CITY OF SAN JOSE

Green Vision 2014 Annual Report

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

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Executive Summary

In 2014, San José made notable strides toward its Green Vision Goals. Through the Green Vision, the City continues to lead by example and grow our vibrant community, with increased economic vitality and environmental stewardship. City staff continue to cultivate an environment that fosters resiliency by pursuing external funding opportunities and strategic partnerships.

To date, San José has received more than $175 million in grant funding related to Green Vision projects. In 2014 there were limited state and federal grant and funding opportunities. The City received modest awards of approximately $5 million to advance Green Vision goals. The 2014 Annual Report reflects the City's successes and progress toward its Green Vision targets. It also outlines a roadmap to overcoming the remaining challenges and continuing our transition to a more sustainable, prosperous City.

2014 Achievements and Progress

Key 2014 Green Vision achievements and progress include:

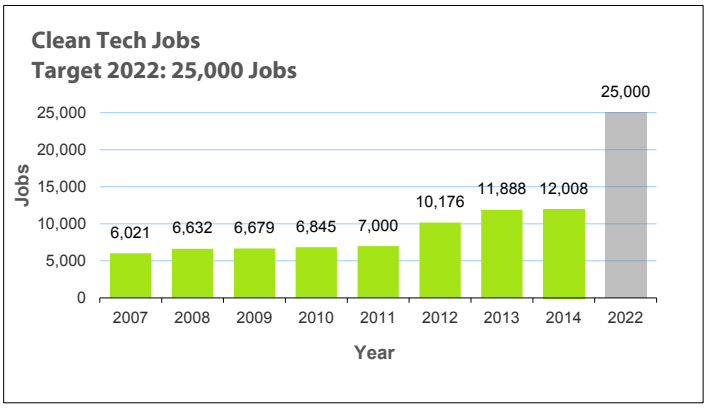
- More than **12,008 cleantech jobs** in San José have been created to date.
- **Prospect Silicon Valley (ProspectSV) opened** as the first nonprofit, Silicon Valley-based catalyst to support emerging technology companies through demonstration, testing, and commercialization.
- During the 2013-14 program cycle, Silicon Valley Energy Watch delivered **850 energy efficiency retrofit projects** to Santa Clara County PG&E utility customers, reducing energy use by over **11.5 million kWh** – enough to power nearly 1,060 U.S. homes for one year.
- In May 2014 the Property Assessed Clean Energy program launched and has completed **195 residential projects valued at $5.3 million.**
- The City has installed **30 solar energy systems** with a total generation capacity of **4.8 megawatts (MW)** at City sites.
- By the end of 2014, **9,055 solar photovoltaic (PV) systems** with a total capacity of approximately **80.8 megawatts (MW)** had been installed at homes, businesses, and industrial facilities in San José.
- Nearly **one million square feet** (SF) of certified private sector green building space was added in 2014. More than **2.1 million SF** of City facilities have achieved green building certification since 2004.
- San José continued to have among the highest solid waste diversion rates in the nation, including a **73 percent overall** diversion rate and a **90 percent** diversion rate in City facilities.
- The City and partner Zero Waste Energy Development Company (ZWED) launched the **world's largest** dry fermentation anaerobic digestion **facility,** converting commercial **organic waste** into **1.6 MW of renewable energy** and 32,000 tons of compost.
- The City's contracted haulers converted **76** residential waste collection **trucks** from diesel fuel to **compressed natural gas**, generating cleaner emissions and significantly reducing greenhouse gas emissions.

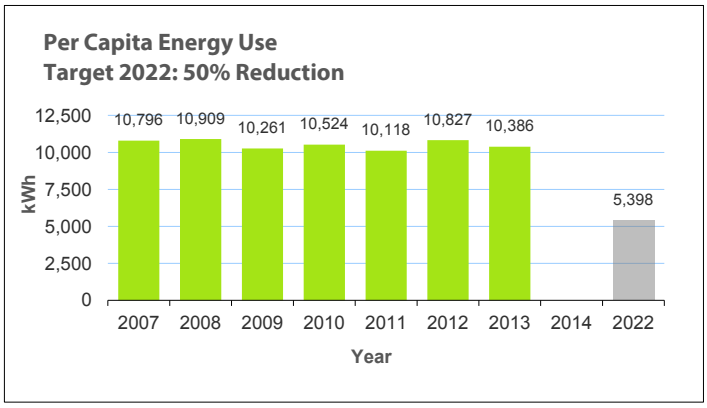
- **A record 785** customers used an average of **14.1 million gallons** of **recycled water** per day, made possible by a 142-mile network of recycled water pipelines.
- The City maintained 41 percent of its vehicle fleet to run on alternative fuel, with a total of **991 alternative fuel vehicles.**
- Through a partnership with Our City Forest, **1,749 new trees** were planted. A total of 1**2,289 trees** have been planted since 2007, sequestering approximately 479.3 metric tons of carbon dioxide equivalents, comparable to the annual greenhouse gas emissions from **101 passenger vehicles**.
- San José converted nearly **2,130 streetlights** to smart Light Emitting Diode (LED) streetlights in 2014. To date, approximately **5,530 LED streetlights** have been installed, saving the City more than **1.88 million kWh** of electricity annually.
- The City completed 19 miles of onstreet bikeways for a total of **240 miles of onstreet bikeways** and reached **56.8 miles of offstreet trails** to date.
- San José bicyclists took **19,562 trips,** offsetting **14,278 pounds of carbon dioxide** through the Bay Area Bike Share Program.

Awards and Accolades

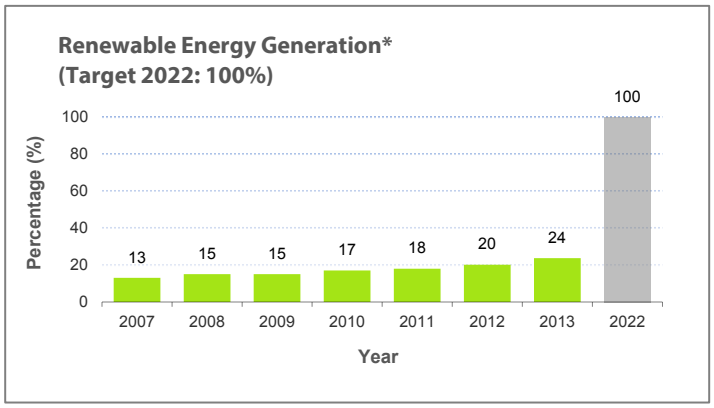
- The League of California Cities awarded San José the Helen Putnam Award **for Excellence in Planning and Environmental Quality 2014** for the Bring Your Own Bag Ordinance.
- The Lower Guadalupe River Trail Project received the 2014 **Project of the Year Award** in the "Sustainable/Green $2-$5 million" category, from the Silicon Valley Chapter of the American Public Works Association, and an **Award of Merit** from the California Trails and Greenways Conference.
- The **San José McEnery Convention Center Expansion and Renovation project** was recognized in the "Structures over $75 million" category by the Silicon Valley Chapter of the American Public Works Association. This project received **LEED Silver Certification** from the USGBC for the Convention Center project in early 2015.
- The Santa Clara Valley Urban Runoff Pollution Prevention Program honored Commodore Park for **Site Design and Low Impact Development for Storm Water Pollution**.

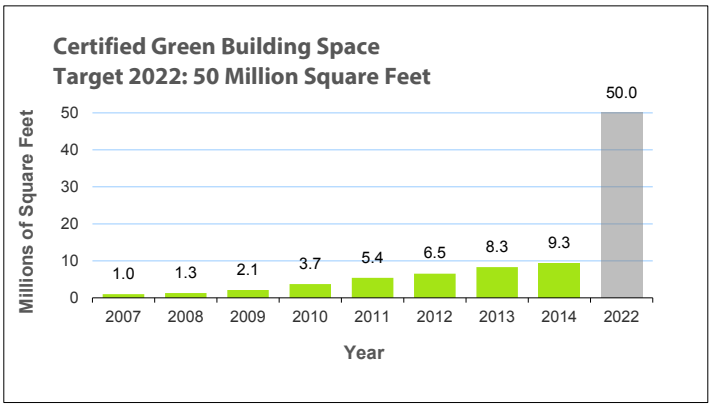
Performance Metrics

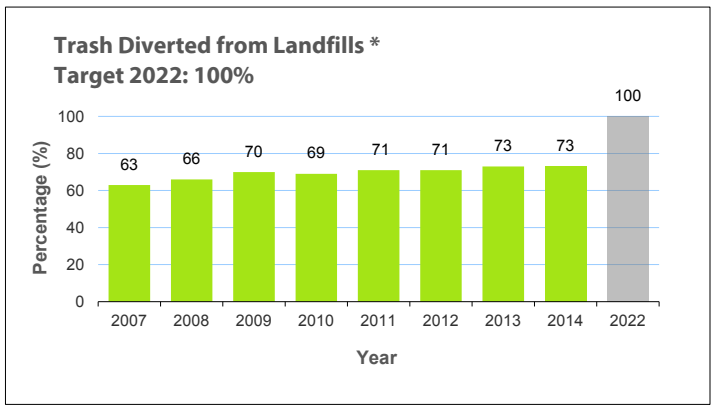


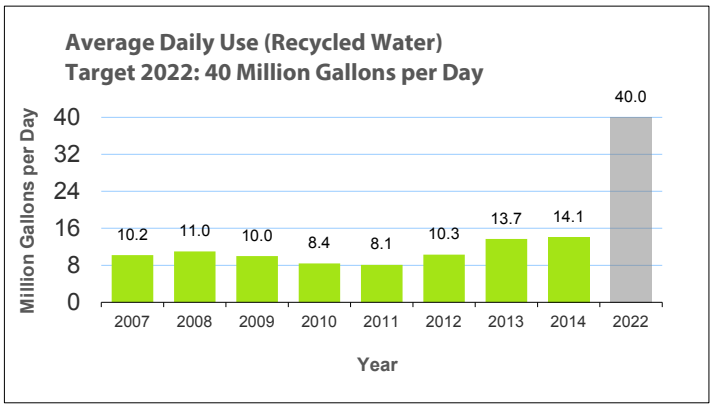


*Per capita baseline figures reflect service population numbers. 2014 energy usage data is not available from PG&E until summer 2015 and will be updated as those figures are available

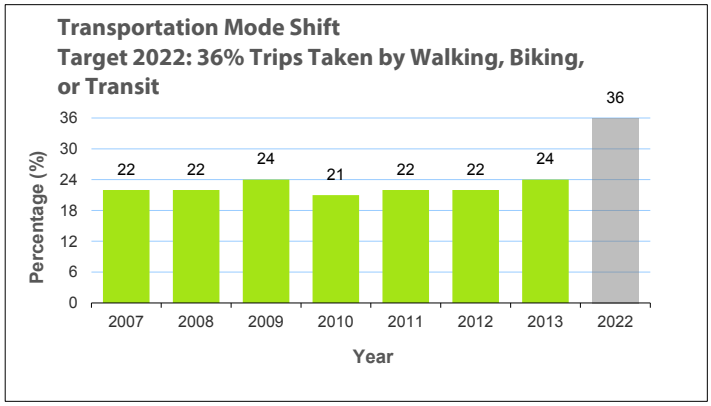


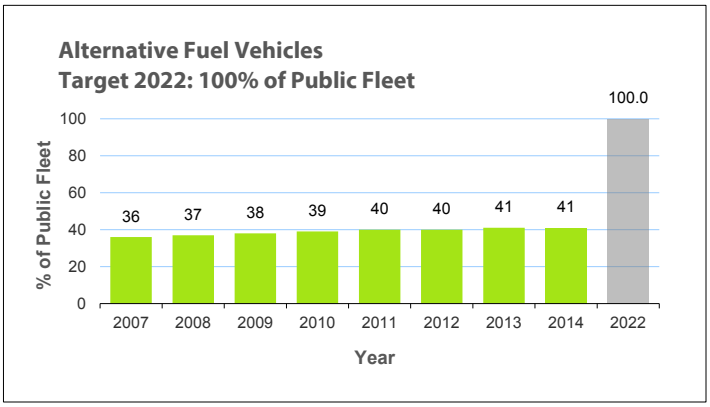




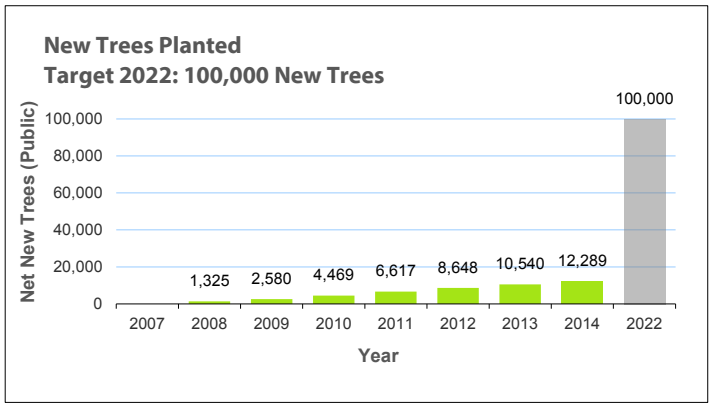


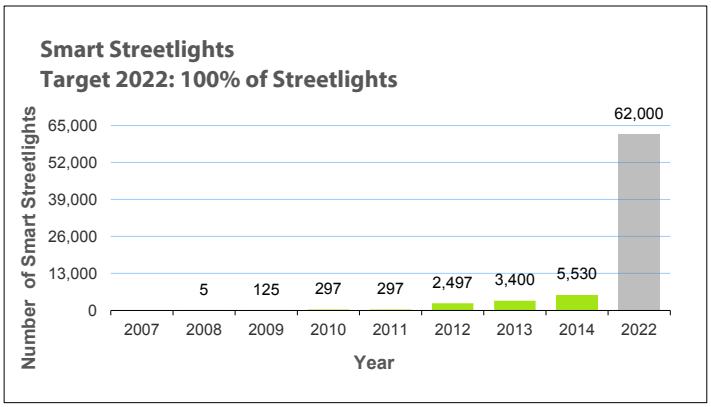
*2012 and 2013 were updated to reflect actuals. 2014 is estimated since actual will not be known until July 2015. Diversion rates have flattened region wide, pointing to larger, economic drivers such as steep increases in new development and redevelopment projects.

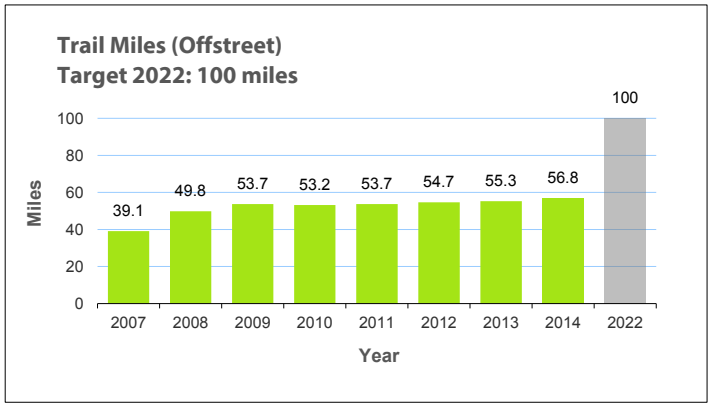




*Please note: the City formally accomplished Green Vision Goal 7 by adopting the Envision San José 2040 General Plan that includes measurable standards for sustainable development. The transportation mode shift is one measure to quantify. This figure based on U.S. Census Bureau, American Community Survey. 2014 data is not available until late 2015.







2015 Work Plan and Priorities

The 2015 Work Plan addresses all Green Vision goals. Per Council direction, staff uses the following criteria to develop annual and long-term work plans:

- Cost savings
- Private investment generated
- Measurable advancement towards goals

A comprehensive work plan summary is included at the end of this report. Key work plan priorities are highlighted below by each strategic framework area, including leading by example, advocacy, financing mechanisms, strategic partnerships, and communication and engagement.

Leading by Example

In 2015, staff will continue to focus on projects and programs that help advance the Green Vision priorities while reducing City operating costs.

2015 Work Plan Highlights

- Work with ProspectSV to facilitate demonstration of emerging technologies.
- Work with PG&E to develop a new partnership program to encourage community participation in energy efficiency efforts.
- Complete design work and construction of six additional solar energy systems on City Facilities with OpTerra.
- Convert 16,497 streetlights through an Energy Service Contract with OpTerra, and convert a minimum of 1,850 streetlights through federal grants and City Capital Improvement Program funds.
- Increase waste diversion from businesses, residents, construction, and City operations by continuing to work with our residential haulers, construction and demolition waste recyclers, Republic and ZWED, for maximum recovery of materials.
- Develop a strategic implementation plan in collaboration with SCVWD for Master Plan goals.
- Hold the 2015 Annual Review to consider amendments to the Envision San José 2040 General Plan in fall 2015, and its first four-year major review of the Envision San José 2040 General Plan.
- Certify the Housing Element under Plan Bay Area Regional Housing Need Allocation.
- Complete B20 biodiesel infrastructure upgrades to achieve higher fuel efficiency vehicles in public safety fleet.
- Install 50 miles of onstreet bikeways, including bikeways enhanced with color and separation, and install 500 public bike parking spaces.
- Secure necessary permits for construction of Coyote Creek Trail from Story Road to Selma Olinder Park, and from Highway 237 to Tasman Drive; have projects prepared for construction in summer 2015.

Advocacy

San José will remain active in legislative advocacy in both Sacramento and Washington, D.C. in order to compete for resources to support Green Vision implementation and cleantech job growth in the region.

2015 Work Plan Highlights

- Continue to support strategic partners such as the Local Government Coalition to advocate for policies that advance renewable energy.
- Work with the Bay Area Regional Energy Network (BayREN) and the California Public Utilities Commission (CPUC) to develop regional and local programs related to energy efficiency and renewable energy.
- Reopen conversation with PG&E on a permanent dimmable LED streetlight rate in 2016.
- City staff on the state's Mattress Advisory Committee will provide technical input on the design and implementation of the Used Mattress Recovery and Recycling Act program.
- Continue to monitor, review, and participate as needed in the cap-and-trade program, AB 1103, and Plan Bay Area.
- Continue to support efficient and consistent regulated uses of recycled water in the region and state.
- Continue to track related state and federal legislation on issues critical to the advancement of the Green Vision goals.

Financing Mechanisms

Staff will continue to explore financing opportunities such as grants, incentives, and rebates with regional, state, and federal agencies to advance the Green Vision.

2015 Work Plan Highlights

- Collaborate on grant applications from funding opportunities such as cap-and-trade, the Small Business Innovation Research program, and the California Energy Commission to support incubators and commercialization of cleantech products and innovation clusters.
- The Finance Department will present its recommendation for 3rd party PACE provider to Council in spring 2015.
- Submit rebate applications for all eligible technologies that have been installed through the Energy Service Company (ESCO) agreement.
- Continue to evaluate funding opportunities for strategic plan implementation, including large scale Prop 1 and Prop 84 opportunities.
- Work with the state and other funding agencies to create opportunities to fund the Waste to Energy Demonstration and commercial projects in San José.
- Apply for planning grants to support development of Urban Village plans and other General Plan implementation actions.
- Continue to pursue grant opportunities from both the federal and state levels to reduce fleet vehicle GHG emissions.
- Continue to seek grants and other opportunities to fund LED streetlight conversions, within or outside of an ESCO agreement.
- Continue to seek opportunities through grants, development projects, and Our City Forest (OCF) partnership to create complete streets with LED streetlights, trees, and bike lanes.

- Seek funding to expand the trail network, and seek grants that match Bike Plan 2020 goals.
- Monitor cap-and-trade funding allocations to identify any potential state funding sources.

Strategic Partnerships

Partnerships will continue to be a strong focus of the Green Vision in 2015. Through the Demonstration Partnership Policy and other key Green Vision initiatives, San José continues to support entrepreneurs and emerging technologies that will become the driving industries of the future. Our partnerships with other entities such as schools, universities, nonprofits, private companies, and regional agencies will help us reach our common goal of creating a thriving community.

2015 Work Plan Highlights

- Further the work of iHub to advance incubators, accelerators, and co-working spaces in San José.
- Partner with San José State University's Battery University program to further its linkages to local employers.
- Continue to work with the Silicon Valley Manufacturing Roundtable to create long-term partnerships that foster the growth of cleantech industry within San José.
- Through coordination with ProspectSV and its demonstration center, assist companies commercializing cleantech-related products work with manufacturing service providers to help develop the products and move them into full-scale production in San José.
- Work with PG&E to develop a new partnership program to encourage community participation in energy efficiency efforts.
- In collaboration with private entities, construct and operate demonstration gasification unit to assess conversion of wood waste and biosolids into a synthesis gas.
- Identify grant opportunities to expand the supply of electric vehicle chargers where demand is or will soon exceed supply.
- Continue collaborative efforts with stakeholders to leverage regional resources to implement the South Bay Water Recycling Master Plan goals.
- Continue participating in regional planning initiatives such as the Sustainable Communities Strategy.
- Investigate additional opportunities for partnerships with local nonprofit or regional transportation agencies to expand and maintain the trail network.

Communications and Engagement

In order for most of the Green Vision goals to be realized, community engagement and participation is critical. Staff will continue leveraging grant funds and partnerships to engage City employees and the larger community alike. Four ongoing partnerships or tactics to boost communication and engagement include:

- *San José Green Vision Resource Team* – A joint collaboration with the Bay Area Air Quality Management District to promote the Green Vision. The San José Green Vision Resource Team, the

City's internal GreenTeam, and other key staff will collaborate to promote and further engage City staff and the community at large in the City's efforts to achieve the Green Vision goals.

- *City GreenTeam* – An interdepartmental team comprised of City employees, working to raise Green Vision awareness throughout the organization and target behavior change to save energy and water, and reduce waste and operating costs.
- *SJEnvironment Facebook Page* – Increase "likes" by creating relevant, environmentally-friendly behavior-change messages.
- *Green Vision Web Page* – A page on the City website that aims to increase community engagement and knowledge. Visit: http://greenvision.sanjoseca.gov/

2015 Work Plan Highlights

- Convene companies around industry-specific issues such as building efficiency regulations and supporting technologies, transportation optimization, or other cleantech topics.
- In collaboration with the Business Attraction, Retention, and Expansion Program and local partner organizations, work to support the retention, expansion, and attraction of cleantech companies in San José.
- Continue Silicon Valley Energy Watch efforts to work with and engage the community around energy efficiency.
- Continue to expand the outreach campaign with the San José Earthquakes to promote large item recycling, litter reduction, household hazardous waste, and used motor oil programs via stadium events and multimedia advertisements.
- Continue to participate in a project funded by the Urban Sustainability Director's Network to determine best practices in environmental behavior change for residents through effective and efficient campaigns and strategies.
- Identify customer engagement needs during the transition from increased recycled water use to a period of increased potable water production from recycled water.
- Continue to engage the community in the Urban Village planning workshops.
- Utilize social media tools further to engage more residents to be environmentally friendly.
- Continue to update the Green Vision website and increase awareness of the Green Vision strategy.

Conclusion

Significant progress has been made in the seven years since the adoption of the Green Vision. Through the San José Green Vision and other sustainability programs and policies, the City has improved the quality of life in San José, while simultaneously saving resources and money. The City has creatively overcome limited general fund resources for Green Vision implementation, and has successfully leveraged grants and partnerships for beneficial outcomes.

Introduction

The Green Vision Goals exemplify the City's commitment to fostering a vibrant economy, environment, and community in San José. In October 2007, the San José City Council (Council) adopted the Green Vision, a 15-year plan with 10 ambitious goals for economic growth, environmental sustainability, and an enhanced quality of life for San José's residents and businesses. Through the Green Vision, San José is modeling the way for others by charting goals to foster cleantech jobs, energy use reduction, renewable energy, green building, waste reduction, water reuse, sustainable development, clean fleet, trees, energy-efficient streetlights, and interconnected trails.

Achieving the 10 Green Vision goals will require capitalizing on the innovation of Silicon Valley and fostering the development of emerging technologies that can address challenges of the future. Through the Demonstration Partnership Policy, the City and its strategic partners will support emerging technologies and policies that will drive a vibrant economy, environment, and community. This report highlights the key accomplishments made in 2014 toward the Green Vision Goals and includes a proposed 2015 Work Plan.

Black-crowned night herons in Artesian Slough

Green Vision Goals

Goal 1: Create 25,000 Cleantech jobs as the World Center of Cleantech Innovation

Goal 2: Reduce per capita energy use by 50 percent

Goal 3: Receive 100 percent of our electrical power from clean, renewable sources

Goal 4: Build or retrofit 50 million square feet of green buildings

Goal 5: Divert 100 percent of the waste from our landfill and convert waste to energy

Goal 6: Recycle or beneficially reuse 100 percent of our wastewater

Goal 7: Adopt a General Plan with measurable standards for sustainable development

Goal 8: Ensure that 100 percent of public fleet vehicles run on alternative fuels

Goal 9: Plant 100,000 new trees and replace 100 percent of our streetlights with smart, zero-emission lighting

Goal 10: Create 100 miles of interconnected trails

Strategic Framework

The 2015 Comprehensive Work Plan outlines focus areas for each goal within a strategic framework. As directed by Council in March 2009, the Green Vision Work Plan continues to use three major screening criteria:

1. Does the initiative result in cost savings or additional revenue generation, especially in the General Fund?
2. Will the initiative generate investment from the private sector or from the federal or state government?
3. Will the initiative make measurable progress on one or more of the 10 Green Vision goals?

The strategic framework helps connect the goals, implementation strategies, and project-level day-to-day actions to the broader intended outcomes of driving economic opportunity and growth, eliminating the structural budget deficit, demonstrating environmental leadership, and improving the quality of life throughout the community.

The strategic framework is developed around five areas:

- ***Leading by example*** – Policies and practices that the City can modify or establish to advance the Green Vision priorities
- ***Advocating policies at the regional, state, and federal levels*** – Advocating legislative action and positioning the City to partner with other agencies on policy changes and development
- ***Financing mechanisms*** – Exploring financing mechanisms such as grants, new market tax credits, modified fee structures, and improvement districts to supplement City dollars

- ***Forming strategic partnerships*** – Partnering with other entities, such as schools, universities, nonprofits, and private corporations to work towards common goals
- ***Communications and engagement*** – Communicating with key audiences to bring about awareness, acceptance, and action on all of the goals

Citywide Implementation of the Green Vision

An interdepartmental Green Vision Steering Committee of senior and executive staff members convenes on a regular basis to coordinate on key issues and ensure alignment with City priorities. Designated goal leads drive implementation efforts and advance individual goals, with the Environmental Services Department (ESD) facilitating interdepartmental coordination and overseeing overall implementation. The Council is kept apprised of progress on the Green Vision through the Annual Report and the Green Vision website http://greenvision.sanjoseca.gov/.

