# Introduction

The citizens of West Linn are proud to call this beautiful place home. However, like the rest of our world, we face complex environmental, social, and economic concerns that require both adaptation and mitigation to ensure West Linn continues to flourish. A responsible city does much more than merely hope for the best – it meets challenges head-on and prepares. It anticipates its citizens’ long-term needs and takes action today to meet those needs. Sustainability requires commitment from everyone, from the individual all the way up to the government, and each one of us will play a very real part in laying the path from the West Linn we love today to the one we will love even more tomorrow.

This S*ustainable West Linn Strategic Plan – Update 2015* is the work of a diverse group of citizens, decision-makers, and experts who have dedicated their time to position West Linn as a leader in sustainability. It builds upon the principles established in the original S*ustainable West Linn Strategic Plan,* provides updates on some of the challenges we face as a city, and proposes new ideas aimed at improving quality of life community-wide. It suggests steps that can help citizens of West Linn stay here for their entire lives, close to their families and to the places they enjoy. It demonstrates why a resilient, sustainable city and a livable, vibrant one are not mutually exclusive; in fact, these combined goals are at the heart of this Plan.

The importance of environmental stewardship, social development, and smart economic growth only increases as time goes on. Many practices that have worked in the past will need to be adapted to meet the demands of the future. This *Sustainable West Linn Strategic Plan – Update 2015* can inspire meaningful conversation about how our hopes and expectations for West Linn’s future relate to the kinds of improvements that need to happen. One day sustainability will be much more than something West Linn does only out of necessity. It will be woven into the tapestry of our community, our culture, and the way we see our place in the world. When that day comes we will be able to look back with pride at these decisions that benefit Earth and all of West Linn in perpetuity. What could be a more inspiring future than that?

This document is the result of countless hours of work and dedication by the West Linn Sustainability Advisory Board (SAB), without whom the objectives and projects identified herein would remain merely ideas. The City would to thank these individuals for their outstanding service:

Nicole Alexander, SAB

Clare Bean, SAB

Lisa Clifton, SAB

Cecil Denny, SAB

Glen Friedman, SAB

Tamara Gilbert, SAB

Bill Hohensee, SAB

Paula Ryan, SAB

Alex Mihm, Citizen Volunteer

Sara Harding Mihm, Citizen Volunteer

Much of the material included herein is adapted from the *Sustainable West Linn Strategic Plan* of 2006. We would like to acknowledge the people who contributed to that document, including:

Rick Wilhelmi, SAB

Michelle Wittenbrink, SAB

Etc., Etc.

Contents

[Introduction 1](#_Toc413346822)

[Sustainable West Linn Vision 4](#_Toc413346823)

[Executive Summary 6](#_Toc413346824)

[Sustainability Frameworks 9](#_Toc413346825)

[Community Outreach 12](#_Toc413346826)

[Existing Conditions 13](#_Toc413346827)

[How this Plan is Organized 16](#_Toc413346828)

[Built Environment 18](#_Toc413346829)

[Energy 23](#_Toc413346830)

[Natural Areas 27](#_Toc413346831)

[Water 32](#_Toc413346832)

[Materials Management 37](#_Toc413346833)

[Health & Food 45](#_Toc413346834)

[Community Inclusion 53](#_Toc413346835)

[Appendix A – Glossary of Terms and Abbreviations 58](#_Toc413346836)

[Appendix B – Top Priorities 62](#_Toc413346837)

[Appendix C - West Linn Civic Ecology Workshop Summary 63](#_Toc413346838)

[Appendix D– Kulongoski’s Executive Order 64](#_Toc413346839)

[Appendix E – The 2030 Challenge 65](#_Toc413346840)

[Appendix F – Web Resources & Links 66](#_Toc413346841)

Sustainable West Linn Vision

The *Sustainable West Linn Strategic Plan – Update 2015* works from the same basic definition of sustainability developed in the original plan:

# Sustainability defined

The term “sustainable development” was popularized in a report published in 1987 by the World Commission on Environment and Development titled, *Our Common Future* (also known as the Bruntland Report).

This report established the classic definition of sustainable development: *“development which meets the needs of the present without compromising the ability of future generations to meet their own needs.”* (WCED, p. 43)

Acceptance of this report by the United Nations gave the term political salience and in 1992 world leaders set out the principles of sustainable development at the UN Conference on the Environment and Development in Rio De Janiero, Brazil.

*“sustainability means conserving, developing, and using resources in a manner that enables people to meet their needs today while also ensuring that ecosystems and future generations can meet all needs of their own. A sustainable community balances the interests of individuals and organizations with the inherent benefits of the natural environment and of economic stability to create a livable, enjoyable community for all future generations.”*

People, Planet, Prosperity

For too long, modern society has acted on an assumption of “either/or”: either jobs or the environment; growth or livability; wealth or health and happiness. Sustainability is about “yes, and...” We can and should make decisions that simultaneously enhance our community, our natural environment, and our economy. These three elements are not trade-offs; they are interdependent, inseparable elements of our community's well-being. This Plan provides recommendations that will make life better for our citizens as well as all other living beings, both today and into the future. This is a critical part of the journey towards a West Linn in which our residents and workforce, our environment, and our economy are all healthy and thriving.

The original *Sustainable West Linn Strategic Plan,* adopted by City Council in 2006, considered the values listed below as the most important features of West Linn to preserve. These values remain relevant for this update:

Natural features — scenic landscapes, green spaces, parks, wildlife, trees, proximity to rivers, views of Mt. Hood

High quality educational institutions/schools

Distinct and safe neighborhoods

Cohesive development — a variety of housing and complementary building designs; few strip malls and big box stores

Convenient access to other regional destinations such as Portland, Mt. Hood, and the Oregon coast

The *2014 City of West Linn Community Survey* found that residents would like to see City Council address the issues of population growth, improved transparency and accountability of the City Council, and financing for water and streets infrastructure. This Community Survey also revealed that residents value West Linn for its family-oriented, friendly feel with an involved citizenry, low crime, and high level of safety. Residents also characterize West Linn as a desirable city because of the high quality of its schools. This Plan Update seeks to preserve what we love most about West Linn while adapting to changing conditions and positioning the city to be prosperous for generations to come.

# Executive Summary

The City of West Linn's efforts to incorporate sustainability thinking and practices into its corporate and community culture began in the early 1990s with the appointment of the West Linn Visioning Committee, which produced the *Imagine West Linn* report in 1993. Succeeding City Councils have embraced sustainability as a community value. The 2005 Council adopted a resolution establishing an *ad hoc* Task Force on Sustainability comprised of citizens with knowledge and expertise in different aspects of sustainability. Its purpose was to make recommendations to the Council on what would be necessary to make serious progress toward a sustainable community, including:

* A specific City Council goal to "protect and enhance the integrity, stability, and beauty of the natural environment”
* A community desire to reduce the negative impacts of growth and development on the City
* A need to provide a healthy, productive, and meaningful life for all community residents ― present and future — and to improve the economic, social, and environmental systems that make up our community of West Linn

City Council adopted the *Sustainable West Linn Strategic Plan* in 2006 and created the Sustainability Advisory Board (SAB) in 2008. This update to the *Sustainable West Linn Strategic Plan* examines long-term trends, identifies where progress has been made since 2006 and suggests recommendations for further action.

The *Sustainable West Linn Strategic Plan* ― *Update* *2015* is organized into discrete focus areas with specific goals, strategies, and implementation steps. This is a change from the original Plan which was organized by recommendations for the community, city government, businesses, neighborhoods, and households. This structural reorganization reduces repetition and emphasizes action steps, as well as identifies possible partners who could be a part of implementing a variety of strategies.

This Update is written as a guiding document for the many individuals and organizations who have participated in this planning process and/or are active in community sustainability issues, including City staff who work closely with the array of services the City provides. This Plan is intended to complement various other documents that City staff and community organizations are currently implementing, such as the *City of West Linn Comprehensive Plan*, the *West Linn* *Transportation System Plan*, and *Imagine West Linn,* among others. This Plan establishes a set of goals that are intended to be achieved by or before the year 2040, which aligns with the City’s *Transportation System Plan* and *Imagine West Linn Vision.* Top priorities to be implemented in the near future are identified in Appendix B. This Appendix will be continuously updated to prioritize and guide Plan implementation.

The City of West Linn, through its government and its citizens, has already implemented a number of sustainability actions; however, much more remains to be accomplished. This *Sustainable West Linn Strategic Plan ― Update 2015* establishes a framework for implementation. This document should be thought of as another step in the pursuit of sustainability and by no means should be considered a final product.

West Linn continues its quest to become a sustainable city. An Oregon Sustainability Board works at the state level to encourage activities that best sustain, protect, and enhance the environment, economy, and community for the present and future benefits of Oregonians. Most agencies have a sustainability plan in place. Many municipalities are pursuing strong sustainability goals. The sustainability plans of Corvallis and Portland in Oregon, Cleveland, Ohio and Whistler, British Columbia have provided considerable insights during this Plan update process. All of us in West Linn can and should do our part to secure a positive future for ourselves and future generations.

Accomplishments to Date

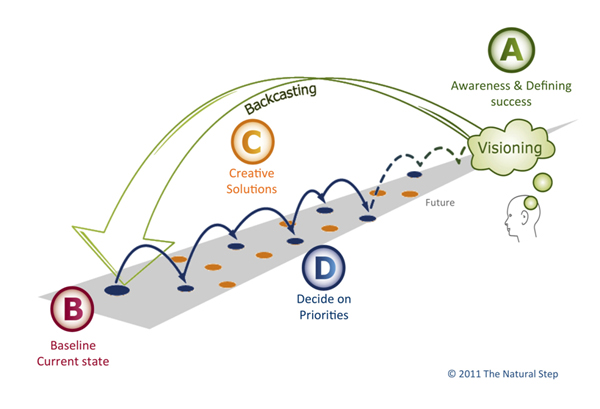
The City of West Linn has accomplished many tasks that are a part of making West Linn a more sustainable city. To date, the City has done the following:

* Conducted baseline energy audits of selected City facilities
* Implemented a number of energy-savings measures, including energy efficient lighting and hand dryers
* Conducted a baseline solid waste audit at City Hall
* Added hybrid vehicles to the City fleet
* Adopted Resolution No. 07-24, which established green building standards for City-owned and other public and private buildings in West Linn. This resolution seeks to achieve a minimum level of Leadership in Energy and Environmental Design (LEED) Silver rating for new construction of City-owned buildings
* Constructed a new West Linn police station in 2015 to meet LEED Gold certification
* Began developing an environmentally preferable purchasing policy
* Held a series of sustainability education courses for City staff and citizen advisory board members
* Held a series sustainability-oriented public lectures
* In 2014, hosted a Solar Home Tour of West Linn homes
* In 2014, hosted three public Civic Ecology workshops to solicit community ideas for achieving sustainability

# Sustainability Frameworks

The *Sustainable West Linn Strategic Plan ― Update 2015* is built around proven frameworks for implementing sustainable community practices. These include the principles of The Natural Step and STAR Communities (Sustainability Tools for Assessing and Rating), both of which are being used by other local jurisdictions around the United States.

