Transit-Oriented Development on Historic River Road

Fall 2019
LTD

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PPPM 611 Introduction to Planning Practice

PPPM 613 Planning Analysis

UNIVERSITY OF OREGON

SCI Sustainable Cities Institute

SCYP Sustainable City Year Program

Fall 2019 LTD

Transit-Oriented Development on Historic River Road

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Contents

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.

About Eugene, Oregon and River Road

The Chifin band of the Kalapuya people originally inhabited the Eugene area and, more specifically, the River Road area along the Willamette River. In the 1840s, settlers arrived in the area via the Oregon Trail and utilized the land for farming and agriculture. This settlement led to the incorporation of Eugene in 1853 (Cogito Partners). The settlers' rural and agrarian way of life continued until the 1950s post-war boom caused expansion due to population growth and economic development.

The industrial era influenced the transition from rural farmland in Eugene and the River Road area, as both became more residential and industrial communities. The urbanization of this area that progressed through the 1970s allowed for infrastructure improvements and new developments (Reed, Jaleel, and Galloway).During this time, the Randy Pape Beltline Highway was completed, intersecting River Road between the Santa Clara neighborhood and the lower River Road neighborhood. River Road transverses a five-mile historic corridor in northwest Eugene. River Road has experienced unprecedented growth in the past 10 years, with parts of the corridor now growing at a rate four times that of Lane County (American Community Survey). To accommodate future growth, the city of Eugene is collaborating with Lane Transit District (LTD) to develop a rapid transit line in this corridor (City of Eugene).

About Lane Transit District

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.

Course Participants

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Executive Summary

Graduate students in the University of Oregon's Community and Regional Planning program worked in four groups to create implementation recommendations for land use and transportation redevelopment for different neighborhoods along River Road. These recommendations focused on the next 20 years. Each group collaborated with their team, other classmates, LTD, and professors to come up with their recommendations.

With LTD as a project partner, certain groups formed their vision around transit-oriented development (TOD) occurring over the next 20 years. Others integrated transit options into their recommendations while focusing on community and social services that cater to families in surrounding neighborhoods.

In conducting background research, each team utilized US Census information to identify key housing, economic, and education trends in the area. The teams made their conceptual and implementation recommendations in part based on this background information. Students felt it was essential to develop a long-term plan that would satisfy the needs of both current and future residents of each neighborhood.

Key themes throughout each group's conceptual and implementation recommendations include:

- Accessible and equitable transit for all ages and mobility levels.
- Multi-use buildings with a mix of housing to address "missing middle" housing that River Road currently lacks.
- Improved placemaking elements that incorporate the neighborhood's culture and provide a sense of community.
- Increased neighborhood economic development along River Road.

Each group approached these concepts in different ways depending on the neighborhood's demographics and existing built infrastructure, however common themes were evident throughout. The groups aligned their recommendations with the city of Eugene Comprehensive Plan, the Eugene 2035 Transportation Plan, and LTD's MovingAhead document. Aligning goals and preferences in this way led to more feasible and realistic recommendations should the students' River Road corridor plans be utilized by LTD or Eugene. This report includes brief summaries of each group project with full reports included in the appendices.

Introduction

Through its partnership with SCYP, LTD requested that students recommend long-term implementation concepts for key portions of River Road. As LTD expands and improves its bus routes, it would like to be cognizant of its impact on surrounding communities. LTD's collaboration with students allowed timely identification of holistic implementation options for these neighborhoods.

LTD's goal in partnering with SCYP is to find new, innovative ideas for how its transit system will integrate with the surrounding community over the next 20 years. LTD chose to focus on the River Road corridor for this project as this corridor is one of the busiest arterial roads in the City. Ensuring all types of transit are safe for users was a key element considered throughout the project and is reflected in the outcomes. Keeping in mind that safety, sustainability, and increased livability are top priorities for LTD, students were able to create realistic, impactful ideas for the future of River Road.

LTD's initial problem statement for the class was "adapting to the future of mobility." LTD plans to expand their transit system and update their bus system to include more EmX routes, prioritizing mobility. Integrating their future plans with the city of Eugene and local neighborhood plans will be essential for successful implementation. The work of the student teams highlights all those needs and connects LTD's goals to the City and neighborhood plans. Student processes considered local culture and history, which were conducted in the research and development process and documented in the final recommendations.

Research Methods

Groups began their research by reading through relevant City and LTD documents to become familiar with current policy and development code requirements in the River Road corridor. Documents included, but were not limited to, city of Eugene Comprehensive Plan, Eugene 2035 Transportation Plan, MovingAhead, and the River Road Santa Clara Neighborhood Plan. Students synthesized the data gathered from these documents, noting City and Plan goals relevant to their project sites and team goals for focus areas.

Student groups conducted site analyses to better understand the strengths and weaknesses of their sites. This helped students visualize their 20-year goal for the site and understand potential obstacles to implementation. Seeing the current built infrastructure also inspired groups to utilize existing structures and helped them reimagine their sites. The site analysis was an important element to producing a strong recommendation that would support LTD's goals for the River Road Corridor.

Following this plan synthesis and site analysis, teams utilized US Census data to better understand each of the project site's community profile, demographics, education levels, economic drivers, and housing information. Teams found that throughout the project sites, there is a need for more affordable housing to accommodate current and future low-income residents prominent in these neighborhoods. To support this, students also reviewed Eugene's Buildable Lands Inventory and Zoning Code. This helped students understand where new developments could be built. The demographic information also helped students understand their site's neighborhood culture, which influenced proposed placemaking elements. Lastly, understanding current economic drivers on this corridor helped student teams better understand and incorporate economic development tactics.

Historical Context

Through its partnership with SCYP, LTD requested that students recommend long-term implementation concepts for key portions of River Road. As LTD expands and improves its bus routes, it would like to be cognizant of its impact on surrounding communities. LTD's collaboration with students allowed timely identification of holistic implementation options for these neighborhoods.

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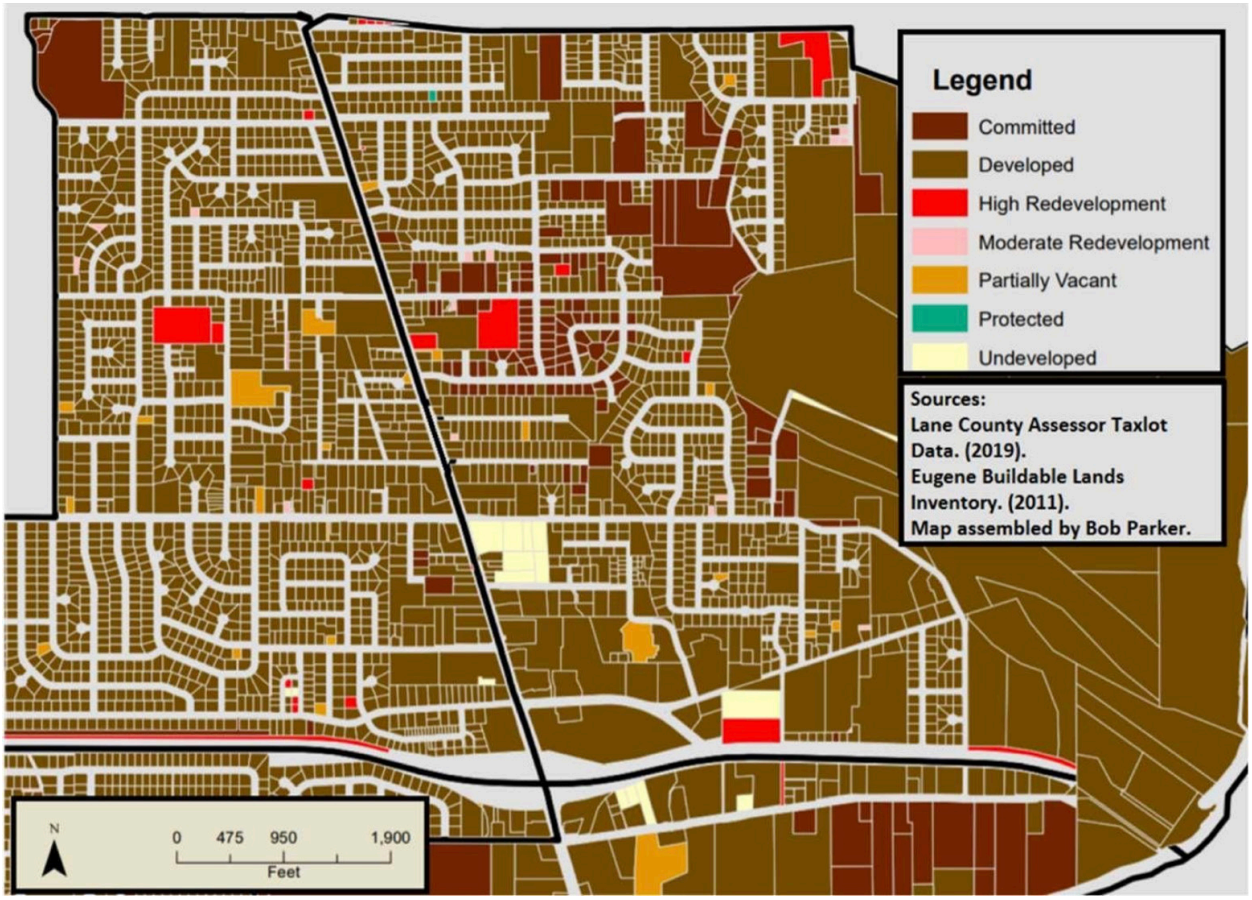

FIG. 1
Buildable lands image

In early November 2019, the students participated in a design charrette, which helped student teams visualize their conceptual ideas and see how viable they would be at each site. Students then formalized their vision and goals, conceptual recommendations, and implementation tactics.

FIG. 2
Design charrette image 1

FIG. 3
Design charrette image 2

Group 1: Santa Clara Transit Station

Allison Ahlert, Jess Downey, John Larson-Friend, Rowan Fairfield

This project focused on long-term neighborhood recommendations for the Santa Clara neighborhood between Hunsaker Lane and Division Avenue. This transit-oriented development centers around the new LTD Santa Clara Transit Station..

INTRODUCTION

LTD has plans to develop the new Santa Clara Transit Station in 2020. The current built infrastructure surrounding the planned station is expected to change as the neighborhood continues to grow, particularly with an anticipated increase in ridership and reliance on public transit. The new transit station will be located on an eight-acre lot but will only occupy about three acres of space, leaving the remaining space for development. Group 1 developed a concept that utilizes the remaining space on this plot to create a hub around LTD's transit station. The concept proposes a transition to a revitalized neighborhood for the rest of the site.

BACKGROUND AND SITE CONTEXT

The planned site for the new LTD Santa Clara Transit Station is located on the corner of Hunsaker Lane, surrounded by single-family homes and surface roads. Santa Clara Square, the commercial shopping center, includes large grocery stores and other retail shops, and is located adjacent to this site.

Using background research, LTD's transportation-focused goals, demographic and zoning information gathered from the US Census data, and local zoning and development code standards, the group developed their concepts and recommendations. Understanding the site's current distribution of income levels, the number of families and individuals below the poverty level, educational attainment, and economic drivers allowed the student team to cater to the community's needs. The group found that this neighborhood houses a large number of low-income and cost-burdened households, indicating the need for affordable housing. Additionally, the team sought to mitigate impediments to safe and equitable transportation in the area.

VISION AND CONCEPTS

The overarching vision for the Santa Clara site begins with the "Schoolhouse Plaza." This vision includes a mixed-income community in which the daily needs of community residents are met within a short distance of their homes. Group 1 added a mixed-use building design at Schoolhouse Plaza and imagined a neighborhood center that includes local neighborhood stores and a community garden adjacent to the transit station. This plan includes a public plaza next to the transit station that acts as a community gathering place for residents and transit riders.

With Schoolhouse Plaza serving as a main hub in this neighborhood, Group 1 also envisioned a revitalized neighborhood constructed around the following concepts.

Concepts included:

1. Mixed-Use Buildings. Group 1 recommends implementing mixed-income, mixed-use development 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. To ensure affordable housing is feasible, a mix of affordable and standard housing types is recommended.

2. Multi-Modal Transit Access. In alignment with City and neighborhood plans, Group 1 proposed multi-modal transportation options for the community. This includes improved transit access and private vehicle transportation as well as new multi-use pathways for bicycles and pedestrians. Group 1 found that many residents in the Santa Clara Neighborhood cannot afford to drive and/or are unable to drive due to age or mobility challenges. It is therefore recommended to focus on improving accessibility through alternate transportation modes.

3. Santa Clara Square Retrofit. The general building footprint of this strip mall remains the same in Group 1's vision. However, the team concept fills the retail centers with local shops and restaurants while surrounding the area with green space and local art. Revitalizing the area and creating a sense of place for community members while enhancing local economic development efforts sets the stage for a vibrant neighborhood.

IMPLEMENTATION

FIG. 4

Group 1 implementation image 1

Group 1 envisions their concept being implemented in four phases over the next 20 years. Below are implementation ideas based on the concepts discussed previously:

1. Collaborate with local affordable housing developers and organizations to develop mixed-income housing. Securing funding and establishing a timeline will support the process of developing housing at Schoolhouse Plaza.

2. Introduce “leading pedestrian intervals” at the traffic lights to give pedestrians and cyclists a three-to-five second head start at crosswalks. This creates more awareness for drivers at the busy River Road intersection.

3. Engage the community in new development decisions, including the addition of affordable housing. Having the community’s support will help to ensure these new developments will be successful and meet the needs of local residents.

FIG. 5
Group 1 implementation image 2

Further detail on project concepts and implementation can be found in Appendix A.

Group 2: Four Corners of River Road

Aqsa Khan, Leslie Harka, Hayley Shapiro, Olenka Wrobel, Adam Tate

Group 2's vision was influenced by the question "Where do we want to go together?" This project focused on reimagining the existing LTD River Road Station and the surrounding neighborhood. This group envisioned a transit-oriented development (TOD) that focuses on accessibility and connectivity for the surrounding family-focused neighborhood through retrofitted shopping centers and reutilized parking lot space.

INTRODUCTION

The River Road Station is currently located at the corner of River Road and River Avenue. LTD plans to sell this plot of land as part of their plan to move the transit station to the Santa Clara Neighborhood. With this information, the group began to generate ideas on how to revitalize the existing River Road Station site, focusing on how to create positive changes at all four corners of the intersection. Group 2 also wanted to promote ridership on the new EmX line while supporting other transportation modes for local residents.

BACKGROUND AND SITE CONTEXT

Group 2's site visit and analysis of the area found that each corner of the intersection is home to a large shopping center with outdated building design and no vibrancy. In addition, the intersection is not conducive to pedestrian or bicycle travel as it is very vehicle-centric. Impediments to safety and accessibility are evident. Group 2's site is also home to North Eugene High School, so the group included safety and placemaking elements for students, as they represent a large population in this neighborhood.

River Road Station is adjacent to the Randy Pape Beltline Highway and is an underutilized plot of land that has potential to be redeveloped into a thriving commercial center. As part of this student group's 20-year vision, the existing station serves as a catalyst site for the rest of the neighborhood, influencing redevelopment and revitalization.

The neighborhood community profile includes a high percentage of cost-burdened, low-income households, which presents the need for affordable housing in the area. The neighborhood surrounding this site is mostly single-family homes, which can be more expensive than multi-family housing developments. With this knowledge, Group 2 was inspired to create the following vision and conceptual recommendations.

VISION AND CONCEPTS

Group 2 developed a vision that engages the community and caters to the local community and culture, creating a sense of place for residents.

The vision begins with transforming the existing River Road Station into a mixed-use building with affordable housing on the top floors and retail shops and restaurants on the first floor. Optimally, this building will adhere to green building standards, making it efficient and sustainable. Surrounding this mixed-use building will be green space and placemaking elements. Bike paths and pedestrian walkways will connect the space to the Willamette River path and the rest of the neighborhood. From there, this group envisions the other three

corners of the intersection gradually following suite and implementing similar infrastructure. This supports the goal of transforming the area into TOD-friendly neighborhood. With a TOD framework, Group 2 incorporated key elements in their recommendations that support LTD's goals of updating the transit system and improving safe and accessible transportation for the community.

Concepts included:

1. Mixed-Use/Multi-Family Housing. The group envisions this development beginning at the existing station site and continuing along the corridor as the neighborhood evolves. The student team understands that single-family housing in the area likely will not change in the near term, but with underutilized asphalt areas at the shopping centers, the group saw an opportunity for mixed-use development.

2. Accessibility and Connectivity. Group 2 improves accessibility and connectivity for all modes of transportation in the area. Accessibility efforts include making transit options accessible for people of all ages and for those with mobility challenges. Group 2 also sought to connect this site more directly to the Willamette River path and make this path better-known to residents, as it is currently difficult to access.

3. Placemaking. One of the main things the group noticed at the site was its lack of vibrancy and sense of place. Placemaking elements include murals completed by local artists, green space for residents to use, and improved signage connecting residents to the river path and retail shops.

IMPLEMENTATION

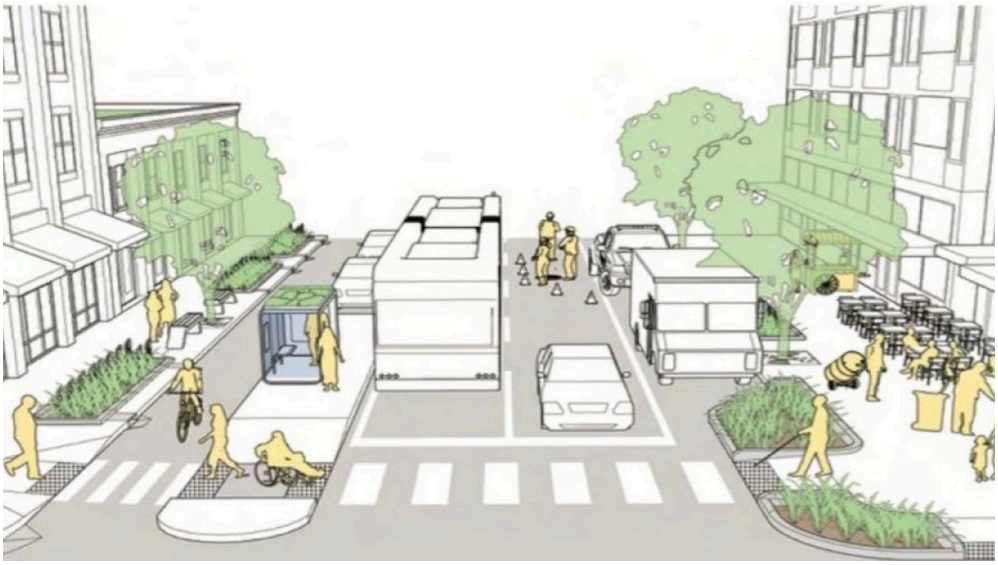

FIG. 6
Group 2 implementation image

Group 2 envisions these concepts being implemented in four phases over the next 20 years. The following are some of the implementation recommendations:

1. Add protected bicycle lanes along River Road. This supports the city of Eugene's plan to implement bike lanes along the corridor. In addition, safer crosswalks at the River Road and River Avenue intersection are important.

2. Move the proposed EmX stop just south of the River Road/River Avenue intersection to make shops and businesses more accessible to people getting off the bus at this stop. Currently, LTD plans to place the EmX stop just north of this intersection.

3. Coordinate with local developers and organizations to create mixed-use development that incorporates affordable housing.

4. Engage the community in decisions about new developments and incorporating the local culture in placemaking elements.

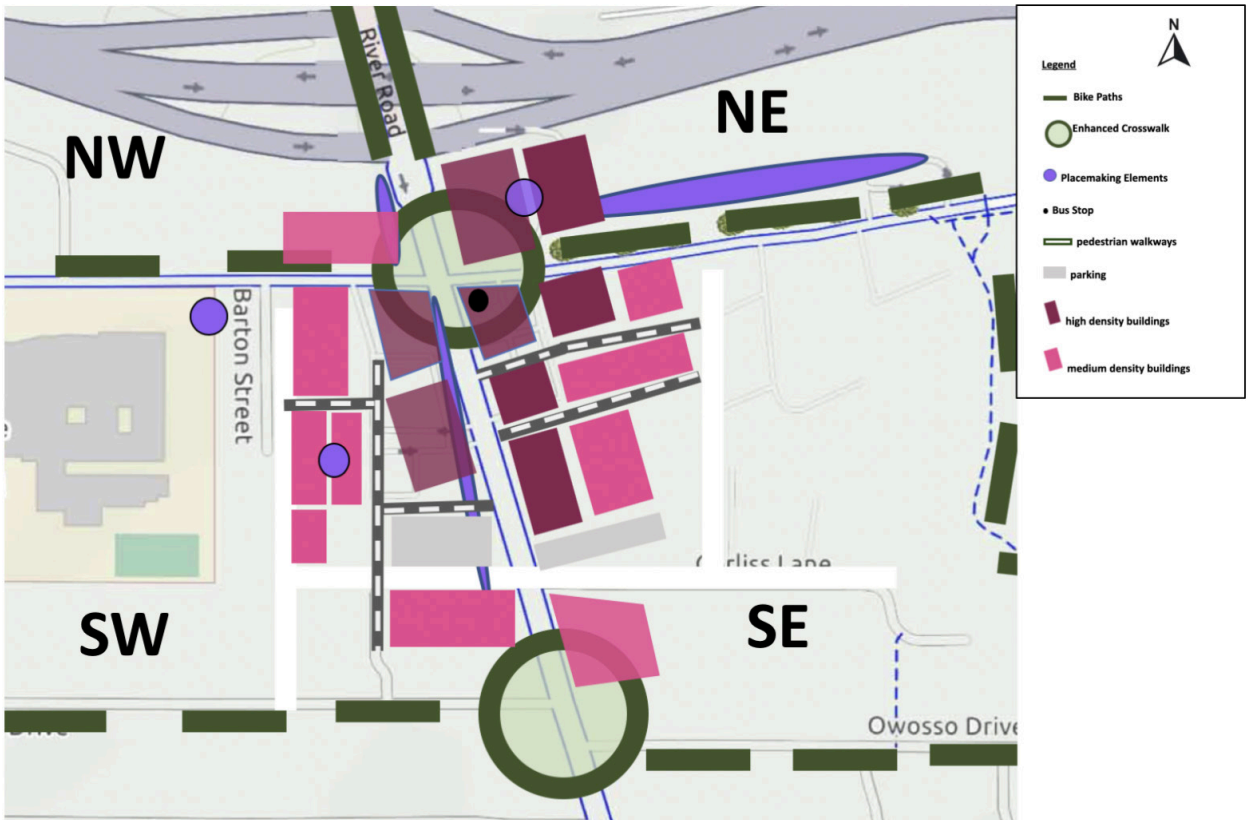

FIG. 7

Group 2 implementation map

Further detail on project concepts and implementation can be found in Appendix B.

Group 3: Co-designing the Lower River Road Neighborhood

Aliza Whalen, Clare Haley, Claire Schechtman, Stephanie Tabibian, Gareth Warr

This project focused on the lower River Road neighborhood near Rasor Park. Within the TOD framework, this group incorporated innovative ideas for revitalizing the area and improving accessibility for community members. A suggested relationship with the Kalapuya people adds an inclusive way to represent the neighborhood's culture and history in this long-term vision.

INTRODUCTION

Group 3 focused on the neighborhood area surrounding the Park Avenue and River Road intersection. Similar to Groups 1 and 2, Group 3 focused on revitalizing and redeveloping the current infrastructure. One of Group 3's key conceptual ideas setting it apart from the other groups is its focus on integrating a stronger relationship with the Kalapuya people. Part of implementing placemaking elements and cultural centers is establishing a tribal community center.

BACKGROUND AND SITE CONTEXT

The lower River Road group based their TOD recommendations on the needs of the community in this area. In partnership with LTD, students focused on Knoop Lane and Park Avenue bus stops. Group 3 analyzed the demographic, housing, and economic characteristics of the community and revealed that the area lacks affordable and "missing middle" housing. Based on US Census data that the group analyzed, this neighborhood has a higher rate of families below the poverty level than the city of Eugene and Lane County. Therefore, affordable housing and accessibility to services became a part of Group 3's proposed plan.

After identifying the site's strengths and weaknesses during the site visit, the team saw an opportunity to utilize Rasor Park and other nearby public land. The team integrated historical connections to the Kalapuya people into their vision and concepts. Such connections can highlight cultural and ecological knowledge. They also found that current zoning provides enough flexibility to allow new housing development. The team noticed a lack of housing density in the area. To support LTD's transit ridership goals, Group 3 saw a need for housing density that supports the TOD framework and LTD's expected ridership increase.

VISION AND CONCEPTS

Of the four sites along the River Road corridor, lower River Road is the closest to the Willamette River. Given its location, the site has greater access to open green space and the greater Eugene area. Group 3's vision utilizes a block pattern with infrastructure recommendations that bring attention to the neighborhood's identity. This vision supports LTD's investment in high-capacity transit by increasing connectivity and establishing a sense of place.

Concepts included:

1. Connectivity. In line with the comprehensive and neighborhood plans, Group 3 advocates for a connected multi-modal transit system. Recommendations include making transit options more accessible and safer for people to use. Among the recommendations are bike lockers to encourage sustainable and active travel, adequate lighting at transit stops to increase safety, and covered waiting areas with seating at transit stops to protect riders from inclement weather.

2. Block Pattern Developments. Group 3 envisions the area on the east side of River Road near the Knoop Lane bus stop being redeveloped into a mixed-use commercial hub. The block pattern indicates different land uses in each block. The image below shows the assigned land use for each block, ranging from mixed-use commercial to housing.

3. Community Economic Development. The area south of Rasor Park is envisioned to include a mixed-use development, increasing neighborhood access and housing density. Activating river-facing storefronts will promote both economic expansion and ecological awareness for the community. Adding medium density housing will help fulfill the need for "missing middle" housing while also bringing more residents to the area. These residents will likely spend time at the proposed retail shops and restaurants, increasing economic activity in the area.

4. Sense of Place. The lower River Road identity is not well-defined. Adding placemaking elements can help establish it. Group 3 suggests increased signage and public art be installed in public places and along pathways. Additionally, the student team recommends engaging with Kalapuya tribal members and Eugene area natives to incorporate indigenous culture and planning practices into the current environment. Group 3 sees a working relationship between federally recognized tribes and the city of Eugene beginning by centering its planning around tribal consultation, enriching the historical and contemporary cultural presence along River Road.

FIG. 8

Group 3 concept image

IMPLEMENTATION

The lower River Road group envisions these concepts being implemented over a 20- to 30-year time period. Implementation recommendations based on the above concepts include:

1. Create a steering committee with local tribes, determining co-design sites and objectives, and collaborating to achieve design goals.

2. Partner with an organization that can assist with housing funding and development.

3. Increase bicycle connectivity to development site and transit stops.

FIG. 9
Group 3 implementation image

Further detail on project concepts and implementation can be found in Appendix C.

Group 4: A Walk Down Hilliard Lane

Melissa Graciosa, Aimee Okotie-Oyekan, Emily Connor, Trevor Ackerman

A Walk Down Hilliard Lane illustrates a long-term vision for this section of River Road that "fosters a connected River Road community through equity." With this vision statement in mind, Group 4 recommended a plan that supports disadvantaged groups and reintegrates historically marginalized populations by enabling access to important services and resources.

INTRODUCTION

"A Walk Down Hilliard Lane" focuses on the neighborhood surrounding Hilliard Lane and the recognized need to reintegrate historically marginalized populations into the community. This student team sought to enable these populations' access to affordable housing, community gathering spaces, employment opportunities, and natural areas while integrating LTD's new transit line and improved infrastructure. Fostering both physical and social connectivity through this process, Group 4 developed a robust conceptual plan and implementation recommendation for their site.

BACKGROUND AND SITE CONTEXT

Group 4's focus on equitable community resources and engagement stems from their site analysis and background research on the demographics of current and past communities living in the area. The group found that, like other sites, the intersection of River Road and Hilliard Lane holds predominantly single-family homes. The River Road/ El Camino del Rio Elementary School is a Spanish-English bilingual school in the neighborhood, suggesting the presence of a Spanish-speaking family population.

Group 4 found that the intersection lacks safe crosswalks, non-compliance with speed limits, and has inconsistent bicycle lanes, creating safety concerns for the neighborhood. Site analysis also revealed a lack of vibrancy and community culture. Group 4's background research revealed current neighborhood demographics and helped the student team understand that these demographics may be attributed to the legacy of restrictive government policy, which institutionalized racism and intolerance in the area. The Hilliard Lane team identified increased income disparities in the neighborhood, a higher percentage of cost-burdened households, an aging population, and decreased racial and ethnic diversity. With these key demographic trends identified, the student team developed their recommendations to support the community and create a welcoming environment for current and future residents.

The team identified a number of strengths and constraints on the site. A lack of connectivity and placemaking translate to a lack of neighborhood vibrancy and illustrate safety concerns for community members. Design interventions may help to transform this neighborhood into a vibrant, inclusive, TOD-centered neighborhood.

VISION AND CONCEPTS

The overarching vision for the Hilliard Lane group is supported by the following slogan created by the student team: "Fostering a connected

River Road community through equity." The group explained their recommendations through a story illustrating "a walk down Hilliard Lane." The story includes their plans for introducing a community center, improved transportation elements, and economic drivers.

FIG. 10
Group 4 site image

Concepts included:

1. Mixed-Use Buildings. Introducing a community center and library in the same building can provide educational and community resources for River Road/ El Camino del Rio Elementary students and for the surrounding community. This can also be a resource for neighborhood residents and LTD transit riders. Additionally, the student team sought to fill the "missing middle" housing by introducing medium density, multi-family housing in the area.

2. Equitable and Safe Transportation. Within the equity framework, Group 4 sought to provide safe transportation for residents and visitors, even with the expected increase in population and transit ridership. The group's primary safety measure is separated bicycle and pedestrian lanes, which minimize contact between vehicles and other modes on the heavily trafficked River Road. A green barrier between River Road and the other travel modes will likely create a safer community and improve the neighborhood's aesthetic quality. . This concept also has potential to engage the community and allow them to participate in designing the creative street design artwork.

3. Food Equity. After identifying disparities in food access, Group 4 developed a plan to add healthy food options by creating The Historic Market. This market would be in a free-standing building that originally housed the McKay Supermarket in the mid-1900s. Repurposing the historic building to provide food and household goods will hopefully enhance the neighborhood's vitality and integrate the site's history. Food and services in and around this Historic Market will be locally sourced, ideally increasing economic development in the neighborhood and reducing residents' reliance on large-scale industrial agriculture.

IMPLEMENTATION/RECOMMENDATIONS

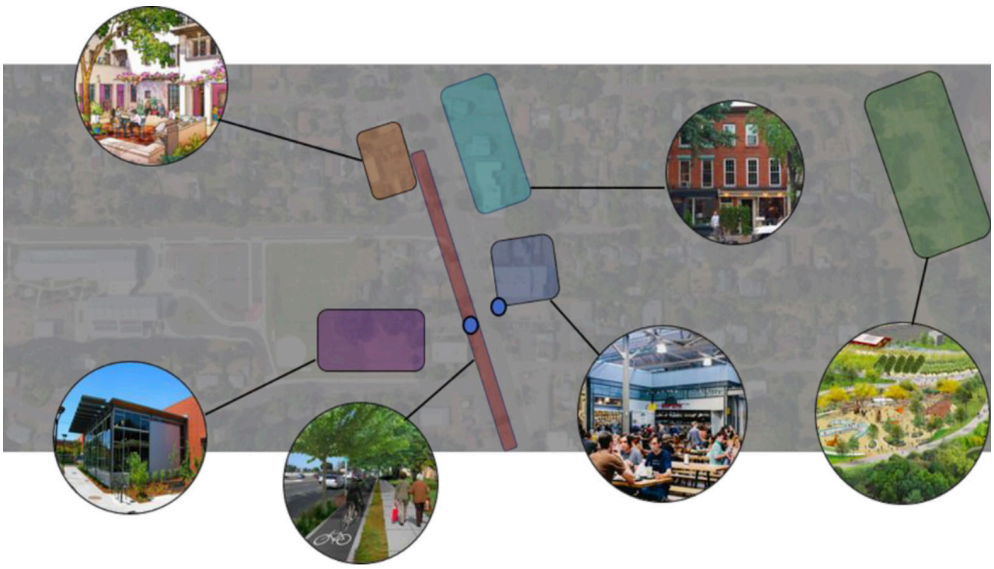

FIG. 11
Group 4 implementation image

The lower River Road group envisions these concepts being implemented over a 20- to 30-year time period through four actionable initiatives:

1. Remove commercial parking requirements in the area to support the TOD framework.

2. Introduce affordable housing options along the LTD transit route that have Inclusionary Housing requirements.

3. Increase public participation during the planning process. Including more surveys on equity issues will help decision makers understand what type of resources the community wants and needs.

Further detail on project concepts and implementation can be found in Appendix D.

Conclusion

The following themes were present in all of the groups' conceptual plans:

1. Mixed-use buildings and affordable housing
2. Accessible and equitable transit options
3. Increased economic development
4. An introduction of cultural placemaking elements

The four student groups produced compelling recommendations that support each of their visions for the historic River Road corridor. With LTD's goal of adapting to the future of mobility, students developed plans that consider accessibility and connectivity. Through this framework, the groups incorporated updated built design and placemaking elements, as well as sustainability measures that focus on current and future River Road residents. Students created long-term conceptual plans for their assigned site and incorporated information gathered through site visits and analysis, background research and analysis, a design charrette, and case study research. The groups came to similar conclusions surrounding a common theme of developing transit-oriented-development to support LTD's proposed transit developments and expected ridership increase.

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Appendix A

Group 1: Santa Clara Transit Station

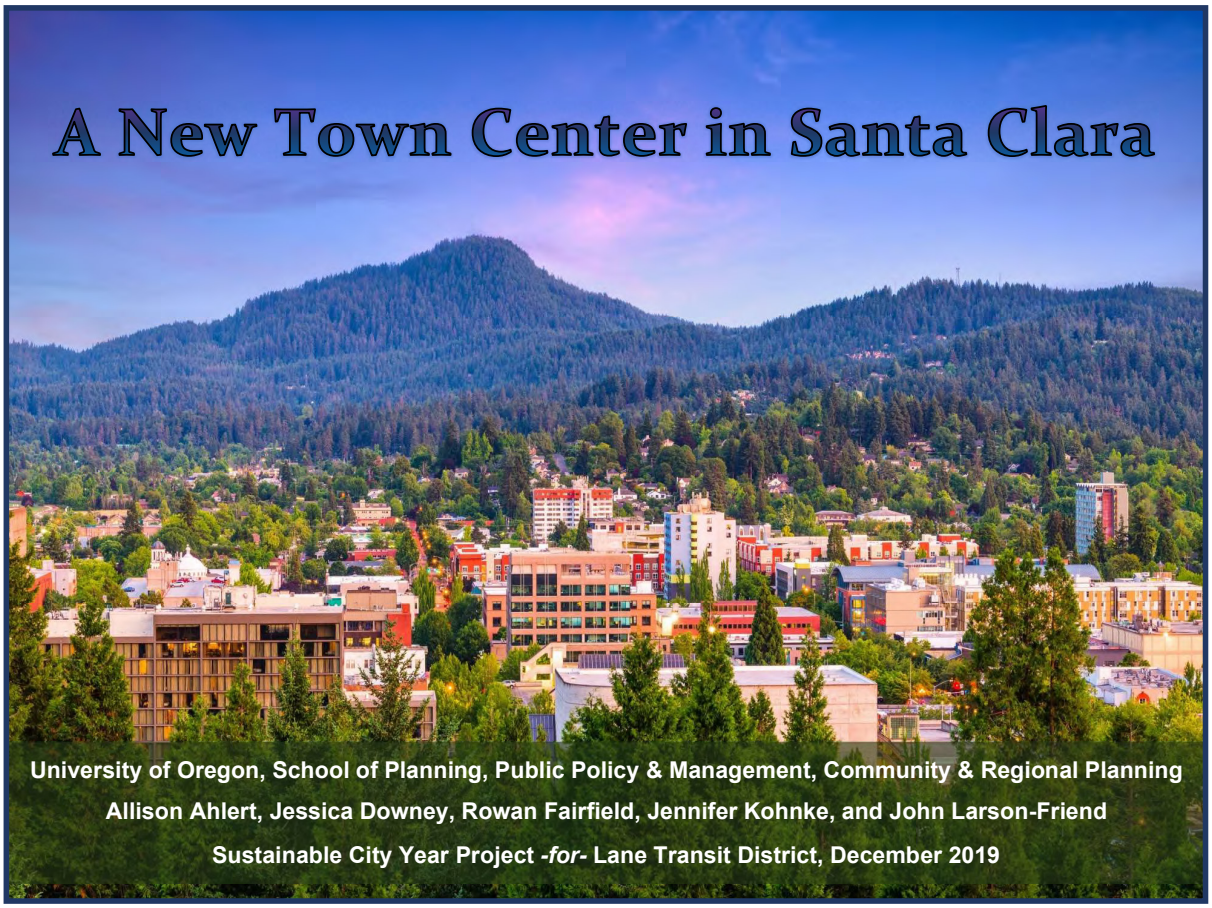


Table of Contents

Executive Summary

Lane Transit District's future plans for expanded service on the River Road corridor provides an opportunity to imagine changes to the area and specific sites along the route. At the northern terminus of a proposed EmX expansion is an eight-acre site owned by LTD, where plans have already been devised to relocate the Santa Clara Transit Station, now served by regular bus service. The new transit station will occupy a little over three acres of the site, leaving a large portion of land available for redevelopment. The site is situated on River Road and Hunsaker Lane, in the heart of Santa Clara neighborhood, and is surrounded by single family homes served by surface streets. The site is also adjacent to a community commercial shopping center called Santa Clara Square that provides groceries, restaurants, and other retail services.

Given an opportunity to serve the Santa Clara community and that of greater Eugene with a redevelopment project, staff reviewed community feedback and planning documents to identify the priority needs of the community. Then staff conducted a research and design process resulting in a proposal for updated use of the site. The proposal includes: a design for the vacant site next to the new Santa Clara Transit Station, a retrofit of the Santa Clara Square Shopping Center, and an infrastructure network to increase pedestrian and bicycle safety.

Vision and Goals

Staff reviewed a number of planning documents which revealed four major goals of the community which could be realized at the site.

- Equity and Safety for Transport Modes
- Neighborhood Economic Development
- Increased Diversity of Housing Types and Creation of Affordable Housing
- Placemaking through Neighborhood Identity

The combination of these goals led to the construct of the project vision: creating a town center based around an equity focused transit-oriented development.

Research Methods

Over ten weeks, staff conducted an extensive site analysis and demographic context study. Neighborhood context from city records and observation combined with demographic data from the US Census identified a lack of housing options at affordable rates and an extreme auto dependency. The immediate area also suffered from a wealth disparity from one side of River Road verses the other, hindering a cohesive identity and creating a division of needs and priorities. Analysis of the physical conditions of the site allowed staff to envision solutions for these problems by optimizing the spaces available.

Center Concept

Design for the site addresses the problems identified during research. For the vacant lot adjacent to the Transit Station, which the team named Schoolhouse Plaza, staff have envisioned a dynamic multi-use space that serves diverse needs of area residents and is welcoming to everyone. A combination of mixed-income housing units, small commercial storefronts, and public gathering spaces will bring the community to the site. References to neighborhood history and community will begin to create a sense of place.

Access to the space will be improved and focused on balancing auto, bicycle, and pedestrian modes. Installation of protected crosswalks, sidewalks and bike lanes, and the addition of an extensive pathway network will allow safer non-auto transport.

These access points will connect the Schoolhouse Plaza, the commercial center, and the surrounding neighborhoods. Santa Clara Square will be transformed from box retail islands in a sea of blacktop into a walkable, activated space steeped in neighborhood context. Shopping streets divide the acres into blocks with residential and commercial uses, and design standards create a cohesive identity.

Implementation Plan

The concept lends itself to incremental construction, beginning with the vacant lot. The mixed-income housing project and framework infrastructure will be constructed first. Crosswalks, bike lanes, and pathways should also be part of the initial construction. Mixed use buildings with commercial spaces and the public plazas will be framed next in order to create usership for the transit station. An overhaul of Santa Clara Square is set further in the future, as it is constrained by the most factors.

The result of this plan is designed to be the creation of a new town center to serve as an economic booster, a supply of affordable housing, and a space accessible to everyone. It will be "a complete and holistic community, a place where neighbors can meet."

Figure 0.01: Retrofit possibilities, Detroit, MI

Source: https://www.modeldmedia.com/devnews/detroit-commercial-corridors-021219.aspx

Introduction

The Sustainable City Year Program, a university-community collaboration, is partnering with Lane Transit District (LTD) for 2019-2020 with a focus on sustainable transportation. Since 2015, LTD has partnered with the City of Eugene to pursue multi-modal transit in five key corridors to meet the needs of existing and future residents. This report focuses on the northmost point of the River Road corridor, Santa Clara Transit Station, and the adjacent neighborhood. Construction is planned to start on the new station in Spring 2020. Ideas were informed by on-site visit, community input, and a survey of local planning documents as well as case studies appropriate to the area.

Santa Clara sits near the edge of Eugene's Urban Growth Boundary. The area is shaped by its agricultural, rural past, and the invention of the automobile. This development has created a lack of pedestrian-friendly and community-oriented streets. Safety is a key issue in the area, which is easily noticed when taking a walk along the busy roadway. River Road acts as a priority thoroughfare for vehicles, ignoring the potential for enjoyment of walking to attain daily needs. Additionally, residents in the area are facing high rates of cost burden, family poverty, and a general lack of affordability. With LTD's plan for expanding EmX, there is potential to redefine the area in a way that promotes community connection to its place and its people, while avoiding displacement of lower-income residents. The empty four-acre site next to the planned Santa Clara Transit Station site as well as the Santa Clara Square further south provide a unique opportunity to create a neighborhood focal point for the community where residents can live, work, and play.

Starting with Schoolhouse Plaza, the team's concept is to create a mixed-income community, where resident's daily needs can be met through mixed-use building design while fostering local neighborhood stores and establishing a community garden adjacent to the transit station. A public plaza placed directly next to the transit station will act as a community gathering space, drawing people in and out of this space. Schoolhouse Plaza will be connected via bicycle and pedestrian ways to the Willamette River bike path to the east, to the neighborhood to the west and to Santa Clara Square further south. Santa Clara Square will mirror Schoolhouse Plaza's design standards with commercial businesses transitioning to more locally owned and operated shops, including addition of green space.

Creating a new town center,
at the heart of Santa Clara!

Background and Context

History of site

The Kalapuya

The Kalapuya people, a blend of thirteen distinct but related communities, lived as hunter-gatherers along the Willamette River for over 10,000 years prior to contact with European-Americans.[1] By 1849, their population dwindled from 15,000 to 600 due to disease outbreaks of malaria and smallpox.[2] Around this time, Joel Palmer, Oregon's first Superintendent of Indian Affairs, was ordered to procure indigenous lands for settlers through treaties and placed their lands into a Donation Land Claim program for settlement.[3] The treaties required the remaining native population to relocate to the Grand Ronde reservation in 1855 without financial compensation for their familial lands.[4]

The Settlers

During the 1840s, pioneers traveled the Oregon Trail and settled in the Willamette Valley for its desirable, resource rich agricultural land and proximity to the Willamette River.[5] The Donation Land Claim program of 1850 provided settlers with 320- or 640-acre plots depending on marital status and by the late 1850s, the area was fully resettled.[6]

In 1862, Eugene Skinner incorporated the City of Eugene.[7] Following this, the community of Santa Clara was founded in 1888 with a land purchase of 36 parcels by Colonel A.J. Straight, who named the area after his California hometown.[8] The area was primarily centered around subsistence farming and orchard production. With the introduction of the Oregon & California Railroad in 1871, subsistence farming transitioned to commercial farming, allowing for export of agricultural products.[9]

[1] Lane Community College. "The Kalapuya: Native Americans of the Willamette Valley, Oregon: Home." *LCC Research Guides*. (October 22, 2019) https://libraryguides.lanecc.edu/kalapuya.

[2] Ibid.

[3] City of Eugene "Eugene's Historic River Road." *River Road History*. (June 22, 2006) https://www.eugene-or.gov/DocumentCenter/View/27106/Eugenes-Historic-River-Road.

[4] Ibid.

[5] Jaleel, Reed, and Galloway Zach. "River Road &Santa Clara Neighborhood Plan: Historical Context and Demographic Analysis." *Envision Eugene, City of Eugene*. (2015). https://www.eugene-or.gov/DocumentCenter/View/36119/RRSC_DemographicsIndicators_2015analysis?bidId=.

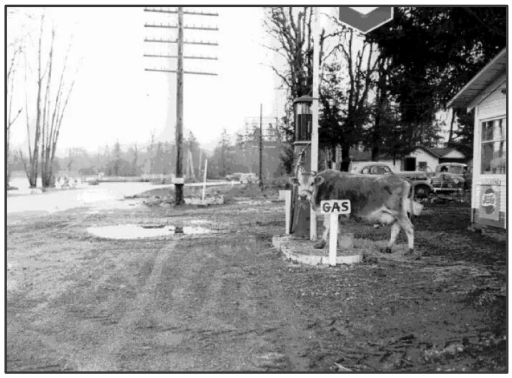
[6] "Eugene's Historic River Road."

[7] Steve McQuiddy. "Eugene." *The Oregon Encyclopedia*. (The Oregon Historical Society, June3,2019) https://oregonencyclopedia.org/articles/eugene/#.Xd7mw3t7kuU.

[8] "Eugene's Historic River Road."

[9] Jaleel, Reed, and Galloway Zach. "River Road &Santa Clara Neighborhood Plan: Historical Context and Demographic Analysis."

Figure 1.01: A cow on flooded and muddy River Road



Source: "Eugene's Historic River Road." *City of Eugene*.

River Road

River Road was originally a section of a Native American trail, emerging as a natural path alongside the Willamette River.[10] In 1846, Jesse Applegate cleared this route for use as an alternative to the Oregon Trail, which became known as the Applegate Trail, while the 14-mile section from Eugene to Junction City came to be called "the river road" by locals.[11]

In 1923, River Road became the Pacific Highway, serving as a primary transportation route from California to Portland.[12] Then, in the 1930s, the road was improved and designated as Highway 99 North.[13] However, this designation did not last for long, as the River Road area was susceptible to frequent flooding due to its low elevation and location near the Willamette River.[14] Highway 99N was moved westward in 1936, just beyond the Southern Pacific railroad tracks, and River Road became a route for local traffic, further enhanced by the personal automobile.[15] Roadway infrastructure fundamentally transformed the area's identity from one associated with the Willamette River to the infrastructure of the highway for transportation. Due to this structural change, the area became less agricultural and more rural suburban with a "checkerboard landscape of homes and farmland."[16] After World War II, development accelerated dramatically, with around 45% of residences built between 1940 and 1959.[17] Further south in Eugene, population surged due to the growing timber industry, doubling the size of River Road-Santa Clara. The neighborhood became dominated by large-scale subdivisions in the 1960s, replacing the groves of hazelnut and walnut trees.[18] Urbanization

[10] Ibid.

[11] "Eugene's Historic River Road."

[12] Jaleel, Reed, and Galloway Zach. "River Road &Santa Clara Neighborhood Plan: Historical Context and Demographic Analysis."

[13] "Eugene's Historic River Road."

[14] Ibid.

[15] Ibid.

[16] Reed Jaleel and Galloway Zach, "River Road & Santa Clara Neighborhood Plan: Historical Context and Demographic Analysis."

[17] Ibid.

[18] "Eugene's Historic River Road."

continued and in the late 1980s tensions arose between the community and the City of Eugene related to the City's requirement for properties to be annexed in order to receive sewer services.[19] Residents questioned the legality and legitimacy of this arrangement, which has led to the jurisdictional patchwork of city and county land within the community.

Santa Clara School

The eight-acre site at the intersection of Hunsaker Lane and River Road was the location of the former Santa Clara School.[20] Oregon was the first territory to designate land in every county and levy taxes to create educational facilities and schools. Santa Clara School was one of the first and was originally a log cabin schoolhouse situated a half mile west of the eight-acre site. In 1904, it was relocated to the eight-acre site and turned into a larger two-room building. The school continued to evolve and increase in size to meet the needs of the community. By 1931, it was a traditional public school serving elementary through high school students. It remained in use until the early 2000s when it was closed, and later burned down and destroyed in 2005.

Figure 1.02: The Santa Clara School, 1907

Source: "Eugene Region - c.1907". Lane County History Museum.

[19] Ibid.

[20] "Eugene's Historic River Road."

Planning Problems and Team Process

Team 1 independently visited the site to observe details and take photos. A team member sketched locations of current major retail businesses along River Road and at the River Road/Hunsaker Lane intersection. Ninety-nine photos were taken of the site extending from all four corners of the River Road/Hunsaker Lane intersection south to Green Lane. Some of these photos would be later used as background layers for proposed design renderings but most served to provide the team members with context for opportunities and constraints.

The afternoon of October 22, 2019, Team 1 met to share observations and key findings about the site. These observations included climate and temperature, sunlight and shadow effects, traffic congestion, and traffic noise levels. The team also listed existing considerations, opportunities, constraints, vision and goals, and brainstormed potential 5-year, 10-year, and 20-year development projects based on review of prior neighborhood plans compiled by the River Road and Santa Clara Neighborhood Associations. In addition to brainstorming these observations, Team 1 drew rough maps depicting the opportunities and constraints, circulation, and existing conditions.

In class on Wednesday, October 23, 2019, the four teams met individually with UO PPPM Instructor Kaarin Knudson serving as project consultant to brainstorm and discuss potential opportunities and constraints of each respective site. Kaarin provided suggestions and feedback.

Figure 1.03: The eight-acre site in October 2019

On Monday, November 4, 2019, Team 1—along with the other teams—met again with Kaarin for the class activity design charrette. From this exercise came several preliminary sketches of how the eight-acre site could potentially be redesigned.

Figure 1.04: Design charrette activity, November 2019

In this configuration layout, mixed-use structures are represented by the red construction paper. They are situated at all four corners of the River Road/Hunsaker Lane intersection and line both sides of the River Road corridor from Hunsaker Lane to south of Green Lane. New built structures in the existing commercial shopping center, "Santa Clara Square,"—as well as the proposed community center plaza in the eight-acre site—are shown in orange construction paper. Proposed green spaces are in green and new residential housing that transitions to existing single-family housing to the east of the eight-acre site are shown using blue construction paper.

Following classes on Wednesday, November 6, 2019, Team 1 met to discuss their proposed site redesigns and to divide up tasks. From this meeting, Team 1 narrowed down the redesign concepts and described the feeling they wanted visitors to have when they entered the eight-acre site redesign. The group narrowed the concepts down to two: a "food-truck forest" and "snack-mix" option. What the team called "snack-mix" option—meaning, a little something offered for everyone—consisted of mixed-use buildings with a public gathering space, affordable housing, and green space at a small neighborhood scale. In contrast, "food truck forest" would be built design and infill structures with green space or open space; in the green space, there would be tree canopies, lawns, and would have an intimate feel). It would provide an opportunity for later infill and would be low-density in its initial phase.

By Wednesday, November 13, 2019, Team 1 had refined their design concepts for an informal presentation regarding the needs of the site. Part of that process was looking to other plazas for a "feels like" experience in the space. Some examples were a pedestrian walkway in Charlottesville, Virginia, and Quincy Market in Boston. In addition, one of the team members sketched a variety of different concept ideas for the vacant eight-acre site. The final site design was closely based on this.

Over the three weeks, concepts were refined as research came to light. The highly collaborative team created an overwhelming amount of input on both the presentation and final report. Finally, the amount of information was streamlined to best support and present the concept.

Plan Review for Santa Clara Transit Station Site

Shared goals in previous and current plans

Starting with the LTD Moving Ahead plans for the new Santa Clara Transit Station as a baseline, Team 1 delved into the information gathered by the City of Eugene, Lane County, and the River Road Community Organization. The team reviewed five planning documents:

- Envision Eugene, 2017
- River Road Santa Clara Neighborhood Plan, 2019
- River Road Corridor Study Workshop, 2019
- River Road Santa Clara Neighborhood Facilities Plan, 1987
- Hunsaker Beaver Corridor Plan, 2017

The review yielded four recurring themes used to guide its concept:

- Safety for Multi-Modal Transit
- Economic Development
- Affordable Housing
- Sense of Place

Appendix A contains a list of selected Goals from the River Road Santa Clara Neighborhood Plan.

In redesigning the proposed site, the team reflected on balancing the need for businesses, infill, and other structural needs with open space—but particularly a communal space that is welcoming to all. The idea of being welcome to all community residents is addressed in the River Road Santa Clara Neighborhood Plan.[21] This Plan also states the demand for clarifying neighborhood identity, creating a vibrant community, the need for vegetation, and for programming. The final concept intends to address all of the goals through a combination of infrastructure, land use, and design.

Pathways and Access

Goal 9 in the River Road Santa Clara Neighborhood Plan is "make the Willamette River a vital, healthy and accessible part of the neighborhoods."[22] Santa Clara neighborhood is cut off from the river where the Knife River industrial site begins, just north of the Beltway. An opportunity exists to improve pathway connectivity to the trails near the south banks, and to connect to public land to the north of Knife River. According to the Corridor Study, one meeting discussed "the lack of good walking and biking routes, not just to businesses but to attractors around the area, including the Willamette River and trail."[23] It seems clear that both the public and city desire to improve access to the Willamette River.

[21] City of Eugene. *River Road Santa Clara Neighborhood Plan*. (2019). p. 22 https://www.eugeneor.gov/DocumentCenter/View/47425/August-2019_Draft-Action-Items.

[22] Ibid.p. 12

[23] City of Eugene. *River Road Corridor Study*. (2019). p. 9. https://www.eugeneor.gov/DocumentCenter/View/45620/2019-0314_RiverRoad-Workshop1Summary_Final_SERA.

Safety and Multimodal Transit

Safety was a steady concern throughout all the reports and was primarily centered on the design of transportation infrastructure regarding cyclists, pedestrians, and children. The River Road Santa Clara Neighborhood Plan also expressed the need for safe crossings for its disabled residents. In Lane County's Beaver-Hunsaker Corridor Plan, the need for non-auto transport is explicit: "Not only is driving too costly for many families, it is not an option for those who are too young or are mobility challenged and cannot drive. Low-cost travel options like public transportation, biking and walking need to be made equally available to area residents to remove the significant barrier of access to a safe, reliable multimodal transportation system."[24]

The River Road Santa Clara Neighborhood community plans to partner with the City of Eugene on applying the Vision Zero Action Plan. This is significant as there was a recent pedestrian death at the intersection of Hunsaker and River Road.[25] The highest frequency of crashes on the River Road corridor between 2009 and 2013 occurred in the area reaching from the Randy Pape Beltline to the intersection with Hunsaker Rd.[26] Clearly, addressing the safety concerns of residents is critical for the City of Eugene to reach their goal of tripling the percentage of trips made by cyclists, transit users, and walkers.[27]

Improving multimodal infrastructure and decreasing auto-orientation will encourage non-auto transport. This is the key to achieving numerous community goals, like improved walkability and livability of neighborhoods, and decreased nuisances like air pollution and noise.[28]

Sense of Place and Economic Development

Each plan emphasized place-making in terms of making walkable neighborhoods and vibrant, active centers. For the River Road Santa Clara Neighborhood Plan, place-making was envisioned as limiting commercial development, identifying historic and architectural structures to safeguard and creating "20-minute neighborhoods."[29] The City of Eugene defines 20 Minute Neighborhoods as, "a vibrant mix of commercial and residential uses all within an easy walk."[30] Envision Eugene's definition is nearly identical, though with one key difference: affordability — "creating walkable, compatible and affordable neighborhoods and a beautiful, active and prosperous downtown and key corridors."[31] Both plans highlight fostering smaller, locally owned businesses. Envision Eugene defines neighborhood vitality goals to

[24] Ibid.p. 6

[25] Ibid.p. 30

[26] Lane County. *Beaver-Hunsaker Corridor Plan*. (2017). p. 29. https://lanecounty.org/UserFiles/Servers/Server_3585797/File/Government/County%20Departments/Public%20Works/Engineering%20and%20Construction%20Services/Transportation%20Planning/Beaver%20Hunsaker/xFinalBeaverHunsakerPlanAugust2017.pdf#page=7&zoom=auto,-36,409 .

[27] City of Eugene. *Envision Eugene Comprehensive Plan*. (2017). p. 21. https://www.eugene-or.gov/DocumentCenter/View/37261.

[28] City of Eugene. *River Road Santa Clara Neighborhood Plan*.

[29] City of Eugene. *River Road Santa Clara Neighborhood Plan*. p 18-20

[30] City of Eugene. 'What is a 20-minute Neighborhood.' https://www.eugene-or.gov/1216/What-is-a-20-Minute-Neighborhood.

[31] City of Eugene. *Envision Eugene Comprehensive Plan*. (2017) p 27

"recognize the vital role of commercial facilities that provide services and goods in complete, walkable neighborhoods throughout the community. Encourage the preservation and creation of affordable neighborhood commercial space to support a broad range of small business owners across all neighborhoods."[32]

The River Road Santa Clara Neighborhood Plan is focused on a desire for improving neighborliness, community identity, and promoting the community's economic stability.[33] The Neighborhood Plan claims that fostering a sense of place can be an economic driver. Goal 1.3.3 identifies branding as a strategy to promote local business, "Use neighborhood brand and network to create a visible 'buy local' campaign that leverages collective advertising and neighborhood identity."[34] It also highlighted a need for youth education, community gardens and wanted to brand itself as the 'River and Garden District' by "[encouraging] actions on residential, commercial, and public properties that enhance food and energy production, water storage and conservation, and social interaction on site."[35] The River Road Santa Clara community appears to remain consistent on many values since the 1987 River Road Santa Clara Urban Facilities Plan, even regarding walkability: "New commercial development must be within walking and biking distance if population is greater or equal to 2000."[36]

Housing

Plans agreed that affordable housing was needed for all income levels. The River Road Santa Clara Neighborhood Plan addressed this by requiring inclusionary zoning in new developments, maintaining existing, and adding new rental housing, as well as creating a process for infill development.[37] However, during the River Road Corridor Study Workshop, strong emphasis was placed on the need to transition from medium to low density residential areas to maintain the character of the neighborhood. There was strong support for increasing "missing middle" housing stock, such as multifamily units, but for these to be placed in new neighborhood centers with nearby access to transit and commercial businesses along the River Road corridor.[38] Inconsistency was noted between community members present at the workshop and their community's vision goals regarding residential infill. "Towards the end of the workshop, the team began to have conversations with the community about suitability of different infill housing types in residential areas and how development types and scales would transition between Neighborhood Centers and predominantly single-family areas. This conversation will continue through the Corridor Study and

[32] Ibid.p 19

[33] City of Eugene. *River Road Santa Clara Neighborhood Plan*. p 1, 3, 21

[34] City of Eugene. *River Road Santa Clara Neighborhood Plan Draft Economic Development Vision Statement.* (2019) p. 1 https://www.eugene-or.gov/DocumentCenter/View/47480/RRSC-DRAFT-Economic-Development-August-2019.

[35] City of Eugene. *River Road Santa Clara Neighborhood Plan*. p 16

[36] City of Eugene. *River Road Santa Clara Urban Facilities Plan*. (1987). p 37 https://www.eugene-or.gov/DocumentCenter/View/41514/River-Road-Santa-Clara-Urban-Facilities-Plan.

[37] City of Eugene. *River Road Santa Clara Neighborhood Plan*. p 17

[38] City of Eugene. *River Road Corridor Study*. p 13

other efforts by the City to address housing needs."[39] This trend was true even in 1987 as demonstrated in the River Road Santa Clara Urban Facilities Plan, which emphasized increasing housing stock variety and medium residential zoning near transit and commercial areas, as well as being sited near parks, schools and open spaces.[40] There is a definite pattern of recognizing need for affordable housing for all income levels,

How the neighborhood is affected by the installation of a new transit center and LTD's planned improvements to transit service will depend on how changes are implemented. The blank slate of four acres on the lot adjacent to the future Santa Clara Transit Station represents an enormous opportunity to improve the neighborhood. Through a review of these planning documents, Team 1 identified the main concerns of planning administrators and community members and applied them to a concept of a new Santa Clara town center.

Figure 1.05: Hunsaker Lane in October 2019

Figure 1.06: The River Road corridor in October 2019

[39] Ibid.p. 4

[40] City of Eugene. *River Road Santa Clara Urban Facilities Plan.* p 32-33

10

Background and Context

Demographic & Economic profile

Purpose & Methods

This section establishes a demographic, economic, and housing profile for the Santa Clara neighborhood, based on the Census Tracts 23.01 (on the east side) and 24.04 (on the west side), and contrasts these two Tracts with Eugene, Lane County and Oregon. The purpose of this analysis is to aid criteria establishment and guide decision-making in building concepts for development It covers trends in:

- Population change as well as projected future growth, Hispanic population, family poverty, and change in median household income from 2010 to 2017.
- Shift in employment and industry concentration from 1970 to 2011.
- Housing mix, tenure, cost burden, median rent, and median house value from 2010 to 2017, as well as projected housing needs.

. Methods utilized in this analysis include:

- Changes in population size by number and percent, population projection and housing needs projection, Hispanic population, family poverty, and median household income.
- Changes in housing tenure, units in housing structure, percent of cost-burdened households, housing value-to-income ratio and rent-to-income ratio.

Population Profile

Eugene's population is growing, while Santa Clara's is declining.

From 2010 to 2017, Oregon grew 5.1%, Eugene grew 4.5% and Lane County grew 3.3%, while the two tracts a experienced net population loss of 1.3%.[41] The City of Eugene is planning for an increase of 34,000 new residents between 2012 and 2032 based on Portland State University's population projection.[42] Population growth has been attributed to immigration from other parts of the country and Eugene is the third largest city in Oregon.[43]

Hispanic population is trending similarly.

Santa Clara, Eugene, Lane County, and Oregon are majority white. From 2010 to 2017, the Hispanic population has grown fastest in Eugene and Oregon at 2% while Tract 24.04 actually experienced a 3.5% decline. The Hispanic population in Tract 23.01 grew marginally at 0.4%. Tract 23.01 has a nominally higher percentage

[41] Appendix C: Table 1. Population Change from 2010 to 2017 for Santa Clara, Eugene, Lane County and Oregon.

[42] "Housing." *City of Eugene*. Accessed November 22,2019. https://www.eugene-or.gov/770/Housing.

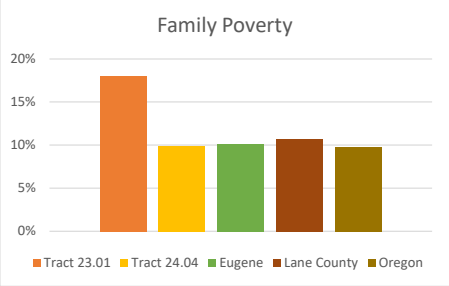
[43]Wihtol, Christian. "Eugene Growing, But Still No. 3." *The Register Guard.* May 26, 2017. http://projects.registerguard.com/rg/news/local/35614158-75/latest-population-stats-peg-eugene-up-1.9-percent-from-2015-to-2016-springfield-up-1.6-percent.csp.

2

Background and Context

of Hispanic residents compared to Eugene and Lane County. It is higher than Tract 24.04, with 10% and 6.5%, respectively.[44]

Figure 1.07: Family Poverty by percent in Santa Clara, Eugene, Lane County, and Oregon in 2017



Source: ACS 2017 (5-Year Estimates), Table: A13002.

Despite a 10.2% increase in median household income, households living in Tract 23.01 remain more financially constrained compared to the surrounding region.

The median household income in this tract is $45,040, which is about $2,000 less annually compared to Eugene and Lane County and over $12,000 less compared to neighboring Tract 24.04 and Oregon. From 2010 to 2017, Tract 23.01 experienced a net loss of $1,627 in median household income compared to Eugene while Tract 24.04 experienced a net gain of $179 compared to Eugene.[45]

Families in Tract 23.01 are twice as likely to live in poverty compared to neighboring Tract 24.04 as well as Eugene, Lane County and Oregon. The family poverty rate in Tract 23.01 is 18.0% while it is 9.9% for Tract 24.04, 10.1% for Eugene, 10.7% for Lane County, and 9.8% for Oregon.[46]

[44] Appendix C: Chart 1. Hispanic Population Percent Change from 2010 to 2017 in Santa Clara, Eugene, Lane County, and Oregon.

[45] Appendix C: Table 2. Change in Median Household Income from 2010 to 2017 for Santa Clara, Eugene, Lane County, and Oregon.

[F]Figure 1.07. Family Poverty by percent in Santa Clara, Eugene, Lane County, and Oregon in 2017.

Economic Profile

Following national trends, employment in Oregon has been shifting from manufacturing and natural resource-based industries to the service sector since the 1970s.47

Historically, Oregon's strongest industry has been forestry, particularly in natural resource-based manufacturing. Employment in the service sector has increased from 19% in the 1970s to 45% in 2011 while manufacturing decreased from 18% to 10% during this time period.[48] Additionally, small business plays a significant role in Oregon's employment pool, accounting for over 50% of total employment since 1996.[49] However, employees of small business typically earn less compared to the statewide average. In 2009, small business employees earned $33,977 annually, which is over $10,000 less compared to the state average of $45,814.[50]

Housing Profile

Housing stock remains predominantly single-family overall, though it is greatest in Tract 24.04.

Tract 24.04 has the highest percentage of single-family detached units, accounting for 74% of total housing stock. Census tract 23.01 contains 11% fewer single-family, detached homes; 10% more 2-unit structures; and 7% more mobile homes. Because of university student housing, Eugene has a lower percentage of single-family, detached homes at 53% and a higher percentage of structures with three or more units at 31% compared to the surrounding region. Additionally, housing stock has not increased significantly in Tracts 23.01 and 24.04, with only 80 units added since 2010. Most homes added were single-family, detached units.[51]

[47] "Eugene Economic Opportunities Analysis." *ECONorthwest.* Accessed November28,2019. https://www.eugene-or.gov/DocumentCenter/View/30452/EconomicOpportunitiesAnalysis_Final_Dec_1_2016.

[48] Ibid.

[49] Ibid.

[50] Ibid.

[51] Figure 1.09. Change in Total Housing Units in Santa Clara, Eugene and Lane County from 2010 to 2017.

Figure 1.08: Units in Housing Structure in Santa Clara, Eugene, Lane County and Oregon in 2017

	Tract 23.01	Tract 24.04	Eugene	Lane County	Oregon
1-unit, detached	63%	74%	53%	62%	64%
1-unit, attached	7%	10%	8%	6%	4%
2 units	11%	1%	3%	3%	3%
3 or more units	9%	12%	31%	20%	20%
Mobile home	10%	3%	4%	9%	9%

Source: ACS 2017 (5-Year Estimates), Table: B25024.

Figure 1.09: Change in Total Housing Units in Santa Clara, Eugene and Lane County from 2010 to 2017

	Tract 23.01	Tract 24.04	Eugene	Lane County
2010 Total Units	**1,565**	**1,706**	**69,146**	**154,121**
1-unit, detached	125	104	2,394	4,909
1-unit, attached	59	-88	-1,111	-160
2 units	-138	87	334	184
3 or more units	32	-54	1,675	1,676
Mobile home	-17	-30	-662	-375
Total change	**61**	**19**	**2,630**	**6,234**
2017 Total Units	**1,626**	**1,725**	**71,816**	**160,440**

Source: ACS 2010, 2017 (5-Year Estimates), Table: B25024.

Projected Shift in Housing Stock

Based on Portland State University's population projection of 34,000 new residents between 2012 and 2032, the City of Eugene determined that an additional 15,100 new homes would be needed, consisting of 55% single-family and 45% multi-family.[52] Based on total population from the 2017 ACS (5-year estimates), Tracts 23.01 and 24.04 together account for approximately 5% of Eugene's population. If the population continues to remain 5% of Eugene's population, an increase of 1,700 people in this area would be expected over the next 20 years, which equates to 750 new homes. To achieve a shift in the housing mix of 3%, 23% of the 750 new housing units built would need to be multi-family units, while single family units would comprise the other 77% of housing units.

Figure 1.10: Projected Shift in Housing Stock in Santa Clara from 2012 to 2032

	Eugene		**Santa Clara Neighborhood (Tracts 23.01 and 24.04)**	
New Homes Needed	15,100		750	
	Single-family	Multi-family	Single-family	Multi-family
Housing Mix (as of 2012)	59%	41%	91%	9%
SHIFT in HOUSING STOCK MIX	↓ 1%	↑ 1%	↓ 3%	↑ 3%
New Mix (2032)	58%	42%	88%	12%
REQUIRES				
New Homes to build, percent (2012-2032)	55%	45%	77%	23%
New Homes to build, units (2012-2032)	8,305	6,795	***575***	***175***

[52] Ibid.

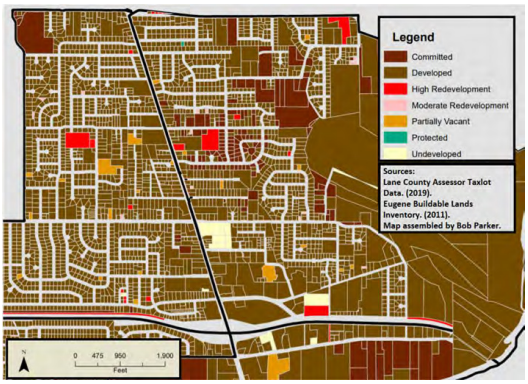
Buildable Lands Inventory and Housing Supply

It is clear that a vast majority of land in Santa Clara is not available for development or redevelopment. The eight-acre site is the largest undeveloped parcel, and being on River Road and Irving Road, it is in an ideal location to create housing.

In order to meet housing needs, some land will need to be redeveloped. The commercial shopping center, Santa Clara Square, provides this opportunity. As a strip mall, the structure of this shopping center is outdated and probably will not survive changes in use and preference, looking twenty years into the future. If it becomes financially unviable, a retrofit is appropriate. This would open up the 32-acre site to a mix of uses, including residential. The entire projected need of multi-family units could easily be placed there.

Although current trends indicate that a far greater number of single-family dwellings will be needed, the opportunity for redeveloping those neighborhoods is much lower. The market may provide some single-family units, but the planning goals of the City and Neighborhood do not support prioritizing these. A future more in line with community goals of walkability and more affordable housing can be reached by focusing on denser, multi-family housing around the EmX corridors.

Figure 1.11: Taxlots by Development Status, 2019

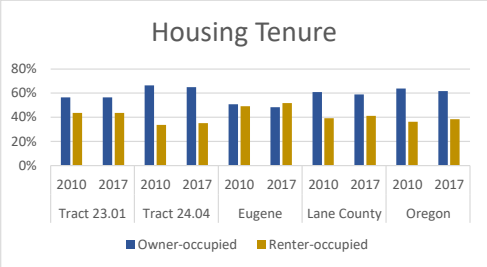


Sources: Lane County Assessor Taxlot Data (2019)
Eugene Buildable Lands Inventory. (2011)

Houses in Tract 24.04 are more likely to be owner-occupied compared to the surrounding area and have a greater divide between owner- and renter-occupied housing.

In Tract 24.04, 65% of houses are owner-occupied compared to 35% renter-occupied. Housing in neighboring Tract 23.01 is 56.4% owner-occupied and 43.6% renter-occupied. Eugene has the highest percent of renter-occupied units at 51.7%. The percent of renting and owning households has remained relatively unchanged since 2010.

Figure 1.12: Housing Tenure in Santa Clara, Eugene, Lane County and Oregon from 2010 to 2017



Source: ACS 2010, 2017 (5-Year Estimates), Table: A10060.

Over 30% of households are cost-burdened in each region, but Eugene has a higher number of cost burdened households.

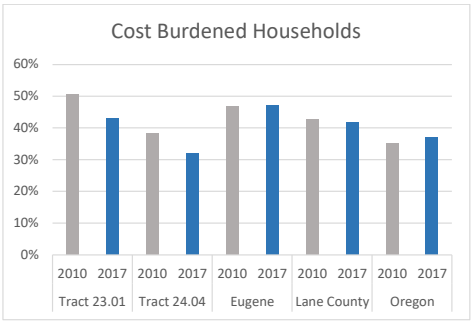
A cost burdened household is defined as a household spending greater than 30% of their income on housing, while a severely cost burdened household spends more than 50% of their income on housing.[53] From 2010 to 2017, the percent of cost burdened households declined by 14.2% in Tracts 23.01 and 24.04, while the percent has remained relatively unchanged in Eugene, Lane County and Oregon, accounting for at least 35% of the population in each studied location.