Climate Change

Statewide Climate Change and Greenhouse Gas Emissions

As discussed in past reports, the California Global Warming Solutions Act of 2006 (AB 32) requires the state of California as a whole to reduce greenhouse gas emissions to 1990 levels by the year 2020 and achieve an 80 percent reduction from 1990 levels by 2050.

AB 32 Scoping Plan. AB 32 required the California Air Resources Board (Board) to develop a Scoping Plan that describes the approach California will take to reduce greenhouse gases (GHG) to achieve the goal of reducing emissions to 1990 levels by 2020; the plan is to be updated every five years. The Board first considered the plan in 2008, and began an update in 2013. Approved on May 22, 2014, the State AB 32 Scoping Plan Update (Update) builds upon the initial plan with new strategies and recommendations.

The Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. It defines the Board's climate change priorities for the next five years and sets the groundwork to reach California's post-2020 climate goals set forth in Executive Orders S-3-05 and B-16-2012. The Update highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals defined in the initial Scoping Plan.

The initial Scoping Plan identified a cap-and-trade program as one of the strategies California will employ to reduce GHG emissions that cause climate change. Based on the first update to the Climate Change Scoping Plan, the cap-and-trade program will be responsible for approximately 30 percent of the required GHG emission reductions to meet the AB 32 goal of reducing GHG emissions to 1990 levels by 2020. The Governor's 2014-2015 Cap and Trade Expenditure Plan provides $832 million in cap-and-trade funds to support GHG emission reductions. The following lend support to San José's Green Vision Goals:

- ***Sustainable Communities Strategies*** —$130 million for the Strategic Growth Council to support investments in transit and transit-oriented development that includes low-income housing, active transportation, agricultural-land preservation, and related planning.
- ***Energy Efficiency Upgrades/Weatherization***— $75 million for the Department of Community Services and Development to assist in the installation of energy efficiency upgrades in low-income dwellings within disadvantaged communities.

- ***Waste Diversion*** — $25 million for CalRecycle to provide financial incentives for capital investments that expand waste management infrastructure, with a priority in disadvantaged communities.

Climate Change and Greenhouse Gas Emissions in San José

The City of San José has prepared a draft Greenhouse Gas Reduction Strategy (GHG Reduction Strategy) in conjunction with the preparation of the Envision San José 2040 General Plan to ensure that implementation of the General Plan aligns with implementation requirements of AB 32.

The objectives of San José's GHG Reduction Strategy are to:

1. Capture GHG reduction efforts already underway by the City of San José
2. Distill policy direction on GHG reduction from the Envision San José 2040 General Plan
3. Quantify GHG reductions that could result from land use changes incorporated in the Envision General Plan Land Use/Transportation diagram
4. Create a framework for the ongoing monitoring and revision of the GHG Reduction Strategy
5. Achieve General Plan-level environmental clearance for future development activities (through the year 2020) occurring within the City of San José

Additionally, the City's GHG Reduction Strategy provides a method to streamline the California Environmental Quality Act (CEQA) review process. The GHG Reduction Strategy was prepared in accordance with the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines, and in conformance with CEQA Guidelines Section 15183.5, which specifically addresses Greenhouse Gas Reduction Plans.

The City continues to study and incorporate best practices for accounting and reporting GHG emissions; staff will continue to evaluate opportunities to streamline and improve GHG reporting. The Green Vision Annual report will provide a detailed snapshot of yearly activities to meet the City's Green Vision Goals. Where appropriate, the Green Vision Annual Report will account for the GHG emissions reductions that result from specific actions taken to further the Green Vision Goals. The General Plan Major Review, conducted every four years, will represent the comprehensive update and inventory of City-wide GHG emissions. The General Plan Major Review will also provide an opportunity for input from members of the General Plan Task Force and other stakeholders to refocus and improve San José's GHG Reduction Strategy for consistency with the San José General Plan and state goals. The Green Vision Annual Reports and General Plan Annual Reviews will inform the City's General Plan Major Review update process. For more information on the City's Envision 2040 General Plan please view Green Vision Goal Chapter 7 or the full Envision San José 2040 General Plan on the City's website.

Green Vision Goal 1

Create 25,000 Cleantech Jobs as the World Center of Cleantech Innovation

Entrepreneurs, companies, and universities are developing technologies that have clean solutions or provide environmental benefits. The technologies and companies developing in this sector will change the world and create economic opportunities for generations to come. San José's Cleantech Strategy provides leadership for the long-term economic success of the emerging technology sector and is an integral component of the Green Vision.

Achievements and Successes

San José's climate of innovation supports the development of technologies, prototyping and manufacturing. Given the continued growth in products with environmental benefits, the cleantech sector continues to evolve and encompass a growing array of technologies. Constraints on energy and water resources exist locally, statewide, and nationally. San José continues to support job growth that drives the development and production of products and services to address these issues.

Manufacturing LED lighting at Xicato

The Evolving Cleantech Sector

Cleantech has evolved recently to include more technology development with multifunctional purposes. The emerging Internet of Things sector focuses on the tools to help systems communicate with each other to capture, share, and analyze data. These technologies are leveraged to maximize resource efficiency and help end users modify behavior to minimize their impact on the environment. Many of the technologies in this sector are being developed at established computer networking companies and cannot be easily tracked as part of the core green economy.

Cultivating Clean Technologies and Jobs

Energy Storage. As alternate energy sources are looking for optimization on- and off-grid, batteries are a clear opportunity. They can store energy, thus minimizing the development of peaker plants to meet demands as they crescendo throughout the day. San José startups such as Gridential and JuiceBox Solar are optimizing energy storage capacity and battery life, or repurposing batteries from alternate vehicles. Patent activity in energy storage has been steadily growing over the last seven years and currently constitutes the largest share of regional clean tech patents overall.

San José is a leader in developing a specialized workforce for the energy storage field. While the region attracts science and engineering talent from around the world, there is a shortage of workers with the specialized skills the storage sector needs. In response to this workforce gap, in 2014 San José State University started the Battery University, the first master's degree program focused on battery science in the country. The program includes opportunities for hands-on experience and projects with local battery storage firms, as well as courses taught by Lawrence Berkeley National Laboratory scientists. There are roughly 50 students in the first cohort, and the program is also open to individuals who want to take courses for professional development. This program will help develop a trained workforce ready to enter the energy storage industry, driving further growth in the sector.

Prospect Silicon Valley. On October 2, 2014 Prospect Silicon Valley (ProspectSV) officially opened as the first nonprofit, Silicon Valley-based catalyst to support emerging technology companies through demonstration, testing, and commercialization. ProspectSV has deep roots with the City of San José and its facility is located in the City's new Environmental Innovation Center. ProspectSV is also a key player in developing the emerging technology ecosystem as it holds events and workshops to further concept and product development. ProspectSV consists of a 23,000 square-foot Technology Demonstration Center with workspace, labs, specialized equipment, meeting rooms, and a suite of commercialization assistance. ProspectSV has startup clients such as AutoGrid, EasCor, Gridential, freeWire, Green Dot, JuiceBox, MetroTech, QuanEnergy, Rey Labs, RideScout, RSM Technology, Slice Energy, Thomson Power, Viking Cold Solutions, and ZERE Systems. These startups are developing products that require less energy, emit less greenhouse gas, and produce less waste, while delivering a better quality of life for people living and working in urban areas. The City of San José's Office of Economic Development (OED) works closely with ProspectSV to provide business development support, information, and facilitation to startups that grow beyond the Technology Demonstration Center, including helping them find brick-and-mortar offices, R&D, or manufacturing space in San José. OED will be providing monthly office hours at ProspectSV for consultation and assistance with startups. ProspectSV's goal is to become the leading technology innovation and commercialization accelerator in California and the nation.

Energy Efficiency for Buildings. Growth in the building energy efficiency sector has been driven in part by California's new Title 24 energy use requirements, which went into effect July 2014 and include strict energy-saving measures for structures. San José-based Xicato is a leading developer of energy-efficient LED lighting modules. Earlier this year, Xicato doubled the size of its San José facility to incorporate manufacturing space for its new LED light module, which has improved efficiency and will significantly reduce building energy use and costs. Phillips Lumileds, developed 40 years ago under Hewlett Packard, is another LED manufacturer in San José. By locating their manufacturing facilities close to their research and development centers, Xicato and Phillips Lumileds are both able to seamlessly develop and manufacture innovative products. Another San José-based company working on energy efficiency solutions for buildings is Cypress Envirosystems, which grew in revenue by 60 percent in 2014. Cypress Envirosystems provides solutions to retrofit existing commercial buildings and industrial facilities with a quick return on investments leading to increased energy efficiency, auto-demand response, asset utilization and lower maintenance costs. Due to its growing customer base across the nation, Cypress Envirosystems is in the process of moving to a larger office space in San José. EASCOR, a lighting startup in San José's ProspectSV, is developing a hybrid lighting solution that combines the efficiency of LED technology with energy from the sun.

Demonstration. Demonstration is a unique opportunity the City of San José gives to technology developers to test, evaluate, and/or demonstrate innovative solutions. Demonstration plays a critical role in the cleantech ecosystem by providing real-life testing labs during the early stages of product development. In 2014, the City worked with JuiceBox Solar to demonstrate their energy storage technology at the Gardener Community Center. JuiceBox Solar's energy storage unit will provide backup power and store energy generated from the building's rooftop solar system, thereby reducing the building's grid demand during peak times. In addition, the City is enhancing its role in clean technology demonstration projects by partnering with the nonprofit ProspectSV and Bay Area technology companies to launch a Transportation Innovation Zone. Still in the beginning stages of development, this city area will provide an opportunity for companies to test and showcase their technologies on city streets, including smart streetlight infrastructure, devices that improve pedestrian safety, vehicle communication, and automated traffic systems. The City of San José's unique demonstration role is critical to accelerating cleantech development and commercialization.

Cupertino Electric, located in central San José, is one of the largest employers of union electricians in the San Francisco Bay Area. In 2014, Cupertino Electric added a 700 kilo-watt (kW) roof-mounted solar system with adjacent parking shade structures that features multiple solar panel and inverter manufacturers. The installation reduces the company's environmental footprint, as well as provides a demonstration site for customers to view various technology options in a real-world setting. Recognizing the community need for awareness and

Cupertino Electric's Solar Demonstration

education around solar technology, Cupertino Electric will provide tours of their solar demonstration facility to school and community groups.

iHUB. The purpose of the iHub program is to promote collaboration between the private sector, universities, and research laboratories to foster the commercialization of technology, with a goal of stimulating job creation. In 2010, the Governor's Office of Economic Development approved the City of San José's application and designated the City of San José as the San Jose/Silicon Valley Emerging Technology Hub (iHub). In 2014, OED embarked on a relaunch of the iHub program. During this process, OED engaged with original iHub partners and also started new dialogues with new iHub incubators and accelerators. In addition to universities and research labs, target groups for collaboration include economic development agencies, workforce development groups, business assistance and advocacy organizations, venture capitalists, municipalities, and others. iHub activities support the innovation ecosystem, which provides cross-over benefits to the cleantech sector. In 2014, OED convened the six incubators/accelerators/co-working spaces in San José to raise awareness of the local startup ecosystem. This early work has resulted in new partnerships within the startup community. In addition, the iHub was the cornerstone of two grant applications submitted by the City to support the broader cleantech innovation community. The first application was for the Investing in Manufacturing Communities Partnership (IMCP) designation as a Manufacturing Community; the second was an Economic Development Administration (EDA) i6 Cluster grant application for ProspectSV to develop a manufacturing program to be available through their Demonstration Center.

Clean & Emerging Technologies Summit. In April 2014 the OED convened the Clean & Emerging Technology Summit at SunPower's corporate headquarters in north San José. The Summit brought together 43 local leaders representing cleantech research and development, prototyping, manufacturing, and business sectors. The event included information sharing by OED, the Governor's Office of Business and Economic Development, and the U.S. Department of Commerce on incentive programs that support business expansion, and a panel discussion on current cleantech sector challenges. Summit participants expressed interest in revising the City's land use ordinances that conflict with or impact the optimal collection of photovoltaic systems; developing a clearinghouse for various local, state, and federal government business programs; and benchmarking against other countries, including China and Canada, to better understand their financial incentives for cleantech businesses.

Legislation

In 2015, staff will work with industry groups and other stakeholders to support state and federal legislative priorities that advance cleantech, including implementation bills and efforts related to Assembly Bill (AB) 32 and any cap-and-trade funding opportunities. The City will be following SB 64 Global Warming Solutions: Clean Technology Investment. SB 64 would make funds available for evaluating the efficacy of a new technology or product to potentially reduce greenhouse gas (GHG) emissions, and would provide grants for technologists and products that have been confirmed to have (GHG) emission reduction potential.

Strategic Direction

Given the City's limited resources, strategic partnerships and a targeted approach are vital to continue fostering the green economy in San José. Proposed focus areas for 2015 include:

- Support the development of startups located in ProspectSV;
- Develop demonstration partnership projects on City facilities; and
- Work with regional consortiums (such as iHub) to create and support the regional cleantech ecosystem.

Staff will also continue supporting emerging cleantech companies by providing business assistance, including expedited permitting assistance (special tenant improvements and industrial tool installation program) and workforce assistance (Employment Training Panel funds and On-the-Job Training funds).

Work Plan

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Lead by Example			
Demonstrate and promote clean transportation, renewable energy, smart grid, and energy efficiency technologies.	Implement City demonstration policy to allow for more clean technologies to be deployed and tested in City of San José facilities and support San José companies pursuing clean technologies.	Bring Prospect Silicon Valley online to provide infrastructure and affordable space for emerging clean technology companies. Launch ProspectSV Demonstration Programs in Spring 2014. Coordinate between the various incubators, accelerators, and innovation service providers to support emerging cleantech companies. Continue to support the advancement of cleantech jobs and sector by investing in and showcasing cleantech within City Facilities. *Status:* ProspectSV officially opened October 14 and has approximately 15 startup clients developing clean and connected technologies Convened through iHUB the six incubators/accelerators/co-working spaces in San José and	Work with ProspectSV to facilitate demonstration of emerging technologies. Continue to support the advancement of cleantech jobs and sector by investing in and showcasing technologies within City Facilities.

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
		began to bring awareness of the ecosystem actors to each other. Worked on citing JuiceBox Solar's energy storage technology as a demonstration at Gardener Community Center.	
Support small businesses looking to 'green' their operations and activities.	Support and promote resources to help 'greening' of small businesses through Business Owner Space (BOS) and other available avenues.	Continue to promote BOS Green Resource pages and Green Assessment Tool through email outreach and linking to websites such as ShopSanJosé. Continue to promote and support PG&E energy efficiency programs for small businesses where possible. *Status*: Ongoing promotion of online tools and PG&E programs.	Investigate alternative funding support for building retrofits or new construction. Promote PG&E energy efficiency programs.
Advocating Policies			
Develop and implement policies to encourage expansion of the cleantech market.	Advocate state and federal policies and programs that promote clean energy demonstration and deployment.	Continue to advocate state and federal policies and programs that promote clean energy demonstration and deployment.	Continue to advocate state and federal policies and programs that promote clean energy demonstration and deployment. Ex: Follow SB 64 Global Warming Solutions: Clean Technology Investment.
Financing Mechanisms			
Support incubators and commercialization of cleantech products and innovation clusters.	Compete for federal and state funding opportunities to support cleantech sector.	Continue supporting ProspectSV development and the launch of EIC's demonstration center. *Status:* City Staff in communication with ProspectSV to support their resident startups with business development assistance. Supported cleantech companies on cap-and-trade grant funding opportunities through CalRecycle.	Collaborate on grant applications from funding opportunities such as cap-and-trade funding, the Small Business Innovation Research program, and California Energy Commission.
Strategic Partnerships			

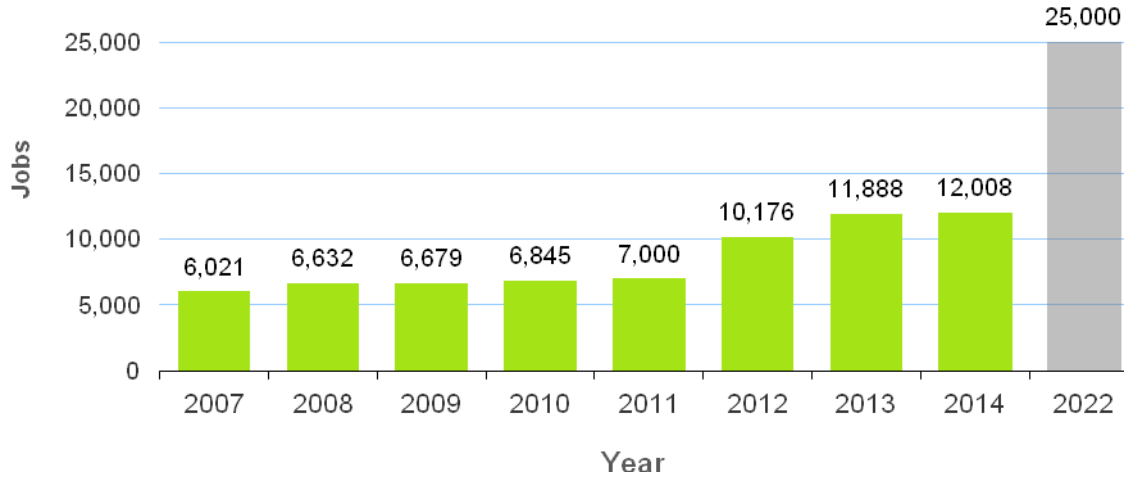
Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Create long-term partnerships that foster the growth of cleantech industry within San José. .	Partner and support cleantech companies and workforce training providers to develop and promote cleantech training opportunities.	Coordinate with Silicon Valley Manufacturing Roundtable. Continue to expand partnerships for workforce development, including PG&E-funded trainings. Continue relationship with strategic partner, Cleantech Open *Status:* Continued to convene Silicon Valley Manufacturing Roundtable and brought topics related from agencies such as Lawrence National Labs, PG&E, and the Electric Power Research Institute on energy savings in the manufacturing process.	Partner with San José State University's Battery University program to further its linkages to local employers. Continue to work with the Silicon Valley Manufacturing Roundtable. Create partnerships with technologies in the Internet of Things (IoT) sector and find areas where integration can happen between cleantech and IoT companies.
Formation of Strategic Partnerships focused on cleantech deployment strategies.	Connect Green Vision platform to nationally significant research teams, research and development resources, and commercialization support.	Provide opportunities for local cleantech companies to connect to regional, state and federal programs that can support their business (including the California iHub initiative and the National Network for Manufacturing Initiative). Through work with the Silicon Valley Manufacturing Roundtable, look for opportunities to help companies commercializing cleantech products connect with manufacturing service providers to help develop their products and move them into full-scale production. *Status:* Completed applications for the Investing in Manufacturing Communities Partnership (IMCP) designation as a Manufacturing Community, and the Economic Development Administration (EDA) i6 Cluster grant application with ProspectSV for a manufacturing program to be available	Further the work of iHub to advance incubators, accelerators, and co-working spaces in San José. Through coordination with ProspectSV and its demonstration center, assist companies commercializing cleantech-related products work with manufacturing service providers to help develop the products and move them into full-scale production in San José.

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
		through their Demonstration Center.	
Communications and Engagement			
Attract and retain cleantech companies to locate in San José.	Provide information to small businesses, emerging cleantech companies, and large, established companies about the benefits of locating in San José, and provide support for companies looking to locate in the City.	Continue to engage and support cleantech companies In collaboration with the Business Attraction, Retention and Expansion Program and a number of local partner organizations, work to support the retention, expansion and attraction of cleantech companies in San José. Convene companies associated with GV Goal 1 to begin an ongoing dialogue that helps identify resources and opportunities that support their ongoing growth and success. *Status:* Held Clean and Emerging Technology Summit to share agency resources, including information sharing, panels, and networking.	Convene companies around industry-specific issues such as building efficiency regulations and supporting technologies, transportation optimization, or other cleantech topics. Work to understand industries and provide assistance as appropriate. Connect with business sectors including, energy storage, solar, and energy efficiency systems. In collaboration with the Business Attraction, Retention and Expansion Program and a number of local partner organizations, work to support the retention, expansion and attraction of cleantech companies in San José.

Performance Metrics

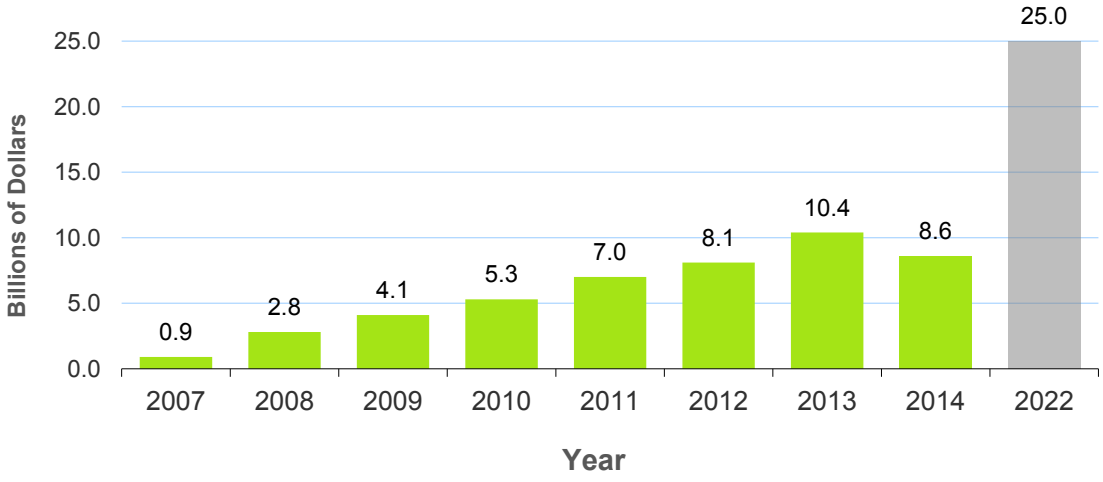
Clean Tech Jobs

Target 2022: 25,000 Jobs



Cumulative Venture Capital Investments Locally

Target 2022: $25 Billion



Green Vision Goal 2

Reduce Per Capita Energy Use by 50 percent

Energy powers our lives. We depend on it to run our homes and businesses. To reach the Green Vision energy reduction goals, San José needs the participation and support of everyone in the community.

Achievements and Successes

The Strategic Energy Action Plan was adopted by Council in June 2010. The initial set of goals focused on the built environment and identified strategies for achieving the energy and renewable goals associated with Green Vision Goal 2 (reduce per capita energy use by 50 percent) and Goal 3 (receive 100 percent of electricity from renewable sources). The Strategic Energy Action Plan activities also support other Green Vision goals, including cleantech jobs (Goal 1), green buildings (Goal 4), zero waste to the landfill (Goal 5), and energy-efficient streetlights (Goal 9). A new, updated Strategic Energy Plan framework will be presented to Council for input and consideration in late spring 2015. The goal of the updated framework will be to seek strategic direction from Council so that staff can develop a plan that achieves the City's objectives.

A significant reduction in per capita energy use will require a combination of increased efficiency and conservation. A detailed update on the Strategic Energy Plan is currently provided semi-annually, once to Council through the Green Vision Annual Report, and then to the City Council's Transportation & Environment Committee each fall. Some associated achievements are highlighted in this chapter.

Downtown City of San José at night

Leading by Example: Reducing Energy Use in City Facilities

In order to lead the community by example, the City has focused on reducing energy usage throughout its internal operations and building stock. To accomplish this, the City hired an Energy Service Company (ESCO) to provide energy management services to supplement energy efficiency, conservation, and generation activities. Through a competitive process in 2012, the City obtained the services of OpTerra Energy Services (formerly Chevron Energy Solutions) to provide energy management design, engineering, procurement, and implementation services. Upon completing an analysis of potential energy projects within several City facilities in 2013, OpTerra began design and engineering work on numerous projects in 2014, including LED streetlight conversions, renewable energy installations, HVAC equipment replacements, indoor and outdoor lighting upgrades, and water efficiency retrofits. Design and engineering work has finished for the streetlight conversion portion of the program, and all procurement of materials and installation services was completed in November 2014. Installation work on 18,127 new LED streetlights began in December 2014, with anticipated completion in May 2015. Design work for the remaining energy improvement projects will continue into mid-2015, with implementation expected in the summer, and completion anticipated in autumn 2015. Additional information about the LED streetlight conversion project can be found in Goal 9.

Strategic Partnerships

Silicon Valley Energy Watch Advances Energy Efficiency and Conservation in Communities

In 2014, San José continued focusing on regional coordination to achieve energy reductions at the community level through the Silicon Valley Energy Watch (SVEW) program, an ongoing collaboration between Pacific Gas and Electric Company (PG&E) and the City of San José.

The City administers the SVEW program to deliver energy efficiency services, outreach, and policy coordination to multiple customer sectors across Santa Clara County. The current program runs through December 2015 and continues many of the programs offered in the past. These efforts include helping moderate-income homes, nonprofits, schools, and small businesses implement energy efficiency upgrades while securing all available utility rebates and incentives. SVEW also provided a Strategic Energy Assistance program including no-cost comprehensive energy audits for public agencies. SVEW also added new and expanded program elements to assist schools in preparing for Proposition 39 funding. During the 2013-2014 program cycle, SVEW delivered 850 energy efficiency retrofit projects to Santa Clara County utility customers, reducing energy use across all sectors by over 11.5 million kilowatt-hours (kWh) – enough to power nearly 1,060 homes for one year. SVEW also completed 442 home retrofits for low- and moderate-income residents, and saved Santa Clara County

Acterra Green@Home volunteers on a house call, discussing a resident's energy profile and current energy-saving activities

utility customers more than $1.7 million on their annual energy utility bills.