In developing this Sustainability Plan, great consideration has been taken to ensure the goals and steps stated herein are compatible with West Linn’s unique character. The frameworks described below are meant to be tailored to individual communities’ needs. We have selected and modified elements to fit and advance the West Linn we all love. While much work needs to be done to both mitigate and adapt to the myriad challenges we will face, West Linn already has in place many conditions that are goals of the listed programs. The insights these programs offer can help preserve what makes our city so unique even while our needs ― and the needs of the world around us ― evolve. This balance is accomplished by selectively creating the goals that are most applicable to our needs and then adapting them as needed.

The Natural Step

The Natural Step is an internationally recognized model for sustainability strategic planning. It is based on scientific understanding of how human activity impacts the natural environment. It embodies a decision-making process to move organizations and civic bodies away from underlying practices that threaten ecosystems and towards others that operate successfully within the limits of natural and social systems. Long-term goals for sustainability are identified, and the necessary steps between present conditions and those long-term goals are formulated through the process of backcasting. Backcasting means working backward from a defined vision to chart the path between that vision and the current situation. These intermediate steps become the blueprints for planning and development.

The Natural Step may be best known for codifying the essential principles of viable ecosystems, known as The Four Systems Conditions. SERA Architects in Portland, the developers of Civic Ecology and the consultant for West Linn’s Civic Workshop series conducted in 2014, has reformulated the underlying Four Systems Conditions into the following thought-provoking questions for examining community undertakings:

Take – Can Earth replace what we take?

Make – Are we poisoning the ground, water, or air?

Respect – Are we respecting the biodiversity of flora and fauna?

Choose – Are the choices we make fair and equitable?

These underlying strategic questions are used to examine choices in community development so that decision-makers can work to find a balance between the diverse needs of people and other living organisms. West Linn’s actions can be prioritized according to whether they move us toward or away from our sustainability goals, whether they offer a degree of flexibility and adaptability in the future, and whether they offer sufficient returns on investment. What time frames should a city consider for these returns on investment? Long-term sustainability projects that may appear to hinder daily operations in the present can, in fact, make daily operations much easier and more affordable in the future. They are investments in ensuring long-term quality of life.

Civic Ecology

Related to the Natural Step is Civic Ecology, which emphasizes the role of active citizens leading the processes of formulating sustainability goals, identifying existing limitations, and enacting practices that benefit the whole community. It fosters a grassroots collaboration that strengthens resiliency from the bottom up. It empowers citizens to make profound changes gradually while adapting to the ever-evolving needs of the community.

Source: SERA Architects

Sustainability Tools for Assessing and Rating (STAR) Communities

The STAR Community Rating System is a framework of sustainability evaluation metrics and targets for communities and governments. It is used to assess existing sustainability conditions, to set goals, and to measure progress across seven broad sustainability topic areas that impact a community’s environmental, social, and economic resiliency. These topic areas each have a number of specific objectives that address common challenges. The objectives discuss what to measure, as well as what some short- and long-term goals could be, while leaving room for communities and governments to prioritize their actions. Clear metrics and concrete goals make the STAR Community Rating System a unique and extremely valuable long-range sustainability planning tool.

Over eighty communities in the United States and two in Oregon are already actively applying STAR as the guideline for their sustainability pursuits. Thousands of other organizations, including the West Linn Sustainability Advisory Board, have referred to it for its insight into community-level actions that can improve sustainability conditions. Some of the goals, strategies, and actions in this plan are closely aligned with STAR. All of the focus areas were informed by the STAR *Communities Technical* Guide.

# Community Outreach

Work for the *Sustainable West Linn Strategic Plan ― Update 2015* included nearly 50 publicly noticed Sustainability Advisory Board meetings from 2012 to 2014. In 2012, the Board met almost every two weeks to work on the Plan Update. The Board also hosted a Natural Step Workshop and a series of Civic Ecology Workshops.

# Learn more

You can learn more about the West Linn Sustainability Advisory Board and their current endeavors on the City of West Linn’s website at [www.WestLinnOregon.Gov/Sustainability](http://www.WestLinnOregon.Gov/Sustainability)

Natural Step

The Sustainability Advisory Board hosted a Natural Step workshop for West Linn residents, businesses, City Council, City staff, and other leaders in the community in February of 2013 in order to provide a deeper understanding of the framework that would be used to guide the Plan Update. The half-day workshop was facilitated by Duke Castle, who was part of a group that introduced The Natural Step sustainability framework to Oregon in 1997 and has since been prominent in teaching organizations how to effectively integrate The Natural Step sustainability framework into their overall operations. Over 30 participants were engaged in this successful workshop.

Civic Ecology

The Sustainability Advisory Board hosted a series of three Civic Ecology workshops in 2014 in order to gather community input on the vision for a Sustainable West Linn, as well as resources and actions to achieve a more sustainable and prosperous West Linn. The workshops were facilitated by Tim Smith, principal at SERA Architects of Portland and the chief developer of Civic Ecology. About 60 participants attended and identified concerns for both the present and future of West Linn. Workshop participants then discussed ideas for turning their concerns into potential strengths. Many of the strategies in this Plan Update, such as a community cooperative, a tool-lending library, and a fruit-collecting program were created and refined over the course of these workshops.

A summary of the Civic Ecology workshops in West Linn, including a more in-depth discussion of Civic Ecology and the Natural Step, is available in Appendix C.

# Existing Conditions

The long-term environmental, social, and economic threats and trends described below are major issues that affect the West Linn community. These issues, first presented in the original *Sustainable West Linn Strategic Plan*, have been updated to reflect the conditions in 2015.

##### 

##### Trends and Threats

Environmental Issues: Climate Change and Greenhouse Gas Emissions

Global climate change is perhaps the most serious environmental challenge facing the world. In West Linn, serious threats from climate change include water scarcity, flooding and other extreme weather events, increased wildfire and diseased forests, a shortage of water for summer crops, and social dislocation.

The 2014 National Climate Assessment (http://nca2014.globalchange.gov) provides an in-depth analysis of climate change impacts in the United States. A team of more than 300 experts guided by a 60-member Federal Advisory Committee produced the report, which was extensively reviewed by the public and experts, including federal agencies and a panel from the National Academy of Sciences. The report includes the following consequences for the Northwest Region and our community:

* Spring snowpack in the Cascade Mountains has decreased 20%, with snowmelt occurring about a month earlier. This impacts the availability of water for humans and crops as well as for hydropower production.
* Warmer summers place more demands on electricity for cooling.
* Oregon’s forests are increasingly threatened by wildfires, insect outbreaks, and tree diseases.
* The agricultural sector is threatened by soil erosion and water supply uncertainty, both of which could be exacerbated by climate change.

Climate change, coupled with diminishing availability of traditional energy sources, will have a direct effect on all West Linn residents and businesses. Recent greenhouse gas inventories in the Portland metropolitan region and in Lake Oswego indicate the majority of greenhouse gas emissions come from the production, distribution, and consumption of goods and foods. These greenhouse gas inventories are end-use, meaning the emissions associated with the production and transport of goods and foods are accounted for at the point of consumption, instead of production.

West Linn is similar demographically to Lake Oswego, so our greenhouse gas emissions are likely to be similar to theirs, which are shown by source below:

* 46% Materials― production, manufacturing, and disposal of materials, goods, and food
* 31% Transportation ― vehicle miles traveled by personal vehicles, operation of public transportation system, freight, and long-distance travel by citizens
* 22% Energy ― Natural gas consumed by residents and businesses, fossil fuel consumption from utilities and imported electricity

According to a Greenhouse Gas Inventory conducted by Metro (the Metropolitan Planning Organization for the Portland Metropolitan Region), regional greenhouse gas emissions are produced in a manner similar to those experience in Lake Oswego: 48% from materials, 25% from transportation, and from 27% energy. The car-dependent layout of West Linn likely results in an even higher transportation carbon footprint than other parts of the Portland metro area.

The Sustainability Advisory Board believes that through a combination of measures, West Linn can reduce its greenhouse gas emissions by 25% in 5 years, despite projected growth in population.

Social Issue: Livability

A sustainable community is one where mobility is easy for all residents. The city's four commercial centers are within a reasonable walking or biking distance from most residences, even given the City’s hilly topography. However, an aging population may mean that residents will not be able to depend on these self-propelled means of transportation entirely. Improving public transportation should be a priority. We must also continue to build safe, convenient, and pleasant walking environments between and in our neighborhoods.

West Linn is currently a bedroom community where 93% of residents commute out of the City for work. This statistic, combined with the high average housing price, threaten our ability to attract the diversity of residents that can provide the skills and services necessary to sustain our community locally. The median sale price of homes in West Linn in 2014 was approximately $400,000 (zillow.com).

We should work to develop commercial districts with a mix of uses such that they may provide a majority of needed services and supplies locally, including more office space, so that vehicle travel is less necessary. We should also work to increase housing density in key areas in order to promote interconnectedness and inclusiveness. A connected community will help citizens not be isolated. Livability means a community is connected not only through mobility, but also through a connected citizenry. Facilitating and encouraging community activities, making sure neighborhoods are hubs for people to gather and meet, and creating a food and services cooperative will promote a stronger, more connected community of West Linn.

Finally, a sustainable community meets the needs of all socio-economic backgrounds, and provides options for diversity in housing. This means creating more affordable, multi-unit, and higher density housing options for those with fewer financial resources and mobility, such as senior citizens and young adults. Higher density encourages walkability, supports local businesses, and allows growth to be absorbed as infill in developed areas, thereby preserving natural habitat and rural lands. The median household income in West Linn of $80,479 is high, yet 11% of households in West Linn earn less than $25,000, which is near the poverty line, and 18% earn less than $35,000. (American Community Survey, Selected Economic Characteristics 2011-2013). We must ensure that people in West Linn with lower-incomes have the resources necessary to thrive.

Economic Issue: Balancing City Revenues and Expenses after Buildout

Tax revenues are constrained at a three-percent growth rate, but the cost of providing services will likely rise at a higher rate. The City has been able to offset the shortfall in part through the development of buildable lots and also through creative collaboration with other municipalities. Once West Linn is built out, expenses associated with that development will decrease. However, the cost of providing a high quality of service already exceeds revenues in some areas, such as road maintenance, and deferred maintenance results in higher expenses when improperly maintained materials fail. Finding a sustainable solution to this funding dilemma is critical to maintaining our quality of life.

West Linn currently consists of primarily residential properties. Development of socially and environmentally sustainable businesses will diversify the tax base and help the City pay for infrastructure and services.

# How this Plan is Organized

The seven focus areas listed below make up the foundation of this Plan. Each focus area has discrete goals using the year 2040 as the planning horizon. Where possible, a baseline and target metrics are specified. Each goal includes strategies with identified implementation steps. Possible partners are indicated for particular strategies. This Plan Update covers a lot of ground and will take many years to implement. The top priorities are listed in Appendix B, which will be regularly updated to include achievable action items as a part of Plan implementation.

