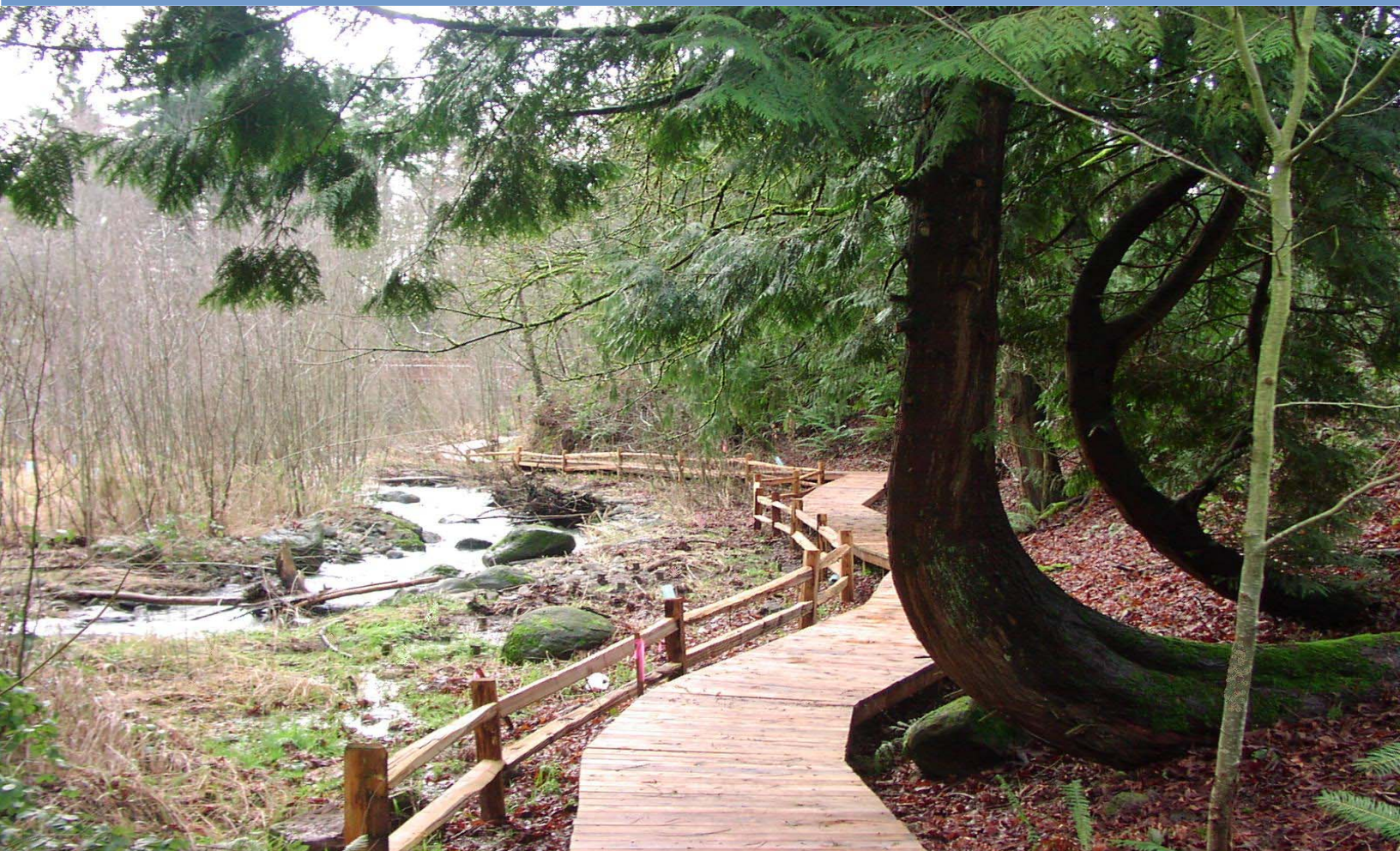


Happy Valley Pedestrian System & Trail Master Plan



Scott Creek Park Boardwalk Trail

JUNE 2009





ACKNOWLEDGEMENTS

Production of this report has been the collective effort of the following people:

City of Happy Valley

Sarah Mizejewski
Associate Planner

DKS Associates

Reah Flisakowski, PE
Senior Transportation Engineer

Harper Houf Peterson Righellis

Mel Stout, RLA, ASLA
Senior Landscape Architect

Lessa Millard, LAIT, ASLA
Landscape Designer

Technical Advisory Committee

Gail Curtis, ODOT
Carol Earle, City of Happy Valley
Lori Mastrantonio, Clackamas County
Michelle Healy, North Clackamas County Parks and Recreation District
Ric Catron, City of Gresham
Chris Alfino, City of Damascus

Citizen's Working Group

Brett Sherman
Gary Schreiber
Michelle Gould
Carolyn Hemmer
Loren Smith
Rita Baker
Sharon Burk

This project is partially funded by a grant from the Transportation and Growth Management (TGM) Program, a joint program of the Oregon Department of Transportation and the Oregon Department of Land Conservation and Development. This TGM grant is financed, in part, by federal Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), local government, and State of Oregon funds. The contents of this document do not necessarily reflect views or policies of the State of Oregon.

Table of Contents

Introduction	1
Public Involvement & Process	1
Trail Interest Groups	2
Trail Use Policy	5
Existing Pedestrian Facilities	12
Route Selection Criteria	22
Facilities	24
Pedestrian Master Plan	25

Introduction

The current Happy Valley Transportation System Plan¹ includes a pedestrian master plan that is primarily made up of planned sidewalks on the street system and a few regional trails. Happy Valley has been experiencing significant development and urban rezoning over the last decade. There is a strong need to plan for an expanded pedestrian system now before future development blocks the opportunity for a well connected system.

The Happy Valley Pedestrian System and Trail Master Plan provide a comprehensive strategy for developing an effective pedestrian network for the City of Happy Valley. The pedestrian network includes local sidewalks, paths, trails, multi-use trails and regional trails. Implementation of the Plan will promote the use of walking, bicycle and transit trips and present viable alternatives to vehicular travel within the City and surrounding area.

The Plan establishes the pedestrian policies that will guide the future development of the pedestrian system for Happy Valley. The policies cover such topics as use of the system, environmental protection, safety, planning and implementation. Project selection criteria are provided which represent the goals of the Plan. The Plan identifies the current pedestrian system needs and the future projects identified to achieve the goals of the City.

The plan focuses on the City of Happy Valley and the surrounding areas. The plan area is approximately bordered by Clatsop Street to the north, 177th Avenue to the east, Highway 212 to the south (east of 152nd Avenue), Sunnyside Road to the south (west of 152nd Avenue) and I-205 to the west. A plan area expanded beyond the Happy Valley city limits allows for an integrated pedestrian system. The plan is based on identified pedestrian connectivity needs within Happy Valley and the pedestrian network envisions by Metro, North Clackamas Parks and Recreation District, City of Damascus, City of Gresham and City of Portland.

Public Involvement & Process

The Plan was developed in close coordination with Happy Valley staff, citizen representatives and technical representatives from the surrounding communities. Two formal committees were formed to guide in the plan development:

- A Technical Advisory Committee (TAC) participated in reviewing the technical methods and findings of the study. The focus of this group was consistency with plans in adjoining jurisdictions, and consensus on new recommendations for the pedestrian system. The TAC was made up of agency staff from the City of Damascus, City of Gresham, North Clackamas County Parks and Recreation District, Clackamas County Land Use and Planning, and Oregon Department of Transportation. Three meetings were held throughout the planning process.

¹ Happy Valley Transportation System Plan, DKS Associates, Inc, adopted February 21, 2006.

- A Citizen’s Working Group (CWG) volunteered their time to serve as the representatives for the community. The focus of this group was to incorporate local walking and hiking knowledge and the needs of the community into the Plan. The CWG was made up of local walking and hiking advocates with a significant interest in the success of the Plan. Three meetings were held throughout the planning process to review interim study findings and policy issues that benefited from their direction.

These groups met regularly through the planning process to create policies, review interim work products, assist in developing pedestrian system solutions, and to refine master plan elements to ensure consistency with community goals.

A public open house was held in March 2009 at Happy Valley City Hall to gather community feedback on the draft Plan. The open house was well attended with over thirty participants. Residences provided feedback regarding the proposed trail corridors and policies for use of the pedestrian system. Several questions pertained to homeowners’ associations and their role in trail development and maintenance.

The Plan process included the following key steps:

- Inventory pedestrian system
- Create base maps
- Identify and contact trail interest groups
- Develop pedestrian and trail policies
- Develop route selection criteria
- Assess the pedestrian system current needs
- Identify pedestrian system future projects
- Draft Pedestrian System and Trail Master Plan

**Pedestrian Master Plan
Open House**

CITY OF HAPPY VALLEY
16000 SE Mast Drive
Happy Valley, OR 97086

Date: March 18, 2009
Time: 7:00pm-9:00pm
Location: Happy Valley City Hall
16000 SE Mast Dr.
Contact: Sarah Mizejewski
503.783.3811

Phone: 503.783.3800
Fax: 503.658.2174
E-mail: sarahm@city.happy-valley.or.us

Trail Interest Groups

This section presents the organizations and/or governmental agencies that have a local, regional or statewide interest in pedestrian and bicycle activities and facilities. These groups were contacted by City staff at the beginning of the planning process to inform them of the Plan and discuss their possible interest and involvement. Information gathered from the trail interest groups was incorporated into the Plan. A brief description of each group is provided.

