City of Corvallis

Sustainability Annual Report

2013 & 2014

CORVALLIS
ENHANCING COMMUNITY LIVABILITY

www.corvallisoregon.gov

Sustainability means using natural, financial and human resources in a responsible manner that meets existing needs without compromising the ability of future generations to meet their own needs.

- City Council Policy on Sustainability

City of Corvallis 2013 & 2014 Annual Sustainability Report

Contents

Corvallis City Council Overarching Goals and Values

1. Diversity
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On the cover:

This 37kW photovoltaic system was installed on the roof of Fire Station #1 (on Harrison Street) in May 2013. The array is made up of 150 panels and is expected to produce over 20% of the station's electrical consumption. More details available on page 17.

Highlights of Corvallis' Sustainability Efforts	
2000	Corvallis joins Cities for Climate Protection campaign
2001	City signs up for renewable energy through Pacific Power Blue Sky program
2004	City Council adopts Sustainability Policy for municipal operations
2005	City Council passes resolution urging residents and businesses to purchase renewable energy
	Environmental Protection Agency (EPA) designates Corvallis a "Green Power Community"
	Sustainability Steering Committee formed (City Manager, Department Directors)
2006	Sustainability Supervisor hired to develop comprehensive sustainability program
2007	Development of ISO 14001-based Sustainability Management System begins
	City becomes founding member of Corvallis Sustainability Coalition
	City becomes founding member of International Society of Sustainability Professionals (ISSP)
2008	City-wide Sustainability Core Team established
	Sustainability fund created to allow departments to explore innovative in-house projects
	Energy Trust of Oregon chooses Corvallis for Oregon's first community energy challenge
	Organization develops five overarching organizational sustainability goals
	City partners with Corvallis Sustainability Coalition on Community Sustainability Action Plan
	Corvallis joins ICLEI — Local Governments for Sustainability
	City earns Julian Award for Sustainability from Oregon Chapter of American Public Works Association
	City earns League of Oregon Cities Award of Excellence for sustainability planning
2009	City Council sub-committee develops *Community Energy Strategy*
	Staff complete City's first greenhouse gas inventory for municipal operations
	City uses its $511,600 federal Energy Efficiency and Conservation Block Grant (EECBG) to fund community programs and infrastructure
	City awarded $78,750 from Pacific Power's Blue Sky program for Fire Station #4 solar project
	Sustainability Program Specialist position created
2010	Council adopts Community Sustainability Policy
	Council passes Sustainability Initiatives Fees for transit, urban forests, and sidewalk maintenance
	EPA chooses Corvallis for its first Green Power Community of the Year award
	EPA awards Corvallis a Climate Showcase Communities grant for $491,762
2011	City awarded $144,000 from Pacific Power's Blue Sky program for Fire Station #1 solar project
2012	City awarded Gold certification (highest level) from State Electronics Challenge for the organization's computer purchasing, use and disposal practices
	Council passes Single-Use Plastic Carryout Bag Ordinance
2013	City awarded $400,000 from Pacific Power's Blue Sky program for a 150kW ground-mounted solar array at the Wastewater Treatment Plant.
	City partners with Benton County and Oregon State University to develop co-branded prompt signs to encourage sustainable behaviors.
2014	The three-year Climate Showcase Communities grant concludes with community-wide greenhouse gas emissions reductions of 15,465 MT CO_2e.
	City conducts community greenhouse gas inventory for the Corvallis area.

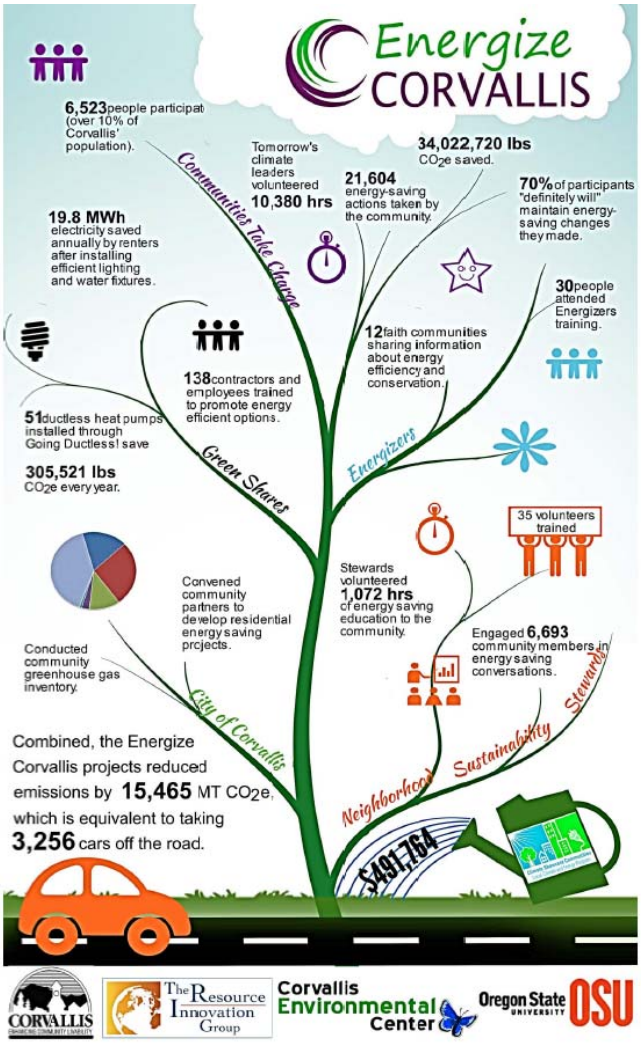
The Sustainability Program in 2013 & 2014

As directed by the City Council Organizational Sustainability Policy, this report focuses on progress achieved by the City's internal sustainability program and objectives. The Sustainability Program's efforts focus on organizational sustainability unless specific assigned projects necessitate public interaction, such as the effort to reduce single-use plastic shopping bags or the Climate Showcase Communities grant. Sustainability Program staff efforts are mainly devoted to employee education, management of the two sustainability committees, annual goal-setting, tracking of internal metrics, and reporting. Some highlights of the Program's efforts over the past two years are noted below.

Closing of the Environmental Protection Agency's (EPA) Climate Showcase Communities grant

The EPA's Climate Showcase Communities grants aimed to help local governments pilot innovative, cost-effective and replicable community-based greenhouse gas reduction projects. In 2011, the City, in partnership with three local organizations, was awarded nearly $500,000 for four programs that aimed to reduce residential energy use. Briefly, those partners and their programs were:

- Green Shares - The Resource Innovation Group hosted meetings where 138 local contractors and employees received training and free direct advertising to support their customers in making efficiency upgrades to their homes.
- Neighborhood Sustainability Stewards – Oregon State University's Benton County Extension trained 35 volunteers on the basic tenets of sustainability. Those volunteers then dedicated 735 hours in service to the community.
- Communities Take Charge – The Corvallis Environmental Center reached out to the Corvallis community and 6,523 people (over 11% of Corvallis residents) participated by pledging to try three new energy-saving actions for a month. This program provided over 10,000 internship hours for tomorrow's climate leaders.
- Energizers – The Corvallis Environmental Center strived to create a network of residents who would serve as liaisons about energy conservation and climate change efforts to specific groups in the community.



