

Investment in EWEB Riverfront Site: Triple Bottom Line Analysis

The Triple Bottom Line (TBL) is a framework to help City Council and staff consider the social equity, environment health, and economic prosperity impacts associated with City decisions. Public investments in the EWEB riverfront area will affect the long-term outcome of the development and the TBL will help Council and staff understand the short-term and long-term implications of potential investments.

The following TBL assessment addresses potential impacts of developing the riverfront site at two levels: the full site development and specific potential public investments to support that development. The individual public investments create the foundation for a successful development on the riverfront site as envisioned in the *EWEB Riverfront Master Plan*.

Key Findings from TBL Analysis

The TBL process found that the redevelopment of the former industrial site has many positive elements and limited downside consequences. The following are the key findings of the TBL review:

- **Benefits of development without displacement.** With the history of industrial uses on the site, new development will not push out vulnerable populations. Instead, it will contribute jobs and housing for a variety of income levels, including affordable housing for low-income households.
- **Creation of a 20-minute neighborhood.** The mixed-use character of the development, along with the street improvements and proximity to downtown, will establish a model neighborhood with greater connectivity and opportunities for auto-free travel and lifestyle.
- **Multiple economic benefits from a showcase destination development.** The project promises a variety of economic benefits, both in the short and long term, including jobs, tourism, retail, and other commercial activity. These will contribute to the growing economic vitality of Eugene's downtown.
- **Expand the property tax base.** The private development of the site will create substantial new taxable value and associated tax revenue. The added tax revenue will become available to local governments after the RURD is terminated.
- **Significant addition to cultural identity and place-making.** The project location and design embraces the City's relationship to the Willamette River and creates an inviting, accessible shared space that can be a source of civic pride and identity.
- **Environmental benefits of brownfield site restoration.** Development of the site will prompt environmental remediation to address contamination from historic practices, preventing potential pollution and ecosystem degradation, and restoring the site to productive and safe use. In addition, the development of the park will restore the riparian function of the riverbanks.

One question that is challenging to answer is how these multiple benefits will be distributed across the community. Who will fill the new jobs created? How will the increased property values that come with redevelopment be shared? Will the retail opportunities be available to minority-owned

businesses? These types of questions are important to keep in mind as the project progresses but it is worth noting that the range of jobs and income created, as well as the inclusion of affordable housing in the residential component, broadens the distribution of these benefits. A city's downtown is a central gathering place for that community. It is everyone's neighborhood. The development of the riverfront area expands Eugene's downtown with creates a new space with access to the Willamette River that is available to everyone. Its central location offers services for the entire community, with access to government services, educational services, legal services, cultural events, recreational opportunities, and entertainment.

A summary table and detailed analysis of the TBL impacts for the different public investments follows.

Public Investments

City staff in the Public Works Department and the Planning and Development Department have worked together to identify public investments that could be made in the riverfront site. We have identified public investments that will enable development of the site and enhance the site to increase its appeal for the proposed development and benefit the overall community.

We have identified the following potential public investments that will create the foundation for a successful development of the riverfront site:

1. Riverfront Park
2. Quiet Zone
3. Bike Path
4. Bike Share
5. Riverfront Renewal Loan Program
6. Enhanced Streets, Sidewalks, and Open Space
7. Preservation of Historic Structures
8. Affordable housing
9. Parking
10. Willamette to Willamette

We expect this list to shift over time, as the development takes place on the site and new opportunities and priorities present themselves. The list should be viewed as a work in progress, designed to keep City Council, City staff, the UO Foundation, and EWEB informed about the City's planned and potential infrastructure investments in the riverfront site over time.

The following table summarizes the TBL impacts for the overall development and for each specific potential public investment. The full TBL analysis follows the table.

Summary of Social Equity, Environmental Health, and Economic Prosperity Impacts

Investment	Description	Social Equity	Environmental Health	Economic Prosperity
Overall development of Riverfront Site	\$235 million of private investment in new residential and commercial structures.	<ul style="list-style-type: none"> + Improve community access to the river + Enhance culture and education at the river + Improve connectivity for all transportation modes + Expand housing and employment opportunities + Complement downtown revitalization 	<ul style="list-style-type: none"> — Increase energy and materials use during construction + Decrease average miles driven, carbon emissions, and other auto-oriented pollutants + Reduce stormwater runoff + Remediate brownfield contamination + Create a compact urban form 	<ul style="list-style-type: none"> + Creates 2,996 direct and secondary jobs and associated income during construction period + Increase property tax revenue by about \$3 million per year at full build out + Enhance tourism and transient room tax revenues + Create cost efficiencies for urban services
1. Riverfront Park	Design and construct City-owned park on Willamette River.	<ul style="list-style-type: none"> + Enhance residents' recreational opportunities + Improve access to Willamette River + Contribute to community cohesion + Positive effect on health 	<ul style="list-style-type: none"> — Increase energy and materials use during construction + Reduce stormwater runoff + Reduce energy consumption + Enhance habitat in riparian area + Positive effect on air quality 	<ul style="list-style-type: none"> + Create 11 jobs and associated income for every \$1 million of park construction expenditure during construction period + Increase property values + Enhance tourism and transient room tax revenues
2. Quiet Zone	Enhance safety at RR crossings to meet federal standards to eliminate train horn noise (which has a minimum of 96 decibels). Project includes 10 crossings: 8 th Avenue, High Street, Pearl Street, and 7 additional crossings west of the riverfront site.	<ul style="list-style-type: none"> + Increase safety at railroad crossings + Improve access to riverfront site + Diminish noise + Improve health 	<ul style="list-style-type: none"> — Increase energy and materials use during construction 	<ul style="list-style-type: none"> + Create 9 jobs and associated income for every \$1 million of park construction expenditure during construction period + Provide essential access to riverfront site (8th Avenue crossing) + Reduce construction costs of development + Efficient use of public funds (8th Avenue crossing)
3. Bike Path	Design and improve Bike Path throughout riverfront site.	<ul style="list-style-type: none"> + Improve connectivity and access to riverfront and downtown core + Increase opportunities to improve health 	<ul style="list-style-type: none"> — Increase energy and materials use during construction + Decrease average miles driven, carbon emissions, and other auto-oriented pollutants 	<ul style="list-style-type: none"> + Create 9 jobs and associated income for every \$1 million of park construction expenditure during construction period + Increase exposure to retail businesses

Investment	Description	Social Equity	Environmental Health	Economic Prosperity
4. Bike Share	The City of Eugene will implement a public bike-share system consisting of approximately 28 stations and about 210 bikes located near residential, shopping, employment, and transit centers in downtown Eugene, the UO campus, the riverfront site, and the Whiteaker neighborhood.	<ul style="list-style-type: none"> + Increase opportunities to improve health + Expand and enhance existing transit services 	<ul style="list-style-type: none"> + Decrease average miles driven, carbon emissions, and other auto-oriented pollutants 	<ul style="list-style-type: none"> + Increase business activity near bike-share stations + Reduce household expenditures on transportation
5. Riverfront District Loan Program	A low-interest loan program available to any business in the Riverfront Urban Renewal District for building improvements.	<ul style="list-style-type: none"> + Provides resources for small businesses + Supports historical preservation 	<ul style="list-style-type: none"> — Increase energy and materials use during construction 	<ul style="list-style-type: none"> + Increase property tax revenues
6. Enhanced Streets, Sidewalks, and Open Space	Improvements to streets above basic street requirements.	<ul style="list-style-type: none"> + Enhance the public experience + Positive effect on health 	<ul style="list-style-type: none"> + Reduce stormwater runoff + Reduce energy consumption + Positive effect on air quality 	<ul style="list-style-type: none"> + Enhance financial viability
7. Historic Preservation	Seismic upgrades and other repairs of Steam Plant and/or Warehouse.	<ul style="list-style-type: none"> + Enhance cultural identity 	<ul style="list-style-type: none"> + Conserve existing resources 	<ul style="list-style-type: none"> — Cost of rehabilitation may exceed economic value of the structures
8. Affordable Housing	New housing in the riverfront district that is specifically targeted to low income households.	<ul style="list-style-type: none"> + Increase location choices for low-income households + Reduce dependency on automobiles + Reduce commute times + Provide access to goods and services + Improved standard of living positively affects health 	<ul style="list-style-type: none"> — Increase energy and materials use during construction + Decrease average miles driven, carbon emissions, and other auto-oriented pollutants 	<ul style="list-style-type: none"> + Create 13 jobs and associated income for every \$1 million of multi-family construction expenditure during construction period + Increase consumption spending + / - Varying impact on property values
9. Parking	Construction of parking structure(s).	<ul style="list-style-type: none"> + Improve access to the riverfront for individuals with limited mobility 	<ul style="list-style-type: none"> — Increase energy and materials use during construction + /- Varying impact on automobile use + Reduce drivers cruising for street parking spaces, thereby reducing fossil fuel consumption + Decrease demand for surface parking 	<ul style="list-style-type: none"> + Create 11 jobs and associated income for every \$1 million of parking structure construction expenditure during construction period + Enhance financial viability of overall development