Focus Areas

Built Environment

Asustainable West Linn evolves in a way that encourages walking, biking, and use of public transit through infrastructure and design.Future development patterns should result in attractive, nature-friendly neighborhoods that facilitate safe and comfortable walking, biking, and public transit, with a variety of housing densities and sizes that mesh with creative arrangements of homes, shops, and employment areas.

Energy

A sustainable West Linn is made up of buildings that are highly energy-efficient. We will work toward carbon-neutral buildings through energy efficiency, energy conservation, and the generation of local renewable electricity.

Natural Areas

A sustainable West Linn is made up of fully functioning and connected natural areas. It is necessary to identify, acquire, protect, restore, and improve natural areas for the benefit of people, land, flora, and fauna.

Water

A sustainable West Linn is nourished by a healthy water supply. We need to protect our watersheds and manage and improve all water resources to provide a dependable supply of healthy water to meet the long-term needs of people, land, flora, and fauna. Managing the watershed also involves conserving our limited water resources.

Materials Management

A sustainable West Linn produces zero waste. Sustainable use of resources of all types allows all people to enjoy a prosperous, clean economy and fulfilling lives, now and in the future. The achievement of this vision builds upon recognizing a closed loop/full lifecycle approach to materials management as opposed to the current sole focus on end-of-product-life waste management.

Health & Food

A sustainable West Linn is made up of healthy, active people. The buildings, infrastructure, and community spaces encourage physical activity. The community is resilient to natural and human hazards, for which we have contingency plans and will preemptively mitigate when possible. Our buildings are healthy, with good indoor air quality. Crime remains low. All people benefit from healthy and sustainable diets supported by edible landscaping and community gardens. Our local agriculture economy is supported by the community.

Community Inclusion

A sustainable West Linn is attractive, affordable, and welcoming to a diversity of people who can provide the skills and services necessary to locally sustain our community. All community members are engaged in local decision-making and in making our community a better place. Everyone has equitable access to community assets, facilities, and human services.

# Built Environment

A sustainable West Linn will evolve in a way that encourages walking, biking, and use of public transit through infrastructure and design. We are currently a bedroom community, with 93% of West Linn residents commuting outside of the city for work. This suburban community character is important to us; from our peaceful neighborhoods, we enjoy quick access to regional attractions.

This Plan seeks to build upon that character by ensuring that we have continued easy access to regional attractions through diverse transportation options and by introducing more local attractions and living-wage employment opportunities. Expanding our commercial base can be done in a way that keeps intact the sedate feel of our community. The Plan also seeks to decrease traffic congestion by providing attractions that people can get to without driving and that showcase West Linn’s heritage and vitality.

Future building and landscape design patterns should result in attractive, nature-friendly neighborhoods that facilitate safe and comfortable walking, biking, and use of public transit, with a variety of housing densities and sizes and with creative new arrangements of homes, shops and employment areas.

Through this Plan, we seek to enhance our existing neighborhood business districts that provide services, attractions, and jobs for our community members, as well as increase the supply of affordable housing for people working in West Linn. The term “affordable housing” can sometimes bring up a negative mental image, but what we seek here is high quality, attractive housing that allows individuals and families on modest incomes to afford living in West Linn. One way that this can be accomplished is by shrinking the size of housing units. In the built environment section, we consider housing and transportation costs together, aiming for a West Linn where all households spend less than 45% of their income on those two components combined.

|  |  |  |
| --- | --- | --- |
| GOAL 1: By 2040, all households in West Linn will have convenient access to diverse transportation options, including walking, biking, and public transit, that are safe, low-cost, and reduce vehicle miles traveled. | | |
| Baseline:  **Target Metrics**: All households in West Linn are within a 20-minute walk (½-mile) of public transit. | | |
| **Strategy 1:** Develop safe pedestrian and bike connections and other infrastructure, particularly on arterial or collector roads that connect people to neighborhood business districts.  Current neighborhood business districts include: Bolton, Robinwood, Cascade Summit, and Willamette. | | **Step 1:** Advocate for the inclusion of already identified high priority bike and pedestrian projects from the *Transportation System Plan* in the 5-year Capital *Improvement Plan,* including sidewalks, bicycle lanes, and parallel off-street paths. |
| **Possible Partners**:City of West Linn Planning Department; Metro Regional Government | | |
| **Strategy 2:** Concentrate mixed-use development in compact, walkable, and human-scaled centers that connect to public transit, offer diverse use and services, and provide housing options for community members of various income levels.  Small lots, duplexes, and townhouses will allow for more cost-effective public transportation, provide sufficient demand for small neighborhood businesses, and provide affordable housing options for all generations. | **Step 1:** Conduct an analysis of areas for compact, walkable, and human-scaled centers. | |
| **Step 2:** Identify possible Community Development Code changes needed to support mixed-use, diverse neighborhoods while protecting resources, land, quality of life, and the environment.  Examples: Form-based code, LEED-ND standards. | |
| **Step 3:** Advocate for walkability to be included in the design. For example:   * 90% of roadways contain sidewalks on both sides * 100% of crosswalks are ADA accessible * 60% of streets contain street trees at no more than 40 feet intervals * 70% of roadways are designed for a travel speed of no more than 25 mph | |

|  |  |
| --- | --- |
|  | **Step 4:** Establish a design review board or similar appointed citizen group that provides suggestions and comments on proposed development projects. |
| **Possible Partners:** City of West Linn Planning Department; City of West Linn Public Works | |
| **Strategy 3:** Expand local employment opportunities.  93% of us commute out of the City for work. More small- and medium-sized local businesses that pay living wages will provide opportunities for us to work close to where we live. | **Step 1:** Identify the demand for various employment sectors. |
| **Step 2:** Identify available land suited for business development. |
| **Step 3:** Determine whether sufficient employment land exists. If not, propose zoning amendments or annexations to make suitable land available and to encourage more employment uses. |
| **Step 4:** Market the local employment opportunities to encourage existing businesses to grow and to attract new entrepreneurs. |
| **Possible Partners**: City of West Linn Planning Department and Economic Development Department | |
| **Strategy 4:** Provide education, outreach and incentives for community members to get around the City and region without a car. | **Step 1:** Encourage employers to offer incentives for employees commuting by modes other than single-occupancy vehicles. |
| **Step 2**: Encourage participation in regional active transportation challenges and incentives such as the Bicycle Transportation Alliance’s Bike Commute Challenge, Metro’s Drive Less Save More, Walk + Bike to School events and safe routes to schools. |
| **Possible Partners:** Bicycle Transportation Alliance; Metro Regional Government | |
| **Strategy 5:** Work toward transportation affordability, with a goal of households in West Linn spending less than 15% of income on transportation costs. | **Step 1:** Analyze the current transportation affordability data to understand what percentage of our community spends more that 15% of their income on transportation, and what groups have unaffordable transportation and why.  *(Note: Data can be found at* [*http://www.htaindex.org/map/*](http://www.htaindex.org/map/) *and* [*https://gis.oregonmetro.gov/equityAtlas/*](https://gis.oregonmetro.gov/equityAtlas/)*)* |
| **Possible Partners**: City of West Linn Planning Department and Economic Development Department | |

|  |  |
| --- | --- |
| GOAL 2: Construct, preserve and maintain an adequate and diverse supply of housing options for all residents that allow for an affordable combined cost of housing and transportation. | |
| **Baseline:** Currently, according to <http://www.htaindex.org/map/>, all of West Linn’s residents spend at least 45% of their income on housing and transportation.  **Target Metrics:** By 2040, at least 80% of West Linn residents spend less than 45% of their income on housing and transportation costs combined, as defined in the STAR Technical Guide. | |
| **Strategy 1:** Increase the amount of affordable housing located near public transit.  Working families, aging parents, and young adults (such as children who have returned home after college) will benefit from increased housing affordability. | **Step 1:** Conduct a housing needs assessment addressing housing supply affordability, diversity of housing stock by unit and ownership type, and community demographics. |
| **Step 2:** Develop a comprehensive housing strategy that works toward housing and transportation affordability for everyone. |
| **Step 3:** Implement strategies to encourage more dense development and rental apartments such as the Hoodview Townhouses in the Parker Crest neighborhood. |
| **Possible Partners:** City of West Linn Planning Department and Economic Development Department | |

|  |  |
| --- | --- |
| GOAL 3: By 2040, all residents will be able to shop, eat, work, and recreate locally. | |
| Baseline:  **Target Metrics**: All households in West Linn are within a 20-minute walk (½-mile) of shopping, dining, and recreation facilities. | |
| **Strategy 1:** Source more goods and services locally or regionally (300-mile radius, as identified in LEED for Neighborhood Development, <http://www.usgbc.org/leed#rating>).  Goods and services that are sourced locally increase demand for local businesses. | **Step 1:** Develop a buy-local campaign that will help community members learn about what is available in West Linn and the benefits of spending money locally.  For example, coordinate a bartering system or time bank through which people can earn, spend, and swap credits for local goods and services, keeping talent and money inside the community. |
| **Step 2:** Encourage and educate the City of West Linn and local businesses about sourcing products and services regionally and the benefits of doing so. Publicly recognize businesses that do so. |
| **Step 3:** Promote farmers’ markets and Community Supported Agriculture.  See the Farmers Market Sale Project description in Appendix C. |
| **Possible Partners**: City of West Linn Economic Development Department; Chamber of Commerce; Clackamas County Office of Sustainability | |
| **Strategy 4:** Engage in regional coordination with other governmental, public, private, and non-governmental entities to attract and retain businesses in the region. | **Step 1:** Partner with regional business development planning groups to consider strategies such as pooling resources to attract companies to the region and engaging in regional tax-base sharing |
| **Possible Partners:** City of West Linn Economic Development; Clackamas County, Metro Regional Government, Cities in Clackamas and Washington Counties; CareWheels.org; Lake Oswego Value Exchange | |

# Energy

A sustainable West Linn is made up of buildings that are highly energy-efficient and carbon neutral. This Plan includes a goal for City buildings and a goal for all other buildings. The goal for City facilities also includes the City’s motor-vehicle fleet, while transportation at the community level is addressed in the Built Environment section of this Plan Update.

In keeping with national efforts like Architecture 2030 (http://architecture2030.org/), we seek to attain carbon-neutral buildings. The goals are based on reducing the greenhouse gas emissions produced in buildings. Greenhouse gas emissions can be reduced by improving the energy efficiency of buildings, promoting energy conservation, and using carbon-free, renewable energy in lieu of fossil fuels.