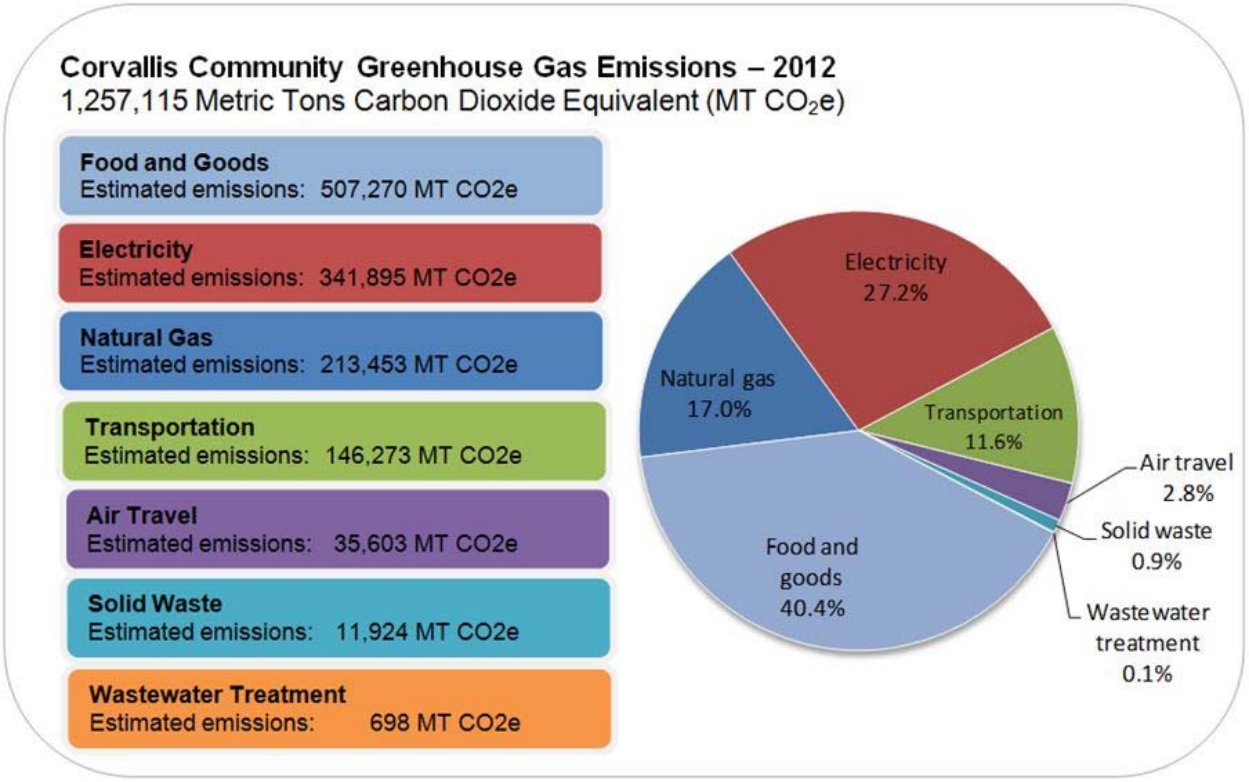
Over the three-year life of the grant, quantifiable greenhouse gas reductions totaling 15,465 MT CO2e were achieved by two programs – Communities

Take Charge and Green Shares. That's not to say that other programs did not affect behavior change and reduce greenhouse gas emissions, but rather emissions reductions were too difficult to reliably track.

As the grant period came to a close, the partners participated in several outreach events in order to highlight the programs and their successes. Additionally, the graphic on page 4 was designed to emphasize the significant accomplishments.

Community Greenhouse Gas Inventory

As part of the Climate Showcase Communities grant, Sustainability Program staff was charged with completing a community greenhouse gas inventory for calendar year 2012. The results are highlighted in the chart below.



The consumption of food and goods ranks highest among the categories, comprising over 40% of overall emissions. This category estimates worldwide greenhouse gas emissions associated with the things we consume – the food we eat, the clothes, appliances, automobiles, pencils and toothpaste that we buy. The second largest category of emissions is electricity, with over 27% of the community's greenhouse gas impact. This large contribution to our community's footprint may surprise some due to the Pacific Northwest's reputation for having relatively clean electricity from hydropower. While this may be true for the region as a whole, the generation mix of some providers relies more heavily on fossil fuels. Pacific Power, which provided over 91% of the electricity used in the community in 2012, generated 67% of their electricity from coal and 13% from natural gas.

The information from this inventory provides perspective and allows us to better understand where our efforts can be most effective. It gives us the opportunity to see where we, as a community, generate greenhouse gases and that will allow us to prioritize and focus any future efforts at reducing those emissions. Greater detail about the community greenhouse gas inventory can be found on the City's website at: http://www.corvallisoregon.gov/communityghginventory.

The Single-Use Plastic Carryout Bag Ordinance

This new City ordinance went into effect for large retailers on January 1, 2013. After providing education to large retailers during the latter part of 2012, the Sustainability Program Specialist monitored the public response to the new regulation, provided guidance to retailers as they worked to comply, and responded to complaints of non-compliance. For the most part, retailers and consumers quickly adapted to the ordinance. Early on, staff sent a letter to several large retailers clarifying how the new ordinance applied to customers using the Women, Infants and Children program (WIC), the Supplemental Nutrition Assistance Program (SNAP), and Oregon Trail vouchers.

Some retailers, anticipating the expansion to all retail outlets on July 1, 2013, identified hurdles that existed for smaller stores that were not evident for larger stores (e.g. existing inventories of non-compliant bags, the difficulty for some small businesses to find suitable bags at a reasonable cost). Small changes were made to the ordinance to help ease that burden.

At the end of 2014, the ordinance had been in place for two full years and retailers have adjusted. Only three verified complaints were received in 2014. Each of those complaints was related to a misunderstanding by personnel at the store and was resolved quickly.

Tracking and updating our Sustainability Goals

Two of the organization's five Sustainability Goals were updated in 2014 to reflect and align with current and expected resources (e.g. organizational waste could be reduced significantly with on-site waste-sorting, but the financial expense would be considerable). When developing new Objectives and Targets, the organization's sustainability teams strived to identify Targets that would make us stretch to reach them.

