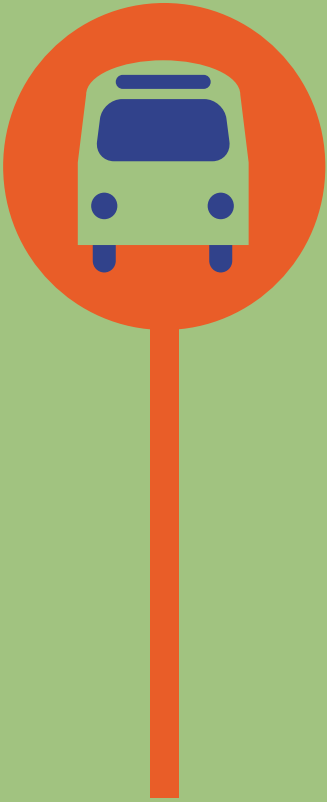


LTD • SCYP Compilation Report



2019-2020 PARTNER



**SUSTAINABLE CITY
YEAR PROGRAM**



LTD • SCYP Compilation Report

Prepared by

Sustainable City Year Program and Lane Transit District



Acknowledgments

Over the 2019-2020 school year, Lane Transit District and the Sustainable City Year Program forged an enduring partnership as they worked together to strengthen LTD's place in the region. Staff, partners, stakeholders, students, and faculty contributed their time, expertise, and creativity to create recommendations and outcomes that will help LTD realize a more sustainable and responsive future.

Thank you to the National Institute for Transportation and Communities (NITC) for its partial support of this project.

Primary staff:

Jennifer Zankowski, Senior Development Planner, SCYP LTD Program Liaison

Thomas Schwetz, Director of Planning and Development, LTD

Megan Banks, SCY Program Director, Sustainable Cities Institute, University of Oregon

Katie Fields, SCYP Graduate Employee/Program Manager, Sustainable Cities Institute, University of Oregon

LTD Board of Directors

Aurora Jackson, General Manager

Mark Johnson, Assistant General Manager

Christina Shew, Director of Finance

Matt Imlach, Director of Fleet Management

Joe McCormack, Director of Facilities

Cosette Rees, Director of Customer and Specialized Services

Frank Wilson, Public Safety & System Security Manager

Theresa Brand, Transportation Outreach and Marketing Manager

Kelly Hoell, Sustainability Program Manager

Jeremy Card, Service Planner

Andrew Martin, Development Planner

Kim Le, Development Planner

Hart Migdal, Development Planner

Sarah Howe, Graphic Designer

Cammie Harris, Marketing & Communication Representative

Renee Jones, Marketing & Communication Representative

Julie Womack, Business Process Associate

Cody Franz, Transportation Options Outreach and Events Coordinator

Tracy Ellis, Rideshare Program Specialist

Pat Walsh, Marketing Consultant

LTD Regional Partners

Kelly Clarke, Senior Transportation Planner, Lane Council of Governments

Kate Wilson, Transportation Planner, Lane Council of Governments

Amanda Ferguson, City Planner, City of Cottage Grove

Maddie Phillips, City Planner, City of Creswell

Jeff Kernen, Planning and Development Manager, City of Coburg

Emma Newman, Senior Transportation Planner, City of Springfield

Monica Sather, Senior Planner, City of Springfield

Sasha Vartanian, Transportation Planning Supervisor, Lane County

Ruth Linoz, Executive Director, South Lane Wheels

Lindsey Hayward, General Manager, PeaceHealth Rides

Matt Keeler, Operations Manager, PeaceHealth Rides

Ruth Linoz, Executive Director, South Lane Wheels

Maddie Phillips, City Planner, City of Creswell

City of Eugene

Rob Inerfeld, Transportation Planning Manager, Public Works Engineering

Terri Harding, Principal Planner, Planning & Development

Anne Fifield, Economic Strategies Manager

Chris Henry, Traffic Operations Manager, Public Works Engineering

Alison Camp, Urban Development Analyst, Planning & Development

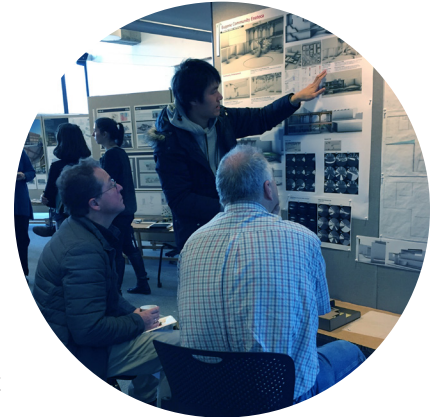
Chelsea Hartman, Senior Planner, Planning & Development



Audrey Stuart, Assistant Planner, Planning & Development
Jennifer Knapp, Urban Designer, Metropolitan & Community Planning
Chad Cramer, Urban Designer, Planning & Development
Shane Rhodes, Transportation Options Coordinator, Public Works Engineering
Reed Dunbar, Bicycle & Pedestrian Planner, Public Works Engineering
Spencer Helwig, GIS Technician, Public Works Engineering
Philip Richardson, Professional Landscape Architect, Parks & Open Space

UO Faculty

Javier L. Bonnin, Professor, Architecture
Juli Brode, Professor, Architecture and Interior Architecture
Nancy Cheng, Department Head, Architecture
Bob Choquette, Instructor, School of Planning, Public Policy and Management
Donald Corner, Professor, Architecture
Howard Davis, Professor, Architecture
Stephen Duff, Associate Professor, Architecture
Ihab Elzeyadi, Professor, Architecture
James Givens, Senior Instructor II, Architecture
Jerolim Mladinov, Professor of Practice, Architecture
Isabel Rivera, Instructor, Architecture
Marc Schlossberg, Professor, School of Planning, Public Policy and Management
James Tice, Professor, Architecture



Stakeholders

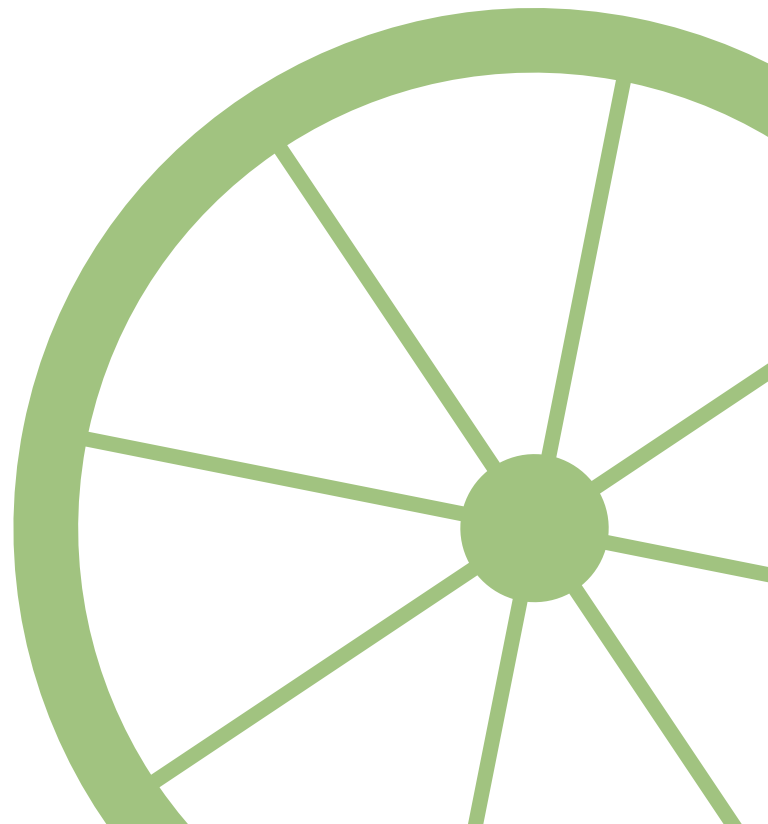
Frannie Brindle, Oregon Department of Transportation
Daniel Constantino, Jarrett Walker & Associates
Amy Cubbage, Director of Real Estate Asset Management, Cornerstone Community Housing
Tiffany Edwards, Director of Business Advocacy, Eugene Chamber of Commerce
Michael Graham, Director of Policy, Columbia-Willamette Clean Cities
Scott Clarke, Architect, PIVOT Architecture
Jacky Grey, Architect, PIVOT Architecture
Alexis Griffin, Cameron McCarthy Landscape Architecture and Planning
Justin Lanphear, Cameron McCarthy Landscape Architecture and Planning
Tim Hilton, Designer
Joseph Moore, Architect, GMA Architects
Corey Newhouse, Founder and Principal, Public Profit
Carleen Reilly, River Road Neighbors
Karen Lawrence, River Road Neighbors
Clare Strawn, River Road Neighbors
Jan Spencer, River Road Neighbors
Mary Walston, River Road Neighbors
Kate Perle, Santa Clara Community Organization
Mark Richardson, Lane Community College
John Rowell, Rowell Brokaw Architects
John Schmidt, Schirmer Satre Landscape Architects
Sam Miller, Student, University of Oregon
Josh Kashinsky, Active Transportation Coordinator, University of Oregon
David Reesor, Director, University of Oregon Transportation Services
Rob Zako, Executive Director, Better Eugene-Springfield Transportation
Travel Lane County

University of Oregon Sustainable Cities Institute staff:

Marc Schlossberg, SCI Co-Director, and Professor of Planning, Public Policy and Management
Nico Larco, SCI Co-Director, and Professor of Architecture
Marsha Gravesen, SCI Fiscal and Office Manager
Sean Vermilya, Report Coordinator
Danielle Lewis, Graphic Designer

Contents

8	About SCI
8	About SCYP
9	Introduction
13	Financial Assessments & Tools
25	Strategic Planning Tools
33	Corridor Studies
57	Stations & Stops
67	Transit-Oriented Development
81	Multimodal & Mobility
99	Multimedia
102	Parting Thoughts
104	SCYP LTD Faculty
108	Appendix A: SCYP LTD Report Links
110	Appendix B: LTD Press Book



About SCI

The Sustainable Cities Institute (SCI) is an applied think tank focusing on sustainability and cities through applied research, teaching, and community partnerships. We work across disciplines that match the complexity of cities to address sustainability challenges, from regional planning to building design and from enhancing engagement of diverse communities to understanding the impacts on municipal budgets from disruptive technologies and many issues in between.

SCI focuses on sustainability-based research and teaching opportunities through two primary efforts:

1. Our Sustainable City Year Program (SCYP), a massively scaled university-community partnership program that matches the resources of the University with one Oregon community each year to help advance that community's sustainability goals; and

2. Our Urbanism Next Center, which focuses on how autonomous vehicles, e-commerce, and the sharing economy will impact the form and function of cities.

In all cases, we share our expertise and experiences with scholars, policymakers, community leaders, and project partners. We further extend our impact via an annual Expert-in-Residence Program, SCI China visiting scholars program, study abroad course on redesigning cities for people on bicycle, and through our co-leadership of the Educational Partnerships for Innovation in Communities Network (EPIC-N), which is transferring SCYP to universities and communities across the globe. Our work connects student passion, faculty experience, and community needs to produce innovative, tangible solutions for the creation of a sustainable society.



About SCYP

The Sustainable City Year Program (SCYP) is a year-long partnership between SCI and a partner in Oregon, in which students and faculty in courses from across the university collaborate with a public entity on sustainability and livability projects. SCYP faculty and students work in collaboration with staff from the partner agency through a variety of studio projects

and service-learning courses to provide students with real-world projects to investigate. Students bring energy, enthusiasm, and innovative approaches to difficult, persistent problems. SCYP's primary value derives from collaborations that result in on-the-ground impact and expanded conversations for a community ready to transition to a more sustainable and livable future.



Introduction

WHY DID LTD ENGAGE THE SUSTAINABLE CITY YEAR PROGRAM?

Lane Transit District's mission statement, at its heart, calls on the organization to listen, learn, and adapt to serve the community today and into the future.

"We believe in providing people with the independence to achieve their goals, creating a more vibrant, sustainable, and equitable community."



The biggest opportunity that LTD has to further its mission is to provide the most useful and utilized transportation services possible – to leverage its programs, in concert with those of its partners, to provide viable alternatives to the automobile through high-quality transportation options, programs, and services.

In planning for the future, however, it is often easier to see the North Star you want to be headed toward than it is to take the next steps on that journey. Planning for the future asks us to contemplate uncertainties that may impact the region's goals – goals related to environment, economy, and social equity – which in turn affect LTD's strategic planning effort. Future success relies on structuring an ongoing strategic conversation with key partners, and engaging the community, in establishing those next steps that allow us to adapt to a yet unknown and changing world.

LTD engaged the University of Oregon's Sustainable City Year Program (SCYP) through a suite of projects, described in more detail

below, with the goal of exploring several focal questions facing LTD's strategic planning effort:

- What are the key uncertainties facing LTD and its regional partners over the next 20 to 30 years?
- What roles can and should LTD play in the emerging mobility landscape?
- What strategic choices will need to be made by LTD and its partners to successfully adapt to the challenges ahead?

LTD'S SCYP YEAR – A YEAR OF COLLABORATION

The SCYP year involved staff from across the LTD organization including staff from planning to finance, and marketing to fleet, as well as staff from local partners including the cities of Eugene, Springfield, Cottage Grove, Creswell and Coburg, Lane Council of Governments and PeaceHealth Rides. In addition to a diversity of stakeholders, this SCYP year engaged faculty and students from across the University of Oregon including the School of Planning, Public Policy and Management, the School of Architecture & Environment, the School of Journalism & Communication, the College of Arts and Sciences, and the Lundquist College of

Business. This interdisciplinary and interagency approach provided for a deeper dive into the region's challenges and opportunities, from diverse vantage points and areas of expertise, and in acknowledgement of the interconnectedness of our collective work.

FOCAL AREAS OF LTD'S SCYP YEAR

The suite of SCYP projects were grouped into several themes in an effort to capture the breadth and varying scales of the factors influencing LTD's strategic planning efforts. This report is organized by the focal areas for LTD's SCYP year:

- Financial Assessments & Tools
- Strategic Planning Tools
- Corridor Studies
- Stations & Stops
- Transit-Oriented Development
- Multimodal & Mobility
- Multimedia

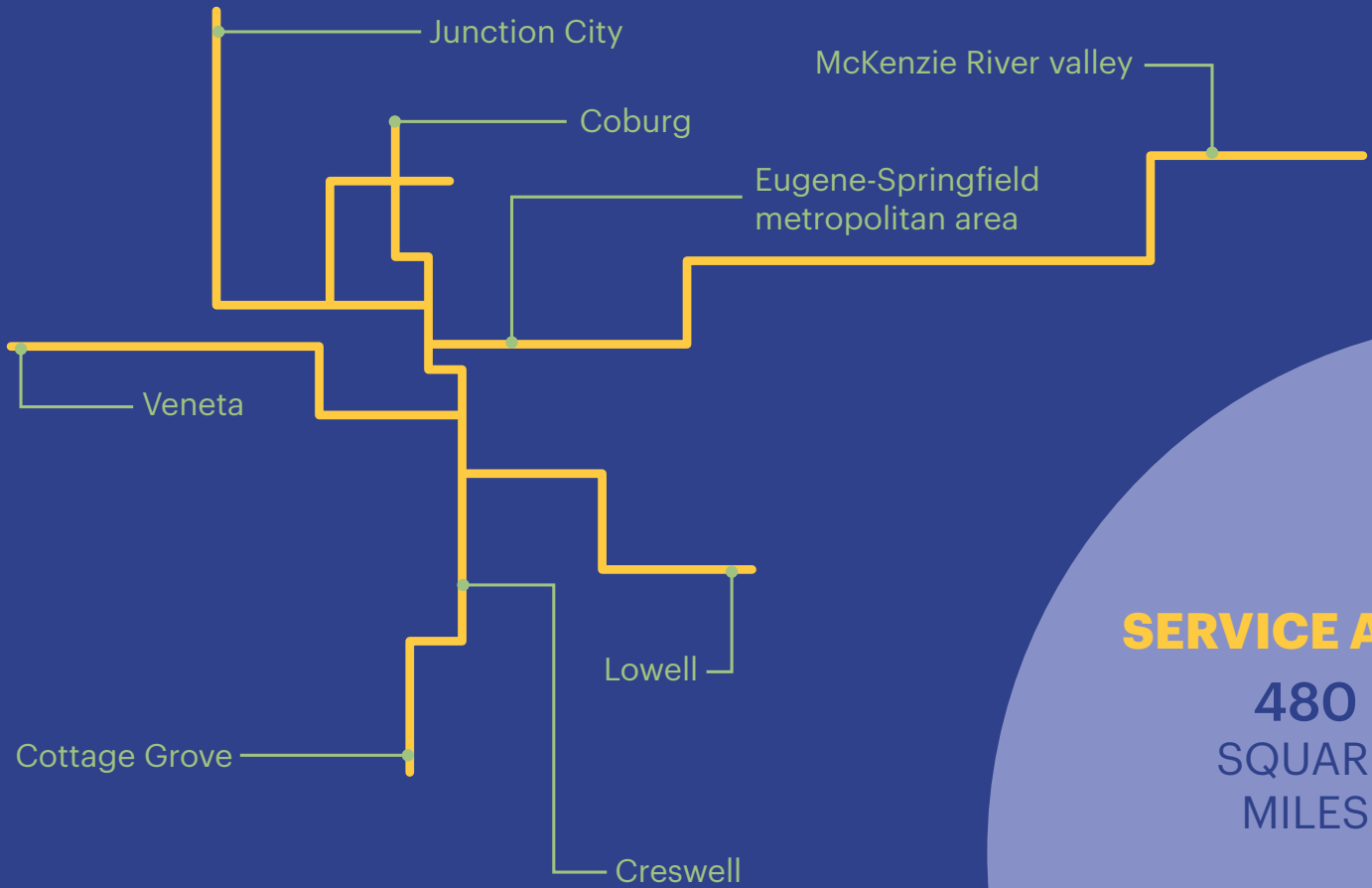
HOW TO USE THIS REPORT

This report highlights the key elements of each project/class including a summary of the problem statements that LTD sought to explore as well as the key takeaways and recommendations that resulted from student analysis. Want to learn more? Appendix A includes links to more in-depth reports and materials produced for each project.



LANE TRANSIT DISTRICT

1970



SERVICE AREA

480
SQUARE
MILES

FLEET

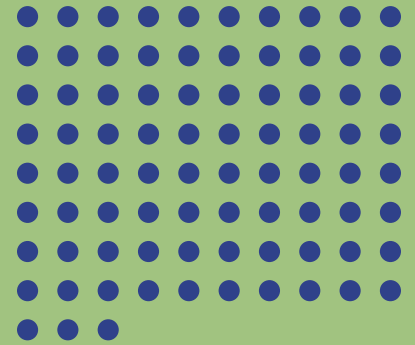
LTD's fleet drives more than **3.4 million miles** each year.



18 bus rapid transit vehicles



56 paratransit vehicles



83 fixed-route buses

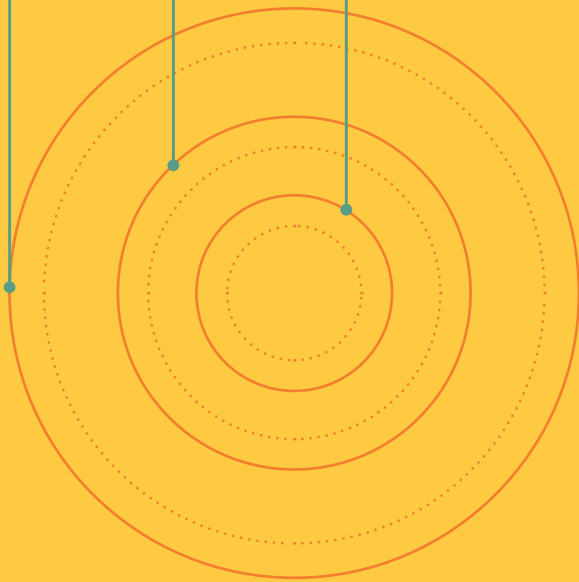
Celebrating 50 years!

OPERATIONS

231,000 service hours / year

363 days / year

7 days / week



SERVICE USAGE



LTD's service area population: **302,000**



10 million rides provided annually

FACILITIES

>1,200 bus stops



60 EmX platforms



10 transit stations





Sustainable City Year Program 2019-20 LTD Classes

College / School	Fall 2019	Winter 2020	Spring 2020
School of Planning, Public Policy and Management	Assessment of <i>Moving Ahead's</i> Potential Funding Options		Franklin Blvd EmX Corridor Assessment
	LTD Performance Management Strategies		Gateway Blvd EmX Corridor Assessment (spring 2019)
	Transit-Oriented Development on Historic River Road		Small City Mobility
	Promoting Sustainable Transportation in the Coburg Corridor		Bike Tourism in Coburg
	Re-imagining River Road for Ecological Equity		
School of Architecture and Environment	Former Downtown LCC Building & Block Revitalization	Santa Clara Station Site Design Studio	
	Bus Stops as Community Gateways	Reimagining Eugene Station	
Lundquist College of Business	The Future of Transit	Payroll Tax and Financial Visualization Scenario Planning	Payroll Tax and Financial Visualization Scenario Planning
		Fleet Replacement, Climate Planning	
School of Journalism and Communication	LTD Stories	LTD Stories	
College of Arts and Sciences		Bike Share Neighborhood Assessment	Bike Share Neighborhood Assessment



Financial Assessments & Tools

LTD Financial Projection Tool

The Class: Strategic Planning Project, Lundquist College of Business
Faculty: Ryan Cabinte

WHY DID LTD ENGAGE THIS CLASS?

LTD's Long Range Financial Plan is a 10-year outlook of expected revenues and expenditures. At this time, this plan is static and represents a snapshot of the conditions that impacted LTD's revenues and planned expenditures at the time it was written. It is LTD's goal that the Long Range Financial Plan be more easily updated and an input into the processes used for annual updates to the Community

Investment Plan (CIP) and annual budgets. To achieve this goal, LTD needs a dynamic financial modeling tool that enables the organization to make accurate estimates of future revenues and costs to do business and to be able to reassess when conditions change.

LTD engaged a team of Masters of Business Administration students to develop a dynamic financial projection tool that staff could maintain on an on-going basis.

PROJECT SUMMARY

As part of equipping LTD leadership with strategic planning tools, the team developed a Financial Baseline module. The Financial Baseline represents a business-as-usual projection of revenues and expenses for the 2020-2030 period. The module was developed to allow LTD staff the ability to update economic indicators and forecasts, as the fiscal years progress, to reflect changing conditions and maintain a rolling 10-year look forward.



KEY OBSERVATIONS, OPPORTUNITIES, AND CHALLENGES

One of the most important discussions in the development of this module was identifying the key revenue indicators. LTD receives revenues from a variety of local, state, and federal sources with differing factors that influence them. The student team employed an exploratory research methodology to identify insights outlining key uncertainties that underpin financial and long-term adaptive strategies.

The work included literature review, stakeholder and expert interviews, a review of the regional planning and policy environment, and industry best practice. The student team worked closely with LTD finance and planning staff through this phase of work to inform their recommendations. The result is a baseline forecast methodology consisting of regression and descriptive statistics techniques as well as direct inputs, based on outside analyses.

Dashboard

Use this dashboard to understand how particular line items are projected to change over time. Change assumptions for selected revenue/expense items in the "Growth Assumptions" tab.

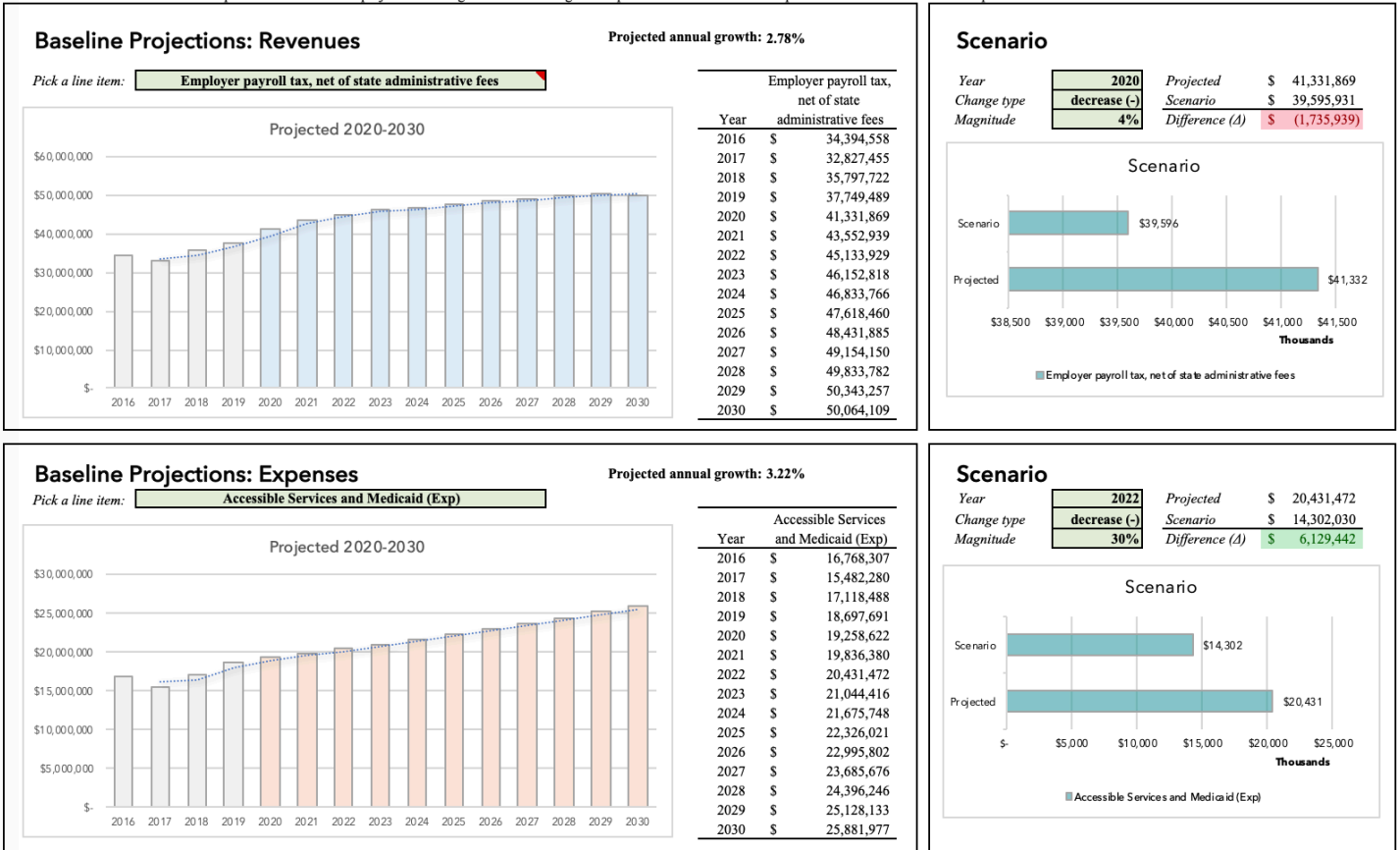


FIG NUM. 1

Caption

OUTCOMES & RECOMMENDATIONS

The Financial Baseline module, while a stand-alone tool, provides the added value of allowing LTD to compare the financial outcomes of different future scenarios. The module includes a dashboard, which translates the baseline forecast into an easy-to-read visualization allowing the user to focus on a particular revenue or expense item.

This tool will allow LTD to:

- Better understand the impacts of changing conditions;
- Explore the fully allocated costs of different scenarios;
- Understand the trigger points that signal a deviation from the trend and/or desired/sustainable future outcome;
- Identify when priorities may need to be reassessed; and
- Better inform decisions/actions that may need to be made to maintain the desired future scenario.

The module projects, assuming normal conditions with periodic economic downturns, that LTD's payroll tax revenue will grow approximately 3.5% annually, reaching \$48 million in 2030.

"Transit creates an urban environment that is livable, providing access, opportunity, services, and choices to the community. Success is achieved when transit considerations are an integral part of land use, transportation, financial and policy decisions made by other public agencies, and transit is integrated in decisions on big goals."

- Aurora Jackson, LTD General Manager



COVID-19 and Estimated Tax Revenue Impacts for LTD

The Class: Strategic Planning Project, Lundquist College of Business
Faculty: Ryan Cabinte



WHY DID LTD ENGAGE THIS CLASS?

The student team that developed the Financial Baseline module, described above, were still engaged in the project at the time the COVID-19 virus reached the United States. The federal, state, and local guidance for responding to this health emergency meant commerce and personal movement was drastically changed. The economic impacts of the health emergency were highly uncertain. And yet, during this time LTD was required to adopt its fiscal year 2021 budget. LTD engaged the student team to conduct research to define possible COVID-recovery scenarios and project the impacts of the scenarios on LTD's revenues.

PROJECT SUMMARY

While not originally scoped as part of the project, the MBA student team added a component to the financial modeling work so that they could help LTD evaluate the possible impacts of the COVID-19 pandemic and corresponding economic impacts on LTD's payroll tax revenues for the remainder of fiscal year 2020 and fiscal year 2021. Using the Financial Baseline module, students tested three potential COVID-recovery scenarios to predict the possible revenue impacts that the COVID pandemic could have.

KEY OBSERVATIONS, OPPORTUNITIES, AND CHALLENGES

In a highly uncertain and changing environment, students were asked, in collaboration with LTD staff, to conduct research of the best available knowledge at the time, to develop three possible trajectories of COVID recovery.

OUTCOMES & RECOMMENDATIONS

The student team developed three scenarios and passed these scenarios through their model. Below describes the scenario assumptions and the possible outcomes. These scenarios show

the possible range in tax revenue loss for FY21 ranging between \$4.1 and \$11.3 million. These findings were shared with LTD staff and the Board of Directors to help provide context for LTD’s strategic conversation about fiscal planning for the coming year.

Scenario A: V-Shaped Recovery:

After a temporary shock, the economy sees a linear recovery, approaching business as usual by the end of FY21.

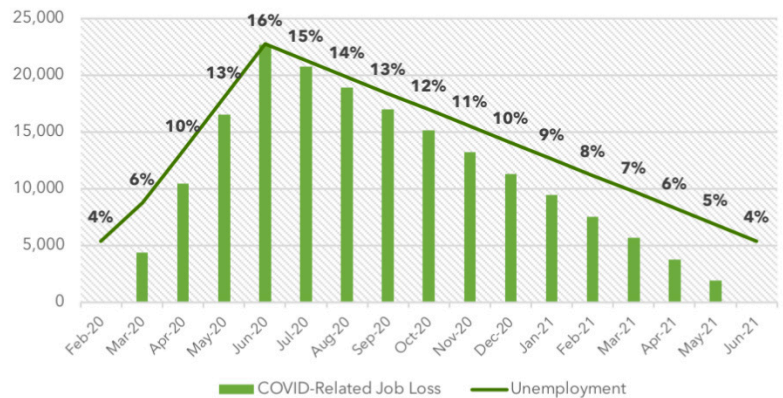
Estimated Tax Revenue Losses

FY 2020: \$1.9 million
 FY 2021: \$4.1 million

Key Metrics

Peak Unemployment: 16%
 Statewide Infections: 18,000 by May 18
 Lane County GDP Impact: -0.2%

Scenario A: Unemployment by Month



Scenario B: U-Shape Recovery:

After an unprecedented quarter-long plummet in jobs, stock markets, and GDP growth, the economy sees a gradual recovery.