NON-GOVERNMENTAL ORGANIZATIONS

Audubon Society of Portland

The Audubon Society of Portland is devoted to preserving wild birds and animals in Oregon. Its activities include recovering threatened and endangered species, invasive plant management, urban conservation and protecting critical wildlife areas. The Audubon Society of Portland is a resource for information on potential threatened and endangered wildlife within the Portland Metro area.

Bicycle Transportation Alliance

The Bicycle Transportation Alliance (BTA) is a non-profit membership organization working to promote bicycling and improve bicycling conditions in Oregon and southwest Washington. The BTA mission is to “creates healthy, sustainable communities by making bicycling safer, more convenient and more accessible.” The BTA strives to create communities where people can meet their daily transportation needs on a bike.

Clackamas River Basin Council

The Clackamas River Basin Council is a local voluntary group promoting “clean water, healthy streams and abundant fisheries in our watershed.” The group’s action plan includes stream improvement, wildlife habitat restoration, water quality assessment, invasive plant management and public outreach and education.

Happy Valley Hikers

The Happy Valley Hikers is a group of local citizens that meets several times a week to hike in Happy Valley and promote “health and friendship.” Its hikes range from easy strolls through city parks to aggressive hikes on Scouter’s Mountain, Mount Talbert and on steep trails through neighborhoods. A member of the Happy Valley Hikers served on the Citizen Working Group for the Plan.

Sierra Club Columbia Group

The Columbia Group serves as the Sierra Club’s Oregon chapter representing northwest Oregon. The group is comprised of over 11,000 volunteers. The group is committed to protecting northwest Oregon’s remaining natural areas within a major urban region and promoting outdoor activities. The group meets regularly for outings into nature including day hikes, flora and fauna-watching trips and conservation-oriented walks.

Three Rivers Land Conservancy

The Three Rivers Land Conservancy is a private group which strives “to inspire and involve people in the conservation of private natural land in the watersheds of the Clackamas, Tualatin,



and lower Willamette Rivers.” The Clackamas River is located along the south border of the Happy Valley Pedestrian Master Plan study area. The group frequently partners with other conservation groups, agencies and businesses to increase the amount of conserved land. Current projects located near the study area include the Abernethy Watershed near Oregon City and the Clackamas River Bluffs near Damascus.

GOVERNMENTAL AGENCIES

City of Damascus

The Draft Damascus Sub-Area Design Ideas (May 2008) and the Pleasant Valley Plan Map (January 6, 2005) were reviewed to ensure that proposed sidewalk and trail connections in the Happy Valley Pedestrian Master Plan align with planned trails to the east in Damascus. The City of Damascus provided a staff person to serve on the Technical Advisory Committee for the Plan.

City of Gresham

The City of Gresham’s parks system includes over 300 acres of park land, 840 acres of natural areas and over eight miles of trails. Proposed sidewalks and trail connections in the Happy Valley Pedestrian Master Plan study area will be reviewed to ensure alignment with planned trails to the east in Gresham. The City of Gresham provided a staff person to serve on the Technical Advisory Committee for the Plan.

City of Portland - Office of Transportation

The Portland Pedestrian Master Plan (June 1998) provides planned pedestrian routes and trails throughout Portland. The proposed pedestrian facilities were reviewed to ensure that future sidewalk and trail connections in the Happy Valley Pedestrian Master Plan align with planned trails in southeast Portland.

Clackamas County - Land Use and Planning

Land Use and Planning is a division of the Clackamas County Department of Transportation and Development. Land Use and Planning oversees the capital improvement program and system development charges for the County. Potential pedestrian and trail projects funded by Clackamas County would be implemented through these programs. Clackamas County Land Use and Planning provided a staff person to serve on the Technical Advisory Committee for the Plan.

Metro

Metro is an elected government which serves the greater Portland area. Its goal is to improve the livability within the region. Metro manages over 12,000 acres of parks and natural areas to protect water quality and provide wildlife habitat. Metro recently purchased 21 acres on Scouter’s Mountain that is located in northeast Happy Valley. Scouter’s Mountain is included in

Metro's East Buttes target area, one of the 27 natural areas identified for protection in Metro's 2006 Natural Areas bond measure. There are five proposed Metro regional trails within or near the Happy Valley Pedestrian Master Plan study area. Metro's Green Trails handbook offers guidelines for planning, designing, constructing and maintaining trails so that impacts on natural resources are avoided or minimized.

North Clackamas Parks and Recreation District

The North Clackamas Parks and Recreation District (NCPRD) provides parks and trail facilities with interest in interconnection of trails. NCPRD offers approximately 50 parks and green spaces to approximately 100,000 residents within the north portion of Clackamas County. The Happy Valley Pedestrian Master Plan study area is located within the NCPRD. The NCPRD provided a staff person to serve on the Technical Advisory Committee for the Plan.

Oregon Department of Forestry

The Oregon Department of Forestry is a state agency responsible for protecting and managing Oregon's forests to enhance environmental, economic and community sustainability. Their urban forestry program "helps Oregon communities plant, care for and manage urban forests, and works to foster public awareness of the contribution of urban forest ecosystems to quality of life, environmental and economic well-being in Oregon cities."

Oregon Parks and Recreation Department

Oregon Parks and Recreation Department (OPRD) is a state agency that promotes a system of trails and waterways to connect communities, recreation areas, and significant landscapes, and that allows for varied methods of transportation. The agency serves recreation providers (local, state, federal and private) with technical expertise on recreation trails (motorized, non-motorized and water trails). The agency also administers a number of trail-related grant funding programs.

Trail Use Policy

Trail use policies were developed to provide the City with priorities to direct its funds towards pedestrian projects that meet the goals of the City. The intent of the policies is to ensure trail safety and accessibility and to provide trail users with the necessary information about the usage of trail facilities. These policies focus on trail use which would apply to pedestrian facilities that are located off-street such as paths in parks, open spaces and natural areas. The trail use policies were reviewed by the Technical Advisory Committee and Citizen's Working Group for this project. These policies are incorporated within the pedestrian element of the Happy Valley Transportation System Plan.

It is the City's policy to:

Livability

Policy 1b: Encourage pedestrian accessibility by providing safe, secure and desirable pedestrian routes.

Multi-Modal Travel

Policy 3b: Require the construction of sidewalks on all streets within Happy Valley unless a variance is approved by the City due to environmental constraints. All schools, parks, public facilities and retail areas shall have direct access to a sidewalk.

Policy 3c: Develop bicycle and pedestrian plans that link to existing and planned recreational trails.

Policy 3g: Improve pedestrian access to transit as service demands increase in the future.

Policy 3h: Pursue the expansion of the regional and local trail system with new development.

Policy 3i: Implement regional alternative mode share targets to reduce the reliance on single-occupancy vehicles.

Policy 3j: Require pedestrian and bicycle connections between neighborhoods to minimize out of direction travel. This is achieved with a well developed local street system and off-street trail system.

Trail Use

Policy 3k: Ensure trail uses are compatible to the natural area to protect the scenic and aesthetic values of the open space area.

Policy 3l: Restrict trails designated as a Pedestrian Trail to use by pedestrians (hikers) only. Restrict trails designated as a Multi-use Trail to use by pedestrians (hikers), bicyclists and other approved non-motorized/electrical wheeled vehicles, including wheelchairs. Authorized acceptable motorized/electrical vehicles on all trails should include vehicles used for emergency and maintenance purposes. Multi-use trail use should be prohibited for bicycle racing and skateboarding to ensure the safety of trail users and the protection of natural resources.

Policy 3m: Allow trail users to bring pets with exception to designated "No Pet" areas. All pets must be kept on a leash no longer than six feet and kept in complete physical control by their owner at all times. Owners shall be responsible for cleaning up after their pets.

Policy 3n: Monitor trail user needs to ensure their concerns, quality of experience and compatibility with various uses are addressed. Walking (hiking) users should be the primary trail users in order to reduce environmental impacts. To ensure that all trails will be accessible to walking (hiking), non-walking users may be restricted or redirected if adverse impacts to user safety occur.

Policy 3o: Restrict use of the trail system within City parks to the set park hours. Currently, City parks are closed from dusk until 6:00 a.m. Use of the trail system located outside City parks should be limited to one hour before sunrise and one hour after sunset.

Convenience

Policy 3p: Prioritize personal safety for the trail system. Trail features should be provided, when appropriate, to increase user safety. Trail safety features to consider include:

- Lighting on paved trails
- Signage for location and trail direction
- Emergency call boxes
- Enforcement of trail regulations
- Public monitoring and patrol



Mount Talbert Nature Park

Policy 3q: Provide signage along pedestrian and multi-use trails with directions to destinations and mileage (consider kilometers).

Policy 3r: Provide signage on all roadways where the trail crosses the roadway alerting motorists of the trail crossing and the presence of cyclists and pedestrians.

Policy 3s: Select roadway and trail crossing locations to reduce pedestrian safety issues (such as poor sight distance). Traffic control measures may be necessary to warn roadway vehicles and trail users of approaching intersections/roadways and to facilitate the safe pedestrian crossing of the intersection/roadway.

Policy 3t: Clear vegetation at trail intersections within natural areas to provide adequate sight distance.

Policy 3u: Clearly mark known hazardous conditions such as sharp curves, low clearance and poor sight distance for trail users.

Environmental Protection

Policy 3v: Establish a buffer area adjacent to all environmentally sensitive habitat areas. The purpose of this buffer area should be to provide for a sufficient area to protect the environmentally sensitive habitat from degradation resulting from trail use and should be compatible with the continuance of such habitat areas.

