



## IV. Implementation

### Project Phasing

The recommended path and trail projects were ranked as part of the bikeway network list of projects in the Vancouver Transportation System Plan. The rankings were based on a weighted scoring system from one to five for each criteria; one being the lowest and five being the highest score based on the following criteria:

#### **1. Destinations served**

*Projects were given one point for each park, school, or other community attractor adjacent to the project, maximum 5 points.*

#### **2. Potential usage**

*Projects were ranked according to likelihood of significant use. Trails located near high population areas or significant attractors like schools, parks or nature preserves received higher scores.*

#### **3. Ease of construction**

*Factors such as difficult street or highway crossings, right-of-way acquisition, regulatory complication, and potential political opposition were considered.*

#### **4. Transit connection**

*Projects that provided connections to C-TRAN bus stops received higher scores.*

The scores are based on the information returned from the public, City staff, and the judgment of the consultant team. Vancouver's trail projects all ranked relatively high, meaning they were recommended for implementation in the short-term.

### Estimated Costs

This section identifies costs for the proposed path improvements, plus strategies on funding and financing.

The City's Pedestrian & Bicycle Advisory committee (recommended to be established as part of the Transportation System Plan) should help monitor the projects identified in this Plan and subsequent updates, and keep a year-to-year list of projects and funding opportunities.

### ***Implementation of Projects***

The steps between the concepts identified in this Plan and final completion vary from project to project, but will typically include:

1. Completion of a feasibility study, which typically includes preliminary design, environmental analysis, alternatives analysis, and related agency coordination. The final product should yield a preferred design alternative, environmental clearance, and an accurate cost estimate that includes acquisition, design, construction, operation and maintenance costs.
2. Approval of the preferred project by the City of Vancouver, and other local governing boards, including acceptance of any environmental documentation. Necessary permits should be obtained. The City of Vancouver typically will commit to providing 10 percent to 50 percent of the project cost, with other funding derived from state and federal grants, as well as private sources. The City will also typically assume responsibility for the cost, operation, and liability for the project.
3. Funding applied for and obtained for the project. Typically, all environmental work must be completed, local approval obtained, and the right-of-way in public control.
4. Completion of final Plans, Specifications and Estimates (P, S &E). Once completed, bids for construction services can be obtained.
5. Construction of the Project.

### ***Cost Breakdown***

Costs are separated between trail facilities and operations/maintenance. A complete breakdown of costs for the proposed trail projects is presented in Table 3.1. The total cost for implementing all projects is estimated to be approximately \$15 million. The candidate projects are recommended to be implemented over the next 15 years, or as funding is available. Some of the more expensive projects may take longer to implement.

Intersection (crossing) treatments in particular must be analyzed as part of the feasibility and design phases. A generic allowance of \$50,000 per intersection is used here; the actual amount will depend largely on the type of crossing installed.

Many of the potential funding sources are highly competitive, so it is impossible to determine exactly which projects will be funded by which funding sources. It is important to note that while many of the projects can be funded with federal, state, and regional transportation, safety, and/or air quality grants, others are recreational in nature and must be funded by local or private sources. Timing of projects is also difficult to pinpoint exactly, due to dependence on competitive funding sources, timing of roadway and development projects, and the overall economy.

Potential sources of project funding are identified later in this section.

Table IV-1: Vancouver Trail System - Estimated Costs for Proposed Projects

Estimated Costs as of January 2004

Trail	Off-Street Miles	On-Street Miles			# of Crossings	Preliminary Cost	Other Costs		Est. Total Cost
		Widening	Signing/Striping	Signing Only			Design & CM 15%	Contingency 20%	
NOTES:	/1	/2	/3	/4	/5	/6			
<b>1. BURNT BRIDGE CREEK</b>									
A. Stewart's Glen (upgrade)			0.2		1	\$ 55,000	\$ 8,250	\$ 11,000	\$ 74,250
B. Leverich Park					2	100,000	15,000	20,000	135,000
C. Falk Road	<i>SEGMENT COMPLETE</i>								
D. Lettuce Fields	1.3				4	895,370	134,300	179,074	1,208,750
E. Beaver Marsh	1.2				2	400,000	60,000	80,000	540,000
F. Burnt Bridge Creek Alt. Rte.			2.3		6	357,500	53,625	71,500	482,625
G. Kevanna Park	1.3				2	425,000	63,750	85,000	573,750
<b>2. COLUMBIA VILLA / EVERGREEN HIGHWAYS</b>									
A. Columbia Shores	<i>SEGMENT COMPLETE</i>								
B. Kaiser Shipyard	2.8					700,000	105,000	140,000	945,000
C. Ryan's Point (Marine Park)	1.5					375,000	56,250	75,000	506,250
D. Lieser Point	0.2				1	100,000	15,000	20,000	135,000
E. Ellsworth	0.9				2	325,000	48,750	65,000	438,750
F. Columbia Springs	3.3				1	875,000	131,250	175,000	1,181,250
<b>3. DISCOVERY LOOP / CENTRAL CITY</b>									
A. Discovery Trail	<i>SEGMENT COMPLETE</i>								
B. Amtrak	1.9					475,000	71,250	95,000	641,250
C. Mill Plain Extension	<i>SEGMENT COMPLETE</i>								
<b>4. VANCOUVER LAKE</b>									
A. Lower River Rd	3.5					875,000	131,250	175,000	1,181,250
B. Frenchman's Bar	<i>SEGMENT COMPLETE</i>								
C. Lake River	5.9					1,475,000	221,250	295,000	1,991,250
D. Fruit Valley Rd		0.8				240,000	36,000	48,000	324,000
E. Lowlands Loop	2.3					575,000	86,250	115,000	776,250
SPUR: Lakeshore Rd			5.5			137,500	20,625	27,500	185,625
SPUR: La Frambois Rd		1				300,000	45,000	60,000	405,000
<b>5. OTHER TRAILS</b>									
A. Powerline / NE 18 <sup>th</sup> St	5.5					1,375,000	206,250	275,000	1,856,250
B. NE 192 <sup>nd</sup> Ave.		3.5				1,050,000	157,500	210,000	1,417,500
C. Blandford	0.2					50,000	7,500	10,000	67,500
D. Ellen Davis Trail (gravel to asphalt)	1.7				1	475,000	71,250	95,000	641,250
E. Firstenberg Cmnty. Ctr.									
<b>TOTALS</b>	<b>33.5</b>	<b>5.3</b>	<b>8.0</b>	<b>0</b>	<b>22</b>	<b>\$11,265,000</b>	<b>\$ 1,689,750</b>	<b>\$ 2,253,000</b>	<b>\$15,572,750</b>