Investment	Description	Social Equity	Environmental Health	Economic Prosperity
10. Willamette to Willamette	Improvements to the public realm between Willamette Street and the Willamette River.	<ul style="list-style-type: none"> + Improve pedestrian access to riverfront site + Improve connectivity for all transportation modes + Complement downtown revitalization 	<ul style="list-style-type: none"> — Increase energy and materials use during construction + Decrease average miles driven, carbon emissions, and other auto-oriented pollutants 	<ul style="list-style-type: none"> + Improve business access + Enhance property values

The remainder of this document describes each potential investment (beginning with the overall development of the site), its expected cost to the City and potential funding sources, and its social, environmental, and economic impacts.

Overall Development of Site

The development of the site will create social, environmental, and economic impacts. The City's investment in specific elements (such as the park and the railroad crossing) will be necessary for private development to occur, but substantial private investment is also necessary to create a riverfront development as envisioned in the *EWEB Riverfront Master Plan*.

This section describes the impacts associated with the overall development of the site. It is the combination of private investment with multiple public investments that will create a new riverfront neighborhood. This section focuses on outcomes of the whole development, which will require both public and private investments. After this section, we describe the impacts that can be tied to specific public investments.

The new development will be a '20-minute neighborhood', a place where residents have easy, convenient access to many of the places and services they use daily including grocery stores, restaurants, and parks, without relying heavily on a car. As described by the City of Eugene's Office of Sustainability, 20-minute neighborhoods 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 the sidewalks, bike lanes and bus routes that support a variety of transportation options. They are an important strategy for reducing reliance on the automobile, lowering transportation costs, and reducing our community's greenhouse gas emissions. In addition, walkable neighborhoods improve public health, help residents save money as they spend less on driving, and improve access to daily needs.

The development also plays a significant role in place-making. As described in a Triple Bottom Line tool for economic development, place-making:

...creates inviting and distinctive spaces where people want to live, work and play. Place-making can contribute to the financial bottom line through increased property value, tourism receipts and firm recruitment and retention...Preserving and enhancing cultural and historic resources can contribute to economic vitality. In addition, community well-being may be improved if these resources contribute to civic pride, a sense of identity and connection, and well-utilized public spaces¹.

Estimated Cost and Funding

The UO Foundation will be the primary investor in new development on the site. The Foundation's development team provided rough estimates of the planned investment of residential and commercial development and we have used that data for our analysis. The Foundation estimates

¹ Hammer, J., G. Pivo, I. Goldstein, and M. McCullough. *The Triple Bottom Line for Economic Development: A Practitioner's Guide*. US Economic Development Administration. January 2015.

that the total private investment will be about \$235 million at full build out; most of the development will be residential (90%) and the remainder will be commercial.

Social Equity

Improve community access to the river

As described in the *EWEB Riverfront Master Plan*, over 20 years of planning documents and community efforts have identified the EWEB property as the place where the city should meet the river. An investment in the park, bike path, and street will create new access to the Willamette River in the city center, creating recreational and health benefits for the public that are both immediate and long lasting. The Eugene community places significant value on the ability to access neighborhood parks, open space, and nearby nature to bicycle, walk, attend events, eat lunch, and experience the river. A newly created riverfront park is expected to attract hundreds of visitors per day, providing health, well-being, and quality of life benefits for the community. We describe benefits specifically associated with the riverfront park in the section below.

Enhance culture and education at the river

The EWEB property is the only property within the *Eugene Downtown Plan* area that is immediately adjacent to the river, and can serve as the community's living classroom for local history and rich natural habitat. For over 100 years, the EWEB operations facility and the former Agripac industrial use have been an obstacle to the community's access to the river from downtown. For decades, the community's vision for the riverfront focused on creating a place where residents and visitors come to live, work, recreate, attend cultural and educational events, and reinforce civic identity and local pride. Creating an accessible neighborhood along the Willamette River will enhance Eugene's civic identity as a city on the river. The *EWEB Riverfront Master Plan* identifies the open space along the river as a place to teach and inspire inquiry into the community's history, in a variety of ways and at a variety of scales.

Improve connectivity for all transportation modes

The transportation improvements include an improved bike path with good connectivity to the downtown core, a street-grade railroad crossing on 8th Avenue, and a road connecting 8th Avenue to 5th Avenue. The new roads and paths will enable access to the new development, the new park, and the Willamette River. Constructing the new transportation routes are consistent with concurrent planning efforts, including the *Climate & Energy Action Plan* and the *Willamette Open Space Visioning Project*.

Expand housing and employment opportunities

The urban development in the riverfront site will create opportunities for households to live within walking distance to the Willamette River, the downtown core, and the University. The UO Foundation has indicated it intends to build affordable and market-rate housing, so households across the income spectrum will have housing choices in the area. The site will offer proximity to employment centers, retail goods and services, views of the river, and recreational activities that are not currently available in Eugene.

Complement downtown revitalization

Redevelopment of the area will complement downtown, thereby enhancing the continued investment and activity in downtown. The enhanced amenities along the riverfront and improved urban design connections to the rest of downtown will realize the *Eugene Downtown Plan* vision for downtown as an active, strong urban core connected to the river.

Environmental Health

Increase energy and materials use during construction period

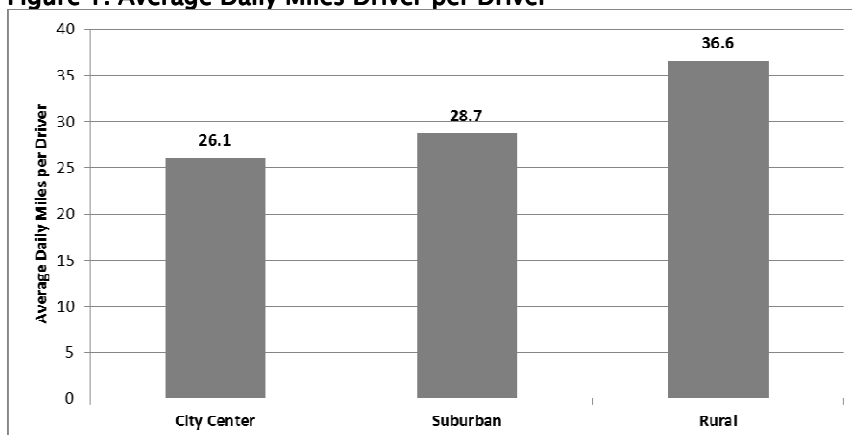
The construction of the infrastructure and new buildings will consume natural resources, including gravel, concrete, wood, steel, and other materials. The construction equipment will generate greenhouse gasses and other emissions. It is important to note that any new development will generate similar negative impacts, but because this area will be a 20-minute neighborhood, this development makes it likely that residents and businesses in the area will consume fewer resources over the long term.

Decrease average miles driven, carbon emissions, and other auto-oriented pollutants

A high priority action item within the *Eugene Climate and Energy Action Plan* is to increase density around the urban core and along high-capacity transit corridors. The Action Plan indicates that increasing the density of development around the urban center is an effective strategy for reducing fossil fuel use and greenhouse gas emissions. As a 20-minute neighborhood, the riverfront development will reduce average energy consumption over the long term.