Community Energy Champions Grants. In 2013, as part of a two-year grant cycle, SVEW awarded $300,000 to four nonprofit organizations and one public agency to implement a wide range of education, behavior change, and community outreach on energy efficiency and conservation. The 2014 results for the Community Energy Champion Grantee projects include:

1. Acterra - Green@Home, a residential energy efficiency program that features online software diagnosis and varying tiers of direct, volunteer-driven customer engagement. The program faced significant data collection challenges with the data management company it contracted with which led to a decreased participation rate and lowered the ability to perform statistical analysis and as a result Green@Home was not able to obtain meaningful information.
2. Center for Training and Careers - EnergizeNOW, an effort that combines training of low-income and vocational students with outreach and retrofits among senior and mobile home communities. After an in-depth training period, the program ultimately reduced electricity consumption by 31,459 kWh.
3. City of Cupertino - Sustainable Education & Economic Development (SEED) Collaborative, a sustainability framework that seeks to engage schools and businesses in Cupertino and Mountain View by using the GreenBiz checklist, developed by the City of Cupertino in 2011 as part of a first-round CECG grant. The program engaged more than 130 Cupertino and Mountain View businesses and certified eight new organizations, with 20 more actively seeking certification. The program created a draft financial guidebook to energy efficiency programs available to businesses within PG&E territory, and will help businesses navigate energy efficiency program offerings.
4. Foothill-De Anza Community College District - The One Million Kilowatt Hour Challenge, a project that combines robust building analysis and energy retrofits with behavioral outreach to students. The goal was to raise student awareness of the need to reduce energy consumption on the Foothill College campus. During the grant period, more than 300 students were engaged through in-class presentations, resulting in a 5% reduction in electricity usage tracked through energy use surveys and pre and post presentations.
5. San José State University Research Foundation - The Green Ninja Project, an effort that will measure and reduce household energy use through an online tracking tool and provide education for students. Nearly 600 K-12 and college level students received information about energy conservation. Participants showed an average reduction in energy use (kWh) of 11 percent and an average of a 9 percent increase in awareness in actions related to in global warming topics. San José State University conducted surveys before and after to track progress.

Students participate in the Green Ninja Project

Financing Mechanisms

Property Assessed Clean Energy (PACE)

Historically, local governments have formed improvement districts to fund public improvements such as streets, sidewalks, or sewers through the issuance of municipal bonds that are secured by special assessments or special taxes. PACE programs utilize improvement districts for property owners to finance energy efficiency, water efficiency, and renewable energy projects on existing residential and commercial structures through a property owner's voluntary agreement for a special assessment or tax placed on the property tax bill. PACE provides financing for energy improvements over time without requiring the property owner to make a large initial investment.

In December 2013, Council authorized joining three Joint Powers Authorities to offer multiple PACE programs in the City of San José. The various PACE programs formally launched at the end of May 2014 and to date74 contractors have been trained and 195 residential projects, valued at $5.3 million, approved for implementation. While staff anticipates growth in the commercial sector over time, currently only two commercial projects are under development. Commercial projects are more complex than residential ones and have a much longer lead time. Per Council direction, the Finance Department released a Request for Proposals (RFP) for a third party administrator to administer and finance a City-run PACE program. The RFP was issued in September 2014 and one proposal was received. The Finance Department is currently evaluating the proposal and anticipates bringing a recommendation to Council in spring 2015.

Energy Services Company

To support the ESCO related project implementation costs, staff released an RFP in January 2014 for financial assistance to fund such energy improvements. Council approved execution of a master equipment lease-purchase agreement with Banc of America Public Capital Corporation in May 2014 for a total amount of $30,000,000. This financing vehicle will assist in funding all design, procurement, and implementation work for the projects, including OpTerra's overhead costs, as well as all City staff costs to manager and administer the projects. Savings in utility costs resulting from implementing the energy conservation measures, as well as any equipment rebates, will be used to repay the financed loan.

Legislation

Staff continue to monitor, review, and comment as appropriate on legislation and regulation related to energy efficiency and renewable energy.

- *AB 2145: Electricity: Community Choice Aggregation* - Introduced in April 2014, AB 2145 would have limited a jurisdiction's ability to form a Community Choice Aggregation program by requiring certain restrictive programmatic and geographic conditions. Council approved staff recommendation to oppose the bill to preserve the City's right, under current law, to develop a Community Choice Aggregation program, if it so chose. Staff worked with the City representative in Sacramento to submit a letter of opposition. Due in part to San José's opposition, AB 2145 died in the Senate.

- *California Energy Commission - Title 24 update to Building Energy Efficiency Standards* - California's Building Energy Efficiency Standards are updated approximately every three years. The 2013 standards improve upon the 2008 standards for new construction of, and additions and alterations to, residential and nonresidential buildings. State regulation will continue to push energy efficiency within private sector buildings through updates to this Building Energy Efficiency Program and Code. The 2013 standards went into effect on July 1, 2014.

Local Government Sustainable Energy Coalition

The City is a member of the Local Government Sustainable Energy Coalition (LGSEC), which provides local governments with expert analysis and leadership in the areas of energy efficiency, renewable energy, climate action, and community choice aggregation.

The LGSEC gives California cities and counties an expert voice in shaping state energy and climate action regulations so the results make sense for local governments and communities. The coalition staff monitor the proceedings of the California Public Utilities Commission, the California Energy Commission and the California Air Resources Board, and submits formal comments when appropriate. When state laws and policies are converted into specific regulations and programs, the LGSEC provides a local government perspective and helps identify emerging problems.

Strategic Direction

Leading by example, the City continues to focus on reducing energy usage at municipal facilities through the implementation of energy efficiency and renewable energy projects. With the completion of the Energy Efficiency and Conservation Block Grants and change to the Energy Fund, the City will focus on the energy management services provided by OpTerra and financed through third party lending assistance. The City will continue to work with OpTerra to implement the approved energy projects to reduce energy use at municipal facilities.

In addition to reducing the City's internal energy usage, City staff will continue to leverage state and utility funding to further energy efficiency and energy conservation within the community at large where possible. To date, more than 80 percent of the City's overall energy program activities were funded by federal and utility grants and agreements. In the past, local governments have utilized American Recovery and Reinvestment Act (ARRA) funds and Utility's Public Goods Charges to implement cutting-edge and community-scale energy and climate action plans. To broaden energy efficiency work in the community, the City may want to evaluate additional energy efficiency strategies that other leading cities across the nation have adopted. Evaluation of other options will require significant staff work and appropriate funding sources will need to be identified in order to cover this investment. Given the loss of key funding streams and limited existing resources, San José will need to tap into other resources to make significant strides toward overall community-wide energy reductions.

In the past, local governments have also spearheaded the formation of regional and statewide partnerships, such as Energy Upgrade California (EUC), that bring together individual cities and counties, Councils of Government, regional government associations, state agencies, investor-owned utilities, municipal utilities, nonprofit organizations, and others to further regional energy efficiency.

Regional Energy Networks were created to leverage existing programs and provide a broader framework for supporting current local government program infrastructure.

PG&E Challenge

In 2015, the City and PG&E will be developing a campaign to engage the business sector to raise awareness around energy efficiency. The program is under development and could involve a range of activities that may help the city towards its energy goals.

Schools – Proposition 39 Funding

SVEW is working to support school districts throughout the City on their efforts to secure energy efficiency funding from the State. Proposition 39 (Prop 39) provides up to $500 million per year statewide to improve energy efficiency and clean energy in public schools. SVEW offers pre-energy audit work and assistance with developing energy expenditure plans so that schools are able to request funding from the State. SVEW will also direct its non-profit partner, Ecology Action, to assist schools with the installation of lighting improvements as well help to ensure they are aware of other incentives offered through the State and local utilities. To date, SVEW has already assisted 15 school districts in Santa Clara County and has engaged five additional districts in early 2015.

SVEW staff conducts a lighting audit at a local high school

Climate Change

San José is focusing on reducing energy use through both conservation efforts and supply-side strategies that lower greenhouse gas (GHG) emissions associated with electricity generation. Energy efficiency and conservation continue to be an effective tool for achieving California's GHG reduction targets. The 2014 energy metrics will be reflected in the 2015 annual report as PG&E's energy data is not available until mid-2015. In 2013, citywide PG&E electricity and natural gas usage (after converting to kWh equivalents) for municipal accounts was 358,691,464 kWh. This equates to approximately 22,469,567 metric tons (MT) of Carbon Dioxide (CO2) equivalents emitted. The amount of CO_2 equivalents emitted is dependent on PG&E's annual fuel mix as well as total energy usage in San José.

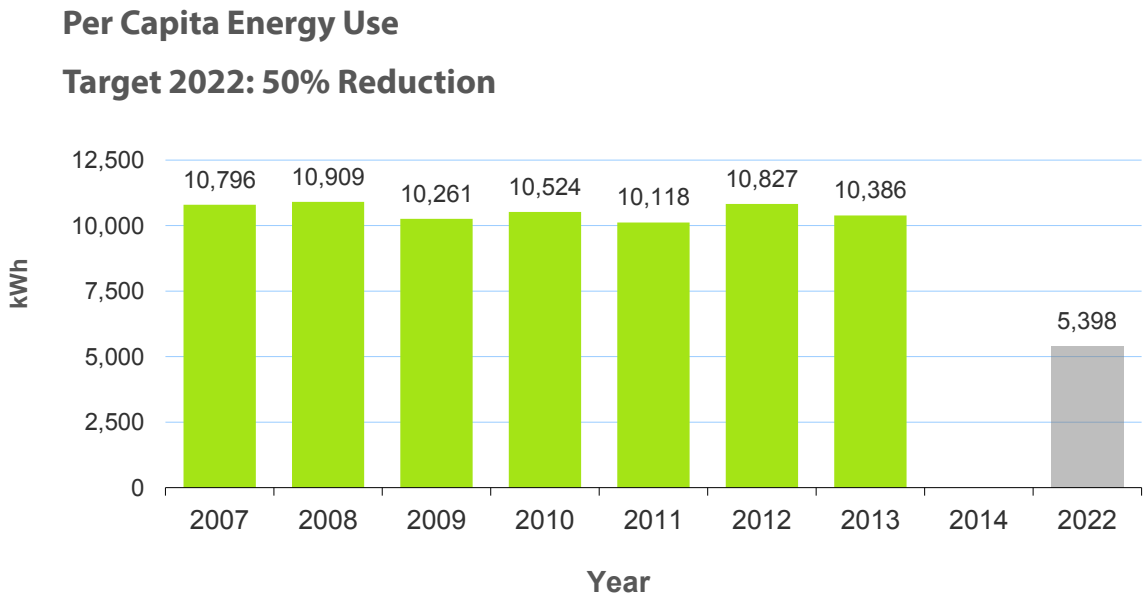
Work Plan

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Lead by Example			
Implement energy efficiency projects in City facilities.	Partner with PG&E to conduct audits; identify additional sources of funds for energy efficiency projects. Use federal and other financing sources for energy efficiency installations.	Reduce municipal energy use by 5 percent from prior year. Continue design work for energy conservation measures in City facilities and streetlights related to the ESCO Agreement. *Status*: Completed design and procurement work for the ESCO streetlight retrofit project, and began installations in December 2014. Due to equipment failure, no landfill gas was used as a fuel source at the Regional Wastewater Facility. As such, more natural gas was procured through PG&E, which resulted in an overall increase in energy consumption for Citywide facilities by 3.1% compared to the 2007 baseline, and an increase by 12.5% compared to the previous year.	Convert 16,497 streetlights through an Energy Service Contract with OpTerra, and convert a minimum of 1,850 streetlights through federal grants and City Capital Improvement Program funds. Complete design, procurement, and installation work for additional Citywide energy improvement measures through the ESCO program, including solar photovoltaic and solar thermal system installations, indoor and outdoor lighting retrofits, HVAC system upgrades, and water efficiency improvements.
Advocating Policies			
Identify and remove barriers to creating energy improvement areas and smart grids.	Work with PG&E, CEC and CPUC to advance the use of energy areas or smart grids. Implement AB 811 or PACE financing districts that will encompass both solar and energy efficiency installation, to be rolled out in conjunction with community education efforts.	Rollout of three existing JPA PACE programs; City's Finance Department will lead procurement process to identify a third-party PACE Administrator and complete exemplar agreement for the procurement process for a third-party PACE program administrator by summer 2014.	Finance Department will present its recommendation for third party PACE provider to Council in spring 2015.

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
		Status: PACE Program formally launched in May 2014. Finance issued an RFP in August 2014 with proposals due in October. Finance is evaluating responses.	
Financing Mechanisms			
Support energy efficiency programs and retrofits.	Facilitate collaboration between various community providers to develop new and existing funding mechanisms for energy efficiency improvements. Market existing rebate and incentive programs to increase their uptake rates, particularly among hard-to-reach communities and those facing barriers to clean energy implementation.	Develop financing plan and seek rebates for municipal energy efficiency projects related to ESCO Agreement. Engage in Proposition 39 and cap-and-trade revenue proceedings. *Status*: Financing plan finalized for energy conservation measures through the ESCO agreement, with a master equipment lease-purchase agreement executed in May 2014. Utility rebates have been identified for energy conservation measures, with applications for streetlight equipment submitted in 2014.	Further identify new and eligible rebates for remaining ESCO energy improvement measures and submit applications to PG&E.
Strategic Partnerships			
Expand knowledge and awareness of energy efficiency program resources.	Work in partnership with businesses, energy resource providers, Bay Area Air Quality Management District, Santa Clara County and cities, and community organizations to implement coordinated programs that minimize gaps and redundancies in program delivery. Coordinate with local workforce development and training providers to ensure a robust clean energy workforce that links to utility- and government-funded energy programs.	Continue SVEW coordination efforts with BayREN to engage the community around energy efficiency. Continue to partner with PG&E to host informative workshops and workforce training relating to energy systems and technology. *Status*: SVEW hosted 8 workshops geared towards energy efficiency contractors. Worked with BayREN to host trainings for local government code officials on changes to Title 24.	Work with PG&E to develop a new partnership program to encourage community participation in energy efficiency efforts.

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Communications and Engagement			
Implement community-wide energy efficiency programs.	Implement the Strategic Energy Plan. Increase demand for energy efficiency and clean energy education and resources. Increase the number of local residents, agencies, and businesses who, through leading by example, become energy efficiency and clean energy "ambassadors."	*Status*: Preparing updates to the Strategic Energy Plan and anticipate presenting to Council in spring 2015.	Continue SVEW efforts to work with and engage the community around energy efficiency. Solicit strategic direction from Council and update the Strategic Energy Plan. Work with PG&E to develop a new partnership program to encourage community participation in energy efficiency efforts.

Performance Metrics



Changes in PG&E's data capacity and San José's service population are just two of several potential explanations for the increase in 2013 per capita energy use in San José since 2011. Over the past few years, PG&E has been updating its data capability and improving the accuracy of the energy data as directed by the California Public Utilities Commission. Additionally, PG&E is currently filtering through all of the utility account numbers within San José territory to ensure that all of the meters are properly accounted for and representative of the incorporated area in San José. Data for 2014 is not presented in the above performance graph as it is not available until summer 2015. City staff will continue to work with PG&E to

improve the accuracy and streamline the aggregation of energy data in San José. As mentioned, the Green Vision report uses San José's "service population" to calculate per capita energy use. As defined by San José's General Plan (Page 20, appendix 3), the service population is equal to the total residential population plus the total number of jobs.

Green Vision Goal 3

Receive 100 percent of Our Electrical Power from Clean, Renewable Sources

Renewable energy comes from resources that can be replenished and that emit little or no greenhouse gases. Innovation and investment are key to providing affordable, renewable energy to the community. In achieving this goal, the City will improve the environment, create local jobs, strengthen energy security, and boost the economy.

Achievements and Successes

According to data provided by PG&E, by the end of 2014, 9,055 solar photovoltaic (PV) systems with a total capacity of approximately 80.8 megawatts (MW) had been installed at homes, businesses, and industrial facilities in San José. Demonstrating its leadership throughout California and the nation in solar installations, San José continues to look for creative strategies to increase our renewable energy generation to meet the ambitious Green Vision Goal 3 Target of 100 percent electrical power sourced from clean, renewable resources.

Bascom Library and Community Center Solar Installation completed April 2014.

Leading by Example: Installing Solar at City Facilities

In 2014, the City continued working with its selected vendor, the SolarCity Corporation, to install solar at two additional city sites: Bascom Library and Community Center, and Seven Trees Library and Community Center. These additional sites added 322 kW of solar electricity capacity. Since the City began contracting with SolarCity in 2012, 17 solar PV installations totaling 2.19 MW have been installed at the following facilities:

- Kelley Park
- Municipal Water Office
- PAL Sports Center
- South Corporation Yard
- Alum Rock Library
- Pearl Avenue Library
- Tully Community Library
- Tully Ballfields
- Willow Glen Community and Senior Center
- Almaden Library and Community Center
- Mabury Service Yard
- Berryessa Library
- Evergreen Community Center
- Evergreen Library
- Roosevelt Community Center
- Bascom Library and Community Center
- Seven Trees Library and Community Center

Solar projects at City facilities are subject to the following requirements:

1. Cash flow positive in years five through 20
2. Meet private activity analysis clearance
3. Receive financing and landlord consent
4. Meet parkland and California Environmental Quality Act (CEQA) clearance

To date, 30 solar energy systems have been installed at City sites, generating 4.82 MW of clean energy. Although the City's agreement with the SolarCity Corporation expired in June 2014, staff continues to work with the City's selected Energy Services Company, OpTerra Energy Services, to design additional solar energy systems for several City facilities. Design work on the newer systems is expected to be complete in mid-2015, with procurement and installation to occur towards the end of calendar year 2015. These solar energy systems will be City owned assets, rather than administered through a power purchase agreement as with the SolarCity projects. Equipment and installation costs, as well as contractor overhead and City staff time for this solar implementation work is being funded by the master equipment lease-purchase agreement through Banc (sic) of America Public Capital Corporation.

Staff is also continuing to explore opportunities for solar generation at the Regional Wastewater Facility. The current strategy is to identify options for solar installations on new building rooftops and for parking shade structures, however those improvements may not occur at the site for the next several years. Staff, at this time, is not identifying opportunities for solar fields on the facility bufferlands as this option was limited during the environmental impact report approval process.

Solar installed at City facilities	Energy (MW) capacity installed	Estimated savings over useful life of systems
Total solar installed in 2014	0.322	$198,000
Total solar installed to date	4.82	$9,519,982

Property Assessed Clean Energy Program (PACE)

As discussed under Goal 2, PACE programs are assessment districts that finance renewable energy projects on existing residential and commercial structures through a special assessment or special tax placed on the property owner's property tax bill. These programs can provide financing for renewable energy improvements over time without requiring the property owner to make a large initial investment.

In December 2013, Council authorized joining three Joint Powers Authorities to administer a PACE program. PACE formally launched at the end of May 2014 and resulted in 195 approved residential projects and two commercial projects. Per Council direction, the Finance Department released an RFP to have a third party administer a City-run PACE program. The RFP was issued on September 10, 2014 with proposal due date of October 15, 2014. The Finance Department is currently evaluating the proposals and anticipates bringing a recommendation to Council in early 2015.

San José Environmental Innovation Center

In 2012, the City secured a $2.35 million grant from the Economic Development Administration (EDA) of the U.S. Department of Commerce for the procurement and installation of solar PV panels at the Environmental Innovation Center (EIC), which requires $1 million in matching funds from the City. A PV system will be installed on the rooftops of the EIC's warehouse and Household Hazardous Waste building, and on newly constructed car shelters throughout the western parking lot. The PV system will generate a minimum of 591,000 kilowatt-hours (kWh) of electricity per year. The size of the PV system is anticipated to make the EIC a net-zero electrical facility (i.e., the annual amount of electrical energy produced onsite will equal the annual amount of electricity used by the building when in operation). Installation of the proposed PV system could result in achieving Leadership in Energy and Environmental Design (LEED) Platinum Certification. Phase II construction is anticipated to achieve LEED Silver Certification, at minimum. PV system construction is expected to begin in 2015 following a Request for Bid procurement process. More details about the EIC are described in Goal 1 and Goal 5 chapters.

Legislation

On the state level, the City continues to actively monitor and, where appropriate, comment on legislation and regulation related to energy and renewable energy.

The City, through its membership in the Local Government Sustainable Energy Coalition, was successful in advocating for a 20 year term for the feed-in-tariff through net energy metering. This will continue to incentivize renewable energy system installation throughout the state.

The net energy metering (NEM) program is an electricity tariff billing mechanism designed to facilitate the installation of customer-side renewable generation. Currently, customers who install and operate small (1 megawatt (MW) or less) renewable generation facilities may choose to participate in a NEM tariff. Under NEM, customer-generators receive a full retail-rate bill credit for power generated by their on-site system that is fed back into the power grid during times when generation exceeds onsite energy demand. The credit is used to offset the customers' electricity bills, and may be rolled over to subsequent bills for up to a year.

NEM is an important element of the policy framework supporting customer and third-party investment in grid-tied distributed renewable energy generation, including customer-sited solar photovoltaic (PV) systems. The majority of NEM customers use on-site photovoltaic solar generators to provide some or all of their electricity, and feed power back to the power grid when they generate more than they need at a given time.

Strategic Direction

The City continues to partner with Pacific Gas and Electric (PG&E) to develop renewable energy generation and energy efficiency projects at City facilities, businesses, and residential homes throughout San José. The City remains a national leader in solar roof installations and leads northern California, while partnering with companies such as OpTerra Energy Services (formerly Chevron Energy Solutions), and Zero Waste Energy Development to increase renewable energy generation at City facilities and at the San José – Santa Clara Regional Wastewater Facility. As the City plans to add additional solar installations in the future, it will need to identify funding to cover Public Works staff time to review design specifications and manage project construction.

Climate Change

Currently the state requires energy providers, including PG&E, to increase the mix of renewable energy in their energy portfolios to 33 percent by the year 2020. Since San José receives the bulk of its energy (both electricity and natural gas) from PG&E, the overall renewable power supply will be dependent on PG&E's generation sources.

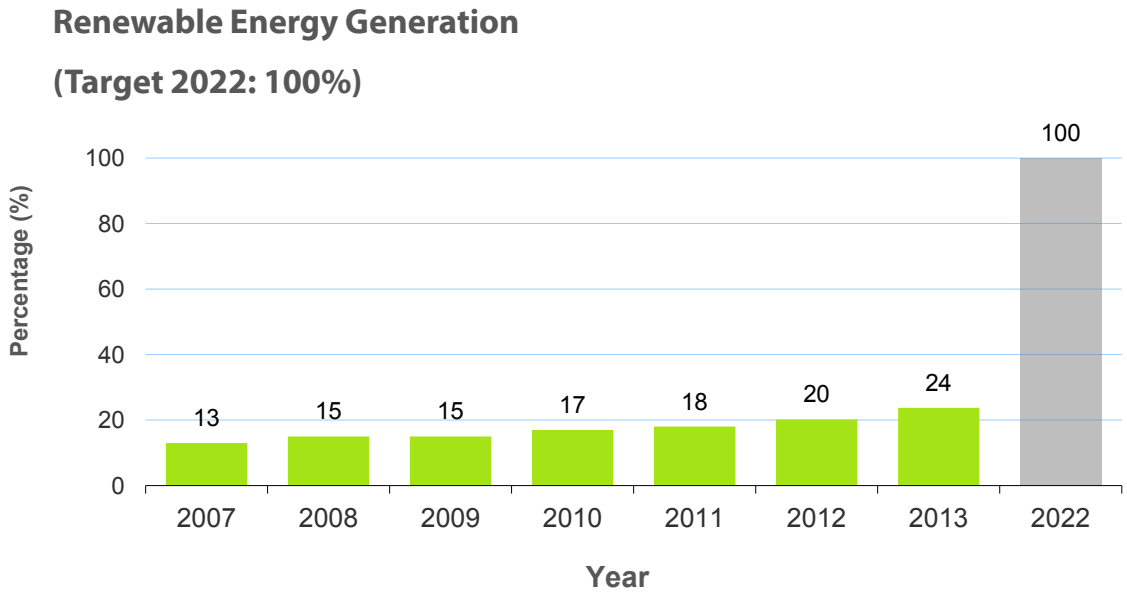
In 2013, 22 percent of PG&E's electric supply came from eligible renewable resources. Eligible renewable resources do not include nuclear energy or large-scale hydroelectric power. The 2014 verified PG&E data is not available until mid-2015; therefore, 2014 GHG emissions will be calculated and reported at that time. San José's total community-wide electricity use in 2013 was 6,077,146,285 kWh, which created 1,177,045 metric tons of carbon dioxide (CO_2) equivalent emissions. As mentioned, the CO_2 equivalents depend on the annual fuel generation mixture used to produce PG&E-supplied electricity. PG&E's fuel mixture can change from year to year, depending on many different variables. For example, in a drought, hydroelectric resources are significantly constrained and therefore a utility must employ another fuel source to overcome the deficit.

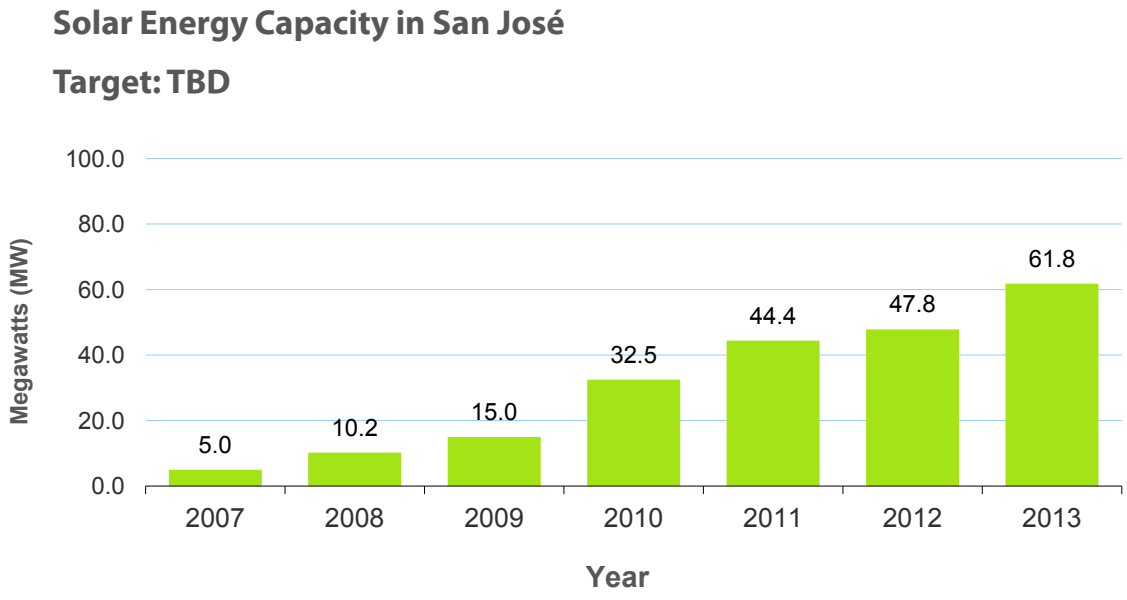
Work Plan

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Lead by Example			
Install solar at City facilities.	Power Purchase Agreement RFP finalized and available for all City facility solar projects; remove barriers to solar installation for all City facilities. Proceed with solar design and installation work as administered through the energy services company (ESCO).	Complete preliminary analysis, design work, and construction for up to five additional solar systems. ***Status:*** Completed the design and installation for two additional solar systems through the end of the PPA contract with SolarCity. Commenced design work for six additional solar energy systems with the ESCO, OpTerra Energy Services.	Complete design work and construction of six additional solar energy systems with the ESCO, OpTerra Energy Services. Continue exploring opportunities for solar energy installations at the Regional Wastewater Facility, including rooftop space and parking shade structures.
Advocating Policies			
Remove regulatory barriers to widespread adoption of solar.	Work with CPUC, utilities and others to establish fair, appropriate, and reasonable tariffs to encourage expansion of solar.	*Status*: Successfully worked through LGC to advocate for a net energy metering tariff as required in AB 327 (Perea, 2013). Ultimately, this will help to continue incentivizing renewable energy systems across the state.	Continue to support strategic partners like the Local Government Coalition to advocate for state-wide policies that advance renewable energy.
Financing Mechanisms			
Support solar programs for rental markets; and other innovative financing mechanisms.	Work with city departments, CPUC, PG&E, and CEC to implement solar programs for multi-family and low-income residents; develop integrated financing offerings for the community.	Continue to monitor, review, and participate as needed in the cap-and-trade program. *Status*: Monitored state's auction proceedings and looked for opportunities to receive funding. Governor directed cap-and-trade funds to High Speed Rail and other transit projects.	Continue to support strategic partners that advance financing mechanisms for renewable energy.
Pursue implementation of clean energy municipal financing for the community.	Participate in regional efforts and examine development of City-wide clean energy financing.	Rollout of three existing JPA PACE programs; City's Finance Department will lead procurement process to identify a third-party PACE Administrator and complete exemplar agreement for the procurement process for a third-party PACE program	Finance Department will present its recommendation for a third-party PACE provider to Council in spring 2015.