## NOTES:

- /1 Off-Street Miles: Mileage for incomplete and proposed projects. Approx. construction cost \$250,000 per trail mile.
- /2 Widening: Approx. construction cost \$300,000 per trail mile.
- /3 Signing/Striping: Approx. construction cost \$25,000 per trail mile.
- /4 Signing Only: Approx. construction cost \$1,500 per trail mile.
- /5 Crossings: Allowance approx. \$50,000 per intersection, depending on crossing.
- /6 Preliminary Cost: Construction cost

## Maintenance

The total annual maintenance cost of the trail system is estimated to be \$550,000 (total 64.65 miles at \$8,500 per mile) when the system is fully implemented.

Most maintenance costs are associated with the shared-use paths, and are based on an estimated cost of \$8,500 per mile, covering labor, supplies, and amortized equipment costs for:

- weekly trash removal,
- monthly sweeping,
- and bi-annual resurfacing and repair patrols, the costs for which include:
  - cleaning, resurfacing and re-striping the asphalt path,
  - repairs to crossings,
  - cleaning drainage systems,
  - trash removal,
  - landscaping,
  - underbrush and weed abatement (performed in mid- and late summer).

Bicycle lanes account for a small proportion of overall maintenance costs. A figure of \$2,000 per mile of bike lane annually is used based on experience in other cities. This includes costs like sweeping, replacing signs and markings, and street repair.

Maintenance access on the trails will be achieved using standard pick-up trucks on the pathway itself. Sections with narrow widths or other clearance restrictions should be clearly marked.

## Security

Adjacent residents are often concerned about security on shared-use paths such as those proposed in this Plan. Fortunately, the security experience with trails nationwide and locally has been extremely positive. In fact, well designed green residential spaces such as trails work to foster safer and stronger communities by providing gathering spaces where neighbors form social ties. The presence of families and trail users on Vancouver's trails further promotes safety by providing surveillance that deters criminals. Lastly, the trail network provides police officers excellent access to potential problem areas.

The following security strategy should be employed to prevent problems from happening:

- Applying “Crime Prevention through Environmental Design” and “Trespass Prevention through Environmental Design” concepts, which recognize that proper design and effective use of space to reduce conflicts and improve overall safety (see text box).
- Continuing support and development of the Vancouver-Clark Parks & Recreation “Trailwatch” program that provides volunteers to meet the information and safety needs of trails users. Specifically, Trailwatch volunteers report safety and security concerns to the appropriate officials.

- Employing strong, secure, and damage-resistant construction materials, landscaping, and a parks maintenance plan.
- Providing secured access areas (parking lots, storage areas), and barrier systems where needed (gates, fences, access control)
- Providing coordinated and responsive patrol service.
- Designating and enforcing rules and regulations (park rules and hours, exclusion provisions, and emergency closure provision).
- Employing crime prevention and problem solving strategies, such as park user education, informational signage, a problem reporting system, incident management and follow-up, and broad-based problem solving groups.
- Holding programmed uses and events, such as regularly scheduled activities, permitted events, and vendors.
- Facilitating positive presence, including staff, vendors, volunteers, public buildings and other public facilities.

Enforcement of applicable laws on trails will be performed by the local Police Department, using both bicycles and vehicles. Enforcement of vehicle statutes relating to bicycle operation will be enforced on the on-street connector bikeways as part of the Department's normal operations. It is not projected that additional worker hours or equipment will be needed for on-street segments.