National data show that individuals living in city centers drive, on average, fewer miles than individuals in other parts of a community. The chart below shows that individuals drive 2.5 fewer miles per day than individuals in suburban parts of a community, and 10.5 fewer miles per day than individuals who live in rural areas.

Figure 1. Average Daily Miles Driver per Driver



National Household Travel Survey, 2009, as reported in *Transportation Energy Data Book*, from Oak Ridge National Laboratory. July 2014.

Dense, mixed-use development near the downtown and UO will increase housing opportunities within close proximity to employment and retail services and cultural venues, decreasing average

miles driven per Eugene resident. This will result in lower per capita carbon emissions and other automobile emissions (including carbon monoxide, nitrogen oxides, sulfur oxide, and particulate matter).

Reduce stormwater runoff

In accordance with the *EWEB Riverfront Master Plan*, the existing riparian river edge will be enhanced, providing significant habitat and ecological connectivity for a healthier environmental balance. To manage stormwater, the new park and landscaped areas will reduce the negative impacts of urban runoff typically associated with large volumes of untreated runoff and the release of harmful chemicals into waterways. To manage stormwater, the Master Plan allows the integration of bioswales, rain gardens, open water channels, green roofs, pervious paving, retention basin, rainwater harvesting, and water-wise planting.

The Master Plan shows almost all of the existing EWEB site (93%) is covered with impervious surfaces, creating 16.4 million gallons of stormwater runoff annually. Implementing the Master Plan will sustainably manage the property's storm water runoff through address collection, retention and cleansing. The result will reduce runoff by an estimated 19% to 65% by conserving water for human use, ground water recharge, filtration and habitat creation. These stormwater enhancements will reduce the amount of impervious surface on the property and represent potential storm water management cost savings for the City.

Remediate brownfield contamination

The site is a brownfield. It is currently undergoing analysis not to determine the level of contamination associated with past activity. In order to building housing, the area will need to be remediated.

Create a compact urban form

Development on the riverfront site will follow the Master Plan and will be a dense, urban development. The compact urban form on the site will reduce pressure to build housing and commercial space on land elsewhere in the region. The compact urban form on the riverfront site will help preserve existing open space and agricultural lands.

Economic Prosperity

Create jobs and income during construction period

Constructing the residential and commercial structures will generate short-term jobs and associated income. Using an input-output model to estimate the number of jobs and income impacts associated with construction expenditures, City staff found that the residential and commercial construction will directly generate 1,260 jobs with an average annual wage of \$60,900. The construction activity will have ripple effects throughout the Lane County economy, generating an

additional 1,735 jobs with an average annual wage of \$35,600. In total, the private investment in residential and commercial structures will generate 2,996 jobs.²

Increase property tax revenue

In the short term, the property will change from public (EWEB) to private (UO Foundation) ownership, so it will become taxable. The taxable value of the property is not known at this time, because the property includes EWEB's headquarters building and associated surface parking area. That portion of the property will remain in EWEB ownership and will not become taxable. City staff reviewed the assessed value of the parcels that comprise the property, and estimated that the land that will become taxable has an assessed value of about \$10.5 million. The permanent tax rate for the property is 15.9484 per \$1,000 of assessed value (excluding bond levies). Bringing the property into private ownership will generate roughly \$168,000 annually.

Redevelopment of area will increase assessed value and property tax revenue. To estimate the expected increase in property tax revenue, we converted the UO Foundation's estimate of its investment into assessed value and multiplied the assessed value by the permanent tax rate of 15.9484 per \$1,000 of assessed value (excluding bond levies). The Foundation has estimated it will have invested \$235 million in new construction at full build out. We estimate this is roughly equal to \$186 million in new assessed value.³ At full build out, the new development will generate about \$2.97 million annually in property tax revenue.⁴ The density and quality of the new built environment will determine the assessed value and the actual tax revenue.

Enhance tourism and transient room tax revenues

The development on the riverfront site will contribute to the community's overall identity as a visitor destination in a positive way. While we do not expect the development will be a tourist attraction, it will enhance the appeal of the Eugene area for tourism. The site's proximity to major athletic venues, including Autzen Stadium and Hayward Field, make it an obvious destination for visitors attending athletic events. The improved access for all transportation modes will ensure that the park and potential restaurants and retail will attract the visitors before and after the athletic events, enhancing the visitor experience and generate increased business sales. To the degree that the Eugene area increases its appeal as a visitor destination, hotel revenue will increase, which will in turn yield increased revenues from the Transient Room Tax (4.5% of all overnight stays).

Create cost efficiencies for urban services

Intensively developing land inside the Urban Growth Boundary will be more cost effective by reducing the need for constructing new infrastructure, and creating service cost efficiencies. For example, national studies show, on average, a 10% savings in services like police and fire for cities that develop their land more densely.

² City staff used the IMPLAN model throughout this analysis to conduct the input-output analysis to estimate jobs and wages. The jobs are short-term jobs specifically associated with construction expenditures.

³ To estimate assessed value, we applied the Changed Property Ratio for Residential (.8070) and Commercial (.6576) for Tax Year 2014-15, as identified by the Lane County Assessor.

⁴ The estimates of property tax revenue are based on rough estimates of private investment and current Changed Property Ratios. The estimate assumes the property will not experience compression loss.

1. Riverfront Park

The City of Eugene and EWEB signed a Memorandum of Understanding (MOU) in February 2014 that documented the City's and EWEB's aligned interests in establishing a public park that enhances public access to the riverfront. The MOU commits the City to funding at least \$3 million of improvements at the approximately three-acre park. EWEB has committing to funding at least \$500,000 for the maintenance of the park property, where it can elect to pay the amount over 10 years, at \$50,000 per year.

Estimated Cost and Funding

The cost of construction will depend on the design of the park. Initial estimates range between \$3.0 and \$5.0 million. Potential funding sources include Riverfront Urban Renewal and the Parks SDC.

Social Equity

Enhance residents' recreational opportunities

The riverfront park will provide a direct benefit to the community's residents, as it will create a public space to enjoy the Willamette River within the urban core. Economists have developed methods to quantify the economic value of the direct use of public space. In the City of Eugene, Earth Economics recently calculated that Eugene's parks and natural areas provide \$21 million in recreational benefits each year.⁵

In Seattle, the Trust for Public Land conducted a survey to estimate the community's 'willingness to pay' for the recreation experience. That is, how much would the residents pay for similar experiences in commercial venues in the absence of public parks. The so-called 'direct use value' represents the amount of money residents save by not having to pay market rates to enjoy the parks. That study found that Seattle residents value general park use (such as playgrounds, trails, dog walking, and picnicking) at \$1.95 per visit and they value special uses (such as fishing, kayaking, gardening, festivals, concerts, and attractions) at \$6.77 per visit.⁶ These data show that residents place economic value on parks and the activities that occur within them and that specialized parks have particularly high value. The presence of a new park in the riverfront site will create new value for Eugene's residents: it will be a new venue general park use and a new specialized riverfront facility.

The park will be an opportunity to promote the cultural heritage of the whole site. As a public place, it will be an opportune location to include interpretive information about the history of the site and the environmental importance of the riparian area.

Improve access to Willamette River

The Willamette River is a hugely important amenity in the community and the park will create a new setting for the community to view and access it. Improved access to the river was one of the

⁵ Earth Economics. *Nature's Value: An Economic View of Eugene's Parks, Natural Areas, and Urban Forest*. For the City of Eugene, Parks and Open Space Division. 2015.

⁶ Trust for Public Land. *The Economic Benefits of Seattle's Park and Recreation System*. March 2011.

community's priorities identified in the *Eugene Riverfront Master Plan* process. The new road and rebuilt bike path will provide the entire community good access to the park and its riverbank.

Contribute to community cohesion

Social gathering spaces, such as parks, schools, and churches, contribute to community cohesion. The institutions and places that make up the network of human relationships can make a neighborhood stronger, safer, and more successful. Parks offer opportunities for all ages and income levels in a community to communicate, interact, and learn.⁷ The riverfront park's central location and proximity to the downtown core will make it a public place where the whole community has an opportunity to interact.