Portland General Electric supplies West Linn with electricity. 22% of that electricity is produced by a coal-fired power plant, 18% by natural gas power plants, and 35% from purchased power which most likely is fossil fuel based. We can encourage and purchase grid-based renewable energy, but we must also increase local renewable energy production. We have made progress in this area in the last few years through an effort called Solarize West Linn/Lake Oswego. Seventy-one kilowatts of solar energy was installed, with an average size of 3 to 4 kW per home. This program included 10 workshops on solar energy and was attended by over 150 people.

|  |
| --- |
| GOAL 1: By 2040, the City of West Linn will reduce greenhouse gas emissions in existing City facilities and operations by 80%. |
| **Baseline:** Total greenhouse gas emissions for City facilities and operations in 2008.  **Target Metrics:** 80% reduction from 2008, including:  Net energy use at park facilities and all City buildings  Annual diesel and gasoline consumption for City vehicles |

|  |  |  |
| --- | --- | --- |
| **Strategy 1:** Establish annual sustainability audits for all City facilities and operations in order to locate possible capital improvements and improve efficiency of operational practices.  The sustainability audit should include energy and water use, waste, toxics, purchasing, etc. | | **Step 1:** Establish a baseline and process for continually tracking sustainability metrics. |
| **Step 2:** Allocate money in the budget for annual sustainability audits. |
| **Possible Partners:** City of West Linn City Manager’s Office, Public Works Department and Finance Department; Cascadia Green Building Council; Clackamas County Office of Sustainability | | |
| **Strategy 2:** All park facilities, *cumulatively*, will be net zero energy users, meaning that they produce as much energy as they consume. | | **Step 1:** Install solar panels where appropriate in park facilities to cover the energy needs of the parks (lighting, irrigation systems, spray fountains, etc.). |
| **Possible Partners**: City of West Linn Parks & Recreation; Energy Trust of Oregon; Portland General Electric; Solar Oregon; Clackamas County Office of Sustainability | | |
| **Strategy 3:** All vehicles in the City fleet will use alternative fuels or be electric or hybrid, with the goal of achieving zero greenhouse gas emissions. | **Step 1:** Inventory existing vehicle characteristics and replacement schedule. | |
| **Step 2:** Conduct a cost/benefit analysis of alternative fuel, electric and hybrid vehicles vs. conventional vehicles. | |
| **Step 3:** Develop a policy regarding the purchase of alternative fuel, electric, and hybrid vehicles. | |
| **Step 4:** Replace vehicles in accordance with the policy. | |
| **Possible Partners:** City of West Linn Public Works Department; Drive Oregon; Oregon Electric Vehicle Association; Oregon Department of Energy | | |
| **Strategy 4:** All new City buildings will be carbon neutral by 2030, and existing buildings will reduce emissions by 80%, in keeping with Architecture 2030 (<http://architecture2030.org/>) | **Step 1:** Follow the energy guidelines established by Architecture 2030  (<http://www.architecture2030.org/files/2030ImplementationGuidelines.pdf>) | |
| **Step 2:** All new and renovated city buildings will use the energy reduction goals established by Architecture 2030 for all RFP’s and construction contracts. | |
| **Step 3:** Adopt an Ordinance that improves upon Resolution No. 07-24 to require at least LEED Silver certification for all new construction and major renovations of City buildings. | |
| **Step 4:** Implement a policy to include a member of the Sustainability Advisory Board on advisory committees for all new City construction and renovations, such as additions to the Adult Community Center and Arch Bridge development. | |
| **Possible Partners**: City of West Linn Public Works, Parks and Recreation, and Planning Departments; Oregon Department of Energy; Architecture 2030; Cascadia Green Building Council | | |

|  |  |
| --- | --- |
| GOAL 2: By 2040, West Linn citizens will reduce greenhouse gas emissions in buildings and houses by 50%. | |
| **Baseline**: Estimated greenhouse gas emissions from buildings in West Linn for 2014, including grid-based electricity and natural gas, as extrapolated from Lake Oswego and Metro Greenhouse Gas Inventories.  **Target Metrics**: 50% reduction | |
| **Strategy 1:** Amend City of West Linn community development and building codes and regulations to foster energy-efficient development patterns, construction, and renovation. | **Step 1:** Inventory development codes and regulations to identify changes, additions, and/or incentives. |
| **Step 2**: Propose to include amendment project on the docket for City Council. |
| **Step 3:** Prepare and adopt amendments. |
| **Possible Partners**: City of West Linn Planning Department; Oregon Building Codes Division | |
| **Strategy 2:** Educate citizens and businesses on the benefits of energy conservation and renewable energy use. | **Step 1:** Encourage residents and businesses to foster energy conservation. |
| **Step 2:** Publicize conservation goals and provide educational opportunities and materials, e.g., lectures, tours, workshops, pamphlets, mail inserts, web content, and e-blasts. |
| **Possible Partners**: Energy Trust of Oregon; Portland General Electric; Solar Oregon; Clackamas County Office of Sustainability; City of West Linn City Manager’s Office (West Linn Citizen Engagement Officer) | |
| **Strategy 3:** Encourage collaborative purchasing of solar electricity (community solar). | **Step 1:** Monitor regional and state community solar activity. |
| **Step 2:** Adapt strategies and regulations to West Linn. |
| **Possible Partners**: Energy Trust of Oregon; Portland General Electric; Solar Oregon; Clackamas County Office of Sustainability | |

# Natural Areas

A sustainable West Linn is made up of fully functioning and connected natural areas. It is necessary to identify, acquire, protect, restore, and improve natural areas for the benefit of people, land, flora, and fauna. We aim to:

* Preserve and restore the integrity of ecosystems so that they are supportive of biodiversity.
* Design and maintain a network of green infrastructure features that integrate with the built environment to preserve ecosystem services and provide associated benefits to the West Linn community.
* Protect, enhance, and restore nature ecosystems and cultural landscapes in order to build resilience and to support clean water and air, our food supply, and public safety.

|  |  |
| --- | --- |
| GOAL 1: In 2040, the current natural areas in and around West Linn will be preserved and functioning from an ecosystem services perspective. | |
| **Baseline**: July 2006 comprehensive survey of natural lands indicates that 31% of the land area within West Linn’s urban growth boundary (1,650 acres) is protected from development, including parks, open space, wetlands and drainage setback. (Sustainable WL Strategic Plan 2006 p. 13)  **Target Metrics**: By 2040, 35% of land area within West Linn’s urban growth boundary has protected vegetated surfaces performing the following functions, as defined in the STAR Communities Technical Guide:   * Localized cooling through tree canopy cover, green roofs or green walls * Water management through wetlands, stream buffers, and permeable surfaces * Recreation opportunities through parks and/or greenways | |
| **Strategy 1:** Determine the percentage of land area in West Linn that is covered by protected vegetated surface.  Protected vegetated surfaces include conservation easements, forest preserves, land trusts, and land zoned as open space. | **Step 1:** Produce a map that shows protected vegetated surfaces and calculate the area percentage. |
| **Step 2:** Create strategies to increase vegetated surfaces to reach 35% goal by 2040 while targeting development in already developed areas and other identified lands. |
| **Step 3:** Educate the public about the benefits of achieving this goal and ensure that the land stays protected through continued education and outreach. |
| **Possible Partners**: City of West Linn Parks & Recreation and Public Works Department | |
| **Strategy 2:** Absorb new growth in already developed land first. | **Step 1:** Support higher density mixed-use, transit-friendly development to limit development pressure on our natural areas. |
| **Step 2:** Use previously disturbed and restored land for new buildings (e.g., redevelop brownfields). |
| **Step 3:** Analyze parking requirements and, where possible, require less parking. |
| **Step 2:** Work with adjoining communities to develop a sustainable vision for the Stafford Basin. |
| **Possible Partners**: City of West Linn Planning Department; City of Lake Oswego; Metro | |
| **Strategy 3:** Maintain or enhance the biodiversity of natural areas. | **Step 1:** Identify invasive species of greatest threat to local ecosystems. |
| **Step 2:** Adopt a local ordinance requiring control of listed priority invasive species or enact a native plant ordinance for private and public landscaping. |
| **Step 3:** Create a public education campaign to inform community members about the hazards of invasive species and how to prevent introducing and/or spreading them. |
| **Possible Partners**: City of West Linn Parks & Recreation, Planning Department, and Public Works Department | |

|  |  |
| --- | --- |
| GOAL 2: By 2040, 85% of residents live within a 20-minute walk (½–mile) of green infrastructure. | |
| **Baseline**: Not determined. Initial assessment needs to be done.  **Target Metrics**: 85% of the population lives within a 20 minute walk (½–mile) from green infrastructures\* that function as outlined in Natural Areas Goal 1 metrics.  *\* Green infrastructure is an interconnected system of natural areas and open space that conserves ecosystem values, helps sustain clean air and water, and provides benefits to people and wildlife (STAR Technical Guide).* | |
| **Strategy 1:** Integrate green infrastructure into the *Parks, Recreation and Open Space Master Plan* in a way that achieves the 2040 goal. | |
| **Possible Partners**: City of West Linn Parks & Recreation Department, Planning Department, and Public Works Department | |
| **Strategy 2:** Include green infrastructure requirements with all new development and redevelopment. | **Step 1:** Adopt local design criteria and associated codes that require proactive green infrastructure practices for new developments. |
| **Step 2:** Develop a process for coordinated interdepartmental review of proposed developments for green infrastructure potential prior to construction. |
| **Possible Partners:** City of West Linn Parks & Recreation Department; Clean Water Services | |

|  |  |
| --- | --- |
| GOAL 3: Achieve no net loss of wetlands, streams, and riparian corridors. | |
| **Baseline**: Identify and measure existing wetlands, streams, and riparian corridors in West Linn as of 2015.  **Target Metrics**: Maintain current acreage. | |
| **Strategy 1:** Adopt best management practices for restoration and management on public lands. | **Step 1:** Review existing restoration and management practices in parks and public natural areas and compare tostate and regional best practices. Update as necessary. |
| **Step 2:** Promote volunteer supported restoration projects, such as:   * Create an Adopt-a-Park program to empower neighborhoods to maintain local parks, e.g., invasive plant removal, trash clean up, etc. * Develop urban creek watershed councils. * Sponsor tree-planting events, e.g., with Friends of Trees, to plant more native, but increasingly rare trees. |
| **Possible Partners:** City of West Linn Parks & Recreation Department and Public Works Department; Local nurseries and garden clubs; Master Gardeners | |
| **Strategy 2:** Promote habitat management, restoration, and ongoing maintenance of private land. | **Step 1:** Adopt land-use regulations that establish appropriate wetland, stream, and shoreline buffer widths and adjacent land uses. |
| **Step 2:** Work with County and State officials to ensure that the highest standards are being met, climate change projections are included in the calculations, and adjacent land uses are appropriate. |
| **Step 3**: Sponsor educational and outreach activities to increase ecological literacy and knowledge about natural resource protection. |
| **Possible Partners:** City of West Linn Parks & Recreation Department and Planning Department | |
| **Strategy 3:** Adopt land use strategies to incentivize permanent land conservation. | |
| **Possible Partners:** City of West Linn Planning Department | |

|  |
| --- |
| GOAL 4: Increase the area of land directly connected to regional natural systems to improve ecosystem functionality. |
| **Baseline:** Identify land areas contiguous to regional natural ecosystems in 2015.  Target Metrics: |
| **Strategy 1:** Implement local and market-based financing strategies to acquire land or development easements, or fund restoration and maintenance activities that provide key connections between natural areas.  Most ecosystems benefit from being a part of a larger, more interconnected system. While a single large parcel may be a sufficient habitat for one member of a species, connecting that parcel with others may create opportunities for interaction with other members of the species. Similarly, interconnected natural areas provide more recreational opportunities for people. |
| **Possible Partners**: Network of Oregon Watershed Councils; Land Trust Alliance; City of West Linn Parks & Recreation Department |
| **Strategy 2:** Restore, maintain, and monitor conserved natural lands to increase natural resource resilience, adaptability, and biological integrity. |
| **Possible Partners:** City of West Linn Parks & Recreation Department and Public Works Department |

