 75.00	\$ 45.00	\$ 120.00
ADD	Water Treatment	1 LS		\$ 70,000	\$ 70,000	\$ 42,000	\$ 112,000
ADD	Comp. toilet + enclosure	1 EA		7200	\$ 7,200.00	\$ 4,320	\$ 11,520.00



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MEMORANDUM

Date: October 2, 2017 Project #: 19625

To: Jocelyn Bates
PLACE

From: Diego Arguea and Phill Worth

Project: Washington Park Master Plan

Subject: Circulation Narrative

The following narrative has been provided in support of the Washington Park Master Plan update (2017). Auto, shuttle, and transit route accesses are described for the envisioned Park transportation system. The reasons and anticipated impacts to the Park vitality are provided below for each access recommendation.

AUTO ROUTES AND ENTRANCES

Continued regional vehicular access to the Park is envisioned from Highway 26, SW Fischer Lane, and SW Fairview Boulevard. Local routes that provide neighborhood-level access include SW Kingston Avenue, and SW Park Place. SW Washington Way will also provide internal connectivity to the immediate neighborhood.

Recommended changes to regional access are centered on improving the overall visitor experience. Wayfinding improvements will drive circulation efficiency while infrastructure improvements will create intuitive visual cues for all roadway users.

The Master Plan envisions a robust transportation system that accommodates all modes, while maintaining up to 1,400 on-site paid parking spaces for visitors. The south entry parking area will include new parking areas east of the central parking area intended to more equitably support all venues. Circulating roadways in the central parking area and north of the MAX station will be wide enough to accommodate drop-off/pick-up when on-site parking areas are full.

On the north entry, the recommendation to create 2-way vehicle movement on SW Sherwood Road reinforces the removal of vehicles from the central attractions, fostering a pedestrian-centric and park-rich environment near the primary attractions. A parking area entry node with a shuttle drop-off and roundabout facilitates efficient vehicular movement away from the Rose Garden environment. This parking area also provides a major shuttle stop location for convenient connection to the rest of the

Park. At the north end, SW Kingston Road will operate one-way inbound from the neighborhood, providing connectivity to the SW Sherwood Road entry node.

Auto-free zones within the Park create opportunities for efficient shuttle movement, protected pedestrian and bicycle ways, encouragement of car-share and, ultimately, autonomous vehicle usage. Examples include Rose Garden Way (shuttle, pedestrians, and bicycles only) and SW Kingston Way as a seasonal test bed for vehicle closures.

SHUTTLE ROUTE

The revisions to the existing Washington Park shuttle route will promote more usage, less patron confusion, and serve as an active, visible promoter of in-park travel and convenience of movement.

Shuttle service efficiency and reliability are expected to increase with its route located entirely within Washington Park. Internal to the Park, the shuttle will move between Stevens Pavilion and Stearns Canyon, providing two-way service along SW Kingston Drive between the south and north entry points. At each end of the park, a one-way loop will ensure all venues, parking areas, and attractions are served with minimal impact to all roadway users. To further meet this goal, parts of the shuttle route are planned to include segments of auto-free zones.

To provide full connectivity to the external roadway system, patrons entering the Park via W Burnside Street at Stearns Canyon will be served by a people mover, transporting park visitors between Stearns Canyon and the Rose Garden. Ultimately, as technology develops, the people mover (or a similar technology) is expected to replace the park-wide shuttle.

TRANSIT

Improved non-auto connectivity from Washington Park to downtown Portland and neighboring regional communities can be achieved through continued partnership with TriMet to create a cohesive system.

Park-and-ride options to Sunset Transit center have historically provided alternatives to direct auto travel into Washington Park for patrons coming from the west. To the east, north, and south of the Park, there is limited opportunity for park-and-ride connections, and small improvements to local transit stations may provide large results for improving non-auto travel to the Park.