## Trespass Prevention Through Environmental Design (TPTED)

Widely employed by law enforcement agencies, TPTED is a *trespass prevention design strategy* which recognizes that proper design and effective use of space can lead to a reduction in the incidence of pedestrian and vehicle conflicts and improve overall safety. TPTED is based on the concept of Crime Prevention Through Environmental Design and its three basic strategies:

1. Access Control
2. Natural Surveillance
3. Territorial Reinforcement

The appropriateness of the design and use of space is determined through an analysis of the “Three D’s”:

- Designation:**
- What is the designated purpose of this space?
  - What was it originally intended to be used for?
  - How well does the space support its current and intended uses?
- Definition:**
- How is the space defined?
  - Is it clear who owns it and where its borders are?
  - Are there social or cultural definitions that affect how that space is to be used?
  - Are legal or administrative rules clearly set out and reinforced in policy?
  - Is there conflict or confusion between the designated purpose and definition?
- Design:**
- How well does physical design support the intended function and the desired or accepted behaviors?
  - Does the physical design conflict with or impede the productive use of space or the proper functioning of the intended human activity?
  - Is there conflict in the manner in which the physical design is intended to control behavior?

TPTED improvements may include:

- Posting of “No Trespassing” signs.
- Fencing repairs or replacement.
- The use of security landscape materials.
- Redesigning sidewalks.
- Improving natural surveillance.
- Providing clear border definition of public and private space.

## Funding Sources

A variety of potential funding sources are available to construct the proposed bicycle and pedestrian improvements; these include local, state, regional, federal and private programs. Most funding programs are competitive, and involve the completion of extensive applications with clear documentation of the project need, costs, and benefits.

Local funding for these projects would typically come from the City of Vancouver, Clark County, or potential future bond or other local revenues. Funding at the state level is available through resources such as the Interagency Committee for Outdoor Recreation (IAC). The primary Federal funding source is U.S. Department of Transportation (USDOT), through the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21). Private funding may be found through foundations, advocacy organizations and businesses.

### ***Federal Funding - TEA-21***

Federal funding through the TEA-21 program provides the bulk of outside funding for trails projects. Congress adopted TEA-21 on May 22, 1998 as the follow-up to the Intermodal Surface Transportation Efficiency Act (ISTEA); it will expire in 2003, to be replaced by new a program. TEA-21 currently contains three major program components:

- STP (Surface Transportation Program),
- TEA (Transportation Enhancement Activities), and
- CMAQ (Congestion Mitigation and Air Quality Improvement),

Relevant minor programs within TEA-21 include the National Recreational Trails Fund, Section 402 (Safety) funds, Scenic Byways funds, and Federal Lands Highway funds.

TEA-21 funding is administered in Washington State through the Washington Department of Transportation (WSDOT) and the state Interagency Committee for Outdoor Recreation. Most, but not all, of the funding programs are oriented towards transportation, as opposed to recreation, with an emphasis on (a) reducing auto trips and (b) providing inter-modal connections. Funding criteria for bicycle and pedestrian projects often include:

- completion and adoption of a bicycle/pedestrian master plan,
- quantification of the costs and benefits of the system (such as saved vehicle trips and reduced air pollution),
- proof of public involvement and support,
- environmental compliance, and
- commitment of some local resources.

TEA-21 provides matching grants of 80 to 90 percent in most cases; however, it is preferred to leverage other moneys at a lower rate.

As the follow-up to ISTEA, TEA-21 offers some important funding opportunities:

1. The Surface Transportation Program (STP) was amended as follows:
  - Bicycle and pedestrian projects remain eligible, and must compete with other modes.
  - Sidewalk improvements to comply with the Americans with Disabilities Act (ADA) are now eligible for STP funds.
  - 11.5% local match.
2. The National Highway System (NHS) program was amended as follows:
  - Pedestrian projects may now be funded with NHS funds.
  - Funds may be used on bicycle and pedestrian projects within Interstate corridors.
3. The Transportation Enhancement Activities (TEA) program was amended as follows:
  - Bicycle and pedestrian safety and education programs are eligible for funds.
  - Tourist and welcome centers are eligible for funds.
  - Environmental mitigation to provide wildlife corridors are eligible for funds.
  - Requirement that each project be directly related to a surface transportation project.
  - Eighty percent federal matching requirement applies only to total non-federal share rather than total project cost.
4. The Congestion Mitigation and Air Quality Improvements (CMAQ) program was amended as follows:
  - Areas not meeting federal air quality standards are eligible.
  - Bicycle and pedestrian project eligibility remains essentially the same, and must compete with other modes.
  - A small percentage can be transferred to other programs.
  - 11.5% local match required.
5. The Recreational Trails Program was amended as follows:
  - \$270 million dollars available nationwide over five years.
  - Bicycle project eligibility remains essentially the same.
  - In Washington, this program is administered through the Interagency Committee for Outdoor Recreation.
6. The Transportation for Livable Communities (TLC) program was amended as follows:
  - \$9 million per year available region-wide.
  - Capital and planning grants to enhance a community's overall quality of life.
  - 11.5% local match required.

7. The Hazard Elimination Program was amended as follows:
  - Now can be used for bicycling and walking hazards.
  - Definition of a “public road” now expanded to include bikeways, pathways, and traffic calming measures.
8. The Transit Enhancements Program was amended as follows:
  - Calls for transit agencies in urbanized areas (population over 200,000) to use one percent of their Urban Formula Funds for Transit Enhancements Activities.
  - Up to 50 million dollars per year may be available for pedestrian access, walkways, bicycle access, bike storage facilities, and bike-on-bus racks.
  - Calls for 95 percent federal/five percent local match.
9. Scenic byway, bridge repair, transit, safety (non-construction), and Federal Lands programs all remain essentially the same under TEA-21, with the amounts either the same or increasing from ISTEA.
10. Planning provisions for states and metropolitan planning organizations have been streamlined, with bicycle and pedestrian needs to be given due consideration in the development of comprehensive transportation plans. Specific policies include directives to not approve any project or regulatory action that will have an adverse impact on non-motorized safety, unless a reasonable alternative route is provided or already exists.
11. When state or local regulations permit, allow use of bicycle facilities by electric bicycles and motorized wheelchairs.
12. Railway-highway crossings should consider bicycle safety.
13. A new Surface Transportation-Environment Cooperative Research Program is established for funding non-motorized research.
14. New bicycle design guidelines have been established in the updated AASHTO Green Book, a collaborative effort of AASHTO, ITE, and other groups.