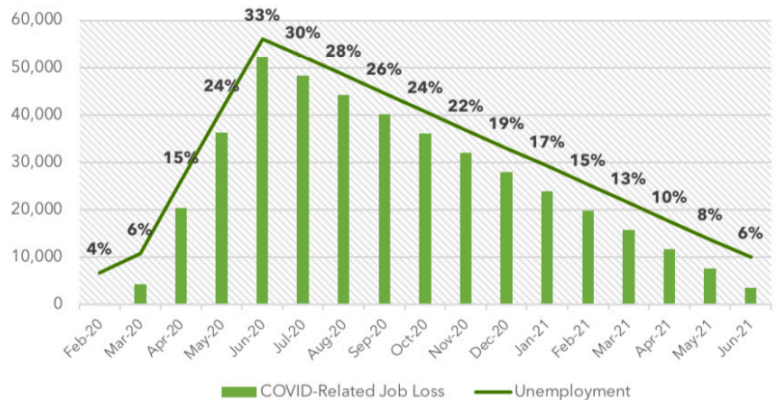
Estimated Tax Revenue Losses

FY 2020: \$3.8 million
 FY 2021: \$10.3 million

Key Metrics

Peak Unemployment: 33%
 Statewide Infections: 40,000 by May 18
 Lane County GDP Impact: -1.1%

Scenario B: Unemployment by Month



Scenario C: Multiple Peak Recovery:

The compounding effects of illness, quarantine, and market disruption spiral the economy from recession into depression, requiring years of economic recovery.

Estimated Tax Revenue Losses

FY 2020: \$3.8 million

FY 2021: \$11.3 million

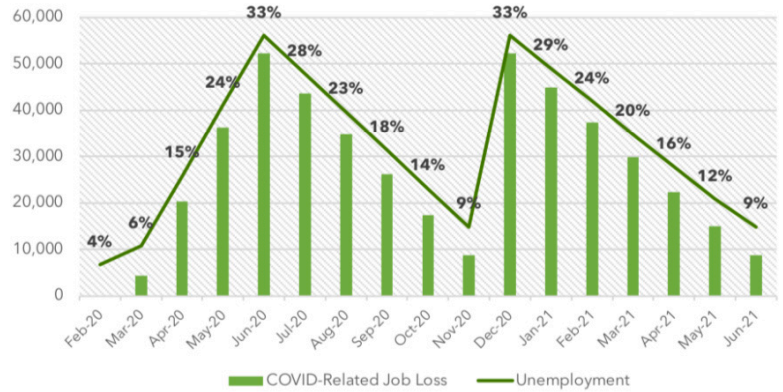
Key Metrics

Peak Unemployment: 33%

Statewide Infections: 40,000 by May 18

Lane County GDP Impact: -1.1%

Scenario C: Unemployment by Month



Assessment of *MovingAhead's* Potential Funding Options

The Class: Public Budgeting, School of Planning, Public Policy and Management
Faculty: Rebecca Lewis

WHY DID LTD ENGAGE THIS CLASS?

MovingAhead is a project focused on better connecting people to jobs, schools, shopping, recreation, and other activities by considering a range of transportation investments along key corridors to improve safety and livability for everyone. The project is a partnership between LTD, the city of Eugene and other regional partners, and builds on community input and local planning projects like: Envision Eugene; Eugene's Transportation System Plan; and LTD's Long-Range Transit Plan.

Based on community feedback the project explored options along five key corridors:

- Highway 99
- River Road
- 30th Avenue to Lane Community College
- Coburg Road
- Martin Luther King, Jr. Boulevard

The project developed possible transportation investment packages and decision-makers are now considering which path to take, in consideration of the possible benefits and impacts and estimated costs. If decision-makers decision adopt an investment package, LTD, Eugene, and its partners will have to consider how to fund the capital costs to advance the projects into construction and the on-going operational costs. LTD engaged the Public Budget Administration class to explore and recommend financial strategies that could be used to



fund and operate the project. The class used a “middle-of-the-road” MovingAhead package, which estimated \$274 million in capital costs, and a \$4.3 million increase in annual operations costs.

PROJECT SUMMARY

The class approached this project by first conducting peer reviews of other transit agencies to better understand the financial tools and strategies that were being used around the country to finance and operate major capital projects. Two student groups focused on funding options for capital costs and two other groups focused on funding options for on-going operations costs. Each funding opportunity was put through a four-factor analysis to better understand the pros and cons. The criteria included:

- **Equity** - The revenue structure should promote fairness to all sectors and citizens in the community.
- **Efficiency** - Administrative costs for the tax should be efficient.

- **Neutrality** - Taxes or fees should not distort the market by changing people’s decisions unless socially desirable.
- **Productivity** - Taxes or fees should produce sufficient and stable revenues to meet expenditures.

Each group then presented the findings for 3+ funding options and provided their recommendations based on what they learned.

KEY OBSERVATIONS, OPPORTUNITIES, AND CHALLENGES

While there are multiple traditional and innovative funding strategies being deployed throughout the country, the taxing structure in the state of Oregon is different than most states in the U.S. So, some strategies that rely on – for example, a sales tax type model – would require action from the state and local leaders before they could be viable for LTD. The other challenge that students presented was a political one – some funding

options may face political pushback, particularly options that would require voter or government approval.

**MENU OF RECOMMENDATIONS
Funding Capital Improvements**

- Group A recommended establishing urban renewal and local improvement districts. The group estimated that these districts could yield a total of \$304 million in revenue over 30 years.
- Group B recommended a “funding bucket” of various sources, including bonds, ride-share taxes, and LTD advertising. The funding bucket could produce \$212 million over 10 years. The group also recommended an urban development district along the River Road corridor that could generate \$70 million over 10 years. Together, these options could yield \$282 million in capital funding over 10 years.

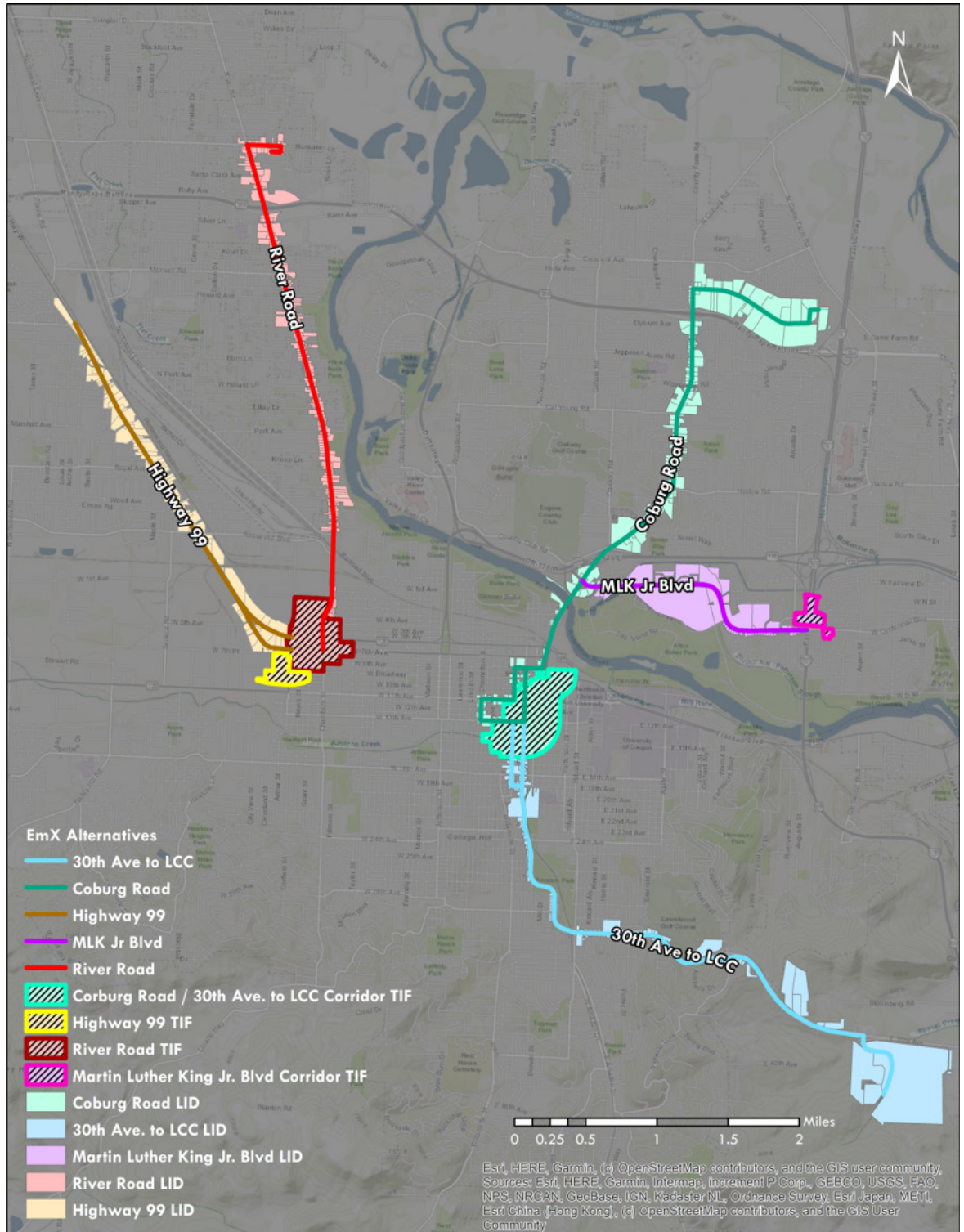
Funding Increased Operations Costs

- Group A recommended a jurisdictional property tax. The group proposed a rate of 0.0192% of assessed value. This property tax could produce \$4.3 million annually. This tax would require voter approval.
- Group B recommended implementing a transportation utility fee in conjunction with the Eugene Water & Electric Board (EWEB). This fee could produce an estimated \$4.8 million in annual revenue. This fee would not require voter approval.

Boundary or Jurisdiction	Property Tax Rate	Estimated Revenue
LTD Jurisdiction only	0.192/1000 or 0.0192%	\$4,317,143
Municipalities only within LTD Jurisdiction	0.214/1000 or 0.0214%	\$4,311,610

FIG NUM. 2
Funding Breakdown for Proposed Tax Rate Increases

FIG NUM. 3
 Map of Proposed
 Urban Renewal
 and Local
 Improvement
 Districts



Life-Cycle Costs of Battery Electric Buses

The Class: Clean Energy Finance, Lundquist College of Business
Faculty: Joshua Skov

WHY DID LTD ENGAGE THIS CLASS?

LTD is looking to lower the carbon intensity of and emissions generated by its fleet of more than 100 diesel and diesel-hybrid buses. LTD's Sustainability Program Manager has developed a framework to help staff and the Board of Directors evaluate the opportunities and tradeoffs presented by different propulsion technologies based on their impacts to the agency's budget, the community and the environment. The community has expressed support for battery electric buses (Eugene's Climate Action Plan 2.0) and over the past couple of years LTD has been evaluating battery electric buses and has plans to add more battery electric buses to its fleet. LTD engaged this business school class to compare cost implications of battery electric buses against the baseline of diesel and diesel-hybrid buses.

PROJECT SUMMARY

This class focused on how to assess the life cycle cost of battery electric buses using LTD's triple-bottom line framework – assessing financial, environmental, and social impacts. A subset of students also explored logistical considerations in managing and monitoring LTD's electricity load. Students explored these topics through literature review and research and by conducting interviews with original equipment manufacturers of battery electric buses. The studies resulted in the development of a life cycle cost calculator that LTD can edit to estimate the effects on total cost ownership of battery electric buses under changing assumptions, as new technology emerges and cost factors change.

KEY OBSERVATIONS, OPPORTUNITIES, AND CHALLENGES

As with any emerging technology, battery electric bus costs are rapidly changing and difficult to predict. This is exacerbated by the nature of transit bus procurement, which are custom-built to agency specifications and operational needs.

Another key consideration for transit agencies pursuing electric buses is how to manage electricity demand charges – more research is needed to understand the tradeoffs between an optimal charging schedule and the operational needs and schedules of LTD transit network.

And, as vehicle electrification continues to gain momentum, load and asset management software systems will emerge and become more flexible to cater to the needs of transit agencies – such as tool to for active management of energy demand and electric buses energy consumption management.

RECOMMENDATIONS

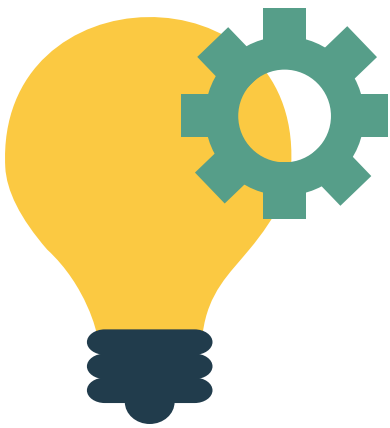
Due to reduced maintenance costs and low-cost local electricity, the class concluded that LTD could recuperate increased capital expenditures on battery electric buses with a 20% reduction in life cycle costs compared to diesel buses. LTD can further capitalize on these saving with future grant opportunities for low

and no emission vehicles and by accumulating and selling Oregon Clean Fuel credits. Additionally, by investing in electric buses, the agency can get ahead of potential diesel cost increases under a statewide cap and trade program.

The student team recommended that LTD track the maintenance costs for their new electric buses in order to benchmark and more

accurate assess the costs. And, another future action includes exploring tools and technologies that provide more visibility into energy consumption throughout LTD's facilities and on-vehicle. New tools could help LTD better understand consumption by asset type and provide for more effective tracking.





Strategic Planning Tools

Scenario Planning Workbook

The Class: Strategic Planning Project, Lundquist College of Business
Faculty: Ryan Cabinte

WHY DID LTD ENGAGE THIS CLASS?

Scenario planning is a way of rehearsing the future to avoid surprises. The purpose of the scenario planning exercise is not to come up with a forecast, but instead to frame multiple possibilities and think about whether you are prepared to face the range of futures that might unfold. In 2011, LTD staff used a scenario planning process to inform the development of its Long-Range Transit Plan and identify a number of uncertainties

that could impact the region's goals for transit. Since that time a great deal of analysis and exploration has advanced related to climate change, transit, and mobility, and technological advances are continuing the change the way we problem solve. LTD wanted to engage this class in a new scenario planning process to help inform LTD and its partners' adaptive capacity to cope with change, adapt effectively, and make strategic choices to successfully navigate the challenges ahead.

PROJECT SUMMARY

The second portion of the Strategic Planning Project (see Financial Assessments & Tools section for details about the first portion of this project) focused on applying a scenario planning. The term "scenario" is used to tell stories about the future to help LTD make better decisions in the present. Scenarios use uncertainties, manifested as questions about the future, to paint a picture of what the world might be like and how the agency can adapt. They are not

FIG NUM. 4
Mobility Hub Concept
IndyGO



Drivers of Long-term Success

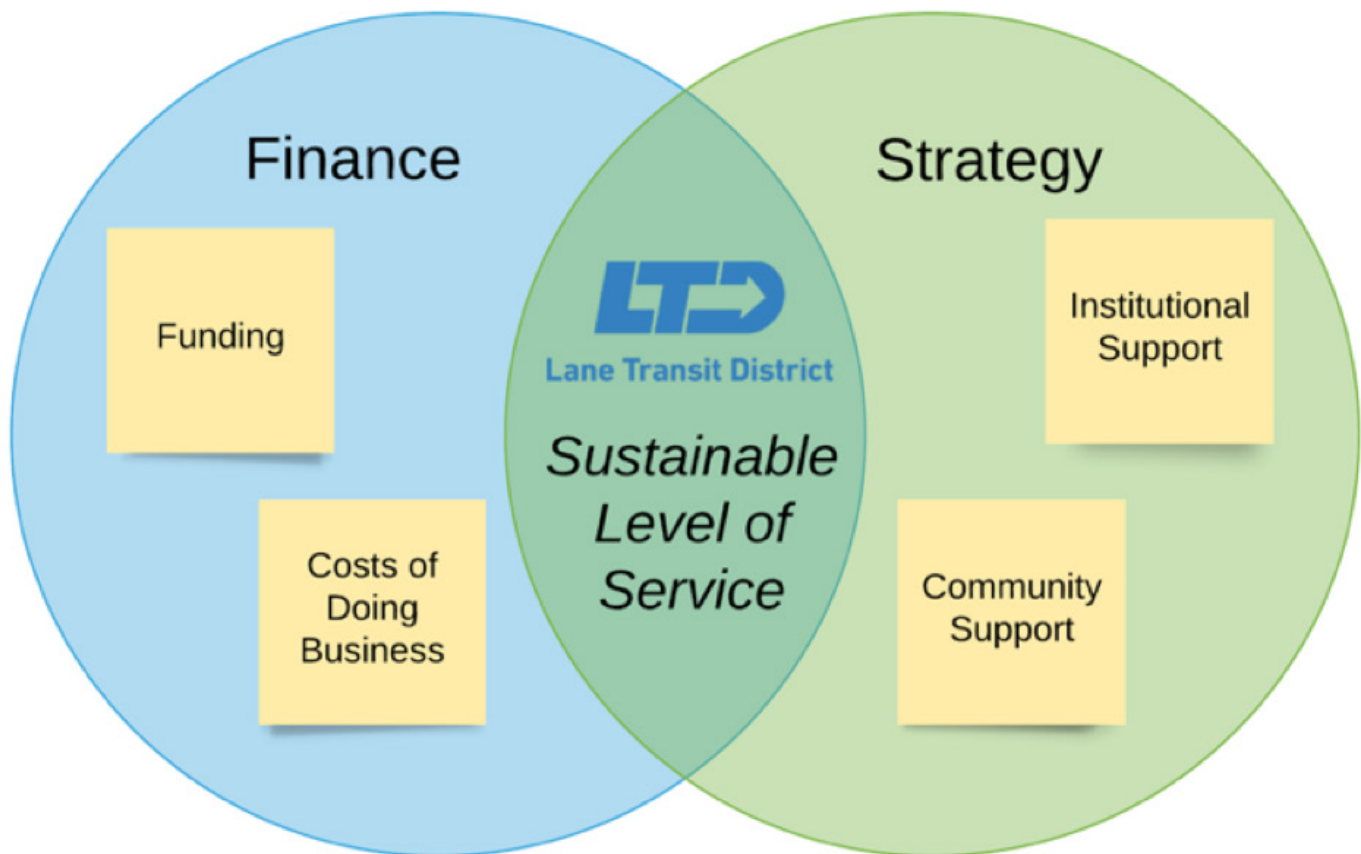


FIG NUM. 5

Drivers of Long-term Success

predictions; rather, the scenarios present a range of possibilities that are both creative and plausible.

The methods for this project element included conducting exploratory research and research on future-oriented strategies relevant to transportation, as well as stakeholder and expert interviews and focus groups. Students also participated in a scenario planning

seminar with LTD staff as part of the foundational efforts. The product of this portion of the project included a Scenario Planning Workbook and methodology, which will help LTD think about uncertainty and how the agency manages its reaction to change in the future. Through this workbook and process, the adaptive strategies LTD develops can help the agency become more agile

and resilient in an unpredictable and evolving transportation world. The Workbook includes step-by-step instructions to illustrate how future users can recreate the process. The team also included integrated guidance, resources, and documentation into the Workbook to guide users through the process.

SWOT Analysis LTD Future-Oriented Strategy

	Helpful	Harmful
Internal	<p style="text-align: center;">Strengths</p> <ul style="list-style-type: none"> • Long history and relationship with community members and stakeholders • Natural resources, such as low-carbon electricity • Land use policy, such as Oregon's urban growth boundaries and HB 2001, which mitigate sprawl 	<p style="text-align: center;">Weaknesses</p> <ul style="list-style-type: none"> • Perceived lack of willingness to take risks • Reliance on payroll tax revenue, which correlates with local economic conditions • Perceived lack of long-term, holistic vision for the transportation system
External	<p style="text-align: center;">Opportunities</p> <ul style="list-style-type: none"> • Commute patterns and norms are changing, as are perceptions of and stigmas about transit • Momentum for transit investment and climate action at the city, regional, and state level • New modes, propulsion, and mobility-related technologies (digital payments, data, etc.) 	<p style="text-align: center;">Threats</p> <ul style="list-style-type: none"> • Modes such as ride-hailing, micromobility, and car ownership will compete for ridership • Shrinking revenue sources, such as federal funding for accessible services • Shift toward remote work/education changes basic assumptions about travel patterns

FIG NUM. 6
SWOT Analysis of LTD's Future-Oriented Strategy

KEY OBSERVATIONS, OPPORTUNITIES, AND CHALLENGES

Selecting a focal question is the foundation for the scenario planning process. Students worked with LTD to select the following focal question: "How LTD might meet the community's mobility needs in 2040?" With this question as the overlay, students documented the numerous issues and trends that affect LTD, the transit industry at-large, the underlying forces behind current transportation trends,

and which forces serve as "critical uncertainties." Team members then used the Scenario Planning Workbook to first independently develop a future scenario(s), and then came together to discuss, refine, and ultimately land on plausible scenarios.

MENU OF RECOMMENDATIONS

Students presented the scenario planning tool to LTD directors, using their scenario work as an example, to provide staff with an orientation of how to use the tool. The scenarios

that students developed follow two axes – one axis considers whether future development will follow sprawl or urbanization patterns and the other axis considers whether consumers, over time, will own less "stuff" and rely more of collective services or if consumers will want to own the goods they need. Students did not recommend a particular choice for LTD to select; rather, they provided the scenarios for LTD to evaluate and consider as part of their strategic planning efforts going forward.

LTD Performance Management Strategies

The Class: Program Evaluation, School of Planning, Public Policy and Management
Faculty: Saurabh Lall

WHY DID LTD ENGAGE THIS CLASS?

LTD collects a significant amount of data from across the organization to maintain compliance with federal regulations, inform decision-making, and to share and compare metrics with peer transit agencies. This vast amount of data is useful because insights can be drawn and the metrics can be used to monitor and manage. LTD engaged this class to provide managers with insights into how they can reliably measure and articulate success across LTD's widely ranging programs.

PROJECT SUMMARY

LTD is a member of the American Bus Benchmarking Group (ABBG), a consortium of mid-sized bus agencies in North America that collect and share data to benchmark performance and share experiences and best practices. Students used the ABBG key performance indicator data collected by LTD from 2006 to 2017 as foundation for their work. Students applied performance best practices and drew from four different strategies – niche, emergent, integrated, and ecosystem, and looked at what

each strategy indicates and what outcomes each strategy fosters. Each strategy follows a logic model of inputs, activities, outputs and outcomes. By analyzing LTD programs using these strategies, students assessed what key performance indicators could best work for LTD's fleet, operations, service planning, risk management, and sustainability programs.

Fleet Logic Model

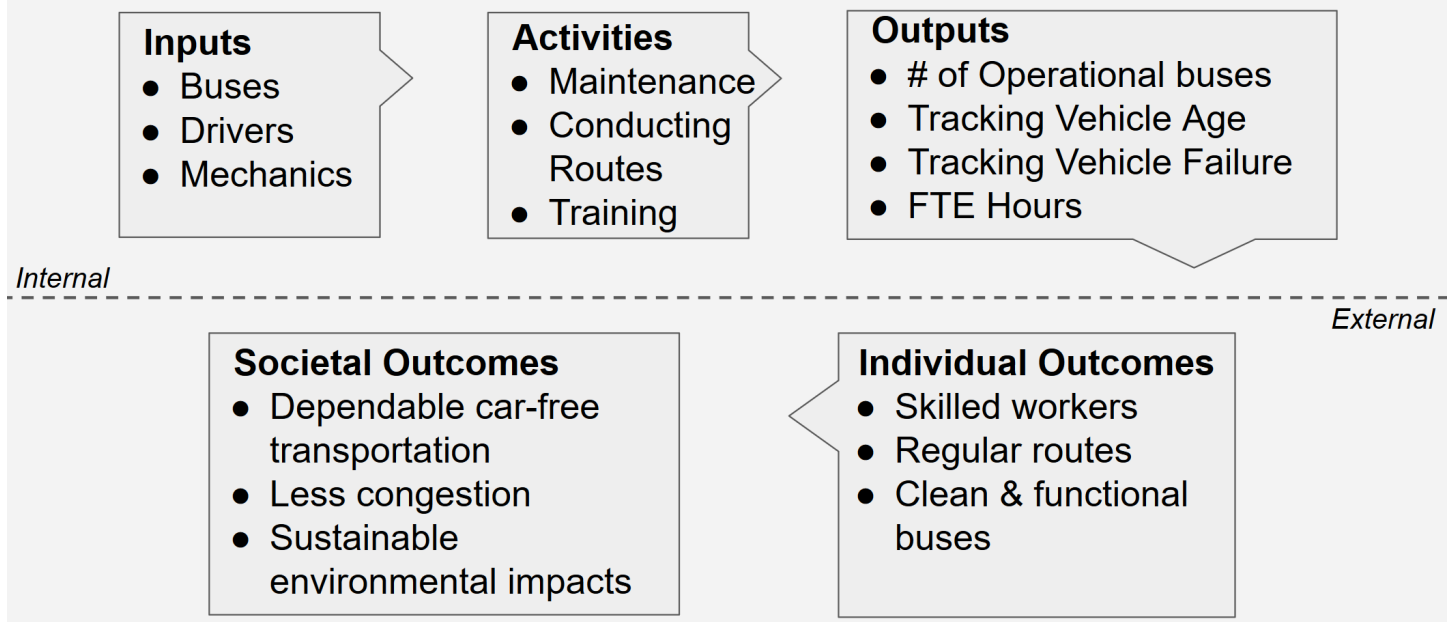


FIG NUM. 7

Fleet logic model example



KEY OBSERVATIONS, OPPORTUNITIES, AND CHALLENGES*

Students focused on four strategies to measure performance for LTD based on LTD’s perceived level of influence and control over its individual programs and those programs’ impact on society.

- **Emergent Strategies:** best for situations of high uncertainty over cause and effect and low control over outcomes
- **Integrated Strategies:** best for situations with low uncertainty over cause and effect and high control over outcomes

- **Ecosystem Strategies:** best for situations with high uncertainty over cause and effect but high control over outcomes
- **Niche Strategies:** best for situations low uncertainty over cause and effect and low control over outcomes

MENU OF RECOMMENDATIONS

In the face of fluctuating ridership, LTD can position its programs in such a way that they can be responsive to changes in technology, rider demand, and climate. Students recommended

LTD carefully track the identified key performance indicators, so that managers can identify trends as they begin to take shape and adjust programming appropriately.

Fleet

- Recommended Strategy: Niche or Integrated
- Recommended Key Performance Indicators: Maintenance and staff time spent per bus; employee performance tracking; logging vehicle and technical assistance calls

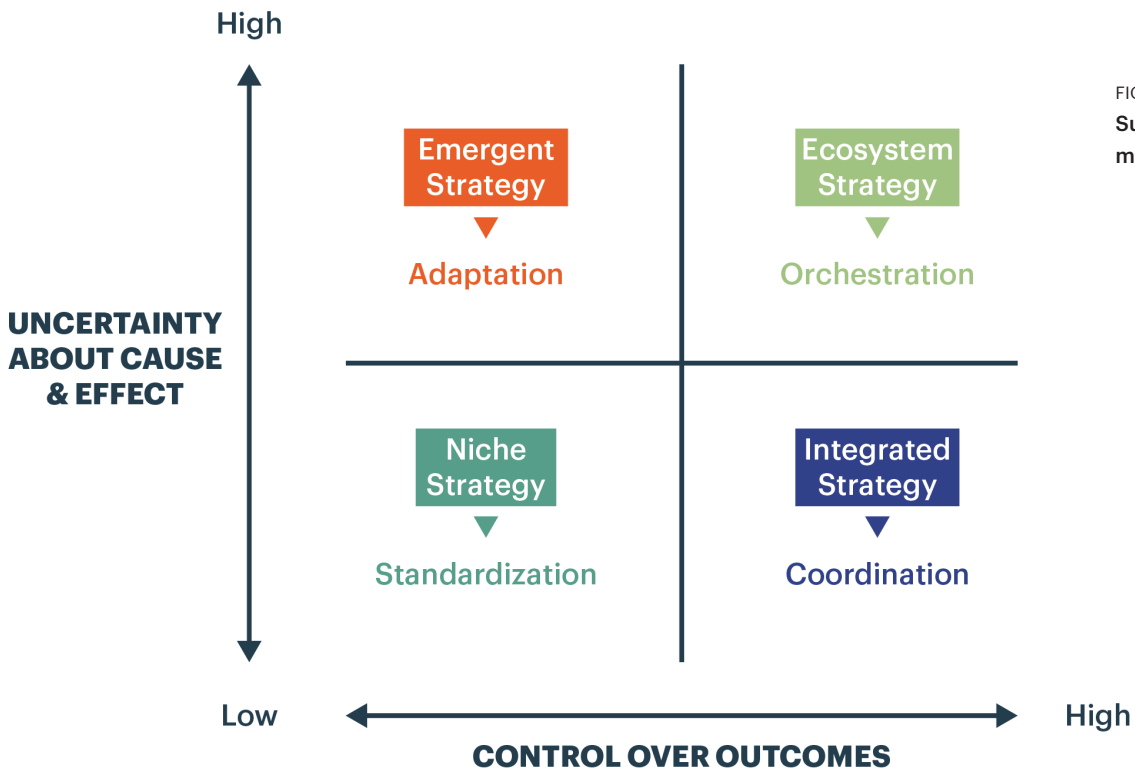


FIG NUM. 8
Summary chart of performance management strategies

Operations

- Recommended Strategy: Niche or Integrated
- Recommended Key Performance Indicators: On-time departure measures; excessive wait time rates; customer satisfaction surveys

Service Planning

- Recommended Strategy: Ecosystem and continued Niche
- Recommended Key Performance Indicators: Relationships with partner transportation-related agencies; passenger boarding; passenger miles; non-revenue generating trips; service area; average speed

Risk Management

- Recommended Strategy: Integrated
- Recommended Key Performance Indicators: Number of preventable/unpreventable collisions with vehicles and property; injuries of passengers, staff, and third parties; quantifying lost staffing capacity due to on-the-job injuries; maintenance and age of buses; on-time boarding

Sustainability

- Recommended Strategy: Niche
- Recommended Key Performance Indicators: Emissions inventory including noise, toxic waste, emissions and greenhouse gases, and infrastructure capacity; Chicago Transit Authority indicators

PROGRAM	STRATEGIES	KEY PERFORMANCE INDICATORS
 <p>Fleet</p>	<p>Niche</p> <p>Integrated</p>	<ul style="list-style-type: none"> • Maintenance and staff time spent per bus • Employee performance tracking • Logging vehicle technical assistance calls
 <p>Operations</p>	<p>Niche</p> <p>Integrated</p>	<ul style="list-style-type: none"> • On-time departure measures • Excessive wait time rates • Customer satisfaction surveys
 <p>Service Planning</p>	<p>Ecosystem</p> <p>Niche</p>	<ul style="list-style-type: none"> • Relationships with partner transportation-related agencies • Passenger boarding • Passenger miles • Non-revenue generating trips • Service area • Average speed
 <p>Risk Management</p>	<p>Integrated</p>	<ul style="list-style-type: none"> • The number of preventable and unpreventable collisions with vehicles and property. • Injuries of passengers, staff, and third parties. • Quantifying lost staffing capacity due to on-the-job injuries. • Maintenance and age of buses • On-time boarding
 <p>Sustainability</p>	<p>Niche</p>	<p>Emissions inventory including:</p> <ul style="list-style-type: none"> • Noise • Toxic waste (waste from maintenance and operations) • Emissions and greenhouse gases • Infrastructure capacity and how that influences sustainability performance • Chicago Transit Authority indicators

FIG NUM. 9
Summary chart of student recommendations



Corridor Studies

Transit-Oriented Development on Historic River Road

The Classes: Introduction to Planning Practice and Planning Analysis;
School of Planning, Public Policy and Management
Faculty: Rich Margerum and Robert Parker



WHY DID LTD ENGAGE THIS CLASS?