Two options under consideration are the MAX stations along SW Jefferson Street (Goose Hollow station) and on SW 18th Avenue (Kings Hill). While neither of these stations is more than a half mile to the Park entrance on SW Park Place, there is little-to-no wayfinding and the vertical topography may limit the ability of patrons to arrive at the Park on foot. Each of these stations could be enhanced with Washington Park branding, directional signage, maps, and even opportunities for shuttle connections.

Arrival to the Park via MAX or bus could further be incentivized with reduced fares, subsidized entry fares to Park venues, car-share credits, or discounts on food or gifts.

As technology evolves, collaboration with TriMet may also lead to development of smartphone visitor applications, simplifying educational outreach while providing real-time traveler information, maps, shuttle pick-up times, and connectivity to the local transit (TriMet) system.

TRANSPORTATION & PARKING ENGINEERING PLAN

Following EWP's development of the transportation strategy for improving the mode share to the park, a consultant that specializes in traffic engineering and transportation planning should prepare a transportation master plan for the entire park that includes parking numbers and layout, transportation impacts and opportunities beyond the park boundary using the recommendations from this master plan.

WA Park Master Plan Preferred Concept Plan

KPFF Civil Action Items

September 28, 2017

The following comments and considerations are intended to support the master plan documentation associated with utilities, drainage and earthwork for the preferred concept improvements developed with the master plan. Our general understanding of the preferred concept plan is based on review of the draft master plan exhibits dated 9/19/2017. Further refinement of the plans may warrant new considerations for earthwork and utilities.

Hoyt Arboretum

- New or improved pathways will need to consider surface drainage to mitigate erosion and provide appropriate level of stormwater treatment
- Soft surface recreational paths should intercept and disperse runoff back to existing flow paths where viable to maintain drainage patterns, and will be exempt from providing flow control
- Path improvements with crushed aggregate or paved surfacing will likely trigger a more formal conveyance system design with drainage channels and culverts, but may not require flow control if runoff can be dispersed over adjacent vegetation along the length of the pathway
- Widening the roadway for on-street parking along Fairview will trigger stormwater treatment and flow control for new impervious surfaces

South Entry Area

- Construct vegetated stormwater facility with south entry improvements in conformance with requirements outlined in Conditional Use Application LU 12-156689 (HO 4120020) and Memorandum of Understanding between Metro and Portland Parks & Recreation
- Infiltration is not viable at this location, so any vegetated storm facilities will have to be lined
- Storm improvements can connect to a new “storm only” line installed by Metro at Gate A

Old City Park

- Utility services for the loo at the City Park Playground will be provided from the public utilities in NW Park Place

Multi-Modal Path

- A majority of the trail improvements fall within an Environmental Conservation overlay zone, with numerous adjacent Environmental Protection overlay zones that align with open drainage channels
- Construction staging, access and phasing will be more complicated due to Environmental Land Use Review and mitigation requirements
- Portions of existing railroad bed are not wide enough to accommodate 16’ wide section (12’ paved with 2’ shoulders on each side)
- Earthwork and path stabilization will be required accommodate section for paving and shoulders
- Guardrail will be required in sections with steep embankments or existing retaining walls
- At a minimum, consider implementing stormwater improvements identified as part of Washington Park Zoo Train Rail Drainage Assessment study in late 2014 to address deficiencies with surface conveyance and culverts that run along or under the tracks

- Some of the recommended improvements include enhanced runoff collection and conveyance from Kingston to mitigate erosion and debris that affects the rail drainage systems
- In some locations it is likely that regrading along rail bed will require reconstruction of stormwater conveyance on uphill side of path
- As identified in the study, the use of concrete channels on upslope side of path could effectively capture sediment and convey stormwater with less maintenance than an earthen channel
- Cut/fill for proposed trail segment climbing slope from existing rail alignment to Kingston will be challenging for access with construction equipment and material haul and delivery
- Proposed earthwork will need to conform with geotechnical recommendations, and is likely to include a balanced cut and fill
- New wall systems should be flexible, such as gabion or MSE systems to accommodate the slow movement of the hillside