Policy 3w: Encourage users to remain on designated trails. The creation and use of trails not part of the trail system should be discouraged. This should include short-cut trails or trails to adjacent private property.



Policy 3x: Encourage users to limit contact with creeks, streams and natural waterways. Users should not be allowed to enter waterways (swim, bathe, etc.), obstruct or divert waterways, and deposit any materials or substances near or in waterways.

**Mt. Scott Creek Trail at
Scott Creek Park**

Policy 3y: Support trail education including proper trail etiquette and low impact use to reduce negative trail use impacts.

Design and Management

Policy 3z: Provide trails that are enjoyable, educational, safe, and compatible with habitats and managed in a sustainable manner.

Policy 3aa: Maintain the scenic quality of the area and minimize operations and maintenance costs with new trails.

Policy 3ab: Consider the construction of new trails within existing and newly acquired public land and open space.

Policy 3ac: Provide accurate and up to date trail maps and use guidelines to citizens and visitors.

- Policy 3ad: Provide trail signage throughout the City with a cohesive design to brand the City trail system and indicate to trail users that jurisdictional boundaries are being crossed.
- Policy 3ae: Consider pedestrian safety at intersections and designated mid-block pedestrian crossings. Pedestrian design elements (painted crosswalk, pedestrian signal) and traffic calming measures (speed hump, raised median) may be appropriate.
- Policy 3af: Provide a high quality pedestrian environment along sidewalks to encourage walking trips. Design elements such as a landscape buffer or street trees, benches, lighting should be considered.

Citizen Interests

- Policy 3ag: Consider trail amenities to ensure the trail system is accessible and enjoyable for everyone. Trailheads (for major trails) serve as primary access to the trail system. Trailhead amenities should be considered such as parking areas, restrooms, drinking fountains, trash cans, information kiosks (maps and points of interest), and destination signage with mileage. Other trail amenities should be considered such as mileage markers along the trail, roadway signage at under/over-crossings, markers at all trail access points, way finding signage, drinking fountains, viewpoints, picnic tables and resting areas (benches).

Adjacent Property Interests

- Policy 3ah: Consider potential impacts to adjacent properties regarding trail placement and design. Design aids such as signs, vegetative screen and fencing should be considered to limit potential impacts such as noise and significant activity levels.
- Policy 3ai: Provide signage to discourage trespassing by trail users onto adjacent property where appropriate.



Mt. Scott Creek Trail South of King Road

- Policy 3aj: Encourage trail use and volunteer trail maintenance assistance to help reduce vandalism and maintain safety.

Continuing Maintenance

Policy 3ak: Retain maintenance responsibility records for each trail segment in Happy Valley. The maintenance responsibility of the trail system varies but is typically the responsibility of the Home Owners' Association, North Clackamas Parks and Recreation District or the City of Happy.

Policy 3al: Ensure the trail system is maintained which includes but is not limited to:

- Caring for plants - weeding, pruning, watering
- Keeping trails clear of down trees, danger trees and limbs, washouts, etc.
- Cleaning storm water facilities
- Repairs to foot bridges, benches, signage, trailhead amenities
- Maintaining screening and fencing



Kensington Bluff Pathway

Policy 3am: Enforce pedestrian system maintenance agreements with established homeowners' associations that are established or through other negotiated mechanisms.

Liability

Policy 3an: Ensure the trail system implements risk management strategies. These strategies may include:

- Avoid placement of trails near hazardous conditions
- Develop a list of permitted trail uses and the associated risks
- Construct trails within design guidelines
- Conduct regular trail inspections
- Take quick action to remedy identified problems
- Develop a plan for medical emergencies on the trails

Policy 3ao: Print a trail user liability release for the City of Happy Valley on all pedestrian materials and maps provided to the public.



Policy 3ap: Hold users liable for any damage incurred to the trail system by themselves, their children or their pets, in addition to any penalties imposed for the violation.

Planning and Implementation

Policy 3aq: Pursue the acquisition of open space and right-of-way land to provide trail connections through vacant private parcels to create a complete trail system.

Policy 3ar: Pursue easements from adjacent property owners to implement the adopted Happy Valley Pedestrian Master Plan and to provide adequate access to the trail system and pedestrian network.

Schools and Parks

Policy 4b: Designate safe and secure walking and bicycle routes for children between schools and residential neighborhoods in Happy Valley.

Policy 4c: Designate safe and secure walking and bicycle routes between parks and other activity centers in Happy Valley.

Accessibility

Policy 6a: Design and construct transportation facilities to meet the requirements of the Americans with Disabilities Act.

Existing Pedestrian Facilities

To assess the current adequacy of the pedestrian system in the study area, an inventory was conducted in July and August 2008. The pedestrian system includes local sidewalks, paths, trails, multi-use trails and regional trails. The inventory serves as the basis to identify the opportunities and constraints of the existing pedestrian system. Other existing conditions used to help develop the future pedestrian plan were evaluated, such as transit routes and traffic signals. The inventory summary for sidewalks and trails are summarized in the following sections.

Sidewalks

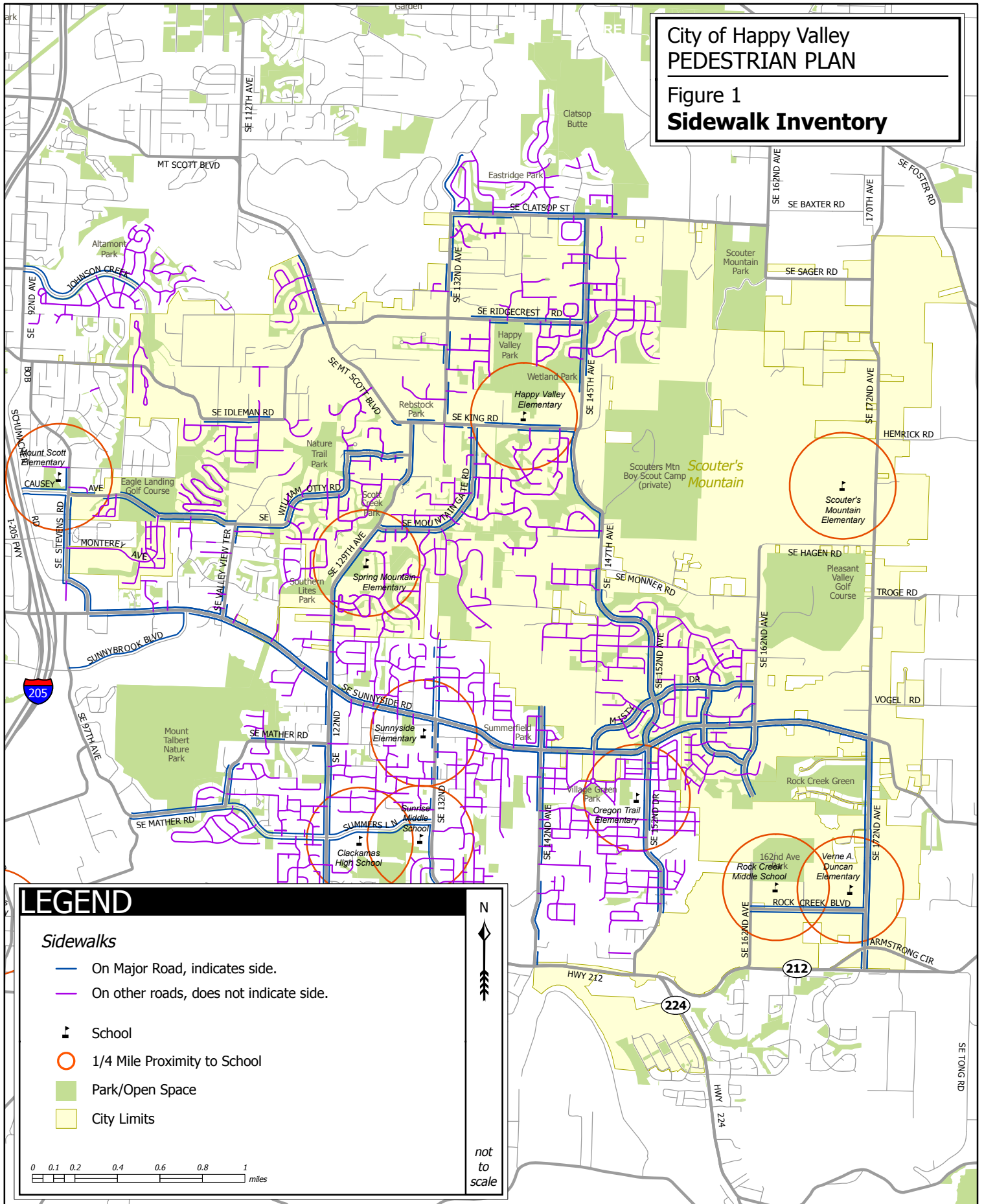
An inventory of existing sidewalks on all public roadways in the Plan area was undertaken to assess the current needs of the on street pedestrian system. The existing sidewalk inventory is shown in Figure 1. In general, arterials and collectors have sidewalks present on at least one side of the roadway. The presence of sidewalks on local and neighborhood streets is typically dependent on the age of the neighborhood or development. Most older neighborhoods and some newer neighborhoods outside the city limits lack sidewalks which force pedestrians to walk on the roadway shoulder. Newer neighborhoods within the city limits provide a sidewalk on both side of the street.