In 2017, 47% of households in Eugene are cost burdened, which is the highest percent compared to the other regions. Census tract 24.04 has the lowest percent of cost burdened households at 32%, while neighboring tract 24.04 is 10% more likely to be cost-burdened.[54]

[53] "Many Households Burdened by Housing Costs in 2017." *Joint Center for Housing Studies. Harvard University.* (2019) https://www.jchs.harvard.edu/son-2019-cost-burdens-map.

[54] Figure 1.13, Cost Burdened Households in Santa Clara, Eugene, Lane County and Oregon from 2010 to 2017.

Figure 1.13: Cost Burdened Households in Santa Clara, Eugene, Lane County and Oregon from 2010 to 2017



Source: ACS 2010, 2017 (5-Year Estimates). Tables: A18002, A10049, and A10051.

According to the Joint Center for Housing Studies of Harvard University 2019 report, *The State of the Nation's Housing*, renters nationwide are more likely to be cost burdened compared to homeowners. In Eugene, 54% of renters are cost-burdened and of these, 31% are severely cost burdened.[55] 30% of homeowners are cost burdened and of these, 13% are severely cost burdened.[56] These percentages have remained relatively unchanged since 2007.[57]

This report also found that low-rent stock has declined significantly since 2011 across the US. In Eugene, the number of rental units charging under $800 declined by 26% and the number of low-income renters declined 12.6%.[58] Coupled with the 34.9% increase of land price in Eugene, these factors could only contribute to the 32% increase homelessness in 2019 as measured by Lane County's 2019 Point in Time Count.[59]

[55] "Many Households Burdened by Housing Costs in 2017." *Joint Center for Housing Studies.Harvard University*.

[56] Ibid.

[57] Ibid.

[58] "The Low-Rent Stock in Most Metros Has Declined Substantially Since 2011." *Joint Center for Housing Studies. Harvard University*, 2019. https://www.jchs.harvard.edu/son-2019-low-rent-units-map.

[59] "2019 Point in Time Count." Point in Time Homeless Count. *Lane County*, May2019. https://www.lanecounty.org/UserFiles/Servers/Server_3585797/File/HSD/FINAL 2019 PIT COUNT report ver 1.0.pdf.

Median rents are rising faster than median household income in each region, except for Tract 23.01 where it declined by 1%.[60] Despite this, households in Tract 23.01 spend more of their income on rent compared to any other region studied. Rent-to-income ratio in Tract 23.01 is 27%, while Tract 24.04 has the lowest ratio at 21%.[61] Rent-to-income ratio rose the greatest in Tract 24.04 at 3% and increased by 2% in Eugene, Lane County, and Oregon respectively.

Figure 1.14: Change in Rent-to-Income Ratio in Santa Clara, Eugene, Lane County, and Oregon from 2010 to 2017.

Rent-to-Income Ratio	2010	2017
Census Tract 23.01	28%	27%
Census Tract 24.04	18%	21%
Eugene	22%	24%
Lane County	21%	23%
Oregon	19%	21%

Source: ACS 2010, 2017. Tables: A18009, A14006.

Houses in Eugene are more expensive compared to the surrounding region. Eugene has the highest value-to-income ratio in the region. Median household income earners in Eugene must spend 5.42 years of their income to purchase a home. This is 1.75 years more than households in Tract 24.04, which have the lowest housing value-to-income ratio at 3.67 years.[62] This indicates a higher median household income and a lower median house value in this area. Between Tracts 23.01 and 24.04, houses in Tract 23.01 cost 1.23 more years of median household income. From 2010 to 2017, housing value-to-income ratio experienced little change.

Figure 1.15: Change in Housing Value-to-Income Ratio in Santa Clara, Eugene, Lane County and Oregon from 2010 to 2017

Housing Value-to-Income Ratio	2010	2017
Tract 23.01	4.88	4.90
Tract 24.04	4.16	3.67
Eugene	5.89	5.42
Lane County	5.36	4.88
Oregon	5.13	4.73

Source: ACS 2010, 2017. Tables: A10036, A14006.

[60] Figure 1.14. Change in Rent-to-Income Ratio from 2010 to 2017 in Santa Clara, Eugene, Lane County, and Oregon.

[61] Ibid.

[62] Figure 1.15. Housing Value-to-Income Ratio from 2010 to 2017 in Santa Clara, Eugene, Lane County, and Oregon.

Regional trends & local context

Lane County and Eugene

Lane County is the fourth largest county by population in Oregon, with around 380,000 people. The county sits at the southernmost part of the Willamette Valley, roughly 100 miles south of Portland. At 4,722 square miles, Lane County stretches from the Oregon Coast in the west to the Cascade Mountains in the east.

With roughly 140,000 residents, Eugene is the largest city within the county and the second or third largest in the state, competing with Salem for the title year by year. According to Portland State University's 2012 population projection, an addition of 34,000 new residents are expected in Eugene between 2012 and 2032. The city covers approximately 41.5 square miles, with the Willamette River running through the heart of the city and the McKenzie River joining the Willamette to the north of town.[63]

Eugene has a high percentage of working professionals, including educators, lawyers, architects, and doctors. This is likely due, though not exclusively, to the presence of schools like University of Oregon, Lane Community College, and Northwest Christian University. However, having a presence of professionals does not preclude Eugene from having poverty within its city limits, like anywhere else. Currently, the poverty rate for the city is 21.7%, which is roughly 1 in 5 residents.[64]

Santa Clara

The City of Eugene is planning for redevelopment along the River Road corridor to meet current population needs and plan for expected population growth. The city is currently partnering with Lane Transit District to redevelop this corridor with a goal to promote residential infill, transportation development, and economic stability in a sustainable manner. Lane Transit District has a new transit center station planned in Santa Clara on the old school site at Hunsaker Lane and River Road near the edge of Eugene's Urban Growth Boundary. The surrounding area is predominantly low residential with large commercial retail chain stores.

The Santa Clara neighborhood exists both within and outside of Eugene's urban growth boundary. The entire community contains 4,242 acres.[65] The area is comprised of 59.1% low-density residential, 20.8% agricultural farmland and 2.4% commercial businesses.[66] This analysis focuses on Tracts 23.01 and 24.04, which lie within a ½ mile of the proposed Lane Transit District station at the intersection of River Road and Green Lane. These tracts were analyzed to establish a demographic profile for existing and future users of the LTD transit station.

[63] "About Eugene." *City of Eugene*. Accessed December 4, 2019. https://www.eugene-or.gov/1383/About-Eugene

[64] "QuickFacts, Eugene city, Oregon." Census.gov. Accessed December 4, 2019. https://www.census.gov/quickfacts/eugenecityoregon

[65] "About Santa Clara, Oregon." Santa Clara Community Organization – Eugene. Santa Clara Community Organization. Accessed November 27, 2019. https://santaclaracommunity.org/scco/about/.

[66] Jaleel, Reed, and Galloway Zach. "River Road & Santa Clara Neighborhood Plan: Historical Context and Demographic Analysis." (2015)

Key Implications

Housing

As of 2017, Eugene, Oregon has the second tightest market in the nation for housing with only 0.6% of its housing stock available for purchase.[67] Furthermore, the rental market is becoming increasingly constrained. Per HUD, rental vacancy rates have declined from 6.3% in 2000 to 4.5% in 2015.[68] The demand for housing is outpacing supply. Per Strategic Economics' report on Eugene's housing tools and strategies, the population grew 17% from 2001 to 2016, while housing stock increased only 15 %.[69] Limited housing supply, both in the rental and real estate markets, increases housing costs for renters and homeowners, while limiting the ability for renters to purchase their own home. In the most recent estimates, 47% of households are cost burdened in Eugene.[70] Renters are disproportionately affected at 54% compared to 30% of homeowners.[71] Furthermore, 31% of renters are severely cost burdened, while 13% of homeowners are.[72]

Home prices in Eugene are likely out of reach for median household income earners as it costs them 5.42 years of their income to purchase a home.[73] This is twice the historical nationwide average.[74] Additionally, Eugene is planning for population growth of 34,000 new residents by 2032, which will further impact housing needs.[75]

With a growing population in Eugene and a lack of affordable housing, people will likely move to Tract 23.01 due to cheaper housing in the area. This is especially likely with the planned expansion of EmX with the new Santa Clara Station, which will create convenient access to downtown and the university. Considering the lower median household income and higher rate of family poverty in this census tract, there is a risk for gentrification.

Compared to Tract 24.04, residents in Tract 23.01 are more likely to rent, 10% more likely to be cost burdened, and spend 6% more of their income on rent. Additionally, median income households

[67] "Eugene, Portland Make List of Top 10 Cities with Biggest Housing Crunch." *OregonLive*. (January 9,2019). https://www.oregonlive.com/hg/2017/01/portland_tops_biggest_housing.html.

[68] "Comprehensive Housing Market Analysis." *U.S. Department of Housing and Urban Development. (*July1,2015). https://www.huduser.gov/portal/publications/pdf/EugeneOR_comp_15.pdf.

[69] "Eugene Housing Tools & Strategies Evaluation." *Strategic Economics. (*January2019) https://www.eugene-or.gov/DocumentCenter/View/44616/Strategic-Economics-Final-Report-2019

[70] Figure 1.13. Cost Burdened Households in Santa Clara, Eugene, Lane County and Oregon from 2010 to 2017.

[71] "Many Households Burdened by Housing Costs in 2017." *Joint Center for Housing Studies Harvard University*..

[72] Ibid.

[73] Figure 1.15. Housing Value-to-Income Ratio from 2010 to 2017 in Santa Clara, Eugene, Lane County and Oregon.

[74] Florida, Richard. "Where the House-Price-to-Income Ratio Is Most Out of Whack." *CityLab.(*May29,2018) https://www.citylab.com/equity/2018/05/where-the-house-price-to-income-ratio-is-most-out-of-whack/561404/.

[75] City of Eugene. *Envision Eugene Comprehensive Plan*.

earn $12,000 less and families are twice as likely to live in poverty. Although Tract 24.04 is financially wealthier, 32% of its households are cost burdened.

The empty four-acre site next to LTD's proposed transit station can serve as a model for equitable transit-oriented development (T.O.D.) to meet the needs of both the city and the surrounding neighborhood. According to Enterprise Community Partners, a national non-profit organization, T.O.D. can raise property values as much as 150%, attracting a higher-income population who likely owns a vehicle.[76]

If affordable housing is not constructed alongside transit development, there is a risk that transit will be underutilized. Equitable T.O.D. uses transit as a catalyst to benefit those who have the greatest economic needs while also efficiently utilizing financial capital of public and non-profit organizations for lower-income populations. This is achieved through placing affordable housing with community services near transit to reduce financial burdens of individuals while also meeting ridership goals of transit agencies.

Building affordable housing creates built-in ridership for transit. This is particularly relevant for this neighborhood since population has declined by 2% in Tract 23.01 and only grown minimally by 0.7% in Tract 24.04 since 2010.

Economy

The creation of new employment opportunities and access to employment are necessities for residents in this area to succeed economically, particularly in locally owned and operated businesses. Local entrepreneurship combined with local employment makes an area less susceptible to external market fluctuations, while enhancing neighborhood identity. With employment shifting from manufacturing to the service sector, development of the four-acre site should include service-oriented jobs in entertainment and food services such as restaurants, a movie theatre, bars, food carts, and coffee shops as well as stores to meet the daily needs of local residents, such as grocery stores, health clinics and barbershops. Considering that small businesses account for over 50% of Oregon's total employment, small businesses should be created on the four-acre site, while businesses in Santa Clara Square should be scaled down to a smaller neighborhood size over time. Promoting small businesses would align with residents' desire for smaller, locally owned businesses in the community to support the local economy as well as promote neighborhood identity. Considering the lower earnings of service sector jobs as well as small business employees, placing nearby affordable housing would benefit these lower-income earners. Additionally, creating access to employment through bus rapid transit will produce cost savings for current and future residents.

[76] Enterprise Community Partners "Planning for Success.". https://www.enterprisecommunity.org/solutions-and-innovation/equitable-transit-oriented-development

Vision & Goals

Creating a new Town Center in Santa Clara

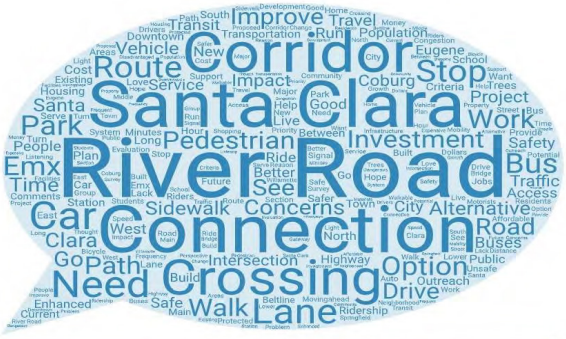
"A complete and holistic community, a place where neighbors can meet."

Vital elements of the new town center:

- Santa Clara Transit Station
- A new equity and transit-oriented development called Schoolhouse Plaza adjacent to the transit station
- Retrofit of the neighborhood commercial center, Santa Clara Square
- Multi-modal infrastructure

By improving infrastructure, pedestrians and bicyclists will face fewer barriers to non-auto transport, increasing the appeal of active and multi-modal travel. At the same time, the creation of a neighborhood of affordable housing units, mixed use commercial units, and market rate apartments, and a public gathering space will initiate the growth of a sense of place and create a foundation for strong transit ridership.

Figure 2.01: Word cloud of resident comments



Word Cloud, based on top 200 most common words from "MovingAhead Outreach Summary", Appendix 3 (pg. 27-44), "All Open House Comments". December 2018.

Equity and Transit Oriented Development

Apply an equity lens to transit-oriented development to "ensure that the development serves those who most stand to benefit and to ensure that cost savings are optimized for the public and non-profit institutions that serve users of **public transportation**. It supports mixed-use developments that incorporate **affordable housing** in close proximity to high-quality public transit and bolsters ridership goals of transit agencies.'"[77]

Reorienting to a Walkable-Neighborhood

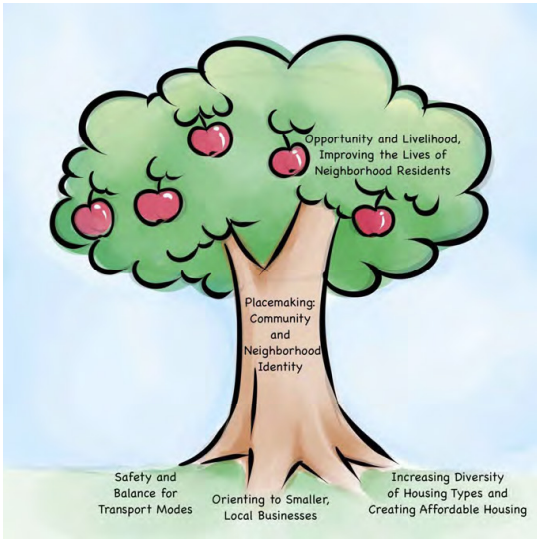
A "**twenty-minute neighborhood**" is a place where residents have easy, convenient access to many of the places and services they use daily, including grocery stores, restaurants, schools and parks, without relying heavily on a car. They are characterized by a vibrant mix of commercial and residential uses all within an easy walk. They have higher concentrations of people and are complete with sidewalks, bike lanes and bus routes that support a variety of transportation options."[78] Lane Transit District and the Santa Clara neighborhood can leverage its substantial existing assets like proximity to commercial areas, transit lines, and a large mostly-vacant lot near where residential areas meet the shopping center.

[77] Enterprise Community Organization. "Equitable Transit Oriented Development." https://www.enterprisecommunity.org/solutions-and-innovation/equitable-transit-oriented-development

[78] City of Eugene. 'What is a 20-Minute Neighborhood' https://www.eugene-or.gov/1216/What-is-a-20-Minute-Neighborhood

Goals

Figure 2.02: Growing a complete, healthful community



In identifying the main goals of River Road Santa Clara planning documents, this team discovered a structure for the realization of those community values. Addressing explicit changes in the built environment will create a concept of place, resulting in a host of benefits that will improve the lives of local residents. These changes build on one another, creating compounding positive effects.

The basis, or roots of the concept, are the physical changes to the environment. These are based on three of the goals identified in the planning documents:

1. Safety and balance for transport modes
2. Orienting to smaller, local businesses
3. Increasing diversity of housing types and creating affordable housing

Making changes to the built environment will encourage these goals and will foment the concept of a town center and a neighborhood identity. Santa Clara town center will have transit access, retail, services, pedestrian and bicycle amenities, and be a place of residence for a lot of people. As sense of place grows, it will create cultural capital. The community identity will remain as the strength, or trunk, of the town center, even as the structure and elements change over time.

As cultural capital grows, use of the infrastructure is reinforced, creating security for business investment and better home values. Availability of services, proximity of housing, access to transit, transport safety, employment and social opportunities all benefit the community in myriad ways. As the plan comes to fruition, the resulting benefits, or fruits, are sustainable and regenerative, standing on the cultural and real capital created there.

Site Analysis

Figure 3.01: Quarter-mile and half-mile radius, or “walking circles”, around the site

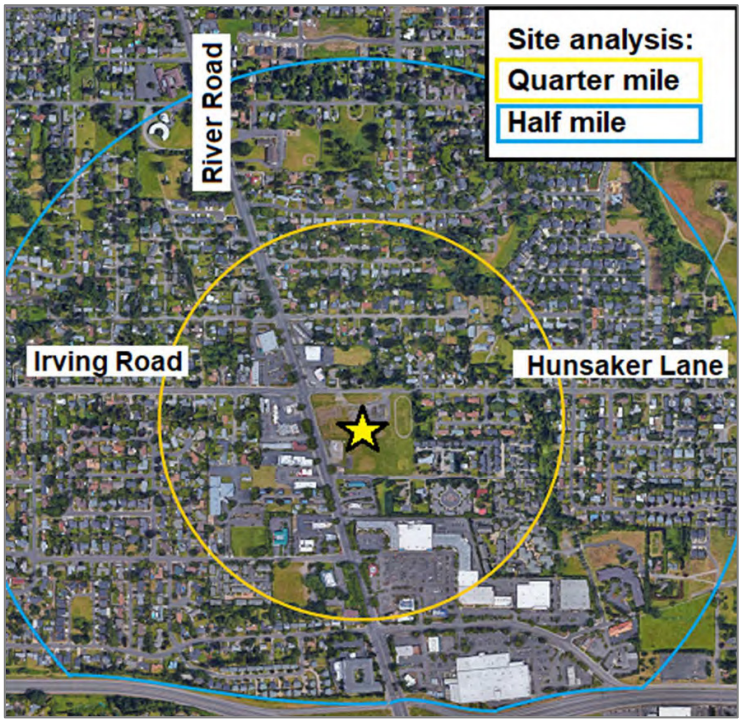


Figure 3.02: Closer look at the site and River Road – Hunsaker intersection

Location

The Santa Clara neighborhood is in the northwest quadrant of the City of Eugene, and River Road is the major corridor that connects the neighborhood to the city center. The future Santa Clara Transit Station will be placed at River Road and Green Lane, on the southern half of the mostly undeveloped lot owned by Lane Transit District. This lot is roughly 7.8 acres in size, trapezoidal in shape, and sits on a parcel with excellent potential, right at the very center of the neighborhood. It measures about 350 feet in longitude, and 675 feet in latitude on its longer side. It is bordered on its north side by Hunsaker Lane, which is a major intersection for River Road.

The eight-acre site is located 5.2 miles from downtown Eugene when traveling via River Road and 13th Avenue. Alternatively, a driver may travel via the Randy Pape Beltline and Interstate 105, a longer distance at 6.2 miles but a faster travel time with highway speeds.

Eugene's Urban Growth Boundary is within a half-mile to the east, separating the residential areas in Census Tract 23.01 from the sand and gravel extraction industries just outside the UGB. Just further north and still within Eugene's UGB are the smaller communities of Fir Grove and Irving; about ten miles further still is the satellite community, Junction City. The distance from the future Transit Center to the edge of Eugene's Urban Growth Boundary, in a straight line heading northwest along River Road, is about two miles, and beyond that, the farmland begins.

Lane Transit District presented their preferred option one year ago for the new Transit Center design, which occupies about three and a half acres on the southern side of the lot.[79] This team took this design as a given when considering the future of the site.

Land Use, Zoning, and Legal Context

The Santa Clara neighborhood, being near the edge of Eugene's Urban Growth Boundary, has a highly fragmented map of jurisdictions. Some taxlots are still under Lane County's jurisdiction. Other taxlots have been annexed to the City of Eugene, often one at a time.[80] This is a constraint on the future development, as some property owners do not prefer (strongly, at times!) the plans of the City of Eugene.

On the eight-acre site, Lane County owns all but one of the properties.

See Appendix B, page 1 for a table and map of the individual taxlots. See Appendix B, Maps 2 and 3 for current zoning and land use designations.

[79] Lane Transit District, "Santa Clara Transit Station Update" presentation to the Santa Clara Community Organization Meeting, December 6, 2019. https://www.ltd.org/file_viewer.php?id=3303.

[80] Lane County Assessor Taxlot Data, November 2019.

The LTD owned site is divided up into 10 individual taxlots. Each are currently zoned as C-2 except lot 17-04-44-00800 in the southwest corner, which is zoned as C-1. Each lot varies in size, between 0.10 to 1.73 acres, all adding up to approximately 7.03 acres.

See Appendix B, Map 1 for taxlots on the eight-acre site, and a Map 2 for lots by date annexed to Eugene.

Most of the land immediately adjacent to River Road between Federal Lane and the Beltline is zoned for "C-2" Community Commercial or "C-1" Neighborhood Commercial, plus a small strip on the southwest side of the side zoned for "GO" General Office. Most of the eight-acre site is currently zoned C-2, except the two most southwest lots which are C-1. Most of the surrounding area with a half-mile is zoned R-1 "Low-Density Residential", with a buffering layer of R-2 "Medium Density Residential" between the C-2 area of the Santa Clara Square shopping center and the rest of the neighborhood. There are pockets of land that are still zoned for "AG" Agricultural, but which are mostly filled with typical lots of single-family homes.

See Appendix B, Map 2 for taxlots by zoning code.

Neighborhood Context

In its local context, the eight-acre lot is quite unusual, owing to its prior service as a public school. It is the largest continuous plot of undeveloped land in the neighborhood,[81] is close to highway interchanges, and is connected with the top end of a "barbell" shape of commercial development along River Road. To the immediate south, west, and northwest are mostly commercial businesses. On the west side, smaller buildings line River Road , and the south contains a large commercial center anchored by an Alberton's grocery store. Although the buildings of big chain stores like Walgreen's and Fred Meyer's dominate the landscape, there are a variety of smaller and locally owned businesses on both sides of River Road, such as the restaurants Wayback Burgers and China Seas, the pet store Hometown Pets, a few beauty salons, and a St. Vincent de Paul store of secondhand goods.

See Appendix B, Map 3 for taxlots by land use.

Surrounding the boomerang-shape of commercial developments are quiet suburban neighborhoods, where about 90% of the homes are single-family detached units, and the average lot size is about a quarter-acre.[82] Along Hunsaker Lane is a predominantly single-story, low-density residential neighborhood. Irving Road housing is also single-story, but with greater details, adornments, and landscaping. There are ribbons of denser housing, including a few mobile home parks and retirement homes, especially on the east side and south side of the area. Most of the structures here

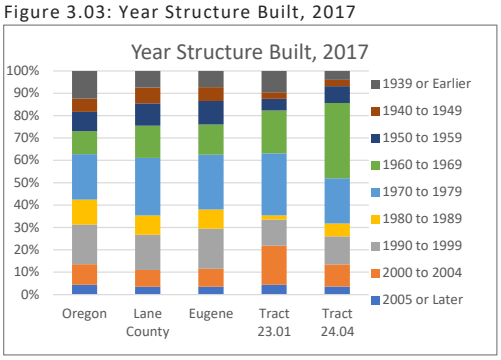
[81] Lane County Assessor Taxlot Data. 2019.

[82] Lane County Assessor Taxlot Data. 2019.

were built in the 1960s and 1970s; this is especially true on the west side in Census Tract 24.04.

The eight-acre site is unique also because it is the pivot point for two axes that transition from urban to rural, most notably on the south-to-north axis, and somewhat on the west-east axis as well. The commercial areas nearby serve not only the local area, but to some extent the region around them as well. This team sees the regional context as a major asset for the future development of the site, and informs its significant opportunities for transit-oriented development.

Figure 3.03: Year Structure Built, 2017



Source: American Community Survey, 5-year Estimates, (2013-2017). Table B25034: Year Structure Built.

Natural Physical Features

The eight-acre site is very flat, with a slight depression on the east side as the land descends towards the Willamette River and nearby sloughs, but not part of the 100-year floodplain.[83] There is grass but no trees, aside from some lining the nearby streets. To the east of the site and within a quarter-mile, a small ditch or slough called the East Santa Clara Waterway extends from the Willamette River riparian zone and then curves south. It carries excess stormwater away to the Willamette, and a small stripe surrounding is within the 100-year floodplain. This slough is not currently protected as the riparian zone, and there are no notable viewpoints or other natural features.[84]

Three parks lie about a half-mile from the site, the closest of which is Lone Oak Park. Soil types nearby and at the site are rich and suitable for crops, with deep drainage and slow run-off. The Willamette River lies east but is separated from the neighborhood by the Knife River and Delta gravel extraction companies, just to the west of Beaver Street.

See Appendix B, Map 5 for waterways and flood zones.

[83] EugMaps. 2019. Retrieved by team, December 1, 2019.

[84] EugMaps. 2019. Retrieved by team, December 1, 2019.

Human-Made Features

The northern half of the eight-acre lot retains some of the features of the Santa Clara school, with a few crumbling paved lots and pathways, and a running track towards the eastern edge. No buildings are located on the lot, except a beauty salon on the southwest corner. The eastern border of site has a chain-link fence and trees separating the adjacent neighborhood.

Only 300 feet to the south, the Santa Clara Square is a strip mall style commercial development, characterized by brick exteriors, roofline facades, and centered on a large, rectangular parking lot. Its largest store is an Albertson's Grocery and has nearly forty operating businesses. Across the street and nestled against the highway, the largest building in the community is the Fred Meyer's, with its own gas station. It acts as the other anchor for this shopping center, selling both grocery and retail goods and having accessory businesses within. Its accessible, U-shaped parking lot draws plenty of auto circulation. These two superblocks, anchored by their respective groceries, boast a combined 1,100 parking spaces.[85]

A few other gas stations, convenience stores, pharmacies, and smaller strip developments cluster elsewhere around River Road, all with ample parking lots and functional, suburban style buildings with one or two stories. The commercial area quickly decreases in intensity, as one moves north.

See Appendix B, Map 6 for lighting, and Map 7 for utilities and public services.

The area is not particularly well-lit at night. Power lines follow the routes of River Road, Hunsaker/Irving, and Green, and other utility lines border the site but do not penetrate very far inwards.

The eight-acre site and its surrounding quarter mile have no historical, protected sites on record, and there are no notable points of interest.

Climate and Sensory

A lack of trees and buildings on the eight-acre site means there are few shadowed areas, and the southern side in particular will see good sun exposure throughout the year. Especially on the west side of the eight-acre site, the relative lack of slope may create pools of stormwater during the rainy seasons, so adequate drainage, perhaps connecting to the East Santa Clara Waterway slough, may require special attention for any future development. The area has a mild climate, like Lane County in general, and is without serious wind or other natural hazards.

Because of the heavy auto circulation, traffic noise and noxious exhaust fumes are constant on River Road throughout the daytime, and active transportation routes near the road are somewhat unpleasant. The interior of the eight-acre site and the southeastern corner are quieter than the rest of the lot. With exposure to sun and shelter from the traffic in mind, and proximity to the future Transit Station, the south and middle section of the site is the most ideal spot for a public outdoor space.

[85] Internal staff research, November 2019.

Circulation

Automobiles

River Road in the Santa Clara community today is defined by its role as a major arterial road for the area. River Road and Hunsaker Lane form the west and north borders of the site, and are often busy with traffic. River Road is used by over 20,000 vehicles on a typical weekday, while Hunsaker Lane and Irving Road are used by about 7,000 vehicles.[86] All three roads have a posted speed limit of 35 miles per hour,[87] but River Road was constructed to be a regional route to Eugene. River Road is flat, wide, and with few stop lights north of the Beltline, and drivers routinely travel at speeds of 45 mph or more.

The nearby commercial areas and especially auto-oriented businesses like drive-through fast food establishments generate auto traffic, and there are many drive-ways into dead end parking lots, drive-throughs, and small clusters of strip development. River Road has a high rate of collisions involving cars, people, and property.[88] The physical differences between drivers traveling at highway speeds versus drivers slowing to enter parking lots or merging onto River Road are partly responsible for the vehicle collision rate in the corridor.

River Road connects directly to an interchange with the Randy Pape Beltline within a half-mile of the site, and Hunsaker Lane connects to the prior exit ramp, via Beaver Street and Division Avenue. The residents of the Santa Clara neighborhood have easy access by private automobile to the highway and therefore to the rest Eugene and Lane County.

Green Lane creates the south border of the site, is a currently a neighborhood street with a speed limit of 25 miles per hour, and is without sidewalks. A new traffic signal at the intersection with River Road will grant the buses from the future Transit Station timely access onto the corridor, and improve safety for pedestrians and cyclists by protecting their crossing time.

Figure 3.04: The intersection of River Road and Irving

[8686] City of Eugene. "Traffic Flow Map." (2013) https://www.eugene-or.gov/DocumentCenter/Home/View/3426.

[87] City of Eugene. "Speed Zone Map." (January 2013) https://www.eugene-or.gov/DocumentCenter/Home/View/3425.

[88] Lane County. "Beaver-Hunsaker Corridor Plan."

Bus Transit

Lane Transit District's proposed new Transit Center design will occupy the southern half of the lot,89 and the Emerald Express alternative has the clearest support on River Road compared to any other corridor in the MovingAhead project.90 Two bus routes currently serve the area, Route 51 which goes north to Spring Creek Drive, and Route 52 which travels west along Irvington before turning south and returning east along Irving Road. LTD has also proposed to consolidate some services with the aim of reducing costs and increasing ridership, at the cost to some area coverage.[91]

Lane Transit District also plans to have dedicated Business Access and Transit Lanes (BAT Lanes) installed on long stretches of River Road, and EmX Buses will have an exclusive entrance from River Road to enter the Transit Station, and to exit onto Green Lane, such that they do not need to share egress and exit with private cars.[92]

Figure 3.05: The preferred design option for the Santa Clara Transit Station

Source: Lane Transit District, "Santa Clara Transit Station Update" presentation to Santa Clara Community Organization, December 6, 2018. https://www.ltd.org/file_viewer.php?id=3303

[89] Lane Transit District. "Santa Clara Transit Station Update." presentation to the Santa Clara Community Organization Meeting, December 6, 2019. https://www.ltd.org/file_viewer.php?id=3303.

[90] JLA Public Involvement, for Lane Transit District and the City of Eugene. "MovingAhead Outreach Summary."(December 2018) p 2. http://www.movingahead.org/wp-content/uploads/2015/03/MovingAhead-Outreach-Summary-FINAL.pdf

[91] Hill, Christian. "LTD looks to cut routes, boost service frequency." *The Register Guard* (Eugene, OR November 7, 2019) https://www.registerguard.com/news/20191107/ltd-looks-to-cut-routes-boost-service-frequency

[92] Lane Transit District and the City of Eugene. *Moving Ahead: Alternative Analysis Executive Summary.* (September 2018) http://www.movingahead.org/wp-content/uploads/2018/09/LTD-Moving-Ahead-Exec-Summary-FINAL-2018-09-05.pdf

Active Transportation

Despite its auto-oriented basic design, the neighborhood does have some magnets for active transportation users. The Santa Clara Square commercial area draws pedestrian and bicycle traffic from nearby homes. North Eugene High School lies south of the Beltline, and its students in the Santa Clara neighborhood also create pedestrian and bike activity. To the northeast and southeast, people can find routes to recreational multi-use paths. However, in contrast to the access and future access for private autos and buses, pedestrian and bicyclist connectivity is relatively low in the Santa Clara neighborhood, and their safety is not particularly prioritized.

There are currently only two signaled intersections with crosswalks for pedestrians on River Road within a quarter mile of the site, and the distance between the crossing at Hunsaker Lane and the closest one at Santa Clara Avenue is around 1,200 feet, or a quarter of a mile. Adding the Green Lane traffic signal will cut that distance roughly in half.[93]

River Road has sidewalks in most places, usually with a buffering strip of turf or trees, but is lacking in safe crosswalks, with long and increasing distances between traffic signals, as one travels northward. River Road also has continuous bike lanes, but these are not buffered from the high-speed traffic. Irving Road has sidewalks and continuous bike lanes, which are not buffered, while Hunsaker has no sidewalks or bike lanes, and small shoulders. Green Lane also has no sidewalks or bike lanes, and small shoulders.

Residents have repeatedly commented that the bike routes are not safe enough to use, especially for young family members. There are a few especially dangerous spots for bicyclists, including a gap in the bike lane connection where Division Avenue meets River Road[94], and a rounded curve that discourages auto drivers from slowing down, while they are turning right from Division Avenue onto Beaver Street. This latter intersection saw a fatality accident in the last ten years, and is exactly at the junction where the multi-use separated pathway becomes an unseparated bike lane. Because of these danger zones, it is difficult to access the River. Another common comment is that the sidewalks are not accessible enough for users with mobility aid devices, and that pedestrian routes could be wider, with better grades, and connectivity.[95]

See Appendix B, Map 4 for current bike routes, and see Center Concept Figure 4.09 for a map of future routes.

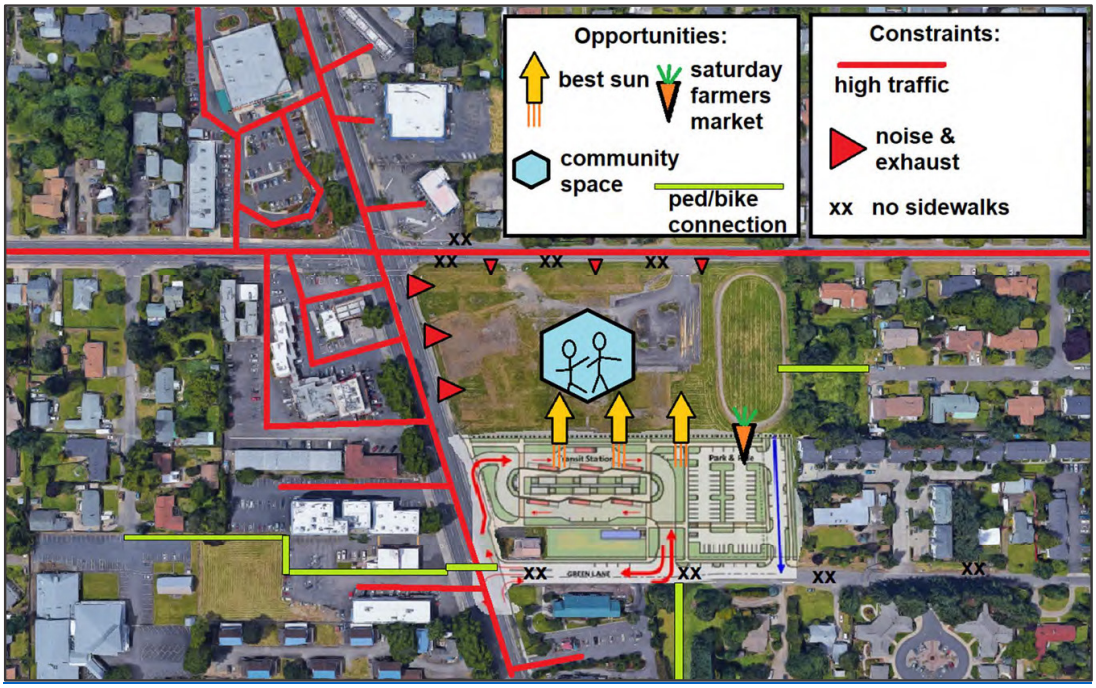
[93] Lane Transit District and the City of Eugene. *Moving Ahead: Alternative Analysis Executive Summary.*

[94] The City of Eugene and the City of Springfield. *The Eugene-Springfield Bicycle Map and Resource Guide.* (2016) http://www.eugene-or.gov/DocumentCenter/Home/View/4268

[95] JLA Public Involvement, for Lane Transit District and the City of Eugene. "MovingAhead Outreach Summary."

Figure 3.06: Circulation and Parking Lots in the center of Santa Clara

Figure 3.07: Opportunities and Constraints



Constraints

River Road was once a regional highway and now serves as a main thoroughfare for the Santa Clara neighborhood, but traffic volumes and speeds in the corridor and in some of the connecting roads discourage pedestrians from feeling safe and enjoying their local streets. Because of the heavy auto circulation, traffic noise and smells are very common. Despite this, residents have voiced comments about negative impacts on auto travel, and are often concerned with "transit, bike, and pedestrian improvements [that] would make driving slower and more congested around these corridors".[96] Any proposal for the site must promote a walkability that can coexist with the traffic-heavy roads, and development should transition in intensity accordingly as it branches further off the main corridor.

Any proposal for the site must not stray too extremely from resident tastes and sensibilities; particularly in Census Tract 24.04, a high rate of single-family homes and home-ownership, relatively higher incomes, and a low intensity of development overall, might indicate more resistance to denser and atypical building forms. Large, low density blocks of residences with typically quarter-acre lots and single-family homeownership will likely hamper any redevelopment of those areas.

Pedestrian and bicyclist safety needs and housing needs are crucial to success of the site and any placemaking effort, and staff recommends they be the first considerations for new design plans. Lastly, the patchwork of jurisdictions and, in particular, the lone remaining business on the eight-acre site will create some barriers for uniform development.

Opportunities

The eight-acre site will be occupied on its southern half by the future Transit Station, leaving about four acres for development to support transit ridership goals of Lane Transit District and affordable housing goals of the City of Eugene. As the EmX improvements are completed, the mostly undeveloped four-acre site can support more population density by having next-door service to transit and prime walkability to the local Santa Clara Square shopping center.

The planned traffic signal at Green Lane will provide a safer place for pedestrian crossings. This crossing and others nearby could be enhanced further, such as with brightly painted crosswalks or signal timing changes. New crossings, new bike lanes, and new multi-use paths could be better integrated with existing paths connecting to and surrounding residential areas. A few places within a quarter-mile could be somewhat easily connected with short easements, creating shortcuts which would decrease travel distances for active transportation users and promote a more connected neighborhood.

See Center Concept section, Figure 4.06 for a map of proposed bike and multi-use routes.

New bike lanes or "sharrows" could be installed along Hunsaker Lane and Green Lane, and later extending onto other low-traffic

[96] JLA Public Involvement, for Lane Transit District and the City of Eugene. "MovingAhead Outreach Summary."

residential streets. Promoting neighborhood greenways with slow, safe auto speeds can better connect bicyclists to the nearby River Loop bike trail and the Willamette River, and other neighborhood blocks.

Most importantly, the eight-acre site and its surrounding neighborhood, represented by quarter-mile and half-mile radiuses, already have many vital elements necessary for a vibrant neighborhood. These vital elements are especially: its close proximity to transit, to shopping, and to residential areas, and the rare opportunity inherent in an undeveloped, continuous parcel of around four acres in a city like Eugene.

These ingredients sum up to a superb opportunity for a new "heart of town" for Santa Clara. As people move away from auto-dependent suburbia and seek a better balance in their communities, the thoughtful redevelopment of the old Santa Clara Elementary School site could serve as a flagship local town center. It has the unique opportunity to not only meet local needs and housing goals, but to set an example for future development and redevelopment in Eugene, and beyond.

Figure 3.08: Tall trees on perimeter lots

Figure 3.09: The undeveloped site in October 2019

Figure 3.10: Pedestrians and traffic by Green Lane

Center Concept Plan

Schoolhouse Plaza as the centerpiece of Santa Clara Town Center

Imagine deboarding your bus at the Santa Clara Transit Station, ending another day's commute in the year 2029. Across the street, things look much the same as they did when you first came to this area, but as you look north from the transit center, a new center of gravity is growing on these blocks. Hedges and trees partly obscure the strings of lights slung between buildings and as you approach, voices and smells of food reach you. Other commuters pause by food trucks on their way to the Park and Ride, or before walking across the green striped crosswalk to their own blocks.

As you wait for your order to be called, you look up the long pedestrian pathway that heads northwest, dotted with a few businesses and some vacant lots. You notice your neighbor among the people seated in the outdoor area of the café. He is a widower in his 70s, who downsized last year from a large ranch-style home to a new apartment overlooking this plaza, citing the opportunities for aging in place and going car-free, while staying near his home of the last forty years. You wave to him, before noticing he's seated across from a well-dressed lady friend. You remember he mentioned meeting a new acquaintance at the Schoolhouse Garden, where he grows onions and herbs. You wave at him as he notices you with a smile.

Figure 4.01: Mixed use, low density concept rendering

Source: http://www.bothellreporter.com/news/downtown-bothell-project-delayed/

Figure 4.02: Center Concept Plan, under the working title "Schoolhouse Plaza"

1.Mixed Income detached cluster homes

Twenty to thirty cluster homes centered around a private open space will provide housing to a range of incomes. A community land trust could dedicate units for different income thresholds, subsidized by market rate units. Parking will be provided in driveways alongside homes, and in two small lots adjacent to the open space. While density will be relatively low, 10-15 units/acre, data suggests that 15 units/acre is sufficient to support bus based transit oriented development.[97] Population statistics show that high density housing may be under-utilized in the foreseeable future. The block directly adjacent to this cluster neighborhood is zoned for R-1, with a maximum density of 14 units/acre.[98] This cluster neighborhood will have similar density, creating a transition to single family homes to the east. Transition between intensity of uses was identified in multiple goals of the Santa Clara Neighborhood Plan, and by preserving low density on this side of the lot, we can decrease impact on neighboring homes.[99] If density increases over time, the cluster homes will be an appropriate bridge between single family, middle housing, and multi-unit buildings.

2. Community Garden

In the sunny part of the lot, a community garden will act as a transition between private and public open space. Although community gardens are not completely public spaces, it will serve the nearby residents who garden for food or recreation. The intensity of use on this portion of the site will be low, making it available for redevelopment as time goes by.

3. Public Plaza

Feedback during the River Road Corridor Study Workshop identified "a desire for the remainder of the Santa Clara transit station site to be developed with significant community gathering spaces."[100] This concept includes a large plaza as a public gathering space. Benches, landscaping and interpretive signs makes this an attractive place to meet or hang out. Food trucks can enter the adjacent parking lot or the plaza itself, and a covered eating area will be provided. The plaza can act as a venue for a farmer's market or craft market, or for performances. Lastly, an art installation or statue with ties to the neighborhood will create a sense of identity and anchor the place to the neighborhood.

[97] Metropolitan Council. Guide for Transit-Oriented Development, Land-Use Densities Rules of Thumb. (2006). https://metrocouncil.org/Communities/Services/Livable-Communities-Grants/Maps,-forms-misc/Metropolitan-Council-TOD-Guide-Land-Use-Densities.aspx

[98] City of Eugene. Eugene Code, Table 9.2750 Residential Zone Development Standards. p 9.2-69 (119) https://www.eugene-or.gov/DocumentCenter/View/2704/Chapter-9-Land-Use.

[99] City of Eugene. *River Road Santa Clara Neighborhood Plan Draft Land Use*. "Goal 14.1.1." (2019). p 5. https://www.eugene-or.gov/DocumentCenter/View/47481/RRSC-DRAFT-Land-Use-August-2019

[100] City of Eugene. *River Road Corridor Study.* p 13.

4. Corner Plaza and Walkways

A plaza on the corner of Hunsaker and River Road creates a view to the interior of the development, inviting people in. It will also be a focal point for the blocks opposite, connecting adjacent buildings to Schoolhouse Plaza. An art installation here that is thematically connected with the main plaza will make the center attractive to people driving by. Mid-block walkways from River Road and Hunsaker also provide a view into the space and invite people to get out of their cars.

Figure 4.03: Pedestrian plaza inspiration
Richmond, VA

5. Mixed Commercial and Residential

Fronting River Road and Hunsaker Lane will be two or three story commercial/residential buildings. Commercial spaces will provide retail, restaurants, services, and offices. A variety of uses bring people to the Plaza at different times of day, and various types of services and price points will serve different needs. For example, the space can accommodate food trucks, upscale coffee shops, and local breweries. Storefronts with windows or convertible walls open to the interior and exterior of the block. Outdoor seating will make the walkways inviting and attractive.

Apartments can accompany the ground floor commercial in the initial build, with the possibility of adding more mixed used buildings with second story residential, or more dense housing on the interior of the site. If future projections justify it, high density residential buildings with four or five stories could be built here. Housing will be a mix of affordable, market rate and senior housing. A variety of sizes and costs will integrate community residents.

With space for 25,000 to 30,000 square feet, buildings will vary in size and shape as they are filled in towards the middle of the site. A mix of commercial and residential can be appropriated based on need and demand.

Parking

Parking for the plaza will be provided on the new shopping streets, with the addition of residential parking in driveways and two small visitor lots. Streets will be 62 feet wide to accommodate two way traffic and parking.[101] According to the Eugene Code, shopping streets must be 'comfortable and pleasant for the pedestrian,' may be public or private and include street trees, sidewalks, and parking.[102] Figure 4.06 shows the number of spaces allowed based on the length of the shopping streets in this design, the standard width of a parking space, 9 feet, and a deduction for design and accessibility. There should be room for 171 parking spaces.

Figure 4.04: Cross section of shopping street

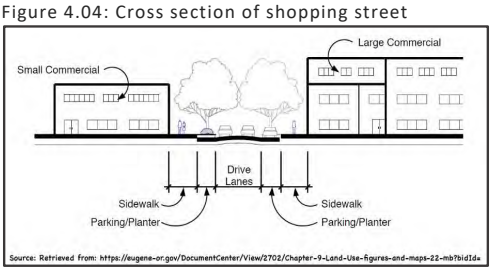


Figure 4.05: Schoolhouse Plaza Street Parking

[101] City of San Diego Department of Planning and Land Use. *Parking Design Manual.* (2013). p 10. https://www.sandiegocounty.gov/pds/docs/Parking_Design_Manual.pdf.

[102] City of Eugene. *Eugene Code.* Section 9.2175 Commercial Zone Development Standards -Large Multi-Tenant Commercial Facilities. p 9.2.20 (70). https://www.eugene-or.gov/DocumentCenter/View/2704/Chapter-9-Land-Use.

Figure 4.06: Schoolhouse Plaza Parking Spaces

street length (feet)	spaces per row (9 ft wide, 90 °)	number of rows	spaces
180	20	6	120
20	2	2	4
320	36	2	71
150	17	2	33
		subtotal	**228**
Lot: 30 x 62 '	4	2	8
Lot: 100 x 62 '	11	2	22
		subtotal	**30**
(accessible spaces, corners,		**total**	**258**
bump-outs, et cetera)		x 2/3	**171**

Because about 1.5 acres of the site are taken up by affordable housing clusters, about 2.5 acres of the site will be the public plazas with mixed use commercial and residential buildings. If we reduce the buildable acreage to 35,000 sq. ft for roads, sidewalks and plazas as the gross vacant area, and plan for a foot area ratio (or FAR) of 0.5, we are left with about 29,000 square feet for buildings. This would mean anywhere from 20,000 to 30,000 square feet of commercial space on the first floor and an equal amount available for residences on upper floors. While we don't know what businesses would fill the spaces at Schoolhouse Plaza, a safe assumption based on the Eugene Code is 1 space per 660 square feet of service or retail use. One parking space is required per dwelling for almost all residential uses, with less required for affordables, affordable senior units, and disability units. As seen in Figure 4.07, the required number of spaces, excluding the cluster homes which will have their own driveways, is 94. Fewer may be required if senior or disability units are installed. [103]

The inclusion of shopping streets increases the parking supply without the need for dedicated surface lots. Parking requirements for cluster homes will be met by providing driveway parking and two small visitor lots. For the mixed use and public gathering areas, the addition of one small lot to the spaces provided on the shopping streets meets or exceeds parking requirements.

Figure 4.07: Parking Requirements on Four-Acre Site

		sq. ft	gross vacant area	FAR 0.5
total acres	4	174,240	140,000	46,200
mixed use	2.5	108,900	87,500	28,875
parking required: 1 per 660 sq. ft commercial				44
parking spaces required: 1 per dwelling				50
total parking needed				**94**

[103] City of Eugene. *Eugene Code*. Table 9.6410 Required Off-Street Motor Vehicle Parking. P. 9.6-28 (420).

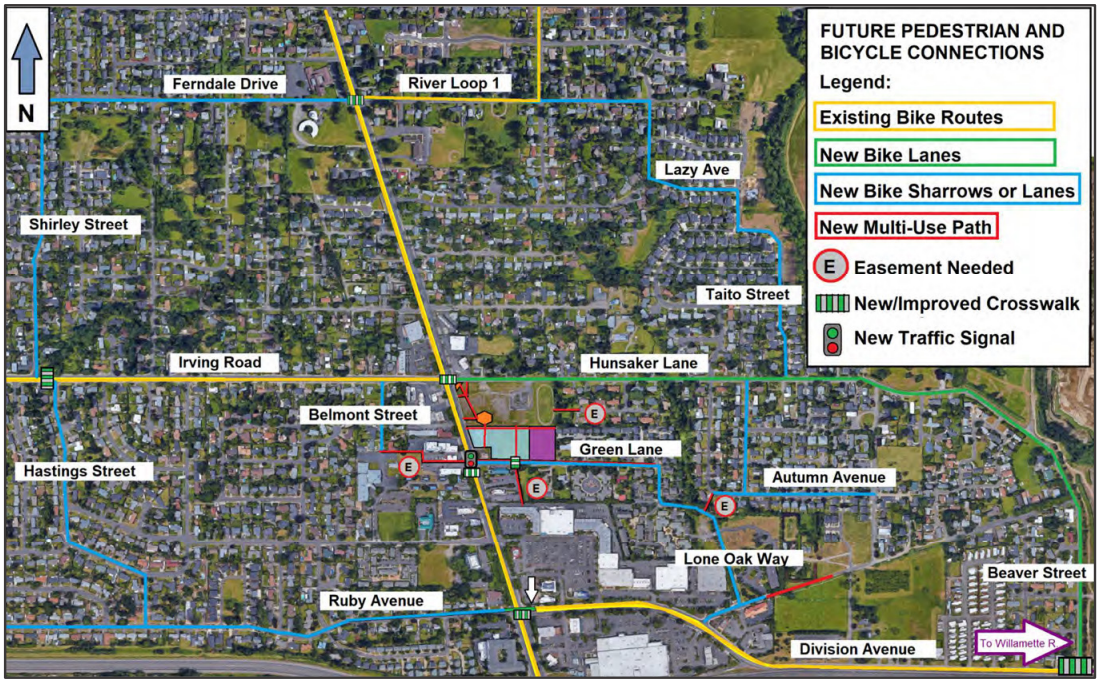
Circulation

Streets enter the site from the north and east, limiting slow down on River Road and traffic interactions between buses and visitors to Schoolhouse Plaza. The plaza and center of the site are accessible to car travel while limiting pedestrian-auto interactions.

A new walkway extending south of the Transit Station connects pedestrians and bicyclists to Santa Clara Square, as well as improved sidewalks along River Road.

Figure 4.08: Map of Circulation for Schoolhouse Plaza blocks, and nearby active connections

Figure 4.09: Map of proposed expanded connectivity for active transportation users



Access/Multi-Modal

The second part of this team's concept addresses multi-modal connectivity and access. Adding infrastructure at key places on the corridor and connecting to neighborhoods and natural resources will reduce accidents and promote active transit. A comprehensive connectivity plan would include these elements:

New **bicycle lanes** on Hunsaker and improved existing lanes

New multi-use **Pathways and Sharrows** create connectivity:

- from Schoolhouse Plaza, south to Santa Clara Square
- west to surrounding residential areas
- connecting to Willamette River Path
- connecting Beaver Lane and Lone Oak to Santa Clara Square

New **crosswalks** at major River Road intersections

New **traffic signal** at River Road and Green Lane

Figure 4.10: Rendering of Green Lane crosswalk and pedestrian path, and new traffic signal

Figure 4.11: Rendering of bike lanes and crosswalks

Santa Clara Square Mall Retrofit

Santa Clara Square Today

Figure 4.12: Sides of buildings in Santa Clara Square with no activity, 2019

- 39 businesses
- About 17 acres of black top
- Foot Area Ratio ~0.5
- 1100 parking spaces
- Grocery Store Anchored
  - Albertsons and Fred Meyer

Figure 4.13: Twenty-year vision, complete retrofit

Santa Clara Square Tomorrow

Installing roads into the 32-acre site and creating a grid of city blocks can create a walkable space while accommodating similar commercial intensity and parking.

A traffic circle at Lone Oak and Division creates an entrance opposite from River Road, drawing people across the site. It also acts as a traffic calming device and an opportunity for art and theming.

While the foot area ratio and the number of commercial spaces will be similar to today's shopping center, the new structure allows more green spaces, a variety of building shapes and sizes, better pedestrian interface, and activation of all sides of buildings.

More than 300 residential units could be installed in mixed use buildings or residential developments. Housing installed on the east side of the site should transition to abutting R-2 residential, which carries a density requirement of 13-28 units/acre.[104]

Large anchor stores can be preserved, encouraging financial security for tenants.

Blocks can be filled in over time, according to need and demand. Likewise, anchor stores can be repurposed or redeveloped without impacting other blocks.

Improved sidewalks and buildings oriented to the street will make pedestrian traffic along River Road safer and more enjoyable, connecting from Santa Clara Square all the way to School House Plaza.

Comprehensive design standards linked to those at Schoolhouse Plaza compound the sense of place and community identity of Santa Clara town center.

As sense of place grows, it creates security for business investment, ensuring financial sustainability.

Figure 4.14: Belmar Shopping Center Retrofit: example of changing the urban form and orientation

[104] City of Eugene. *Eugene Code*. Table 9.2750 Residential Zone Development Standards. p 9.2-69 (119)

Parking

In the new Santa Clara Square, parking will be abundant on shopping streets and small parking lots. Based on the measurements of the new streets and using the same calculations as Schoolhouse Plaza, a conservative estimate puts 873 spaces just on the streets. Additional parking can be added as needed according to demand, as new blocks are developed.

Figure 4.15: Santa Clara Square, Street Parking Spaces

street length (feet)	number of spaces (9ft wide, 90 degree)	number of rows	spaces
East-West streets			
800	89	2	178
1500	167	2	333
1100	122	2	244
North-South streets			
700	78	4	311
300	33	2	67
50	6	2	11
100	11	2	22
		total	1167
	x 2/3 (accessibility, bump outs, corners etc.)		**770**

The Code

Schoolhouse Plaza and Santa Clara Square are zoned Community Commercial, which allows all types of residential developments without density requirements, provided that street frontage on the ground floor is 60% commercial.[105] This project requires a zoning change in order to construct cluster homes and any solely residential developments The Santa Clara Neighborhood Plan identifies form based code as a pathway to commercial infill.[106] This could be an appropriate strategy to allow block development over time without each new block seeking a zoning modification.

Figure 4.16: Street parking at Mashpee Commons, MA

Source: http://visitingnewengland.com/mashpee-commons-cape-cod.html

[105] City of Eugene. *Eugene Code*. Table 9.2160 Commercial Zone Land Uses and Permit Requirements, and Special Use Limitations, 9.2161. p 9.2-10 (60-61).

[106] City of Eugene. *River Road Santa Clara Neighborhood Plan Draft Land Use*. "Goal 14.1.1." p 2.

Design and Theming

Design themes and programming will be mid-century modern as a nod to the era when most of Santa Clara's homes were built. References to the old school and Santa Clara's agrarian roots could add to a classic style and nostalgia, and promote inclusiveness with references to the different ethnic groups that support Oregon's agricultural economy. Adding a fern wall and river themed art would also invoke the natural resources of the neighborhood. A mosaic depicting a field with the historic schoolhouse would be a wonderful centerpiece on the main plaza

Local style and vernacular architecture

(All photos sources from Google Maps until otherwise noted)

Figure 4.17: Ranch style single-family home Santa Clara, Eugene, Oregon

Figure 4.18: Foursquare style residences Eugene, Oregon

Figure 4.19: Midcentury style neighborhood café Eugene, Oregon

Figure 4.20: Cottage cluster homes
Shoreline, WA.[107]

Figure 4.21: Mid-century style apartments
Unknown city, OH.[108]

Figure 4.22: Downtown small lots
McMinnville, OR

[107] Andersen, Michael." Cottage clusters: Portland's chance to build community in a new way." *Medium*. (November 2, 2017) https://medium.com/@pdx4all/cottage-clusters-portlands-chance-to-build-community-in-a-new-way-7c504c5b260b

[108] Glass, Chris. 2009. Untitled blog post. https://chrisglass.com/album/2009/02/20/apt/

Mixed use concepts

Figure 4.23: Mixed use, rendered concept
Fairview, Oregon[109]

Figure 4.24: Bronaugh Apartments
Portland, Oregon[110]

Figure 4.25: Mixed use, rendered concept
Ann Arbor, Michigan[111]

[109] Sparling, Zane. "Residences over retail proposed in Fairview. *Gresham Outlook*. (August 17, 2017) https://pamplinmedia.com/go/42-news/369677-252422-residences-over-retail-proposed-in-fairview

[110] "Bronaugh Apartments – Portland, Oregon". 2010. https://en.wikipedia.org/wiki/File:Bronaugh_Apartments_-_Portland,_Oregon.JP.

[111] Alfs, Lizzy. "Blighted gas station on Ann Arbor's Detroit Street could be replaced with 3-story development." September 25, 2012. *The Ann Arbor News.* http://www.annarbor.com/business-review/blighted-gas-station-on-ann-arbors-detroit-street-could-be-replaced-with-3-story-development/

Case studies

Collaborative Financing at Fruitvale

Figure 5.01: Fruitvale Station, completed

In late 1999, the Bay Area Rapid Transit District (BART) broke ground on a new transit village in Fruitvale, located in Oakland, California. The Fruitvale Transit Village project became what it is today due only to collaboration between public, private, nonprofit, and community members.

Built on former BART parking lots, the Fruitvale Transit Village integrates retail space, mixed-income housing, and community services, all connected to the adjacent Fruitvale Transit Station. The area provides a pedestrian promenade and plaza lined with shops, leading from the station to the neighborhood's International Boulevard business district. Phase 1 of the Village provides "220 units of mixed-income housing and 68 units of HUD-assisted housing", "114,000 square feet of community services (clinic, library, senior center) and office space", and "45,000 square feet of neighborhood retail (shops and restaurants.)"[112] Phase 2 is "slated to be finished by the end of 2019, will include 94 units – 92 affordable and two market rate – and house about 400 people."[113] Phase 2 is located next to Phase 1 to the southeast, hoping to "bring new residents and homeowners to the Village and foster 24-hour, 7-day vibrancy and sense of

[112] Benfield, K. (n.d.). "The remarkable story of Oakland's Fruitvale Transit Village (part 1)." *Smart Cities Dive*.
https://www.smartcitiesdive.com/ex/sustainablecitiescollective/remarkable-story-oaklands-fruitvale-transit-village-part-1/20724/

[113] Tadayon, A. "Work begins on affordable housing at Fruitvale Village." *Eastbay Times*. (2018).
https://www.eastbaytimes.com/2018/02/02/work-begins-on-affordable-housing-at-fruitvale-village/

community that further strengthen the commercial and retail components located at the Village retail plaza."[114]

In the early 1990s, the City and Regional Planning Department at University of California Berkeley conducted a study of Fruitvale. The study ultimately concluded that the area needed a pedestrian connection from the Transit Station to the Business District. The existing parking lots of the area and the proposed parking garage hindered the area's economic and social development, thus the need to create alternative options would be essential to the neighborhood's future. The Unity Council capitalized on this study, using it as a part of a series of community meetings to dream up alternatives to the BART's proposed parking garage.

Following the first meetings and "to further its planning efforts, the Unity Council then applied for and was awarded a $185,000 Community Development Block Grant (CDBG) from the City of Oakland."[115] Using this money, the Unity Council continued to hold meetings and design charrettes, drawing upon community input and interests. "From this planning program a new vision of Fruitvale emerged in which the development around the BART station would take the form of a mixed-use transit village that would serve as a catalyst to economically revitalize the whole neighborhood."[116] By 1993, the project got the attention of U.S. Secretary of Transportation Federico Pena and pushed through $470,000 of USDOT funds to the project. Using this grant, the Unity Council was able to commission "concept plans, environmental assessments, traffic studies, and feasibility studies" for the site.[117]

Through a variety of local and national partnerships, the Unity Council successfully raised the necessary funds needed to complete the project, "including nearly $6 million from the Federal Transit Administration and nearly $100 million from both the Department of Housing and Urban Development and the Environmental Protection Agency."[118] The Unity Council formed the Fruitvale Development Corporation (FDC) to oversee the project, which broke ground in 1999. BART owned the adjacent land to the Transit Village project, thus a strong partnership between the two was necessary. The transit organization fully supported the project, even assisting with the planning process itself.

One complication which arose between the two organizations was that "BART required that the FDC replace all of the parking that would be lost once the transit village was built. The total cost of the replacement parking exceeded $12 million, and included a $7,561,000 grant from the USDOT, a $4.2 million bond that was a part of a larger transportation bond approved by Alameda County voters, and several other grants for surface parking."[119] An

[114] Benfield, K. (n.d). "The remarkable story of Oakland's Fruitvale Transit Village (conclusion)." *Smart Cities Dive.*

[115] ULI Development Case Studies. *Fruitvale Village I.* (2015).
https://casestudies.uli.org/wp-content/uploads/2015/12/C035004.pdf

[116] Ibid.

[117] Ibid.

[118] Federal Transit Administration. *Fruitvale Transit Village.* (2016).
https://www.transit.dot.gov/regulations-and-guidance/environmental-programs/livable-sustainable-communities/fruitvale-transit

[119] ULI Development Case Studies. *Fruitvale Village I.*

amicable result was achieved through the planning process, as well as a land swap between BART and FDC. Phase 1 of the project was completed in 2004, while Phase 2 began in 2018 and has a planned finish date of late 2019.

Figure 5.02: Phase 2 Housing at Fruitvale

Source: https://www.bizjournals.com/sanfrancisco/blog/real-estate/2015/06/oakland-housing-fruitvale-bart-transit-village.html

Implications

Just as Fruitvale, the Santa Clara neighborhood lacks a central sense of place. A development similar to that of the Fruitvale Transit Village might create a central point for the Santa Clara community and raise its social value. The use of Transit Oriented Development in an area of potentially higher pedestrian traffic can often give neighborhoods a sense of ownership over the site, especially when designed to be inclusive, walkable, and trendy. The Fruitvale Transit Village also includes mixed-use residential housing and commercial space, essentially creating a neighborhood within a neighborhood. In order for Santa Clara to reclaim a sense of identity, the creation of a similarly structured "transit village" at the Santa Clara Transit Station site could acknowledge the past history of the region while also modeling its potential future.

The key to financing at Fruitvale was a collaboration between many entities and drawing funding from large and small sources. Fruitvale had high profile advocates, allowing the project to draw significant funding from government grants, and used publicity to create momentum. Creating a coalition between community, land owners, and government stakeholders allowed the project ensure funding was directed appropriately. By creating a robust coalition with dedicated advocates, project momentum in Santa Clara could lead to similar success.

Integrated Housing at Mariposa

Figure 5.03: Rendering of Mariposa development

Mariposa Background

South Lincoln Homes, a 250-unit public housing development, built in 1952, was deeply impoverished and known for high crime rates. Because of these issues, the community, the City of Denver and Denver Housing Authority worked together to improve the neighborhood. Denver Housing Authority also saw an opportunity with the existing under-utilized light rail stop to connect residents to resources downtown.[120] The goal was to combine transit-oriented development with affordable housing. The City of Denver and Denver Housing Authority collaborated with private consultant firm, Mithun, to create the Mariposa Healthy Living Tool, which identified six main objectives that also served as gauges to monitor the project's success. Objectives included: (1) Adequate and Healthy Housing; (2) Environmental Stewardship; (3) Safe and Sustainable Transportation; (4) Social Cohesion; (5) Public Infrastructure; and (6) Healthy Economy.[121] Together, they developed a master plan for the 17.5-acre site to develop a mixed-income, mixed-use, transit-oriented development project to promote community revitalization.[122] The project was titled the Mariposa District with eight phases of construction completed in 2017.[123]

Ensuring Quality, Healthy Housing Access

The starting point for DHA's approach to housing equity began with a desire to create a new home for current residents living in South Lincoln Homes public housing. Emphasis was placed on public housing and subsidized housing units to look the same as market-rate units with the only difference being rent charged.[124] Every unit has the same amenities with modern touches and many have affordable high-speed internet through Comcast's broadband accessibility program for eligible public housing residents. Likewise, residents have equal access to community rooms, a playground, a community garden, and an on-site fitness center.[125] Additionally, DHA wanted to build units based on long-term sustainability and to keep operating costs down with more efficient utilities' usage. They applied LEED, Enterprise Green Communities, and NYC Active Design Guidelines into their building design. Quality was applied to construction, as well as maintenance. DHA maintains its buildings and grounds well. Based

[120] B. H. Places. "A Ride to Better Health." (2017, May 25). https://medium.com/bhpn-crosswalk/a-ride-to-better-health-7a41dd8d338e.

[121] Denver Housing Authority. "Mariposa: The South Lincoln Redevelopment." (Denver, CO 2012). https://cdn.ymaws.com/www.housingcolorado.org/resource/resmgr/resources_development/mariposa,_the_s_ lincoln_rede.pdf.

[122] Denver Housing Authority. "Healthy Development Measurement Tool." (2009). http://www.denverhousing.org/development/Mariposa/Documents/HDMT%20Summary%20Booklet.pdf.

[123] A. D. Garcia. "$197 million Mariposa District transforms public housing from 'projects' to community." (2018, September 28). https://denverite.com/2017/08/04/197-million-mariposa-district-transforms-public-housing-projects-community/.

[124] J. Siebrase. "Yes, This Is Public Housing: How Denver Housing Authority Is Mixing It Up -- and Making Better Homes." (2017, December 13). https://www.confluence-denver.com/features/dha-overview-121317.aspx.

[125] Ibid.

on HUD's Public Housing Assessment System, the DHA has rated as a high performer since 2013.[126]

Meeting Population's Housing Needs Based on Affordability, Size and Tenure

The project constructed over nine hundred units of housing on the 17.5 acre site.[127] One hundred units were dedicated to public housing for senior and disabled residents.[128] The remaining units consisted of a mixture of public housing, privately managed LIHTC units, and market rate units ranging from one- to four-bedrooms.[129] Most units were designed for renter-occupation, though one phase of the project constructed for-sale townhomes in collaboration with Habit for Humanity.[130]

Community Engagement

Denver Housing Authority recognized the need for residents to design their community. They held over 150 community meetings and worked to include the voices of those who weren't present at the meetings, but represented a significant portion of the population, mainly immigrants. They walked around the site and had casual conversations with under-represented community members and at times, residents' children translated for them.[131] Additionally, they created outreach materials in three different languages, as well as going door-to-door to ensure participation from underrepresented community members.[132] The neighbors of La Alma – Lincoln Park knew their buildings were dilapidated, that safety was a concern given crime rates in the area, but they also knew that this place was their community where they felt strong ties to the school and services in the area.[133] Denver Housing Authority listened to their suggestions and inputs not only during the initial planning process, but throughout each of the eight phases.

Collaboration Between Public, Private, and Non-profit Organizations

The goal of collaborative efforts was to pool knowledge and financial capital. A coalition was formed of more than 70 organizations called Mile High Connects (MHC).[134] Organizations included local as well as national partners such as Wells Fargo, Chase Bank, Enterprise Community Partners and the Ford

[126] Parker, Nguyen, & Chou. "HUD Inspect." (2018, November 16). https://projects.propublica.org/hud/owners/CO001.

[127] A. D. Garcia. "$197 million Mariposa District transforms public housing from 'projects' to community." .

[128] US HUD. (n.d.) "Denver's Mariposa District: Supporting Healthy, Mixed-Income Living." https://www.huduser.gov/portal/pdredge/pdr_edge_inpractice_022414.html.

[129] Garcia, A. D. (2018, September 28). "$197 million Mariposa District transforms public housing from 'projects' to community.".

[130] Ibid.

[131] B. H. Places. "A Ride to Better Health."

[132] US HUD. (n.d.) "Denver's Mariposa District: Supporting Healthy, Mixed-Income Living."

[133] B. H. Places. "A Ride to Better Health." Retrieved from

[134] MZ Strategies, LLC. "Advancing Equitable Transit-Oriented Development." (2016, October.) https://static1.squarespace.com/static/5021cc16e4b0c203353d08c5/t/57fbc838e4fcb58bdf33c9ad/1476118586893/Community+Explainer_10-10-16.pdf.

Foundation.[135] MHC's objective is to "ensure that 90% of *existing* affordable housing units near transit stops are preserved, that 25% of all new housing near transit stops is affordable and that multi-modal connections between housing and job opportunities, healthcare facilities, educational institutions and supportive services are improved."[136] From this coalition, the Denver Transit Oriented Development (TOD) Fund was created in 2010 to achieve this objective and is managed by Enterprise Community Partners a national, non-profit housing organization.[137] Additionally, the community utilized the HUD-DOT-EPA Partnership for Sustainable Communities, a federal program that aids community efforts in promoting affordable housing and transportation access in an environmentally sustainable manner.[138] The program supplied technical assistance while also facilitating community meetings.[139]

Implications

- **Construct an even mixture of housing based on AMI** to avoid poverty concentration as well as the displacing effects of gentrification. Units should consist of varied income levels. Follow Denver's model: 33% of residents with income levels at 30% of Eugene's AMI, 33% with incomes between 30-60% AMI and 33% with incomes over 60% AMI. Plan for varied tenure status with rental units and home ownership. Discussions should be conducted with St. Vincent de Paul, Cornerstone Community Housing or DevNW regarding community land trusts or other types of affordable housing models as well as local private developers to create mixed-income units to achieve economic diversity.
- **Promote creation of a Transit Oriented Development Fund** to fund affordable housing and associated community amenities along LTD bus-rapid transit station sites. Encourage discussion between the City of Eugene and Homes for Good of Lane County Housing Agency regarding this. The City of Eugene should consider consulting with Enterprise Community Partners to guide this process.
- **Promote partnership between the City of Eugene and the HUD-DOT-EPA Partnership for Sustainable Communities**, a federal program that aids community efforts in promoting affordable housing and transportation access in an environmentally sustainable manner.

[135] Ibid.

[136] Ibid.

[137] Ibid.

[138] HUD-DOT-EPA Partnership for Sustainable Communities. (2019, April 11). https://www.epa.gov/smartgrowth/hud-dot-epa-partnership-sustainable-communities.

[139] Emily Miller. "Mariposa: Denver, Colorado." (2019, January). https://case.edu/socialwork/nimc/sites/case.edu.nimc/files/2019-02/Mariposa-Denver.1.2019.pdf.

Walkability and Organic Growth at Belmar

The main retail center of the Santa Clara, Santa Clara Square, represents an opportunity to make an impactful change from auto-oriented retail to dense mixed use in a walkable structure and scale. Using a shopping center that has historically been a center of gravity for the neighborhood, cities can encourage economic development, and community goals like sustainability and walkability, to create a new, even more gravitational town center.

One famous redevelopment project that parallels many of the conditions in Santa Clara Neighborhood is that of Lakewood, Colorado. Lakewood is Colorado's fourth largest city, a suburb about 7 miles from central Denver. Although Lakewood had more than half a million residents in the early 2000s, it was 'a city without a downtown.' [140] Instead they had one of the largest enclosed shopping centers in the world, Villa Italia, which served as the 'symbolic center' of the new city of Lakewood, Colorado when it was incorporated in 1969.[141] Although the mall had at one time been a main economic driver for the county, generating $3.12 million in sales tax at its peak in 1994, just three years later voters authorized its demolition. The enclosed mall archetype with anchor stores and acres of parking was not adapting to new economic trends. The entire property, 1.2 million square feet, would have to be demolished and reimagined[142].

Lakewood envisioned a new downtown, with a massive initial investment in street grids that created spaces for retail, offices and residential units to fill in. They created a denser, mixed use, dynamic urban center out of what had been a single building in a sea of black top surface parking. The new development, called Belmar, was a partnership between a private development firm, Continuum Partners, and the city of Lakewood. Belmar was a single massive redevelopment project, but rather than install another monolith, it re-created the town center on a walkable scale and a much more adaptable framework for business and residents to use.