Positive effect on health

Greenspace positively affects emotional and physical well-being. There is research that measures the correlation between the risk of health problems to living near green space, and it has shown that living close to green space lowers the risk of heart disease, diabetes, chronic neck and back pain, asthma, migraines, depression and anxiety.⁸ Parks provide opportunities for people to engage in physical activity, which has been shown to lower claims against medical insurance and health care costs.⁹

Environmental Health

Increase energy and materials use during construction period

The construction of the park infrastructure will consume natural resources, including gravel, concrete, and other materials. The construction equipment will generate greenhouse gasses and other emissions while it operates.

Reduce stormwater runoff

Pervious surfaces and trees in parks can help infiltrate stormwater, thereby reducing stormwater management costs. This keeps it from entering the municipal stormwater system, which can reduce capital investments in stormwater infrastructure and operation and maintenance costs for the city. A 2007 study in Portland found that an average tree in an urban park in Portland processes 226 gallons of stormwater annually, providing the city \$6 in avoided stormwater management costs each year.¹⁰ It is important to note that, in its current condition, the property is dominated by impervious surfaces and has no trees.

⁷ Trust for Public Land. *The Economic Benefits of Seattle's Park and Recreation System*. March 2011.

⁸ Maas, J., R.A. Verheij, P.P. Groenewegen, et al. "Green Space, Urbanity, and Health: How Strong is the Relation?" *Journal of Epidemiology and Community Health* 60 (2006): 587-592.

⁹ Gies, E. *The Health Benefits of Parks*. The Trust for Public Land. 2006.

¹⁰ Portland Parks and Recreation. *Portland's Urban Forest Canopy: Assessment and Public Tree Evaluation*. October. 2007.

Reduce energy consumption

Trees influence the demand for energy at a local level, providing nearby structures shade in the summer and reducing the urban heat island effect.¹¹ This effect can reduce energy demand, which in turn lowers utility costs, improves air quality, and contributes fewer carbon emissions to the atmosphere.¹² A 2007 report in Portland found that an average street tree in Portland reduces the demand for electricity and natural gas, providing property owners about \$3 in energy savings each year.¹³ While the average park tree may not affect the energy demand for structures adjacent to a park, those that are positioned similar to street trees may provide similar benefits.

Enhance habitat in riparian area

The park will be developed along the edge of the Willamette River and it will be designed to improve the natural function of the riparian edge. Riparian areas support a wide variety of plants and wildlife, and the planned improvements will increase the health of the area.

Positive effect on air quality

The trees and other vegetation in the park will positively contribute to air quality in the region. Trees, in particular, capture gaseous air pollution and particulate matter. For example, a 2007 study of the value of parks in Portland found that trees in parks throughout Portland remove on average 462,662 pounds of air pollutants annually, providing benefits of more than \$500,000 per year in reduced healthcare costs.¹⁴

Economic Prosperity

Create jobs and income during construction period

Constructing the park will generate short-term jobs and associated income. Using an input-output model to estimate the number of jobs and income impacts associated with construction expenditures, City staff found that for every \$1 million in parks construction activity generates about 6 jobs with an average annual wage of \$60,200. The construction activity will have ripple effects throughout the Lane County economy, generating an additional 5 jobs with an average annual wage of \$39,600. In total, every \$1 million in parks construction will generate 11 jobs in Lane County.

Increase property values

A well-designed park creates a desirable space, and some households are willing to pay a premium to live near that park. An extensive literature review of the impact parks have on property values

¹¹ Earth Economics. *Nature's Value: An Economic View of Eugene's Parks, Natural Areas, and Urban Forest*. For the City of Eugene, Parks and Open Space Division.

¹² Simpson, J.R. "Improved Estimates of Tree-Shade Effects on Residential Energy Use." *Energy and Buildings* 34 (2002): 1067-1076.

¹³ Portland Parks and Recreation. *Portland's Urban Forest Canopy: Assessment and Public Tree Evaluation*. October. 2007.

¹⁴ Portland Parks and Recreation. *Portland's Urban Forest Canopy: Assessment and Public Tree Evaluation*. October. 2007.

concluded that most studies conducted over the past four decades found that parks increase the value of property near those parks.¹⁵

Studies that focused on parks in city centers found that parks have a greater positive impact on nearby properties than parks in more suburban landscapes. A study in the Minneapolis-St. Paul metropolitan area found that the benefit of being close to a park is higher for residences closer to the central business district.¹⁶ One study showed that residents were willing to pay a premium of 15% for homes or apartments nearby a neighborhood park, and an additional 2% if the home also had a view of the park.¹⁷

These results indicate that a public park in the riverfront site will enhance property values. Developing the park before private development begins will create higher assessed values for the structures than if they were built before the park. This will increase property tax revenue to the City.

Enhance tourism and transient room tax revenues

The development on the riverfront site will contribute to the community's overall identity as a visitor destination in a positive way. While we do not expect the park will be a tourist attraction, it will enhance the appeal of our area for tourism. The park's proximity to major athletic venues, including Autzen Stadium and Hayward Field make it an obvious destination for visitors attending athletic events. The improved access for all transportation modes will ensure that the park will attract the visitors before and after the athletic events, enhancing the visitor experience. To the degree that the Eugene area increases its appeal as a visitor destination, hotel revenue will increase, which will in turn yield increased revenues from the Transient Room Tax.

2. Quiet Zone

The purpose of the Quiet Zone (QZ) is to eliminate the routine sounding of train horns at 10 downtown railroad crossings to increase neighborhood livability and downtown redevelopment potential, including at the riverfront site. In the absence of a QZ, the Federal Railroad Administration (FRA) has the following requirements:

- Train horns must be sound 15 to seconds prior to and until a train reaches a crossing.
- The horn should not be sounded greater than a quarter-mile in advance of a grade crossing.
- The minimum sound level of the horn is 96 decibels (dBA), 100 feet in front of the train in its direction of travel.
- The maximum sound level is 110 dBA.

For context, audible communication usually ceases when background noise exceeds 90 dBA.

¹⁵ Crompton, J.L. 2001. "The Impact of Parks on Property Values: A Review of the Empirical Evidence." *Journal of Leisure Research* 33(1): 1-31.

¹⁶ Anderson, S.T. and S.E. West. 2006. "Open Space, Residential Property Values, and Spatial Context." *Regional Science and Urban Economics* 36(2006): 773-789.

¹⁷ Jim, C.Y. and W.Y. Chen. 2010. "External Effects of Neighborhood Parks and Landscape Elements on High-Rise Residential Value." *Land Use Policy* 27 (2010): 662-670.

The Public Works Department has identified 10 railroad crossings that need to be altered in some way to meet the FRA's QZ requirements before the FRA will allow a QZ in the area.

- **8th Avenue Crossing.** The road crossing at 8th Avenue will require re-location so that the existing 8th Avenue to the west of the riverfront site aligns with a new road connecting the site to the rest of the City's street system. The reconstruction of the crossing will be designed so it meets the FRA's safety standards to become a QZ.
- **High Street Crossing.** High Street is a major collector street at the railroad crossing. Public Works has determined that a quad gate is best safety measure.
- **Pearl Street Crossing.** Pearl Street is a major collector street at the railroad crossing. Public Works has determined that a quad gate is best safety measure.
- **Remaining 7 RR Crossings.** The safety measures at the remaining crossings include a mix of closures and supplemental safety measures.

Estimated Cost and Funding

Public Works has estimated the cost of implementing the safety measures at the 10 crossings will be \$7.4 million:

- **8th Avenue Crossing.** The design is expected to cost \$140,000 and construction will cost \$2.26 million.
- **High Street Crossing.** Design and construction is expected to cost \$1.0 million.
- **Pearl Street Crossing.** Design and construction is expected to cost \$1.0 million.
- **Remaining 7 RR Crossings.** Design and construction is expected to cost \$3.0 million.

Potential funding sources include Riverfront Urban Renewal (which can be applied to the 8th Avenue, High Street, and Pearl Street crossings) and the General Fund.

Social Equity

Increase safety at railroad crossings

To establish a QZ, railroad crossings must have supplemental safety measures (SSMs). The SSMs include closing streets, constructing quad gates, and installing other apparatus to warn people of approaching trains and/or keep them off the tracks. The improved safety measures at the crossings will make them safer, reducing the risk of fatal accidents with trains.

