



# PORTLAND OFF-ROAD CYCLING MASTER PLAN

2018

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## EXECUTIVE SUMMARY

### Purpose

This Off-Road Cycling Master Plan (ORCMP) provides the City of Portland with a foundation in identifying local off-road cycling needs and desired experiences, as well as current best management practices for planning, designing, building, and managing successful off-road cycling facilities. It presents a citywide roadmap for developing a connected, citywide system of trails and bicycle parks. This plan is intended to guide the City's investment in off-road cycling facilities over the next 15-20 years.

This Off-road Cycling Master Plan is conceptual. It does not change or create any City regulations or 'greenlight' any recommended projects. Future projects will require site-specific planning and community engagement; more detailed site analysis and design, environmental reviews; and funding for planning, construction and long-term operations and maintenance.

The project was undertaken by the Bureau of Planning and Sustainability, with its partner agencies Portland Parks & Recreation, the Bureau of Environmental Services, the Portland Bureau of Transportation, and the Portland Water Bureau. It reflects a comprehensive approach – in terms of the geography of the plan, the type of needs considered, collaboration among bureaus, and consideration of the City's overarching policy context. The plan provides a comprehensive strategy for the development and management of off-road cycling trails and facilities across the city, as well as citywide policy guidance for implementing the plan.

The overall system plan works to connect off-road cycling trails and facilities to each other to create more varied riding options for all Portlanders. It identifies ways to make it easy for people to access off-road trails and facilities using the city's paved bicycle network and transit. It also considers ways to leverage investments in trails and facilities to achieve multiple community goals, such as increasing overall recreational opportunities and access to nature, restoring natural resources and wildlife habitat, enabling more active transportation, and managing stormwater.

This Plan is an opportunity to implement a system of off-road facilities across the city. To that end, the system was developed to deliver an equitable geographic distribution of off-road cycling opportunities, but also a diversity of experiences, of skill levels, and opportunities for a range of ages. The system is intended to offer experiences citywide for the technical expert to the casual rider to families and kids. In this way, the system will reflect the diversity of experiences off-road cycling offers.

### Existing Conditions

Off-road cycling is currently allowed seven public locations in the City of Portland, all of which are owned by the City of Portland.

#### Natural surface trails

Forest Park, Mt. Tabor Park and Powell Butte Nature Park, which are managed as natural areas and together provide approximately 13.5 miles of shared-use hiking and biking trails.

#### Bike Parks

Portland has three bicycle parks, which include pump tracks, jump tracks, and skill parks, at Gateway Green, Ventura Park, and New Columbia.

Portland's existing off-road cycling facilities provide close-to-home opportunities for some local residents, but offer a limited range of off-road cycling experiences. Notable issues include:

#### Uneven geographic distribution

Existing off-road cycling facilities are predominantly sited in larger parks at the periphery of the city limits and are not equitably distributed and require many Portlanders to drive to them.

### Limited trail experiences

Existing off-road cycling trails lack the diversity that off-road cyclists seek in terms of width, alignment, surface, grade, and terrain. Existing facilities primarily provide trail experiences where cyclists mix with pedestrians, mostly on wider trails and fire service/maintenance roads.

## Community Priorities

Community input on the need and opportunities for off-road cycling around Portland was a key project component. A concerted effort was made to seek out a broad range of voices and perspectives through a variety of engagement formats.

The majority of community members who participated in the planning process were supportive of providing a system of off-road cycling facilities. There was broad support for trails and trail connections that provided opportunities for youth and families to access nature. Connections to schools, neighborhoods and transit were particularly important. However, there were mixed opinions about expanding, enhancing or establishing new trails in Forest Park and River View Natural Area.

Some common themes about the project or overall system were:

### Access

Respondents generally felt that having local access within neighborhoods and near schools was important. Facilities should be accessible by bike, on foot or via transit.