The Employer of Choice goal

The previous Objectives and Targets for the Employer of Choice goal sought input from employees through an annual survey, but those surveys were discontinued in 2012. The two sustainability teams focused on the issues of employee safety, employee retention and employee engagement and worked to develop ways to measure those effectively. The new Objectives and Targets are:

Separation Rate Maintain a separation rate of 2-3 percentage points below the annual separation rate for State and Local Government as reported by the Bureau of Labor Statistics.
Injuries Maintain an annual nonfatal workplace injury and illness incidence rate below that of the Local Government (Oregon) industry sector through a comparison of the Bureau of Labor Statistics' DART Rates (total cases involving days away from work, days of restricted work activity, and/or job transfer).
Spring Fitness Challenge Track employee participation in the Spring Fitness Challenge, a voluntary employee fitness program, with target participation at 25%.

The Zero Solid Waste goal

A goal of 'zero' waste was impossible for the organization to reach because several waste streams cannot be eliminated completely. For example, medical wastes from Fire and Police responses must be disposed of according to very specific regulations.

Working with the Steering Committee and Core Team, new targets were developed for waste generated from both City operations and City-collected public waste (e.g. from the Library, parks):

Objective	Target
Reduce waste from City operations sent to landfill. Baseline 2009: 186 tons of waste to landfill from City operations.	2020: 50% reduction from 2009 baseline 2030: 90% reduction from 2009 baseline
Reduce City-collected public waste sent to landfill (e.g. from Library, parks, Osborn). Baseline 2009: 202 tons of waste to landfill from the public that is collected by the City.	2020: 50% reduction from 2009 baseline 2030: 90% reduction from 2009 baseline

To get to those reduction targets, we looked at past performance and expected changes to recycling markets and collection trends. Since we began collecting data we have seen an average decrease of about 18.5 tons of waste sent to the landfill each year (from both City operations and City-collected public waste combined). If we maintain that pace we'll reach these new targets. But that's not as easy as it sounds – as our waste stream gets smaller it becomes more difficult to identify ways to reduce it. We continue to search for possible solutions to some of our largest waste streams and we anticipate that the future will bring changes to the recycling and manufacturing worlds that will help us achieve these long-term targets.

Managing for the life-cycle of electronics

For the third year in a row, the City of Corvallis was awarded the highest level of recognition (Gold) from the State Electronics Challenge for our life-cycle management of computer and electronics equipment. There are three distinct areas of the equipment's life-cycle that are of concern for this award, and the City's Management Information Systems (MIS) division addresses each phase differently:

- Purchase – All computer equipment purchased must meet Electronic Procurement Environmental Assessment Tool (EPEAT®) standards for energy efficiency and reduced toxicity during manufacturing. This is a requirement of the City's Energy Conservation Policy.
- Use – Maximizing the efficiency of equipment during use through energy management and paper reduction programs (e.g., turning off computers at night, enabling 'sleep' functions, and double-sided printing). MIS has Standard Operating Procedures (SOPs) that specifically address power management.
- Disposal – At the end of its useful life at the City, computer equipment is either donated for reuse in the community or is recycled responsibly through Republic Services' certified e-waste program. The City's SOPs concerning IT Asset Management guide end-of-life decision making.

Educating employees

Each month, Sustainability Program staff writes an article for the employee newsletter, Read & Recycle. Articles cover a timely sustainability topic and aim to inform and educate the employee population about issues that impact their work or home life. Topics covered over the past two years include alternative transportation, Ultraviolet Light Disinfection of the City's swimming pools, photovoltaics, life-cycle management of electronics, consumerism, the cost of printing, landscaping for resource management, LED streetlights, and many more.

Additionally, every month new City employees are provided a full-day orientation. As part of that, Sustainability Program staff provides a brief introduction to the organization's history of efforts around sustainability. New employees are introduced to the organization's definition of sustainability, related policies, how sustainability is implemented, the organization's sustainability goals, and how they can contribute.

Looking ahead to 2015

Tracking and updating our Sustainability Goals
Sustainability Program staff will continue to track quarterly the usage of energy and water, promote conservation practices, and document cost savings. Staff will closely follow the new Objectives and Targets for the Waste Reduction and Employer of Choice goals. Staff will also complete an organizational greenhouse gas inventory to better understand and document our Sustainable Purchasing goal.

Several goals have target dates coming due in 2015, including Sustainable Facilities (both Water and Energy Use), and Vehicle Carbon Footprint. Each will require an examination with the sustainability teams to determine if we want to update the targets or the timeframes.

Organizational greenhouse gas inventory
Staff will conduct an organizational greenhouse gas inventory for calendar year 2013. Prior organizational inventories cover calendar years 2004 and 2008. This update will provide context for changes to where our purchasing dollars are spent, our usage of different types of fuel, management of major emitters like the wastewater treatment plant, and the impacts from various sources of the organization's carbon emissions.

Managing internal sustainability teams
Program staff will continue to facilitate the two organization-wide sustainability teams. The Sustainability Steering Committee, which includes all Department Directors, provides strategic direction around the organization's sustainability efforts. The City-wide Sustainability Core Team includes staff and management from all departments and reviews ideas for feasibility, communicates achievements and opportunities to staff, and recommends policies and projects to help institutionalize change.

Goals, Objectives, and Targets

Long-term sustainability Goals were developed in 2008 as a way to define and measure progress.

Long-term sustainability goals				
Sustainable Facilities	Sustainable Purchasing	Employer of Choice	Vehicle Carbon Footprint	Waste Reduction

By their titles, these goals reflect the sustainable endpoints the organization seeks to achieve. In 2010, staff worked to define how to monitor and measure progress relative to these five goals by setting objectives and targets for each. Since then, as the timeframe for Objectives and Targets has come due, sustainability staff and the two organization-wide sustainability teams have updated those to reflect progress and provide an on-going challenge to the organization.

Objectives are the over-riding considerations the City takes into account to meet long-term goals.

