THE BICYCLE TRANSPORTATION ALLIANCE

Blueprint for Better Biking
40 Ways to Get There

A Blueprint: 40 Ways to Get There

Portland's investment in bikeways has paid off, with bicycling as a means of transportation more than tripling in the last decade.

A Great Start

The Bicycle Transportation Alliance is Oregon's voice for cyclists. Thanks in part to the BTA's advocacy and educational efforts, Portland leads the country in bike-friendliness for a city its size, being named America's Best Bicycling City three times by *Bicycling* magazine. We're continuing to push the envelope to discover new ways to provide more transportation choices for people in the Portland metro area.

PHOTO BY CHRIS HO, CHRISHOPHOTO.COM

Since the BTA's start in 1990, Portland has quadrupled our miles of bikeways, tripled the number of people riding bikes, and developed a vibrant bicycle culture. Our efforts are working. But we need to do more.

Setting the Scene

Fueled by a desire to be designed the nation's first "Platinum-rated" bicycling city (a designation by the League of American Bicyclists), and create a clear path for our future, the BTA is launching a campaign to focus the region's decisionmakers on a set of forty tangible improvements.

The *Blueprint for Better Biking* provides a list of 40 priority projects that would help the Portland Metro area achieve a new level of success in bicycling. We recommend innovative, popular, and realistic solutions to substantially increase cycling. We feature low-cost, high-return solutions and projects that fill serious gaps in the current network. We offer solutions based on a set of consistent principles that are appropriate to the different urban and suburban contexts.

This project defines the future direction of the BTA's bicycling advocacy. It is intended to inspire cyclists and our agency partners, and develop partnerships and advance cycling for the good of all. The BTA brings you the **Blueprint for Better Biking: 40 Ways to Get There**.

Goals of the Blueprint Report

The goal of the *Blueprint for Better Biking* is to identify a consistent set of bicycling facilities, policies, and programs that will drastically increase bicycling among a wide range of users including adults, elderly and youth.

Implementing our recommendations will:

- Increase the safety, accessibility and convenience of all major bike routes.
- Inspire new bicyclists by making cycling a viable option for all types of transportation trips and recreational and fitness purposes.
- Increase the quality of experience for cyclists.

What People Want...

Process: People Generated our Vision

In our quest to develop a vision that increases bicycling, we focused on listening to people. The BTA worked with experts and listened to everyday and novice cyclists.

Starting in 2004, the BTA:

- Convened a cabinet of experts on bicycling facilities, programs, and policy to serve as our advisory committee.
- Surveyed over 900 Portland area residents about cycling.
- Met with bicycling planners, presented at bicycle advisory committees, and ran a series of ground-truthing bike rides called "Ride the Region."
- Researched cost-effective techniques that will attract current and emerging cyclists.

Themes and Challenges

Our research identified four major themes summarizing the challenges common to everyday bicycling:

1. Cycling Around Cars

Cycling in traffic, around automobiles, is the top concern of cyclists of all levels of skill and experience. Increasing the number of low-traffic bicycling routes is especially important for parents and families, people with limited cycling experience, seniors, and those who simply prefer an aesthetically pleasing ride.

2. Complete Routes

Bicycle lanes and facilities often end, disappear, or have key gaps. Gaps at dangerous intersections are a major barrier to inexperienced cyclists.

3. Motorist Behavior

As congestion, speeding, and driver aggression increases, driver behavior has become an increasing concern for cyclists. Cyclists feel endangered when motorists speed, run red lights, fail to yield, and drive while drunk or talking on cell phones.

4. Quality of the Facilities

Debris, poor street conditions, and lack of clear signs and markings are critical problems cited by many regular cyclists, especially in suburban areas. Conditions that are acceptable for motorists can be barriers for cyclists.

Action

The *Blueprint for Better Biking* defines a vision that addresses these four themes.