### Equity

Facilities should be distributed equitably across Portland. All ages and skill levels, particularly youth and beginner riders, as well as people using non-traditional bicycles, should have opportunities to ride and experience nature. The Plan should also provide more opportunities for walkers to be active outdoors, including families with strollers.

### Natural Resources

Most participants value protecting and enhancing the natural environment and wildlife habitat and avoiding adverse impacts on natural resources. This was true regardless of whether they supported the expansion or enhancement of off-road cycling facilities.

### Safety

Safety and appropriate design and management practices were listed as important considerations when shared use trails are recommended.

### Funding

Funding to establish new facilities and long-term maintenance were listed among stakeholder concerns. Several people mentioned the opportunity to partner with cycling groups to coordinate work parties and trail maintenance efforts.

### Best practices

Many people mentioned best practice examples in other communities as examples to strive for. Look to best practices and tools across the nation to create a visionary, yet reasoned approach to planning, designing and managing off-road cycling trails and facilities.

### Regulatory constraints

Some people cited concerns with regulatory constraints on some properties. Working within the context of City regulatory requirements will be important.

## Recommendations

The Off-Road Cycling Master Plan offers an opportunity to expand off-road cycling opportunities in Portland by creating an off-road cycling network that takes advantage of the city’s diverse urban and natural setting.

### Foundational Recommendations

1. Support the ongoing protection, restoration, and management of City natural areas. Engage the Portland community in natural area stewardship and educational programs.
2. Support the ongoing maintenance and enhancement of the City’s parks.
3. Develop parks and trails in underserved areas, where residents do not currently have safe and convenient access to parks, natural areas or trails.
4. Build the planned active transportation network, with an emphasis on the regional trail network and bikeways that serve people of all ages and abilities, to facilitate access to off-road cycling facilities by foot, bicycle and transit.
5. Expand the City’s network of natural surface trails for all users to expand recreational opportunities and meet community demand.

### System Planning

1. Distribute facilities equitably. Provide experiences across the city so that all residents can access close-to-home riding opportunities. Prioritize areas that are currently underserved by parks, trails, or other safe places to ride a bicycle. Focus on serving youth, communities of color, and lower income residents.
2. Use a scaled approach.
  - a) At the **citywide** scale, provide a few large anchor sites.
  - b) At the **district** scale, provide multiple mid-sized opportunities.
  - c) At the **neighborhood** scale, provide locally-accessible smaller opportunities.
3. Provide a range of facility types and riding experiences for riders of different ages and skill levels. To balance limited funding resources with the challenge of meeting community needs, prioritize natural and urban trails; and beginner to intermediate, family-friendly riding options.
4. Connect the system. Create a connected system of well-distributed trails and bike parks, accessible by bike and transit, to offer urban experiences and access to nature for all.

### Level of Service Goals

Scale	Trails	Bicycle Parks
<b>Citywide</b>	<ul style="list-style-type: none"> <li>• 2 to 3 trail experiences of at least 10 miles, urban or natural</li> <li>• Trails should provide a mix of beginner, moderate, and technically challenging experiences</li> <li>• Urban trail corridors link districts</li> </ul>	<ul style="list-style-type: none"> <li>• 1 citywide facility that includes beginner, moderate, and technically challenging options</li> <li>• 1 regionally-serving event facility</li> </ul>
<b>District</b>	<ul style="list-style-type: none"> <li>• 1+ trail experience of at least 3-5 miles per district</li> <li>• Focus on beginner-moderate challenge</li> </ul>	<ul style="list-style-type: none"> <li>• 2-3 facilities per district</li> <li>• Size can vary from small neighborhood options (2,500 – 8,000 sf) to larger (up to 1 acre) facilities</li> <li>• Focus on beginner to moderate challenge</li> </ul>
<b>Neighborhood</b>	Short connector opportunities or skill trails – see bicycle parks	<ul style="list-style-type: none"> <li>• Could include skill trails or bicycle parks</li> </ul>