River Road has been identified in adopted plans as a location for future population and employment growth and where future investments would be needed (Envision Eugene, 2035 Transportation System Plan, Long Range Transit Plan). In anticipation of this growth, several studies are currently evaluating the types of transit and active transportation improvements that could be made on River Road (Moving Ahead); the potential changes to zoning that could be made to accommodate that growth (River Road Transit Community Investment Plan); and the values that neighborhood residents would like to use to shape and measure change to the corridor and the surrounding community (River Road-Santa Clara Neighborhood Plan). In addition to these efforts, LTD is currently constructing the new Santa Clara Transit Station, which will provide safer access to transit for residents and improve operational efficiency of the transit service. LTD engaged these two graduate-level planning classes to take a comprehensive, long-term look at River Road and the surrounding communities and recommend complementary transportation and land use concepts that could be implemented to leverage the investments already under consideration.

PROJECT SUMMARY

Students approached this challenge by understanding the past, present, and future of the corridor – they reviewed planning documents, analyzed socioeconomic data, reviewed land use and buildable land inventory, and conducted site assessments. The students then participated in a design charrette with their peers to test conceptual ideas and refine their recommendations. The work products were developed by teams of students with each team focusing on a different segment of the corridor. Some teams developed their vision around transit-oriented development (TOD) occurring over the next 20 years. Others integrated transportation options into their recommendations, while focusing on community and social services that cater to families in nearby neighborhoods. Each team emphasized the need for long-term planning that would satisfy the needs of both current and future neighborhood residents.

KEY OBSERVATIONS, OPPORTUNITIES, AND CHALLENGES

Affordable Housing: Student teams noted that there is a need for more affordable housing to accommodate current and future low-income residents. The opportunity and challenge of this need may require both new development and redevelopment.

Neighborhood Cultures: River Road is one corridor but has different neighborhood cultures throughout it. Students used site assessments and demographic profile research to better understand unique cultures, which influenced the placemaking elements of their recommendations. There is an opportunity to make placemaking improvements that are both cohesive and recognize local flavor.

Economic Drivers: As with neighborhood culture, different segments of the corridor have more or less economic activity. Understanding the economic drivers of each segment helped student teams better understand the economic development potential, which informed their recommended economic development tactics.

MENU OF RECOMMENDATIONS

Corridor-wide Recommendations:

Several common themes arose in the recommendations of all groups.

- **Equitable Access to Transit:** Not all neighborhoods have safe and easy access to transit. Future improvements should ensure that people of all ages and of all mobility levels have equitable access to transit. This could mean new or improved sidewalks and bike lanes or new connecting streets.

- **Missing Middle Housing:** “Missing middle” housing is lacking throughout the corridor and students recommended mixed-use buildings with a mix of housing be considered.
- **Placemaking:** In general, placemaking capitalizes on a local community’s assets, aspirations and culture, to create public spaces that promote people’s health, happiness, and well-being. Specific placemaking elements were recommended throughout the corridor to incorporate neighborhood culture and express community identity and pride.
- **Economic Development:** Students noted that most of the corridor is residential and lacks economic activity. Changes to the urban form, land use, transportation network, and incentive programs could be used to enhance the potential for economic development along River Road.
- **Community Engagement:** All teams recognized the need to engage the community, early and often, in meaningful and equitable participation in projects -- including imagining, developing, and making decisions about projects. All teams recommended that project sponsors take advantage of existing community organizations to inform communication strategies.



FIG NUM. 10

Site-specific small group work by students

Site Specific Recommendations:

Santa Clara Transit Station: This group evaluated River Road from Hunsaker Lane to Division Avenue and developed concepts for the undeveloped property adjacent to the Santa Clara Transit Station and the Santa Clara Square shopping center on River Road, and recommended the following:

- **Access & Connectivity:** Focus on multimodal transportation options and connectivity for all modes. Improvements including sidewalks, crossings, bike lane, and connecting streets and paths would provide better access to transit and a more grid-like street network. Students found that many residents may not be able to afford to drive and/or are unable to drive due to age or mobility challenges. The introduction of “leading pedestrian intervals” (3-to-5 second head start for bikes/pedestrians) at busy River Road intersections will improve safety and accessibility.
- **Housing:** Implement mixed-income, mixed-use development on the Santa Clara site that caters to the needs of a variety of demographics in the neighborhood. Mixed-income housing is important as there is a known need for affordable housing in the area and to ensure affordable housing is feasible, a mix of affordable and standard housing types is recommended. Collaborating with local affordable housing developers and organizations and the community is suggested.



- Economic Development:** Retrofit the Santa Clara Square strip mall by adding a new multimodal grid onto the property to improve accessibility and mobility as well as green spaces and local art (general building footprints within the strip mall could remain). The proposed market for the retail center would be local shops and restaurants.

Four Corners of River Road: This group focused on the intersection of River Road and River Avenue/ Silver Lane and reimagined all four corners including the existing LTD River Road Station site, and recommended the following:

- Access & Connectivity:** Improve accessibility and connectivity for all modes of transportation in the area with sidewalks, crossings,

protected bike lanes, and connecting streets and paths. Enhancement of the crosswalk at the intersection is proposed to better protect pedestrians and cyclists. These improvements would enhance access to transit and the river path and provide transportation options for people of all ages and for those with mobility challenges.

- **Housing:** Develop mixed-use multi-family housing that starts with the River Road Station site and build-out to all four corners and south along River Road as redevelopment is feasible. Collaborate with local affordable housing developers and organizations and the community.
- **Placemaking:** This intersection currently lack vibrancy and sense of place. Placemaking elements such as murals done by local artists, green spaces for residents use, and improved signage connecting this area to the river path and retail shops to improve the intersection.

A Walk Down Hilliard Lane: This group focused on the neighborhood surrounding Hilliard Lane and the recognized need to reintegrate historically marginalized populations into the community. Students recommended the following:

- **Access & Connectivity:** Improve equitable access and safety of the transportation system by integrating separate bicycle and pedestrian lanes to minimize contact with vehicles since safety measures are particularly important along River Road. The streetscape should include green buffers to enhance safety and the aesthetic quality. In support of the transit-oriented development framework, students recommend removing commercial parking requirements.

- **Community-oriented Development:** Introduce a community-oriented development that includes space for community organizations, a community center, and a library. A community-oriented building can provide educational and community resources for El Camino del Rio Elementary students and the greater community.
- **Food Equity:** After identifying disparities in food access, students recommended bringing healthy food options to the community by creating “The Historic Market” -- restoring the McKay Supermarket building back to a place where locally sourced and affordable food and household goods can be sold. Bringing back the market would bring healthful food to the community and add vitality to this section of River Road.

- **Housing:** Introduce affordable housing options along transit routes that have inclusionary housing requirements. Students sought to fill the “missing middle” housing need by introducing medium density, multi-family housing in the area.

Co-designing the Lower River Road Neighborhood: This group evaluated the neighborhoods along River Road from Park Avenue to Hansen Lane. Their concept focused on the public and park lands on the east side of River Road (Rasor Park). This group’s proposal calls for coordination with the Kalapuya tribe to help inform the cultural and ecological context of design elements. Students recommended the following:

- **Access & Connectivity:** The proposed development area should have a block/grid pattern for improved connectivity, accessibility, and safety for all modes. This group proposes dedicated paths for cyclists and pedestrians as well as enhanced crosswalks across River Road. They recommend including bike lockers on the site to support cycling as a more sustainable and active travel option.
- **Transit Stop Amenities:** Students recommend providing shelter at Knoop Lane stop to protect riders from inclement weather and provide lighting to enhance safety.
- **Housing:** To help address the “missing middle” housing need, students recommend adding medium density housing and partnering with an organization that can assist with housing funding and development.
- **Economic Development:** Activate community economic development through mixed-use development. Students recommend promoting economic expansion and ecological awareness with river-facing storefronts.
- **Placemaking:** To give lower River Road a sense of place, the team proposes adding culturally and ecologically contextual placemaking elements in signage, buildings, and public art.

Re-imagining River Road for Ecological Equity

The Class: Green Cities; School of Planning, Public Policy and Management
Faculty: John Arroyo

WHY DID LTD ENGAGE THIS CLASS?

As described for the previous project, River Road was the focus of a handful of planning studies and had been identified one a several corridors throughout Eugene that will grow its population and employment. This course was offered to the wider University of Oregon student body and as such, offered LTD and its partners a look at River Road through an interdisciplinary, human ecological lens. This class sought to develop recommendations to promote sustainability, resilience, and equity through implementable, community-scale projects for River Road that complement planning efforts already underway.

PROJECT SUMMARY

To understand the unique characteristics of the River Road corridor, LTD staff provided an orientation to students in the class. Students then conducted site visits to make observations and select a site and topic for group study. Student groups reviewed literature on transportation ecosystems, environmentally-oriented community development, and what factors create a dynamic neighborhood. Students used the experiences from other communities and case studies to identify strategies that could be applied locally. The final proposals include a diverse inventory of design interventions, land use and transportation improvements, and community engagement plans.

KEY OBSERVATIONS, OPPORTUNITIES, AND CHALLENGES

- **Green Spaces:** The green spaces and parks around River Road present an opportunity as they provide space for community building and mental and physical health. Currently much of the green space is not programmed but could be turned into more functional community space. The proximity of transit to these green spaces means that any new programming opportunities would be accessible by River Road residents and members of the broader community.
- **Food Security:** Students perceived that River Road lacks affordable, healthy food options, which may increase

food insecurity in the area. There is an opportunity to integrate food equity strategies into the community as a means of improving physical and mental health and building community.

- **Walkability & Safety:** During site visits, students observed unsafe and uncomfortable walking conditions along River Road and in the surrounding neighborhoods. As walkability fosters community, reduces carbon emissions, reduces obesity, and increases neighborhood land value, students felt there was an opportunity to make pedestrian and bicycle improvements on River Road and within neighborhoods.



FIG NUM. 11

Proposed amenities at Hunsaker Lane and River Road

- **Bus Stop Amenities:** There is an opportunity to grow transit ridership and enhance safety at bus stops by providing bus stop amenities, such as shelter, seating, and lighting. Improving bus stop safety could facilitate a better transit experience for all people, including traditionally underrepresented riders (minorities, low-income populations, older adults, women, and persons with disabilities).

MENU OF RECOMMENDATIONS

- **Transportation:** These recommendations are designed to decrease the need for personal vehicle transportation and increase active modes of transportation, which would reduce carbon emissions and increase accessibility.
 - **Transit:** Increase bus route frequency serving River Road and add bus stop amenities that enhance rider safety and comfort.

- **Bicycle & Pedestrian:** Provide protected bike lane on high speed streets; build accessible pedestrian facilities; place lighting in locations that enhance pedestrian and bicycle comfort at night; focus on travel routes to and from schools in the corridor.
- **Roadways:** Use a data-driven approach (traffic and safety data) to identify locations for road diet opportunities.

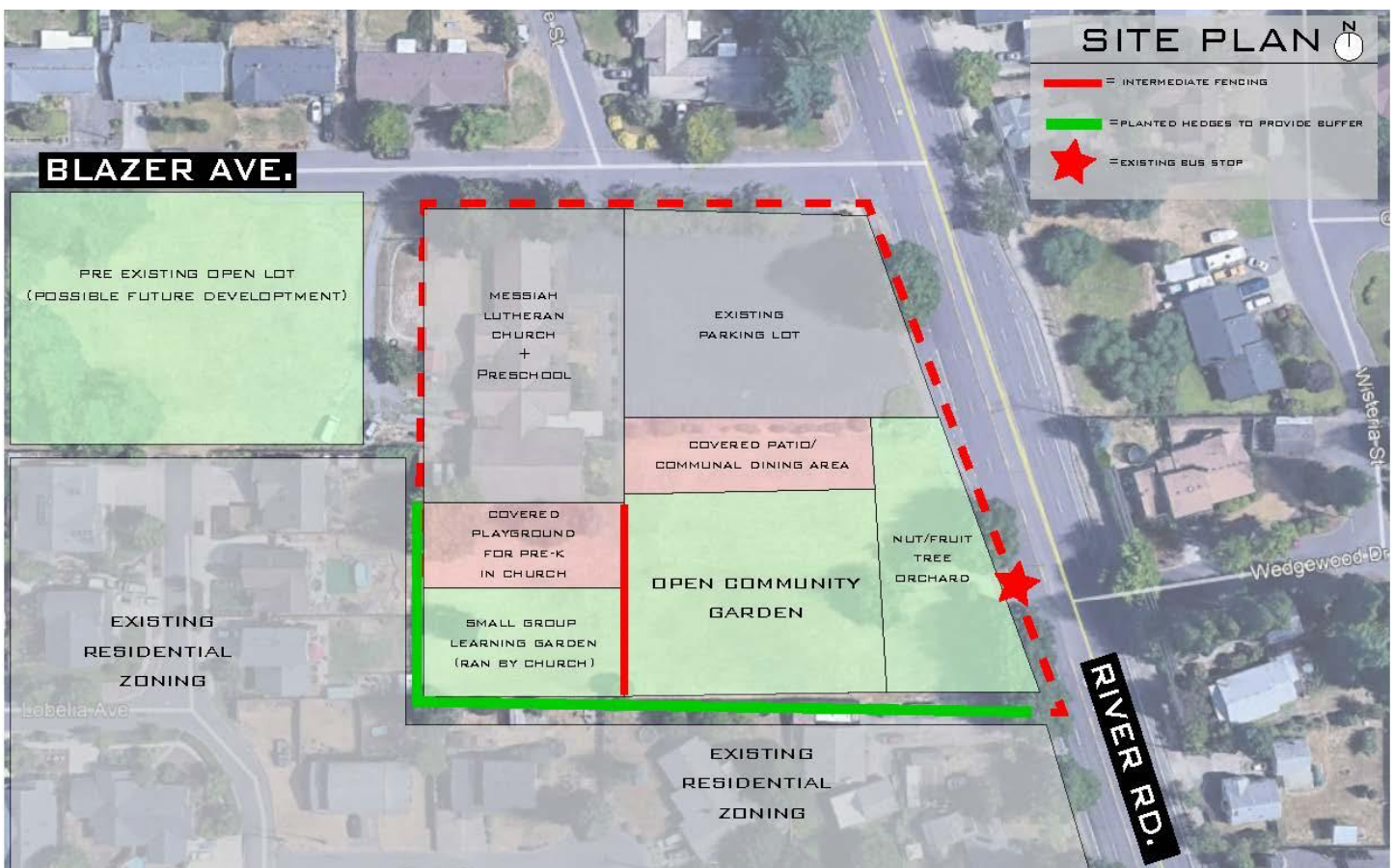


FIG NUM. 12

Proposed site plan for the intersection of Blazer Avenue and River Road

- **Wayfinding:** Add wayfinding signage and maps as key locations to help pedestrians and cyclists navigate the corridor as well as to and from the corridor from the Ruth Bascom Riverbank Path and parks; create information kiosks to improve awareness of community activities.
- **Engagement:** include residents in a tactical urbanism task force; partner with local organizations in placemaking projects, such as art installations; find dedicated community leaders to help support a community garden.



FIG NUM. 13
Proposed community garden

- **Parks & Green Spaces:** Parks and green spaces should be programmed with art, cultural, and environmental and food/garden elements to increase vitality in the River Road corridor. Green space recommendations include conducting a community survey to determine interest in

a community garden; adding lighting within and near park entrances; and evaluating future opportunity sites among vacant lots for pocket parks or gardens.

- **Community Gardens:** Students noted several locations within the River Road corridor that could be possible sites for

community gardens/food gardens – such as Messiah Lutheran Church and School, Rasor Park, and Maynard Park. Students suggested coordinating with school districts, property owners, city parks staff, Food for Lane County, and Lane County Farmers Market. Gardens also present an opportunity to include beekeeping and garden elements that attract local pollinator species.

- **Rasor Park:** Set clear park boundaries to delineate community space from private property; add amenities and park programming; protect native vegetation and wildlife habitats; use the park for monthly farmers’ market; and involve local residents in programming and amenity development.



FIG NUM. 14
Proposed Rasor Park amenities



FIG NUM. 15

Proposed crosswalk improvement



FIG NUM. 16

Community garden example

- West Bank Park: Add safety amenities, such as lighting to the Riverbank Path; improve connections between off-street bicycle and pedestrian paths, adjacent streets, and corridor activity centers through wayfinding and by designating active mode routes.
- Maynard Park: This park presents an opportunity for a community garden and education center. Programming would focus on sustainable building and gardening practice, such as rain water collection, and food, health, and wellness.
- Maurie Jacobs Park: Students recommended a park entryway at the Fir Lane park entrance and a redesign of the parking lot to accommodate bike parking and better accessibility; improve the existing play structure; and consider opportunities for seasonal programming.

Promoting Sustainable Transportation in the Coburg Corridor

The Class: Sustainable Transportation; School of Planning, Public Policy and Management
Faculty: Marc Schlossberg

WHY DID LTD ENGAGE THIS CLASS?

Coburg Road is a major transportation and transit corridor in Eugene that is forecast to grow its population and employment in the future. It is a corridor being studied by LTD and Eugene for possible future transit and active transportation investments through the Moving Ahead project. Coburg is an active commercial corridor with strip shopping centers, frequent driveways, and large parking lots that transitions to residential to the north. This active corridor is surrounded by residential neighborhoods that need to travel to Coburg Road for shopping and/or access transit. In order to leverage the transportation investments currently being considered on Coburg Road, LTD engaged this class to evaluate opportunities for mobility hubs as a means to promote multimodal transportation options as an alternative to a personal vehicle.

PROJECT SUMMARY

This class tackled the challenge by first understanding mobility hubs – how to identify where they might be needed and the urban form elements needed to create a place where multiple forms of transportation can be concentrated to facilitate convenience, efficiency, and to increase multimodal transportation options for travelers. Students studied and applied urban design methods to evaluate walking and biking, address actual and perceived safety issues in the corridor, and anticipate how emerging micromobility solutions could be integrated. Each student team aimed to decrease the number of cars on the road; decrease emissions via reduction in traffic congestion; increase safety for pedestrians, cyclists and transit users; and stimulate human-scale development along Coburg Road.

KEY OBSERVATIONS, OPPORTUNITIES, AND CHALLENGES

Mobility hubs can advance Eugene and LTD's sustainability and related goals by reducing reliance on personal vehicles and thereby improving air quality, conserving resources, reducing car exhaust greenhouse gas emissions, reducing congestion by limiting the number of vehicles on the road, increasing equity by enabling carless households to thrive, and increasing the productivity of transit. A mobility hub on Coburg Road has the potential to function not only as a transportation connection, but also as a welcoming, social space for people to meet up and relax. Emerging micromobility modes, such as electric scooters and bikes, may be more widely adopted into Eugene's policy and infrastructure in the near future and support potential mobility hubs such as along Coburg Road. Student recommendations acknowledge and



FIG NUM. 17

Illustration of bicycle and bus lanes along Coburg Road near Harlow Road

Source: Eric Burdette, Victor Garcia, and Allison Grover



FIG NUM. 18
 Targeted areas for redesign along Coburg Road at the Oakway Center

accommodate these modes into their designs. In addition, current site conditions make Coburg Road a viable option for renovation to address the real and perceived safety issues associated high vehicle speeds, lack of crosswalks, and documented injuries/fatalities.

MENU OF RECOMMENDATIONS
 Mobility hubs on Coburg should provide all the necessities to make multimodal trips possible, including sidewalks and safe crossings; secure bicycle parking; park-and-ride parking spaces; electric vehicle

charging stations; bike share and scooter share stations; and covered seating for people to wait between trips. Several locations along Coburg Road were evaluated for a mobility hub. The following are site-specific recommendations.

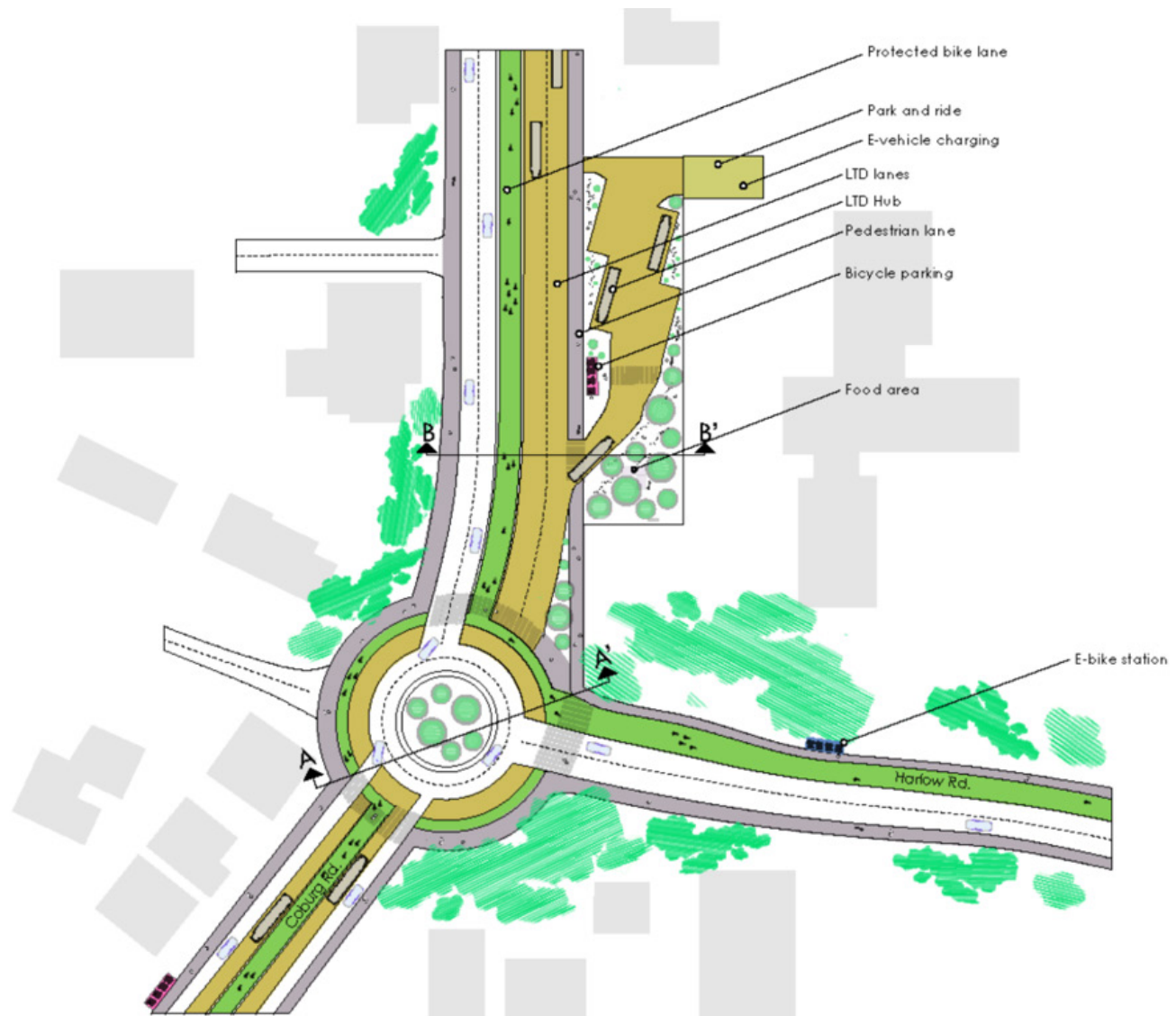


FIG NUM. 19

Plan view of proposed changes at the intersection of Coburg and Harlow Road

Source: Eric Burdette, Victor Garcia, and Allison Grover

Oakway Center:

- Pedestrians: add a raised crosswalk across Coburg Road to improve safe bus stop access as well as a designated pedestrian path through the parking lot from the bus stop to the shopping center.
- Bicycle and Micromobility: add a bidirectional cycle track or bike lanes along Coburg Road with safety features such as a green paint, buffer, or bollards; add protected turning for bicycles at intersections; incorporate bike share station into the mobility hub; designate a ride-share drop-off/pick-up space near shopping center with covered seating.
- Transit Stop: separate transit and car traffic around the transit stop; ideas include bus pullouts or floating transit platform
- Amenities: add covered waiting area for transit/ride share

Harlow Road:

- Pedestrians: add vegetative buffer along sidewalks to separate pedestrians from high-speed traffic; enhance visibility of crosswalks by painting them; add connecting paths to neighborhoods to facilitate walkability.
- Roadway: slow traffic in this area; recommendations include narrowing vehicle lanes, reducing traffic flow to single lane, or installing a roundabout
- Bicycle and Multimodal: add a bidirectional cycle track or off-street bike lanes; add bike share/ electric scooter share stations; rebrand bike lane as “micro lane”; add safety features on bike facilities such as green paint and protective barriers; place electric vehicle charging stations and rideshare pickup at the mobility hub.
- Transit: reduce traffic lanes and add dedicated bus lanes on length of Coburg Road; repurpose Westminster Presbyterian parking lot as transit hub.
- Amenities: add covered waiting area for transit/ride share; provide opportunities for complementary businesses such as food trucks, lending library, or café.

Willakenzie Road:

- Parking: repurpose some of the parking lot space to construct a mobility hub at Coburg Road and Willakenzie Road.
- Pedestrian: fill in sidewalk gaps to make nearby neighborhoods within a 20-minute walk.

- Bicycle and Micromobility: add lockable parking for personal micromobility devices; create wider, separated micromobility lane; move bike lanes off-street and paint them green for visibility; designate rideshare use locations; design micromobility and ride share for first-last mile trips.
- Transit: reduce traffic lanes and add dedicated bus lanes on length of Coburg Road to increase frequency and reliability of transit trips.
- Additional: add covered waiting area for transit/rideshare.

Sheldon High School:

- Parking: repurpose some of the parking lot space for a designated food truck hub/social space.
- Student-oriented Hub: design a hub with students in mind due to proximity of Sheldon High School to Coburg Road and the younger population that it would serve.
- Pedestrian: create wider crosswalks with median refuge at the Coburg Road intersection.
- Roadway: reduce vehicle speeds to enhance safety by using tools such as speed bumps on Coburg Road; improve street lighting.
- Bicycle and Micromobility: incorporate bike share and e-scooter share hubs across from Sheldon High School.
- Transit: provide shelter and seating at transit stops.

Costco Shopping Center:

- Pedestrian: increase crosswalk frequency along the length of Coburg Road; increase pedestrian separation from vehicles by adding buffers along sidewalks.
- Roadway: add bike signals at intersection of Coburg Road and Chad Drive with protected cyclist turn lanes; close one Costco driveway to address major conflict zone; improve street lighting.
- Bicycle and Micromobility: add dedicated bike lanes; create a network of carless paths within the mobility hub site for bikes and micromobility modes; add a bike share station.
- Transit: reduce traffic lanes and add dedicated bus lanes the length of Coburg Road; add seating, shelter, and lighting at transit stops; separate transit and car traffic at mobility hub by using pullouts and floating transit islands.
- Additional: add space for social events, food trucks, gathering to create economic hub for retail businesses and restaurants.

Environmental Assessment of the EmX Franklin Boulevard Corridor

The Class: Advanced Geographic Information Systems;
School of Planning, Public Policy and Management
Faculty: Yizhao Yang

WHY DID LTD ENGAGE THIS CLASS?

LTD's EmX system is as a high-quality bus-based transit mode designed to deliver fast, comfortable, and cost effective transit services. Features such as dedicated lanes, off-board fare collection, level boarding, and

frequent service attract ridership and make EmX the most used part of LTD's transit network. The Franklin segment of the EmX system opened to revenue service in 2009, followed by Gateway in 2011 and West Eugene in 2017. Each segment of this system has seen different ridership patterns

since opening and as the transit market has adjusted and leveled over time. LTD engaged this class to investigate the possible reasons for these differences and to identify opportunities for improvements. This project was a three-part series conducted across three classes –

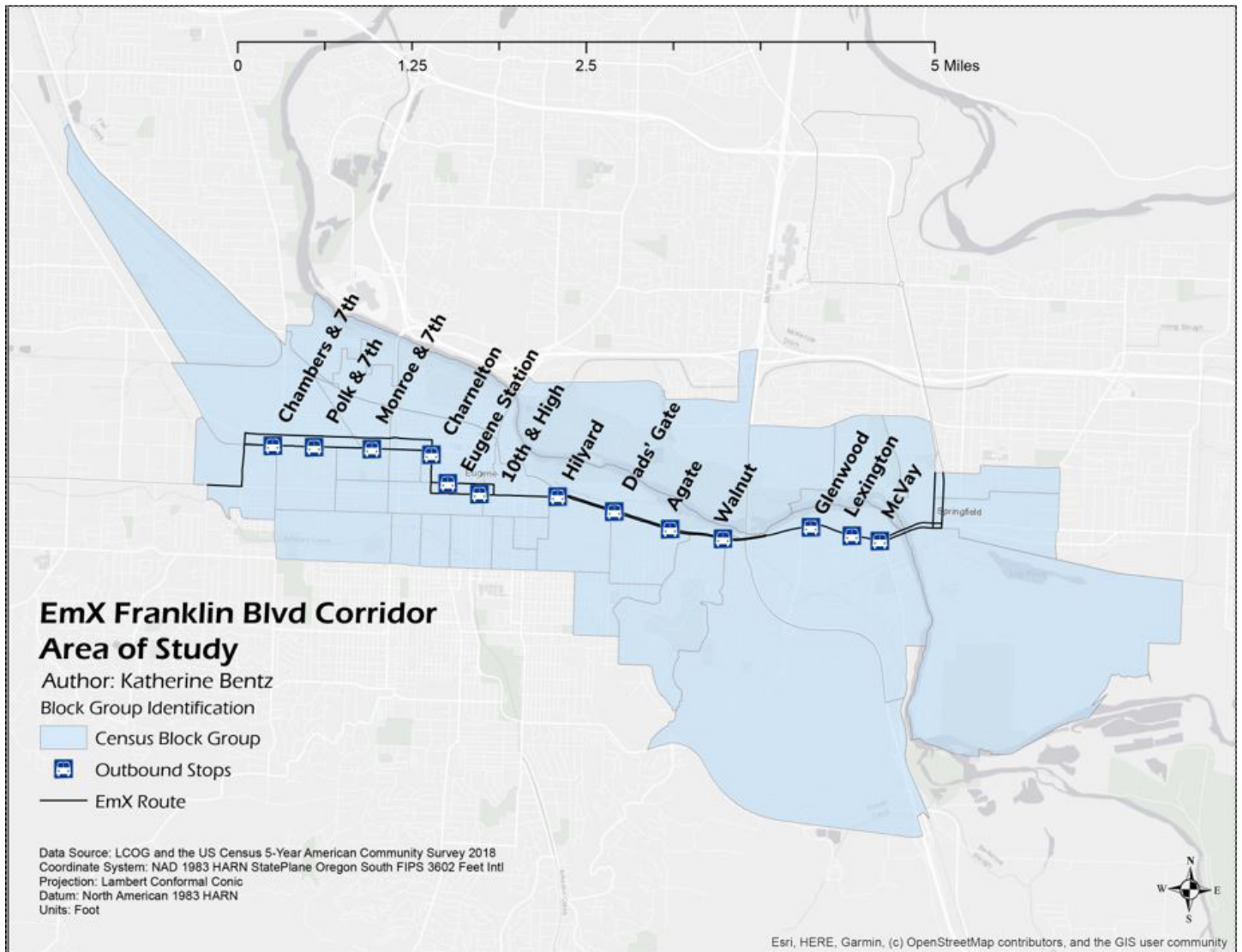


FIG NUM. 20

EmX Franklin Boulevard Corridor Area of Study

the Franklin and Gateway segments were evaluated as part of the SCYP partnership and the West Eugene segment was analyzed in a previous year.