# Water

Less than 1% of Earth’s water resources are fresh and accessible for human use. West Linn is fortunate to be nourished by three watersheds: the Willamette River, the Tualatin River, and the Clackamas River. We acknowledge our role in ensuring their health as follows:

* We need to protect, manage, and improve all water resources to provide a dependable supply of healthy water to meet the long-term needs of people, land, flora, and fauna.
* West Linn shall continue to meet or exceed all EPA standards with respect to drinking water quality, wastewater management, and stormwater management.
* We seek to achieve hydrological self-sufficiency for West Linn so that the amount of water consumed by people does not exceed the amount of freshwater entering the system through precipitation, river flow, and other sources.

|  |  |
| --- | --- |
| GOAL 1: The amount of water purchased annually by West Linn through 2040 will not exceed 140,200,000 ccf/year (equal to water use in 2002), regardless of population growth. | |
| **Baseline**: 140,200,000 ccf/year, which is equal to 2002 annual water consumption.  **Target Metrics**: No increase over 2002 baseline. | |
| **Strategy 1:** Amend the *Comprehensive Plan* and Building Codes to require water-conserving appliances and systems and to facilitate retrofits with greywater systems. | **Step 1**: Audit the *Comprehensive Plan* and Building Code.  ***Note****: An audit of the Building Code is recommended here, in Materials Management Goals 1 and 3 and Energy Goal 2. It may be most efficient to consider all of these aspects in a Building Code audit.* |
| **Step 2**: Coordinate with City departments and water partners to identify best practices to include in *Comprehensive Plan* and Building Code updates. |
| **Step 3**: Research financial incentives to implement the identified best practices. |
| **Step 4:** Stay informed about the latest technologies for water conservation and efficient delivery for updating relevant plans, codes, and regulations. |
| **Possible Partners:** City of West Linn Planning and Public Works Departments; Clean Water Services; Clackamas County Water Environment Services | |
| **Strategy 2:** Encourage widespread use of rainwater harvesting.  Rainwater harvesting can be used as a stormwater management technique (covered in more depth in the next goal) and also as a water conservation technique since it can be used to water plants. | **Step 1:** Identify best practices for rainwater harvesting in our region. |
| **Step 2:** Research education strategies and financial incentives to implement best practices. |
| **Step 3:** Publicly recognize community members and businesses who harvest rainwater. |
| **Possible Partners:** City of West Linn Planning Department; Metro Regional Government; Tualatin Riverkeepers | |
| **Strategy 3:** Work with community groups to provide watershed education and incentives to residents, businesses, and youth. | **Step 1:** Continue and expand upon current incentives like the toilet and washing machine rebates. |
| **Step 2**: Create partnerships between area landscaping businesses, nurseries, community groups, and watershed restoration interests to help plant native species along sensitive waterways and to promote pollution prevention activities. |
| **Possible Partners**: Tualatin Riverkeepers; local plant nurseries; Metro Regional Government  Nurseries, landscapers, and nearby schools can also be resources to help educate people about attractive and environmentally responsible natural treatments. | |

|  |  |
| --- | --- |
| GOAL 2: By 2040, all stormwater at new development will be infiltrated on or near the place where it falls. | |
| Baseline:  Target Metrics: | |
| **Strategy 1:** Amend the *Comprehensive Plan* and building codes to require onsite stormwater management where practicable. | **Step 1:** Audit the Comprehensive Plan and Building Code.  *(See overlap with Goal 1, Strategy 1.)* |
| **Step 2:** Coordinate with City departments and water partners to identify best practices to include in *Comprehensive Plan* and Building Code updates. |
| **Possible Partners**: City of West Linn Public Works and Planning Departments; Clean Water Services; Tualatin Riverkeepers | |
| **Strategy 2:** Convert West Linn roadways to Green Streets.  42% of the total land area in West Linn is covered by impervious surfaces. According to the EPA, urban roads, sidewalks, and parking lots constitute almost 66% of water runoff.  **Green Streets** provide control of stormwater by incorporating design elements such as street trees, permeable pavements, bioretention, and swales. Green Streets provide multiple benefits such as improved water quality and more livable communities (EPA). | **Step 1:** See EPA’s *Managing Wet Weather with Green Infrastructure Municipal Handbook* for guidance. |
| **Step 2:** Evaluate various funding options. |
| **Step 3:** Include Green Street concepts into all roadway improvements. Coordinating green infrastructure installation with broader transportation improvements can significantly reduce the marginal cost of stormwater management (EPA, *Managing Wet Weather with Green Infrastructure Municipal Handbook*). |
| **Possible Partners**: City of West Linn Public Works and Planning Departments; Clean Water Services; Tualatin Riverkeepers | |
| **Strategy 3:** Update and localize commercial building stormwater management systems. | **Step 1** Develop stormwater management codes for new buildings. |
| **Step2:** Coordinate with partners to create incentives for stormwater management retrofits to existing buildings. |
| **Step 3:** Promote incentives to business owners. |
| Possible Partners: City of West Linn Public Works Department; Clean Water Services | |
| **Strategy 4:** Educate residents on best practices for sustainable stormwater landscaping. | **Step 1:** Promote regional educational programs such as Clean Water Services’ Clean Water Hero Program (<https://www.cleanwaterservices.org/Residents/JoinTheCycle/InYourYard/Hero/default.aspx>). |
| **Step 2:** Organize a sustainable stormwater landscaping tour and recognize residents who are taking steps to creatively manage stormwater on their property. |
| **Possible Partners**: City of West Linn Public Works Department; Clean Water Services; Tualatin Riverkeepers | |

|  |  |
| --- | --- |
| GOAL 3: Continue to maintain and upgrade infrastructure to deliver water efficiently and to protect the watershed. | |
| Baseline:  **Target Metrics:** | |
| **Strategy 1:** Ensure that rates for water services include infrastructure needs. | **Step 1:** Refer to the *West Linn Water System Master Plan* to identify infrastructure needs over the 20-year planning horizon (<http://westlinnoregon.gov/publicworks/water-master-plan>). |
| **Step 2:** Advocate for the cost estimate to be built into rate structures, over 20 years. |
| **Step 3:** Participate in the 2030 *Water System Master Plan* update and advocate for water efficiency and conservation infrastructure. |
| **Possible Partners**: City of West Linn Public Works and Finance Departments | |
| **Strategy 2:** Continue to work with partners to protect and restore the watershed. | **Step 1:** Encourage activism of volunteer organizations. |
| **Step 2:** Identify the interests and goals of volunteer organizations to help strengthen their watershed protection initiatives. |
| **Possible Partners:** City ofWest Linn Public Works Department; Metro Regional Government; Clean Water Services; Tualatin Riverkeepers | |

# Materials Management

A sustainable West Linn produces zero waste by emphasizing materials reduction, reuse, and recycling. Sustainable use of all types of resources allows everyone to enjoy a prosperous, clean economy both now and in the future. The achievement of this vision builds upon recognizing a closed loop/full lifecycle approach to materials management as opposed to focusing solely on waste management strategies.

|  |  |  |
| --- | --- | --- |
| GOAL 1: By 2040, all products designed, produced, or supplied in West Linn are done so with an informed awareness of their full life cycle, recognizing there are impacts, positive or negative, within our shared environment. | | |
| Baseline:  **Target Metrics**: Percentage of toxic materials purchased (zero by 2040).  Goods and services in West Linn are:   * Non-polluting * Conserving of energy and natural resources * Economically viable * Safe and healthful for workers, communities, and consumers * Socially and creatively rewarding for all working people   (Lowell Center for Sustainable Production, <http://www.sustainableproduction.org/abou.what.php>) | | |
| **Strategy 1:** Eliminate the production of hazardous waste.  Hazardous waste can include cleaning fluids, pesticides, electronic waste, bulbs, and batteries*.* Residents and businesses may not be aware of their use of and proper disposal of hazardous wastes. | **Step 1:** Organize partners and volunteers to conduct an analysis and inventory of hazardous wastes produced and used in West Linn.  ***(Note:*** *The Master Recyclers are a great volunteer resource for all materials management strategies.)* | |
| **Step 2:** Provide targeted technical assistance, based on the inventory, to determine whether specifically identified hazardous wastes are necessary. Identify suitable alternatives and recommend proper disposal. | |
| **Possible Partners**: Oregon Department of Environmental Quality; Clackamas County Office of Sustainability; Master Recyclers; Metro Regional Government | | |
| **Strategy 2:** Incentivize businesses and industry in West Linn for sustainable production of goods. | **Step 1:** Conduct an inventory of businesses producing goods in West Linn, including home-based businesses. | |
| **Step 2:** Determine where the process could be improved, such as Green Chemistry. | |
| **Step 3:** Identify andcapitalize on incentive or reward programs and certifications that could be applied to sustainable production.  For example, the Clackamas County Business Recycling Awards Group (BRAG) (<http://www.clackamas.us/recycling/brag.html>). | |
| **Possible Partners**: Chamber of Commerce; Clackamas County Office of Sustainability | | |
| **Strategy 3:** Amend building codes to reduce building materials used and to increase the use of more sustainable products for construction.  ***(Note:*** *An audit of the Building Code is recommended here, in Materials Management Goal 3, Energy Goal 2, and Water Goals 1 and 2. It may be most efficient to consider all of these aspects in a Building Code audit.)* | | **Step 1:** Conduct an audit of the West Linn Building Code. |
| **Step 2:** Determine opportunities to incorporate construction and demolition materials reduction into the building code. |
| **Possible Partners**: City of West Linn Planning Department; Clackamas County Office of Sustainability | | |