Belmar is exceptional for a number of reasons. First, the infrastructure installment was the prime pathway to development, as in an organically growing city. Second, although the upfront costs were large, more costs could be spread out over time as buildings and businesses were added. This allowed the development to be more adaptable to market demands, and for more adaptable financing. Third, proper design and programming created not just infrastructure capital but also cultural capital, making the center more valuable. This directly affected its success

[140] S Titus. "Belmar project takes Lakewood downtown: city center rises in Villa Italia's wake." *ColoradoBiz*. (2005, August). p *32*(8), https://link-gale-com.libproxy.uoregon.edu/apps/doc/A134857091/ITOF?u=euge94201&sid=ITOF&xid=4599748e (1)

[141] Continuum Partners. "Belmar History." *https://continuumpartners.com/project-page/belmar-history/*

[142] Rachel MacCleery, et. Al. *Shifting Suburbs, Reinventing Infrastructure for Compact Development.* Urban Land Institute. (2012). p 20. http://americas.uli.org/wp-content/uploads/sites/2/ULI-Documents/Shifting-Suburbs.pdf

at stimulating economic development, which had far reaching affects in the community.

Despite this massive initial phase, Belmar's developers did not over-design or mandate the uses and stages of infill. Rezoning allowed for designation of uses over time, which made the project flexible while also being master planned.[143] This meant that apartments, condos or office space could be built and appropriated according to demand. Belmar exemplifies a contrast to a comprehensively imagined, over-designed, and inauthentic space, while benefitting from what Dunham-Jones refers to as an 'instant city.' She points out that Belmar "tripled density on its 100-acre (40-ha) site but did not require a single new traffic signal on surrounding streets. Such capturing of internal trips is dependent on achieving the critical mass associated with instant cities, not with incremental changes to the suburban pattern.[144]

The design of Belmar has had lasting impacts on its success. The size of the blocks informs the feel of the place and the type of buildings that have been installed. Walkability extends from the length of the blocks to the width of sidewalks, with benches, trees, and outdoor seating. Brickwork evokes the American Mercantile style, referencing the history of Denver and Colorado.[145] A local brickmaker, who manufactured bricks for the first mall, was employed to make a number of different brick styles to differentiate buildings.

References to the past, architecturally and thematically, helped residents connect emotionally with the place. The name Belmar is a reference to the estate that first occupied the site, built in the early 1900s. It was a mansion modeled after Marie Antionette's 'Trianon Palace' for the heiress to the Denver Post.[146] All sides of the buildings were activated for pedestrians, even the back of parking garages which had 'jewel box' artisan studios installed on the ground level. [147]

[143] Rachel MacCleery, et. al. *Shifting Suburbs, Reinventing Infrastructure for Compact Development.* (21)

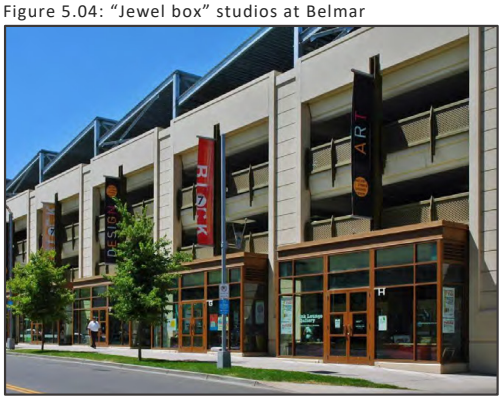
[144] E Dunham-Jones, and J Williamson. *Retrofitting Suburbia.* Urban Land. (2009) p 42. https://uli.org/wp-content/uploads/2009/10/Sustainable-Suburbs-Retrofitting-Suburbia.pdf

[145] Continuum Partners. (2012). *The Making Of Belmar* [Video File]. https://continuumpartners.com/project-page/the-making-of-belmar/

[146] Continuum Partners. *Belmar History.*

[147] Congress for the New Urbanism. *Belmar: Lakewood, Colorado.* https://www.cnu.org/what-we-do/build-great-places/belmar

Figure 5.04: "Jewel box" studios at Belmar



Source: https://www.cnu.org/what-we-do/build-great-places/belmar

One contributor remarked, "That sense of place is really missing from suburban communities and we're going to create that, not in an artificial way, not in a Disneyland or Universal Studios way, but in a real way."[148]

Good design, activation of spaces, and authenticity, created a sense of place and community identity. A sense of pride and ownership was noted in Belmar, making it an attractive option for business investment. Like Belmar, Santa Clara already enjoys the presence of a retail center and could utilize the retail anchor model to create a mixed use, dense and walkable development. An initial investment in infrastructure could create the conditions for the formation of social capital and ongoing economic development. Investing in transit improvements might have more long-term benefits, and unlike Belmar, Santa Clara is already connected via public transit. Creating a development project where transit supplies the main condition for people being there might alleviate the risk of relying on a single retail anchor. A transit station supplies security for large businesses and can be the main driver of retrofit.[149] By combining transit and infrastructure investment, Santa Clara Square could be a venue for the creation of a community identity and a sustainable economic driver for the neighborhood.

[148] *The Making Of Belmar*

[149] E Dunham-Jones. *Retrofitting Suburbia.* (2010). [Video file]. https://www.ted.com/talks/ellen_dunham_jones_retrofitting_suburbia

Implementation

Phases of Development

Phase 0- Construction of LTD Santa Clara Transit Station

LTD will break ground on the Transit Station in Spring 2020, and will begin bus operations in early 2021.[150] The installation and startup of the station will signal the beginning of the rest of the proposed phases, giving the whole region something to follow and look forward to making their own.

Phase 1- Find Funds and Developer, while including the Santa Clara community in partnership building

Funding will be essential to the project, whether raised through grants, public-private partnerships, Lane County Bond Measures, or philanthropic investment. Finding a developer which understands the shared vision of the community and LTD will be important to keeping the desired character of the site intact. Additionally, continued conversation with the surrounding community will keep interest high, invite neighbors to be a part of the placemaking process, and hopefully win over skeptics from the area.

Phase 2- Construction of Affordable Housing units, Schoolhouse Plaza, access streets, and multi-modal infrastructure

In order to create transit ridership and a sense of place from the beginning, Affordable Housing and the basic outline of the site should be built first. Often affordable housing is put in either last or not at all due to lack of funding or initiative toward the end of larger projects. Putting it first will send a strong message to the community of the development's priorities. Along with housing, this phase includes the installation of basic infrastructure, streets, sidewalks, multi-modal infrastructure, and the plaza. As this site is meant to provide connection to the neighborhood and other parts of Eugene, the creation of more multi-modal paths and lanes around the neighborhood should spur more people to use the plaza and transit center in a way that reduces car use in the area. The creation of the plaza will also allow food trucks the opportunity to be installed on site despite commercial buildings being not yet built, providing a foundation for other future businesses to be established at a later date.

Phase 3- Incremental development on Schoolhouse Plaza site

This phase will see the finish of the overall plan for the Santa Clara Transit Center site. This includes mixed-use residential housing, commercial buildings, green space, and art installations. Once completed, the plaza will act as a place of connection for the Santa Clara neighborhoods, providing housing, commercial opportunities, places to eat, and a bus station connection to the rest of Eugene.

[150] Lane Transit District. "Santa Clara Transit Station: New Proposed Transit Station". https://www.ltd.org/santa-clara-transit-station/.

Phase 4- Schoolhouse Plaza site becomes the model for surrounding redevelopment, including Santa Clara Square

The architectural style and larger community focus of the development of Schoolhouse Plaza can be used to inspire redevelopment in the surrounding area, which is currently disjointed and disconnected. This includes Santa Clara Square to the south, which has great potential for continued redevelopment and placemaking. By incentivizing reorganizing the area into a block structure, replacing the current strip mall and open parking lots design, the Square has the potential to become its own place, complete with commercial, mixed-use, and residential buildings.

Compelling Change in the Area

LTD currently owns the land upon which the new Santa Clara Transit Station and Schoolhouse Plaza will be built. Looking toward the future and Phase 4 after the plaza is completed, the question will become how to influence the surrounding area to redevelop as well. While redevelopment occasionally occurs on its own, the free market is generally given to the status quo unless pushed by outside forces. Staff suggests that meetings take place between the owners of Santa Clara Square, during which LTD and the City of Eugene present the idea of commissioning a publicly paid for analysis of the Square. Through this process, the owners may be influenced into beginning the process of redeveloping their site into a more modern, gridded, pedestrian-friendly model, as suggested in this Staff's plan.

Funding Strategies

Developers often put up the capital themselves or apply for bank loans, however there are many types of funding alternatives on the federal, state, and local levels, especially for Transit Oriented Developments. Tapping into these types of resources can save money for municipalities and developers, making the project more attractive and more likely to be completed as originally envisioned.

Figure 5.05: Two-way bicycle pathways

Federal

Transportation Alternatives Grant

According to the "Fixing America's Surface Transportation (FAST) Act", the Federal Highway Administration (FHWA) can authorize "funding for programs and projects defined as ***transportation alternatives***, including on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access

to public transportation and enhanced mobility, community improvement activities such as historic preservation and vegetation management, and environmental mitigation related to stormwater and habitat connectivity; recreational trail projects; safe routes to school projects; and projects for planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former divided highways."[151]

New Markets Tax Credits (NMTC)

The NMTC program, through the support of the US Treasury Department, works to attract investment for real estate projects, community facilities, and new businesses in low-income communities. Through tax credits, the program "attracts private capital into low-income communities by permitting individual and corporate investors to receive a tax credit against their federal income tax in exchange for making equity investments in specialized financial intermediaries". [152]

State

Connect Oregon Grants

Through the use of tax-exempt bonds and lottery funds, Connect Oregon "provides grant funding for public, non-profit and private entities through a reimbursement process for investments in air, rail, marine and bicycle/ pedestrian, and in earlier programs, transit (non-highway) infrastructure projects."[153] The grants are given out through a reimbursement system, thus funds must be spent before any money is received from the state. The program also requires grantees to match 20% to 30% of their own funds to the project. There are other requirements as well, such as Monthly Progress Reports and Project Performance Reports.

Transportation and Growth Management Planning Grants

The purpose of these grants is to "help local jurisdictions plan for streets and land to lead to more livable, sustainable, and economically vital communities. This planning increases opportunities for transit, walking and bicycling."[154] The TGM Program uses these funding opportunities to provide "long range planning resources to help Oregon communities address pressing transportation, land use, and growth management issues".[155]

[151] Federal Highway Administration. "Transportation Alternatives". (June 15, 2018). https://www.fhwa.dot.gov/environment/transportation_alternatives/.

[152] US Department of the Treasury. "New Markets Tax Credit Program." Community Development Financial Institutions Fund. (2016). https://www.cdfifund.gov/programs-training/Programs/new-markets-tax-credit/Pages/default.aspx.

[153] Oregon Department of Transportation. "Connect Oregon, Guidelines for Grantees." (August 2018). p 2. https://www.oregon.gov/ODOT/Programs/TDD%20Documents/ConnectOregon-Guidelines-for-Grantees.pdf.

[154] Department of Land Conservation and Development. "TGM Planning Grants." https://www.oregon.gov/LCD/TGM/Pages/Planning-Grants.aspx.

[155] Department of Land Conservation and Land Management. "Transportation & Growth Management Program, 2019 Application

Various types of entities are eligible to apply, including cities, counties, and mass transit districts. Applicants should have plans ready to be implemented.

City

Capital Improvement Plan (CIP)

"The CIP provides a six-year funding plan for the City's capital improvements, including transportation, airport, public buildings, parks and open space, stormwater and wastewater projects."[156] Capital projects are large in terms of cost and size, and generally have a great benefit to the community. The project must be adopted by the City Council after nine months of development. If the project is deemed viable by the City Council, then the process moves forward and is funded by the city.

General Obligation (GO) Bonds

Instead of relying on project revenue, GO Bonds are applied for and received by municipalities "with the belief that a municipality will be able to repay its debt obligation through taxation or revenue from projects."[157] The bonds are a secure way for local governments to raise money in order to improve the economic well-being of a city, such as building roads, transit centers, parks, and bridges.

Tax Increment Financing (TIF)

According to Oregon's Urban Renewal Statute (ORS 457), local governments may activate its urban renewal agency after establishing an area of "blight" within a community. "Blight" is defined as areas, by reason of deterioration, faulty planning, inadequate or improper facilities, deleterious land use or the existence of unsafe structures, or any combination of these factors, are detrimental to the safety, health, or welfare of the community.[158] The definition also includes "obsolescence, deterioration, dilapidation, mixed character or shifting of uses" as appropriate characteristics of "blighted", which does describe the current state of the former LTD owned school site. Thus, as argument can be made to allow TIF funds to be available for the redevelopment of this site.

Packet." (2018). p 2.https://www.oregon.gov/lcd/TGM/Documents/TGM-Application-Packet.pdf.

[156] City of Eugene. "Capital Improvement Program". https://www.eugene-or.gov/371/Capital-Improvement-Program.

[157] James Chen. "General Obligation Bond (GO)." Investopedia. (April 3, 2019).https://www.investopedia.com/terms/g/generalobligationbond.asp.

[158] Oregon Legislature. "Chapter 457 – Urban Renewal". (2017). https://www.oregonlegislature.gov/bills_laws/ors/ors457.html.

Affordable Housing Strategies

The City of Eugene incentivizes the building of low-income housing, which includes funding for a plethora of costs, including acquisitions, construction, redevelopment, and soft costs. "Regulatory incentives include density bonuses and reduction of parking requirements. Projects receiving funds include small developments for special need populations as well as medium sized affordable housing development."[159]

Land Acquisition for Affordable Housing

Through Eugene's Land Bank program, the city acquires land for redevelopment and works with the surrounding community to create a viable plan for the site. The Development process generally takes much longer, performing neighborhood outreach, accepts proposals from potential developers, and ultimately a decision is made by the City Council.

Low-income Rental Housing Property Tax Exemption (LIRHPTE)

Under Oregon start statute, LIRHPTE provides a 20 year exemption for rental properties owned by 501c(3) non-profits.[160] The purpose of this program is encourage the construction of more low income housing options across the city, of which the income limit is 60 percent of the area median income based on household size.

Community Land Trust (CLT)

CLTs can offer a viable way for community members to build wealth. The trusts are nonprofit, community-based organizations employed in various types of development, but are most often used in creating long-term housing affordability. The community non-profit controls the land, while homeowners enter into a lease instead of a traditional sale. In the event the party leasing the land decides to sell, they only earn a portion of the increased property value, allowing the CLT to keep the rest in order to preserve affordability for future leasers.[161] In order to form a CLT, capital must be input into the trust, generally from outside sources such as private donors, community foundations, and anchor institutions.[162]

Possible Partnerships

River Road Community Organization

Due to city policy, the River Road and Santa Clara region has become a "patchwork of incorporated and unincorporated parcels". [163] The River Road Community Organization keeps the area up to date through an electronic newsletter and community meetings. The "River Road – Santa Clara Neighborhood Plan" was created through a partnership between Eugene Planning and the Community Organization. Keeping the Community Organization included in the process will prevent miscommunications from

[159] City of Eugene. "Affordable Housing Development Programs". https://www.eugene-or.gov/4160/Affordable-Housing-Development-Programs. (n.d.)

[160] City of Eugene. "Affordable Housing". https://www.eugene-or.gov/1042/Affordable-Housing-Development-Incentive.

[161] Democracy Collaborative. "Community Land Trusts (CLTs)". https://community-wealth.org/strategies/panel/clts/index.html.

[162] Ibid.

[163] City of Eugene. "River Road Community Organization". https://www.eugene-or.gov/1382/River-Road-Community.

happening, make neighbors feel heard, and will hopefully build support for the overall project throughout the community.

Huerto de la Familia

This organization focuses on community garden initiatives, specifically with Latinx populations. According to their website, "Huerto de la Familia provides families with personal plots of land to grow healthy, nutritious and culturally appropriate food for their families. Families also have the opportunity to use the space to express their culture and build community with each other."[164]

DevNW

This non-profit focuses on "developing thriving communities" through improved financial wellbeing, the building of affordable homes, helping low income people get access to funds, and helping communities thrive through a myriad of ways.[165] Partnership with this organization could aid or advise on the building of affordable homes on the Schoolhouse Site, which is a valuable strength of the organization.

Homes For Good

Once known as the Housing and Community Services Agency of Lane County, Homes for Good helps families in need if affordable housing, thus a partnership with this non-profit would easily fill the Schoolhouse Plaza with tenants, as there are currently long wait lists in Eugene for affordable housing options.

Cornerstone Community Housing

"Home is the foundation for families to thrive."[166] Cornerstone recognizes that family dynamics are strongly affected by unstable housing, thus this organization seeks to provide family centric affordable housing options for families in need. They choose specific home layouts, common spaces, playgrounds, and safety features on their sites in order to promote a safe and stable environment for families. This is a model which the Schoolhouse Plaza housing could learn from and possibly partner with.

Community Input

LTD and the developer will need to present the mixed-use and affordable housing strategy in a way which the community not only understands, but also supports. The City of Eugene is facing a need to diversify the types of housing within city limits due to the Urban Growth Boundary, which the city recently affirmed by not expanding. Public engagement is time and money intensive, thus a balance will need to be struck in how much the public has a say. That being said, there will be a need to actively include the surrounding community in the development process on some level. As this site is meant to be a space in which the local community feels a sense of ownership over, allowing the public to invest time and thought into it will be important. One aspect we have left open in respect to the community is the site name. Throughout the project, Staff has been using "Schoolhouse Plaza" to reference the site. However, Staff recommends that an official

[164] "Organic Gardens Program". Huerto de la Familia, The Family Garden. https://huertodelafamilia.org/organic-gardening/.

[165] DevNW. https://devnw.org/.

[166] Cornerstone Community Housing. "About". https://cornerstonecommunityhousing.org/about/.

name ultimately be given over to the community to decide upon in hopes that the process will give neighbors even more ownership over their new community space.

Additional Recommendations

Zoning Changes

Currently, both Schoolhouse Plaza and Santa Clara Square are zoned C-2, Community Commercial. Staff recommends a zoning variance in order to allow the construction of cluster homes on the Schoolhouse Plaza site and the addition of residential developments at Santa Clara Square.

Leading Pedestrian Intervals at Crosswalks

Staff recommends that, if possible, both traffic lights at the site should have a "leading pedestrian interval". By giving pedestrians a three- or five-second head start on their go signal, they are more visible to drivers and their right-of-way over turning vehicles is reinforced.[167] With a relatively small and cost-effective change to traffic signal timing, LTD can prioritize pedestrian safety.

Traffic Circle at Division and Lone Oak

Staff recommends the installation of a traffic circle at Division and Lone Oak at whatever time the redesign of Santa Clara Square occurs. As the goal of the redesign is to encourage more mixed-use of the space, some traffic calming measures will need to be taken, but not ones that will cause traffic. According to the Washington State Department of Transportation (WSDOT), "studies have shown that roundabouts are safer than traditional stop sign or signal-controlled intersections."[168]

Wayfinding Signs and Bulletin Boards

Signs showing distance or travel time to nearby locations such as North Eugene High School, the Willamette River access points, and Santa Clara Square, or to connecting bike routes, can help establish connectivity at a human scale, at low cost.

Community bulletin boards are another low-cost way to create visual interest and activity around public spaces, as well as serving as informal information centers for neighbors and small groups.

Figure 5.06: Public bulletin board

[167] A.C. Fayish and Frank Gross. "Safety effectiveness of leading pedestrian intervals evaluated by a before–after study with comparison groups." Transportation Research Record No. 2198. (2010). p 15–22. https://nacto.org/docs/usdg/safety_effectiveness_of_lpi_fayish.pdf

[168] WSDOT. "Roundabout Benefits." https://www.wsdot.wa.gov/Safety/roundabouts/benefits.htm.

Conclusion

For years, new development has seemed just around the corner at the corner of River Road and Hunsaker Lane, but with the proposed expansion of EmX bus lines along the River Road corridor, the time for thoughtful action and infrastructure improvements is now.

The site has several significant advantages that set it apart and make it a superb place for an equitable and transit-oriented development that meets the goals of the many overlapping planning documents:

- it's the largest continuous plot of undeveloped land in the Santa Clara neighborhood and it's owned by Lane Transit District,
- it's centered on a major intersection, a future Bus Rapid Transit line, and a seam of commercial and residential zones, and
- it has a history, in its prior life as the Santa Clara School, as the heart of the neighborhood.

Human-scaled amenities like a new public plaza, food truck lot, and pedestrian pathways will create interest and activity, and a more traditional block structure and mixed use of buildings will set an example for the future infill development of the greater area.

By working with the City of Eugene and local developers, non-profits, neighborhood groups, and community stakeholders, the neighborhood can commit to meeting some of its vital needs, especially expanding its housing stock and diversity, facilitating opportunities for small business, and engaging its residents on multiple levels. With all of these elements forming the roots, the community of Santa Clara can grow up and grow into itself. With time, the heart of the community will gravitate to the Plaza, where all neighbors can meet and enjoy the fruits of their labor.

Figure 6.01: A farmer's market in St Johns, WA

Source: http://www.stjohnsopportunity.org/

Appendix A

Zoning Codes, Selected Summary:

Code	Description
AG	Agricultural
R-1	Low-Density Residential
R-2	Medium-Density Residential
C-1	Neighborhood Commercial
C-2	Community Commercial
MU	Mixed Use

Index of Figures:

River Road Santa Clara Neighborhood Plan Goals

Selected for relevance to this plan

Transportation

Goal 4.5 Active Transportation to Commercial Centers: Develop active transportation networks that connect neighborhoods to their adjacent commercial areas, schools and community gathering spaces.

Goal 5: Plan for a transportation system that is future oriented, environmentally responsible and transitions to zero carbon

Goal 6: Ensure a safe transportation system for all users

Economic Development

Goal 1: Improve the neighborhood economy and empower local residents by encouraging the growth and creation of local businesses.

Goal 13.1.2 Limit size and scale of commercial development outside of area along River Road immediately north of Beltline. Reduce the current maximum size of retail uses permitted (50,000 square feet) to assure that retail facilities are small and neighborhood focused.

Housing

Goal 11.2 Well Designed Built Environment: Ensure that building design, size, scale and site layout provide a desirable transition between different uses and scales.

Goal 12 Ensure future housing addresses the needs of the community

Goal 12. 1 Compatible Infill: Allow for residential infill development at compatible scales using a variety of housing types at appropriate densities and scales to fit neighborhood demand.

Goal 12.2.1 Develop strategies and tools to create and preserve rental and owner-occupied affordable housing and housing affordability throughout the area. Identify and implement investment strategies that expand and maximize local, regional, state and federal affordable housing resources, partnerships and tools.

Placemaking

Goal 11.3 Well Designed Community Space: Use well-designed community space (public and private) to support the goals and policies of the neighborhood plan and other applicable City and State-wide goals.

Goal 13.1.4 Allow developments of 4-6 stories in designated nodes along River Road as long as public amenities are provided by the developer.

Goal 13.2 20-minute neighborhoods: Support walkable neighborhoods where people can meet most of their daily needs within a 20-minute walk

Goal 1.3.2 Brand the neighborhood as a recognizable identity that draws on these assets (eg: “River and Garden district”)

Goal 1.3.4 Use neighborhood gathering spaces to support the buy local campaign

Appendix B: Site Analysis Maps

Map 1 and Table 1: Taxlots on the eight-acre site

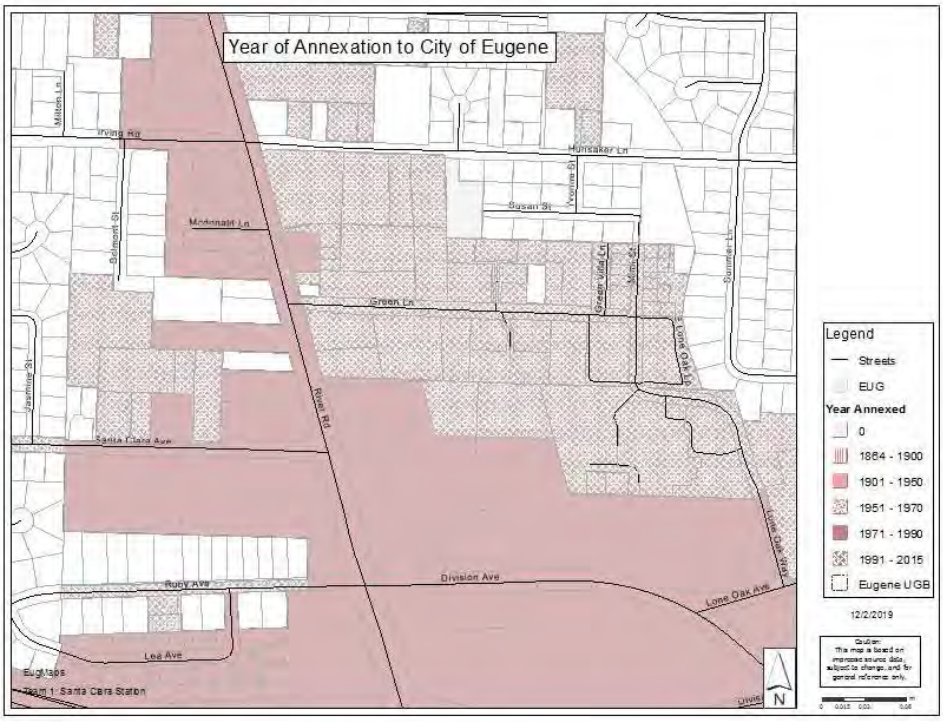
Map 1: Taxlots owned by Lane Transit District, at the “eight-acre site”

Table 1: Taxlots by zoning code and development status.

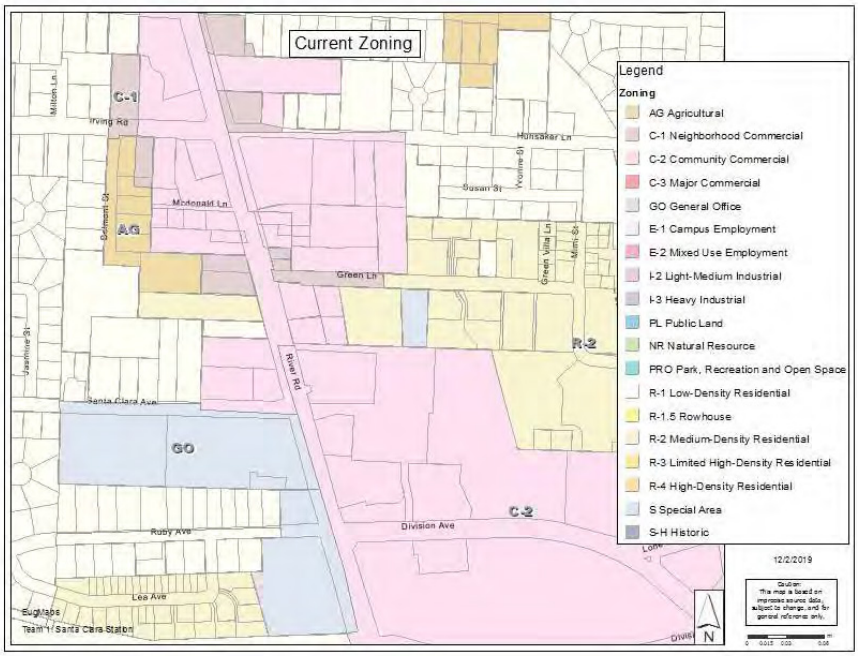
Map	Taxlot	Property Description	Status	Zone Designation	Acres	Development Status
Owned by Lane Transit District						
17041141	9100	COMMERCIAL, VACANT		C-2	1.094	Undeveloped
17041141	9101	COMMERCIAL, VACANT		C-2	1.731	Undeveloped
17041141	9200	COMMERCIAL, VACANT		C-2	0.517	Undeveloped
17041141	9300	COMMERCIAL, VACANT		C-2	0.813	Undeveloped
17041144	200	COMMERCIAL, VACANT		C-2	0.775	Undeveloped
17041144	300	COMMERCIAL, VACANT		C-2	1.106	Undeveloped
17041144	400	COMMERCIAL, VACANT		C-2	0.874	Undeveloped
17041144	501	COMMERCIAL, IMPROVED	QUICK LUBE	C-2	0.399	Undeveloped
17041144	601	COMMERCIAL, IMPROVED	QUICK LUBE	C-2	0.257	Undeveloped
17041144	602	COMMERCIAL, IMPROVED	QUICK LUBE	C-2	0.136	Undeveloped
17041144	800	COMMERCIAL, IMPROVED	SMALL OFFICE*	C-1	0.096	Developed*
**Out of date; no building exists here.*				**Subtotal Acreage:**	**7.80**	
Privately Owned *(X on the taxlot map)*						
17041144	900	COMMERCIAL, IMPROVED	BARBER/BEAUTY SHOP	C-1	0.083	Developed
				Subtotal Acreage:	**0.08**	
				TOTAL ACREAGE:	**7.88**	

Source: Lane County Assessor Taxlot Data, and staff analysis. November 2019.

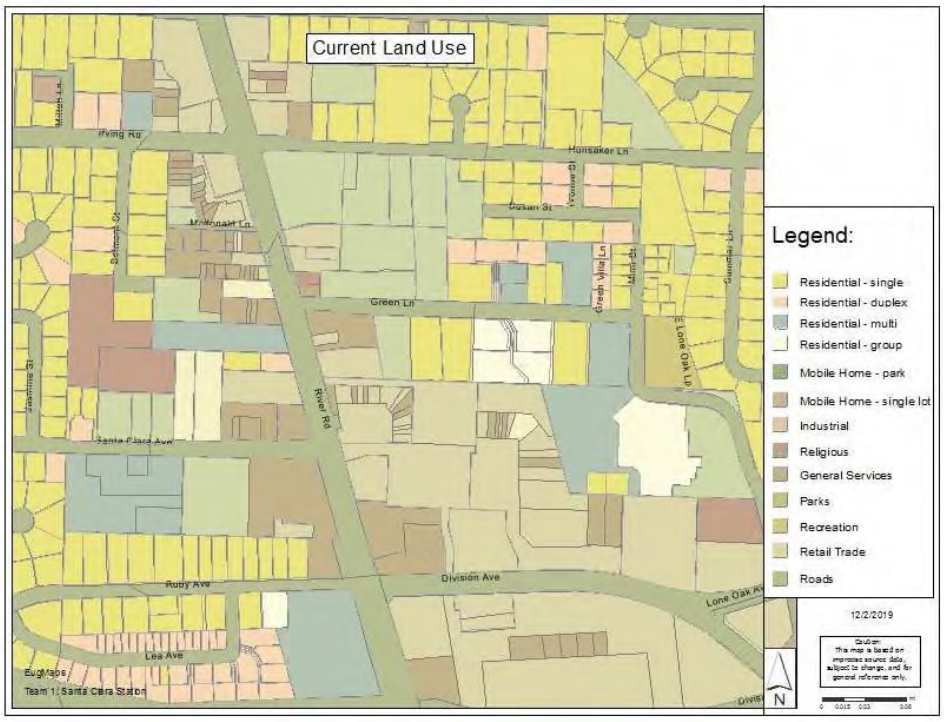
Map 2: Taxlot Annexation to Eugene and Year of Annexation



Map 3: Current Zoning

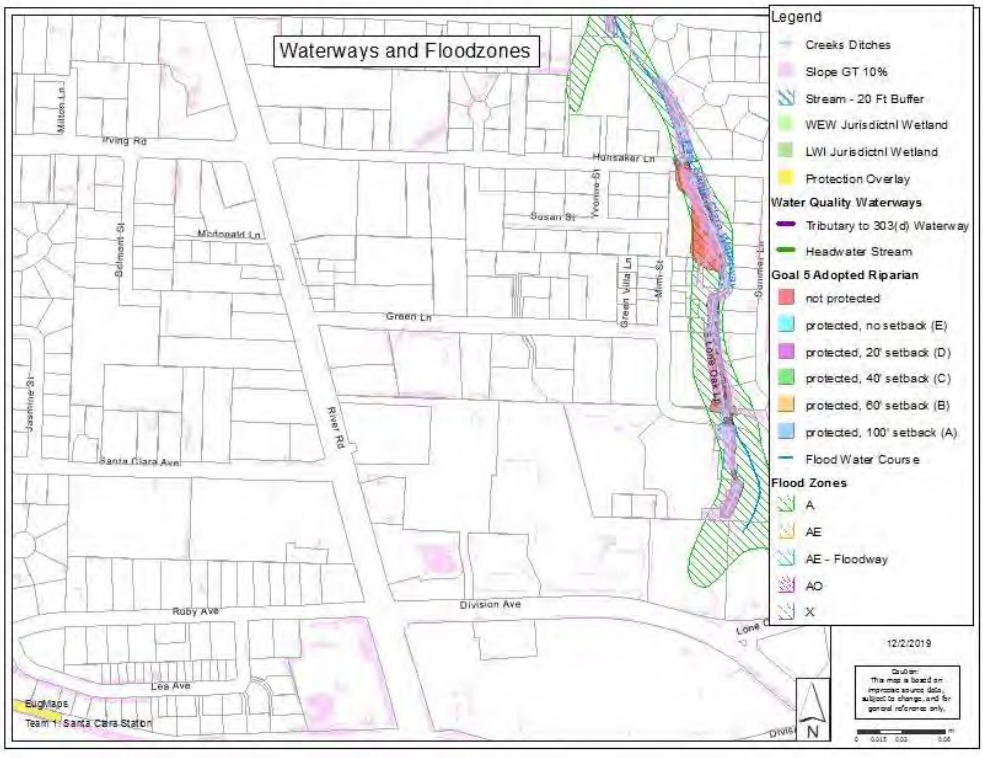


Map 4: Current Land Use

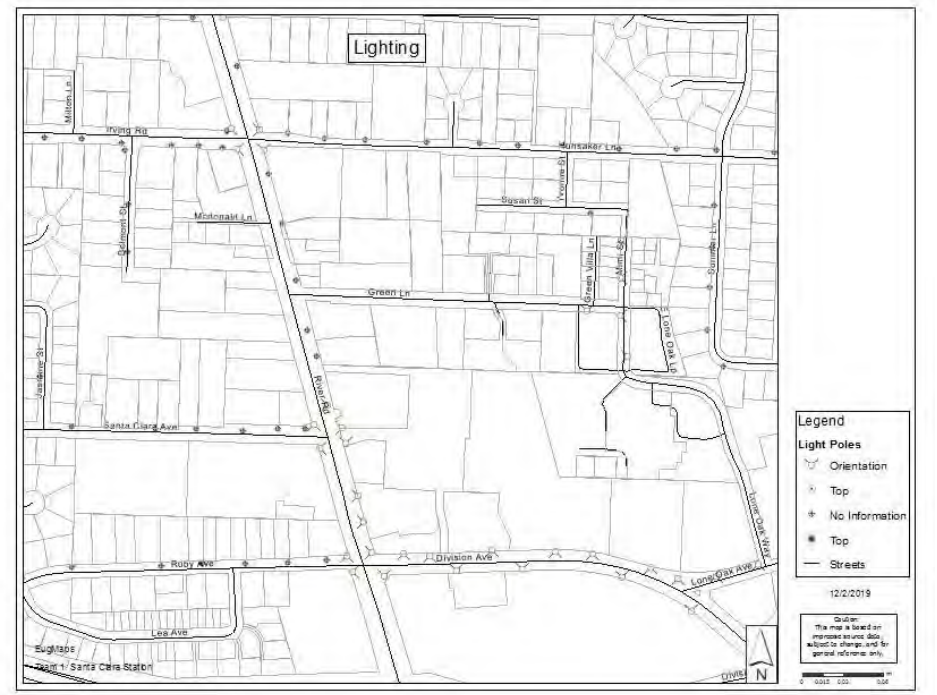


Map 5: Current Bikeways

Map 6: Waterways and Floodzones

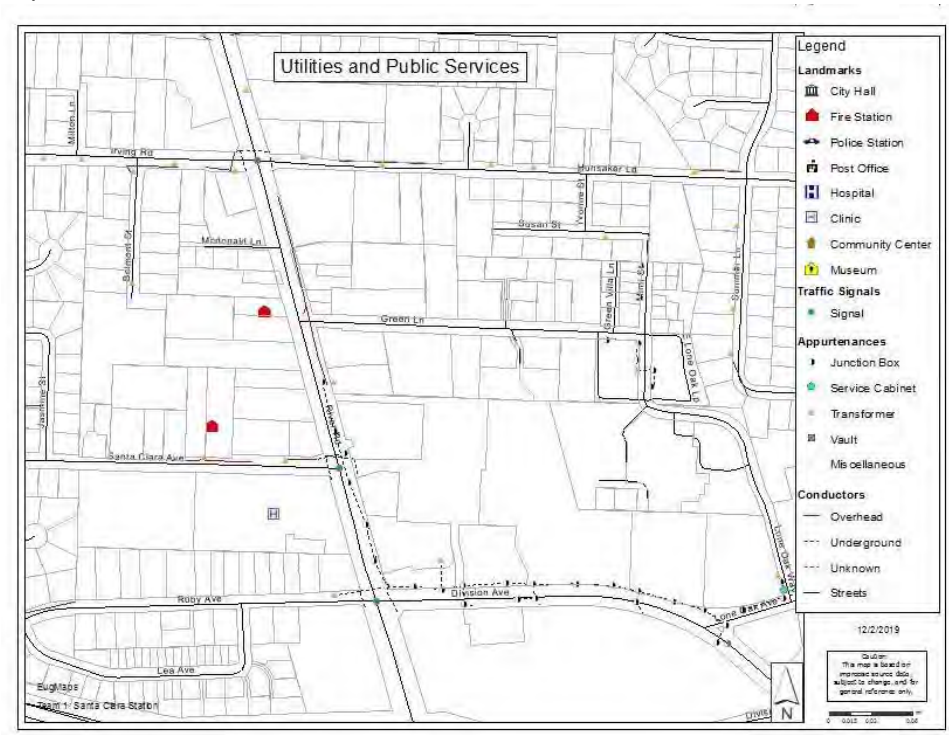


Map 7: Lighting



74 Appendix B: Site Analysis Maps

Map 8: Utilities and Public Services



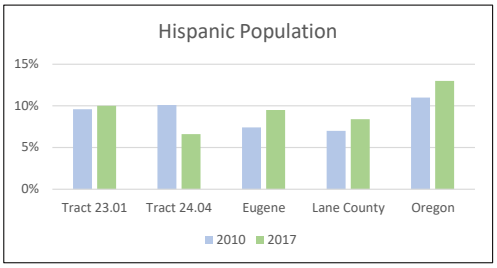
Appendix C: Demographics

Table 1: Population Change from 2010 to 2017 for Santa Clara, Eugene, Lane County and Oregon.

Location	Numerical Change	Percent Change
Tract 23.01	-78	-2.0%
Tract 24.04	28	0.7%
Eugene	6,950	4.5%
Lane County	11,756	3.3%
Oregon	194,053	5.1%

Source: Census 2010, Table: T1. ACS 2017 (5-Year Estimates), Table: A00001.

Chart 1: Hispanic Population Percent Change from 2010 to 2017 in Santa Clara, Eugene, Lane County, and Oregon.



Source: Census 2010, Table: T55. ACS 2017 (5-Year Estimates), Table: A04001.

Table 2: Change in Median Household Income from 2010 to 2017 for Santa Clara, Eugene, Lane County, and Oregon.

	Tract 23.01	Tract 24.04	Eugene	Lane County	Oregon
2010	$40,879	$52,891	$41,701	$42,923	$49,260
2017	$45,040	$58,858	$47,489	$47,710	$56,119
Numerical Change	$4,161	$5,967	$5,788	$4,787	$6,859
Percent Change	10.2%	11.3%	13.9%	11.2%	13.9%

Source: Census 2010, Table: S1903. ACS 2017 (5-Year Estimates), Table A14006.

Appendix B

Group 2: Four Corners of River Road

Acknowledgements

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Table of Contents

Executive Summary

In 2015 Lane Transit District (LTD), in partnership with the City of Eugene, regional agencies, and the Eugene-Springfield community launched the MovingAhead project. The objective of the project was to identify important streets in the Eugene-Springfield area and determine what transportation investments were needed.[1] The MovingAhead team identified five key corridors and considered the costs and benefits of a variety of transportation investments for each. The MovingAhead Executive Summary was published in September of 2018 to inform the community of where this partnership planned to focus their investments over the next decade. River Road was named as one of the five corridors along with Coburg Road, Highway 99, 30th Avenue to LCC and MLK Jr. Blvd./Centennial Blvd. Consequently, a year later, the Sustainable City Year Program and LTD formed a partnership with University of Oregon's Public Planning, Policy, and Management department. The Community and Regional Planning students were asked to conceptualize, design, and propose a site plan for one of the bus stops along the River Road corridor. This report will put forth our proposal for the Old Station site (Census Tract 28) on the Northeast corner of River Road and River Avenue.

Our vision is influenced by the question: "Where do we want to go together?"

The River Road community is at a critical turning point in its history and this is an important moment to decide what the future looks like for the River Road neighborhood. Our vision is to create a catalyst site on the Northeast corner of River Road and River Avenue that will honor the heritage and history of River Road and help solidify the neighborhood brand. Currently, the NE corner is operating as LTD's main bus station on the existing corridor and it shares the lot with a vacant building, once a furniture store. It is just south of the Beltline Highway and adjacent to a McDonald's drive-through.

Our vision for this site is big – one that will take up to 20 years of implementation over four phases.

We were encouraged to think and dream big and believe that through collaborative public-private partnerships, community engagement and ingenuity, redevelopment on the NE corner could spur redevelopment on all of the other corners. Inspired to take on this challenge and think of how this area could transform, we came up with our proposal for this site: "The Four Corners of River Road." Together, these four corners will help create a walkable, vibrant, safe, and sustainable community. This will be achieved by providing access to transit, affordable housing, community gathering spaces, cultural programming, and economic opportunity.

Through extensive analysis and research, we gained valuable insight into what has helped form the River Road community, who has contributed to that formation and what it looks like today. We researched the neighborhood history, cultural background, current demographics and needs of its residents, and conducted a site analysis to further understand the locational context within which we were working. We reviewed and analyzed various plans including the River Road Santa Clara Neighborhood Plan, the Eugene 2035 Transportation Plan, the MovingAhead Plan, and the City of Eugene Comprehensive Plan. Through this, we identified common themes which influenced our recommendations aligning with the community's visions and broader planning goals for the area.

We noticed an emphasis on place-based planning wherein community values significantly inform planning objectives. The provision of a diverse, affordable array of housing types. A focus on context-responsive infill throughout the transit corridor and in residential areas with compact housing options to address the "missing middle." Additional commonalities included increasing economic prosperity, fostering regional identity, promoting the overall health of community members, and improving transit safety.

Our goal with this project was to focus on how we could account for future growth while maintaining the neighborhood's integrity and culture. This informed our four main planning objectives: improve pedestrian and cyclist safety, engage the community in placemaking efforts, promote sustainability and prioritize affordability

The overall design concept focuses on four areas: affordability, connectivity, placemaking and sustainability. This report details each of these concepts and includes background information as to why these four concepts are relevant for the River Road community at this time as well as offers relevant case studies and ideas for implementation. Our recommendation includes multi-family housing and a more vibrant street corner. This section of the corridor is particularly outdated in building design and infrastructure, so implementing a plan that adds vibrancy and culture to the area is key.

In order to fortify our concepts, we suggest a flexible and comprehensive approach to implementation:

- LTD decides to sell or lease the land
- Moving the bus stop to the Southeast Corner of River Road and River Avenue
- Creating opportunities for community engagement related to placemaking efforts
- Propose mixed-use buildings that fit within current zoning
- Incorporate sustainable efforts into updated urban design

The River Road area has the potential to transform from a place that you drive through at high-speeds on your way to somewhere else to a destination. A place where both visitors and neighborhood members notice the strides that were made to include community stakeholders in decision making. An intersection that prioritizes pedestrian safety and ensures that high schoolers have an easy path to get to school. A residential neighborhood that provides diverse housing options, a commercial environment that values local businesses and placemaking features that honor the heritage, history and future of the area. With commitment from The City and Lane Transit District, "The Four Corners on River Road" can provide more community gathering spaces, affordable housing, diverse economic opportunities and sustainable values; efforts which will benefit residents, businesses, developers and community organizations for years to come.

Our Site: Old Station – near the on-ramp to the Randy Pape Beltline.

Source: Aqsa Khan (2019)

Site History and Background

The area of the modern-day River Road neighborhood lies on indigenous land of the Kalapuya Native American tribe.[2] The fertile soil along the banks of the Willamette River made it an important agricultural area for the tribes for generations. In the 1840's and 1850's Anglo settlers from the United States arrived to the area via the Oregon Trail. This led to the formal establishment of the City of Eugene in 1853.[3] Early settlers to the area utilized the River Road area for farming, just as the Native Americans had before them. In fact, the modern thoroughfare of River Road is located along an old Kalapuya trail. Most farming in the area consisted of small locally owned grain farms and various orchards. The construction of the Oregon & California Railway in 1871 led to the establishment of the Roosevelt Railyard on the western edge of the River Road neighborhood and provided a way for the local farmers goods to get to markets beyond the Eugene-Springfield area.[4] The area remained rural and agrarian until the 1950's post-war economic boom which caused the city of Eugene to expand with new subdivisions. In the decades since, the River Road Neighborhood has continued to grow, its remaining small farms dwindled in number every year until they eventually disappeared. The completion of the Randy Pape Beltline Highway in the area in 1970 brought even further growth and now serves as the boundary between the Santa Clara neighborhood to the North and the River Road neighborhood to the South.[2] When the 1982 Metro plan established that all areas within the Eugene-Springfield Urban Growth Boundary be annexed by the city, deep resistance from the residents emerged. This has led to an area with complicated jurisdictions as a majority of the neighborhood is now under city jurisdiction, but a number of sites still fall under Lane County jurisdiction in somewhat of a patchwork pattern.[2] The area in the present day is a suburban community of aging subdivisions and shopping centers ripe for change.[4]

Historic Photograph of River Road

Source: Eugene Historic Review Board (2005)

History of Planning and Policy in the Area

The history of planning and policy in the area goes back to the 1890's when the land was originally subdivided into large land claims of 640 or 320 acres.[4] Most of these land claims were developed as family farms which subdivided as they were passed down from generation to generation or sold to new owners. Many of the roads in the neighborhood were built along these old property lines. The area was first platted for subdivisions in the 1910's with modest growth till the 1930's. The area boomed postwar and took on many of the characteristics it has today.[4] More modern plans for the area include the 1982 Metro Plan, the 1987 Urban Facilities Plan, The current Eugene-Springfield Metro Plan, Envision Eugene, LTD's Moving Ahead and most recently the River Road & Santa Clara Neighborhood Plan.

Old Station Site Analysis

Site Location

For our project, the site location and its proximity to different hubs in the Eugene/Springfield area are important elements in drafting our proposal. Our site includes the Old LTD Park-and-Ride Station on the corner of River Road and River Avenue. Our initial focus was on the parcel of land available between the intersection of River Road and River Avenue, near the Randy Pape Beltline in Old Station. But as LTD has discussed possibly selling the Old Station land we look at the future development prospects of this land acting as a catalyst to the other four corners and the neighborhood surrounding this intersection. This intersection near the highway is one of the busiest with one of the highest accident rates in the area. A redevelopment plan is needed for the neighborhood to mitigate transportation related safety issues, revitalize the outdated infrastructure, and connect the neighborhood with its natural environment.

Macro View

It is located at the heart of the city of Eugene with a distance of 4.3 miles from Eugene Airport, 4 miles from the University of Oregon: and 5.6 miles from Springfield (Figure 1). With its proximity to these hubs and connectivity of the transit lines, Old Station is an attractive location for future residents to move to.

Old Station Site: River Road and Silver Lane Intersection

Source: Aqsa Khan (2019)

FIGURE 1. MACRO VIEW MAP OF OLD STATION – EUGENE, OREGON, 2019

Source: Google Earth and Aqsa Khan (2019)

Meso View

If we zoom in further to the parcel of land that is owned by LTD, the former park-and-ride station, we see its role in neighborhood context of the site. From this view, the neighborhood seems like the ideal place for an upcoming development with North Eugene High School 0.4 miles away, the Bi-Mart 0.2 miles away, and the highway only 300 feet away (Figure 2). We can see the development happening. The River Ridge golf course is only 1.9 miles which is another neighborhood attraction. Yujin Gakuen Japanese Immersion School Elementary School near North Eugene High School is also 0.6 miles away. Lastly, the Willamette riverfront, a designated catalyst point of our site, is 0.6 miles away.

FIGURE 2. MESO VIEW MAP OF OLD STATION – EUGENE, OREGON, 2019

Source: Google Earth and Aqsa Khan (2019)

Micro View

The total area for the census tract is 1.2 square miles and it has an estimated population of 4,566 people. The site is South facing which means we can incorporate maximum sunlight in our design (Figure 3). The Old Station's parcel of land has a vacant Aaron's furniture store. Window signage indicates that it has been closed since June 2019 and will either be sold or deconstructed. Near the old park-and-ride station is an old McDonald's with pedestrian as well as heavy vehicular traffic flow at the intersection. The current bus station's design acts as a buffer between the user and the bus. While there is some covered seating and active vegetation lining the parking lot, it lacks neighborhood context and vibrancy. With the implementation of the new EmX Alternative bus station and the park-and-ride station moving to the Santa Clara Neighborhood, we see the current bus stop being redeveloped into another useful amenity for the neighborhood.

FIGURE 3. MICRO VIEW MAP OF OLD STATION – EUGENE, OREGON, 2019

Source: Google Earth and Aqsa Khan (2019)

SWOT Analysis

In analyzing the strengths, weaknesses, opportunities, and threats (SWOT) of the area, we were able to determine where improvements need to be made and where the neighborhood already has optimal infrastructure and opportunity for revitalization. The purpose of this analysis is to identify areas of improvement in the neighborhood in terms of social aspects, build environment, and the natural environment. This was completed early on in our proposal development process and helped to inform our recommendations for the Old Station site. The below chart outlines key elements of the SWOT of Old Station with more detail on the critical focus points following the chart.

Source: Aqsa Khan (2019)

Strengths	Weaknesses	Opportunities	Threats
Surrounded by neighborhood of single-family and apartment homes. K-12 schools in proximity to the bus stop Established bus stop with parking lot, large space to work with Buildable land on the four corners Public land providing amenities for residents	Outdated urban design, unattractive infrastructure High traffic area and congestion at peak hours Issue of safety at this intersection Lack of neighborhood vibrancy Water treatment plant nearby	Make school commutes safer and more accessible for students Make bike lanes and pedestrian crossing more prominent and safer Connection to the river bike path Develop affordable housing units on underutilized strip mall land, starting with the Old Station	Proximity to Beltline highway increases noise, safety, and traffic congestion Fast food chains in the surrounding area, contribute to congestion, neighborhood culture, etc.

Bicycle and Pedestrian Access

Goal 4 of the River Road/Santa Clara Neighborhood Plan[6] (hereafter referred to as the Neighborhood Plan) seeks to achieve a safe, efficient, and accessible multi-modal transportation system for the area. Considering this goal, we focus on enhancing the transportation network for one aspect of our site plan. Pedestrian and bicycle safety are a significant concern for our site due to its proximity to the freeway. The high traffic of this area results in congestion at peak travel hours and issues of safety at the intersection of River Road and River Avenue (the highest automobile accident rate in Lane County). Plenty of development opportunities exist for this topic, including enhancing pedestrian and bicycle access to the river, improving pedestrian safety near the Beltline area, and increasing walkability throughout the neighborhood. Ways to achieve these goals include adding or enhancing crosswalks near significant traffic areas and creating dedicated cycling lanes where needed.

We've specifically identified the following aspects as existing constraints and opportunities relating to this topic for our site. To enhance safe transportation near the Beltline, we support the Neighborhood Plan's identified action to build a bicycle/pedestrian bridge across the Beltline (near the North Eugene High School location).[6] This could take the form of a tunnel beneath the freeway near Ruby Avenue and Sterling Drive. Additional steps are the addition of pedestrian signals at school crossings to ensure student safety. At the dangerous intersection of River Road and River Avenue we advocate for the installation of a raised crosswalk (to slow down drivers and increase awareness of pedestrians in the area). Pedestrian safety can be further enhanced by the installation of sidewalks near business, recreation, and school areas where needed. For bicycle safety, we propose creating dedicated bike lanes along major collector roads and main routes to schools. To enhance access to the river, we see an opportunity to create a bike path that provides access to the Willamette River and connects the neighborhood to the greater Ruth Bascom Riverbank Path System. Regarding the existing physical structure at the Old Station, we see this as an opportunity to redevelop the station into a pedestrian-focused area, with a bicycle share and dockless scooter storage for enhanced mobility. We would like to incorporate a new bike path on the north facing side of the site. This area could be further enhanced with the installation of a park/playground area to enhance the overall neighborhood character and vibrancy.

Protected Bike Lanes in Portland, Oregon

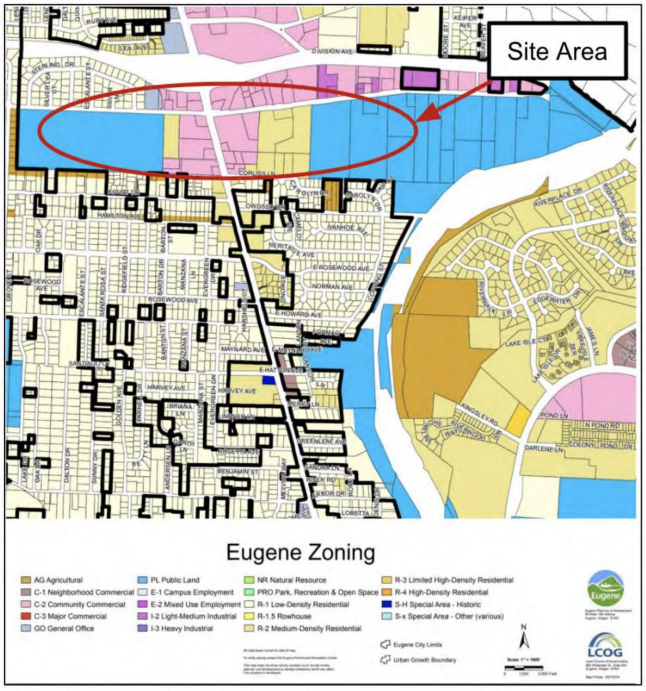
Source: Bike Portland (2018)

Existing zoning of area

Old Station is primarily zoned as C-2 Community Commercial (Figure 4). This classification is intended to allow for community commercial uses in the district.[7] The existing zoning provides all the opportunity and flexibility needed to create more mixed use in this neighborhood. Therefore, we are not proposing any land use or zoning changes. District areas zoned as C-2 range in size from 5 to 40 acres. Community commercial uses encompass a wide variety, including retail, entertainment, office, and service needs to meet the needs of a large residential population. Housing use is allowed in C-2 zones, with
a high degree of flexibility. Residential housing can be built on individual lots, shared lots, and in clusters with shared parking.[7]

Additionally, a significant proportion of our site is also designated as Public Land. Current uses for these areas are schools, wastewater services, and riverfront parks. These lands further serve as an asset to our site, providing important amenities such as access to education, water treatment facilities, and recreational open spaces.

FIGURE 4. EUGENE ZONING



Source: Eugene, Lane County, Lane Council of Governments, and Springfield (2015)

Environmental Context

According to the Envision Eugene[8] and River Road Corridor Study[9] the site is expected to experience:

- Reduced snowpack
- Increased flooding
- Drier summers
- The potential of more people coming in due to global warming effects in the other regions

Challenges

In addition to population growth, the prices for natural resources are expected to rise dramatically. This not only affects the rise in fuel and electricity prices but as Oregon thrives on the timber industry and natural organic food resources so the change will increase the amount of economic prosperity in the region.[10]

Flooding in Alton Baker Park – Eugene, Oregon

Source: Annette Truck Anderson (2019)

Solutions

In terms of our design, we are preparing for the incoming potential migrations by proposing low cost, multi-family housing in the form of mixed-use buildings, and spaces for pocket parks and vertical gardens. While designing the buildings, we have to consider the threats and risks of flooding so strategizing according to the new design ideas and materials especially for the piling and foundations of the densities being built. The Riverfront area and the river bike pathways have to be kept at a certain elevation in case of flooding. Also, with the summers being drier, having water fountains near bike pathways and pedestrian crossings will be beneficial. Lastly, planting more trees and native vegetation in the neighborhood, especially along the built densities, pedestrian crossings, and roads will enhance neighborhood vibrancy while contributing to the environmental elements of the area.

Ruth Bascom Riverbank Trail

Source: Vern Rogers (201

Socioeconomic Profile

Demographic trends

The demographic and overall socioeconomic profile of Old Station influences the proposed improvements to the area, as we hope to cater to the needs of the current and future residents of the neighborhood. Old Station has experienced population growth over the last ten years and is expected to continue this pattern. Over the next 5 years, Social Explorer has projected population in our census tract to increase by about 8% or 383 people.[12] The neighborhood experienced 9% growth from 2010 to 2017 according to ACS estimate data (Table 1).

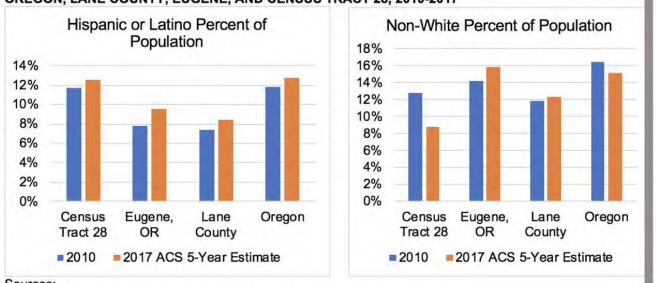
This is a higher rate than its larger encompassing regions, Eugene, Lane County, and Oregon, which shows that it is attracting more people to the area for various reasons. This increase has a significant impact on housing, the local school system, and other community services. Many factors may contribute to this increase, including job opportunities, housing affordability, and educational opportunities. This area offers affordable housing, a K-12 school district with an International Baccalaureate high school program, and grocery outlets. It is an attractive area for families, and low-income residents because of the affordable housing options and family-centric services available.

TABLE 1. POPULATION CHANGE BY GEOGRAPHY

Geographic Area	2010	2017	Change	Percent change
Oregon	3,831,074	4,025,127	194,053	5.1%
Lane County	351,715	363,471	11,756	3.3%
Eugene	156,185	163,135	6,950	4.4%
River Road CT 28	4,189	4,566	377	9.0%

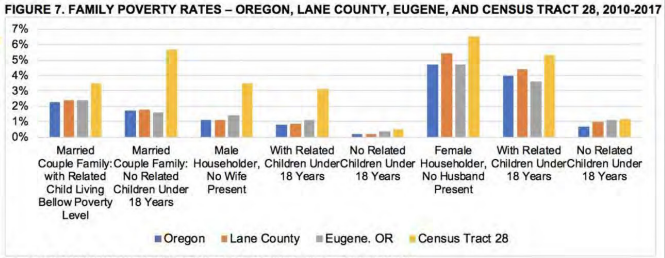
Sources:
Census 2010, Social Explorer Table T1
ACS 2013-2017 (5-Year Estimates), Social Explorer Table A00001

FIGURE 5. HISPANIC OR LATINO AND NON-WHITE PERCENT OF POPULATION DEMOGRAPHICS – OREGON, LANE COUNTY, EUGENE, AND CENSUS TRACT 28, 2010-2017



Sources:
Census 2010, Social Explorer Tables B03003 and T54
ACS 2013-2017 (5-Year Estimates), Social Explorer Tables B03003 and A03001

FIGURE 7. FAMILY POVERTY RATES – OREGON, LANE COUNTY, EUGENE, AND CENSUS TRACT 28, 2010-2017



Source: ACS 2013-2017 (5-Year Estimates), Social Explorer Table A13002

Hispanic/Latino and Non-White Population

Hispanic/Latino and non-white residents in Oregon show interesting results when compared with each other. Overall, the Hispanic/Latino population has increased since 2010, but the non-white population has decreased everywhere but Eugene (Figure 5). The non-white population in the Old Station neighborhood has decreased by roughly 4% since 2010. With the increase in population in this area, the decrease in non-white residents can be a result of the increase in white residents moving to the area.

Population is younger in our neighborhood.

Figure 6[1] shows that 60.1% of the population in Eugene is between 18 and 54 years of age. The city of Eugene has a higher percentage of 18- to 24-year-old residents than the other geographies which is likely due to the University of Oregon population. Our neighborhood has a very low percent of the population in this age range which shows that university-age students do not live here, and rather, adults above the age of 25 who are likely employed full-time and need to commute to work. Of note as well, is the higher percent of population under the age of 5 (8.5%) in our neighborhood compared with the larger geographic regions. Having young children in the area shows a need for services such as daycares and community centers and opportunity to further develop these family-oriented amenities and bring more traffic to the K-12 schools on Silver Lane.

Income/Poverty level

This data in Figure 7 explaining the percentage of families below the poverty level shows that our census tract has higher rates than the rest of the Oregon geographies we examined. It can be inferred from this information that these families may rely on public transportation more than those above the poverty level and therefore, a need for improved transportation, along with other social/public services is prevalent. Majority of households below the poverty line have a female head of house, with no husband present. According to Figure 7, about 5% have children under the age of 18. This shows the importance of safe public transit systems and safe public access in the neighborhood, for residents, and especially for children in this area. Making the Old Station, specifically the bus intersection safe for families and children to cross and to interact with on a regular basis will make the neighborhood more community focused.

[1] See Figure 6 in the Appendix

Educational attainment
In adults over the age of 25, 35% have completed some college and only 18.4% have graduated with a bachelor's degree. Educational attainment and income level generally relate to each other, so it is not surprising to see the majority of the population has graduated from high school or has only finished some college with the lower overall income levels in the neighborhood. Majority of the Old Station population is over the age of 25 with high school diplomas or some college completed, according to Figure 8.[2] This helps to explain why such a large percent of the population makes less than $45,000 annually and why a portion of households live below the poverty line. It is more difficult to make a livable wage with a high school diploma alone. With this information, it can be inferred that there is a need for affordable housing and access to public transportation at our site.

Source: KVAL (2019)

[2] See Figure 8 in the Appendix

Demographic Implications
Upon analyzing the community profile above, we found that it provides compelling data for the Old Station study area. The results highlight an area that has the potential for growth: a large percentage of the population is young and educated. However, there are some significant economic implications in this area that may impact growth and need to be taken into consideration as proposals for development are made. For our study area, it was crucial to examine the racial diversity of the community our site is in, as well as the economic characteristics of this community. We focused on the social and economic characteristics of this community profile as we began to propose ideas for development, long-term visions and site-analysis. Our team considered the questions of access and equity in development proposals and considered what proposals will function best for this demographic. In an attempt to understand the character of the community, it was important to factor in the age distribution of our study area in combination with race/ethnicity and potential economic barriers. Each of these demographics contributes to how the character of the River Road community is fostered, and we kept these numbers and percentages in mind as a reflection of the people who live in and occupy these neighborhoods around Old Station.

River Road Community Members


Source: River Road Santa Clara Neighborhood Plan (2019)

Economic trends

As of 2018, Lane County has an estimated population of **375,120**, making it the fourth largest county in the state of Oregon.[13] The major employers in the area include PeaceHealth Medical Group, University of Oregon, and the Eugene School District, among others.[14] As part of this study, we analyzed employment trends in Lane County, Oregon and the United States. From this, we gathered the below trends.

Overall Employment Growth
As we moved forward in proposing alternative plans and development strategies for Lane Transit District's River Road Corridor project, it was important that we look at the economic profile of the region in order to have a better understanding of the economic factors that impact our planning area. Table 2 shows the total employment numbers and percentages and the change in employment between 2001 and 2016 in Lane County and the United States. It also reveals that between 2001 and 2016 **28,149,200 jobs** were created in the United States, meaning the National Average Growth Rate for this timeframe was **17%**. Comparatively, Lane County saw an increase of **19,624 jobs**, a Local Growth Rate of **11%.** This data reveals that employment in Lane County is growing at a lower rate than national employment.

Largest Employment Sectors
The following data looks at how employment growth breaks down by industry. Table 3[3] shows a selection of four different employment sectors in Lane County. This selection is exemplary of areas where there are opportunities for growth as well as areas that are declining. Additionally, these four industries: manufacturing, retail trade, educational services and healthcare and social assistance, have the potential to inform economic development as they exhibit areas where

[3] See Table 3 in the Appendix

TABLE 2. OVERALL EMPLOYMENT – UNITED STATES AND LANE COUNTY, 2001-2016

LANE COUNTY

Sector	2001		2016		Change	
	Employment (#)	Employment (%)	Employment (#)	Employment (%)	#	%
Total employment (number of jobs)	185,118	100%	204,742	100%	19,624	10.6%

UNITED STATES

Sector	2001		2016		Change	
	Employment (#)	Employment (%)	Employment (#)	Employment (%)	#	%
Total employment (number of jobs)	165,519,200	100%	193,668,400	100%	28,149,200	17.0%

Source: NAICS

a qualitative shift in resources may prove beneficial. More context for how to interpret these numbers will follow in Tables 4-6.

In Lane County, the manufacturing industry lost **5,772 jobs** between 2001 and 2016. Nationally, manufacturing also experienced decline with **3,817,900 jobs** lost over the same time period. In Lane County specifically, the retail trade industry was a huge employer and projected immense growth rates only to tank in January of 2008.[15] The **-27.4%** change in the manufacturing industry means many people were left unemployed. The other four industries experienced varying degrees of growth, with retail trade on the lower end of the overall percentage change at **10.2%** and educational services on the high end with **80.9%** change. Though these percentages can seem impressive, it is also important to look at the aggregate numbers; not all of the industries that experience high percentage change actually create that many more jobs. Take health care and social assistance for example, which grew by **8,116 jobs** between 2001 to 2016 an overall percent change of **39.9% in Lane County.**[4]

Shift-share Analysis
Table 4 shows how County rates compare to the National numbers. A shift-share analysis looks at the National Growth Rate and compares

[4] See Table 3 in the Appendix

that to industry specific growth locally (Industrial Mix Component). The third element of a shift-share analysis is the Competitive Share Analysis, which provides some information on industry competitiveness.

TABLE 4. SHIFT SHARE ANALYSIS – UNITED STATES AND LANE COUNTY, 2001-2016

Industry	National Growth Rate Component	Industrial Mix Component	Competitive Share Component
Manufacturing	3,577.0	-8320.7	-1026.7
Retail Trade	3,767.2	-2392.9	893.7
Educational Services	396.8	925.0	566.3
Health Care and Social Assistance	3460.0	5467.8	-811.8

Source: NAICS

Accordingly, manufacturing lost a higher percentage of jobs in Lane County than the National growth rate and is therefore not a very competitive industry. Whereas, educational services are growing much faster than the national growth rate and are relatively competitive. The shift-share analysis provides a good overall summary of which industries are gaining and losing employment. However, further analysis is necessary to draw more precise conclusions. Tables 5 and 6 look at location quotient and population-employment ratios to help determine where Lane County has economic potential.

Employment Factors by Location

Location quotient is a measure that shows the relative concentration of employment in a given area. Higher concentrations of employment are reflected by a location quotient (LQ) greater than 1, lower concentrations of employment have an LQ less than 1. Table 6 breaks down LQ by industry.

An important factor when looking at location quotient is to not interpret these numbers arbitrarily. Sometimes, a high (greater than 1) LQ can signify an important industry that may require attention or an important growth industry, whereas, a low (less than 1) LQ could be interpreted as an industry of little promise or an industry with potential for emergence. It is important to consider all of the data previously presented in conjunction with one another for the most efficacious interpretations of where economic growth is in Lane County. For example, manufacturing has a high LQ, however, as we see in Table 5[5] there has been a decline in overall employment growth.

Employment Factors by Population

The last factor to take into account is the Population/Employment ratio (P/E ratio). These ratios reflect the portion of the population that is participating in the labor force. In other words, the P/E ratio measures the number of people per job in a particular industry in a given location. The P/E ratio can also help in making inter-community comparisons of different sectors. For the purposes of this analysis, the P/E ratio aids in understanding the jobs/people balance for four industries across three geographies.

Combining the Population/Employment Ratio into this analysis adds yet another layer of trends to interpret. Although, as identified from Table 6, educational services have the potential for expansion, there is already an imbalance of jobs/people.[6] That said, the ratio has declined since 2001 which shows promise. Looking across geographic regions, the ratio is still higher in Lane County than in the State of Oregon or in the nation, which is something to consider if you are thinking of moving to Eugene to work in education. Healthcare and social assistance is another economic sector that presents a favorable P/E ratio. The ratio has declined over time reflecting more demand and availability for this kind of labor, and in Lane County, this sector had the most growth in jobs between 2001-2016.

[5] See Table 5 in the Appendix

[6] See Table 6 in the Appendix

Economic Implications

Though this community economic analysis does not look at employment in the River Road area it does lend some insight into the overall community context. The data indicates that employment in Lane County is growing overall; however, the poverty rate in our study area is still **19.3%.**[7] This implies that the current economic conditions in the community are not ones that are lifting people out of poverty. It is important to ask what policies make sense at the neighborhood level to address income inequality and lack of employment.

Proposing transit development along the River Road Corridor is an option that should be pursued. Connecting the River Road community to other parts of the surrounding areas has the potential to impact the economic characteristics of this site in a positive way; more transportation leads to more access, more access leads to more influx of opportunity and industry, more influx leads to more jobs. Now, with the existing transit infrastructure, it would take someone in the River Road about an hour to get to the nearest hospital using public transportation. Not only is this disconcerting in terms of medical response time, but also, if you are someone who works in the emerging health care and social assistance industry, and do not have access to personal transportation, you would have a commute of at least 2 hours every day. Not having reliable and accessible transportation is a barrier to economic development. Considering the River Road area for corridor development opens up the possibilities for more industry to move into this area. In conclusion, as we collaborated on proposed alternatives and plans for development it was important to keep these economic characteristics in mind and think of what options can be pursued in the short and long term.

EmX Bus Service in West Eugene

Source: Lane Transit District (2019)

Transit Investment and Equity

Source: Metro Magazine (2019)

[7] See Figure 9 in the Appendix

Housing Trends

As of 2018, Eugene has an estimated population of 171,245 residents, including 22,760 students enrolled at the University of Oregon.[16,17] Population forecasts indicate that the city is growing, with a projected annual population growth of 1% resulting in 34,000 new residents between 2012-2032. Consequently, the city has reported an estimated housing need of 15,105 new homes by 2032.[18]

For the purposes of this report, housing trends and characteristics are assessed for Oregon, Lane County, Eugene, and Old Station. Insights gained from the following analysis are intended to inform evaluation criteria and aid in decision making processes for future planning purposes for the Old Station study area.

Old Station's home ownership rates are decreasing.
In comparing housing tenure trends for Oregon, Lane County, Eugene, and Old Station, all areas show a decrease in homeownership.[8] Upon closer inspection, it is apparent that Old Station has an overall higher percentage of owner-occupied households than the general trend indicated for the city. However, the percentage of owner-occupied households has decreased slightly between 2010 to 2017 for all four geographies, and Old Station shows the greatest change with 3.4% decrease of owner-occupied status.

Old Station has high housing costs
Housing value-to-income ratio reflects the number of years it would take to purchase a home at a given price relative to the buyer's median household income. A general guideline reflecting housing affordability purchase for home-buyers is a ratio of approximately 2.6 years of income respective to the housing price.[19] Ratios for 2017 are highest for Eugene, at 5.9 (with Oregon close behind at 5.7; Table 7).

[8] see Figure 10 in Appendix

TABLE 7. HOUSING VALUE - OREGON, LANE COUNTY, EUGENE, AND CENSUS TRACT 28, 2010-2017

Geographies	2010	2017
Oregon	5.4	5.7
Lane County	5.6	5.4
Eugene	6.2	5.9
Census Tract 28	5.0	4.5

Sources:
ACS 2006-2010 (5-Year Estimates), Tables S1901 & S2506
ACS 2013-2017 (5-Year Estimates), Table S1901 & S2507

This indicates that, given the median household value and median household income for the area, it would take 5.9 years of household income to purchase a home. With a rent-to-income ratio of 4.5, Old Station ranks lowest for the four geographies, but still reflects unaffordable housing costs, requiring 4.5 years of income to purchase the average cost of a home in the area.

Old Station has a strong demand for rental units
A 2019 economic analysis conducted by ECONorthwest reveals that rental units encompass 37% of the area's single-family dwellings in the River Road/Santa Clara area.[18] Old Station mirrors area trends with 39.5% of single-family dwellings existing as rental units.[20] General trends indicate that the cost to buy a house has not kept pace with income levels for all geographies in Oregon (Table 8). Old Station shows the greatest change between 2010 to 2017, with a 6.3% increase in rent paid relative to income for households (Table 8). State trends for Oregon are similar (6.1% increase), while Lane County and Eugene have fared better at 4.4% and 3.9%, respectively. This indicates that while median income and median rent have both increased for all regions, Oregon and Old Station lag behind Lane County and Eugene when it comes to median income keeping pace

with median rent increases.[9] Consequently, it has become less affordable to own a home and more appealing to rent in these areas.

