



**Testimony Of
Lane Transit District**

**Before The
Senate Committee
On Banking, Housing, And Urban Affairs**

**Hearing on Bus Rapid Transit
and Other Innovations**

May 8, 2003

Presented by

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Mr. Chairman, thank you very much for the invitation to testify here today. We appreciate your interest in bus rapid transit, and thank you for considering our opinion as you prepare to write the transit portion of the next surface transportation bill.

Background

Lane Transit District is headquartered in Eugene, Oregon, and serves the central Lane County area. Eugene and its neighbor city of Springfield, together with the immediate suburbs, have a population of approximately 230,000 people. We are about 110 miles south of Portland, and Eugene is the home of the University of Oregon and the Fighting Ducks.

Lane Transit District has been recognized as one of the top transit systems in the country, and we consistently rank very high in per capita ridership and service level. We attribute our success to the implementation of innovative services and programs that have generated a positive response from the community.

In 1985, Lane Transit District was the first major transit system to equip all of its buses with lifts for people in wheelchairs. This was long before that became a requirement of the American with Disabilities Act. We also were a pioneer in the concept of what we call group passes. It started with the University of Oregon in 1987, when an agreement was reached whereby all students pay a transit fee as part of their student fees, and then can ride our system simply by showing their student ID. There are now approximately 30 organizations in our community, both public and private, that use group passes, and the program has been emulated by other transit districts around the country.

Eight years ago, members of our board of directors began to consider how our system could be improved further. How could we make a significant step up in the quality of our service in order to attract more riders? How could we guarantee on-time performance in the face of increasing traffic congestion? How could we control operating costs that were increasing annually due to congestion-related delays to our buses? Many in the community suggested light rail, and those suggestions led to a rail study. The conclusion was obvious: we are too small a community to support the investment in rail infrastructure. However, not willing to accept that as a final answer, the board directed staff to investigate the feasibility of designing our system to emulate as closely as possible the service characteristics and image of a rail system. That became bus rapid transit, or BRT.

BRT Defined

BRT has taken on a number of forms within the country. In fact, that is one of the strengths of BRT: It has the flexibility of design to allow it to meet varying operating environments and political considerations. BRT can be considered a combination of a number of potential elements, including:

- Exclusive transitways to separate buses from traffic
- Transit signal priority at intersections
- Improved stops and stations
- Fewer stops per mile
- Off-board fare collection
- Level boarding onto low-floor buses
- Automated guidance, including precision docking at stations
- Real-time passenger information
- Tram-like, low-emission, quiet vehicles
- Rail-like image

Most of these elements have been proven in transit systems here and around the world. The innovation of BRT is to combine the elements into a package of improvements. Across the country, BRT systems are being built using different combinations of these elements. We believe that it is important to have a very complete BRT system, for only in that manner can it truly emulate a light rail system. We believe that creating a rail-like image of the system is a key, and can be achieved by the design of exclusive transitways, improved stations, buses that have a tram-like appearance, and marketing.

LTD took the BRT concept to the community, to city councils, the board of county commissioners, and to the Oregon congressional delegation. The response was positive, and the BRT strategy is now a key element of the region's adopted transportation plan. The first phase of our bus rapid transit project was authorized in TEA-21. Over time, as we worked to develop, define, and design our project, we became recognized as innovators and leaders in this new mode.

There have been a number of definitions proposed for BRT. One that we like is as follows:

Bus rapid transit (BRT) integrates capital and operational improvements with transit-supportive land use planning to create a faster, higher quality mode of travel than traditional bus service. BRT projects demonstrate permanence by using exclusive busways over at least half the BRT corridor and enjoy special treatment at intersections through traffic signal priority. BRT systems employ advanced fare collection and other techniques to reduce dwell times.

BRT can fulfill a number of needs in communities around the country. For medium-sized cities like ours, it provides an affordable rapid transit option. In our larger urban areas, it can be used to complement rail systems.

LTD's BRT Project, Phase 1

Our entire transit system is being planned around the BRT concept. BRT lines will operate on major corridors, with small buses circulating in neighborhoods, connecting those neighborhoods with the BRT line and with neighborhood shopping areas, schools, and employment areas. There will be a series of park and ride lots that provide access to the BRT line.

Like light rail, our BRT system is being built one corridor at a time. The first phase of our project is a four-mile-long segment connecting the downtowns of Eugene and Springfield. It follows a corridor that is our most heavily traveled arterial and serves the University of Oregon and a major regional medical facility. The BRT design for this corridor has 65 percent exclusive transitways and features transit signal priority, queue jumpers, median stations, off-board fare collection, and level boarding.