**Ridgecrest Road
West of 132nd Avenue**

City of Happy Valley PEDESTRIAN PLAN

Figure 1 Sidewalk Inventory



There are several existing deficiencies in the sidewalk system which prevent adequate pedestrian connectivity to key pedestrian destinations such as schools, parks, retail centers and bus stops. Sidewalk connectivity is relatively good near most schools and community services. However, there are locations where sidewalk coverage could be more complete and gaps could be filled to provide greater connectivity. Gaps within the sidewalk network discourage pedestrian use and put pedestrians at an increased safety risk by requiring them to share the roadway with vehicles.

As shown in Figure 1, key existing pedestrian sidewalk deficiencies include:

- Sidewalk gaps along King Road between 132nd Avenue and 145th Avenue create difficulty for students who wish to walk to Happy Valley Elementary School.



**King Road
West of 132nd Avenue**

- The lack of sidewalks along 129th Avenue north of Mountain Gate Road prevents adequate pedestrian access to Spring Mountain Elementary School, Scott Creek Park and Southern Lites Park.
- Sidewalk gaps along Ridgecrest Road and 145th Avenue limit connectivity for pedestrians destined to Happy Valley Park.
- The lack of sidewalks along 172nd Avenue near the planned Scouter's Mountain Elementary School significantly impacts pedestrian access to the school.
- The lack of sidewalks along 162nd Avenue and 172nd Avenue near the planned Verne A. Duncan Elementary School and the Rock Creek Middle School significantly impacts pedestrian access to the school. As the area develops, new roadways would be constructed with sidewalks which would improve the pedestrian system.
- Sidewalk gaps along 132nd Avenue south of Sunnyside Road prevent adequate pedestrian access between the residential neighborhood and community services and bus stops along Sunnyside Road.

- A lack of sidewalks on 162nd Avenue north of Misty Drive limits pedestrian access to community services and bus stops along Sunnyside Road.
- Sidewalk gaps along Valley View Terrace prevent adequate pedestrian access between the residential neighborhood and community services and bus stops along Sunnyside Road.

Trails

An existing inventory of paved and unpaved trails is shown in Figure 2. These trails include recreational trails in natural areas, park trails, connections within subdivisions and paved alleys. The trails within the Mt. Talbert Nature Park are primarily unpaved (as shown in Figure 2), however, short sections of the trail system are paved. Several trails within the study area are comprised of stairways due to the steep topography.

Table 1 summarizes the inventoried trails by name, ownership, maintenance, surface type, approximate length and location. The trail identification number coincides with the trails shown in Figure 2. In general, the City of Happy Valley owns most of the trails that have names, while those marked N/A are homeowner association owned and maintained with public easements over them.



Mount Talbert Nature Park

Table 1: Existing Happy Valley Trails

ID	Trail Name	Maintenance	Ownership	Type	Length	Location
1	Mt. Talbert Nature Park Trail	METRO and NCPRD	Happy Valley, NCPRD ⁽¹⁾ and METRO	Paved with some unpaved sections	20,100'	South of Sunnybrook Rd and east of 97 th Ave
2	Southern Lites Park Trail	NCPRD	NCPRD	Paved and unpaved	2,500'	East of 117 th Ave and north of Sunnyside Rd
3	Ashley Meadows Park Trail	NCPRD	NCPRD	Paved	600'	Connects Oregon Trail Dr and Park Tree Dr
4	Mt. Scott Nature Park Trail	Happy Valley Public Works Department	Happy Valley and NCPRD	Paved and unpaved	8,600'	North of William Otty Rd and west of Kimberly Way
5	Scott Creek Trail	Happy Valley Public Works Department	Happy Valley, Metro and N. Clackamas SD	Paved	5,450'	Near 129 th Ave at Scott Creek Ln
6	Mountain Gate Trail	Happy Valley Public Works Department	Happy Valley and NCPRD	Paved and unpaved	2,400'	Connects Mountain Gate Rd and Masa Ln
7	Happy Valley City Park Trail	Happy Valley Public Works Department	Happy Valley	Paved, unpaved and boardwalk	14,000'	Happy Valley Park
8	N/A	HOA	HOA	Unpaved	3,400'	East of Spring Mountain Dr
9	N/A	HOA	HOA	Unpaved	300'	Southeast of Rimrock Dr
10	N/A	HOA	HOA	Unpaved	250'	South of Caldera Ct
11	N/A	HOA	HOA	Unpaved	450'	South end of 134th Ave
12	Kensington Bluff	HOA	HOA ⁽²⁾	Paved, unpaved and stairs	3,250'	North of William Otty Rd
13	N/A	HOA	HOA	Unpaved	700'	Connects Isaac Dr and Mt Scott Blvd
14	Bella Casa	HOA	HOA	Paved and unpaved	6,250'	Connects 152nd Ave and Palermo Ave
15	Bella Casa/ Burgundy Rose	HOA	HOA	Paved	4,500'	Connects Palermo Ave and Misty Dr
16	Powerline Trail	HOA	HOA	Paved	3,250'	Within the powerline easement, connects Monner Rd to 142 nd Ave
17	Rolling Acres	HOA	HOA	Paved	300'	Connects 152nd Ave and Nia Dr

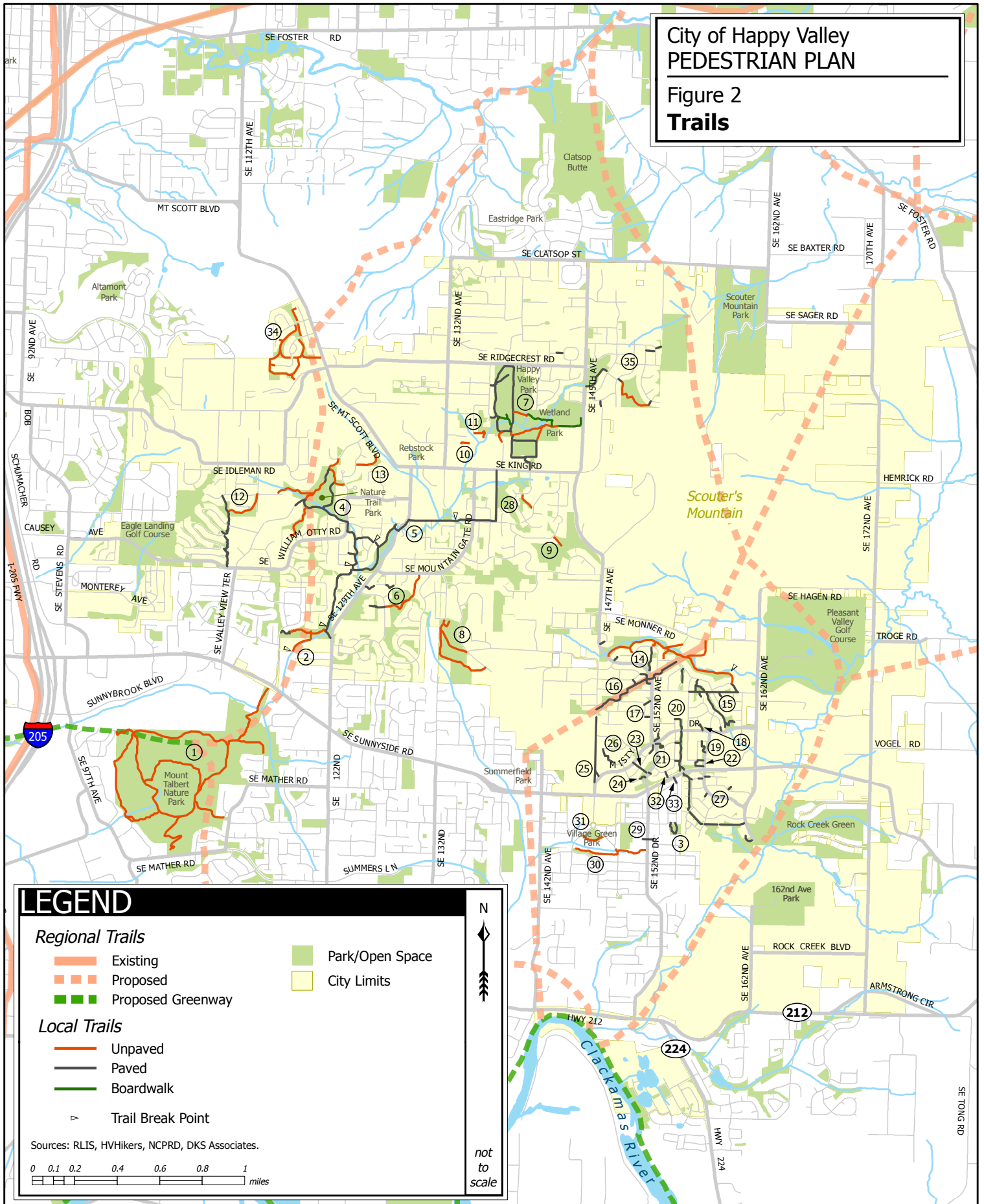
ID	Trail Name	Maintenance	Ownership	Type	Length	Location
18	Burgundy Rose	HOA	HOA	Paved	160'	Connects Sunrunner Ct and Misty Dr
19	Happy Valley Village	HOA	HOA	Paved	400'	Connects Nyla Way and 157th Ave
20	Sunrise Heights	HOA	HOA	Paved	1,800'	West of 155 th Ave and north of Sunnyside Rd
21	Sunrise Heights	HOA	HOA	Paved	900'	Connects Jubilee St and Shaunte Ln to 152 nd Ave
22	Happy Valley Village	HOA	HOA	Paved	500'	Connects Vivian Way and 157 th Ave
23	Sunrise Heights	HOA	HOA	Paved	450'	Connects Misty Dr and Kempton Ct
24	Sunrise Heights	HOA	HOA	Paved	160'	Connects 152nd and Autumnwood Ln
25	147 th Avenue Trail	HOA	HOA	Paved and stairs	200'	Connects Misty Dr and 147 th Ave north of Verlie St
26	Sunrise Heights	HOA	HOA	Paved and stairs	500'	Connects Page Park Ct and Donley Ln
27	Taralon	HOA	HOA	Paved	2,900'	Connects the Taralon neighborhood to the adjacent open space
28	N/A	HOA	HOA	Unpaved	430'	East of Mountain Gate Rd
29	N/A	HOA	HOA	Paved	270'	Connects 153rd Dr and Oregon Trail Elementary School
30	N/A	HOA	HOA	Unpaved	2,000'	Connects 152 nd Dr and Sieben Pkwy
31	N/A	HOA	HOA	Unpaved	600'	Connects Sieben Pkwy and Hines Dr
32	Sunrise Heights	HOA	HOA	Paved	150'	Connects Meadehill Ave and Sunnyside Rd
33	N/A	HOA	HOA	Paved	150'	Connects Honey Suckle Way and Sunnyside Rd
34	Lincoln Heights	HOA	HOA	Unpaved	5,200'	Connects the Lincoln Heights neighborhood to Mt. Scott Blvd, Idleman Rd and the adjacent open space
35	Jackson Hills	HOA	HOA	Paved	1,500'	Connects the Jackson Hills neighborhood to 145 th Ave and the adjacent open space