TABLE 8. RENT-TO-INCOME RATIO - OREGON, LANE COUNTY, EUGENE, AND CENSUS TRACT 28, 2010-2017

Geography	2010	2017
Oregon	17%	23%
Lane County	19%	24%
Eugene	20%	24%
Census Tract 28	19%	25%

Sources:
ACS 2006-2010 (5-Year Estimates), Tables S1901 and B25063
ACS 2013-2017 (5-Year Estimates), Tables S1901 and B25063

Nearly 40% of Old Station residents are cost burdened
Cost-burdened households are defined as residents paying 30% or more of their income on housing costs.[21] In looking at trends across the four geographies, it is clear that Old Station has lower rates of cost burden than Eugene.[10] For 2017, approximately 38.7% of Old Station residents struggled to afford their housing costs. While Old Station has lower rates of cost burden than the other regions overall, it demonstrates the greatest growth in cost burdened households at 3.7% growth between 2010-2017.[11]

Demand for New Housing & Multifamily Units
Analyzing these trends, it is clear that more affordable housing is needed in the River Road neighborhood and Old Station area. With little buildable land left in the Old Station area this demand will increasingly be met with multi-family units of apartments, row houses and townhomes. Additionally the passage of H.B. 2001 should encourage developments of new duplexes, triplexes, and fourplexes in the area as well as accessory dwelling units.[22] It is clear that the area is essentially built out in terms of subdivisions and therefore the future of housing for River Road will be focused on infill development

[9] see Table 9 in the Appendix
[10] see Figure 10 in Appendix

and multifamily units. This development is sorely needed as only 10% of the housing stock in the River Road neighborhood is made up of multifamily units, compared to 36% for the City of Eugene.[23]

These are the exact types of structures we are proposing for our site and they will help fill a pressing community need for a wider variety of affordable housing types. Our first proposed structure at the former Old Station on the Northeast corner of River Road and River Avenue fits the bill perfectly. Taking advantage of the existing C-2 Community Commercial zoning, it is a 6 story, mixed-use building with ground floor retail and social services. The remaining five floors will feature mixed income housing with 20% inclusionary zoning for affordable housing. This will provide 16 new affordable housing units for the neighborhood. We intend to replicate this formula for mixed-use structures on the remaining three corners creating a minimum of 50 new affordable housing units. This will help meet the increasing demand for rental units in the River Road neighborhood driven by the rising cost of home ownership in the area and Eugene at large.

Eugene, Oregon

Source: Lauram12345 (2006)

[11] see Figure 11 in Appendix

Housing Implications

The housing trends above surrounding affordability, ability and preference to rent or own, and housing availability impact the current and future residents of Old Station. With almost 40% of households in Old Station being cost-burdened in 2017, there is a clear need for additional affordable housing in the neighborhood. As part of our site analysis above, we found that there is already some affordable multi-family housing in the area, but not enough to support all residents in a way that would reduce cost-burden for all residents. The neighborhood in Old Station is comprised predominantly of lower-income households with a high percent of cost burdened households. This indicates that affordable housing is needed in this community. The percent of people renting is increasing in this area, which may mean it is too expensive to purchase housing in the area. There is a lack of supply of purchasable housing, or people are only expecting to live in the neighborhood temporarily; thus, renting instead of owning a home. The rent-to-income ratio in this area is also higher than statewide data, at 25.1% in 2017 according to Table 8. This shows that on average, households are paying 25.1% of income on rental expenses. When compared with Eugene, Old Station has a high rent-to-income ratio for its residents who have lower income overall. These are important statistics to understand as we recommend land-use and development options for the area. Old Station's strong need for rental properties is influenced by the demographics of the area and the affordability of purchasable homes.

The need for multi-family housing in the area can be fulfilled by developing on the C-2 zoned land on the four corners of River Road and River Avenue, with the expectation that over the long-term, this will expand further along the corridor and in the neighborhood. With clear need for multi-family, affordable housing, and little supply currently available in the neighborhood, it will be important to provide this for future residents as the population continues to increase at a higher rate than the city as a whole. In addition, rental units are in demand due to the high cost to purchase and lifestyle change of the overall population, so providing this multi-family housing in the form of rental properties will cater to the needs of the local community.

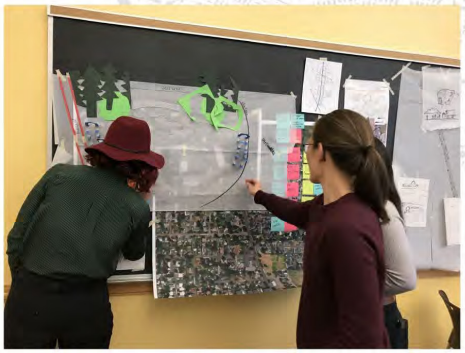
The Oaks at 14th –
Low Income Apartments in Eugene, Oregon

Source: Affordable Housing Online (2019)

Team Process & Methods

Our team process began with establishing roles and expectations as we began to understand the entirety of the project and each individual member's strengths in the research, development, and execution process. Once established, we created an outline of expectations. The key elements, other than the vast research on city plans, community socioeconomic information, and feedback from our instructors, was the site visit and the design charette. The site visit allowed us to visualize the neighborhood and understand what we had to work with on a deeper contextual level than just looking at maps and reading about the area. The design charette was one of the first times we were able to put all of our ideas on paper and begin to see how it would all take shape. Through this exercise, we learned that we had many strong ideas, but were concentrating them in one small area, when in reality, we needed to expand our scope and include our recommendation along River Road and into the neighborhoods. We realized that the focus of our project is not on a single parcel of land, but rather a catalyst site intended to spur a new functionality of the existing area (e.g., between the riverfront neighborhood and the North Eugene Highschool).

As a result, we adapted our vision so that it is both modest and monumental – a plan aimed to provide the user with not only public and private spaces but also with special "places" that set the stage for a sociable scenario of all socioeconomic groups. Our highest priority is to enhance pedestrian safety, provide low cost housing, increase neighborhood vibrancy, and to attract more families and businesses into the neighborhood. Ideally, our proposals for the redesign of Old Station can maximize the opportunities of the area to meet the needs of new and current residents and enhance the standard of living. Consequently, we anticipate that the implementation of our vision will take about twenty years.



Source: Kaarin Knudson (2019)

Source: Kaarin Knudson (2019)

Overview of Concept Plan

Vision

We envision the Four Corners of River Road as a vibrant, mixed-use transit-oriented development that is safe, walkable and sustainable. This vision is formed by the question, "Where do we want to go together?" We recognize that the River Road community is at a critical turning point in its history. The massive investment and changes coming with LTD's EmX corridor expansion will forever change the neighborhood and it offers the opportunity to introduce further changes for the community's future. To that end we propose new transit-oriented development (TOD) along the corridor combining mixed-use development in public-private partnerships to create new businesses, affordable housing and community gathering spaces built to the highest environmental standards. We advocate for a complete streets approach with improved bicycle and pedestrian infrastructure at these new developments in order to transform the neighborhood from an auto-dependent suburb to a thriving community that is vibrant, safe, walkable and sustainable.

Guiding Principles

Our vision seeks to create a 20-minute neighborhood tying the people of Old Station to their homes, resulting in a walkable, forward-looking, inclusive community. Our proposal seeks to achieve this by creating a pedestrian-friendly neighborhood with dense residential development along the River Road corridor. In order to accomplish our vision for Old Station, we are guided by the principles of improving:

- Placemaking: neighborhood character & vibrancy
- Mixed-use: multi-family, affordable housing
- Accessibility: pedestrian and cyclist safety
- Connectivity: people, places, ideas

Strategy

The Four Corners of River Road has the ability to transform the overall vibrancy of the neighborhood over the next 20 years by:

More specifically, by following the five stages of TOD, we can incorporate all the elements in our action plan for the community (Figure 12).

1. Assess: How ready is Old Station for the TOD and is there a need for it?
2. Enable: Making policies that can be helpful in implementing the design strategies
3. Plan and Design: How cities are being designed and how they will impact the future of transit
4. Implement: Making the change actually happen
5. Economic Influence: After the implementation we have to observe how the new project has impacted the overall economic condition of the city.

- Improving accessibility and connectivity for local residents to nearby transit stations, local businesses, community spaces and schools
- Providing safe transit lanes for all modes of transportation
- Implementing the EmX enhanced stop near retail business and services to instill a sense of place and culture in the neighborhood
- Creating placemaking elements to the neighborhood while maintaining the neighborhood's culture in terms of urban planning and design
- Supply housing for the "missing middle" to ensure Envision Eugene and Neighborhood Plan goals are met over the next 20 years

Design Concepts

Accessibility and Connectivity

Neighborhood planning collaboration processes have highlighted the community's concerns around safety and multi-modal improvements.[25] Current transportation infrastructure along the River Road corridor includes a four-lane road with a center turn lane. Bike lanes and sidewalks exist on both sides and transit service runs up and down the road. According to LTD staff, there are an estimated 2,500 riders per day using the LTD transit services.[26] As LTD seeks to expand services along the River Road corridor, the implementation of a Bus Rapid Transit system (locally referred to as the EmX) will result in increased frequency of bus services, with service occurring every 15 minutes along the corridor.[26] However, there are key design considerations to consider to help transit succeed and improve the safety and accessibility of the area.

The Arlington TOD case study made substantial accessibility improvements along their corridor, and thereby offer some useful design concepts for Old Station to consider adopting. Arlington recognized early on the need to implement multimodal transportation planning to offer a variety of travel choices to community members and make car travel unnecessary. That said, pedestrian environment in the TOD project was initially neglected.[27]

County planners and residents began showing an increased interest in pedestrian and cyclist accessibility in the early 2000s. Since then, the creation of guidelines for pedestrian and streetscape design standards has helped the county make significant strides in accessibility. The mitigation of pedestrian hazards has been addressed through the implementation of wider sidewalks, curb ramps, and improved street lighting. Cyclists benefit from greater connectivity from the transit station corridor to the greater bike trail system in the surrounding area. This provides increased safety for cyclists and enhanced recreational opportunities. Bridges have also been adapted to better serve pedestrians and cyclists, and residential areas have received street resurfacing improvements and bike lane additions.[27] Bicyclists are also able to find adequate parking along the corridor as site plan reviews for TOD projects stipulate the provision of secure indoor bicycle parking as a requirement.

To address traffic congestion, Arlington implemented a transportation demand management (TDM) initiative in 1989. TDM reflects strategies utilized to reduce travel demand in an area.[28] Arlington's TDM is geared towards addressing workplace commuter trips and seeks to influence travel behavior through lessening single-occupancy trips during peak-hour traffic. and involves a variety of actors, including employers, residents, transit users, and developers among other people.[27] The TDM implementation has been continuously refined over the past fifty years and led to the creation of the Arlington Transportation Partners Program, which offers employer program assistance. A 2000 survey on Arlington's TDM outcomes showed an overall 10% reduction in single-occupancy trips.[27] Car ownership along the metro corridor is also significantly less than the national average. A 2012 car ownership survey showed that 16.7% of corridor residents have zero cars compared to 9% nationally.[26]

A reduced need for parking emerged a byproduct of the county's focus on minimizing automobile use, undertaking community mixed-use development near the five stations, and increasing pedestrian and cyclist accessibility.[28] Average metro ridership has grown substantially along with corridor, from 13,637 daily riders in 1991 to 33,891 in 2010 nationally.[28] A 2012 commuting behavior survey showed that 42.8% used transit to commute to work, 9.5 percent walk or bike, and 3.1 percent work from home.[29] Further trends show that for those who use

the metro transit in the corridor, 76.9% prefer to walk, 6.3% take another bus, and only 10.9% use auto.[30] As a result, the area has generated less traffic and the county has been able to reduce parking requirements for development.[27, 32]

Accessibility and Connectivity Lessons – Design Strategies for Old Station

Old Station should also take note of Arlington's significant progress towards enhanced accessibility. Arlington's case study demonstrates that prioritizing a pedestrian and cyclist-friendly environment delivers results. Improvements such as widened sidewalks, improved street lighting, and greater bike trail connectivity encouraged residents to utilize alternate modes of transit. Average daily metro ridership showed a net gain of 20,254 riders over a 19-year period. This helped gradually reduce parking in a dense urban environment and led to relatively little increases in traffic.

Sidewalk Zones

Source: National Association of City Transportation Officials (2019)

Source: National Association of City Transportation Officials (2019)

The following strategies can help LTD achieve its goals of improving transit safety and accessibility for the area's residents:

- Create guidelines for pedestrian and streetscape design standards
- Implement wider sidewalks, curb ramps, and improve street lighting
- Connect the transit station corridor to the greater bike trail system in the surrounding area
- Implement protected bicycle lanes along River Road
- Provide secure indoor bicycle parking as a requirement for new development proposals
- Adapt bridges to better serve pedestrians and cyclists
- Resurface streets and add bike lanes in residential areas
- Implement a transportation demand management initiative

22

Mixed-use buildings/multi-family housing

Our proposal includes redevelopment of current underutilized commercial space on the corners of this intersection. In order to stay within current zoning code, we propose to build mixed-use buildings on the community commercial land on our site. This will allow us to develop taller buildings, with commercial and retail spaces on the first floor and residential, mixed-use rental units on the remaining floors. Community commercial zoning limits building size to a maximum of 120 feet with medium density buildings ranging from 85-95 feet.[33] This is an approximate maximum height of 8 stories for high-density buildings and 5-6 stories for medium-density buildings. These developments will happen in stages as explained below in the Implementation section the buildings lining River Road will transform into a mix of medium- and high-density to accommodate for population growth, housing needs, and the shift to a TOD. We understand that not all of the residential dwellings will be low-income, but we want to stress the importance of affordability for current and future residents as we navigate the housing issue in Eugene.

Each corner of River Road and River Avenue features outdated infrastructure, old shopping centers, and large parking lots that are never filled completely. With a growing population in the neighborhood, and a need for low-income housing based on the demographics of the area, affordable, multi-family housing is a viable option to be included in our vision for the neighborhood. The vision for this neighborhood on River Road can be similar to the Dedham, MA vision, as explained in the below case study, as goals and the current infrastructure are similar. A mixed-use building with retail shops on the first floor and housing on the top floors would be viable at this intersection. A preference towards utilizing local experts to aid in the planning process is present in this area as the neighborhood wants to keep its culture intact.

Crescent Village Apartments in Eugene, Oregon

Source: Crescent Village (2019)

Amazon Corner Apartments in Eugene, Oregon

Source: Dan Straub (2019)

23

Case Study: Dior Dedham

The neighborhood surrounding the intersection of River Road and River Avenue is overpowered by strip malls and fast food restaurants with large parking lots, contributing to the sprawl that is common in these suburban areas. Large parking lots support these shopping centers, but also end up creating empty space that could be utilized differently. Many neighborhoods in suburban areas across the U.S have similar strip centers and shopping centers that were once wanted by the community and now have outdated designs and diminishing use. The concept of retrofitting strip malls and shopping centers is becoming more popular and many cities have found that these updates contributed positively to the local community, providing multi-story, mixed-use buildings in place of one-story big box stores, and updating the urban design of the area, among other benefits. A strong example of this retrofitting phenomenon is that of the strip mall in Dedham, MA. Around 2015, Boston's Regional Planning Agency (RPA) and the Metropolitan Area Planning Council (MAPC) worked on comprehensive plans for the area at the same time the owner of the Dedham strip center, Chris Priore, started considering the future of the land he owned. Their plans worked in tandem to provide a positive outcome for community members and for the city's vitality.[34]

Dedham, MA, a suburb of about 25,000 residents southwest of Boston, is the home of the Legacy Place shopping mall, opened in 2009, which is adjacent to the future Dior Dedham mixed-use building, a Whole Foods grocer, existing affordable apartments, and the area's commuter rail station. What is now the Dior Dedham center, a 0.8-acre parcel of land previously had retail shops on the main frontage, a larger building containing Priore's family-owned Dedham Cabinet Shop, and a parking lot to accommodate shoppers. This strip center is located along the Providence Highway, a busy 6-lane road that makes the area conducive for automobile transit but not pedestrian or cycle transit. Priore recognized the flaws with this suburban sprawl and sought to improve the strip center for the surrounding residents.[34]

The MAPC and the RPA noticed the connectivity flaws with the entire neighborhood and conducted two studies on the city to see how they could improve the area in terms of urban design, housing, and connectivity to the retail centers and rail station. While these studies were being conducted, the city of Dedham also contracted the Urban Land Institute (ULI) Technical Assistance Panel (TAP) to provide insight from a broad range of industry experts (architects, engineers, planners, etc.) on land use improvements. At the same time, Priore's cabinet shop was expanding and needed to relocate to a larger store, so he was open to completely redesigning the infrastructure on the land. He utilized the feedback and findings from TAP to ultimately make his decision on how to redevelop to optimize the available space while considering the impact on the local community.[34] Priore had ideas for the redevelopment that were confirmed by attending the TAP, solidifying his plans of building a mixed-use structure with retail shops on the first floor and multi-family housing on the top floors. Because of the housing need in the area, he aimed to provide some housing relief with his development.[34]

Priore worked with a local architect on the development and used a local attorney to aid as needed with the legal process. The city planners supported his vision for the area and provided support where needed to ensure pedestrian connectivity was improved, and open spaces were being utilized to benefit the community. The planning process was smooth for the most part as there was very little community opposition to the development. They were able to proceed with construction on a normal timeline, barring the issue of securing financing. Because Priore was not a developer by trade, he did not have an adequate down-payment for his construction loan and had to find a capital partner before taking out the loan and beginning construction. Priore set out to develop a multi-family housing structure in a mixed-use building with a contemporary design that matched the Legacy Place building design as opposed to using a more traditional New England design style common in the Boston area. Figure 13 shows the design of the new mixed-use Dior Dedham building. Everything they set out to do was accomplished and Priore achieved

his goals of increasing multi-family housing while contributing to the MAPC's broader goals for the city of connectivity and improved urban design.[34]

Ellen Dunham-Jones, an expert on retrofitting suburbia believes that shopping malls and strip centers across the U.S. are heading towards revitalization and sustainable redevelopment as large retail stores are becoming less desirable for consumers.[34] According to the American Planning Association, nationally, large retailers and shopping centers are seeing a shift in how buyers interact with them. In some cases, storefronts are closing due in large part to the online retail presence and the overall shift in consumer buying patterns.[35] With empty storefronts in large shopping centers or outdated strip malls, cities need a way to revitalize the areas and create resiliency in this transformative time.[35] Revitalizing these areas can add vibrancy and open spaces to areas that were once bland, spread out retail centers. Dunham-Jones describes the dynamic of underperforming asphalt, common in suburban areas and how it can be retrofitted into a more usable open space or development opportunity. Underperforming asphalt is a term used by developers to describe underutilized parking lots.[35] Underperforming asphalt was a factor Priore encountered and helped influence the decision to rethink its land use.[34] Recreating the open space on parking lots as well as redeveloping on retail shops provides an innovative way to make public spaces more accessible.

There are many aspects of the Dior Dedham project that relate to our River Road project. Neighborhood plans in our area can take key aspects from the Dedham case to revitalize the area and create a space the community needs and wants. As with Dior Dedham the elements outlined below can be improved for Old Station.

The Dior Dedham development project included positive implementation elements that would translate well to the Old Station revitalization:

Implementation support

- The use of local experts (planners, architects, attorneys, capital partners)
- Engagement and support from the local community
- Support from the land owner to transform the built environment on the strip mall

Development ideas

- Updating urban design of the built environment
- Adding multi-family housing in the form of mixed-use buildings

Mixed-use Building – Dior Dedham

Source: Dior Dedham (2019)

Low Cost Housing

Low-cost mixed-use housing is one in which we reduce the cost of construction without sacrificing the strength required for the performance of the building. When production is low cost, we are able to provide the housing at below market cost so residents in the Old Station neighbor can afford them and are less cost burdened by housing expenses. Sustainable mixed use should ensure a better quality of life for current and future generations. It should combine protection of the **environment, sensible use of natural resources, economic growth and social progress.**

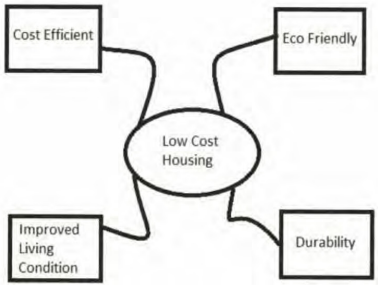
People earning low to moderate incomes are increasing in numbers and unable to access housing that is affordable, hence demand for low-cost mixed-use housing far exceeds its supply. As discussed above in the housing trends and implications, there is evident demand for affordable housing based on income levels and number of families below the poverty line. There is a need for the adoption of strong durable environmentally friendly, ecologically appropriate, energy efficient and yet cost-effective materials and appropriate technologies in construction. Sustainable technology when adopted with care and creativity, can lead to a unique architectural expression.

Why do we need low-cost mixed-use housing?

There are a number of factors that influence the demand for affordable housing.

Low-cost mixed-use housing is beneficial to a community in many ways, including:

- Stronger labor force:
  - A good supply of housing for all income groups helps a community retain jobs and retail stores, and helps business owners attract and retain good workers.
  - Employees are able to live near employment centers, so are more able to report to work on time and have time to improve their job skills or get an education.
- Economic benefits:
  - New construction and management of a property creates new employment and generates multiple ripple effects that strengthen the local economy.
- Stronger families:
  - Affordable housing creates a more stable environment for children; children do better in school. Families are able to save for a home purchase down payment.



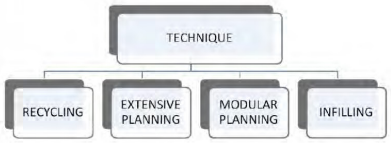
Approach for low cost housing

- There should be a logical approach for providing appropriate technology based on the availability of options, considering its technical and economic analysis.
- There should be optimal space in the design considering efficiency of space, minimum circulation space.
- Economy should be considered in the design of individual buildings, layouts, clusters etc.
- While preparing the specifications it should be kept in mind that, cost effective construction systems are adopted.

- Energy efficiency has gained considerable importance due to energy crisis especially in developing countries. Orientation, built–form, openings & materials play a vital role besides landscaping / outdoor environment.
- To develop an effective mechanism for providing appropriate technology-based shelter particularly to the vulnerable group and economically weaker section

Factors affecting construction cost estimation

- Building cost: the building cost can be divided into two
- building material cost: 65-70 %
- labor cost: 30-35 %
- Size: the smaller the project in terms of scope or the number of square feet, the more it will cost per square feet.
- Type: different types of projects have different levels of complexity and detail.
- Special construction: complexity can greatly increase the cost of project.
- Project accessibility
- Labor rates
- Material cost
- General economic pressure



Techniques and material help us reduce cost of the building
Recycling

- Recycled materials adapted for low cost housing include wood and rubber that are previously been used.
- Reprocessed into materials that are used in building walls and other parts of a house
- Recycled glass and metal are also used on occasions
- These recycled materials are often less expensive than using fully natural products.

Extensive Planning

- In extensive planning the more planning goes into the house, the less the actual construction will cost
- Contractors should plan out exact dimensions and should gather facts
- Contractors should look for best material at the cheapest prices so they can order exactly what they need
- This saves up money that would otherwise be wasted on unnecessary supplies and cleanup caused by littered materials.
- Most houses are built as quickly as possible without this detailed planning beforehand

Modular Planning

- Modular, or prefabricated design is a type of construction where pieces of the house or typically whole rooms or major parts, are built off site in large factories
- The process allows them to be built efficiently and exactly according to the building standards
- At the site the pieces are connected to the house
- Since material are assembled on site the owner saves money on construction time
- Many of these processes use newer technologies such as SIPs (structurally integrated panels), creating stronger, better insulated structures and shortened construction timelines.

Infilling

- Infilling is the practice of going back through residential areas and building in areas that had previously been left empty.
- Infilling makes better use of existing space
- It is less expensive for contractors overall.

Placemaking

Communal Place Making

We all desire a place we can call home. There are many elements that can make a place feel like home such as tradition, religion, art, culture, and landscape. These all play a vital role in creating a place and giving it a sense of identity. Well placed elements such as public art, fountains, courtyards and other community gathering spaces can imbue this sense of home and community.

Placemaking can be achieved by creating a sense of belonging which can be accomplished through community engagement and well-structured policies. The places that we live in and the experience of our everyday life gives people this sense of "home." Giving an identity to a certain community or place creates more significance for residents and helps them to take ownership of their space. Creating spaces for people to gather is a good first step in placemaking, which can be complemented by community programs designed to create social interaction between people belonging to different age groups, socioeconomic backgrounds and racial groups.

Downtown Eugene

Source: City of Eugene (2019)

MEMBERSHIP INFLUENCE INTEGRATION EMOTION

Objectives for Placemaking Elements

- Create a center that provides community programs and opportunities for empowerment and growth.
- Architecture that enhances the local neighborhood and its culture.
- Engage the community with cultural programs
- Increase interaction between the community center users in order to remove stigma and create a feeling of mutual acceptance and empowerment
- Keep connectivity a vital part of design
- Design a facility that user may identify as "home"
- Encourage new businesses to provide economic opportunity.

Mural by Hush – 20x21 EUG Mural Project

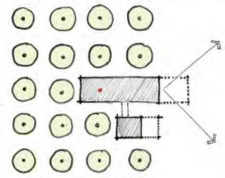
Source: City of Eugene (2018)

Efficient and Integrated Design

The following design considerations should also be kept in mind for the project:

Introverted Planning: Instead of opening up to the outside world, rather the design opens up inside the building/ project (Figure 14).

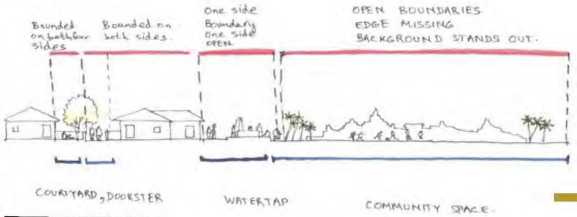
FIGURE 14. INTROVERTED PLANNING



Source: Aqsa Khan (2019)

Outdoor Spaces: They can be functional or nonfunctional depending on the design and the program but we can see that there are many advantages of the courtyard and how it is incorporated in the design (Figure 15).

FIGURE 15. OUTDOOR SPACES



Source: Aqsa Khan (2019)

Tree planting, reduced parking spaces, public art and sculptures also offer a number of advantages, including:

- Rediscovering history and heritage
- An interactive experience creating human connections
- Creating an oasis or a breathing space within the city
- A space for remembrance and reflection

Open Spaces and Recreation

We propose a variety of open spaces to be included in the development for the purpose of outdoor recreation. Outdoor recreation is a vital component of community life and a major industry here in the Pacific Northwest. We propose the following outdoor recreation spaces for the Four Corners of River Road:

- Public plaza with placemaking water feature.
- Large public mural designed by local artists featuring the history of River Road and the local high school mascot, the Highlanders.
- Several pocket parks incorporated into the design of residential structures on site for residential use.
- A public playground with multiple sections for age appropriate play and safety.
- A bicycle share station.
- A dockless e-scooter sharing station.
- Generous allocation of park benches.
- A community garden.
- 20 sets of tables and chairs to be dispersed in various locations on site.
- Raised planters to serve as landscaping and green screening.
- A small public amphitheater for community events and plays.
- Sections of parking lots dedicated for weekend markets and food truck use during special events.

Sustainability

As we enter a new decade in the 2020's the growing threat of climate change to our way of life is greater than ever before. By implementing proven sustainability solutions and focusing on the triple bottom line the Four Corners of River Road can be an environmentally friendly site that promotes a greener lifestyle for its residents and remains financially viable for decades to come. To that end we propose the following sustainability solutions for the development.

- Strict energy use guidelines for new buildings
- A complete streets approach with large urban tree canopy to promote walkability, shade buildings, absorb rainwater and emissions.
- Sustainable transportation options on site like bicycle share and e-scooter stations.
- Pursuing LEED certification for buildings on site larger than 30,000 sf.
- A new city ordinance requiring cool roofs or green roofs on structures larger than 20,000 square feet (i.e., similar to the City of Portland[36]).
- Public-private partnerships to offer incentives for onsite renewable energy such as solar photovoltaic panels.
- Extensive stormwater management through the use of rainwater catchment systems, rain gardens, and bioswales where appropriate.
- Landscaped pocket parks serving as an urban oasis for residents.
- Native vegetation for landscaping and a community garden where residents can grow their own food for consumption or sale

Mixed-use Food and Community Hub in Eugene (Green Building)

Source: Essex General Construction – Mahonia Building (2019)

Multi-family Housing in Eugene (LEED Gold Targeted)

Source: Essex General Construction – 35 Club Road (2019)

Source: Aqsa Khan (2019)

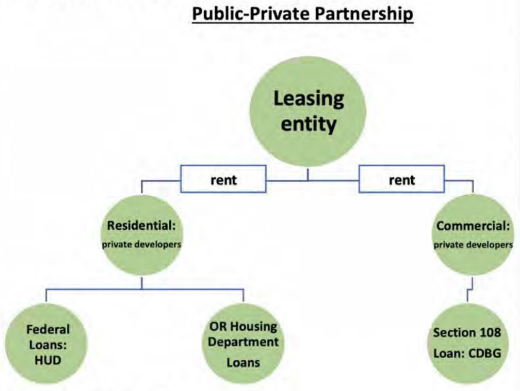
Funding Toolkit

Public and Private Partnerships

One concern our team has had when thinking about our River Road site is financing. The Old Station is currently designated as a park and ride with three different bus stops. The station is just South of a major freeway, located on the busiest intersection on River Road, difficult to access by vehicle and shares the lot with a vacant building. Our vision for this site is for it to be redeveloped for mixed use affordable housing and begin to function as a community gathering space which will later catalyze the other three street corners to develop and evolve. We are committed to development that prioritizes affordability, walkability, pedestrian and bike safety, local businesses, neighborhood branding and community development. Our team acknowledges that these are lofty and long-term visions and are also strategizing to propose recommendations that will appeal to the local transit authority.

Looking at other case studies of similar redevelopment lends insight into innovative funding schemes. One Santa Fe, based in Los Angeles, offers an interesting case study in respects to public-private partnerships and innovative financing; an important reference for our site. To begin, the land where One Santa Fe was built is still owned by LA Metro and thus, benefits Metro in several ways. First, the terms of the lease are for 81 years, "with a base rent set at $525,150, plus a percentage of commercial rent, and a schedule of increases greater than the consumer price index."[37] These leasing terms ensure revenue that Metro can later invest in future projects. After the lease agreement expires, Metro retained the right to revert the site to its original use, so, for a site that was not previously being used and can change uses in the future, Metro made an advantageous choice. Additionally, Metro rents part of the commercial space at One Santa Fe at a prorated fee, and through their public-private partnership they are thinking of ways to open new rail stations that service the area. This approach to public-private partnership and leasing agreements is something our team should keep in mind when pitching development plans to Lane Transit District (LTD).

FIGURE 16. FUNDING TOOLKIT



Source: Hayley Shapiro (2019)

A simplified version of what a revenue stream could look like if LTD chose to lease the land and establish Public-Private Partnerships is in Figure 16 shown here. As the leasing entity, LTD will not benefit unless the private developers find a way to build the project, therefore this chart also outlines some funding opportunities for private developers. Following the example of the One Santa Fe case, this chart breaks developers up into two categories: Residential and Commercial; categorizing rental revenue similarly. Where the funding

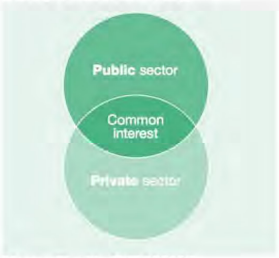
comes from, will inform how the lease will need to be drawn up. In the case of One Santa Fe, different entities owned the different aspects of the building: affordable housing, market-rate housing and commercial. This subdivision permitted developers to look for funding from various sources. Loans for affordable housing came primarily from HUD and funding for the ground floor commercial portion of the project came from Section 108 loans through a program that allows cities to loan federal Community Development Block Grant funds. This innovative funding scheme is certainly involved, but it creates an enticing paradigm where public and private organizations work together on development projects. Additionally, it leaves the leasing entity, which in our case would be LTD, in a position where it is involved in the TOD on the River Road Corridor as well as earning profit from private rent.

One Santa Fe found funding from many different sources including: multifamily mortgage revenue bonds, HUD, LA's city housing trust fund, and community development block grant funds. A funding package like this had requisites. Developers of One Santa Fe had to adhere to a variety of different stipulations for affordable housing and deliver these outcomes in the final project. Our vision for the Old Station is that a portion of the multi-use building on the catalyst site will offer affordable housing. If private developers look to federal or state sources of funding for this project the affordable housing component will most likely be mandatory.

Luckily, in the case of One Santa Fe, the developers did not see the affordability requirements as constraints, but as opportunities. Also, it is important to keep in mind that One Santa Fe was entering a part of the Arts District that was once an artist haven where studios only cost about $150 a month. So, regardless of the fact that the developers were including affordable housing, the community still had concerns about such a large development coming to their artsy and industrious part of town. Currently, 20% of the units in One Santa Fe are considered affordable. The mortgage revenue bonds mandated that 20 percent of the units set aside as affordable had to be at 50% of the area median income (AMI).[38] The loan from the city's housing trust fund also required lower rents on the affordable units at 40 percent AMI. Not to mention the myriad of qualifications set forth by HUD, which required significant attention from the developers. Nonetheless, both the developers and HUD were enthusiastic about building a project of this scale and scope and pointing to it as an example of what a HUD project could look like. Adhering to these affordability requirements meant net operating income of the project was impacted significantly, but developers knew that these sacrifices needed to be made in order to get the project built.

In proposing our vision to LTD, we wanted to suggest alternatives to auctioning or selling the land outright. The Old Station has the potential to serve as a catalyst site in this area, and as we continue to ask throughout this project, "where do we want to go together?" we challenge LTD to consider themselves as part of that future. Leasing the land is a viable option that allows LTD to stay involved in the development of this area now and throughout the future.

Public-Private Partnerships



Source: Farming First (2010)

Housing funding options

An additional concern for our team's planning project for Old Station is the provision of affordable housing. Considering the current population forecast given for Eugene, Old Station can also expect to grow. Current predictions estimate that upwards of 4,000 of Eugene's anticipated 40,000 new residents may move to the River Road Santa Clara neighborhood over the next 20 years.[25] As new residents move to the area, the increased housing demand will need to be met. However, overall trends summarized earlier in this report (such as the high housing value-to-income ratio) indicate the challenge and decrease of housing affordability for Old Station. Future planning needs to account for the provision of affordable housing options for development proposals in the area.

A stated pillar in Envision Eugene is to:
"Provide housing affordable housing to all income levels.[39]***"***

Currently, Eugene is awarded Community Development Block Grants and Home Investment Partnership Program funds from the federal government to support current affordable housing initiatives.[40] Other strategies include neighborhood proposals for urban reserves, growth monitoring, collaborative planning efforts with various stakeholders (e.g., city, business, and residential interests), affordable housing development projects, and a Multi-Unit Property Tax Exemption option, among other approaches.[40]

However, as the Eugene City Council notes, current access to affordable housing is still inadequate and poses significant challenges for residents.[40] In addition to increasing housing supply through redevelopment, an analysis of the Arlington County Transit-Oriented Development (TOD) approach offers some useful insights to address Old Station's housing affordability challenges. For Arlington, their TOD project led to a steep rise in property values which ultimately increased housing costs and significantly affected the availability of affordable housing options in the corridor.[27] The county initially sought to address this beginning in the 1990s by protecting existing affordable housing and developing new options along the corridor. Their approach included the provision of "community benefit units" (CBUs) by nonprofits and individuals and has helped meet some demand for affordable housing near transit stations. CBUs are promoted by county policies which provide a thirty-year guarantee to nonprofits and individuals offering housing affordability options. 2001 estimates indicated the presence of 1,783 CBUs out of the 22,708 housing units along the corridor.[27]

Additionally, the containment of the TOD project along the corridor (within a half mile radius from each of the stations) has helped retain existing affordable housing located outside of the corridor's well-defined development boundaries.[32] Arlington County's successful push for residential developments has kept pace with housing demand in the area and also helped reduce high housing costs. The county has also taken a proactive approach for any new development. As part of the site plan review process, developers must provide one of two options—either affordable on-site units or affordable housing fund contributions to future off-site affordable housing construction projects. As of 2004, Arlington County contributions to affordable housing initiatives ranged from $1 to $2 million dollars annually. To further preserve affordable housing the county board enacted a stipulation in 1990 called the "Special Affordable Housing Protection District," which mandates one-for-one unit replacements.[27]

While Arlington continues to address the challenge of providing affordable housing, there are some useful approaches for Old Station to consider. Containing development within a traditional TOD half-mile radius from the station may be one way to help preserve existing affordable housing located outside of that boundary. Another technique to consider is requiring developers to provide affordable housing on-site or, alternatively, to contribute to an "Affordable Housing Trust Fund" for future off-site affordable housing projects.

Implementation and Phases

Coordinated Implementation

Four Corners

- **Northeast Corner**: LTD old station, this is our catalyst site and the first stage of implementation with a large mixed-use building featuring a community center and ground floor businesses with residential units above. Location of placemaking elements; fountain and mural.
- **Southeast Corner**: Location of new Northbound LTD EMX stop on the corner of River Rd. and River Ave. Site of shopping center retrofits and medium density, mixed-use residential units with central pedestrian corridor.
- **Southwest Corner**: Location of Southbound LTD EMX stop and additional shopping center retrofits for local businesses with row houses and/or townhome residential units
- **Northwest Corner**: Mixed use building with strong emphasis on community and social services like a day care and senior center with residential units and additional placemaking elements.

Vision: The Four Corners on River Road

1. We propose a community catalyst site on the Northeast corner of the River Road, River Avenue intersection on the former site of the old LTD park-and-ride bus station. The primary structure on site will be a new 6 story mixed-use building. It will contain ground floor retail and the new River Road neighborhood Community Center. The building will have 80 new housing units. Using traditional 20% inclusionary zoning the building will contain 16 new affordable housing units, the rest going at market rate. This will bring much needed affordable housing and new economic opportunities to the neighborhood. The building will serve as the anchor of the site and a buffer to the Randy Pape Beltline Highway. Behind the building plantings of Emerald Arborvitae trees will act as a noise, emissions and wind barrier, mitigating the negative effects of highway traffic. In the plaza space outside the building there will be a small parking lot, and a fountain honoring the neighborhood's connection to the Willamette River and its Native American heritage. By the fountain will be a new playground complete with age appropriate sections for younger as well as older children. Around the playground and set inside the plaza will be numerous park benches, tables and chairs bordered by a wall mural depicting the history of the River Road neighborhood and the North Eugene High School mascot, the Highlanders. Along the eastern edge of the site in the area of the former bus slipway will be a bicycle share station and e-scooter sharing station in order to increase sustainable mobility and offer "last mile" public transit solutions.

2. The Southeast corner of the River Road, River Avenue intersection will feature the bulk of the Four Corners development, anchored by the new EmX bus stop nearest to the intersection and a retrofitted shopping center at its heart. To the south of the bus stop will be a new cafe and coffee shop complete with an outdoor dining section that overlooks the rest of the development. Surrounding it will be the pedestrian only heart of the Four Corners development. The pedestrian only center will be intersected by numerous new paths and sidewalks designed to bring pedestrians in from the activated street corners to the heart of the site. Though it will be a pedestrian only center, the pathways will

be wide enough to accommodate emergency and service vehicles when necessary, a design feature pioneered by the Vauban district in Freiburg, Germany.[41] The pedestrian center will contain a community garden and small amphitheater designed for plays and other community programs. The area will feature native plants in elevated planters and rain gardens for landscaping. Five large structures will surround the heart of the development as mixed-use buildings featuring ground floor retail and social services with mixed income apartments on the upper floors. These will follow the inclusionary zoning model of 20 percent affordable housing established by the initial structure on the Northeast corner. Several of the buildings will feature small pocket parks with green walls where residents can rest and gather. The Southern end of the section will contain the main parking lot for the development with areas designated for residents and shoppers. A section of the parking lot will be marked to function as a weekend market and parking for food trucks during special events. A new street will run from Corliss Lane in the South to River Avenue in the North marking the Eastern edge of the site. Along its Eastern side will be a row of new two-story townhomes with on street parking. The townhomes will act as a soft edge helping the development blend in with the single-family homes around it more harmoniously than the taller units in the center of the site.

3. The Southwest corner of the development will feature street facing row houses with mixed-income housing units. Parking will be in the rear, between the row houses and several new mixed-use development buildings featuring ground floor retail and additional housing units on their upper floors. This corner will host the southbound EmX bus stop which will be directly across from the new Northbound stop on the other side of River Road. They will be connected by an elevated crosswalk that bisects a new planted median running from the intersection of River Road and the Beltway to the intersection of River Road and Corliss Lane. This planted median will act as a traffic calming measure and provide a halfway point for pedestrians crossing River Road.

4. The Northwest Corner, at the intersection of Silver Lane and River Road will somewhat mirror the Northeast corner of the development. It too will be anchored by a new mixed-use building with ground floor businesses and mixed-income apartments above. The building will host a new day care as well as the new River Road Senior Center. It will have a small playground for young children and park furniture for seniors designed specifically for games like chess. The building will also host a study lounge for North Eugene High School students. In combining these social services, the Northwest Corner of the Four Corners development will serve as a unifying element of the neighborhood, bringing together multiple generations in community and fellowship.

These plans are in keeping with the principles of the River Road and Santa Clara Neighborhood plan and principles, Envision Eugene, Eugene 2035 Transportation Plan, and LTD's Moving Ahead plan. They will require public-private cooperation, but can bring a newfound sense of community and opportunity to the River Road neighborhood through transit-oriented development that is human scaled, safe, walkable and sustainable.

Old Station Design Concepts

Accessibility and Connectivity:

- EmX Transit Station: MovingAhead[1] and Eugene 2035 Transportation Plan[42] see the EmX Transit alternative as offering the greatest benefit to pedestrian and cyclist connectivity. LTD is planning on replacing the Old Station with the new EmX station at the corner of River Road and River Ave. We propose moving the station directly south of River Avenue so transit riders board and exit the bus further away from the highway, mitigating safety issues, and closer to retail and community amenities, providing a more welcoming experience for riders.
- Pedestrian access: Our design concepts surrounding pedestrian safety and accessibility are also in line with Eugene 2035. We support their plan to build a pedestrian/cyclist bridge across the Beltline Highway, near North Eugene High School, to connect residents to the north side of the highway and provide an alternate route to using the congested, dangerous River Road. Additional pedestrian safety and accessibility options include:
  - Raised crosswalks on the intersection of River Road and River Avenue
  - Well-lit crosswalks
  - Enhanced crosswalks and creative street design
  - Tree canopy lining the roads
- Cyclist access: Improving cyclist safety and connectivity to the surrounding amenities on River Road is essential to increasing cyclist traffic in this neighborhood. We propose developing protected bike lanes along River Road to improve safety and make cyclists feel welcome Eugene 2035 already plans on implementing protected bicycle lanes from Division Avenue, just north of the Beltline Highway, south to the Northwest Expressway. Additional cyclist proposals include:
  - Connecting the bicycle lane at our intersection to the Willamette River path
  - Improving signage along the river path so people are aware of surrounding amenities on River Road
  - Expanding the bicycle lane for additional access to North Eugene High School from Kourt Drive south of the school and Silver Lane north of the school

Affordable Housing and Mixed-use Buildings:

- To accommodate for future population growth in the neighborhood and to account for the lower socioeconomic demographics of its residents, we propose developing affordable, multi-family housing along River Road.
- Through collaborating with private owners and developers who own the outdated strip malls, we propose retrofitting these areas and developing mixed-use buildings with improved pedestrian connectivity to the retail and food centers on the first floor of these buildings.
- To address affordable housing concerns, we proposed containing development within a traditional TOD half mile radius from the station may be one way to help preserve existing affordable housing located outside of that boundary.
- We also propose that the city consider requiring developers to provide affordable housing on-site or, alternatively, to contribute to an "Affordable Housing Trust Fund" for future off-site affordable housing projects.

Placemaking:

- We suggest a placemaking approach that starts with a shift in strategic questions from "what should we do?" to "who are we becoming as a community?" asking stakeholders to share their stories and using this input to inform placemaking projects. We envision proposals that provide diverse economic opportunities for local businesses, value community health outcomes that prioritize jobs and income as much as a sense of belonging and leadership and create opportunities for organizations that promote the brand of River Road.
- Physical manifestations of these placemaking efforts, designed with the River Road community and its heritage in mind, could result in

things like:

- Public art
- Water features
- Historical signage
- Wayfinding maps
- Physical spaces designed for community gatherings
- Programming and activities for the entire neighborhood

Sustainability:

- Strict energy usage guidelines for on-site buildings
- A complete streets approach with large urban tree canopy to promote walkability and shade buildings.
- Sustainable transportation options on site like bicycle share and e-scooter stations.
- Pursuing LEED certification for buildings larger than 30,000 sf on site.
- A new city ordinance requiring cool roofs or green roofs on structures larger than 20,000 sf.
- Public-private partnerships to offer incentives for onsite renewable energy such as solar photovoltaic panels.
- Extensive stormwater management through the use of rainwater catchment systems, rain gardens, bioswales and permeable paving solutions where appropriate.
- Landscaped pocket parks providing an urban oasis for residents.
- Native vegetation and a community garden where residents can grow their own food for consumption and sale.

Policy Adoptions

TOD framework

As a concept, TOD is defined as mixed-use, mixed-density development occurring inside a half-mile radius from a transit station.[27] This measurement reflects the normative area of acceptable walking distance most residents are willing to take during a commute. However, as Dittmar and Ohland observe, TOD projects must go beyond the physical form and functionally to integrate not only with transit but with the greater surrounding community.[27] The approach of complementing the purpose of a place with the community's needs illustrates the importance of placemaking in the successful implementation of TOD. If done well, TOD can lead to positive outcomes related to enhanced neighborhood livability. These outcomes include fostering neighborhood identity and vibrancy, the creation of a healthy pedestrian environment, interconnected streets, increased transit options, and availability of mixed housing types.[32]

The Arlington case study illustrates the importance of early, organized, and ongoing community engagement to foster greater project success. Fortunately, the Old Station site located along the River Road corridor in Eugene, Oregon represents an area in which City of Eugene project leaders have had ongoing engagement with the River Road Santa Clara neighborhood community.[9] For any future development project to succeed, a collaborative process involving a wide range of actors (i.e., city planners, neighborhood associations, developers, businesses, and property owners) in which the primary goal is to realize the community's vision will continue to be of paramount importance[27] To finance redevelopment, city officials may want to consider adopting a similar policy to Arlington County, requiring developers to finance public infrastructure improvements as part of their development project.

Arlington's "bulls-eye" approach to concentrate high and mid-density development directly around the transit stations reflects a preference for a similar approach along the River Road corridor. The River Road Corridor Study showed that participants supported concentrated development along four neighborhood centers.[9] For the Old Station site specifically, related research indicates that sites with large surface parking lots are prime areas for TOD projects.[32] Notably, Goal 14 of the River Road Santa Clara Neighborhood Plan advocates for privacy transitions between low- and high-density areas.[6] If a TOD approach creating high density neighborhoods was implemented for the Old Station site, additional steps need to be taken to buffer existing uses between areas.

Community Engagement

There are five themed vision statements In the River Road and Santa Clara Neighborhood plan. The draft vision statement for Community states,

> "The River Road and Santa Clara Neighborhoods exude a strong sense of place. They are welcoming and inclusive neighborhoods for people of all backgrounds. River Road and Santa Clara celebrate and nurture community unity and diverse cultures, while honoring the rich history of farming in the neighborhoods. The community recognizes the value of natural assets, such as the River, and thriving shared spaces, such as parks, schools and local businesses. Our neighborhoods are safe, resilient, and engaged, with strong social networks and reliable public services."[6]

Accordingly, our vision also prioritizes community identity and unity and it is important to us that the River Road community feel some level of ownership in the development that happens on the Four Corners of River Road. One strategy that we suggest for public participation and community engagement is Sensemaking. A concept based on Neil Takemoto's tools for co-creation and sensemaking that center a community's health in the process of community development. In the article titled *Co-creating places start with collecting stories, sensemaking* Takemoto comments, "a community's health is often measured by explicit outcomes (e.g. income, jobs, crime) over intrinsic outcomes (e.g. belonging, compassion, leadership), resulting in a dominance of investment in those explicit outcomes. This one-sided investment severely inhibits meaningful growth in intrinsic outcomes, inhibiting extrinsic outcomes as well."[43] In order to fulfill the vision set forth in the River Road Neighborhood plan, any development must consider how place is also about community health, and it is one of many tools that can be used to establish a relationship between intrinsic and extrinsic outcomes in planning. While thinking about our site, we would be wise to shift our strategic questions from the notion of "what should we do?" to "who are we becoming as a people?"[43] and how to make the spaces we occupy reflect this.

Takemoto suggests that the most powerful problem-solving systems are when people engage in authentic participation. The vision we have for the Four Corners on River Road will involve a great deal of community engagement and participation if this place strives to reflect the character of the community. As outsiders coming in, one approach planners ought to consider starts with sincerely listening to the stakeholders in the community. Takemoto lays this approach out in a five-step process:

1. **Stories** are collected from the people in the community
2. The people **make sense** of what the collective stories are trying to say.
3. The people **self-organize** based on aligned interests.
4. The people **co-create** solutions.
5. The people **co-invest** in those solutions, and repeat the cycle.[43]

This is what Takemoto refers to as a system of emergence, or the point at which there are tangible outputs and outcomes from a group of people (a community) collaborating. In practice, each of these steps would be followed by the planners engaging community in public participation. The Stories are collected from community members through a sensemaking program in which folks give meaning to their collective experience. The idea behind sensemaking is to shift the focus of organization studies from how decisions shape organizations to how meaning drives organizing. In effect, experience and collective experience are considered meaningful and used to create a shared understanding from different perspectives and interests. Next, the sensemaking results are displayed in maps or by trends for the community to better understand one another. Then, based on aligned interests people self-organize into groups or networks and often this leads to the organic emergence of leadership and solutions. Now that community members have self-organized into informed and energized groups, co-created solutions come to fruition. Lastly, is the co-investment phase. Members establish a system of co-ownership of their creative content, ideas, and solutions and have a sense of ownership for the outcomes of their labor.

Community Planning Process

Source: River Road Corridor Study (2019)

An approach such as sensemaking is but one way to engage the community. That said, this approach centers the community as the experts of their own experience and the most equipped to inform planners, developers and decision-makers. Our vision aims to create a neighborhood brand for the River Road area that captures the character of their community. It would be naive and nearly impossible to accomplish this without involving and deriving meaning from the stories of community stakeholders. Efforts towards placemaking that capture the community's visions, honor the heritage and history of the area, and create opportunity for River Road residents can only succeed if those community members are directly involved in informing the development process.

Ultimately, regardless of how much data we gather, how many case studies we examine or alternatives we suggest, the River Road community members will need to be involved in co-creating solutions and informing decisions about what makes sense for the development in their own neighborhoods.

Community Planning Process

Source: River Road Corridor Study (2019)

Phasing

Our vision for Old Station requires coordinated implementation for projects with a phased approach over a 30-year timeframe. *The phases below are in 5-year increments: Phase 0, 0-5 years; Phase I, 6-10 years; Phase II, 11-15 years; Phase III, 16-20 years.

Implementation Strategy	Phase*	Responsible Party
Concept 1: Connectivity and Accessibility		
Review existing zoning - City parking requirements - Propose removal of minimum parking requirements - Analyze if density zoning fits within density gradient of concept plan - Propose zone changes if necessary	0	City
Sell or Lease the LTD Old Station	0	Lane Transit District (LTD)
Move the EmX station just south of the River Road intersection	0	LTD
Make bike lanes and sidewalks safer and clearer at our intersection - Implement protected/buffered bike lanes along River Road - Use context-sensitive design and widen sidewalks for pedestrians - Install wayfinding signs for cyclists and pedestrians	0	LTD
Create safer crossings at River Rd/Silver Ln intersection - Install flashing lighted crosswalks - Use pavement markings and creative street design to increase crosswalk visibility	0	LTD
New EmX	I	LTD
Extend the bike path from the river pathway	I	City
Create bicycle bridges in the Silver Lane neighborhood	I	City
Create new pedestrian walkways on smaller roads - Identify areas currently in need of new sidewalk construction - Construct sidewalks along main school routes	I	City

40

- Implement neighborhood walking routes along alleyways		
Road diet for River Rd. between Beltline & Corliss Ln. complete with planted median and room for proposed EMX lane	I	LTD/City
Require new construction to reduce surface parking lots to a minimum	I, II	City/Private
Concept 2: Mixed-use buildings and spaces		
Review existing zoning and policies - policy implementation providing affordable housing price guarantees - new site plan review requirements to build or fund affordable housing projects	0, I	City
Identify ideal sites of context-responsive infill for Old Station site area	0	City
Incentivize private redevelopment of strip malls on the four corners. - Invite developers to a community meeting to talk about economic opportunities for local business - Brainstorm business ideas that fit into the RR brand - Open RFP	0, I, II, III	City
Redevelop the northeast corner of the Old Station site with a mixed-use building and public space	0, I	City/Partnership
Create infill in the empty parking lot space in the strip malls	I	Private
Buffer existing uses between low- and high-density areas	I, II, III	City/Partnership
Continue mixed-use building development and affordable, multi-family housing (i.e., construct high-density buildings on each of the corners to provide amenities, housing, and services)	II, III	City/Partnership
Retrofitting strip malls. Redeveloping this buildable land to provide mixed-use buildings with residential and commercial elements to cater to the future population's needs.	III	Private/City
Concept 3: Placemaking: Enhancing the Neighborhood Character and Vibrancy		
Engaging the community through focused public participation workshops		

41

	0, I, II, III	City
Construct community center on the northeast corner of the Old Station	I	City/Partnership
Place-making - Community engagement: sensemaking - Stakeholder stories inform placemaking projects - Prioritize community organizations that fit the RR brand - Bilingual signage around the area - River bike path historical informational/wayfinding signs - Create programming in community gathering spaces	I, II, III	City/Neighborhood groups/Community stakeholders
Identifying places on the master plan	0	City developers, Architects and Planners
Creating economic and mixed-use nodes		Planners and City developers
Installation of public art, murals, sculptures, wayfinding etc.	I, II, III	Artists, Architects and Planners

Conclusion

This plan for Old Station was created with the following question in mind: Where do we want to go together?

The Old Station site offers vast opportunity to introduce vibrancy into the neighborhood and provide a safe sense of place for residents. Through the implementation of mixed-use buildings, placemaking elements, pedestrian/cyclist connectivity, and accessibility elements we are able to cater to the needs of the current and future residents in the surrounding neighborhood. Ensuring community engagement is utilized during implementation is key to a successful redevelopment of the area that properly represents the current and future needs of the River Road residents. Together we can create a future for the River Road neighborhood that is vibrant, safe, walkable, sustainable and accessible for all.

Source: OregonLive(2015)

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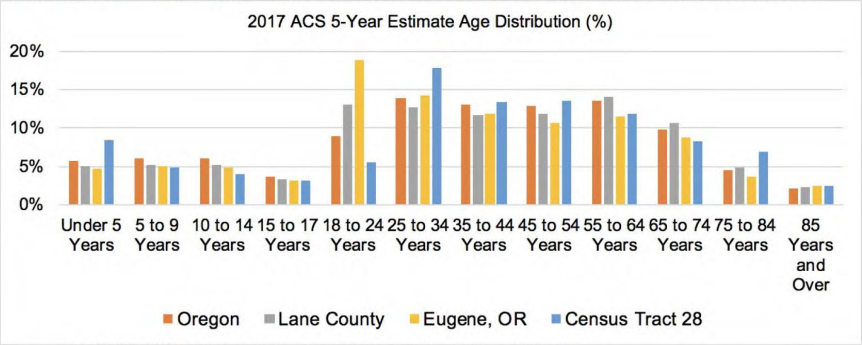
Appendix

FIGURE 6. AGE DISTRIBUTION – OREGON, LANE COUNTY, EUGENE, AND CENSUS TRACT 28, 2017



Source: ACS 2013-2017 (5-Year Estimates), Social Explorer Table A01001

TABLE 3. SELECTED INDUSTRY – LANE COUNTY, 2001-2016

Industry	2001		2016		Change	
	Employment (#)	Employment (%)	Employment (#)	Employment (%)	#	%
Manufacturing	21,032	11.4%	15,260	7.5%	-5,772	-27.4%
Retail Trade	22,160	12.0%	24,428	11.9%	2,268	10.2%
Educational Services	2,334	1.3%	4,222	2.1%	1,888	80.9%
Health Care and Social Assistance	2,353	11.0%	28,469	13.9%	8,116	39.9%

Source: NAICS

TABLE 5. LOCATION QUOTIENT – LANE COUNTY, 2001-2016

Sector	2001	2016
Manufacturing	1.11	1.10
Retail Trade	1.09	1.19
Educational Services	0.69	0.85
Health Care and Social Assistance	1.19	1.23

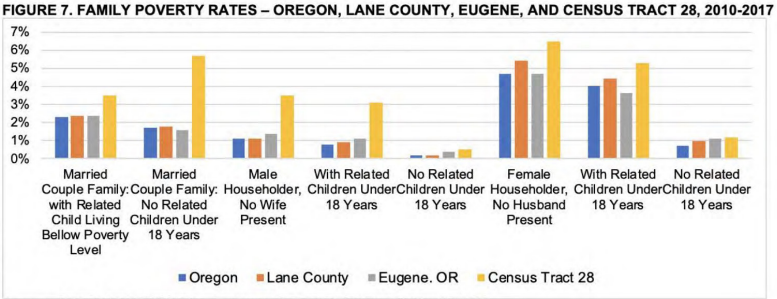
Source: NAICS

TABLE 6. POPULATION-EMPLOYMENT RATIOS – UNITED STATES, OREGON, AND LANE COUNTY, 2001-2016

Sector	UNITED STATES		OREGON		LANE COUNTY	
	2001	2016	2001	2016	2001	2016
Manufacturing	16.8	24.6	15.3	19.9	15.5	24.0
Retail Trade	15.6	16.6	14.8	16.0	14.7	15.0
Educational Services	94.6	68.4	100.3	66.9	139.6	86.7
Health Care and Social Assistance	18.7	14.7	18.0	14.1	16.0	12.9

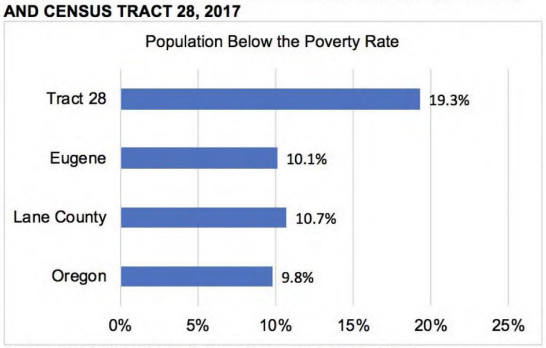
Source: NAICS

FIGURE 7. FAMILY POVERTY RATES – OREGON, LANE COUNTY, EUGENE, AND CENSUS TRACT 28, 2010-2017



Source: ACS 2013-2017 (5-Year Estimates), Social Explorer Table A13002

FIGURE 9. POVERTY RATE – OREGON, LANE COUNTY, EUGENE, AND CENSUS TRACT 28, 2017



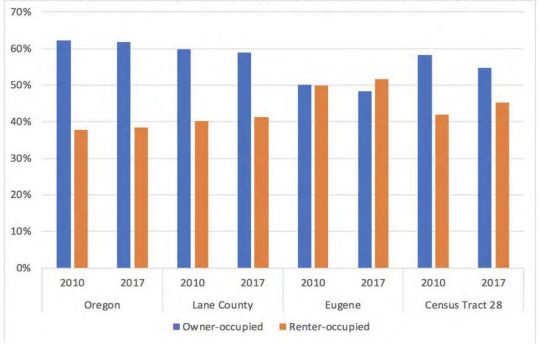
Source: ACS 2013-2017 (5-Year Estimates), Table DP03

TABLE 9. PERCENT CHANGE IN RENT-TO-INCOME RATIO - OREGON, LANE COUNTY, EUGENE, AND CENSUS TRACT 28, 2010-2017

Median Rent and Income	Oregon	Lane County	Eugene	CT 28
Gross Rent (dollars)	35.7%	22.6%	20.0%	33.5%
Household Income (dollars)	13.9%	11.2%	13.9%	6.2%

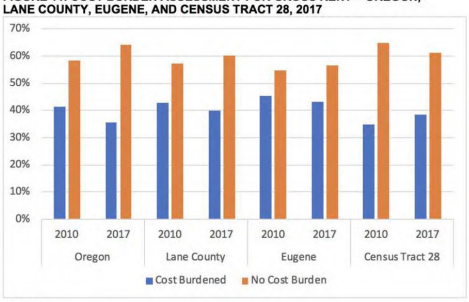
Sources:
ACS 2006-2010 (5-Year Estimates), Tables S1901 and B25063
ACS 2013-2017 (5-Year Estimates), Tables S1901 and B25063

FIGURE 10. HOUSING TENURE - OREGON, LANE COUNTY, EUGENE, AND CENSUS TRACT 28, 2010-2017



Sources:
Census 2010, Table SE:T69
ACS 2017 (5-Year Estimates), Table A10060

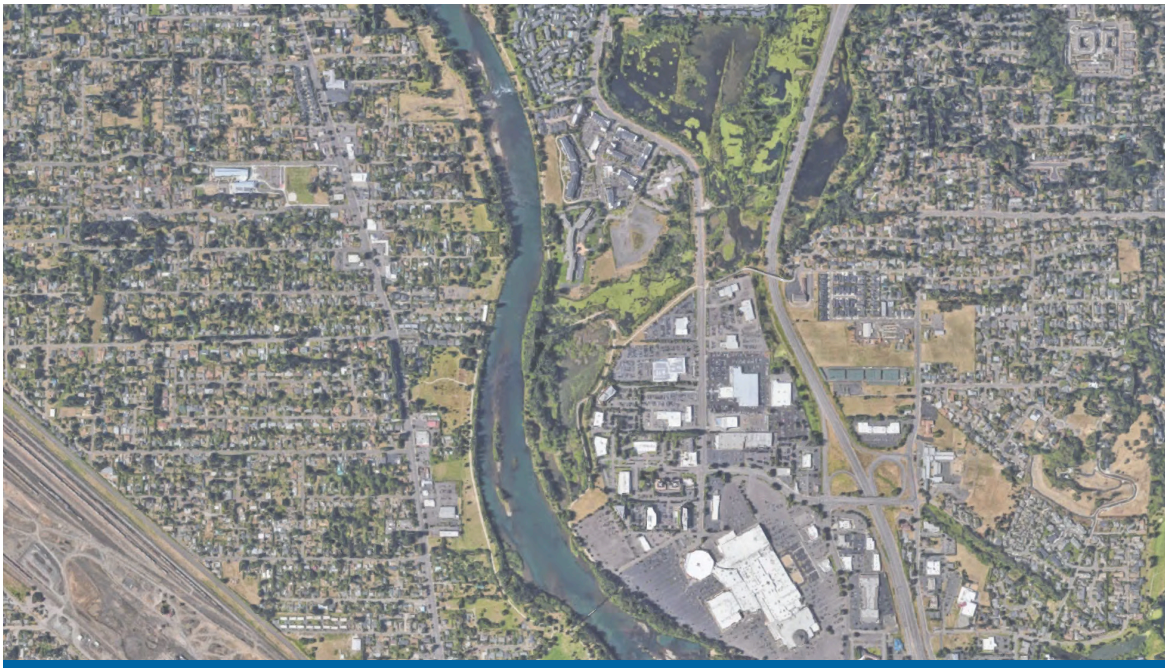
FIGURE 11. COST BURDEN ASSESSMENT FOR GROSS RENT – OREGON, LANE COUNTY, EUGENE, AND CENSUS TRACT 28, 2017



Sources:
ACS 2006-2010 (5-Year Estimates), Tables A18009 and B25063
ACS 2013-2017 (5-Year Estimates), Tables A18009 and B25063

Appendix C

Group 3: Co-designing the Lower River Road Neighborhood



CO-DESIGNING THE LOWER RIVER ROAD NEIGHBORHOOD

For Bob.

We are grateful to be joining the numerous planners in Oregon who have grappled with the parking garage problem - congratulations on your retirement!

For the Kalapuya Ilihi.

This site and the City of Eugene are located on Kalapuya Ilihi, the traditional indigenous homeland of the Kalapuya people. Following treaties between 1851 and 1855, Kalapuya people were dispossessed of their indigenous homeland by the United States government and forcibly removed to the Coast Reservation in Western Oregon. Today, Kalapuya descendants are citizens of the Confederated Tribes of Grand Ronde and the Confederated Tribes of Siletz Indians, and they continue to make important contributions to their communities, to Eugene, to Oregon, and to the world.

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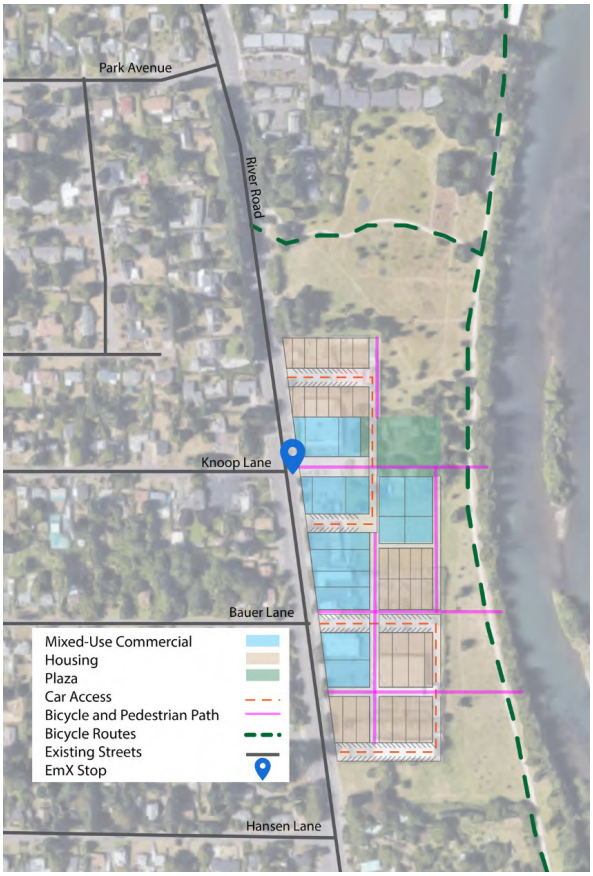
City of Eugene

TABLE OF CONTENTS



EXECUTIVE SUMMARY

Originally occupied by Kalapuya tribes and later, agrarian settlers, the Lower River Road neighborhood is defined by its historic land use patterns around farming, single-family homes, and automobile use. Presented with Lane Transit District's (LTD) planned investments in five major corridors in Eugene, we were tasked with an opportunity to improve the built environment near the Park Avenue bus stop.

An analysis of the community demographic, economic, and housing characteristics revealed that, among a growing population of young families, there is a severe lack of affordable and "missing middle" housing options. Additionally, Tract 41 has the highest rate of families experiencing poverty when compared to Eugene, Lane County, and Oregon. Current zoning identifies the site as an area for future redevelopment as a community commercial hub. LTD's financial commitment is significant, but it will not automatically increase ridership or spur development around transit without parallel infrastructure investments.

We developed a concept for a mixed-use, mixed-income transit-oriented development (TOD) in the area south of Rasor Park and east of River Road. This concept supports LTD's investment and the neighborhood's vision described in current planning work. Our concepts are grounded in Indigenous inclusion and guided by goals to improve connectivity, to spur community economic development, and to enhance the neighborhood sense of place. Ultimately, our concepts will leverage this generational opportunity to improve the quality of the built environment.

The proposed TOD is centered around the Knoop Lane bus stop. Understanding that TODs often overestimate commercial need, and fail because of that miscalculation, most space is currently allocated for housing. Commercial space provides amenities and services to

residents, commuters, and visitors. Mixed-use space activates the public realm to provide a smooth transition between the privately-owned plaza and the public park space. A cohesive and connected network of pedestrian walkways prioritizes the movement of people instead of cars. Car routes provide access to residents and increase ADA accessibility.

Zooming in on our study area, we recommend the following infrastructure improvements:

- Advisory bike lanes on local streets increases safe access to the site.
- An enhanced transit stop transforms the first point of contact with transit from one that does not prioritize riders' comfort or safety to a competitive alternative to driving.
- Enhanced crosswalks and a raised cycle-track on the corridor improve pedestrian and bicyclist safety and network connectivity. This infrastructure improves conditions for drivers by better delineating space for different modes.
- A pedestrian promenade invites commuters, residents, and visitors to enter the space and spend time, instead of moving through the area without ever stopping.
- Multi-family housing provides density to support transit, infill to accommodate growth within the existing urban growth boundary, and a range of housing costs and types to fill "missing middle" housing needs.
- Wayfinding signage improves the connection between the river and the corridor by indicating proximity to different streets and destinations.
- A plaza provides private outdoor space in which people can enjoy food and drinks, gather for events and spontaneous neighbor interaction, and act as a porous border into the adjacent public park space and riverfront.
- Overlook piers provide both visual connection to the river and spaces for people to stop and enjoy natural beauty.
- A destination playground will draw families from the immediate and nearby neighborhoods and may serve as a catalyst for further development.

This site is conducive to redevelopment with unique advantages of compliant zoning and proximity to the Willamette River. This proposal is situated within the neighborhood context and builds on past planning work done in the ***2009 Lower River Road Concept Plan*** and more recent ***River Road/Santa Clara Neighborhood Plan***. The concept pursues goals around infill and modal split that are outlined in the ***Envision Eugene Comprehensive Plan*** and the ***Transportation System Plan***.

CONCLUSIONS

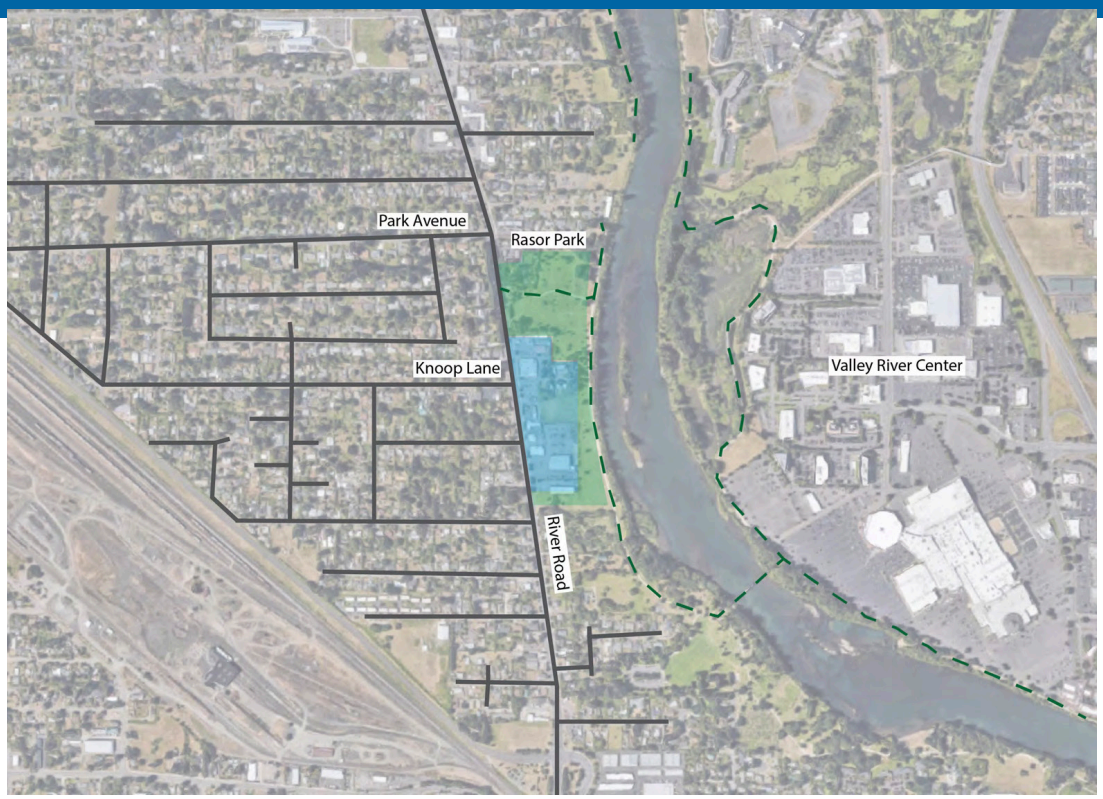
The intent of this concept plan is to respond to LTD's investment and provide a 20-30 year vision that helps transform transit into a competitive alternative. Our proposed development provides necessary density to support high-capacity transit, enhance the neighborhood character, and create a community cultural hub.