|  |  |  |
| --- | --- | --- |
| GOAL 2: By the year 2040, citizens make thoughtful, informed, and deliberate decisions about their use of products and services. We live well and consume within our sustainable share of the world's natural resources. Citizens recognize that conscious choices can be used as tools to create a more sustainable environment. | | |
| Baseline:  **Target Metrics**: Percentage of businesses and other organizations that have an environmentally preferable purchasing policy; total number of product sharing sites and events. | | |
| **Strategy 1:** Provide education and incentives for businesses and community members to be aware of the social and environmental consequences of the products that we consume. | | **Step 1**: Partner with appropriate non-profit and government organizations. |
| **Step 2:** Determine educational venues and mediums for promoting material management awareness. |
| **Possible Partners**: General public; West Linn Refuse and Recycling; Master Recyclers; Clackamas County Office of Sustainability | | |
| **Strategy 2:** Encourage businesses, the City, and other organizations to establish an environmentally preferable purchasing policy. | **Step 1:** Conduct an audit of City purchasing and determine areas for improvement. | |
| **Step 2:** Write and adopt a City environmentally preferable purchasing policy. | |
| **Step 3:** Recruit and facilitate a group of business owners who are interested in implementing similar purchasing policies. | |
| **Step 4:** Implement environmentally preferable purchasing policies with group members and use their work to establish case studies and example policies to share with the wider business community. | |
| **Possible Partners**: City of West Linn Finance Department; Chamber of Commerce; Metro Regional Government; local businesses | | |
| **Strategy 3:** Increase opportunities for community members and businesses to share and repurpose unwanted products. | **Step 1:** Organize a city-wide garage sale to help people part with unneeded goods.  *(See the City-Wide Garage Sale Project from the Sustainable West Linn Civic Ecology Workshop described in Appendix C.)* | |
| **Step 2:** Connect businesses and residents who may have useful waste products for one another, e.g., Pacific Northwest Pollution Prevention Resource Center’s Resource Full Use workshop (<http://pprc.org/index.php/2012/efficiency/resourcefull-use/>). | |
| **Step 3:** Promote the use of second-hand stores, such as Goodwill and the ReStore. | |
| **Step 4:** Increase community sharing opportunities such as a tool library, a kitchen library, Swap and Play, and makerspace.com.  *(See the Tool Exchange and Tool Library Projects from the Sustainable West Linn Civic Ecology Workshop described in Appendix C.)* | |
| **Possible Partners**: West Linn School District; Purchasing organizations, both commercial and City; Oregon Department of Environmental Quality; Metro Regional Government; Reuse non-profit organizations, such as Habitat for Humanity and the Community Warehouse | | |
| **Strategy 4:** Implement city-wide bans on products that are determined to be widely used and detrimental, such as plastic bags and Styrofoam take-out containers, and support this type of policy change at the state and local level. | **Step 1:** Conduct an analysis of product bans in other jurisdictions, including effectiveness and consequences. | |
| **Step 2:** Conduct outreach to community members and businesses to design a policy measure that is most beneficial to all parties involved. | |
| **Step 3:** Write a product ban policy for City Council adoption and/or voter approval. | |
| **Possible Partners**: Oregon Department of Environmental Quality; Chamber of Commerce; City of West Linn Public Works and Environmental Services | | |
| **Strategy 5:** Educate the public (consumers) on Product Stewardship.  Products are designed with the consumer in mind. We must make responsible purchases which consider complete environmental and social impacts. We must use products responsibly and assure that our products are recycled responsibly. | **Step 1:** Provide information and outreach about current retail take-back programs, such as for paint, fluorescent bulbs, and e-waste. | |
| **Step 2:** Provide information and outreach about responsible disposal of large, hard-to-recycle items, such as carpet and mattresses. | |
| **Step 3:** Promote and educate residents and businesses on Extended Producer Responsibility and product stewardship (producer/manufacturer responsibility for their products at end of those products’ lives). | |
| **Possible Partners:** Oregon Department of Environmental Quality; Metro Regional Government; Clackamas County Office of Sustainability | | |

|  |  |
| --- | --- |
| GOAL 3: By the year 2040, all products, including those from West Linn, will have a long, useful life and are reused and repurposed as much as possible before being recycled into new products. Citizens will realize that products need to be managed within the context of those products’ entire life cycle and not merely thrown away after a single use. | |
| Baseline:  **Target Metrics**: 90% landfill diversion | |
| **Strategy 1:** Educate businesses, organizations, and residents about product reuse, recycling, and composting options. Incentivize the use of these actions. | **Step 1:** Provide a range of educational opportunities about curbside recycling for homes and businesses. Connect businesses and community members with resources if further assistance is needed. |
| **Step 2:** Promote and expand the commercial composting program. |
| **Step 3:** Conduct a feasibility study for residential curbside composting and implement as appropriate. |
| **Step 4:** Establish an educational team and a process to promote and educate about home composting options. |
| **Step 5:** Continue to strengthen and implement a K-12 curriculum on waste reduction and reuse. |
| **Possible Partners**: West Linn Refuse and Recycling; Master Recyclers; Reuse non-profit organizations, such as Habitat for Humanity and the Community Warehouse; Metro Regional Government; Clackamas County Office of Sustainability; Oregon Department of Environmental Quality | |
| **Strategy 2**: Reduce the amount of construction debris that goes to the landfill. | **Step 1:** Amend the Building Code to require deconstruction and building material reuse when feasible.  *(See Materials Management Goal 1, Strategy 3 for overlap.)* |
| **Step 2**: Develop a program to educate contractors and homeowners about reuse and recycling of building materials, and incentivize such processes. |
| **Possible Partners**: City of West Linn Planning Department; Clackamas County Office of Sustainability | |
| **Strategy 3:** Provide incentives and establish policies that encourage landfill waste reduction. | **Step 1:** When renewing City franchise agreement for solid waste, recycling, and yard debris collection services, include a rate structure to incentivize waste reduction (such as a “pay-as-you-throw” system) that makes it more profitable for the hauler to reduce, rather than increase, landfill-bound waste. |
| **Step 2:** Require all City events and City-sponsored events to be zero-waste, and require event vendors to meet the City Purchasing Policy (from Materials Management Goal 2, Strategy 2). |
| **Possible Partners**: City of West Linn City Manager’s Office; Clackamas County Office of Sustainability | |
| **Strategy 4**: Provide suitable, convenient options and locations for both businesses and residents to recycle non-curbside items | **Step 1:** Organize volunteers to manage hard-to-recycle drop sites and/or collection events. |
| **Step 2:** Establish drop sites so that all residents can reach a site within a 5-minute drive. |
| **Step 3:** Promote the drop sites and/or collection events. |
| **Step 4:** Link together a central compost facility with neighborhood food/yard waste collection and compost soil distribution points, as described in Appendix C. |
| **Possible Partners**: City of West Linn Neighborhood Associations; regional recyclers such as Far West Recycling; grocery stores; West Linn Refuse and Recycling | |

# Health & Food

A sustainable West Linn is made up of healthy, active people. The buildings, infrastructure, and community spaces encourage physical activity. The community is resilient to natural and human hazards, for which we have planned and preemptively mitigated when possible. Our buildings are healthy with good indoor air quality. Crime is low.

The decisions about what we eat not only affect our personal health, but also have a substantial impact on the environment. By making better choices with access to locally-sourced whole foods, healthy eating is one of the most effective levers we have to enrich our environment, improve our health, and build economic opportunity.

|  |  |
| --- | --- |
| GOAL 1: By 2040, all people in West Linn will have access to local options for healthy, active lifestyles. | |
| Baseline:  Target Metrics: | |
| **Strategy 1:** Increase physical activity of school-aged children. | **Step 1:** Ensure that all schools in West Linn require some form of physical activity daily, such as physical education class and/or recess, with an overall goal of 60 minutes of physical activity a day between school and home. Students should be introduced to a wide variety of physical activities. |
| **Step 2:** Establish school-siting guidelines that give preferential considerations to locations that maximize the number of students who can walk or bicycle safely to school. |
| **Step 3:** Participate in Safe Routes to School (<http://www.saferoutesinfo.org/>). |
| **Step 4:** Participate in Bike and Walk to School events (<http://www.walkbiketoschool.org/>). |
| **Possible Partners**: West Linn School District; Safe Routes to Schools; Bicycle Transportation Alliance | |
| **Strategy 2:** Increase the active transportation roadway infrastructure in West Linn, such as bike lanes and sidewalks. | **Step 1**: Include active transportation sections in the *Comprehensive Plan* and *Transportation System Plan*. |
| **Step 2:** Require bicycle and pedestrian amenities in new developments, as well as with redevelopment and construction projects.  Street redesign could include:   * Traffic calming measures * Street furniture, street trees, and pedestrian-scale lighting * Bicycle parking * Protected bike lanes * Traffic signals that detect cyclists   *(See overlap with the stormwater infiltration and Green Streets strategies from the Water Section, Goal 2.)* |
| **Possible Partners**: City of West Linn Planning and Public Works Departments | |
| **Strategy 3:** Increase the use of building design that encourages physical activity in new buildings, renovations, and active recreation facilities. | **Step 1:** Create guidelines that encourage the incorporation of:   * High-visibility, attractive stairways * Secured, sheltered, and accessible bicycle storage * Physical activity spaces, such as exercise rooms * Shower and locker room facilities |
| **Step 2:** Advocate for and implement the Park and Recreation Standards in the West Linn Park, Recreation & Open Space Plan. |
| **Possible Partners:** City of West Linn Planning Department and Parks & Recreation | |
| **Strategy 5:** Include health outcomes in the review of development and planning projects. | **Step 1:** Conduct health impact assessments on proposed infrastructure investments and development projects to increase positive health outcomes and minimize adverse impacts.  Health impact assessment (HIA) is becoming an increasingly common tool for local governments to evaluate the anticipated impact of a proposed infrastructure investment or development project on community health. HIAs assess the health risks and benefits of proposed projects, recommend changes to increase positive health outcomes, minimize adverse impacts, and monitor the results of approved projects over time (STAR Technical Guide). |
| **Step 2:** Integrate health considerations into local plans and polices that affect the built environment, physical activity, and access to fresh food. |
| **Possible Partners**: City of West Linn Planning Department; Oregon Health Authority; Coalition for a Livable Future | |

|  |  |
| --- | --- |
| GOAL 2: By 2040, all people in West Linn will have local access to healthy and sustainable diets. | |
| Baseline:  Target Metrics: | |
| **Strategy 1:** Increase the percentage of residents who live within a half-mile of a food outlet that sells local food. | **Step 1:** Adopt zoning and development regulations that recognize the value of local farmers markets, community gardens, urban agriculture, and healthy food retailers. |
| **Step 2:** Establish a West Linn Garden Team that will work to convert available residential and commercial area lots into community gardens and eventually establish community gardens throughout the city.  *(See the West Linn Garden Team Project from the Sustainable West Linn Civic Ecology Workshop described in Appendix C.)* |
| **Possible Partners**: Watershed councils; local plant nurseries; farmers’ markets | |
| **Strategy 3:** Ensure that people of all income levels are able to afford local, healthy food and are educated about healthy, sustainable diets. | **Step 1:** Conduct an assessment of the local food system, including existing policies and programs that increase access to local healthy food and nutrition education. |
| **Step 2:** Expand and improve the offerings and services of community food pantries. |
| **Step3:** Participate in programs to increase the spending power of farmers’ markets’ customers receiving SNAP benefits, such as the Portland Farmers’ Market Fresh Exchange Program (http://farmersmarketfund.org/programs/fresh-exchange/). |
| **Step4:** Provide education about healthy, sustainable diets. |
| **Step 5:** Organize a fruit-gathering group to harvest the often-unused edibles growing around West Linn. Distribute food to food pantries, senior centers, and schools.  *(See the Fruit Tree Project from the Sustainable West Linn Civic Ecology Workshop described in Appendix C.)* |
| **Step 6:** Establish a West Linn food and services cooperative and/or develop a year-round farmers’ market connecting vendors, growers, restaurants, and community members.  *(See the West Linn Co-op Project from the Sustainable West Linn Civic Ecology Workshop described in Appendix C.)* |
| **Possible Partners**: West Linn Farmers’ Market; West Linn food pantries; general public | |
| **Strategy 5:** Provide education and outreach about backyard and container gardening, as well as about raising appropriate domestic farm animals as food resources. | |
| **Possible Partners**: Oregon State University Extension; Master Gardeners | |

