CITY OF PORTLAND AND MULTNOMAH COUNTY

CLIMATE ACTION PLAN 2009

YEAR ONE PROGRESS REPORT

DECEMBER 2010

City of Portland Bureau of
Planning and Sustainability
Sam Adams, Mayor | Susan Anderson, Director

Sustainability Office
Jeff Cogen, County Commissioner

CONTENTS

OVERVIEW

In 1993, Portland became the first local government in the U.S. to adopt a plan to address global warming. In 2001, Multnomah County joined the City of Portland in adopting a revised plan, the Local Action Plan on Global Warming. In late 2009, under the leadership of Mayor Adams and Chair Cogen, the City and County adopted the third-generation local strategy on global warming, the Climate Action Plan.

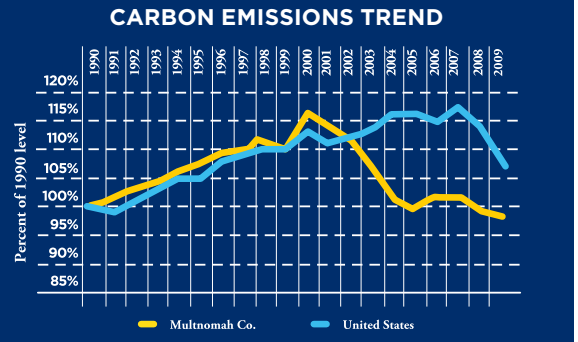
This progress report contains updated local carbon emission numbers and provides a snapshot of the status of efforts made by the City and County in the first year of implementing the Climate Action Plan. The appendix (beginning on page 23) includes a more detailed summary of the status of each of the actions in the Climate Action Plan.

LOCAL CARBON EMISSIONS CONTINUE TO TREND DOWNWARD

Portland and Multnomah County have made substantial progress in carrying out the actions identified in these plans, and local emissions have dropped significantly since 2000, sharply countering the national trend. Despite rapid population growth, local greenhouse gas emissions in 2009 were two percent below 1990 levels (see Figure 1). On a per capita basis, emissions in Multnomah County have fallen by 20 percent, a very encouraging trend.

In 2009, local carbon emissions declined half a percent from 2008 (see Table 1 on page 5). In part, this reflects the continued economic downturn.

Figure 1.



Bureau of Planning and Sustainability.
U.S. Energy Information Administration

Industrial and commercial energy use was slightly lower in 2009 than in previous years, offsetting the similarly small increase in emissions from households and transportation. Gasoline sales in Multnomah County in 2009 were almost identical to sales in 1990, a remarkable fact given the 24 percent increase in population during the same period.

The continued addition of renewable energy resources in the Pacific Northwest contributed to a two percent decline in the carbon intensity of electricity nationally from 2008 to 2009 (regional figures are not yet available, but will be incorporated when they are released).[1] Green power sales locally continued to grow, with more than 14 percent of homes in Portland voluntarily purchasing green power from Portland General Electric and Pacific Power, leading to Portland's designation in October 2010 as U.S. Environmental Protection Agency's largest "Green Power Community." Consistent progress by the Energy Trust of Oregon and its many partners in improving energy efficiency in Portland and Multnomah County has helped limit the increase in electricity use to two percent from 2000 to 2009, and natural gas use declined by one percent over the same period.

With total local carbon emissions two percent below 1990 levels, Portland is well ahead of the nation, which has experienced a seven percent increase over the same period. But local achievements also underscore the magnitude of the challenge ahead. Even in Portland, where climate-friendly decisions, policies and programs have prevailed over the past 20 years, emissions have only begun to dip below 1990 levels.

Recognizing this, the Climate Action Plan adopted in October 2009 outlined a plan to put Portland and Multnomah County on a path to achieve a 40 percent reduction in carbon emissions by 2030 and an 80 percent reduction by 2050.

A copy of the full Climate Action Plan is available at www.portlandonline.com/bps/climate.

1 U.S. Carbon Dioxide Emissions in 2009: A Retrospective Review. URL: www.eia.gov/oiaf/environment/emissions/carbon/.

Table 1. Greenhouse Gas Emissions in Multnomah County by Sector, 1990 - 2009								
Total emissions (metric tons CO2-equivalent)								
Year	1990	1995	2000	2005	2006	2007	2008	2009
Residential	1,730,000	1,760,000	2,010,000	1,650,000	1,700,000	1,690,000	1,730,000	1,770,000
Commercial	1,860,000	2,040,000	2,400,000	2,000,000	2,050,000	2,070,000	2,080,000	2,040,000
Industrial	1,510,000	1,740,000	1,940,000	1,290,000	1,340,000	1,290,000	1,280,000	1,200,000
Transportation	2,970,000	3,120,000	3,050,000	3,090,000	3,180,000	3,230,000	2,910,000	2,960,000
Waste disposal	110,000	110,000	90,000	80,000	70,000	60,000	60,000	50,000
Total	8,180,000	8,770,000	9,490,000	8,110,000	8,340,000	8,340,000	8,060,000	8,020,000
Percent change from 1990		7%	16%	-1%	2%	2%	-1%	-2%
Percent change from 2000				-15%	-12%	-12%	-15%	-15%

Per capita emissions (metric tons CO2-equivalent)								
Year	1990	1995	2000	2005	2006	2007	2008	2009
Residential	3.0	2.8	3.0	2.5	2.5	2.5	2.5	2.5
Commercial	3.2	3.3	3.6	3.0	3.0	3.0	3.0	2.9
Industrial	2.6	2.8	2.9	1.9	2.0	1.9	1.8	1.7
Transportation	5.1	5.0	4.6	4.6	4.7	4.7	4.2	4.1
Waste disposal	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Total	14.0	14.0	14.4	12.0	12.4	12.2	11.5	11.2
Percent change from 1990		0%	3%	-14%	-12%	-13%	-18%	-20%
Percent change from 2000			0%	-16%	-14%	-15%	-20%	-22%

Note: Figures have been revised from previous years to incorporate revised data from U.S. Energy Information Administration and updated electricity emission coefficients

YEAR ONE PROGRESS

The Climate Action Plan establishes 18 measurable 2030 objectives across eight primary focus areas:

- **Buildings and Energy**
- **Urban Form and Mobility**
- **Consumption and Solid Waste**
- **Urban Forestry and Natural Systems**
- **Food and Agriculture**
- **Community Engagement**
- **Climate Change Preparation**
- **Local Government Operations**

Within those focus areas, the Climate Action Plan outlines nearly 100 specific actions to be initiated by 2012. Those actions are not intended to be an exhaustive list of every effort that Portland and Multnomah County will undertake to achieve our emission reduction goals. Rather, the actions identified in the Climate Action Plan are the highest priority efforts, all of which must be pursued by the end of 2012.

In general, meaningful progress is being made on the majority of actions in the plan. Approximately 54 percent of actions slated for the first three years are on track for completion; a further 33 percent are underway but face obstacles or are just getting underway; four percent have been completed; and the remaining 9 percent have not yet been initiated. The remaining sections of this report identify major accomplishments and remaining challenges in each of the Climate Action Plan's eight action areas.

HIGHLIGHTS

BUILDINGS AND ENERGY

Energy use in buildings is the single largest contributor to carbon emissions in Multnomah County, accounting for more than 40 percent of total emissions. The Northwest has a strong tradition of prioritizing energy efficiency as a resource, and recent years have seen an encouraging trend with per capita building energy use declining 10 percent since 2000. Even with population growth, total energy use in residential and commercial buildings in 2009 was one percent below 2000 levels. The Climate Action Plan contains four 2030 objectives in the focus area of buildings and energy:

1. *Reduce total energy use of all buildings;*
2. *Achieve zero net greenhouse gas emissions in all new buildings;*
3. *Produce some of our energy from on-site renewables and clean district energy systems; and*
4. *Ensure that our buildings can adapt to a changing climate.*

Clean Energy Works Portland: Establishing mechanisms to finance building energy efficiency has been a priority for the City. In response, Clean Energy Works Portland was initiated in 2009. Clean Energy Works Portland is partnership among the City, County, Energy Trust of Oregon, Enterprise Cascadia, Green for All, contractors, unions and community groups. The program was created to provide up-front financing, an exemplary customer experience, and quality jobs to retrofit single-family homes. In 2010, the pilot phase of Clean Energy Works improved the energy efficiency in more than 300 Portland homes (see text box). With initial funding of $1.6 million in federal stimulus support, Clean Energy Works has assembled nearly $25 million in capital and program funding. In June 2010, the City established Clean Energy Works Oregon, an independent non-profit organization with the dual mission of reducing carbon emissions and supporting quality jobs. The non-profit is currently developing a major expansion of the Clean Energy Works pilot that will make retrofit funding available throughout the Portland metro area and in targeted communities around Oregon. The scaled-up program is expected to launch in spring 2011.

Solar: Installation of on-site renewable energy increased dramatically in 2009 and 2010, with more than five megawatts of solar power installed in Portland as of September 2010. An additional five megawatts is currently in process, and the three-year Climate Action Plan goal of 10 installed megawatts will likely be achieved by the end of 2010.

The longer-term growth trend in solar installations has been dramatically accelerated by Solarize Portland, a neighborhood-based bulk-purchase of solar panels and installation. Developed by SE Uplift and

CLEAN ENERGY WORKS

Based on ~300 homes retrofitted to date:

- Energy savings per house = 300 therms and 2,300 kWh/year
- Average bill savings = $600/year
- Average project cost = $12,000
- Carbon savings/house = 2.7 metric tons/year
- 94 percent of jobs pay 180 percent of minimum wage or better
- 49 percent of hours have been worked by women or minorities
- 22 percent of project dollars have gone to historically disadvantaged businesses

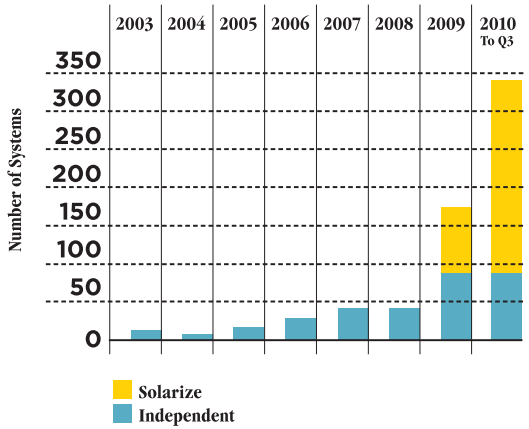
Based on current funding (next 3 years):

- Total lifetime carbon savings = 540,000 metric tons
- Total lifetime bill savings = $125 million

Clean Energy Works Home Weatherization Project

implemented by neighborhood coalitions throughout Portland, Solarize has helped motivate and inform residents about solar energy while also achieving substantial price reductions. At the same time, installation of systems through non-Solarize channels has also increased (see Figure 2). These efforts have helped achieve the Climate Action Plan goal two years ahead of schedule.

Figure 2.
Residential solar installations, including installations done through the Solarize Portland effort.



Coal: In April 2010, Portland General Electric (PGE) announced the potential closure of its coal-fired Boardman power plant, the only coal plant in Oregon. The City is continuing to participate in regulatory proceedings at the Department of Environmental Quality and Public Utility Commission to support closure of Boardman no later than 2020. Assuming PGE, regulators, customers, and stakeholders can arrive at a final proposal that eliminates coal operations at Boardman while managing rate impacts and protecting air quality, the early closure of Boardman represents a nationally significant milestone in reducing carbon in the electricity supply.

Challenges: The City and County must still pursue policy initiatives around existing commercial buildings, including building performance labeling. The continued slump in new construction, both residential and commercial, has also delayed development of any new policy or program efforts around high-performance new construction Establishing and expanding district energy systems remains a priority and is a key component of the emerging EcoDistricts Initiative, but no new systems are currently moving forward.

HIGHLIGHTS

URBAN FORM AND MOBILITY

Unlike major cities elsewhere in the United States, Portland's urban planning and transportation policies and programs have kept a lid on emissions from transportation since 1990. Portland-area residents and businesses reap a "green dividend" of more than $1 billion annually in reduced transportation costs as a result of driving less than residents of other American cities.[2] Nevertheless, transportation of goods and people accounts for 40 percent of Multnomah County carbon emissions. The Climate Action Plan contains five 2030 objectives in the focus area of urban form and mobility:

1. *Create walkable and bikeable neighborhoods;*
2. *Reduce daily vehicle-miles traveled;*
3. *Improve the efficiency of freight movement;*
4. *Increase the average fuel efficiency of cars and the road system; and*
5. *Reduce the carbon intensity of our transportation fuels.*

2 J. Cortright, "Portland's Green Dividend." CEOs for Cities (July 2007)

20-Minute Neighborhoods: One key strategy in the Climate Action Plan is to create vibrant neighborhoods where residents can easily and safely walk or bicycle to meet basic daily, non-work needs, and have safe access to transit for longer trips. This concept, referred to as a "20-minute neighborhood" or "complete community," is emerging as a key integrating strategy in the Portland Plan, a strategic plan to shape Portland's next 25 years and guide a major overhaul of the City's comprehensive plan. The City is developing a 20-minute neighborhood geography, an important first step to further developing this concept. In early 2011, discussion and feedback at public workshops will help to refine the 20-minute neighborhood draft strategy and identify specific actions to make individual neighborhoods more walkable and accessible (Inspiring Communities Series, www.pdxplan.com).