Central to this concept are infrastructure recommendations that support multi-modal transportation, revitalize the community economy, and reconnect the neighborhood with the Willamette River.

This plan enters a process that is 10 years in the making and recommends incremental implementation over the next 20-30 years. Understanding the challenge of financing new development, our implementation strategies include designation as a multi-unit property tax exemption (MUPTE) zone and tax increment financing (TIF), among others.

Our plan is grounded in infrastructure recommendations that are supported by research, data analysis, and prior planning work, but our vision goes beyond pedestrian promenades and wayfinding signage. We envision a space that supports and prioritizes people. In our people-first design we imagine families utilizing a daycare and visiting a playground, commuters picking up bread at the market on their way home, and teenagers looking after their siblings while also spending time with their friends. Infrastructure is critical, but it is the beginning, not the end, of enhancing community.

5



6

INTRODUCTION

This report presents a concept for a transit-oriented development in the Lower River Road neighborhood. The concept builds on previous planning work and provides infrastructure recommendations to help realize goals set by the City of Eugene and LTD. The concept is grounded in the current condition of the site and reflects needs identified by an analysis of community demographic, economic, and housing characteristics. The report includes a proposed site map, specific infrastructure recommendations, and high-level implementation strategies.

BACKGROUND

The River Road area was originally inhabited by the Chifin band of the Kalapuya people who lived along the Willamette River (HRR). The Willamette derives from the Kalapuyan term Whilamut, translating to "Where the river ripples and runs fast"(1).

In the 1840s, settlers were attracted to the fertile riparian area (2). This agrarian settler community existed in the area at the time of Eugene's 1853 founding and remained through the building of the California Railroad in 1871 (3). During the 19th century, this land was primarily used for scattered subsistence farming (4).

The 20th century brought a decline in agriculture and the subsequent subdivision of farming lots (5). This newly subdivided land was sold primarily for the development of single-family homes (6). In 1923, River Road was designated the "Pacific Highway" and provided an important connection between Portland, Oregon and California (7). Soon after, Southern Pacific received 205 acres for the Roosevelt Railroad yard, an industrial hub which spurred more residential development to accommodate local families (8).

In 1954, construction of Emerald Center brought an expanding commercial presence to the neighborhood (9). Simultaneously, more farms in the River Road/Santa Clara area were subdivided to accommodate single-family homes (10). By the 1960s, River Road had effectively transitioned from an agricultural space to a residential and industrial community (11).

This incremental urbanization that continued through 1975 resulted in both infrastructure improvements such as curbs, gutters, and streetlights, as well as a patchwork of city and county jurisdiction (12). By 1982, the ***Metro Plan*** for Eugene, Springfield, and Lane County required that, if new development occurred on properties within the established urban growth boundary (UGB), they must be incorporated by the appropriate city (13).

As Eugene grew, River Road became the focus of planning work, starting with the ***2009 Lower River Road Concept Plan***. The major theme of this plan is to establish the area as a gateway into a Willamette River Greenway and Garden district that "serves as a central hub and backbone unifying and stabilizing the larger lower River Road neighborhood." (14). This plan provides a guide to neighborhood residents and city decision makers for future action to this gateway to the wider River Road area.

More recently, the ***River Road-Santa Clara Neighborhood Plan*** draft, updated in August 2019, focuses on five major vision statements: Economic Development, Transportation, Parks & Natural Resources, Land Use, and Community. Together, the culmination of these statements envisions a neighborhood with sustainable local economic activity that promotes the unique River Road and Santa Clara neighborhood identity. Finally, the ***River Road Corridor Study Workshop #1*** included neighborhood community members and business owners, as well as staff from the City, County, and LTD in discussions regarding the context for planning, feasibility, codes, and the policy of the area.

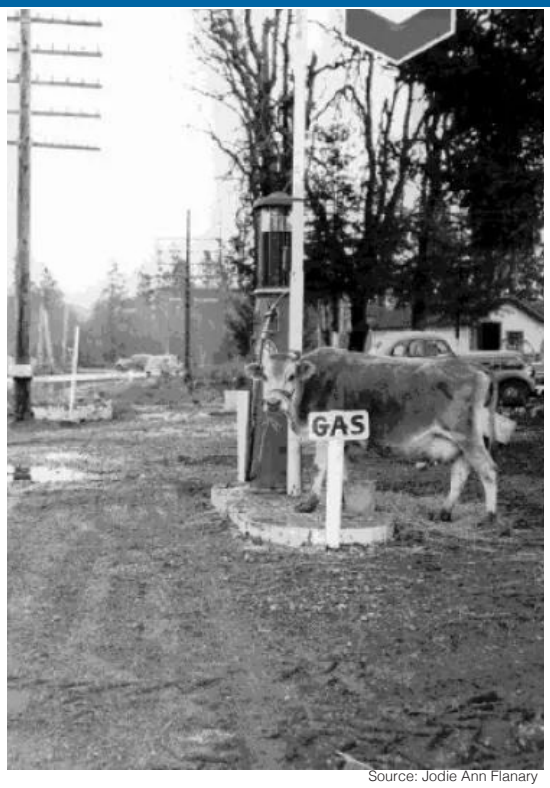
PURPOSE AND METHODS

The purpose of this report is to provide a framework for the future of the Lower River Road neighborhood near Park Avenue and Knoop Lane. We envision the Lower River Road of the future to have a thriving local economy with diverse housing options that is safe and accessible for all modes, culturally distinct, integrated with its riparian landscape, connected to its Kalapuyan history, and a vibrant community hub. By implementing this concept plan, the neighborhood will have improved connectivity, community economic development, and a cohesive identity that will enhance residents' and visitors' lives. The report outlines the principles, background, context, and objectives to arrive at this vision.

Having discussed our individual work styles and commitments, our group visited the site to experience the current conditions. This experience aided in the identification of the opportunities and constraints which facilitated the development of our guiding principles. We evaluated relevant plans to identify key themes. A design charette and advisor meetings led to the development of an initial concept. An analysis of the community demographics, economics, and housing identified key trends. We shaped our concept to reflect this information and continued to develop and iterate our concept based on feedback. We utilized case studies to both refine concepts and provide implementation ideas.

Source: Aliza Whalen

Source: Rick Obst



Source: Jodie Ann Flanary

BACKGROUND AND CONTEXT

REGIONAL CONTEXT: NATURAL HISTORY AND GEOGRAPHICAL REGION

Eugene is situated in the southern Willamette Valley, carved out of the area between the Coast Range to the west and the Cascades to the east. The Valley's northern edge is marked by the Columbia River, and extends as far south as the California border. Dozens of millennia ago, massive floods shaped the topography of the region into its present form: a mostly flat, fertile valley broken up by numerous lakes, marshes, and buttes (1).

The Willamette Valley ecoregion is diverse, containing prairie and savanna; coniferous and deciduous riparian forests; and a multitude of wetlands (2). The climate and soil composition make the Willamette Valley an important area for agricultural production. Most of the Valley's 48 inches of average annual rainfall occurs during the winter, while summers are warm and dry (3). Soil in the valley is rich due to concentrations of volcanic basalts. Lower elevations have many riparian flood plains, and high-water tables exist throughout the Valley (4).

The River Road neighborhood is in northern Eugene. It lies between the Northwest Expressway and Highway 99 to the west, and the Willamette River to the east. River Road's southern boundary is marked by the Chambers Connector/Viaduct, which connects the neighborhood and the River Road Corridor to the rest of Eugene. The northern edge of the neighborhood is marked by the Beltline Road, where it meets the Santa Clara neighborhood (5).

INDIGENOUS HISTORY

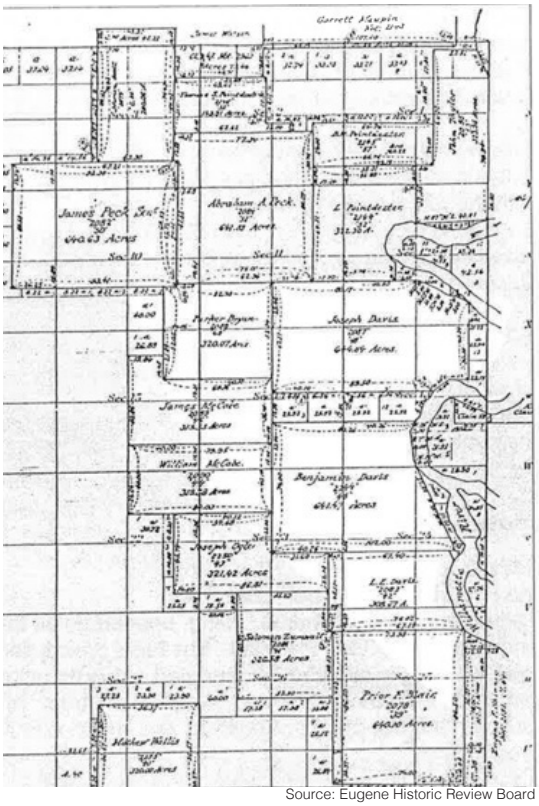
Before settlement of the area by European-Americans, the Kalapuya Native Americans had existed throughout the Willamette Valley since time immemorial. The Kalapuya were not a singular group, but a collection of various tribes inhabiting the Willamette Valley, numbering as few as 15,000 (6) and as many as 25,000 (7).

Kalapuyan tribes practiced hunting and gathering, harvesting local fauna, and fishing from river weirs. Though they were not agrarian societies, hunting and fishing harvests were supplemented with cultivation of salal, camas, and other food crops. "Pyroculture" was practiced by female members of the tribes, a practice of burning sections of the valley floor to clear the flora and create a temporarily nutrient-rich area that allowed for the rapid cultivation of native plants (8).

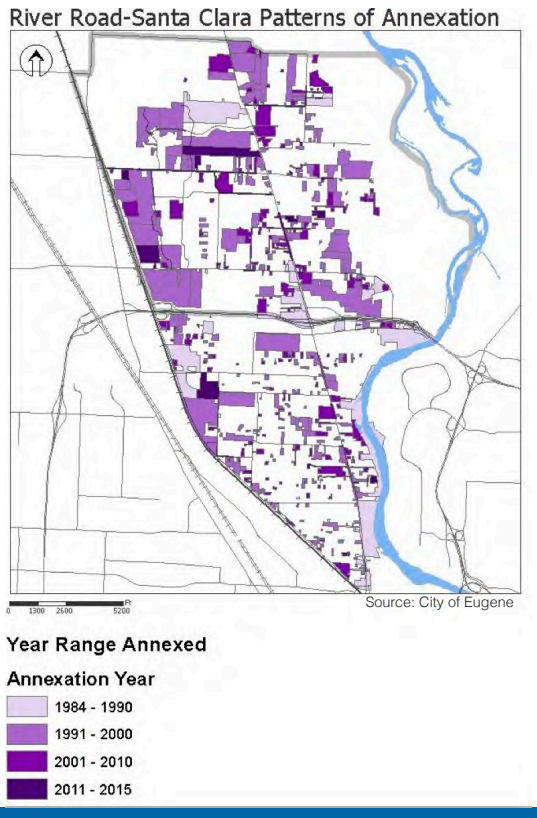
SETTLER AND AGRICULTURAL HISTORY

European trappers periodically visited the area, but they did not leave an imprint like their agrarian successors. Settlers arriving in the 1840s were attracted to this fertile region, and an agricultural community existed in the River Road area when Eugene was founded in 1853 (9). After the 1855 Treaty with the Kalapuya, the Willamette Valley was officially ceded to the United States (10). The Oregon Donation Land Act legitimized settler's claims to land. Scattered subsistence farms were the dominant land use around River Road for the rest of the 19th century and evidence of these 320- and 640-acre lot divisions can still be seen today (11).

The California (O&C) Railroad was built through the area in 1871, encouraging the expansion and intensification of agriculture (12). This trend towards large-scale farming continued until the turn of the century, when the original lots were subdivided for smaller farms and residential construction. The checkerboard layout remained, but the agricultural area became increasingly suburban.



Source: Eugene Historic Review Board



INDUSTRIALIZATION AND POST-WAR DEVELOPMENT

Numerous developments in the early-20th century accelerated River Road's shift from an agrarian community to the predominantly residential area it is today. In 1923, River Road was designated the "Pacific Highway," making it the primary connection between Oregon and California (13). Paving this road allowed motor vehicle traffic that was previously frustrated by routine flooding and muddy conditions. Subsequent development of feeder roads to the Pacific Highway increased the number of connections between River Road and its neighbors. In 1925, the Southern Pacific Railroad was given a 205-acre plot to build the Roosevelt Railroad yard (14).

The railyard's employees and the new traffic brought a demand for housing and services, and River Road was further subdivided and developed over the subsequent decades. After World War II, River Road experienced the boom in suburban growth that impacted many parts of the country - GIs returned and housing demand resurged. Between 1940 and 1950, the number of residents in the River Road/ Santa Clara neighborhood increased by 72% (15). 45% of the residences in River Road were constructed between 1940 and 1959 (16).

1960S TO PRESENT

Despite these changes, the area remained agricultural in character until the 1960s and 70s. Construction of the Beltline and Delta Highways in the early to mid-1960s accelerated modernization of the River Road community. These new highways connected River Road to Interstate 5 and 105, bringing new traffic through the neighborhood. Changes to land use and commercial services catered to these new travelers. By the end of the decade, the last working farm in River Road had ceased operations – in 1986, a filbert orchard was replaced by a Bi-Mart and Safeway stores (17).

Urbanization continued through the 1970s and 80s, bringing about the contemporary pattern of land use and urban form that

survives today. Jurisdictional boundaries between Eugene and the unincorporated parts of River Road/Santa Clara were complicated by the 1980-82 *Metro Plan* for Eugene and Springfield, which required incorporation in exchange for provision of city utilities for both old and new developments (18). This resulted in political backlash from the community, leaving the pock-marked pattern of annexation that exists today.

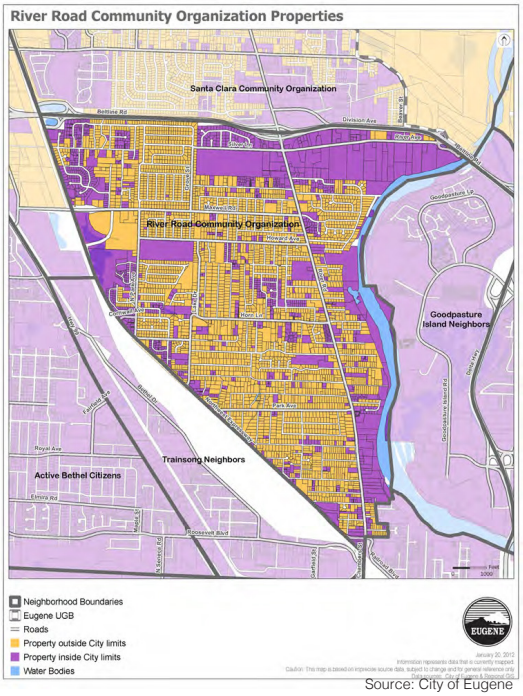
PRESENT DAY CONTEXT AND KEY TRENDS

Census Designations and City/County Jurisdiction

The River Road neighborhood is comprised of three Census Tracts: 27, 28, and 41 (19). The River Road/Park Avenue stop is located in Census Tract 41, or the "Lower River Road Neighborhood." River Road lies within the urban growth boundary (UGB), but is not entirely annexed by the city of Eugene. Because of this, the provision of services is split between Eugene and Lane County. The provider and attendant costs associated with the service provided depends on whether a resident of River Road lives on land that has been annexed by the City. Some services are universal: emergency services are provided by the City of Eugene to all residents in the UGB regardless of annexation status. In other instances, services are provided by different government entities and the costs are assessed at different rates (20).

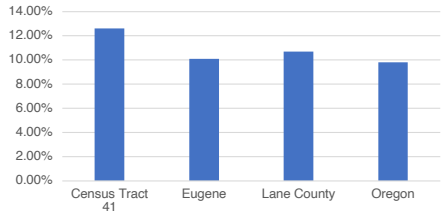
Demographics

Between 2010 and 2017, the Lower River Road neighborhood (Census Tract 41) grew substantially. The 13.3% growth is more than twice the rate of the rest of Eugene and Lane County. As of 2017, the three largest age groups are 20-29, 30-39, and 50-59. With most people between ages 20 and 59, there is a large labor pool. Unlike the rest of the city, Census Tract 41 became less diverse: the non-white population decreased from 13% in 2010 to 5.8% in 2017 (21). A demonstrated increase in the number of 20-39 year-olds may indicate that young families are moving to the area. Young families with higher incomes will create demand for housing and services that are currently lacking or not present in Census Tract 41.



Source: City of Eugene

Figure 1. Percentage of Families Below the Poverty Level



Source: 2013-2017 ACS

Income

As of 2017, households in the Lower River Road are were generally wealthier than the rest of the City. Median household in Tract 41 was $54,042 compared to $47,489 in the rest of Eugene. Almost 30% of the population of Tract 41 earns between $75,000 and $124,999.

Poverty

Compared to Eugene, Lane County, and Oregon, Tract 41 also has the highest percentage (12.6%) of families below the poverty level (Figure 1). The wealth gap in Tract 41 may cause the needs of low-income families to be subordinated by the more prominent and privileged voices in the neighborhood. The wealth gap may also contribute to the prominence of single-family homes and lack of "missing middle" housing options (22).

Employment

The 2016 North American Industry Classification System assessment does not give data for Census Tract 41 specifically. Trends in Lane County's employment illustrate the larger economic forces that affect River Road. Based on employment, Lane County's largest private industries in 2016 were health care and social assistance, retail trade, and accommodation/food services (Figure 2). The industries with the greatest degree of growth between 2001 and 2016 were educational services, management of companies and enterprises, and health care/social assistance. The industries with the most decline were manufacturing, information, and forestry, fishing, and related activities (23).

Figure 2. Lane County Economic Strengths, 2001 and 2016

LANE COUNTY - ECONOMIC STRENGTHS	2001				2016				Change 2001-2016	
Sector	Employment (#)	Employment (%)	LQ	P-E Ratio	Employment (#)	Employment (%)	LQ	P-E Ratio	Number	Percent
Total employment (number of jobs)	185,118	100%	1.0000	1.7605	204,742	100%	1.00	1.79	19,624	11%
Retail trade	22,160	12%	1.0852	14.7067	24,428	12%	1.19	14.98	2,268	10%
Educational services	2,334	1%	0.6930	139.6315	4,222	2%	0.85	86.67	1,888	81%
Health care and social assistance	20,353	11%	1.1931	16.0124	28,469	14%	1.23	12.85	8,116	40%
Local government	14,982	8%	1.0057	21.7528	20,381	10%	1.36	17.95	5,399	36%

Source: Oregon Employment Department

Education

40% of Census Tract 41 has attended some college but not received a degree while 20% have a bachelor's degree (Figure 3). People with different education levels may have different commute routes based on their industry. The lower education levels combined with a high median income in Tract 41 may indicate a high number of specialized tradespeople.

The job, education, and income trends in this site indicate a growing population of financially successful families, whose demand for housing and services will rise accordingly. The number of families below the poverty level indicates a growing wealth gap between those who are well-employed and moving to the area, and those families who are struggling to make ends meet. A greater mix of housing types and affordability is necessary to meet the needs of all of Lower River Road's residents.

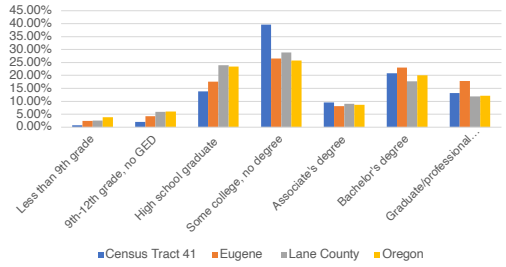
Housing Characteristics

Between 2010 and 2017, renter-occupied housing increased more in Tract 41 than in Eugene, Lane County, or Oregon. This is notable because median rent in Tract 41 is higher than other areas while household value is lower. While income is usually a determiner of homeownership, Tract 41 experienced increased median household income and decreased rate of owner-occupied dwellings.

In Tract 41, one-unit dwellings grew 2.5% from 2010 to 2017, accounting for 90% of housing stock (Figure 4). While this growth reflects the historic land-use patterns of the area, the maintenance of the UGB will soon require infill. The majority of one-unit dwellings in Tract 41 may produce resistance to higher density construction and impede the development of "missing middle" housing.

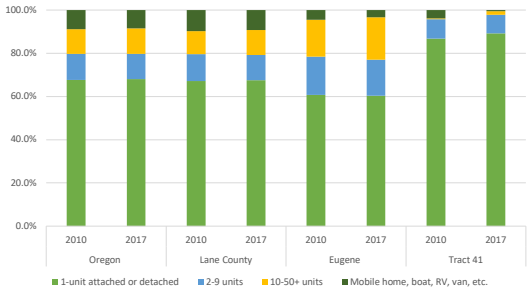
Unlike the rest of the state, cost burden decreased by 3% in Tract 41 between 2010 and 2017. Since rent is higher in this area, and renter-occupied housing increased, the decrease in cost burden suggests that higher-income residents are moving to the neighborhood (24).

Figure 3. Educational Attainment: 25 and Older



Source: 2013-2017 ACS

Figure 4. Units in Structure



Source: 2010 ACS, 2017 ACS

Figure 5. Street Classification

Source: City of Eugene

Transportation

River Road is a 5-lane boulevard: four lanes for north/south-bound motor vehicles, with a center turn-left lane. The speed limit is 35mph along the boulevard. Buses share lanes with the rest of motor vehicle traffic, but a cut-out at each stop allows buses to exit the right lane while passengers board. Both sides of River Road have an unprotected bicycle lane between the curb and motor vehicle lanes. The bus boarding cut-outs block the bicycle lane when occupied. Bicycles can access Eugene's riverside pedestrian/bicycle path via Rasor Park. Branching off River Road are numerous two-lane streets that connect residential areas to the corridor. Several signaled pedestrian crossings exist along River Road – some are at traffic signals while others have a strobe signal that stops traffic for the crossing.

LTD operates three bus routes along the River Road corridor. All three originate at the downtown Eugene bus station. Route 51 provides access to Santa Clara Square, North Eugene High School, and Washington-Jefferson Park, terminating at the River Road Station and doing a short loop before running the same route in reverse. Route 52 follows a similar path, terminating on Irvington at Willowbrook, and looping around Arrowhead St and Irving Rd to merge back onto River Road. Route 55 connects several schools: North Eugene High, Kelly Middle, and Howard Elementary, as well as providing access to Emerald Park. It stops at Park & River Road before heading west on Park, joining Northwest Expressway briefly to connect the schools. It terminates at River Road station, and immediately turns around and does the same route in reverse (25).

Transit data from the Lane Council of Governments show consistent daily boarding rates across the three routes. All experienced a contraction between 2014-2015, but otherwise have static utilization (26).

Past and Present Planning Work

Envision Eugene's Comprehensive Plan is the city's overarching document for land use policy. It provides vision and guides the use of city resources.

The Eugene *2035 Transportation System Plan* describes the city's policies and projects related to the transportation network. They relate to improving infrastructure for pedestrians, bicyclists, and motor vehicles, goals for implementation, needs assessment for the network, and the best practices for creating a transportation system that accommodates all users.

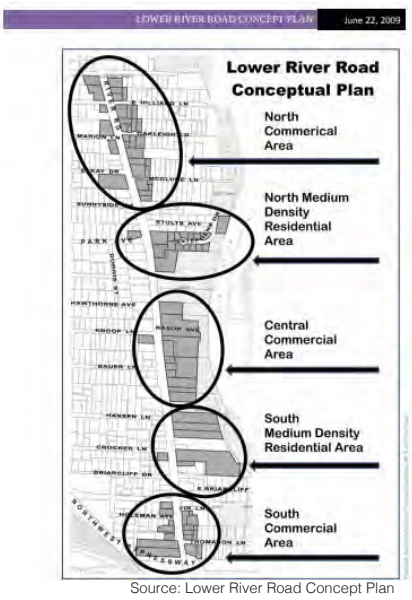
Moving Ahead's *Alternative Analysis Report* compares the costs and benefits of different transportation/transit investments on several important corridors, among them River Road. The criteria for evaluation stem from three goals: "1. Improve multimodal transit corridor service, 2. Meet current and future transit demand in a cost-effective and sustainable manner, and 3. Support economic development, revitalization, and land use opportunities for the corridor (27)." It identifies the EmX option as the preferred alternative for River Road, due to the middle turn lane and better cost-to-benefit ratio.

The *River Road Corridor Study* reports the results of a workshop with residents of the neighborhood, intended to identify desirable outcomes for potential development. Feedback was generally positive toward concentrating development around "neighborhood centers," along with more mixed use and medium density housing.

The *Economic Development Vision Statement for River Road/Santa Clara* outlines goals for the two neighborhoods' future development. Ample economic opportunities, affordable housing, resilience to climate change, encouraging dense development, and efficient transportation were among the desired outcomes listed in this vision.

The 2009 Lower River Road Concept Plan designates the site as a "Central Commercial Area," intended for mixed use/nodal development. It specifies a concentration of mixed-use multitenant commercial development, with low-rise and mid-rise form. Around that would be a variety of R-1.5 rowhouses fronting greenway and parks, preserving areas for community gardens and farmer's markets, and buildings oriented to face the greenway and parks.

The 2018 Parks System Plan identifies system-wide goals and needs for Eugene's parks system. Equity mapping identified River Road and Santa Clara as an area under-served by the parks system.



Source: Lower River Road Concept Plan

Source: Eugene Castcades Coast

Public involvement indicates a high degree of support for increasing walking and biking connections, enhancing local waterways, and improving access to the Willamette River.

These plans support our transit-oriented development proposal. The proposal is in accordance with vision and resource allocation ascribed by *Envision Eugene's Comprehensive Plan* and 2035 *Transportation System Plan*. A relocated and expanded EmX transit hub, in tandem with residential and commercial development, fulfills Moving Ahead's goals of improving transit service while supporting economically beneficial land use opportunities on the corridor. More diverse housing, job opportunities, and efficient transportation created by this TOD pursues the goals listed in the *Economic Development Vision Statement* for River Road/Santa Clara. The 2009 *Lower River Road Concept Plan* and the *River Road Corridor Study* support concentrating development in neighborhood centers, which this TOD proposal does. The *Parks System Plan* identifies River Road as an area for improvement, which this concept addresses in its recommendations for improving amenities around Rasor Park, and in turn, increasing its utilization.

CONCLUSION

River Road, built on Kalapuya land, is a formerly agrarian area that became a suburban neighborhood in the 20th century. It remains a sprawling part of the city, comprised of mostly single-family homes. The Lower River Road neighborhood (Census Tract 41), in which this site exists, is a growing neighborhood with wealthy residents. Median household incomes are higher than the rest of Eugene, and there are fewer cost-burdened households. More families in the area creates a higher demand for services, many of which are not currently present around this site. The proposed transit-oriented development, which is supported by the city's existing plans, seeks to remedy many of the neighborhood's shortcomings by providing better transit service, more commercial opportunities, and additional housing types to suit the needs of all residents.

SITE ANALYSIS

The purpose of this site analysis is to gain a deeper understanding of environmental, physical, social, and zoning contexts for the surrounding area. This analysis is based on in-person observations conducted by our group to identify strengths, weaknesses, opportunities, and threats for the proposed TOD centered around the Knoop Lane bus stop site located on River Road in Eugene, Oregon. Additional online research provided data from Google Maps, Eugene City Code, and US Weather Services.

Strengths	Weaknesses	Opportunities	Threats
Site proximity to Willamette River	Residents may be resistant to change that directly affects their property	Building a welcoming community identity (inward and outward)	Flood plain zone and lack of storm water infrastructure could threaten future development
Site proximity to Rasor Park and City owned public lands	Lack of racial diversity (and decreasing)	Comprehensive plan supports planning initiatives for diversifying housing	Increasing wealth gap/stratification
The Willamette River area is historically Kalapuya territory and can highlight cultural and ecological knowledge of the site	Limited access to cultural amenities/public social hubs	Develop connectivity to Rasor Park and greater public park space, especially around the commercial area.	Commercial property owners and business owners unwilling to work with developers
Proximity to river path can enhance pedestrian and bicycle access from site transit system to surrounding Eugene neighborhoods	Limited room to work with beyond the River Road right-of-way	Consolidate two bus stops into one EMX stop in front of Rasor Park to attract people to commercial area	
Current C-2 Community Commercial Zone supports higher density development in providing services, offices, and housing with shared parking	Lack of density to support high capacity transit	Increasing visibility of Rasor Park and create a sense of place– create entrance to park with bus stop, bike racks	
River & garden reflection of community brand	Street grid is not well connected	Increasing connectivity to the river path	
River Road has a wide right-of-way		Improve transit infrastructure	
		Large lot size for future mixed uses	

LOCATION

The Park Avenue bus stop is located along River Road within the City of Eugene, Oregon. River Road resides in the southern Willamette Valley, north of Eugene. The area is bound to the east by the Willamette River and west by the Northwest Expressway/ Highway 99. North of the River Road community lies the Santa Clara neighborhood with similar history of incorporating to the City of Eugene, and with residents who also utilize the River Road arterial for commuting to Eugene.

The Northwest Expressway is an asset for traffic seeking a more direct route. Proximity to the Expressway may support transformation of River Road from a major single-occupancy vehicle artery to a multi-modal corridor.

NEIGHBORHOOD CONTEXT

Lots surrounding the intersection of Park Ave and River Road are predominantly single-family homes, with a mix of duplexes, multifamily apartments, townhouses, and large public park areas. On the west side of River Road are large lots occupied by single unit structures, navigable by narrow local roads without sidewalks.

On the east side of River Road, nearby commercial amenities include auto repair shops, thrift stores, restaurants, and offices. The River Road & Santa Clara library and River Road/El Camino del Rio Elementary School are nearby. The majority of users access these lots by motor vehicle via River Road. Bike and pedestrian paths are scattered throughout the area to connect the Greenway River path system to River Road. Some of the paths are defined as formal paved routes, while others are informal, unmarked dirt trails.

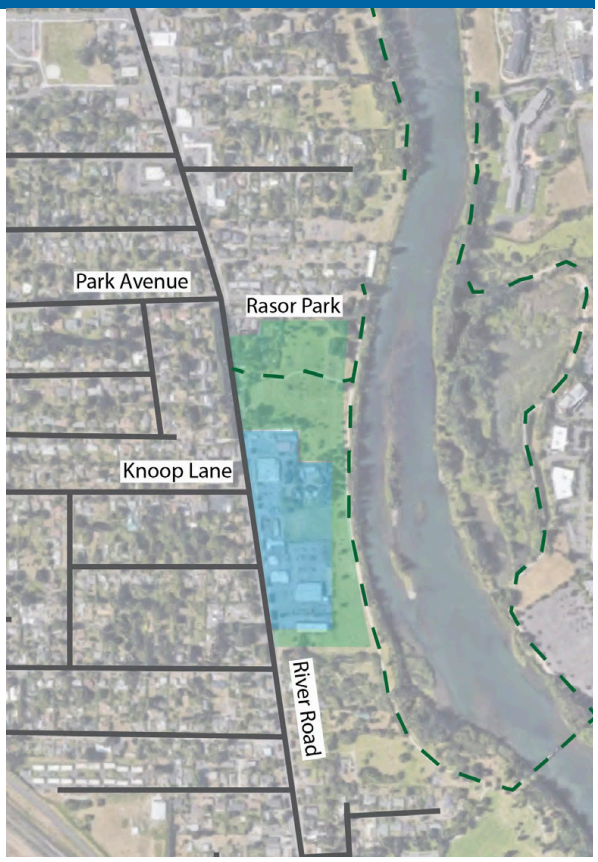
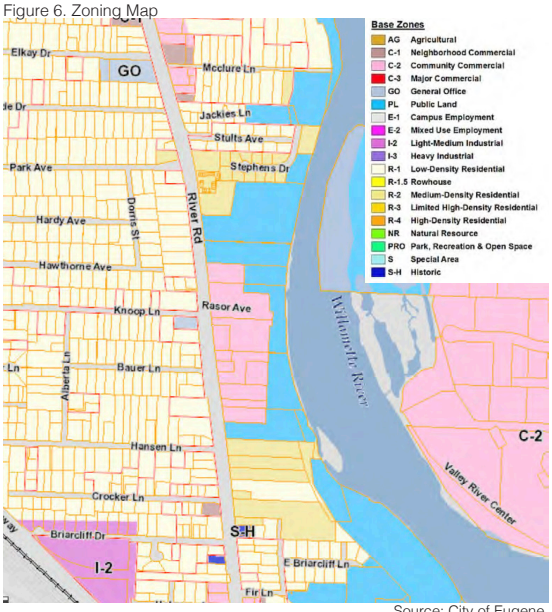


Figure 6. Zoning Map



Source: City of Eugene

EXISTING ZONING

River Road has unique jurisdictional boundaries, as many lots are outside of Eugene City limits. There is no clear boundary between city and county jurisdictions, as lots have been annexed individually over time. Zoning along the lower River Road corridor is mainly zoned R-1 for Low-Density Residential use. As you move south along the corridor, lots begin to vary between R-2 Medium-Density Residential, PL Public Lands, and C-2 Community Commercial land use. Just south of the Park stop is Rasor Park. It is zoned public land and connects to the large area of public land adjacent to the Willamette River.

The area directly south of Rasor Park is zoned C-2, and is the focus of our proposed TOD plan, as our concept and infrastructure recommendations fulfill and align with the purpose of C-2 zoning. C-2 Community Commercial zones are designed to implement the Eugene ***Comprehensive Plan*** by providing areas for community commercial uses. These areas usually include at least five acres and not more than 40 acres. They are intended to include a wide range of purchaser goods, entertainment, office, and service needs to support a population smaller than that of the metropolitan area but larger than that of a neighborhood. Housing is also permitted in this zone, which may occur either independently on individual lots or parcels, or in clusters that share parking facilities and other common spaces (1).

NATURAL PHYSICAL FEATURES

The Park Avenue and River Road intersection is flat in topography with an array of natural features. The neighborhood was built within a flood plain due to the proximity to the Willamette River. Tall old-growth fir trees line the southwest corner of the intersection and create a forested streetscape that also provides wind and sun protection. Close to the northbound bus stop are the Greenway Townhouses, featuring newly planted native plants and gravel to promote drainage from rain runoff on the southeast corner of the intersection. Adjacent to the parking lot is a median with evenly spaced oak trees, but little to no ground cover on the exposed dirt median between the street and sidewalk.

Rasor Park, located 400 feet south of the intersection, is a large open space that has a buffer of dense trees facing River Road and a substantial grassy berm between the park and the sidewalk. The combination of the large berm and dense trees successfully reduces traffic noise, but decreases visibility of the larger natural features in the park.

MAN-MADE FEATURES

At the intersection of Park Avenue and River Roads there is a traffic light and crosswalks. Park Avenue has one vehicle lane in each direction, terminating in two eastbound turn lanes. Park Avenue has painted fog lines but lacks both sidewalks and bike lanes. River Road has four vehicle lanes, one center turning lane, sidewalks, and bicycle lanes on either side. The intersection has two streetlights, with no additional (or at least limited) streetlights continuing down Park Avenue and River Road. There are telephone poles with suspended electric cables and transformers lining the streetscape.

A multi-use path from the Greenway River path terminates at the intersection. Only the northbound route supports bike lanes from the location of where the path ends. In addition, the crosswalk button is positioned on the opposite side from where a cyclist emerges. An enhanced crosswalk exists south of Park Ave, which cautions pedestrians that “drivers may not stop.” Overall, there are few pedestrian crossing points, and no crosswalk directly across from Rasor Park.

There are two bus stops. The east side stop has two seats and is overgrown with foliage. Right next to the stop is an electric box with exposed wires. The west side stop has two seats and is close to the intersection fuse box. Neither bus stop provides shelter or a trash can.

Source: Claire Schechtman

Source: Stephanie Tabibian

Source: Google Maps

Source: Gareth Warr

Source: Lane Transit Dictrict

SENSORY

Commuters utilizing the north and southbound Park Avenue bus stops experience the noise pollution of oncoming traffic. The nearest bike lane and car lane are within 10 feet of the bus stops. The lack of barrier between people and fast-moving vehicles instills a sense of fear in pedestrians such as parents of young children. There are two small seats available at each stop which can provide relief to elderly, youth, disabled, or anyone wishing to rest their legs. Respite is only available for two waiting riders at a time. Some cyclists choose to utilize the sidewalk to further distance themselves from vehicles. This results in potentially dangerous collisions and creates an even less inviting sidewalk space for pedestrians who are now required to be on constant alert of drivers and cyclists.

Both bus stops lack protection from weather, leaving riders vulnerable to the elements, which include rain, snow, and high UV rays during summer, among other weather impacts. The bus stop located on the east side of the road is backed by thick foliage which can serve as a weather barrier but can also become a nuisance to people sitting if it is overgrown. The westward stop is backed by a residential fence line and high grown trees that can block some weather impacts for waiting riders.

TRANSPORTATION CIRCULATION

River Road is a 5-lane corridor: four lanes for north and southbound motor vehicles, and a center turn-left lane. The speed limit is 35mph along the corridor. Buses share lanes with the rest of motor vehicle traffic, but a cut-out at each stop allows buses to exit the right lane while passengers board. Both sides of River Road have an unprotected bicycle lane between the curb and motor vehicle lanes. The bus boarding cut-outs block the bicycle lane when occupied. Bicycles can access Eugene's riverside multi-use path via Rasor Park.

Branching off River Road are several two-lane streets running east-

west that connect residential areas to the corridor. None of these local streets have sidewalks or bike lanes. Other than River Road, there are few north-south streets that connect residential roads. Pedestrian crossings exist throughout the corridor. Some are at traffic lights, and others are pedestrian triggered stops that notify oncoming vehicles to yield.

LTD operates three bus routes along the River Road corridor. All three originate at the downtown Eugene bus station. Route 51 and 52 follow similar paths, and provide access to Santa Clara Square, North Eugene High School, and Washington-Jefferson Park. Route 55, which stops on Park and River Road, connects several schools: North Eugene High, Kelly Middle, and Howard Elementary, as well as providing access to Emerald Park.

Figure 7. Flood Plain Map

Source: City of Eugene

CLIMATE

River Road is oriented northwest-southeast, with tall trees on the west side of the road, and housing and shorter trees on the east side. This aspect means that the area is exposed to morning light from the east side but shielded from the hot afternoon sun from the west. In the winter, the road will see some south-western afternoon sun while also still being shielded from the summer afternoon sun.

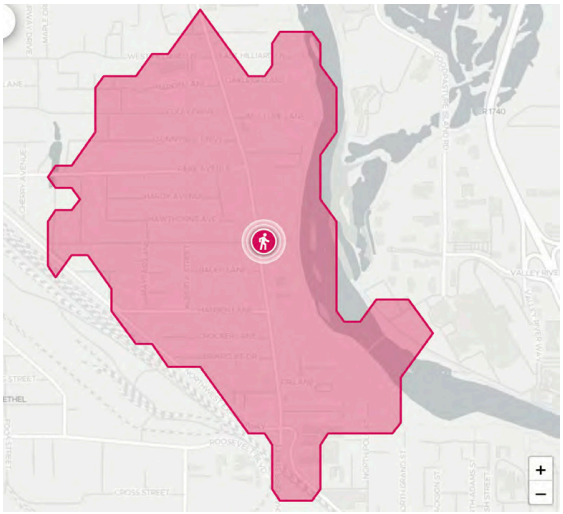
The wind in Eugene primarily comes from the south. River Road experiences some of that, but less than if the road were oriented true north/south.

The annual average temperature in Eugene is between 45 and 65 degrees Fahrenheit, with more frequent high and low temperatures in the summer and winter, respectively.

"The wettest month (with the highest rainfall) is December (7.8"). Driest months (with the lowest rainfall) are July and August (0.6")." "Months with the highest number of rainy days are November and December (17.9 days). The month with the lowest number of rainy days is July (3.1 days) (2).

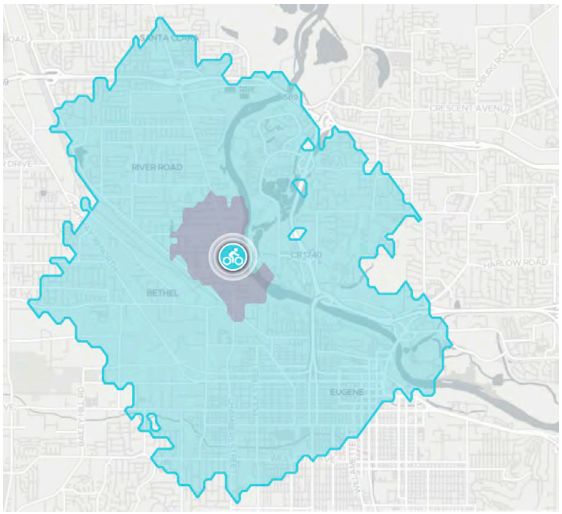
Source: Google Maps

Figure 8. 15 minute walk shed from the intersection of Knoop Lane and River Road



Source: TravelTime Maps

Figure 9. 15 minute bike shed from the intersection of Knoop Lane and River Road



Source: TravelTime Maps

CONCEPT PLAN

OVERVIEW

The Lower River Road neighborhood is a community with many unique assets and opportunities. Of all the neighborhoods in the River Road area, it is the closest to the Willamette River and Greenway. The proximity to the river brings access to open greenspace for recreation, transportation, and native habitat. Lower River Road is also near the Chambers and Roosevelt connectors, creating access to and from the neighborhood and to the greater Eugene area.

Many residents in the neighborhood may self-identify as gardeners, plant lovers, and homesteaders due to residences with a combination of large yards and small homes, as well as rich loamy riverbed soil perfect for growing vegetables. From the Greenway and the street's namesake to the healthy soil and native ecosystem, this section of the Willamette River has had profound effects on this neighborhood even before the Chafan tribe of the Kalapuya people lived alongside the river's edge. All these aspects of the river's story have created a unique neighborhood identity.

However, this unique identity has become invisible as the Lower River Road neighborhood has changed over time. When you are in the area, it is difficult to understand the proximity of the river to the road. Perhaps only a well-versed local could navigate the series of informal dirt paths and shortcuts to get to the closest bus stop. Additionally, few people may ever choose to take the time to get

Source: Newman Architects, Storrs Center Master Plan

Source: Goody Clancy

to know this area because of the lack of destinations or diverse residential options.

This plan explores an overall concept and block pattern with infrastructure recommendations aimed to bring the Lower River Road neighborhood's identity to the forefront. The concept outlined here builds on the neighborhood and city's vision of the future of the Lower River Road neighborhood and are based on work that has already been done. We recommend this concept to Lane Transit District (LTD) and the City of Eugene to support the investment in high-capacity transit and revitalization of the River Road corridor.

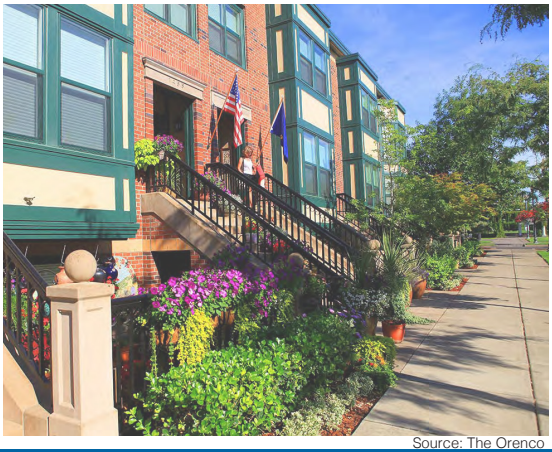
The first four infrastructure recommendations increase connectivity of transportation. The community of River Road has indicated that a cohesive and connected multi-modal transportation system is important to support redevelopment and enhance the neighborhood sense of place. Infrastructure in the form of improved transit stations, protected bikeways, and enhanced pedestrian crossings help realize this system. We envision a Lower River Road that enthusiastically supports safe and efficient travel by all modes.

We recommend advisory bike lanes on local streets west of River Road to increase access to the proposed TOD. Since residents are responsible for the cost of sidewalks, we chose not to recommend sidewalk installation on these roads. While advisory bike lanes will be an improvement from the current conditions, we hope that our study area serves as a catalyst for subsequent neighborhood development and streetscape improvements.

The next four pieces of infrastructure support community economic development projects. A TOD will enhance the neighborhood near Rasor Park by creating a destination with daily amenities and a public space that interfaces with the river. This commercial area will include both retail and housing units to increase density and provide services to residents and visitors. Combined with a TOD, the new EmX stop will bring business to the area and encourage transit ridership. Commercial space will be highly integrated with both Rasor Park and the existing riverfront path to enhance enjoyment of

Waking up to a sliver of sunlight coming across the river, you get ready for the day. Hand in hand with your child, you walk by your sister's apartment to pick up her kids before dropping everyone off at the ground floor daycare. The EmX comes near the plaza every ten minutes, so you have time to stroll through numerous paths. At the edge of the park, you stop at the café and grab a coffee for your morning walk. You love visiting the river overlook to enjoy the view of the Willamette, watching the animals whose habitat lies before you. While there is car access in the project, you hardly notice since the pedestrian areas are robust and well connected. It's time to get on the EmX - even though it's rush hour and most of your neighbors take the bus to work, it's never too crowded because it comes so frequently.

Source: Planner's Web



Source: The Orenco

natural spaces while offering opportunities shop and play in the area.

The final four infrastructure recommendations increase the neighborhood's sense of place, including consultation with Native entities and Indigenous planners to reconnect with the area's Kalapuyan history. The River Road neighborhood has a major opportunity to enhance and elevate the neighborhood's sense of place and identity through creating wayfinding and urban navigation design system, a neighborhood gateway, and well-defined public spaces that enhance and connect visitors' and residents' experiences as they move through the neighborhood. These projects also include a destination playground and community gathering plaza that connect community commercial activities and services with the surrounding natural riparian landscape.

Most importantly, from the start of settler colonial land planning in Eugene, Indigenous Kalapuyan people were erased from the process. While the River Road area and Eugene have physically developed, there are opportunities for the city of Eugene to decolonize future planning practices. Today, government-to-government relationships exist between federally recognized tribes and the United States. The City of Eugene has an opportunity to establish a working relationship with the two Oregon tribes that historically absorbed the dispossessed Kalapuyan bands from the Eugene area: the Confederated Tribes of Siletz Indians and the Confederated Tribes of Grande Ronde.

We envision the Lower River Road of the future to have a thriving local economy with diverse housing options, to be safe and accessible for all modes, to be culturally distinct, to be integrated with its riparian landscape, to be connected to its Kalapuyan history, and to be a vibrant community hub. By achieving these concepts, the neighborhood will have improved connectivity, community economic development, and a cohesive identity that will enhance residents' and visitors' lives.

BLOCK PATTERN

In pursuing this vision to bring the river back to the community and leverage the investment to improve the built environment, we recommend implementing a transit-oriented development (TOD). Removing the Park Avenue stop, the TOD would be centered around Knoop Lane. We have chosen to locate an enhanced transit stop in front of this opportunity site because the existing Community Commercial zoning allows for mixed-use development. Also, the ***River Road/Santa Clara Neighborhood Plan*** and 2009 ***Lower River Road Concept Plan*** identify this site to be redeveloped as a mixed-use commercial hub.

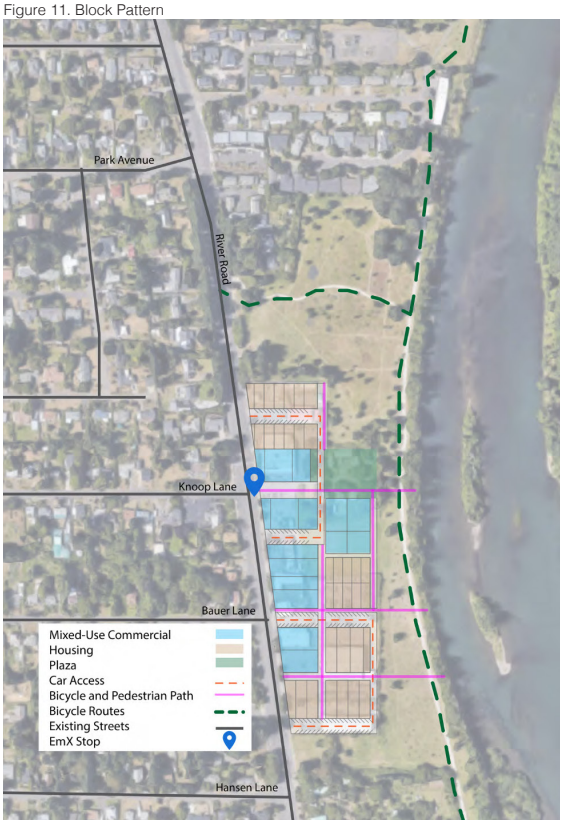
Figure 10 diagrams our proposed block pattern and land uses. The beige color indicates housing, which accounts for 3.1 acres of the site. We estimated capacity based on an average unit size of 1,000 ft². At two stories, this site can accommodate about 272 units and 27 units per acre. Increased to three stories, the site could house about 408 units at 40 units per acre. We envision this site to have numerous housing typologies, with higher density apartments above mixed-use commercial space and the potential for slightly less dense rowhouses or condominiums along the periphery. As mentioned previously, Tract 41 is strongly single-family home dominant. Diversifying the housing stock provides necessary infill, increases the number of housing options, supports high capacity transit, and encourages a sense of community.

The data also show that despite having a medium income that is higher than Eugene overall, Tract 41 also has a higher percentage of households experiencing poverty. With this in mind, we recommend implementing policy that requires 20% be allocated for affordable housing – this would be 81 of 408 units on this site.

The blue shading indicates mixed-use commercial space which occupies about 3.21 acres. In addition to supplying amenities and services, this space may also provide jobs and house local businesses. The ***River Road/Santa Clara Neighborhood Plan*** identifies community economic development.

Figure 10. Block Pattern

Figure 11. Block Pattern



The green indicates the central plaza. The plaza is bounded by buildings on the south and west sides and by public space on the north and east sides. We have pulled a piece of plaza across the main street to reinforce the community and bike/pedestrian orientation. Defining a portion of the space with buildings offers a sense of "refuge." A porous delineation of space on the other sides allows the plaza to flow into the adjacent open space of Rasor Park, increasing its visibility and activating its utility. The fourth "wall" of the plaza is the Willamette River, which reinforces the connection to and visibility of this natural asset.

As a privately-owned space, the plaza can house permanent businesses, restaurants, and bars with outdoor seating. As a gathering space from the neighborhood network and the riverfront open space network, the plaza may also accommodate temporary uses such as markets and food cart events.

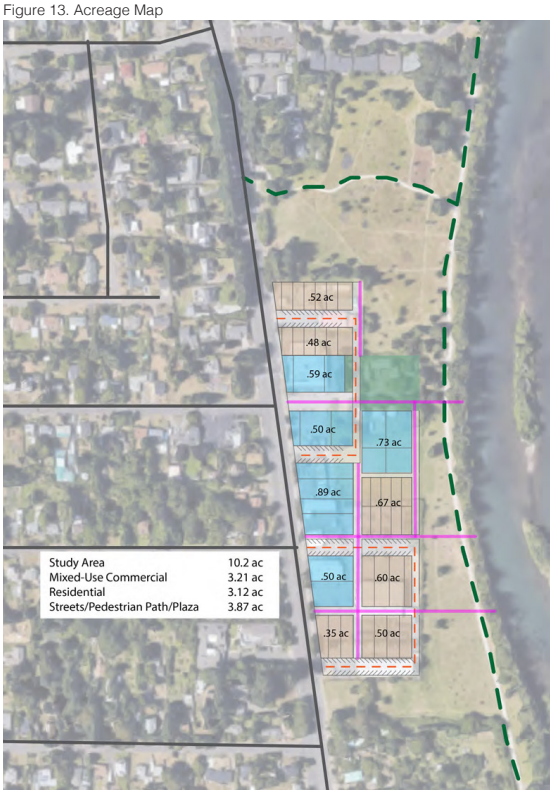
We designed this site to prioritize people, not cars. The pink lines indicate pedestrian and bicyclist paths. In addition to a main bike and pedestrian thoroughfare and plaza, a high level of pedestrian connectivity through the site indicates priority and encourages pedestrian movement and interaction. Numerous connections to the riverfront are enhanced by overlook piers - these both activate the riverfront and increase the visibility of the River.

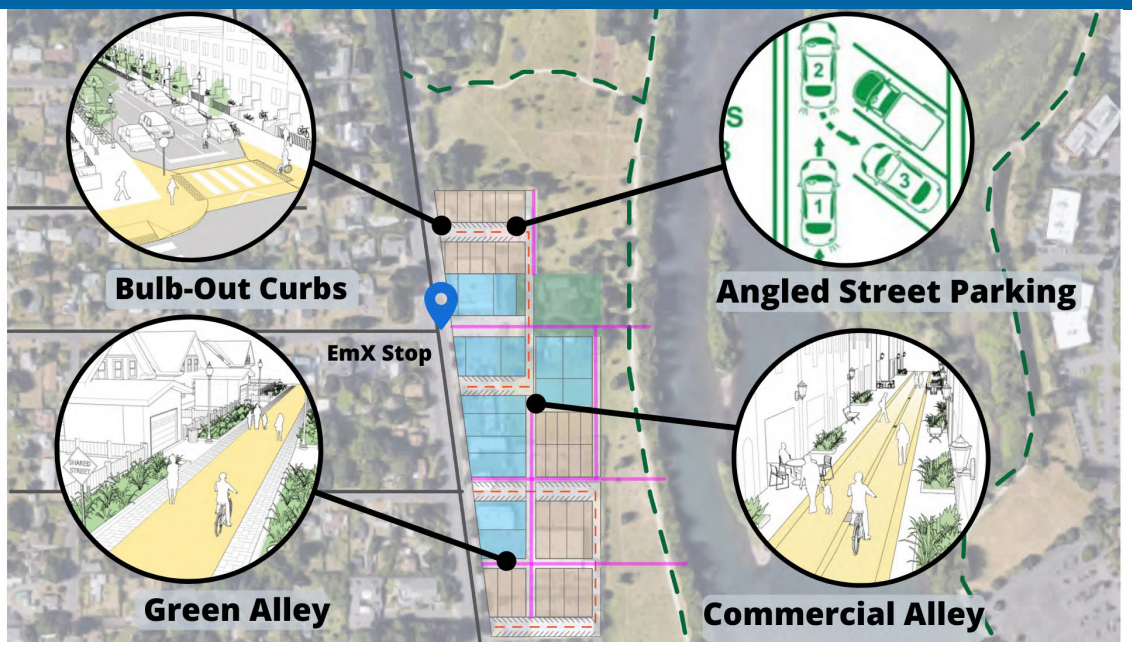
Car routes, seen in the dashed orange line, provide limited access that may better utilize the site and increase equitable access for all people. We drew upon concepts of "filtered permeability" demonstrated in the Vauban neighborhood of Freiberg, Germany. Because this site already includes parking for existing businesses, we do not believe that turning in or out of the site would impact traffic or safety.

Figure 12. Density Map

We recommend a mix of densities on site, with taller, 3-5 story mixed-use commercial structures indicated in orange, and 2-4 story medium density residential buildings indicated in yellow. The maximum height for Community Commercial zoning is five stories.

Figure 13. Acreage Map





We envision welcoming streets with few pedestrian-car interactions, blub-outs to reduce travel for pedestrians, and landscaping to break up the space and provide permeability. Most pedestrian areas are scaled to a 28-foot right-of-way allowing for a "Green Alley" or "Commercial Alley."

In line with current best practices outlined by NACTO, we have included back-in diagonal parking with two-way access. We believe that this site is a good candidate for reduced parking requirements since the site is centered around a high-capacity transit stop.

An established block pattern with car, bike, and pedestrian networks serve redevelopment and provide access to public open space. Mixed-use commercial density at the center of the site activates the riverfront, while lower density residential arms pull back toward River Road.

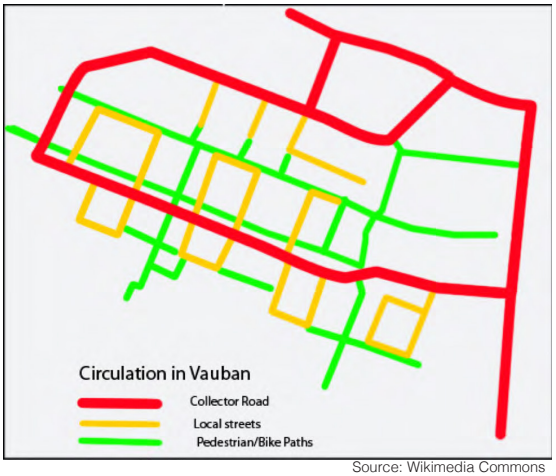
To move to TOD, we need to make other modes a competitive option. This site provides necessary car access but prioritizes walking, biking, and riding transit. With this site plan, we hope to offer one vision of the future and also highlight the flexibility of the space. Utilizing the potential of this site is important both to reconnect the neighborhood with the river but also to leverage LTD's investment and shape the future of development in Eugene.

CASE STUDY: FILTERED PERMEABILITY IN FREIBURG'S VAUBAN NEIGHBORHOOD

The Vauban neighborhood is a 94-acre transit-oriented development that has a little over 5,000 residents living in approximately 2,000 dwelling units (1). Through collaborative design between the state, city, and cooperative citizen groups, the area has emerged as a fascinating case study in how policy and the built environment can be shaped to create a sustainable and nearly car-free community.

Central to the Vauban neighborhood's design is the principle of "filtered permeability." Filtered permeability suggests an alternative to the scale and sprawl found in traditional grid design. The

Source: Pinterest User Limun



Source: Wikimedia Commons

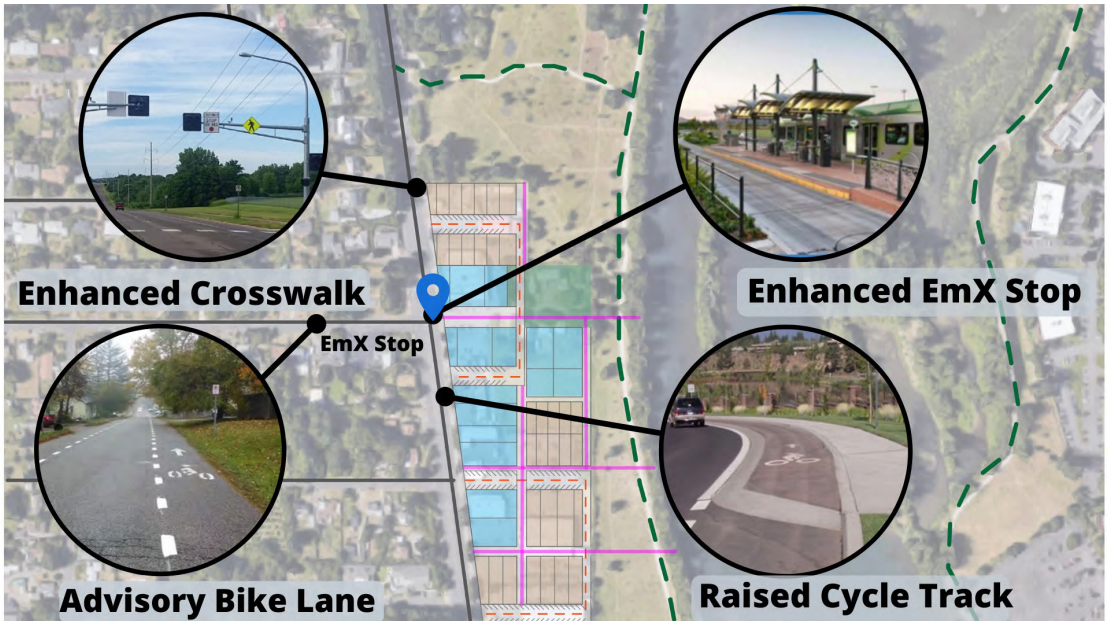
Source: Upper Rhine Valley

geometry of the street network is designed so that there are gradations in the level of service for cars and other users. Some large streets will collect automobile traffic and accommodate parking, but they are accompanied by a number of smaller connections with levels of reduced permeability and parking for motor vehicles. Multiple tiers of connections emerge, where some remain automobile-oriented, but others "filter" car travel to better accommodate pedestrians, bicyclists, and others whose use of the road is complicated by vehicle traffic. These gradations can be achieved with a mix of street design features and changes to the law that aim to calm vehicle traffic or redirect it entirely (2).

Vauban's block structure informed our design of the street grid for Rasor Park's mixed-use commercial area. The idea of filtered permeability factored heavily in our discussion of how to best divide streets among different modes. The resulting block structure is intended to encourage active transportation and calm vehicle traffic. Although River Road is a major arterial for auto travel, we aimed to create a neighborhood where transit is the primary mode of transportation.

Source: City of Freiberg

CONNECTIVITY



35

Source: Claire Schechtman

CONNECTIVITY OVERVIEW

Both the ***Comprehensive*** and ***Neighborhood Plans*** advocate for well-connected multi-modal transportation systems. The ***Comprehensive Plan*** specifically cites the 2035 ***TSP*** goal to triple the number of trips made by transit, bike, and on foot (5). The ***Neighborhood Plan*** places a greater emphasis on safe and efficient travel within their community as well as improved connection to other areas of Eugene. The following ***Transportation Vision Statement*** goals from the neighborhood plan were identified that support connectivity:

Goal 4: Promote a connected and efficient multi-modal transportation system that is equitable and affordable

Goal 5: Plan for a transportation system that is future oriented, environmentally responsible and transitions to zero carbon

Goal 6: Ensure a safe transportation system for all users (6)

An integrated transportation system is essential to facilitating the success of other community goals such as economic development and sense of place.

Our connectivity recommendations firmly support the goals listed in these plans. By improving bike and pedestrian connectivity, bus stop services, connection to the Willamette River, and safety for all road users, we will support economic development, enhance the neighborhood sense of place, provide safe multi-modal networks, and increase transit ridership.

36

ESTABLISH A ROBUST TRANSIT STATION IN THE LOWER RIVER ROAD NEIGHBORHOOD

Enhancing the Knoop Lane stations and removing the Park Avenue stop encourages activity, patronage, and development around this commercial hub. This improved station will have several amenities:

- A roofed waiting area with seating to provide protection from inclement weather
- Trash cans to reduce litter
- Bike lockers to encourage sustainable and active first/last mile travel
- A screen with estimated waiting time to enhance the sense of consistency and reliability
- Adequate lighting to make the space welcoming and safe

Siting the station at this specific location is crucial in encouraging transit use by future residents of our proposed mixed-use commercial/residential redevelopment. As the 2007 ***NACTO BRT*** guide says, "stations remain an important first impression of the transit experience." This location will also encourage transit riders to utilize future amenities of the area including coffee shops, small markets, or daycares. By encouraging development of such local services, we seek to reduce car-based trip-chaining.

Source: Pivot Architecture

IMPROVE BIKING CONDITIONS ON LOCAL ROADS WEST OF RIVER ROAD

Advisory bike lanes on east-west roads adjacent to our proposed redevelopment facilitate access and improve neighborhood connectivity. Park Avenue, Knoop Lane, Bauer Lane, and Hansen Lane are currently without sidewalks or bike infrastructure. Advisory bike lanes designate road space to cyclists who occupy the lane, but do not affect the road when the lane is empty. Introducing shared space encourages interaction between road users which increases safety. Improved bicycle infrastructure serves Goals 4 and 6 of the ***Neighborhood Vision***.

Source: Scott Robinson, City of Bloomington

Source: NACTO

Source: Alamo Master Plan

ENHANCE BIKE LANES ON RIVER ROAD

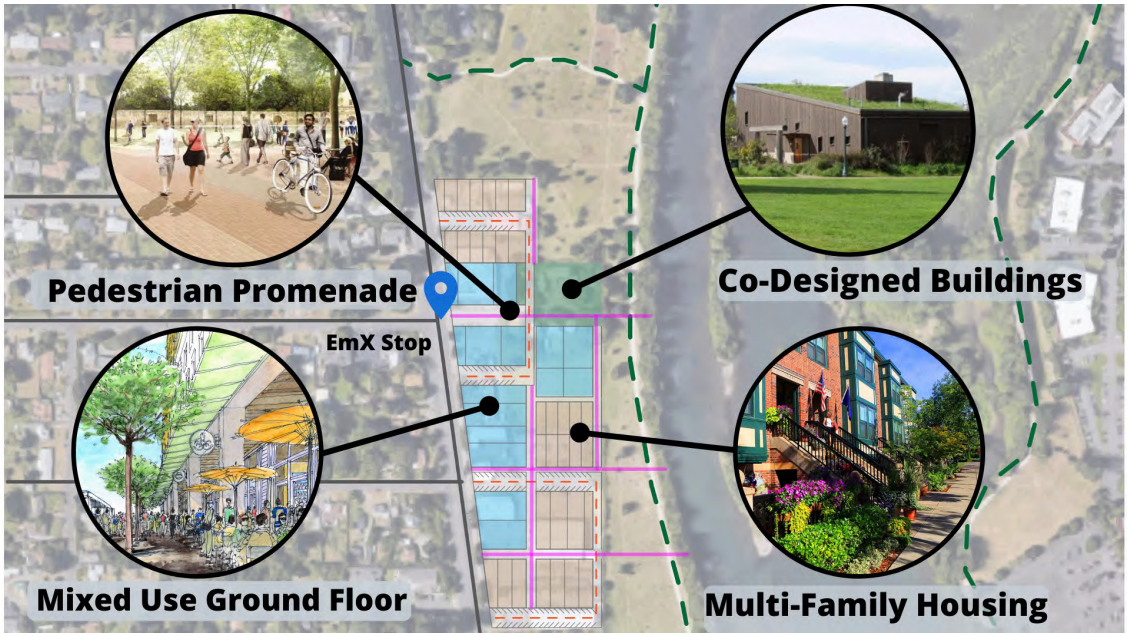
The bigger the road, the better the infrastructure. Such is not currently the case for bicycle infrastructure on River Road. A raised cycle-track pursues Goal 6 of the ***Neighborhood Vision***. The current street hierarchy prioritizes River Road as a central collector; commuters must use this road for efficient travel by bike as well.

ENHANCE CONNECTION BETWEEN RIVER ROAD AND THE RIVER PATH

River Road's proximity to the Willamette River and river path is not clear. Currently, there are few wayfinding indicators anywhere in the area that inform visitors and residents where they are located. Improved wayfinding and additional access points create more awareness of this natural asset. This new connection enhances the neighborhood sense of place and facilitates riverside development. Goal 4 of the ***Neighborhood Plan*** advocates for such improvements. We recommend developing a wayfinding system of visual cues that reflects the River Road neighborhood identity. Visual cues include infrastructure such as sidewalk materials, pavement murals, maps, kiosks, lighting, interpretive signage and more that communicate to visitors and residents how to navigate through the area.

All of these recommendations increase traffic pressure on River Road which helps reduce vehicle speeds (to the posted 35 miles-per-hour), improving conditions for bicyclists and pedestrians, reducing noise, and facilitating patronage of local businesses. Robust bicycle infrastructure, tree-lined medians, and street-side building contribute to the sense of traffic pressure. Traffic pressure may also be increased by the addition of an enhanced and accessible pedestrian crossing. Goal 5 of the ***Neighborhood Plan*** calls for increased traffic pressure to reduce vehicle speeds and prioritize active transportation over private vehicles. Additional enhanced crosswalks helps manage speeds of traffic and facilitates crossing to access Rasor Park and the proposed TOD.

COMMUNITY ECONOMIC DEVELOPMENT



Economic development is a priority for several city and neighborhood plans. The ***Comprehensive Plan*** lists economic opportunities first in its list of values (7), and the ***Neighborhood Plan*** discusses economic development before any of its other goals (8). The ***Neighborhood Plan*** strives to foster small business development, local employment opportunities, and redevelopment that enhances neighborhood livability (9). Lane Transit District (LTD) also listed economic development as one of its three goals in its Moving Ahead plan (10). The ***Lower River Road Concept Plan*** recommends establishing a central commercial zone near the study site. The plan advocates for increasing density through neighborhood commercial centers and nodal development strategies (11).

Our economic development concepts firmly support the goals listed in these plans. By encouraging mixed use development, creating a community center, and increasing housing density, we will encourage small business growth, provide needed amenities for the neighborhood, and increase transit ridership.

CREATE A NEIGHBORHOOD COMMERCIAL AND COMMUNITY CENTER INTEGRATED WITH THE RIVERFRONT

Mixed-use development in the commercial areas south of Rasor Park will increase neighborhood access to amenities and increase housing density. We envision a neighborhood center that fosters small business development, attracts residents to a community gathering space, connects the community to natural areas and the river, and provides much-needed amenities that can be accessed through transit, walking, or biking.

The improved utilization of Lower River Road's commercial space combined with increased connectivity and sense of place to create a space that highlights the area's existing assets. This is supported by the ***Lower River Road Concept Plan***, which identifies our opportunity site as the Central Commerical Area. More business and permeability between Rasor Park and the commercial area to its south will create complementary activity. Storefronts near the river will face the water, emphasizing River Road's principal natural feature. Providing outdoor seating and a pedestrian pathway parallel to the riverside

Source: Goody Clancy

Source: Jim Leggitt

bike path encourages pedestrians to shop and enjoy the space without impeding other path users. Public space in Rasor Park will give residents the option to use this area without feeling obliged to spend money, but small businesses near the park will also increase use of this public space and provide reasons for visiting.

The City Zoning Map designates the area surrounding Rasor Park as a Nodal Development Overlay Zone. The designation will ensure that businesses achieve neighborhood scale by regulating setbacks and lowering parking standards. Creating public gathering spaces this area supports the goals of the current city plan and the Metro plan. The ***Final Parks System Plan*** identifies River Road as a neighborhood lacking access to open spaces and gardens (12). Rasor Park is zoned as public land and because this area is a valuable ecological zone, sustainable building and landscape practices will be used when developing new structures around the park. Development will not occur between the existing multi-use path and the riverfront to protect this riparian zone. New buildings will conform to neighborhood aesthetic and border Rasor Park without detracting from or encroaching on the public space that already exists.

The neighborhood center will synergize with increased connectivity and sense of place to create a result that is greater than the sum of its parts. The expanded transit hub and enhanced pedestrian and bicycle infrastructure will accommodate all users, regardless of mode of transportation. A well-designed commercial development will interact with existing natural assets to create a multitude of reasons to spend time and money in the Lower River Road area. Increased activity turns underutilized park land into a vibrant space, reinforcing the notion of Lower River Road as a destination, rather than a place to travel through.

Source: Design by the Bay, Santa Clara TOD

Source: Jim Leggitt

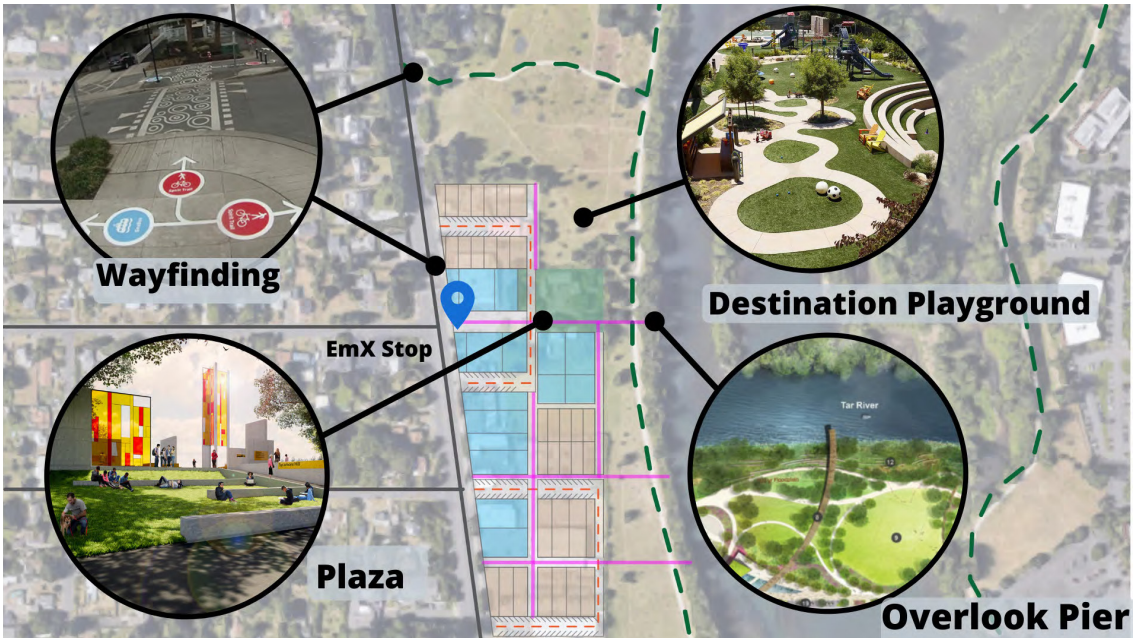
ENCOURAGE MIXED-USE DEVELOPMENT AND INCREASED HOUSING DENSITY

Providing housing at an increased density will positively affect the local economy in several ways. Medium density apartments fill a "missing middle" of housing stock that is in low supply but high demand from those who wish to downsize from single-family homes and those who are looking to upsize from higher-density housing (13). In the context of Eugene, medium density is 2 to 3 stories. Additional housing will bring residents to the area, whose money will be spent locally. Increased density will support the concurrent transit development and ridership that connects all of River Road's residents to the larger economic activity occurring in Eugene. Further housing density will be encouraged on the properties on the west side of River Road through House Bill 2001.