PROJECT SUMMARY

Students conducted a multi-scale environmental study of LTD's EmX route along the Franklin Boulevard corridor (from Chambers Street and 7th Avenue station in Eugene to McVay Station in Springfield).

The class began by reviewing literature on walkability, safety, and accessibility affected by station design, street design, urban design, landscape design, and user experiences. Students then conducted geospatial analyses using GIS to examine various land use, demographic, and transportation characteristics within each station's "pedestrian catchment zone" – a ¼-mile walkshed as well as ½-mile

service area. For the other segments, students conducted site assessments; however, the pandemic prevented this activity. Instead, students used LTD ridership data to explore relationship between ridership and population density, density of community facilities, density of commercial uses, and density of bike-share stations on the Franklin segment.



FIG NUM. 21

Dads' Gate station



FIG NUM. 22

Monroe Street and 7th Avenue station

KEY OBSERVATIONS, OPPORTUNITIES, AND CHALLENGES

- **Transportation Connectivity:** within the ½-mile service area around stations there are 128 bus stops, and 28 bike share stations. The stations in Springfield are without bike share facilities.
- **EmX and Housing:** there are 5,758 residential buildings within the ½-mile service area.
- **Demographics:** The 25 to 45 age bracket represents 36% of the population that lives along the Franklin EmX segment and there more households living below the poverty line than Lane County as a whole. Vehicle ownership is high – only eight percent of household reports not having access to a vehicle.
- **Ridership/Density Correlations:** In general there appears to be positive relationship between density and transit ridership along the Franklin corridor.

 - Stations near higher population density tend to have higher ridership; however there were outliers. High Street and Polk Street/7th Avenue station has a high population density but lower ridership and Chambers Street & 7th Avenue station has low population density but high ridership.
 - Stations within walking distance to a high number of community facilities tend to have higher ridership, except: Charnelton Street station has many facilities within walking distance but low ridership and Hilyard Street, Dad’s Gate, and
- Agate Street stations have fewer communities facilities in the catchment area but high ridership due to the proximity of the UO, a major activity center.

 - Stations near a high number of commercial properties tend to have higher ridership, except: Charnelton Street and High Street stations have a relatively high number of surrounding commercial properties but have lower ridership when compared with stations with fewer commercial properties and Hilyard Street Station has high ridership despite a medium number of nearby commercial properties – this station is influenced by the proximity of the UO and major health facilities.

- Stations within walking distance to a bike share station tend to have higher ridership. However, the density of bike share stations did not appear to clearly correlate to higher ridership numbers.

MENU OF RECOMMENDATIONS

Summarized below are the overall recommendations for the Franklin segment of the EmX system. The full report has detailed assessments and recommendations for each station.

- **Multimodal Connectivity:** fill in pedestrian and bicycle infrastructure gaps; collaborate with the cities of Springfield and Eugene to add crosswalks across Franklin Boulevard; add

sidewalks to the surrounding neighborhoods where there are gaps; ensure sidewalks meet ADA standards; improve bike infrastructure with bike paths, bike wayfinding, and place bike racks near stations; work with the cities of Eugene and Springfield to develop bike lanes on Franklin Boulevard. and 7th Avenue; adjust traffic signal timing to encourage walking and biking to stations; and add bike share stations in Springfield and where there are coverage gaps.

- **Safety:** add lighting around station areas; focus on stations near I-5 for increased safety interventions such as warning signs and flashing lights to alert

travelers of the presence of the station; implement measures to reduce traffic speed along Franklin Boulevard; add barriers between the sidewalk and street to prevent jaywalking/ promote use of crosswalk to island platforms; add accessible pedestrian signals (auditory message); add enhanced crosswalks across Franklin Boulevard and 7th Avenue.

- **Wayfinding:** Collaborate with the cities of Springfield and Eugene to add wayfinding signs/ maps near stations to help riders find connecting transit, bike-share stations, and service area amenities and park spaces.



FIG NUM. 23
McVay station

- **Land Use:** Partner with the city of Springfield to encourage greater density and mix of development types.
- Collaborate with the city of Eugene to improve street, sidewalk, and bike lane connectivity beyond the station area; Coordinate with Eugene to change/reduce the parking requirements around downtown stations.
- **Placemaking:** Incorporate University of Oregon at stations that serve the school; improve the waiting experience at stations by enhancing visibility and aesthetics; add natural and artistic elements and greenspace

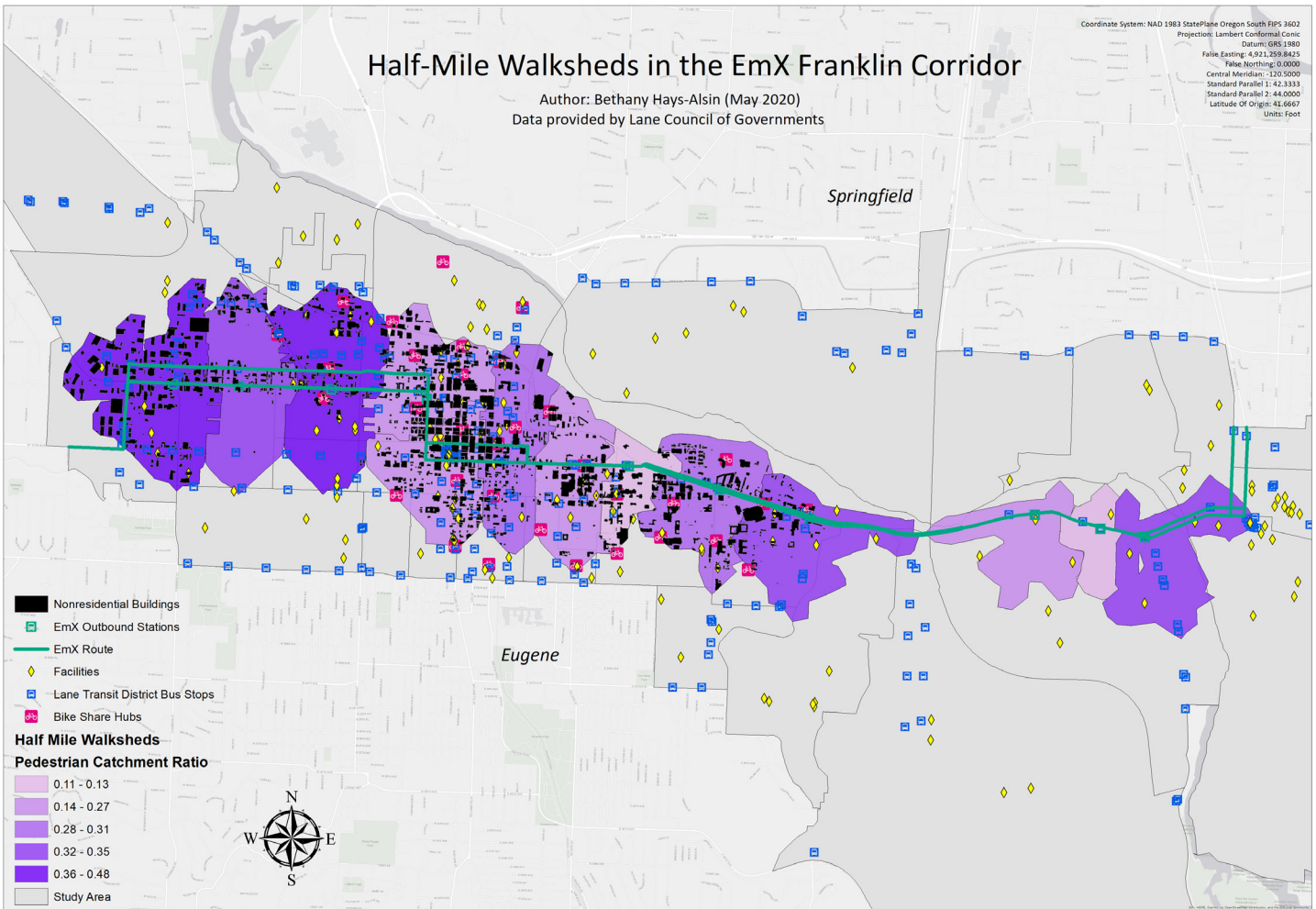


FIG NUM. 24

Half-Mile Walksheds in the EmX Franklin Corridor

Environmental Assessment of the EmX Gateway Corridor

The Class: Advanced Geographic Information Systems; School of Planning, Public Policy and Management
Faculty: Yizhao Yang

WHY DID LTD ENGAGE THIS CLASS?

As described above, LTD engaged in a three-part project with this Advanced GIS class to evaluate environmental factors that influence the ridership patterns along its EmX routes. This class focused on the Gateway segment – from Springfield Station to the Gateway Loop.

PROJECT SUMMARY

The class began by reviewing literature on walkability, safety, and accessibility affected by station design, street design, urban design, landscape design, and user experiences. Students then conducted geospatial analyses using GIS to examine

various land use, demographic, and transportation characteristics within each station’s “pedestrian catchment zone” – a 1/4 mile walkshed as well as 1/2 mile service area. Students then conducted site assessments to make note of opportunities and challenges.





FIG NUM. 25
Centennial Station looking north

KEY OBSERVATIONS, OPPORTUNITIES, AND CHALLENGES

- Demographics:** the average population density is seven people/acre; the average housing density is 3.2 units/acre; 12% of the population identifies as non-white; 39% of the population are between 25 and 54 years old; 25% of households live below the poverty line but most (63%) earn \$50,000 or greater per year; and 88% of households own at least one car.
- Stations:** the EmX stations along the Gateway segment have quality amenities.
- Connectivity:** there are some transportation barriers and infrastructure gaps that impact transit accessibility from the surrounding areas as well as to/from other transportation systems/transit routes.
- Land Use:** there are 43 community facilities along the corridor, most are located near Springfield station; land uses nearby some transit stations are incompatible with transit.

MENU OF RECOMMENDATIONS:

Summarized below are the overall recommendations for the Gateway segment of the EmX system. The full report has detailed assessments and recommendations for each station.

- **Neighborhood Characteristics**

- Coordinate with the city of Springfield to encourage infill development within the EmX Gateway neighborhood in order to increase population and housing densities.

- Consider reducing financial barriers (i.e. fare waiver) for households below poverty line to encourage ridership and reduce household transportation costs.
- Evaluate bus stops in areas with high female populations to ensure adequate amenities to facilitate female ridership.
- Coordinate with the city of Springfield to ensure areas in EmX Gateway Corridor meet housing needs of people aged 25-54 to match EmX Gateway line's capacity for likely riders.

- **Accessibility and Connectivity**

- Coordinate with the city of Springfield to prioritize bike facility locations around Gateway Corridor stations to improve accessibility and connectivity
- Re-evaluate viability of poorly connected and accessible EmX Gateway line stations where no active transportation facilities exist.
- Further evaluate travel behavior of users to identify frequented destinations to prioritize station and station service area improvements.
- Build upon success at Springfield Station and increase ridership by focusing resources to further enhance pedestrian experience and make surrounding facilities more accessible.

- **Land Use Mix**

- Coordinate with the city of Springfield to increase intensity of uses and mix of uses in station service areas.
- Focus on up-zoning areas where current information shows ridership potential based on existing land use mix and accessibility and connectivity attributes.



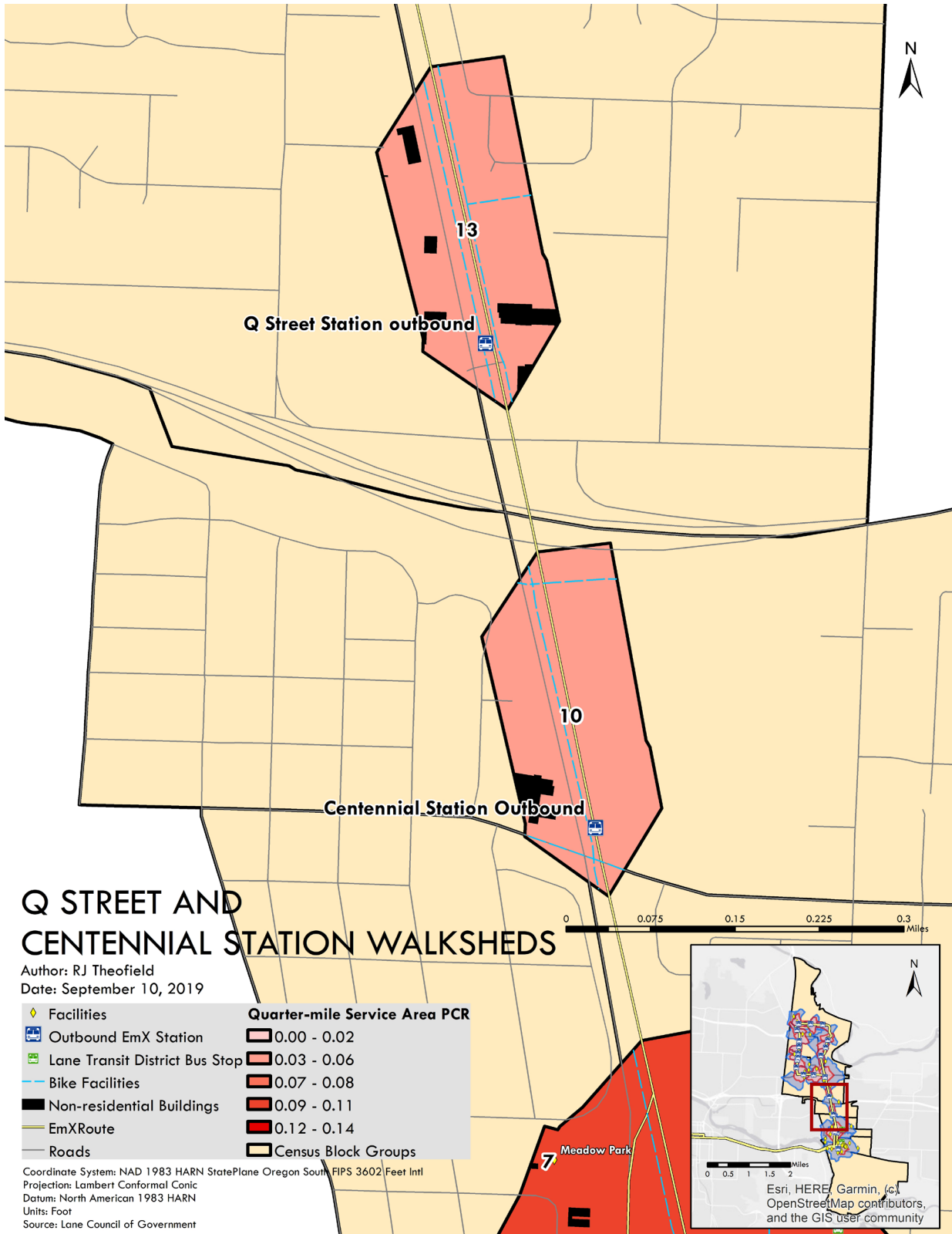
FIG NUM. 26

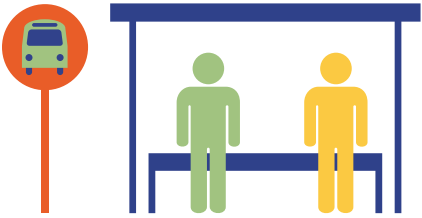
Final presentation



FIG NUM. 27
 Sacred Heart station quarter- and half-mile
 pedestrian catchment areas

FIG NUM. 28
**Q Street and
 Centennial Station
 Walksheds**

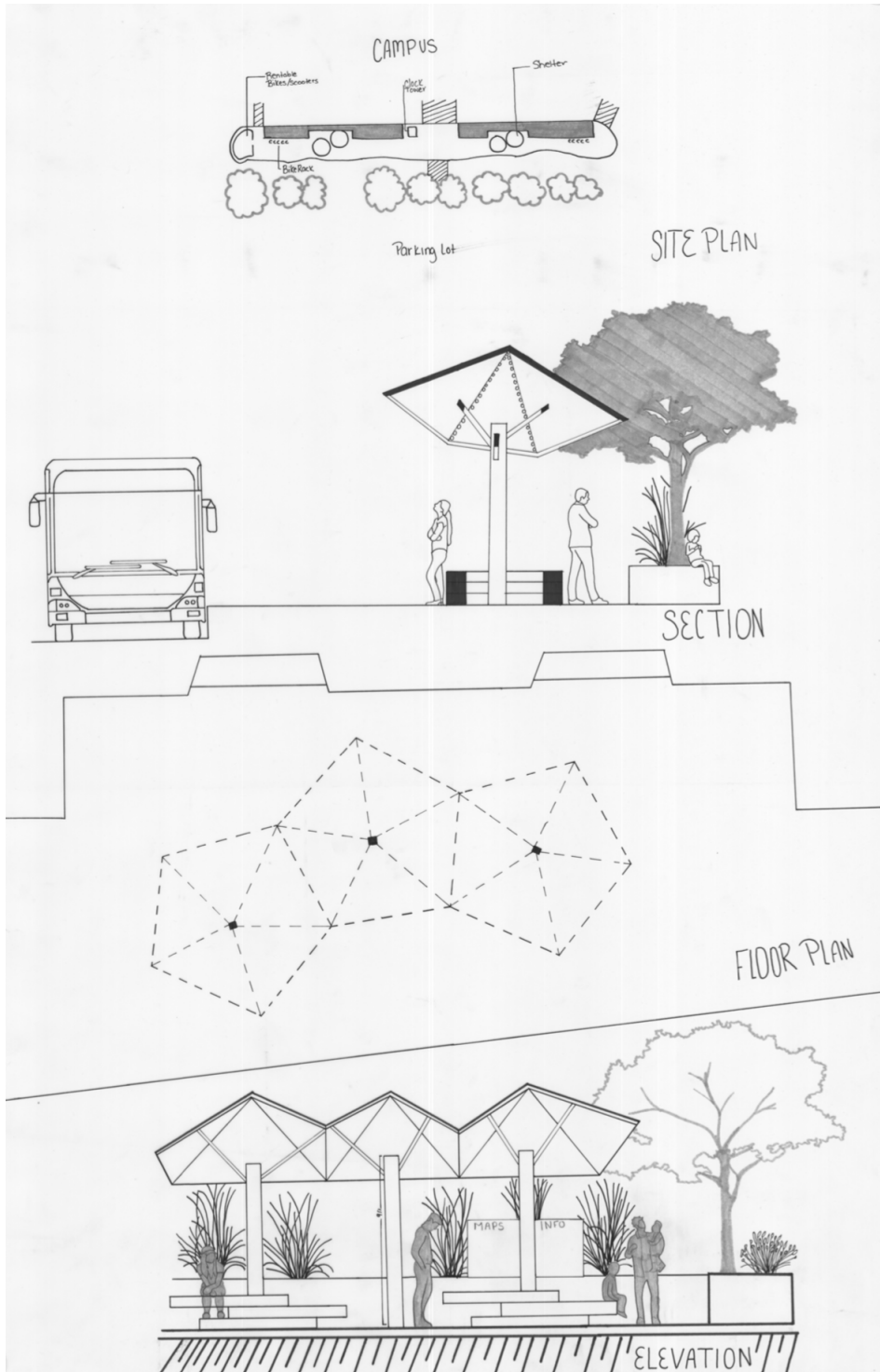




Stations and Stops

Bus Stops as Community Gateways

The Class: Design Thinking; College of Design
Faculty: Daisy O'lice Williams



WHY DID LTD ENGAGE THIS CLASS?

As expressed by the American Public Transportation Association (2017), "Bus stops are the front door to American public transit systems: they are where half of transit riders wait for service, they are a visual representation of transit service in every region in the country, and they can and do serve all transit riders. Great bus stops are comfortable places to wait, surrounded by safe and accessible walking conditions – and they are important drivers of bus ridership and customer satisfaction. Great bus stops result from collaboration; careful design and placement; and continuous funding, maintenance, and improvement." Research shows that better stops (and the walk to/ from stops) can encourage ridership and improve the transit experience. LTD engaged this design class to explore possible approaches and considerations for creating great bus stops.

FIG NUM. 29

Proposed LCC station design
by Crystal Voogd

PROJECT SUMMARY

In this course, students were given the charge of reimagining two bus stops that have different conditions and characteristics -- Lane Community College (LCC) and Commerce Station. Students began by conducting site assessments and reviewing program requirements -- consideration was given to the stop purpose, existing stop amenities, transit rider demographics, LTD's design criteria for safety and accessibility, on-going maintenance needs, and the surrounding built and natural environment. Students then conducted transit stop case studies and ultimately developed design concepts as drawings, 3D models, and visualizations. Each design concept emphasized increasing user interaction and sustainability.

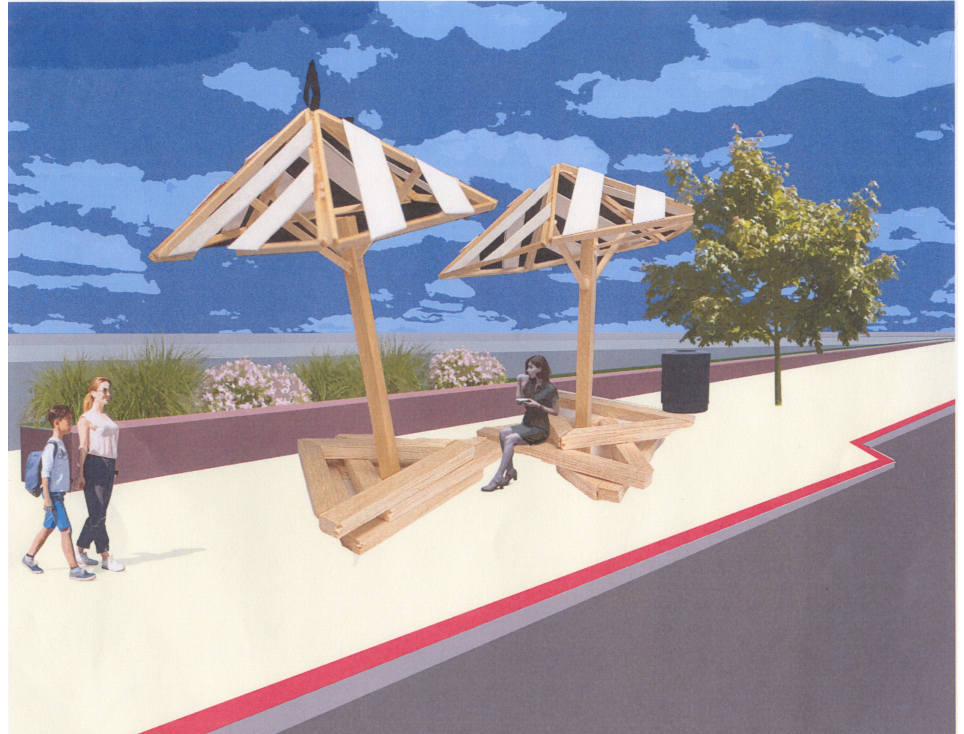


FIG NUM. 30
Proposed LCC station structures by Crystal Voogd



FIG NUM. 31
Proposed Commerce station design by Zhongyang Huang

KEY OBSERVATIONS, OPPORTUNITIES, AND CHALLENGES

Two common observations occurred at both sites: 1) the existing shelters provide protection from rain and heat but minimal protection from prevailing winds; and 2) both stations offer rider amenities such as lighting, waste disposal, benches and bus route and schedule infographics.

Observations specific to the LCC Transit station included:

- LCC Station primarily caters to students and college employees; ridership peak hours are influenced by the school's class schedule



FIG NUM. 32

Proposed LCC station design by EJ Del Rosario

- The station receives buses at 30-minute intervals, which result in longer possible wait time than at Commerce
- The station is served by routes that connect LCC to University of Oregon and downtown Eugene and Springfield
- The station sits on campus between the main entrance and large parking lots
- Challenges include a lack of cohesion with campus aesthetic; constrained passenger flow during boarding and alighting; and underutilized space
- Observations specific to the LCC Transit station included:
 - Commerce Station caters to a wide variety of transit users, many of whom were observed using transit to access the adjacent major retailers
 - There are several fixed-route and EmX stops in the general area that operate at more frequent intervals than LCC; peak ridership hours varied but were often influenced by the operating hours of the surrounding businesses
 - West 11th Avenue is a major arterial with lots of traffic, adjacent commercial activity, and large parking lots
 - Challenges at this site include insufficient seating, particularly for those that are carrying shopping bags and/or traveling with children; traffic noise

MENU OF RECOMMENDATIONS

• LCC Station

- Sustainability Features: incorporate a green roof and capture run-off to support landscaping around station; use passive design for heating/cooling; add native plants
- Safety Features: ensure lighting provides good coverage for the station
- Convenience Amenities: add electrical outlets and standing height counters as work spaces

- Comfort Amenities: building seating plates with varied and adjustable seating heights; route green roof run-off flow to create a waterfall
- Aesthetic Design: reflect the surrounding natural environment into the design and choice of materials; improve cohesion with campus by mimicking the physical aesthetic of campus buildings

• Commerce Station

- Sustainability Features: integrate green roofs and/or solar panels
- Safety Features: maintain clear sight lines to traveling vehicles
- Convenience Amenities: add electrical outlets, vending machine, small storage spaces, and/or a water fountain
- Comfort Amenities: add overhead heating; provide sufficient seating; provide shelter from variable climate through a more enclosed design
- Aesthetic Design: stand out from the road and adjacent shopping center with unique design, or develop a landmark station



FIG NUM. 33

Proposed Commerce station
structures by Alice Li

Reimagining Eugene Station

The Class: Landscape Architecture Design Studio; College of Design
Faculty: Cory Parker

WHY DID LTD ENGAGE THIS CLASS?

Eugene Station was built in the 1990s on a central block in downtown Eugene. Though the station has served the community effectively so far, the mobility landscape is changing; current use of bike share, ride-share, and electric scooters underscore the community's desire for a varied transit system. In addition, climate change threatens to affect all aspects of human society. For these reasons, LTD is looking for innovative designs that would facilitate a multimodal transit system and a design that will be resilient to a changing climate. LTD engaged this class to re-imagine Eugene Station in 2040. Three focal questions guided this work: How

do people inhabit the landscape interactively and dynamically? How could Eugene Station facilitate connections to the larger network of movement? How could Eugene Station infrastructure become more inclusive and sustainable?

PROJECT SUMMARY

This Landscape Architecture design studio explored how to prepare Eugene Station for future needs and addressed how the station connects to its downtown location. Investigative designs centered on emerging trends in autonomous vehicles, ride sharing, densification, micromobility, pedestrian flow, and climate change. Students used text research qualitative data collection and random station user interviews to inform their concept

designs, maps, and ultimately, final proposals. Student approach their design by considering several scales:

- **Downtown Eugene Station:** Students redesigned the current downtown Eugene Station, incorporating the speculative complexities Eugene will be facing in the year 2040. At this scale, designs provided detailed analyses of how the station space will interplay with the rise of automated vehicles, micromobility, urban densification, increased usership of public space, and climate change. Most students used this scale to design for station safety and inclusivity.



FIG NUM. 34

Proposed base plan by Rae Matthews

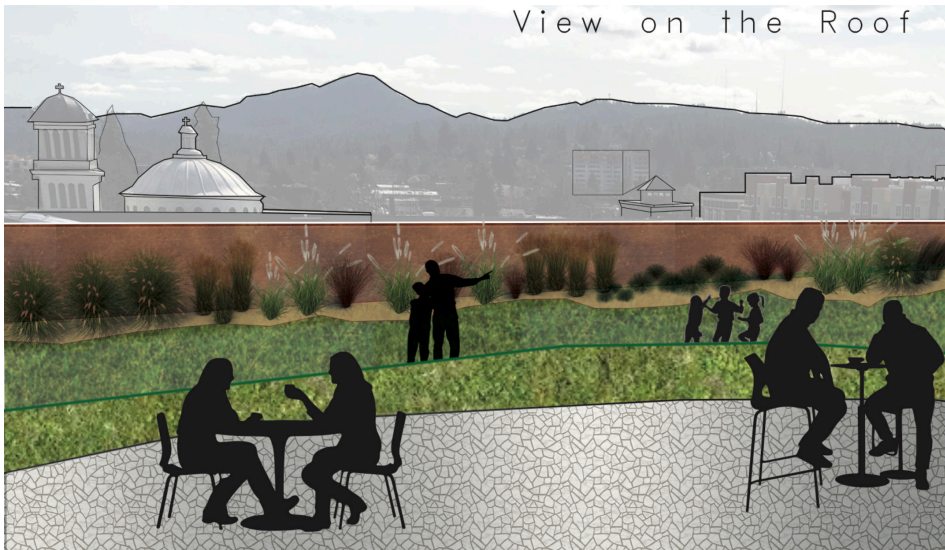


FIG NUM. 35
Eugene Station perspective by Eyrie Horton



FIG NUM. 36
Eugene Station perspective by Eyrie Horton

potential. Students used their research to inform how designs can improve use for casual and dedicated LTD riders. At this scale, students designed transit efficiencies, ecological connectivity, and transfers for transit users through Eugene Station.

KEY OBSERVATIONS, OPPORTUNITIES, AND CHALLENGES

- **Pedestrians:** heavy use of crosswalks although less adherence to crosswalks in the afternoon and evening; station buildings create pedestrian bottlenecks, particularly in the morning peak; lower volumes of pedestrian on Willamette Street than other walkways and sidewalks.
- **Bicyclists:** bicyclists did not interact significantly with the station itself but used Olive Street as a major thoroughfare in the mornings.
- **Mobility Devices:** Students found mobility device users to be most present in the afternoon with much fewer in the morning. In the evening, mobility device users were observed near the Eugene Library, using the east crosswalk across Olive Street, but few within the station block itself.
- **Car Drop-off/Pick-up:** student observed very few individuals getting in or out of vehicles near the station. The observations were limited to the evening and were located at Olive Street and 10th Avenue. If people were getting dropped-off/picked-up by a vehicle to/from the station it occurred outside the station area.

- **Nine-Block Radius around Eugene Station:** Students integrated their designs with the larger city fabric and designed for connectivity. Increased attention to city space added complexity and influenced how Eugene Station's design will serve the larger downtown area. At this scale, students focused on how pedestrians and micromobility users will enter and exit the

Eugene Station as well as barriers to connectivity.