Vancouver should be in a good position to secure its fair share of TEA-21 funding for the projects described in the plan. It will be critical to get the local state legislators and senators briefed on these projects and lobbying WSDOT for these projects.

### ***Federal Funding - other programs***

Federal resources other than TEA-21 are available through programs concerned with conservation, community development, and public health. The following is a partial list of potential grants and their federal sources:

- Land and Water Conservation Fund Grants, US Forest Service
- Community Development Block Grants, US Department of Housing and Urban Development
- Conservation Reserve Program, US Department of Agriculture
- Wetlands Reserve Program, US Department of Agriculture
- Watershed Protection and Flood Prevention Grants, US Department of Agriculture
- Urban And Community Forestry Assistance Program, US Department of Agriculture
- Small Business Tree-Planting Program, Small Business Administration
- Public Works and Facilities Development Economic Development Grants, US Department of Commerce
- Design Arts Program, National Endowment for the Arts

## State and Local Funding

The Interagency Committee for Outdoor Recreation (IAC) is a main source for funding at the state level. IAC administers several grant programs for recreation and habitat conservation purposes. Depending on the program, eligible project applicants can include municipal subdivisions of the state (cities, towns, and counties, or port, utility, park and recreation, and school districts), Native American tribes, state agencies, and in some cases, federal agencies and nonprofit organizations.

The IAC's Washington Wildlife Recreation Program has a specific trail component:

Program Name:	<b>Washington Wildlife Recreation Program (WWRP)</b>
Agency Name:	Interagency Committee for Outdoor Recreation (IAC)
Contact:	phone (360) 902-3000 fax (360) 902-3026 email <a href="mailto:info@iac.wa.gov">info@iac.wa.gov</a> web <a href="http://www.wa.gov/iac/iacmain.html">http://www.wa.gov/iac/iacmain.html</a> (IAC) <a href="http://www.wa.gov/iac/downloads/Manual%2010.pdf">http://www.wa.gov/iac/downloads/Manual%2010.pdf</a> (specifically WWRP)
Program Description:	Provides funds for the acquisition and development of recreation and conservation lands. Funds are administered by account and category. The Habitat Conservation Account includes critical habitat, natural areas, and urban wildlife categories. The Outdoor Recreation Account includes local parks, state parks, trails, and water access categories. Grants are awarded every two years in the trails category
Relevant Information:	Vancouver was awarded a grant through the Program last year for the Burnt Bridge Creek pedestrian overpass of I-5, it was the highest ranked project within the program. Clark County has also received grant awards in the past, including for the Frenchman's Bar Trail.

## Other Funding Sources

A funding strategy for trail development should seek resources nationally as well as locally, and from the private bodies as well as government agencies.

Many foundations and corporations offer grant programs targeting such general areas as conservation, recreation and transportation alternatives, and such specific areas as bicycling, habitat preservation, and trail development. Some valuable sources for researching such funders are:

- Urban Parks Institute (Project for Public Spaces)  
[http://urbanparks.pps.org/topics/funding/greenway\\_sources](http://urbanparks.pps.org/topics/funding/greenway_sources)
- Trails and Greenways Clearinghouse (Rails-to-Trails Conservancy)  
<http://www.trailsandgreenways.org>
- The Washington Foundation DataBook  
<http://www.foundationdatabook.com/walinks.html>  
C&D Publishing , 1017 SW Morrison #500, Portland, Oregon 97205  
(503) 274-8780, [info@foundationdatabook.com](mailto:info@foundationdatabook.com)
- The Foundation Center  
<http://www.fdncenter.org/>

## SECTION IV

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As some funders will not accept unsolicited grant requests, or will only give grants to other non-governmental organizations, a fundraising strategy should attempt to identify and make use of intra-organizational relationships and partnerships, in addition to simply identifying potential funders. Below are six examples of the many non-governmental funding sources available nationwide:

- Program Name:** **American Greenways Award**
- Funder Name:** Eastman Kodak Corporation, Conservation Fund and National Geographic Society
- Contact:** The Conservation Fund  
1800 North Kent Street, Suite 1120, Arlington, Virginia 22209-2156  
phone (703) 525-6300  
web <http://www.conservationfund.org/?article=2106>
- Program Description:** Provides small grants to stimulate the planning and design of greenways. Grants may be used for activities such as: mapping, ecological assessments, surveying, conferences, and design activities; developing brochures, interpretative displays, audio-visual productions or public opinion surveys; hiring consultants, incorporating land trusts, building a foot bridge, planning a bike path, or other creative projects. In general, grants can be used for all appropriate expenses needed to complete a greenway project including planning, technical assistance, legal and other costs.
- Maximum grant is \$2,500, and most grants range from \$500 to \$1,000. Deadlines are March 1<sup>st</sup> and June 1<sup>st</sup>. Most awards go to nonprofit organizations, although public agencies may also apply.
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- Funder Name:** **Bikes Belong Coalition**
- Contact:** Tim Baldwin, Grants Program Administrator  
phone (617) 734-2111  
email [tim@bikesbelong.org](mailto:tim@bikesbelong.org)  
web <http://www.bikesbelong.org>
- Program Description:** The Bikes Belong Coalition will accept applications for grants of up to \$10,000. Their grant program seeks to assist local organizations, agencies, and citizens in developing bicycle facility projects that will be funded federal transportation appropriations.
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- Funder Name:** **Community Foundation for Southwest Washington**
- Contact:** phone (360) 694-2550  
fax (360) 737-6335  
web <http://www.cfsww.org/>  
703 Broadway, Suite 610, Vancouver, Washington 98660
- Program Description:** The Foundation receives and manages funds to build a permanent endowment, and serves Cowlitz, Clark, Skamania, and West Klickitat counties.. Grants are reviewed in Spring and Fall, and are awarded in program areas such as social services, civic affairs, health, education, children's issues, and arts and cultural affairs.

Program Name: **Direct Impact on Rivers and Trails (DIRT)**  
 Funder Name: PowerBar Corporation  
 Contact: PowerBar, D.I.R.T. Program  
 2150 Shattuck Ave., Berkeley, California 94704  
 Program Description: Provides grants ranging from \$1,000 - \$5,000 in support of efforts to:  
 – protect threatened land and rivers from development and environmental degradation that threaten recreational use and public enjoyment;  
 – preserve the natural, accessible state of pristine land and waterways; and,  
 – restore damaged lands and waterways to their natural, accessible states.  
 Past grant awards have been made to both urban and non-urban projects nationwide.

Funder Name: **Hugh and Jane Ferguson Foundation**  
 Contact: phone (360) 694-2550  
 fax (360) 737-6335  
 web <http://www.cfsww.org/>  
 Two Union Square, Suite 5523, 601 Union Street, Seattle, Washington 98101  
 Program Description: The Foundation is dedicated to the preservation and restoration of nature, including wildlife and their required habitats. It also supports the institutions that present nature and the community's cultural heritage to the public — via museums, libraries, aquariums, zoos and public media.  
 Only 501(c)3, non-governmental organizations may apply. Grant deadlines are in Spring and Fall.  
 Relevant Information The following grants were recently awarded by the Foundation:  
 – Groundswell NW (Seattle), Thyme Patch Park development, \$1,000  
 – Pacific Science Center (Seattle), Mercer Slough Environmental Ed. Ctr., \$5,000  
 – Puget Sound Environmental Learning Ctr. (Bainbridge Island), \$100,000

Funder Name: **Northwest Fund for the Environment**  
 Contact: phone (206) 386-7220  
 fax (206) 386-7223  
 web <http://www.nwfund.org>  
 email [staff@nwfund.org](mailto:staff@nwfund.org)  
 Program Description: Grants are from an endowment designated to be spent promoting change in the uses of natural resources which will increase their protection and preservation in the State of Washington. Special emphasis is placed on "the protection of wild fish, native wildlife, natural forests, wetlands and shorelines, and the preservation of pure and free-flowing waters."  
 Grant cycle deadlines are in February and August  
 Relevant Information: Washington Trails Association received a \$10,000 grant for "Fair Trails Coalition" in 2001. Friends of the Columbia River Gorge received \$7,500 for organizing for review of a regional management plan.

A variety of other creative funding options should also be considered for funding trail development. Grant funding can be a component of a larger comprehensive funding strategy that includes:

- local bond referenda
- annual appropriations through a capital improvement plan
- creation of a trust fund for land acquisition and facility development
- private-public partnerships – creating relationships with businesses and developers that would benefit from trail construction
- private sponsorship programs (“Adopt-A-Trail”, “Buy-A-Foot”)
- provide encouragement and support of a “Friends of...” group – such a volunteer organization could raise funds from the private sector.



## V. Support Programs

Once the trail system is in place, it is crucial to develop and manage support programs to ensure safe and increasing levels of trail usage. It is also critical for the development of the trail system be coordinated with on-street transportation facilities, including bikeways, walkways, and street improvements. Finally, existing initiatives and organizations present an opportunity to learn from and expand on established programs and their resources.

Programs that can support the installation and use of bikeway and walkways in Vancouver are outlined below under the following areas:

- Advocacy Organizations
- Events
- Community Involvement
- Trail Maintenance
- Bicycle End-of-Trip Facilities
- Signing
- Education
- Enforcement

### Advocacy Organizations

***Responsible Parties:*** *Non-governmental organizations, City of Vancouver,*

Non-profit organizations and extra-governmental initiatives present an especially valuable opportunity to share resources with people who are already working on related issues. An advisory committee should be established to ensure the continued presence of community members in city and county trails' planning efforts.