|  |  |  |  |
| --- | --- | --- | --- |
| GOAL 3: By 2040, all buildings in West Linn will have healthy indoor air quality. | | | |
| Baseline:  Target Metrics: | | | |
| **Strategy 1:** Improve indoor air quality in commercial and public buildings. | | | **Step 1:** Require new or substantially renovated buildings to incorporate advanced ventilation standards.  *(See LEED Building Design + Construction Guide: http://www.usgbc.org/leed.)* |
| **Step 2:** Conduct local public education campaigns regarding prevention and safe remediation of common indoor air pollutants, such as:   * Carbon monoxide * Secondhand smoke * Formaldehyde and volatile organic compounds (VOCs) * Radon * Mold or other biological contaminants (e.g., mice and cockroaches) * Asbestos * Pesticides * Lead |
| **Possible Partners:** American Lung Association of Oregon; Oregon Department of Health Services; Environmental Protection Agency; National Pesticide Information Center | | | |
| **Strategy 2:** Reduce or eliminate toxic pesticide use in locally-owned or managed buildings through the use of integrated pest-management techniques. | | | **Step 1:** Perform inspections and enforcement using authority from the state or local housing code or public health code. |
| **Possible Partners**: City of West Linn Parks and Recreation | | | |
| **Strategy 3:** Address residential indoor air quality problems related to mold, pests, and other hazards. | | | **Step 1:** Provide free, subsidized, or at-cost supplies to test and monitor indoor air quality to prevent harm from common pollutants. |
| **Step 2:** Provide grants or loans to remediate indoor air pollution problems in low-income homes and affordable rental units. |
|  |
| **Possible Partners:** American Lung Association of Oregon; Oregon Department of Health Services; EPA; National Pesticide Information Center | | | |
| GOAL 4: By 2040, West Linn will be a more resilient community that has reduced its vulnerability to natural and human hazards and has a long-term preventative and collaborative approach to avoid emergency incidents. | | | |
| Baseline:  Target Metrics: | | | |
| **Strategy 1:** Increase community awareness of and preparation for natural hazards through education and outreach. | | **Step 1:** Publish information to encourage residents to prepare emergency kits and evacuation plans. | |
| **Step 2:** Encourage adoption of the FEMA Citizen Corps’ “neighbor helping neighbor” approach to emergency planning at the neighbor association level (<http://www.ready.gov/neighbors-helping-neighbors-through-preparedness>). | |
| **Step 3**: Encourage businesses to develop emergency procedures and shelter-in-place plans. | |
| **Step 4:** Identify public and private facilities that meet code standards to be used as shelters and command centers. Renovate or build additional facilities as necessary. | |
| **Step 5:** Educate the community about vulnerable areas, such as flood zones. | |
| **Possible Partners**: FEMA; Clackamas County Emergency Management Department | | | |
| **Strategy 2**: Reduce community vulnerability to hazards. | | **Step 1**: Identify high-risk areas. | |
| **Step 2**: Reduce the percentage of residents living in designated high-risk areas. | |
| **Step 3**: Reduce the critical infrastructure below code standards located within designated high risk areas. | |
| **Step 4:** Promote the use of the Clackamas County Emergency Management Notification System (<http://www.clackamas.us/emergency/ccens.html>). | |
| **Possible Partners:** FEMA; Clackamas County Emergency Management Department | | | |
| **Strategy 3:** Develop a hazard-mitigation action plan that includes a plan for both short and long term responses in coordination with Clackamas County | **Step 1**: Coordinate with Clackamas County to develop emergency response procedures that include provisions for evacuating low-income, disabled, and other persons likely to need assistance. | | |
| **Step 2**: Develop a post-disaster plan that addresses long-range redevelopment issues such as land use, economic development, housing, infrastructure, public services, and environmental restoration. | | |
| **Step 3:** Implement highest-priority utility improvements listed in the hazard mitigation plan. | | |
| **Step 4**: Rehearse the emergency response procedures in accordance with the National Incident Management System (NIMS), as released by the U.S. Department of Homeland Security in 2004. | | |
| **Possible Partners:** FEMA; Clackamas County Emergency Management Department | | | |

|  |  |
| --- | --- |
| GOAL 5: Prevent and reduce crime and increase safety through interagency collaboration with residents as empowered partners. | |
| Baseline:  Target Metrics: | |
| **Strategy 1:** Create crime reduction campaigns and programs. | **Step 1:** Conduct a survey of community perceptions of safety, recognizing that some crimes are not reported, to illuminate safety issues that need to be addressed. |
| **Step 2:** Develop crime prevention programs based on survey findings. |
| **Step 3:** Perform ongoing data collection, evaluation, and monitoring from multiple agencies to track trends and identify emerging community needs. |
| **Possible Partners**: City of West Linn Public Safety Department | |

# Community Inclusion

Community Inclusion is an integral aspect of sustainability because the strength of our community depends on meeting the basic needs and aspirations of our citizens. Any meaningful measure of sustainability must be broad enough to include the well-being of members of the community as well as the environment and the physical aspects of West Linn.

A sustainable West Linn is attractive, affordable, and welcoming to a diverse community of people. All community members are engaged in local decision-making and in making their community a better place. Everyone has equitable access to community assets, facilities, and human services. West Linn is a relatively affluent bedroom community to Portland. We shall maintain the high quality of life that most community members enjoy while also ensuring that everyone has access to the amenities that make living in West Linn great.

The median household income in West Linn of $80,479 is high, yet 11% of households in West Linn earn less than $25,000, which is near the poverty line, and 18% earn less than $35,000. (American Community Survey, Selected Economic Characteristic 2011-2013). We must ensure that our lower-income residents have the necessary resources to thrive. Approximately 10% of our population is minority. We must continue to attract diversity to enrich our community and ensure that all people are engaged and connected in the community.

|  |  |
| --- | --- |
| GOAL 1: By 2040, community well-being will be improved through community members’ participation in local decision-making and volunteering with civic and charitable organizations in our community. | |
| Baseline:  Target Metrics:   * 50% increase in voter participation * 35% of community members volunteer in community activities | |
| **Strategy 1:** Increase voter participation in local elections. | **Step 1:** Conduct education campaigns about the electoral process, voter registration and participation and other issues related to civic literacy. |
| **Step 2:** Partner with business, civic, and neighborhood organizations to increase voter registration and turnout. |
| **Step 3:** Create a mock youth voting program to teach children about democracy, elections, and the importance of voting. |
| **Possible Partners**: West Linn School District; City of West Linn City Manager’s Office; West Linn Neighborhood Associations | |
| **Strategy 2:** Encourage community members to volunteer in civic and charitable organizations so that 35% of community members have volunteered in the past year.  Increasing the number of people volunteering locally will strengthen local organizations and empower community members. Many of the strategies in this plan will require volunteer work. | **Step 1:** Compile a list of organizations such as food banks, schools, community gardens and City boards that service West Linn and accept volunteers. |
| **Step 2:** Coordinate with Clackamas County Volunteer Connection (<http://www.clackamas.us/socialservices/volunteer.html>) to list volunteer opportunities and track volunteer activity. |
| **Step 3:** Report on voluntarism annually. |
| **Step 4:** Publicize the results to build a community norm of volunteering and increase knowledge of volunteer opportunities. |
| **Step 5:** Expand the activities of Citizen Engagement Coordinator to promote and encourage voluntarism. For example, partner with business, civic, and neighborhood organizations to increase volunteer opportunities and participation. |
| **Possible Partners**: City of West Linn City Manager’s Office;West Linn Neighborhood Associations; religious organizations | |
| **Strategy 3**: Increase the percentage of residents who believe they are able to have a positive impact on our community. | **Step 1:** Provide training for City departments on successful public engagement techniques. |
| **Step 2:** Survey residents to identify their level of agreement with statements such as:   * I have opportunities to participate in my local government’s decision-making; * My local government is willing to listen and be influenced when residents participate; and/or * I have opportunities to improve my community’s well-being by working with my local government and community groups. |
| **Possible Partners:** City of West Linn City Manager’s Office; West Linn Neighborhood Associations | |

|  |  |
| --- | --- |
| GOAL 2: By 2040, all community members will enjoy a high quality of life with access to community services, facilities, and economic and educational attainment. | |
| Baseline:  Target Metrics: | |
| **Strategy 1:** Provide equitable access to current and future community facilities, human/social services, and infrastructure, including:   * Public transit facilities * Public libraries * Public schools * Public urban and natural spaces * Healthful food * Public and private healthcare opportunities * Publicly provided internet access * Emergency response times (preparedness)   *(Equitable access means that facilities, services and infrastructure are distributed in a way that benefits all community members. It also includes infrastructure that allows physically and mentally disabled people to access facilities and services.)* | **Step 1:** Conduct a community needs assessment to determine access to facilities, human/social services, infrastructure by income level, race, and ethnic background. (The *STAR Technical Guide* provides a methodology for performing this analysis.)  The *Regional Equity Atlas* provides mapping tools to help analyze geographic access to resources and opportunities (<https://clfuture.org/equity-atlas>). |
| **Step 2:** Publicize the results of this analysis and efforts to improve equitable access and proximity to community facilities, services, and infrastructure. |
| **Step 3:** Periodically review, update, and improve the “Social Services in West Linn” booklet, currently located on the City of West Linn website, City Manager page in the Departments tab (<http://westlinnoregon.gov/communications/social-services-available-west-linn>).  Promote and prominently display this resource on the City website to ensure that community members who need these resources are able to access the document. |
| **Step 4:** Provide diversity training for local government staff. |
| **Step 5:** Provide neighborhood library drop boxes and lending branches. |
| **Step 6:** Encourage creative use of existing spaces to develop neighborhood community centers. For example, partner with the School District to increase the use of schools as community centers, allowing the school, community members, and the City to jointly use and care for facilities. |
| **Step 7**: Advocate for programs that reduce the costs of basic needs for low-income households such as utilities, transportation, healthy fresh food, basic medical care, and school supplies. |
| **Possible Partners:** City of West Linn Public Works, Planning, and Economic Development Departments; City Manager’s Office; West Linn Library; West Linn Neighborhood Associations; West Linn Food Pantry; Coalition for a Livable Future; Metro Regional Government | |
| **Strategy 2:** As West Linn grows, ensure that all community members continue to enjoy full civil and human rights. | **Step 1:** Adopt policies and practices to specifically protect the civil and human rights of all community members, such as provide diversity training for police officers focused on non-discrimination and conflict prevention. |
| **Step 2:** Conduct local public education campaigns regarding civil and human rights. |
| **Step 3:** Provide language translation or interpretation services to ensure that residents who are not fluent in English have access to information about local government programs, services, and operations. |
| **Possible Partners:** City ofWest LinnCity Manager’s Office and Police Department | |

*(Note: Many of the strategies, actions, and metrics from the Community Inclusion section are drawn from the STAR Communities Technical Guide.)*

# Appendix A – Glossary of Terms and Abbreviations

Active Transportation**:** Means of getting around that are powered by human energy, primarily walking and bicycling.