The BTA's strategy to increase bicycling focuses on both current and potential bicyclists. We identify different kinds of cyclists and discuss facilities to accommodate each type. Our strategies focus on generating the largest increase in bicycling among the total population.

Nearly 500,000 Americans ride their bicycles to work on a daily basis, and 52 percent of Americans want to bike more than they do.

PHOTO BY HUGH BYNUM

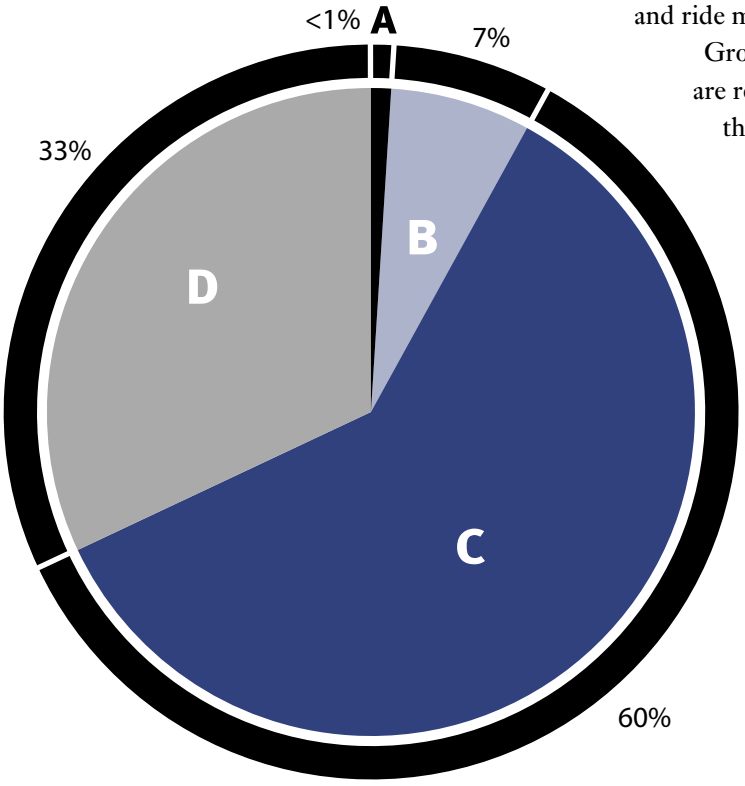
Blueprint for Success

BTA Vision: create a network of bicycle routes that attracts all people, using clearly identified, well-maintained, and connected bikeways that minimizes exposure to automobile traffic.

1. Increased User Base

Research shows that most Portlanders enjoy bicycling and would bicycle for recreation, exercise, and to get around. We have categorized these people into three groups:

Group A is a small group of "strong and fearless" riders who ride anywhere, on any road. **Group B** are "enthused and confident" cyclists who ride regularly on most types of bikeways. **Group C**, the "interested and concerned," are the largest group that ride in smallest numbers. They require low-traffic and no-traffic routes to feel safe and ride more often. Groups B and C are roughly two-thirds of the population.



- **A** FEARLESS
- **B** CONFIDENT
- **C** INTERESTED
- **D** NON-CYCLISTS

The potential is great to drastically increase bicycling rates in the metro area by creating new low-traffic, well-placed bikeways.

2. Comprehensive Bikeway Network

A comprehensive network of connected bikeways is key to attracting Group B and C cyclists. Low-traffic bicycle streets will link to off-street or higher traffic, longer-distance routes. Each type of route should be designed for appropriate user groups.

