

Active Transportation Urban Demonstration Project: Lents

Description of Demonstration Project

Introduction

This proposal for an *active transportation urban demonstration project* is to saturate one urban travel shed in Portland, Oregon with the types of active transportation infrastructure that are found in the world's best bicycling and pedestrian cities. The intent is to demonstrate how a dense network of world-class cycling facilities, in conjunction with targeted encouragement programs, can reduce driving and increase bicycling to rival levels seen in the world's best cycling cities. This almost \$60 million, four-year project will boost bicycle use in this area of 160,000 residents from its current estimated level at 10% of trips to more than 35% of trips.

This demonstration project will show how to take bicycle transportation in America to the "next level." By insistently implementing bikeway improvements and assertively encouraging their use, Portland has achieved an enviable bicycle mode split (for an American city). However, the difference in quality between the bicycle systems in Portland compared to those found in the best bicycling cities of Europe remains large. By implementing world-class designs in a concentrated manner, we intend to replicate the same conditions that result in the bicycle being the primary means of personal mobility in cities around the world.

This demonstration project will:

- demonstrate the "art of the possible" in achieving world-class levels of non-motorized mode splits in an American city, and
- provide a proving ground for the full development of those world-class designs in an American context.

Project Specifics: Area

The area proposed for this demonstration project is defined by a three-mile radius within the City of Portland centered on Lents Town Center. It is an area of 23 mi² with 164,000 residents. Within this area are 31 public schools and more than 85 publicly-accessible parks. By definition all households are within 3 miles (18 minute bicycle ride) of the heart of the Lents Town Center. There are 12 grocery stores in the project area. In addition to the commercial concentrations in the Town Center, there are also commercial corridors on Powell, Foster, 82nd, Division and in the Stark-Washington commercial area.

Project Specifics: Bicycle Infrastructure. There are four principal bicycle infrastructure elements to this proposal: residential bicycle boulevards, commercial corridor cycle tracks, new and/or improved bicycle lanes/cycle tracks on collector streets and advisory bicycle lanes. This project will build a dense network of low-stress shared roadways in this area. The 36 miles of new bicycle boulevards and advisory bicycle lanes will be built to the highest standards. The bicycle boulevards will be designed to provide clear priority to bicycle transportation on such streets. All arterial crossings will be clearly treated to create easy, safe and comfortable conditions. All available tools will be used to minimize automotive speeds and volumes on the shared roadway routes.

To provide safe, comfortable and prioritized mobility for cyclists and excellent access to commercial destinations the project will convert the eight miles of existing bicycle lanes on Foster, 122nd and Division to cycle tracks. The project will add bicycle lanes to other important corridors in the area, most notably Market Street and Division Street west to the 50s Bikeway. The project will also

construct more than two miles of new cycle track on Foster between Lents Town Center and Powell Boulevard.

Project Specifics: Pedestrian Infrastructure. Another major infrastructural element will be pedestrian improvements. Pedestrian improvements will focus on streets where current facilities are substandard, especially those that provide direct access to transit and commercial uses.

Project Specifics: Encouragement Programs. The project will couple Portland's award-winning SmartTrips encouragement program with the infrastructure improvements. Using an individualized marketing approach, the encouragement program will alert area residents to the new and improved mobility options available to them following completion of the infrastructure improvements.

An Important Project for the Region

On a scale not previously envisioned for the region, this project proposes a myriad of improvements that offer substantial benefits. First is the potential to achieve dramatic shifts in mode split toward active means of transportation. This project will create a density of world-class bikeways currently unrivaled in the United States. The absence of such facilities in this area is the primary missing element in allowing for high active transportation mode splits. The project area benefits from a large population base in close proximity to commercial land uses, recreational opportunities and high-capacity transit. Match those attributes with an existing and growing awareness of active transportation as a legitimate means of mobility and the conditions will be ripe for the blossoming of active transportation once this area is provided with the primary thing it now lacks: a high quality active transportation infrastructure. Given the experience of bicycle-friendly cities around the world, where it is recognized that high quality bicycle facilities attract high ridership, there appears no reason why this area could not achieve a bicycling mode split on a par with that found in the best cycling cities of the world.

Second is the opportunity this project will provide the region to determine how to best build and promote a world-class urban bikeway system. It is in these types of dense, mixed-use environments—the types of mixed-use urban areas that underpin the region's 2040 Regional Growth Concept—where the bicycle can easily be more attractive than driving for the types of short trips characteristic of these areas. This project will demonstrate not only how, but what can be achieved in urban areas throughout the region. This project will develop three types of facilities that will ultimately prove crucial to moving the region toward a more sustainable means of transportation: high quality bicycle boulevards, advisory bicycle lanes and cycle tracks. This project will provide professional staff, local residents, business owners and other interested parties the opportunity to develop, improve and assess how these types of facilities—successfully employed in cities around the world—can be designed in a U.S. context.