**Alternative fuels and alternative-fueled vehicles:** Fuels not derived from traditional fossil fuel sources. *(See biofuels.)* Alternative-fuel vehicles may run on natural gas, biodiesel, ethanol, or hydrogen. Some vehicles can easily switch from one source to another, e.g., the E-85 models that run on either gasoline or 85% ethanol blends.

**Americans with Disabilities Act (ADA):** A wide-ranging civil rights law passed by Congress in 1990 that prohibits discrimination based on disability. The ADA also requires covered employers to provide reasonable accommodations to employees with disabilities, and imposes accessibility requirements on public accommodations.

Backcasting**:** A planning process that involves working backward from a sustainable state rather than forecasting which begins from your current state.

**Biofuels:** Fuels such as biodiesel and ethanol that are derived from plants instead of from fossil fuels.

**Bioretention:** The process in which contaminants and sedimentation are removed from stormwater runoff.

**Bioswale:** Landscape elements designed to remove silt and pollution from surface runoff water.

**Brownfield:** Defined by EPA as real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance pollutant or contaminant.

**Carbon Neutral:** An action that removes as much carbon from that atmosphere as it contributes.

**Collector Streets:**

**Capital Improvement Plan (CIP):** CIP documents are prepared to educate citizens about capital planning within the City’s financial forecast. Progressive organizations focus on capital planning because it allows for targeted, strategic financial decision-making that results in critical projects that leave a lasting impact on a community.

Collaborative Purchasing**:**

**Community Supported Agriculture (CSA):** CSA consists of a community of individuals who pledge support to a farm operation so that the farmland becomes, either legally or spiritually, the community's farm, with the growers and consumers providing mutual support and sharing the risks and benefits of food production.

**Conservation Easement:** A voluntary agreement that limits the type or amount of activity or development on the property while retaining private ownership of the land.

Development Easement**:** SAME THING?

**Ecological Literacy:** A way of thinking about the world in terms of its interdependent natural and human systems, including a consideration of the consequences of human actions and interactions within the natural context.

**Ecosystem services:** Benefits obtained from ecosystems, including food, clean water, natural materials, flood control, and pollination of native and agricultural plants, as well as recreational and spiritual benefits.

**Electric Vehicles:**

**Environmentally Preferable Purchasing Policy:** A policy that prioritizes the procurement of goods and services that are safe for humans and the environment, or at least less harmful than competing goods and services that serve the same purpose.

**Extended Producer Responsibility:** Producer/manufacturer responsibility for their products at the end of their products’ lives.

**Forest Preserves:**

**Full Lifecycle Approach (Closed loop):**

**Form-based code:** A land development regulation that fosters predictable built results and a high-quality public realm by using physical form (rather than separation of uses) as the organizing principle for the code. A form-based code is a regulation, not a mere guideline, adopted into city, town, or county law.

**Fresh Funds Program:** A farmers’ market incentive program that leverages the purchasing power of SNAP and WIC dollars to support local farmers and increase access to healthy, fresh foods to under-served communities; a program to increase the spending power of customers receiving SNAP benefits (formerly known as food stamps).

**Green Building:** The practice of constructing and remodeling buildings to reduce their environmental impacts through such practices as daylighting (letting natural light into the building), energy efficiency, selection of materials with low toxic content, etc.

**Green Chemistry:** The design of chemical products and processes that reduce or eliminate the generation of hazardous substances.

**Green Infrastructure:** An interconnected system of natural areas and open space that conserves ecosystem values, helps sustain clean air and water, and provides benefits to people and wildlife.

**Green Streets:** Streets that provide control of stormwater by incorporating design elements such as street trees, permeable pavements, bioretention, and swales. Green Streets provide multiple benefits, including improved water quality and more livable communities.

**Greenhouse Gas:** Any gas that absorbs infrared radiation in the atmosphere. Greenhouse gases include carbon dioxide, methane, nitrous oxide, ozone, and others.

**Greenways:** Trails or other paths separated from vehicular traffic that serve as transportation links or recreation routes for pedestrians, bicyclists, and equestrian riders.

**Grey *(or urban)* Infrastructure:** **T**raditional practices for stormwater management and wastewater treatment, e.g., pipes and sewers.

**Health Impact Assessment:** A systematic process to analyze the potential effects of a proposed policy, plan, program, or project on human health and the distribution of those effects, and then provide recommendations to improve positive health outcomes and minimize adverse impacts.

**Hybrid Vehicles:**

**Invasive Species:** A non-native or alien species in the ecosystem whose introduction causes or is likely to cause economic harm, environmental harm, and/or harm to human health.

**Land Trust:**

Leadership in Energy & Environmental Design (LEED)**:** A green-building certification program that recognizes best-in-class building strategies and practices.

**LEED-EB:** Leadership in Energy & Environmental Design for Existing Buildings; a process and scoring system for operating and remodeling existing buildings.

**LEED-ND:** Leadership in Energy & Environmental Design for Neighborhood Development; a process engineered to inspire and help create better, more sustainable, well-connected neighborhoods. It looks beyond the scale of buildings to consider entire communities.

**Invasive species:** Certain non-native species of plants spread quickly in nature, choking out native vegetation and reducing local biodiversity. These include Scotch broom, Himalayan blackberry, and English ivy, among many others.

**Integrated Pest Management (IPM):** A set of methods that minimizes but does not completely eliminate the use of synthetic pesticides.

**Materials Management: A** holistic view of environmental impacts across the full life cycle of materials, as well as actions that can be taken to reduce those impacts. It includes resource extraction and the use of recovered materials, the design and production of materials, their use, and management at end-of-life, including solid waste disposal and recovery.

**Native Plants:** Plants that are indigenous to a location. These are adapted to local conditions and therefore are usually low-maintenance.

**Product Stewardship:** A product-centered approach to environmental protection. It calls on those in the product lifecycle **–** manufacturers, retailers, users, and disposers **–** to share responsibility for reducing the environmental impacts of products (EPA).

**Regional Tax-base Sharing:** Under tax-base sharing, all of the municipalities within a metropolitan area agree to share tax proceeds from new development. This eliminates inter-regional competition; facilitates other planning goals, such as preserving open space or maintaining a vibrant downtown; encourages suburbs and central cities to cooperate on regional economic development goals; and leads to a more equitable distribution of tax burdens and public services.

**Renewable Energy:** Energy that come from resources that are naturally replenished on a human timescale, e.g., solar and wind power.

**Riparian Corridors:**

**Stream Buffers:** Strips of trees and other vegetation that improve water quality by filtering pollutants from stormwater runoff; reduce flooding and erosion by stabilizing stream banks; moderate stream temperature and sunlight, keeping fish and other aquatic life healthy; and provide nesting and foraging habitat for many species of birds and animals (<http://nccwep.org/involvement/buffers/index.php>).

**Stormwater:** Precipitation that runs off impervious surfaces, typically picking up pollutants, such as soil, fertilizers, and oil, before entering streams and other water bodies untreated.

**Sustainability:** Conservation, development, and use of resources in manners that enable today’s people to meet their needs while also ensuring ecosystems and future generations can meet all needs of their own. A sustainable community balances the interests of individuals and organizations with the inherent benefits of the natural environment and of economic stability to create a livable, enjoyable community for all future generations.

**Transportation System Plan** **(TSP):** Provides the framework for transportation improvements for West Linn through 2030. The plan addresses anticipated pedestrian, bicycle, mass transit, and motor vehicle needs, establishing the capital improvements and capital maintenance plans for the transportation network.

**The Natural Step:** An internationally recognized model for sustainability strategic planning based on scientific understanding of how human activity impacts the natural environment.

**Watershed Education:**

**Wetland:** An area inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

**Workforce Development:** Programs that help to connect low-income workers to quality career coaching, education, training, and supportive services that enhance skills and career prospects.

# Appendix B – Top Priorities

Conduct a sustainability audit of City facilities and operations (Energy Goal 1, Strategy 1)

Other priorities to be determined by annual recommendations of the Sustainability Advisory Board to City Council

# Appendix C - West Linn Civic Ecology Workshop Summary Memorandum

# Appendix D– Kulongoski’s Executive Order

# Appendix E – The 2030 Challenge

# Appendix F – Web Resources & Links

**Architecture 2030:**

<http://architecture2030.org/>

**Bicycle Transportation Alliance:**

**Brundtland Report, Our Common Future:**

**Clean Water Hero Program; Clean Water Services:**

**Civic Ecology:**

**Clackamas County Business Recycling Awards Group:**

**Clackamas County Emergency Management Notification System:** <http://www.clackamas.us/emergency/ccens.html>

**Clackamas County Volunteer Connection:** <http://www.clackamas.us/socialservices/volunteer.html>

**Community Greenhouse Gas Inventory for Lake Oswego:** <http://www.ci.oswego.or.us/sites/default/files/fileattachments/sustainability/webpage/13289/att_a_lakeoswego-commghginv-021612-final.pdf?t=1425747997058>

**Drive Less, Save More:**

**FEMA Citizen Corps “neighbor helping neighbor”:**

<http://www.ready.gov/neighbors-helping-neighbors-through-preparedness>

**Friends of Trees:**

<http://www.friendsoftrees.org/>

**H + T Affordability Index (Housing and Transportation):** [**http://www.htaindex.org/map/**](http://www.htaindex.org/map/)

**Leadership in Energy and Environmental Design (LEED):**

**Lowell Center for Sustainable Production:** <http://www.sustainableproduction.org/abou.what.php>

**Managing Wet Weather with Green Infrastructure Municipal Handbook for guidance, EPA:**

**Master Gardeners, OSU:**

<http://extension.oregonstate.edu/mg/>

**Master Recyclers:**

**National Climate Assessment:**

<http://nca2014.globalchange.gov/>

**Natural Step:**

**Pacific Northwest Pollution Prevention Resource Center’s ResourceFull Use workshop:** <http://www.co.washington.or.us/HHS/SWR/RecycleatWork/resourcefull-use.cfm>

**Regional Equity Atlas:**

<https://gis.oregonmetro.gov/equityAtlas/>

**Regional Greenhouse Gas Inventory for the Portland metropolitan region:**

[http://www.goodcompany.com/wpcontent/uploads/2010/08/Metroregional\_greenhouse\_gas\_inventory.pdf](http://www.goodcompany.com/wp-content/uploads/2010/08/Metroregional_greenhouse_gas_inventory.pdf)

**Safe Routes to School:**

<http://www.saferoutesinfo.org/>

**Social Services in West Linn booklet:** <http://westlinnoregon.gov/communications/social-services-available-west-linn>

**STAR Community Rating System:**

**Sustainable Development (From Brundtland to Rio 2012). Background Paper:**

**Walk + Bike to School:**