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
		administrator by Summer 2014. *Status:* In JPA Administrators formally launched PACE in May. In September, Finance Department issued an RFP for a third-party PACE provider. RFP for supplementary PACE program administrator was released in Fall 2014.	

Performance Metrics





The above graph of Solar Energy Capacity in San José represents the total Solar Energy Capacity throughout all homes, businesses, industrial facilities, and municipal facilties within San José.

Green Vision Goal 4

Build or Retrofit 50 Million Square Feet of Green Buildings

An estimated 70 percent of a community's total energy use and 16 percent of its water use is associated with buildings. Green buildings reduce energy and water use, incorporate sustainable construction materials, and result in significant greenhouse gas reductions.

Achievements and Successes

Nearly one million square feet (SF) of certified private sector green building space was added to the inventory in 2014. The amount of retrofit green commercial building square footage is 533,492 SF. The amount of new certified commercial green building square footage is 434,189 SF. More than 2.1 million SF of City facilities have achieved green building certification since 2004.

303 Almaden Boulevard achieved LEED Gold certification for an existing building in 2014

Leading By Example: City Facilities

Originally adopted in 2001 and updated in 2007, the Municipal Green Building Program City Council Policy 8-13 requires the City to achieve LEED Silver certification for all City projects larger than 10,000 SF and to identify opportunities to certify existing municipal buildings. This policy reflects the City's commitment to provide leadership on the planning, design, construction, management, renovation, operation, and demolition of green buildings. LEED certification involves documentation of the project's energy and water efficiencies and other environmental attributes. The documentation is submitted with appropriate fees to the U.S. Green Building Council (USGBC) for certification. To date, 21 City facilities have achieved LEED certification and have contributed approximately 2.1 million SF towards achieving Green Vision Goal 4.

The total volume of all municipal green building square footage remains at 2,132,754 SF as no new certifications were obtained in 2014. Following the completion of its 158,500 SF expansion, the San José Convention Center received a LEED Silver rating for New Construction in January 2015. Additionally, completing the LEED certification process for the 47,157 SF Environmental Innovation Center is in progress, which a LEED Silver rating for New Construction is expected for the facility. These two facilities will add an additional 205,657 SF of green building space to the City's inventory. However, after more than 10 years of replacing older structures with new libraries; community centers; fire and police stations; as well as a new airport terminal and City Hall, the City of San José's construction of new municipal facilities is drawing to a close. As time and resources permit, the City will try to revisit possible participation in the LEED Volume Program for Operations & Maintenance to certify the existing building stock in the future.

Private Sector Green Buildings

The Green Building Ordinance requires commercial projects larger than 25,000 SF and residential projects greater than 10 units to pay a deposit calculated at 30 cents per SF ($30,000 or 10,000 SF maximum). The projects must achieve minimum certification levels in to order to receive a refund of the deposit when formal certification is received from USGBC or from Build It Green, another certifying organization, or forfeit the deposits.

LEED Gold window marker at LPA, Inc, a sustainable design architecture firm

A total of 41 commercial/industrial projects, 53 multi-unit residential projects (equaling approximately 3,013 units) and 202 single-family detached residences were subject to paying a Green Building Deposit in 2014. Of these, 13 commercial/industrial projects, 31 multi-unit residential projects (174 units), and 126 single-family detached residences received final building permits. A total of $795,785.00 of Green Building deposits were collected in 2014. Approximately $59,890 of the total Green Building deposits collected was refunded.

According to the USGBC a total of eight projects received LEED certification in 2014. This includes one standard certification, one Silver certification, and six Gold certifications. Build It Green indicates that approximately 1,094 residential units (including single family and multifamily) were Green Point rated in 2014.

City Green Building Retrofits in 2014

Nearly one million square feet of certified private sector green commercial building space was added to the inventory in 2014. The amount of retrofit green commercial building square footage is 533,492 SF. The amount of new certified commercial green building square footage is 434,189 SF.

Legislation

On November 5, 2013, Council approved an ordinance amending Title 24, Part 11 of the San José Municipal Code to adopt the California Green Building Standards (CALGreen) Code. This ordinance maintains the City's consistency with various state code standards published by the Building Standards Commission (BSC) every three years. The 2014 updates pertain to any building or structure that applies for a building permit on or after January 1, 2015, regardless of its entitlement date.

As mentioned in the Green Vision Goal 2 chapter, AB 1103 requires the disclosure of a building's energy data to prospective buyers, lessees, or lenders financing the building. If directed by Council, staff will evaluate policy options to build upon this legislation.

Strategic Direction

In 2012, Council approved a recommendation that San José not pursue any updates to the private sector green building policy to address existing building and retrofit. As stated earlier, this allowed staff adequate time to monitor implementation of the existing private sector policy as well as evaluate requirements of the state's CalGreen building code. However, to reach the Green Vision goal of 50 million SF of green buildings, the City will need to define green building standards for existing building stock and develop policies to address existing buildings and retrofits--even taking into consideration state efforts to incorporate more environmental elements into the building code

To date, the City has focused on encouraging businesses to move into vacant buildings, and welcoming continued investment in home remodels. Since energy is a major element of green buildings, increasing awareness of energy performance and providing tools to enable energy efficiency improvements and renewable energy installations will also help lay the foundation for future green building policies. Staff will continue to monitor state activities and existing private sector policy implementation in the context of the City's green building goals and bring forward future recommendations to the Transportation and Environment (T&E) Committee and Council in 2015.

Climate Change

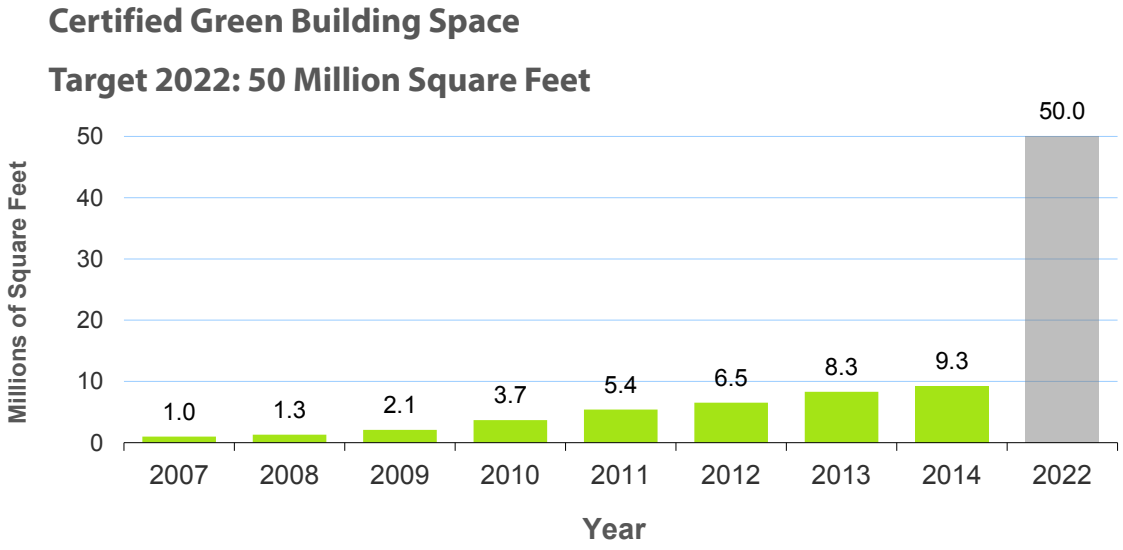
The City's building code requires new buildings to achieve certification using either the Build It Green or USGBC's rating systems, which strive to optimize building energy performance. While retrofitting existing municipal buildings will reduce some greenhouse gas emissions, planning new green building sites to improve surrounding areas will also have a positive impact. Improvements include encouraging the public to take fewer single-vehicle trips, and helping to reduce other emissions that impact public health, such as carbon monoxide, nitrogen oxides, organic gases, sulfur oxides, and particulate matter. The positive impact green buildings can have on climate change is thus closely tied to Green Vision Goal 7 – Adopt a General Plan with Measurable Standards for Sustainable Development.

Work Plan

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Lead by Example			
Implement private sector policy for new construction.	Evaluate policy effectiveness by monitoring the number of projects obtaining green building certification. Policy modifications or Deposit increase may be necessary to increase levels of Green Building.	Track state AB 1103 and specific requirements for energy benchmarking and disclosure to facilitate energy upgrades to existing commercial buildings. Discussion of AB 1103 is tracked under Goal 2. *Status*: Due to limited staff resources, staff could not track AB 1103 requirements.	Continue to evaluate the implementation of the private sector green building policy and investigate the need to revise the policy.
Certify existing City facilities using LEED Existing Building (EB) Rating System.	Participate in USGBC Portfolio Program (now known as the Volume Program).	Complete protocol pre-certification. Identify/ pursue new funding sources that are aligned with program objectives. *Status*: Due to limited resources, staff could not advance existing building stock into the Volume Program.	Depending on capacity and funding, revisit opportunity for LEED-EB certification of existing municipal facilities.

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Communications and Engagement			
Promote green building for private sector new construction through staff interactions with the public.	Develop outreach materials to support private sector green building policy for new construction and showcase municipal facilities.	Conduct additional outreach and education for staff and development community. Status: Ongoing; however, Due to limited staff resources, staff could not expand this program.	Continue outreach and education for staff and development community and explore opportunities to support 2030 district through ProspectSV partnership.

Performance Metrics



Green Vision Goal 5

Divert 100 percent of Waste from Landfill and Convert Waste to Energy

Pursuing zero waste improves our local environment, economic welfare, and the livability of our neighborhoods.

Achievements and Successes

The City of San José and its strategic partners made significant strides toward Green Vision Goal 5 in 2014. The City's efforts focused on:

- Furthering the transition of waste to energy;
- Implementing the groundbreaking policy to ban polystyrene;
- Refining the redesigned commercial solid waste system;
- Improving diversion at local events and City facilities, and enhancing residential recycling programs

Wind turbine and solar installation at the Environmental Innovation Center, featuring Habitat for Humanity ReStore, Prospect Silicon Valley, and Santa Clara County Household Hazardous Waste facility, as well as office, meeting and event space.

Diverting Waste from Landfill

San José's programs continue to make strides toward 100% waste diversion from residences, businesses, construction and demolition (C&D) projects, city facilities, and large events and venues.

Residential Program Highlights

Single-Family Dwelling Garbage Recycling. The Recycle Plus program has historically maintained a high recycling rate of approximately 61 percent. In FY2013-2014, the residential recycling rate decreased from the previous year's 61 percent to 57.8 percent. The decline is contributed to a decrease in yard trimmings collected and the rate of recycling in two of the three Hauler Districts. The overall Recycle Plus recycling rate is anticipated to improve with the addition of backend processing of garbage from single-family dwellings (SFD). In July 2014, garbage from 49,000 SFD (20 percent of the City's SFD) from one Hauler District began being processed to remove recyclables and compost organics, rather than hauling directly to the landfill. Staff plans to phase-in backend sorting in the other two Districts as well, depending on processing facility capacity. Backend processing all single-family garbage is expected to increase the residential recycling rate to approximately 80 percent. San José's multi-family sector has already achieved a recycling rate of nearly 80 percent due to coupling backend sorting with traditional recycling.

Neighborhood Cleanups. ESD continues to partner with the City's Department of Planning, Building, and Code Enforcement (PBCE) and the contracted collection (GreenTeam) and processing (GreenWaste Recovery) companies, to conduct approximately 25 Neighborhood Clean-Up (NCU) events annually. Between 2,000 and 5,000 residents attend each NCU, which are held on Saturdays and serve every San José neighborhood over a three-year cycle. In FY2013-2014 the events collected more than 2,300 tons of discarded bulky items, electronic waste, and pharmaceuticals and 74 percent of the discarded material was either recycled or diverted from the landfill.

In 2014, Hope Services participated in some of the events to salvage material for reuse. Goodwill began collecting unwanted mattresses and other reusable goods in December. Goodwill provides a local jobs program that hires chronically unemployed and homeless veterans to deconstruct unwanted mattresses. Staff continually looks for non-profit partners to participate in NCU efforts. In January 2014, PBCE began collecting bulky, expanded polystyrene (EPS), or foam packaging, at all NCU events. The enhanced program collected more than 950 pounds of EPS from residents, which was recycled at no additional cost to the City.

Large Item Collection Program. A program improvement for the Multi-Family Dwelling (MFD) sector of Recycle Plus went into effect in July 2014. As part of the 2014-2015 Adopted Operating Budget, funding for bulky item collections was incorporated in the MFD garbage rate. This will reduce blight and mitigate illegal dumping by making bulky item collection service more convenient and accessible to property managers. As a result, bulky item collections from multi-family properties have significantly increased since July 2014. Compared to seven months ago, large item collections have increased dramatically to 7,500 bulky items collected (versus 1,200) at 525 participating complexes (versus 125). Properties from all Council Districts have participated in the program, customer feedback has been positive, and blight hot spots have seen decreased illegal dumping of bulky items. At least 75 percent of all bulky items collected are processed to recover reusable or recyclable items.

Household Hazardous Waste Collection. In 2014, 8,182 San José households and 150 small businesses correctly disposed of common Household Hazardous Waste (HHW) at the City's two temporary collection events and, since September, the new HHW facility at the Environmental Innovation Center (EIC). San José participates in the Countywide HHW program to provide residents and small businesses a way to legally recycle and dispose of hazardous materials such as batteries, pesticides, paint, household cleaners, and other commodities that contain harmful substances like lead and mercury. Due to the greater convenience of the permanent HHW facility at the EIC, the number of residents and businesses correctly disposing of HHW is expected to increase by an additional 6,000 appointments in the facility's first year of operation. Retail locations participating in take-back programs for items such as electronic waste, paint, medications, and batteries, also further the convenience of proper HHW recycling and disposal for City residents.

Cars lined up to drop-off Hazardous Waste at the HHW facility at the EIC.

Community Engagement & Outreach. Engaging youth on the subject of recycling nurtures environmental stewardship. As part of the Residential hauler agreements, the haulers prepare and implement three to four campaigns each calendar year to increase diversion and resident participation as part of their agreements with the City. In the past 12 months, the garbage and recycling haulers participated in community events such as CommUniverCity's Safe and Green Halloween; San Jose Earthquakes pre-game and World Soccer Cup viewings; Great American Litter Pickup; San José Children's Faire; Pumpkins in the Park; Almaden Valley Art and Wine Festival; Environmental Alley at Christmas in the Park; Earth Day events; various presentations at local elementary and middle schools; and facility tours. ESD and the haulers also participated in the San José Public Library's Green Gift Workshops in November and December 2014.

Student dressed in a recyclable material costume for Safe and Green Halloween.

The Recycle Plus program's fleet of 184 trucks installed new truck signs in January 2014. GreenTeam began installing new labels on recycling dumpsters at multi-family properties that have large, bright images of what can and cannot be recycled. GreenWaste conducted targeted outreach to residents about moving their cars on street sweeping day, and to multi-family property managers who may not be aware that yard trimmings collection is provided with their Recycle Plus service. In 2014, the Recycle Plus service providers presented to 12 school groups and provided information and resources to school-aged children at more than 20 community events throughout the year.

Commercial Program Highlights

The Wet/Dry collection program and processing system, now in its second year, sends all commercial solid waste and organics to Republic Services' state-of-the-art Materials Recovery Facility (MRF) at Newby Island Resource Recovery Park (NIRRP) or to ZWED for organics processing. In 2014, the diversion rate was nearly 80 percent, an increase of almost 10 percent from 2013. The commercial solid waste program has been further enhanced by ZWED's new AD facility, which began processing organic material in early 2014. Staff continues to work with both Republic Services and ZWED to ensure performance standards are met, resulting in increased diversion and successful customer service.

Republic's materials recovery facility, San José's Newby Island Resource Recovery Park

In 2014, the ESD Enforcement Program's Inspectors investigated more than 1,000 cases, and visited more than 3,700 businesses to ensure that exclusive and non-exclusive franchisees are collecting waste per the terms of their agreements and are meeting requirements for the quality of services to the customer. Inspectors also helped increase construction and demolition (C&D) debris and residential cleanout material diversion by enforcing franchisee agreements and indentifying unauthorized collection and hauling. As a result, three new C&D haulers signed non-exclusive agreements in 2014. The Enforcement team also began designing a pilot program that leverages commercial hauler reporting procedures to help inspectors identify customers in need of education and assistance in proper solid waste management practices.

Restaurant's Phase-out Expanded Polystyrene Foam Food Ware

The initial phase of the EPS ordinance took effect on January 1, 2014 for all national chain restaurants in the City. All other restaurants must comply beginning January 1, 2015. The ordinance allows individual restaurants to decide which alternative packaging to use. Following a two-and-a-half year stakeholder process, in which City staff made direct contact with more than 1,000 restaurants and held more than 12 stakeholder meetings, the City created a detailed financial hardship process for restaurants that will be negatively impacted by an increased cost in packaging; allowing the potential for a one-year exemption from the ordinance. In addition, the City will produce a comprehensive local pricing survey to ensure that restaurants have the best pricing information about EPS alternatives. The last survey was conducted in October 2014. San José continues to provide trilingual information both in person and online to ensure that businesses are supported during the transition.

Construction and Demolition Diversion

In 2014, San José's C&D Diversion Program continued to meet the annual goal for facilities to recover and divert at least 75 percent of construction and demolition debris from landfill. The City's construction and demolition debris diversion goal will remain at 75 percent in 2015, which is well above the state mandate of 50 percent.

City Facilities, Events, and Venues Recycling

City Facilities Achieve 90 Percent Recycling Rate. In 2014, more than 150 City facilities including parks; libraries; community centers; the Mineta San José International Airport; the Convention Center; and City Hall achieved a 90 percent recycling rate. This remains the highest rate of any municipal recycling program in the nation. The City Facilities garbage and recycling program continues to look for opportunities to further increase the municipal recycling rate. For example, in 2014, recycling stations were installed at the new Police substation and Department of Transportation operations center.

Zero Waste Events Achieve 91 Percent Diversion Rate. During 2014, the Zero Waste Event program provided services to approximately 79 events. The program's support led to approximately 91 percent diversion of event waste from landfill, an increase of 10 percent from 2013. In March 2014, the Zero Waste Events program launched a pilot to expand the role of partner organizations and increase the program's focus on composting, comprehensive public education messages, and efficient resource utilization. Due to the pilot, the Zero Waste Event program reached nine new participants and helped those events divert material from landfill. The program's diversion increase in 2014 is largely due to composting, and requiring program participants to use compostable food and beverage products; in past years this practice was optional.

San José Environmental Innovation Center

The San Jose EIC had its grand opening in May 2014 and all three of its tenants are now operational. More than 300 people attended the opening, toured the facility, shopped at ReStore and learned about green technologies. Since opening, more than 25 events and workshops have been held in the EIC's conference rooms, and more than 15 tours were given to both City employees and the public. Tours showcase the site's green features, including wind turbines and composting toilets. EIC tenants are providing needed services to the community and include:

ReStore: The Habitat for Humanity retail operation is open to the public and accepts new and gently used building and household supplies, which they resell at deep discounts. ReStore keeps material out of the landfill while meeting a public need for affordable water heaters, furniture, appliances, fixtures, and more. Customer traffic increased from 175 in May to 764 in October, exceeding expectations. ReStore staff reported that sales in 2014 reached $200,000. The three Bay Area ReStores have diverted over 700 tons of material from the landfill.

The ribbon cutting at the San Jose Environmental Innovation Center on May 30, 2014.

Household Hazardous Waste Facility: This newest and largest HHW facility in the county began accepting waste from the public in September. Demand for the collection program is high, but the locations haven't always been convenient to a large part of San José residents or neighboring cities such as Milpitas and Campbell. Having the HHW and ReStore together in the EIC is supporting traffic to each. About 6,000 drop-off visits are anticipated during the first year of operation.

Prospect Silicon Valley: As mentioned in Chapter 1, ProspectSV provides clean technology entrepreneurs with working space and resources, meeting rooms, and a suite of commercialization

support services. The facility promotes partnering with the entire product ecosystem to help cities and companies save on energy costs, reduce energy use and carbon emissions, and improve quality of life.

Converting Waste to Energy

San José continues to lead in the development of cleantech infrastructure that can convert the community's waste – food scraps, yard and tree trimmings, and other organic waste products – into a renewable energy source.

Anaerobic Digestion Technology

In 2014, Zero Waste Energy Development (ZWED) Company opened Phase One of their dry fermentation anaerobic digestion (AD) and in-vessel composting (IVC) facility. Phase One has helped the City increase landfill diversion and produce energy from waste. The facility is now accepting and processing San José's commercial organic waste, turning it into biogas and compost. The biogas is used to power the facility's operations and ZWED plans to sell any excess to other local facilities. When Phase Two and Three are completed, the facility will have the capacity to process more than 270,000 tons of organic waste annually.

Demonstration Project for Conversion of Biomass to Fuel

The CEC approved an agreement with the City and ZWED to implement a small-scale demonstration gasification unit at the San José-Santa Clara Regional Wastewater Facility (RWF). The unit will gasify San José wood waste and biosolids into a synthesis gas, or SynGas, mixture consisting primarily of hydrogen, carbon monoxide, and carbon dioxide. SynGas will be tested for suitability for conversion to a vehicle fuel. Site and installation design began in December 2014, with construction expected to start in January 2015. This project helps develop energy generation alternatives by testing new biosolids management options, and furthers the City's waste to energy goals.

Highlighting Renewable Energy from Waste

San José hosted the 2014 Renewable Energy from Waste Conference. The City was chosen because of its successful commercial solid waste management approach, which introduced electricity-producing dry-fermentation anaerobic digestion (AD) and helped the City triple the commercial diversion rate. The conference was attended by waste generators; the government sector; waste management firms; recycling firms; energy and chemical producers; and equipment and technology suppliers. During the session "A City with a Vision: How San José Made Waste to Energy a Reality," ESD staff explained how the City transitioned into its new commercial waste system and brought the world's largest anaerobic digestion facility to San José.

San José is a member of the Bay Area to Biosolids (BAB2E) Coalition. The BAB2E is a coalition of 19 San Francisco Bay Area public agencies working together to identify biosolids management options that will maximize energy potential and decrease greenhouse gases. In 2014, BAB2E coalition has been working on an agreement with the company Synagro to implement an innovative water-based technology (SCFI Technology) that converts biosolids to energy. This regional effort is novel in the waste-to-energy arena, and will be a showcase for similar partnerships throughout the country.

Partnerships Advance the Green Vision

Reaching the Community

Staff continue to work with the San Jose Convention Center to develop public outreach material and produce signage with green tips and sustainability messages. In 2014, a wall-size sign highlighting the Green Vision goals was designed and will be installed in the San Jose McEnery Convention Center in 2015. Staff also began to work with the San Jose Giants for the same purpose.

San José, the County of Santa Clara, Santa Clara Valley Urban Runoff Pollution Prevention Program, and the San José Earthquakes are collaborating to showcase City/County solid waste partnerships and City environmental programs. The new Avaya Earthquakes stadium will feature environmentally-themed game nights and City and County branded garbage cans, composting stations, and signage. Outreach campaigns at the stadium and throughout the City will showcase Earthquakes players supporting environmental programs, including litter and waste reduction, and HHW.

Valley Transportation Authority Litter Reduction Outreach Campaign in Collaboration with the San José Earthquakes

Engaging Universities and Youth

During Fall semester 2014, ESD staff sponsored two San José State University Industrial & Systems (ISE) Engineering student teams that evaluated the Residential Street Sweeping program, identified trash hot spots along creeks, recommended cost reduction strategies, and proposed quality and operational improvements for the City.

During the 2014 football season, staff partnered with San Jose State University Athletics to promote waste diversion at five home football games and educate fans about various environmental issues. More than thirty San José State University Environmental Studies students developed and distributed Zero-Waste Tailgate Pledges to raise awareness about reducing tailgate and other waste. Nearly 400 fans displayed the pledges during the games, and public outreach during game timeouts – quizzing fans on household hazardous waste (HHW), zero waste, litter, and recycling – reached 75,240 fans.

Resource Area for Teaching (RAFT) is a San José nonprofit that provides teacher training and low-cost curriculum support materials to schools. Each year more than 400 local companies donate materials to RAFT that would otherwise end up in the landfill. RAFT then repurposes these materials into educational tools and provides them to teachers for use in their lesson plans. To support the distribution of free City-provided classroom recycling containers, RAFT works under a City grant to store and manage containers that teachers order online and pick up at the RAFT site. In 2014, RAFT distributed approximately 1,000 classroom recycling containers for San José schools.

Legislation

San José has participated in the advocacy of legislation aligning with San José's legislative priorities. San José is an active member of the California Product Stewardship Council (CPSC), a statewide nonprofit that advocates for the passage of laws that reduce the cost to municipal programs for the collection and disposal of special waste items. For example, in the FY2013-2014 legislative term, the City supported a bill addressing unused prescription drugs. SB 1014 would require manufacturers to provide for the safe take-back and disposal of home-generated prescription medicines. This legislation did not pass in 2014. Senator Hanna-Beth Jackson, the original author, will be introducing a new version of this bill in the 2015 legislative session.