Metrics and Decision-making: The ability to evaluate carbon impacts from urban form and mobility policy and investment decisions is critical to reducing current and future emissions, and the City is developing the analysis tools needed to make that possible. The City is working on a methodology to evaluate the relative carbon impacts of the various Portland Plan growth scenarios, as well as in transportation planning and investment decisions. In addition, the City advocated for stronger consideration of carbon emissions in regional transportation planning efforts, and Metro is currently developing analysis tools and scenarios to help do this.

Sidewalks and Bicycles: In 2010, the City continued to implement several carbon emission-reducing transportation projects, policies and programs. Major efforts currently underway include building two miles of sidewalks on arterials (Barber, Glisan and 82nd Avenue), and planning for and building the next generation of bicycle boulevards, called Neighborhood Greenways, that combine bicycle-friendly streets with green infrastructure. During 2009-10 the City built the first fifteen miles of Neighborhood Greenways. In early 2010, the City adopted codes requiring more long-term bike parking spaces in multi-family developments and established a new Transportation Management Association in the South Waterfront.

Streetcar and MAX Expansions: The MAX Greenline, a partnership between TriMet, the City of Portland, Metro, Clackamas County and the Oregon Department of Transportation, opened in the past year, extending service from downtown to Clackamas. As of September 2010, an average of about 20,800 people ride on the Greenline each weekday, and MAX ridership is up about 2.6 percent compared to 2009. The City is actively working to build the Eastside Streetcar loop. The project is currently about one-third completed and is expected to be in service in 2012.

Transportation Options: In 2010 SmartTrips Portland reached 31,000 households in East Portland along the new MAX Greenline; preliminary results show a shift away from drive alone trips 10-15 percent. In 2011, SmartTrips will reach 47,000 households in

Cyclist Enjoying Sunday Parkways

North and Northeast Portland. During the 2009-10 and 10-11 school years, the City worked with TriMet and Portland Public Schools to provide TriMet passes to all high school students within the Portland Public School District, as well as several alternative schools. The program reaches over 11,000 high school students each year. Nearly all Portland elementary schools (a total of about 70 schools) are receiving some level of Safe Routes to School programming.

Sunday Parkways: A remarkable 91,000 Portland area residents walked, biked, jogged, and rolled at five Sunday Parkways events in 2010. Even on the rainy event dates in May and September, thousands of families, runners, cyclists, skaters and picnickers enjoyed traffic-free streets filled with performers, physical activities and food.

Electric Vehicles: The City adopted an electric vehicle strategy in July 2010 that outlines the policies, programs, incentives and other efforts the City will implement to support the adoption of electric vehicles and the installation of the associated charging infrastructure. The County is also supporting the adoption of electric vehicles by piloting electric vehicles in its fleet and by installing electric vehicle charging stations at high traffic public areas like County libraries. By early 2011, approximately 1,000 electric vehicle charging stations are expected to be installed in the Willamette Valley, including hundreds in Multnomah County and Portland.

Challenges: The dominant source of funding for the transportation system remains the gas tax. While the increase in State Highway Trust Fund revenues has allowed the City to increase funding for preservation and maintenance, the increase is not sufficient to cover the unmet maintenance needs of the transportation infrastructure.

With vehicle fuel efficiency standards becoming steadily more stringent beginning in 2011, gas taxes will be increasingly inadequate to address the already mounting maintenance needs of the transportation system. This is not an issue the City and County can address in isolation, and both remain committed to developing more sustainable state-wide funding for transportation needs.

HIGHLIGHTS

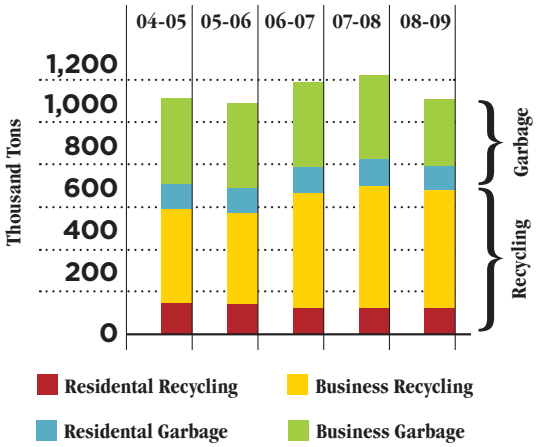
CONSUMPTION AND SOLID WASTE

Recent data from the Environmental Protection Agency indicates that almost 30 percent of carbon emissions can be attributed to the life-cycle of goods other than food.[3] These emissions come from the manufacturing, distribution, storage and disposal of the products we use and consume everyday. The actions identified in the Climate Action Plan seek to foster better consumption and waste management choices to reduce the emissions. The Climate Action Plan contains three 2030 objectives in the focus area of consumption and solid waste:

1. *Reduce solid waste generated;*
2. *Recover more of our waste; and*
3. *Reduce the greenhouse gas impacts of the waste collection system.*

Recycling Steady, Waste Down: Portland's recycling rate is among the highest in the U.S., climbing to 67 percent in 2009, twice the national average. For the second consecutive year, the total tonnage of waste also declined in Portland, falling eight percent from 2008 to 2009 and reaching its lowest level in eight years (see Figure 3.) In part, this reflects the decline in building construction and the overall weakness of the economy, which influences consumption. As the economy recovers, it will be critical to continue to emphasize opportunities to shift consumption toward low-carbon products and services.

Figure 3.
Portland solid waste trend.



3 U.S. Environmental Protection Agency. "Opportunities to Reduce Greenhouse Gas Through Land and Materials Management" (September 2009). URL: http://www.epa.gov/oswer/docs/ghg_land_and_materials_management.pdf.

Food-Scrap Collection
Pilot Program

Be Resourceful: In fall 2010 the City launched a new public outreach campaign called "Be Resourceful: Get More of the Good Stuff." The campaign is currently focused on wasted food in the kitchen, which connects directly with reducing greenhouse gas emissions. Portlanders are able to share their stories about thoughtful consumption actions through the Be Resourceful: Get More of the Good Stuff website, which is full of tips and resources: www.portlandonline.com/bps/beresourceful.

Residential Food-Scrap Collection: The City launched a pilot residential food-scrap collection program in four Portland neighborhoods in May 2010. The program is testing curbside collection of food scraps, every-other-week recycling and every-other-week garbage collection. Extensive monitoring of the pilot program is helping to shape recommendations for citywide implementation, anticipated in 2011.

Public Place Recycling: The City has placed an order for 175 heavy-duty recycling containers, which will be installed next to every trash can on the 5th and 6th Ave Transit Mall in downtown in early 2011.

Reducing Single-Use Bags: Portland City Council has signaled its readiness to adopt a local policy to discourage single-use bags. In July 2010, Council adopted a resolution supporting statewide action by the Oregon Legislature to ban single-use plastic bags and require a fee for single-use paper bags, pledging to act at the municipal level if the legislature did not take action in its 2011 session.

Regulating Waste and Recycling in Unincorporated Areas of Multnomah County: The County is currently developing a policy that will establish, for the first time, regional service standards for waste and recycling collection as well as business recycling requirements in unincorporated areas of the County. A policy is anticipated to be adopted in 2011.

Challenges: Developing a measurement and evaluation mechanism to estimate waste prevented (e.g. the absence of waste) through preservation, re-use and thoughtful consumption remains a challenge given existing waste stream monitoring and data collection options.

In addition, The City's ability to institute a mandatory commercial food scrap program and citywide implementation of the residential program (currently in pilot phase) remains constrained due to the limited capacity of existing composting and transfer facilities needed to manage the expected quantities of food scraps that would be collected.

HIGHLIGHTS

URBAN FORESTRY AND NATURAL SYSTEMS

Without strong safeguards, population growth in Multnomah County will cause the amount of impervious surfaces (e.g., roads, parking lots, buildings) to increase, displacing vegetation and habitat, and degrading stream and river quality with stormwater runoff. These natural systems play an important role in addressing climate change by sequestering carbon, by reducing building energy use through cooling and shading in the summer, and by improving the resilience of the community as the climate changes. The Climate Action Plan contains one 2030 objective in the focus area of urban forestry and natural systems:

1. *Expand the urban forest and increase watershed health.*

Enhancing and Harmonizing Tree Policies: The Citywide Tree Policy Review and Regulatory Improvement Project is nearing completion. This project is a multi-bureau effort to review the City's current tree policies and regulations, address complexities, gaps, and inconsistencies, and enhance the urban forest through a comprehensive update and development of a cohesive regulatory framework to address trees. The products will include a new, consolidated City code Title 11, Trees, substantial revisions to the City's zoning code, and a suite of customer service improvements, including a single point of contact for the public, a community tree manual, and a 24-hour tree hotline.

Accelerating Grey to Green and Tree Stewardship: The City's Grey to Green initiative supported the planting of nearly 3,000 street trees and nearly 5,000 yard trees in the past year. This program also provided incentives to support approximately 1.5 new acres of ecoroof construction. The City's Neighborhood Tree Steward Program provided volunteer trainings that gave participants tools and knowledge to lead urban forestry projects. A new monthly workshop series on urban forestry topics was created, as well as a tree care providers certification workshop.

The City's Protect the Best program prevented small patches of invasive, non-native species from spreading in ecologically healthy natural areas, resulting in hundreds of acres being treated and thousands of invasive trees removed. The City's revegetation program also planted more than 47,000 trees and 64,000 shrubs in natural areas in last year, and the new Early Detection Rapid Response Program began to address new invasive plant species on private properties and public rights-of-way. This program is key to limiting the spread of new species before they become infestations that will be exacerbated by climate change.

Tree Planting and Revegetation Efforts

Baltimore Woods Natural Area Acquisition

The City has acquired 17 acres for protection and restoration, and the Johnson Creek Willing Seller program acquired nearly eight additional acres for floodplain restoration. The City's stream restoration and watershed revegetation work encompassed more than 2,300 acres. The City and partners completed significant restoration of the confluence of Tryon Creek with the Willamette River, where floodplain area was increased and habitat restored.

River Plan/North Reach: The City Council approved a new set of policies, a plan, and regulations for the North Reach of the Willamette River. The products include updates to City overlay zones and other regulations to improve natural resource protection and restoration, and to enhance tree preservation and replacement.

Challenges: Evaluating green infrastructure (both built and natural systems) approaches in alternatives analyses for public infrastructure projects has not been fully incorporated into planning beyond the Tabor to the River project. The funding for implementation of some components of the Portland Watershed Management Plan through the Grey to Green initiative (green streets, trees, invasives removal, land acquisition and ecoroofs) is uncertain after FY 2012-13, which limits long-term planning for these projects and programs.

HIGHLIGHTS

FOOD AND AGRICULTURE

The U.S. Environmental Protection Agency estimates that 13 percent of total U.S. carbon emissions are attributable to the food system.[4] These emissions result from how and where food is produced and transported, as well as the type of food. Most meats, for example, use more fossil fuel energy to be produced and have a much larger greenhouse gas impact per calorie than most grains. To reduce the carbon impact of the food system, residents and businesses need access to information to make healthy, affordable, low-carbon consumption choices. The Climate Action Plan contains two 2030 objectives in the focus area of food and agriculture:

1. *Reduce consumption of carbon-intensive foods; and*
2. *Significantly increase the consumption of local foods.*

Remove Barriers to Urban Food Production: The City, with several partners, is beginning work on a zoning code revision initiative to identify food production and distribution barriers. Potential code changes will be evaluated in 2011. The County is partnering with Clackamas County to develop a Food System Economic Opportunities Analysis that will identify barriers and recommend strategies to increase urban food production. A Community Supported Agriculture (CSA) farm, run by Nepalese immigrants in conjunction with Mercy Corps Northwest (see photo to the right), was established on a piece of property identified in the City's Diggable City Project. The City has built 150 new community garden plots, and partners have built an estimated 75 others.

Food System Planning: The County has partnered with the community and key food system stakeholders to develop a food system action plan. The Multnomah Food Action Plan (see text box), to be released in December 2010, is a 15-year roadmap to a sustainable, local food system. Among other goals, the Multnomah Food Action Plan seeks to increase urban food production and consumption, and encourage environmental resource stewardship including our climate. Food system stakeholders, including businesses, non-profit organizations, faith communities, local governments, academic institutions, and individuals are signing Declarations of Support committing to the shared vision, goals and actions in the Multnomah Food Action Plan.