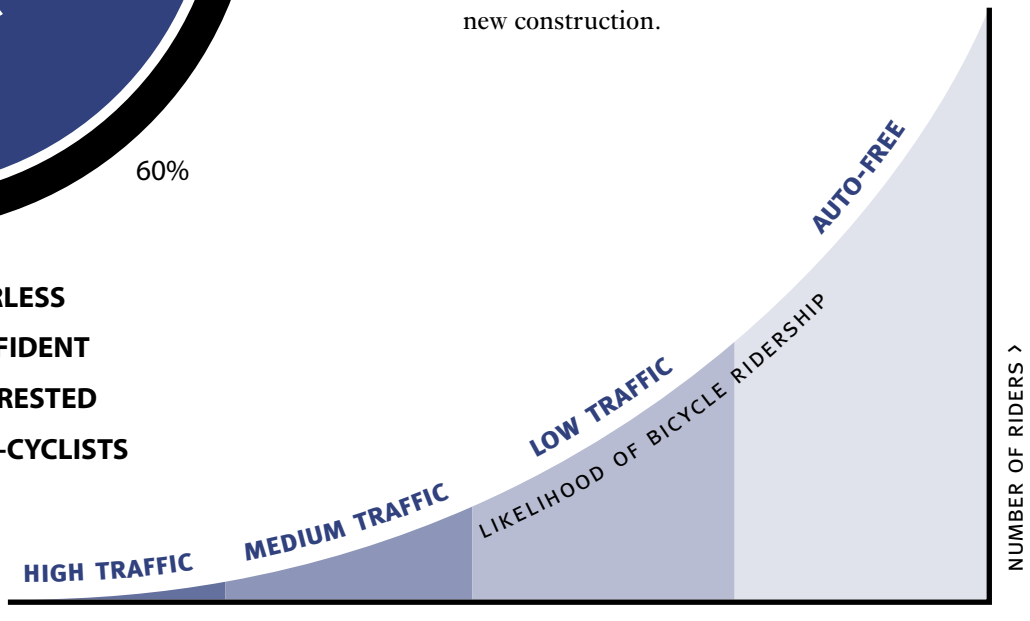
Low Traffic Streets

Bicycle Boulevards - Streets where bicycles are prioritized. Boulevards provide connected routes and are easily identified with pavement markings and signs. The most effective boulevards restrict automobile travel and improve major intersection crossings.

Woonerfs, the Dutch word for "living streets," are extremely low traffic, low speed streets where walkers and bicyclists share the road with autos.

Bike Lanes: A tool for major roadways

Striping bike lanes is a low-cost way to convert primary streets into bicycle-friendly streets. Bicycle lanes on mid-traffic streets are primary commuting routes for Group A and B cyclists; they should be included in new construction.



3. Solutions for the Suburbs

Bicycling in the suburbs is less common and logistically more difficult than in older urban areas. Urban centers, including Portland's, have a network of connected lower-traffic streets; most suburban through-streets have higher volumes and speeds.

Suburban areas often start with bike lanes on high-traffic streets, providing access for Group A cyclists. A wider range of solutions will appeal to more riders.

4. Cultural Shift

Targeted marketing and promotions are effective in increasing first time and continued bicycling. Examples include:

Car Free Sundays

On any given Sunday, two million of Bogotá, Columbia's seven million residents take to the streets on bicycle and foot using the 120 Km of streets that are closed to cars.

Travel Smart

A social marketing program that identifies and works with individuals that want to change the way they travel. In Portland's pilot programs, participants reduced car trips by 12%.

Safe Routes to School

Nationwide only 15% of children walk and bike to school. Ongoing efforts in pilot communities have doubled children's bicycling and walking to school.

Financial Incentives and Employer Support

Would a $200 cash-out compensation entice more bikers? Federal law allows employers to offer tax-exempt incentives to employees who take transit or carpool. This could be extended to bicycling.

SUBURBAN SOLUTIONS:

BIKEWAY TYPE	ATTRIBUTES
Shared Use Paths	Build paths with new developments along power lines, waterways, utilities and in parks.
Low-traffic Network	Identify and mark existing low-traffic suburban streets. Add bicycle "cut-throughs" to schools, parks, and between subdivisions
Safe Routes to Schools	Develop programs and parent-coalitions to help more children walk and bike to school.
Centers and Campuses	Focus high-cost facilities in town centers and on campuses to encourage limited auto use areas.