#### ***Community Choices 2010***

Community Choices 2010 is a non-profit organization dedicated to improving the physical health of Clark County residents by focusing on upstream prevention strategies. In 2003, Community Choices 2010 convened stakeholders to develop strategies to increase physical activity and improve food choices in order to address the alarming increase in overweight and obesity and the associated health risks such as diabetes and heart disease. In addition, Community Choices 2010 was chosen to participate in a five year, \$5.9 million STEPS grant from Health and Human Services to reduce the burden of chronic disease including:

- Reducing and preventing overweight and obesity
- Preventing diabetes among populations with pre-diabetes
- Increasing the likelihood that persons with undiagnosed diabetes are diagnosed
- Reducing complications of diabetes
- Reducing the complications of asthma

In partnership with Vancouver Clark Parks & Recreation Department, the local health department, schools, business, healthcare, the faith community, parks and more Community Choices 2010 is working to define strategies to significantly improve the health of Clark County citizens. The provision of paths and trails is essential to achieving goals of preventing and reducing overweight and obesity problems through increased physical activity.

### ***Lewis & Clark Discovery Greenway Project***

The Lewis & Clark Discovery Greenway Project is a regional effort of multiple agencies and organizations to complete river-side trails that will provide access to the historical landing sites of the Lewis & Clark Expedition. The Greenway Project includes such bodies as Vancouver-Clark Parks & Recreation, the City of Vancouver Transportation Department and Metro Parks & Greenspaces. Trail connections are projected to be completed in time for the 2005-2006 bicentennial of the Expedition, and the resulting increased tourism.

Although the Greenway Project's focus is to make trail connections rather than to focus on individual sites, its scope does include trail amenities and site-specific improvements.

### ***Parks & Recreation Foundation of Vancouver & Clark County***



The Foundation is a non-profit organization established in 1999 to accept and administer such donations, gifts and bequests for the enrichment and enhancement of the community's parks, recreation and cultural services.

The Foundation provides a stable source of funding for the Vancouver-Clark County Parks Department, particularly during tight city and county budget periods. It will fund acquisition and enhancement of trails, as well as open space, interpretive centers and other park amenities. As a citizen-based organization, it also creates a valuable relationship between the park/trail system and the public.

## **Events**

***Responsible Parties:***     *Community groups, City of Vancouver, health organizations*

Special events simultaneously attract large numbers of users and advertise the trail network. They present an opportunity to encourage citizens to both use the trail system and value it as a real community asset and source of civic pride. Bicycle and pedestrian interest groups are well-positioned to capitalize on the growing interest in on-road and off-road bicycle races and criteriums (races on closed courses over public roads closed to normal traffic).

The Vancouver Mayor's Bike Rides and rides sponsored by the Vancouver Bicycle Club and Portland Wheelmen Touring Club are all very popular, as are walks sponsored by VolksWalk and the

March of Dimes. The potential for walks and rides to draw enormous crowds in Vancouver exists; the Portland Bridge Pedal and Bridge Walk, for example, draws over 15,000 participants annually.

### ***Discovery Walk Festival***

The annual Discovery Walk Festival, sponsored each April by the City and the International Walk Fest, is an example of a successful Vancouver event that attracts both trail users and tourists. Centered around Esther Short Park, the Festival annually attracts over 1,000 participants from the region and beyond. In addition to promoting use of Vancouver's trails, the Festival also presents an opportunity to both showcase and build public support for a high quality trail network.



### ***Passport to Wellness***

Southwest Washington Medical Center, together with other corporate supporters, has sponsored the “Passport to Wellness” program since 2001 to promote local walking events. The program encourages participants to walk in such events as the March of Dimes *Walkamerica* and The Columbian's *Morning River Walk* by entering walkers in drawings for prizes. Most walking events take place in spring and summer, and the Westfield Shoppingtown Vancouver Mall-Walking program runs regularly year-round.



### ***Event Ideas***

Additional events could attract even more people to Vancouver and its trail system. Ideas include:

- Columbia Bridge Pedal. As the Columbia Waterfront Trail is completed and connected to Portland's developing Marine Drive system, a route drawing riders and walkers over both the I-5 and I-205 bridges would be popular.
- Vancouver Lake/Frenchman's Bar Ride.
- Lewis and Clark Discovery Ride, following the Lewis and Clark Trail into the Vancouver-Portland area.

Events are usually sponsored by local businesses, and involve some promotion, insurance, and development of adequate circuits for all levels of riders. Vancouver can assist in developing these events by acting as a co-sponsor, and expediting and possibly underwriting some expenses (for example, police time). Vancouver should also encourage these events to have races, walks, and tours that appeal to the less experienced cyclist.

## **Community Involvement Programs**

**Responsible Parties:** *City of Vancouver, community participants*

Community involvement programs can effectively invest citizens in their community resource by involving them in its planning, care and maintenance. Vancouver is fortunate to already have successful examples of this.

## ***Public Participation in Planning***

Vancouver and Clark County Parks & Recreation departments have many years of experience involving the community in planning processes. In addition to soliciting public comments on master and strategic plans, the departments have also administered citizen visioning sessions for more specific undertakings such as the recent “Vision 2000” open space symposium. These opportunities for citizen input in specific planning process are valuable and should be encouraged.

## **Trail Maintenance Program**

***Responsible Parties:*** *City of Vancouver, potentially volunteers*

Keeping shared use path facilities in good condition is critical to the success of the trail system. Key trail maintenance activities include sweeping debris, repairing and resurfacing pavement, replacing signs and markings, emptying trash cans, trimming vegetation, ensuring good drainage, re-grading shoulders, and other activities. Poor trail maintenance can contribute to accidents and deter potential cyclists and pedestrians unwilling to risk flat tires and conflicts.