Archery Site Restoration

- Ponding water on the uphill side of Kingston Road may be a geotechnical concern
- If restrooms are to be provided, pit toilets are recommended since no domestic water or sewer service is available at site
- Improve perimeter drainage around the archery site to mitigate wet soil conditions prevalent in the rainy season
- Improved surface and subsurface drainage collection and conveyance may mitigate some of the erosion and sediment issues observed at the base of the ravine, above the rail track

Portland Children’s Museum Site

- Stormwater quality treatment and detention will be required for new parking and path improvements in accordance with BES requirements
- Infiltration is not viable at this location, so any vegetated storm facilities will have to be lined
- Storm improvements can connect to a new “storm only” line installed by Metro at Gate A
- Existing combined sewer serving PCM building can be abandoned
- Proposed earthwork will need to conform with geotechnical recommendations, and is likely to include a balanced cut and fill

Greenhouse and Visitor Center

- Stormwater quality treatment and detention will be required for new improvements in accordance with BES requirements
- Infiltration is not viable at this location, so any vegetated storm facilities will have to be lined
- Storm connection available nearby in SW Sherwood Blvd.
- Existing storm conveyance line in SW Sherwood Blvd was recently relined and should have adequate capacity for proposed improvements
- Combined sanitary sewer point of connection available nearby in SW Rose Garden Way or SW Kingston Ave.
- Water main connection available nearby in SW Rose Garden Way or SW Kingston Ave.

Tennis Courts & Maintenance Facility

- Stormwater quality treatment and detention will be required for new improvements in accordance with BES requirements
- This is one of the more geologically stable areas and may be a candidate for infiltration if the soils are suitable and the use of infiltration does not create a problem downslope

- There is no nearby storm drainage infrastructure aside from surface conveyance channels and it is likely that a new storm pipe will be required for the outfall as opposed to an open ditch down the slope to Highway 26 due to the extent of proposed impervious improvements
- We expect the acceptable outfall location will be approximately 1,500 feet away, below the Water Bureau reservoir
- A majority this new storm line fall within an Environmental Conservation overlay zone and trigger construction staging, access and phasing challenges due to Environmental Land Use Review and mitigation requirements
- Sanitary sewer points of connection available nearby in SW Sherwood Blvd or the 6" sanitary sewer line serving the maintenance building and the Elephant House
- Water main point of connection available nearby in SW Sherwood Blvd.

Amphitheater

- Enhance or repair subsurface drainage system under the Rose Garden to intercept perched groundwater that causes wet soil conditions at the base of the slope.
- Frequency and duration of wet soil conditions suggest the water source is regional, and not isolated to the Amphitheater site.

Maintenance

The following observations and recommendations are based on site observations, review of available record documents and mapping and discussions with BES staff and Washington Park maintenance personnel. While stormwater conveyance ditches, catch basins and pipes appear to be in place throughout the park, we observed numerous instances where these systems have been compromised or damaged due to inadequate maintenance. It is imperative to maintain existing stormwater facilities and remove accumulated sediment and debris so they function as designed and limit erosion and other environmental impacts. Routine inspection and maintenance can keep overall maintenance and future capital costs to a minimum by avoiding large repair or replacement projects.

A summary of specific and representative observations is provided below.

- Existing roadside drainage ditch along SW Kingston Drive full of sediment, debris, and overgrown vegetation at numerous locations. Representative of similar conditions observed along other park roadways. Maintaining these facilities by removing debris and sediment will increase conveyance capacity and mitigate uncontrolled overland flows.
- Embankment below SW Kingston Drive appears to be very steep and cannot support adequate vegetation. Proper vegetation cover reduces erosion and sediment transport with runoff.
- Existing drainage channels and culverts flowing along and under the zoo rail alignment are not functioning as originally intended due to sediment accumulation. Existing crib walls supporting the track bed area also being degraded by saturated soils resulting from the poor drainage. A previous study looked at the conveyance systems and completed geotechnical borings to identify and prioritized drainage improvements and retrofit repairs to reinforce the crib walls.
- Observed water seeping out from slope above SW Sherwood Blvd.
- Concrete channel that parallels west side of SW Sherwood Blvd between the water reservoirs and the Rose Garden experiencing differential settlement with separated joints, disrupting flow of drainage.
- Metal bar debris barriers have been installed within natural drainage channel upslope of train station. Buildup of debris has redirected flow to form a new channel and erosion around barrier.