(1) NCPRD: North Clackamas Parks and Recreation District, a service district of Clackamas County government, community partner (volunteer dept).

(2) HOA: Homeowner's Association, with public easements over them.

City of Happy Valley PEDESTRIAN PLAN

Figure 2 Trails



LEGEND

Regional Trails

- Existing
- - - Proposed
- - - Proposed Greenway

- Park/Open Space
- City Limits

Local Trails

- Unpaved
- Paved
- Boardwalk
- ▲ Trail Break Point

Sources: RLIS, HVHikers, NCPRD, DKS Associates.

0 0.1 0.2 0.4 0.6 0.8 1
miles

not
to
scale

Traffic Control

The existing and proposed traffic signal locations within the study area are shown in Figure 3. Signal controlled pedestrian crosswalks are included at all existing traffic signals. All proposed traffic signals would also provide signal controlled pedestrian crosswalks. The proposed traffic signal locations are based on the draft Happy Valley Transportation System Plan (dated June 30, 2007) and the current draft Happy Valley Comprehensive Plan Map (dated August 29, 2008).

The purpose of identifying signalized traffic control is to show the existing and planned location of signalized pedestrian crossings. It is ideal for trails to cross arterial and collector roadways at signalized crossing when possible. The proposed traffic signal locations are based on planning assumptions and may be relocated or removed in future plans. Also, roundabout traffic control may be implemented at the proposed traffic signal locations, which would not provide signalized pedestrian crossings.

Transit Routes

The existing transit routes and bus stops within the study area are shown in Figure 4. Sunnyside Road serves as the key transit corridor in the study area with three transit routes (Route 155, 156 and 157). Minor transit routes provide service on Mt. Scott Boulevard west of 117th Avenue (Route 119) and in the Happy Valley “bowl area” (Route 157). Route 155 was recently extended to the east to 155th Avenue to serve recent development.

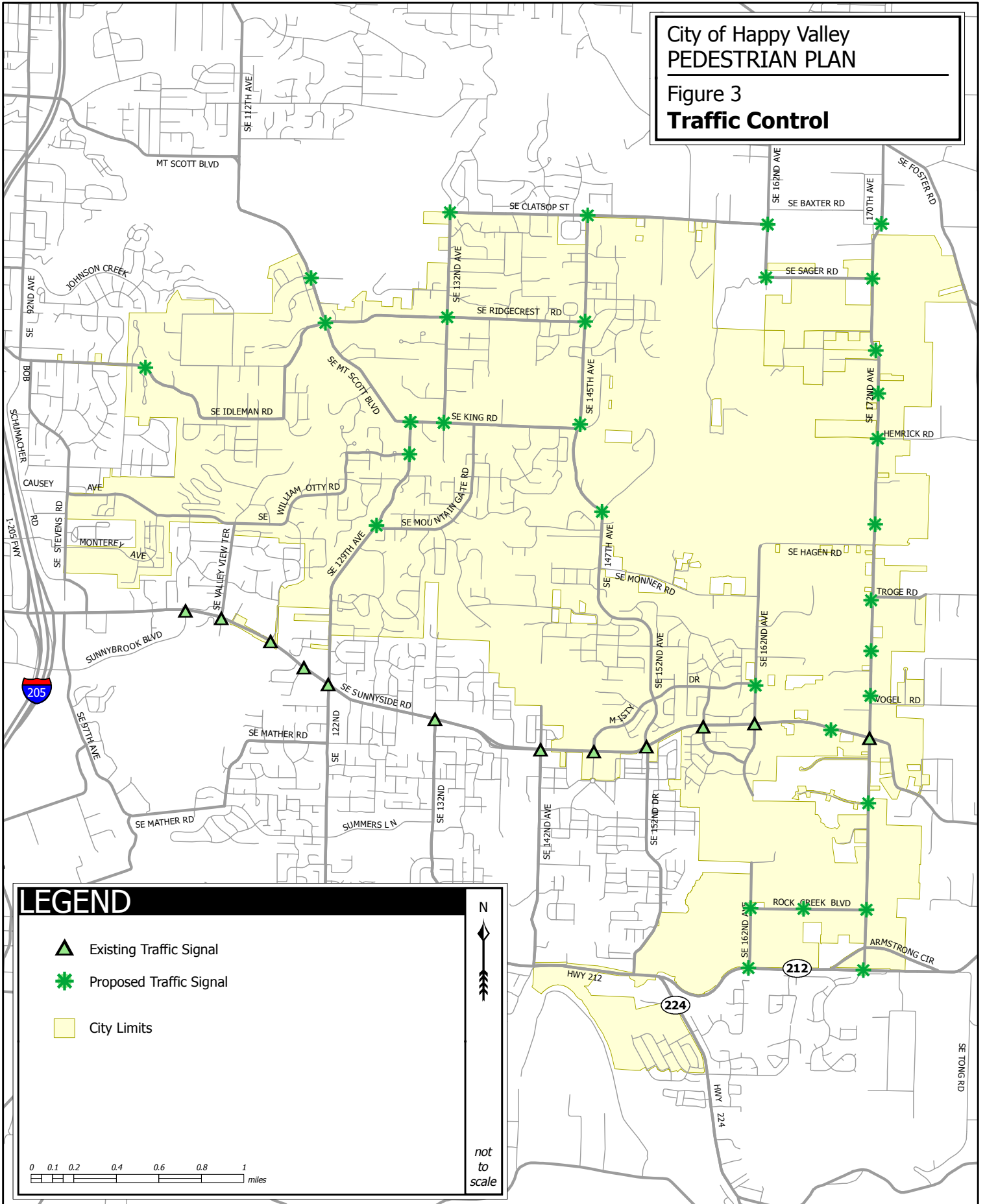
The purpose of identifying transit facilities (bus routes and stops) is to show key pedestrian destinations. Providing pedestrian links to transit facilities may be a priority to the community. The existing transit routes and bus stops will likely be revised and expanded in the future as transit needs in the study area change with new development. The Metro Regional Transportation Plan² identifies a transit project which would provide frequent transit service on Sunnyside Road between Clackamas Town Center and Damascus Town Center.

Beyond transit service improvements to Sunnyside Road, it is difficult to identify where the new or revised transit routes would be located. TriMet is the regional transit provider for the Portland metro area and is responsible for any changes in transit routes through its annual Transit Investment Plan (TIP) report. The City will need to work with TriMet in the future to ensure future transit needs are met.

² 2035 RTP Financially Constrained System Project List, Metro, Approved December 13, 2007.

City of Happy Valley PEDESTRIAN PLAN

Figure 3 Traffic Control



Route Selection Criteria

Criteria measures were developed to guide the selection of proposed pedestrian routes. These route selection criteria define characteristics that are important to planning an effective and well used pedestrian system. These criteria were the basis for locating potential routes within the Plan area. The route selection criteria focus on improving pedestrian mobility and access to pedestrian destinations. The pedestrian route selection criteria were reviewed by the Technical Advisory Committee and Citizen's Working Group for this project. The route selection criteria used for the development of this Plan are described below.

Criteria 1 - Access to Natural Areas

Providing pedestrian access to premiere natural areas should be a priority. Premiere natural areas include creeks, forests, wetlands and viewpoints. The boardwalk trails within Happy Valley Park and the trails within the Mt. Scott Nature Park are examples. The areas adjacent to Rock Creek and the Scouter's Mountain area are premiere natural areas and potential locations for future trails.



Wetland Park

Criteria 2 - Connections to Pedestrian Destinations

Pedestrian routes should be located near facilities with a potential for significant pedestrian demand. In general, pedestrian trips are likely to occur within one-quarter mile of a destination. This one-quarter mile area should be a priority for planning connections to pedestrian destinations. Key pedestrian destinations include:

- Schools and Parks – Providing pedestrian routes to schools and parks are especially important due to the age of the intended users. Special focus should be made to provide pedestrian connections from schools and parks to adjacent neighborhoods.
- Community Services – Pedestrian routes connecting to community services such as commercial centers, post offices, libraries and community centers should be a priority to encourage walking trips.
- Transit Facilities – Pedestrian routes that connect transit stops to nearby residential neighborhoods and commercial areas should be provided to encourage transit ridership.
- Existing Trail Systems – Pedestrian route connections to existing trail systems and open spaces should be provided to encourage recreational activity.