Staff is closely following the County of Santa Clara's consideration of a local pharmaceutical take-back ordinance. The Alameda County Board of Supervisors unanimously adopted the first Safe Medication Disposal Ordinance in the U.S. in July 2012, requiring manufacturers to fund and implement a take-back program for pharmaceuticals. A similar ordinance in Santa Clara County could have positive ramifications for both the City's solid waste management and watershed protection efforts.

In 2014, ESD partnered with the Santa Clara Valley Water District (SCVWD), County of Santa Clara, and CPSC's *Don't Rush to Flush* campaign and will be installing medication take-back bins in pharmacies and hospitals throughout Santa Clara County to facilitate proper disposal. The permanent drop-off locations, funded by a $206,000 SCVWD grant, will educate the public about the proper way to dispose of medications.

Signed into law in September 2013, SB 254, the Used Mattress Recovery and Recycling Act, requires manufacturers to implement a plan for the collection, recycling, and disposal of used mattresses. In 2014, SB 1274, a related cleanup bill, included language to ensure that cities are compensated for collecting illegally dumped mattresses. A stakeholder advisory committee appointed by CalRecycle, which includes a City staff member, is currently tasked with developing a plan to recover and recycle mattresses as required by the law.

In September 2014 the state Assembly enacted AB 1826, a bill that requires businesses and multi-family properties that generate a specified amount of organic waste to arrange for waste recycling. This legislation targets the vast amount of organic material that could be composted instead of landfilled. The City has robust commercial and multi-family organics programs in place that exceed these legislative requirements.

Finally, staff plans to work with CalRecycle, other governmental agencies, and nonprofit stakeholders to pursue opportunities to generate additional revenue and allocate additional funding for local governments through the California Beverage Container Recycling Program. Bottle Bill modification would mitigate the need and cost of handling beverage container waste through the Recycle Plus system.

Strategic Direction

San José continues to lead by creating and implementing innovative waste programs. The City will continue in this trend by investing in long-term planning efforts and infrastructure necessary to achieve the City's Zero Waste goals. In 2015, staff will pursue continued expansion of back-end processing of garbage generated by single-family homes to remove recyclables and compost or anaerobically digest the organic portion of the waste. The residential sector will also be evaluating opportunities to conduct pilots that may divert additional material from the waste stream. Other efforts to increase residential recycling will include an education campaign featuring the San José Earthquakes, continued enhancements to the Neighborhood Clean-Up Program, the Large Item Collection Program, and increasing participation in the new HHW drop-off facility at the San José Environmental Innovation Center. The City will also continue to refine the wet/dry commercial collection program, including support of measures to improve operational efficiency and expansion of organics processing at ZWED's AD facility. City staff will continue to investigate and explore opportunities for converting waste to energy, and focus on strengthening strategic partnerships that help the City reach Green Vision goals..

Climate Change

San José is a national leader in diverting waste from landfills and implementing cutting-edge waste-to-energy technology. A majority of GHG emissions related to waste disposal comes from methane produced as a byproduct of organic decay at landfills and the transport of waste to landfills. San José's redesigned commercial waste program provides recycling to all commercial facilities, thereby diverting more waste from the landfill. The City's contracted haulers transitioned from diesel trucks to cleaner burning compressed natural gas (CNG) trucks, reducing transportation emissions. The Recycle Plus program haulers have completed CNG conversion of their collection fleets, and Republic Services has an all CNG fleet for commercial collection. When combined with routing efficiencies gained by having one commercial service provider (as opposed to more than 20), the GHG emissions from trucks serving the City have significantly decreased. Additionally, an estimated 509,500 tons of waste were trucked to a managed landfill, resulting in the capture of approximately 11,202 metric tons (MT) of carbon dioxide (CO_2) equivalents (using the California Air Resource's Control Board's Landfill Emission Tool).

Work Plan

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Lead by Example			
Readjustments for Commercial Sector.	Administer contracts with Republic Services and ZWED that offer a range of services to San José businesses while complying with state-mandated diversion and furthering Green Vision and other City policies.	Continue working with Republic and ZWED to maximize material recovery, increase business training and support, and maximize diversion. *Status*: ZWED's AD facility began	Continue working with Republic and ZWED to create energy from waste and maximize recovery of materials, focusing on system refinements, and increased training and support for businesses to recover more

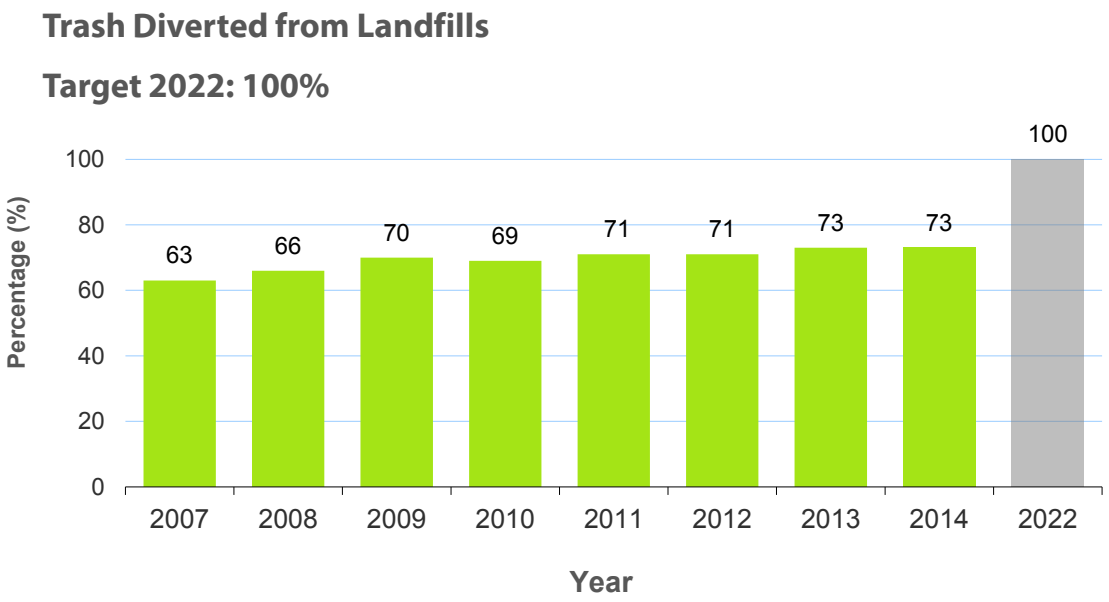
Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
		operation. Staff worked with Republic and ZWED to refine material processing and recovery to maximize diversion. Diversion increased to nearly 80 percent.	challenging materials, such as glass, in order to reach 80 percent diversion in 2015.
Construction and Demolition Waste Diversion.	Develop new program/reporting requirements for construction and demolition (C&D) facilities.	Collaborate with PBCE to ensure new CALGreen requirements are integrated into AMANDA database and permitting process. Revise and update outreach materials and online resources to reflect statewide regulations and internal, programmatic changes. Explore internal and external opportunities to enhance programmatic benefits to customers and facilities, while maximizing C&D diversion. Actively participate in region-wide discussions on implementing a collaborative third-party certification program for future years. *Status*: Continued collaboration with regional partners to develop third-party certification program.	Analyze program requirements ensuring alignment with state building code. Encourage facilities to improve operations and develop capabilities to increase diversion. Continue to seek additional C&D facilities to certify. Explore region wide partnerships to implement a collaborative third-party certification program for future years. Continue to utilize enforcement to encourage more non-exclusive haulers to dispose and recycle their collected cleanout and C&D waste appropriately.
Maximize use of Recycle Plus Residential solid waste services by residents	Develop strategies to enable residents to divert additional materials safely and conveniently.	Evaluate backend processing of garbage from single-family homes to divert recyclables and organics from the landfill and significantly increase diversion rate for Collection District B. Implement Recycle Right campaign to raise residents' awareness on recycling best practices by providing education and enforcement. Complete EIC construction and prepare for HHW facility, opening in Spring 2014. Utilize HHW outreach campaign to increase use of new facility by San José residents.	Continue to work with residential haulers on activities to address recycling correctly. Scope opportunities to expand backend processing of garbage to additional SFD customers. Collaborate with nonprofit recyclers such as Goodwill, Salvation Army, and Hope Services to provide more opportunities for residents to recycle textiles, mattresses, and other hard-to-recycle material. Expand the NCU program through partnerships with Code Enforcement and the Santa Clara County HHW staff to include

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
		Status: Initiated backend processing in District B. Added EPS collection and recycling to NCU events. Raised residents' recycling awareness with 800 outreach letters, daily inspections. Opened EIC and HHW facility.	collection of batteries and medical sharps. Increase use of on-call large item pickup services by single and multi-family customers. Continue to effectively coordinate resources with Police and PBCE to provide services to minimize blight-related activities. Utilize outreach, education, and enforcement as methods.
Eliminate litter to achieve Zero Waste and decrease blight.	Reduce use of disposable, single-use items that contribute to litter, including carryout bags, water bottles, and expanded polystyrene (EPS) takeout food packaging.	Staff will implement the provisions of the recently passed EPS phase-out set to take effect on January 1, 2014 and January 1, 2015. Collaborate with Parks, Recreation & Neighborhood Services (PRNS); Public Works (DPW) and Mineta San José International Airport (SJC) to increase the number of public water bottle filling stations and reduce the usage of disposable plastic water bottles as opportunities allow. *Status*: Implemented EPS provisions. Collaborated with PRNS, DPW, and SJC to install water bottle filling stations at five parks.	Staff will continue to implement the provisions of the recently passed EPS phase-out effective on January 1, 2014 and January 1, 2015. Incorporate waste reduction and litter prevention messages in outreach at large venues. Continue collaboration with key public venues to add more public water bottle filling stations. Initiate a pilot program to ensure right level of solid waste service for customers to prevent blight and litter.
Drive large San José events and venues toward Zero Waste.	Provide education and assistance to event organizers and food vendors to increase waste diversion. Work with public events and venues to educate visitors about sustainability.	Use stakeholder focus group results to implement a new streamlined program including a stronger role for partner organizations, effective technology use, including an online map tool, increased public education of department wide messages, and efficient resource utilization. Work with the San José Convention Center and other flagship public venues to develop messaging and displays that	Evaluate pilot for permanent program implementation. Begin the scope of a new diversion services contract for FY 2016-17. Continue to partner with SJSU Spartan Athletics on public education and zero waste tailgating during home football games in 2015. Work with the San José Convention Center and other

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
		educate visitors about various green features of the facility and its operations and encourage similar actions at home or work. Work with the Earthquakes to create permanent green messaging and displays as the new stadium *Status*: Successfully implemented streamlined Zero Waste events pilot and worked with the San José Convention Center, Earthquakes, and public venues to develop and promote green vision messages.	flagship public venues to develop messaging and displays that educate visitors about various green features of the facility and its operations and encourage similar actions at home or work. Work with the Earthquakes to create permanent green messaging and displays at the new stadium.
Strategic Partnerships			
Develop waste-to-energy technology infrastructure at the City's Regional Wastewater Facility (RWF).	Collaborating with regional and state public partners as well as private planners and investors will provide the most efficient solution for waste diversion and energy production.	Implement demonstration unit at RWF for one year gasification pilot using wood waste and biosolids as feedstock Evaluate opportunities for fats, oil, and grease (FOG) collection and processing with private sector partners to determine feasibility of design and construct pilot FOG receiving station at the Plant. *Status*: Gasification pilot feasibility study was published by the City in April 2014, and recommended proceeding with a demonstration project. The FOG pilot initiative was deferred by staff in FY2013-14 due to capital planning and construction efforts underway at the RWF and is currently estimated to start in 2019.	In collaboration with private entities, construct and operate demonstration gasification unit to assess conversion of wood waste and biosolids into a synthesis gas. Berkeley Lawrence Berkeley National Laboratory, in partnership with the City and ZWED, will administer a $4.3 million CEC EPIC grant and will recommend actions to enable further deployment of AD for solid waste-to-energy. Continue monitoring ZWED AD system performance. Work with the state and other funding agencies to create opportunities to fund WTE demonstration and commercial projects in San José.
Work in partnership with public and private organizations to support San José's Green Vision goals.	Collaborate with a variety of regional public and private organizations.	Develop campaign with the San José Earthquakes to promote waste and litter reduction. Work to expand the state Bottle Bill as part of a regional and/or statewide program to provide	Expand fan outreach at Earthquakes games. Partner with Stanford University's Sustainable Cities class to identify strategies that will increase residential HHW

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
		resources to reduce litter. *Status*: Promoted waste and litter reduction at five San Jose Earthquakes home games and five World Cup special events.	appointments. Develop communication plan that pools resources from the EIC's tenants to promote and educate the public on available waste diversion programs. Collaborate with SCVWD, County of Santa Clara, and CPSC, to purchase and locate medication disposal bins in the RWF tributary area, and outreach proper use. City staff on the state Mattress Advisory Committee will provide technical input on the design and implementation of the Used Mattress Recovery and Recycling Act Program. Work to expand the state Bottle Bill as part of a regional and/or statewide effort to provide resources to reduce litter. Work to guide legislation that supports, including funding, the City's Green Vision Plan, zero waste and waste-to-energy priorities.
Communications and Engagement			
Promote San José programs while reducing reliance on traditional marketing campaigns.	Engage the public using creative partnerships and new technologies.	Increase social media presence. Promote the use of smart phone applications for programs at local and regional conferences instead of printed materials. Collaborate with the Earthquakes to promote environmental programs though television and radio ads and in-person outreach opportunities. *Status:* Posted environmental messages through ESD, Earthquakes and other partners' social media outlets, such as the Silicon Valley Bike Party.	Continue and expand outreach campaign with San José Earthquakes to promote large item recycling, litter, HHW, and used motor oil programs via stadium events and multimedia advertisements. Explore mobile applications and mobile advertising as part of the Earthquakes campaign.

Performance Metrics



Note: 2012 and 2013 were updated to reflect actual diversion rates. The number for 2014 is estimated since the actual will not be known until July 2015. Diversion rates have flattened regionally, pointing to larger, economic drivers such as steep increases in new development and redevelopment projects.

Green Vision Goal 6

Recycle or Beneficially Reuse 100 percent of our Wastewater

The demand for potable water is expected to increase as an improving global economy brings more jobs to Silicon Valley. This, combined with a projected scarcity in our region's water supply, makes the creation of new water sources increasingly critical.

Achievements and Successes

Currently, the South Bay Water Recycling (SBWR) network consists of more than 142 miles of distribution pipelines and 9.5 million gallons of water storage, serving 785 customers in the cities of Milpitas, Santa Clara, and San José. SBWR customers range from large businesses, schools, municipalities, and more. There were 46 additional customers using recycled water and 10 previous customers that stopped using recycled water in 2014, which increased recycled water delivery by approximately 0.2 million gallons per day (MGD), or approximately 2 percent over 2013 levels. Average per customer use was down in 2014. Currently, SBWR provides an average of 14.1 MGD of non-potable recycled water annually. Overall recycled water delivery has increased between calendar years 2013 and 2014. The growth in 2014 recycled water delivery is attributed to new customers and additional use by a large golf course. San José staff continue to work collaboratively with the Santa Clara Valley Water District (SCVWD) to increase recycled water use.

Recycled water drought signage at the Mineta San José International Airport

Silicon Valley Advanced Water Purification Center: Testing Continues

Purified water storage at the Silicon Valley Advanced Water Purification Center

Partially funded by grants from the United States Bureau of Reclamation (USBR), the American Reinvestment and Recovery Act (ARRA), and the California Department of Water Resources (DWR), the Silicon Valley Advanced Water Purification Center (SVAWPC) is a joint effort by the City of San José and SCVWD to produce highly purified water. Startup, testing, and commissioning activities began in December 2012 and were completed in March 2014 when SVAWPC was officially commissioned for full production. SVAWPC was able to provide up to 8-10 MGD purified product water for blending with tertiary recycled water during peak summer months when the extra water helped to reduce hourly peaks due to high irrigation demand. SVAWPC operations continue to be managed through a joint Operations and Maintenance Agreement, including water quality monitoring and facility coordination between the San José-Santa Clara Regional Wastewater Facility (RWF) and SVAWPC. The City and District continue to review opportunities for the use of the purified product water during future periods of drought and increased water supply needs.

SBWR Strategic and Master Planning

Recycled water is a critical element of the regional water supply plan that estimates the need for an additional 35 MGD of recycled water use by 2035. The SBWR Master Plan (Master Plan), completed in January 2015, estimates that the cost of adding additional infrastructure to provide recycled water directly to customers is nearly equivalent to producing potable water from secondary sources at the RWF. As a result, the proposed strategy for the SBWR system focuses on reliability improvements to maintain current levels of service, provision of 5 MGD of recycled water contractually committed to the District for potable recharge, further analysis of potable water infrastructure, and opportunistic expansions of the non-potable system, where the costs can be recovered by the retailers. This aligns with the program goal of maintaining program expenses at cost recovery.

Collaborating with members from the San José - Santa Clara RWF Tributary Agencies, recycled water retailers, and SCVWD, the planning team will continue to review Master Plan recommendations in order to develop annual workplans and budgets for approval, to ensure that SBWR continues to meet current and future recycled water demands. The cost of the Master Plan was partially funded through a USBR grant, while the SBWR Feasibility Study was partially funded by a cost-sharing agreement with SCVWD. Each agency contributed approximately $1.2 million to the planning effort. In FY2013-14 an amount of $460,895 was received in grant reimbursement for the feasibility study.

System Pipeline Expansions

SBWR's interim strategy has been to suspend all ratepayer-funded system expansion projects until the master planning process has been completed. Developer and recycled water retailer expansion efforts, such as distribution alignments being constructed by the San Jose Water Company, could still move

forward as long as construction is fully funded by the developer or retailer. Once SBWR's planning efforts have been completed and applied to potential budget strategies, staff will be better able to inform Council on expansion policy options and strategies for further consideration.

In 2014 USBR awarded the City $4 million through its 2014 WaterSmart program as partial funding of the City's approximate $80 million Phase 1B project, completed in 2009. To date, USBR has reimbursed the City almost all of its $61 million obligation, with an estimated $7 million remaining as unfunded. In December of 2014, USBR published a solicitation for project proposals to compete for their 2015 WaterSmart program; in that same month, SBWR submitted its application to participate in funding the remaining unfunded $7 million balance. We anticipate the 2015 WaterSmart award to be announced towards the later half of 2015 leaving a remaining unfunded balance of $3 million. In addition, the City received an extension to February 2017 on its 2013 WaterSmart reimbursement award of $1.3 million on approximately $3.3 million in SBWR construction projects that would include expanded production and storage at SBWR's Transmission Pump Station. The WaterSmart 2013 grant was put on hold until the completion of SBWR's Master Plan, completed in January of 2015.

Health of the Bay

In response to concerns expressed in 1990 over potential habitat conversions and negative impacts to the lower south bay from metals and nutrients, RWF staff and external partners (USGS, UC Davis, Regional Monitoring Program) have conducted numerous studies and assessments, and have implemented treatment upgrades and programs during the intervening 24 years. These studies and assessments have documented improvements to the health of the Lower South Bay and measured the environmental benefits the RWF discharge provides to the San Francisco Bay. Improvements in treatment technology and source control programs have dramatically lowered the loads of nutrients and metals discharged to the San Francisco Bay. Water conservation and water recycling programs have lowered overall flows entering and leaving the RWF even with an ever-increasing population. Studies conducted by RWF staff, consultants, and external partners indicate that Artesian Slough, which directly receives the highly oxygenated, clean RWF discharge, has the most diverse and abundant fish and wildlife community of any slough in the south bay. The environmentally healthy community is due to the high quality freshwater effluent from the RWF mixing with restored habitats in the lower south bay, resulting in high levels of ecological productivity. The RWF discharge is a critical component to this healthy ecological system and provides an important environmental benefit to the San Francisco Bay, a point that was acknowledged by State Water Resources Control Board (Water Board) members and staff at the adoption hearing for RWF's reissued NPDES Permit in September 2014. The Water Board praised the efforts required to maintain and operate an exemplary

Outfall at the San José-Santa Clara Regional Wastewater Facility

wastewater treatment plant that provides a level of wastewater treatment far exceeding regulatory requirements. In light of this important environmental benefit RWF effluent provides to the Bay, it is important to continue to document the ecological conditions and investigate the possible environmental consequences of further decreasing effluent discharges to the San Francisco Bay.

Legislation

Significant legislative activities in 2014 included the passage of Prop. 1, California's water bond measure, which authorizes state officials to borrow $7.12 billion and repurpose $425 million in bonds approved earlier to pay for new water projects. The measure includes $2.7 billion for storage projects, such as dams; $800 million to clean up contaminated underground water; and $725 million for water recycling projects. Governor Brown proposed to spend $532 million for FY 2015-2016 in total bond funds. Recycled water was proposed to be funded at $131 million going to SWRCB for recycling, and an additional $5.7 million going to DWR for desalination projects. SBWR is working with Bay Area Clean Water Association partners and WateReuse California to position the program to participate in funding through the Bay Area's Integrated Regional Water Management Plan and similar local partnerships.

Strategic Direction

In 2015, SBWR will continue system reliability and enhancement efforts as identified through the master planning process, as well as continue its partnership with SCVWD to manage SVAWPC to improve recycled water quality and provide additional water during peak hour demands.

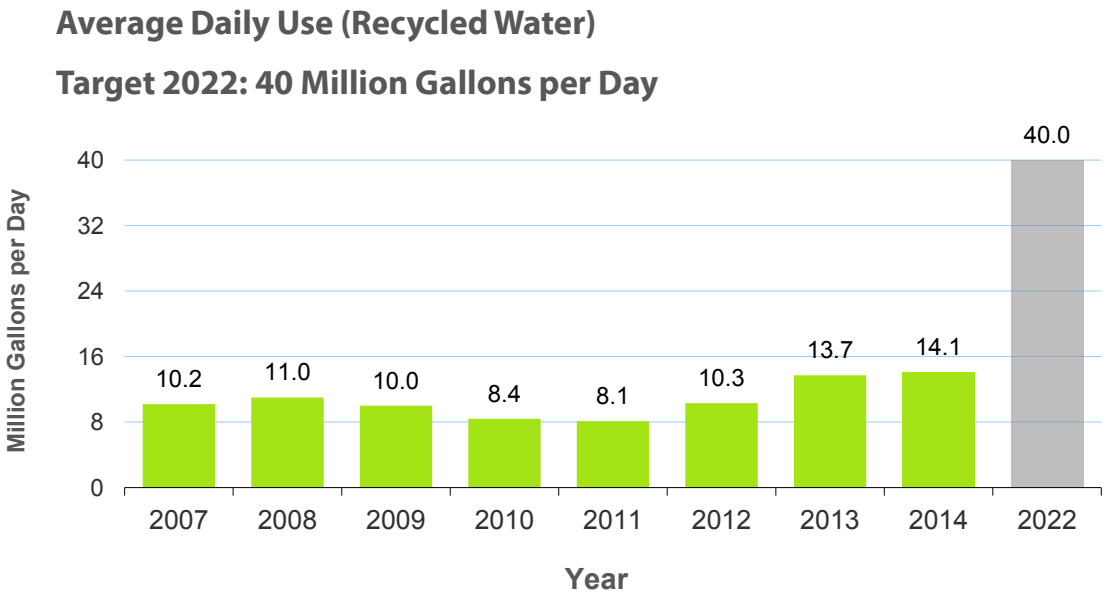
SBWR staff will focus on developing implementation plans that leverage opportunities outlined in the Master Plan, including short-term reliability and production projects such as filter and chlorine projects that will enhance production; and infrastructure improvements to add storage capacity at Yerba Buena Reservoir. Long-term improvements include reviewing potable processing technologies and identifying any opportunistic additions to the non-potable water system that could be covered by wholesale or retail rates. SBWR will continue to seek reimbursement for past pipeline expansion projects and develop a new grant strategy for projects identified in the Master Plan. Staff will continue to coordinate with regional stakeholders, including SCVWD, to determine the optimum governance structure for long-term management of the SBWR system.

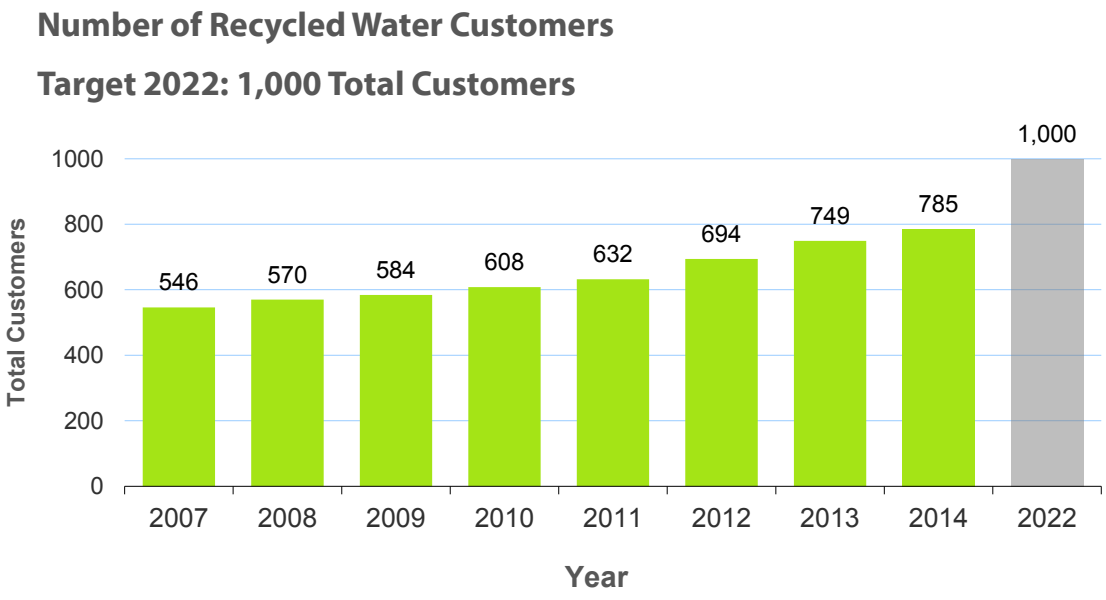
Work Plan

Strategic Focus	Proposed Strategy	2014 Work Plan	2015Work Plan
Lead by Example			
Determine the most effective and efficient options to expand production and uses of recycled water.	Identify program opportunities as part of the strategic planning process.	Complete the master planning process in collaboration with SCVWD. *Status*: Master Plan completion December 2014.	Develop a strategic implementation plan in collaboration with SCVWD for Master Plan goals.
Financing Mechanisms			
Determine funding options for recycled water infrastructure, operations and maintenance, and expansion.	Identify options as part of the strategic planning process.	Continue to work with USBR to maximize funding opportunities in support of increasing SBWR return on investment and system reliability. *Status*: Staff working to maximize grant funding opportunities for future capital expenditures. In FY 2013-2014, SBWR received $4million in grant reimbursements.	Continue to evaluate funding opportunities for strategic plan implementation, including large scale Prop 1 and Prop 84 opportunities.
Strategic Partnerships			
Develop the SCVWD and other agency partnerships to further the objectives of SBWR.	Take advantage of strategic partnering opportunities to leverage SBWR resources effectively.	Review coordination opportunities with SCVWD through the Master Plan Governance Analysis. Status: Engage RWF tributary agencies, retailers, SCVWD, and other potential partners in implementation of strategic plan recommendations.	Continue collaborative efforts with stakeholders to leverage regional resources in the implementation of Master Plan goals.
Support the state's goals for additional use of recycled water which leverage state and regional resources to meeting SBWR objectives.	Participate in regional and state recycled water efforts and forums which further SBWR objectives.	Continue to support and develop efficient and consistent regulated uses of recycled water in the region and state. *Status*: SBWR staff participating in state and regional efforts to support water recycling.	Continue to support efficient and consistent regulated uses of recycled water in the region and state.
Communications and Engagement			

Strategic Focus	Proposed Strategy	2014 Work Plan	2015Work Plan
Effectively engage potential customers and other stakeholders on the benefits of recycled water.	Increase recycled water customers and partners.	Continue to effectively collaborate with nonprofit, academic, and private sector partners to increase use of recycled water for customers along existing SBWR pipelines. *Status*: Suspended while system upgrades are being implemented.	Identify the needs for customer engagement during the transition from increased recycled water use to a period of increased potable water production from recycled water.