The success of this project is likely to have ramifications far beyond demonstrating the “art of the possible.” Lents is a burgeoning Town Center with its commercial elements not yet mature. The area is now served principally by an automobile-oriented transportation network. Soon it will include high-capacity transit. Lacking from this mix are the types of facilities that would attract the average person to active transportation. A positive response to the implementation of this proposal's infrastructure and programs could dramatically alter the landscape in the area. This project may well influence thinking about the form that future development in the area will take. With results that

approach world-class active transportation mode splits, developers and lenders may more strongly consider an urban design for Lents that more closely resembled a “car-light” mixed-use center.

The current commute mode split¹ in this area is likely close to 10% bicycle, 20% transit, 4% walking and 71% automobile. Post-implementation commute mode splits could more closely resemble what is found in the most bicycle-friendly Dutch, Danish or German cities. It would not be unreasonable to expect mode splits in this 23 mi² area to become 35% bicycle, 25% transit, 5% walking and 35% driving.² This project, as proposed, would create conditions under which schoolchildren could safely and comfortably bike and walk to school, workers could safely and comfortably bicycle and walk to work, and all residents of the area could safely, comfortably and conveniently access all commercial, recreational and institutional destinations within the project area using active transportation.

In an era of diminishing transportation resources and growing population, this project will demonstrate how, for pennies on the dollar, the region can effectively, healthfully and sustainably serve the mobility needs of our region.

Cost Estimate and General Project Timeline

Table 1: Scenario Evaluation: Lents Area Demonstration Project

	Existing Miles	Added Miles	Improved Miles	Costs per mile (millions)	Cost for New & Improved Miles
Path					
Boulevard	4.3	23.6		\$0.25	\$5.9
Advisory Bicycle Lanes		12.1		\$0.25	\$3.0
Bicycle Lanes/Cycle track	21.6	16.2	8	\$1.00	\$24.4
Enhanced Shared Roadway		0.5		\$0.01	\$0.0
				subtotal	\$33.3
Sidewalk s		4		\$1.00	\$4.0
				subtotal	\$4.0
				<i>Planning</i>	<i>10%</i>
				<i>Engineering</i>	<i>20%</i>
				<i>Overhead</i>	<i>20%</i>
Encouragement Programs					\$1.0
	26	56	8		\$57.1

This is a \$57 million project, with the bulk of the cost needed for creating new and retrofitting existing roadways with cycle tracks. Table 1 displays the rough breakout of project costs. The project is scalable. Implementing fewer or greater miles of bikeways, especially the cycle tracks, will affect the overall project cost.

The project will require public outreach for the more difficult project elements—notably the provision of cycle tracks on targeted roadways. Acceptance and support of area residents and business and property owners proximate to and along the targeted corridors will be necessary prior

¹ Based on data from the City of Portland Auditor’s Office in their annual resident surveys. Bicycling and transit are likely overrepresented in commute mode split compared to overall mode split, while driving and walking are likely underrepresented compared to overall mode split.

² We would also expect bicycling and walking to increase in overall mode split as their networks improve and their use is further encouraged.

to implementation. We believe we will need at least one year of public process with focused attention on cycle tracks before we will be in a position to construct them. The bicycle boulevards and advisory bicycle lanes offer more immediate opportunity for implementation as they tend to be less controversial. The project schedule will allow for constructing and retrofitting approximately 20 miles of boulevard per year. Thus, we expect this project to be completed within four years from funding being available.

Partnership

Many of the civil improvements that contribute to the bicycle boulevards also lend themselves to “green treatments” that would serve to detain or retain street run-off from entering the city’s sewer system. To that end, Portland’s Bureau of Transportation (PBOT) and the city’s Bureau of Environmental Services (BES) will continue their collaboration and closely coordinate designs and locations to derive as much dual-use as possible.

Perhaps most notable with an effort like this are the partnerships that would develop or continue around evaluating this project. Currently, Portland remains the best source for national data about bicycling. Portland’s “build it and they will come” story provides some of the best support for the argument that bicycling offers not only the best return on investment in terms of transportation dollars spent, but also offers the least expensive means to address a number of the big issues that currently plague us. This project continues and can dramatically strengthen that tradition. We will work with researchers at Portland State University’s Center for Transportation Studies to both establish baseline levels of bicycling, walking and transit use and to then track changes over time.