As the City develops the Portland Plan, making healthful food the easy choice is a key element. Increasing access to affordable, home-grown and locally-grown food, expanding access to food education, and decreasing dependence of food

4 U.S. Environmental Protection Agency. "Opportunities to Reduce Greenhouse Gas Through Land and Materials Management," September 2009. URL: http://www.epa.gov/oswer/docs/ghg_land_and_materials_management.pdf.

MULTNOMAH FOOD ACTION PLAN: Creating a Sustainable, Local Food System

This 15 year community plan to transform the local food system has four action pillars:

- Local Food
- Healthy Eating
- Social Equity, and
- Local Economic Vitality

The Local Food objectives include:

- Maintain the Agricultural Land Base
- Support Small and Mid-Scale Farming Ventures
- Increase Urban Food Production
- Encourage Environmental Resource Stewardship

Multnomah County
CROPS Farm

Community Supported Agriculture
Farmer on City Property

assistance are vital features in the City's road map for the next 25 years.

Focus on Food Choice: Information about sustainable and climate-friendly food choices is an integral component of the City's outreach, including:

1. *Be Resourceful: Get More of the Good Stuff campaign,*
2. *Portland Climate Action Now! campaign, and*
3. *Step Up to the Plate" blog (www.portlandonline.com/bps/food).*

A public event, Food and Climate Change Day, was held in April 2010 and included a panel discussion that received significant media coverage. Over 700 people attended the City's Urban Growth Bounty classes on organic gardening, animal husbandry, cooking and food preservation. The County hosted the Multnomah Food Summit in May 2010 that brought together over 200 food system stakeholders to discuss the creation of a sustainable, local food system. The County Health Department received a grant as part of the federal Communities Putting Prevention to Work initiative that will address the equitable access to healthy foods.

Challenges: Developing quantitative metrics remains an elusive goal for food system efforts. Until very recently, traditional planning efforts have not included the food system as a recognized infrastructure or service function, or as an economic cluster opportunity.

HIGHLIGHTS

COMMUNITY ENGAGEMENT

Residents and businesses are an essential part of the solution to climate change. More than one-third of all carbon emissions result directly from household energy use and personal vehicles, while non-industrial businesses account for another third. The Climate Action Plan contains one 2030 objective in the focus area of community engagement:

1. *Motivate residents and businesses to change their behavior in ways that reduce carbon emissions.*

Climate Action Now! Campaign: In summer 2010, the City launched a new public outreach effort called Portland Climate Action Now! Efforts to date include 1) participating at events, including the Better Living Show, Good in the Neighborhood, and Movies in the Park, 2) the development of a website to share information, ideas and tools on carbon reducing actions (www.portlandclimateaction.org). The Climate Action Now! campaign talked with approximately 1,400 people about actions they can take to reduce their carbon emissions.

Portland Climate Action Now! focuses on four primary topic areas:

HEALTHY HOME: home energy use, weatherization, renewables, water conservation and landscaping.

GETTING AROUND: walking, biking, transit, carpooling, fuel efficiency, low-carbon fuels, vehicle maintenance and driving habits.

YOUR STUFF: waste reduction, recycling, composting and thoughtful consumption.

FOOD CHOICES: low-carbon food choices, gardening and eating local.

Climate change education and information is now included in the City's Master Recycler curriculum and in the City's ReThink workshops. The City developed an energy efficiency workshop titled "Home Energy IQ" that has been delivered to 10 groups in traditionally underserved areas.

Climate Prosperity Project: A number of Portland-area businesses and organizations are collaborating on the Portland Metro Climate Prosperity Project – an effort to align economic development and carbon-reduction opportunities. The initiative produced a draft strategy document in June 2010 for public review, and the final "greenprint" is expected by the end of 2010. Leadership is shared among Greenlight Greater Portland, the Portland Sustainability Institute, Metro, the City of Portland, the Portland Development Commission, and a host of public, private, and non-profit supporters. The participants are contemplating establishing a leadership group to guide coordination and implementation of the efforts identified in the greenprint.

Challenges: Much work and research remains to be done to fully understand how to most effectively discuss the issue of climate change with the public,

HIGHLIGHTS

CLIMATE CHANGE PREPARATION

Climate change impacts are already evident, both globally and in Oregon, and more impacts are inevitable. The Climate Action Plan commits the City and County to accelerate efforts to protect and improve watershed health, strengthen the linkages between public health and climate change, and comprehensively evaluate and respond to the community's vulnerabilities to climate change. The Climate Action Plan contains one 2030 objective in the focus area of climate change preparation:

1. *Adapt successfully to a changing climate.*

Planning for a Changing Climate: The City and County participated in the climate change preparation planning work done in the past year by the University of Oregon's Climate Leadership Initiative. This work will help the City and County in preparing an assessment of climate-related vulnerabilities, strengths and resiliency. The City's Water Bureau has remained an active participant in the Water Utility Climate Alliance, establishing research priorities nationally and informing development of tools and best practices for decision making under uncertainty. The Water Bureau is also working with Portland State University to look at the relationship of land use, climate change, and water consumption. The Multnomah County Health Department is actively working with national, state and local health organizations to develop a strategy for assessing and responding to the public health vulnerabilities that will result from climate change.

Mapping: The City is currently updating and developing several maps that will prove useful in assessing climate vulnerabilities as more information and data become available about expected climate impacts in the Portland region. For example, 1) mapping of landslides through the use of light detection and ranging technology is currently being analyzed for the entire city; and 2) wildland urban interface maps are in review as a part of the Community Wildfire Protection Planning process.

Challenges: Neither the City nor the County has formally launched the systematic assessment of vulnerabilities to climate change called for in the Climate Action Plan. However, preparatory work is underway: 1) The Water Bureau and County Health Department are both building on past work in assessing specific threats from climate change, 2) A team including participants from Metro and the City's Bureaus of Environmental Services and Planning and Sustainability participated in a multi-day Climate Leadership Academy on adaptation. The workshop featured best practices from Chicago and New York City, as well as climatologists and risk managers. More work is needed in restoration and protection of natural systems to create resilliency, but these forward-looking

The Bull Run Watershed – Portland's drinking water, at it's source

HIGHLIGHTS

LOCAL GOVERNMENT OPERATIONS

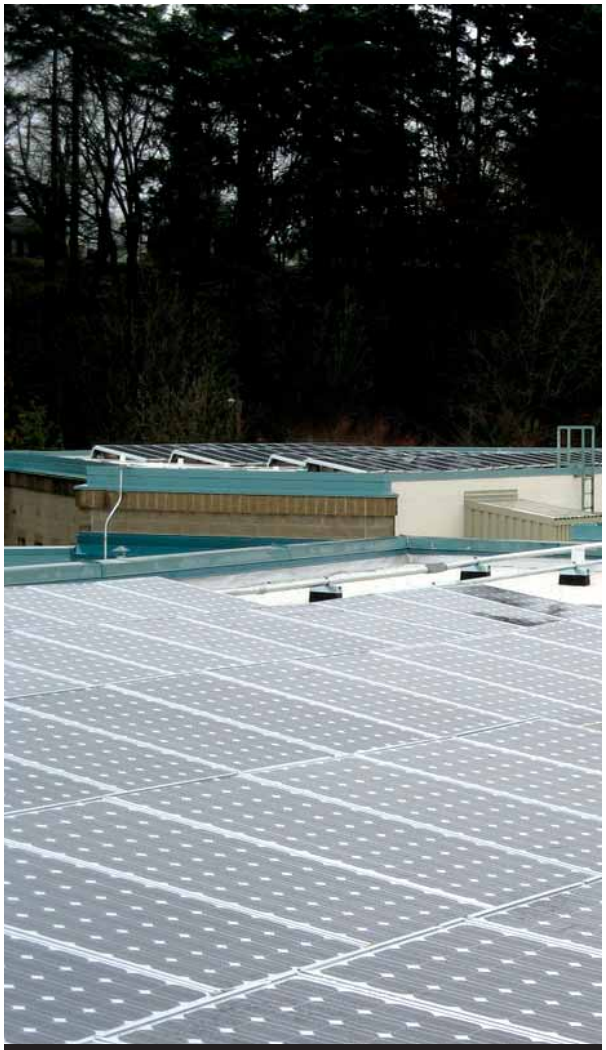
Emissions from City and County operations account for about one percent of total local emissions. While overall public policy, technical assistance, education, incentives and other support are essential to long-term success in reducing emissions, the City and County have important opportunities to lead by example. The Climate Action Plan contains one 2030 objective in the focus area of local government operations:

1. *Reduce carbon emissions from City and County operations.*

Clean Energy: Improving the energy efficiency of City buildings, streetlights, and water and waste water systems has been a City policy and goal since 1990. Today, choosing efficient products and high performance designs is largely integrated into the way facility and construction Project Managers approach their work. The City Energy Challenge program provides technical assistance and help with securing financial incentives, including grant funding. Recent examples of energy projects include the installation of second-generation LED (light emitting diode) lamps for traffic and pedestrian signals; traffic signal optimization to cut vehicle idling time at stop lights; lighting retrofits in Community Centers and the City's parking garages; and new energy management controls in the Portland Building. The Water Bureau has installed two sizable solar electric systems, a 267-kilowatt system at the Columbia South Shore Well Field and a 12-kilowatt system on the roof of the Meter Shop.

The County is currently exploring energy efficiency retrofits at County facilities using the 3rd party energy service company (ESCO) model. The County is also currently investing approximately $2 million in American Recovery and Reinvestment Act (ARRA) grant funds into projects that will increase energy efficiency, including building automation system upgrades, a heat capture system at the Inverness Jail laundry facility, and a new data center in the basement of the East County Courthouse facility that will reduce its energy demand by half. In 2009 The County installed solar electric systems at the John B. Yeon Facility and the Juvenile Justice Center, totaling nearly one half of a megawatt of energy generation.

Green Building: Two City projects have earned LEED (Leadership in Energy and Environmental Design) certification in 2010: the East Portland Aquatic Center and the Water Bureau's Meter Shop. Other projects currently seeking certification include the Portland Building, University Park Community Center, PGE Park, Fire Station 18, Emergency Communications Center and the Columbia Boulevard Wastewater Treatment plant. In addition, the City's



County Juvenile Justice Center Solar Array

Facilities Services has hired a full-time Sustainable Building Specialist to coordinate efforts for buildings within its portfolios, including achieving LEED for Existing Buildings (LEED EBOM). Portland Parks and Recreation has hired an Energy Coordinator to audit their portfolio of facilities. The County's East County Courthouse project, planned for completion in 2012, is anticipated to receive LEED Gold certification and will meet the American Institute of Architects (AIA) 2030 Challenge goals. In addition, the County will pursue LEED Certification for five existing County buildings to support maintaining all County buildings to LEED standards.

Electric Vehicles: CityFleet is aggressively pursuing the goal of having 20 percent of the City's fleet be electric vehicles by the year 2030. Recently a number of smaller electric vehicles, including electric bicycles, have been incorporated into the City's fleet for use by City staff, and seven older vehicles are scheduled to be replaced with the Nissan LEAF, an all-electric vehicle. County Fleet Services is committed to purchasing four Nissan LEAF vehicles in the current fiscal year to pilot the electrification of its fleet, and will explore adding additional electric vehicles based on this pilot.

Sustainable Purchasing Policy: In 2010 the County adopted a Sustainable Purchasing Policy that requires the inclusion of sustainability principles for all County procurements, including both goods and services. The policy seeks to integrate environmental and social equity goals into a single unified framework.

Recycling and Waste Prevention: A commercial food scrap composting program has been set up for City staff at several locations, including The Portland Building, City Hall, the 1900 Building, the Portland Communications Center, and the Water Bureau's Interstate Facility. The County has established commercial composting programs at each of its three justice facilities, and at the Multnomah Building, capturing both pre and post-consumer food scraps.

Challenges: Incorporating climate change considerations in purchasing practices remains a challenge. Standardized carbon emissions data to consider carbon emissions from the production, transportation, use and disposal of goods, including food is not currently available, making it difficult to include this as a criterion in City and County purchasing decisions. In several instances the sustainable practices of prospective vendors have been included in Request for Proposal (RFP) solicitations; however, this has been done selectively based on the scope of work and dollar amount of the solicitation.

NEXT STEPS

The City and County have made considerable progress in the first year of implementing the actions identified in the Climate Action Plan. Efforts to date have spanned numerous bureaus and departments within the two jurisdictions, as well as other community partners.