In the commercial area south of Rasor Park, mixed-use commercial development is encouraged. This is consistent with the ***Metro Plan***, which designates this area as a nodal development zone. The area is currently zoned Community Commercial, allowing for increased density of businesses as well as dwelling units attached to these businesses. Incentives can be used to encourage desirable business that will add neighborhood amenities, such as grocery stores or day care facilities. Local commercial operations will provide jobs for existing residents of the neighborhood or expand employment opportunities to those who might move to River Road. Therefore, we recommend ground floor commercial for uses such as a local neighborhood grocery, services such as daycare, cafes, restaurants, and other small businesses.

Source: Missing Middle Housing

SENSE OF PLACE



Source: Long Tom Watershed Council

Source: Long Tom Watershed Council

INCREASE VISIBILITY BETWEEN THE CORRIDOR, PARKS, AND RIVER PATH THROUGH PLACEMAKING

The River Road neighborhood has a major opportunity to enhance and elevate the neighborhood's sense of place. As of 2019, the neighborhood identity is unclear and invisible. Visibility can be increased through the creation of wayfinding and urban navigation design, gateways, and well-defined public spaces that enhances visitors' and residents' experiences as they move through the neighborhood.

Signage and public art should be installed at the entrances to these public spaces and along an inter-connected system of pedestrian paths. The public art signage should reflect the community's contemporary, historical, ecological, and geographic identity. This placemaking can be used for wayfinding and for interpretive educational purposes. Implementing signage at entrances and pathways will increase visibility, usage, and appreciation for these spaces while enhancing the sense of place.

ENGAGE WITH KALAPUYA TRIBAL MEMBERS AND EUGENE AREA NATIVE ENTITIES

Kalapuyan people inhabited the Eugene area and lower Willamette Valley for time immemorial, until settler contact in the late 1840s. "The Kalapuyan tribes were about nineteen tribes and bands in three distinct areas, organized linguistically north, central, and south. They occupied the majority of the Willamette Valley with villages scattered along the rivers and streams of the valley. They had a seasonal lifeway, where the tribes would harvest vegetables, hunt and fish at specific times of the year throughout a wide expanse of the valley and into the foothills and mountains bordering the valley" (14). The City of Eugene was incorporated 157 years ago in 1862. Over the period of 1851 to 1887 Kalapuyan people endured treaties, removal to the reservations, and reservation life, all impacting the tribes with significant changes. After 1887 and the passage of the Dawes Act, there was a melding of tribal peoples and disintegration of individual tribes, if not individual identities, in the Grande Ronde Reservation and Siletz Reservation.

Source: Formline

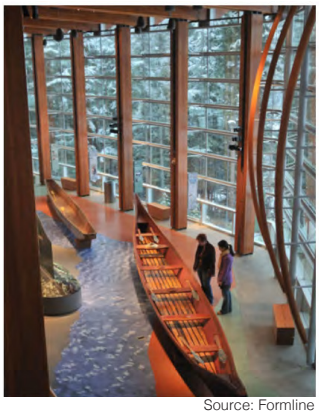
Source: Formline

ETHICS IN THE PLANNING PROCESS & TRIBAL CONSULTATION

From the start of settler colonial land planning in Eugene, Kalapuyan people were erased from the process. While the River Road area and Eugene have physically developed, there are opportunities for the City of Eugene to decolonize future planning practices. Planners can reposition their work by taking responsibility for the impacts the field of planning has made on tribal people. We can move past "long established normative assumptions about planning's role in bettering the world" (15). While the young city of Eugene grew over time, so did claims for self-determination, restitution for land, political autonomy, and the recognition of customary rights for federally recognized tribes in the planning process.

Today, government-to-government relationships exist between federally recognized tribes and the United States. The City of Eugene has an opportunity to establish a working relationship with the two Oregon tribes that historically absorbed the dispossessed Kalapuyan bands from the Eugene area, the Confederated Tribes of Siletz Indians and the Confederated Tribes of Grande Ronde. By acknowledging tribal self-determination, the right for people to govern themselves by their own laws and exercise jurisdiction over their territories the city can move beyond colonial discourse and its interactions with planning(16). A working relationship can begin by centering planning through tribal consultation, enriching historical and contemporary cultural presence along River Road.

Source: Squamish Lil'wat Cultural Centre



Source: Formline

CASE STUDY: THE SQUAMISH LIL'WAT CULTURAL CENTRE IN BRITISH COLUMBIA

A sense of place begins with acknowledging history. Tribal history is shared history of the River Road area. The Squamish Lil'Wat Cultural Centre in British Columbia can teach us best practices towards strengthening the economy and culture of a community. Two transferable concepts from the case study include the co-design process and partnering with Tribal entities to express Native culture and nature.

"Co-design is a collaborative design process between Indigenous communities and architects"(17). A project steering committee was created to develop the Squamish Lil'Wat Cultural Centre in British Columbia. It comprised of several stakeholders including First Nations chiefs and tribal officials who identified an Indigenous architect experienced in working with tribal people. The goal was to accomplish a design that was culturally accurate and modern. Windows were strategically located to avoid direct sunlight with low-glass walls that face north, and natural ventilation allowed passive air to circulate the building. The site was constructed to represent Longhouse and Istken pit-house design, because embodying the archetypal architectural forms were important in order to preserve social structures and spiritual world views. The design accomplishes its intentions to bring visitors to connect with the natural living environment of the Lil'Wat and Squamish peoples (18).

Understanding a place begins with recognition of shared history. This can lead to co-designed features for the neighborhood. The city could activate a protocol agreement, and recognize Eugene occupies the Kalapuyan homelands and their descendants are members of the Confederated Tribes of Siletz Indians, and the Confederated Tribes of Grande Ronde. A protocol agreement would derive from a shared goal to collaboratively live and work together in Eugene for future community economic development.

CASE STUDY: UNIVERSITY OF OREGON MANY NATIONS LONGHOUSE

In the 1960s and 1970s, Native American students at the University of Oregon were allocated an old World War II army barracks to serve as a Longhouse. Over time, the dilapidated structure was condemned. On January 11, 2005, the nine Tribes of Oregon entered into agreement with President Dave Frohnmayer. With a meaningful mission to serve as a home for Native American students while they pursue higher education, the longhouse was built. Through the co-design process Cherokee architect and UO alumnus, John Paul Jones was tasked with replicating a Kalapuya Longhouse to represent traditional housing of the traditional people to this area (19) .

To date, the Many Nations Longhouse is the only structure in the state of Oregon to be collaboratively co-designed by the nine federally recognized tribes of Oregon and a public institution. In partnership the UO, each of the sovereign nations of Oregon contributed to the construction process via financing, timber and other materials provided by the tribes.

Source: The University of Oregon


Source: The University of Oregon


Source: The University of Oregon


Source: Jim Leggitt


Source: Goody Clancy

BRAND THE LOWER RIVER ROAD NEIGHBORHOOD AS THE RIVER & GARDEN DISTRICT

Through public engagement and consultation processes, the River Road Neighborhood has an opportunity to design elements that reflect the neighborhood's identity and strengthen a sense of place. The goal is for residents and visitors to understand where they are once they are immersed in place. Developing a sense of place can begin with community consensus around identity. The "River & Garden District" has already been identified as a possible place identity that draws from the neighborhood's assets. Creating this neighborhood brand invites the opportunity to incorporate design elements that reflect the connection to native culture, riparian ecology, parks, restoration, gardens, and farms in bus stop design, a gateway feature, public art, interpretive signage, and an overlook viewing pier.

Planning around existing and for new infrastructure can enhance the branding of the neighborhood. Drawing attention to the open public spaces and the green way will enhance the branding of the neighborhood. Residents have identified goals for strengthening the River & Garden district which include:

- Acquiring park spaces within one half mile of all residents
- Promoting neighborhood pride and ethics around enhancing habitat corridors
- Creation of small scale urban agricultural enterprise zoning within the UGB
- Encouraging organic pollinator-friendly practices

Incorporation of Indigenous technological ecological and historical knowledge (ITEK)

Tribal relationships can lead to the emergence of traditional place names and knowledge for the environment. Indigenous communities resided within their homelands for centuries, which allowed for the development of unique knowledge of biodiversity and ecology. To ensure survival, people become informed stewards with established

place names and innovations that allowed them to regrow seasonally and increase food production.

The Kalapuyan people were known as people who depended on plant-based diets and they centered their practices within their relationship to the river. As the River Road area strives to create a recognizable identity, the local tribes can serve as leaders in providing ITEK of the region and guidance for planning practices with a goal for understanding accurate history and maintaining knowledge of place (20).

RIVER OVERLOOK PIER AND REMEMBRANCE DESIGN

To further draw attention to the Willamette River and promote the River & Garden District branding, we recommend building a river overlook pier to inspire connection to the riparian landscape that is connected to the Ruth Bascom bike path. In Greenville, North Carolina, the Town Common Park Redevelopment Project along the Tar River provides opportunities for several destination park features that encourage people to visit the park and stay in the area, instead of using it as a vacant space to move through. One of these features is a river overlook pier, which we recommend could also have a positive impact in Eugene.

The Town Common Park Redevelopment Plan also embraces elements of Remembrance Design, which is design that intentionally reflects culture and heritage. Kofi Boone, the landscape architect who worked on the new Town Common design says, "'Architects, planners, and landscape architects can't do remembrance design processes alone. Success comes from partnerships with policymakers, community leaders, and activists. You have to bring in people who haven't been heard before.' For authentic engagement, 'the most historically disenfranchised communities should have the loudest voice'" (21). In the case of Rasor Park, we have seen that the historically marginalized communities of River Road are communities of color, low income families, and the Kalapuya people of the area who also became invisible when the City of Eugene was settled. Therefore, park features have the opportunity to reflect neglected culture and heritage through design. We see a unique opportunity to incorporate the tribal fishing communities of the area in remembrance design of a river overlook pier.

Source: City of Greenville


Source: The National Museum of the American Indian


Source: Washington DC Curbed, Eastern Market Metro Park

COMMUNITY GATHERING PLAZA & DESTINATION PLAYGROUND

The Lower River Road neighborhood has a lot of open public space. According to the City of Eugene ***Parks & Rec System Plan***, the entire River Road neighborhood has 172 acres of park and open space land. Of this, 100 acres is natural area, 58 is set for future park development, and 15 is developed park land (23). Specific to Lower River Road, Rasor Park is currently 10 acres of undeveloped park land. From the City of Eugene's webpage on Rasor Park:

"Rasor Park...is an exceptional, distinctive public space because of its location on the river; special landscape including oak woodland, savanna-prairie, and other native vegetation; considerable neighborhood investment in native planting, care and maintenance; undeveloped condition; excellent views; good pedestrian and bicycle access; and potential role in nodal development...The existing Oregon white oak, woodland, and other native trees are also valuable resources in the park" (22).

Source: City of Eugene

There is also a large amount of park open space that is owned by the city, but currently undefined and undeveloped. It is valuable to have large areas of undeveloped native riparian and oak savanna landscape in Rasor Park and in the undefined area pictured here. However, while these spaces can continue to remain wild, residents would use and enjoy them more if they were better defined. Parks and open spaces can be well-defined through interpretive signage, a connected network of pedestrian paths, and active restoration educational programming. These elements should be clearly visible to people traveling on River Road and on the Greenway path. This concept is supported by the ***River Road and Santa Clara Neighborhood Plan*** draft under Goal 11.3 of "Well-Designed Public Spaces". Strategic direction 11.3.2 aims to "establish a network of streets with green and pedestrian friendly features in conjunction with public spaces" (23).

Several neighborhood plans indicate that River Road residents desire public community gathering places. Under Goal 8: "Provide neighborhood access to recreational opportunities, parks, and community centers", the ***River Road Santa Clara Neighborhood Plan*** lists strategic directions 8.1.1 - 8.1.5 for ways to develop parks that include facilities for children, natural areas, walking paths, and an urban plaza (24). The ***Lower River Road Concept Plan*** proposes to "preserve areas fronting the greenway for open space, community gardens and farmer's market" and, "provide for a plaza or some kind of community gathering space in the area" (25). This opportunity site that includes Rasor Park, additional open space park land, a proposed LTD EmX stop, connection to the neighborhood and Greenway, and Community-Commercial zoned land for economic and residential development is an ideal location for a public community gathering space that is permeable and integrated with the natural riparian landscape.

For these reasons, we believe that this site is a great candidate not just for a public plaza, but a destination playground as well. The nearest playground is at Maurie Jacobs Park, about half a mile south on the Ruth Bascom River Path. The closest large destination playground is the Riverplay Discovery Village at Skinner Butte, about 2 miles away on the river path. Implementing such a playground will act as a catalyst by immediately attracting families from the Lower River Road neighborhood to the currently under-used park.

CONCEPT PLAN IMPLICATIONS

Embracing Rasor Park as an important and central public gathering space for the Lower River Road community is an incredible opportunity to bring together the current residents while remembering the Kalapuya and include their current tribal members as a major influence in the planning process. Architect Zena Howard says, "More than creating a beautiful space…lead projects that navigate social issues of equity and justice — honoring history and memory and restoring lost cultural connections…All projects, all of them, are opportunities to mend physical or social riffs" (26). The Rasor Park mixed-use opportunity site is an opportunity for the city of Eugene to do this during redevelopment to improve transit, bike and pedestrian connectivity, and economic and residential development.

Source: Minneapolis Parks Foundation, Great Northern Greenway River Link

IMPLEMENTATION

The City of Eugene has many tools that could be employed to make public space improvements and transit-oriented development (TOD) feasible. The following section provides a broad framework for implementation including a master planning process; a timeline for transportation improvements; a toolkit for implementing affordable housing and a transit-oriented development; and examples from several case studies.

MASTER PLANNING PROCESS

The first and foremost implementation tool will be a thorough master planning process. Lane County, the City of Eugene, and Lane Transit District have already begun this process through public engagement efforts with ***Envision Eugene, MovingAhead***, and the ***River Road/Santa Clara Neighborhood Plan***. These entities could build upon these efforts by continuing public engagement to determine the design of Rasor Park and the nearby commercial center. A master planning process will also refine implementation schedules and help build consensus in the River Road neighborhood.

The following table outlines major strategies for implementing a master plan on this site, including relevant previous and ongoing public engagement work.

Source: Galen Sollom- Brotherton

Table 1: Implementing a Master Planning Process

Strategy	Key Outcomes	Responsible Party	Year
Envision Eugene Public Engagement	River Road identified as key corridor (1)	City of Eugene	2010
State Approval for Urban Growth Boundary	UGB is not expanded for single-family homes, infill strategy adopted (2)	City of Eugene, State of Oregon	2017
River Road Corridor Study	River Road neighborhood identified preferred options and locations for development (3)	City of Eugene River Road Community Organization	2018-2020
River Road/Santa Clara Neighborhood Plan	Neighborhood vision and goals created (4)	River Road Community Organization City of Eugene	2018-2020
MovingAhead Public Engagement	Determine best practices for expanded bus services along River Road (5)	Lane Transit District City of Eugene	2018-2020
Feasibility Study for Rasor Park adjacent Commercial Development	Determine if development is financially, socially, and environmentally feasible	River Road Community Organization City of Eugene	2020
Lower River Road Community Survey	Gather feedback about proposed development	River Road Community Organization City of Eugene	2020
Co-Design Process	Create steering committee with local Tribes, determine co-design sites and objectives, and collaborate to achieve design goals	City of Eugene Lane County River Road/Santa Clara Neighborhood Community Advisory Committee Confederated Tribes of Siletz Indians Confederated Tribes of Grande Ronde Community	2020-2040

River Road Public Engagement	Gather community input and develop specific implementation schedule and design goals	City of Eugene River Road/ Community Advisory Committee	2020-2021
Collaborate with Affordable Housing Developer	Partner with organization that can assist with funding and development of housing	City of Eugene Affordable Housing CBO (i.e. St. Vincent de Paul, DevNW, Homes for Good, Cornerstone Community Housing, etc) HUD Tribal housing grants (6)	2020-2040
Develop Site	Create co-designed spaces, improve Rasor Park, create commercial opportunities, and provide affordable and market-rate housing	City of Eugene Affordable Housing CBO River Road Community Organization Confederated Tribes of Siletz Indians Confederated Tribes of Grande Ronde Community	2040

Source: Lane Transit District

TRANSPORTATION INFRASTRUCTURE IMPROVEMENTS

The following table outlines a strategy and schedule for improving the transportation infrastructure in Lower River Road.

Table 2: Implementing Transportation Infrastructure Improvements

Strategy	Key Outcomes	Responsible Party	Year
Paint Advisory Bike Lanes on Park Ave, Knoop Lane, Bauer Lane, and Hansen Lane	Increase bicycle connectivity to development site and transit stop	City of Eugene	2025
Install wayfinding on River Road and Ruth Bascom Bike Path	Increase awareness of access to development site and transit stop	City of Eugene	2025
Expand Emx to River Road (7), Improve Bus Stop on Knoop Lane	Increase transit ridership	Lane Transit District	2030
Install Enhanced Crosswalk to Entrance of Rasor Park	Allow better pedestrian access to park, increase safety, calm traffic	City of Eugene	2030
Street Construction within Development Site	Increase bicycle/pedestrian connectivity, prime site for private development	City of Eugene	2030

AFFORDABLE HOUSING AND TRANSIT-ORIENTED DEVELOPMENT TOOLKIT

The following tools could be utilized to make affordable housing and TOD feasible for our site. Not all of these tools can be applied together; however, these ideas will give the City of Eugene, LTD, and private and non-profit interests a starting place for developing implementation strategies.

Multi-Unit Property Tax Exemption

A multi-unit property tax exemption (MUPTE) allows new housing developments to avoid property taxes for up to 10 years. In Eugene, the MUPTE zone is currently limited to the downtown area (8). The City Council could vote to expand MUPTE to include transit corridors such as River Road. This would support the City of Eugene's goal to increase economic development along key corridors (9). If MUPTE were expanded to River Road, affordable housing developments would become more feasible for developers by allowing them tax relief during the critical first stages of a housing project.

Low Income Housing Tax Credits (LIHTC)

The U.S. Department of Housing and Urban Development provides federal tax credits for qualified affordable housing projects. This program is one of the main funding sources for affordable housing developments in the U.S. (10). Funding is distributed through the state, which allocates tax credits through both a competitive and non-competitive process. In Oregon, a housing development is eligible for LIHTC if it reserves at least 20% of units for households making 50% or lower of Area Median Income (AMI) and 40% of units for households making 60% or lower of AMI (11). These tax credits

Source: Vector Stock

Source: KLCC Oregon Public Radio

are available for a ten-year timeframe (12).

A housing development in Lower River Road could qualify for a LIHTC. Although these funds are highly competitive, the neighborhood could greatly benefit from the addition of affordable housing, especially if housing were located near an EmX stop.

Tax-Increment Financing (TIF)

Creating a tax increment financing (TIF) district is another option for providing affordable housing and attracting private investment to Lower River Road. TIF works by allocating additional property taxes collected from rising property values to be used for public improvements in the TIF redevelopment district (13). TIF funds could be used to make improvements to Rasor Park, build an inclusive playground, construct a public plaza, or build a street system within the proposed development area. Any of these improvements would increase nearby property values, which would result in higher property taxes that could be used to invest in further neighborhood improvements. These revenues could then be used to fund affordable housing projects. Not only would creating a TIF district result in direct public improvements to the neighborhood, it would also encourage private investment in Lower River Road.

Affordable Housing Trust Fund

Eugene's Affordable Housing Trust Fund was made possible in May 2019 when City Council established a Construction Excise Tax (CET). This tax applies to all new construction in the City of Eugene and revenues are put aside for affordable housing projects. Projects that qualify for trust funds include acquisition of land or existing housing for affordable housing projects and gap funding for these types of developments (14). Funds will be allocated to projects that support households making 100% of AMI or below (15). Access to these funds could help an affordable housing developer with up-front costs of development.

Land Bank

The City of Eugene runs a land banking program which could be used to acquire properties along River Road and prime them for affordable housing development. The city has already implemented this strategy by acquiring a vacant lot on River Road and East Maynard Avenue through the land bank and a Community Development Block Grant (16). When the lot is ready for development, the city has promised that an affordable housing developer can expect waivers for systems development charges and a 20 year property tax exemption (17). A similar strategy could be employed for our proposed TOD site south of Rasor Park. This would provide significant financial incentives to building affordable housing on the site and help make such a project financially feasible.

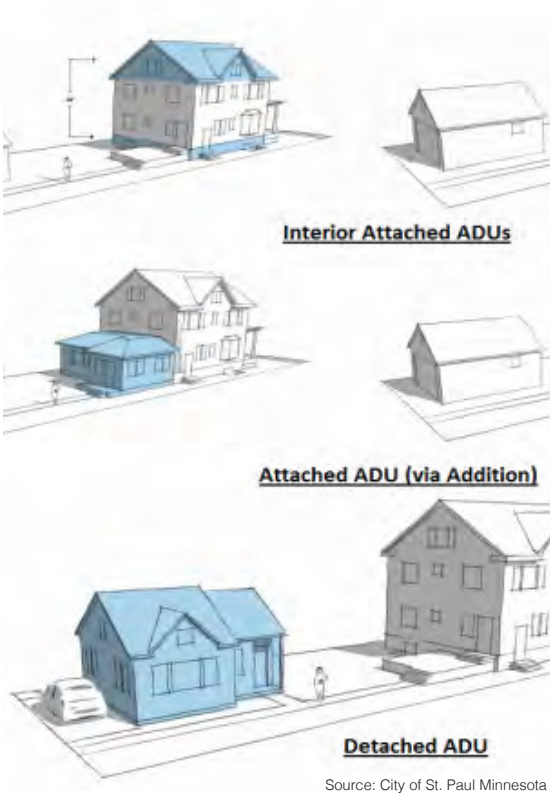
HUD Tribal Housing Grants

The U.S. Department of Housing and Urban Development (HUD) provides grants specifically intended to support affordable housing for indigenous people. Tribes can apply for Housing Block Grants and Community Development Block Grants that fund affordable housing for native people (18). Local tribes could apply for these grants and use the funding to support affordable housing near Rasor Park, so long as this housing was set aside for tribal members.

House Bill 2001

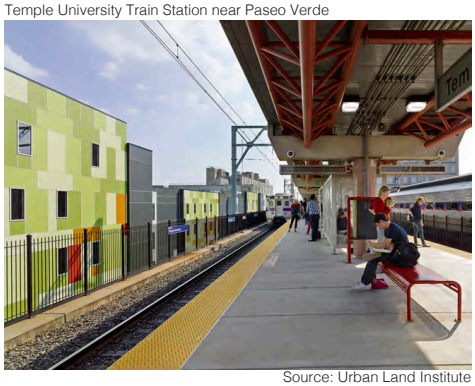
House Bill 2001, passed by the Oregon Legislature in 2019, changes zoning regulations for single-family residential lots. In cities with populations over 25,000, single-family lots may now include multi-family housing up to quadplexes. This ordinance will go into effect on June 30, 2022 (19).

Although this policy will not provide funding assistance for multifamily housing, it may affect development patterns along River Road to increase housing density. If private owners see economic potential in converting single-family homes into multifamily housing, or in building accessory dwelling units, the Lower River Road neighborhood may



Source: City of St. Paul Minnesota

Temple University Train Station near Paseo Verde



Source: Urban Land Institute

Paseo Verde

Source: Urban Land Institute

increase in population. This could be an asset for transit expansion along the corridor, as density could increase transit ridership. Although this type of housing development would be entirely at the discretion of private owners, it could play a role in the availability of affordable housing options in the area.

Parking Requirement Reductions

In the Eugene City Code, Table 9.6410 details off-street parking requirements for residential and commercial buildings. For multi-family dwellings, the code calls for one parking space per dwelling unit. Parking requirements for low-income housing is slightly lower with a minimum of .67 spaces per unit (20). Our concept provides 128 on-street parking spaces near the proposed housing development, which is much lower than city parking minimums allow. This parking space reduction is intentional, as it will not only encourage transit use and bicycle/pedestrian modes, but will also lower development costs. Reducing minimum parking requirements is a key feature of successful transit-oriented development and will aid in the implementation of affordable housing.

CASE STUDIES FOR IMPLEMENTATION

The following two case studies show how transit-oriented development and affordable housing can be implemented successfully. These cases demonstrate how thoughtful partnerships and innovative financing can unlock the potential of underutilized spaces. These projects successfully demonstrate how cities can work with other agencies and communities to create transit-oriented developments that catalyze further investment in a neighborhood.

Case Study 1: Philadelphia's Paseo Verde

Paseo Verde is a mixed-use affordable housing development located in the neighborhood of Eastern North Philadelphia. It was built on a vacant lot by the Associación de Puertorriqueños en Marcha (APM), a community-based organization that focuses on developing affordable housing. The complex opened in 2013 and has 120 units,

53 of which are subsidized affordable housing. The building was built to LEED certification standards and includes neighborhood amenities on the bottom floor. APM intentionally sited the project near Temple University Train Station, which provides fast transit to Philadelphia's city center (21).

Paseo Verde is an important case study for River Road because it reflects how a successful partnership between the city and a non-profit housing developer can result in transit-oriented development. This case shows how low-income housing tax credits and grants can help finance a project (22). Eastern North Philadelphia has also been successful at using Philadelphia's land bank to encourage development. Furthermore, Paseo Verde shows how initial investment in a neighborhood can have wider economic benefits and encourage private development.

Fruitvale Village

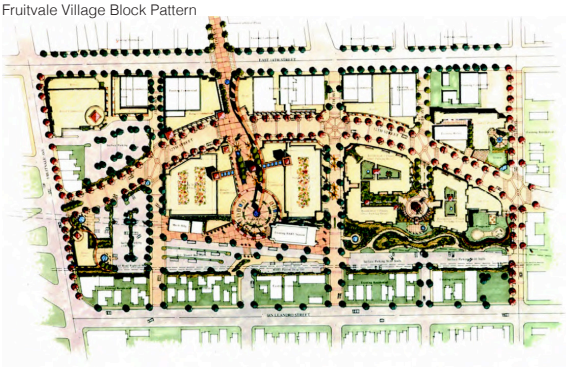
Source: The Unity Council

Case Study 2: Fruitvale Village Development

Completed in 2005, Fruitvale Village is a mixed-use, mixed-housing, transit-oriented development (TOD) in Oakland, California. The project grew out of a Bay Area Rapid Transit (BART) proposal for a four- to five-story parking garage that was negatively received by the community. A study by UC Berkeley graduate students recommended a pedestrian connection between the BART station to an adjacent commercial street; this recommendation served as the starting point for community engagement (23). Instead of moving forward with the parking garage, BART joined the Unity Council, a non-profit development corporation, to form the Fruitvale Development Corporation (FDC).

Fruitvale Village serves community needs, bolsters BART ridership, and provides property tax revenue due to its successful implementation. Partnership between the Unity Council, BART, and the City of Oakland and innovative financing, including tax-increment financing (24), were central to the implementation and subsequent investment in the area.

Fruitvale Village Block Pattern



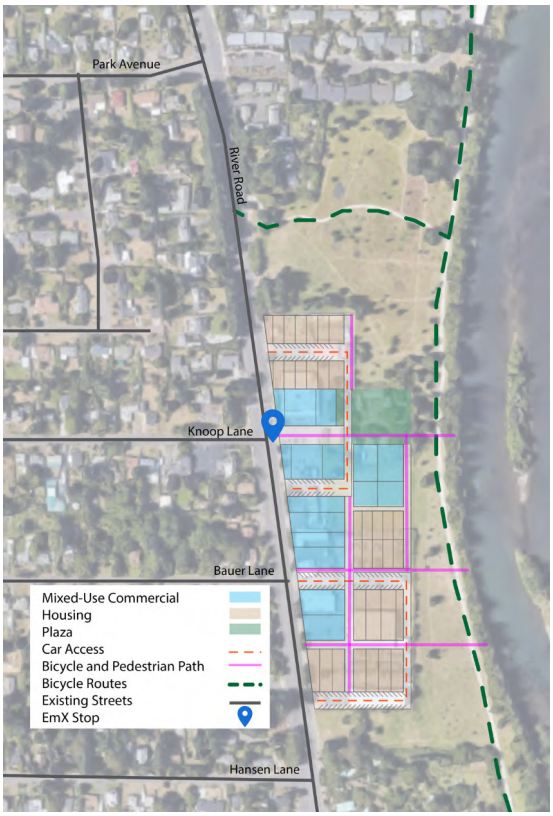
Source: ULI Development Case Studies

CONCLUSION

LTD's expansion of the Emerald Express line to the River Road corridor represents a large investment in this neighborhood. High capacity transit will allow residents fast and reliable access to key destinations around the City of Eugene. However, if the current land use patterns persist along River Road, it is unlikely that the arrival of mass transit will change residents' auto-oriented transportation preferences.

Our team believes that transit-oriented development can help reduce the need for car ownership in the Lower River Road neighborhood. In addition, our proposed TOD and transportation infrastructure improvements will support the principals of connectivity, neighborhood sense of place, and community economic development. This proposal can be implemented through a robust master planning process that includes the indigenous groups who have previously been left out of the planning process. By codesigning natural and built spaces, we can create a vibrant gathering space for the entire neighborhood. Finally, through implementation and policy, we hope that the neighborhood will be an affordable and equitable place for all residents.

This site represents an incredible opportunity to leverage LTD's investment by creating a space that will not only enhance the Lower River Road Neighborhood, but also increase transit ridership and support the goals outlined through Envision Eugene. We believe that this site is unique and the opportunity to thoughtfully plan for its redevelopment should not be overlooked.



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Appendix D

Group 4: A Walk Down Hilliard Lane

Walk Down Hilliard Lane

A Transit-Oriented Community Development Plan for River Road

Isabella Kjaer, Trevor Ackerman, Aimee Okotie-Oyekan, Melissa Graciosa, Emily Connor

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PPPM
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Table of Contents

Introduction

Population projections for the City of Eugene indicate an increase of around 34,000 additional people by 2032. About half of that increase is expected to be from local births, and about half from people moving to Eugene from other places (City of Eugene, "Growth Management and Population"). With a future hinged on limited availability of resources, climate destabilization, and social unrest, the time is now to put in place policies that work towards accommodating growth in the face of these existential factors.

Lane Transit District and the City of Eugene are partnering together to do just that. Using the values and priorities of Envision Eugene as a framework, LTD and Eugene are proposing a new EMX transit line along the River Road corridor, a historic neighborhood area in northwest Eugene.

This year, LTD is enlisting the input of the Planning, Public Policy, and Management (PPPM) program at the University of Oregon (UO) to provide additional ideas and inspiration for the transit-oriented development on River Road. As part of the Sustainable City Year Program, UO first year PPPM graduate students in the Community and Regional Planning program teamed up in groups to design innovative TOD on River Road and to offer these recommendations to LTD.

Executive Summary

The following analyses and subsequent concept recommendations for transit-oriented development on River Road all support this group's vision statement:

> "Fostering a connected River Road community through equity".

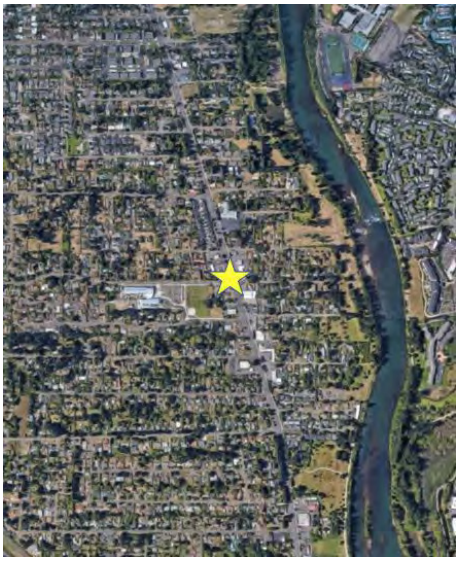
Equity is the lens through which our concepts are crafted because the historical context of the River Road corridor reveals a legacy of exclusion of disadvantages groups from access to land and resources, beginning with native dispossession of land by European settlers. Current day River Road along with its economic and housing trends point to a similar exclusion, this time of low-income and communities of color at the hands of market pressures tied redevelopment and revitalization initiatives. Our concepts thus strive to reintegrate historically marginalized populations by enabling access to affordable housing, community gathering spaces, employment opportunities, and natural areas. By integrating these developments with the new transit line on River Road, the outcome is not only to foster physical connectivity to neighborhood assets, but a social connectivity and cohesion as well**. A River Road community that is connected, diverse, and economically and environmentally resilient can withstand any threat the future may hold.**

Background and Context

The River Road/Santa Clara Neighborhoods have been identified in the Eugene Metro Plan as crucial for the future development of the City of Eugene. This area is characterized by single-family homes, automobile dominated infrastructure and businesses, and a patchwork of streets with no consistent development pattern. This project focuses on the intersection of River Road and Hilliard Lane in the heart of the River Road Neighborhood. River Road is an arterial road; its purpose is to move high volumes of traffic in and out of downtown Eugene. The intersection has an "anywhere in America" feel and provides little access to community amenities and businesses for both residents and visitors unless you are driving a car. In addition, River Road/El Camino del Río Elementary School is located about a thousand feet from the intersection. All of this provides a unique and very important opportunity to improve the neighborhood's livability, inclusiveness, and safety for elementary school children. The goal of this project is to foster a connected River Road Community through equity. For this report, equity is defined as the ability of communities, who have been historically marginalized through planning policies, to have access to resources, which include housing, transportation, food, employment, and community amenities.

Planning Process

In order to understand the opportunities at the intersection, our team conducted several site visits during high-volume traffic hours. These included before and after school, which are during the rush hours on River Road, and an afternoon on the weekend. This provided information on pedestrian and business traffic. The current infrastructure of the site was noted, such as parking spots, utilities, and lack of sidewalks, and it was



Star represents the intersection of River Road and Hilliard Lane, Image from Google Earth

Figure 1, Metsker map from 1968, River Road PDF, 5.6

observed that many people driving along River Road do not obey the speed limit, which is posted at 35mph. Once we the key opportunities of the intersection, we began to research the history of the site as well as collect data on demographics and other key trends in the neighborhood. Through this process, we concluded that the best way to redevelop the intersection is through the lens of equity. All of the concepts presented in this report relate to equitable access, which is crucial to the future development of this neighborhood.

Historical Background

Indigenous Settlement

River Road's history predates the wave of initial European settlement that occurred in the 1840s (City of Eugene, 2005). The Kalapuya tribe were the original inhabitants of the area and sustained themselves through their hunter-gatherer ways of life. Directly east of the Willamette River was riparian woodland that slowly transitioned to wide, flat prairie grassland. Though a modern observer may view this as wild land, the Native Americans intentionally managed the land through controlled burns and plantings (Historic Preservation Northwest, 2005, 2.2). The combination of the area's Mediterranean climate, proximity to the Willamette River, abundance of natural resources, and fertile soils attracted Europeans settlers, leading to the forced acquisition of native land to give way to agrarian lifestyles. This was done through two major treaties: the Treaty of Calapooia Creek, Oregon, (November 29, 1854) and the Treaty with the Kalapuya at Dayton, Oregon, (January 22, 1855)

(Lane Community College Library, 2019). The first treaty ceded the Umpqua and Kalapuya lands to the United States while the second treaty ceded the entire drainage area of the Willamette River Valley (Lane Community College Library, 2019). The natives were moved to reservations in Western Oregon, where they continued to clash with the United States government. The Western Oregon Indian Termination Act in 1954 led to the selling of almost all of the reservation land, however, some land was restored to Kalapuya descendants with the Confederated Tribes of the Siletz (1977) and the Confederated Tribes of the Grand Ronde Community of Oregon (1983). Today, there are an estimated 4,000 Kalapuya descendants in Oregon (Lane Community College Library, 2019).

European Settlement

Although they may have over-hunted wildlife, the European settlers kept the native's constructed landscape. The proximity to the river, fertile soil, and the open grasslands were perfect for agriculture and livestock and thus led to heavy settlement. Through the Donation Land Claim Act of 1850, the land was subdivided into 320- and 640-acre lots and one of the Native American trails became what is now River Road (Historic Preservation Northwest, 2005, 2.3). These lot sizes, in combination with a new railroad, led to large scale agriculture operations dominated by grain. Once large-scale agriculture began to decline in the 1890s, the lands were subdivided even further into 20- to 200-acre lots, contributing to the checkerboard-type development (Historic Preservation Northwest, 2005, 2.3). This allowed for more diverse agricultural products, however, it provided almost no development standards for the lots and infrastructure.

The commercial era took root in the early 1900s, and suburbanization of the neighborhood began in the 1920s (City of Eugene, 2005). Two major factors contributed to this increase in development: the addition of railroads and the automobile. As it became more feasible to live outside city limits, people began to take advantage of cheap land in the River Road neighborhood. Although increasingly more farmland was consumed and constantly divided to support Eugene's growth following World War II, the River Road Neighborhood kept its rural aesthetics until around the 1960s. By then, true subdivisions began to take shape in the area (Historic Preservation Northwest, 2005, 2.3). Unlike the city, which had uniformity through its street grid, land in the River Road Neighborhood was sold to individuals instead of land developers. Donation Land Claim (DLC) owners west of River Road often partitioned off small sections of their property at a time, with 5-10-acre parcels being sold directly to individuals (Historic Preservation Northwest, 2005, 5.1). The issue was that the lots, although often rectangular, followed no pattern, varying in size, shape, and even distance from other lots. As shown in the map in Figure 1, this led to a patchwork of different lot sizes and shapes that complicated infrastructure development.

The land was outside of the city limits and was served by septic tanks and not subject to zoning regulations and land division rules. New lots were generally sited along existing roads, which tended to follow or dead-end at original claims and subsequent

5

property lines. This sale of lots to individual owners caused single-family houses to dominate this neighborhood, which still characterizes the neighborhood today (Historic Preservation Northwest, 5.1).

6

Site Analysis

Local Context

Today, the area surrounding the River Road-Hillard Lane intersection is dominated by low-density single-family homes (Eugene Zoning Map). The small, locally owned businesses can be found clustered near the intersection. The majority white population has seen an increase in population levels and median income since 2010, suggesting the area is becoming wealthier and less diverse (U.S Census Bureau, 2010). These neighborhood demographics are consistent with the larger trends of the River Road-Santa Clara neighborhood. West Hilliard Lane houses River Road/El Camino del Río Elementary, an English-Spanish bilingual school, suggesting the presence of a Hispanic-speaking population. Non-compliance to speed limit signals, lack of safe crosswalks and inconsistent bike lanes present concerns for the neighborhood safety at this intersection.

"Life is Art" Photo by: Aimee Okotie-Oyekan

Trees Lining River Road. Photo by: Aimee Okotie-Oyekan

Sensory

The area around the intersection is characterized as gray and generic, very void of vibrancy and lacking visual appeal. Few people are seen walking about with most of the movement consisting of motor vehicle traffic. The large parking lots belonging to businesses are empty, giving the intersection and surrounding area a vacant air.

The cars, trains, and nearby airport all pose as potential sources of noise pollution for residents in the area, contributing to a rather unpleasant experience for an individual wanting to spend a few moments sitting at the bland picnic tables on the northwest corner of the intersection. East Hillard Lane provides some relief to this bleak picture: the smaller lot sizes of the residential area leading to the river in the east offers a cozy green path that, though lacking sidewalks, would welcome residents to a leisurely stroll towards the Willamette. The large trees dotting the neighborhood offer additional consolation and noise barrier. A historic culture resting on reliance on natural assets present in the community offers an opportunity to enhance the natural character in the neighborhood.

Land Use and Zoning

As shown in Figure 2, the majority of the land near the intersection is zoned for R1 low-density single-family homes, with some R-2 medium-density lots scattered throughout. Directly adjacent to River Road is zoned C1 neighborhood commercial and C-2 community commercial. There is little to no medium-density zoning providing a transition between the high-density commercial developments and the single-family lots. North of Hillard Lane contains a collection of lots zoned as General Office, meant to accommodate a mixture of residential, office, and retail development. River Road/El Camino Del Río Elementary School along with the area adjacent to the Willamette River on the east side of River Road is zoned as public land and is meant for public and semi-public uses (City of Eugene Eugene Code 2017; City of Eugene Zoning Map). Current zoning presents an opportunity to alter the land use code to accommodate denser, mixed-use development.

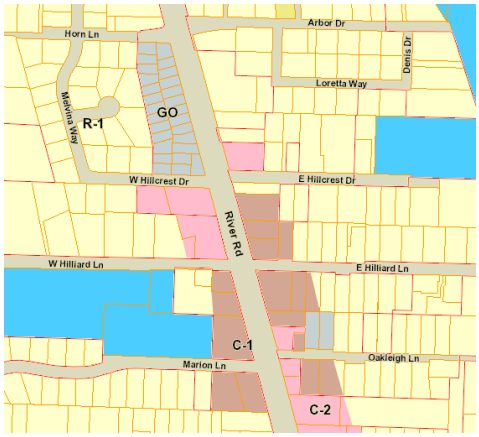


Figure 2: Eugene Zoning Map

Human-Cultural

Much of the community was built around the establishment of Southern Pacific Railroad's railyard just west of River Road, which provided jobs and drew workers and their families to the area (Eugene Historic River Road). A culture of racism and intolerance institutionalized by exclusionary government policy severely limited settlement and land ownership by people of color (Imarisha, 2013). The current demographics of the River Road neighborhood can be attributed to the legacy of these restrictive laws. As of 2017, only 6% of the population of census tract 41, which contains the site's intersection, identifies as non-white, mostly comprised Hispanic or Latinos (U.S. Census Bureau, 2017). These demographics, coupled with a 29% increase in median household income since 2010, are significant indicators of gentrification. The influx of a population with a higher income along with increased property values and costs of living creates a market pressure that pushes out lower-income individuals that can no longer afford to maintain residence (Eugene Historic River Road, 2005). The concept for this study is thus situated within this rapidly changing socio-cultural landscape, considering racial and class disparities in resource access attributed to these market pressures.

"NIMBY" Photo by Emily Connor

Natural Environment

Regionally, River Road is placed in the central Willamette Valley, a region characterized by small volcanic buttes and alluvial plains. The Cascade Mountains to the east and the Coast Range to the west bound the valley. The southern Willamette Valley is flat-bottomed. Geologic unit areas include marine sedimentary rocks, basalt flows, intrusive rocks, and unconsolidated alluvium. Uplift and erosion over time resulted in the exposure of larger sedimentary rock, forming local landmarks as Spencer and Skinner Buttes. The primary natural boundary of River Road is the Willamette River toward the east, depositing rich alluvial soils that provide ample nourishment to support the diverse array of native flora and fauna. Ecologically sensitive wet prairies and agricultural wetlands dominate the open space landscape of the area and the remaining West Eugene. In addition to providing habitat for threatened, endangered, and sensitive species, these wetlands provide hydrologic functions, such as flood attenuation, and groundwater recharge (City of Eugene-Land and Water in West Eugene).

Climate

River Road is situated within a Mediterranean climate region, characterized by mild, wet winters and hot, dry summers.

During summer, regions of Mediterranean climate are dominated by subtropical high pressure cells, with dry sinking air capping a surface marine layer of varying humidity and making rainfall impossible or unlikely except for the occasional thunderstorm, while during winter the polar jet stream and associated periodic storms reach into the lower latitudes of the Mediterranean zones, bringing rain, with snow at higher elevations. As a result, areas with this climate receive almost all their precipitation during their winter season and may go anywhere from 4 to 6 months during the summer without significant precipitation (UC Rangeland Research and Education Archive).

The Cascade Range blocks the westward passage of all but the strongest continental air masses, but when air does flow into the Willamette Valley from the east, dry hot weather develops in summer, causing an extreme fire hazard. In winter, this situation causes clear sunny days and cool frosty nights. The low-pressure systems, with which rain is generally associated, usually pass inland north of Eugene. As a result, southwest winds with speeds of 10 to 20 mph usually accompany rainfall. Heavier storms bring winds of 30 to 40 mph and occasional southwest winds exceeding 50 mph are experienced. Fair weather in both summer and winter is most often accompanied by calm nights and daytime northerly winds increasing to speeds of 5 to 15 mph in the afternoon (Climate of Eugene Oregon, NOAA Technical Memorandum, 1997). Due to seasonal variations in precipitation, natural annual spring flooding was a fixture before flood control measures were introduced in the twentieth century and major floods could be expected every ten years (Oregon History Project, 2018). Such precipitation and flooding patterns give rise to the viability and productivity of the area's rich natural landscape which is capitalized on in the concept design. Additional consideration is given to increased flood risk as climate destabilization gives rise to an increased frequency of extreme weather events in the future

Willamette River. Source: Google Maps

Built Environment

Food

A small handful of business operations provide food services along River Road. Govinda's Vegetarian Buffet located in the southwest portion of the intersection had been offering a selection of vegan options for the neighborhood's residents

Global Delights Coffee Roasters. Photo by Aimee Okotie-Oyekan

since its opening in 2007. This building historically served as the first national chain fast food restaurant to the area and operated as a Dairy Queen from the 1960s until 1986 when it relocated to Santa Clara (Eugene Historic River Road, 2005). Tio Pepe Mexican Restaurant is another food provider located in the northeast quadrant of the intersection diagonal from the vegetarian buffet. Though this may provide a source of culturally appropriate foods for the Hispanic Latino population, it still consists of majority processed food options (Tio Pepe Mexican Restaurant). A similar establishment is the Burrito Boy on the northwest quadrant, offering Mexican, Latin American, and Carribean inspired dishes. The Global Delights Coffee Kiosk is a small drive-through businesses providing, grab-and-go drinks and pastries. Apart from two wooden picnic benches hugging the northwest corner of the intersection, there is a lack of space to congregate comfortably after residents patron these sites. These food service patterns enforce a culture that is time-sensitive and auto-oriented. Furthermore, notable is the lack of access to a grocery store providing unprocessed, fresh, and healthy foods within a mile of this intersection. This presents an opportunity for a concept that would co-serve as a community gathering space and a source of healthy food alternatives.

Retail

A noticeable proportion of the businesses within a mile of the Hillard Lane-River Road intersection, such as Slater Auto Sales and North Eugene Automotive, cater to automobile-related

Slater Auto Sales. Photo by Aimee Okotie-Oyekan

River Road Baptist Church. Photo by Aimee Okotie-Oyekan

interests, reinforcing the area's motor-vehicle dependency. Other retail offerings include small local businesses such as The Laundrymutt, Modern Classic Tattoo, and Twin Ravens Press.

Social Services

The River Road Annex building in the northeast corner of the intersection is owned by the River Road Parks and Recreation District. Constructed in 1936, it operates as a community and activities center (Eugene Historic River Road, 2005).

River Road/El Camino del Rio Elementary School on west Hilliard Lane School was initially established in 1912. The building standing today is the fourth iteration of the school. They run a dual language program, which was started in 2009, with part of the day taught in English and the other in Spanish (Eugene Historic River Road 2005).

River Road Baptist Church offers a space for Christian fellowship in the community (River Road Baptist Church).

Transportation and Infrastructure

The stretch of River Road that contains the intersection of Hilliard is classified as an arterial road. It is a high capacity road with five lanes (two in either direction and one turning lane) and a bike lane on either side.

Car

Personal vehicles are the prioritized method of travel at the River Road Hilliard Lane intersection. From the 2013 Traffic Flow Map, there is a typical weekday average of 11,400 cars going north on River Road, and 10,700 going south. In the 1987 River Road Santa Clara Urban Facilities Plan, they discuss widening roads for traffic safety and congestion issues, and this was something that was clearly prioritized in development. This is the most used and highest capacity form of transportation at this intersection.

Bus

The River Road Hilliard Lane intersection has two bus lines that go through it, Route 51 and Route 52. Route 51 comes every half hour until 8 pm, when the service drops to once every hour until 11 pm. For Route 52, it comes to this intersection every half hour until 6 pm, when service ends.

Observing the bus onboarding average for the stops at this location for these two routes gives insight for potential uses for the bu.

From the onboarding data, we can see that the majority of trips are taken going towards downtown during the week. On the resident input map for the River Road Santa Clara Neighborhood Plan, one commenter at this intersection mentioned "Promise of EmX? Issue of downtown connection", with the comment listed as a transportation issue (River Road Santa Clara Neighborhood Plan, 2017).

Pedestrian

To put it simply- "The defining factor for pedestrians in this part of town is the legacy of patchy, often lot-by-lot incorporation, leaving many roads in this part of town outside of city control and thus not subject to city standards." (City of Eugene 2017, Eugene 2035 Transportation System Plan). On the east side of River Road, what little sidewalk exists is not reliable. Most of it is under grave disrepair and are disjointed between one lot to the next. This being said, this is a smaller road and with the trees that exist and how few cars travel down this side of Hilliard, it is perfectly comfortable to walk directly in the street here.

On Hilliard to the west side of River Road, there is one sidewalk on the south side going to the school- but that is all that there is. Along River Road itself, there are sidewalks along both sides, but things are spread out to the point where it is noy very accommodating to walk from place to place. After all- for a good portion of this walk, you would just be walking right next to vast plains of parking lot.

Places to rest are few and far apart, and the ones that do exist, like the picnic tables at the coffee shop at River Road and Hilliard Lane, are not comfortable to stay. Observations in this location found pedestrians running across the stress while crossing to minimize time and no other groups using the other picnic bench to rest.

Table 1: Bus Onboarding Average (April 2019)

Northbound Stop		Southbound Stop	
Route 51			
Weekday:	89	Weekday:	478
Weekend:	10	Weekend:	56
Route 52			
Weekday:	152	Weekday:	246
Weekend:	8	Weekend:	15

Source: Central Lane Metropolitan Planning Organization Transit Ridership Data

Bike

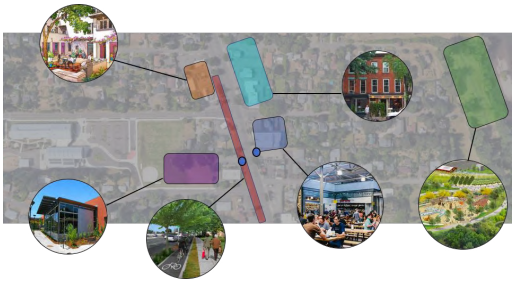
While bicycle options and safety are mentioned in both current plans as well as the Utilities Plan from 1987, that seems to be something that has not quite caught on in this intersection just yet. "Residents report that the five-lane cross-section and heavy traffic makes for an uncomfortable bicycling environment" (City of Eugene 2017, Eugene 2035 Transportation System Plan). The bike lanes on either side of River Road are extremely close to traffic which does not promote bike travel. Current bicycle count estimate near River Road and Hilliard Lane puts the daily weekday count at 45 people (1.82 per hour) and at 32 people (1.35 per hour) on the weekend. (Central Lane Metropolitan Planning Organization, Bicycle Counts). There is currently no bicycle infrastructure along Hilliard Lane.

Currently, the Ruth Bascom Riverbank Path System is the major bicycling route for this area. But there are no signs to it from River Road to indicate that is an option.

Constraints and Opportunities

The site analysis allowed for the identification of constraints and opportunities applicable to the proposal for transit-oriented development at the River Road-Hilliard Lane intersections. An overall constraint is the lack of connectivity and place-making through poor planning, resulting in inefficient provision and access to essential resources in this community. This presents itself in a lack of welcoming and communal gathering spaces near the heart of the intersection. Specifically related to the elementary school on west Hilliard Lane, concerns for the safety and wellbeing of the youngest members of the River Road population are presented by the large 5- lane major arterial road with fast-moving traffic, lack of sidewalk connectivity and bike lanes, and lack of age-appropriate play and gathering areas. Current low-density zoning and single-family home dominated development patterns, as well as a majority older population that may express sentiment resisting growth and diversity, are both constraints for high-density development addressed through the equity lens presented in this concept.

The lack of community gathering spaces, access to healthy foods, connections to the Willamette River, and the desire in the community to preserve local identity all present opportunities for a development proposal that would serve these needs while accommodating for future growth. The following concept recommendations propose inviting community gathering spaces that build upon present assets, such as existing local businesses, the elementary school, the library and annex building, the historic market, and the natural environment. In the process of doing so, we create safe access to these spaces with a people and passive transportation-oriented streetscape. All of these initiatives are seamlessly integrated with public transportation at the heart of the intersection, with the outcome being a community-oriented landscape that addresses the needs and values of a diverse population.

Constraints Map	Opportunities Map
	

Community Profile

Population

Age Distribution

Lower River Road's population is aging. Between 2010 and 2017, the largest percentage of growth within Census Tract 41 occurred in residents over 65 and under 9 years of age. Table 2 shows that individuals age 65-74 have grown by 116%, traditionally the age at which people retire. Children aged 5-9 increased by 39% in the same time period. Census tract 41 trends are consistent with the rest of River Road – Santa Clara with having more people under the age of 18 and over the age of 65 as compared to Eugene (ECONorthwest, 2019). People 60 years and older is expected to increase by 25% from 2010 to 2030 (Envision Eugene, 2019).

The age distribution of Census Tract 41 suggests that there will be a need for an increase in the accessibility of services that can accommodate both older and younger residents. These services include reliable transportation to medical needs and services, educational resources, access to healthy and affordable food, and updates to the built environment that can accommodate residents of different abilities.

U.S. Census Bureau: Census 2010, 2013-2017 American Community Survey 5-Year Estimates

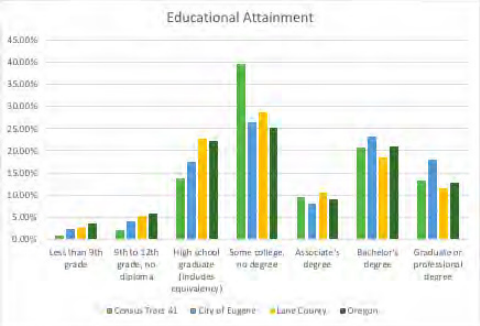
Table 2. Population and Age Distribution for Census Tract 41

	2010	2017	Percent Change
Under 5 years	153	174	**14%**
5 to 9 years	194	269	**39%**
10 to 14 years	198	228	**15%**
15 to 19 years	206	239	**16%**
20 to 24 years	306	285	**-7%**
25 to 34 years	604	699	**16%**
35 to 44 years	470	578	**23%**
45 to 54 years	638	546	**-14%**
55 to 59 years	323	404	**25%**
60 to 64 years	258	247	**-4%**
65 to 74 years	135	292	**116%**
75 to 84 years	190	194	**2%**
85 years and over	62	79	**27%**

Educational Attainment

Attainment of a bachelor's degree or higher is lower in Census Tract 41 than in the city of Eugene and Lane County. 83% of Census Tract 41's population has attained educational levels at some college or higher. Nearly 40% has some college with no degree. Compared to the city of Eugene and Lane County, Census Tract 41 has fewer residents with bachelor's or graduate level degrees. Educational attainment is related to the ability to obtain employment at higher wages. Both shifts in the economy and increasing cost of living may create more vulnerability in employment for the residents of the neighborhood.

Figure 3.



Source: U.S. Census Bureau, 2013- 2017 American Community Survey 5 Year Estimates

Income

Income disparity is increasing within Census Tract 41. Median household income increased by 29% from 2010 to 2017 (Table 3). The areas median income is impacted by the 116% increase of households earning $75,000-$99,000 and the increase from 0 to 36 of households earning over $200,000 (See Appendix Table 4). Higher earning households corresponded with housing tenure; those who own their homes earn higher incomes than units that are renter-occupied (See Appendix Table 2).

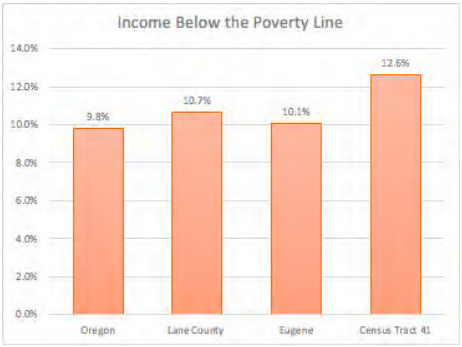
In contrast to increased affluence, Census Tract 41 has a higher percentage of households below the poverty line as compared with the city, county, and state. While the data could point to increased economic prosperity of its residents between 2010 and 2017, the change in racial and ethnic demographics of Census Tract 41 suggests that affordability of basic needs has forced lower-income residents to other parts of Eugene.

Table 3. Median Household Income in Dollars

	2010	2017	Change
Oregon	49,260	56,119	**13.9%**
Lane County	42,923	47,710	**11.2%**
Eugene	41,701	47,489	**13.9%**
Tract 41	41,846	54,042	**29.1%**

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Figure 4.



Social Explorer, ACS 2006-2010, ACS 2013-2017

Racial and Ethnic Diversity

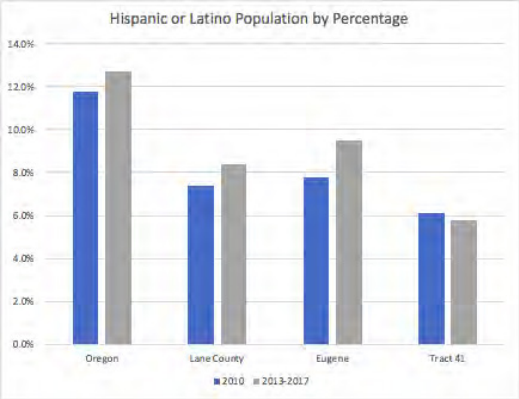
Racial and Ethnic diversity within Census Tract 41 is decreasing despite an increase within the city of Eugene. The Hispanic and Latino population make up the majority of Census Tract 41's non-white population at 5.8% The increase of non-white population in Eugene suggests that the overall demographics of the city is shifting. This trend is reflected in the student enrollment statistics of UO. Ethnic minorities made up 26.8% of the student body in 2017 and 16% of the student body in 2010 (University of Oregon, 2010 & 2017). Hispanic and Latino Populations trends in Oregon, Lane County, and Eugene have increased from 2010 to 2017. According to Envision Eugene (2019), Eugene's Latino population has increased by 260% from 1990 to 2007 and matches the trends of the state and the nation. However, Census Tract 41 has seen a decrease in both Hispanic and Latino and Non-White populations since 2010. This implies that conditions within Census Tract 41 have created a lack of accessibility to basic needs, such as transportation, housing, employment, education, and food access that is affordable. Other neighborhoods in Eugene with greater accessibility to these needs are likely experiencing greater growth of non-white and Hispanic or Latino populations.

Table 4. Non-White Population in Percentage

Year	Oregon	Lane County	Eugene	Tract 41
2010	16.40%	11.80%	14.20%	9.50%
2013-2017	15.10%	12.30%	15.90%	5.90%
Percent Change	**-1.30%**	**0.50%**	**1.70%**	**-3.60%**

Social Explorer, Census 2010, ACS 2017 5 year estimate

Figure 5



Social Explorer, Census 2010, ACS 2013-2017

Housing

Tenure

Owner-occupied housing units declined in Census Tract 41, Eugene, Lane County, and the state of Oregon. Census Tract 41 saw the steepest rate of decline at -8% (Table 9). State, county, and city saw decline at -2% or -3%. Census Tract 41 has a higher percentage of owner-occupied units at 59% compared to Eugene at 48%. This difference likely reflects the demand of the student population from the University of Oregon for rental housing units. The student-aged population, age 18-24, represents 8.3% of Census Tract 41, while they represent 18.9% of Eugene's total population (Table 8). Given the distance of Census Tract 41 from the University, student housing needs have not yet pressured the housing market in this area.

Table 5. Percentage of Occupied Housing Units by Tenure

	Oregon		Lane County		Eugene		Census Tract 41	
Year	Renter	Owner	Renter	Owner	Renter	Owner	Renter	Owner
2010	36%	64%	39%	61%	49%	51%	35%	65%
2015	39%	61%	41%	59%	52%	48%	41%	59%

Social Explorer, American Community Survey 2010, American Community Survey 2015.

Housing Units by Structure

Census Tract 41's development pattern that has resulted in a lower density of population. Single-family residences made up 84% of total housing units in Census Tract 41, compared to 55% in Eugene. Housing structures with 5 or more units make up 25% of Eugene's total housing units, compared to Census Tract 41 with 2%. To accommodate the growing population of the Eugene-Springfield Metro, the residential landscape of Census Tract 41 will be required to adopt development patterns of infill and redevelopment.

Table 6. Housing Units in Structure

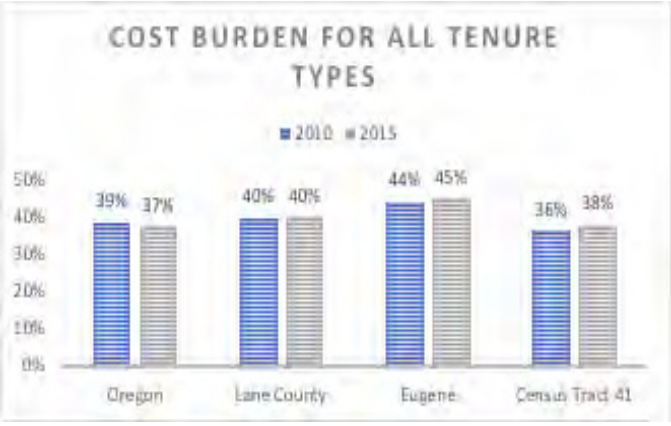
	Oregon		Lane County		Eugene		Census Tract 41	
	2010	2015	2010	2015	2010	2015	2010	2015
1-unit detached	68%	64%	62%	63%	53%	55%	78%	84%
1-unit, attached	4%	4%	6%	5%	8%	6%	9%	5%
2 to 4 units	7%	7%	8%	8%	11%	10%	7%	8%
5 or more units	16%	16%	15%	15%	24%	25%	3%	2%
other	9%	9%	10%	9%	5%	4%	4%	1%

Social Explorer: American Community Survey 2010, American Community Survey 2015, Table: A10032.

Cost-burden

Eugene and Census Tract 41 have increasing trends of cost-burdened households. 45% of Eugene's households spend more than 30% of their incomes on housing costs. While the percentage of cost-burdened households has increased from 2010 to 2015, Census Tract 41 has a lower percentage of cost-burdened households than Eugene or Lane County overall. These values could be affected by the lower rates of renters in Census Tract 41 than the city of Eugene. At present, Census Tract 41 is more affordable for its residents than other parts of Eugene. However, increasing population, transit infrastructure, and pressure from other parts of Eugene for housing will affect the affordability of Census Tract 41.

Figure 6



Social Explorer: American Community Survey 2010 and American Community Survey 2015.

Walk Down Hilliard Lane

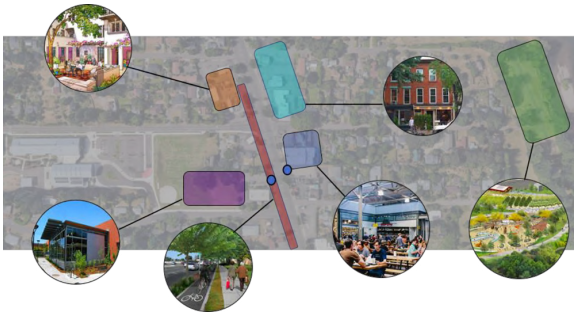
Given our findings in researching the community profile, our group found a strong need to take an equity filter through any proposed suggestion because of the history of exclusion in this area. Which brings us to our vision statement:

"Fostering a connected River Road community through equity"

By focusing this project through an equity lens, this project hopes to bring access to

- Housing,
- Transportation
- Food
- Employment
- Community Amenities.

To illustrate the concepts in this plan, we're going to take you- the reader- on a walk down Hilliard Lane. Starting at the school and continuing towards River Road and the River this concept will illustrate different ways that design can influence equity.



From School to River Road
Community Center and Library

To increase equitable access to community gathering spaces and learning opportunities.

River Road/El Camino del Rio Elementary, the River Road Annex and the River Road – Santa Clara Volunteer Library serve as important community gathering spaces and provide access to educational resources. As this neighborhood faces increasing pressure to develop in response to the growth of the Eugene-Springfield Metro and the investment in transit infrastructure, maintaining and increasing the capacity of these community assets is integral to supporting equity.

Creating a mixed-use building that would house both the community center and library would increase access to the student body of River Road/El Camino del Rio Elementary, their families and their teachers as well as the immediate neighborhood, the community of River Road – Santa Clara, and Eugene.

Libraries act as important institutions within the community by providing free access to knowledge and information. These services are integral to users with constraints of income, transportation, shelter, and limited accessibility to technology.

Flexible site location for a community center and library that increases the physical proximity to the school and to the transit stop. The school, River Road Annex, and volunteer library are noted by open circles. The transit station is noted as a filled circle.

Source: Google Maps

Essential services provided by the Eugene Public Library (City of Eugene, n.d.):

- Books, magazines, newspapers, and other materials available in print or as digital copies
- Computer and internet access
- Tax assistance and forms
- Social services that are available in the area
- Job resources, such as one-on-one help, classes, and workshops
- Business building resources
- Adaptive technology for users with disabilities
- Maker's space

Neighborhood context

Bringing together these uses also enables them to share resources and common spaces that invite the neighborhood to participate in community events. With the development of a frequent transit line, a community center and library building could additionally serve the whole of the River Road – Santa Clara neighborhood and the Eugene- Springfield Metro. A mixed-use building could also update and expand on the services that the River Road Annex and volunteer library provide now and increase opportunities to co-locate commercial spaces within the same building.

2019 River Road Community Resilience Festival- https://riverroadco.org/resilience-festival-followup-and-video/

River Road/El Camino del Río Elementary School

The River Road Elementary School has been established in the River Road neighborhood since 1914 (City of Eugene, 2005). The current building is the fourth iteration of the elementary school and opened in the Fall of 2017. It was one of four schools in the 4J district that was replaced with 2013 school bond funds (Eugene School District, n.d.). The school's current capacity is built for 450 students but is designed for an expansion to accommodate up to 600 students. Before rebuilding, the previous building had been in operation since 1953.

River Road/El Camino del Rio Elementary has been running a dual language program since 2009 (El Camino del Río, 2014).

http://www.pivotarchitecture.com/projects/river-roadel-camino-del-rio-elementary-school/?cat=education

The language immersion program consists of half the day being taught in English and half the day being taught in Spanish. The goals of this program are to foster students that are biliterate, bilingual and multicultural.

The school served 368 students in the 2018-2019 school year, an increase of 12 students from 2017-2018. Hispanic or Latinos make up 49% of the student body and 39% of teachers (Oregon Department of Education, 2018 & 2019).

Source: Google Maps Street View

River Road Annex

The River Road Annex building is located on the corner of River Road and W Hillcrest Drive. Originally constructed in 1936, the building is currently owned and operated by the River Road Parks and Recreation Department and functions as a community and activities center (City of Eugene, Eugene Property Explorer). Classes, events and neighborhood meetings are often hosted here.

River Road and Santa Clara Volunteer Library

Source: Google Maps Street View

The volunteer library was established in 2003 as a non-profit with the mission of establishing and maintaining library services for the community of River Road and Santa Clara. The building opened in 2005 and is operated by a group of volunteers that provide over 15,000 books and materials to residents. Additionally, the library organizes several events throughout the year such as fundraisers, book sales and themed storytimes (River Road Santa Clara Volunteer Library, n.d.).

Concept alignment with Current Plans

A mixed-use building to house a community center and library meets several of the goals stated in Envision Eugene and the River Road - Santa Clara Neighborhood Plan. These goals represent visions of livability, resilience, accessibility, and equity through walkable gathering and learning spaces that have the capacity to serve all residents.

River Road - Santa Clara Neighborhood Plan

Goal 15- Ensure our community is welcoming and inclusive.

Goal 16: Foster collaborative relationships to build a stronger and more resilient community

Goal 17: Provide comprehensive public services and community resources responsive to the needs of the community

Identified objectives of this goal include increasing opportunities for under-represented residents to participate in community activities. The neighborhood plan recognizes these

http://www.pivotarchitecture.com/projects/river-roadel-camino-del-rio-elementary-school/?cat=education

communities as being under-represented: people with disabilities, non-English speakers, communities of color, youth, families, and unhoused residents (City of Eugene, 2019).

A new community center and library with increased capacity has the ability to meet equity through a building design that incorporates the unique history of the River Road - Santa Clara Neighborhood, adheres to ADA accessibility requirements, and creates space within the building's footprint that act as pathways and gathering spaces that encourage interactions between community members.

Case Studies

Mitchell Park in Palo Alto, CA

https://www.aiasmc.org/design_awards/palo-alto-mitchell-park-library-and-community-center/

The Mitchell Park library and community center was the newest of six libraries in the Palo Alto community and is the result of almost ten years of community-based planning (Library Journal, 2015). The new complex includes spaces for classrooms, multi-purpose rooms for meetings and events, early childhood learning spaces, a teen activity room, and cafe. The complex is located within Mitchell Park which provides access to sports courts, trails, picnic areas, playgrounds, and a dog run.

The Mitchell Park Library and Community Center replaced two smaller and outdated facilities. The building was designed in alignment with the city of Palo Alto's 3 pillars of sustainability: social equity, economy, and environment (US Green Building Council, 2015). Equity was supported by the complex's ability to increase both their capacity and service and creating a built environment that reflected a shared and common history. The facility supported economic goals through the partnership between the city's library and community service's department, sharing resources and maximizing operational efficiency which was also enabled by the environmental goals of the project and achieve LEED gold certification.

Northgate Library and Community Center in Seattle, WA

http://www.absherco.com/project/northgate-library/

The Northgate Library and Community Center forged a new partnership between the city's library and parks and recreation department and opened its doors in 2006 (Miller Hull, 2007).

The facility is located in-between one of Seattle's densest retail developments and a residential neighborhood and watershed park. The Northgate library and community center offers access to several multi-purpose rooms, a gymnasium, a kitchen, teen center, and classrooms, and provides programming for children, teenagers, after school and special populations (Seattle Parks and Recreation, n.d.).

By the physical location of the facility, the civic center acts as a link between these two different types of developments. The pathway through the Northgate Library and Community Center acts as a thoroughfare into the neighborhood as well as a place for gathering and allowing for community interactions to occur.

Bringing the community building and library into a mixed-use building creates an opportunity to expand community gathering spaces, increase access to education services, and integrate the school community into the neighborhood. This concept can meet equity through a building and design process that incorporates the feedback of the community and uses elements of the neighborhood's shared history into the built environment. The physical location of this concept can be adaptable to available space within our study area of Hilliard Lane and River Road. Integral to this concept is the increased access to educational resources for under-represented residents of the community as the River Road and Santa Clara neighborhood grows and experiences an increase in transit infrastructure.

A mixed-use building provides additional possibilities such as:

- Providing a transition from River Road to the residential neighborhood
- Opportunities for retail and office space
- Shared outdoor spaces that can serve as informal gathering spots for surrounding residences and businesses
- Space that is adaptable in hosting events like farmers markets, seasonal celebrations, or outdoor movies

29

http://www.pivotarchitecture.com/projects/river-roadel-camino-del-rio-elementary-school/?cat=education

30

Neighborhood Scale Mixed-Use Buildings

Increasing Equity through economic and employment opportunities

Commercial Plaza

One thing that is already established in this area is a commercial core. With establishments like Global Delights Coffee Roasters, Govinda's Vegetarian Buffet and the Laundromutt- facilitating that style and scale of business in this area will be essential to making sure that all needs are met in this area, as well as provide employment opportunities for those who live nearby. As can be seen with the image of Global Delights, there is already beginning attempts to also make this area a place to gather with the picnic tables, but it's lacking some key points to really make it a community building space. Neighborhood Scale Mixed-Use Buildings is one way to help bring those two needs together.

Corner of River Road and Hilliard Lane, showing Global Delights Source: Google Maps Streetview

Here we have a design by Opticos Design for a car-free neighborhood for Tempe, Arizona. This is a housing design project, but the eye-catching thing to this and how it connects to this project is the scale of the design. This is not a giant complex for a large store to move into with dozens of apartments above like you would see in downtown. This is neighborhood scaled and has the ability to retain details of neighborhood character- which was mentioned in the Neighborhood Plan as a priority of residents. This is the sort of scale that would allow for businesses like the ones that already exist in this intersection and the neighborhood surrounding it to exist on the ground floor.