The City recommends development, over time, of a comprehensive, integrated approach to bikeway and walkway maintenance. This effort would include the following items related to trail maintenance:

- A “quick response” mechanism for routine items like sweeping, filling potholes, trimming vegetation, signing/stripping, and drainage repair.
- Enhancement of routine maintenance activities. Examples include: encouraging private property owners with gravel driveways along a path to pave the driveway 5-10 feet (1.5-3 m) back from the edge of pavement, or to right-of-way, to prevent gravel from spilling onto the path; working to trim vegetation from shared use paths; replacing or repairing shared use paths broken by tree roots; inspecting and maintaining bikeway signs, lines, and legends regularly; modifying or replacing drainage as needed
- Community adoption program to allow local businesses and organizations to ‘adopt’ a shared use path. This would be similar to the program allowing adoption of segments of the Interstate Highway system. Small signs located along the pathway would identify supporters, acknowledging their contribution. Support would be in the form of an annual commitment to pay for the routine maintenance of the pathway, which in general costs about \$8,500 per mile. The Parks & Recreation Department, the Parks Foundation or other advocacy groups may administer this program.



*Asphalt path cracking*

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## Bicycle End-of-Trip Facilities Installation Program

**Responsible Parties:** *local businesses, City of Vancouver*

End-of-trip facilities (bicycle parking, showers, lockers) for bicycle riders are as important to bicycling as motor vehicle parking is to auto drivers. The end-of-trip facilities program is proposed as part of the Transportation System Plan. From the perspective of the trail system, the program should focus on installation of installation of bike racks at parks, public buildings, and trailheads. This would be City-funded and managed.

## Signing Program

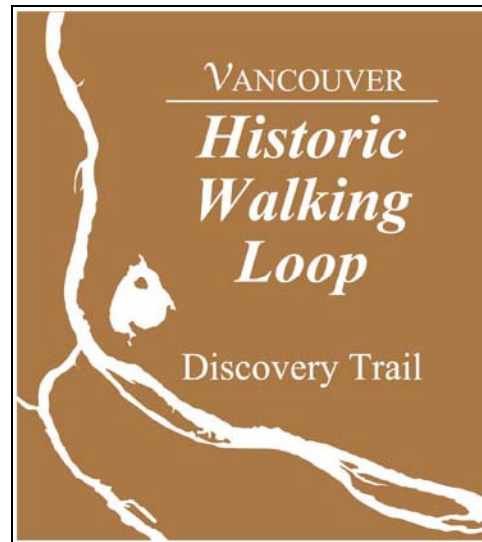
**Responsible Parties:** *City of Vancouver*

Signs help bicyclists and pedestrians find and travel appropriate routes. The signs also provide a safety measure for bicyclists, pedestrians and motorists. Signage can be implemented as part of new bikeway creation, and added to existing on and off-street bikeways. This program consists of trail signs, safety signs (including etiquette signs on shared use paths), informational kiosks. Again, it will be part of a comprehensive bicycling and walking improvement effort for Vancouver.

1. Trail identification signs should be posted along the primary north-south and east-west corridors. This type of sign helps direct travel by having a consistent symbology. Currently Vancouver uses the standard AASHTO “bike route” sign. However, this sign has been used inconsistently around the City, and does not assist cyclists in identifying appropriate bikeway routes. A sample trail identification sign for Vancouver is shown below. Such signs may include a destination plate to direct cyclists and pedestrians to transit stations, bridges, schools, parks, and other key locations. The City should work with the Pedestrian and Bicycle Advisory Committee to develop a signage system with a common identifying theme (such as Ft. Vancouver, shown in sample sign below), destinations, and implementation funding sources and schedule.
2. Safety signs, such as trail etiquette signs, can help improve user behavior on shared use paths and in specific roadway situations.
3. Informational kiosks help lay out a specific route with supplemental information. An example is the Discovery Trail Historic Walking Loop, for which an informational kiosk with a map of the route should be placed in two to three locations along the loop, such as Esther Short Park.



*Trail etiquette sign*



*Sample trail sign*

The implementation phasing of a signing program would:

- Develop a protocol for trail signing, including sign design, locations, destination plates, and potential items such as mileage.
- Improve or replace signs on existing trails.
- Develop and install safety signs on shared use paths and other locations as needed.
- Develop and install informational kiosks as part of Discovery Trail implementation.

## Education

***Responsible Parties:*** *City of Vancouver, schools, parents, teachers, community groups*

The lack of education for bicyclists, especially younger students, continues to be a leading cause of accidents. For example, Vancouver's accident history includes a number of wrong-way and sidewalk riding crashes. Motorist education on the rights of bicyclists and pedestrians is virtually non-existent. Many motorists mistakenly believe, for example, that bicyclists do not have a right to ride in travel lanes and that they should be riding on sidewalks. Many motorists do not understand the concept of 'sharing the road' with bicyclists, or why a bicyclist may need to ride in a travel lane if there is no shoulder or it is full of gravel or potholes.

Bicycle education programs in schools are typically taught once a year to sixth, seventh and eighth graders. Curriculum is generally derived from established programs developed by groups such as the League of American Bicyclists, Bicycle Alliance of Washington, Oregon's Bicycle Transportation Alliance. In Vancouver, the Police Department teaches bicycle education at selected schools annually, but the program is far from comprehensive. Formal adult bicycle education is virtually non-existent in Vancouver.