A key question that we are currently deciding is the vehicle to use for the BRT service. The ideal vehicle would be low-emission, quiet, have an entirely low-floor design, have automated guidance, have doors on both sides, and have a tram-like appearance. Vehicles with these characteristics are in development in Europe. We have not found an American manufacturer able to produce such a vehicle for us in the needed time frame.

The design and construction cost for the Phase 1 corridor (without the vehicles) is currently estimated to be \$16 million, or \$4 million per mile. This is about 10 percent of the cost of a moderately priced light rail line.

Next Steps

Construction is about to begin on the Phase 1 corridor, with implementation planned for early 2005, though the date likely will depend on the delivery date for the vehicle. When the Eugene and Springfield City Councils approved the Phase 1 corridor, they both requested that LTD immediately begin planning the next corridors, recognizing the greatest benefit of BRT, like light rail, is when there are multiple corridors that start to form a system. LTD is now in the planning stage for the next two corridors, and is seeking authorization for one of the corridors as part of the transportation bill. This is where you become very important to us.

Not only is the funding for the project important to us, but the match ratio is key. A transit system of our size has difficulty providing local match for large (for us) capital projects. Anything larger than a 20 percent local match would significantly slow the development of our BRT system

We also believe very strongly that there needs to be some recognition of less expensive fixed-guideway projects, like BRT, in the structure of your bill. The Administration proposed in its FY 04 budget a "small starts" subcategory of New Starts. The small starts would have a more streamlined review and approval

process to reflect their lower level of investment when compared to major new rail starts. We assume that the small starts subcategory also will be included in the administration's reauthorization proposal. This subcategory may be acceptable if it is not too inclusive. Projects in such a category should be limited by total cost, not just by federal share costs, in order to ensure that they truly are smaller capital investments.

The Administration proposed in its FY 04 budget recommendation a streamlined regulatory approach for these "small starts" projects. This is very appropriate, and we hope that you will impress upon the FTA the need to achieve a much simpler process than currently exists for New Starts. This will be easier to accomplish if the total size of the project is the determiner for this subcategory, not just how much the federal share will be.

I had mentioned our difficulty in obtaining the appropriate BRT vehicle for our needs. Some funding or incentives for American vehicle manufacturers should be a part of your bill. This could be in the form of funds for research and development and engineering, or perhaps tax incentives for capital spent on redesign or retooling.

The FTA has been a good partner with us, and we look forward to working with them and with you as we develop our bus rapid transit system. Thank you again for inviting us today.



Bus Rapid Transit Pilot Corridor Goals and Performance Objectives

- Goal 1:** Improve bus travel times, service reliability, rider comfort and convenience, and the image of the service in order to achieve an increase in the transit market share of trips along the BRT pilot corridor.

- Goal 2:** Reduce the operating cost for transit service along the pilot corridor.

- Goal 3:** Increase the person-carrying capacity of the corridor.

- Goal 4:** Design the BRT service to support planned land use patterns.

- Goal 5:** Where feasible, incorporate “non-transit” enhancements as part of the BRT project, including improvements in traffic safety, traffic flow, bicycle and pedestrian facilities, and aesthetics.

Phase 1 Corridor Enhancements

Lane Transit District has approached BRT system development with the goal that a BRT corridor project must be implemented in such a way that the resulting corridor is improved for all users. The following is a list of “non-transit” corridor improvements for the Phase 1 corridor.

Traffic Safety Improvements

- Elimination of a dangerous merge at the intersection of 13th Avenue and Franklin Boulevard.
- The addition of a traffic signals on Franklin Boulevard will provide protected left turns at Orchard Street and at Moss Street

Traffic Flow Improvements

- Improvement of the level of service of the Agate Street and Franklin Boulevard intersection
- The addition of five new traffic signals
- The elimination of buses stopping to pick up passengers (and, therefore, blocking traffic) in the travel lanes of 11th Avenue and Franklin Boulevard

Bicycle Enhancements

- New bicycle lane on 10th Avenue between Oak Street and High Street
- New bicycle route on 13th Avenue between Agate Street and Villard Street
- New bicycle lane on the south side of Franklin between Villard Street and Walnut Street

Pedestrian Enhancements

- New sidewalk on the south side of Franklin Boulevard between Agate Street and Moss Street
- New crosswalks using colored concrete at all BRT stations
- New traffic signals with pedestrian walk phases at 10th and High Street, 11th and Mill Street, and Pioneer Parkway East and South A Street in Springfield
- Traffic calming techniques along South A Street between Mill Street and Pioneer Parkway East
- Sidewalk improvements in Glenwood

Aesthetics

- New Street Trees in many locations
- Additional landscape strips along 11th Avenue and Main Street
- Public Art at BRT stations

BUS RAPID TRANSIT

MOVING AHEAD!