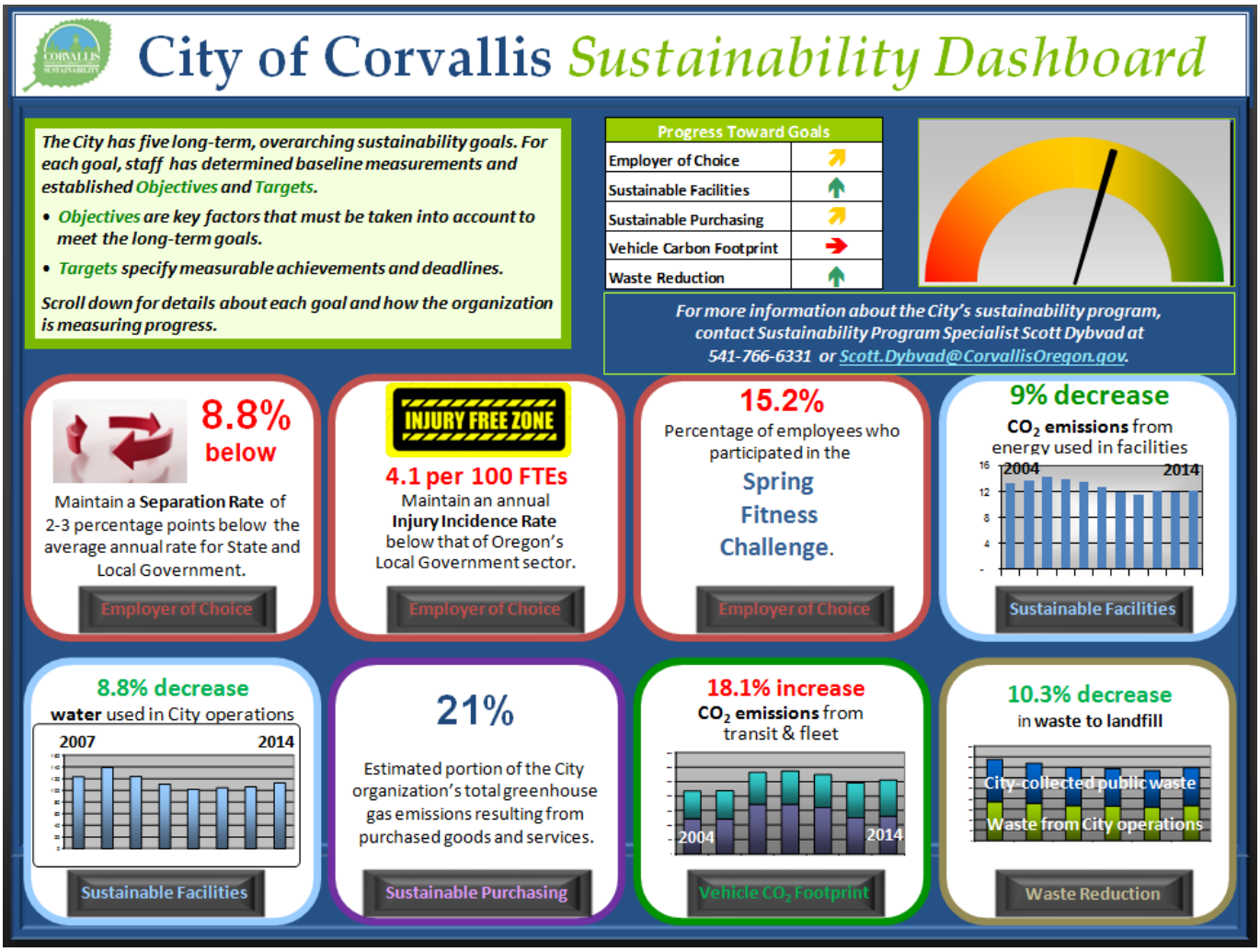
Targets are performance measures to aim for to ensure we're on the path to achieve our objectives.

For example, the Sustainable Facilities goal has two objectives, each with two future targets:

Goal Sustainable Facilities			
Objective 1 Reduce emissions from energy used in City operations		*Objective 2* Reduce water use in City operations	
Target 2015: 5% below 2004 emissions	*Target* 2020: 15% below 2004 emissions	*Target* 2015: 15% below 2007 use	*Target* 2020: 30% below 2007 use

Sustainability Dashboard

The Sustainability Dashboard was designed to provide quick analysis of our progress on our internal Goals, Objectives, and Targets. The more carefully we track, measure and monitor our sustainability progress, the better we will manage our resources. The Dashboard provides information about all of our sustainability goals and is updated quarterly. Below is the Dashboard as of the end of 2014.



Sustainable City Report Cards

This Report Card shows progress on objectives related to the 2013 and 2014 Sustainability Work Plans. Development of the Work Plan occurs towards the end of each calendar year and identifies specific projects related to each Sustainability goal. During 2013, the organization made limited progress on these objectives, primarily due to declining resources across all City departments. Over the two year period, twenty-one objectives were identified and all showed progress, with eleven fully completed.

Meets/exceeds goal  **Some progress toward goal**  **No progress toward goal** 

2013 & 2014 Objectives	Progress
Goal: Employer of Choice	
2013 – Develop and implement a new employee orientation program.	
2013 – Develop and implement a supervisor training program.	
2013 – Update the City's sustainability web page and include achievements from all departments.	
2013 – Improve employee participation in green office practices through increased education and awareness-raising.	
2014 – Update the Employee Handbook	
2014 – Begin using the new Performance Appraisals.	
Goal: Sustainable Facilities	
2013 – Develop an Energy Conservation Upgrade Project List for City buildings starting with the Library and City Hall.	
2013 – Determine the efficiency and effectiveness of irrigation systems under City control.	
2014 – Evaluate irrigation system software (Maxicom) to determine best future path for irrigating parks.	
2014 – Evaluate irrigation practices.	
2014 – Install or determine feasibility of daylighting light controls in Madison Avenue Building.	
2014 – Develop an Energy Conservation Upgrade Project List for the Madison Avenue Building and continue work on the List for the Library.	
Goal: Sustainable Purchasing	
2013 – Update the City organization's greenhouse gas inventory, including supply chain emissions.	
2014 – Conduct green cleaning training with all relevant purchasers.	

2013 & 2014 Objectives	Progress
Goal: Vehicle Carbon Footprint	
2013 – Separate Equipment Management System administrative policy into two policies – one focused on garage operations and another addressing the sustainability aspects of our vehicle fleet, including replacement schedules, vehicle types and fuel purchased.	
2013 – Establish strategies to reduce vehicle fuel use.	
2014 – Explore best management practices to reduce vehicle carbon footprint and make recommendations for suggested actions.	
Goal: Zero Solid Waste / Waste Reduction	
2013 – Conduct gap analyses of waste reduction opportunities at each facility.	
2013 – Improve recycling in public areas of the Library and Osborn Aquatic Center.	
2014 – Re-evaluate the targets and objectives for the City's Zero Solid Waste goal.	
2014 – Evaluate alternative disposal options for snails from the wastewater treatment process, the City's largest contribution to our waste stream.	

Progress Toward Organizational Goals

The City organization has five sustainability goals. As described above, indicators have been established for each goal to gauge our progress. Each goal is described in detail in the next few pages. The table below summarizes the organization's performance on the metrics used to measure each goal.