- Multiple channel inlets appear to be blocked with debris.
- Drains at the bottom of SW Sherwood Blvd near the gate have a history of repeatedly clogging with leaves.
- Drainage system at Pittock Mansion has a history of repeatedly clogging.

Infrastructure Improvement Actions

- Portland Parks & Recreation has allocated approximately \$1M toward infrastructure improvements throughout Washington Park
- Record documents and institutional knowledge limited, and initial investment should be made to thoroughly inventory existing infrastructure of water, sanitary and surface water systems
- Older water systems are susceptible to leaks, particularly in areas of geologic instability that strain pipe joints. Leaks can be costly both for the water bill and aggravating slope instability by saturating site soils. Field locate and map mainlines and control valves. Verify operation of valves and test water lines and irrigation systems for leaks. Prioritize repair and replacement of damaged pipes and valves. Evaluate pipe networks and add isolation valves as appropriate to mitigate water loss and damage with enhanced response to future breaks, or to allow continued water supply during maintenance or repair on other parts of the system.
- The investigation should quantify storm drains, storm lines, and culverts. The age and condition can be evaluated by scoping lines and through visual observation. Deficiencies in pipe capacity, flooding roadways and parking lots, and deteriorated drainage channels requiring restoration can be identified with recommendations for corrective action of maintenance or repairs.
- The City constructed a subsurface drainage system network of tunnels and curtain drains in the 1950s under the current Rose Garden to mitigate geologic instability. Record drawings provide a rough layout of the network, but it is not clear how much access is available for inspection and maintenance. The seeps and wet soil conditions observed on the slope below the Rose Garden, the Amphitheater, and along SW Sherwood Blvd suggest the performance of the drainage system may be compromised. Prioritizing inspection and repair of this system may mitigate a number of deficiencies observed in this area.
- Clean all inlets, outlets, and culverts that are 50 percent blocked.
- Develop and implement an operation and maintenance plan to maintain existing infrastructure. A proactive maintenance program of existing utilities can mitigate future large capital expenditures.



**Geotechnical Narrative
Washington Park Master Plan
Prepared by GRI for PLACE Studio**

(September 26, 2017)

The majority of Washington Park is located on either an ancient landslide, a historic landslide within the larger ancient landslide, or an area considered to have a moderate to high risk for landslides and slope instability. The existing known landslides and the susceptibility to landslides within most of the park will need to be considered when planning development, such as grading, road widening, or construction of new structures. Stormwater management can significantly affect areas susceptible to landslides. Additionally, earthquake-induced displacements can occur in areas of existing landslides and on steep slopes.

The effects of grading on landslides and slope stability will need to be evaluated for design of projects, such as a terraced parking area at the South Entry or expansion of the maintenance facility building. Road widening or construction of new parking areas, such as additional parking on SW Fischer Lane, can adversely affect the stability of the slopes and should be evaluated as part of the planning and design of specific projects.

Structural support for new buildings will need to be provided by mat foundations due to landslide and seismic slope stability considerations. Conventional spread foundations tied together with grade beams may be considered if the structure can accommodate the estimated slope movement.

All stormwater collected on roofs and paved surfaces should be directed to the city stormwater system where possible. In portions of the park without sewer service, water collected in roadside ditches should be directed to drainage ravines through maintained stormwater culverts. On-site infiltration is not recommended due to the historic landslides and susceptibility to landsliding on slopes throughout the park.