### Range of Experiences

1. Provide a range of off-road cycling experiences for people of all ages and abilities, including children and beginner cyclists. This range of experiences can be provided within an overall trail and facility system or, ideally, within each trail system and facility itself.
2. Base the range and scale of experiences provided on community needs and priorities, participation rates, and trends in off-road cycling.
3. Plan, design, and maintain all trails, including paved and natural surface trails, with all intended users (such as walkers, cyclists, equestrians, and emergency responders) in mind. Pursue opportunities to expand or improve trail access for multiple user groups.
4. Incorporate continued assessment of current participation and latent demand for off-road cycling trails and facilities into future planning or surveying for the park and recreation system. Use trail counters and other monitoring techniques to understand use patterns.

### Trails

1. Carefully plan and design shared use trails to ensure they provide a quality, enjoyable recreation experience for all intended users. This requires understanding the existing and/or intended user groups, usage patterns, and user desires.
2. Designate trails as shared use (used by multiple user groups) or single use (one user type allowed) on a site-specific basis, depending on considerations like user safety, impacts on natural and cultural resources, public input, and need.
3. Use best practices in trail design to provide safe experiences for all users.

### Bike Parks

1. This plan identifies fourteen additional bike parks to provide small, local opportunities for neighborhoods; larger, district-scale parks; and citywide opportunities.

### Competition Venues

1. Continue to provide location(s) for off-road cycling events and competitions.
2. If races or competitions are allowed on City facilities, develop an event protocol that provides guidance and balances this use with other park uses, environmental conditions, and the needs of the local community.

### Skill Progression and Rider Safety

1. Based on an effective community engagement process, design trails and bike parks to provide desired opportunities for all intended users.
2. Design trail systems and bike parks to allow skill progression, so riders can use trails and features that are appropriate to their skill level. Progressive facilities minimize risk while providing fun and compelling experiences for a variety of users.
3. Where appropriate and desired, incorporate natural or prefabricated skill features to skill trails or bike parks to add variety and skill progression opportunities.
4. Incorporate best practices for rider safety that provide riders with indications of the level of technical difficulty, options for diverting around technical features, and safe-fall zones for technical sections.

### Recommended Locations

This Plan recommends improvements at all existing off-road cycling facility locations as well as the development of 19 additional trail and bike park locations and three urban off-road cycling trail corridors. These locations were selected based on community input, the needs assessment and level of service goals, site screening process, and technical analysis. These concepts will require further design refinement, robust environmental review and permitting, and community input prior to funding and construction.



## Forest Park

### Management

1. Expand and enhance a comprehensive education and outreach program regarding trail rules and etiquette for all trail users. Improve signage for wayfinding and trail use expectations.
2. Increase resources and partnerships for restoration, management, enforcement and trail maintenance.
3. Monitor impacts of trails and recreation use on vegetation, wildlife and users.
4. Practice adaptive management, including trail closures, to address unintended negative impacts. Decommission unsanctioned trails.

### Planning

5. Develop a comprehensive trail plan that addresses pedestrian, cyclist, equestrian, emergency responder, and maintenance access needs; trail maintenance and restoration, trailhead access and facilities; and identifies desired future improvements.

### Design and Development

6. Recognize the role of Forest Park as a regionally significant ecological, recreational, and educational resource. Recognize that the unique natural quality of Forest Park makes it popular and cherished place to recreate, learn and reflect.
7. Design and develop any trail changes in ways that align with the goals and strategies in the Forest Park Natural Resource Management Plan, including the Goals for Trail Management, the Northwest Hills Management Plan, and the Greater Forest Park Conservation Initiative.
  - a) Use the Management Units (which divide the park into North, Central, and South management units) and the vision for each unit to guide planning and recommendations. Manage recreational use intensity on a gradient ranging from the most intense in the South unit to the least intense in the North unit.
  - b) Adhere to implementation procedures and approval criteria established in the Natural Resource Management Plan.
8. Design and develop any improved off-road cycling access in Forest Park in ways that meet multiple community and ecological goals and foster improved environmental and recreational conditions in the park.