Improve access to riverfront site

Re-locating the 8th Avenue crossing so that the riverfront site is connected to the existing street system will greatly improve access to the Willamette River and the proposed public park. The 8th Avenue crossing is one part of an expanded road system, and it will create new connection to the River in the urban core. All members of the community will experience improved access to the whole site, the new public park, and the river.

Diminish noise

Implementing a QZ will reduce noise levels throughout the community. The FRA has modeled how train horn sound dissipates from its source. The model shows that speech interference can begin to

occur approximately 7,000 feet (1.3 miles) from the track when the train horn is sounding. People, outside and closer than 1,500 feet from the track, may have to shout to be heard.¹⁸

Improve health

Reducing the noise level will positively impact individuals who work or live within the impacted area. Some effects identified by researches include decreased performance on cognitive tasks, hearing loss, speech interference, and sleep disturbance. Research has also shown that negative cardiovascular effects are associated with long-term exposure to daily equivalent sound levels greater than 65 dBA and transportation noise is believed to accelerate and intensify the development of latent mental disorders.¹⁹

Environmental Health

Increased energy and materials use during construction period

The construction of the infrastructure will consume natural resources, including concrete, steel, and other materials. The construction equipment will generate greenhouse gasses and other emissions while it operates.

Economic Prosperity

Create jobs and income during construction period

Constructing the crossing will generate short-term jobs and associated income. Using an input-output model to estimate the number of jobs and income impacts associated with construction expenditures, City staff found that for every \$1 million in streets construction activity generates about 4 jobs with an average annual wage of \$60,700. The construction activity will have ripple effects throughout the Lane County economy, generating an additional 5 jobs with an average annual wage of \$42,200. In total, every \$1 million in streets construction will generate 9 jobs in Lane County.

Provide essential access to riverfront site

Re-locating the 8th Avenue crossing so that the riverfront site is connected to the existing street system is essential to the success of the development project. Without access, the site cannot become an integrated part of the city and its urban core and development of the full site cannot occur.

Reduce construction costs of development

In the absence of a QZ, there is strong evidence that development will not occur on the riverfront site. For example, HUD is may not allow the use of its funds for affordable housing. As part of the environmental review required by HUD to use CDBG funds, the City has to identify areas of 'problem' noise. Anything over 65 dBA is considered a problem and must be mitigated. For sound

¹⁸ Redden, John W.P., P.E. "Is Train Horn Noise a Problem in Your Town" *APWA Reporter*. September 2005.

¹⁹ Lee, Cynthia S.Y. and Gregg G. Fleming. *General Health Effects of Transportation Noise*. US Department of Transportation, Research and Special Programs Administration, John A. Volpe National Transportation Systems Center. June 2002.

levels exceeding 75 dBA, HUD encourages the developer to seek a different location. Sound Mitigation efforts include triple-glazed windows and thicker walls. These mitigation efforts create higher construction costs, and the costs can increase so much that rents cannot cover them. Affordable housing will not be financially feasible on this site.

Mitigation costs will be an issue for other development types, including market-rate housing and commercial structures. To mitigate the high level of sound, the construction costs will increase. It is unlikely that rents in the Eugene market will be able to be high enough so that the rent covers the higher construction costs. The increased costs of noise mitigation will make development financially infeasible. The lack of high-decibel train horns will eliminate need for highly sound-resistant windows and walls, thereby lowering constructions costs.

Efficient use of public funds

Public Works has recommended that the supplemental safety measures that meet QZ requirement occur in tandem with the re-alignment of 8th Avenue. By coordinating the two different improvements, total infrastructure costs are lower than if the City separated the construction efforts.

3. Bike Path

The Ruth Bascom Bike Path provides bicycle and pedestrian access along the Willamette River. The path exists at this time, but will be rebuilt in coordination with the riverfront Park and the 8th Avenue railroad crossing. The rebuilt path will create a strong bike/pedestrian connection between the riverfront site and the downtown core.

Estimated Cost and Funding

Public Works has estimated that designing the path will cost \$180,000 and the cost of constructing the path will be \$750,000. The Metropolitan Policy Committee held a public hearing on March 24, 2015 on the City's request for \$180,000 to fund design.

Potential funding sources include Federal STP-U and the City of Eugene's Transportation SDC.

Social Equity

Improve connectivity and access to riverfront and downtown core

The bike path will improve connectivity between the existing bike path system and the new housing and commercial development at the riverfront site and the downtown core. The improved connectivity will lower the time required to reach the different locations on bike or foot. The improvement will enhance the experience of pedestrians and bicyclists and reduce their travel time. This will increase the likelihood that individuals will choose to make trips on foot or bicycle, instead of using a car.

Increase opportunities to improve health

An improved bike path connecting the riverfront site to other parts of the community will increase the opportunity for residents to use the bike path and increase their physical activity. Please see the discussion under the Bike Share program for a description of health impacts.

Environmental Health

Increase energy and materials use during construction period

The construction of the bike path will consume natural resources, including gravel and other materials. The construction equipment will generate greenhouse gasses and other emissions.

Decrease average miles driven, carbon emissions, and other auto-oriented pollutants

The bike path will improve connectivity and will increase the likely that individuals choose to make trips on foot or bicycle, instead of using a car, thereby reducing the number of miles driven by Eugene residents. This will result in lower per capita carbon emissions and other automobile emissions (including carbon monoxide, nitrogen oxides, sulfur oxide, and particulate matter).

Economic Prosperity

Create jobs and income during construction period

Constructing the bike path will generate short-term jobs and associated income. Using an input-output model to estimate the number of jobs and income impacts associated with construction expenditures, City staff found that for every \$1 million in streets construction activity generates about 4 jobs with an average annual wage of \$60,700. The construction activity will have ripple effects throughout the Lane County economy, generating an additional 5 jobs with an average annual wage of \$42,200. In total, every \$1 million in streets construction will generate 9 jobs in Lane County.

Increase exposure to retail businesses

The bike path will directly pass near commercial activity in the riverfront site. In particular, restaurants stand to take advantage of pedestrians and bicyclists traveling along the path and choosing to stop at the retail facilities. The existing bike path covers many miles, but very few retail services are directly available on the path. The riverfront site has the potential to be a destination for weekend and evening bicyclists, looking to combine a recreational ride with a meal along the River. A recent study conducted for the City of Eugene reviewed the potential economic impacts of proposed street-design change to South Willamette, making it more accessible to bicycles and pedestrians.²⁰ The study reported that bike and walk trips are associated with more frequent business patronage, but with smaller per-trip expenditures. A survey in the Portland metropolitan area found that cyclists spent more than drivers at restaurants, drinking establishments, and

²⁰ ECONorthwest. "South Willamette Street Redesign: Economic Literature Review" memorandum for the City of Eugene, February 28, 2014.

convenience stores, but motorists spent more than cyclists at supermarkets.²¹ These data indicate that retail goods and services in the riverfront site will benefit from the proximity of the bike path.

4. Bike Share

Bike share is an innovative transportation program that allows people to check out a bicycle for short urban trips. System subscribers have access to public bicycles through self-service kiosk locations throughout the community. The system is accessed through low-cost subscriptions ranging from one-day access to annual membership. It is ideal for short distance, point-to-point trips. It is designed to be financially accessible to users of all economic strata.

The Oregon Transportation Commission (Connect Oregon) approved a \$900,000 grant to develop a bike-share system to serve central Eugene. The grant will likely fund 24 stations and about 170 bikes. The initial launch locations correspond to locations where people are likely to use bikes including downtown Eugene, the UO campus, the riverfront site, and portions of the Whiteaker neighborhood.

Estimated Cost and Funding

It will cost \$1.14 million to establish the program. Partner agencies are currently discussing operational funding. The Connect Oregon grant will fund \$909,000 of the start-up cost, and the City is currently working to identify a funding source for the remainder.

Social Equity

Increase opportunities to improve health

A bike-share program connecting the riverfront site to other parts of the community will increase the opportunity for residents to increase their physical activity. Bike sharing in other communities has been able to increase the transportation-mode share of bicycles. By decreasing the use of autos and increasing the use of bicycles, the program will have positive impacts on community health.