Source: Opticos Design Culdesac Tempe
https://opticosdesign.com/work/culdesac-tempe/

Bringing mixed-use into the buildings closer to River Road brings in an array of possibilities and opportunities. Depending on the needs of the developer and the neighborhood, use could be mixed, having offices or residences on the higher floors. Either of those options would help provide equity by bringing in employment or housing opportunities.

This scale of development also brings economic potential for the area as well. "Streets where walking is safe and easy are streets where businesses usually thrive" (Quednau, 2018). When people have agency in a space and feel free to move around it, it helps businesses thrive as well. Global Delights has started to plant those seeds with the picnic tables- inviting people into the space to gather, to form community, to build in that space. To gather, to meet with people before going to the River, or to school, or just waiting for someone to get off the bus.

But it's not built to a scale for people- as can be seen in the picture, it's built for cars as there are several visible cars there, but the only person that can be seen can only be seen if you zoom in on the coffee shop itself. And as such, people drive through this space- instead of enjoying it- because that's what it was designed for.

One way to make the environment more human-scaled, safe and comfortable for pedestrians and cyclists is by enhancing the streetscape itself.

Streetscape

Increasing equity through safe and accessible street infrastructure

Aesthetics through Safe Design

Within the equity framework that this project is based on, questions about physical accessibility and safety are essential to answer. In this section on streetscape, we will be focusing on suggestions for a more physically accessible and safe River Road community. These suggestions would allow residents and visitors to travel safely within the community, even as River Road is expected to grow as an arterial with increased transit options and traffic. This sense of accessibility and safety can be created through separating cyclists and pedestrians from cars, having accessible sidewalks, dedicated bike lanes, and adding a traffic calming and protective median.

Another focus of this section is to find ways to create a community that has the aesthetics and amenities of a neighborhood rather than the surrounding area of a busy, car-focused arterial. We suggest this be accomplished through greenery, less emphasis on cars, and community involvement in the design process.

Our goal is to offer suggestions that would result in an aesthetically pleasant space to be in, while also ensuring a physically accessible and safe space to travel through. These end goals would help increase the sense of community around River Road through design and increase equity by allowing for better accessibility, safety and less necessity for car-ownership.

Green Barrier

A green barrier consisting of a mixture of trees and shrubs along River Road would have multiple benefits. It would both improve the aesthetic quality of the space as well as increase safety. Having proximity to nature has been found to have direct health benefits for people, such as lessening depression, increasing sense of well-being, decreasing mortality, fewer stress-related illnesses, and improved ability to focus (Jaffe, 2015).

In addition, people do find tree canopies to be aesthetically pleasing, this would likely encourage more people to spend more time out in the community and ultimately add to the sense of community around River Road.

A green barrier along River Road would also act as a traffic calming feature by narrowing the driver's field of vision and creating rhythm (Nacto, 2013). Given that River Road is already a fairly busy arterial and that traffic will naturally increase with the expected increase in new development and density in the area, we recognize the importance of avoiding adding traffic calming features that would hinder the flow of traffic. We have avoided recommending physically disruptive traffic calming elements because of this reason. But with the current excess level of speeds along River Road we recommend a green barrier as a traffic calming element, in hopes that it will calm traffic to the point where speed limits would be exceeded less frequently.

https://vtcommunityforestry.org/Green_Streets

In addition to all the health benefits, improved aesthetic qualities and traffic calming features, a green barrier would also provide physical protection. Green barriers that include tree canopies will reduce temperature and protect pedestrians from the elements. They can also be considered a protective barrier for pedestrians and cyclists by acting as a physical hindrance for cars to invade bike lanes and sidewalks.

Along River Road and specifically in the Hilliard Lane and River Road intersection, there are already some areas with partial tree canopy and shrubs present. We are recommending that the existing green elements be expanded into a consistent green

barrier, which would increase health, improve safety and encourage community building.

Creative Street Design

Creative street design can take many forms. In its essence, it is the idea of using art in all its forms to create functional elements that enhance the streetscape. For our creative design element, we are recommending adding colorful illustrations to the road itself and specifically to crosswalks. This would serve as a non-physical traffic calming feature because it would draw the attention of drivers and encourage them to slow down.

Implementing creative street design should also be seen as a way to include the area's history and character in its streetscape, as well as being a way to do community building through the planning, design and implementation processes. For example, there could be a collaboration with River Road Elementary by asking students to come up with ideas for how to design the crosswalk, this would give students ownership of their neighborhood and it could teach them about traffic safety.

https://etchasketchdev.com/creative-crosswalk-at-moca

Sidewalks and Bike Lanes

There are very few sidewalks available when you travel through the side streets of River Road. The few sidewalks that exist are not well-maintained, while some are even physically blocked by private property or green overgrowth. We recommend focusing on creating better accessibility and connectivity in the community by adding

sidewalks. This recommendation particularly pertains to side streets that lead to the river. As the maintenance of these streets should not just be considered the responsibility of the individual property owner, but also that of the city given that these streets provide access to the river which is a public space.

We also recommend adding in bike lanes along the River Road corridor and the most essential side streets to create a pattern of connectivity for cyclists throughout the River Road area. Bike lanes should be physically protected either by a green barrier consisting of trees and shrubs as mentioned previously or a curbed bike lane, the ideal design would have both a green barrier and a curb for protection.

https://ggwash.org/view/43010/copenhagen-uses-this-one-trick-to-make-room-for-bikeways-on-nearly-every-street

Currently, Eugene has a substantial amount of painted bike lanes, although studies have found that painted bike lanes are not a very safe option. A recent study by researcher Dr. Ben Beck at Monash University, has found that drivers pass cyclists about 40 cm closer when they are in painted bike lanes as opposed to streets with no bike lane markings. In addition, 22% of bike crashes occur with cyclists riding in a painted bike lane (Monash University, 2019).

In contrast to a painted bike lane, a curbed bike lane consists of a curb separating the bike lane from the road and another small grade change between the bike lane and the sidewalk. The curbed bike lane would be tapered into a small ramp at each end of the block to ensure accessibility for folks who would be unable to get onto the curb otherwise. The curb functions as a protective barrier, yet allows for full visibility for both cyclists and drivers.

Case Study: Danish Curbed Bike Lanes and Bike Regulation

The suggestion for this bike lane design stems from curbed bike lanes in Denmark, where this approach has become the standard. The majority of streets in Danish downtown areas have curbed bike lanes, making for safe travel for cyclists. Safety is increased further by having green barriers or parked cars act as protective barriers between the curbed bike lane and the road.

Another factor that plays into making it safe for cyclists to get around in Denmark is that traffic laws are clear for cyclists. For example, you can be fined if you bike without lights, use your phone while biking, are missing reflectors, cross the road or turn on a red light. Having clear regulation that is enforced as well as protected bike lanes makes for a safe environment both for cyclists and vehicles.

Median

For at least one of the River Road crosswalks at the intersection of Hilliard Lane and River Road we are recommending adding a median. Having a median would increase safety through offering people a place to rest midway if they are not able to cross the entire road with the time allotted. A median would also act as a traffic calming feature, although it is a physical feature we do not anticipate a median hindering the flow of traffic.

Transit-Focus through Reduced Parking

As the River Road community develops its transit options, it should also be seen as an opportunity for the area to establish itself as a Transit-Oriented Development (TOD). In order to take the first steps of getting to the point of being a TOD, it is essential that some of the space that vehicles occupy within the community should be reclaimed. This is why we are recommending reducing parking spaces or at least not having a minimum requirement for parking.

We also suggest requiring any new commercial development that parking lots should be placed behind buildings and storefronts should be pushed to face the street. This would increase aesthetic quality, make commercial buildings more interactive and make the area feel more like a walkable neighborhood.

Source: NACTO

EmX Stops

Providing access to equitable modes of transportation

The existing bus stops are not very visible as they blend in with the surroundings and are, as seen in the picture below, sometimes being partially covered by green overgrowth. The existing stops are less than ideal and so we are recommending creating two new bus stops. The

goal should be to create bus stops that are visible, accessible and that are connected to the community.

Bus Stop at River and Horn. Photo courtesy of Aimee Okotie-Oyekan

We suggest moving one stop south so that the two new EmX stops would be facing each other, one on the southwestern side of the intersection and the other on the southeastern side, as illustrated in the map below.

These stops would be approximately 180 feet away from the intersection itself, and utilize proximity to community amenities such as the Library Community Center Space as well as McKay's Market. McKay's Market also has the benefit of having an extended sidewalk area in front of the store, providing space for the EmX Stop to use.

For the design of the EmX stops, we are wanting to be consistent with the current EmX stop design. The existing design offers accessibility, shelter from the elements, and an openness that encourages interaction with the surrounding community, all features that fit into the vision that we have laid out.

EmX Stop Locations Currently. Map Source: Google maps?

Proposed EmX Stop Location. Map Source: Google maps?

Historic Market

Fostering equity with access to healthy food.

Addressing Food Equity

The site analysis revealed marked spatial disparities in food access when viewing the intersection of Hilliard Lane and River Road as a focal point. We draw from a growing body of research analyzing correlations between food access, racial and ethnic demographic patterns, and health risks to support our proposal for a locally-sourced market or grocery store at the heart of this intersection.

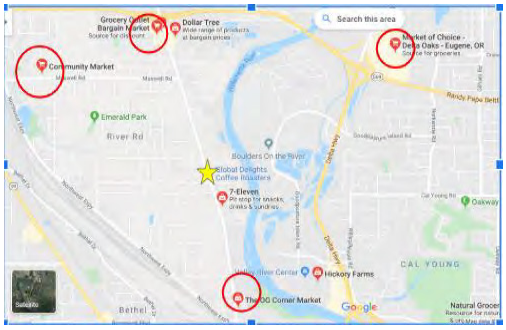
As aforementioned in the site analysis, there is no traditional supermarket or grocery store within a mile from the Hilliard Lane-River Road intersection offering healthy, affordable, and fresh food options. The closest business offering such food access is the OG Corner Market at 295 River Road, located one mile south of the site intersection (Google Maps). The tiny, locally owned food market opened in 2009 and provides fresh, local organic produce and locally grown products.

Grocery Outlet Bargain Market, The Community Market, and The Market of Choice are all comparable food service facilities and are located more than a mile and a half away from the Hilliard Lane River Road intersection (Google Maps). Though easily accessible by car, these distances may pose barriers to local residents. When analyzing the population age structure of census tract 41, residents aging 50-59 years comprise the

The OG Corner Market. Source: The OG Cornet Market Facebook Page

largest portion of the population. In addition, the proximity of River Road Elementary School suggests families with young children may take residence nearby. For these reasons, the dispersed location of health food access carries implications concerning safety and an obstacle for residents with constrained mobility.

In the absence of healthy options, several fast, grab-and-go food facilities are located near the intersection, offering snacks, pastries, and other processed foods. Such businesses include



Nearby Grocery Stores. Source: Google Maps

the Global Delights Coffee Roasters, Burrito Boy, Tio Pepe Mexican Restaurant, and 7-Eleven. This spatial trade-off of

distance and access to healthy food frames the concept of a "food desert", a term coined in the 1990s to describe neighborhoods and communities that have limited access to affordable and nutritious foods (NCBI, 2009). A great majority of food desert studies use larger food stores and markets as a proxy for access to healthy, lower-cost food options, and posit that food desert communities are more likely to be urban and rural low-income neighborhoods. In these communities, there are few larger supermarkets and numerous smaller stores that stock very limited healthy food items such as fruits and vegetables. Consequently, spatial mapping shows that these

communities are also frequently areas with high rates of obesity and chronic, diet-related diseases. Another important note is that merely supplying healthy food will not suddenly induce people to buy and eat such food over less-healthy options, especially when relative prices of healthier foods are high. Therefore, affordability is an important consideration when framing our concept design (NCBI, 2009).

The Historic Market

There is a need at this particular site in the River Road community for a community gathering space and access to culturally appropriate, healthy, and affordable foods. In proposing a historic market, the goal is achieving equitable access to healthy and affordable food options and co-locating these options with reliable transportation to provide a means of attaining them. With the integration of the rich agricultural history of the River Road neighborhood, the market will serve as a community gathering space, increasing ease of access to daily needs of residents and contributing to greater livability of the area surrounding the intersection

The building the concept intends of repurposing is the McKay's historic market, at 1015 River Road (Figure ()). The McKay family dominated the grocery industry in the neighborhood since the 1930s. The particular building of interest was built in 1949 and became the cornerstone of the regional McKay's Supermarket chain. This use continued until it closed in 1965. The building was then used consecutively as the Mayfair Markets' sign shop, Tom Peterson's furniture and appliance store, and Mike Porter's discount appliance store until the 1970s. It most recently served

McKay's Market at 1015 River Road in the 1950s.

McKay's Historic Market. Source: Eugene's Historic River Road 2005

as the location of a Goodwill store (Eugene's Historic Markey 2005).

The building is freestanding and currently zoned C-1 Neighborhood Commercial according to Eugene Land Use Zoning Code. Facilities zoned as such are meant to serve the day-to-day needs of the surrounding neighborhood. Neighborhood commercial areas should enhance rather than intrude on the character of a neighborhood by providing landscaped buffering and ensuring sufficient street frontage to provide safe and efficient access. These areas are usually 5 acres or less in size. The property sits on 10,558 sq. ft. and contains at least 30 parking spaces.

41

Case Study: Adaptive Reuse on the Atlanta Beltline

Figure 7: Krogg Street Market, Atlanta, Georgia. Photo by Lee Thomas, Andrew

A case study of adaptive reuse urban design on the Atlanta Beltline serves as a guiding example of the historic market concept. The Atlanta Beltline is a 22-mile corridor of transit-oriented development encircling Atlanta's urban core. The goal of this complex and interconnected web of development is to accommodate the growth of the sprawling Atlanta metropolitan area by increasing density. This is achieved by condensing commercial and residential spaces near high quality transportation investments. Historically, Atlanta was a heavily industrialized area, and remnants of its rail-based history can still be found scattered about the landscape: dilapidated rail lines, old flat-roofed manufacturing buildings and warehouses. Instead of reinventing the wheel, developers of the Krogg Street Market, pictured in Figure 7, repurposed a potbelly stove factory into an open and inviting community space. Through the intentional integration of Atlanta's industrial history, the market was able to serve the needs of the present urban community with a tasteful combination of old and new design.

Concept Recommendation

What we can glean from this example is that we can accommodate the future growth of census tract 41 in a way that is uniquely River Road. The design for our market intends on creating a sense of place by including design inspired by River Road's agricultural history. We recommend installing large glass windows and glass fixtures in the ceiling. This will not only be more energy-efficient and reduce the need for electric light fixtures, but this will also encourage a culture of trust and transparency in the community, fostering connectedness and social cohesion.

Food and services will be provided by locally sourced vendors, providing job opportunities and encouraging local entrepreneurship. The business ethic should support a theme of farm to table consumer responsibility. Consumers knowing exactly where food comes from supports local farmers and businessmen, thus preserving the local identity of the neighborhood. Over time the goal is to ultimately phase out and reduce the reliance on large-scale industrial agriculture, which through globalization and mass production has become void of unique identity and character, lacking any ties to a specific locality.

42

Neighborhood sentiment and community plans both frame and support this proposed development. In 2017, River Road and Santa Clara community members spatially mapped their values and ideas for future development in their neighborhood. According to this data, residents express a desire to repurpose the Goodwill building into a space to provide food access:

"Old Goodwill into natural grocery/café"

"Old Goodwill make into food co-op/wine bar"

"Want gathering space/health foods store at Old Goodwill building"

"Plaza and vendors" (City of Eugene, 2017)

Historic Food Market Today Source: Google Maps

In addition, this concept aligns with priorities listed in the River Road Santa Clara Neighborhood plan that seeks to "encourage the patronage of locally owned businesses" and "base local economic development on neighborhood assets". Priorities of the Envision Eugene plan also align closely with our concept in promoting "economic opportunity that is equitable, environmentally sensitive, and reflects local culture and values" while integrating these with transportation planning (City of Eugene, 2017).

Housing

Increasing the ability for everyone to have a home.

The Value of a Home

The value of a home is more than merely its market price. A home provides multiple use values as well. Those uses most intuitively include shelter, but also provide proximity to other attractions like jobs, shopping and recreation. Use can include amenities such as type and quality of fixtures and appliances, landscaping, and views of natural areas. Use can be associated with self-worth and prestige. Finally, use can be access to public services such as schools and health care facilities. (City of Eugene, Housing Needs Assessment 2016). The proposed affordable housing concept takes into consideration the diversity of uses a home provides, as well as the diversity of housing occupants that homes can serve. This concept defines affordable housing as accommodations that are within a household's financial means thus applying to all households within the River Road community. Housing is no longer affordable when a household pays 30% or more of their income on housing and utility costs, at which point the resident is experiencing a cost burden (City of Eugene, 2016). Using equity as a guiding lens, this concept seeks to address disparities in home access by recognizing the provisions that need to be in place to offer stabilization to populations historically othered by exclusionary housing policy.

Gentrification

Single Family Home Subdivision on Hillcrest Dr, Eugene

Photo by: Aimee Okotie-Oyekan

Data from the community profile and subsequent housing and economic analyses of the trends in census tract 41 suggest gentrification is occurring in River Road. Current median household income level in census tract 41 increased by 29% from 2010 levels. This is more than double the percent increase seen in Eugene, Lane County, and Oregon. Furthermore, as of 2017, census tract 41 compared to the three aforementioned geographies has the highest proportion of single-family, detached homes at 90%, and the lowest percentage of cost-burdened residents at 33% (U.S Census Bureau). The

combination of these trends would suggest that in comparison to the other geographies, residents of census tract 41 are experiencing an increase in affluence and have greater financial stability to afford homeownership and other basic needs. These trends, however, may not be representative of the very small percentage of poor or non-white population residing in the area. This points to a lack of diversity in housing occupants as a result of gentrifying processes that price out low-income residents. Another notable trend is in population growth and poverty statistics. River Road census tract 41 is growing faster than Eugene, Lane County, and Oregon. With a percent population change of 13.3% shown in Figure 1, census tract 41 is growing approximately 3 times faster than Eugene, 4 times faster than Lane County, and more than twice as fast as the state of Oregon. In addition, since 2015, census tract 41 has had a higher percentage of families below the poverty line compared to Eugene, Lane County, and Oregon (U.S. Census Bureau). As River Road continues to experience growth, the continuation and widening of these socioeconomic disparities will potentially lead to further marginalization of populations already burdened with vulnerabilities from a combination of racial and class factors. However, revitalization with a focus on equity in diverse housing options can work towards reversing these trends through the stabilization of vulnerable residents and increasing the economic capacity of the community as a whole.

Row Houses in Eugene. http://www.wecaneugene.org/housing-types

Affordable Housing Concept Recommendation

This affordable housing concept addresses the future housing needs of the River Road community while simultaneously increasing economic well-being for all community residents. This is achieved with an emphasis on locality. By integrating commercial and residential spaces, we are concentrating the availability of businesses and services, public amenities, and housing facilities. The outcome is greater retention of community products and reduced reliance on services and products outside of the community. In this way, both the inputs and outputs of community revitalization and growth are recaptured for the economic and social benefit of the community as a whole. Integral to this concept is the co-location of these services with efficient and reliable mass transit options to provide a means of access.

As of 2016, the city of Eugene needs another 1600 multifamily units (City of Eugene, “Housing”). Though it is unfeasible to adequately address these needs within the scope of this concept, we propose to accommodate denser population growth by providing housing, 15-25% being allocated to affordable housing through inclusionary zoning. In addition, enforcing mixed-use commercial and residential zoning and incentivizing live-work units will aid in accommodating dense growth while providing job opportunities close to places of residency. Furthermore, the development pattern of this proposal will over time result in a density gradient, with higher density mixed-use commercial and residential spaces located at the corners of the Hilliard Lane River Road intersection as well as northward and southward along River Road. High to middle-density housing, such as rowhomes, triplexes, and duplexes will stretch eastward and westward, providing a more gradual transition in home density moving towards the detached single-family homes.

Alignment with Neighborhood Desires

This goal of this proposal to address housing needs and increase economic capacity closely mirrors the first two pillars of Envision Eugene:

“Provide ample ECONOMIC OPPORTUNITIES for all community members”

“Provide HOUSING AFFORDABLE to all income levels”.

(City of Eugene, 2017)

Additionally, the implementation of a density gradient through development of middle housing supports the desires of residents as expressed in the River Road Corridor Study Workshop. It was shown that among residents of River Road that there was “general support for “missing middle” type housing near Centers and to transition into single-family areas” (City of Eugene 2019).

Riverfront Amenities

To increase equitable access to community gathering spaces, natural resources, recreation, and learning opportunities.

Currently, the Ruth Bascom Riverbank Path System connects the River Road Neighborhood with the Eugene and the City of Springfield. While access from Hilliard Lane to the trail system exists, there are no sidewalks along the road and no signs that connect the neighborhood to the trail system. Along the path, there are several benches, but no gathering space or additional amenities besides the trail infrastructure, as seen in Figure X. The river also has a minor green barrier that could be improved upon through the addition of more native plants and other habitat restoration techniques. Therefore, there is a large potential to add amenities to the river, which include a gathering space, art installations, and an improved green barrier. This concept, through the lens of equity, will support the following goals of the River Road/Santa Clara Neighborhood Plan:

Figure X, Current Infrastructure on Ruth Bascom Trail System near River Road and Hilliard Lane, Image from: https://www.eugene-or.gov/3660/Topic-Areas

Goal 7 - Ensure that natural areas are healthy, thriving spaces that provide habitat for native species and function as natural infrastructure

Goal 8 - Provide neighborhood access to recreational opportunities, parks, and community centers

Goal 9 - Ensure the Willamette River is a vital and accessible part of the neighborhoods

Goal 10 - Preserve agricultural land and open spaces within and around our neighborhood boundaries

(City of Eugene. "River Road Santa Clara Neighborhood Plan")

Gathering Space

The addition of a multi-function gathering space on the river, that could be used for events, exercising, children playing, or enjoying the scenery, is one way to meet the neighborhood goals. Although there is already some minor infrastructure in place, there is potential for a larger, more uniform gathering space that can serve several needs of the community. Due to the high population of children in the neighborhood, an outdoor learning space that doubles as a playground with seating and amenities is an interesting prospect for this area. With its rich indigenous, agricultural, and natural history, an interactive playground can not only provide education about the area, but also offers a place to gather the community and increase social equity and awareness. When people have places to interact,

they are able to better understand each other and build community. This will also add to neighborhood character, which is important to the residents in this area. Some of the features that could be included are:

- Educational playground equipment that highlights history and uniqueness of the neighborhood
- Moveable tables/chairs to create a sense of ownership
- Water feature to highlight hydrology as well as provide recreation
- Bilingual signs that educate visitors about equipment and the ecology of the site
    - Additional signs directing visitors to the amenities along River Road
- Increased connectivity through the addition of sidewalks to neighborhood and trail system
- Potential for business such as a coffee shop, historic market, or other small business

Figure 8 is a proposed revitalization of Margaret T. Hance Park in Phoenix, which features a playground, trail connectivity, and open spaces. Although this is not along the riverfront, it provides an example of what could be done to revitalize open spaces and an existing trail system. The park features a playground, a water feature, art installations, shaded seating, a cafe, gardens, and native plants. All of this is connected through trails, that link the surrounding neighborhood, library, and cultural centers to the park.

Figure 8, Margaret T. Hance Park Plan in Phoenix, AZ. Image from: https://www.phoenix.gov/parks/hancerevitalization

Art Installations

Art installations have the potential to provide more than just aesthetics and culture; they can educate residents and visitors about significant events or people in the history of an area. In addition to the park amenities, art installations can be used to tell the story of the River Road Neighborhood, from its

ecological to indigenous to agricultural history. This area is unique compared to the rest of Eugene and Springfield and that should be represented through art. Although it is important throughout the entire process, community engagement is crucial in this step because the residents should provide input as to what they want to highlight about their neighborhood. This will increase a sense of ownership and community identity, which helps to build social equity. When people feel as though they have ownership over a space, they tend to take care of it and use the amenities to their fullest extent. Art installations will also attract visitors from the surrounding neighborhoods as well, further increasing visibility for River Road and its businesses. Figure 9 demonstrates a Native American building design located at the arboretum at Mt. Pisgah in Eugene. Something similar could be designed at this site to highlight indigenous history.

Figure 9, Arboretum at Mt. Pisgah, Image from: *https://www.mountpisgaharboretum.com/learn/connect/*

Green Barrier

Although the Willamette River already has some green barriers and flood control infrastructure, as seen in Figure 10, there is potential to further increase the amount of native vegetation and natural flood controls.

This supports the neighborhood goals as well as provides a natural habitat for small wildlife and increases safety of those living in the neighborhood. Even though the river has not had a major flood event in this neighborhood recently, changing climate and weather patterns may increase the risk of such an event; that is why environmental restoration is crucial along the

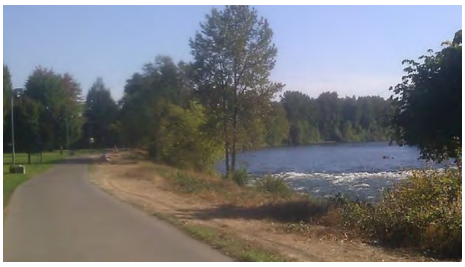


Figure 10, Ruth Bascom Trail near River Road, Photo submitted by HappyinEugene on TripAdvisor (Jul 2013)

river. Figure 11 is an example of a riverfront park in St. Johns County, FL. The park is located along the St. Johns River and combines open space with habitat restoration.

Figure 11, Riverfront Park in St. Johns County, FL. Image from: https://www.tsw-design.com/portfolio-items/rivertown-riverfront-park/

Equity

These riverfront concepts increase equitable access to recreation, natural resources, and art, thus creating social sustainability. When people are able to gather in open spaces and appreciate the outdoors and amenities, they build a stronger sense of community and understanding. This concept would allow for people in the River Road Neighborhood to showcase their pride in their neighborhood as well as highlight its robust history and uniqueness in the region. These amenities would not only be accessible to neighborhood residents, but to anyone using the Ruth Bascom Trail System, thus increasing access to all of Eugene and Springfield.

Case Study: Depot Park in Gainesville, FL

The City of Gainesville converted a brownfield site into a park that serves both as an outdoor gathering space as well as a stormwater treatment system. The site used to be the old train depot, through which almost all of the trains in North Florida passed. The city needed a new stormwater system and instead of diverting the water and building a plant, they decided to create an environmental preserve as well as open spaces for the community to gather. As seen in Figure X1, the site features the stormwater system, a museum, open lawns, and a play area for children.

The site captures water from nearly 89-acres of land in downtown Gainesville and provides a system to treat the water before it runs into Paynes Prairie, located just south of the city (City of Gainesville, FL, 2016). Connections to current trails make the park accessible from every corner and adds to the 16-mile Gainesville-Hawthorne State Trail that runs through Gainesville, Hawthorne, and Paynes Prairie (Florida State Parks, 2019). In addition to the habitat restoration, the city included an educational park, with equipment that salutes all aspects of Gainesville's history. As seen in Figure X2, the playground highlights the depot's history of trains as well as its history with indigenous tribes, native plants and animals, and its industrial history. All of the playground equipment have signs that

educate people about what they represent; each piece of equipment was intentionally placed and designed to tell the story of Gainesville, from its ecology, Native Americans, and its recently industrial history. This could be replicated along the trail near our site in River Road. Although the scale is not equivalent, there is potential to take the ideas from Depot Park and retrofit them to the site along the Willamette River. This park provides equity to residents of Gainesville because it is free, located near transit stops, provides ecological benefits for all residents, and helps create a sense of pride for the community. The vision was to create a "Central Park" for Gainesville, and the developers succeeded in delivering a park that is heavily trafficked today (City of Gainesville, FL, 2016).

Figure X1, Map of Depot Park in Gainesville, FL. Image from: http://www.depotpark.org/

Figure X2, Playground Equipment at Depot Park. Images from: http://www.depotpark.org/

Implementation

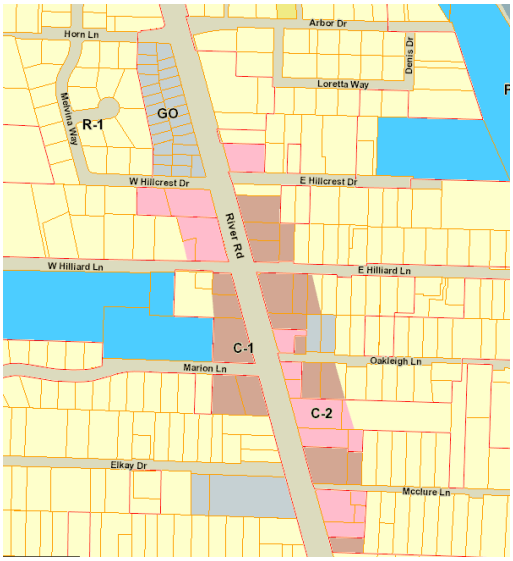
For the implementation section, we have chosen to focus on four actionable initiatives that will directly affect the implementation of our concept ideas. In comparison with the other subject areas on River Road, that may work towards incentivizing development, our subject area is different in that development is bound to happen given the increase in wealth and the proximity to the city. Our mission is to find ways to lead the expected growth in a direction that is beneficial to the community. While also being aware of the fact that gentrification is imminent and that in order to avoid further gentrification of the area, we need to form policies that protects residents and encourages diversity.

We plan to accomplish a more equitable River Road community through looking at strategies to implement zoning that allows for a vibrant community, reducing parking requirements to change the focus from being on cars to centering on pedestrians and cyclists, working with developers to ensure an equitable and affordable housing market, and underlining the importance of public participation. In the Appendix, these implementation strategies will be put into a three phase diagram to illustrate how progress would be made through these initiatives.

Zoning

In our focus area, which is the intersection of Hilliard Lane and River Road, the commercial lots are currently mostly zoned as C-1, which is considered neighborhood commercial, and C-2, which is community commercial.

We recommend rezoning the commercial lots as C-2, because consistency in zoning would make it easier for developers to combine lots and there would be consistency in applicable uses of these commercial lots. Both C-1 and C-2 would allow the mixed-use buildings that have been envisioned in this report, but C-2 allows for more different kinds of uses than C-1.



https://pdd.eugene-or.gov/Maps/ZoningMap

The residential zone around the intersection is almost exclusively zoned as R-1, which is a zoning designation that is meant for single-family dwellings. While we recognize the importance of not allowing development to alter the composition of the community in a way that is not beneficial, we also recognize that the River Road community is in need of affordable housing.

In order to reach a moderate increase in density that would allow for more affordable housing, we recommend gradually re-zoning some lots as R-2. While R-1 technically allows for some of the same levels of density and uses as R-2, R-1 has a range of Special Use Limitations that are not applicable to R-2. In addition, R-2 also allows for Single Room Occupancy, meaning that a property owner would be allowed to rent out a single room, which could help with the student housing shortage, and R-1 does not allow for this use.

Rezoning to R-2 would encourage developers and property owners to create more affordable housing options. In addition, rezoning the area immediately surrounding the intersection as R-2, would help create middle housing for better transitional coherence between the residential area and the commercial center.

Parking Requirement

We recommend that there be no commercial parking requirement. If the goal is to create a TOD it is essential to reclaim some of the space that cars take up in the community and repurpose that space to be more geared toward other transportation options, such as taking the bus, walking or biking. Reducing the amount of space dedicated to cars through parking is a part of the process that leads to being able to build a TOD.

As mentioned in the section on Streetscape, we recommend requiring that new commercial developments place their parking behind their buildings and also require that storefronts should be pushed to face the street. This would increase aesthetic quality, make the buildings more interactive and make the area more walkable.

In this report, we are proposing a collection of mixed-use buildings around the intersection, with this increased residential density and commercial use there will be a need for parking. This is a need that is in the interest of developers to meet, even if there is no minimum commercial parking requirement. We recommend that any parking lots that will be developed in conjunction with the proposed mixed-use buildings be considered “shared parking”. This would essentially mean that the parking lots would be shared between commercial use and residential use, which would likely result in residents occupying the parking lot overnight while they would be open to the customers of the ground-floor businesses during the day.

Our plan for a reduced focus on cars aligns closely with the Envision Eugene Comprehensive Plan. Specifically, pillar number three which is “Plan for Climate Change and Energy Resiliency”, because supporting a stronger effort for people to use public transportation over personal vehicles supports the planning for climate change, and by encouraging walkable, bikeable, bus-able neighborhoods there would be a reduction in emissions. It

also aligns with pillar number four “Promote Compact Urban Development and Efficient Transportation Options”, because reducing parking lots gives us the opportunity to create more compact and cohesive communities.

Affordable Housing

With the new EmX line, housing prices should be expected to increase. If we look at the housing data from the census tract that our site is within, that being Census Tract 41, there is cause for concern. The racial and ethnic diversity has decreased, and the income level of Census Tract 41 has increased dramatically over the past decade. These are clear indicators that this area is in the process of gentrifying. In addition, in Eugene overall almost half of all residents are cost-burdened according to the 2017 American Community Survey, this means that 30% or more of their income goes towards housing. Therefore, encouraging affordable housing development is crucial to having the area and Eugene overall retain a level of affordability that is accessible to lower-income households.

The River Road community is growing and with the proposal of the new EmX line, it should be assumed that growth in population, visitors and traffic will increase further. With this, growth, space and specifically housing will be a concern. The area around our site is particularly evenly developed, meaning that there is very little undeveloped land and most of the developed land is dedicated to single-family dwellings. This poses a problem when there is an affordable housing shortage, because the lack of undeveloped land requires that density is increased in order to be able to build affordable housing.

For suggestions on how to deal with the affordable housing problem, we have three recommendations that can also be combined. We suggest implementing an inclusionary housing requirement, working with developers to set a financially feasible rate of affordable housing and working with existing affordable housing non-profits.

Unlike some of the other sites in this project, this site will likely not have any issues with attracting developers simply due to its proximity to the city. If we accept that development is inevitable, our concern should be focused on encouraging the most equitable development. Regulating development through an Inclusionary Housing requirement, would allow the city to require developers to dedicate a certain percentage of their units to be affordable housing units. The percentage could be set on a sliding scale from 15-25%, where a new development would land on that scale would depend on the level of affordability of its units.

In addition to having a sliding scale for the Inclusionary Housing requirement, we also recommend not giving developers the option to choose to locate affordable housing units off-site or choose to pay an in-lieu fee. We do not recommend these options because it would allow for affordable housing to be concentrated in areas or be moved to the periphery of the city, the latter is a tendency that we are already seeing with existing affordable housing communities in Eugene. If we choose to forego the options of placing units off-site and in-lieu fees, we are ensuring that developers include affordable housing units in all new developments. This would arguably be a way of ensuring even dispersal of affordable housing units across the city. It

would also give affordable housing residents the ability to live in wealthier and more attractive parts of the city. Ultimately, this would ensure housing equity by giving people who have lower income access to the amenities and services that comes with

living in traditionally wealthy neighborhoods.

Another option is to work directly with developers to establish a rate of affordable housing units that is still financially feasible for them. Developers are essential to the growth of cities, working with them in order to find out what they need to succeed and by extension for your city to succeed, should be common practice.

Another community of potential partners are the local non-profit affordable housing organizations. These organizations are working hard to provide affordable housing, but are experiencing some of the same financial challenges that private developers are. If the city could help these organizations through more subsidies or through donating property, that would help invigorate the affordable housing market.

These suggestions aimed at providing access to affordable housing, align closely with the public participation workshop that was a part of the River Road Corridor Study. During this workshop, residents specifically voiced concern about the lack of affordable housing and the possibility of their neighborhoods being gentrified.

https://www.eugene-or.gov/DocumentCenter/View/45620/2019-0314_RiverRoad-Workshop1Summary_Final_SERA

Public Participation

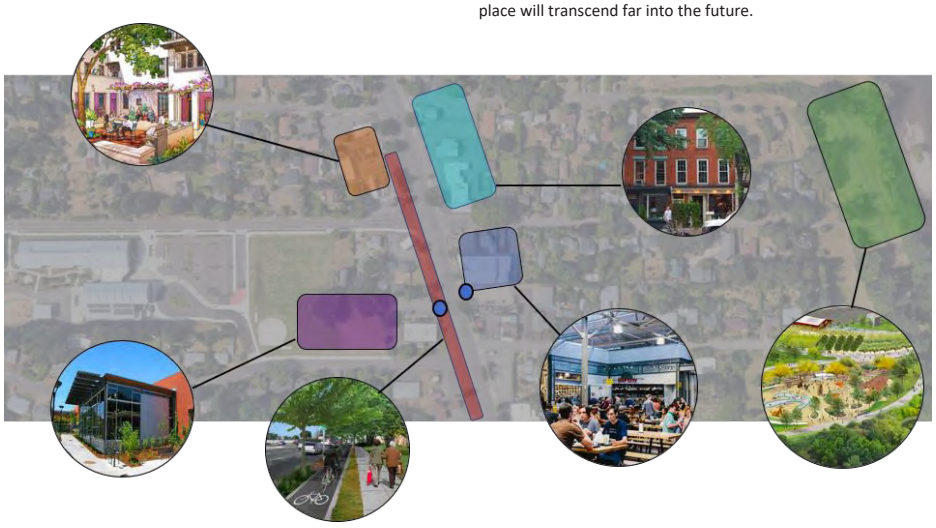
There has already been significant public participation in this process of planning for River Road, the results have been incredibly useful in writing this report as well. We have chosen to also include public participation in this implementation section because public participation

should be an ongoing part of the process. We suggest including surveys on equity issues in the area such as housing affordability, food access and access to transportation. As well as, surveys on what kind of amenities people would like to see in their community. This area has a great resource in the River Road/El Camino del Río Elementary

school, we recommend finding ways to engage the local student in the design process. This would help get both the children and their families to get engaged in the development of their community, and it would also teach the children about community building and planning. And lastly, there should be ongoing public meetings in order to collect feedback from residents on any new initiatives that are being planned for.

Conclusion

In the implementation of our equity agenda, we recognize that gentrification is not merely economic displacement through market pressures. Gentrification is also a process of socio-cultural displacement, in which residents no longer feel a sense of place. This can be due to a variety of reasons, including a lack of cultural support, or reduced access to food, music, art, and other forms of cultural identity expression. Affordability and economics alone will not create a desirable or livable environment. Only when
this is combined with social and environmental dimensions does a space become truly welcoming and accessible to a diverse range of residents. Through the discussed development initiatives, we are helping to shape an equitable River Road community connected by reliable active and passive transportation, whose welcoming and diverse identity rooted in place will transcend far into the future.



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Appendix

Implementation Phases

Phase 1	Phase 2	Phase 3
Establish EmX Line	Plant Green Barrier	Grocery Market
Zoning Change C-1 to C-2	Community Center and Library	Mixed-use Development
River Road Elementary Design Charrette	Start Work on Bike Lanes and Sidewalk	Zoning Change R-1 to R-2
Reduce Commercial Parking Requirement	Implement Median	Implement River Amenities
Plan for Bike Lane and Sidewalk	Plan for River Amenities	Public Participation
Tree Inventory for Green Barrier	Public Participation	
Affordable Housing Policy		
Improve River Signage		
Public Participation		

Table 1. Total Occupied Units by Tenure in Census Tract 41

	Oregon			Lane County			Eugene			Census Tract 41		
Year	**Total**	**Owner**	**Renter**	**Total**	**Owner**	**Renter**	**Total**	**Owner**	**Renter**	**Total**	**Owner**	**Renter**
2010	1,499,267	956,144	543,123	143,894	87,469	56,425	64,999	33,038	31,961	1,614	1,044	570
2015	1,533,430	939,637	593,793	146,235	85,785	60,450	66,093	31,926	34,167	1,614	959	655
% change	2%	-2%	9%	2%	-2%	7%	2%	-3%	7%	0%	-8%	15%

Social Explorer, American Community Survey 2010, American Community Survey 2015.

Table 2. Median Household Income by Tenure

	Oregon	Lane County	Eugene	Census Tract 41
Median Household Income Occupied Housing Unit	$ 56,119	$ 47,710	$ 47,489	$ 54,042
Owner Occupied	$ 72,625	$ 64,219	$ 74,422	$ 71,339
Renter Occupied	$ 36,295	$ 30,138	$ 27,814	$ 38,145

Social Explorer, ACS 2013-2017

Table 3. Age Distribution by Percentage

	Oregon	Lane County	Eugene	Census Tract 41
Under 5 Years	5.8%	5.0%	4.7%	4.1%
5 to 9 Years	6.0%	5.3%	5.1%	6.4%
10 to 14 Years	6.0%	5.3%	4.9%	5.4%
15 to 17 Years	3.7%	3.4%	3.2%	4.1%
18 to 24 Years	9.0%	13.0%	18.9%	8.3%
25 to 34 Years	13.9%	12.7%	14.3%	16.5%
35 to 44 Years	13.1%	11.7%	11.9%	13.7%
45 to 54 Years	12.8%	11.9%	10.6%	12.9%
55 to 64 Years	13.5%	14.0%	11.5%	15.4%
65 to 74 Years	9.8%	10.6%	8.8%	6.9%
75 to 84 Years	4.5%	4.8%	3.7%	4.6%
85 Years and Over	2.1%	2.4%	2.5%	1.9%

Social Explorer: American Community Survey 2017.

Table 4. Household Income Lane County, OR Tract 41			
	2010	2017	Change from 2010
Less than $10,000	125	97	-22.4%
$10,000 to $14,999	155	79	-49.0%
$15,000 to $19,999	109	70	-35.8%
$20,000 to $24,999	81	81	0.0%
$25,000 to $29,999	104	63	-39.4%
$30,000 to $34,999	81	70	-13.6%
$35,000 to $39,999	73	121	65.8%
$40,000 to $44,999	107	141	31.8%
$45,000 to $49,999	105	51	-51.4%
$50,000 to $59,999	160	118	-26.3%
$60,000 to $74,999	132	133	0.8%
$75,000 to $99,999	155	335	116.1%
$100,000 to $124,999	189	150	-20.6%
$125,000 to $149,999	19	105	452.6%
$150,000 to $199,999	19	26	36.8%
$200,000 or more	0	36	Divides by 0
Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates			

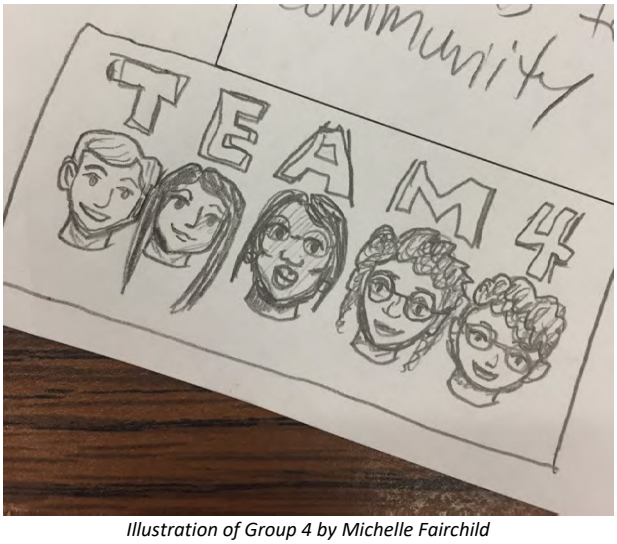

Illustration of Group 4 by Michelle Fairchild

Appendix E

Final Write-Up

Acknowledgements

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Table of Contents

Executive Summary

In 2015 Lane Transit District (LTD), in partnership with the City of Eugene, regional agencies, and the Eugene-Springfield community launched the MovingAhead project. The objective of the project was to identify important streets in the Eugene-Springfield area and determine what transportation investments were needed.[1] The MovingAhead team identified five key corridors and considered the costs and benefits of a variety of transportation investments for each. The MovingAhead Executive Summary was published in September of 2018 to inform the community of where this partnership planned to focus their investments over the next decade. River Road was named as one of the five corridors along with Coburg Road, Highway 99, 30th Avenue to LCC and MLK Jr. Blvd./Centennial Blvd. Consequently, a year later, the Sustainable City Year Program and LTD formed a partnership with University of Oregon's Public Planning, Policy, and Management department. The Community and Regional Planning students were asked to conceptualize, design, and propose a site plan for one of the bus stops along the River Road corridor. This report will put forth our proposal for the Old Station site (Census Tract 28) on the Northeast corner of River Road and River Avenue.

Our vision is influenced by the question:
"Where do we want to go together?"

The River Road community is at a critical turning point in its history and this is an important moment to decide what the future looks like for the River Road neighborhood. Our vision is to create a catalyst site on the Northeast corner of River Road and River Avenue that will honor the heritage and history of River Road and help solidify the neighborhood brand. Currently, the NE corner is operating as LTD's main bus station on the existing corridor and it shares the lot with a vacant building, once a furniture store. It is just south of the Beltline Highway and adjacent to a McDonald's drive-through.

Our vision for this site is big – one that will take up to 20 years of implementation over four phases.

We were encouraged to think and dream big and believe that through collaborative public-private partnerships, community engagement and ingenuity, redevelopment on the NE corner could spur redevelopment on all of the other corners. Inspired to take on this challenge and think of how this area could transform, we came up with our proposal for this site: "The Four Corners of River Road." Together, these four corners will help create a walkable, vibrant, safe, and sustainable community. This will be achieved by providing access to transit, affordable housing, community gathering spaces, cultural programming, and economic opportunity.

Through extensive analysis and research, we gained valuable insight into what has helped form the River Road community, who has contributed to that formation and what it looks like today. We researched the neighborhood history, cultural background, current demographics and needs of its residents, and conducted a site analysis to further understand the locational context within which we were working. We reviewed and analyzed various plans including the River Road Santa Clara Neighborhood Plan, the Eugene 2035 Transportation Plan, the MovingAhead Plan, and the City of Eugene Comprehensive Plan. Through this, we identified common themes which influenced our recommendations aligning with the community's visions and broader planning goals for the area.

We noticed an emphasis on place-based planning wherein community values significantly inform planning objectives. The provision of a diverse, affordable array of housing types. A focus on context-responsive infill throughout the transit corridor and in residential areas with compact housing options to address the "missing middle." Additional commonalities included increasing economic prosperity, fostering regional identity, promoting the overall health of community members, and improving transit safety.

Our goal with this project was to focus on how we could account for future growth while maintaining the neighborhood's integrity and culture. This informed our four main planning objectives: improve pedestrian and cyclist safety, engage the community in placemaking efforts, promote sustainability and prioritize affordability

The overall design concept focuses on four areas: affordability, connectivity, placemaking and sustainability. This report details each of these concepts and includes background information as to why these four concepts are relevant for the River Road community at this time as well as offers relevant case studies and ideas for implementation. Our recommendation includes multi-family housing and a more vibrant street corner. This section of the corridor is particularly outdated in building design and infrastructure, so implementing a plan that adds vibrancy and culture to the area is key.

In order to fortify our concepts, we suggest a flexible and comprehensive approach to implementation:

- LTD decides to sell or lease the land
- Moving the bus stop to the Southeast Corner of River Road and River Avenue
- Creating opportunities for community engagement related to placemaking efforts
- Propose mixed-use buildings that fit within current zoning
- Incorporate sustainable efforts into updated urban design

The River Road area has the potential to transform from a place that you drive through at high-speeds on your way to somewhere else to a destination. A place where both visitors and neighborhood members notice the strides that were made to include community stakeholders in decision making. An intersection that prioritizes pedestrian safety and ensures that highschoolers have an easy path to get to school. A residential neighborhood that provides diverse housing options, a commercial environment that values local businesses and placemaking features that honor the heritage, history and future of the area. With commitment from The City and Lane Transit District, "The Four Corners on River Road" can provide more community gathering spaces, affordable housing, diverse economic opportunities and sustainable values; efforts which will benefit residents, businesses, developers and community organizations.

Our Site: Old Station – near the on-ramp to the Randy Pape Beltline.
Source: Aqsa Khan (2019)

Site History and Background

The area of the modern day River Road neighborhood lies on indigenous land of the Kalapuya Native American tribe.[2] The fertile soil along the banks of the Willamette River made it an important agricultural area for the tribes for generations. In the 1840's and 1850's anglo settlers from the United States arrived to the area via the Oregon Trail. This led to the formal establishment of the City of Eugene in 1853.[3] Early settlers to the area utilized the River Road area for farming, just as the Native Americans had before them. In fact, the modern thoroughfare of River Road is located along an old Kalapuya trail. Most farming in the area consisted of small locally owned grain farms and various orchards. The construction of the Oregon & California Railway in 1871 led to the establishment of the Roosevelt Railyard on the western edge of the River Road neighborhood and provided a way for the local farmers goods to get to markets beyond the Eugene-Springfield area.[4] The area remained rural and agrarian until the 1950's post-war economic boom which caused the city of Eugene to expand with new subdivisions. In the decades since, the River Road Neighborhood has continued to grow, its remaining small farms dwindled in number every year until they eventually disappeared. The completion of the Randy Pape Beltline Highway in the area in 1970 brought even further growth and now serves as the boundary between the Santa Clara neighborhood to the North and the River Road neighborhood to the South.[2] When the 1982 Metro plan established that all areas within the Eugene-Springfield Urban Growth Boundary be annexed by the city, deep resistance from the residents emerged. This has led to an area with complicated jurisdictions as a majority of the neighborhood is now under city jurisdiction, but a number of sites still fall under Lane County jurisdiction in somewhat of a patchwork pattern.[2] The area in the present day is a suburban community of aging subdivisions and shopping centers ripe for change.[4]

Historic Photograph of River Road

Source: Eugene Historic Review Board (2005)

History of Planning and Policy in the Area

The history of planning and policy in the area goes back to the 1890's when the land was originally subdivided into large land claims of 640 or 320 acres.[4] Most of these land claims were developed as family farms which subdivided as they were passed down from generation to generation or sold to new owners. Many of the roads in the neighborhood were built along these old property lines. The area was first platted for subdivisions in the 1910's with modest growth till the 1930's. The area boomed postwar and took on many of the characteristics it has today.[4] More modern plans for the area include the 1982 Metro Plan, the 1987 Urban Facilities Plan, The

current Eugene-Springfield Metro Plan, Envision Eugene, LTD's Moving Ahead and most recently the River Road & Santa Clara Neighborhood Plan.

Old Station Site Analysis

Old Station Site: River Road and Silver Lane Intersect

Site Location

For our project, the site location and its proximity to different hubs in the Eugene/Springfield area are important elements in drafting our proposal. Our site includes the Old LTD Park-and-Ride Station on the corner of River Road and River Avenue. Our initial focus was on the parcel of land available between the intersection of River Road and River Avenue, near the Randy Pape Beltline in Old Station. But as LTD has discussed possibly selling the Old Station land we look at the future development prospects of this land acting as a catalyst to the other four corners and the neighborhood surrounding this intersection. This intersection near the highway is one of the busiest with one of the highest accident rates in the area. A redevelopment plan is needed for the neighborhood to mitigate transportation related safety issues, revitalize the outdated infrastructure, and connect the neighborhood with its natural environment.

Macro View

It is located at the heart of the city of Eugene with a distance of 4.3 miles from Eugene Airport, 4 miles from the University of Oregon: and 5.6 miles from Springfield (Figure 1). With its proximity to these hubs and connectivity of the transit lines, Old Station is an attractive location for future residents to move to.

: Google Earth and Aqsa Khan (2019)

Meso View

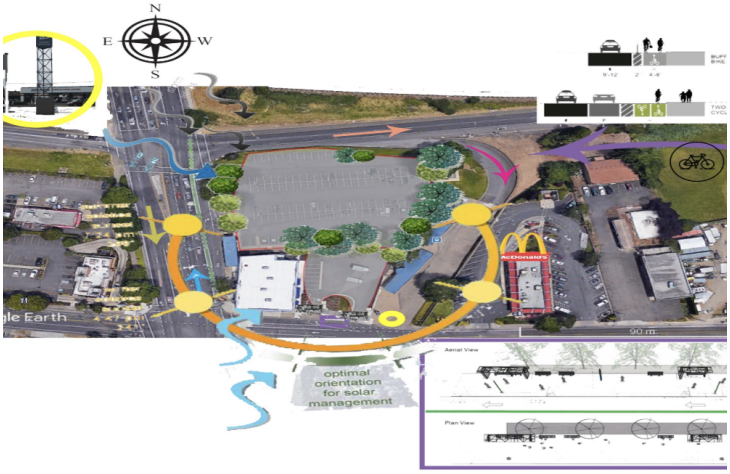
FIGURE 2. MESO VIEW MAP OF OLD STATION – EUGENE, OREGON, 2019

Source: Google Earth and Aqsa Khan (2019)

If we zoom in further to the parcel of land that is owned by LTD, the former park-and-ride station, we see its role in neighborhood context of the site. From this view, the neighborhood seems like the ideal place for an upcoming development with North Eugene High School 0.4 miles away, the Bi-Mart 0.2 miles away, and the highway only 300 feet away (Figure 2). We can see the development happening. The RiverRidge golf course is only 1.9 miles which is another neighborhood attraction. Yujin Gakuen Japanese Immersion School Elementary School near North Eugene High School is also 0.6 miles away. Lastly, the Willamette riverfront, a designated catalyst point of our site, is 0.6 miles away.

Micro View

IRE 3. MICRO VIEW MAP OF OLD STATION – EUGENE, OREGON, 2019



ce: Google Earth and Aqsa Khan (2019)

The total area for the census tract is 1.2 square miles and it has an estimated population of 4,566 people.The site is South facing which means we can incorporate maximum sunlight in our design (Figure 3). The Old Station's parcel of land has a vacant Aaron's furniture store. Window signage indicates that it has been closed since June 2019 and will either be sold or deconstructed. Near the old park-and-ride station is an old Mcdonald's with pedestrian as well as heavy vehicular traffic flow at the intersection. The current bus station's design acts as a buffer between the user and the bus. While there is some covered seating and active vegetation lining the parking lot, it lacks neighborhood context and vibrancy. With the implementation of the new EmX Alternative bus station and the park-and-ride station moving to the Santa Clara Neighborhood, we see the current bus stop being redeveloped into another useful amenity for the neighborhood.

SWOT Analysis

In analyzing the strengths, weaknesses, opportunities, and threats (SWOT) of the area, we were able to determine where improvements need to be made and where the neighborhood already has optimal infrastructure and opportunity for revitalization. The purpose of this analysis is to identify areas of improvement in the neighborhood in terms of social aspects, build environment, and the natural environment. This was completed early on in our proposal development process and helped to inform our recommendations for the Old Station site. The below chart outlines key elements of the SWOT of Old Station with more detail on the critical focus points following the chart.

ırce: Aqsa Khan (2019)

Strengths	Weaknesses	Opportunities	Threats
Surrounded by neighborhood of single-family and apartment homes. K-12 schools in proximity to the bus stop Established bus stop with parking lot, large space to work with Buildable land on the four corners Public land providing amenities for residents	Outdated urban design, unattractive infrastructure High traffic area and congestion at peak hours Issue of safety at this intersection Lack of neighborhood vibrancy Water treatment plant nearby	Make school commutes safer and more accessible for students Make bike lanes and pedestrian crossing more prominent and safer Connection to the river bike path Develop affordable housing units on underutilized strip mall land, starting with the Old Station	Proximity to Beltline highway increases noise, safety, and traffic congestion Fast food chains in the surrounding area, contribute to congestion, neighborhood culture, etc.

Bicycle and Pedestrian Access

Goal 4 of the River Road/Santa Clara Neighborhood Plan[6] (hereafter referred to as the Neighborhood Plan) seeks to achieve a safe, efficient, and accessible multi-modal transportation system for the area. Considering this goal, we focus on enhancing the transportation network for one aspect of our site plan. Pedestrian and bicycle safety are a significant concern for our site due to its proximity to the freeway. The high traffic of this

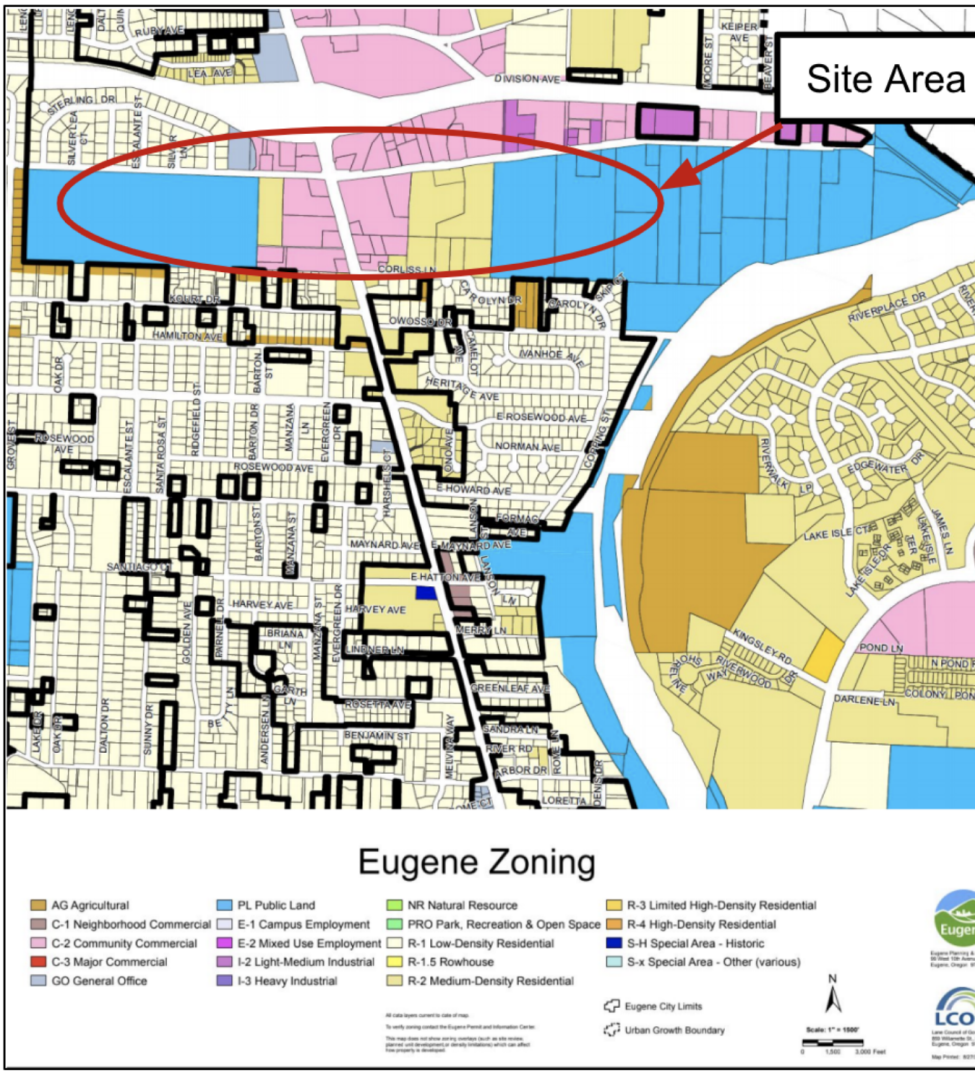
area results in congestion at peak travel hours and issues of safety at the intersection of River Road and River Avenue (the highest automobile accident rate in Lane County). Plenty of development opportunities exist for this topic, including enhancing pedestrian and bicycle access to the river, improving pedestrian safety near the Beltline area, and increasing walkability throughout the neighborhood. Ways to achieve these goals include adding or enhancing crosswalks near significant traffic areas and creating dedicated cycling lanes where needed.

We've specifically identified the following aspects as existing constraints and opportunities relating to this topic for our site. To enhance safe transportation near the Beltline, we support the Neighborhood Plan's identified action to build a bicycle/pedestrian bridge across the Beltline (near the North Eugene High School location).[6] This could take the form of a tunnel beneath the freeway near Ruby Avenue and Sterling Drive. Additional steps are the addition of pedestrian signals at school crossings to ensure student safety. At the dangerous intersection of River Road and River Avenue we advocate for the installation of a raised crosswalk (to slow down drivers and increase awareness of pedestrians in the area). Pedestrian safety can be further enhanced by the installation of sidewalks near business, recreation, and school areas where needed. For bicycle safety, we propose creating dedicated bike lanes along major collector roads and main routes to schools. To enhance access to the river, we see an opportunity to create a bike path that provides access to the Willamette River and connects the neighborhood to the greater Ruth Bascom Riverbank Path System. Regarding the existing physical structure at the Old Station, we see this as an opportunity to redevelop the station into a pedestrian-focused area, with a bicycle share and dockless scooter storage for enhanced mobility. We would like to incorporate a new bike path on the north facing side of the site. This area could be further enhanced with the installation of a park/playground area to enhance the overall neighborhood character and vibrancy.

Protected Bike Lanes in Portland, Oregon

Source: Bike Portland (2018)

FIGURE 4. EUGENE ZONING



Source: Eugene, Lane County, Lane Council of Governments, and Springfield (2015)

Existing zoning of area

Old Station is primarily zoned as C-2 Community Commercial (Figure 4). This classification is intended to allow for community commercial uses in the district.[7] The existing zoning provides all the opportunity and flexibility needed to create more mixed use in this neighborhood. Therefore, we are not proposing any land use or zoning changes. District areas zoned as C-2 range in size from 5 to 40 acres. Community commercial uses encompass a wide variety, including retail, entertainment, office, and service needs to meet the needs of a large residential population. Housing use is allowed in C-2 zones, with a high degree of flexibility. Residential housing can be built on individual lots, shared lots, and in clusters with shared parking.[7]

Additionally, a significant proportion of our site is also designated as Public Land. Current uses for these areas are schools, wastewater services, and riverfront parks. These lands further serve as an asset to our site, providing important amenities such as access to education, water treatment facilities, and recreational open spaces.

Environmental Context

According to the Envision Eugene[8] and River Road Corridor Study[9] the site is expected to experience:

- Reduced snowpack

- Increased flooding
- Drier summers
- The potential of more people coming in due to global warming effects in the other regions

Challenges

In addition to population growth, the prices for natural resources are expected to rise dramatically. This not only affects the rise in fuel and electricity prices but as Oregon thrives on the timber industry and natural organic food resources so the change will increase the amount of economic prosperity in the region.[10]

Flooding in Alton Baker Park – Eugene, Oregon

Source: Annette Truck Anderson (2019)

Solutions

In terms of our design, we are preparing for the incoming potential migrations by proposing low cost, multi-family housing in the form of mixed-use buildings, and spaces for pocket parks and vertical gardens. While designing the buildings, we have to consider the threats and risks of flooding so strategizing according to the new design ideas and materials especially for the piling and foundations of the densities being built. The Riverfront area and the river bike pathways have to be kept at a certain elevation in case of flooding. Also with the summers being drier, having water fountains near bike pathways and pedestrian crossings will be beneficial. Lastly, planting more trees and native vegetation in the neighborhood, especially along the built densities, pedestrian crossings, and roads will enhance neighborhood vibrancy while contributing to the environmental elements of the area.

Ruth Bascom Riverbank Trail

Source: Vern Rogers (2010)

Socioeconomic Profile

Demographic trends

The demographic and overall socioeconomic profile of Old Station influences the proposed improvements to the area, as we hope to cater to the needs of the current and future residents of the neighborhood. Old Station has experienced population growth over the last ten years and is expected to continue this pattern. Over the next 5 years, Social Explorer has projected population in our census tract to increase by about 8% or 383 people.[12] The neighborhood experienced 9% growth from 2010 to 2017 according to ACS estimate data (Table 1).

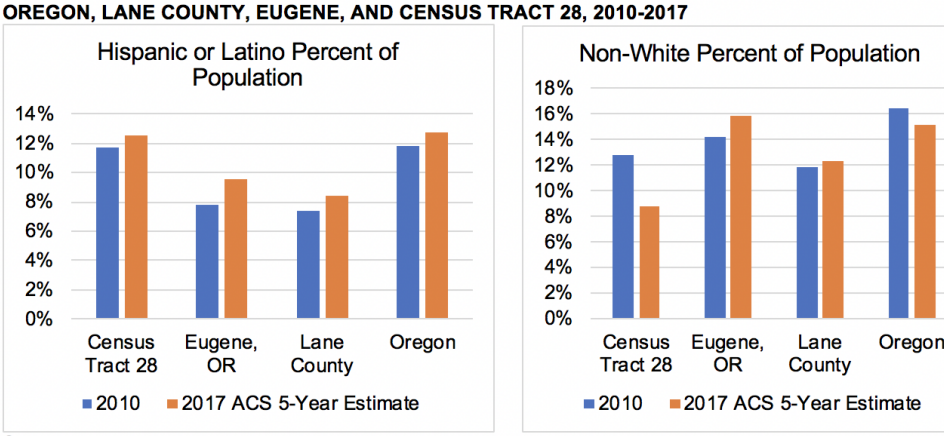
This is a higher rate than its larger encompassing regions, Eugene, Lane County, and Oregon, which

TABLE 1. POPULATION CHANGE BY GEOGRAPHY

Geographic Area	2010	2017	Change	Percent char
Oregon	3,831,074	4,025,127	194,053	5.1%
Lane County	351,715	363,471	11,756	3.3%
Eugene	156,185	163,135	6,950	4.4%
River Road CT 28	4,189	4,566	377	9.0%

Sources:
Census 2010, Social Explorer Table T1
ACS 2013-2017 (5-Year Estimates), Social Explorer Table A00001

FIGURE 5. HISPANIC OR LATINO AND NON-WHITE PERCENT OF POPULATION DEMOGRAPHICS – OREGON, LANE COUNTY, EUGENE, AND CENSUS TRACT 28, 2010-2017



Sources:
Census 2010, Social Explorer Tables B03003 and T54

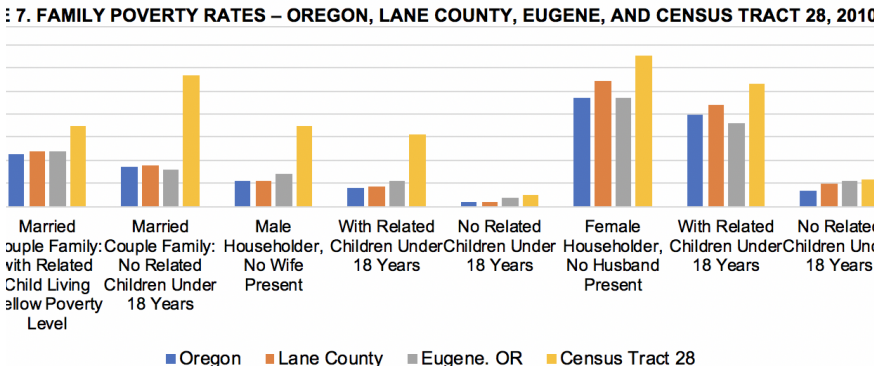
shows that it is attracting more people to the area for various reasons. This increase has a significant impact on housing, the local school system, and other community services. Many factors may contribute to this increase, including job opportunities, housing affordability, and educational opportunities. This area offers affordable housing, a K-12 school district with an International Baccalaureate high school program, and grocery outlets. It is an attractive area for families, and low-income residents because of the affordable housing options and family-centric services available.

Hispanic/Latino and Non-White Population

Hispanic/Latino and non-white residents in Oregon show interesting results when compared with each other. Overall, the Hispanic/Latino population has increased since 2010, but the non-white population has decreased everywhere but Eugene (Figure 5). The non-white population in the Old Station neighborhood has decreased by roughly 4% since 2010. With the increase in population in this area, the decrease in non-white residents can be a result of the increase in white residents moving to the area.

Population is younger in our neighborhood.

Figure 6[1] shows that 60.1% of the population in Eugene is between 18 and 54 years of age. The city of Eugene has a higher percentage of 18- to 24-year-old residents than the other geographies which is likely due to the University of Oregon population. Our neighborhood has a very low percent of the population in this age range which shows that university-age students do not live here, and rather, adults above the age of 25 who are likely employed full-time and need to commute to work. Of note as well, is the higher percent of population under the age of 5 (8.5%) in our neighborhood compared with the larger geographic regions. Having young children in the area shows a need for services such as daycares and community centers and opportunity to further develop these family-oriented amenities and bring more traffic to the K-12 schools on Silver Lane.



Income/Poverty level

This data in Figure 7 explaining the percentage of families below the poverty level shows that our census tract has higher rates than the rest of the Oregon geographies we examined. It can be inferred from this information that these families may rely on public transportation more than those above the poverty level and therefore, a need for improved transportation, along with other social/public services is prevalent. Majority of households below the poverty line have a female head of house, with no husband present. According to Figure 7, about 5% have children under the age of 18. This shows the importance of safe public transit systems and safe public access in the neighborhood, for residents, and especially for children in this area. Making the Old Station, specifically the bus intersection safe for families and children to cross and to interact with on a regular basis will make the neighborhood more community focused.

Educational attainment

In adults over the age of 25, 35% have completed some college and only 18.4% have graduated with a bachelor's degree. Educational attainment and income level generally relate to each other, so it is not surprising to see the majority of the population has graduated from high school or has only finished some college with the lower overall income levels in the neighborhood. Majority of the Old Station population is over the age of 25 with high school diplomas or some college completed, according to Figure 8.[2] This helps to explain why such a large percent of the population makes less than $45,000 annually and why a portion of households live below the poverty line. It is more difficult to make a livable wage with a high school diploma

[1] See Figure 6 in the Appendix
[2] See Figure 8 in the Appendix

alone. With this information, it can be inferred that there is a need for affordable housing and access to public transportation at our site.

Source: KVAL (2019)

Demographic Implications

Upon analyzing the community profile above, we found that it provides compelling data for the Old Station study area. The results highlight an area that has the potential for growth: a large percentage of the population is young and educated. However, there are some significant economic implications in this area that may impact growth and need to be taken into consideration as proposals for development are made. For our study area, it was crucial to examine the racial diversity of the community our site is in, as well as the economic characteristics of this community. We focused on the social and economic characteristics of this community profile as we began to propose ideas for development, long-term visions and site-analysis. Our team considered the questions of access and equity in development proposals and considered what proposals will function best for this demographic. In an attempt to understand the character of the community, it was important to factor in the age distribution of our study area in combination with race/ethnicity and potential economic barriers. Each of these demographics contributes to how the character of the River Road community is fostered, and we kept these numbers and percentages in mind as a reflection of the people who live in and occupy these neighborhoods around Old Station.

River Road Community Members


Source: River Road Santa Clara Neighborhood Plan (2019)

Economic trends

As of 2018, Lane County has an estimated population of **375,120**, making it the fourth largest county in the state of Oregon.[13] The major employers in the area include PeaceHealth Medical Group, University of Oregon, and the Eugene School District, among others.[14] As part of this study, we analyzed employment trends in Lane County, Oregon and the United States. From this, we gathered the below trends.

	Employment (#)	Employment (%)	Employment (#)	Employment (%)	#	%
Total employment (number of jobs)	185,118	100%	204,742	100%	19,624	10.

UNITED STATES

Sector	2001		2016		Change	
	Employment (#)	Employment (%)	Employment (#)	Employment (%)	#	
Total employment (number of jobs)	165,519,200	100%	193,668,400	100%	28,149,200	1

Source: NAICS

Overall Employment Growth

As we moved forward in proposing alternative plans and development strategies for Lane Transit District's River Road Corridor project, it was important that we look at the economic profile of the region in order to have a better understanding of the economic factors that impact our planning area. Table 2 shows the total employment numbers and percentages and the change in employment between 2001 and 2016 in Lane County and the United States. It also reveals that between 2001 and 2016 **28,149,200 jobs** were created in the United States, meaning the National Average Growth Rate for this timeframe was **17%**. Comparatively, Lane County saw an increase of **19,624 jobs**, a Local Growth Rate of **11%.** This data reveals that employment in Lane County is growing at a lower rate than national employment.

Largest Employment Sectors

The following data looks at how employment growth breaks down by industry. Table 3[3] shows a selection of four different employment sectors in Lane County. This selection is exemplary of areas where there are opportunities for growth as well as areas that are declining. Additionally, these four industries: manufacturing, retail trade, educational services and healthcare and social assistance, have the potential to inform economic development as they exhibit areas where a qualitative shift in resources may prove beneficial. More context for how to interpret these numbers will follow in Tables 4-6.

In Lane County, the manufacturing industry lost **5,772 jobs** between 2001 and 2016. Nationally, manufacturing also experienced decline with **3,817,900 jobs** lost over the same time period. In Lane County specifically, the retail trade industry was a huge employer and projected immense growth rates only to tank in January of 2008.[15] The **-27.4%** change in the manufacturing industry means many people were left unemployed. The other four industries experienced varying degrees of growth, with retail trade on the lower end of the overall percentage change at **10.2%** and educational services on the high end with **80.9%** change. Though these percentages can seem impressive, it is also important to look at the aggregate numbers; not all of the industries that experience high percentage change actually create that many more jobs. Take health care and social assistance for example, which grew by **8,116 jobs** between 2001 to 2016 an overall percent change of **39.9% in Lane County.**[4]

[3] See Table 3 in the Appendix
[4] See Table 3 in the Appendix

Shift-share Analysis

Table 4 shows how County rates compare to the National numbers. A shift-share analysis looks at the National Growth Rate and compares that to industry specific growth locally (Industrial Mix Component). The third element of a shift-share analysis is the Competitive Share Analysis, which provides some information on industry competitiveness.