### Environmental Preservation and Restoration

9. Achieve a net ecological benefit through implementation of Plan recommendations.
10. Pursue opportunities to pair enhanced recreational access with restoration of habitat and water resources, particularly as established in the park's Desired Future Conditions and Ecological Prescriptions.
11. Avoid adverse impacts to areas of park with highest ecological function and value, including the North unit, interior forest, the Balch and Miller Creek Watersheds, the Newton Wetlands and Doane Lake, and rare plant and animal communities. In other areas, plan any new trail alignments or trail management activities to result in the least adverse impact to sensitive habitat areas.

### Off-road Cycling Access

12. Continue to allow off-road cycling where currently allowed, except where the Off-road Cycling Master Plan recommends decommissioning trails for environmental reasons.
13. Recognize cycling as a recreational activity that is appropriate within Forest Park, if provided sustainably, responsibly and in accordance the park's management goals.

14. Enhance and expand appropriate opportunities to ride a bicycle off-road within Forest Park, see *Trail Improvement Concepts* below.
  - a) Enhance cross-country cycling experiences, which are best suited to the topography and character of the park, ideally on longer contoured trails.
  - b) Focus on opportunities to create narrow to mid-width cross-country trails, which are currently limited.
  - c) Create loops, ideally stacked loops, to provide a variety of riding options and lengths. *Note, the length of a typical cross-country ride is approximately 10 miles.*
15. Support and build partnerships with park users and community organizations (including the Forest Park Conservancy, the Forest Park Alliance, and the Northwest Trail Alliance) for trail construction and maintenance, park restoration and enhancement, and education.

#### **Pedestrian Access**

16. Recognize the need for pedestrian-only trail experiences. The Trail Improvement Concepts maintain the highest use pedestrian-only trails (the Wildwood Trail, Maple Trail, and all pedestrian-only trails in the Southern management unit) as pedestrian-only.
17. Consider the need or desire for pedestrian access when determining the design and designation (e.g. shared-use versus single-use) of future trail improvements.

#### **Emergency response and maintenance access**

18. Maintain maintenance and emergency access routes in the Park.
19. Recognize that fire lanes and maintenance access road (Trail Type N) were designed, constructed, and intended for use by emergency and maintenance vehicles, which impacts the grade, width, and surface of these routes. Although various walkers, runners, cyclists, and equestrians also use these trails, they are intended for access by park maintenance and first responder vehicles.
20. Consider fire lanes and maintenance access roads separately from the inventory of trails because of the differences in purpose, built characteristics, and management responsibility.
21. Improve the contouring, surface, width, and clearing of fire lanes and maintenance access roads to provide a safer and more sustainable experience for all users. Prioritize improvements to fire lanes that require ATV-only access, as the lower width and clearance requirements for these fire lanes are more compatible with the narrow trail experience preferred by most recreational users (compared to fire lanes that are designated for brush- or truck-access).

#### **Trail Improvement Concepts**

These recommendations focus on initial areas where a) off-road cycling trail access could be improved in ways that meet the goals outlined above; b) impacts to other users would be minimized; c) habitat and natural resources could be protected or enhanced.

22. Improve Firelane 1 and build a new trail parallel to Highway 30 (Concept D)
23. Improve Firelane 4 and open it to off-road cycling (Concept C)
24. Improve cycling access to the park from the St. John's Bridge (Concept F)
25. Build a new trail south of NW 53rd Drive (Concept E)

## River View Natural Area

### Interim Restoration and Trail Management

1. Continue to implement the ecological prescriptions of the River View Natural Area Management Plan, including continued stream and habitat restoration, to move towards the desired future condition of the natural area.
2. Develop interim guidance for the management of existing demand trails until construction of the Access and Management Concept begins. Base this guidance on adopted City policy for the site, best management practices, latest research on ecological impacts of recreational trail use, and the potential for mitigation of impacts through adaptive management techniques (such as trail closures, rerouting, use restrictions, etc.).
3. Continue the interim prohibition of off-road cycling until sustainable trails to adequately accommodate off-road cycling are identified or developed. Any proposed addition of off-road cycling use will require appropriate land use review prior to construction of trail improvements.