Physical inactivity is a well-documented risk factor for many of the most common health problems facing Americans, including obesity, heart disease, stroke, some cancers, diabetes and depression. In a report that examined bicycle programs on federal lands, the Federal Highway Administration reported that it is estimated that 67% of U.S. adults age 20 years and over are overweight or obese and bicycling can be a good way to engage in regular physical activity.²²

²¹ Clifton, Kelly at al. "Consumer Behavior and Travel Mode Choices" Oregon Transportation Research and Education Consortium. 2013. As cited in ECONorthwest. "South Willamette Street Redesign: Economic Literature Review" memorandum for the City of Eugene, February 28, 2014.

²² Gleason, Rebecca and Laurie Miskimins. *Exploring Bicycle Options for Federal Lands: Bike Sharing, Rentals and Employee Fleets*. Federal Highway Administration, Western Federal Lands Highway Division, Western Transportation Institute. FHWA-WFL/TD-12-001. January 2012.

The City of Eugene completed a Feasibility Study for a Bike Share program in 2014.²³ That study found that bike share's ability to reduce some of the common barriers to regular bicycle use, (i.e., allowing new users to try bicycling without needing to own or store a bicycle) as well as the design of the bicycles and the visibility of the stations has a significant impact in attracting new riders. In Minneapolis for example, 33% of new members surveyed in 2010 by Nice Ride Minnesota had ridden less than once per month before joining.

Expand and enhance existing transit services

Bike share creates additional mobility in a community by adding transportation options. Bike share trips tend to be short—between one to two miles in length and about 20 minutes in duration. As a result, they provide an option for trips too far to walk and trips too short to wait for transit; a perfect first-mile / last-mile solution to access public transit. Many bike share users combine membership in a bike share system with transit, car-share, walking, and other transportation options to reduce their dependency on automobile travel. In some places, this has resulted in a fundamental shift in trip-making and household vehicle ownership.²⁴

Environmental Health

Decrease average miles driven, carbon emissions, and other auto-oriented pollutants

As part of its Feasibility Study for a Bike Share program, the City of Eugene found evidence that bike-share programs can reduce carbon emissions because bike sharing has been able to increase the transportation-mode share of bicycles. In communities where bike share is an active transportation option, surveys have shown that approximately 20% to 40% of annual member bike-share trips replace what would have been an automobile trip. For example, the City of Denver calculated that its program helped avoid the emission of about 730,000 pounds of CO₂ in one year.

Economic Prosperity

Increase business activity near bike-share stations

As part of its Feasibility Study for a Bike Share program, the City of Eugene found evidence that bike-share programs can increase economic activity. The bike-share program in Miami, Florida found that the bike-share users were more likely to patronize a business with a bike share station close by. By locating bike-share stations near commercial activity, the program can increase patronage and sales.

Reduce household expenditures on transportation

Participating individuals and households may experience reduced expenditures on transportation and health care, which combined make up over 22% of annual average household expenditure in the United States. Compared to the cost of operating an automobile, bike share membership is relatively inexpensive with most systems costing between \$50 and \$100 per year. In comparison,

²³ Toole Design Group. Eugene Bike Share Feasibility Study. Prepared for Lane Transit District and City of Eugene. June 2014.

²⁴ Toole Design Group. Eugene Bike Share Feasibility Study. Prepared for Lane Transit District and City of Eugene. June 2014.

the median cost of annual car ownership is approximately \$9,100. A study of a bike-share program in Washington DC found that 87% of its annual members reduced weekly travel expenditures.

5. Loan Program

The Riverfront Renewal Loan Program will be a revolving loan program designed to encourage capital investment within the Riverfront Urban Renewal District. The program is modeled on the existing Downtown Revitalization Loan Fund in the Downtown Urban Renewal District. The loan program will be a flexible financing program designed to encourage investments within the Riverfront Urban Renewal District that contribute to the economic vibrancy and density goals for District. It is also designed to be responsive to unique redevelopment opportunities, redevelopment challenges, and individual project financing needs.

The loan program will be available to property owners and tenants. Generally, the terms of the loan are favorable, with a flexible repayment schedule. It can be applied to physical improvements within the District, including façade improvements, historic preservation, and tenant improvements.

Estimated Cost and Funding

The Riverfront Urban Renewal Agency has established \$1.0 million in Fiscal Year 2016 for the revolving loan program's initial capital infusion. The Riverfront Renewal Loan Program will be managed along with existing loan programs. The increased administrative costs will be incremental, and funded with existing Riverfront Urban Renewal District funds.

Social Equity

Provides resources for small businesses

The loan program will provide gap financing to business and property owners. Borrowers face gaps in financing for a variety of reasons, including a lack of credit or business history (typical of startups), lack of collateral, and tight lending requirements.

Supports historical preservation

The loan program will be applicable to the rehabilitation of the Steam Plant and the Bow Truss buildings.

Environmental Health

Increase energy and materials use during construction period

The construction financed by the loan program will consume natural resources, including concrete, wood, steel, and other materials and the construction equipment will generate greenhouse gasses and other emissions.

Economic Prosperity

Increase property tax revenues

The loan program provides financing for physical improvements, which will increase the value of the improvement property. The property tax revenue generated by the properties will increase if the physical improvements cause the property to experience an increase in assessed (or taxable) value.

Since 2004, the Downtown Revitalization Loan Fund has loaned \$5.0 million to businesses and property owners, which leveraged an additional \$20.5 million in additional funds for the improvements. The value of the property in the Downtown Urban Renewal District has increased as a result of those investments. For example, a rehabilitation of one older building that relied on the Downtown Revitalization Loan Fund increased its assessed (taxable) value from \$1.4 million to \$3.4 million.²⁵

6. Enhanced Streets, Sidewalks, and Open Space

The *EWEB Riverfront Master Plan* envisioned an enhanced pedestrian environment that connects sites within the riverfront area and back to downtown. The Planning and Development and Public Works Departments are working to identify how to enhance that infrastructure so that the overall development offers a high quality urban experience.

At this time, City staff and the development team are working to identify specific enhancements that could be included in the public environment. The enhancements may include rounded curbs, treatments to the street surface, enhanced cross walks, wide sidewalks, additional landscaping, quality lighting, street furniture, public art, and a water feature.

Estimated Cost and Funding

We have not identified expected costs of the enhanced streets, sidewalks, and open space. Potential funding sources include Riverfront Urban Renewal.

Social Equity

Enhance the public experience

The enhancements to basic transportation infrastructure and small-area open spaces will make the area more visually appealing and make it a desirable location. Because the sidewalks, roads, and surrounding landscaping are in the open, all members of the community will enjoy the higher quality infrastructure. In addition, the wider sidewalks will make it easier to navigate the area for individuals with impaired mobility.

²⁵ Based on assessed values reported by Lane County Assessment and Taxation.

Positive effect on health

The enhancements are expected to include small greenspaces with natural landscaping. Greenspace positively affects emotional and physical well-being. There is research that measures the correlation between the risk of health problems to living near green space, and it has shown that living close to green space lowers the risk of heart disease, diabetes, chronic neck and back pain, asthma, migraines, depression and anxiety.²⁶

Environmental Health

Reduce stormwater runoff

The landscaping throughout the riverfront site will be designed to reduce stormwater runoff and filter runoff through bioswales. These stormwater enhancements will reduce the amount of impervious surface on the property and represent potential storm water management cost savings for the City. The existing EWEB site has a total of 16.4 million gallons of stormwater runoff annually, and the greenspace in combination with the park will reduce runoff by an estimated 19% to 65%.