May 2003

Since 1998, Lane Transit District (LTD) has been developing a new transportation system for the Eugene/Springfield area called bus rapid transit (BRT). BRT is most easily envisioned as using buses to emulate the speed, comfort, and convenience of rail systems. The proposed BRT system is composed of high-frequency, fast transit service along major corridors, with smaller buses providing access from neighborhoods to the BRT lines, as well as to nearby shopping and employment. The system includes exclusive bus lanes, vehicle guidance, traffic signal priority, precision docking at stops, off-board fare payment, level boarding, wider stop spacing, and supports land use planning.



BRT station near the University of Oregon

LTD intends to create a public image for the BRT system that is consistent with the image people have of rail. Studies have shown that more people will choose to ride a train than a bus, even if the service is equivalent. Achieving a rail-like image can be accomplished by the design of the system and through the marketing of the system.



BRT vehicle at Franklin Blvd. and Onyx St. intersection

Eventually, LTD will develop a comprehensive system of BRT corridors within the community. The first corridor between downtown Eugene and downtown Springfield will be under construction shortly and in operation in early 2005. Planning work has begun on two future corridors, one in Springfield and one in Eugene.

***BRT STEERING
COMMITTEE***

LTD Board of Directors

Pat Hocken, Chair
Hillary Wylie
Gerry Gaydos

Springfield City Council

Tammy Fitch

Eugene City Council

George Poling

**Lane County Board of
Commissioners**

Peter Sorenson

Community Representatives

Dan Egan
Dave Jewett
Charlie Magee

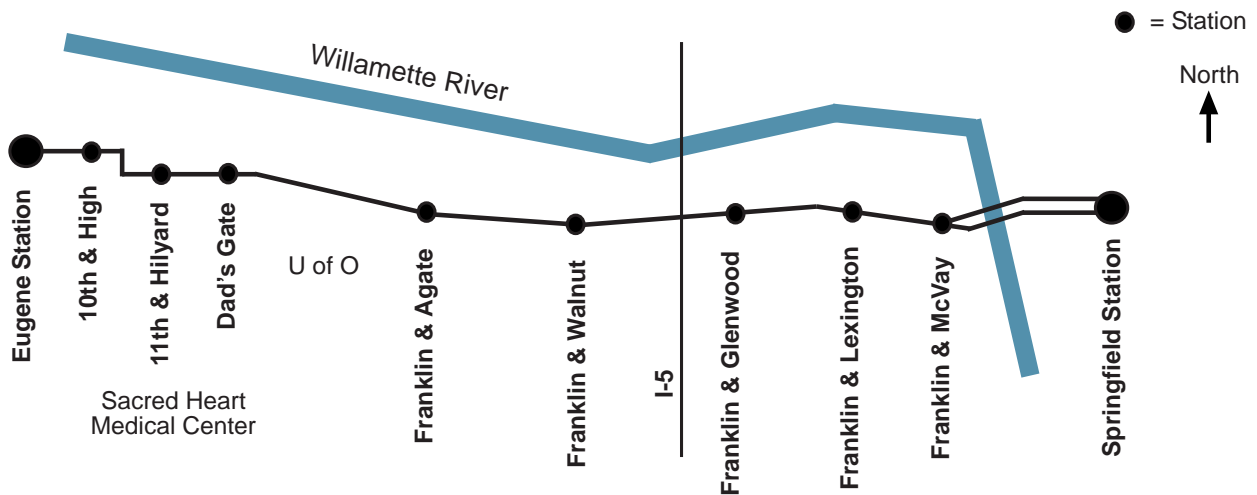
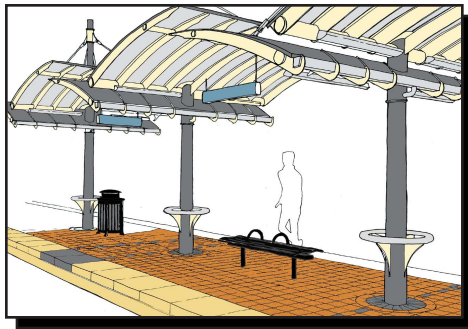
**Oregon Department of
Transportation**

Bob Pirrie

BUS RAPID TRANSIT

PHASE 1

The first corridor is four-miles long and connects downtown Eugene and downtown Springfield; the two main hubs for the transit system. This corridor also serves a regional hospital and the University of Oregon, two key markets for the District's services. This corridor is expected to be in operation in early 2005. There will be eight BRT stations between downtown Eugene and downtown Springfield that are located to serve the most significant destinations along the corridor.