### Trail Design

4. Complete detailed alignment planning and trail design for the natural surface trail loop described in the River View Natural Area Management Plan's Access and Management Concept as a model of a safe and sustainable shared-use trail, for cross-country off-road cycling, walking, running, and enjoyment of nature.
5. Design trails to protect core habitat while meeting best practices for sustainable stormwater management, to reduce impacts on streams and important fish and wildlife habitat.
6. Determine the detailed trail alignment in consultation with a multi-disciplinary design team, including environmental and natural resource experts, off-road cycling trail designers, and engineers or other technical specialists. Involve community stakeholders, including potential trail users, in the trail design process.
7. As part of the trail design process, estimate the anticipated levels of use by pedestrians and off-road cyclists. Use these estimates to inform trail design, construction techniques, and management strategies, including the designation of trails as shared- or single-use.
8. Design trails using best management practices appropriate to the natural area's topography, environmental assets, and expected level of use by pedestrians and cyclists. Best practices should include those in the River View Natural Area Management Plan, this Off-road Cycling Master Plan, and Portland Parks & Recreation trail design best management practices.
9. If the City cannot identify a sustainable shared-use trail alignment that is consistent with best management practices while meeting site objectives, evaluate alternative approaches and management strategies (such as directional designations, time- and user-based restrictions).

### Trail Development

10. Prior to development, secure sufficient funding to build a well-designed, sustainable trail that will limit potential negative impacts, reduce maintenance costs, and serve relatively high recreational use. Ongoing investment in trail maintenance will also be required to support user safety and address erosion or other adverse impacts.
11. Consider opportunities to build other recommended natural surface trails in western Portland either before, or in concert with, River View trail design and construction to help distribute the latent demand for off-road cycling experiences.

### Ongoing Maintenance, Monitoring, and Management

12. Develop a maintenance plan for the trail system that identifies who is responsible for performing maintenance activities; thresholds for unacceptable environmental impacts (disturbances) or safety risks; and methods to address these impacts.

13. Monitor trail use, including any safety or environmental risks, through on-site observation and/or community reporting.
14. Use adaptive management strategies (e.g. seasonal closures, trail improvements, education, conditional or permanent rerouting or closure of trails, use restrictions) to address unsustainable conditions or unacceptable impacts.

### Design with Nature

1. Apply ecologically sustainable best management practices and applicable Natural Resource Management Plans to the siting, design, construction, and maintenance of off-road cycling trails and parks.
2. Site and design trails and facilities according to the mitigation hierarchy of avoiding, minimizing, and then mitigating negative impacts.
3. Develop and maintain local design and management guidelines and construction specifications that reflect acknowledged best management practices and current science.
4. Pair enhanced recreational access with restoration of habitat, streams, and other natural resources.
5. Improve or decommission and restore existing trail segments that are unnecessary, poorly designed, unsustainable, or which negatively impact areas with the highest ecological function and value.
6. Locate off-road cycling parks (such as pump tracks) in developed parks, ideally in areas with no ecological value.

### Soil and Water Resources

1. Locate trails to avoid crossing streams, wetlands, and floodplain areas. Where no avoidance alternatives exist, design and construct trails to minimize and mitigate for impacts and follow applicable best management practices.
2. Site and design trails using best management practices for natural stormwater management to minimize soil erosion and help protect water resources.
3. Develop and implement specifications for low impact trail crossings of streams and drainages, based on best practices.