Reduce energy consumption

Trees influence the demand for energy at a local level, providing nearby structures shade in the summer and a barrier to wind in the winter. Both effects can reduce energy demand, which in turn lowers utility costs, improves air quality, and contributes fewer carbon emissions to the atmosphere. The effectiveness of a tree to reduce energy consumption depends on its proximity and position relative to a structure. Trees nearby structures on south-facing exposures typically provide greater levels of benefits than trees more distant from structures, or on north-facing exposures.²⁷ A 2007 report in Portland found that an average street tree in Portland reduces the demand for electricity and natural gas, providing property owners about \$3 in energy savings each year.²⁸

Positive effect on air quality

The trees and other vegetation in the landscaped areas will positively contribute to air quality in the region. Trees, in particular, capture gaseous air pollution and particulate matter. For example, a 2007 study of the value of parks in Portland found that trees in parks throughout Portland remove on average 462,662 pounds of air pollutants annually, providing benefits of more than \$500,000 per year in reduced healthcare costs.²⁹

²⁶ Maas, J., R.A. Verheij, P.P. Groenewegen, et al. "Green Space, Urbanity, and Health: How Strong is the Relation?" *Journal of Epidemiology and Community Health* 60 (2006): 587-592.

²⁷ Simpson, J.R. "Improved Estimates of Tree-Shade Effects on Residential Energy Use." *Energy and Buildings* 34 (2002): 1067-1076.

²⁸ Portland Parks and Recreation. 2007. *Portland's Urban Forest Canopy: Assessment and Public Tree Evaluation*. October.

²⁹ Portland Parks and Recreation. 2007. *Portland's Urban Forest Canopy: Assessment and Public Tree Evaluation*. October.

Economic Prosperity

Enhance financial viability

The enhanced public infrastructure will create a sense of place that makes the riverfront site a desirable location. The more desirable the site becomes, the more likely that the development will be financially successful and achieve full buildout.

7. Preservation of Historic Structures

The riverfront site includes two older buildings: the bow-truss warehouse and the steam plant. The City of Eugene (and the Urban Renewal Agency) could support the preservation of the historic buildings by contributing funds or extending financing.

Estimated Cost and Funding

At this time, the cost to rehabilitate the structures is not known. Potential funding sources include Riverfront Urban Renewal and loans from the proposed Loan Program.

Social Equity

Enhance cultural identity

Adaptive reuse of the historic steam plant and bow-truss building preserve an important part of Eugene's past. Built structures are a tangible representation of history in a place. By preserving historic structures, we are able to share the spaces in which earlier generations lived and worked. Older structures are part of a community's history and preserving them enhances the City's cultural identity.

Environmental Health

Conserve existing resources

Restoration and redevelopment may consume less energy than demolition and new construction, and preservation continues to use the value of past energy investment. Demolition and new construction not only consume present-day energy, but negates and wastes the past energy investment made in a building.

Economic Prosperity

Cost of rehabilitation may exceed economic value of the structures

The full cost of rehabilitating the two older structures in the riverfront site is not known. It is possible, however, that the cost of rehabilitation will exceed the economic value of the structures. The true value of rehabilitation is how the cultural value of the older structures enhance the overall site and help to make the place a unique part of the community.

8. Affordable Housing

The UO Foundation development team has indicated it intends to build affordable housing. The City of Eugene supports affordable housing with a wide variety of tools that can be used at the riverfront site. In Eugene, many individuals and families struggle to find housing they can afford.

Approximately 60% of Eugene households pay more than 30% of their income on housing.³⁰ The City of Eugene works to create a range of stable, safe, and affordable housing opportunities for area residents. Eugene programs provide financial and regulatory incentives for the development of permanent, transitional and emergency housing developed by partner organizations.

Estimated Cost and Funding

We have not identified expected costs for affordable housing. Potential funding sources include:

- HOME funds
- Federal Low Income Housing Tax Credits
- State of Oregon Tax Credits
- CDBG
- SDC Waivers
- Low Income Rental Housing Property Tax Exemption (LIRHPTE)

Social Equity

Increase location choices for low-income households

Current residents of affordable housing in the community have indicated that they have diverse preferences about housing locations.³¹ Affordable housing in the riverfront site will create opportunities for low-income households to live within walking distance to the Willamette River, the downtown core, LCC, and the University. The site will offer proximity to employment centers, retail goods and services, views of the River, and recreational activities that are not currently available in Eugene.

Reduce dependency on automobiles

Housing in the riverfront site will provide households the opportunity to live close to two major employment centers and a range of goods, services, educational, recreational, and cultural opportunities. Households living in existing affordable housing developments in the downtown core—the Aurora and West Town on 8th—rely on automobiles much less than households living in other parts of the community. Two-thirds of commuters living in downtown affordable housing projects travel by bus, bike or walk, a significantly higher portion than 20% of all commuters in Eugene.³² Proximity to major employment centers and transit hubs is particularly valuable to low

³⁰ U.S. Census Bureau. American Community Survey, 2007-2011.

³¹ St. Vincent de Paul Society of Lane County, Inc., Housing and Community Services Agency of Lane County, and Metropolitan Affordable Housing Corporation. *Assessment of Equity and Opportunity for Affordable Housing Residents*. For Livability Lane. January 2014.

³² City of Eugene, Planning and Development Department. *Sustainability and Affordable Housing*. June 2007. To show the different impacts, we used previously existing affordable developments in the City of Eugene. The two developments that most closely resemble the expected development in the riverfront site are the

income households. If they can get to work (and other activities) without a car, they may choose to not own a car, eliminating the cost of car ownership.

Reduce commute times

Housing in the urban core reduces average commute times for its residents. Across Eugene, 20% of commuters have a commute time of less than 10 minutes, but 25% of commuters in existing downtown affordable projects have a commute time of less than 10 minutes.³³

Provide access to goods and services

Many forms of federal and state funding for affordable housing require access to key facilities, such as a grocery store. New affordable housing on the riverfront site will have access to the farmers market and existing and planned new grocery stores. In addition, the new development is close to LCC's downtown campus, recreation possibilities at the new riverfront park, and good access to the bike path. A 2014 study initiated by the Lane Livability Consortium assessed the issues of access, equity, and opportunity of affordable housing residents. The study found that many affordable housing residents experience a lack of access to nutritious food and safe places to exercise.³⁴ New affordable housing in the riverfront site will provide increased opportunity to for its residents to address those issues.

Improved standard of living positively affects health

Quality affordable housing creates positive health outcomes for many reasons. Low quality housing has problems which negatively affect health, such as lead paint, mold and mildew, cockroach infestations, and other factors. In addition, poor quality housing (and uncertainty regarding housing options) can impact mental health conditions. High housing costs can lead to budget trade-offs that shortchange health care.³⁵ Affordable housing also helps low-income individuals escape domestic violence.³⁶

Environmental Health

Increase energy and materials use during construction period

The construction of new buildings will consume natural resources, such as wood, steel, and other materials. The construction equipment will generate greenhouse gasses and other emissions.

Aurora building (at 11th Avenue and Oak) and West Town on 8th (on 8th Avenue between Charnelton and Lincoln). The Aurora building has the highest density, at 245 units per acre and West Town has 107 units per acre. To show the impacts, we average the numbers that describe these two buildings.

³³ City of Eugene, Planning and Development Department. *Sustainability and Affordable Housing*. June 2007.

³⁴ St. Vincent de Paul Society of Lane County, Inc., Housing and Community Services Agency of Lane County, and Metropolitan Affordable Housing Corporation. *Assessment of Equity and Opportunity for Affordable Housing Residents*. For Livability Lane. January 2014.

³⁵ Mueller, E.J., and J.R. Tighe.. "Making the Case for Affordable Housing: Connecting Housing with Health and Education Outcomes." *Journal of Planning Literature* 21 (371). 2007.

³⁶ Martin, E.J. and N.S. Stern. "Domestic Violence and Public and Subsidized Housing: Addressing the Needs of Battered Tenants through Local Housing Policy." *Journal of Poverty Law and Policy*. January-February 2005.

Decrease average miles driven, carbon emissions, and other auto-oriented pollutants

As described in the section above describing the impacts of the Overall Development of the Site, dense, mixed-use development near the downtown and UO will increase housing opportunities within close proximity to employment and retail services, decreasing average miles driven per Eugene resident, and associated automobile emissions and carbon footprint.

Economic Prosperity

Create jobs and income during construction period

Constructing new affordable housing will generate short-term jobs and associated income. Using an input-output model to estimate the number of jobs and income impacts associated with construction expenditures, City staff found that for every \$1 million in multi-family residential construction activity generates about 5 jobs with an average annual wage of \$61,200. The construction activity will have ripple effects throughout the Lane County economy, generating an additional 8 jobs with an average annual wage of \$45,600. In total, every \$1 million in multi-family residential construction will generate 13 jobs in Lane County.