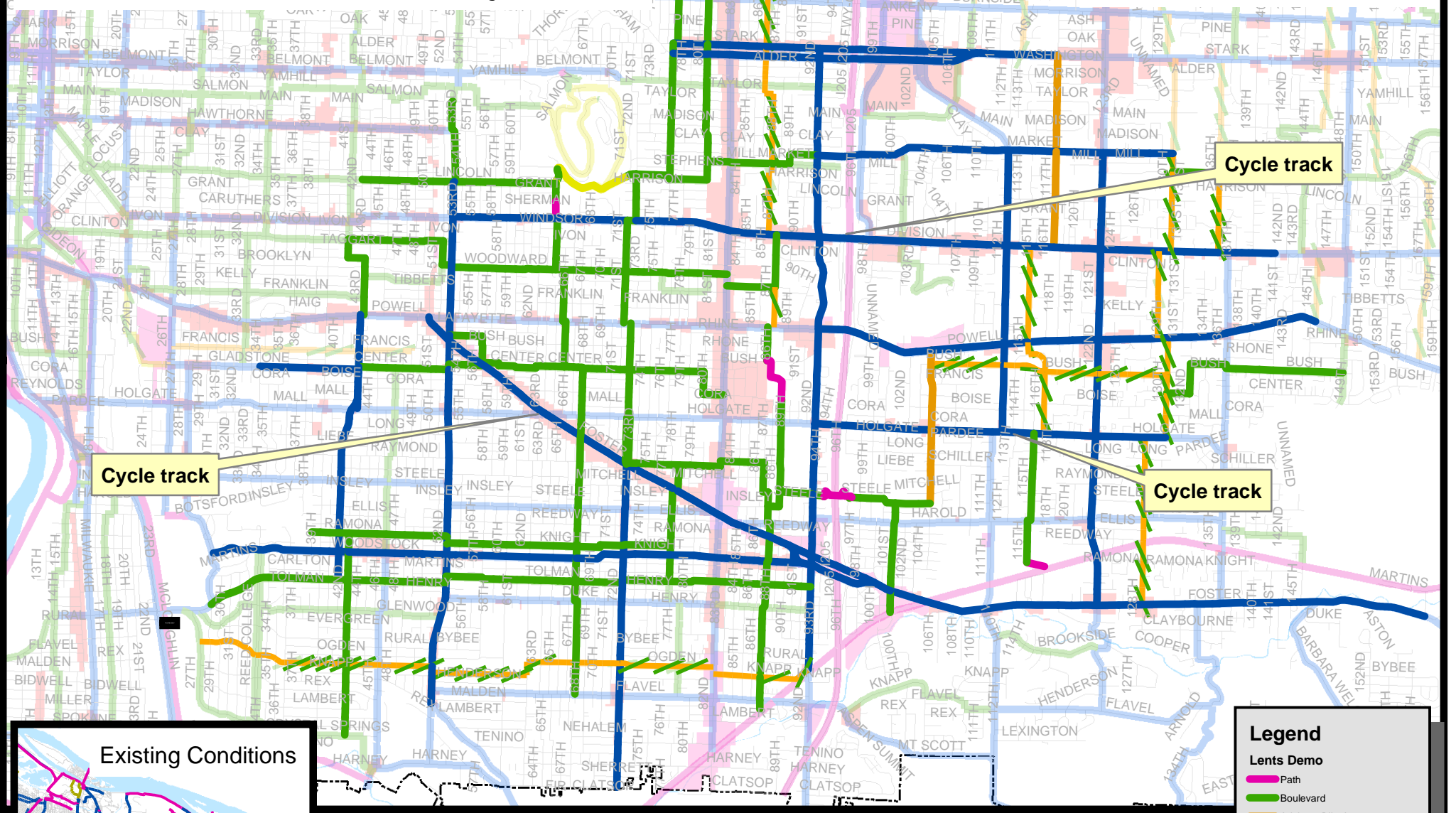
Project Sponsor

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Lents Area Active Transportation Proposal: Urban Demonstration Project

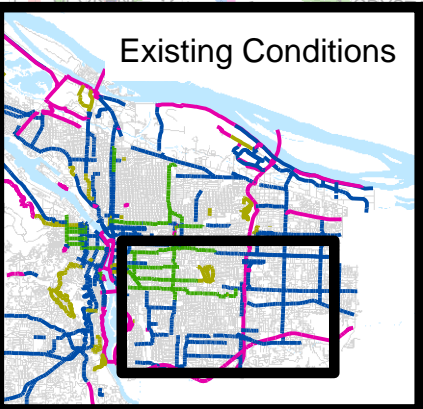
Creating World Class Bicycling Neighborhoods



Cycle track

Cycle track

Cycle track



Existing Conditions

40 miles of low stress shared roadways
24 miles of cycle tracks
14 miles of bike lanes

Legend

Lents Demo

- Path
- Boulevard
- Advisory Bike Lane
- Lane/Cycle track
- Advisory Bike Lane/Boulevard
- Enhanced Shared Road

Portland Zoning

Zoning

- Commercial
- Employment