### Vegetation

1. Pair construction or improvement of trails with vegetation restoration through removal of invasive species and the planting of native vegetation.
2. Manage vegetation immediately adjacent to trails in concert with recreational access and safety (for example, vegetation may need to be pruned to allow safe clearances for trail users).
3. Use targeted plantings or fencing to deter trail users from venturing off-trail into sensitive areas.

### Wildlife and Habitat

1. Site and design trails using best management practices to maintain and improve habitat connectivity and limit impacts to wildlife.
2. Use adaptive management strategies, such as seasonal closures during migratory, mating or nesting seasons, where trail use would adversely impact species of concern.
3. Continue and expand monitoring of natural resources and fish and wildlife populations in the City's parks and natural areas. Use monitoring data to inform trail siting, design, and management.

### Planning, Design and Permitting

1. Consider opportunities for off-road cycling facilities in new or updated park master plans for locations recommended by the Off-road Cycling Master Plan.

2. Involve and stakeholders early in the design process to document equity issues as well as existing environmental conditions and to identify potential enhancement and mitigation opportunities.
3. Develop and maintain trail and bike park design guidelines that are based on best practices.
4. Ensure codes and permitting requirements for trails and bike parks forward goals to protect and enhance ecological health, provide recreational opportunities, support equity, public transparency, and steward public funds for facility construction and maintenance.

### Construction

1. Develop construction documents and specifications that reflect best practices in trail and bike park design as appropriate to the planned facility and site conditions.
2. Involve a multi-disciplinary design team in the development of construction documents, such as a bike park/trail designer; civil, structural and/or geotechnical engineers; landscape architects; and environmental and technical specialists. natural resource experts
3. Use qualified trail or bike park builders to perform or manage facility construction.
4. Clearly define the boundaries of construction, resource protection areas, staging areas, etc. during construction activities.
5. Manage construction activities to minimize exposure to disturbed earth during the wet season and near sensitive water resources.
6. Work within seasonal work “windows” and build trails and bike parks outside of breeding seasons for species using the site (i.e. avoid bird nesting season – see TEES Guidelines on Avoiding Impacts on Nesting Birds).
7. Minimize the spread of ecological/invasive species by cleaning tools, boots and equipment prior to entering the project area and make sure imported soil is weed free.

### Signage & Wayfinding

1. Provide public education that supports stewardship of the trail system and associated parks and natural areas. Recognize and support the need for continued education and enforcement of park and trail rules.
2. Use clear and consistent signage, maps, and public information to enhance user experience, minimize risk, establish rules and expectations, and promote stewardship based on best practices.

### Education & Programming

1. Pursue opportunities to partner with public, private, and non-profit organizations to provide educational programs and equipment to expand the accessibility of off-road cycling.
2. Prioritize partnerships and programs that increase accessibility for historically under-served communities.
3. Explore opportunities to expand existing City programs and partnerships, such as recreational classes and trips, Safe Routes to Schools, and the Schools Uniting Neighborhoods (SUN) Program, to incorporate off-road cycling instruction and opportunities.
4. Develop partnership agreements and protocols that document and support such programs.

### Maintenance

1. Create and maintain an inventory of off-road cycling trails and facilities across the City. Identify trail segments or facilities that do not meet current design guidelines and work to either restore or decommission these facilities based on system needs.
2. Identify and incorporate ongoing maintenance costs into planning for sites and operations budgets. Track maintenance activities as a basis for budget and resource planning.

3. Establish inspection and maintenance activity schedules and protocols. Perform regular maintenance on all facilities in compliance with maintenance plan protocols to ensure trails and facilities remain in a safe, rideable condition appropriate to their technical difficulty.
4. Use maintenance logs to identify trail segments or riding elements with chronic functional problems or unacceptable environmental impacts which should be addressed. For example, remedy or relocate problem trail sections rather than performing continuous maintenance to repair damage.
5. Use experienced staff, trained volunteers, or professional contractors, or a combination of these options, to conduct maintenance as appropriate.