- **Eugene City Boundary:** Students explored how the transit system connects the City of Eugene through Eugene Station. Each student rode and documented various routes through the City of Eugene to gain a more nuanced understanding of how and who uses transit and improvement

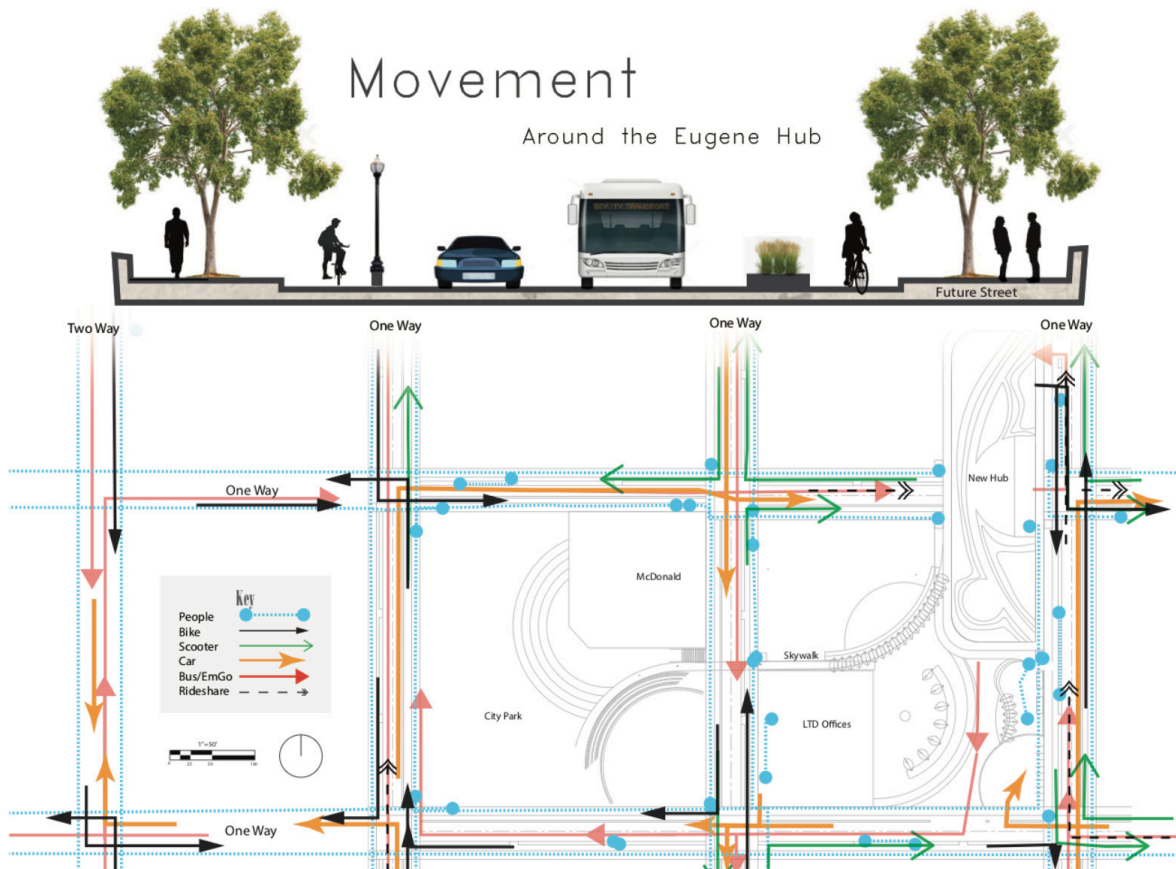


FIG NUM. 37

Eugene roof view movement patterns by Eyrie Horton

- **Transit Ons/Offs:** Students observed consistent high volume use of the EmX stations and Bay R (Route 66 – VCR/Coburg).
- **Walking/Sitting/Standing:** Students observed the majority of individuals actively walking. Of those standing, most waited under the covered walkway. And, of those that preferred to sit, most were inside the customer service building.
- **User Feedback:** Fifty-two individuals agreed to be interviewed -- the majority were between the ages of 26 and 64, were employed, used the station 2 to 7 days per week,

and spent an average of 30 minutes per day at the station. The majority of those interviewed liked the station, although those interviewed in the evening has less favorable opinions. The majority reported feeling safe at the station noting lighting and security guards as contributing factors. The most universally desired improvements were increased amenities, such as Wi-Fi, stores, coffee shops, improved bathrooms, and post office boxes, followed by warmer shelter spaces for waiting and/or longer hours to access the customer service building (interviews were in January).

MENU OF RECOMMENDATIONS

- **Make Pedestrian Connections:** By 2040, Eugene’s population will increase and the city center will densify. More people in the city of Eugene will lead to higher use of the transit system, particularly at Eugene Station, a rise of micromobility use, and decline of personal vehicles. To safely incorporate expected user increases at Eugene Station, crosswalks and connection points to the station should be prioritized.
- **Make Transit-Micromobility Connections:** Micromobility users will increase by 2040 in the form of bikes, scooters,

and skateboards (electric and manual). This creates efficiencies for the transit system as less-used bus routes could be replaced by these modes. But, an increase in micromobility use necessitates infrastructure to connect these modes to the greater city fabric, including redesigned streets, protected lanes, and expanded sidewalks.

- **Restrict Personal Cars:** Micromobility increases in and around Eugene Station prompt concerns over how these modes

interact with larger vehicles. Reducing existing non-essential traffic lanes and parking for personal vehicles could help create a safer and better connected station. Some space currently dedicated to personal vehicle use could be used for micromobility, pedestrian use, and automated vehicle drop-off zones. Incorporate traffic-calming measures such as narrower streets and gentler curves. A multimodal station will likely take up a larger footprint than the existing station.

- **Dedicate Space for Public Interaction:** As Eugene grow denser and micromobility use grows, more public space for the various modes is needed. Expanding public space is vital for encouraging growth. Design more mixed-use space with an emphasis on public safety and inclusivity. Densification could also result in the loss of open space downtown and create a greater need for gathering spaces. Design plaza and social spaces for better social connections.

Proposed Base Map

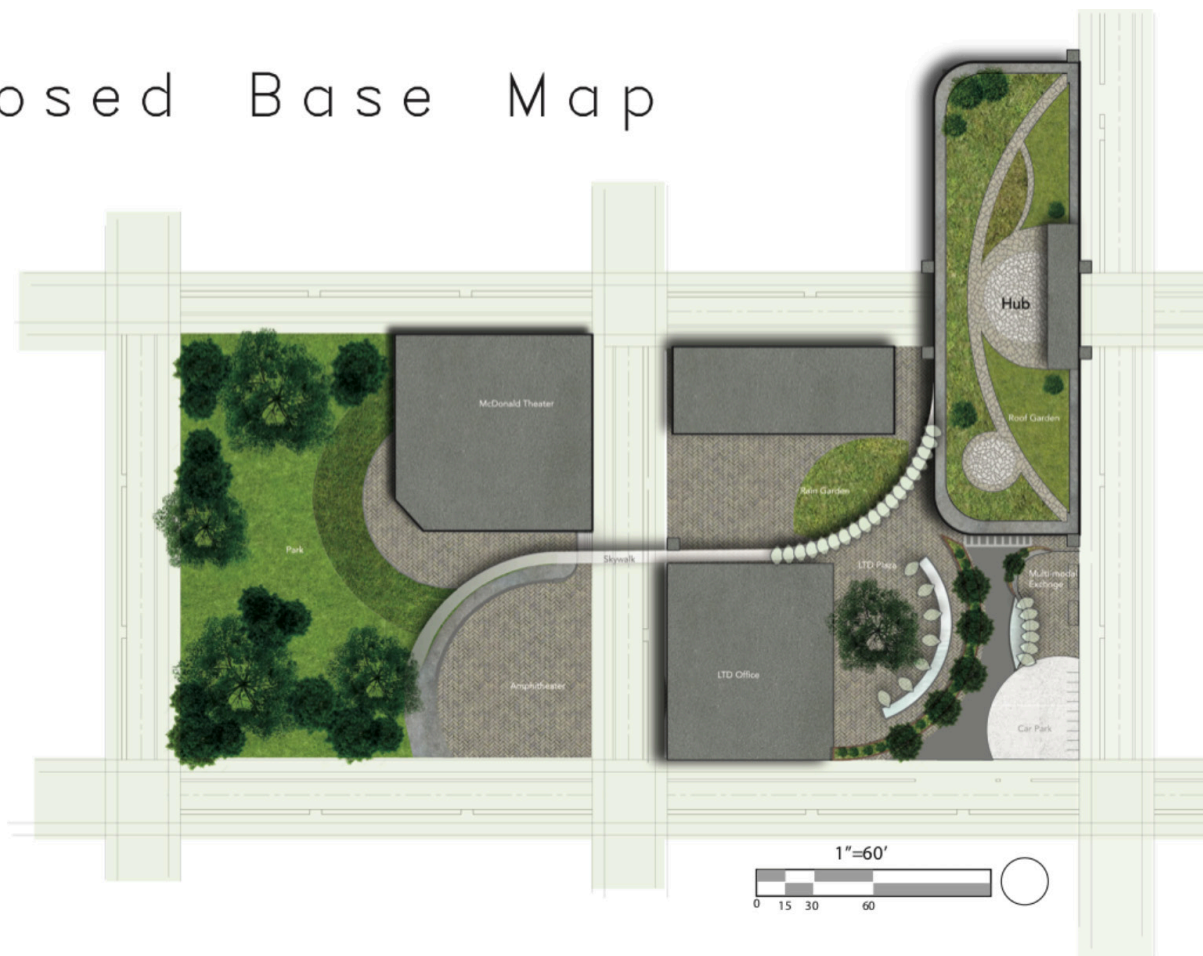


FIG NUM. 38

Proposed Eugene Station base map by Eyrie Horton

- Respond to Climate Change:** The effects of climate change on Eugene are speculated to be dramatic. Students concluded that public spaces need trees and vegetation to reduce the heat island effect and to help sequester carbon. Incorporate stormwater management such as swales, green roofs, and rain gardens to capture, store, and direct water.

- Providing Areas of Safety and Comfort:** In anticipation of more dramatic climate events, it is essential to provide areas of safety and comfort. Add elements that provide shelter from the environment to ensure protection from heat, cold, rain, snow, and wind. Incorporate lighting throughout the site, which could include passive designs that make use of natural light.

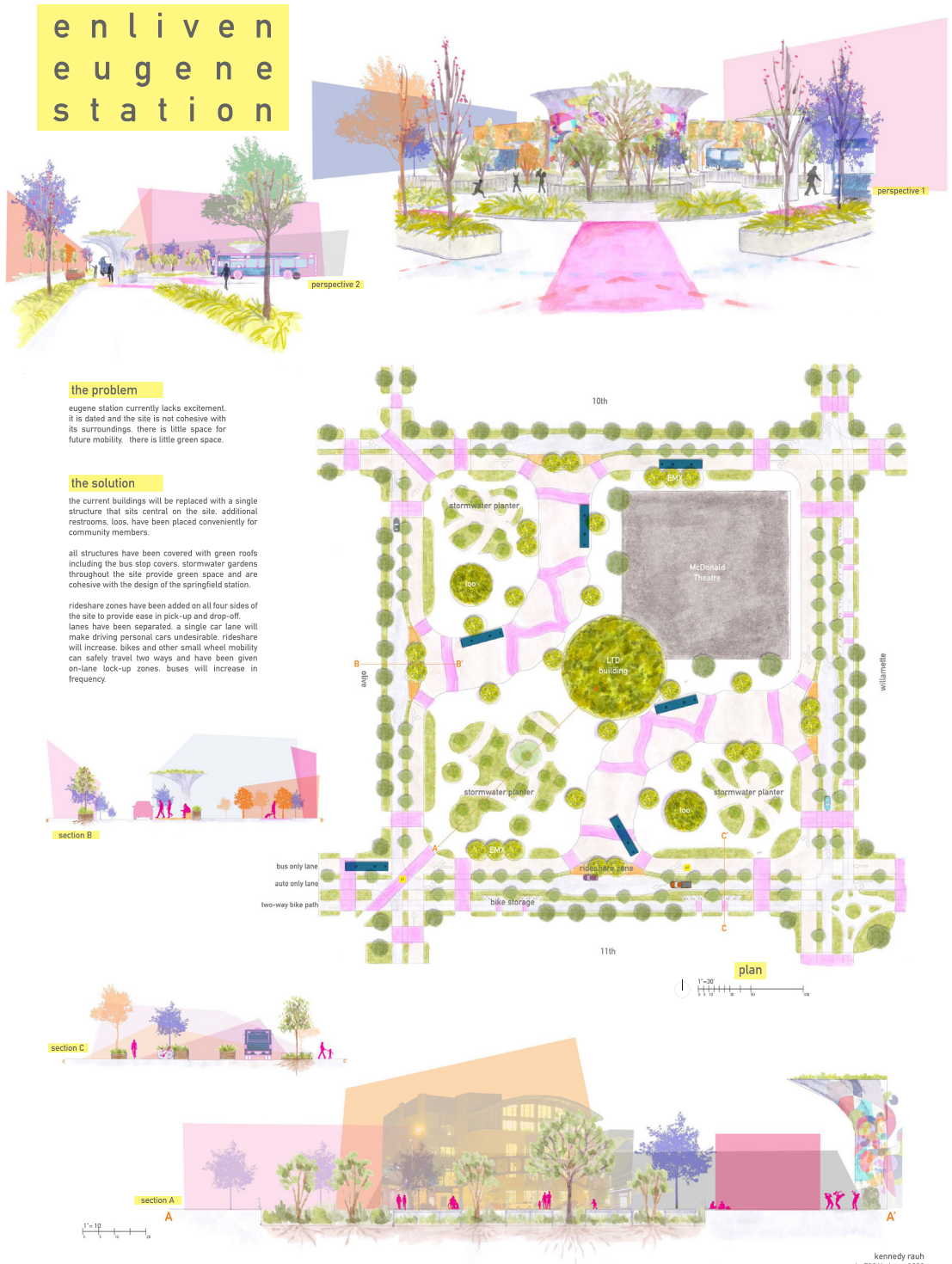
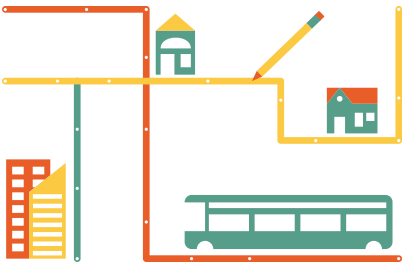


FIG NUM. 39
Proposed Eugene Station base plan by Abby Pierce



Transit-Oriented Development

LCC Building Downtown

The Class: Architecture Design Studio, College of Design
Faculty: Virginia Cartwright

WHY DID LTD ENGAGE THIS CLASS?

LTD's Eugene Station sits in the center of downtown Eugene and is the largest transit hub within the transit system. The station is a major activity center within an area of Eugene that has seen renewal and economic development. LTD, the city of Eugene, and local businesses and organizations all have an interest in fostering an active, safe, productive, and sustainable downtown. Changing the urban form is one way to achieve these goals. Lane County Community College (LCC) owns an underutilized building across the street from Eugene Station on Willamette Street – this building presents an opportunity for redevelopment. LTD, in partnership with city of Eugene economic development staff, engaged this architecture studio to reimagine what the space could look like in the future.

PROJECT SUMMARY

The class toured the building, completed a neighborhood site assessment, and discussed with Eugene and LTD staff desired outcomes for a mix of active uses and workforce housing on the site. The building's prominent Willamette Street location has the opportunity to enhance LTD's Eugene Station environment and activate this area of downtown Eugene. An Enoteca concept emerged -- Italian for a local and regional agricultural library. Eugene's Enoteca could be a place where people learn about and experience the bounty of the southern Willamette Valley's wine and food region. Students also programmed a public gathering

space and used their creativity to incorporate any other uses they believed would enhance the area's lifestyle and needs. Student applied

the American Institute of Architects' Committee on the Environment (AIA COTE) ten sustainability measures to their designs.



FIG NUM. 40
Student site visit

ECONOMICAL VENTURE

In order to incorporate the design aspect of the economy of the project, the designer must do several tests or even several calculations anticipating the performance future of a building. This project, even though certain aspects of it may be expensive in the construction phase, in the long run will be able to perform in a way that the initial cost of the expenses will be canceled out by the savings. Another aspect of the design though will be the cost of the materials, and being that majority of them are of local companies, the essential cost will be cheaper than using materials from companies from a long distance away.

OPEN COMMUNITY

When looking at the city of Eugene, the amount of community greenspace within commercial buildings is very limited. The concept that deals with the community within the design is the idea of incorporating a space for a community garden and a community veranda space. Within the building are rental mixed use areas for people of the community that allows them to use it for what ever space they need it to be. There is also a sense of an open floor plan that gives the sense of everything within the building being open and interconnected for public use.

HEALTHY BUILDING

Wellness means that the design must be healthier for the users and promote a healthier lifestyle for them.

The design promotes a healthy lifestyle and a healthier building by using materials such as hempcrete, a breathable wall that doesn't mold or attract pests, and the use of more daylight within the building. Another form of wellness seen in the design is the motivation of gathering the community outdoors and using the community garden area on the site. This promotes a healthy human interaction as well as bringing the people outdoors into nature.



BREATHABLE WALLS



COMMUNITY



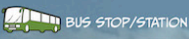
GREEN SPACES



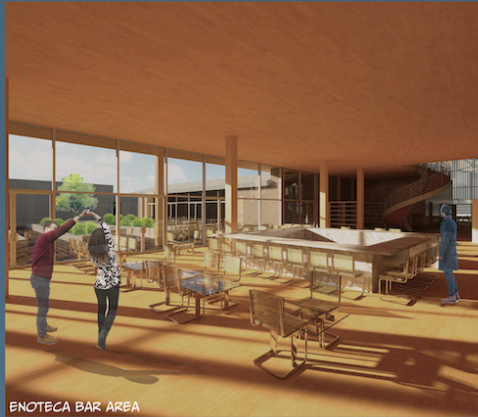
DAYLIGHT



COMMUNITY GARDEN



BUS STOP/STATION



ENOTECA BAR AREA



CAFE AREA



COMMUNITY GARDEN



COMMUNITY VERANDA

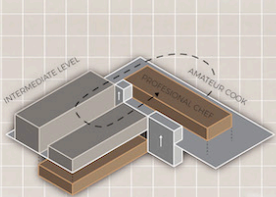
FIG NUM. 41

Design by Emma Davis

G/T EUGENE

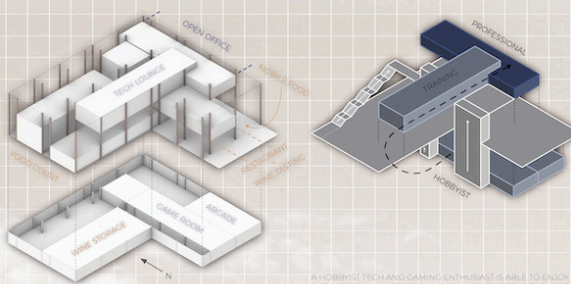
CULINARY & STARTUP INCUBATOR
[LEARNING / CREATING / SHARING]

CULINARY EXPERTISE



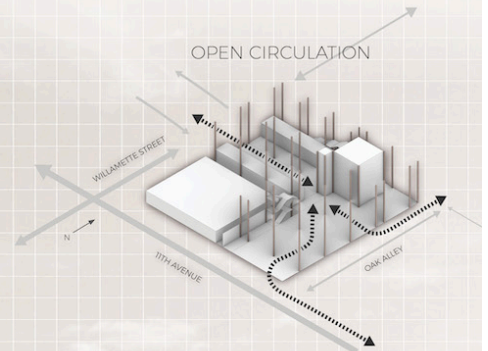
G/T PROVIDES THE COMMUNITY A SPACE TO IMPROVE IN THE CULINARY ARTS. THERE IS SPACE FOR EUGENE'S EXISTING AND THRIVING FOOD TRUCK AND FOOD COURT CULTURE. THE ROTATING CHEF FOOD COURT ENCOURAGES THE CUISIS TO BUILD A REPUTATION AND PROVIDES THEM TOOLS IN ORDER TO ALLOW THEM TO OPEN THEIR OWN RESTAURANT AS THEY GROW. THE ULTIMATE GOAL WITHIN THE BUILDING IS TO BE ABLE TO COOK FOR THE WINERY AND CATER FOR THE BUILDING'S EVENTS AS A PROFESSIONALLY ESTABLISHED CHEF.

TECH DEVELOPMENT



A HOBBYIST TECH AND GAMING ENTHUSIAST IS ABLE TO ENJOY THE INFORMAL UNDERGROUND GAMING CENTER. IF THEY ARE INTERESTED OR BECOME RECRUITED THEY CAN THEN BE TAKEN TO THE CASUAL TECH LOUNGE TO IMPROVE THEIR SKILLS FOR AN INDUSTRY IF THEY CHOOSE TO INSTEAD OF STAYING. THE OPEN OFFICE PROVIDES A SPACE FOR DEVELOPMENT OF A COMPANY USING EUGENE ROBUST INFRASTRUCTURE HERE.

OPEN CIRCULATION



THE DESIGN TAKES A PROACTIVE STANCE IN CIRCULATION, ALLOWING THE EXISTING NETWORK TO WORK THROUGH THE BUILDING. THIS IS ALSO A METHOD TO DRAW PEOPLE INTO THE SPACE, ACTIVATING THE AREA AND ALLOWING THE BOUNDARIES FOR PROGRAM AND CITY TO BLEND.



FIG NUM. 42
Design by Alex Tapia

KEY OBSERVATIONS, OPPORTUNITIES, AND CHALLENGES

Willamette Street: Willamette Street has historically been and is currently oriented as a “Main Street.” It contains wide lanes for cars and bikes, wide sidewalks, space for parked cars, and easy access to transit. There are opportunities to leverage these elements by creating a more open and welcome building façade on Willamette Street.

Neighborhood History &

Architectural Context: By the turn of the century, the architectural trends in downtown Eugene had moved away from ornate buildings and were replaced with buildings with simple facades and similar scale and volume. The existing facade of the LCC building is consistent with this trend. However, unlike the taller buildings that started to appear in downtown Eugene, buildings along Willamette Street remained smaller in scale and many were built with brick, unlike the timber-framed buildings in other part of downtown. This makes Willamette Street a place where architectural creativity could fit in.

Changes in Transportation:

Students reviewed how transportation and transit have evolved and changed in downtown Eugene and the goals and strategies for the future. The class explored how the urban form could be an opportunity to complement a desire for sustainable transportation that offers greater transportation choice, efficiency, and usefulness.

Climate & Climate Change: In order for students to explore design solutions that are resilient, it was important to understand the climate and natural seasonal processes, as they play out in the urban context of downtown. In addition to analyzing historical patterns students considered how patterns may change as a result of climate change and the impacts of local, regional, national, and global policy interventions. Their work considered the possible future challenges of changing temperatures (hotter and colder), and how that influences precipitation (snow or rain), and the frequencies and intensities of drought and wildfires.

MENU OF RECOMMENDATIONS

Students saw this project as an opportunity to incorporate sustainability performance standards and design practices. The recommendations, as expressed in architecture design include:

- **Design Integration:** incorporate buildings into existing built and natural environments;
- **Design for Community:** contribute to community wellness by improving walkability, human-scaled design, and other aspects to address equity;
- **Design for Ecology:** reduce emissions by fostering sustainable transportation modes into design; design to benefit natural ecosystems and habitat;

- **Design for Water:** apply water conservation methods like rainwater harvesting, natural water filtration, and greywater reuse systems;
- **Design for Economy:** create economically sustainable space by incorporating spaces that can be repurposed/are adaptable;
- **Design for Energy:** maximize energy efficiency, including elements like passive heating, operable windows, and using local materials;
- **Design for Wellness:** promote resident/user wellness including operable windows, access to green space, natural light, protection from inclement weather (rain, cold, heat), and space for activity/relaxation;
- **Design for Resources:** use sustainable resources like cross laminated timber, hemp-crete, and cork materials -- all are recyclable while structurally sound;
- **Design for Change:** design space that can be adapted, such as for use during emergency situations to provide shelter, food distribution, and spaces for emergency logistics planning; and
- **Design for Discovery:** design with an eye to continual learning, such as surveying occupants after building is completed and occupied to learn their opinions about the space.

CONNECTING COMMUNITY

Revitalization of urban space, connecting community, and innovative sustainable planning.

Located in Eugene, Oregon the design of two buildings is meant as an experiment to activate the city's downtown area. Located west of Willamette and north of 11th Street is Eugene Central station which is frequented by approximately 8,000 commuters per day. This frequentation raises the potential of urban revitalization of the site as well as making it more suitable for the future needs of the growing tech-sector in the Willamette Valley known as the Silicon Shire.

The project imagines a place in an urban setting that is capable of reacting to a rise of the already established tech industry of willamette valley by providing spaces for young entrepreneurs, start-ups and other local businesses. In addition to this a market provides a variety of locally sourced produce as well as a Wine library that promotes the regional culture and history of wine making. This concept of three uses is designed to further engage the community aspect as well as create a cycle where each use benefits from the other on an ecological and economical level.

By placing spaces for offices, a market and an enoteca on site that are connected by a plaza, the design aims to create a space that is occupied for the majority of the day. This project imagines a place in which diverse groups of people like to inhabit, enjoy spending time in, as well as feel a sense of ownership, responsibility in keeping it that way. Beyond the built structures the design aims to become a place that is beneficial to the public and promotes inclusiveness.

The two structures implement a similar level of technology aimed to make the design more sustainable. Dynamic shading allows for higher indoor environmental quality as well as glare reduction. Live-roof-systems act as an insulation layer and reduce heating loads in the summer, and natural ventilation is provided through automated systems that open and close windows dependent on season and air quality.

DESIGN FOR:

- ECOSYSTEM 1. ECOLOGY 2. ENERGY 3. WATER
- ENGAGEMENT 4. COMMUNITY 5. CHANGE 6. WELLNESS 7. DISCOVERY
- SUSTAINABILITY 8. ECONOMY 9. RESOURCE 10. INTEGRATION

QUESTIONS ASKED:

1. How is local flora and fauna incorporated into the design?
2. In what way does the design aim to be self sufficient in energy production?
3. How is the reuse of rainwater implemented into the design process?
4. How will the design impact future societal needs?
5. How does the design promote occupant health and indoor environmental quality?
6. How might the design change by 2030 and how would it handle these changes?
7. In what ways have previous project affected the design process?
8. In what way does the design contribute to the promotion of occupant health and how are savings achieved?
9. What materials were used and why?
10. What design strategies are implemented to reduce the need for non-renewable energy resources?



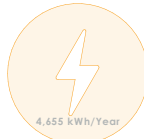
FIG NUM. 43
Design by David Deussen

DESIGN FOR ECOSYSTEM



1. ECOLOGY

How is local flora and fauna incorporated into the design?
 The sites previous use did not allow for any green areas. By giving occupants green spaces Connecting Community provides downtown Eugene with additional public space in which regional plants and animals are found which change throughout the seasons. Approximately 65% of the sites Area are covered by plants.



2. ENERGY

In what way does the design aim to be self sufficient in energy production?
 The building aims to be carbon neutral by decreasing cooling and heating loads, optimizing glare reduction, providing natural ventilation and through the production of renewable energy by using PV cells and geothermal energy. The radiant floors provide the building with a steady temperature whereas the green roof protects the building from heat loss



3. WATER

How is the reuse of rainwater implemented into the design process?
 The implementation of live roofs ensure the reuse of rainwater. Utilization of green spaces on ground-level further contribute to the amount of rainwater that is being collected for further redistribution into the site. The first filtering process occurs during the initial rain phase where rainwater filters through the live roofing systems and the green spaces on the plaza. The second filtration process occurs pre-redistribution into the building's watering system. Grey water is filtered in this process and used for toilet flushing, the sprinkler system and for radiant floors. Waste water is channeled into the city sewer system.

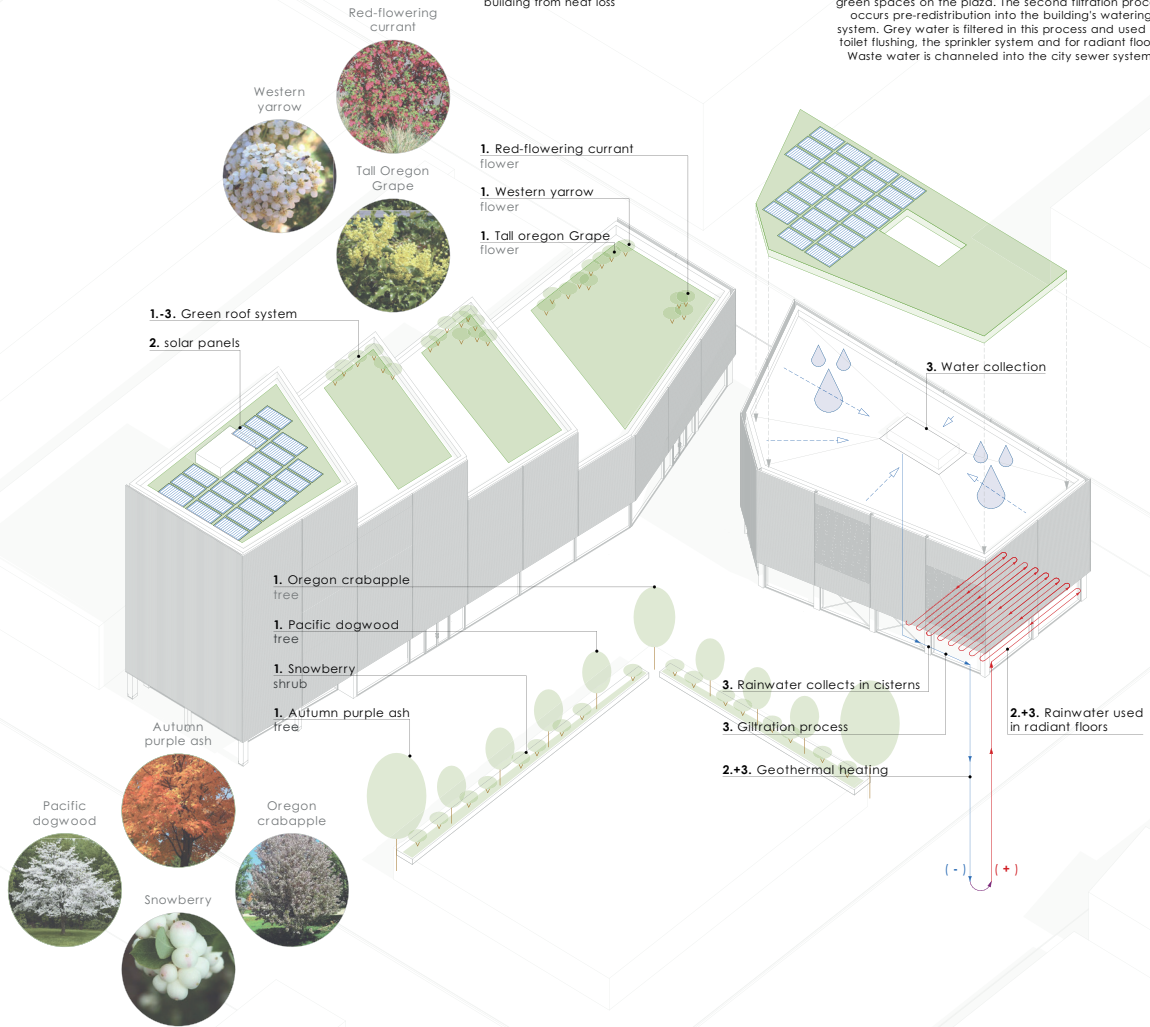
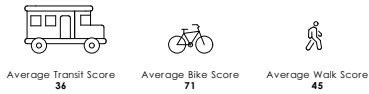


FIG NUM. 44

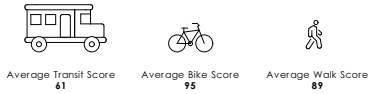
Design by David Deussen

DESIGN FOR ENGAGEMENT

Average Score in Eugene according to walkscore.com:

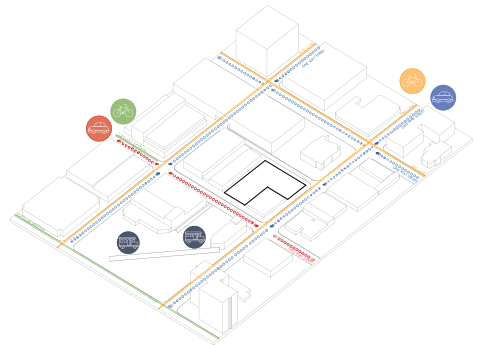


Average Score in Downtown Eugene according to walkscore.com:



4. COMMUNITY

How will the design impact future societal needs?
 The design responds to current as well as future needs by implementing much needed office and market space, and brings attention to the regional culture and history of winemaking. The site location was selected for its short distance to the city's main station which encourages occupants to commute through the use of public transportation. By creating a plaza that opens up toward the entrance of the main station the design also sets up a public space for community interaction in a previously unused area.