Construction access and project staging will be significant considerations for projects located on steeply sloping and generally undeveloped areas, such as the proposed Canopy Walk, new trail connections for the rail-to-trail path conversion, and for repair of retaining walls supporting cut slopes along the existing rail alignment.

The stucco-covered exterior walls for the Zoo Bear House are visibly out of plumb on the north side of the building, as are concrete columns for the lower level. The condition of this structure will need to be evaluated.



THE
BOOKIN
GROUP
LLC

Land Use &
Institutional
Planning

Policy Analysis

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MEMORANDUM

DATE: July 25, 2017

TO: Jocelyn Bates, PLACE

FROM: Beverly Bookin and Debbie Cleek, The Bookin Group

SUBJECT: ANTICIPATED LEVEL OF LAND USE REVIEW FOR PROPOSED ELEMENTS OF THE WASHINGTON PARK MASTER PLAN (WPMP)

Per our recent telephone conference, we have reviewed the Multi-Hub Scheme that proposes 10 potential future projects for Washington Park as part of the Draft WPMP. The park is located in the Open Space (OS) Zone where park-related uses are allowed by right, and other uses – parking, retail sales/services, swimming pools – are Conditional Uses (CU). There are many uses – office, residential and industrial uses – that are not allowed at all. The Multi-Hub Scheme has uses that are both allowed by right and conditionally.

In general we do not believe that a Type III Conditional Use Master Plan (CUMP) review is necessary or beneficial to approve the projects that are CUs, given the uncertainty about timing and financing. Rather, it would be prudent to do one or more projects as individual Conditional Use applications, subject to a Type II (Minor) or Type III (Major) review, depending on the specific accessory use, size and potential impacts. It is based on this recommendation that we have reviewed each of the proposed projects to determine what type review would likely be required given the characteristics of each project. Moreover, since much of Washington Park lies within either the Environmental Conservation (“c”) or Preservation (“p”) overlay zones, a Type II or III Environmental Review (EN) may be triggered either concurrently with a CU or independently in cases where a proposed project is allowed by right.

It is recommended that the client apply for an Early Assistance appointment with the Bureau of Development Services (BDS) to confirm these determinations. Please be advised that our analysis is preliminary based on our superficial knowledge of the proposed WPMP. More specific information about each project – location, size, increased utilization – will be helpful to get BDS determinations upon which the Client can rely.

DEVELOPMENT	ANTICIPATED BDS REVIEW	NOTES
1. Visitor Center	Allowed by right in the OS zone as an accessory use to the park. A small gift shop and other amenities also would be allowed within the confines of the center.	Assumes that this use serves patrons already coming to the park.
2A. New Parking Garage	Parking additions require a Type III Conditional Use. The proposed site near the Zoo in in the environmental zone so it will likely trigger either a Type II or Type III Environmental Review.	Major geotech/structural engineering would be required to construct a parking structure on a surface lot adjacent to the Zoo due to landslide issues.
2B. Reconfigure Surface Parking Lots	Reconfiguring the existing parking is an alteration to an existing CU.* Would trigger a Type II or Type III CU if there is a minor increase or loss of parking spaces. If in the “c” overlay, also a concurrent Type II EN.	Would need to justify the retention of relocated parking spaces, given the Washington Park TMA’s multi-modal transit efforts and change in traffic flow patterns.