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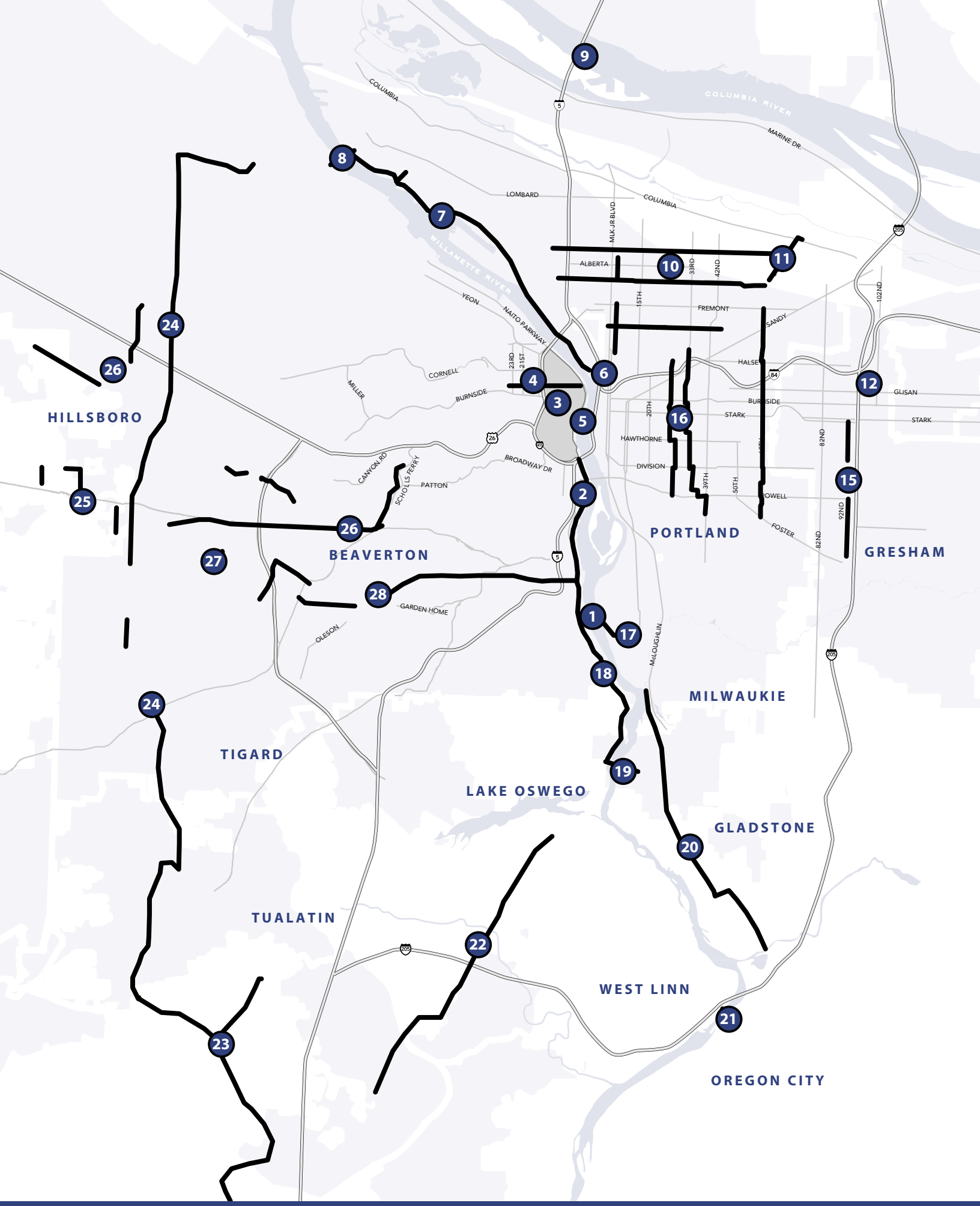
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TOP 10 : This symbol marks the projects most likely to increase cycling

Note: projects 29-40 not shown on this map

The Top 40 Projects

1: Sellwood Bridge

The biggest barrier identified by Portland-area, the Sellwood Bridge is nearly uncrossable. Bicyclists cannot legally use the narrow sidewalks, and the busy traffic lanes are narrow. The bridge is over three miles from a safe alternative.