- 5. 58% of total floor area within 15 ft of an operable window total area of floors above ground for both buildings
- 5. 72% of total floor area is daylight during occupied hours total area of floors above ground for both buildings
- 5. 88% of total floor area with views to the outdoors total area of floors above ground for both buildings

- 5. Ventilation shaft
- 6. Urban revitalization (planned) future phase
- 4. Private outdoor space
- 6. Adaptable interiors provides outdoor views
- 6. CLT-Structure

- 4.+5.+7. Public outdoor space for community interaction
- 4.+7. Wine library as community and knowledge space
- 5. Dynamic shades
- 5. Ventilation

OFFICE
15.250 ft²

MARKET
5.200 ft²

ENOTECA
5.100 ft²



5. WELLNESS

How does the design promote occupant health and indoor environmental quality?
 The design aims to promote occupant health and work against absenteeism. Strategies include providing views to the outdoors, allowing ample sunlight to enter spaces, and optimized control of indoor air quality. Providing occupants the ability to manually control the dynamic shades allows the user to adjust the indoor environment as needed. To further enhance the site-user's connectedness to nature outdoor areas are offered for public and private use.



6. CHANGE

How might the design change by 2030 and how would it handle these changes?
 Achieving an efficient and long term as well as flexible use has been a priority during the design process. Keeping possible changes in mind, the building provides enough adaptability potential for reuse of space and materials. Using prefabricated cross-laminated-timber elements throughout the project allows for fast construction and deconstruction of parts that have been more exposed to the local climate than others. Future use seeks to expand the site through urban revitalization of the corner building, turning the space into an open plaza.



7. DISCOVERY

In what ways have previous project affected the design process?
 Having learned through previous projects spaces in the urban environment are an extremely valuable asset that provide a public meeting spot. By having implemented this idea throughout the design process, gives the site the character that it deserves, and intends for users to feel a sense of ownership and comfort. A valuable lesson to be learned throughout any design process is the need to design for inhabitants of a community and for future generations in order to function properly in the long term.

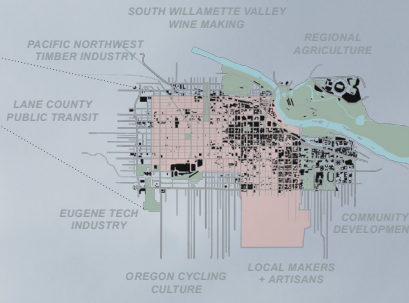
FIG NUM. 45

Design by David Deussen

AGORA CASCADIA

INTEGRATION

This project integrates site specific ecological design strategies with diverse program elements to create a new urban gathering hub for Eugene, Oregon. The design supports local community development efforts, Eugene's burgeoning tech innovation industry, the adjacent Lane County public transportation hub, the city's cycling culture, South Willamette Valley's agriculture economy, and the Pacific Northwest region's forestry industry. Strategies to achieve this include: flexible co-working offices, a large banquet hall and outdoor terrace for community gathering events, a public indoor market to provide an evening/winter season alternative to the popular Saturday Market with rentable pop-up shops for local artisans, farmers and vendors, a bike garage, store and community workshop along a major cycling artery, a rooftop edible garden used for community education, and a locally-sourced farm to table cafe, an enoteca with a library of regional wines, and a highly visible CLT structure.



COMMUNITY

Located in the heart of downtown along a primary transportation spine, this project addresses the community's need for more indoor flexible gathering spaces, especially during the rainy season. Local artisans, farmers and vendors can rent pop-up shops within the public market space while local community groups can reserve the second floor banquet hall and terrace, which accommodate larger gatherings and events. The urban enoteca celebrates the region's culture of wine growing and making. The farm to table cafe sources locally to highlight the region's agriculture industry. These spaces all address the City's desire to keep the downtown area occupied during the evenings. Co-working offices support Eugene as an emerging tech hub. The cafe and bike shop draw cyclists and public transit-users from the adjacent transit station inside. Community education workshops on rainwater harvesting, greenroof design, gardening and bike maintenance are held.

RESOURCES

This design's CLT structure celebrates and supports the Pacific Northwest region's bountiful natural resources and responsibly-managed forestry industry. Cross-Laminated Timber is a highly sustainable building material because it sequesters carbon and is a local material for this project, thus reducing the carbon footprint of material transportation. Strategies to reduce material use include exposing overhead structure and using unfinished concrete floors that serve as both the structural slab and thermal mass for the radiant heating system. The highly visible wood structure extends beyond the building envelope to frame the terrace event space and is a keystone element in downtown Eugene. It also breaks up the Willamette Street facade pattern and creates a more heterogeneous urban fabric that connects back to the ecology of the Pacific Northwest. Interior finishes use regionally sourced Oregon White Oak panels.






		
64	100	96
TRANSIT SCORE	BIKE SCORE	WALK SCORE

FIG NUM. 46

Design by Jocelyn Reynolds

Santa Clara Design Studio

The Class: Landscape Architecture Design Studio, College of Design
Faculty: Rob Ribe

WHY DID LTD ENGAGE THIS CLASS?

LTD is currently building a new transit station, the Santa Clara Transit Station, on River Road at Green Lane to serve the River Road and Santa Clara neighborhoods of Eugene. The property purchased for the project is larger than the station so, when construction is complete, LTD intends to sell the remaining land for development. While LTD will not own and develop this property, it does favor a

development type that is transit-supportive. The transit investment will add value to the community, which could be leveraged by thoughtful development. Several other on-going projects, including MovingAhead, the River Road Transit Community Implementation Plan, and River Road-Santa Clara Community Plan are all looking at the transit-land use nexus along River Road -- through transportation investment options, potential zoning changes, and community

visioning. All of these timely planning activities made this site a unique opportunity for students to envision what the site adjacent to the Santa Clara Transit Station could look like. LTD partnered with the city of Eugene and asked this landscape architecture studio class to develop design options for the site adjacent to Santa Clara Transit Station that meet the needs for more housing, community spaces, and commercial/mixed uses.



FIG NUM. 47

Rendering by Mikah Walhstrom and John Tromley

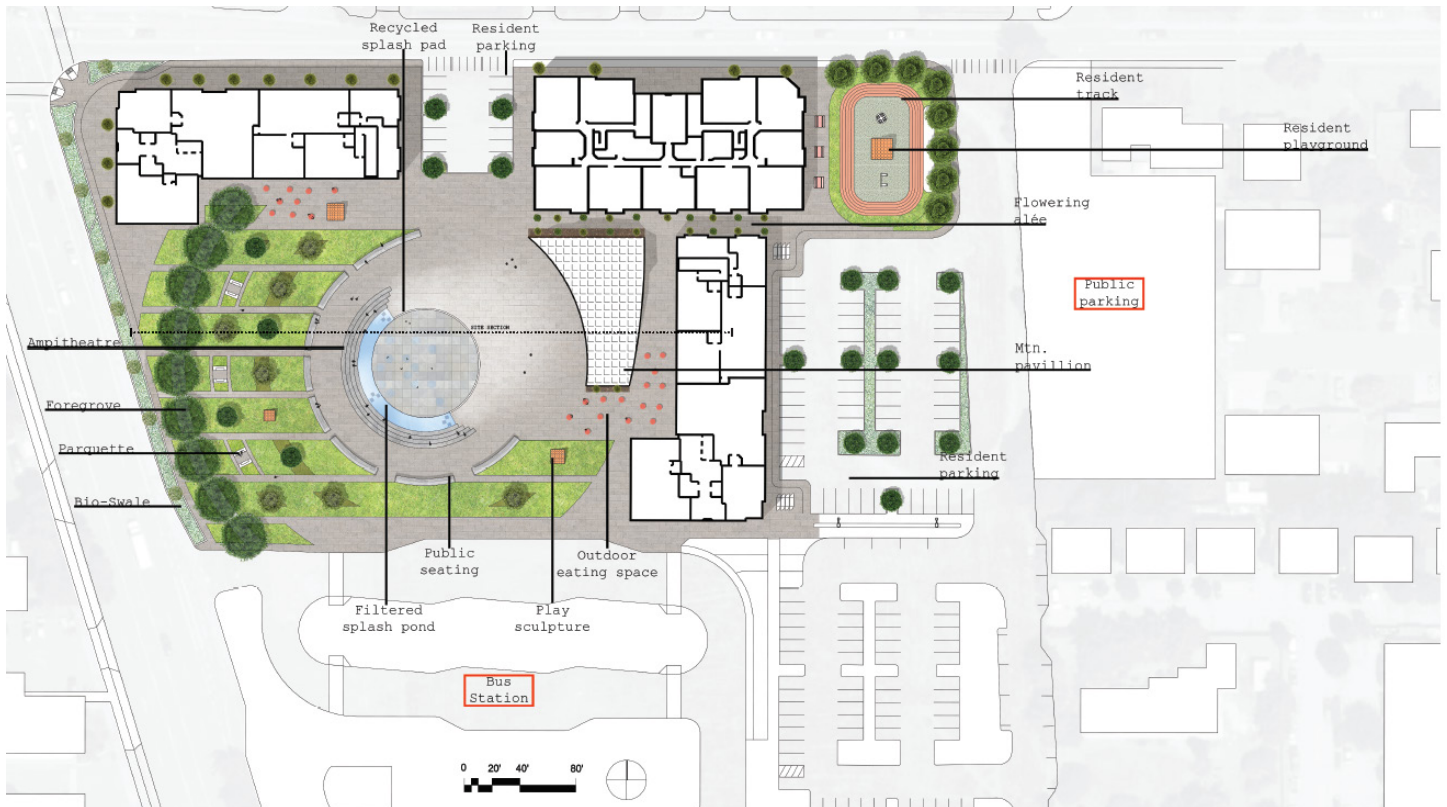


FIG NUM. 48

Illustrative plan by Mikah Walhstrom and John Tromley

PROJECT SUMMARY

Students walked the site with LTD and Eugene staff and discussed the local planning context. They also reviewed on-going planning activities to dig deeper into the goals and objectives and possible future investments that could occur over the next five to ten years. Faculty gave students design parameters including a minimum number low-income housing units, parking requirements, mixed/commercial uses, and community space. Initially, students worked in teams to develop ideas for the site and then worked individually on their specific design concepts.

KEY OBSERVATIONS, OPPORTUNITIES, AND CHALLENGES

In reviewing the documentation for the on-going planning efforts for River Road, students keyed in on common values that informed their thinking about the project. Specifically, an emphasis on sustainability – economic, environment and equity – and community-scale resilience and vibrancy. These values were expressed as a desire for safe and efficient multimodal transportation options and development that could support a farmers’ market, affordable housing, a public plaza, neighborhood commercial buildings, and a variety of housing types, with context sensitive amenities and designs.

MENU OF RECOMMENDATIONS

Community Identity: students recommended that the site development reflect the community’s identity. This could be achieved by making the site an identifiable place that will attract locals to public transportation and pedestrian-friendly shopping. Students contemplated the following features to create a sense of identity and community pride: social blocks; an outdoor theatre; a splash zone; an outdoor pavilion; a sunken courtyard; a central plaza; a market street; gardens for strolling that emphasize spatial composition of buildings and vegetation; placement and uses of iconic landmarks; natural stimulation; and art integration to stimulate community engagement.

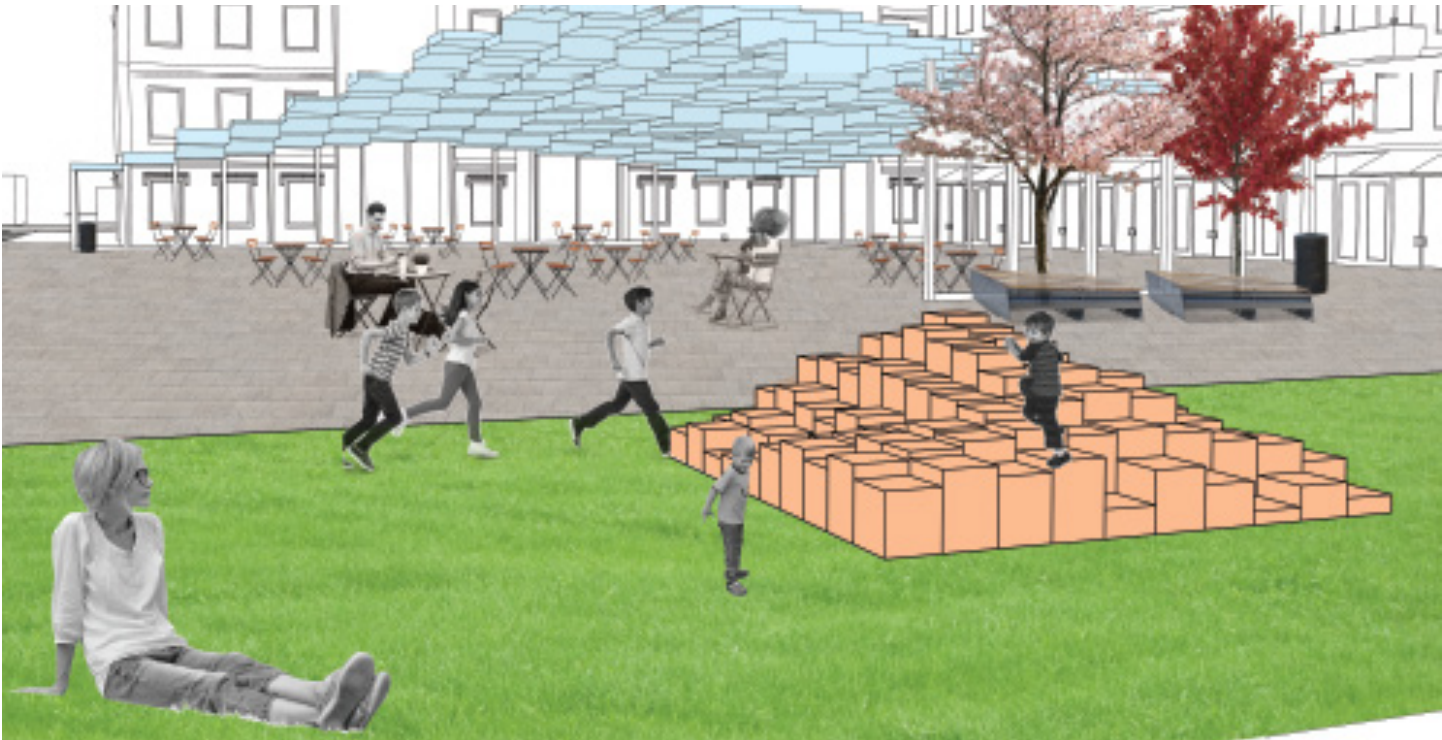


FIG NUM. 49
Rendering by Mikah Walhstrom and John Tromley



FIG NUM. 50
Illustrative plan by Chase Matthews and Isabella Ospina

Gathering Space and Central Hub: students recognized that this site is unique for its ability to act as a central gathering place for community and visitors. Students recommended strong programmable elements that will engage the community year-round. They also emphasized that the site should be easily accessible to/ from Santa Clara Transit Station and for all abilities and ages. Other recommendations include: a central

plaza that could accommodate a variety of programming; a market pavilion; themed play structures with seating areas; context-sensitive sculptures and public art to attract locals and visitors, such as a focus on relationship between nature and people; a variety of seating areas to frame specific programs within the site; garden space; an amphitheater; active space for food, shopping, and socializing; a safe and comfortable gathering space to host large scale

events; and residential space for leisurely use

Anchor Space for Transit: students recommended that the site serve as an anchor space for promoting transit use. The site plan achieved this by ensuring clear sight lines from the transit station to the activity centers of the development to facilitate connections and express how LTD connects the community more broadly.



FIG NUM. 51
Rendering by Sydney Castman and Brooke Ridgeway



FIG NUM. 52
Perspective by Emma Frazier



FIG NUM. 53
Rendering by Vanessa Taylor



Multimodal & Mobility

The Future of Transit

The Class: Industrial Ecology, Lundquist College of Business
Faculty: Joshua Skov

WHY DID LTD ENGAGE THIS CLASS?

The roles of technology and data in facilitating mobility choices have grown exponentially over the last decade and mobility options are becoming cheaper, more convenient, a better experience, safer, and cleaner. LTD understands that the biggest opportunity it has to impact the sustainability of its service and community is to provide the most useful and utilized services possible - high-quality transportation options, programs, and services present an alternative to the automobile. As LTD considers how its role as a mobility manager in the region will change in the future, it needs to strategically assess the ways in which new advancements, and business models help achieve the organization's strategic objectives. LTD engaged this class to envision how LTD could provide the community with safe, affordable, and low-carbon mobility options in the face of a changing urban mobility ecosystem.

PROJECT SUMMARY

This class sought to answer how changes in technology, business models, consumer behavior and urban form might affect LTD. Students explored emerging technologies and business models that are shaping the future of mobility and transit. Students applied corporate sustainability strategy principles to assess potential opportunities and threats created by these global trends in transportation. Students analyzed potential impacts of new modes, technologies, and business models, as well as the resulting shifts in consumer behavior in six areas:

1. First-last mile solutions
2. App ecosystem opportunities
3. Partnerships and policies for ride-hailing
4. Travel behavior, mode choice, and perceptions
5. Data disclosure, privacy, and security issues
6. Collection of consumer insights through survey instruments

KEY OBSERVATIONS, OPPORTUNITIES, AND CHALLENGES

Emerging Technologies

Mobile applications and online platforms create an opportunity for LTD to connect residents with its services. LTD will need to balance its ability to have a high level of control with the level of technological sophistication needed for development and maintenance, which could present cost, skill, and time barriers for the organization. Big data presents another the opportunity for LTD to better understand and analyze rider behavior and travel patterns. LTD's new TouchPass program presents a major opportunity to collect meaningful insights and help inform LTD's long term strategy. Data analytics is a needed skill – if this is not one of LTD's core competencies, partnerships present a viable alternative. But, with all emerging technologies and partnership models, the threat to data privacy and security is a serious consideration.

New Modes and Models

Many have argued that ride-hailing competes with transit and is therefore having a negative impact on transit ridership, and that this risk could be reduced through strategic partnerships that leverage the unique benefits of transit. The ride-hailing model along with other shared and micro-mobility modes could be strategically deployed to address gaps in LTD's system and connect people with its current and future high-frequency network.

A Changing Lane County

The demographics in Lane County are changing along with public perception, and travel behaviors, which affect how, where, and why people travel. LTD will need to adapt to ensure it can provide inclusive and accessible transit options to meet these changes. The built environment and urban form have a strong influence on whether transit is a more or less attractive mobility option. LTD can leverage its partnerships with local governments and to advocate for an urban form that is conducive to multimodal travel and transit ridership.

The changing policy landscape and regional strategy that LTD employs will alter planning efforts in the region. LTD's exploration of a high ridership fixed-route transit model, while resulting in regional mobility benefits overall, could present new mobility needs. LTD can support these communities through partnerships with new mobility services, multimodal incentives, and wayfinding applications.

MENU OF RECOMMENDATIONS

Students recommended that LTD leverage pilot projects and partnerships to explore new opportunities while adapting emerging trends to community needs in order to foster positive outcomes.

- **Experiment and Pilot:** pilot projects give LTD the ability to experiment with new ideas and technologies for a limited period of time while minimizing risk to core services. Pilots should collect program data

and feedback from community members. Data should be analyzed to measure success to help inform whether to renew, adjust, or discontinue pilots.

- **Leverage Partnerships:** LTD can partner with local and regional government agencies and public institutions to share ideas and maximize community benefits. Partnerships with third-party mobility services allow LTD to outsource technological capabilities while sharing benefits to LTD riders.

- **Adapt Global Trends to Address Local Needs:** keeping in mind broader trends in mobility technology, business models, and best practices in transit, LTD can adapt these trends to community needs. As the community grows and changes, these new technologies can help the agency update its service to changing preferences and habits.



Bicycle Transportation – A Vision for Coburg

The Class: Bicycle Transportation,
School of Planning, Public Policy and Management
Faculty: Marc Schlossberg

WHY DID LTD ENGAGE THIS CLASS?

Most of LTD's fixed-route network is within the Eugene-Springfield metropolitan area but does include a handful of rural routes that serve as life-line transit services to surrounding small cities. The rural routes are primarily designed to connect the small cities to the urbanized area and with frequencies to serve essential trips such as work/school commutes. As such they do not provide for all of the mobility needs of a surrounding small community. One way to leverage the transit asset and better serve the mobility needs of the community is to apply a multimodal lens. LTD engaged this class to explore the opportunities that the bicycle mode could present – as a complement to transit and as a stand-alone asset for a community. LTD partnered with

the city of Coburg on this project, building from momentum to better integrate a variety of bicycling types within the City. Coburg also had the benefit of being an ideal size for a class case study.

PROJECT SUMMARY

The city of Coburg's planner briefed students on the bicycle planning activities that have taken place to-date, the planning priorities of the Coburg community as well as the context of planning in a small town. Students examined and explored possible bicycle transportation opportunities for Coburg, keeping in mind that project implementation may occur in phases and/or over time. The class analyzed bicycle transportation opportunities through the lens of: 1) policy and planning; 2) design, safety, and legal issues; and 3) social change. The resulting

recommendations included ideas and design concepts for multi-use paths; ways to make auto-centric streets more bicycle friendly; opportunities for safe routes to school; extending bicycle tourism within Coburg and throughout the region; and marketing materials and campaigns related to bicycling.

KEY OBSERVATIONS, OPPORTUNITIES, AND CHALLENGES

While the city of Coburg is a small town with limited resources and staff bandwidth, students found that bicycle transportation projects could serve dual purposes and help the community achieve some of its other goals. For example, bicycle infrastructure projects could serve the city's desire to invest in parks, crosswalks, lower traffic speeds, and pedestrian amenities; and



FIG NUM. 54

Example school crossing design



FIG NUM. 55

Coburg Loop path signage

could address residents’ desire for more interpersonal connection, greater outreach, and equitable development. The opportunity to pursue bicycle transportation projects was consistent with resident and city staff interests in improved infrastructure. Students felt the addition of protected bike lanes could be an opportunity to encourage more cycling by appealing to those who are “interested yet concerned” in cycling.

MENU OF RECOMMENDATIONS

- Community Events:** Coburg has the opportunity to bring cycling focus to the community through events. One student group recommended hosting “The Big Ride” – a Gran Fondo that offers a variety of ride distances to draw in bicycle tourism. Another group recommended a summer cycling program to incentivize youth cycling and outdoor activity – the program would teach safety and bike mechanic skills to build young riders’ confidence and interest in cycling for transportation.
- Bicycle Tourism:** Coburg has the opportunity to capitalize on existing features by developing partnerships. For example, the Willamette Valley Scenic Bikeway already draw cyclists to Coburg’s businesses. There are opportunities to partner with Travel Oregon and the League of American Bicyclists to promote Coburg. Another recommendation would leverage the historic character and resources within Coburg. There are opportunities to link cycling with historic resources by partnering with the Coburg Heritage Committee to develop a cycling tour of Coburg’s historic buildings and places of interest. As the community builds out the remaining segments of the Coburg Loop Path, there could be an opportunity to enhance it with historical markers or other natural resources information.
- Multimodal Safety:** small changes in infrastructure could help improve safety for all roadway users (cars, transit, bicycles, and pedestrians). With the downtown area of Coburg,

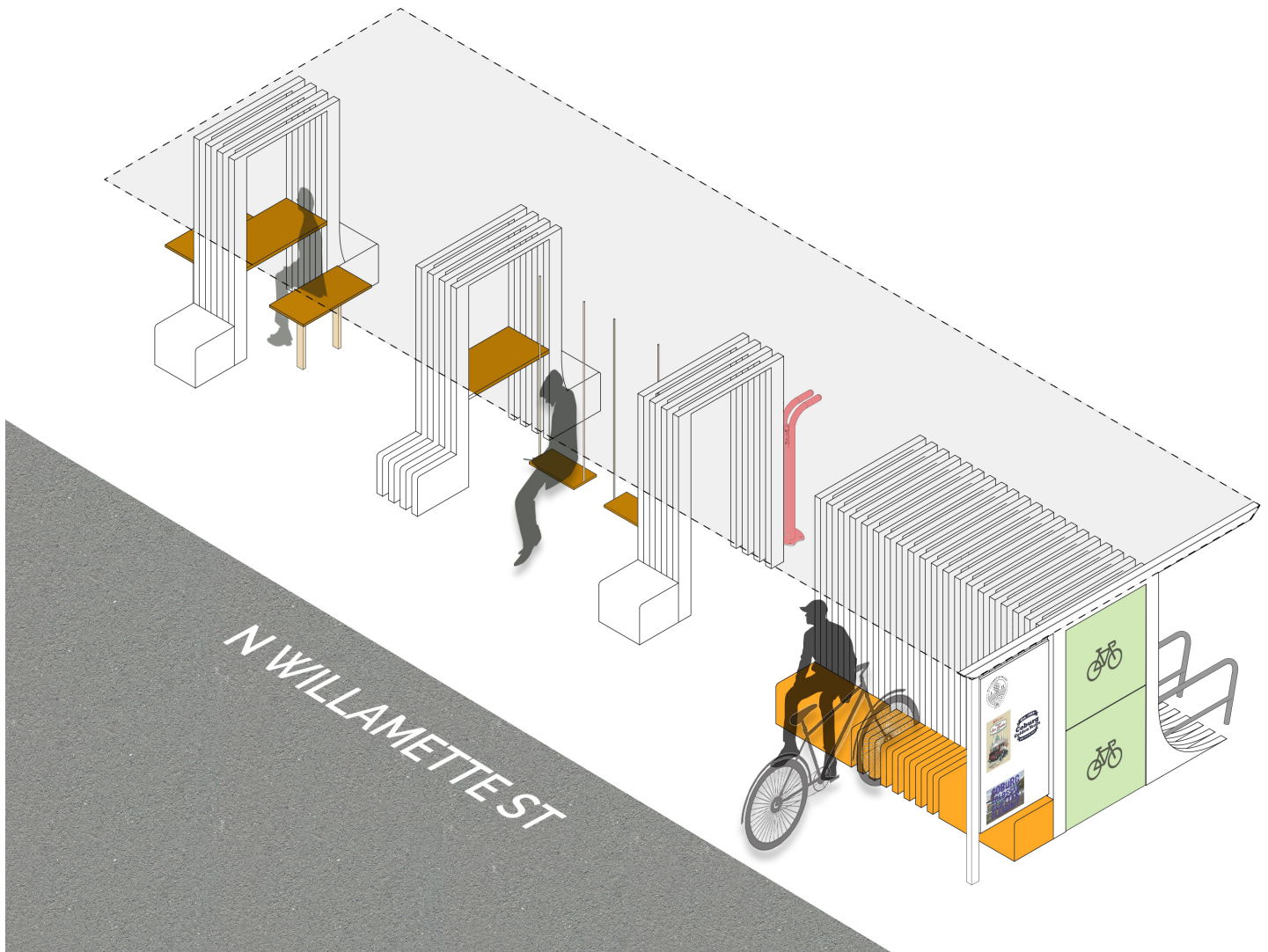


FIG NUM. 56

Mobility hub proposed design

students recommended tools to calm traffic such as flashing signage, speed humps, clearly marked crosswalks, buffered bike lanes, small traffic islands to limit turning speeds, and landscaping and trees to create the perception that the road is narrower thereby lowering speeds. Students also recommended spot improvements to enhance safety,

such as condensing traffic lanes before entering a high activity area.

- **Safe Routes to School:** Coburg has an opportunity to building upon Coburg Community Charter School’s partnership with Safe Routes to School. Small infrastructure improvements could make bicycling to/from school a more viable option.

Students recommended: designating bike boulevards between neighborhoods and to the school; installing advisory bike lane(s) on neighborhood streets; adding a Dutch-style intersection in front of the school that emphasizes a “hook turn” for bicycles; and adding a single, large crosswalk with signage including flashing lights in front of the school.

- **Coburg Loop Path:** The Coburg Loop Path is partially built out – some student groups focused on this project as a jumping off point for future enhancements. Recommendations included: adding an advisory bike lane on Coleman Street; creating a northbound, one-way street on North Harrison Street and converting the southbound lane to a two-way buffered bike lane; and creating a safer intersection at Coburg Road with a formalized crossing.

- **Bicycle and Transit Hubs:** Students saw an opportunity to better connect LTD’s transit service to the other multimodal opportunities by creating a mobility hub. Recommendations included: building a mobility hub in a park space that would offer bike parking, weather protection, and other community resources such as do-it-yourself bike repair, street furniture, community message boards and/or commercial space opportunities. Students also recommended moving an existing LTD stop to better serve the mobility hub.

- **Bicycle Parking:** Convenient and safe bicycle parking is a simple way to signal that bicycles and cycling are welcome in Coburg. Students recommended expanding the availability of bicycle parking throughout the town. Bicycle parking presents an easy, creative and more affordable approach to encouraging downtown business activity when compared to building parking facilities for vehicles.



FIG NUM. 57

Proposed Pavilion Park mobility hub rendering

PeaceHealth Rides – Bike Share Assessment

The Class: Geographic Information Systems II, Geography,
College of Arts and Sciences
Faculty: Nick Kohler

WHY DID LTD ENGAGE THIS CLASS?

PeaceHealth Rides is a network of bike share stations and publicly-available bicycles that account holders can use for a small fee to get around Eugene without a vehicle. The program is a partnership between the City of Eugene, University of Oregon, Lane Transit District, and Social Bicycles by JUMP Bikes¹ and is sponsored by PeaceHealth. Bike share is an active transportation mode that helps expand transportation

¹ The COVID-19 pandemic occurred while this project was on-going. As part of the pivot to a new economic reality, PeaceHealth Rides transitioned the on-going operations and management of the program from Social Bicycles by JUMP Bikes to the City of Eugene.