Map of BRT route between downtown Eugene and downtown Springfield

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"Progressive leadership in finding effective and efficient solutions to the community's transportation needs and integrating transportation and land use planning."

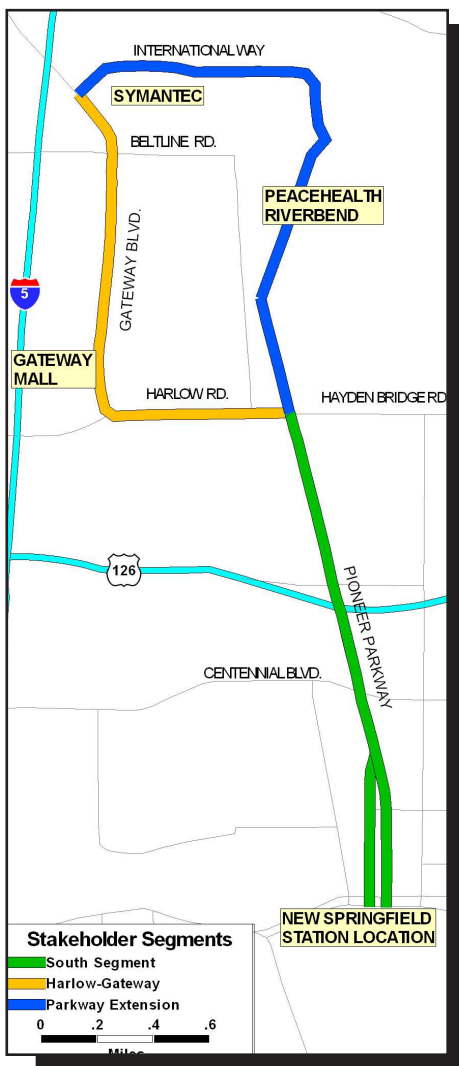
exerpt - LTD Mission Statement

BUS RAPID TRANSIT SPRINGFIELD EXTENSION

May 2003

PIONEER PARKWAY

The City of Springfield and LTD have selected the Pioneer Parkway corridor to be the next bus rapid transit (BRT) corridor developed in Springfield. More frequent and reliable transit service is necessary to serve the growing Gateway area. The City of Springfield is planning an extension of Pioneer Parkway to serve the proposed Sacred Heart Hospital and the Riverbend development area. The ability to incorporate BRT into the planning process is a unique opportunity. The Pioneer Parkway corridor could be operational in 2007.



Corridor Planning

Corridor planning and preliminary engineering began in early 2002 and will continue through the summer of 2003 with participants from the City of Springfield, Lane County, and citizen stakeholder groups. The public will have the opportunity to review and comment on design ideas at open houses and public hearings during the process.

Stakeholder Groups

Three stakeholder groups of property and business owners adjacent to the corridor will work with LTD, City of Springfield, ODOT, and Lane County staff to address potential concerns and develop preliminary designs for the corridor alignment, station locations, landscaping, and non-transit improvements.

Preliminary Engineering Tasks

- Guideway location
- Bus lane location
- Station location and design
- Pedestrian improvements
- Bike lanes
- Intersection improvements
- Access issues
- Landscaping