TOP 10

2: South Waterfront Path

The South Waterfront development district will transform Portland's waterfront with new residential and employment districts. This area is also a major gap in the Willamette riverfront trails system.

3: Central City Bicycle Plan

Getting to and around Portland's central city is a challenge for cyclists. The downtown Bicycle Plan update will target west-side access and accommodations for less-experienced cyclists. Other issues include: access to and from Waterfront Park; north-south bikeways; signs and markings; and bicycle parking.

TOP 10

4: NW Flanders St.: Bike Boulevard

Flanders Street was identified as a future bicycle boulevard in the Burnside Street plan. This new bicycle route will connect the Pearl and Nob Hill business district with a bike- and pedestrian-only bridge over I-405.

5: Morrison Bridge

The Morrison Bridge connects SE Portland and the Esplanade to central downtown Portland. Bicyclists cannot safely cross the bridge and must detour to bridges either north or south.

6: Rose Quarter

The Rose Quarter is a "black hole" for cyclists; the direct and intuitive connection between the well-used Eastside Esplanade and the Vancouver/Williams bikeways is prohibited through the Rose Quarter Transit Center.

Focus on Bottlenecks. Bridges and freeway crossings are non-negotiable; even a well-designed network fails if cyclists can't cross the rivers and freeways.

Top 40 Projects (cont'd)

PHOTO BY HUGH BYNUM

Vancouver's Waterfront Renaissance Trail runs 3.5 miles and costs $3.5 million. The trail has helped catalyze over $300 million in private redevelopment along the inner waterfront and downtown.

7: North Willamette Greenway Trail

Part of the Willamette River Greenway vision, this trail creates a new route from the Eastbank Esplanade north through Swan Island to the St. Johns. It will connect major employment centers, the Lewis and Clark Discovery Greenway Trail, and Marine Drive.

8: St. Johns Bridge

The only bridge for 5 miles, the St. Johns is very dangerous for cyclists. If improved it would connect North Portland to Forest Park, job sites in industrial Northwest Portland, and Sauvie Island. A possible two-lane solution with bike lanes would accommodate all users.

9: I-5 Bridge Access: Portland

Traveling from Portland to Vancouver is confusing and disconcerting, even for experienced cyclists. The I-5 bridge crossing lacks adequate markings and has gaps, especially at Jantzen Beach, deterring bicycling between the cities.

10: North/NE Portland – New East-West Bikeways

North and Northeast Portland lack high-quality, connective low-traffic bikeways running east-west (such as SE Ankeny and SE Lincoln/Harrison). Improvements can be made on existing routes such as NE Tillamook or Knott; a new set of bicycle boulevards are recommended (e.g. N Failing, N Mason, and N Bryant).

11: NE Cully Boulevard

NE Cully improvements will serve an economically challenged community and improve a dangerous gap for cyclists.

12: I-205 Bike Path Crossings

The I-205 path has dangerous crossings at a number of major streets; the crossing at NE Glisan is particularly hazardous. Trails target new and inexperienced users, making safe trail crossings especially important to protect all users.

13: Gresham Fairview Trail

This trail will be a major north-south connection in east Multnomah County. Starting at the Springwater Corridor in Gresham, it crosses the eastside MAX light-rail and will continue at the Columbia River connecting to the existing Lewis and Clark Discovery Greenway Trail along Marine Drive.