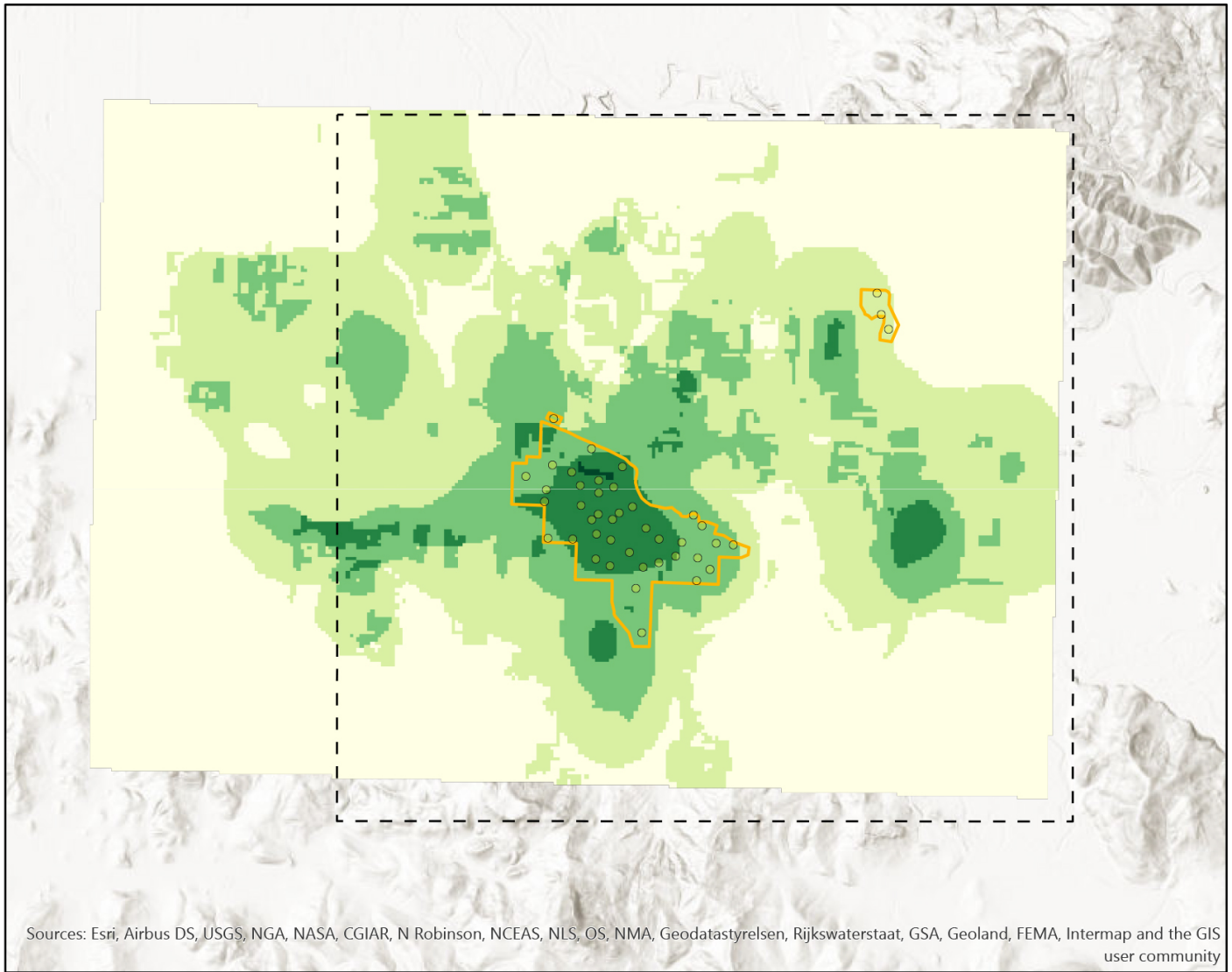
options for Eugene residents and visitors – it is designed to integrate with and complement LTD’s transit system. This geospatial analysis class provided an opportunity for the PeaceHealth Rides partners to investigate the GPS data collected on the bikes to analyze spatial usage patterns and to explore opportunities to expand the bike share service area. LTD pursued this project in coordination with staff from Social Bicycles by JUMP Bikes and the University of Oregon transportation team.

PROJECT SUMMARY

This Geographic Information Systems (GIS) class started with an introduction of how the PeaceHealth Rides system was

developed and discussed some of the considerations for placing a bike share station. The class then analyzed spatial datasets including LTD transit ridership by stop, bike share usage patterns, socioeconomic and demographic characteristics, land use patterns and densities, and transportation facilities such as bike lanes. Students concluded their analysis with a suite of recommendations: some students focused identifying where the bike share service area could be expanded; some focused on opportunities for transit-bike share multimodal hubs; and others identified underserved areas and populations that could benefit from expanded access to transit and/or bike share.





2 Miles

[- -] BikeShare Total StudyArea

○ BikeShare Hub Points

▭ BikeShare Downtown Operating Zone

Potential high demand for BikeShare Service

- 1
- 2
- 3
- 4
- 5

FIG NUM. 58
 Bike share suitability map
 by Gabrielle Henrion

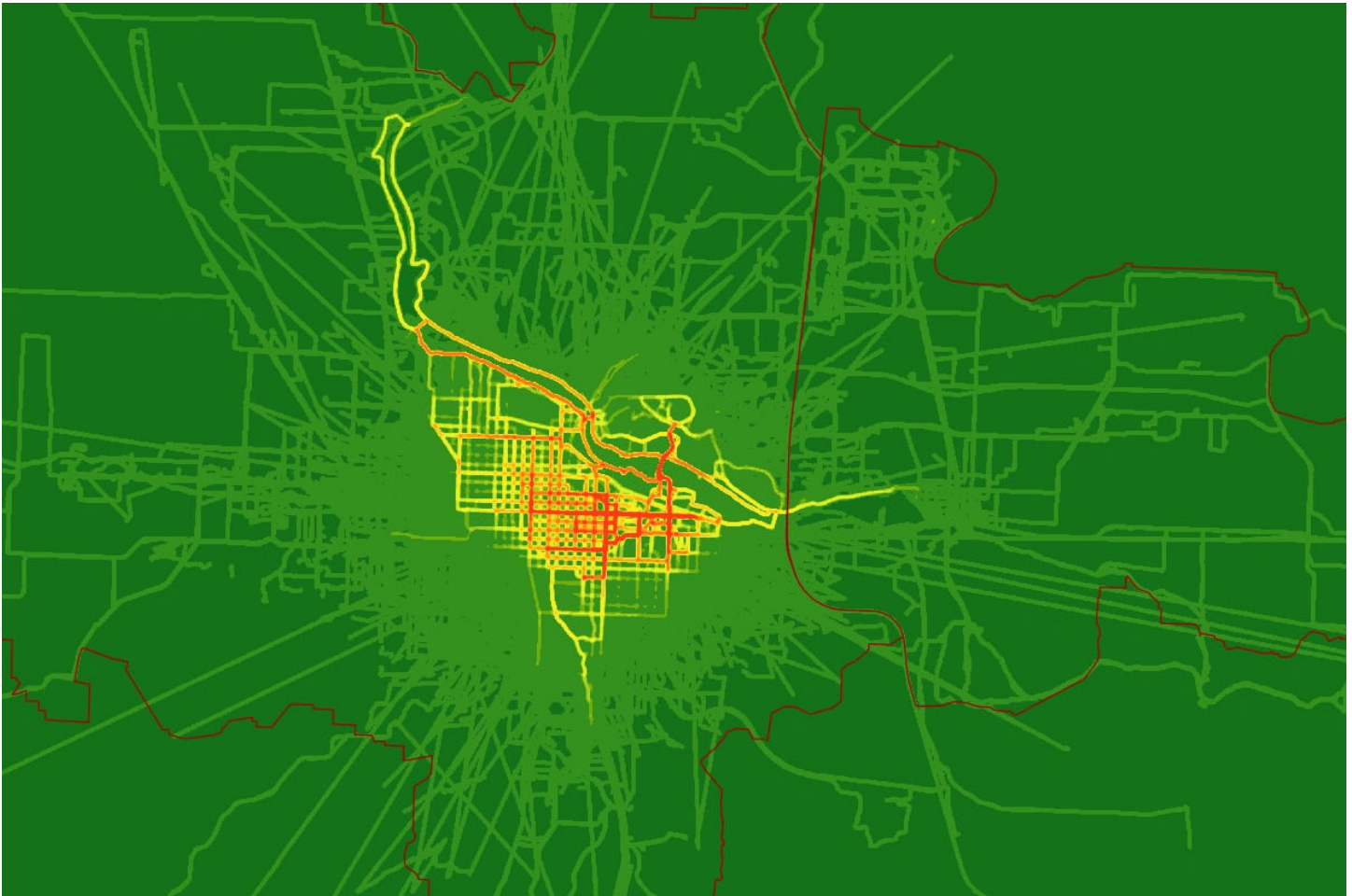


FIG NUM. 59

Density map of routes taken by PeaceHealth Rides users from June 2019 to April 2020

KEY OBSERVATIONS, OPPORTUNITIES, AND CHALLENGES

Existing Service Area: In order to maintain an efficient and accessible bike share network, best practice is to maintain a high density of bike share stations within the service area. For this reason, students investigated opportunities for improvements within the current service area. What they learned is that the current service area primarily services people who are near or making trips to downtown or the University of Oregon and a

higher share of minority populations live in this area when compared to the region. However, there are still places within the service area that could benefit from additional accessible bike share stations.

Expanding the Service Area: Students noted isolated areas beyond the existing service area that showed the potential for demand. Serving these areas may be a challenge in the short-term but could be a future opportunity.

Using Bike share User Data for Geographic Analysis: While students had access to GPS bike share data, not all data points were sharable, including ride start and end points. The fidelity of information reflects balancing the need to protect privacy and proprietary information with usable data to inform analysis. However, the data that was available did allow students to make temporal observations. Rider behavior changed during the pandemic – the average number of rides decreased but distance per ride increased post-COVID.

MENU OF RECOMMENDATIONS

Increase Coverage within Existing Service Area: There are opportunities within the existing service area to improve multimodal connectivity between bike share and LTD’s transit by adjusting bus stop and/or bike share station locations. Students also recommended that new and/or adjusted bike share station locations should focus on areas with a higher density of renters and low-income populations. An example includes more coverage in the Whitaker neighborhood.

Expanding the Service Area: If resources were available, there are several areas in proximity to the existing service area that were shown to be potentially high demand areas. Student recommended the following areas could benefit from a bike share station: near the student housing in Duck’s Village and around Autzen Stadium; into downtown Springfield and adjacent to Gateway Mall; near the Oakway Center; on the west side of Amazon Park; and in West Eugene. The underlying factors that informed these recommendations included the opportunity to expand

bike share service to low-income and minority populations, to increase access to student housing and to make connections to food service, grocery stores, and other places of commerce.

Using Bike-share User Data for Geographic Analysis: Students recommended that partners discuss opportunities to share more data for the purposes of analysis. Specifically, being able to analyze ride beginning- and end-point locations would help to assess demand and inform operational strategy.

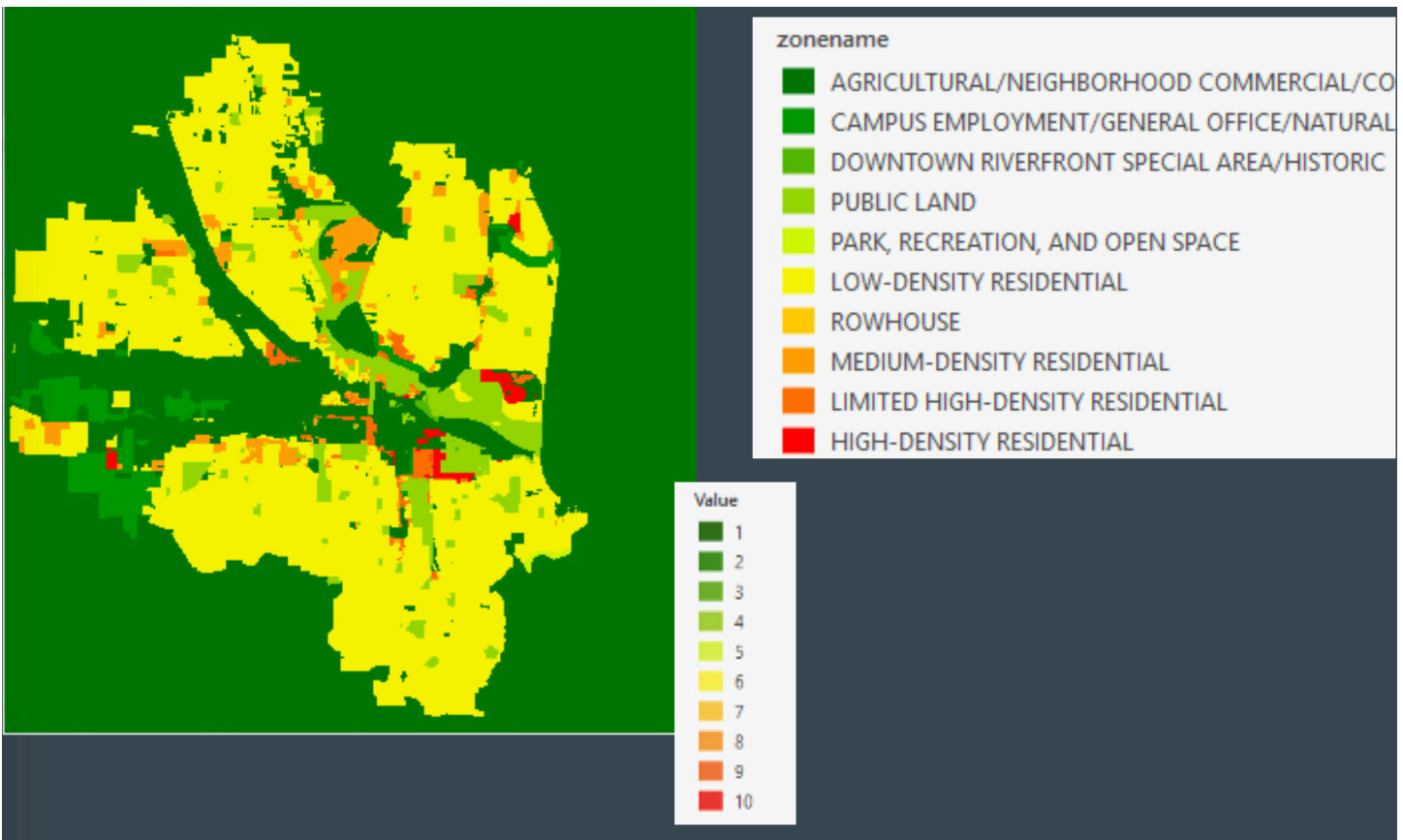


FIG NUM. 60
Ranked zoning boundaries map by Chase Krogh



FIG NUM. 61
Student final presentations

Creswell and Cottage Grove Mobility Needs Assessment

The Class: Transportation Planning;
School of Planning, Public Policy and Management
Faculty: Anne Brown

WHY DID LTD ENGAGE THIS CLASS?

LTD's rural routes are currently designed to provide a commute level of service between the surrounding small cities in the district to the urban core – this means the route offers limited frequency and span. While these routes address some mobility needs, many people choose or are reliant on a car or someone with a car to travel to the Eugene-Springfield metro area for work, medical appointments, shopping, recreation, etc. In the past year, LTD, in partnership with the city of Cottage Grove and South Lane

Wheels, began a Mobility-on-Demand (MOD) pilot program within the city limits of Cottage Grove to gain experience with the MOD service model; test whether this service would be used to connect the community to both the fixed-route service on Route 98 and within the community; and determine whether the MOD service model could be applied in other areas of the District. LTD, in coordination with planners from Cottage Grove and Creswell, engaged this class to explore the current and projected mobility needs of these two small cities; to provide context for evaluating the modes that LTD is

currently running and testing; and to provide recommendations that LTD and its partners may be able to implement to enhance accessibility and mobility choice.

PROJECT SUMMARY

In order to understand both the constraints and mobility needs, the project began by conducting interviews with transportation providers and transportation planning stakeholders as well as a public survey of Creswell and Cottage Grove community members. Students also reviewed the data and analysis that had been conducted to date about the MOD



pilot as well as other transportation planning documents. Students analyzed unique transportation needs and challenges related to Creswell and Cottage Grove's small size, land development patterns, and existing travel patterns – some patterns were shared and some patterns were unique. The class then explored the literature to identify successful examples of small town mobility projects and services being offered in other communities around the country. The final report provided recommendations that LTD and its partners may consider to address current and future mobility needs for the communities of Creswell and Cottage Grove.

KEY OBSERVATIONS, OPPORTUNITIES, AND CHALLENGES

The data collection phase of the project revealed some opportunities and challenges.

- **LTD's Route 98:** Opinions about the usefulness of Route 98 in addressing mobility needs and what improvements may be needed varied among LTD, transportation stakeholders, and the general public. Divergent opinions present a challenge, but also an opportunity to explore ways to find common ground.
- **Transportation Infrastructure:** The existing transportation infrastructure in Creswell and Cottage Grove has some features (fewer gridded streets, gaps in sidewalks and bike lanes, and higher speed limits) that impact the physical connectedness of these communities by modes other than a car. There is an opportunity to reduce barriers and enhance mode choice through infrastructure improvements.
- **Financial Constraints:** LTD, Creswell, and Cottage Grove have limited budgets to address mobility needs. Feasible options for these small cities will be influenced by the cost-benefit of various technologies and funding opportunities that LTD, Creswell, and Cottage Grove can use to implement, operate, and maintain service.
- **Multimodal Connections:** There is an opportunity to improve the programmatic connectedness among the current transportation services provided in Cottage Grove and Creswell. Better integration among services could improve how accessible they are to the communities they serve.
- **New Mobility:** There is an opportunity to add new transportation mode options to address some of the unmet transportation needs in Creswell and Cottage Grove. Modes such as bike share, ride hail partnerships, and mobility-on-demand could be feasible.

MENU OF RECOMMENDATIONS

Students made recommendations for the cities' current transportation networks as well as suggested what to consider when looking at new modes and the cities' needs.

- **Route 98:** Increased frequency may make this route more useful; additional bus stop amenities at higher usage stops, such as internet hot spots for waiting passengers; and expanded coverage within and between Cottage Grove and Creswell.
- **Mobility-on-Demand Pilot:** Continue piloting the MOD service model until more data are generated, especially post-pandemic; better integration of MOD with Route 98 to make transfers easier; creation of varied pricing for frequent vs. single-use riders to incentivize use; improved service information; allowing for round-trip scheduling with a single interaction; prioritizing ADA accessibility and trips related to medical/mental health appointments.
- **Paratransit:** Consider investing in a pilot on-demand service in partnership with rideshare companies to expand paratransit services.
- **Land Use:** Encourage land use development patterns that are transit-supportive and an urban form that promotes transit accessibility.
- **Partnerships:** Increase coordination and establish more partnerships across organizations to improve transportation options for Cottage Grove and Creswell residents.
- **Transportation Infrastructure:** Prioritize bike and pedestrian infrastructure improvements, especially around popular stops to enhance safety and encourage multimodal transportation.
- **Funding:** Fund future transportation initiatives with transient room tax revenue; increase Lane County's transient room tax and allocate funding to transportation initiatives; and identify creative revenue sources.
- **New Mobility - Payment:** Provide alternative methods of payment for new mobility options to ensure equitable access to services.
- **New Mobility - Ride Hail Partnerships:** Explore opportunities to partner with a ride-share company to create a carpool-based system; consider utilizing promotions, such as 10% off all rides for the first week of use; and consider a flat rate payment based on the average annual income.
- **New Mobility - Bike Share:** Explore bike share opportunities and integrate cycling into Cottage Grove and Creswell's transportation plans. Students did not support scooter/e-scooter-share.

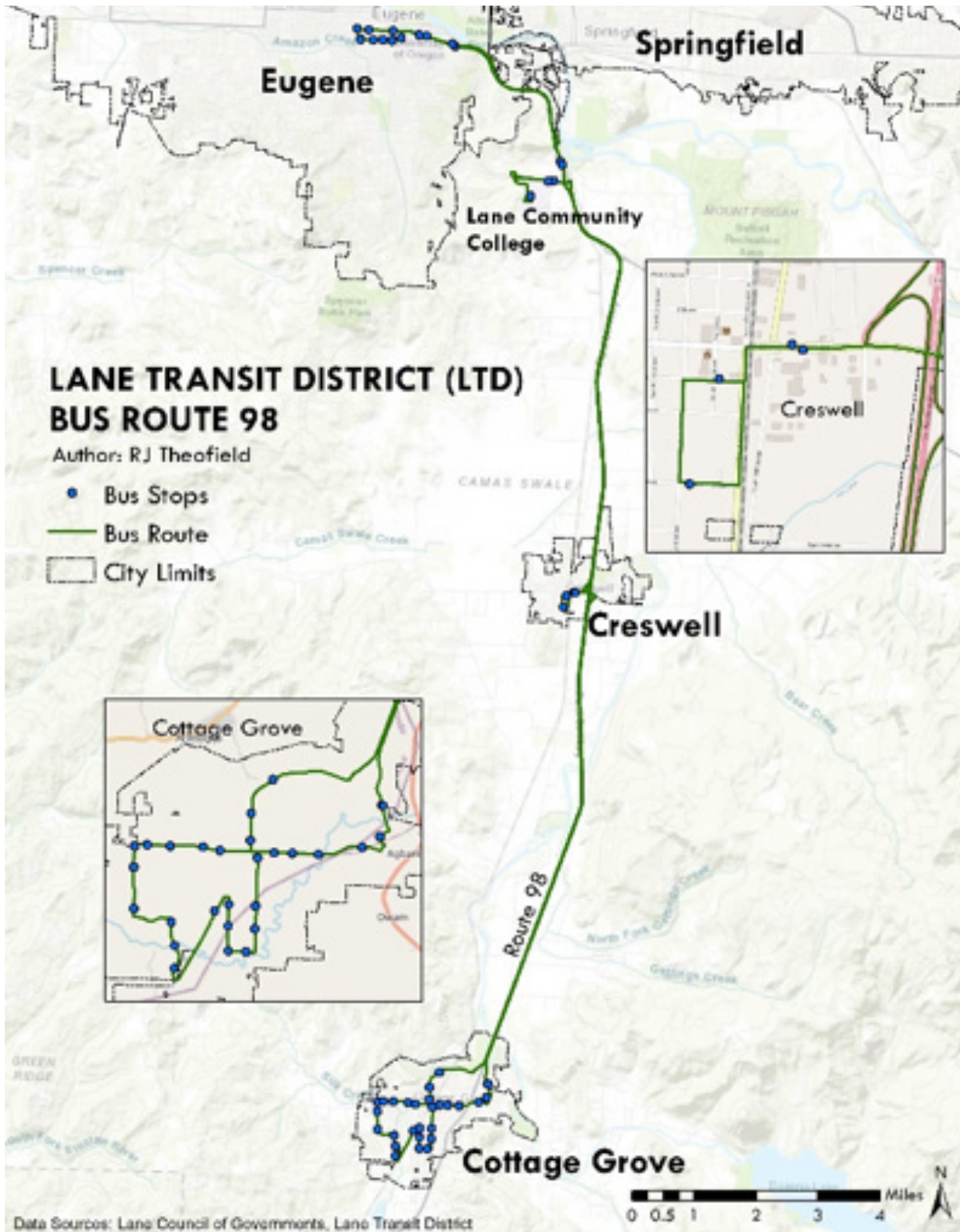


FIG NUM. 62
Lane Transit District (LTD) Bus Route 98



Multimedia

LTD Stories

The Class: Allen Hall Media, School of Journalism and Communication
Faculty: Maya Lazaro

WHY DID LTD ENGAGE THIS CLASS?

Allen Hall Media (AHS) is a School of Journalism and Communication student-run multimedia production agency. LTD asked students that participate in AHS to produce photo sets and videos to be used in print and digital materials, social media, web sites, presentations, and other marketing and communications initiatives. The series of projects were developed to tell the story of LTD -- showing people using its assets (people and buses), sharing how LTD serves and engages the community and riders in positive ways that promote transit and other

transportation options, demonstrate value, and build agency morale.

PROJECT SUMMARY

Appendix A contains links to the photo sets and videos.

PHOTOGRAPHY

The theme of the photography project was Truth & Beauty: A Day in the Life of LTD. Students took photos in the public domain and at LTD facilities to capture active images that reflect the diversity of LTD staff and LTD riders. LTD facilities images including stops, stations, park-and-rides, and vanpool locations; on LTD diesel, hybrid, electric buses,

RideSource, and EmGo vehicles; behind-the-scene images of LTD staff in action; and active shots of people using LTD services and interacting with LTD staff.

VIDEOGRAPHY

The series of videography projects focused on the following topics:

- More than a Bus: a montage that highlights some of the transportation options that LTD provides to the community beyond its fixed-route transit service.



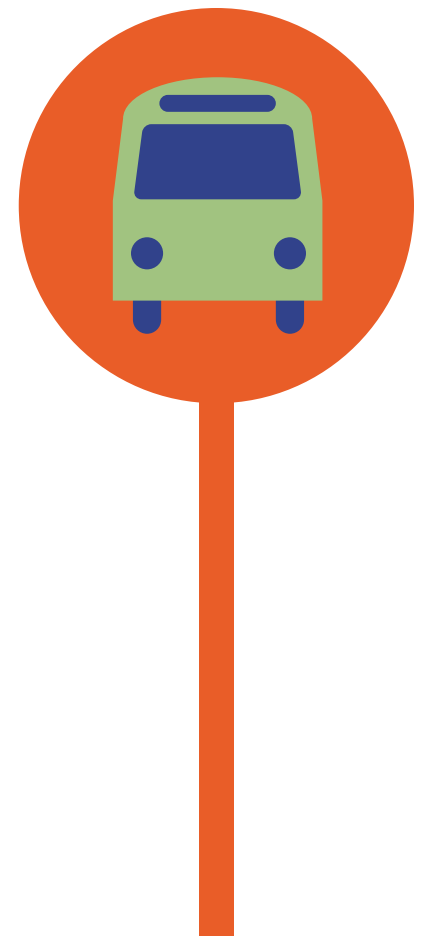
- How to Use TouchPass: a light-hearted sketch of young and older transit riders teaching each other how to use the TouchPass app and tap card.
- Sustainability at LTD: clips of interviews with LTD staff, leadership, and Board members describing how LTD defines sustainability and steps LTD is taking to provide services that are equitably distributed, environmentally conscious, and economically responsible. The video was released on Earth Day 2019.
- Point2Point Programs: a series of short light-hearted videos that highlight the conveniences that the Point2Point offers such as support to help people find transportation options on the fly, the Emergency Ride Home program, and the Get There carpool/vanpool tool.



Parting Thoughts

We often hear that one must focus on the end goal; however, in practice it is often along the journey where new discoveries emerge and opportunities for change come into focus. For LTD, the year-long Sustainable City Year Program provided just that -- an awesome journey of collaboration and creative problem-solving. The final outcomes of this immense body of work have yielded strategic, tactical, and visionary tools; designs; and policy

recommendations on a diversity of topics, which LTD and its partners can use today and into the future as the community adapts to the challenges ahead. LTD would like to thank all of the students, faculty, and administrative staff that made this partnership a great success, as well as agency staff and community stakeholders that volunteered their time to enrich the learning environment.



SUSTAINABLE CITY YEAR PROGRAM

2019–2020 Partner: Lane Transit District



SCYP is excited to work with Lane Transit District, or LTD, on a variety of priority projects, from creating greater connectivity with smaller Lane County communities to integrating bikeshare into the transit system to preparing for the 2021 track and field world championships to be held in Eugene.

Participating academic disciplines include business, architecture, landscape architecture, product design, planning, public administration, nonprofit management, journalism, geography, and others. Classroom work, applied learning assignments, and collaboration with LTD will culminate with SCYP students making recommendations to LTD.



For more information:
sci.uoregon.edu/scyp

ABOUT SUSTAINABLE CITY YEAR PROGRAM

A catalytic learning model connecting students with projects from an Oregon community at an unprecedented scale for an entire academic year.

In a typical year, 500+ students from 10–12 disciplines across 20–35 classes devote 60,000+ hours of work on city-identified projects to help partners transition to a more sustainable future.

FOLLOW

 @SustainableCities
 @SCI_UO



UNIVERSITY OF
OREGON



SCYP
Sustainable City Year Program

SCI
Sustainable City Year Program

2019-2020 SCYP LTD Faculty





John Arroyo, Assistant Professor
School of Planning, Public Policy and Management
jarroyo@uoregon.edu

SCYP Class: Green Cities (PPPM 445)



Anne Brown, Assistant Professor
School of Planning, Public Policy and Management
abrown33@uoregon.edu

SCYP Class: Transportation Planning (PPPM 410/510)



Ryan Cabinte, Instructor
Program Manager, Center for Sustainable Business Practices
Lundquist College of Business
rcabinte@uoregon.edu

SCYP Class: Strategic Planning (MGMT 609)



Virginia Cartwright, Associate Professor
Department of Architecture; Director, UO Baker Lighting Lab
vcart@uoregon.edu

SCYP Class: Architecture Studio (ARCH 683)



Nick Kohler, Senior Instructor
Department of Geography
nicholas@uoregon.edu

SCYP Class: GIS II (GEOG 482/582)



Saurabh Lall, Assistant Professor
School of Planning, Public Policy and Management
slall@uoregon.edu

SCYP Class: Program Evaluation (PPPM 465/565)



Maya Lazaro, Education Program Assistant
Production Manager, OR Media
School of Journalism and Communication
mlazaro@uoregon.edu

SCYP Class: Allen Hall Media (J409)



Rebecca Lewis, Associate Professor
School of Planning, Public Policy, and Management
rlewis9@uoregon.edu

SCYP Classes: Public Budget Administration (PPPM 629) and Growth Management (PPPM 610)



Richard Margerum, Professor
Director, School of Planning, Public Policy and Management
rdm@uoregon.edu

SCYP Class: Introduction to Planning Practice (PPPM 611)



Bob Parker, Instructor
Director, Institute for Policy and Research Engagement
School of Planning, Public Policy and Management
rgp@uoregon.edu

SCYP Class: Planning Analysis I (PPPM 613)



Rob Ribe, Professor
Director, Master of Landscape Architecture Program
Department of Landscape Architecture
rribe@uoregon.edu

SCYP Classes: Site Planning and Design (LA 489/589) and Landscape Architecture studio (LA 439/539)



Marc Schlossberg, Professor
Co-Director, Sustainable Cities Institute
School of Planning, Public Policy and Management
schlossb@uoregon.edu

SCYP Classes: Sustainable Transportation (PPPM 407/507) and Bicycle Transportation (PPPM 438/538)



Joshua Skov, Instructor
Center for Sustainable Business Practices
Lundquist College of Business
jskov@uoregon.edu

SCYP Classes: Industrial Ecology (MGMT 641) and Clean Energy Finance (MGMT 608)



Daisy-O'lice Williams, Associate Professor
School of Architecture and Environment
daisyoli@uoregon.edu

SCYP Class: Design Thinking (ARCH 399)



Yizhao Yang, Associate Professor
School of Planning, Public Policy and Management
yizhao@uoregon.edu

SCYP Class: Advanced GIS (PPPM 408/508)

Appendix A

SCYP LTD Report Links

SPRING 2019

Environmental Assessment of the Emerald Express Gateway Corridor

<https://scholarsbank.uoregon.edu/xmlui/handle/1794/25573>
PPPM 408/508 – Advanced GIS
RJ Theofield, Author
Yizhao Yang, Instructor

FALL 2019

ARCH 683 Studio Report

<https://scholarsbank.uoregon.edu/xmlui/handle/1794/25332>
ARCH 683 - Architecture Design Track II
Amy Arroyo, Author
Virginia Cartwright, Instructor

Assessment of Moving Ahead's Potential Funding Options

<https://scholarsbank.uoregon.edu/xmlui/handle/1794/25337>
PPPM 629 – Public Budget Administration
Eric Burdette, Author
Rebecca Lewis, Instructor

Bus Stops as Community Gateways

<https://scholarsbank.uoregon.edu/xmlui/handle/1794/25331>
ARCH 399 – Design Thinking
EJ Del Rosario, Author
Daisy Williams, Instructor

The Future of Transit

<https://scholarsbank.uoregon.edu/xmlui/handle/1794/25333>
MGMT 641 – Industrial Ecology
Rachel Cohen, Author
Josh Skov, Instructor

Promoting Sustainable Transportation in the Coburg Corridor

<https://scholarsbank.uoregon.edu/xmlui/handle/1794/25334>
PPPM 407/507 – Sustainable Transportation
Alison Grover, Author
Marc Schlossberg, Instructor

Re-imagining River Road for Ecological Equity

<https://scholarsbank.uoregon.edu/xmlui/handle/1794/25339>
PPPM 445 – Green Cities
Julia Urone, Author
John Arroyo, Instructor

Transit-Oriented Development on Historic River Road

<https://scholarsbank.uoregon.edu/xmlui/handle/1794/25336>
PPPM 611 – Introduction to Planning Practice and PPPM 613 – Planning Analysis
Olenka Wrobel, Author
Rich Margerum and Robert Parker, Instructors

WINTER 2019

LTD Performance Management Strategies

<https://scholarsbank.uoregon.edu/xmlui/handle/1794/25335>
PPPM 465/565 – Program Evaluation
Corum Ketchum, Author
Saurabh Lall, Instructor

Reimagining Eugene Station

<https://scholarsbank.uoregon.edu/xmlui/handle/1794/25403>
LA 539 – Landscape Architecture Studio
Will Bonner, Eyrie Horton, and Stephen Lorber, Authors
Cory Parker, Instructor

Santa Clara Design Studio Report and Findings

<https://scholarsbank.uoregon.edu/xmlui/handle/1794/25402>
LA 439 Design and Process
Michael Soto, Author
Robert Ribe, Instructor

SPRING 2020

Applying Business Strategy to Manage Uncertainty

<https://scholarsbank.uoregon.edu/xmlui/handle/1794/25571>
MGMT 607 – Sustainable Business Seminar
Rachel Cohen, Author
Ryan Cabinte, Instructor

Current and Future Mobility Needs Assessment for the Cities of Cottage Grove and Creswell

<https://scholarsbank.uoregon.edu/xmlui/handle/1794/25570>
PPPM 410/510 – Transportation Planning
Emily Connor, Author
Anne Brown, Instructor

Cycling in Coburg for Recreation, Transportation, and Tourism: A Visioning Process

<https://scholarsbank.uoregon.edu/xmlui/handle/1794/25568>
PPPM 438/538 – Bicycle Transportation
Nick Hart, Author
Marc Schlossberg, Instructor

Environmental Assessment of the Emerald Express Franklin Boulevard Corridor

<https://scholarsbank.uoregon.edu/xmlui/handle/1794/25572>
PPPM 408/508 – Advanced GIS
Marie Haefliger and Bethany Hays-Alsin, Authors
Yizhao Yang, Instructor

Expanding the PeaceHealth Rides Bike-share Network

<https://scholarsbank.uoregon.edu/xmlui/handle/1794/25569>
GEOG 482/582 – GIScience II
Heather Dawson, Author
Nicholas Kohler and Lindsey Kurtz, Instructors

FALL 2019/WINTER 2020

LTD Stories

<https://www.allenhallmedia.com/client-work-1>
J409 – Allen Hall Media
Maya Lazaro, Instructor

Appendix B

LTD Press Book



MEDIA ADVISORY

University of Oregon and Lane Transit District to Host Partnership Kickoff Celebration

WHAT: Kickoff celebration of Sustainable City Year Program and Lane Transit District partnership for the 2019-20 academic year

DATE: Thursday, October 10, 2019 from 3:00-4:30 pm

WHERE: Papé Reception Hall, Jordan Schnitzer Museum of Art, 1430 Johnson Lane, Eugene, OR 97403 (on University of Oregon campus)

WHO: LTD officials, city project partners, University of Oregon leadership, and students and faculty in architecture, journalism, planning, landscape architecture, public administration, geography, nonprofit management, and business students

DETAILS:

The SCYP-LTD Kickoff celebrates the beginning of a year-long partnership between Lane Transit District and the Sustainable Cities Institute (SCI) at the UO. The kickoff will feature attendees and speakers from both entities, as well as elected officials including Representative Peter DeFazio.