TABLE 4. SHIFT SHARE ANALYSIS – UNITED STATES AND LANE COUNTY, 2001-2(

Industry	National Growth Rate Component	Industrial Mix Component	Competitive Sha Component
Manufacturing	3,577.0	-8320.7	-1026.7
Retail Trade	3,767.2	-2392.9	893.7
Educational Services	396.8	925.0	566.3
Health Care and Social Assistance	3460.0	5467.8	-811.8

Accordingly, manufacturing lost a higher percentage of jobs in Lane County than the National growth rate and is therefore not a very competitive industry. Whereas, educational services are growing much faster than the national growth rate and are relatively competitive. The shift-share analysis provides a good overall summary of which industries are gaining and losing employment. However, further analysis is necessary to draw more precise conclusions. Tables 5 and 6 look at location quotient and population-employment ratios to help determine where Lane County has economic potential.

Employment Factors by Location

Location quotient is a measure that shows the relative concentration of employment in a given area. Higher concentrations of employment are reflected by a location quotient (LQ) greater than 1, lower concentrations of employment have an LQ less than 1. Table 6 breaks down LQ by industry.

An important factor when looking at location quotient is to not interpret these numbers arbitrarily. Sometimes, a high (greater than 1) LQ can signify an important industry that may require attention or an important growth industry, whereas, a low (less than 1) LQ could be interpreted as an industry of little promise or an industry with potential for emergence. It is important to consider all of the data previously presented in conjunction with one another for the most efficacious interpretations of where economic growth is in Lane County. For example, manufacturing has a high LQ, however, as we see in Table 5[5] there has been a decline in overall employment growth.

Employment Factors by Population

The last factor to take into account is the Population/Employment ratio (P/E ratio). These ratios reflect the portion of the population that is participating in the labor force. In other words, the P/E ratio measures the number of people per job in a particular industry in a given location. The P/E ratio can also help in making inter-community comparisons of different sectors. For the purposes of this analysis, the P/E ratio aids in understanding the jobs/people balance for four industries across three geographies.

Combining the Population/Employment Ratio into this analysis adds yet another layer of trends to interpret. Although, as identified from Table 6, educational services have the potential for expansion, there is already an imbalance of jobs/people.[6] That said, the ratio has declined since 2001 which shows promise. Looking across geographic regions, the ratio is still higher in Lane County than in the State of Oregon or in the nation, which is something to consider if you are thinking of moving to Eugene to work in education. Healthcare and social

[5] See Table 5 in the Appendix
[6] See Table 6 in the Appendix

assistance is another economic sector that presents a favorable P/E ratio. The ratio has declined over time reflecting more demand and availability for this kind of labor, and in Lane County, this sector had the most growth in jobs between 2001-2016.

Emx Bus Service in West Eugene

Economic Implications

Though this community economic analysis does not look at employment in the River Road area it does lend some insight into the overall community context. The data indicates that employment in Lane County is growing overall; however, the poverty rate in our study area is still **19.3%.**[7] This implies that current economic conditions in the community are not the ones that are lifting people out of poverty. It is important to ask what policies make sense at the neighborhood level to address income inequality and lack of employment.

Proposing transit development along the River Road Corridor is an option that should be pursued. Connecting the River Road community to other parts of the surrounding areas has the potential to impact the economic characteristics of this site in a positive way; more transportation leads to more access, more access leads to more influx of opportunity and industry, more influx leads to more jobs. Now, with the existing transit infrastructure, it would take someone in the River Road about an hour to get to the nearest hospital using public transportation. Not only is this disconcerting in terms of medical response time, but also, if you are someone who works in the emerging health care and social assistance industry, and do not have access to personal transportation, you would have a commute of at least 2 hours every day. Not having reliable and accessible transportation is a barrier to economic development. Considering the River Road area for corridor development opens up the possibilities for more industry to move into this area. In conclusion, as we collaborated on proposed alternatives and plans for development it was important to keep these economic characteristics in mind and think of what options can be pursued in the short and long term.

[7] See Figure 9 in the Appendix

Source: Lane Transit District (2019)

Transit Investment and Equity

Source: Metro Magazine (2019)

Housing Trends

As of 2018, Eugene has an estimated population of 171,245 residents, including 22,760 students enrolled at the University of Oregon.[16,17] Population forecasts indicate that the city is growing, with a projected annual population growth of 1% resulting in 34,000 new residents between 2012-2032. Consequently, the city has reported an estimated housing need of 15,105 new homes by 2032.[18]

LE 7. HOUSING VALUE - OREGON, LANE COUN
ENE, AND CENSUS TRACT 28, 2010-2017

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For the purposes of this report, housing trends and characteristics are assessed for Oregon, Lane County, Eugene, and Old Station. Insights gained from the following analysis are intended to inform evaluation criteria and aid in decision making processes for future planning purposes for the Old Station study area.

Old Station's home ownership rates are decreasing.
In comparing housing tenure trends for Oregon, Lane County, Eugene, and Old Station, all areas show a decrease in homeownership.[8] Upon closer inspection, it is apparent that Old Station has an overall higher percentage of owner-occupied households than the general trend indicated for the city. However, the percentage of owner-occupied households has decreased slightly between 2010 to 2017 for all four geographies, and Old Station shows the greatest change with 3.4% decrease of owner-occupied status.

Old Station has high housing costs
Housing value-to-income ratio reflects the number of years it would take to purchase a home at a given price relative to the buyer's median household income. A general guideline reflecting housing affordability purchase

[8] see Figure 10 in Appendix

for home-buyers is a ratio of approximately 2.6 years of income respective to the housing price.[19] Ratios for 2017 are highest for Eugene, at 5.9 (with Oregon close behind at 5.7; Table 7).

This indicates that, given the median household value and median household income for the area, it would take 5.9 years of household income to purchase a home. With a rent-to-income ratio of 4.5, Old Station ranks lowest for the four geographies, but still reflects unaffordable housing costs, requiring 4.5 years of income to purchase the average cost of a home in the area.

Old Station has a strong demand for rental units

A 2019 economic analysis conducted by ECONorthwest reveals that rental units encompass 37% of the area's single-family dwellings in the River Road/Santa Clara area.[18] Old Station mirrors area trends with 39.5% of single-family dwellings existing as rental units.[20] General trends indicate that the cost to buy a house has not kept pace with income levels for all geographies in Oregon (Table 8). Old Station shows the greatest change between 2010 to 2017, with a 6.3% increase in rent paid relative to income for households (Table 8). State trends for Oregon are similar (6.1% increase), while Lane County and Eugene have fared better at 4.4% and 3.9%, respectively. This indicates that while median income and median rent have both increased for all regions, Oregon and Old Station lag behind Lane County and Eugene when it comes to median income keeping pace with median rent increases.[9] Consequently, it has become less affordable to own a home and more appealing to rent in these areas.

TABLE 8. RENT-TO-INCOME RATIO - OREGON, LANE COUNTY, EUGENE, AND CENSUS TRACT 28, 2010-2017

Geography	2010	2017
Oregon	17%	23%
Lane County	19%	24%
Eugene	20%	24%
Census Tract 28	19%	25%

Sources:
ACS 2006-2010 (5-Year Estimates), Tables S1901 and B25063
ACS 2013-2017 (5-Year Estimates), Tables S1901 and B25063

Nearly 40% of Old Station residents are cost burdened

Cost-burdened households are defined as residents paying 30% or more of their income on housing costs.[21] In looking at trends across the four geographies, it is clear that Old Station has lower rates of cost burden than Eugene.[10] For 2017, approximately 38.7% of Old Station residents struggled to afford their housing costs. While Old Station has lower rates of cost burden than the other regions overall, it demonstrates the greatest growth in cost burdened households at 3.7% growth between 2010-2017.[11]

[9] see Table 9 in the Appendix
[10] see Figure 10 in Appendix
[11] see Figure 11 in Appendix

Demand for New Housing & Multifamily Units

Analyzing these trends it is clear that more affordable housing is needed in the River Road neighborhood and Old Station area. With little buildable land left in the Old Station area this demand will increasingly be met with multi-family units of apartments, row houses and townhomes. Additionally the passage of H.B. 2001 should encourage developments of new duplexes, triplexes, and fourplexes in the area as well as accessory dwelling units.[22] It is clear that the area is essentially built out in terms of subdivisions and therefore the future of housing for River Road will be focused on infill development and multifamily units. This development is sorely needed as only 10% of the housing stock in the River Road neighborhood is made up of multifamily units, compared to 36% for the City of Eugene.[23]

These are the exact types of structures we are proposing for our site and they will help fill a pressing community need for a wider variety of affordable housing types. Our first proposed structure at the former Old Station on the Northeast corner of River Road and River Avenue fits the bill perfectly. Taking advantage of the existing C-2 Community Commercial zoning, it is a 6 storey, mixed-use building with ground floor retail and social services. The remaining five floors will feature mixed income housing with 20% inclusionary zoning for affordable housing. This will provide 16 new affordable housing units for the neighborhood. We intend to replicate this formula for mixed-use structures on the remaining three corners creating a minimum of 50 new affordable housing units. This will help meet the increasing demand for rental units in the River Road neighborhood driven by the rising cost of home ownership in the area and Eugene at large.

Eugene, Oregon

Source: Lauram12345 (2006)

Housing Implications

The housing trends above surrounding affordability, ability and preference to rent or own, and housing availability impact the current and future residents of Old Station. With almost 40% of households in Old Station being cost-burdened in 2017, there is a clear need for additional affordable housing in the neighborhood. As part of our site analysis above, we found that there is already some affordable multi-family

housing in the area, but not enough to support all residents in a way that would reduce cost-burden for all residents. The neighborhood in Old Station is comprised predominantly of lower-income households with a high percent of cost burdened households. This indicates that affordable housing is needed in this community. The percent of people renting is increasing in this area, which may mean it is too expensive to purchase housing in the area. There is a lack of supply of purchasable housing, or people are only expecting to live in the neighborhood temporarily; thus renting instead of owning a home. The rent-to-income ratio in this area is also higher than statewide data, at 25.1% in 2017 according to Table 8. This shows that on average, households are paying 25.1% of income on rental expenses. When compared with Eugene, Old Station has a high rent-to-income ratio for its residents who have lower income overall. These are important statistics to understand as we recommend land-use and development options for the area. Old Station's strong need for rental properties is influenced by the demographics of the area and the affordability of purchasable homes. The need for multi-family housing in the area can be fulfilled by developing on the C-2 zoned land on the four corners of River Road and River Avenue, with the expectation that over the long-term, this will expand further along the corridor and in the neighborhood. With clear need for multi-family, affordable housing, and little supply currently available in the neighborhood, it will be important to provide this for future residents as the population continues to increase at a higher rate than the city as a whole. In addition, rental units are in demand due to the high cost to purchase and lifestyle change of the overall population, so providing this multi-family housing in the form of rental properties will cater to the needs of the local community.

v Income Apartments in Eugene, Oregon

rce: Affordable Housing Online (2019)

Team Process & Methods

Our team process began with establishing roles and expectations as we began to understand the entirety of the project and each individual member's strengths in the research, development, and execution process. Once established, we created an outline of expectations. The key elements, other than the vast research on city plans, community socioeconomic information, and feedback from our instructors, was the site visit and the design charette. The site visit allowed us to visualize the neighborhood and understand what we had to work with on a deeper contextual level than just looking at maps and reading about the area. The design charette was one of the first times we were able to put all of our ideas on paper and begin to see how it would all take shape. Through this exercise, we learned that we had many strong ideas, but were concentrating them in one small area, when in reality, we needed to expand our scope and include our recommendation along River Road and into the neighborhoods. We realized that the focus of our project is not on a single parcel of land, but rather a catalyst site intended to spur a new functionality of the existing area (e.g., between the riverfront neighborhood and the North Eugene Highschool).

As a result, we adapted our vision so that it is both modest and monumental – a plan aimed to provide the user with not only public and private spaces but also with special "places" that set the stage for a sociable scenario of all socioeconomic groups. Our highest priority is to enhance pedestrian safety, provide low cost housing, increase neighborhood vibrancy, and to attract more families and businesses into the neighborhood. Ideally, our proposals for the redesign of Old Station can maximize the opportunities of the area to meet the needs of new and current residents and enhance the standard of living. Consequently, we anticipate that the implementation of our vision will take about twenty years.

Source: Kaarin Knudson (2019)


Source: Kaarin Knudson (2019)

Overview of Concept Plan

Vision

We envision the Four Corners of River Road as a vibrant, mixed-use transit oriented development that is safe, walkable and sustainable. This vision is formed by the question, “Where do we want to go together?” We recognize that the River Road community is at a critical turning point in its history. The massive investment and changes coming with LTD’s EmX corridor expansion will forever change the neighborhood and it offers the opportunity to introduce further changes for the community's future. To that end we propose new transit oriented development (TOD) along the corridor combining mixed-use development in public-private partnerships to create new businesses, affordable housing and community gathering spaces built to the highest environmental standards. We advocate for a complete streets approach with improved bicycle and pedestrian infrastructure at these new developments in order to transform the neighborhood from an auto-dependent suburb to a thriving community that is vibrant, safe, walkable and sustainable.

Guiding Principles

Our vision seeks to create a 20-minute neighborhood tying the people of Old Station to their homes, resulting in a walkable, forward-looking, inclusive community. Our proposal seeks to achieve this by creating a pedestrian-friendly neighborhood with dense residential development along the River Road corridor. In order to accomplish our vision for Old Station, we are guided by the principles of improving:

- Placemaking: neighborhood character & vibrancy
- Mixed-use: multi-family, affordable housing
- Accessibility: pedestrian and cyclist safety
- Connectivity: people, places, ideas

Strategy

The Four Corners of River Road has the ability to transform the overall vibrancy of the neighborhood over the next 20 years by:

More specifically, by following the five stages of TOD, we can incorporate all the elements in our action plan for the community (Figure 12).

1. Assess: How ready is Old Station for the TOD and is there a need for it?
2. Enable: Making policies that can be helpful in implementing the design strategies
3. Plan and Design: How cities are being designed and how they will impact the future of transit
4. Implement: Making the change actually happen
5. Economic Influence: After the implementation we have to observe how the new project has impacted the overall economic condition of the city.

- Improving accessibility and connectivity for local residents to nearby transit stations, local businesses, community spaces and schools
- Providing safe transit lanes for all modes of transportation
- Implementing the EmX enhanced stop near retail business and services to instill a sense of place and culture in the neighborhood
- Creating placemaking elements to the neighborhood while maintaining the neighborhood's culture in terms of urban planning and design
- Supply housing for the "missing middle" to ensure Envision Eugene and Neighborhood Plan goals are met over the next 20 years

Design Concepts

Accessibility and Connectivity

Neighborhood planning collaboration processes have highlighted the community's concerns around safety and multi-modal improvements.[25] Current transportation infrastructure along the River Road corridor includes a four-lane road with a center turn lane. Bike lanes and sidewalks exist on both sides and transit service runs up and down the road. According to LTD staff, there are an estimated 2,500 riders per day using the LTD transit services.[26] As LTD seeks to expand services along the River Road corridor, the implementation of a Bus Rapid Transit system (locally referred to as the EmX) will result in increased frequency of bus services, with service occurring every 15 minutes along the corridor.[26] However, there are key design considerations to consider to help transit succeed and improve the safety and accessibility of the area.

The Arlington TOD case study made substantial accessibility improvements along their corridor, and thereby offer some useful design concepts for Old Station to consider adopting. Arlington recognized early on the need to implement multimodal transportation planning to offer a variety of travel choices to community members and make car travel unnecessary. That said, pedestrian environment in the TOD project was initially neglected.[27]

County planners and residents began showing an increased interest in pedestrian and cyclist accessibility in the early 2000s. Since then, the creation of guidelines for pedestrian and streetscape design standards has helped the county make significant strides in accessibility. The mitigation of pedestrian hazards has been addressed through the implementation of wider sidewalks, curb ramps, and improved street lighting. Cyclists benefit from greater connectivity from the transit station corridor to the greater bike trail system in the surrounding area. This provides increased safety for cyclists and enhanced recreational opportunities. Bridges have also been adapted to better serve pedestrians and cyclists, and residential areas have received street resurfacing improvements and bike lane additions.[27] Bicyclists are also able to find adequate parking along the

corridor as site plan reviews for TOD projects stipulate the provision of secure indoor bicycle parking as a requirement.

To address traffic congestion, Arlington implemented a transportation demand management (TDM) initiative in 1989. TDM reflects strategies utilized to reduce travel demand in an area.[28] Arlington's TDM is geared towards addressing workplace commuter trips and seeks to influence travel behavior through lessening single-occupancy trips during peak-hour traffic. and involves a variety of actors, including employers, residents, transit users, and developers among other people.[27] The TDM implementation has been continuously refined over the past fifty years and led to the creation of the Arlington Transportation Partners Program, which offers employer program assistance. A 2000 survey on Arlington's TDM outcomes showed an overall 10% reduction in single-occupancy trips.[27] Car ownership along the metro corridor is also significantly less than the national average. A 2012 car ownership survey showed that 16.7% of corridor residents have zero cars compared to 9% nationally.[26]

A reduced need for parking emerged a byproduct of the county's focus on minimizing automobile use, undertaking community mixed-use development near the five stations, and increasing pedestrian and cyclist accessibility.[28] Average metro ridership has grown substantially along with corridor, from 13,637 daily riders in 1991 to 33,891 in 2010 nationally.[28] A 2012 commuting behavior survey showed that 42.8% used transit to commute to work, 9.5 percent walk or bike, and 3.1 percent work from home.[29] Further trends show that for those who use the metro transit in the corridor, 76.9% prefer to walk, 6.3% take another bus, and only 10.9% use auto.[30] As a result, the area has generated less traffic and the county has been able to reduce parking requirements for development.[27, 32]

Accessibility and Connectivity Lessons – Design Strategies for Old Station

Old Station should also take note of Arlington's significant progress towards enhanced accessibility. Arlington's case study demonstrates that prioritizing a pedestrian and cyclist-friendly environment delivers results. Improvements such as widened sidewalks, improved street lighting, and greater bike trail connectivity encouraged residents to utilize alternate modes of transit. Average daily metro ridership showed a net gain of 20,254 riders over a 19-year period. This helped gradually reduce parking in a dense urban environment and led to relatively little increases in traffic.

Sidewalk Zones

Source: National Association of City Transportation Officials (2019)

Source: National Association of City Transportation Officials (2019)

The following strategies can help LTD achieve its goals of improving transit safety and accessibility for the area's residents:

- Create guidelines for pedestrian and streetscape design standards
- Implement wider sidewalks, curb ramps, and improve street lighting
- Connect the transit station corridor to the greater bike trail system in the surrounding area
- Implement protected bicycle lanes along River Road
- Provide secure indoor bicycle parking as a requirement for new development proposals
- Adapt bridges to better serve pedestrians and cyclists
- Resurface streets and add bike lanes in residential areas
- Implement a transportation demand management initiative

Mixed-use buildings/multi-family housing

Our proposal includes redevelopment of current underutilized commercial space on the corners of this intersection. In order to stay within current zoning code, we propose to build mixed-use buildings on the community commercial land on our site. This will allow us to develop taller buildings, with commercial and retail spaces on the first floor and residential, mixed-use rental units on the remaining floors. Community commercial zoning limits building size to a maximum of 120 feet with medium density buildings ranging from 85-95 feet.[33] This is an approximate maximum height of 8 stories for high-density buildings and 5-6 stories for medium-density buildings. These developments will happen in stages as explained below in the Implementation section the buildings lining River Road will transform into a mix of medium- and high-density to accommodate for population growth, housing needs, and the shift to a TOD. We understand that not all of the residential dwellings will be low-income, but we want to stress the importance of affordability for current and future residents as we navigate the housing issue in Eugene.

Each corner of River Road and River Avenue features outdated infrastructure, old shopping centers, and large parking lots that are never filled completely. With a growing population in the neighborhood, and a need for low-income housing based on the demographics of the area, affordable, multi-family housing is a viable option to be included in our vision for the neighborhood. The vision for this neighborhood on River Road can be similar to the Dedham, MA vision, as explained in the below case study, as goals and the current infrastructure are similar. A mixed-use building with retail shops on the first floor and housing on the top floors would be viable at this intersection. A preference towards utilizing local experts to aid in the planning process is present in this area as the neighborhood wants to keep its culture intact.

Crescent Village Apartments in Eugene, Oregon

Source: Crescent Village (2019)

Amazon Corner Apartments in Eugene, Oregon

Source: Dan Straub (2019)

Case Study: Dior Dedham

The neighborhood surrounding the intersection of River Road and River Avenue is overpowered by strip malls and fast food restaurants with large parking lots, contributing to the sprawl that is common in these suburban areas. Large parking lots support these shopping centers, but also end up creating empty space that could be utilized differently. Many neighborhoods in suburban areas across the U.S have similar strip centers and shopping centers that were once wanted by the community and now have outdated designs and diminishing use. The concept of retrofitting strip malls and shopping centers is becoming more popular and many cities have found that these updates contributed positively to the local community, providing multi-storey, mixed-use buildings in place of one storey big box stores, and updating the urban design of the area, among other benefits. A strong example of this retrofitting phenomenon is that of the strip mall in Dedham, MA. Around

2015, Boston's Regional Planning Agency (RPA) and the Metropolitan Area Planning Council (MAPC) worked on comprehensive plans for the area at the same time the owner of the Dedham strip center, Chris Priore, started considering the future of the land he owned. Their plans worked in tandem to provide a positive outcome for community members and for the city's vitality.[34]

Dedham, MA, a suburb of about 25,000 residents southwest of Boston, is the home of the Legacy Place shopping mall, opened in 2009, which is adjacent to the future Dior Dedham mixed-use building, a Whole Foods grocer, existing affordable apartments, and the area's commuter rail station. What is now the Dior Dedham center, a 0.8-acre parcel of land previously had retail shops on the main frontage, a larger building containing Priore's family-owned Dedham Cabinet Shop, and a parking lot to accommodate shoppers. This strip center is located along the Providence Highway, a busy 6-lane road that makes the area conducive for automobile transit but not pedestrian or cycle transit. Priore recognized the flaws with this suburban sprawl and sought to improve the strip center for the surrounding residents.[34]

The MAPC and the RPA noticed the connectivity flaws with the entire neighborhood and conducted two studies on the city to see how they could improve the area in terms of urban design, housing, and connectivity to the retail centers and rail station. While these studies were being conducted, the city of Dedham also contracted the Urban Land Institute (ULI) Technical Assistance Panel (TAP) to provide insight from a broad range of industry experts (architects, engineers, planners, etc.) on land use improvements. At the same time, Priore's cabinet shop was expanding and needed to relocate to a larger store, so he was open to completely redesigning the infrastructure on the land. He utilized the feedback and findings from TAP to ultimately make his decision on how to redevelop to optimize the available space while considering the impact on the local community.[34] Priore had ideas for the redevelopment that were confirmed by attending the TAP, solidifying his plans of building a mixed-use structure with retail shops on the first floor and multi-family housing on the top floors. Because of the housing need in the area, he aimed to provide some housing relief with his development.[34]

Priore worked with a local architect on the development and used a local attorney to aid as needed with the legal process. The city planners supported his vision for the area and provided support where needed to ensure pedestrian connectivity was improved, and open spaces were being utilized to benefit the community. The planning process was smooth for the most part as there was very little community opposition to the development. They were able to proceed with construction on a normal timeline, barring the issue of securing financing. Because Priore was not a developer by trade, he did not have an adequate down-payment for his construction loan and had to find a capital partner before taking out the loan and beginning construction. Priore set out to develop a multi-family housing structure in a mixed-use building with a contemporary design that matched the Legacy Place building design as opposed to using a more traditional New England design style common in the Boston area. Figure 13 shows the design of the new mixed-use Dior Dedham building. Everything they set out to do was accomplished and Priore achieved his goals of increasing multi-family housing while contributing to the MAPC's broader goals for the city of connectivity and improved urban design.[34]

Ellen Dunham-Jones, an expert on retrofitting suburbia believes that shopping malls and strip centers across the U.S. are heading towards revitalization and sustainable redevelopment as large retail stores are becoming less desirable for consumers.[34] According to the American Planning Association, nationally, large retailers and shopping centers are seeing a shift in how buyers interact with them. In some cases, storefronts are closing due in large part to the online retail presence and the overall shift in consumer buying patterns.[35] With empty storefronts in large shopping centers or outdated strip malls, cities need a way to revitalize the areas and

create resiliency in this transformative time.[35] Revitalizing these areas can add vibrancy and open spaces to areas that were once bland, spread out retail centers. Dunham-Jones describes the dynamic of underperforming asphalt, common in suburban areas and how it can be retrofitted into a more usable open space or development opportunity. Underperforming asphalt is a term used by developers to describe underutilized parking lots.[35] Underperforming asphalt was a factor Priore encountered and helped influence the decision to rethink its land use.[34] Recreating the open space on parking lots as well as redeveloping on retail shops provides an innovative way to make public spaces more accessible.

There are many aspects of the Dior Dedham project that relate to our River Road project. Neighborhood plans in our area can take key aspects from the Dedham case to revitalize the area and create a space the community needs and wants. As with Dior Dedham the elements outlined below can be improved for Old Station.

The Dior Dedham development project included positive implementation elements that would translate well to the Old Station revitalization:

Implementation support

- The use of local experts (planners, architects, attorneys, capital partners)
- Engagement and support from the local community
- Support from the land owner to transform the built environment on the strip mall

Development ideas

- Updating urban design of the built environment
- Adding multi-family housing in the form of mixed-use buildings

Mixed-use Building – Dior Dedham

Source: Dior Dedham (2019)

Low Cost Housing

Low cost mixed use housing is one in which we reduce the cost of construction without sacrificing the strength required for the performance of the building. When production is low cost, we are able to provide the housing at below market cost so residents in the Old Station neighbor can afford them and are less cost burdened by housing expenses. Sustainable mixed use should ensure a better quality of life for current and future generations. It should combine protection of the **environment, sensible use of natural resources, economic growth and social progress.**

People earning low to moderate incomes are increasing in numbers and unable to access housing that is affordable, hence demand for low cost mixed use housing far exceeds its supply. As discussed above in the housing trends and implications, there is evident demand for affordable housing based on income levels and number of families below the poverty line. There is a need for the adoption of strong durable environmentally friendly, ecologically appropriate, energy efficient and yet cost effective materials and appropriate technologies in construction. Sustainable technology when adopted with care and creativity, can lead to a unique architectural expression.

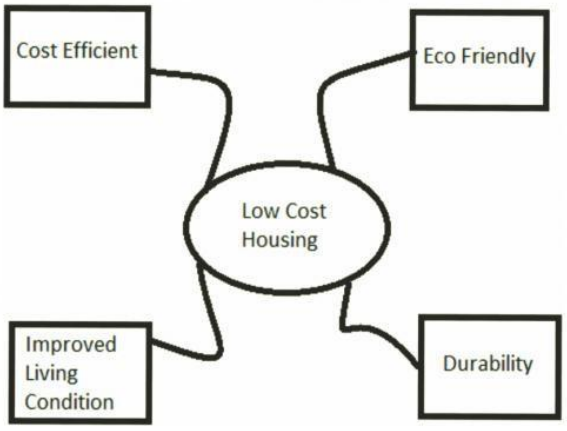
Why do we need low cost mixed use housing?

There are a number of factors that influence the demand for affordable housing.

Low cost mixed use housing is beneficial to a community in many ways, including:

- Stronger labor force:
  - A good supply of housing for all income groups helps a community retain jobs and retail stores, and helps business owners attract and retain good workers.
  - Employees are able to live near employment centers, so are more able to report to work on time and have time to improve their job skills or get an education.

- Economic benefits:
  - New construction and management of a property creates new employment and generates multiple ripple effects that strengthen the local economy.
- Stronger families:
  - Affordable housing creates a more stable environment for children; children do better in school. Families are able to save for a home purchase down payment.



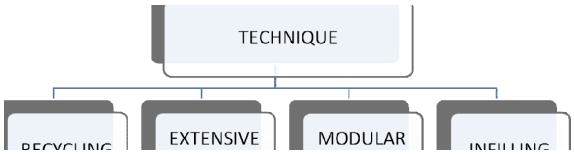
Approach for low cost housing

- There should be a logical approach for providing appropriate technology based on the availability of options, considering its technical and economic analysis.

- There should be optimal space in the design considering efficiency of space, minimum circulation space.
- Economy should be considered in the design of individual buildings, layouts, clusters etc.
- While preparing the specifications it should be kept in mind that, cost effective construction systems are adopted.
- Energy efficiency has gained considerable importance due to energy crisis especially in developing countries. Orientation, built–form, openings & materials play a vital role besides landscaping / outdoor environment.
- To develop an effective mechanism for providing appropriate technology-based shelter particularly to the vulnerable group and economically weaker section

Factors affecting construction cost estimation

- Building cost: the building cost can be divided into two
- building material cost: 65-70 %
- labor cost: 30-35 %
- Size: the smaller the project in terms of scope or the number of square feet, the more it will cost per square feet.
- Type: different types of projects have different levels of complexity and detail.
- Special construction: complexity can greatly increase the cost of project.
- Project accessibility
- Labor rates
- Material cost
- General economic pressure



Techniques and material help us reduce cost of the building
Recycling

- Recycled materials adapted for low cost housing include wood and rubber that are previously been used.
- Reprocessed into materials that are used in building walls and other parts of a house
- Recycled glass and metal are also used on occasions
- These recycled materials are often less expensive than using fully natural products.

Extensive Planning

- In extensive planning the more planning goes into the house, the less the actual construction will cost
- Contractors should plan out exact dimensions and should gather facts
- Contractors should look for best material at the cheapest prices so they can order exactly what they need
- This saves up money that would otherwise be wasted on unnecessary supplies and cleanup caused by littered materials.
- Most houses are built as quickly as possible without this detailed planning beforehand

Modular Planning

- Modular, or prefabricated design is a type of construction where pieces of the house or typically whole rooms or major parts, are built off site in large factories
- The process allows them to be built efficiently and exactly according to the building standards
- At the site the pieces are connected to the house

- Since material are assembled on site the owner saves money on construction time
- Many of these processes use newer technologies such as SIPs (structurally integrated panels), creating stronger, better insulated structures and shortened construction timelines.

Infilling

- Infilling is the practice of going back through residential areas and building in areas that had previously been left empty.
- Infilling makes better use of existing space
- It is less expensive for contractors overall.

Placemaking

Communal Place Making

We all desire a place we can call home. There are many elements that can make a place feel like home such as tradition, religion, art, culture, and landscape. These all play a vital role in creating a place and giving it a sense of identity. Well placed elements such as public art, fountains, courtyards and other community gathering spaces can imbue this sense of home and community.

Placemaking can be achieved by creating a sense of belonging which can be accomplished through community engagement and well structured policies. The places that we live in and the experience of our everyday life gives people this sense of "home." Giving an identity to a certain community or place creates more significance for residents and helps them to take ownership of their space. Creating spaces for people to gather is a good first step in placemaking, which can be complemented by community programs designed to create social interaction between people belonging to different age groups, socioeconomic backgrounds and racial groups.

Downtown Eugene

Source: City of Eugene (2019)

Objectives for Placemaking Elements

- Create a center that provides community programs and opportunities for empowerment and growth.
- Architecture that enhances the local neighborhood and its culture.

- Engage the community with cultural programs
- Increase interaction between the community center users in order to remove stigma and create a feeling of mutual acceptance and empowerment
- Keep connectivity a vital part of design
- Design a facility that user may identify as “home”
- Encourage new businesses to provide economic opportunity.

Mural by Hush – 20x21 EUG Mural Project

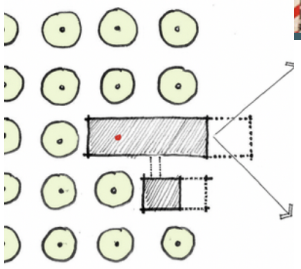
Source: City of Eugene (2018)

Efficient and Integrated Design

The following design considerations should also be kept in mind for the project:

Introverted Planning: Instead of opening up to the outside world, rather the design opens up inside the building/ project (Figure 14).

RE 14. INTROVERTED PLANNIN

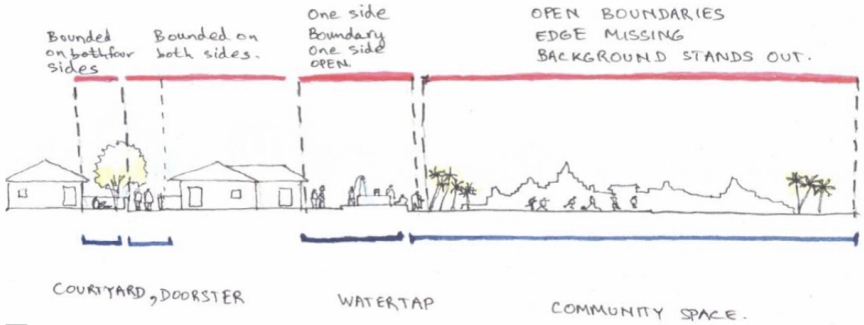


e: Aqsa Khan (2019)

Outdoor Spaces: They can be functional or nonfunctional depending on the design and the program but we can see that there are many advantages of the courtyard and how it is incorporated in the design (Figure 15). Tree planting, reduced parking spaces, public art and sculptures also offer a number of advantages, including:

- Rediscovering history and heritage

FIGURE 15. OUTDOOR SPACES



Source: Aqsa Khan (2019)

- An interactive experience
- Creating human connections
- Creating an oasis or a breathing space within the city
- A space for remembrance and reflection

Open Spaces and Recreation

We propose a variety of open spaces to be included in the development for the purpose of outdoor recreation. Outdoor recreation is a vital component of community life and a major industry here in the Pacific Northwest. We propose the following outdoor recreation spaces for the Four Corners of River Road:

- Public plaza with placemaking water feature.
- Large public mural designed by local artists featuring the history of River Road and the local high school mascot, the Highlanders.
- Several pocket parks incorporated into the design of residential structures on site for residential use.
- A public playground with multiple sections for age appropriate play and safety.
- A bicycle share station.
- A dockless e-scooter sharing station.
- Generous allocation of park benches.
- A community garden.
- 20 sets of tables and chairs to be dispersed in various locations on site.
- Raised planters to serve as landscaping and green screening.
- A small public amphitheater for community events and plays.
- Sections of parking lots dedicated for weekend markets and food truck use during special events.

Sustainability

As we enter a new decade in the 2020's the growing threat of climate change to our way of life is greater than ever before. By implementing proven sustainability solutions and focusing on the triple bottom line the Four Corners of River Road can be an environmentally friendly site that promotes a greener lifestyle for its residents and remains financially viable for decades to come. To that end we propose the following sustainability solutions for the development.

- Strict energy use guidelines for new buildings
- A complete streets approach with large urban tree canopy to promote walkability, shade buildings, absorb rainwater and emissions.
- Sustainable transportation options on site like bicycle share and e-scooter stations.
- Pursuing LEED certification for buildings on site larger than 30,000 sf.
- A new city ordinance requiring cool roofs or green roofs on structures larger than 20,000 square feet (i.e., similar to the City of Portland[36]).
- Public-private partnerships to offer incentives for onsite renewable energy such as solar photovoltaic panels.
- Extensive stormwater management through the use of rainwater catchment systems, rain gardens, and bioswales where appropriate.
- Landscaped pocket parks serving as an urban oasis for residents.
- Native vegetation for landscaping and a community garden where residents can grow their own food for consumption or sale

Mixed-use Food and Community Hub in Eugene (Green Building)

Source: Essex General Construction – Mahonia Building (2019)

Multi-family Housing in Eugene (Leed Gold Targeted)

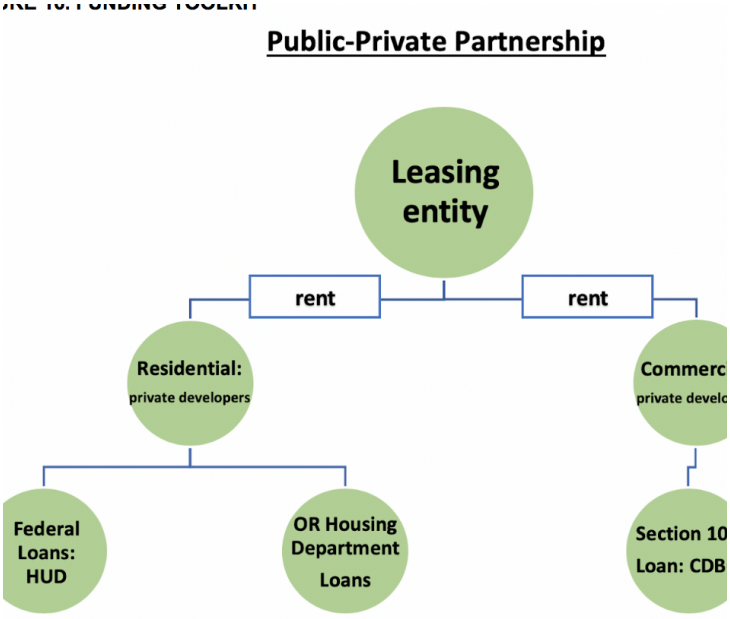
Source: Essex General Construction – 35 Club Road (2019)

Funding Toolkit

Public and Private Partnerships

One concern our team has had when thinking about our River Road site is financing. The Old Station is currently designated as a park and ride with three different bus stops. The station is just South of a major freeway, located on the busiest intersection on River Road, difficult to access by vehicle and shares the lot with a vacant building. Our vision for this site is for it to be redeveloped for mixed use affordable housing and begin to function as a community gathering space which will later catalyze the other three street corners to develop and evolve. We are committed to development that prioritizes affordability, walkability, pedestrian and bike safety, local businesses, neighborhood branding and community development. Our team acknowledges that

these are lofty and long-term visions and are also strategizing to propose recommendations that will appeal to the local transit authority.



ce: Hayley Shapiro (2019)

Looking at other case studies of similar redevelopment lends insight into innovative funding schemes. One Santa Fe, based in Los Angeles, offers an interesting case study in respects to public-private partnerships and innovative financing; an important reference for our site. To begin, the land where One Santa Fe was built is still owned by LA Metro and thus, benefits Metro in several ways. First, the terms of the lease are for 81 years, "with a base rent set at $525,150, plus a percentage of commercial rent, and a schedule of increases greater than the consumer price index."[37] These leasing terms ensure revenue that Metro can later invest in future projects. After the lease agreement expires, Metro retained the right to revert the site to its original use, so, for a site that was not previously being used and can change uses in the future, Metro made an advantageous choice. Additionally, Metro rents part of the commercial space at One Santa Fe at a prorated fee, and through their public-private partnership they are thinking of ways to open new rail stations that service the area. This approach to public-private partnership and leasing agreements is something our team should keep in mind when pitching development plans to Lane Transit District (LTD).

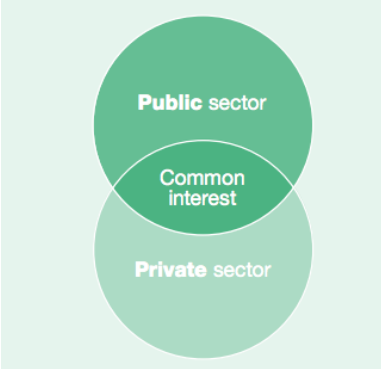
A simplified version of what a revenue stream could look like if LTD chose to lease the land and establish Public-Private Partnerships is in Figure 16 shown here. As the leasing entity, LTD will not benefit unless the private developers find a way to build the project, therefore this chart also outlines some funding opportunities for private developers. Following the example of the One Santa Fe case, this chart breaks developers up into two categories: Residential and Commercial; categorizing rental revenue similarly. Where the funding comes from, will inform how the lease will need to be drawn up. In the case of One Santa Fe, different entities owned the different aspects of the building: affordable housing, market-rate housing and commercial. This subdivision permitted developers to look for funding from various sources. Loans for affordable housing came primarily from HUD and funding for the ground floor commercial portion of the project came from Section 108 loans through a program that allows cities to loan federal Community Development Block Grant funds. This innovative funding scheme is certainly involved, but it creates an enticing paradigm where public and private organizations work together on development projects. Additionally, it leaves the leasing entity, which in our case would be LTD, in a position where it is involved in the TOD on the River Road Corridor as well as earning profit from private rent.

One Santa Fe found funding from many different sources including: multifamily mortgage revenue bonds, HUD, LA's city housing trust fund, and community development block grant funds. A funding package like this had requisites. Developers of One Santa Fe had to adhere to a variety of different stipulations for affordable housing and deliver these outcomes in the final project. Our vision for the Old Station is that a portion of the multi-use building on the catalyst site will offer affordable housing. If private developers look to federal or state sources of funding for this project the affordable housing component will most likely be mandatory.

Luckily, in the case of One Santa Fe, the developers did not see the affordability requirements as constraints, but as opportunities. Also, it is important to keep in mind that One Santa Fe was entering a part of the Arts District that was once an artist haven where studios only cost about $150 a month. So, regardless of the fact that the developers were including affordable housing, the community still had concerns about such a large development coming to their artsy and industrious part of town. Currently, 20% of the units in One Santa Fe are considered affordable. The mortgage revenue bonds mandated that 20 percent of the units set aside as affordable had to be at 50% of the area median income (AMI).[38] The loan from the city's housing trust fund also required lower rents on the affordable units at 40 percent AMI. Not to mention the myriad of qualifications set forth by HUD, which required significant attention from the developers. Nonetheless, both the developers and HUD were enthusiastic about building a project of this scale and scope and pointing to it as an example of what a HUD project could look like. Adhering to these affordability requirements meant net operating income of the project was impacted significantly, but developers knew that these sacrifices needed to be made in order to get the project built.

In proposing our vision to LTD, we wanted to suggest alternatives to auctioning or selling the land outright. The Old Station has the potential to serve as a catalyst site in this area, and as we continue to ask throughout this project, "where do we want to go together?" we challenge LTD to consider themselves as part of that future. Leasing the land is a viable option that allows LTD to stay involved in the development of this area now and throughout the future.

Public-Private Partnerships



Source: Farming First (2010)

Housing funding options

An additional concern for our team's planning project for Old Station is the provision of affordable housing. Considering the current population forecast given for Eugene, Old Station can also expect to grow. Current predictions estimate that upwards of 4,000 of Eugene's anticipated 40,000 new residents may move to the River Road Santa Clara neighborhood over the next 20 years.[25] As new residents move to the area, the increased housing demand will need to be met. However, overall trends summarized earlier in this report (such as the high housing value-to-income ratio) indicate the challenge and decrease of housing affordability for Old Station. Future planning needs to account for the provision of affordable housing options for development proposals in the area.

A stated pillar in Envision Eugene is to:
"Provide housing affordable housing to all income levels.[39]***"***

Currently, Eugene is awarded Community Development Block Grants and Home Investment Partnership Program funds from the federal government to support current affordable housing initiatives.[40] Other strategies include neighborhood proposals for urban reserves, growth monitoring, collaborative planning efforts with various stakeholders (e.g., city, business, and residential interests), affordable housing development projects, and a Multi-Unit Property Tax Exemption option, among other approaches.[40]

However, as the Eugene City Council notes, current access to affordable housing is still inadequate and poses significant challenges for residents.[40] In addition to increasing housing supply through redevelopment, an analysis of the Arlington County Transit-Oriented Development (TOD) approach offers some useful insights to address Old Station's housing affordability challenges. For Arlington, their TOD project led to a steep rise in property values which ultimately increased housing costs and significantly affected the availability of affordable housing options in the corridor.[27] The county initially sought to address this beginning in the 1990s by protecting existing affordable housing and developing new options along the corridor. Their approach included the provision of "community benefit units" (CBUs) by nonprofits and individuals and has helped meet some demand for affordable housing near transit stations. CBUs are promoted by county policies which provide a thirty-year guarantee to nonprofits and individuals offering housing affordability options. 2001 estimates indicated the presence of 1,783 CBUs out of the 22,708 housing units along the corridor.[27]

Additionally, the containment of the TOD project along the corridor (within a half mile radius from each of the stations) has helped retain existing affordable housing located outside of the corridor's well-defined development boundaries.[32] Arlington County's successful push for residential developments has kept pace with housing demand in the area and also helped reduce high housing costs. The county has also taken a proactive approach for any new development. As part of the site plan review process, developers must provide one of two options—either affordable on-site units or affordable housing fund contributions to future off-site affordable housing construction projects. As of 2004, Arlington County contributions to affordable housing initiatives ranged from $1 to $2 million dollars annually. To further preserve affordable housing the county board enacted a stipulation in 1990 called the "Special Affordable Housing Protection District," which mandates one-for-one unit replacements.[27]

While Arlington continues to address the challenge of providing affordable housing, there are some useful approaches for Old Station to consider. Containing development within a traditional TOD half-mile radius from the station may be one way to help preserve existing affordable housing located outside of that boundary. Another technique to consider is requiring developers to provide affordable housing on-site or, alternatively, to contribute to an "Affordable Housing Trust Fund" for future off-site affordable housing projects.

Implementation and Phases

Coordinated Implementation

Four Corners

- **Northeast Corner**: LTD old station, this is our catalyst site and the first stage of implementation with a large mixed-use building featuring a community center and ground floor businesses with residential units above. Location of placemaking elements; fountain and mural.
- **Southeast Corner**: Location of new Northbound LTD EMX stop on the corner of River Rd. and River Ave. Site of shopping center retrofits and medium density, mixed-use residential units with central pedestrian corridor.
- **Southwest Corner**: Location of Southbound LTD EMX stop and additional shopping center retrofits for local businesses with row houses and/or townhome residential units
- **Northwest Corner**: Mixed use building with strong emphasis on community and social services like a day care and senior center with residential units and additional placemaking elements.

Vision: The Four Corners on River Road

1. We propose a community catalyst site on the Northeast corner of the River Road, River Avenue intersection on the former site of the old LTD park-and-ride bus station. The primary structure on site will be a new 6 storey mixed-use building. It will contain ground floor retail and the new River Road neighborhood Community Center. The building will have 80 new housing units. Using traditional 20% inclusionary zoning the building will contain 16 new affordable housing units, the rest going at market rate. This will bring much needed affordable housing and new economic opportunities to the neighborhood. The building will serve as the anchor of the site and a buffer to the Randy Pape Beltline Highway. Behind the building plantings of Emerald ArborVitae trees will act as a noise, emissions and wind barrier, mitigating the negative effects of highway traffic. In the plaza space outside the building there will be a small parking lot, and a fountain honoring the neighborhood's connection to the Willamette River and its Native American heritage. By the fountain will be a new playground complete with age appropriate sections for younger as well as older children. Around the playground and set inside the plaza will be numerous park benches, tables and chairs bordered by a wall mural depicting the history of the River Road neighborhood and the North Eugene High School mascot, the Highlanders. Along the eastern edge of the site in the area of the former bus slipway will be a bicycle share station and e-scooter sharing station in order to increase sustainable mobility and offer "last mile" public transit solutions.

2. The Southeast corner of the River Road, River Avenue intersection will feature the bulk of the Four Corners development, anchored by the new EmX bus stop nearest to the intersection and a retrofitted shopping center at its heart. To the south of the bus stop will be a new cafe and coffee shop complete with an outdoor dining section that overlooks the rest of the development. Surrounding it will be the pedestrian only heart of the Four Corners development. The pedestrian only center will be intersected by numerous new paths and sidewalks designed to bring pedestrians in from the activated street corners to the heart of the site. Though it will be a pedestrian only center, the pathways will be wide enough to accommodate emergency and service vehicles when necessary, a design feature pioneered by the Vauban district in Freiburg, Germany.[41] The pedestrian center will contain a community garden and small amphitheater designed for plays and other community programs. The area will feature native

plants in elevated planters and rain gardens for landscaping. Five large structures will surround the heart of the development as mixed-use buildings featuring ground floor retail and social services with mixed income apartments on the upper floors. These will follow the inclusionary zoning model of 20 percent affordable housing established by the initial structure on the Northeast corner. Several of the buildings will feature small pocket parks with green walls where residents can rest and gather. The Southern end of the section will contain the main parking lot for the development with areas designated for residents and shoppers. A section of the parking lot will be marked to function as a weekend market and parking for food trucks during special events. A new street will run from Corliss Lane in the South to River Avenue in the North marking the Eastern edge of the site. Along its Eastern side will be a row of new two storey townhomes with on street parking. The townhomes will act as a soft edge helping the development blend in with the single family homes around it more harmoniously than the taller units in the center of the site.

3. The Southwest corner of the development will feature street facing row houses with mixed-income housing units. Parking will be in the rear, between the row houses and several new mixed-use development buildings featuring ground floor retail and additional housing units on their upper floors. This corner will host the southbound EmX bus stop which will be directly across from the new Northbound stop on the other side of River Road. They will be connected by an elevated crosswalk that bisects a new planted median running from the intersection of River Road and the Beltway to the intersection of River Road and Corliss Lane. This planted median will act as a traffic calming measure and provide a halfway point for pedestrians crossing River Road.

4. The Northwest Corner, at the intersection of Silver Lane and River Road will somewhat mirror the Northeast corner of the development. It too will be anchored by a new mixed-use building with ground floor businesses and mixed-income apartments above. The building will host a new day care as well as the new River Road Senior Center. It will have a small playground for young children and park furniture for seniors designed specifically for games like chess. The building will also host a study lounge for North Eugene High School students. In combining these social services, the Northwest Corner of the Four Corners development will serve as a unifying element of the neighborhood, bringing together multiple generations in community and fellowship.

These plans are in keeping with the principles of the River Road and Santa Clara Neighborhood plan and principles, Envision Eugene, Eugene 2035 Transportation Plan, and LTD's Moving Ahead plan. They will require public-private cooperation, but can bring a newfound sense of community and opportunity to the River Road neighborhood through transit oriented development that is human scaled, safe, walkable and sustainable.

Old Station Design Concepts
Accessibility and Connectivity: ● EmX Transit Station: MovingAhead[1] and Eugene 2035 Transportation Plan[42] see the EmX Transit alternative as offering the greatest benefit to pedestrian and cyclist connectivity. LTD is planning on

replacing the Old Station with the new EmX station at the corner of River Road and River Ave. We propose moving the station directly south of River Avenue so transit riders board and exit the bus further away from the highway, mitigating safety issues, and closer to retail and community amenities, providing a more welcoming experience for riders.

- Pedestrian access: Our design concepts surrounding pedestrian safety and accessibility are also in line with Eugene 2035. We support their plan to build a pedestrian/cyclist bridge across the Beltline Highway, near North Eugene High School, to connect residents to the north side of the highway and provide an alternate route to using the congested, dangerous River Road. Additional pedestrian safety and accessibility options include:
    - Raised crosswalks on the intersection of River Road and River Avenue
    - Well-lit crosswalks
    - Enhanced crosswalks and creative street design
    - Tree canopy lining the roads
- Cyclist access: Improving cyclist safety and connectivity to the surrounding amenities on River Road is essential to increasing cyclist traffic in this neighborhood. We propose developing protected bike lanes along River Road to improve safety and make cyclists feel welcome Eugene 2035 already plans on implementing protected bicycle lanes from Division Avenue, just north of the Beltline Highway, south to the Northwest Expressway. Additional cyclist proposals include:
    - Connecting the bicycle lane at our intersection to the Willamette River path
    - Improving signage along the river path so people are aware of surrounding amenities on River Road
    - Expanding the bicycle lane for additional access to North Eugene High School from Kourt Drive south of the school and Silver Lane north of the school

Affordable Housing and Mixed-use Buildings:

- To accommodate for future population growth in the neighborhood and to account for the lower socioeconomic demographics of its residents, we propose developing affordable, multi-family housing along River Road.
- Through collaborating with private owners and developers who own the outdated strip malls, we propose retrofitting these areas and developing mixed-use buildings with improved pedestrian connectivity to the retail and food centers on the first floor of these buildings.
- To address affordable housing concerns, we proposed containing development within a traditional TOD half mile radius from the station may be one way to help preserve existing affordable housing located outside of that boundary.
- We also propose that the city consider requiring developers to provide affordable housing on-site or, alternatively, to contribute to an “Affordable Housing Trust Fund” for future off-site affordable housing projects.

Placemaking:

- We suggest a placemaking approach that starts with a shift in strategic questions from “what should we do?” to “who are we becoming as a community?” asking stakeholders to share their stories and using this input to inform placemaking projects. We envision proposals that provide diverse economic opportunities for local businesses, value community health outcomes that prioritize jobs and income as much as a sense of belonging and leadership and create opportunities for organizations that promote the brand of River Road.
- Physical manifestations of these placemaking efforts, designed with the River Road community and its heritage in mind, could result in things like:
    - Public art
    - Water features
    - Historical signage
    - Wayfinding maps
    - Physical spaces designed for community gatherings
    - Programming and activities for the entire neighborhood

Sustainability:

- Strict energy usage guidelines for on site buildings
- A complete streets approach with large urban tree canopy to promote walkability and shade buildings.
- Sustainable transportation options on site like bicycle share and e-scooter stations.
- Pursuing LEED certification for buildings larger than 30,000 sf on site.
- A new city ordinance requiring cool roofs or green roofs on structures larger than 20,000 sf.
- Public-private partnerships to offer incentives for onsite renewable energy such as solar photovoltaic panels.
- Extensive stormwater management through the use of rainwater catchment systems, rain gardens, bioswales and permeable paving solutions where appropriate.
- Landscaped pocket parks providing an urban oasis for residents.
- Native vegetation and a community garden where residents can grow their own food for consumption and sale.

Policy Adoptions

TOD framework

As a concept, TOD is defined as mixed-use, mixed-density development occurring inside a half-mile radius from a transit station.[27] This measurement reflects the normative area of acceptable walking distance most residents are willing to take during a commute. However, as Dittmar and Ohland observe, TOD projects must go beyond the physical form and functionally to integrate not only with transit but with the greater surrounding community.[27] The approach of complementing the purpose of a place with the community's needs illustrates the importance of placemaking in the successful implementation of TOD. If done well, TOD can lead to positive outcomes related to enhanced neighborhood livability. These outcomes include fostering neighborhood identity and vibrancy, the creation of a healthy pedestrian environment, interconnected streets, increased transit options, and availability of mixed housing types.[32]

The Arlington case study illustrates the importance of early, organized, and ongoing community engagement to foster greater project success. Fortunately, the Old Station site located along the River Road corridor in Eugene, Oregon represents an area in which City of Eugene project leaders have had ongoing engagement with the River Road Santa Clara neighborhood community.[9] For any future development project to succeed, a collaborative process involving a wide range of actors (i.e., city planners, neighborhood associations, developers, businesses, and property owners) in which the primary goal is to realize the community's vision will continue to be of paramount importance[27] To finance redevelopment, city officials may want to consider adopting a similar policy to Arlington County, requiring developers to finance public infrastructure improvements as part of their development project.

Arlington's "bulls-eye" approach to concentrate high and mid-density development directly around the transit stations reflects a preference for a similar approach along the River Road corridor. The River Road Corridor Study showed that participants supported concentrated development along four neighborhood centers.[9] For the Old Station site specifically, related research indicates that sites with large surface parking lots are prime areas for TOD projects.[32] Notably, Goal 14 of the River Road Santa Clara Neighborhood Plan advocates for privacy transitions between low- and high-density areas.[6] If a TOD approach creating high density neighborhoods was implemented for the Old Station site, additional steps need to be taken to buffer existing uses between areas.

Community Engagement

There are five themed vision statements In the River Road and Santa Clara Neighborhood plan. The draft vision statement for Community states,

> "The River Road and Santa Clara Neighborhoods exude a strong sense of place. They are welcoming and inclusive
> neighborhoods for people of all backgrounds. River Road and Santa Clara celebrate and nurture community unity
> and diverse cultures, while honoring the rich history of farming in the neighborhoods. The community recognizes the
> value of natural assets, such as the River, and thriving shared spaces, such as parks, schools and local businesses.
> Our neighborhoods are safe, resilient, and engaged, with strong social networks and reliable public services."[6]

Accordingly, our vision also prioritizes community identity and unity and it is important to us that the RIver Road community feel some level of ownership in the development that happens on the Four Corners of River Road. One strategy that we suggest for public participation and community engagement is Sensemaking. A concept based on Neil Takemoto's tools for co-creation and sensemaking that center a community's health in the process of community development. In the article titled *Co-creating places start with collecting stories, sensemaking* Takemoto comments, "a community's health is often measured by explicit outcomes (e.g. income, jobs, crime) over intrinsic outcomes (e.g. belonging, compassion, leadership), resulting in a dominance of investment in those explicit outcomes. This one-sided investment severely inhibits meaningful growth in intrinsic outcomes, inhibiting extrinsic outcomes as well."[43] In order to fulfill the vision set forth in the River Road Neighborhood plan, any development must consider how place is also about community health, and it is one of many tools that can be used to establish a relationship between intrinsic and extrinsic outcomes in planning. While thinking about our site, we would be wise to shift our strategic questions from the notion of "what should we do?" to "who are we becoming as a people?"[43] and how to make the spaces we occupy reflect this.

Takemoto suggests that the most powerful problem-solving systems are when people engage in authentic participation. The vision we have for the Four Corners on River Road will involve a great deal of community engagement and participation if this place strives to reflect the character of the community. As outsiders coming in, one approach planners ought to consider starts with sincerely listening to the stakeholders in the community. Takemoto lays this approach out in a five step process:

1. **Stories** are collected from the people in the community
2. The people **make sense** of what the collective stories are trying to say.
3. The people **self organize** based on aligned interests.
4. The people **co-create** solutions.
5. The people **co-invest** in those solutions, and repeat the cycle.[43]

This is what Takemoto refers to as a system of emergence, or the point at which there are tangible outputs and outcomes from a group of people (a community) collaborating. In practice, each of these steps would be followed by the planners engaging community in public participation. The Stories are collected from community members through a sensemaking program in which folks give meaning to their collective experience. The idea

behind sensemaking is to shift the focus of organization studies from how decisions shape organizations to how meaning drives organizing. In effect, experience and collective experience are considered meaningful and used to create a shared understanding from different perspectives and interests. Next, the sensemaking results are displayed in maps or by trends for the community to better understand one another. Then, based on aligned interests people self-organize into groups or networks and often this leads to the organic emergence of leadership and solutions. Now that community members have self-organized into informed and energized groups, co-created solutions come to fruition. Lastly, is the co-investment phase. Members establish a system of co-ownership of their creative content, ideas, and solutions and have a sense of ownership for the outcomes of their labor.

An approach such as sensemaking is but one way to engage the community. That said, this approach centers the community as the experts of their own experience and the most equipped to inform planners, developers and decision-makers. Our vision aims to create a neighborhood brand for the River Road area that captures the character of their community. It would be naive and nearly impossible to accomplish this without involving and deriving meaning from the stories of community stakeholders. Efforts towards placemaking that capture the community's visions, honor the heritage and history of the area, and create opportunity for River Road residents can only succeed if those community members are directly involved in informing the development process.

Community Planning Process

Ultimately, regardless of how much data we gather, how many case studies we examine or alternatives we suggest, the River Road community members will need to be involved in co-creating solutions and informing decisions about what makes sense for the development in their own neighborhoods.

Phasing

Our vision for Old Station requires coordinated implementation for projects with a phased approach over a 30-year timeframe. The phases below are in 5-year increments: Phase 0, 0-5 years; Phase I, 6-10 years; Phase II, 11-15 years; Phase III, 16-20 years.		
Implementation Strategy	**Phase***	**Responsible Party**

Concept 1: Connectivity and Accessibility		
Review existing zoning - City parking requirements - Propose removal of minimum parking requirements - Analyze if density zoning fits within density gradient of concept plan - Propose zone changes if necessary	0	City
Sell or Lease the LTD Old Station	0	Lane Transit District (LTD)
Move the EmX station just south of the River Road intersection	0	LTD
Make bike lanes and sidewalks safer and clearer at our intersection - Implement protected/buffered bike lanes along River Road - Use context-sensitive design and widen sidewalks for pedestrians - Install wayfinding signs for cyclists and pedestrians	0	LTD
Create safer crossings at River Rd/Silver Ln intersection - Install flashing lighted crosswalks - Use pavement markings and creative street design to increase crosswalk visibility	0	LTD
New EmX	I	LTD
Extend the bike path from the river pathway	I	City
Create bicycle bridges in the Silver Lane neighborhood	I	City
Create new pedestrian walkways on smaller roads - Identify areas currently in need of new sidewalk construction - Construct sidewalks along main school routes - Implement neighborhood walking routes along alleyways	I	City
Road diet for River Rd. between Beltline & Corliss Ln. complete with planted median and room for proposed EMX lane	I	LTD/City
Require new construction to reduce surface parking lots to a minimum	I, II	City/Private
Concept 2: Mixed-use buildings and spaces		
Review existing zoning and policies - policy implementation providing affordable	0,I	City

housing price guarantees - new site plan review requirements to build or fund affordable housing projects		
Identify ideal sites of context-responsive infill for Old Station site area	0	City
Incentivize private redevelopment of strip malls on the four corners. - Invite developers to a community meeting to talk about economic opportunities for local business - Brainstorm business ideas that fit into the RR brand - Open RFP	0, I, II, III	City
Redevelop the northeast corner of the Old Station site with a mixed-use building and public space	0, I	City/Partnership
Create infill in the empty parking lot space in the strip malls	I	Private
Buffer existing uses between between low- and high-density areas	I, II, III	City/Partnership
Continue mixed-use building development and affordable, multi-family housing (i.e., construct high-density buildings on each of the corners to provide amenities, housing, and services)	II, III	City/Partnership
Retrofitting strip malls. Redeveloping this buildable land to provide mixed-use buildings with residential and commercial elements to cater to the future population's needs.	III	Private/City
Concept 3: Placemaking: Enhancing the Neighborhood Character and Vibrancy		
Engaging the community through focused public participation workshops	0, I, II, III	City
Construct community center on the northeast corner of the Old Station	I	City/Partnership
Place-making - Community engagement: sensemaking - Stakeholder stories inform placemaking projects - Prioritize community organizations that fit the RR brand - Bilingual signage around the area - River bike path historical informational/wayfinding signs - Create programming in community gathering spaces	I, II, III	City/Neighborhood groups/Community stakeholders
Identifying places on the master plan	0	City developers, Architects and

		Planners
Creating economic and mixed-use nodes		Planners and City developers
Installation of public art, murals, sculptures, wayfinding etc.	I, II, III	Artists, Architects and Planners

Conclusion

This plan for Old Station was created with the following question in mind: Where do we want to go together?

The Old Station site offers vast opportunity to introduce vibrancy into the neighborhood and provide a safe sense of place for residents. Through the implementation of mixed-use buildings, placemaking elements, and pedestrian/cyclist connectivity and accessibility elements we are able to cater to the needs of the current and future residents in the surrounding neighborhood. Ensuring community engagement is utilized during implementation is key to a successful redevelopment of the area that properly represents the current and future needs of the RIver Road residents.

Source: OregonLive(2015)

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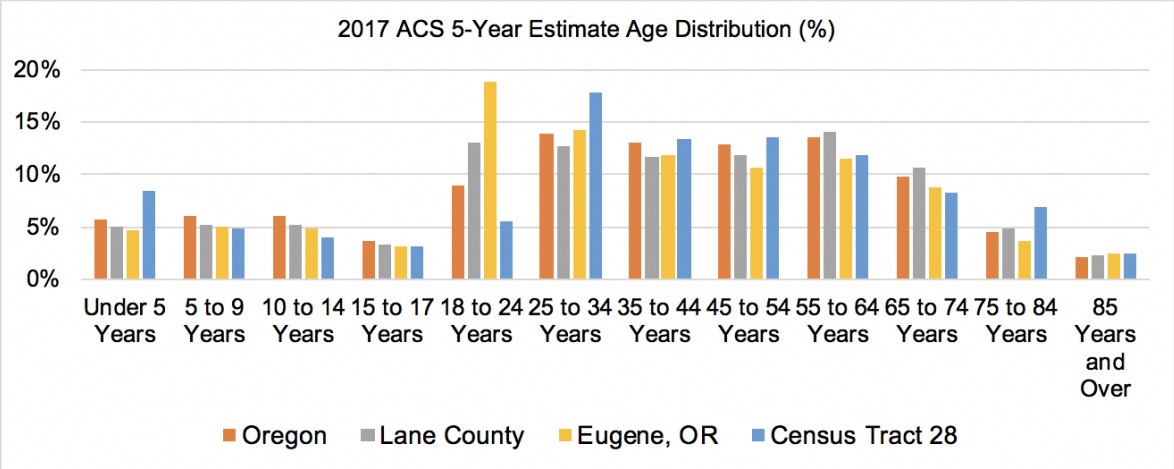
Appendix

FIGURE 6. AGE DISTRIBUTION – OREGON, LANE COUNTY, EUGENE, AND CENSUS TRACT 28, 2017



Source: ACS 2013-2017 (5-Year Estimates), Social Explorer Table A01001

TABLE 3. SELECTED INDUSTRY – LANE COUNTY, 2001-2016

Industry	2001		2016		Change	
	Employment (#)	Employment (%)	Employment (#)	Employment (%)	#	%
Manufacturing	21,032	11.4%	15,260	7.5%	-5,772	-27.4%
Retail Trade	22,160	12.0%	24,428	11.9%	2,268	10.2%
Educational Services	2,334	1.3%	4,222	2.1%	1,888	80.9%
Health Care and Social Assistance	2,353	11.0%	28,469	13.9%	8,116	39.9%

Source: NAICS

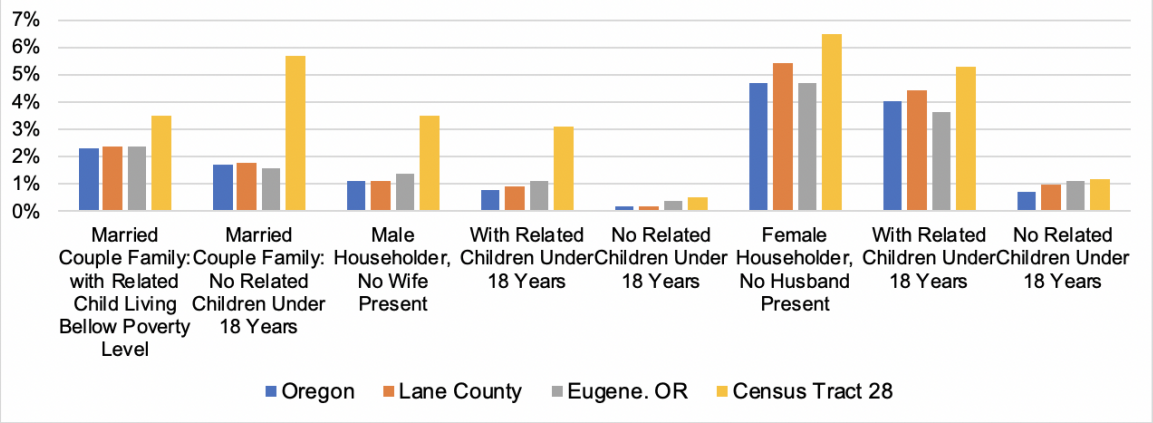
Sector	2001	2016
anufacturing	1.11	1.10
tail Trade	1.09	1.19
lucational ces	0.69	0.85
ealth Care and		

TABLE 6. POPULATION-EMPLOYMENT RATIOS – UNITED STATES, OREGON, AND LANE COUNTY, 2001-2016

	UNITED STATES		OREGON		LANE COUNTY	
Sector	2001	2016	2001	2016	2001	2016
Manufacturing	16.8	24.6	15.3	19.9	15.5	24.0
Retail Trade	15.6	16.6	14.8	16.0	14.7	15.0
Educational Services	94.6	68.4	100.3	66.9	139.6	86.7
Health Care and Social Assistance	18.7	14.7	18.0	14.1	16.0	12.9

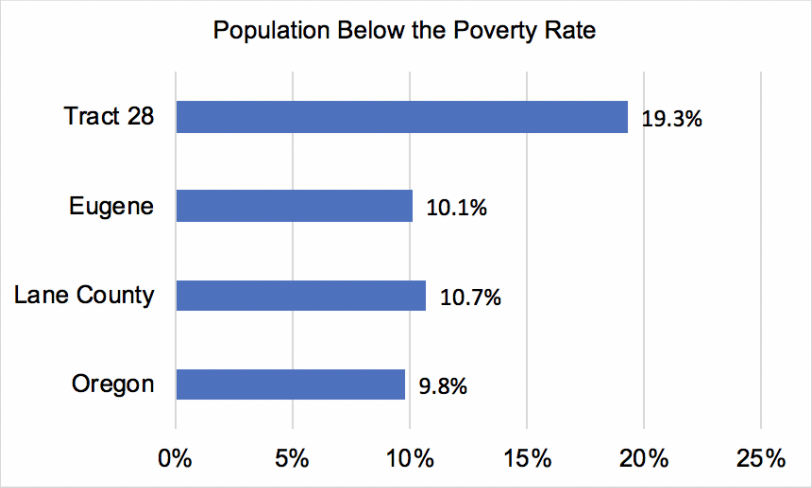
Source: NAICS

FIGURE 7. FAMILY POVERTY RATES – OREGON, LANE COUNTY, EUGENE, AND CENSUS TRACT 28, 2010-2017



Source: ACS 2013-2017 (5-Year Estimates), Social Explorer Table A13002

FIGURE 9. POVERTY RATE – OREGON, LANE COUNTY, EUGENE, AND CENSUS TRACT 28, 2017



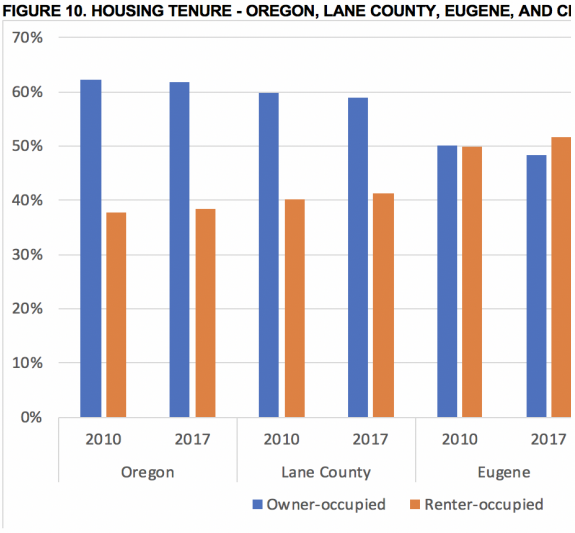
Source: ACS 2013-2017 (5-Year Estimates), Table DP03

TABLE 9. PERCENT CHANGE IN RENT-TO-INCOME RATIO - OREGON, LANE COUNTY, EUGENE, AND CENSUS TRACT 28, 2010-2017

Median Rent and Income	Oregon	Lane County	Eugene	CT 28
Gross Rent (dollars)	35.7%	22.6%	20.0%	33.5%
Household Income (dollars)	13.9%	11.2%	13.9%	6.2%

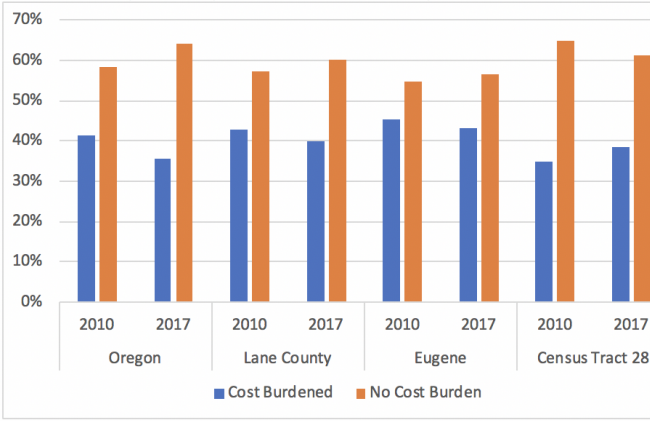
Sources:
ACS 2006-2010 (5-Year Estimates), Tables S1901 and B25063
ACS 2013-2017 (5-Year Estimates), Tables S1901 and B25063

FIGURE 10. HOUSING TENURE - OREGON, LANE COUNTY, EUGENE, AND CI



Sources:

FIGURE 11. COST BURDEN ASSESSMENT FOR GROSS RENT – OREGON, LANE COUNTY, EUGENE, AND CENSUS TRACT 28, 2017



Sources:
ACS 2006-2010 (5-Year Estimates), Tables A18009 and B25063
ACS 2013-2017 (5-Year Estimates), Tables A18009 and B25063

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