Criteria 3 - Construction, Maintenance and Management Costs

Trail and pedestrian routes should be selected with consideration for construction, maintenance and management costs. Trails located near constrained areas may require stairways or other special features. Providing access for persons with disabilities should be balanced with costs.

Criteria 4 - Environmental Constraints

Environmental constraints such as steep slopes, creeks, rivers and ravines present a potential hazard for pedestrians. Planning trails near these constrained areas should balance the appeal of a trail near interesting geography with protecting natural resources.



Criteria 5 - Existing Roadway Pedestrian Network

Completing existing gaps in the pedestrian system should be a priority.

Criteria 6 - Pedestrian Safety

Planned pedestrian routes should provide dedicated pedestrian facilities set back a safe distance from roadway curb lines to separate pedestrians from vehicular traffic. The location where planned pedestrian routes would cross a roadway should consider the appropriate crossing type (signalized, striped, signed, etc.), roadway volume and speed and available sight distance.

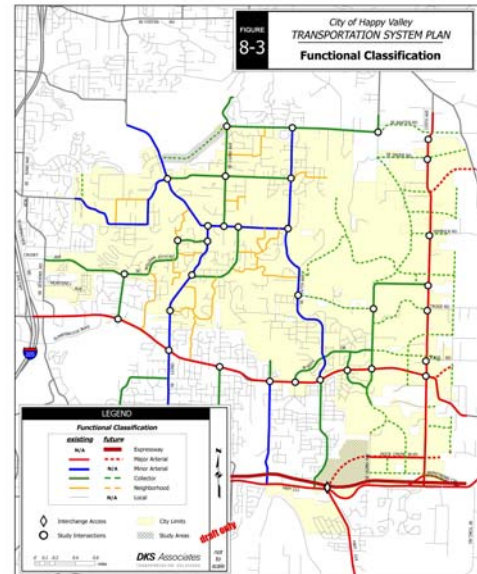
Happy Valley Park

Criteria 7 - Public Support

Pedestrian route selection should balance private property owner's need for privacy with the community's need for access throughout the community.

Criteria 8 - Roadway Functional Classification

The designated functional classification of a roadway should be considered when selecting pedestrian routes. Roadway functional classifications are provided in the Happy Valley Transportation System Plan (Figure 8-3). Arterial and collector roadways provide connections to major community destinations along key transportation corridors. Arterial and collector roadways typically experience higher vehicle travel speeds where pedestrian facilities may improve safety. Local and neighborhood streets provide connections to pedestrian destinations such as parks and schools. With lower vehicle volumes and speeds, local and neighborhood streets would provide ideal on-street trail connections.



Facilities

The pedestrian system in Happy Valley is provided in various forms. Pedestrian facilities include sidewalks, paths, multi-use trails, and access ways.

- Sidewalk – A walkway that provides pedestrian passage adjacent to a roadway. Sidewalks may be located directly adjacent to the roadway (curb tight) or separated from the roadway by a landscape strip. Sidewalks are typically constructed of concrete.
- Path – A walkway that provides pedestrian passage that is not associated with a roadway (off-street). Paths are primarily used for walking trips with bicycle use discouraged. Typically, paths are located in parks, natural areas, and residential designated green spaces. Paths may require stairs in steep areas and a raised structure (boardwalk or bridge) in sensitive natural areas.
- Multi-use Trail – A walkway that provides pedestrian and bicycle passage that is not associated with a roadway. Multi-use trails are typically located in parks, natural areas, and residential designated green spaces.
- Access way – A walkway that provides pedestrian and bicycle passage either between streets (alleyway) or from a street to a building or other destinations such as a school, park or transit stop.

Typically, wider pedestrian facilities are desirable to create a comfortable pedestrian environment and encourage walking trips. Off-street trail facilities located in a constrained environment (steep topography, wetlands, etc.) may require a smaller footprint to limit the impact of the surrounding area. Pedestrian facilities should be built to current design standards of and in compliance with the Americans with Disabilities Act.³ The Happy Valley Design Manual

³ *Americans with Disabilities Act*, Uniform Building Code.

provides the construction standards for pedestrian facilities such as sidewalks, paths, trails and curb ramps. The Happy Valley Trail Development Handbook outlines the City’s approval process for constructing a trail and provides guidelines for trail construction including cross-sections standards for various trail conditions.

Pedestrian Master Plan

The Plan is a result of an evaluation of the existing pedestrian deficiencies within the Plan area combined with the pedestrian policies and the trail route selection criteria presented in the previous sections of this chapter. The recommended Plan provides a list of future projects to promote pedestrian, bicycle and transit trips, and provide the City a balanced multi-modal transportation system. The recommended pedestrian projects are separated into sidewalk and trail facilities as shown in Tables 2 and 3 respectively. The planning level cost estimates provided for pedestrian projects are based on general unit costs, but do not reflect the unique project elements that can significantly add to project costs.

Table 2: Pedestrian Master Plan Projects – Sidewalks

Priority	Project	Location/Side	From	To	Preliminary Cost (\$1,000s)
Sidewalks on Existing Arterials and Collectors					
High	Ridgecrest Road	South	132 nd Avenue	Parkwood Way	\$110
High	Ridgecrest Road	South	150 feet east of Parkwood Way	110 feet west of Plover Dr	\$100
High	King Road	North	132 nd Avenue	175 feet west of Regina Ct	\$130
High	King Road	North	Rolling Meadows Drive	145 th Avenue	\$50
High	King Road	South	175 feet east of 132 nd Avenue	130 feet west of Mountain Gate Road	\$40
High	King Road	South	Mountain Gate Road	155 feet east of Regina Court	\$90
High	King Road	South	129 th Avenue	132 nd Avenue	\$90
High	145 th Avenue	West	King Road	550 feet south of Purple Finch Loop	\$30
High	132 nd Avenue	East	King Road	90 feet north	\$10
High	132 nd Avenue	East	Parkside Drive	335 feet south	\$40
High	132 nd Avenue	East	Ridgecrest Road	350 feet south	\$40
High	122 nd /129 th Avenue	East	150 feet north of Mountain Gate Road	Scott Creek Lane	\$140
High	147 th Avenue	West	Krause Lane	Monner Road	\$70
High	172 nd Avenue North	East/West	Sunnyside Road	Clatsop Street	\$2,690
Medium	Mt. Scott Boulevard	East/West	Ridgecrest Road	129 th Avenue	\$730
Medium	Ridgecrest Road	North/South	Mt. Scott Boulevard	132 nd Avenue	\$650
Medium	132 nd Avenue	East	Ridgecrest Road	145 feet north of Lucille St	\$160
Medium	132 nd Avenue	West	Ridgecrest Road	Callahan Road	\$60
Medium	132 nd Avenue	West	Clatsop Street	305 feet north of Callahan Road	\$160

Priority	Project	Location/Side	From	To	Preliminary Cost (\$1,000s)
Medium	132 nd Avenue	West	Ridgecrest Road	Wellington Court	\$60
Medium	132 nd Avenue	West	King Road	130 feet south of Wellington Court	\$180
Medium	Clatsop Street	South	160 feet east of 138th Drive	220 feet east of 141st Court	\$150
Medium	145 th Avenue	East	Clatsop Street	180 feet north of Northern Heights Drive	\$70
Medium	145 th Avenue	East	140 feet north of Wallowa Way	290 feet south of Northern Heights Drive	\$20
Medium	Valley View Terrace	East	100 feet north of Sunnyside Road	125 feet north of Cascade View Court	\$190
Medium	Valley View Terrace	West	William Otty Road	Niklas Lane	\$160
Medium	Valley View Terrace	West	Spruce View Lane	120 feet north	\$15
Low	122 nd /129 th Avenue	West	390 feet north of Sunnyside Road	Scott Creek Lane	\$520
Low	122 nd /129 th Avenue	West	King Road	330 feet north of Scott Creek Lane	\$120
Low	162 nd Avenue	East	Sunnyside Road	Hagen Road	\$460
Low	162 nd Avenue	West	235 feet north of Palermo Avenue	Hagen Road	\$240
Low	162 nd Avenue	West	Misty Drive	Palermo Avenue	\$380
Low	Idleman Road	North	Western City limits	220 feet west of Hillside Ct	\$360
Low	Idleman Road	North	Mt. Scott Blvd	180 feet east of Hillside Ct	\$330
Low	Idleman Road	South	310 feet east of Nichole Lane	Tumberry Loop	\$180
Low	Idleman Road	South	Solomon Court	Mt. Scott Blvd	\$300
Low	147 th Avenue	East	King Road	190 feet south	\$20
Low	147 th Avenue	East	300 feet south of King Road	Monner Road	\$360
Low	Clatsop Street	North	147 th Avenue	162 nd Avenue	\$400
Low	Clatsop Street	South	145 th Avenue	162 nd Avenue	\$470
Low	145 th Avenue	East	King Road	310 feet south of Denali Dr	\$170
Low	Ridgecrest Road	North	132 nd Avenue	700 feet east	\$75
Low	Mt. Scott Boulevard	East	Northern city limits	Ridgecrest Road	\$50
Local/Neighborhood Street Sidewalk Infill					
Low	Kanne Road	Both	132 nd Avenue	139 th Avenue	\$280
Low	139 th Avenue	Both	Kanne Road	Portland View Place	\$210
Low	139 th Avenue Ext	Both	Kanne Road	Ridgecrest Road	\$110
Low	City View Drive	Both	Tyler Road	Ridgeway Drive	\$260
Low	Ridgeway Drive	Both	City View Drive	Eastview Drive	\$260
Low	Eastview Drive	Both	Ridgeway Drive	Tyler Road	\$260
Low	Parkside Estates N/S Roadway	Both	King Road	Ridgecrest Road	\$590
Low	Peggy Way	Both	Valley View Terrace	William Otty Road	\$180
Low	Lucille Street	Both	132 nd Avenue	137 th Avenue	\$280
Low	137 th Avenue	Both	Kanne Road	Portland view Place	\$210