Performance Metrics





In previous Green Vision Annual Reports, SCVWD provided the City with potable water usage data. Due to limitations on tracking data, this performance metric will no longer be provided. As mentioned, SBWR provides recycled water to large commercial properties and public agencies. This recycled water is commonly utilized for irrigation and landscaping.

Green Vision Goal 7

Adopt a General Plan with Measurable Standards for Sustainable Development

The General Plan is the City's comprehensive policy document to guide San José's future growth, development, and day-to-day provision of services to residents, businesses, and the community at large.

Achievements and Successes

The Envision 2040 San José General Plan (Envision General Plan), adopted in November 2011, established the City's long-term vision, goals, and policies for land use, the development of transportation and other infrastructure, and the delivery of municipal services. The adoption of the Envision General Plan marks a major step and accomplishment with relation to Green Vision Goal 7 by incorporating measurable standards for sustainable development into the City's General Plan. Staff will continue to improve the measurement and implementation of sustainable development strategies for the City. Adoption of the Envision General Plan signifies a significant step in San José's evolution from a relatively small community of farms and orchards, to one of the fastest growing cities in the nation and most recently to an increasingly prominent urban center within Silicon Valley.

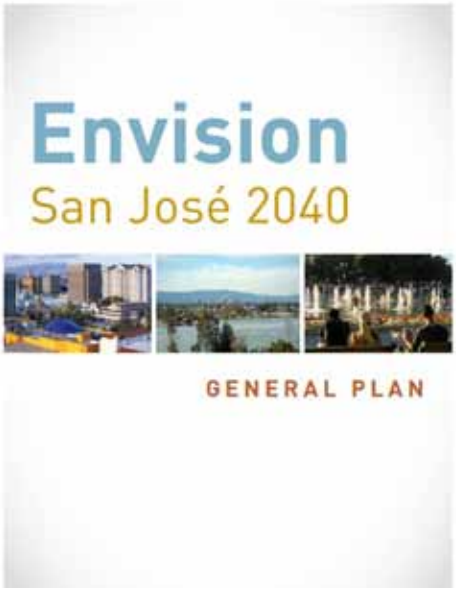
East Santa Clara Street Urban Village Community Meeting

As San José's population continues to grow, the City's urban form must further evolve to accomplish key City goals including supporting growth that is increasingly sustainable from economic, environmental, and fiscal standpoints. A key strategy of the Envision General Plan is to focus new housing and job development into key growth areas such as Downtown, North San José, and "Urban Villages." The Growth Areas identified in the General Plan are generally located along corridors with existing and planned transit including Caltrain, Bay Area Rapid Transit (BART), Light Rail, and Bus Rapid Transit (BRT).

Envision General Plan Annual Review

On October 22, 2013, the first Envision General Plan Annual Performance Review was submitted to the City Council. The report provided an update on the City's progress in achieving major strategies identified in the General Plan. This review provided an opportunity for Council to discuss the fundamental goals of the plan prior to decisions on pending land use and text amendments. Council accepted the Envision General Plan Annual Report and provided direction to continue the "jobs first" policy and the planning and implementation of Urban Villages.

At the October 2014 City Council Committee of Economic Development City staff gave a presentation on the Envision General Plan and Urban Village implementation, including an update on performance indicators as compared with performance data from previous years. For 2015, City staff will be initiating the first four-year Envision General Plan major review process. As part of this process the Envision San José 2040 Task Force will be reconvened to evaluate progress towards achieving the Envision General Plan's key goals, including those related to: Economic Development; The Jobs/Housing Balance; Fiscal Sustainability; Affordability of Housing Supply; Implementation of the Urban Village concept; and Environmental Sustainability.



Envision 2040 General Plan

Urban Village Planning and Implementation

Major Strategy #5 of the Envision General Plan establishes the Urban Villages concept to create a policy framework for most new job and housing growth to occur within pedestrian- and bike-friendly Urban Villages that have good access to transit and other existing infrastructure and facilities. Urban Villages will focus new growth in developed areas where existing infrastructure is already available, maximize the use of transit systems, and reduce GHG emissions, all of which support the plan's environmental goals.

Beginning in 2012, the City worked with property owners, local neighborhood and business associations, community leaders, and other stakeholders to launch the preparation of several strategically selected Urban Village Plans. In October 2013, the Council approved the Alum Rock rezoning, which serves as the Urban Village for this corridor. On November 19, 2013, the City Council approved a set of four Urban Village plans within the Five Wounds Strong Neighborhoods Initiative Area, including:

1. Roosevelt Park Urban Village Plan
2. Five Wounds Urban Village Plan

3. 24th and William Street Urban Village Plan
4. Little Portugal Urban Village Plan

In November 2013, Council conducted a study session on Urban Villages complete with presentations from City staff and consultants, as well as input from a panel of key stakeholders. A second City Council study session was held in April 2014 and focused on implementation financing plans for the Urban Villages.

In addition, the planning process is nearing an end for the West San Carlos, South Bascom, and the Alameda Urban Villages, expected to be heard by Council in February 2015. The following Urban Village Plans are also underway to facilitate development in neighborhoods where the private sector has expressed interest in investing:

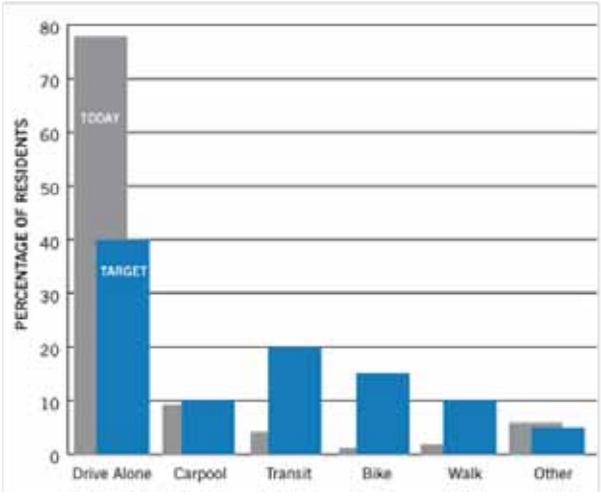
- East Santa Clara Street
- Stevens Creek
- Valley Fair/Santana Row and vicinity
- Winchester Boulevard

The Hitachi site (northeast corner of Highway 85 and Cottle Road), which was assigned the new Urban Village General Plan Land Use/Transportation Diagram designation upon adoption of the Envision General Plan, is currently under construction. The Hitachi mixed use transit village is ultimately planned to include nearly 3,000 housing units, 460,000 square feet of commercial/retail space, and 3.6 million square feet of industrial space, and is located near the Blossom Hill Caltrain station.

Transportation Innovations

In 2014, the City of San José Department of Transportation established a new Transportation Options Program to increase biking, walking, and transit use, with a goal of reducing the community's dependence on solo driving. In transportation terms, such a change in the way people move around is referred to as "mode shift" – shifting from one mode of transportation to others. The San José Green Vision targets 36 percent of all trips to be made on foot, bike, transit or other alternatives by 2022, rather than by solo-occupancy vehicle, while the Envision General Plan goal is that 60 percent of trips be made this way by the year 2040.

The Transportation Options Program team continues to improve facilities for bicyclists, pedestrians, and transit- and car-share-users, and also encourages the use of these modes. In 2014, San José constructed 19 new bikeway miles and improved many other bike routes, bringing the total miles of on-street bike lanes in San José to 240. With partners throughout the City and community, team members have also facilitated pedestrian enhancements, transit improvements, expanded car-sharing services, electric vehicle infrastructure, and other innovations to increase the sustainability of City transportation facilities. Beyond infrastructure, the team also administers Walk N' Roll San Jose, a



Envision 2040 Mode Split Goals

school-based program to encourage alternative transportation for kids that has prompted 28 percent more walking and biking at participating schools since it was launched in 2012. In 2015, pending confirmed support from the Metropolitan Transportation Commission (MTC), the Transportation Options team will begin a new program to encourage residents and employees in targeted areas to walk, bike, and take public transit.

Legislation

In 2008, the state enacted Senate Bill 375, the Sustainable Communities and Climate Protection Act, as a tool to achieve the goals of AB 32, the Global Warming Solutions Act of 2006. SB375 requires that metropolitan planning organizations integrate transportation, land use, and housing planning at the regional level to reduce GHGs consistent with AB 32.

On July 18, 2013, Plan Bay Area was approved by MTC and the Association of Bay Area Governments Executive Board. This plan includes the region's Sustainable Communities Strategy (SCS), the 2040 Regional Transportation Plan, and the Regional Housing Need Allocation (RHNA) for the 2014-2022 time period. Working in collaboration with San José and other municipalities and public agencies, the Plan Bay Area advances initiatives to expand housing and transportation choices, create healthier communities, and build a stronger regional economy. The RHNA is the state-mandated process to identify the total number of housing units (by affordability level) that each jurisdiction must accommodate in its Housing Element. In response to ABAG's updated RHNA, the City of San José will develop and submit an update to its Housing Element to the California Department of Housing and Community Development (HCD) by January 2015. This update will detail San José's strategies to accommodate its portion of the region's housing need.

Strategic Direction

Land use and transportation are inextricably linked because land use patterns create specific travel needs. Compact, mixed-use development reduces travel distances and encourages transit ridership and active transportation modes that result in lowered GHG emissions and a healthier community.

The close proximity between identified growth areas and transit facilities also show the close ties between land use and transportation. Unlike the San José 2020 General Plan, which provided considerable flexibility for residential development throughout the city, the Envision General Plan focuses residential growth in identified growth areas and prevents large-scale residential development on sites that have not been allocated new growth capacity (General Plan Focused Growth Major Strategy). As a result, San José's future growth will be focused in Urban Villages and other urban centers that leverage the benefit of existing and future public infrastructure, including public transit, bicycle lanes, mixed use development, green space, and green buildings.

Climate Change

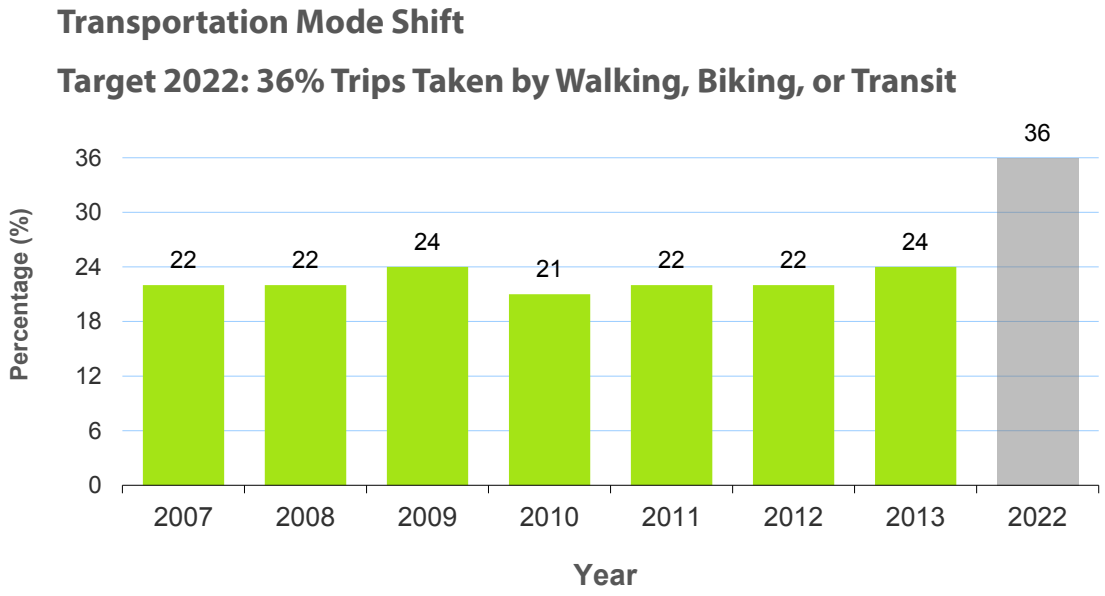
The City prepared a Greenhouse Gas Reduction Strategy in conjunction with the Envision San José 2040 General Plan to ensure that implementation of the General Plan meets the requirements of AB 32. The City has also prepared a Greenhouse Gas Reduction Strategy Compliance Checklist that supports the Greenhouse Gas Reduction Strategy through the development review process on a project level. The checklist helps to document an individual project's compliance with mandatory and voluntary measures to reduce GHG emissions. The City will continue to evaluate the implementation of the Greenhouse Gas Reduction Strategy and investigate the need to revise the draft policy. In addition, the City will continue to promote sustainable development and growth within San José through the specific targets set in the Green Vision Goals and the supplementary strategic plan established by the Envision General Plan.

Work Plan

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Lead by Example			
General Plan Update.	Complete Envision San José 2040 General Plan (adopted 11/01/11).	Continue work on Urban Village Plans. Begin the development of Housing Element under the Plan Bay Area (RHNA). The City held the 2014 Annual Review to consider amendments to the Envision San Jose 2040 General Plan in fall 2014. Approvals included three General Plan text amendments, twelve amendments to the land use diagram, and adoption of the Diridon Station Area Urban Village Plan.	Continue work on Urban Village Plans. Certify the Housing Element under the Plan Bay Area (RHNA). The City will hold the 2015 Annual Review to consider amendments to the Envision San Jose 2040 General Plan in fall 2015. These amendments are considered only once a year. The City will also hold the first four-year major review of the Envision San Jose 2040 General Plan.
Advocating Policies			
Monitor and advocate for legislation that enables the implementation of the General Plan.	Review proposed legislation and implementation of existing laws related to sustainable land use planning.	Ongoing review and analysis as needed. *Status*: Interdepartmental team has been formed to review proposed cap-and-trade program.	Continue to monitor, review, and participate as needed in the cap-and-trade program, AB 1103, and Plan Bay Area.
Financing Mechanisms			
Leverage grants.	Seek outside funding sources for	Continue applying for grants	Continue to apply for

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
	sustainability planning activity and implementation of the General Plan.	that support development of Urban Village Plans and other General Plan implementation actions. *Status*: Received grant to develop an Urban Village Master Plan for East Santa Clara Street corridor between City Hall and Coyote Creek. Also received grants to develop Urban Village Plans for the Santana Row/Valley Fair, Winchester, and Stevens Creek Village Plan Areas.	planning grants in order to support development of Urban Village Plans and other General Plan implementation actions.
Strategic Partnerships			
Strengthen advocacy; broaden partnerships.	Increase role as an advocate in state/regional planning and grow partnerships with nonprofits.	Continue participating in regional planning initiatives (e.g., Sustainable Communities Strategy). *Status*: Ongoing.	Continue participating in regional planning initiatives (e.g., Sustainable Communities Strategy).
Communications and Engagement			
Publicize Envision San José 2040 General Plan policies.	Focused civic engagement with identified stakeholders and community organizations, First Horizon village area residents.	Engage community in Envision General Plan Implementation elements, such as zoning ordinance amendments and Urban Village plans, through community meetings, website information, and other modes; engage Planning Commission in creation of Urban Village zoning districts; and engage developers to catalyze new development in focus areas. *Status*: Held more than a dozen urban Village workshops in 2014.	Continue to engage the community in Urban Village planning workshops.

Performance Metrics



The Envision San José 2040 General Plan fulfills the Green Vision goal for a measurable General Plan by establishing performance measures for a wide range of sustainability indicators. To measure the achievement of environmental goals, the General Plan incorporates the Green Vision measures, extending them through the 2040 timeframe, and identifies annual review of the Greenhouse Gas Reduction Strategy as an important indicator.

The General Plan Greenhouse Gas Reduction Strategy quantifies the anticipated amount of per capita GHG emissions reductions that would be achieved through implementation of the General Plan. While a significant portion of the quantified reductions would result from Green Vision implementation, build-out of the General Plan Land Use/Transportation Diagram, consistent with the Focused Growth Major Strategy and other General Plan policies that promote high-density, mixed-use development, will also make a significant quantified contribution to reduced GHG emissions. Reductions resulting from land use are primarily determined based upon projected impacts upon per capita Vehicle Miles Traveled (VMT), a measure of how much San José's residents drive on a daily basis. The Greenhouse Gas Reduction Strategy specifically identifies a 13 percent reduction in per capita VMT to be achieved through increases in average density and through improved access to various services resulting from mixed-use development patterns.

While the City does not have the ability to measure per capita VMT for San José on an annual basis, transportation mode data that is readily available from the Census Bureau's annual American Community Survey can be an useful indicator of overall reduction in VMT. Also, Transportation Mode Shift data directly relates to one of the General Plan transportation goals. Additionally, density and mixed-use development reduce VMT through reduction in travel distances and promotion of alternative travel modes (e.g., transit use, bicycling, and walking). These metrics are the best indicators to measure

the degree to which new development activity is consistent with the General Plan environmental sustainability goals (quantified within the Greenhouse Gas Reduction Strategy) for density and mixed-use development. As land use changes take several years to show effects, the initial data for this latter indicator will most closely reflect existing conditions rather than the effects of the new General Plan. Periodic modeling to assess the effects of land use changes and development over a four-year timeframe of the Major Review of the General Plan could provide benchmarks in the reduction of GHG emissions.

Green Vision Goal 8

Ensure 100 Percent of Public Fleet Vehicles Run on Alternative Fuel

In Santa Clara County, more than 40 percent of our GHG emissions come from cars, trucks, buses, and trains. Converting 100 percent of the City's fleet to alternate fuels not only reduces greenhouse gas emissions and improves air quality, but also models the way for others.

Achievements and Successes

At the start of 2015, the City operated 1,017 alternative fuel vehicles and equipment, totaling approximately 41 percent of the City's fleet. The City's alternative fuel vehicles include compressed natural gas (CNG), B20 biodiesel blend, plug-in electric vehicles, hybrid electric vehicles, liquid propane gas (LPG), and bi-fuel (unleaded gas and CNG). There has also been significant progress in the reduction of unleaded fuel consumption and the reduction of GHG emissions: since 2007 unleaded fuel use has declined by 20 percent and GHG emissions by 18 percent.

Car Share Parking Space in Front of City Hall

Fleet Size and Vehicle Acquisitions

After recent years of reductions in the City's workforce and fleet size, the workforce has begun to grow moderately as the economy recovers. This trend is translating to requests for additions to the fleet. The City's procurement options are better than ever for fuel efficient vehicles and in many cases alternative fuel vehicles. A significant portion of the City's progress in the area of alternative fuel vehicle count can be attributed to the use of biodiesel. While progress in the overall percentage of alternative fuel vehicles will incrementally increase, gains in reductions of fuel consumption and GHG emissions will also occur. The gains may be greater in the latter with all segments of new fleet purchases exhibiting greater fuel economy. Where the City may experience modest gains in the percentage of alternative fleet such as patrol vehicles, it will still experience reductions in fuel use and reduced GHG emissions.

Police Patrol Vehicles. In January 2014, San José placed its last new Ford Crown Victoria into service. Over the next five to six years these police vehicles will retire and the next generation of patrol vehicle will emerge. These new units have been incorporated into the patrol fleet since the beginning of 2014. Early data show a few miles per gallon of improved fuel economy, with greater economy in some cases. This is significant when considering the total miles traveled and fuel consumption for patrol operations. The patrol fleet can collectively travel more than 4 million miles and consume 500,000 gallons of fuel in one year. A few miles per gallon of improvement can reduce fuel consumption by 90,000 gallons per year, compared to the fuel consumption of the Crown Victoria. This reduction in consumption also reduces GHG emissions.

New San José Police Patrol Vehicles

Electric Vehicles and Charging Stations

In 2013 San José joined other San Francisco Bay Area cities and the Bay Area Climate Collaborative to accept 50 new Mitsubishi plug-in electric vehicles (i-MiEVs). San José received 38 of the 50 i-MiEVs for the City's internal fleet. The agreement was for a one-year lease at no cost to the City other than tax and license. The City opted to extend the lease on 27 i-MiEVs for two additional years and purchase two outright. Seven of the i-MiEVs are assigned to a City Hall motor pool available to all City employees for business needs. In 2014 City employees utilizing the i-MiEVs motor pool logged more than 1,100 transactions with an average check out time of 3.5 hours per transaction.

In addition to the 29 Mitsubishi i-MiEVs, the City added 24 new hybrid vehicles in 2014. To date, the City fleet employs a total of 169 hybrid and electric vehicles. San José participated in several grants that focused on fostering the deployment of electric vehicles (EV) and establishing the infrastructure necessary to support EV.

The City received positive feedback from City employees about the comfort, ease, and convenience of EV technology. As the variety of plug-in electric and hybrid vehicles on the market continues to expand, the

City will continue to identify further opportunities to transition the City's fleets to run on alternative fuels.

Electric Vehicle Infrastructure. San José has long sought to make the San Francisco Bay Area the EV capital of the nation. To support wider use of EVs, the City has installed a network of 53 EV chargers. The chargers support the City's all-electric and plug-in hybrid vehicle fleet and provide EV drivers – both employees and members of the public--a place to recharge when they are away from home. For a smaller segment of the population, the City's chargers are a primary means of charging their plug-in vehicles.

I-Miev used as Parking Control Vehicle

The charging stations are concentrated primarily in downtown San José to best meet the demand and serve the maximum number of users. In May 2014, ESD installed three stations at the Environmental Innovation Center on Las Plumas Road, increasing the total number of chargers from 50 to 53. The EV chargers are a mixture of Level 1 (110 volt) and Level 2 (220 volt). It would take 20 hours to fully recharge a Nissan Leaf EV using a Level 1 charger or eight hours using a Level 2 charger. All of the chargers installed thus far were manufactured by ChargePoint (formerly known as Coulomb) and are connected to ChargePoint's network. The network allows drivers to locate the charging stations and determine their availability via the internet. The technology also allows the City to collect data on charger usage, electrical consumption, and charge for non-City vehicle usage.

The City increased its charger use fee in June 2014 to ensure that the program remained revenue neutral. The two grants that helped fund the purchase and installation of the City's initial 50 chargers included a subsidy for ChargePoint's network subscription, which was expiring. As a result, the City had to assume that cost. Originally, the City charged $1.00 per hour during the day, and $0.25 overnight. The new rate is $1.25 per session plus $0.25 per kilowatt during the day, or $0.20 per kilowatt overnight. The lower evening rate (9:30 p.m. to 8:30 a.m.) was adopted to encourage EV ownership among downtown residents who don't have the access to an outlet or charger where they live. The City's charging rate is necessarily higher than the cost paid by an EV owner to recharge at home because the City's electrical rates are higher than residential rates, the fee includes the cost to the City to maintain the chargers, and the City must pay a fee to ChargePoint to operate the chargers. The fee provides credit card access to users, licenses ChargePoint's software, and gains access for users to ChargePoint's network.

In 2014 EV drivers consumed an average of 10 MWh (megawatt hour) of electricity per month to recharge their vehicles using City charging stations, diverting more than 4,500 kg of GHG emissions per month, or a total of 50,000 kg of GHG emissions for 2014.

Other Alternative Fuel Vehicles

B20 Biodiesel. The City has been using the B20 biodiesel fuel blend to support the transition to alternative fuel-based vehicles. However, the City was required to temporarily halt the use of B20 biodiesel at several facilities until it could resolve an underground storage tank compatibility issue. The City still maintains several B20 fueling stations, but the capacity for B20 refueling stations is temporarily limited. In locations of suspended B20 use, B5 is in use until completion of the infrastructure upgrade is completed. The budget for this project has been allocated and infrastructure upgrades are targeted for completion in early 2015.

Diesel Fleet. Advancements in clean diesel technology and regulatory mandates enable the City to create a cleaner environment and better air quality in San José. In 2014, the City procured 25 new clean diesel trucks for its fleet. Many of these units will replace vehicles with antiquated diesel and gas emission systems. The City's Fleet Division continues to make significant strides to comply with environmental mandates and to take advantage of technological advances. These efforts produce cleaner air and a healthier environment for the greater San José community.

New Clean Diesel Fire Truck

E85. Many of the City's emergency and general fleet vehicles employ flex-fuel technology, which allows the vehicle to run on E85 fuel. E85 is a blend of 85 percent denatured ethanol and 15 percent gasoline. Due to the controversial nature of E85 as a renewable fuel, and the lack of infrastructure, the City's flex-fuel vehicles are powered solely with gasoline. Therefore, the Green Vision report does not incorporate flex-fuel or E85 into Goal 8 at this time.

Compressed Natural Gas (CNG). CNG has gained momentum as domestic production of natural gas has increased in recent years. The current challenges with CNG still include the availability of vehicles on the market and the volatile costs associated with this fuel. To begin building infrastructure capacity, the City has two CNG fueling stations for CNG vehicles. The City will continue to look for opportunities to effectively integrate this technology into the fleet where feasible. In addition to the City's internal fleet, the City's waste collection and recycling program contractor utilizes CNG-powered vehicles. For more information about the City's waste collection and recycling program, please reference Green Vision Goal 5 in this report.

Off-Road Diesel Engine Emission Standards. California Air Resources Board (CARB) regulations mandate public agencies and utility vehicle owners reduce diesel particulate matter emissions through the application of Best Available Control Technology (BACT) on specific heavy-duty, on-road diesel vehicles.