14: Springwater Corridor to Mt. Hood

Extending the popular Springwater Corridor southeast to Mt. Hood, connecting to the Pacific Crest Trail will provide an outstanding destination for bicycle tourists and a recreation opportunity for metro-area residents.

15: 92nd Ave

SE 92nd Ave will fill gaps in the connection between the Lents neighborhood and other parts of Portland, including Rocky Butte. The Route must develop an innovative and easily identifiable way to cross I-84.

16: North-South Eastside Bikeways

NE and SE Portland lack safe and accessible north-south connections. Crossing I-84 is especially challenging. Possible improved/new crossings include 7th, 24th, 28th, 52nd, and 74th Avenues.

17: Close the Springwater Gap

Connecting the final gap in the popular Springwater Trail corridor will complete the off-street route between Boring and downtown Portland.

18: Highway 43 and Willamette Shoreline Trail

Cyclists going between West Linn / Lake Oswego and Portland face Highway 43, one of the most dangerous and challenging gaps in the region. The "Willamette Shoreline" corridor might include an updated streetcar line, must include a high-quality bicycling route.

19: Lake Oswego to Milwaukie Crossing

Crossing the river is again a barrier for cyclists, here between Lake Oswego and Milwaukie / Gladstone. A possible solution is to convert an existing railroad bridge into a bicycle /pedestrian river crossing.

20: Trolley Trail

This north-south route will connect Sellwood, Milwaukie, Oregon City, and Gladstone along a former streetcar line. It will connect to the Springwater Corridor and to the Willamette River trail network.

21: West Linn to Oregon City Crossing

Recreational and transportation cyclists have no safe way to cross the river between West Linn and Oregon City. An improved crossing added to the historic bridge will provide a necessary link between two important town centers.

22: Stafford Road

Stafford Road has no shoulders, fast-moving traffic, and is located in a rapidly-growing area. It is also a popular route for recreational riders. Addition of safety shoulders or bike lanes will greatly improve bicyclist safety on Stafford.

23: Tonquin Trail

The Tonquin Trail is a proposed 19-mile path linking Wilsonville, Tualatin and Sherwood. The Mt. Scott-Scouter's Loop Trail is a proposed trail that would link Happy Valley and the Sunnyside Road area to future development in Pleasant Valley, Damascus and the Sunrise Corridor.

24: Beaverton Powerline Trail

A powerline corridor owned by PGE and BPA runs from the Tualatin River north to Forest Park. More than two miles of this 16-mile trail concept are complete.

25: Low-Traffic Suburban Routes

To increase cycling among suburban residents, well-marked low-traffic bicycle networks must be developed. Even among current cyclists, many suburban riders develop their own circuitous neighborhood routes. A formalized network will creatively identify existing routes and mark them with high-visibility treatments.

26: Gaps in Suburban Bikeways

Suburban bicycle routes are often high-traffic streets with bicycle lanes. These bikeways must be connected and major gaps fixed. Sample gaps to be fixed are: SW Garden Home Road; Beaverton-Hillsdale Highway at Scholls Ferry; SW Walker Road; SW Barbur Blvd.; Bethany Road.

27: SW Hall Boulevard

SW Hall Blvd. leads directly in and out of downtown Beaverton. An unmanageable gap is a barrier for shoppers, recreational cyclists, MAX users and folks just trying to visit Beaverton's renowned Farmer's Market.

Every day thousands of bicyclists travel downtown to work and shop. Every cyclist frees up a parking space, improving the economic vitality of downtown.

PHOTO BY HUGH BYNUM

Top 40 Projects (cont'd)

Effective low-traffic bikeways include:

• Low car volumes obtained by diverting auto traffic at intersections with arterial streets.

• Low traffic speeds obtained through design (traffic calming, skinny streets, street trees, striping), markings, and enforcement.

• Innovative signs and markings for designated bikeways that raise driver awareness, slow vehicle speeds, and make the street welcoming for bicyclists.

• Connected network that allows cyclists to travel to major destination centers.