Nevertheless, a number of key actions require attention in the near term to stay on track to meeting our 2030 and 2050 carbon emission reduction goals. Major next steps include:

- Complete the Portland Plan, the City's strategic plan to create a prosperous, healthy, opportunity-filled community that thrives while producing less carbon emissions. This includes major policy decisions about neighborhood investments, transportation systems, and commitments by many parties, public and private.
- Implement an energy performance scoring system for new and existing residential and nonresidential buildings, pending recommendations from the Oregon Task Force on Energy Performance Scores to the Oregon Legislature.
- Continue to work internally and with Metro to develop the tools needed to analyze and evaluate expected carbon emissions from urban form and mobility policy, and investment decisions and scenarios.
- Establish a sustainable funding source adequate to maintain the existing transportation system, and invest in transportation capital projects and programs that reduce carbon emissions.
- Create and publicize climate action metrics by neighborhood, including measures such as household energy use, vehicles miles traveled, walkability and bicycle commute rates.
- Develop a measurement and evaluation mechanism to track waste prevented through preservation, re-use and thoughtful consumption.
- Complete the evaluation of the residential food-scrap composting pilot program and implement the program citywide in 2011.
- Adopt a policy regulating waste and recycling service in unincorporated areas of the Multnomah County.
- Continue the community engagement around food system planning to increase urban food production and encourage climate-friendly food choices.
- Continue to partner with the Portland Sustainability Institute (PoSI) to bring together academia, businesses and government to foster policy development, best practices and collaboration to address climate change, including the construction of the Oregon Sustainability Center and development of EcoDistricts.
- Prepare an assessment of climate-related vulnerabilities, strengths and resiliency of local food, water and energy supplies, infrastructure, transportation and freight movement, floodplains, watershed health, public health, public safety, social services and emergency preparedness.
- Develop a climate change preparation plan that analyzes and prioritizes preparation actions to manage risks and increase overall flexibility and resiliency, ensuring that disproportionate impacts on vulnerable populations are addressed.

Achieving a 40 percent reduction in carbon emissions by 2030, and 80 percent by 2050, remain ambitious goals, but with innovation, persistence and coordination, Portland, Multnomah County and our many partners can achieve our goals and serve as a model and catalyst for action for other communities throughout the world.

APPENDIX

This appendix shows a snapshot of the progress made by the City and County in the first year of implementing the Climate Action Plan.

COORDINATING AGENCY ACRONYMS

The acronym for the coordinating agency is provided for the City and/or the County following each action in the tables that follow. These references indicate the City bureau(s) or County department(s) that serves as the primary coordinator or facilitator of implementing the given action. There are likely several other bureaus, departments and partners that are involved with the implementation of an action. The coordinating agency acronym is given to provide a useful indication of the bureau or department that is most responsible for reporting on the status of a given action.

Coordinating Agency
City of Portland Acronyms

BES – Bureau of Environmental Services
BPS – Bureau of Planning and Sustainability
CCFM – Cable Communications and Franchise Mgmt.
OMF – Office of Management and Finance
PBOT – Portland Bureau of Transportation
PDC – Portland Development Commission
PHB – Portland Housing Bureau
POEM – Portland Office of Emergency Mgmt.
PP&R – Portland Parks and Recreation
PWB – Portland Water Bureau
RB – Revenue Bureau

Coordinating Agency
Multnomah County Acronyms

Chair – Office of County Chair
OS – Office of Sustainability
DCM – Department of County Management
DCS – Department of Community Services
HD – Health Department
IT – Information Technology
OEM – Office of Emergency Management

1. Reduce the total energy use of all buildings built before 2010 by 25 percent.

Action	Notes
(i) Establish an investment fund of at least $50 million in public and private capital to provide easy access to low-cost financing to residents and businesses for energy performance improvements. (City: BPS)	In June 2010 the City received a $20 million federal grant to fund energy-efficiency retrofits in existing buildings. The Portland Development Commission (PDC) has committed $3.5 million in tax increment finance funding, and the City has provided an additional $1.2 million from its formula EECBG allocation. The grant funds are expected to leverage additional public and private funds at a ratio of at least 5:1, so the anticipated total funding will exceed $100 million.
(ii) Require energy performance ratings for all homes so that owners, tenants and prospective buyers can make informed decisions. (City: BPS) (County: OS)	BPS has developed an energy performance rating policy proposal. The proposal is on hold pending the outcome of a related state-wide task force and expected recommendations from the Oregon Department of Energy in fall 2010. The County continues to monitor the state-wide energy performance rating task force and will consider additional action based on the outcome of that work.
(iii) Require energy performance benchmarking for all commercial and multi-family buildings. (City: BPS) (County: OS)	BPS has developed an energy performance rating policy proposal. The proposal is on hold pending the outcome of a related state-wide task force and expected recommendations from the Oregon Department of Energy in fall 2010. The County continues to monitor the state-wide energy performance rating task force and will consider additional action based on the outcome of that work.
(iv) Provide resources and incentives to residents and businesses on carbon-reduction actions in existing buildings, including energy efficiency, renewable energy, choice of materials and building re-use. (City: BPS)	BPS continues to provide training and free technical assistance via phone and email to businesses and residents in the region. Covered topics include energy efficiency, renewable energy, material selection and construction waste management. In FY 2009-10, the Green Building program responded to more than 750 technical inquiries and assisted 12 major projects. An incentive was added into the Zoning Code as part of RICAP 5 to allow energy upgrades to count toward (be done in lieu of) meeting certain other zoning standards.
(v) Work with partner organizations to promote improved operation and maintenance practices in all commercial buildings. (City: BPS)	In April 2010, BPS released an updated version of "Creating a High Performance Workspace," a user-friendly guidebook that provides resources and checklists for improving the environmental performance of existing commercial buildings - www.portlandonline.com/bps/tiguide. BPS continues to provide free green building technical assistance via phone or email to business in the region. The BEST Business Center provided onsite assessments and educational resources to help improve building operation and maintenance practices.
(vi) Establish a City business tax credit for installing solar panels and ecoroofs together. (City: BES, RB, BPS)	BES, BPS and Revenue Bureau staff have developed a proposal for a City business tax credit for the combined installation of solar and ecoroofs. City Council will consider the proposal as part of the 2011-12 budget discussions.

2. Achieve zero net greenhouse gas emissions in all new buildings and homes.

Action	Notes
(i) Participate actively in the process to revise the Oregon building code to codify the performance targets of Architecture 2030. (City: BPS)	BPS tracked the State's building code amendment process, provided informal and formal comments, and reviewed the code's implementation timeline with the state's Green Building Services Manager. The draft of the new Reach Code appears to be on track to meet the performance targets of Architecture 2030, pending approval in April 2011.
(ii) Adopt incentives for high performance new construction projects that consider life-cycle carbon emissions impacts. (City: BPS)	BPS has developed a policy proposal. This proposal is on hold due to changes in state's energy code, economic conditions and incentive packages. The City will resume policy development as conditions improve.
(iii) Accelerate existing efforts to provide green building design assistance, education and technical resources to residents, developers, designers and builders. (City: BPS)	BPS continues to provide training and free technical assistance via phone and email to businesses and residents in the region. In FY 2009-10, the Green Building program responded to more than 750 technical inquiries and assisted 12 major projects. Covered topics include energy efficiency, renewable energy, material selection and construction waste management.

3. Produce 10 percent of the total energy used within Multnomah County from on-site renewable sources and clean district energy systems.

Action	Notes
(i) Make the investment fund referenced in Objective 1 available to finance distributed generation and district energy systems. (City: BPS)	The City and Clean Energy Works, the non-profit that is developing and managing these investments, are currently focused on scaling up financing for energy-efficiency retrofits for residences. As this effort matures, we continue to expect to broaden its availability for additional clean energy investments, including renewable and district energy.
(ii) Establish at least one district heating and cooling system. (City: BPS)	BPS has hired a contractor to solicit firms to provide district energy research and outreach. Results will help identify suitable sites to focus efforts to establish district heating and cooling systems. Additionally, RICAP 5 included Zoning Code changes designed to facilitate district energy systems. Specifically, the City re-wrote how small scale energy generation is described as a use, so it is no longer automatically classified as an industrial use.
(iii) Facilitate the installation of at least ten megawatts of on-site renewable energy, such as solar energy. (City: BPS)	As of July 2010, ~five megawatts of solar had been installed in Portland, with an additional five megawatts in process. Since the Climate Action Plan's adoption, around 400 residential solar installations have been completed.
(iv) Collaborate to reduce the role of carbon - including from coal and natural gas sources - in Portland's electricity mix. (City: BPS)	The City continues to participate actively in proceedings at the Oregon Public Utility Commission and Oregon Department of Environmental Quality addressing Portland General Electric's proposal to cease coal operations at the Boardman power plant by 2020 or earlier. The City has welcomed PGE's consideration of options for early closure of Boardman and supports eliminating coal as early as practicable.

4. Ensure that new buildings and major remodels can adapt to the changing climate.

Action	Notes
(i) Participate actively in state of Oregon code-development processes to ensure that building codes support buildings that can adapt to higher temperatures, stronger storms, and other physical impacts of climate change. (City: BPS)	The State's draft of the new Reach Code appears to be on track to meet the performance targets of Architecture 2030, pending approval in April 2011. The proposed code changes do not, however, explicitly address adaptation to climate change. The issue of ensuring that new buildings and major remodels can adapt to climate change will be addressed as part of the larger impacts and vulnerabilities assessment outlined in the Climate Change Preparation section of the Climate Action Plan.

5. Create vibrant neighborhoods where 90 percent of Portland residents and 80 percent of Multnomah County residents can easily walk or bicycle to meet all basic daily, non-work needs and have safe pedestrian or bicycle access to transit.

Action	Notes
(i) The City and County both recognize the critical role of the Urban Growth Boundary in guiding the region's growth while meeting economic, environmental and social needs.	
a. The City will advocate for accommodating all population and business growth within the existing UGB, with the possible exception of industrial needs. (City: BPS)	The City has been a vocal advocate for a tight urban growth boundary (UGB) in the deliberations at Metro regarding growth capacity and how to manage the UGB. A Metro Council decision is expected in December 2010.
b. The County will advocate for accommodating substantially all population and business growth within the existing UGB. (County: Chair)	The County has advocated for limiting substantially all population and business growth to within the UGB as part of the tri-county urban and rural reserves process. It is anticipated that the result of this process will substantially limit future growth scenarios to within the UGB.
(ii) In the Metro Urban/Rural Reserves program, the City will advocate for adopting the low end of Urban Reserve Designations to reflect the trends in demographics, climate change, energy supply and infrastructure costs. (City: BPS)	In Spring 2010, the City strongly advocated for adopting a low amount of Urban Reserves. In the end, Metro and the three counties adopted 28,000+ acres of Urban Reserves; 10,000 acres more than the low end of the forecasted need. In response, the City filed an objection to the State's Land Conservation and Development Commission (LCDC); however LCDC overruled the City's objections and approved more than 27,000 acres of Urban Reserves.
(iii) Make 20-minute complete neighborhoods a core component of the Portland Plan. (City: BPS)	The City's Portland Plan team is working with Technical Advisory Groups to develop a set of integrated strategies that will define the Portland Plan. One of those strategies will likely focus on the 20-minute neighborhood concept. A Speaker series will highlight some of these strategies in the Fall of 2010, and public workshops will occur in early 2011 to refine the draft strategies.
(iv) For each type of urban neighborhood, identify the land use planning changes and infrastructure investments, including public-private partnerships, that are needed to achieve a highly walkable and bikeable neighborhood and develop an implementation action plan. (City: BPS)	The City has developed a 20-minute neighborhood geography as part of the Portland Plan as a mechanism to make neighborhood-specific priority lists. Developing this geography is an important first step to completing this action.