The City's off-road diesel stock is in compliance with the active elements of the CARB "off-road rule." Off-road vehicles include bulldozers, cranes, and other diesel-powered vehicles. A revision to this

regulation was documented by CARB in 2014. By year 2029 all fleet vehicles are required to have Tier 2 or higher engines. The overall purpose of the regulation is to reduce nitrogen oxide emissions (NOx) and particulate matter from off-road diesel vehicles. The City has been proactive when opportunities arise by replacing equipment under this regulation with newer, cleaner technology. Since 2007 the City has procured 39 new, off-road diesel vehicles and has retired 46 units.

Car Share Parking Pilot Program

In April 2012, Zipcar, a U.S. car share company owned by Avis Budget Group, announced that the company was expanding to San José with 12 vehicles. To encourage car sharing to take root and grow in San José, Council voted in September 2012 to allow the City to designate up to 40 public parking spaces to qualified car share companies at no cost for 18 months. The intent of the pilot program was to provide a cushion for car share operators during this startup phase, to facilitate their growth to the point where the service would be sustainable when the pilot ended. The program required participating companies to secure one private parking space for every two provided by the City.

Zipcar was the sole car share service provider that applied to participate in the initial pilot program, and was the sole provider again when Council extended the program for another two years in February 2014. In its first two years in the program, Zipcar expanded its vehicle fleet, enlarged its service territory, and nearly quadrupled its membership, from 349 to 1,319. By December 2014, Zipcar's fleet had grown from 12 to 58 vehicles, 15 of which were parked on public property: 33 in the greater Downtown area and North San Jose and 25 at the airport's rental car center. Despite these impressive gains, Zipcar's utilization rate –the proportion of time an operator's vehicles are reserved by members in a 24-hour day --was still soft in 2014. The utilization rate is a core indicator of demand and effectiveness for car share programs. The rate for a highly successful, established program is typically around 45 percent. However, it can take several years for programs to achieve that level. Zipcar's average utilization rate in 2014 was 32 percent, a gain of two percentage points over 2013.

Legislation

Assembly Bill 8 (AB 8), which was signed into law in 2013, reinforced California's commitment to reduce GHG emissions by accelerating the transition to zero-emission vehicles, including battery EVs and fuel cell (hydrogen) EVs. The state's goal is to get 1.5 million hydrogen, battery electric and plug-in (hybrid) EVs on the roadway by 2025. Specifically, AB 8 requires the California Energy Commission (CEC) to dedicate $20 million per year until a network of at least 100 hydrogen fueling stations has been established to support the deployment of fuel cell EVs. The CEC has also set aside $15 million in Fiscal Year 2014-15 to support the expansion of charging infrastructure for plug-in EVs. This is a significant increase over prior year CEC allocations, reflecting the rapid increase in plug-in EV adoption in the state.

Strategic Direction

In 2015, the City will continue to transition the vehicle fleet to alternative fuel vehicles. The City will investigate strategies to expand its plug-in EV fleet and electric charging infrastructure. Additionally, the City will encourage and support its strategic partners to use alternative fuel vehicles. As described in the

Green Vision Goal 5 Chapter of this annual report, San José's residential waste haulers will continue to transition to CNG-fueled collection trucks. Several new Department of Transportation (DOT) aerial trucks equipped with hybrid systems (in which the aerial portion of the vehicle operates on battery power) were ordered in 2014 to be received in 2015. These trucks will replace older units currently in the fleet. These trucks are used throughout the City servicing traffic signals and street lights, and will provide significant fuel savings associated with their respective programs. The City will continue to seek grant funds to support the procurement of alternative fuel vehicles and infrastructure.

Where budget and technology constraints limit the City's progress toward replacing all City fleet vehicles with alternative fuel vehicles, staff will continue to explore vehicle options that at least achieve a better fuel economy. By increasing fuel efficiency, the City can also reduce fuel usage and costs, and ultimately GHG emissions. As a result of demonstrating these alternative fuel vehicle technologies within the City fleet, San José continues to lead by example with its Green Fleet Policy. The City is also focusing on other efforts outside of procuring alternative fuel vehicles. For example, by expanding the car share program, seeking grants, and collaborating with regional partners and private companies to upgrade infrastructure, San José continues to be engaged as more alternative fuel vehicles come to market.

Climate Change

In 2014, the City's vehicle fleet emitted approximately 14,800 metric tons of CO2 equivalents, which is 36 percent below the baseline emissions established in 2003.

Work Plan

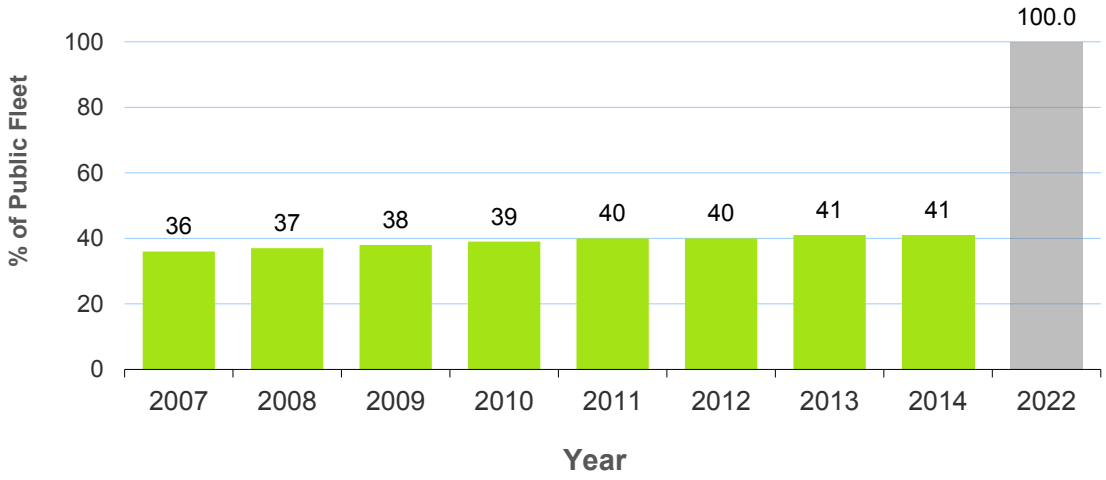
Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Lead by Example			
Reduce fuel consumption and GHG emissions.	Use higher fuel efficiency vehicles in public safety fleet.	Explore grant opportunities for procurement of hybrid aerial trucks for the City's traffic signal maintenance program. *Status*: Hybrid aerial trucks were ordered in FY 2013-14. Grant opportunities were not available for the class of vehicle needed.	Complete B20 biodiesel infrastructure upgrades to achieve higher fuel efficiency vehicles in public safety fleet.
Financing Mechanisms			
Reduce GHG emissions from fleet.	Utilize annual fleet replacement funding to replace fleet in accordance with the Green Fleet Policy; pursue grant funding.	Continue to pursue grant opportunities. Work with departments with vehicle needs that are supported by special or fee-supported programs in replacing	Continue to pursue grant opportunities from both the federal and state levels.

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
		vehicles with alternative fueled vehicles. *Status*: Acquired 24 hybrids and extended the lease on 27 i-Mievs plug-in EVs for two additional years and purchased two i-Mievs.	
Strategic Partnerships			
Expand alternative fuel infrastructure.	Collaborate with other jurisdictions for regional compatibility.	Work with private firms to evaluate the potential of installing a fast charger in one of the downtown parking garages. Consider extending the Car Share Parking Pilot program for two years and allow new participants to apply for the pilot – while retaining the 40-space limit. Status: The City installed another three EV chargers at the Environmental Innovation Center, increasing the total number of publically accessible chargers to 53. The City elected not to install a fast charger as it could not come to agreement with a private provider on terms acceptable to the City. In February 2014, Council voted to extend the car share parking pilot program for two years, until March 2016.	Identify grant opportunities to expand the supply of EV chargers where demand is or will soon exceed supply and to provide opportunities for more employees to charge personal vehicles and purchase and charge more City vehicles. Strategically increase electrical capacity at key sites to support that expansion and future growth.

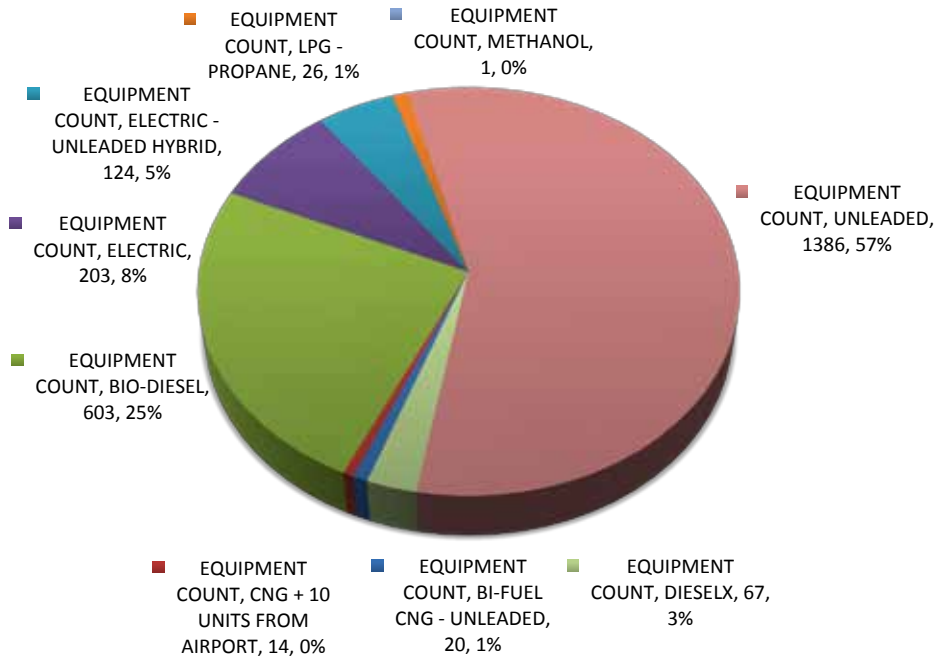
Performance Metrics

Alternative Fuel Vehicles

Target 2022: 100% of Public Fleet



Total City Fleet Count and Percentage by Fuel Type, 2014



Green Vision Goal 9

Plant 100,000 New Trees and Replace 100 Percent of Streetlights with Smart, Energy-Efficient Lighting

Goal 9 reflects the City's commitment to improve the urban landscape by enhancing tree canopies and switching to more energy-efficient "smart" streetlights. This transition provides numerous environmental, financial, and aesthetic benefits to our neighborhoods, including beautifying streets, boosting property values, reducing energy use, and improving air quality.

Achievements and Successes

Despite continuing budget constraints, the City and its community partners found creative ways to advance the City's streetlight and community forestry goals. In 2014, San José completed its street tree inventory, planted 1,749 trees via its partnership with Our City Forest, and converted 2,130 of the City's streetlights to "smart," energy-efficient light-emitting diode (LED) lights.

Our City Forest grows local environmental stewards

Investing in Our Urban Forest

To achieve Goal 9, the City of San José engaged in a strategic partnership with Our City Forest (OCF), an award-winning community forestry nonprofit serving the San José area. OCF has long been instrumental in leveraging non-City funds to provide San José residents with a range of services including tree pruning, technical support, volunteer opportunities, educational workshops, and free and low-cost trees for public and private spaces. OCF's program strategies and fund development efforts are essential to achieve the City's community forest goals.

In 2014, OCF obtained close to $1 million in non-City grants to allow for a team of 28 full-time AmeriCorps members and eight staff members to provide the above services. The reduction of six full-time AmeriCorps members from 2013 was necessitated by a shortfall in local matching funding.

Engaging the Community. Since 1994, OCF has been a resource to neighborhoods, parks, schools, and other agencies for trees and related services. In 2014, OCF continued a significant planting effort with a net increase of 1,749 15-gallon trees and 853 5-gallon shrubs. OCF recruited and managed 6,188 community volunteers to assist with planting, tree care and education events at San José parks, public schools and residential areas. In addition to the newly planted shrubs and trees, OCF also provided structural pruning for 1,917 trees, full tree care for another 1,070 trees, and watering visits for 7,425 trees. OCF also continued its three-year tracking program whereby resident tree stewards provided an estimated 140,854 hours watering and caring for OCF trees in their first three years after planting. High levels of engagement ensure high tree survival rates, essential to protect the initial investment and to realize optimum environmental benefits sought by the Green Vision tree planting goal.

In order to promote awareness and impart the importance of the City's urban forest, OCF also reached out to 21,702 residents through events and educational programs with multilingual programs and literature. Examples of educational offerings included: guided tree tours enjoyed by 349 residents; forestry pin badges awarded to 190 Cub Scouts; and 211 classroom presentations with mascot visits to 8,105 elementary students.

Community Nursery and Training. With its new cultivation operation on City land, OCF's Community Nursery and Training Center provides the community with fruit trees, native shrubs and grasses, and shade trees. In 2014, OCF introduced 52 new varieties of trees and shrubs, with an emphasis on drought tolerant Mediterranean species and California natives. OCF also began cultivation of 3,000 riparian native trees and shrubs, and increased its varieties of drought tolerant shrubs for use as understory plants and for OCF's Grey2Green lawn and parking strip makeover program. The nursery is open to the public for tree pick-up, selection, technical assistance, and training classes. Onsite trainings include planting instruction, basic tree care, proper staking, mulching, berm adjustments, and watering techniques. OCF's nursery offers exciting green volunteer opportunities. In 2014, OCF hosted 88 nursery projects open to volunteers, attracting 1,541 community members, all eager to play a part in growing a robust urban forest for San José.

Green Jobs Training. In 2014, OCF's AmeriCorps team of 28 full-time members contributed 47,902 hours of urban forestry services to the San José community. These dedicated AmeriCorps team members provided planting, tree care, and cultivation. In addition to directly furthering progress on Goal 9, the team members also led outreach and public education programs; developed and distributed literature;

taught classes; recruited and trained community volunteers; processed tree requests; and assisted seniors. In 2014, OCF's staff team provided 4,789 hours of green job training to this service member team.

Street Tree Inventory. A complete inventory of its street trees helps a city determine the location, size, species diversity, and condition of existing trees and determines the number of vacant planting spots that can be used for future street tree plantings. OCF provided street tree inventory services during the year, enabling the City to complete the inventory as planned.

In San José, individual property owners are responsible for the maintenance of the street trees adjacent to their property. Often people do not know how to properly maintain trees and individual tree maintenance can be very expensive. Now that the inventory is complete, staff will be seeking additional grant funding to develop a Community Forest Management Plan to explore possible funding mechanisms for tree planting and maintenance activities, and will bring forward for Council consideration as appropriate. The foundation of the tree inventory will enable the City to design a program with property owners to prune the street trees on a regular cycle, address tree emergencies at no additional cost, and establish new trees in vacant planting locations.

Converting Streetlights to "Smart," Energy-Efficient Lights

Since 2008, the City has been gradually upgrading its 62,000 streetlights. While many cities around the globe installed energy-efficient, long-lasting LEDs, San José went a step further. It pioneered the idea of "smart" LED streetlights--LED streetlights paired with a network control system. Marrying the two technologies enables the City to boost the efficiency and life expectancy of its streetlights even higher, get timely and accurate information on the performance of its lights; and modulate lighting levels to provide the amount of light needed while protecting the night sky. However, the cost and complexity involved in coupling two emerging technologies hampered the pace of City's conversion efforts.

In 2014, the City replaced 2,130 of its traditional streetlights with smart LED streetlights -1,630 via an energy service company and 500 by the City - increasing its total conversion count to 5,530. All of San José's 3,900 prior conversions, as well as the 500 installed this year, were funded by two primary sources: the Community Development Block Grant (CDBG) and the American Recovery and Reinvestments Act (ARRA). The 1,630 lights installed in December 2014 tested a different approach to the City's long-standing effort conversion effort.

In February 2014, Council approved a bundle of energy efficiency and renewable energy improvements identified by Chevron Energy Solutions, an energy service company. The package included the conversion of approximately 18,000 of the City's streetlights. The City took advantage of record low interest rates to finance the projects, including the larger streetlight conversion. The City plans to use the energy savings generated by these projects to repay the City's loan.

San Jose's New Smart LED Streetlight

In mid-December, crews working for an energy

service company began replacing approximately 100 streetlights a day in the southeast portion of the City. By the end of the month, 1,630 lights had been converted. Between January and early May 2015, when the project is scheduled to conclude, streetlight crews will convert the remaining 16,497 lights. Should this strategy be successful, the City could employ it to expedite the conversion of its remaining 38,000 streetlights. (For more information regarding the City's energy service contract, please reference Green Vision Goal 2).

Distribution of 18,000 streetlights. Chevron Energy Solutions had planned to convert all 18,000 lights by the end of 2014 to maximize the benefit of a PG&E LED streetlight rebate that will be reduced as of January 1, 2015. However, the complexity of the project and the annexation of Chevron Energy Solutions by a global investment management firm in August 2014 delayed the work. To accelerate the process, the new company, OpTerra, and the City decided to concentrate the conversions in one contiguous area -- the southeastern portion of San Jose. The conversions include lights on a number of corridors identified as having a high percentage of pedestrian and bicycle injuries and fatalities, including Monterey Highway, White Road, Jackson Avenue, Senter Road, and McLaughlin Avenue.

The City is also prioritizing conversions in 20 areas identified by the Police Department as gang activity hot spots, as well as areas with a high rate of streetlight wire theft. The City streetlight control system provides real-time notification of circuit malfunctions, enabling the City to intervene and deter wire theft. Twelve of the areas will be converted by OpTerra. The balance will be addressed through City projects in 2015.

Regardless of whether Council chooses to engage an energy service company to convert more streetlights in San José, City staff will continue its efforts. San José's Department of Transportation anticipates that it will convert another 1,850 streetlights in 2015 through a combination of grant funds (CDBG) and Capital Improvement Program (CIP) funds. Between the approximately 16,497 lights OpTerra will replace in the first six months of 2015, and the 1,850 the City plans to replace, San José will convert a minimum of 18,347 streetlights in 2015.

Regulatory Changes. The City participated in negotiations with PG&E and the California City-County Street Lighting Association (CAL-SLA) to revise and extend PG&E's existing networked streetlight pilot program. That program, which was initially approved by the CPUC in 2012, allows the City to get credit for dimming its streetlights in the late evening hours. However, San José was the only city that chose to participate in the original program. PG&E sought to amend the terms of the pilot to encourage other cities to participate. The revised pilot, which has been submitted to the CPUC for approval, would continue to allow the City to get credit for dimming its streetlights and minimize the City's administrative costs to participate. The pilot would end on December 31, 2017, or the effective date of the CPUC's final decision in PG&E's 2017 General Rate Case Phase II proceeding, whichever comes later. The City and CAL-SLA will revisit the idea of a permanent dimmable streetlight tariff with PG&E when PG&E's 2017 General Rate Case is filed in early 2016.

Strategic Direction

Limited funding continues to constrain progress on the Green Vision goal to plant 100,000 new trees and, to a lesser extent, replace 100 percent of the City's 62,000 streetlights. In 2015, staff will begin review and

analysis of the street tree inventory data and the development of a Community Forest Management Plan; continue the Downtown Property-Based Improvement District tree maintenance partnership; support the OCF community nursery by encouraging City purchase of trees, shrubs, and plants wherever possible; and collaborate with OCF on fundraising and other tree planting efforts. Between January and early May 2015, OpTerra will complete installation of the remaining 16,497 streetlights included in the bundle of energy efficiency and renewable energy improvements approved by Council in February 2014. Staff has secured grant and CIP funds to convert an additional 1,850 streetlights in 2015. At a minimum, the City will convert 18,347 streetlights in 2015. Staff will continue to pursue other avenues to increase that number and accelerate the conversion of the City's remaining streetlights.

Climate Change

Trees provide multiple benefits with regard to GHG emissions. Trees remove carbon dioxide from the air, provide shade that helps mitigate heat, and reduce energy needed to cool the air. In 2014, 1,749 net trees were planted in San José which then sequestered approximately 68.2 metric tons (MT) of carbon dioxide (CO_2) equivalents, using the Environmental Protection Agency's formula for trees, assuming these trees survive for 10 years. A total of 12,289 trees have been planted since 2007, sequestering approximately 479.3 MT of CO_2 equivalents, which are equivalent to annual GHG emitted from 101 passenger vehicles.

As of December 31, 2014, the City had converted a total of 5,530 of its streetlights to smart LED lights. By switching to a more energy-efficient light and modulating its lighting levels in relation to changing activity levels, San José will save 1,885,000 kWh annually, averting approximately 1,300 MT of CO_2 equivalents. That is equivalent to the volume of greenhouse gases emitted annually by 274 passenger vehicles.

Work Plan

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Lead by Example			
Reduce Citywide streetlight energy consumption.	Use federal grant funds to convert LPS streetlights to LED with adaptive controls.	Implement LED streetlight conversions through Energy Service Contract with Chevron; Chevron plans to convert approximately 18,000 streetlights in 2014. *Status*: OpTerra began to convert 18,000 streetlights in December 2014. The remainder of the lights will be installed in early 2015. The City also converted 630 lights through development projects and federal grants.	Convert 16,497 streetlights through an Energy Service Contract with OpTerra; convert a minimum of 1,850 streetlights through federal grants and City Capital Improvement Program funds.
Advocating Policies			
Change state regulation to allow cost effective metering of individual lights.	Advocate CPUC regulatory changes.	Reach resolution with PG&E on an extension of the tariff pilot to summer 2014. Towards end of the pilot, begin discussion of potential longer-term billing solutions, such as development of a permanent tariff for adaptable streetlights. *Status*: PG&E, the California City/County Street Lighting Association (CAL-SLA) and the City reached consensus on revisions to PG&E's dimmable streetlight pilot program in August 2014. The revised tariff was submitted to the CPUC for approval.	Reopen conversation with PG&E on a permanent dimmable streetlight rate in late 2015- early 2016, when PG&E's 2017 General Rate Case is filed with the CPUC.

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Financing Mechanisms			
Increase the care of the community forest and meet the Green Vision planting goal.	Prepare long range plans for an alternative funding mechanism for street tree maintenance and planting.	Finish the street tree inventory, which then can be used to evaluate funding mechanisms, planting and maintenance strategies in the formulation of a possible Community Forest Master Plan for San José. Coordinate City's community forestry programs with OCF to optimize scarce resources and advance San José's tree planting programs.	Begin review and analysis of street tree inventory data and the development of a Community Forest Management Plan Coordinate City's community forestry programs with OCF to optimize scarce resources and advance San José's tree planting programs.
Identify funds to upgrade to smart, energy-efficient streetlights.	Require energy-efficient lighting for new development; identify federal and city funding sources; investigate potential for pooled purchase to improve purchase price and financing options.	Continue to seek financing and grant opportunities to fund conversions. *Status*: OpTerra's 18,000 streetlight conversion project began in December 2014. Work is expected to be completed in March 2015.	Continue to seek grants and other opportunities to fund conversions, within or outside of an ESCO agreement.
Strategic Partnerships			
Expand, maintain, and track new community forest tree plantings through partnerships with residents and community groups.	Continue to build upon and enhance Our City Forest partnership through collaborative initiatives. Jointly pursue other partnerships that might advance City's tree goals.	Complete street tree inventory. Continue working with OCF to leverage resources, promoting the Community Nursery, and relocate OCF offices. Continue to build OCF partnership through collaborative initiatives. Jointly pursue other partnerships that might advance City's tree goals. Seek opportunities through grants, development projects, and OCF partnership to create complete streets with LED lights, trees and bike lanes. *Status:* Inventory complete. City entered into a fee-for-service contract with OCF to plant trees on selected bikeways.	Continue to seek opportunities through grants, development projects, and OCF partnership to create complete streets with LED lights, trees and bike lanes.

Performance Metrics

New Trees Planted

Target 2022: 100,000 New Trees

Smart Streetlights

Target 2022: 100% of Streetlights

Green Vision Goal 10

Create 100 Miles of Interconnected Trails

The City continues to enhance the accessibility and quality of the offstreet trail and onstreet bikeways network in an effort to meet the targets set in the Green Vision. San José is opening up access to the City's most scenic areas by developing an extensive 100-mile trail network along creeks, rivers and open space corridors. Onstreet bikeways will lead to the network and provide 400 miles of onstreet facilities.

Achievements and Successes

Mirroring national trends, San José's many trails are enjoying greater usage as documented by the City of San José's annual Trail Count. For the eighth consecutive year, San José staff and volunteers documented an increase in trail usage in 2014. The number of users increased by 50 percent along the Guadalupe River Trail (at Coleman Avenue). A similar large increase of 40 percent at the nearby San Fernando Street Count Station supported the findings that trail usage is increasing dramatically through downtown and north San José. Over a 12-hour period, volunteers counted nearly 1,700 users along the Guadalupe River Trail (River Oaks Parkway). The City also observed increases in usage at Los Gatos Creek Trail/Hamilton Avenue (15.0 percent). The Los Alamitos Creek Trail/Camden Avenue was the only count station recording a decrease (18.5 percent decline). A new Count Station along the Five Wounds railway alignment found 369 people walking along the corridor during the morning and evening peak periods.

Riders and Volunteers Participate in the 2014 Trail Count

The City has made a significant investment over the past 12 years to increase the size of the multisystem trail network and its bikeway system. The trail network currently includes 56.77 miles of trails; 0.3 mile of new paved trails were added in May 2014, and about 1.1 miles of previously unrecorded miles were confirmed for the inventory. Over the past 12 months, the City built and improved trails; 0.3 miles of paved trail were improved along Lower Silver Creek (through Capitol Park), 200 feet of paved trail replaced gravel trail along Los Alamitos Creek Trail, and 600 feet of Lower Guadalupe River Trail were enhanced with the elevating and resurfacing of the Tasman Drive Under-Crossing. Planning and design work also occurred to support future construction of trail reaches along Los Gatos Creek, Coyote Creek, and Penitencia Creek. The projects constructed this year were developed upon "interim" alignments with mileage already recorded, so there was no additional mileage due to this work. Changes in the total trail mileage over last year occurred with corrections made to the tracking database of all potential trails. In 2014, the City added an additional nineteen miles of onstreet bikeways to create a total of 240 miles of onstreet bikeways in San José.

San José Off-Street Trail Improvements

The development of a successful trail network in San José is made possible by a partnership between the City and the Santa Clara Valley Water District (SCVWD). Through a Collaborative Action Plan, the two agencies have permitted public recreation across District lands, which make projects like the Guadalupe River and Coyote Creek trail projects possible.