28: Fanno Creek Trail

Beginning at Willamette Park, this trail will stretch 15 miles south-west through Beaverton, Tigard, and Durham, ending at the Tualatin River. With half of the trail complete or under construction, this trail network will provide access to other north-south trails and the Willamette River Greenway trails.

29: Low-Speeds / Low-Volume Bikeways

Portland's Bicycle Boulevards and European Woonerfs are successful street treatments that reduce speeds in residential neighborhoods and provide cyclists with excellent cross-town routes. Building more of these facilities will be a cost-effective way to attract new riders.

30: Signs and Markings

Bikeway signage and pavement markings indicate routes and provide navigation, safety, and security functions. Ideal systems are easily seen, on-street markings visible by both cyclists and drivers. Markings are used to indicate bicycle boulevards, to direct cyclists to major routes and paths, indicate route shifts, and alert drivers to cyclists' expected presence.

31: Maintenance of Bikeways

Bikeway maintenance is a core concern for cyclists. Maintenance includes sweeping bike lanes and paths, paving and pothole repair, landscaping, and street marking repainting. Jurisdictions must schedule regular sweeping and improve responsiveness, especially in Washington County and for blue bike lanes.

32: Employer-Based Incentive Programs

Current law provides employer-based tax breaks for car parking and transit. Developing employer-based programs that offer cyclists cash-out or other incentives will increase the number of people who bike or walk.

33: Tourism Center

A regional tourism center and office will increase bicycle tourism by promoting bicycling, providing tourism information and offering services to people interested in traveling in Oregon.

34: Enforcement Campaigns

Enforcement campaigns targeting the most dangerous violators will increase safety. Motorist violations include running red lights; aggressive and drunk driving, failure to yield, and speeding in low-speed zones. Cyclist violations include wrong-way riding, improper lights, and red light running. Police liaisons will help facilitate community-based enforcement and coordinate with engineers. Diversion programs will increase public acceptance.

35: Education Campaigns

Education campaigns will teach the rights and responsibilities of bicycling. Institutionalized education programs are preferred, such as mandatory drivers' education, improved DMV literature and testing, and outreach via Commercial Driver's Licensing. Billboard and advertising campaigns can communicate public messages and raise visibility.

36: Car-Free Events

Worldwide, cities host events to make walking and biking easier for families, children, and the elderly. The most successful are regular, weekly events that close a portion of the roads. Others prohibit auto use in a larger zones. In Portland, Bridge Pedal is one event that touches these concepts, with 20,000 bicyclists and walkers!

PHOTO BY HUGH BYNUM

37: Safe Routes to School

Safe Routes to School programs increase bicycling and walking to school through a comprehensive approach that includes engineering, education, encouragement, and enforcement components. Programs engage schools, parents, children and community groups.

38: Bike Parking

Improved end-of-trip bike parking, both long-term and short-term, will increase the number of people who bike to retail and commercial districts, transit stops, campuses, and jobsites.

39: MAX Station Bicycle Hubs

In order to connect transit and cycling, bicycle hubs should be placed at every MAX station. They will include signage, bike-route maps, on-demand bike lockers, and bike tourism information. Safe and well-marked bike routes leading to each stop will enhance the system.

40: Oregon Center for Bicycling and Walking

Founding this institute at Portland State University will incubate, test, and evaluate, and propose innovative bicycle and walking plans, street treatments, etc., as well as providing a center for learning and research.

Bicycling at a moderate pace for just 30 minutes, three times a week, provides great improvements in cardiovascular health, body weight, and mental health.

Blueprint for Better Biking

The Blueprint for Better Biking is a project of the Bicycle Transportation Alliance. Contact us at 503.226.0676 or www.bta4bikes.org

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You and Your Role

To make sure these projects are built, we need your help. The BTA's 4,000 members make all of our advocacy work possible. Join today and activate!

www.bta4bikes.org/join

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