(v) Require evaluations of major planning scenarios, Comprehensive Plan and Transportation System Plan decisions to include estimates of carbon emissions. Partner with Metro and regional jurisdictions to develop modeling tools for evaluating emissions impacts of land-use and transportation decisions and monitoring carbon emissions. (City: BPS) (County: DCS)	The City is working on a methodology to evaluate the relative carbon impacts of the various Portland Plan growth scenarios. The City advocated for stronger consideration of carbon emissions in the Regional Transportation Plan (RTP), but the policy was deferred until the next update (in 2015) while Metro develops analysis tools and scenarios - the first of which are rolling out in Fall 2010 with additional modeling work in 2011. The City proposed a Regional Framework Plan policy change to promote a compact urban form as a key climate action strategy to reduce greenhouse gas emissions, which has been recommended by the Metro Policy Advisory Committee (MPAC) and the Metro Council will consider in December 2010. The County provides input on greenhouse gas (GHG) modeling tools through its role on the Governor's GHG Technical Advisory Committee. The County has supported the policy proposals made by the City on the RTP and at MPAC to support inclusion of carbon emissions in planning scenarios.
(vi) Develop a more balanced funding mechanism and adopt a schedule for public investments to make neighborhoods highly walkable and bikeable, including sidewalks and improved access to transit for reaching destinations beyond a reasonable walking or biking distance. (City: BPS)	The Portland Plan will identify several bundles of strategic actions ("strategies"), expressed as both 25-year goals, and 3 year action plans. Walkability and accessibilty has become a central focus of the plan, both from a transportation perspective, and a public health perspective. Actions to support this work plan item will be central to several of the Portland Plan strategies, and will be in the resulting 3-year action plan. Work is underway with the Office of Management and Finance and the Mayor's Office to integrate the plan framework into the budget process for future years.
(vii) Partner with federal agencies, including Housing and Urban Development, the Environmental Protection Agency, and the Department of Transportation, on efforts like the joint Interagency Partnership for Sustainable Communities to apply new federal priorities around sustainable development in Portland and Multnomah County. (City: PHB, BPS) (County: HD)	In August 2010, the City and County partnered with Metro and twenty other regional jurisdictions and NGO's to submit a $5 million application for a HUD Sustainable Communities Initiative grant to create a regional Housing Equity and Opportunity Strategy focused on strengthening the linkages between housing access & affordability and land use and transportation policy, jobs & job training, education, health & environmental impacts. Particular emphasis in the proposal was placed on the involvement of groups historically underrepresented in planning processes, especially communities of color and those living in poverty, and on development of tools that improve livability outcomes for these communities such as Opportunity Mapping and Equity Impact Analysis. This project proposal was not funded in the most recent round of HUD funding, but work to better align investments to leverage housing equity and opportunity outcomes continues, including seeking alternative funding for the proposal.
(viii) Seek funding to accelerate remediation of brownfields in the city and county to accommodate growth within the current Urban Growth Boundary. (City: PDC, BES)	PDC's Harbor ReDI project in 2010 prepared four state legislative concepts to assist brownfield redevelopment, including tax incentives for brownfield cleanup and resulting job creation. BES is currently seeking grant funding to continue brownfield program tools and assistance, concentrating on commercial corridors in lower income neighborhoods. Building on Portland Plan research, BPS is seeking grant funding to assess market feasibility needs and actions to significantly increase the rate of redevelopment and productive reuse of Portland's brownfields over the next 25 years.

(ix) Work with Metro and other local governments to make reducing carbon emissions and adapting to climate change impacts a funding criteria for the Metro Policy Advisory Committee and the Joint Policy Advisory Committee on Transportation. (City: BPS, PBOT) (County: DCS)	Metro and the Transportation Policy Alternatives Committee (TPAC) staff will be updating the technical measures for evaluating local transportation projects applying for regional flexible funds by February 2011. Potential measures addressing reductions in carbon emissions will be considered at that time.
(x) Coordinate decisions about future Streetcar investments with Portland Plan land use decisions. (City: PBOT)	No Portland Plan land use decisions have been made since the adoption of the Climate Action Plan.
(xi) Facilitate the aggregation of smaller land parcels which, when aggregated, provide opportunities for industrial development. (City: BPS)	As part of the Hayden island project, the City is re-evaluating the inventory of harbor land supply, with an eye toward identifying key opportunities. Additional funding to implement the ideas remains a barrier.

6. Reduce per capita daily vehicle-miles traveled (VMT) by 30 percent from 2008 levels.

Action	Notes
(i) Establish a sustainable funding source adequate to maintain the existing transportation system and to invest in transportation capital projects and programs that reduce carbon emissions. (City: PBOT) (County: DCS)	The passage of HB 2001 provided a boost of funding for transportation projects. The increase in the gas tax and vehicle registration fees provided funding for preservation and maintenance, as well as for programs and projects aimed at reducing vehicle miles traveled (however, the increase is not sufficient to cover the unmet maintenance needs of the City's transportation infrastructure). Of note is the creation of the "Affordable Transportation Fund" which provides $1,000,000/year in fiscal year 2010-11 for innovative bicycle projects. HB 2001 provides funding for sidewalk infill projects, SmartTrips, Safe Routes to School, traffic safety projects and high crash corridor programming. HB 2001 also provides $21 million/year in "Flexible Funds" for multi-modal projects coordinated through the State of Oregon. PBOT participated on the committee that helped set criteria for the funds and was successful in getting key measures such as greenhouse gas and vehicle-miles traveled (VMT) reductions added as grant criteria. Ongoing funding for multi-modal projects will always be an issue however.
(ii) Account for greenhouse gas emissions from investments in and the performance of the transportation system.	
a. Establish a method for projecting the life cycle carbon footprint of transportation investments, including embodied energy, operations (VMT and flow) and maintenance. (City: PBOT)	PBOT is working on this now and is making good progress. For example, projects submitted to the ODOT for Flexible Funds will use a first draft of a new sketch planning methodology that estimates greenhouse gas emissions reductions for capital projects. There is a lot of work that needs to happen before 2012, but there is good momentum and PBOT is committed to finding a workable solution for this.
b. Develop a reporting mechanism for tracking carbon emissions. The report will include key performance measures and will document progress toward emission reduction goals. Key measures include commute mode share, VMT by vehicle type, traffic flow on major arterials and highways, fuel efficiency of vehicles, and total carbon emissions from the transportation system. (City: PBOT)	PBOT has begun developing the reporting mechanism to track carbon emissions at this level, and expect to make such information available in subsequent Climate Action Plan progress reports.

(iii) Support investments to provide high-performance broadband connectivity to every business and residence to enable widespread e-commerce, telecommuting and improved emergency response. (City: CCFM)	City Council initiated a Broadband Strategic Planning process in September 2010. Obstacles include lack of funding. CCFM staff will move forward with this effort in cooperation with PDC and Bureau of Technology Services, as well as other bureaus.
(iv) Work with regional partners including the Oregon Department of Transportation, Metro, local cities and counties, and TriMet to reduce VMT through strategic investments and policies.	
a. Work with metro-area, state, regional, and federal agencies to develop a strategy for high-speed rail from Eugene to Vancouver, B.C. (City: PBOT)	PBOT in concert with the Mayor and his staff, and the Office of Government Relations, have been coordinating with partners including the City of Seattle, the City of Vancouver, B.C., the City of Eugene, ODOT, WSDOT and Metro. PBOT has led an interbureau committee that has reviewed ODOT and WSDOT high-speed rail plans and suggested priority improvements on the high-speed rail infrastructure within the City.
b. Participate in developing least cost planning methodologies and to achieve mobility greenhouse gas emission reduction goals. (City: PBOT)	ODOT is continuing the least cost planning work. PBOT staff continue to follow the State's least cost planning work and have attended presentations at the Oregon Transportation Commission. While PBOT staff were involved in preliminary discussions, the City has not been actively involved since that time as there are multiple representatives from this region working on the project.
c. Work with Metro and the Oregon Department of Transportation to support investments and policies that help the region meet the carbon emission, VMT-reduction and mode-share goals. (City: PBOT)	PBOT's work on the Flexible Funds rules committee is an example of the growing partnership with ODOT. The City, along with partners, was able to get the funding committee to prioritize bike, pedestrian, transit and transportation demand management (TDM) projects and to link them to carbon emission reductions.
d. Work with TriMet and Metro to revise the system service plan to reflect the mode-share goals of this plan and to develop an investment strategy that includes infrastructure to support connectivity and safe routes to transit. (City: BPS, PBOT)	Work on this action has not been initiated.
e. Partner with Metro to implement the Household Activity Survey in 2010 and beyond. (City: PBOT)	This next Household Activity Survey is scheduled to take place in two phases; Spring 2011 and Fall 2011. Results should be ready by 2012.
(v) Update the Transportation System Plan to incorporate mode-share goals that will result in a 40 percent reduction in transportation-related emissions by 2030. (City: PBOT)	PBOT is currently entering a Transportation System Plan (TSP) update. During 2011, PBOT will perform a technical update to include some key projects and policy updates. Once the technical update is complete PBOT will take on a more comprehensive update in conjunction with the Portland Plan adoption. PBOT received a significant grant from the County (via the Centers for Disease Control) to incorporate health objectives in to the TSP, there is a significant amount of overlap between what the health community is trying to do, and climate change efforts.

(vi) Prioritize funding for low-carbon transportation and access projects, policies and programs that will achieve emission reduction goals while also balancing safety, maintenance and freight movement. Efforts already underway include:	
a. Build the Eastside Streetcar (3.3 miles of track) and complete the analysis of the next streetcar corridor. (City: PBOT)	Construction of the Eastside Streetcar is 1/3 complete and is expected to wrap up by the end of 2011 with service beginning in 2012. The City is participating in the Draft Environmental Impact Statement (DEIS) for the Lake Oswego to Portland Transit Project. Streetcar and enhanced bus service are options being evaluated. The DEIS is scheduled for publication in November 2010 with selection of a Locally Preferred Alternative (LPA) in February 2011.
b. Implement SmartTrips Portland to 30,000 households each year. (City: PBOT) (County: DCS)	In 2010 SmartTrips Portland reached 31,000 households in East Portland along the new Greenline MAX; preliminary results show a shift away from drive alone trips on the order of 10-15 percent. The final report for SmartTrips Greenline will be available in December 2010. In 2011 SmartTrips will reach 47,000 households in North and Northeast Portland.
c. Expand Safe Routes to School to serve all schools in Portland. (City: PBOT)	All elementary schools are receiving some level of Safe Routes to School programming: 40 schools are receiving the full "6 E" package (education, enforcement, engineering, encouragement, evaluation, and equity), and 31 are getting a reduced package. The City does not have Safe Routes to School programs for middle or high school students.
d. Provide TriMet passes to all high-school students in Portland. (City: PBOT)	During the 2009-10 and 10-11 school years, the City worked with TriMet and Portland Public Schools to provide TriMet passes to all high school students within the Portland Public School District, as well as several alternative schools. The program reaches over 11,000 high school aged students each year.
e. Build 15 miles of bicycle boulevards before 2010 and aggressively implement the City's Bicycle Master Plan. (City: PBOT)	Since the adoption of the Climate Action Plan, PBOT has completed 15 miles of Neighborhood Greenways including Going, Concord, Wabash, and Spokane streets.
f. Complete the design of the Green Line to Milwaukee and participate in a regional lightrail system plan. (City: PBOT)	The Milwaukie Light Rail project is planned for and funded. The Federal Transit Administration recently accepted TriMet's environmental impact statement signaling the project to continue work. The project is on schedule to open in 2015.
g. Construct two miles of sidewalks on arterials (SE 122nd Avenue, NE/SE 82nd Avenue, and SW Barbur Boulevard). (City: PBOT)	Since the adoption of the Climate Action Plan, 2 miles of sidewalks have been built. The projects include sidewalks on NE Glisan, SW Barbur and NE/SE 82nd Ave. More projects are planned for fiscal year 2010-11.
h. Incorporate improved bicycle and pedestrian infrastructure in the redesign of the Sellwood Bridge. (City: PBOT) (County: DCS)	The Sellwood Bridge is in final engineering phase. The current design calls for 37 feet of bicycle and pedestrian space, with 24 feet of lanes devoted to automobiles – greatly improving bicycle and pedestrian safety and mobility across the structure.
i. Require a minimum amount of long-term bicycle parking spaces for multi-dwelling development in areas other than the dwelling unit. (City: BPS)	This action is completed. RICAP 5 updated the Zoning Code to increase the number of required long term bike parking spaces, and removed exceptions that allow the unit by itself (without additional facilities) to serve as that space.
(vii) Help establish at least two new transportation management associations and two new parking management districts. (City: PBOT)	The City led a multi-year effort that resulted in the launch of the South Waterfront Transportation Management Association (TMA) in July 2010. Conversations are on-going for another, however Metro is changing their policy on funding TMAs, as a result the City efforts are on hold until that policy is clarified.

7. Improve the efficiency of freight movement within and through the Portland metropolitan area.

Action	Notes
(i) Protect existing intermodal freight facilities, and support centrally located and regionally significant industrial areas that may provide for future intermodal facilities and provide efficient local deliveries. (City: BPS)	The City adopted River Plan North Reach in 2010, which strengthened and refined land use regulations that protect the prime industrial lands along Portland Harbor. Also in 2010, City Council agreed to move forward with planning for potential annexation and zoning of West Hayden Island, including up to 300 acres of land for new marine terminal development to partially meet forecast marine cargo land needs.
(ii) Work with the Portland Freight Committee and other regional partners to develop a plan for reducing greenhouse gas emissions related to freight movement within and through the Portland region. (City: PBOT)	PBOT is currently developing a Sustainable Freight Strategy. Work scope for this project includes: 1) Defining sustainability for goods movement in the context of the Portland Plan; 2) Understanding the how, when, where and what of freight mobility via interviews with logistics service providers; and 3) Case study research of sustainable freight practices implemented in other urban areas, such as New York City, Toronto, Vancouver, BC, Chicago, Rotterdam, and Copenhagen. TY-Lin International was awarded the contract for completing this phase of the Sustainable Freight Strategy. A project Working Group, which includes members from the Portland Freight Committee, has been formed and has been meeting since August 2010. A final report and recommendations will be complete around late 2010/ early 2011.