### Stewardship

1. Support and build partnerships with park users and community organizations for trail and bike park construction and maintenance, park restoration and enhancement, and education.
2. Partner with trail-based organizations with expertise in planning, constructing, maintaining, and programming off-road cycling facilities.
3. Create formal partnership documents, such as Memorandums of Understanding (MOUs), to establish a framework of cooperation between the project owner and volunteer groups or organizations who will be assisting in the construction, maintenance and operation of a facility.
4. Encourage volunteer stewardship activities. Enhance trail stewardship programs, through improvements like increased use of volunteers and partnerships, additional volunteer training, trail adoption programs, tool libraries, and expansion of the City's Youth Conservation Corps.

### Management

1. Develop a Risk Management Plan, addressing both user risk and environmental risk, for each facility or type of facility.
2. Monitor trail and bike park use, including any incidents and accidents, and any safety or environmental risks. Encourage community reporting of safety risks. Use adaptive management practices to address any problem areas.

### Enforcement

1. Establish enforcement protocols that define the rules for facilities, associated penalties, and enforcement mechanisms.
2. Use the escalating management hierarchy address unsanctioned trail use and reinforce sanctioned trail use and etiquette.

### Funding

1. Develop funding strategies for site development and maintenance. Explore options for creative financing (such as grants, sponsorships and donations) to secure capital funds.

Figure 2. Recommended Off-road Cycling Locations

The Portland Off-road Cycling Master Plan includes recommended locations for three different types of places for off-road cycling:

- Natural surface trails
- Urban trail corridors
- Bicycle parks

These locations were chosen using a site screening process because they:

- Distribute opportunities equitably across the city
- Provide a range of riding experiences appropriate for various skill levels and ages
- Connect the entire city by bike or transit

**BICYCLE PARKS**

Bike parks, such as pump tracks, jump parks, and skill trails, are dedicated places for people of all riding abilities to practice their riding skills and have fun. They can be built on a portion of a property, or around the perimeter. For this master plan, bike parks were only considered in developed parks, not in natural areas.

**Parks with existing bicycle parks**

Improvements are recommended at these parks.

- A. Gateway Green
- B. Ventura Park
- C. New Columbia Bicycle Park

**Recommended future locations**

- D. Brentwood Park
- E. Central City
- F. Colonel Summers Park
- G. Creston Park
- H. Farragut Park
- I. Fernhill Park
- J. Gabriel Park
- K. Gates Park
- L. Hamilton Park
- M. John Luby Park
- N. Rutherford Park
- O. Pier Park
- P. Portland International Raceway
- Q. Rose City Golf Course or Glenhaven Park
- R. University Park