2013-2014 Progress		
Goal	**Indicator**	**Performance**
Employer of Choice	**Separation Rate** Maintain a separation rate of 2-3 percentage points below the annual separation rate for State and Local Government as reported by the Bureau of Labor Statistics.	In 2013, the City's separation rate was about 5% below comparables. In 2014, the rate was 8.8% below comparables.
	Injuries Maintain an annual nonfatal workplace injury and illness incidence rate below that of the Local Government (Oregon) industry sector through a comparison of the Bureau of Labor Statistics' rate for cases of a more serious nature involving days away from work, job transfer, or restriction (DART Rate).	In 2013, the City's DART rate rose just above the Local Government rate for Oregon. 2014 data not yet available.
	Spring Fitness Challenge Track employee participation in the Spring Fitness Challenge, a voluntary employee fitness program, with target participation at 25%.	Employees' participation rate in this voluntary fitness program fell from 19.9% in 2013 to 15.2% in 2014 – both are below the target rate.

Goal	Indicator	Performance
Sustainable Facilities	Reduction in greenhouse gas emissions from energy used in City operations	Emissions from energy used in 2013 decreased by 2% compared to 2012, then increased by 2% in 2014.
	Reduction in water used in City operations	Water use by the organization increased in 2013 by 1.5% and in 2014 by 6% over prior years.
Sustainable Purchasing	Reduction in impacts from purchases (i.e., emissions, waste, toxicity)	Organizational greenhouse gas inventory is underway to determine the impact of City purchasing.
Vehicle Carbon Footprint	Reduction in greenhouse gas emissions from City vehicles (fleet, transit)	In 2013, the organization's vehicle emissions continued to decline, down 10% from 2012. In 2014, that trend reversed and emissions increased by 4.4%.
Waste Reduction	Reduction in waste to landfill from City operations and City-collected public waste (e.g. Library, parks).	In 2013, waste to the landfill declined by 3.2% compared to 2012, but in 2014, waste rose by 4.2%.

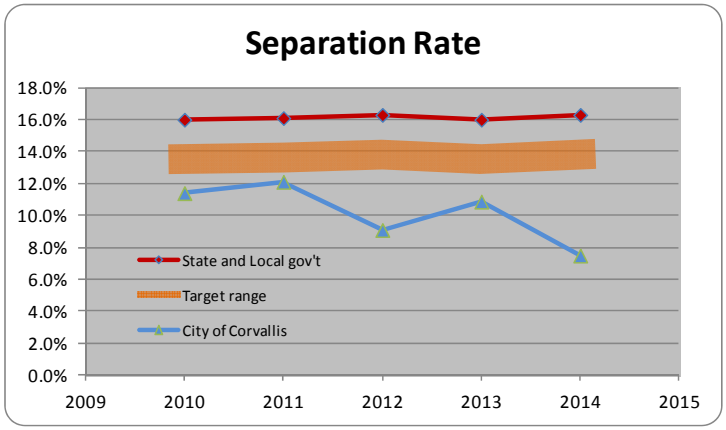
Employer of Choice

An Employer of Choice is one whose practices, policies, benefits and overall work conditions enable it to successfully attract and retain talent.

Separation Rate

Objective: Maintain a separation rate of 2-3 percentage points below the annual separation rate for State and Local Government as reported by the Bureau of Labor Statistics.

Separation Rate	2013	2014
Comparables (State & Local Gov't)	16.0%	16.3%
Target range	13-14%	13.3-14.3%
City of Corvallis	10.9%	7.5%



Employer of Choice

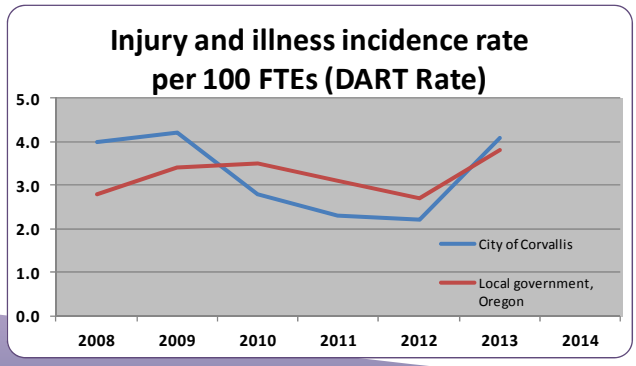
Spotlight story: The Police Department has been addressing lead exposure in the firing range. By changing the types of ammunition used, air quality has improved considerably for those using the indoor range.

Additionally, the Police Department adjusted their 12-hour patrol schedule to provide improved balance between work and personal lives.

Injuries

Objective: Maintain an annual nonfatal workplace injury and illness incidence rate below that of the State and Local Government industry sector through a comparison of the Bureau of Labor Statistics' DART Rates (total cases involving days away from work, days of restricted work activity, and/or job transfer).

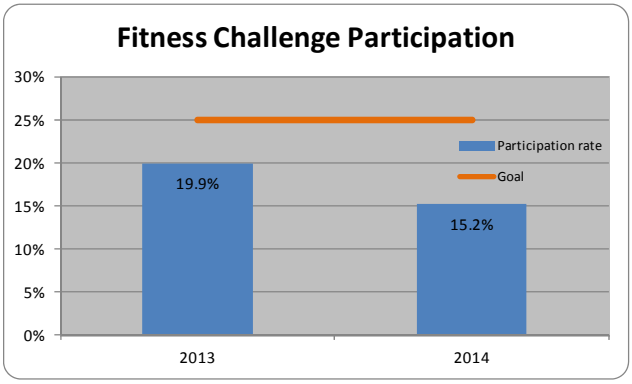
Injuries	2010	2011	2012	2013	2014
Comparables (Local Gov't, Oregon)	3.5	3.1	2.7	3.8	Not
City of Corvallis	2.8	2.3	2.2	4.1	available



Spring Fitness Challenge participation

Objective: Track employee participation in the Spring Fitness Challenge, a voluntary employee fitness program, with a target of 25% participation.

Spring Fitness Challenge participation	2013	2014
Employees	427	415
Participants	85	63
Rate	19.9%	15.2%



Tracking the new Employer of Choice metrics shows that the organization has progress to make. It is possible that targets were set too high or too low and may need to be readjusted at some point. For instance, the organization's separation rate target range was discussed and researched at length to determine what percentage was appropriate for our organization. With our rate dropping considerably below comparables in 2014, we must ask ourselves whether our separation rate is below what is desirable or if we want to reconsider our target range. Most importantly, measuring and monitoring this data is what makes these considerations possible.