8. Increase the average fuel efficiency of passenger vehicles to 40 miles per gallon and improve performance of the road system.

Action	Notes
(i) Support progressive strengthening of federal fuel efficiency standards. (City: BPS)	The City continues to identify climate change as a key issue in its federal legislative agenda, including efforts explicitly directed at carbon as well as related initiatives to improve energy efficiency and renewable energy, such as improved fuel efficiency standards. The federal government has taken significant steps toward strengthening vehicle efficiency standards in the past year. In April 2010, the Environmental Protection Agency and National Highway Traffic Safety Administration issued new rules that will increase fuel efficiency to an aggregate average of just over 34 miles per gallon in 2016. Federal agencies have also released draft rules that will apply fuel efficiency standards for the first time to medium- and heavy-duty trucks. Final rules are expected in summer 2011.
(ii) Work with ODOT to identify and fund the system and demand management projects that have the greatest potential to reduce emissions related to congestion, idling, and system performance. (City: PBOT)	The City and ODOT have worked together to get some key wins for Transportation Demand Management (TDM) and Transportation System Management (TSM). For example, getting TDM projects included in the Flexible Funds grant pool was a major success. Similarly, the two agencies reached some agreement on TDM activities for the Columbia River Crossing. PBOT continues to serve on the Transport committee which prioritizes and allocates funds across the region, including ODOT facilities, as well.
(iii) Work with ODOT and Metro to implement a congestion-pricing pilot program that prioritizes movement of freight and non-single-occupancy vehicles. (City: PBOT)	This program is moving forward, however it will not be a traditional congestion pricing project. At this time it looks like the project will more likely to be event parking pricing, or congestion parking pricing. ODOT is the lead on this project; however the City will continue to be aggressive in pushing for a good project.

9. Reduce the lifecycle green-house gas emissions of transportation fuels by 20 percent.	
Action	**Notes**
(i) Accelerate the transition to plug-in hybrids and electric vehicles by supporting the installation of a network of electric car charging stations. (City: PBOT) (County: DCM)	In July 2010, the City of Portland adopted an electric vehicle strategy, Electric Vehicles: The Portland Way, which outlines the policies, programs, incentives and other efforts the City plans to implement to support of the adoption of electric vehicles and the installation of the associated charging infrastructure. The County is pursuing the installation of electric vehicle charging stations at high traffic public areas like County libraries as part of the federal grant to eTec. By the end of 2010, approximately 1,000 electric vehicle charging stations are expected to be installed in the Willamette Valley, including hundreds in Multnomah County and Portland.
(ii) Implement the second phase of the City's renewable fuels standard to require that diesel fuel sold in Portland includes at least 10 percent biodiesel, half of which must be made from sources that can be produced in Oregon. (City: PWB)	In March of 2010, the Portland City Council voted to temporarily suspend the B10 minimum biodiesel content requirements of Portland City Code 16.60 due to economic and technical circumstances. Implementing the B10 requirement will be re-evaluated in the future as conditions change.

CONSUMPTION AND SOLID WASTE

10. Reduce total solid waste generated by 25 percent.	
Action	**Notes**
(i) Work with partner organizations to encourage businesses and residents to purchase durable, repairable and reusable goods; to reduce the amount of materials that go to waste, including food; and to reduce consumption of carbon-intensive consumer goods and services. (City: BPS)	Be Resourceful: Get More of the Good Stuff, a thoughtful consumption residential campaign was launched in fall 2010 by BPS. Campaign messaging and brand evaluation is planned for the spring 2011. Purchasing and waste prevention recommendations are part of Recycle at Work and BEST Business Center onsite assessment and educational resources. In addition, Metro's business recovery workgroup is planning on launching a regional waste prevention campaign in the spring of 2011.
(ii) Develop a measurement and evaluation mechanism to track waste prevented through preservation, re-use and thoughtful consumption. (City: BPS)	No progress has been made on this action in the first year, however the City plans to begin exploring policy options connected to waste prevention in the coming year, and measurement and evaluation will be part of that effort.
11. Recover 90 percent of all waste generated.	
Action	**Notes**
(i) Complete the implementation of mandatory commercial food waste collection in Portland and begin collection of residential food waste. (City: BPS)	Collection of commercial food scraps continues to expand on a voluntary basis with over 680 businesses now participating. Implementation of a mandatory program for commercial food scrap generators will be undertaken when expansion of composting and transfer facilities can provide adequate capacity to handle the additional quantity of food scraps generated. The City launched a residential food-scrap collection pilot in summer 2010 and is currently evaluating the pilot phase. Results and recommendations for next steps due in late 2010.
(ii) Assist 1,000 businesses per year to improve compliance with Portland's requirement of paper, metal and glass recycling. (City: BPS)	Since adoption of the Climate Action Plan, nearly 750 businesses have been helped by the Business Outreach Team, including Recycle at Work and the BEST Business Center.

(iii) Together with Metro and DEQ, create and periodically update a regional waste management hierarchy that reflects energy and greenhouse gas emissions as key factors in prioritizing such technologies as commercial composting, digestors, plasmafication and waste-to-energy systems. (City: BPS)	A BPS representative serves on the Metro Solid Waste Advisory Committee that is currently developing priorities that promote energy recovery from solid waste and programs that reduce greenhouse gas emissions.
(iv) Regulate solid waste collection for unincorporated Multnomah County. (County: OS)	The County is currently developing a policy that will establish, for the first time, regional service standards for waste and recycling collection as well as setting business recycling requirements in unincorporated areas of the County. A policy is anticipated to be adopted in 2011.
(v) Provide technical assistance to contractors and construction firms to meet Portland's new requirement to recycle 75 percent of construction and demolition debris, giving priority to salvage and reuse activities. (City: BPS)	The City hired a Construction Waste Specialist to design and implement a new program to enhance reuse and recycling activities in Portland. The staff person is working with the construction community to develop best management practices, integrate reporting requirements with the development review process, and identifying additional resources to make construction recycling easier and more cost-effective.
(vi) Institute post-collection sorting for municipal solid waste, particularly for waste coming from sectors like multifamily housing that are typically underperforming on recycling. (City: BPS)	Post-collection sorting of municipal solid waste is being conducted at public and private transfer stations throughout the region. BPS will monitor the effectiveness of these recovery programs to determine the need for implementing a more targeted approach for waste streams like that generated by the multifamily housing sector.
(vii) Participate actively in the process to develop state and federal product stewardship legislation. (City: BPS)	A BPS representative serves on the Oregon Department of Environmental Quality's Product Stewardship Work Group that is developing legislative recommendations.
(viii) Explore mandatory residential recycling. (City: BPS)	The main emphases of residential recycling program options currently under consideration include collection of food scraps, every-other-week recycling and every-other-week garbage collection. Mandatory options will be reviewed in the future based on program performance.
(ix) Clearly label trash cans and other garbage receptacles as "landfill". (City: BPS)	Implementing a public recycling program is the main priority in the near future and labeling of public garbage receptacles will be considered in the future.
(x) Establish public place recycling in Central Portland. (City: BPS)	Funding has been allocated from the Solid Waste & Recycling Fund to purchase at least 175 recycling containers, which will be placed next to every trash can on the 5th and 6th Ave Transit Mall. The container manufacturer is producing a prototype for the City's review before going into full production. Installation of these recycling cans is expected in the winter of 2010/11.
12. Reduce the greenhouse gas impacts of the waste collection system by 40 percent.	
Action	**Notes**
(i) Provide weekly curbside collection of food waste, other compostable materials and recycling. Shift standard residential garbage collection to every other week. (City: BPS)	BPS launched a foods scraps collection pilot program in four Portland neighborhoods in May 2010. The program is testing collection of food scraps, every-other-week recycling and every-other-week garbage collection. Extensive monitoring of the pilot program will help shape recommendations for citywide implementation.
(ii) Complete the installation of particulate filters on pre-2007 waste collection vehicles to reduce particulate emissions. Older trucks that are not good candidates for retrofit should be phased out of operation. (City: BPS)	There have been delays in securing funding for the diesel particulate filters for garbage haulers, but retrofits for priority collection vehicles in the region could begin in the winter of 10-11. Phasing out older collection vehicles in the City of Portland has begun and is on schedule.

(iii) Evaluate actions under the Portland Recycles! Plan and consider additional regulatory options to improve the efficiency of commercial collection service. (City: BPS)	The Portland Recycles! plan calls for BPS to assess the performance of the commercial sector in 2011, and data is currently being collected to conduct that analysis.

URBAN FORESTRY AND NATURAL SYSTEMS

13. Enhance the urban forest canopy to cover one-third of Portland, and at least 50 percent of total stream and river length in the city meet urban water temperature goals as an indicator of watershed health.

Action	Notes
(i) Expand public and private programs to encourage planting, preserving and maintaining trees and shrubs, controlling invasive species, and reducing and cooling impervious areas, including removing regulatory obstacles and exploring incentives. (City: BES, PP&R, BPS)	The Citywide Tree Policy Review and Regulatory Improvement Project is a multi-bureau effort to review the current system of regulations, address complexities, gaps, and inconsistencies, and enhance the urban forest through a comprehensive restructuring and update of city codes addressing trees. The project is nearing completion. River Plan/North Reach: The City Council approved a new set of policies, a plan, and regulations for the North Reach of the Willamette River. The products include updates to City overlay zones and other regulations to improve natural resource protection and restoration, and to enhance tree preservation and replacement. PP&R issues thousands of permits annually for tree planting, pruning, and removals; PP&R continues to provide tree maintenance for Parks and some City-owned properties, including establishment care, pruning, canopy raising, removals, and hazard abatement. The City's Protect the Best program is designed to prevent small patches of invasive, non-native species from spreading in ecologically healthy natural areas; and over 500 new acres have been treated and thousands of invasive trees removed. The Grey to Green invasives program treated 284 new acres of invasives through "Early Detection Rapid Response." The City's Grey to Green initiative supported planting of 2,921 street trees and 4,859 yard trees in FY10; BES Revegetation programs also planted more than 47,000 trees and 64,000 shrubs in natural areas; supported Friends of Trees' new Plant it Portland campaign; incentivized approximately 1.5 new acres of ecoroof construction in FY10. BES also launched the "Treebate" program as an incentive for yard-tree planting.
(ii) Acquire, restore and protect natural resources to promote functional watersheds and forest ecosystems, reduce the urban heat island effect, improve air and water quality, connect habitats, and contribute to regional health, biodiversity, and resiliency. (City: BES, PP&R)	Progress has been made on this action, including: the City acquired 17 acres in FY10 for protection and restoration; the Johnson Creek Willing Seller program acquired nearly 8 additional acres for floodplain restoration; BES stream restoration and watershed revegetation work encompassed more than 2,300 acres; and BES is working with partners to remove or redesign several culverts that block fish passage. The Portland Plan has taken steps toward adoption of the Natural Resources Inventory, which is a step necessary before the City can use land use tools to protect those resources.