Priority	Project	Location/Side	From	To	Preliminary Cost (\$1,000s)
Low	Valemont Lane	Both	132 nd Avenue	East end of Street	\$210
Low	Portland View Place	Both	137 th Avenue	145 th Place	\$440
Low	140 th Place	Both	Portland View Place	Clatsop Street	\$110
Low	Lucille Street	Both	139 th Avenue	145 th Avenue	\$340
Low	Clover Lane	Both	Idleman Road	End of Street	\$270
Low	Lenore Street	Both	Valley View Terrace	West end of Street	\$330
Low	Hillside Drive	Both	Idleman Road	South end of Street	\$250
Low	Aldridge Road	Both	147 th Avenue	West end of Street	\$500
Low	Eastbourne Lane	Both	Aldridge Road	Existing Sidewalk	\$160
Low	Hilltop Court	Both	Hillside Drive	East end of Street	\$130
Low	Walnut Drive	Both	Idleman Road	Tyler Road	\$270
Low	Tyler Road	Both	Walnut Drive	Idleman Road	\$550
Low	Dorset Lane	Both	Idleman Road	Cresthill Road	\$70
Low	Cresthill Road	Both	Dorset Lane	Sichel Way	\$150
Sidewalks on New Arterials/Collectors					
	Johnson Creek Road Extension	Both	Mt. Scott Boulevard	132 nd Avenue	**
	Clatsop Street Extension West	Both	162 nd Avenue	177 th Avenue	**
	Clatsop Street Extension East	Both	Idleman Road	North City Limits	**
	162 nd Avenue Extension South	Both	157 th Avenue	Highway 212	**
	Sager Road	Both	172 nd Avenue	Foster Road	**
	Scouter Mountain East Roadway #1	Both	162 nd Avenue	Foster Road	**
	Scouter Mountain East Roadway #2	Both	162 nd Avenue	177 th Avenue	**
	Hemrick Road Extension	Both	162 nd Avenue	177 th Avenue	**
	Scouter Mountain Road	Both	147 th Avenue	177 th Avenue	**
	Troge Road Extension	Both	162 nd Avenue	177 th Avenue	**
	169 th Avenue Extension	Both	Sunnyside Road	177 th Avenue	**
	Misty Drive Extension	Both	162 nd Avenue	177 th Avenue	**
	Rock Creek Court Extension	Both	172 nd Avenue	177 th Avenue	**
	Creekwood Road Extension	Both	172 nd Avenue	177 th Avenue	**
	Rock Creek Boulevard	Both	Sunrise Corridor Rock Creek Interchange	177 th Avenue	**
	Rock Creek East-West Collector	Both	162 nd Avenue	177 th Avenue	**
	Parklane Loop	Both	162 nd Avenue	Rock Creek Collector	**
	167 th Avenue	Both	Rock Creek Boulevard	Rock Creek Collector	**
	177 th Avenue	Both	Scouter Mountain East Roadway #1	Armstrong Circle	**

The trail projects shown in Table 3 are intended to complete the pedestrian system as planned. Portions of the proposed trail system exist today as either off-street trails or sidewalks. The trail route for each project in Table 3 provides a general trail alignment with destinations along the route such as parks and connections to other trails. The project length represents the estimated trail distance to be constructed as part of the trail project. The total trail length represents the length of the entire trail corridor, including both existing and planned trail sections. The regional multi-use trails are based on the Metro Regional Transportation Plan.⁴ Although some of planned trail network would be utilized by bicyclists, all of the proposed trails would benefit pedestrians. Therefore, the recommended trail system is included in the Pedestrian Master Plan.

Table 3: Pedestrian Master Plan Projects – Trails

Project	Trail Route	Length (miles)	Preliminary Cost (\$1,000)
Regional Multi-Use Trails			
Rock Creek Trail (A)	Trail Route - Springwater Trail, Clatsop Butte Park, Scouter Mountain Park, Pleasant Valley Golf Course, Rock Creek Green, Taralon open space, 162 nd Avenue Park, Clackamas River Trail	Project Length 5.9 Total Trail Length 5.9	\$5,440
West Happy Valley Trail (B)	Trail Route - Rock Creek Trail, Clatsop Butte Park, Kingsley D. Bundy Park, Eastridge Park open space, Willamette National Cemetery, Nature Trail Park, Scott Creek Park, Southern Lites Park, Mount Talbert Nature Park	Project Length 3.0 Total Trail Length 4.8	\$2,750
Powerline Trail (C)	Trail Route – Foster Road, Scouter Mountain Park, pathway on 162 nd Avenue, Pleasant Valley Golf Course, Bella Casa open space, Shadow Ridge open space, Rolling Acres open space, Vista Heights open space, Southern Ridge open space, Village Green Park, Sieben Park, Clackamas River Trail, Rock Creek Trail	Project Length 2.8 Total Trail Length 5.1	\$2,560
Local Paths and Multi-Use Trails			
Idleman Loop (D)	Trail Route – West Happy Valley Trail near Mt. Scott Blvd, Lincoln Heights open space, Altamont open space, Johnson Creek Blvd extension to Idleman Road, Scott Mountain open space, Eagle Landing Golf Course, Causey Avenue-William Otty Road, Kensington Bluff open space, Grayhawk Ridge open space, West Happy Valley Trail near Solomon Court	Project Length 1.3 Total Trail Length 3.4	\$1,150
The Reserve Trail (E)	Trail Route – West Happy Valley Trail at Scott Creek Park, Lazy Hawk Ranch open space, Deerfield open space, Reserve open space, Powerline Trail	Project Length 0.5 Total Trail Length 1.3	\$500
Clackamas River Trail (F)	Trail Route – Runs along the north bank of the Clackamas River with connections to Rock Creek Trail and Powerline Trail.	Project Length 2.6 Total Trail Length 2.6	\$2,360

Note: The Project ID shown with each project name corresponds to the ID shown on Figure 6.
 The Project Length is the estimated trail distance to be constructed as part of the project.
 The Total Trail Length is the entire length of the trail corridor, including existing and planned trail and roadway/sidewalk sections.

⁴ 2035 RTP Financially Constrained System Project List, Metro, Approved December 13, 2007.

The cost estimates provided were based on the construction of the trail network gaps only and assumed the existing trail and sidewalk sections would be available. The cost estimate for the Powerline Trail assumed the pathway along 162nd Avenue between Sager Road and Hagen Road would be included in the construction cost of the roadway and the future trail in the Southern Ridge subdivision would be constructed as part of the development. The Clackamas River Trail cost estimate is based on the trail section located within the study area and does not represent the cost to construct the entire trail corridor.

The trail unit cost estimates were applied to the estimated project length shown in Table 3. The unit costs used were a preliminary estimate and assumed the construction of a multi-use trail with a paved surface but no significant structural needs such as retaining walls, bridges or stairs. The actual cost estimates based on detailed alignment and design efforts may be moderately lower or higher than the preliminary cost estimates provided.

The pedestrian master plan projects are shown in Figure 5. Sidewalk projects include new sidewalks on existing arterials and collectors, sidewalk gap infill on existing local and neighborhood roadways and sidewalks that would be constructed as part of a planned arterial and collector roadway. The planned trail system includes off-street paths and multi-use trails combined with sections of roadway sidewalk. The overall objective of the trail system is to promote pedestrian trips and provide an alternative to the sidewalk system. The trail system was planned based on the route selection criteria presented in this chapter.