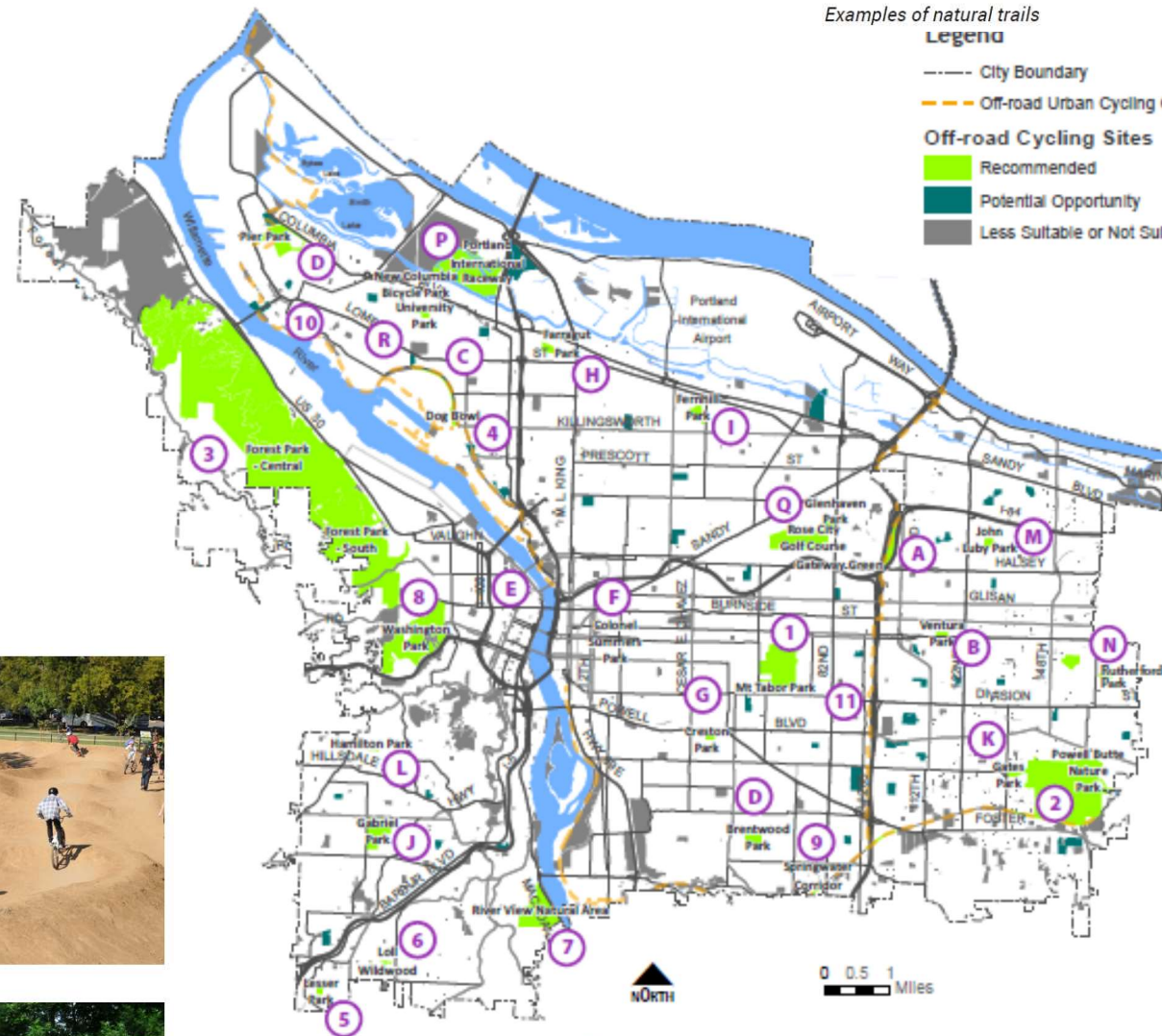
Pump track



Skill trail



Examples of natural trails



**NATURAL SURFACE OFF-ROAD CYCLING TRAILS**

Dirt trails in parks or natural areas could be designed exclusively for people biking, or for both biking and walking. The plan requires that trails be designed according to best practices for user safety and environmental sustainability.

**Parks with existing natural off-road cycling trails**

Improvements are recommended at these parks.

- A. Gateway Green
- 1. Mt. Tabor Park
- 2. Powell Butte Nature Park
- 3. Forest Park

**Recommended future locations**

- 4. "Dog Bowl" at N. Willamette and N. Jessup
- 5. Lesser Park
- 6. Loll-Wildwood Natural Area
- 7. River View Natural Area
- 8. Washington Park

**URBAN OFF-ROAD CYCLING TRAILS**

Urban trail corridors could combine paved and natural surface trails to create longer and more varied riding experiences. Urban trails could include new natural surface trails or skill features parallel to trails or in adjacent parks.

**Recommended future locations**

- 9. Springwater Corridor
- 10. North Portland Greenway
- 11. I-205 Trail from the Springwater Corridor to Gateway Green