(iii) Develop and implement an outreach campaign to provide educational resources to residents about the benefits of trees, watershed health, and green infrastructure. (City: BES, PP&R)	PP&R's Neighborhood Tree Steward Program, a volunteer training course that gives participants tools and knowledge to lead urban forestry projects, was expanded and revised. A new monthly workshop series on urban forestry topics was created; as well as a tree care providers certification workshop. PP&R continues to provide work days, workshops, school arboreta plantings, professional trainings for other city bureaus, and outreach events such as Arbor Week. BES's ongoing K-12 clean rivers education program reached over 15,000 students in FY10. The Community Watershed Stewardship Program involves and educates people through hands-on projects. Grey to Green has bolstered education and outreach efforts for trees (see action (i) above), invasive species, and ecoroofs. The Sustainable Stormwater Management website received over 234,000 views (42% increase over previous year). BES developed public outreach fact sheets and tools, including an ecoroof handbook, ecoroof incentive materials, updated stormwater cycling map and annual stormwater monitoring report. BES also developed programmatic elements for a Green Street Steward volunteer maintenance program including volunteer maintenance guide. The 2010 "Ecoroof Portland" (free public event and vendor fair) attracted over 550 attendees and 60 vendors. A blog site sponsored by the ecoroof program received nearly 30,000 hits its first year.
(iv) Recognize trees, shrubs, vegetation and natural landscapes as assets of the City and County infrastructure. Advocate for similar recognition by state and federal agencies. Explore the feasibility of managing street trees and other public trees as capital assets. (City: BES, PP&R, BPS)	The 2007 Citywide Assets Report proposed a common definition and framework for "green infrastructure" assets within the City of Portland, and identified City owned and/or managed green infrastructure assets for capital planning, budgeting and reporting purposes. Since then, bureaus have reported on the status of these assets in the annual citywide assets reports. Natural features provide ecosystem and infrastructure system functions, however, consistently applying this framework to bureau capital improvement plans has not been institutionalized, and assets like trees are not formally recognized in financial accounting systems.
(v) Clarify codes and policies to maximize the preservation of the largest, longest-living trees, and ensure expansion of the urban forest over time. Encourage tree species and age diversity and increase canopy in tree-deficient areas. (City: BES, PP&R, BPS)	The Citywide Tree Policy Review and Regulatory Improvement Project is a multi-bureau effort to review the current system of regulations, address complexities, gaps, and inconsistencies, and enhance the urban forest through a comprehensive restructuring and update of city codes addressing trees. The project is nearing completion.
(vi) Evaluate both green and traditional grey alternatives for public infrastructure projects. Develop final designs that support the restoration, enhancement, and protection of Portland's urban forest and watershed health. (City: BES, PWB, PBOT, PP&R) (County: DCS)	169 new green street facilities were completed in FY10 (including private, interagency, and Sustainable Stormwater program). The Tabor to the River program is utilizing green infrastructure in combination with traditional "grey" approaches in a multi-year capital investment to resolve basement backups and pipe capacity issues. BES partnered with PBOT to install green stormwater facilities as part of neighborhood greenway (bike boulevard) projects. Beyond Tabor to the River (Brooklyn Creek Basin), no basin-wide or system-wide alternatives analyses have been done. The County currently considers both green and grey alternatives for investments in road infrastructure in unincorporated areas of the County. In addition, the County has prioritized a list of culverts to be replaced to improve fish passage and watershed health.

14. Reduce consumption of carbon-intensive foods.	
Action	**Notes**
(i) Include food choice as a component of the public engagement campaign (Objective 16) that inspires the community to live a climate-friendly lifestyle. (City: BPS) (County: OS, HD)	Food choice is an integral component of the City's Be Resourceful and Climate Action Now! campaigns and Step up to the Plate blog. The Climate Action Now! food brochure is distributed at events and public places such as the City Hall Garden. A presentation on food waste and climate was produced and is presented to Master Recyclers and other organizations. A public event, Food and Climate Change Day, was held in April 2010 and included a panel discussion that received significant media coverage. The Multnomah Food Action Plan currently under development will include an action for the community that addresses food choice and climate impacts.
(ii) Create City and County partnerships with healthcare, schools and other organizations to promote healthy, low-carbon diets. (City: BPS) (County: HD)	The Portland Plan has advanced these partnerships over the past year. BPS has applied for a federal grant, in partnership with the Multnomah County Health Department, Village Gardens, and the Portland-Multnomah Food Policy Council to conduct a city-wide hunger assessment which will hopefully lead to additional funding for the promotion of healthy, low-carbon diets. The County Health Department has received a grant from the U.S. Department of Health and Human Service's Communities Putting Prevention to Work initiative that will reduce obesity by promoting healthy diets, which also supports low carbon diets.
15. Significantly increase the consumption of local food.	
Action	**Notes**
(i) Integrate sustainable food system issues, and where practical, quantitative goals and metrics, into planning processes, including the City's Portland Plan and the Multnomah Food Initiative. (City: BPS) (County: OS, HD)	The City's Portland Plan team is working with Technical Advisory Groups to develop a set of integrated strategies that will define the Portland Plan. One of those strategies will likely focus on the 20-minute neighborhood concept and will include objectives and actions that support improved access to affordable healthy food. A Speaker series will highlight some of these strategies in the Fall of 2010, and public workshops will occur in early 2011 to refine the draft strategies. Food and climate are also considered in ecodistrict planning currently underway. In December 2010, the County will be releasing the Multnomah Food Action Plan. The 15-year plan is being developed with significant community stakeholder input and incorporates food system indicators into the goals. The Multnomah Food Action Plan will align with the Portland Plan, the Climate Prosperity Greenprint, and the goals of the Health Department's Communities Putting Prevention to Work grant received from the U.S. Department of Health and Human Services.

(ii) Identify and implement City and County strategies to encourage local food production and distribution, including providing incentives and removing regulatory obstacles. (City: BPS) (County: OS)	A BPS zoning code revision initiative is working with partners to identify food production and distribution barriers. Appropriate changes to the code will be brought to the Planning and Sustainability Commission in 2011. A Community Supported Agriculture (CSA) farm, run by Nepalese immigrants in conjunction with Mercy Corps Northwest (see photo to the right), was established on a piece of property identified in the City's Diggable City Project. The County continues to bolster the County Digs project, which donates surplus, tax-foreclosed properties to non-profits and local governments for urban agriculture purposes. The Multnomah Food Initiative is fully staffed and will release the Multnomah Food Action Plan in December 2010, which is being developed with significant community stakeholder input. The Plan sets forth objectives and actions to increase local food production by a wide range of community stakeholders.
(iii) Develop policy and provide programmatic resources to significantly increase the percentage of home-grown and locally sourced food, including the support of farmers markets and community supported agriculture; the use of public and private land and rooftops for growing food; promoting fruit and nut trees as options for the 33,000 yard trees to be planted as part of the Grey to Green initiative; and develop or facilitate, 1000 new community garden plots. (City: BPS, BES, PP&R) (County: OS)	BPS continues to assist groups in setting up neighborhood gardens, zoning code revisions, and offering Urban Growth Bounty classes promote homegrown food. Commissioner Fish's office led the Oregon Solutions project for expanding community gardens. Since the adoption of the Climate Action Plan, the City has built 150 new community garden plots, and partners have built an estimated 75 others. Commissioner Fish will be tracking their progress on his website beginning in early 2011. While the Grey to Green tree planting initiative has multiple goals, 20% of trees planted through their treebate program were fruit trees. The sustainable food program in BPS offers marketing and technical support to area farmers markets and Community Supported Agriculture (CSAs) farms and web-based tools to promote direct-market producers. The County's OS continues to bolster the County Digs project which donates surplus, tax-foreclosed property to the community for urban food production. The county will release the Multnomah Food Action Plan in December 2010, a strategic plan for our community to create an intentional food system including significant support of local food production. The county is partnering with major food system stakeholders on specific projects which will be announced in early 2011. The Multnomah Food Initiative maintains a website with a community food system calendar and a repository of grant opportunities. The county also runs a county farm called CROPS which is a demonstration farm for community volunteers and has donated over 20,000 lbs. of vegetables to the Oregon Food Bank.
(iv) Provide educational opportunities for residents to gain skills in organic gardening, fruit production, animal husbandry, food preservation and cooking, and affordable, healthy eating. (City: BPS) (County: OS)	Over 700 people attended BPS's Urban Growth Bounty classes on organic gardening, animal husbandry, cooking and food preservation. In 2010, the County hosted the Multnomah Food Summit where 200 regional food system organizations gathered to discuss food system issues.
(v) Multnomah County to work to reestablish funding to the Oregon State University Extension Service. (County: Chair, OS)	The County is pursuing funding for this action, but is constrained by ongoing fiscal challenges.

(vi) Establish quantitative metrics for consumption of regionally sourced food. (City: BPS) (County: OS)	Data from Portland farmers markets and CSAs are currently being used as a proxy while BPS identifies other available and relevant data sets. The draft Multnomah Food Action Plan identifies the need for more detailed metrics on local food consumption as a priority action.
16. Motivate all Multnomah County residents and businesses to change their behavior in ways that reduce carbon emissions.	
Action	**Notes**
(i) In partnership with businesses, universities, schools, non-profit organizations, community groups, public agencies, and existing efforts, develop a community-wide public engagement campaign to promote carbon emission reductions. (City: BPS)	The Portland Climate Action Now! public outreach campaign was launched in the summer of 2010, and includes a website (www.portlandclimateaction.org), educational materials, a booth for event outreach, and class/workshop curriculum as part of the ReThink series and Master Recycler classes.
(ii) Establish a business leadership council to catalyze the business community to create a prosperous low-carbon economy. (City: BPS) (County: Chair)	A number of Portland-area organizations are collaborating on the Climate Prosperity Project, an effort to align economic development and carbon-reduction opportunities. The initiative produced a draft strategy document in June 2010 for public review, and the final "greenprint" is expected by the end of 2010. Leadership for the effort is shared among Greenlight Greater Portland, the Portland Sustainability Institute, the City of Portland, the Portland Development Commission, Metro, and a host of public, private, and non-profit supporters. The participants are contemplating establishing a leadership group to guide coordination and implementation of the efforts identified in the greenprint.
(iii) Establish and publicize climate action metrics by neighborhood, including measures such as household energy use, vehicles miles traveled, walkability and bicycle commute rates. (City: BPS)	BPS is identifying data that can be available at the neighborhood scale, including a walkability index and energy use, in addition to the bicycle commute figures currently available through census data. The Portland Plan is developing a framework for reporting metrics on all aspects of the plan, including these data sets, at the 20-minute neighborhood scale. Data will be mapped and is expected to be released over the next year.
(iv) Partner with the Portland Sustainability Institute to bring together academia, businesses and government to foster policy development, best practices and collaboration to address climate change. (City: BPS)	The City is working with the Portland Sustainability Institute through the Climate Prosperity Project, described above, and through the EcoDistricts Initiative. An EcoDistrict is a neighborhood or district with an explicit commitment to accelerate sustainable development. Each EcoDistrict conducts an assessment of its current performance on a number of environmental and social metrics, establishes performance goals, and commits to carrying out actions to move toward these goals, tracking and reporting the results over time. Five areas in Portland have been proposed as pilot districts, and work is underway in each to evaluate interest and potential opportunities.
(v) Expand opportunities for residents and business, especially in historically underserved areas, to learn how to track and manage energy use, improve efficiency and adapt to a changing climate. (City: BPS)	The BPS Green Building Program developed and delivered 10 workshops/presentations, and delivered outreach to residents and businesses, in traditionally underserved areas about tracking home energy use. At least ten more presentations are scheduled for FY 2010-2011.

(vi) Seek funding to support neighborhood and community groups in the implementation of carbon-reduction projects and programs. (City: BPS)	No funds have been secured to date; continuing to look for funding opportunities.

17. Adapt successfully to a changing climate.

Action	Notes
(i) Prepare an assessment of climate-related vulnerabilities, strengths and resiliency of local food, water and energy supplies, infrastructure, transportation and freight movement, floodplains, watershed health, public health, public safety, social services and emergency preparedness. (City: BPS, BES, PWB) (County: OS, HD, OEM)	Neither the City nor the County has formally launched the systematic assessment of vulnerabilities to climate change called for in the Climate Action Plan. Preparatory work is underway, however. The Water Bureau and County Health Department are both building on past work in assessing specific threats from climate change, and a team including participants from Metro and the City's Bureaus of Environmental Services, and Planning and Sustainability participated in a multi-day Climate Leadership Academy on adaptation. The workshop featured best practices from Chicago and New York City, as well as climatologists and risk managers. The PWB is participating with other utilities in the Water Utility Climate Alliance on a pilot project to better understand the methods and use of more recent downscaled climate data to update the study of the Bull Run watershed. In addition the PWB is participating with PSU researchers on a NOAA funded grant on the relationship between land use, climate change, and water consumption. The County and City have both participated in the University of Oregon's Climate Leadership Institute workshops on climate vulnerabilities in the Lower Willamette region and anticipate using the results of that study to support future assessment work by both organizations. The County Health Department is actively working with national, state and local health organizations to develop a public health framework for assessing and adapting to climate change vulnerabilities.
(ii) Develop a climate change preparation plan that analyzes and prioritizes preparation actions to manage risks and increase overall flexibility and resiliency, assigns responsibility to appropriate bureaus or departments and ensures that disproportionate impacts on vulnerable populations are addressed. (City: BPS, BES, PWB) (County: OS, HD, OEM)	Development of a climate change preparation plan will follow the assessment of climate-related vulnerabilities, strengths and resiliency outlined in action (i) above. Key tasks in the coming two years include 1) Inventorying existing strategies, data and projects; 2) Gathering available data on physical impacts; 3) Conducting a high-level assessment of vulnerability and exposure of people, infrastructure, and ecosystem; 4) Identifying research needs to fill in gaps where significant potential hazards seem likely; and 5) Developing strategies to reduce vulnerability and prepare for unavoidable impacts.
(iii) Monitor implementation of climate change preparation actions and emerging data on risks. If necessary, revise adaptation plans more frequently than the three-year revision cycle for the overall plan. (City: BPS, BES, PWB) (County: OS, HD, OEM)	Monitoring the implementation of the climate change preparation plan will follow the development of the plan outlined in action (ii) above.
(iv) Protect and restore wetlands, floodplains, wildlife habitat and corridors to strengthen the capacity of natural systems to respond to more severe weather events, streamflow changes, and flooding. (City: BES, PP&R)	The City has made progress in protecting and restoring natural areas, as outlined in the status updates given under the Urban Forestry and Natural Systems section of this report (see pages 12-13 and 34-35). However, much more needs to be done to move towards natural system resiliency, and several planned habitat restoration projects were delayed this year.