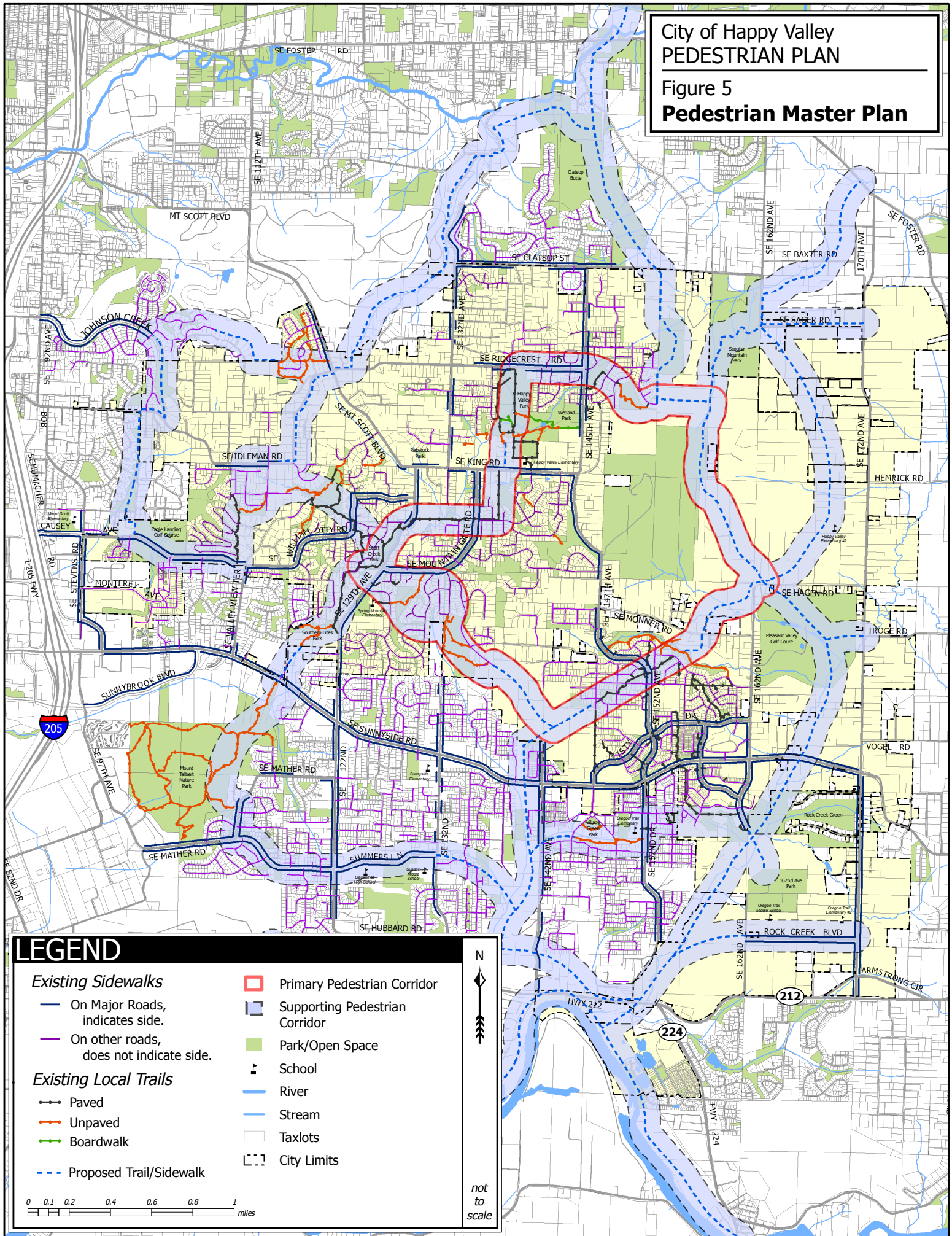
The planned trail system was divided into two groups to indicate the priority and function of trails and paths within the system. The trail groups include:

- Primary Pedestrian Corridor – These trails combine to create a central loop within the City with connections to major pedestrian destinations. The destinations include Scott Creek Park, Happy Valley Elementary School, Happy Valley Middle School, Happy Valley Park, Scouter’s Mountain, and Spring Mountain Elementary School. These trails are designated as multi-use trails and allow both pedestrians and bicycles. Pedestrian projects (both sidewalk and trail) located within the primary pedestrian loop should be a priority for project funding.
- Supporting Pedestrian Corridors – These trails provide additional loops within the Plan area that connect back to the Primary Pedestrian Loop trails. These trails also provide links to the pedestrian system in Damascus, Portland and Clackamas County. These trails are designated as pedestrian trails and may be limited to pedestrian use only depending on the location and environmental constraints.

Figure 5 shows the future trail system made up of pedestrian corridors to illustrate that the specific alignments may require refinement based on further topographical and environmental evaluation. In some areas, the trail uses a sidewalk to complete the connection between off-street trails. The area south of Mountain Gate Road and east of 129th Avenue has several opportunities for a trail connection. In this location, the trail corridor is wider to include all of the possible trail

City of Happy Valley PEDESTRIAN PLAN

Figure 5 Pedestrian Master Plan



LEGEND

<p>Existing Sidewalks</p> <ul style="list-style-type: none"> On Major Roads, indicates side. On other roads, does not indicate side. <p>Existing Local Trails</p> <ul style="list-style-type: none"> Paved Unpaved Boardwalk Proposed Trail/Sidewalk 	<ul style="list-style-type: none"> Primary Pedestrian Corridor Supporting Pedestrian Corridor Park/Open Space School River Stream Taxlots City Limits
--	---

0 0.1 0.2 0.4 0.6 0.8 1 miles

N
↑
↑
↑
↑
↑
↑

not to scale

locations (local street sidewalk, trail in dedicated green space, etc.). The trail system in the Idleman Road area is particularly difficult due to a lack of undeveloped parcels and substandard roadways with no sidewalks. The planned trail corridor along Idleman Road may require a special design treatment to create an effective pedestrian connection.

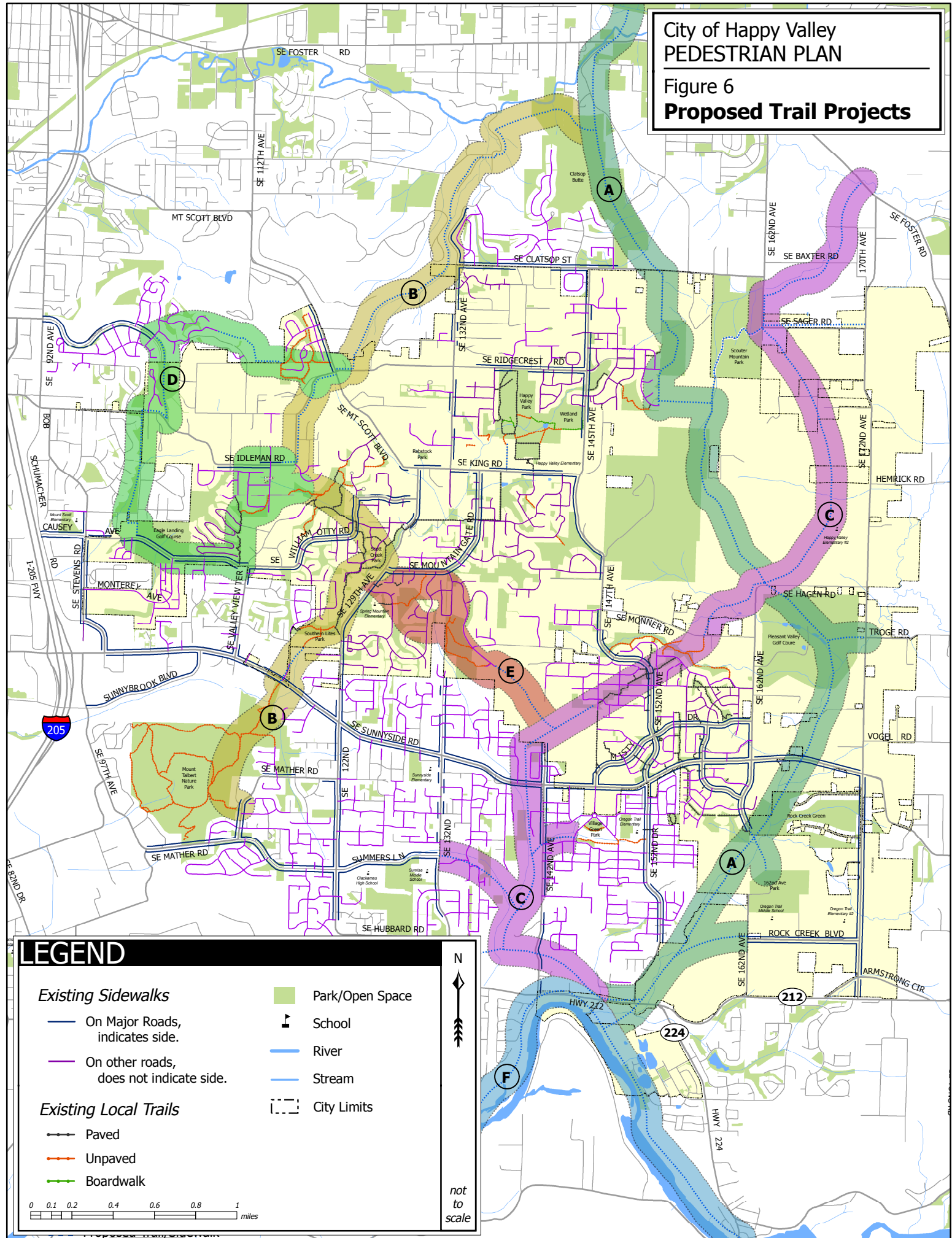
The Pedestrian Master Plan projects for trail facilities summarized in Table 3 are shown in Figure 6 to help identify each of the separate trail projects. Each trail project has been given an identification letter to help distinguish between projects. The trail projects and identification letters are:

- Rock Creek Trail (A)
- West Happy Valley Trail (B)
- Powerline Trail (C)
- Idleman Loop (D)
- The Reserve Trail (E)
- Clackamas River Trail (F)

The trail route description provided in Table 3 and the alignment shown in Figure 6 provides a clear depiction of the proposed trail project. Figure 6 does not include the large sections of trail corridors that exist today but rather focuses on the trail corridors that are planned for construction in the future.

**City of Happy Valley
PEDESTRIAN PLAN**

**Figure 6
Proposed Trail Projects**



LEGEND

Existing Sidewalks

- On Major Roads, indicates side.
- On other roads, does not indicate side.

Existing Local Trails

- Paved
- Unpaved
- Boardwalk

- Park/Open Space
- 🏫 School
- River
- Stream
- ⋯ City Limits



not to scale