During this partnership, through SCI's Sustainable City Year Program (SCYP), students and faculty will pour 40,000 hours of work into more than 20 projects identified by Lane Transit District. The partnership is oriented to identifying strategies for preparing for the influx of new technologies, meeting the needs of diverse ridership populations, and fostering alternative modes of transportation. Several LTD project partners will participate in the SCYP year, including Lane Council of Governments, PeaceHealth Rides, and the cities of Creswell and Cottage Grove.

At this event, LTD staff and UO faculty will also unveil the year's upcoming projects and the specific details of the partnership's work.

ABOUT THE SUSTAINABLE CITY YEAR PROGRAM

The Sustainable City Year Program (SCYP) is a year-long partnership between SCI and a partner in Oregon, in which students and faculty in courses from across the university collaborate with a public entity on sustainability and livability projects. SCYP faculty and students work in collaboration with staff from the partner agency through a variety of studio projects and service-

learning courses to provide students with real-world projects to investigate. Students bring energy, enthusiasm, and innovative approaches to difficult, persistent problems. SCYP's primary value derives from collaborations resulting in on-the-ground impact and expanded conversations for a community ready to transition to a more sustainable and livable future.

ABOUT LTD

LTD provides more than 10 million trips per year on its buses and EmX Bus Rapid Transit line in Lane County, Oregon. Encompassing the Eugene-Springfield metro area, LTD is a special district of the state of Oregon and led by a seven-member board of directors appointed by Oregon's Governor. LTD also operates RideSource, a paratransit service for people with disabilities, and numerous transportation options programs to promote sustainable travel county wide, and Point2Point, an initiative that provides community members with the necessary information and resources to assist them in identifying opportunities to drive less by discovering transportation choices that meet their individual lifestyles.

CONTACTS: Megan Banks, SCYP Manager, 541-346-6395, mbanks@uoregon.edu

Jennifer Zankowski, Lane Transit District Senior Development Planner,
Jennifer.Zankowski@ltd.org

For media inquiries, contact Katie Fields, SCYP Graduate Employee, 541-346-3582,
kfields7@uoregon.edu

The Register-Guard

Lane Transit District to benefit from UO student-led innovations

By Adam Duvernay

@DuvernayOR

Posted Oct 13, 2019 at 1:00 PM

Lane Transit District is this year's partner in UO's Sustainable Cities Institute Sustainable City Year Program

The agency responsible for moving people around Lane County will have access this year to the imagination and innovations of University of Oregon students in an effort to make a local future more efficient and more sustainable.

UO's Sustainable Cities Institute will work with the Lane Transit District during its 10th year of cooperative projects in its Sustainable City Year Program, which gives students from across campus disciplines the opportunity to work on local, partner-identified projects through their existing courses.

"We meet learning objectives that the faculty set out, but also we responded to what LTD is looking for in terms of priority projects," said Sustainable City Year Program Manager Megan Bank. "LTD is thinking about the future and what that could mean for transit."

LTD serves more than 300,000 residents in Lane County with a fleet of 105 buses. The Sustainable City Year Program includes about 20 classes.

The projects on which UO students will work include planning LTD fleet replacement, re-imagining River Road with the environment in mind, telling the stories of LTD's everyday ridership and assessing the bike share program's impact on neighborhoods, among others.

Each project will be a part of students' coursework through the school year and will draw from a variety of university disciplines.

“We’re looking at various components of what makes a city green, but also being very critical about who that serves and how that’s designed,” said John Arroyo, an assistant professor in the university’s school of planning, public policy and management.

Arroyo’s project “Re-imagining River Road for Ecological Equity” will benefit from students in-class assignments throughout the year, he said. For example, his students will write an op-ed piece about an environmental issue on the River Road corridor and construct district profiles of neighborhoods on that corridor, as well as small projects such as a radio hub focused on environmental issues.

The Sustainable City Year Program chooses a new community partner each year, often municipalities such as Eugene and Springfield. But organizations like Portland’s TriMet transportation district also have been past partners, according to the university.

“We should get some really good ideas,” said LTD Assistant General Manager Mark Johnson. “We should get some really good plans in place to see how we can approach the future. They’re all actually projects we’re currently working on at some level but where we maybe don’t have the time or were thinking about hiring consultants to do some of the more deep-down work to try to understand them.”

Joshua Skov, a university business school instructor and a LTD board member, will be focusing his students on local fleet replacement and clean energy finance. He mostly teaches MBA students, and he said a large portion of what they’ll do for the project is research.

“What they bring to this is the chance to integrate notions of business viability and total cost accounting with options for transportation that maybe don’t exist here in the community,” Skov said. “Bike share, scooters and ride hailing, all of those could be haphazard additions to a transportation system or they could be brought in as deliberate compliments to an efficient transportation system.”

Research and ideas from each class are put into a final community report at the end of each year so the work remains accessible. Johnson said those portfolios will help LTD be a better community partner, and in exchange those students get real and practical experience.

“It really helps the students,” Johnson said. “They can really make a difference while they’re in school.”

Follow Adam Duvernay on Twitter [@DuvernayOR](#) or email aduvernay@registerguard.com.

The Register-Guard

UO-Lane Transit District partnership brings brainstorming to reality

By Adam Duvernay

@DuvernayOR

Posted at 5:00 AM

University of Oregon students' ideas for future of LTD are starting to take shape during the 10th year of Sustainable City Year Program.

The University of Oregon's Sustainable City Year Program in the fall partnered with Lane Transit District and set students to work on a variety of projects meant to make local transportation more efficient and sustainable. With the first two quarters of the school year now finished, many of those student projects are taking shape.

"It's been a really good experience. It provides a good opportunity for students to gain professional experience and work on real world issues and experiment and try new things," said Rachel Cohen, a second-year UO business graduate student participating in the Sustainable City Year Program.

The projects undertaken this year asked students to examine physical infrastructure, such as design ideas for the transit station at the former Santa Clara Elementary School site, and those that require some long-term imagination, such as re-imagining River Road for the residents who live there.

There were 10 classes during the fall term and six classes are ongoing through the winter term, all centered around LTD projects, according to Sustainable City Year Program Manager Megan Banks. It's not yet determined how many classes will focus on the LTD goals in the spring, she said.

The Sustainable City Year Program, part of UO's Sustainable Cities Initiative, is in its 10th year of pairing students from across college disciplines with community partners in need of fresh ideas. In past years, the program has paired

with groups such as the city of La Pine and TriMet, the tri-county transit agency in Portland.

The program has been so successful, Banks said, it's being replicated in 35 universities nationwide.

"Transit is evolving. It's going to be different in the future than it is now, and universities are this resource for helping guide that," Banks said.

Transit in Eugene is about more than making sure the buses run on time, and many of the student projects identified by LTD are focused on the MovingAhead initiative, a citywide plan to update and expand services on and around some of the area's most important transportation corridors: 30th Avenue to Lane Community College, Coburg Road, Highway 99, Martin Luther King Jr. Boulevard and River Road.

LTD already is getting a look at some of the student project ideas.

Nine teams of landscape architecture students on Friday showcased their visions for the former Santa Clara Elementary School site to LTD managers. The eight acres of property is where the agency plans to put a new transit station, but only about half of the property is needed for the station's operations.

"After that construction is done, people want to know what we should do with this property. It's one of the few large lot vacant properties in the community that could be something that both supports transit and becomes a community amenity," said Jennifer Zankowski, LTD senior development planner and project manager for the Sustainable City Year Program.

Zankowski said the students were asked to include housing, mixed-use commercial offices, a public plaza, a playground and a pavilion in their proposals for site development. She said members of the community told LTD while plans were being made that they lacked a local gathering place.

"They see this site as an opportunity for that. They were happy to see the ideas students were coming up with," she said about the community's input. "From the LTD and city perspective, this idea of taking this opportunity to have land development that compliments transit and helps achieve some of the density the city is trying to achieve within our urban growth boundary. It's fun to give

students that challenge to work on.”

The landscape design work the students presented is the kind LTD normally would have hired an outside contractor to complete, and the students’ presentations provided the additional benefit of having members of the community in the room, as well, so they could offer LTD live feedback.

“(Community members) were very encouraging, yet they had specific things they were interested in,” Banks said. “These are really difficult concepts and questions that the students are addressing.”

The project covering the Santa Clara Elementary School site runs for 10 weeks. The pitches made Friday are only drafts for the students’ final contributions to those LTD plans. Zankowski said the meeting was an opportunity for their creativity to encounter real world design challenges.

“These are younger, undergrad students. They’re not going to be able to, for example, design something that considers the grade of the ground or how storm water detention would work or where you would locate utilities,” Zankowski said. “We had an interesting discussion on Friday because our safety officer was in attendance talking about fire lanes and emergency response, and that is something new to the students.”

Some of the work that was completed in the fall now is being assembled into reports for LTD by students like Cohen, who is integrating seven projects into a report for UO professor Joshua Skov’s course on industrial ecology. Those seven teams conducted analyses on topics such as potential partnerships LTD could form with ride hailing companies based on similar alliances in other cities, data privacy and security issues, and LTD use of e-scooters.

“My job is to really take out the most poignant insights and recommendations and put them on display for the public agency,” Cohen said. “Business students, we are able to provide a very different perspective to the public sector. We have so much knowledge and learning and work that’s going on within the business school. It’s sort of gratifying to be able to provide that back to our community and the city of Eugene and LTD.”

John Arroyo’s students have been working on a project “re-imagining River

Road for ecological equity” in which LTD plans for the corridor are examined based on how those already living there might be affected. He challenged his students to find options for improving residents’ lives as the transportation infrastructure changes around them.

“In places like Eugene, in places like Oregon, there is this general narrative of ‘green equals good.’ A lot of people don’t challenge that green also can have problems. There are issues where green development displaces people, green gentrification,” Arroyo said. “Once transportation comes through in a neighborhood and there’s infrastructure, it can lead to uneven development.”

His students’ proposals looked at case studies from other parts of the country to see what they could bring to scale for local projects, which included one proposal for a mobile produce drop-off site and urban farming library in Rasor Park.

“There’d be not only a lending library but actually a tool library and a demonstration site there at that fixed spot. They’d have a secondary component which they called the ‘Volks Veggie Van,’ a mobile produce stand that would drive around different parts of Santa Clara and River Road and provide produce for anyone who was immobile,” Arroyo said. “A project like this has occurred in Boston and Evenston, Illinois, and parts of Canada.”

Exactly which proposals or what parts of them eventually will be incorporated into wider city projects still is to be decided. It may be years before any of them come to life, Zankowski said. But UO students may one day be able to point to physical manifestations of work they’re doing now.

“Some of the ideas, what we’ve gotten back so far has been a range from possibly implementable to some that are perhaps more aspirational. But overall the idea generation is having LTD staff start thinking about the future and things beyond projects that are day to day,” Zankowski said. “The things the students are working on are in the next five to 10 years, but it’s making sure to shine a light on what’s coming up next.”

Follow Adam Duvernay on Twitter [@DuvernayOR](https://twitter.com/DuvernayOR) or email aduvernay@registerguard.com.

The Register-Guard

Special

BLUECHIP 2020 RETROSPECTIVE: Moving right along

By Catherine Russell

Posted Feb 4, 2020 at 12:01 AM

TRANSPORTATION ECONOMY: We weren't always the mobile society we are in 2020, but even 100 years ago, people did need to get around. The travel may only have been from the farm to town, to school and back, maybe across a river, carrying people or goods, but it still required getting from place to place. It required transportation.

By the 1920s, the country was nearly a decade into the history of the automobile, with Henry Ford's Model T first coming off assembly lines in 1913. In 1920, a new car cost about \$300, which worked out to be at least 10% of what the average U.S. wage earner might take home in a year. Even so, an individually owned automobile was a luxury for most people. In Lane County, what many people needed most was to get around town.

Most transportation was shared, either between individuals, or operated by small private companies, but it wasn't one person in a private car or truck. It was multiple people using few vehicles, being used for all purposes.

Streetcars, or trolleys, were a norm. They started out as horse-drawn wagons, but the electric streetcars, powered by overhead wires, had been around since 1907, running within and between Eugene and Springfield. The last trolley in Eugene was consigned to the barn in 1927.

Getting to and from Lane County was most often by train, and the Southern Pacific Railroad had built a fine passenger station in downtown Eugene in 1908.

Routine passenger air travel for the masses was decades away, but Eugene did have an air park at 18th Avenue and Chambers Street as early as 1919. That small park would be replaced in 1943 by the larger Mahlon Sweet field in west Eugene, a location that still serves the area, now the fifth-largest airport in the Pacific Northwest.

But as the number of automobile companies around the county grew, the number of auto dealerships and repair shops in the Eugene area grew as well. Today there are four major companies here representing the national manufactures in auto sales — including Kendall, Lithia, Sheppard, and Kiefer dealerships — and dozens of other businesses specializing in off-road vehicles, trucks, pre-owned vehicles, parts and maintenance.

Livery stables that once did double duty, providing storage space for both horses and automobiles, faded away. Even American Express, in 2020 it's an international financial behemoth, but in the 1920s still primarily an express delivery service, retired its last horses in Eugene in 1926, switching to trucks.

Buses replaced the electric trolleys. The age of motorized transportation had arrived, along with America's love affair with the automobile.

The influence of the automobile on local infrastructure and culture simply cannot be overstated. In 1939, Eugene installed its first traffic lights, and by the 1940s, most families had cars. That meant traffic, and the city of Eugene had to deal with it. The solution was the one-way grid system that essentially still exists today.

By the 1950s, cars weren't just necessary, they were hip, fun, freedom, status symbols, prizes. There was youthful drag racing in town, and auto camping in recreation areas. But there was still public transportation, with a private bus company serving much of town, at least until the 1960s.

Then as the decade changed, so did the public sense about cars, traffic, the environment, and congestion, and about what people wanted to see on the streets of Eugene and Springfield. That's when Lane Transit District began as a public agency, operating with 18 buses and two vans and developing a system where many people could again be mobile and productive while using fewer motorized vehicles.

THE FUTURE: LANE TRANSIT DISTRICT

The year 2020 marks the 50th anniversary of Lane Transit District, LTD for short. That's a long run. "There are not many of us left who were here in 1970 when LTD came into being," says Aurora Jackson, general manager at LTD, "but I think the basic mission has not changed: LTD exists to serve the community with safe, reliable and accessible transportation services that provide the independence for people to achieve their goals."

The business of public transportation has become more complex over the decades. That small gaggle of LTD vehicles has been replaced by a fleet of more than 100 modern buses, incorporating contemporary technologies, including all-electric and all-diesel. The majority of the buses in the fleet are hybrid electric vehicles, and LTD is testing battery-electric, renewable diesel, and renewable natural gas as power sources.

"Technology in the transportation sector is moving as fast as I have ever seen it," Jackson says. For LTD that has meant competition from the likes of Uber and Lyft. Technology is also the driving factor for LTD to look beyond being just a bus system. "We are a mobility manager and integrator, with bus service being a core product, but many other services are also available," Jackson adds.

LTD services include an expansive plan of fixed bus routes, and the Emerald Express, or EmX, a bus rapid transit (BRT) system that specifically connects the cities of Eugene and Springfield. LTD also supports bike share and scooters, and is exploring the potential for automated services.

LTD was one of the first transit agencies to have video surveillance systems on the entire fleet, which company officials believe has improved safety.

A lot of it is perspective. LTD doesn't see public transit as simply a social service for people who don't or can't drive. LTD is looking ahead, listening to public comment and responding with innovation that provides attractive alternatives to the model of one person driving alone in a single vehicle.

Jackson cites both economics and the environment as guiding forces for LTD, and notes that "the best way that LTD can reduce greenhouse gas emissions is to create a system that encourages ridership on the LTD system." That would take

single-occupancy vehicles off of the road, and that's key to reducing transportation-related greenhouse gas emissions.

The latest LTD presence is EmGo, a pilot project designed to help mitigate parking issues downtown. The partnership between the City of Eugene, Lane County, Lane Council of Governments and LTD has put the zippy-looking five-passenger electric vehicles in Eugene's downtown core every weekday from 7:00 a.m. to 6:00 p.m., and rides are free.

The hope is that the free rides around downtown will allow people to park at the perimeters of town, and grab the little bus to move around at lunchtime or otherwise during the day. So far, it seems to be well received, with the main LTD station and 5th Street Market area seeing a lot of ridership.

"LTD must continue to look for ways to provide safe, reliable and convenient services that include a wide variety of mobility options that appeal to people of all demographics so that we are a relevant player in the transportation system," Jackson says, looking to the future.

The Register-Guard

Special

BLUECHIP 2020 RETROSPECTIVE: Steady progress, one wire at a time

By Matt Sayre / FOR THE REGISTER-GUARD

Posted Feb 4, 2020 at 12:01 AM

TECHNOLOGY ECONOMY: This is probably the most difficult economic sector to define, specifically because it seems it should be self-evident. Tech is tech, right? But when you consider all the technology we take for granted — social media, the Internet, GPS, the cloud, apps, gaming, AI, and everything else — then look back over the past 100 years, we have to recognize that all of it is built on the shoulders of one single, amazing technical thing: electricity.

In the 1920s, electricity had arrived in the Pacific Northwest, along with telephones and a basic form of radio. Well, at least in the cities. In the outlying areas around Eugene and Springfield, there were still homes without any of those conveniences at all. And even in towns, electricity wasn't then the invisible, reliable infrastructure we know today. In fact, some people still found it intimidating or dangerous.

We now rely locally on Eugene Water and Electric Board (EWEB) and the Springfield Utility Board (SUB), both public utilities. We count on them, and most of us don't think about the service except when we pay our bills, or when there's an interruption.

So it's easy to forget that EWEB started off as a water utility, just the Eugene Water Board. Its involvement with electric power began in 1911,

when, to satisfy the need to power its own plant to pump and purify water, they built the Walterville Hydroelectric Plant on the McKenzie River. Electricity leftover for anything else was just a byproduct, and the first thing the City of Eugene did with it was install proper streetlights.

SUB has only been around since 1950. In the 1930s, Springfield was still getting its power from a private company, Mountain States Power, but the city wasn't happy with the service. Meanwhile, electric power as a public utility was coming into favor all over the country and Springfield fell in line, even if not right away.

It took bond issues and the work of many public administrations, but in September of 1950, Springfield Municipal Power wired up its first residential customers. Soon thereafter, it became the Springfield Utility Board.

Without reliable electricity, not much of what we know today as “tech” would be possible, or even conceived of, and that includes the communications industries — telegraph, telephone, radio, media — all of which effectively preceded the computers we now both rely on and scorn, love and hate, in everyday life.

Lane County's first radio station, KORE, was established in 1927. It was 1939 before dial phones were standard in Eugene; before that, people had to connect with local switchboard operators to make calls. Imagine that — no phone pinging in your pocket at all times.

Thinking further ahead, even as recently as the 1960s, the word “computer” had one basic meaning: a person who computes numbers. But as the 1970s rolled on, that was changing.

In the 1980s, because of advances in communications and computing, people and companies realized that not everyone had to be tethered to a single desk in a fluorescent-lit office somewhere, and the concept of telecommuting became a professional alternative. And if you don't have to live where you work, why not live where you want to live? Suddenly, the reasonable costs of living and high quality of life in Lane County

took on broader appeal — and businesses paid attention.

In January of 1994, Sony announced that it would build a \$50M CD facility in Springfield. Technology rolled on — even rolled over Sony and CD technology itself — and the plant only operated for nine years. Then, in 1995, Korean company Hyundai Electronics (now SK Hyix) suffered a similar trajectory, when they selected Eugene as the site of a computer-chip plant, only to close completely in 2008. Not lasting successes, but it could still be argued that these investments were the start of a trend.

Oregon still had but one area code in the early 1990s, and that thing called the Internet wasn't yet fully established, but the local tech boom in Lane County had begun. So the future of tech in Lane County really is rooted in the past.

THE FUTURE: A DIFFERENT KIND OF WEB

While it's difficult to draw a straight line from Sony or Hynix to today's tech boom, it is easy to see the influence of the University of Oregon and groundbreaking local startups.

Startups don't stay startups; they grow. When they grow, they sometimes have spinoffs, or change focus entirely, but even if they stumble, they still put down roots and send out scions. If you map out a family tree of the tech companies in greater Eugene, what you will find is that their origins can often be traced back to four original companies.

Dynamix - Founded in Eugene in 1984 by two University of Oregon graduates, Jeff Tunnell and Damon Slye, Dynamix at its peak employed 200 people and had \$50M in annual revenue. "We were just making games, because we liked it," Slye says. "Tech is the type of industry that flourishes in Eugene. Tech companies offer high-paying jobs and come with very little environmental impact," Slye adds.

Palo Alto Software - Originally founded in 1988 by Tim Berry in California, Berry brought the company with him to Eugene in 1992. "I came to Eugene originally to attend the University of Oregon in the

1970s and loved it here. Decades later, I returned to grow my business and my family,” Berry shares. Over the course of generations, Palo Alto has grown exponentially in its own right and has also provided a start for entrepreneurial employees who have gone on to create several other prominent Eugene-based tech companies, IDX and SheerID among them.

Symantec - In 1993, Eugene and Colorado Springs competed to be the new North American site for Symantec’s tech support and customer service divisions. “Colorado Springs offered cash and tax incentives, but Eugene took a very hands-on approach to help Symantec get up and running quickly,” according to Dana Siebert, who led Symantec’s growth in Oregon. Over the decades, the company trained thousands of employees, many of whom have now moved on locally and are employed by dozens of new cybersecurity-focused firms, including SentinelOne, which itself was specifically attracted to the region because of its talented tech workforce.

Lunar Logic - Founded in Eugene in 1996, Lunar Logic employed more than 200 people in the mid-2000s. Former Lunar employees have gone on to create other exciting tech companies including Concentric Sky, Emberex, and Extanto.

In 2020, greater Eugene’s tech industry is stronger than ever, and the future of tech is in the very seedbed of what’s already growing here. More than 500 tech companies now call the region home, nearly 100 more than just five years ago. These companies currently employ nearly 4,000 people. Average annual wages in the industry have risen to \$79,667 compared with \$44,492 in all other industries locally.



ALT. MOBILITY | LANE TRANSIT DISTRICT PARTNERS WITH UO'S SUSTAINABLE CITY YEAR PROGRAM

Lane Transit District Partners with UO's Sustainable City Year Program

Lane Transit District has engaged the University of Oregon's Sustainable City Institute's Sustainable City Year Program (SCYP). The goal of this partnership is to provide research and recommendations for a variety of LTD's priority projects.

Lane Transit District (LTD) APRIL 5, 2019

Lane Transit District has engaged the University of Oregon's Sustainable City Institute's Sustainable City Year Program (SCYP). The goal of this partnership is to provide research and recommendations for a variety of LTD's priority projects such as service opportunities that create greater connectivity with smaller Lane County communities, integrate bikesharing into the transit system, and assist with preparation for the 2021 International Association of Athletics Federation (IAFF) World Championships for track and field to be held in Eugene.

"LTD's riders and taxpayers have been the beneficiary of the good work SCI and its SCYP have provided to our agency in the past," said Aurora Jackson, LTD's general manager. "We believe SCYP will provide valuable and timely information about several LTD priority projects that will contribute to decisions made concerning the future of transit locally and throughout the industry."

SCYP classes that are directed toward LTD projects may be from varied academic disciplines across the University of Oregon campus. Based on the scope of the projects, classes may include business, design, journalism, arts and sciences, and law. SCYP students, either individually or as teams, are charged with identifying and analyzing a client organization's opportunities and challenges. Through classroom work, applied learning assignments, and collaboration with the client organization, SCYP students then makes recommendations as to the best course of action to be considered.

LTD worked with SCI's SCYP on several projects during 2012-'13 school year that connected students to transportation priorities for areas served by LTD, including the cities of Eugene and Springfield.

The LTD-SCI partnership will officially launch in September 2019.

College of Design
(<http://design.uoregon.edu>)

School of Planning, Public Policy and Management (✓)

SCYP Partners with Lane Transit District in 2019



Students working on the 2015-2016 SCYP partnership with Redmond

Beginning in September 2019, the UO [Sustainable City Year Program \(https://sci.uoregon.edu/sustainable-city-year-program-0\)](https://sci.uoregon.edu/sustainable-city-year-program-0) (SCYP) will [collaborate with the Lane Transit District \(https://sci.uoregon.edu/sites/sci1.uoregon.edu/files/ltd-scyp_application_03122019.pdf\)](https://sci.uoregon.edu/sites/sci1.uoregon.edu/files/ltd-scyp_application_03122019.pdf) (LTD) to work on priority projects such as increasing connectivity in rural Lane

County communities, integrating bike sharing, and preparing the area for the 2021 International Association of Athletics Federation (IAFF) World Championships hosted in Eugene, Oregon.

SCYP is housed within the multidisciplinary Sustainable Cities Institute (SCI), whose co-directors are Planning, Public Policy and Management Professor Marc Schlossberg and School of Architecture & Environment Professor Nico Larco.

“LTD’s riders and taxpayers have been the beneficiary of the good work SCI and its SCYP have provided to our agency in the past,” Aurora Jackson, LTD’s general manager, told *Mass Transit* magazine.

The program partnered with LTD once before in 2012 (<https://scholarsbank.uoregon.edu/xmlui/handle/1794/12931>).

Read more about the partnership at *Mass Transit* (<https://www.masstransitmag.com/alt-mobility/press-release/21075041/lane-transit-district-ltd-lane-transit-district-partners-with-uos-sustainable-city-year-program>).

April 17, 2019

More News

MASS TRANSIT



LTD

MANAGEMENT

LTD Board of Directors adopts climate action policy

The policy aims to reduce greenhouse gas emissions by 75 percent over the next 10 years and eliminates the use of fossil fuels in 15 years.

From — [Lane Transit District \(LTD\)](#)

Jun 22nd, 2020

Lane Transit District (LTD) has adopted a climate action policy following unanimous approval from its board of directors, with one member absent.

The policy provides a pathway for LTD to reduce greenhouse gas (GHG) emissions by 75 percent for its owned vehicle fleet over the next 10 years and eliminates the district's use of fossil fuels in 15 years.

"LTD recognized climate change is an urgent matter for the public and private sectors," said Carl Yeh, president, LTD Board of Directors. "We adopted these significant climate change policy, goals and measurements because we wanted to take aggressive action with achievable results that will better the environment and increase the quality of life in the district."

To develop its climate action policy, the LTD Board established an Ad Hoc Sustainability Committee to review a study of the district's carbon footprint that determined the best opportunities for LTD to reduce GHG emissions is to focus on increasing ridership and reducing emissions from its fleet vehicles. Based on the findings from the study, the Ad Hoc Sustainability Committee drafted board-level guidance for fleet procurement and intergovernmental collaboration, recommending that the board adopt the following three measurable

climate change goals.

- Goal 1 – Short-term: 25 electric buses are to be under contract to replace 25 aging 40-foot fossil fuel and hybrid buses by 2023.
- Goal 2 – Long-term: 100 percent fleet turnover and phase-out of fossil fuel vehicles by 2035 and 75 percent GHG emissions reduction by 2030.
- Goal 3 – Other considerations: Deliberate exploration of emerging technology and fuels that improve reductions in GHG emissions; joint community GHG emission reduction goals with partner jurisdictions, including cities of Eugene and Springfield, Lane County and Lane Council of Governments, among others; and iterative process to review progress and goals annually.

Efforts to achieve these goals have already begun. In March, LTD ordered 11 New Flyer battery-electric buses. The first of the new electric buses are expected to arrive later this year, with the order filled by summer 2021. The 11 battery-electric buses are paid for with money from the Federal Transit Administration Low or No-Emission fund and LTD general funds.

“Replacing LTD’s aging diesel and diesel-hybrid fleet with zero tailpipe emission battery-electric buses will reduce GHG emissions in our communities while supporting the state of Oregon’s goal to reduce emissions statewide by 75 percent,” said Aurora Jackson, LTD’s general manager. “Low or no-emission buses and in collaboration with state, city and county governments offer important avenues for reducing our dependence on fossil fuels, but the one thing we can all do today to support these goals is to make only essential trips using the bus or other forms of transportation other than a single passenger vehicle.”

Source URL: <https://www.masstransitmag.com/management/press-release/21143111/lane-transit-district-ltd-ltd-board-of-directors-adopts-climate-action-policy>