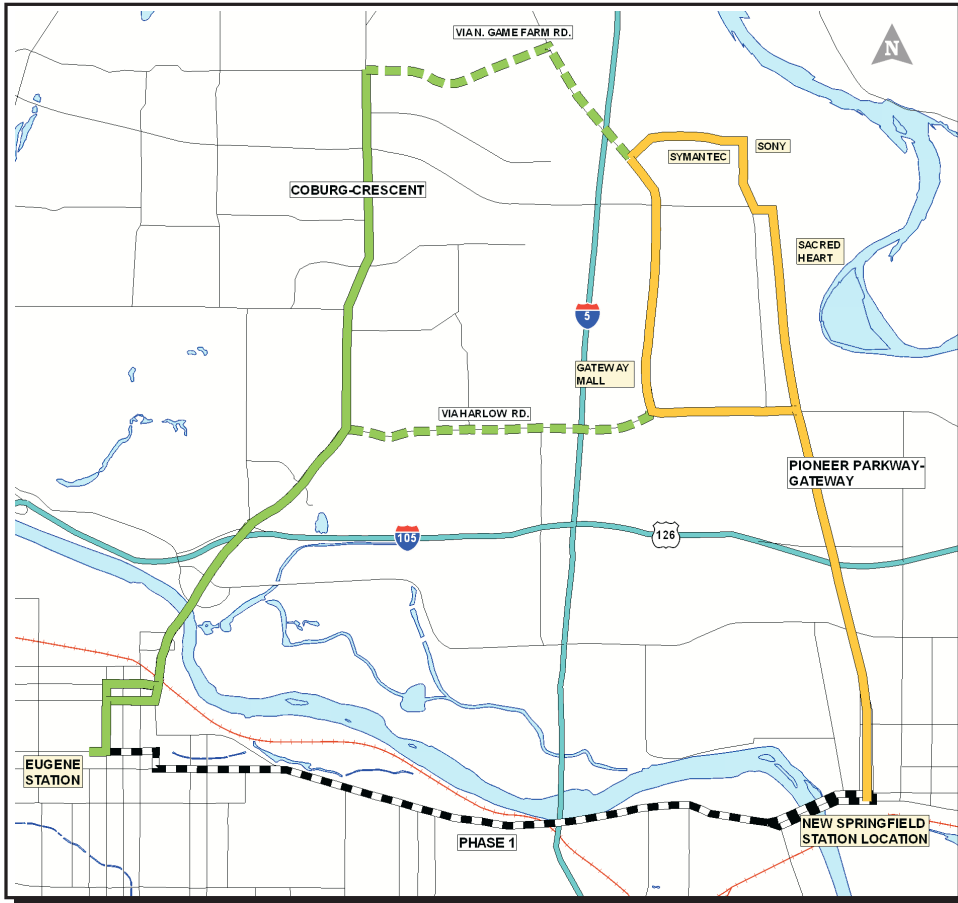
Left: Each segment of the route (represented in separate colors) has an associated stakeholder group.

The City of Springfield is committed to improving public transit. Bus rapid transit has the potential to make transit operate faster and better.

Sid Leiken, Mayor, City of Springfield

BUS RAPID TRANSIT

EUGENE EXTENSION



Phase 1, Coburg Road, and Pioneer Parkway Corridors

COBURG ROAD CORRIDOR STUDY

Coburg Road has been selected as the next bus rapid transit (BRT) corridor in Eugene. The route will originate at the Eugene Station and proceed over the Willamette River onto Coburg Road. Alternative street routing will be examined as part of the design process. Connections to the Springfield corridor also will be pursued.

Rather than start immediately with the segment-by-segment design process, the Coburg Road process includes an initial step to develop a conceptual corridor master plan. This step would determine the general alignment, allow for the ultimate vision for the corridor to be determined, and include factors such as access management and land use planning. The segment-by-segment design process would be used to refine the master plan and to determine an appropriate implementation plan.

Right: Before and after computer simulation of BRT Phase 1 Route near the University of Oregon.



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"Bus rapid transit promises to be an important, innovative, and effective part of a comprehensive transportation system designed to meet increased demand and maintain a high quality of life. For this reason, I believe BRT is the right transit solution for our community."