Some highlights of the City's efforts around Employer of Choice include:

- The City Manager's Office's City Hall Ambassador program won the 2013 International Institute of Municipal Clerks (IIMC) Program Excellence in Governance Award. The award recognizes efforts to foster excellence in governance and to enhance participation that will greatly benefit communities and citizens. The Ambassadors staff the front desk, greet visitors, provide directions, and assist with City inquiries. The City benefits from having a more engaged citizenry and Ambassadors fill a critical gap left by budget reductions.
- Public Works Water Production staff was acknowledged by the Safety Committee for work on bringing handrails and chains at the Taylor Water Plant up to OSHA standards using re-purposed aluminum.

Next steps for Employer of Choice Goal:

- Implement strategies to improve employee participation in the Spring Fitness Challenge.
- Update targets for Sustainable Facilities and Vehicle Carbon Footprint that continue to challenge the organization's employees to maintain the organization as a leader in sustainability.

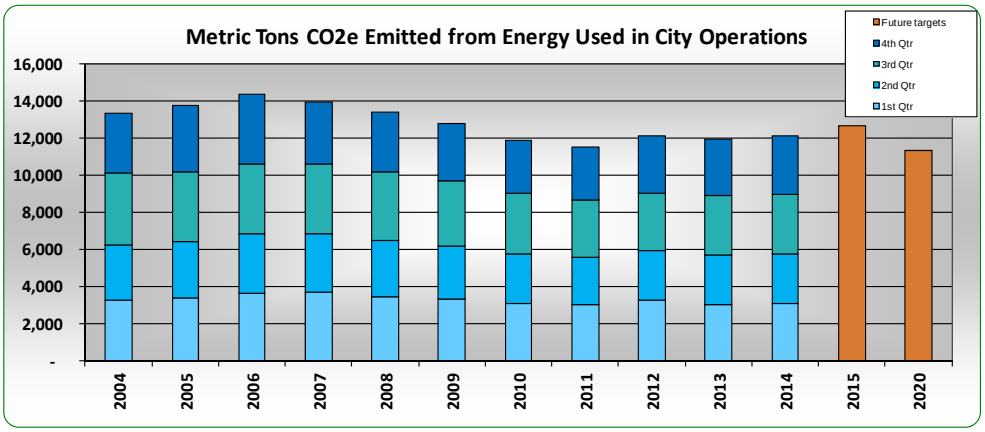
Sustainable Facilities

Sustainable facilities are those built, maintained, and operated in a manner that reduces the consumption of energy, water, and materials, and harm to human health and the environment. They include unoccupied buildings and facilities such as parks and water and wastewater pumping stations.

Energy

Objective: Reduce emissions from energy used in City operations (e.g., facilities, streetlights, water, wastewater). Using 2004 baseline emissions, by 2015 and 2020 respectively, reduce emissions by 5% and 20%.

Energy use	MT CO2e emitted	% change from baseline
2004 emissions (baseline)	13,307	--
2013 emissions	11,884	10.7% below
2014 emissions	12,109	9% below



Emissions from energy use over the past three years have been relatively steady and the organization is still on track to meet its 2015 target. However, emissions are up 5.5% since 2011.

The impact of the organization's energy use is measured in metric tons of carbon dioxide equivalent (MT CO2e). It includes the impact of all major greenhouse gases expressed in terms of the amount of carbon dioxide that would create the same amount of warming. As lower-carbon energy sources are adopted, we will be able to continue using the same metrics to track our progress.

One recent project worth noting is the replacement of 70 high-wattage streetlights around town. The electric utilities charge the City for the cost of the new fixture plus installation. Payback on the initial investment comes through energy savings and takes about 3 years.

Sustainable Facilities

Spotlight Story

The City turned on its second city-owned renewable solar electric generation project in May 2013. The project crossed department lines with expertise and effort coming from Fire, Public Works (Administration, Buildings, and Electronics), and MIS.

The 37kW system was constructed on the roof of Fire Station #1 (on Harrison Street). The array is made up of 150 panels and is expected to produce 39,529 kWh, over 20% of the station's electrical consumption. All of the project funding came from Pacific Power's Blue Sky program and the Energy Trust of Oregon.

Since it went live, Fire Station #1 photovoltaics have produced 78.8 MWh, or the equivalent power of over 26 million AA batteries. The smaller photovoltaic installation on Fire Station #4 (15kW), installed in 2011, has produced about 71 MWh in its lifespan, or about 60% of that station's electrical needs.

The City's website has a link to the monitoring systems at both sites.

Water

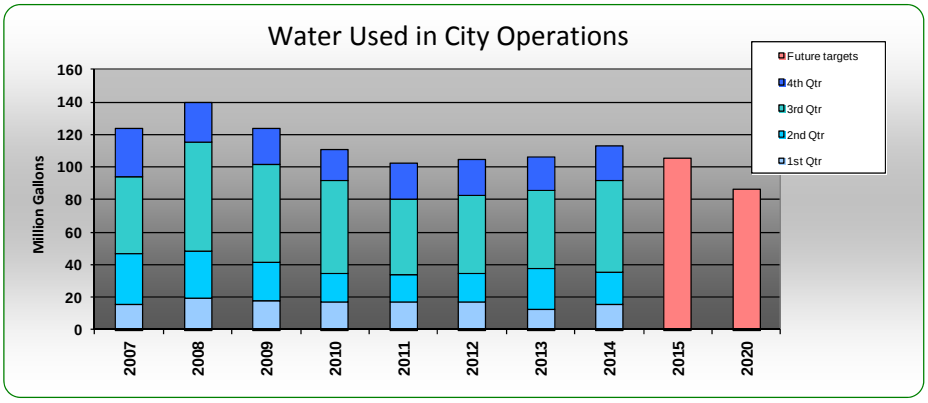
Objective: Reduce water use in City operations. Using 2007 baseline usage, by 2015 and 2020 respectively, reduce usage by 15% and 30%.

Water use	Million gallons	% change from baseline
2007 usage (baseline)	123.8	--
2013 usage	106.4	14.1% below
2014 usage	112.9	8.8% below

Sustainable Facilities

Spotlight Story

Parks Operations staff reduced irrigation and mowing frequency at some neighborhood parks and light-use turf areas. Irrigation was reduced to both save water and slow turf growth. The reduction in water enabled staff to reduce mowing from weekly to bi-weekly at these locations during the summer months, saving on fuel consumption, equipment wear and tear, and freeing up staff time to put towards other priority tasks.



City water usage increased in both 2013 and 2014 from prior years. It will take a reduction of over 7.5 million gallons to meet the 2015 target to reduce water used to 15% below the baseline year of 2007. Most of the increase in 2014 can be attributed to a greater need to irrigate landscapes. This emphasizes the importance of staff efforts to try projects aimed to reduce irrigation at some locations, such as the example described in the Spotlight Story.