Increase consumption spending

Reducing housing costs for low-income households directly increases consumption spending for those households. The household income is so low that they typically do not direct the funds into savings; the savings from reduced housing costs are immediately spent on other basic items.

Varying impact on property values

Academic research has measured the impact new affordable housing developments have on values of surrounding property, but the research has found that impacts differ across programs and circumstances. A review of previous studies found that affordable housing can have a negative effect on nearby property values, but design and management of the affordable housing can limit that impact.³⁷ The empirical evidence indicates that five key factors influence the effect affordable housing has on nearby property values.³⁸

- The physical appearance of subsidized housing can affect the appeal of a community. Unattractive or unkempt buildings may harm a community, while attractive and well-maintained buildings may enhance a community.
- The development of subsidized housing may signal to developers an area is viable and attract additional investment.
- New housing will lead to increased population. An increase in population can make local streets safer and promote commercial activity.
- Affordable housing may lead to a more stable population, since residents of subsidized housing tend to live in units for longer periods of time.

³⁷ Nguyen, M.T. "Does Affordable Housing Detrimentally Affect Property Values? A Review of the Literature." *Journal of Planning Literature* 20 (15). 2005.

³⁸ Schwartz, Ellen, Voicu, and Schill. Cited by Ellen, I.G. "Spillovers and Subsidized Housing: The Impact of Subsidized Rental Housing on Neighborhoods." Joint Center for Housing Studies, Harvard University. RR07-3. March. 2007.

- Subsidized housing often replaces abandoned buildings or vacant lots. This can make neighborhoods safer and more attractive. On the other hand, subsidized housing could replace a desirable use, such as a park or open space.

This research indicates that by carefully selecting the locating and incorporating good project design, subsidized housing can have a positive impact on nearby property values. The existing affordable projects in downtown Eugene have enhanced the overall viability of development in downtown. The projects are visually appealing and have brought residents to the area. If the affordable housing development in the riverfront site is similar in quality to the recent downtown projects, it should positively impact nearby property values.

9. Parking

The riverfront site has no public parking facilities at this time. The City of Eugene (and the Urban Renewal Agency) with a private partners could fund the construction of a parking structure that supplied parking for public, commercial, and residential uses in the riverfront site.

Estimated Cost and Funding

At this time, the cost to construct a parking structure is not known. Potential funding sources include Riverfront Urban Renewal.

Social Equity

Improve access to the riverfront for individuals with limited mobility

The riverfront site will have strong bicycle and pedestrian access, but not all members of the community have the physical capacity to reach the area without an automobile. Providing adequate parking will ensure that residents with limited mobility will be able to access the new park and new commercial activity on the riverfront.

Environmental Health

Increase energy and materials use during construction period

The construction of new buildings will consume natural resources, such as wood, steel, and other materials. The construction equipment will generate greenhouse gasses and other emissions.

Varying impact on automobile use

Providing parking for the development may be viewed as increasing dependency on automobile transport. Negative environmental impacts may be mitigated by pursuing “Green Garage Certification,” a rating system that defines and recognizes sustainable practices in parking structure, design, programming, technology, and management. The City of Eugene’s Parking Services staff work with the Green Parking Council to promote a holistic approach to managing the City’s parking infrastructure. The parking structure can be designed and managed to enhance access to mass transit, provide access to the bike share program, and direct new visitors to nearby amenities.

Reduce drivers cruising for street parking spaces

A central and well-identified parking location reduces the number of people cruising for parking spaces. This has an equity benefit of reducing traffic and a significant environmental benefit. Research has shown that, on average, 30% of cars in a business district are cruising for parking.³⁹ There are environmental benefits of reduced fossil fuel consumption and improved air quality to be gained by reducing parking space cruising.

Decrease demand for surface parking

A multi-level parking structure provides greater parking capacity per acre than surface parking. Surface parking is much less costly to provide, on a per space basis. A multi-level structure decreases the amount of impervious and its associated heat island effect.

Economic Prosperity

Create jobs and income during construction period

Constructing a new parking structure will generate short-term jobs and associated income. Using an input-output model to estimate the number of jobs and income impacts associated with construction expenditures, City staff found that for every \$1 million in parking-structure construction activity generates about 6 jobs with an average annual wage of \$60,200. The construction activity will have ripple effects throughout the Lane County economy, generating an additional 5 jobs with an average annual wage of \$39,600. In total, every \$1 million in parking structure construction will generate 11 jobs in Lane County.

Enhance financial viability of overall development

Although the development on the riverfront site will create a neighborhood that offers nearby employment and services, providing parking for commercial activity will be necessary for the development's financial success. If the new development has inadequate parking supply, the new area may be unable to attract office and retail tenants. Researchers have identified how parking affects demand for different uses.⁴⁰

- If there are not enough parking spaces or if drivers perceive that there are not enough parking spaces, they may abandon their trip and choose to not visit the new park or patronize new retail activity.
- If there is not enough parking available drivers may choose to travel to a different destination, where there is sufficient parking. This is particularly true for retail activity.
- Some studies have shown that restricting the availability of parking may not result in a decrease in economic activity or vitality, provided that there are attractive alternative modes of transportation, such as public transit, bicycling, or walking. This requires that an

³⁹ Shoup, Donald. "Cruising for Parking" in *Access*. No. 30, pp. 16-22. Spring 2007.

⁴⁰ Yoram Shiftan, Daniel Shefer, and Gali Avraham. *The Impact of Auto Restraint Policies on the Location of Businesses in City Centers*. Annual meeting of the Transportation Research Board, 2003.; and Yaron Hollander, Joseph N. Prashker, and David Mahalel. *Determining the desired amount of parking using Game Theory*. *Journal of Urban Planning and Development*, Vol. 132, No. 1, March 2006; and Ben Still and David Simmonds. *Parking restraint policy and urban vitality*. *Transportation Reviews*, Vol 20, No 3, 2000.

extensive public transportation system is available, connecting the destination to residences throughout the community.

Adequate parking is essential to commercial and retail activity. Without adequate parking, some firms and retailers will find an area undesirable and will choose to locate elsewhere. How much parking is adequate is a much more difficult question to answer.

10. Willamette to Willamette

Willamette to Willamette is a Plan with implementation strategies to improve the public realm between Willamette Street and the Willamette River. City staff have recently begun to identify the scope of the Plan. At this time, it is expected to cover 8th Avenue and is likely to include changes such as converting it to a two-way street, creating pedestrian amenities, and enhancing the landscaping. The modifications will create a sense of connectivity between the downtown core and the riverfront site.

Estimated Cost and Funding

Planning and designed work will be conducted using existing budgeting resources. The cost of construction is not yet known. Potential funding sources include Riverfront Urban Renewal (for portions within the Riverfront Urban Renewal District).

Social Equity

Improve pedestrian access to riverfront site

The enhancements will improve the pedestrian experience along 8th Avenue. Landscaping and wider sidewalks will make it more pleasant to walk between the downtown core and the riverfront.

Improve connectivity for all transportation modes

The aim of the Plan will be to improve the connectivity for cars, bikes, and pedestrians, so the route between the two areas is inviting and easily navigated.

Complement downtown revitalization

The enhanced public realm amenities will realize the *Eugene Downtown Plan* vision for downtown as an active, strong urban core connected to the river.

Environmental Health

Increase energy and materials use during construction period

The construction of the infrastructure will consume natural resources, including gravel, concrete, and other materials. The construction equipment will generate greenhouse gasses and other emissions.

Decrease average miles driven, carbon emissions, and other auto-oriented pollutants

Improving the pedestrian and bicycle route between the downtown core and the riverfront will increase the likelihood that individuals will choose to bike or walk between the two areas.

Economic Prosperity

Improve business access

Well-designed public spaces improve the physical appeal of a commercial area, making it a more desirable location for businesses.

Enhance property values

The enhanced public spaces will create a sense of place that makes the riverfront site a desirable location, which will enhance nearby property values.