DEVELOPMENT	ANTICIPATED BDS REVIEW	NOTES
3. People Mover	A transportation improvement; not a land use matter.	Will need to be undertaken in collaboration with TMA.
4. Main Trail	Use is allowed by right. If the trail is located entirely in the “c” overlay zone and it meets certain development limits, it will be exempt from EN review. Trails not meeting one or more of these standards would be subject to Type II EN.	To be exempt from EN Review, trails in the “c” zone must be in public ownership, unpaved (except at steps), a maximum of 30” wide and a maximum 20% grade.
5. Shared Street: Shuttle and People	No CU required if all work involves maintenance and re-striping of existing roads.	Assumes no new roadway construction or increase in impervious surface, which likely would trigger EN review.
6. Shared-Use Pathway	Accessory use is allowed by right as a Parks/Open Space Use. New paved path will require either a Type II or Type III EN based on size and location.	Assumes that such a path cannot meet the requirements for a trail provided above.
7. Food Options	Type III CU required, as this is one of the accessory uses in Parks/Open Space Use clearly identified as requiring a new CU review regardless of size	The concern here is that any food options would independently draw patrons into the park that otherwise would not be there, rather than as an accessory use for people already there.
8. Additional Gardens	“Botanical and community gardens” are allowed by right in the OS Zone, including gardens inside of a new building. This has been confirmed in the recent Portland Japanese Garden.	Adding capacity for events such as weddings, or concessions to the indoor garden facility would likely trigger the need for a Type III CU, since Retail Sales/ Services is a CU in the OS Zone. Such a venue serves patrons who might not otherwise be using the park.
9. Upgraded Amphitheater	If the upgrades will not increase the physical size or capacity of the amphitheater or number of events, than this should be considered maintenance and allowed by right. Otherwise Type II or Type III Conditional Use, depending on the increase in size/capacity/number of events or number of attendees at events.	The 10% rule applies here, e.g., a change of 10% or less in venue size/capacity/ number of events from the current would be reviewed as a Type II CU. Over 10% would be reviewed as a Type III CU.

DEVELOPMENT	ANTICIPATED BDS REVIEW	NOTES
10. Forest Canopy Walk	Use is allowed by right as a trail. Development might need an EN depending on amount of ground area disturbed to construct the walkway.	Check use determination of the forest canopy walk at Leach Botanical Gardens. If trail includes a covered portion used for small events it would be considered a Retail Sales/Service use, triggering the need for a Type III CU.
11. Maintenance Office and Yard Expansion/ Demo Bear House**	Expanded interior and exterior maintenance facilities are allowed by right as an accessory use if accommodating maintenance staff and equipment working inside the park. Expansion of the exterior development area may trigger a CU. Offices for PPR staff working outside the park would be considered Office Use, which is not allowed in the OS zone.	Demolition of a building does not require land use review. However, the Bear House is listed the City's Historic Resource Inventory so the demolition permit approval will be delayed for 120 days.

* Assumes that the existing parking spaces in the park are an existing conditional use because many of the parking spaces were included in the CUMP for the Zoo.

** Development not shown on Multi-Hub Scheme.

FOREST CANOPY WALK

CASE STUDY

Morris Arboretum | Philadelphia, Pennsylvania

“Out on a Limb” Tree Canopy Walk

- Bird’s-eye view of the forest.
- Fun way to learn about important trees in our environment.
- Fully wheelchair accessible.
- Canopy walk does not touch or harm the trees.
- Built with sustainable materials.
- Lightweight structure can be relocated as trees grow.
- 450 feet long, 50 feet above the ground.
- Accommodates 100 people





Tree canopy walk. Morris Arboretum | Philadelphia
The bridge to the bird's nest gives kids a unique experience.



Tree canopy walk. Kew Gardens | London
Get a bird's eye view of the forest.



"Out on a Limb" Tree Canopy Walk. Morris Arboretum | Philadelphia
The canopy walk is accessible to all.



FOREST CANOPY WALK EXAMPLE FOR WASHINGTON PARK

A forest canopy walk will give visitors a different view of nature and the forest along a series of accessible, raised walkways, bridges and platforms that move between and around the trees and their canopy. The one shown on the map is a concept only. More study is needed to find the best location that provides optimum access and educational experiences for all.

"I'm most excited about the Canopy Walk. Conveniently near the arboretum and forestry center!"

"Prefer unique activities like the forest canopy walk. There are lots of parks and green spaces in and around Portland, but Washington Park is unique because of the different attractions/amenities."

-Washington Park Master Plan Update outreach survey results