Next steps for Sustainable Facilities Goal:

- Investigate power generation options from digester methane gas, such as for Public Works boilers.
- For all irrigated park areas, assess irrigation versus actual evapotranspiration needs and prioritize areas for attention.
- Evaluate and prioritize facilities with fluorescent lighting for LED replacement.

Sustainable Purchasing

The Sustainable Purchasing goal considers the Triple Bottom Line of environmental, economic and social impacts in purchasing decisions. Useful tools include Life Cycle Costing to determine the lowest economic cost over a product's lifetime; specifications that include environmentally preferable characteristics; and Third Party Certifications (e.g., Energy Star, Green Seal) to identify environmentally preferable products.

Objective: Reduce impacts from purchases (i.e., emissions, waste, toxicity).
The City does not track all of its purchases in a manner sufficient to determine whether negative impacts are being reduced from one year to the next. However, staff is updating the organizational greenhouse gas inventory for calendar year 2013 in order to estimate the emissions related to purchased goods and services.

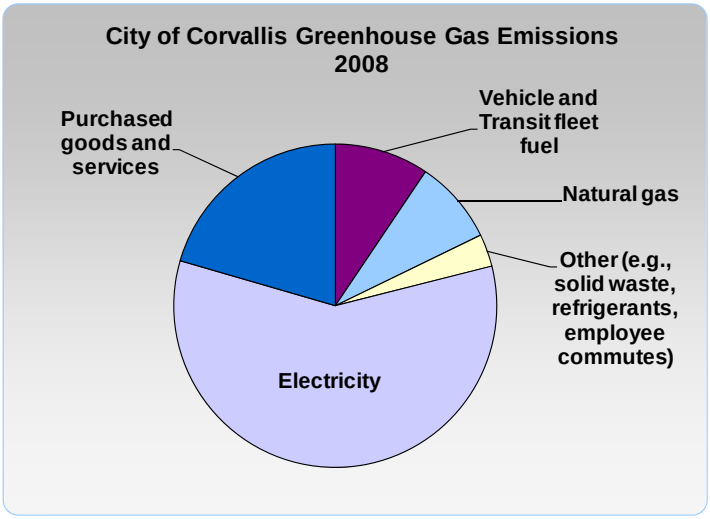
Greenhouse gas inventory tools are not sophisticated enough to account for efforts to purchase locally or to purchase more 'sustainable' goods, so variations from the 2008 inventory will be a product of different dollar amounts spent in different expense categories. This will provide an updated look at where our dollars are spent and the associated impacts of those spending categories, but it will not reflect any sustainable purchasing efforts other than a reduction in dollars spent.

Sustainable Purchasing

Spotlight story

The City used the Environmental Protection Agency's new guidelines that allow electronic delivery of the annual Consumer Confidence Report (also known as the Water Quality Report) and the required notice to consumers.

This reduced paper use by 97% compared to prior editions. Additionally, the cost of printing, mailing, and advertising the Report was about 12% lower than for previous years.



Next steps for Sustainable Purchasing Goal:

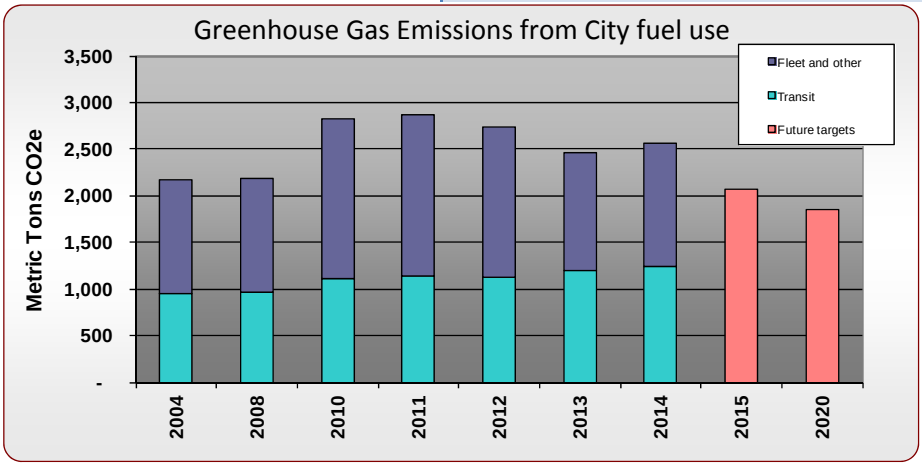
- Update vehicle replacement policy for fleet vehicles purchased through the Public Works garage.

Vehicle Carbon Footprint

Vehicle carbon footprint is measured in terms of greenhouse gas emissions, rather than in gallons of fuel, in order to better measure progress towards sustainability. As more alternative fuels become available "a metric ton of CO2" better quantifies the impact of our fuel use on climate change than "a gallon of gas". The City aims to decrease its use of fossil fuels by using more energy-efficient, alternative-fuel, and hybrid vehicles and by altering driving behaviors.

Objective: Reduce greenhouse gas emissions from City vehicles (fleet and transit). Using 2004 baseline emissions, by 2015 and 2020 respectively, reduce emissions by 5% and 15%.

Vehicle Carbon Footprint	MT CO2e Fleet	MT CO2e Transit	MT CO2e Total	% change from baseline
2004 emissions (baseline)	1,223	949	2,172	--
2008 emissions	1,217	964	2,181	0.4% above
2011 emissions	1,717	1,144	2,861	31.7% above
2013 emissions	1,253	1,203	2,456	13.1% above
2014 emissions	1,319	1,245	2,564	18.1% above



The carbon impact of our fuel use declined for the second year in a row in 2013, but increased slightly in 2014. The increase in transit fuel usage was expected as routes expand. The jump in fleet fuel use is mainly attributed to the sludge trucks that haul wastewater biosolids from the Public Works lagoons to local farmlands, which rarely ran in 2013, and snow and ice response.

Another project of note:

- The Police Department continues to replace patrol vehicles with V8 engines with vehicles having V6 engines, which reduces fuel consumption and improves miles per gallon.

Vehicle Carbon Footprint

Spotlight story:

Public Works staff began reporting fuel use to managers and supervisors in a different way this year. Quarterly reports were provided showing fuel use, miles driven, and miles per gallon for each vehicle under their supervision.

The response was clear – specific information, clearly presented in a timely manner matters. Managers and supervisors in Public Works are now able to more closely monitor their vehicles and can allocate resources in a more informed manner.