Pedestrian education programs are rare, but important as well. School children need to understand how to safely cross the road (e.g. scanning for cars), where the best places to cross are, never to cross behind a bus or car, seatbelt safety, etc... Pedestrian education should be taught as early as first grade, and continue through third grade.

These programs should be seen as an integral part of the Safe Routes to School Program described above.



*Teaching handling skills to children*

### ***Expand Current Education Programs***

Existing educational programs at Vancouver schools should be expanded in a cooperative effort between the City and the School District, and supported by a secure, regular funding source. A Safety Committee should be formed consisting of appointed parents, teachers, administrators, police, an active bicyclist, and public works staff whose task it is to identify problems and solutions, ensure implementation, and submit recommendations to the School Board or City Council.

### ***Develop New Educational Program Materials and Curriculum***

Education materials should be expanded to promote the benefits of bicycling and walking, the need for education and safety improvements, the most recent educational tools available in the country (including the use of low-cost safety videos), and directives to parents on the proper school drop-off procedure for their children. Educational pamphlets for children should be made more readable. Incentive programs to reward good behavior should be developed. Educational programs, and especially on-bike and on-street pedestrian training, should be expanded to more grades and for more hours per year. Education curriculum should, at a minimum, cover the following lessons:

- on-bike training or bicycle ‘rodeos’
- use and importance of bicycle helmets
- how to adjust and maintain a bicycle
- night riding (clothes, lights)
- rules of the road
- riding on sidewalks
- how to negotiate intersections
- riding and walking defensively
- use of hand signals
- seatbelt safety

A standard safety handbook format should be developed incorporating the best elements of those currently in use, and made available to each school on disk so they may be customized as needed. Vancouver schools should develop a circulation map of the campus and immediate environs to include in the handbooks, clearly showing the preferred circulation and parking patterns and explaining in text the reason behind the recommendations. This circulation map should also be a permanent feature in all school newsletters. Bicycle helmet subsidy-programs are available already in Vancouver, and should be used to provide low-cost approved helmets for all school children bicyclists.



*Helmeted riders going with the flow of traffic*

### ***Develop an Adult Education Program***

Establish an adult bicycle education program through organizations such as the Vancouver Bicycle Club, in cooperation with the Parks and Recreation Department and/or other City departments. This program should (a) teach adults how to ride defensively, (b) teach adults how to ride on a variety of City streets, and (c) encourage adults to feel more confident to ride to work or for utilitarian and recreational trips. The program should coordinate with local bicycling groups who could provide the training expertise, and possibly lead organized bicycle-training sessions, tours and rides. Likewise, educational walks could teach appropriate pedestrian behavior on city streets.

The City should also partner with local, State and national health organizations to promote walking and bicycling. Examples of possible partnering organizations include: the Robert Wood Johnson Foundation, The Center for Disease Control, and other organizations that focus on public health issues. Through these partnerships, Vancouver residents could be educated about the health benefits of incorporating walking and bicycling into their daily lives.

### ***Educate Motorists***

Educate motorists about the rights and characteristics of bicyclists and pedestrians through a variety of means including:

- making pedestrian and bicycle safety a part of traffic school curriculum in Vancouver,
- producing a brochure on pedestrian and bicycle safety and laws for public distribution,
- enforcing existing traffic laws for motorists, bicyclists and pedestrians,
- working to improve the DMV manual's treatment of bicyclists and pedestrians
- sending an official letter to the Department of Motor Vehicles recommending the inclusion of bicycle and pedestrian laws in the drivers license exam.

## Enforcement

*Responsible Parties:* Police Department, City of Vancouver

Bicyclists, pedestrians, and motorists all must behave consistently and according to established laws in order for all to enjoy a safe system. The City should work with the Police Department to develop a consistent enforcement program for pedestrian and bicycle-related laws. Such programs have been very effective, in combination with increased bikeway and walkway facilities, at increasing public awareness of bicycle and pedestrian safety issues. Suggested components of a program for Vancouver include:

- Police training: work with the Police department to ensure officers are trained in Washington State laws and local ordinances related to safe motoring, walking, and bicycling. Invite a police department liaison to participate in the BPAC. Hold regular meetings with traffic enforcement officers to discuss issues and solutions.
- Develop and distribute Informational brochures to bicyclists, pedestrians, and motorists.
- Design periodic traffic enforcement “sting” operations targeting violations like failing to yield to pedestrians in crosswalks, speeding in school zones, driving in bicycle lanes, and bicyclists and motorists running red lights. Publicize to ensure maximum benefit.
- Consider increased enforcement and fees for traffic violations that endanger pedestrians and bicyclists.
- Develop and continue a Police on Bikes Program to establish police presence at a community level.



## Volunteerism

Vancouver-Clark Parks & Recreation’s “Trailwatch” program recruits, trains and supports volunteers to help meet the information and safety needs of other trail users and park staff. “Trailwatchers” provide trail users with information on rules and points of interest, report safety and security concerns to appropriate officials, and also assist with light trail maintenance. Volunteers are assigned to the following trails: Discovery Trail, Burnt Bridge Creek Trail, Ellen Davis Trail, Waterfront Renaissance Trail, and the Discovery Historic Loop.

**Trailwatch**

Vancouver-Clark Parks and Recreation Services.