Jim Torrey, Mayor, City of Eugene



Lane Transit District

Bus Rapid Transit
Eugene / Springfield, Oregon



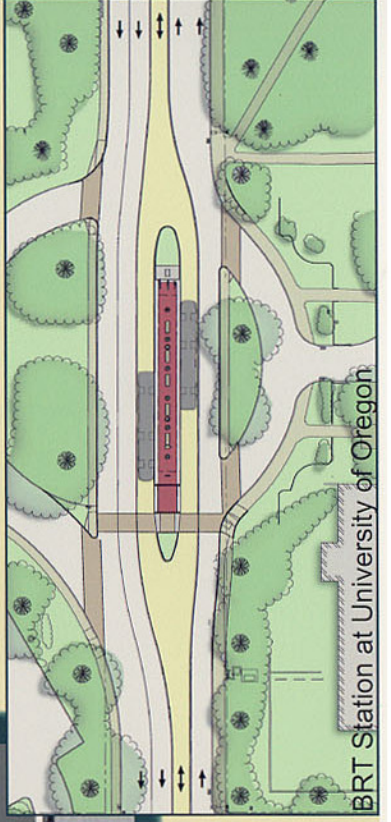
Computer Simulation of BRT Station



Computer Simulation of BRT Station



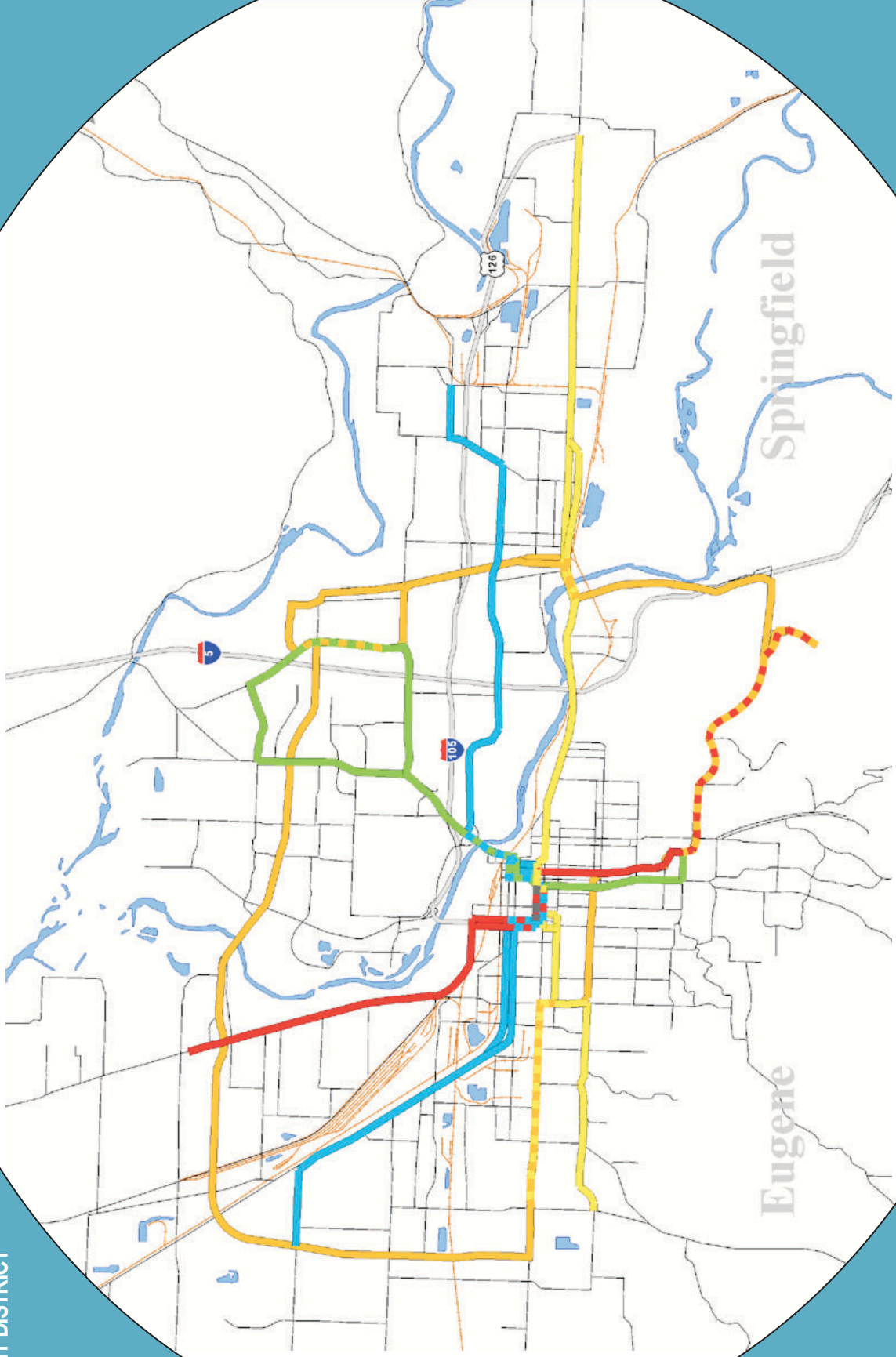
Existing Conditions



BRT Station at University of Oregon



BRT System Build-Out



Smaller, neighborhood friendly buses would connect neighborhood-residents to the main BRT corridors highlighted in this map.

The Phase 1 Corridor will link downtown Eugene and downtown Springfield.