Next steps for Vehicle Carbon Footprint Goal:

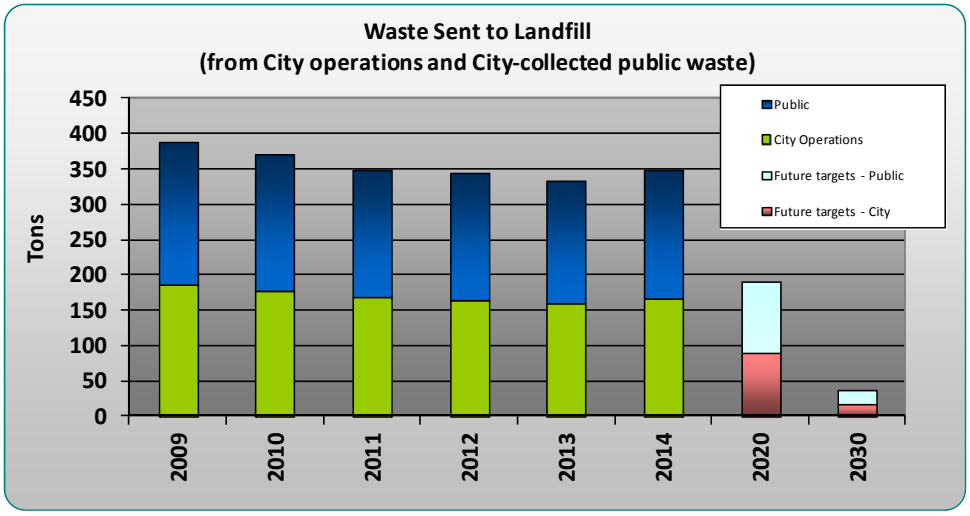
- Evaluate the viability of the City transitioning to compressed natural gas (CNG) as a fuel source for transit buses.

Waste Reduction

Waste Reduction encourages staff to use resources in a manner that reduces waste to the landfill to zero. It promotes reuse, recycling, and waste prevention from reduced consumption and considers the entire life cycle of a product. Staff conducts waste audits and measures success by the diversion of waste from the landfill, an increase in materials recycled or reused, and financial savings from smaller garbage containers.

Reduce waste to landfill from City operations

Objective: Reduce waste from City operations sent to landfill. Using 2009 baseline data, by 2020 and 2030 respectively, reduce tonnage by 50% and 90%.



Reduce waste to landfill from public collections

Objective: Reduce City-collected public waste sent to landfill. Using 2009 baseline data, by 2020 and 2030 respectively, reduce tonnage by 50% and 90%.

Waste Reduction	Waste from Operations	Waste from public	% change from baseline
2009 tons (baseline)	186.2	201.8	--
2010 tons	178.1	192.9	4.4% below
2011 tons	168	182	9.8% below
2012 tons	165.6	179.4	11.1% below
2013 tons	160.3	173.7	13.9% below
2014 tons	167	181	10.3% below

Waste sent to the landfill in 2013 decreased by nine tons compared to the prior year. In 2014, it increased to slightly more than 2012's tonnage.

Measurements of waste to the landfill are based on the number of times each dumpster was emptied, assumptions of how full dumpsters are when dumped, and standard industry conversions determining the weight of the materials in each dumpster. The number of times the dumpsters were emptied increased for both organizational and public waste.

Next steps for Waste Reduction Goal:

- Explore more efficient methods for Parks waste collection (e.g. equipment, routes).

Community Capacity Building

As directed by the City Council Organizational Sustainability Policy, this report focuses on progress achieved by the City's internal sustainability program and objectives for the next reporting period. However, City staff efforts have a significant impact in the community as well. Below are a few examples of staff contributing to community sustainability.

- The Economic Development Office coordinates logistics for the following events:
  - Monthly Pub-Talks for the Willamette Innovators Network
  - Monthly Willamette Innovators Network Board meetings
  - Willamette Innovators Network Expo and Ignite events
- The Library installed a hearing loop system in their large meeting room to help meet the needs of users who are hearing-impaired. Many hearing aids have a feature which allows them to connect to this type of system. The Library will have headphones available for checkout for users without that feature.
- Parks and Recreation hosted Campeones de Salud Soccer Tournament and Family Weekend at Willamette Park. The event had 16 participating teams and more than 1,500 visitors for the health fair events.
- City staff, in conjunction with the Police Department and volunteers from the Mid-Valley Bike Club, held "Light it Up" events in 2013 and 2014 that installed more than 260 front and rear light sets on unlit bicycles.
- Corvallis Transit System (CTS) upgraded its route Web pages to be more user friendly for mobile devices. The route pages offer easier site navigation, better route map enlargement, and the ability to narrow stop choices in the time chart. The new pages are also easier to navigate for individuals who rely on screen readers to read Internet sites.
- City staff assisted the Corvallis Sustainability Coalition, Corvallis Bike Collective, and Corvallis School District with their Car Free Day Festival on September 22nd. This included hosting a booth on Transportation Options, providing bicycle racks and fencing for the event's bicycle parking and the Collectives' Bike Swap, and hosting a tire toss for children.

Employees bought and wrapped gifts for over 140 Benton County foster kids in 2013 and 2014. The Fire Department had an especially strong effort, collecting so many toys that extras were also donated to the ABC House.

Sustainability Efficiencies

Staff works diligently to improve efficiency in City operations, often searching for best management practices or improvements through technology to save time, money, and/or resources. The following items are examples that don't readily fit into one of the five sustainability goal areas.

- The City Manager's Office converted the enrollment for employee benefits, an annual undertaking for every employee, to an all on-line process. This step provides significant paper and time savings, and reduces errors.
- Similarly, MIS implemented auto-remittance processing for utility billing, Municipal Court, ambulance billing and others. This has decreased the already-low error rate and provided considerable time savings.
- Parks and Recreation hosted volunteer events to help maintain landscapes downtown, at Riverfront Commemorative Park, Avery Park, the Sunset Park wetlands, and Crystal Lake Sports Fields.
- The Police Department recently implemented an "eCitation" program. In 2013, the Police Department received $157,000 from the Oregon Department of Transportation (ODOT) to implement eCitation. The funds are designated to assist local law enforcement agencies with the purchase of necessary computer hardware and software to implement the eCitation program. Historically, the Police Department hand-wrote traffic citations, then that information was hand-entered into separate databases. eCitation eliminates data entry redundancies through the electronic transfer of data, eliminates handwriting errors, eliminates translation errors, and allows records staff to reprioritize service delivery. Records personnel have realized a 75% reduction on time spent managing traffic citations.

Conclusion

The City's sustainability efforts reflect the community's desire to protect our natural resources, to wisely use available funding, and to provide a safe and healthy working environment for our employees. The items and efforts highlighted in this report underscore staff's efforts to incorporate sustainable practices into organizational operations. The organization strives to reduce energy use, save operational costs, reduce waste, conserve resources, protect natural features, and strengthen relationships within our own community and with other organizations that value sustainability.

If you have questions or comments about the City's Sustainability Program, please contact the Sustainability Program Specialist at (541) 766-6331 or visit http://www.corvallisoregon.gov/sustainability.