(v) Collaborate with Metro and state agencies to update and ensure continued accuracy of land hazard mapping and inventories, including landslide hazards, floodplains and areas subject to wildfire risk. (City: POEM) (County: OS, OEM, DCS)	The City's 2010 Natural Hazard Mitigation Plan has identified the need for a mapping committee to index, maintain a mapped inventory and prioritize list of critical facilities, residential and commercial buildings within known hazard areas (e.g. earthquake, erosion, the 100-year and 500-year flood plains, invasive plant species, landslide and wildfire areas). This will include identification of parameters and methods for new maps as needed to meet multi-hazard mitigation goals and to improve communication with the public. Updated Flood Insurance Rate Maps will soon be considered by City Council; mapping of landslides through the use of light detection and ranging technology is currently being analyzed for the entire city; and wildland urban interface maps are in review as a part of the Community Wildfire Protection Planning process.
(vi) Integrate climate adaptation and natural hazard mitigation strategies into major planning efforts and consider the potential for substantial numbers of "climate refugees" in contemplating future growth scenarios. (City: BPS) (County: OS, DCS)	The Portland Plan team is actively working on methodology to evaluate the different possible land use and growth scenarios based on a variety of key issues, including climate adaptation. Discussion of the climate refugee issue in the Portland Plan faces some obstacles. Many Portlanders are reluctant to embrace the possibility that large numbers of people could move here. The County will incorporate the findings of the climate vulnerability assessment into major planning efforts.
(vii) When planning public infrastructure investments and service delivery strategies, consider the physical, social, environmental, economic, and regulatory impacts of mitigating and adapting to climate change. This may necessitate developing and using forecasts and models that account for potential climate changes and evaluating investment alternatives based on triple bottom line and climate change impacts over the lifespan of the infrastructure. (City: BES, PWB, PBOT, BPS) (County: OS, HD, DCS, OEM)	The Portland Plan will set the stage for an update to the policies within the City's Comprehensive Plan. The Comprehensive Plan policies play a central role in infrastructure decision-making (in that the adoption of capital improvement plans are governed by those policies). The draft Objectives and Directions developed in Phase 2 of the Portland Plan will be a starting point for Comprehensive Plan policy development. The County will use the findings of the climate vulnerability assessment as a starting point for integrating climate vulnerabilities into strategic planning efforts. Mitigation actions identified within the Climate Action Plan are currently being used in County budget and strategic planning.

18. Reduce carbon emissions from City and County operations 50 percent from 1990 levels.	
Action	**Notes**
(i) Identify funding sources to finance energy-efficiency upgrades in City and County facilities. (City: BPS) (County: OS, DCM)	Under Portland's City Energy Challenge (an internal program for energy efficiency and renewables) staff continue to promote high efficiency energy retrofits, design and equipment specifications. Funding to implement upgrades remains a challenge, but bureaus are supportive of funding ways to make projects happen. Recently, the City has had success by bundling energy improvements with other major capital projects and paying for stand alone energy projects with ARRA grant funds. The County is currently exploring through a Request For Information (RFI) process 3rd party energy efficiency retrofits on County facilities. Based on the results of the RFI, the County may pursue a contract for these services. The County is currently investing approximately $2 million in federal ARRA grant funds into projects that will increase energy efficiency, including building automation systems and a heat/water capture and reuse system at the Inverness Jail laundry facility.
(ii) Require that all new City and County buildings achieve Architecture 2030 performance targets. (City: BPS) (County: DCM) (County: OS, DCM)	The City's green building policy for its own facilities was updated and adopted by Council in April 2009. The policy continues to be implemented on qualifying capital improvement projects. At this time, however, the policy does not meet all of the Architecture 2030 performance targets. The County's 2008 green building policy requires that all new County buildings achieve AIA 2030 performance targets. The County's first new building since the adoption of the policy, the East County Courthouse, planned for completion in 2012, was designed for and is anticipated to achieve the AIA 2030 goals.
(iii) Convert street lighting, water pumps, water treatment and other energy intensive operations to more efficient technologies. (City: PBOT, PWB, BES, BPS) (County: OS, DCM, DCS)	Improving the energy efficiency of the City's buildings, street lights and water and waste water systems has been the City's policy and goal since 1990. Choosing efficient products and high performance designs is largely integrated into the way facility and construction Project Managers approach their work. Recent examples of energy projects include installing second generation of LED (light emitting diode) lamps for traffic and pedestrian signals; traffic signal optimization to cut vehicle idling time at stop lights; lighting retrofits in community centers and parking garages and new energy management controls in The Portland Building. The PWB is systematically evaluating pump stations (PWB's largest use of electricity other than at buildings) to improve the efficiency of operating strategies as well as to install more efficient equipment. The County is committed to reducing energy consumption in its facilities and its other energy intensive operations. Significant work has been completed to reduce energy consumption in its buildings over the past decade. Over 90% of the County maintained traffic signals have been converted to energy efficient LEDs. A project at the County's Inverness Jail laundry will significantly reduce the energy use at the facility through heat capture and reuse. The new County data center, built in the basement of the East County Courthouse to reduce heating and cooling demands, will combine the use of virtualization technology to reduce energy use to half of the current data center.

(iv) Adopt and implement green building policies that include third-party certification of energy, water and waste conservation strategies. (City: BPS) (County: OS, DCM)	The City's green building policy for its own facilities was updated and adopted by City Council in April 2009. The policy requires third-party environmental performance certification for new and existing buildings. Targeted areas for improved conservation and performance include energy, water, storm water management, construction waste recycling, renewable energy, operations and maintenance. To date, two City projects have earned LEED certification. Other projects also seeking certification include The Portland Building, University Park Community Center, PGE Park, Fire Station 18, Emergency Communications Center and the Columbia Blvd. Wastewater Treatment plant. In addition, OMF Facilities Services hired a full-time Sustainable Building Specialist to coordinate efforts for buildings within its portfolios. The County's 2008 green building policy for its own facilities requires that all new construction and major renovation projects pursue LEED Gold certification. In addition, new construction projects must also achieve AIA 2030 goals. The policy also requires that all County owned buildings be maintained at LEED-EBOM Silver standard or higher, and that five existing buildings must be certified LEED-EBOM Silver or higher by 2015. The Hillsdale Library, completed in 2004, achieved LEED Gold for New Construction certification. The East County Courthouse project, planned to be completed in 2012, is anticipated to achieve LEED-NC Gold certification and AIA 2030 challenge goals.
(v) Purchase or generate 100 percent of all electricity required for City operations from renewable sources, with at least 15 percent from on-site or district renewable energy sources such as solar and biogas. (City: BPS) (County: DCM)	In 2009/10 the City's on-site generation was about 9 percent of the agency's total electricity consumption. Most came from biogas generation at Columbia Boulevard Wastewater Treatment. The PWB has installed solar facilities at the groundwater pump station and the meter shop (approximately 280 kW total capacity). The Bureau of Hydropower continues to generate an average of 80-90 million kWh per year as a byproduct of water supply operations at the Bull Run dams. Efforts to reach the 100% renewables goal for City operations by 2012 have stalled. The City's ability to fund a purchase of Renewable Energy Certificates (RECs) or another form of renewable acquisition has been hampered by two formidable obstacles: (1) the City's ability to add $1.5 million to bureau budgets (if we were to choose an annual purchase of RECs) and (2) a very volatile and uncertain green power market, largely influenced by California's ever-changing rules for a statewide renewable energy portfolio. Prices have risen sharply. For example since 2007, the price for wind power from an Oregon facility has doubled -- from $55/MWh to over $110/MWh. In 2009 the County installed nearly 1.5 megawatts of solar power on two of its buildings, and continues to look for additional opportunities to install renewable energy on County sites. The County also purchases 7 percent of its energy from utility green power programs.
(vi) Require that local government fleets, regulated fleets (e.g., taxis and waste/recycling haulers), and the fleets of local government contractors meet minimum fleet fuel efficiency standards and use low-carbon fuels. (City: BPS) (County: OS)	All City of Portland solid waste and recycling franchisees and permittees have been required to run B20 in their collection vehicles for all Portland operations since March 2009. BES, PBOT and PWB have included contract evaluation criteria for prospective vendors related to fuel usage and air emissions (e.g. anti-idling, use of biofuels, diesel emission retrofits), including: the Bull Run dam 2 tower improvements; SW Moody Ave. roadway and track relocation; stormwater residuals hauling and reuse/disposal; and rain garden construction on call services.

(vii) Buy electric and plug-in hybrid vehicles for City and County fleets as they become commercially available. (City: OMF) (County: OS)	CityFleet is aggressively pursuing the goal of having 20 percent of the City's fleet be electric vehicles by the year 2030. Recently a number of smaller electric vehicles, including electric bicycles, have been incorporated into the City's fleet for use by City staff. In the near-term, seven older vehicles are expected to be replaced by the Nissan LEAF, an all-electric vehicle. CityFleet is evaluating the feasibility of replacing vehicles that have reached the end of their economic lifecycle with an electric vehicle (including step vans, etc.). The County plans to purchase 4 Nissan LEAFs in the current fiscal year to pilot the inclusion of electric vehicles into the County fleet. County Fleet Services will continue to monitor the performance of the vehicles and will look at including additional electric vehicles into the fleet mix as vehicles turn over in the fleet.
(viii) Stop the growth of waste generation and recover 75 percent of all waste generated in City and County operations. (City: BPS) (County: OS)	Each of the City's six property managing bureaus (OMF, Fire, BES, PBOT, PP&R and PWB) have assigned a recycling coordinator to improve their respective bureaus materials management performance and tracking. The bureau recycling coordinators meets twice annually. FY 09-10 highlights include: initiating food scrap composting systems at six facilities; initiation of a micro-electronics reuse and recycling program; and improved tracking for materials recycled outside the Trashco contract. A baseline for waste generation is expected in FY 10-11. The County's OS created a new position and hired a Resource Conservation Coordinator who will coordinate many waste prevention and recycling programs within the County, focused on meeting the specific goal of stopping the growth of waste and recovering 75 percent of waste generated. This work will be done in partnership with assigned Sustainability Liaisons within each department. In addition to standard recycling programs, the County currently diverts a significant portion of its waste from its jail facilities through the Portland Composts! program.
(ix) As standardized carbon emissions data becomes publicly available, consider carbon emissions from the production, transportation, use and disposal of goods, including food, as a criterion in City and County purchasing decisions. Where practical, include the sustainable practices of prospective vendors, contractors and service providers as evaluation criteria. (City: OMF) (County: OS, DCM)	Carbon emissions are not routinely included in purchasing decisions at this time due to minimal availability of standardized carbon footprint data. The sustainable practices of prospective vendors are selectively included in Request for Proposal (RFP) solicitations. Prioritization of when to include sustainability practices in evaluation criteria is based on the scope of work and dollar amount of the solicitation. The County adopted a Sustainable Purchasing Policy in 2010, which requires that all County purchases, includes goods and services, reflect the County's sustainability values and goals. Including in the policy is the requirement that the County consider carbon emissions in all purchasing decisions as emission data becomes available.
(x) Establish video and/or web conferencing capability in all major City and County facilities. (City: OMF) (County: IT)	The County has purchased a video conference infrastructure and has deployed this technology at six County sites. An additional eight sites will be provisioned in the current fiscal year.
(xi) Establish interbureau and interdepartmental teams to implement the Climate Action Plan and report on progress. (City: BPS) (County: OS)	To date, the City has approached coordination on the implementation of the Climate Action Plan a project/action specific basis. The County's OS has established an interdepartmental Climate Action Plan Implementation Team (CAP I-Team) to operationalize and secure funding for department actions identified within the CAP. The CAP I-Team is finalizing a workplan that addresses the three-year actions set forth in the Climate Action Plan. In addition, the recently formed citizen Advisory Committee on Sustainability and Innovation (ACSI) will assist the OS with oversight and recommendations on the CAP's implementation and updates to the three year identified actions.

CLIMATE ACTION PLAN 2009

CITY OF PORTLAND AND MULTNOMAH COUNTY

WWW.PORTLANDONLINE.COM/BPS/CLIMATE & WEB.MULTCO.US/SUSTAINABILITY

Printed on 100% post-consumer recycled paper.