Tasman Drive Undercrossing

Staff continues to build on San Jose's reputation as a national leader in trail development. In past years, staff worked with industry to develop innovative lightweight bollards, mileage markers linked to the 911 center for public safety, and a special formulation for highly-reflective striping. Due to regulatory issues, San José cannot light most trails in riparian corridors, so the striping aids trail users with lights to follow the alignment after dark, and supports aerial police monitoring. Over the past year, staff have spoken at national conferences on best practices, engaged with the SPUR organization to explain the San Jose Trail vision, and participated in an American Pedestrian Bicyclists Professionals webinar.

Construction of undercrossing improvements at Tasman Drive along the Guadalupe River Trail was completed in October. The undercrossing is now three feet above its prior elevation and will not be subject to tidal flooding as it was before. An extension to the Los Alamitos Creek Trail now provides a continuous paved trail to McKean Road/Harry Road.

Planning and design work does not immediately add mileage to the network, but supports construction of new projects in future years as funding becomes available.

Special Designations and Awards. The American Public Works Association and the California Trails and Greenways Conference both awarded San José for the Lower Guadalupe River Trail project.

Future Trail Development. Future trail development includes:

- Bay Trail – Reach 9 and 9B (1.1 future miles)
- Coyote Creek Trail – Highway 237 Bikeway to Tasman Drive (1.1 future miles)
- Coyote Creek Trail – Selma Olinder Park to Story Road (0.6 future miles)
- Coyote Creek Trail – Story Road to Phelan Avenue (0.9 future miles)
- Guadalupe River Trail – Coleman Road Undercrossing (0.1 future miles)
- Lower Silver Creek – Alum Rock to Highway 680 (1.1 future miles)
- Penitencia Creek Trail – Noble Avenue to Dorel Drive (0.4 future miles)
- Penitencia Creek Trail – King Road to Berryessa BART (0.1 future miles)
- Thompson Creek Trail – Tully Road to Quimby Road (0.6 future miles)

Onstreet Bikeway Improvements

In 2014, 19 bikeway projects were completed, bringing the total onstreet bikeway system mileage to 240. The program name change highlights the strong connection and importance of providing walkable, bikeable, transit-friendly communities to generate healthy and strong neighborhoods. The change supports new and growing partnerships with public health communities.

Bike Lanes and Bike Parking. In 2014, 19 bikeway projects were completed adding 19 miles to the onstreet bikeway network. These projects included Class II Bike Lanes, Class III Shared Lane Markings (sharrows), and enhanced bikeways such as the Monterey Road Buffered Bike Lanes. These projects connect with existing onstreet bikeways and trails. During 2014, the Active Transportation Program also installed 200 new bicycle racks that accommodate 400 bikes. These new bicycle racks are a significant step forward toward the City's goal to install 5,000 public bike parking spaces by 2020. The new bicycle racks include onstreet bike corrals that fit 10 bicycles in the space equivalent to one parking space for a car. Together these projects helped advanced the City's goal of increasing the number of trips made on bike from 1 percent to 5 percent.

Downtown Sidewalk Safety Campaign 2014

Bay Area Bike Share. In 2014, the City added two additional stations to its growing Bay Area Bike Share network, bringing the total to 16 stations and 160 bikes in downtown San José. San José and four other Bay Area cities participate in this pilot project, led by the Bay Area Air Quality Management District, in partnership with the Metropolitan Transportation Commission and the Valley Transportation Authority. Bike share stations are conveniently located near transit centers, office towers, high density residential areas, shopping centers, tourist attractions, and San José State University. During 2014, San Jose bicyclists took 19,562 trips on Bike Share, offsetting 14,278 pounds of CO2.

The Bay Area Bike Share Program is an option for a trip's first or last mile, such as connecting home or work to public transportation. A first or last mile trip could include using Bike Share to easily and quickly go from Diridon Transit Center to San

José State University or other downtown destinations. In 2015, Phase Ia will add seven more stations and 70 more bikes in downtown San José. In 2017 Phase II will add 14 stations and 140 bikes connecting to Berryessa BART and north San José. For more information, visit www.bayareabikeshare.com.

Grant Funding

Grants for Onstreet Bikeways and Bike Parking. During 2014, San José Department of Transportation (DOT) received grants totaling more than $3.3 million in funding for onstreet bicycle and pedestrian improvements. Highlights include:

Grant	Funding Organization	Requested	Received	Status
Citywide Bikeways	State of California (TDA3)	$553,000	$553,000	Awarded
Bike Safety Education	State of California (TDA3)	$150,000	$150,000	Awarded
Transportation Encouragement Program: Transit, Walking & Biking	Metropolitan Transportation Commission (Climate Initiatives)	$1,500,000	$1,500,000	Awarded
Public Bike Parking Facilities	Bay Area Air Quality Management District (TFCA)	$50,000	$50,000	Awarded
Bike Share Expansion	Bay Area Air Quality Management District (TFCA)	$ 130,000	$130,000	Awarded
Ocala Safety Improvements	Federal (HSIP)	$ 973,000	$973,000	Awarded

Grants for Offstreet Trails. As of December 2014, staff has or will seek Council approval to pursue the following grants:

Grant	Funding Organization	Requested	Received	Status
Singleton Crossing Feasibility Study	Fisheries Restoration Grant Program (FRGP)	$405,000	$0	Declined
Coyote Creek Trail: Fish Barrier Removal & Trail Bridge	Integrated Regional Water Management Implementation	$2.5M	$0	Pending
Coyote Creek (Watson Pk-BART)	ATP-Regional	$3.6M	$0	Declined
Coyote Creek (Watson Pk-BART)	ATP-Statewide	$3.6M	TBD	Pending
Coyote Creek (Singleton Xing)	IRWMP	$2.5M	TBD	Pending
Coyote Creek (Singleton Xing)	FRG	$405k	TBD	Pending
Coyote Creek (Brokaw-UPRR)	Priority Conservation Area	$850k	$712k	Awarded
Three Creeks Trail (West)	Urban Greening	$1.1M	$1.0M	Awarded

Trail Count

In 2014, the eighth annual Trail Count documented increases in trail usage at six of seven count stations, which were set up to survey trail users. The Trail Count measured a 50 percent increase along the Guadalupe River at Coleman Avenue. At this count station, volunteers counted 1,082 trail users in 2014 (compared to about 719 users in 2013). The Coleman Avenue count station has been part of each year's usage inventory and has continually recorded an increase in usage. This significant increase is notable because it demonstrates the impact of paving the trail from Highway 880 to Gold Street (6.4 miles) and provides compelling data to the granting agencies on the return on investment. Staff has prepared a Fact Sheet on the travel increase and shared it with our granting agencies.

Thirty-five volunteers staffed the six count stations and manually counted the number of pedestrians and bicyclists. Interested trail users were offered a postcard that led them to an online survey where they were asked 25 questions about their usage of the trail network. The data collected over the past eight years has been used to build public awareness about the need for more trails, prepare more competitive grant applications, and justify inclusion of trails as part of a transportation element in the City's newly-adopted General Plan.

The eighth annual Trail Count was made possible through a partnership with the Guadalupe River Park Conservancy, Five Wounds Neighborhood/CommUniversity, Save Our Trails organization, and San José's Department of Parks, Recreation and Neighborhood Services. General findings are posted on the Trail Program website and were shared via Twitter (@sanjosetrails) and through the City Manager's Weekly Report. Preliminary findings are available via this Fact Sheet; more detailed investigation of findings will be posted by June 2015.

The City's Active Transportation Program reports that in the last seven years the number of San José trips made by bicycle has increased 100 percent and currently is 33 percent above the national average provided by the U.S. Census.

Strategic Direction

The City continues to make progress on developing new trail mileage. However, at the current pace of funding and pace of development, it is difficult to anticipate completion of the 100-mile interconnected trail network by 2022. Available funding levels and current staff resources prevent more rapid planning, design, and construction. Strict regulatory conditions and land issues further challenge staff to proceed more rapidly.

To support the Council and community in charting a successful path, staff is initiating a strategic plan to assess, document, and propose resolutions for the many challenges to developing new trail mileage, as well as determine how to best leverage our strengths. It is expected that the plan will identify an approach for accelerating trail development to meet Green Vision goals while sustaining the quality, character, and award-winning designs of past work; and the consistency of infrastructure that makes San José trails popular for both recreation and bike commuting. Staff will engage with the Transportation & Environment Committee, Parks and Recreation Committee, and Council as the strategic plan develops.

Developer-constructed trails do offer an opportunity to ultimately contribute new mileage to the trail network. Approval of the Communication Hill development will add 4.6 miles to the network. Addition of these trails results from active engagement by staff with the developer to ensure connectivity of the new trail mileage to the existing regional trail network. Work as part of the Berryessa BART and Flea Market developments are also adding mileage along the Penitencia Creek and Coyote Creek trail systems.

Climate Change

San José continues to develop trails and bikeways to make biking or walking more viable and appealing means of travel as part of the overall set of travel options. By developing and improving the trails and bikeways in San José, the City hopes to reduce the amount of GHG emissions produced from the transportation sector--one of the largest and most difficult sectors to address. In the Bike Plan 2020, a goal of a 5 percent bike mode share was developed for the year 2020. In lieu of annual surveys, the City and partners at San José State University created a methodology to estimate change in annual bike ridership from the 2007 baseline year.

Work Plan

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Lead by Example			
Expand City's trail network.	Identify priority areas to expand the interconnected trail network.	Commence construction of Guadalupe River Tasman Under-Crossing (500 ft) *Status:* Open to the public in November 2014. Commence construction on Lower Silver Creek (0.3 mile) *Status:* Open to the public in May 2014. Developer constructing Coyote Creek, Old Oakland Road to UPRR tracks (0.3 mile) *Status:* Under construction. Developer constructing Coyote Creek, Berryessa Road to Chessington Drive (0.5 mile) *Status:* Under construction.	Submit budget proposal to expand trail network Secure necessary permits for construction of Coyote Creek Trail from Story Road to Selma Olinder Park, and have project prepared for construction in Summer 2015 Secure necessary permits for construction of Coyote Creek Trail from Highway 237 to Tasman Drive, and have project prepared for construction in Summer 2015. Accept Developer-built (0.8 miles) Coyote Creek Trail improvements (Old Oakland Road to UPRR, and Berryessa Road to Chessington Drive)

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Expand City's bike network.	Implement "Bike Plan 2020," the Council-approved citywide bike plan.	Install 20 miles of onstreet bikeways including color and separation enhancements. *Status*: Completed 19 miles of onstreet bikeways. Installed 200 public bike parking spaces.	Install 50 miles of onstreet bikeways. Install 500 public bike parking spaces.
Financing Mechanisms			
Fund expansion of trail network.	Work with regional, state, federal, and private entities to secure funding and sponsorship.	Pursue 5 competitive grants (minimum). *Status:* Pursued funds as noted in report.	Pursue up to 3 competitive grants (minimum).
Fund expansion of onstreet bikeway network.	Seek grants to help expand and improve onstreet bikeway network.	Seek grants that match *Bike Plan 2020* goals *Status:* Obtained seven grants totaling $9.3 million.	Seek grants that match *Bike Plan 2020* goals including the annual Transportation Development Act.
Strategic Partnerships			
Expand and maintain trail network through partnerships.	Establish partnerships with nonprofits and private entities.	Investigate partnership with health care organization to promote usage of trail network for health and fitness. Conduct Trail Count with community partners. *Status*: Unsuccessful in identifying a partnership with the heath care industry. Completed seventh annual Trail Count.	Investigate additional opportunities for partnerships with local nonprofits or regional transportation agencies.

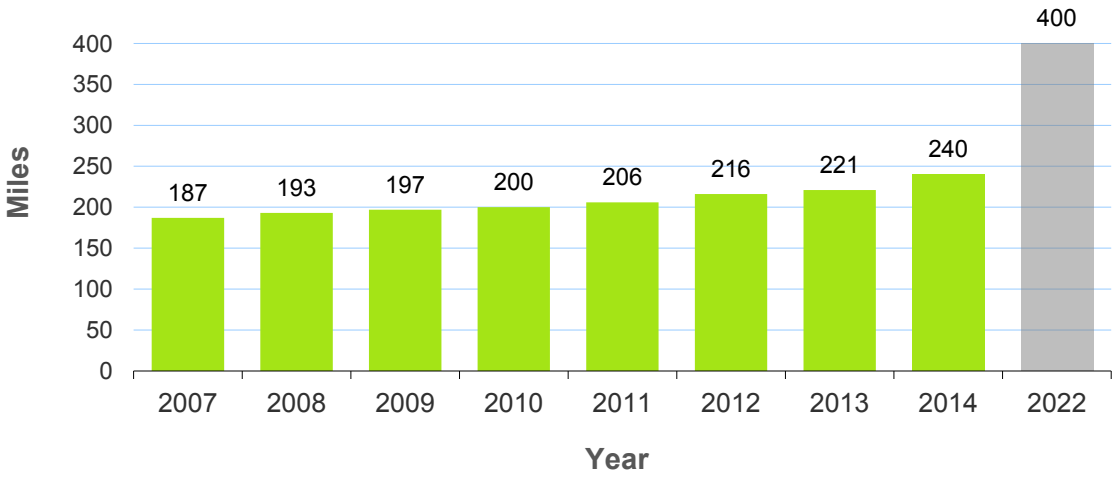
Performance Metrics

Trail Miles (Offstreet)

Target 2022: 100 miles

Bikeway Miles (Onstreet)

Target 2022: 400 miles



Glossary

Abbreviation	Description
AB	Assembly Bill
ABAG	Association of Bay Area Governments
AD	Anaerobic Digestion
ARRA	American Recovery and Reinvestment Act
B	Billion
BAAQMD	Bay Area Air Quality Management District
BAB2E	Bay Area to Biosolids Coalition
BACT	Best Available Control Technology
BART	Bay Area Rapid Transit
BOS	Business Owner Space
BRT	Bus Rapid Transit
BSC	Building Standards Commission
CAL-SLA	California City-County Street Light Association
CALGreen	California Green Building Standards Code
CARB	California Air Resources Board
CDBG	Community Development Block Grant
C&D	Construction and Demolition
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFL	Compact Fluorescent Light
CIP	Capital Improvement Program
CNG	Compressed Natural Gas
CO_2	Carbon Dioxide
CPSC	California Product Stewardship Council
CPUC	California Public Utilities Commission
DOE	Department of Energy – U.S. Federal Government
DOT	Department of Transportation
DWR	California Department of Water Resources
E85	Ethanol 85 Blend
EDA	Economic Development Administration
EECBG	Energy Efficiency and Conservation Block Grant
EIC	Environmental Innovation Center
EPA	Environmental Protection Agency
EPS	Expanded Polystyrene
ESCO	Energy Service Company
ESD	Environmental Services Department of City of San José
EUC	Energy Upgrade California
EV	Electric Vehicle
FY	Fiscal Year
GHG	Greenhouse Gas
HCD	California Department of Housing and Community Development
HHW	Household Hazardous Waste
iHub	San Jose/Silicon Valley Emerging Technology Hub

Abbreviation	Description
iOT	Internet of Things
kW	Kilowatt
kWh	Kilowatt Hour
LBNL	Lawrence Berkeley National Lab
LED	Light Emitting Diode
LEED	Leadership in Energy and Environmental Design
LLC	Limited Liability Company
LGSEC	Local Government Sustainable Energy Coalition
M	Million
MFD	Multi-Family Dwelling
MGD	Million Gallons Per Day
MRF	Materials Recovery Facility
MT	Metric Tons
MW	Megawatt
NCU	Neighborhood Clean Up
NEM	Net Energy Metering
NIRRP	Newby Island Resource Recovery Park
OCF	Our City Forest
OED	Office of Economic Development
PBCE	Planning, Building, and Code Enforcement Department of City of San José
PACE	Property Assessed Clean Energy
PG&E	Pacific Gas and Electric
Prospect SV	Prospect Silicon Valley
PV	Photovoltaic
RAFT	Resource Area for Teaching
RENs	Regional Energy Networks
RFP	Request for Proposals
RFQ	Request for Qualifications
RWF	San José – Santa Clara Regional Wastewater Facility
SB	Senate Bill
SBIR	Small Business Innovation Research
SBWR	South Bay Water Recycling
SCS	Sustainable Communities Strategy
SCVWD	Santa Clara Valley Water District
SF	Square Feet
SFD	Single Family Dwellings
SVAWPC	Silicon Valley Advanced Water Purification Center
SVEW	Silicon Valley Energy Watch
T&E	Transportation and Environment
USGBC	United States Green Building Council
VC	Venture Capital
VMT	Vehicle Miles Traveled
VTA	Valley Transportation Authority
ZWED	Zero Waste Energy Development Company

Appendix A – Comprehensive Work Plan

Goal 1: Clean Tech Jobs

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Lead by Example			
Demonstrate and promote clean transportation, renewable energy, smart grid and energy efficiency technologies.	Implement City demonstration policy to allow for more clean technologies to be deployed and tested in City of San José facilities and support San José companies pursuing clean technologies	Bring Prospect Silicon Valley online to provide infrastructure and affordable space for emerging clean technology companies. Launch ProspectSV Demonstration Programs in Spring 2014. Coordinate between the various incubators, accelerators, and innovation service providers to support emerging cleantech companies. Continue to support the advancement of cleantech jobs and sector by investing in and showcasing cleantech within City Facilities. *Status:* ProspectSV officially opened October 14 and has approximately 15 startup clients developing clean and connected technologies Convened through iHUB the six incubators/accelerators/co-working spaces in San José and began to bring awareness of the ecosystem actors to each other.	Work with ProspectSV to facilitate demonstration of emerging technologies. Continue to support the advancement of cleantech jobs and sector by investing in and showcasing technologies within City Facilities.

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
		Worked on citing JuiceBox Solar's energy storage technology as a demonstration at Gardener Community Center.	
Support small businesses looking to 'green' their operations and activities	Support and promote resources to help 'greening' of small businesses through Business Owner Space (BOS) and other available avenues	Continue to promote BOS Green Resource pages and Green Assessment Tool through email outreach and linking to websites such as ShopSanJosé. Continue to promote and support PG&E energy efficiency programs for small businesses where possible. *Status*: Ongoing promotion of online tools and PG&E programs.	Investigate alternative funding support for building retrofits or new construction. Promote PG&E energy efficiency programs.
Advocating Policies			
Develop and implement policies to encourage expansion of the cleantech market	Advocate State and Federal policies and programs that promote clean energy demonstration and deployment	Continue to advocate state and federal policies and programs that promote clean energy demonstration and deployment.	Continue to advocate state and federal policies and programs that promote clean energy demonstration and deployment. Ex: Follow SB 64 Global Warming Solutions: Clean Technology Investment.
Financing Mechanisms			
Support incubators and commercialization of cleantech products and innovation clusters.	Compete for federal and state funding opportunities to support cleantech sector..	Continue supporting ProspectSV development and the launch of EIC's demonstration center. *Status:* City Staff in communication with ProspectSV to support their resident startups with business development assistance. Supported cleantech companies on cap-and-trade grant funding opportunities through CalRecycle.	Collaborate on grant applications from funding opportunities such as cap-and-trade funding, the Small Business Innovation Research program, and California Energy Commission.

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Strategic Partnerships			
Create long-term partnerships that foster the growth of cleantech industry within San José.	Partner and support cleantech companies and workforce training providers to develop and promote cleantech training opportunities.	Coordinate with Silicon Valley Manufacturing Roundtable. Continue to expand partnerships for workforce development, including PG&E-funded trainings. Continue relationship with strategic partner, Cleantech Open *Status:* Continued to convene Silicon Valley Manufacturing Roundtable and brought topics related from agencies such as Lawrence National Labs, PG&E, and the Electric Power Research Institute on energy savings in the manufacturing process.	Partner with San José State University's Battery University program to further its linkages to local employers. Continue to work with the Silicon Valley Manufacturing Roundtable. Create partnerships with technologies in the Internet of Things (IoT) sector and find areas where integration can happen between cleantech and IoT companies.
Formation of Strategic Partnerships focused on cleantech deployment strategies.	Connect Green Vision platform to nationally significant research teams, research and development resources, and commercialization support.	Provide opportunities for local cleantech companies to connect to regional, state and federal programs that can support their business (including the California iHub initiative and the National Network for Manufacturing Initiative). Through work with the Silicon Valley Manufacturing Roundtable, look for opportunities to help companies commercializing cleantech products connect with manufacturing service providers to help develop their products and move them into full-scale production. *Status:* Completed applications for the Investing in Manufacturing Communities Partnership	Further the work of iHub to advance incubators, accelerators, and co-working spaces in San José. Through coordination with ProspectSV and its demonstration center, assist companies commercializing cleantech-related products work with manufacturing service providers to help develop the products and move them into full-scale production in San José.

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
		(IMCP) designation as a Manufacturing Community, and the Economic Development Administration (EDA) i6 Cluster grant application with ProspectSV for a manufacturing program to be available through their Demonstration Center.	
Communications and Engagement			
Attract and retain cleantech companies to locate in San José.	Provide information to small businesses, emerging cleantech companies, and large, established companies about the benefits of locating in San José, and provide support for companies looking to locate in the City.	Continue to engage and support cleantech companies In collaboration with the Business Attraction, Retention and Expansion Program and a number of local partner organizations, work to support the retention, expansion and attraction of cleantech companies in San José. Convene companies associated with GV Goal 1 to begin an ongoing dialogue that helps identify resources and opportunities that support their ongoing growth and success. *Status:* Held Clean and Emerging Technology Summit to share agency resources, including information sharing, panels, and networking.	Convene companies around industry-specific issues such as building efficiency regulations and supporting technologies, transportation optimization, or other cleantech topics. Work to understand industries and provide assistance as appropriate. Connect with business sectors including, energy storage, solar, and energy efficiency systems. In collaboration with the Business Attraction, Retention and Expansion Program and a number of local partner organizations, work to support the retention, expansion and attraction of cleantech companies in San José.

Goal 2: Reduce Energy Use

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Lead by Example			
Implement energy efficiency projects in City facilities.	Partner with PG&E to conduct audits; identify additional sources of funds for energy efficiency projects. Use federal and other financing sources for energy efficiency installations.	Reduce municipal energy use by 5 percent from prior year. Continue design work for energy conservation measures in City facilities and streetlights related to the ESCO Agreement. *Status*: Completed design and procurement work for the ESCO streetlight retrofit project, and began installations in December 2014. Due to equipment failure, no landfill gas was used as a fuel source at the Regional Wastewater Facility. As such, more natural gas was procured through PG&E, which resulted in an overall increase in energy consumption for Citywide facilities by 3.1% compared to the 2007 baseline, and an increase by 12.5% compared to the previous year.	Convert 16,497 streetlights through an Energy Service Contract with OpTerra, and convert a minimum of 1,850 streetlights through federal grants and City Capital Improvement Program funds. Complete design, procurement, and installation work for additional Citywide energy improvement measures through the ESCO program, including solar photovoltaic and solar thermal system installations, indoor and outdoor lighting retrofits, HVAC system upgrades, and water efficiency improvements.
Advocating Policies			
Identify & remove barriers to creating energy improvement areas and smart grids.	Work with PG&E, CEC and CPUC to advance the use of energy areas or smart grids. Implement AB 811 or PACE financing districts that will encompass both solar and energy efficiency installation, to be rolled out in conjunction with community education	Rollout of three existing JPA PACE programs; City's Finance Department will lead procurement process to identify a third-party PACE Administrator and complete exemplar agreement for the procurement process for a third-party PACE program administrator by summer 2014.	Finance Department will present its recommendation for third party PACE provider to Council in spring 2015.

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
	efforts.		
Financing Mechanisms			
Support energy efficiency programs and retrofits.	Facilitate collaboration between various community providers to develop new and existing funding mechanisms for energy efficiency improvements. Market existing rebate and incentive programs to increase their uptake rates, particularly among hard-to-reach communities and those facing barriers to clean energy implementation.	Develop financing plan and seek rebates for municipal energy efficiency projects related to ESCO Agreement. Engage in Proposition 39 and cap-and-trade revenue proceedings. *Status*: Financing plan finalized for energy conservation measures through the ESCO agreement, with a master equipment lease-purchase agreement executed in May 2014. Utility rebates have been identified for energy conservation measures, with applications for streetlight equipment submitted in 2014.	Further identify new and eligible rebates for remaining ESCO energy improvement measures and submit applications to PG&E. .
Strategic Partnerships			
Expand knowledge and awareness of energy efficiency program resources.	Work in partnership with businesses, energy resource providers, Bay Area Air Quality Management District, Santa Clara County and cities, and community organizations to implement coordinated programs that minimize gaps and redundancies in program delivery. Coordinate with local workforce development and training providers to ensure a robust clean energy workforce that links to utility- and government-funded energy programs.	Continue SVEW coordination efforts with BayREN to engage the community around energy efficiency. Continue to partner with PG&E to host informative workshops and workforce training relating to energy systems and technology. *Status*: SVEW hosted 8 workshops geared towards energy efficiency contractors. Worked with BayREN to host trainings for local government code officials on changes to Title 24.	Work with PG&E to develop a new partnership program to encourage community participation in energy efficiency efforts.

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Communications and Engagement			
Implement community-wide energy efficiency programs.	Implement the Strategic Energy Plan. Increase demand for energy efficiency and clean energy education and resources. Increase the number of local residents, agencies, and businesses who, through leading by example, become energy efficiency and clean energy "ambassadors."	*Status*: Preparing updates to the Strategic Energy Plan and anticipate presenting to Council in spring 2015.	Continue SVEW efforts to work with and engage the community around energy efficiency. Solicit strategic direction from Council and update the Strategic Energy Plan. Work with PG&E to develop a new partnership program to encourage community participation in energy efficiency efforts.

Goal 3: Renewable Energy

Strategic Focus	**Proposed Strategy**	**2014 Work Plan**	**2015 Work Plan**
Lead by Example			
Install solar on City facilities	Power Purchase Agreement RFP finalized and available for all City facility solar projects; remove barriers to solar installation for all City facilities. Proceed with solar design and installation work as administered through the energy services company (ESCO).	Complete preliminary analysis, design work, and construction for up to five additional solar systems. ***Status:*** Completed the design and installation for two additional solar systems through the end of the PPA contract with SolarCity. Commenced design work for six additional solar energy systems with the ESCO, OpTerra Energy Services.	Complete design work and construction of six additional solar energy systems with the ESCO, OpTerra Energy Services. Continue exploring opportunities for solar energy installations at the Regional Wastewater Facility, including rooftop space and parking shade structures.

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Advocating Policies			
Remove regulatory barriers to widespread adoption of solar	Work with CPUC, utilities and others to establish fair, appropriate, and reasonable tariffs to encourage expansion of solar.	*Status*: Successfully worked through LGC to advocate for a net energy metering tariff as required in AB 327 (Perea, 2013). Ultimately, this will help to continue incentivizing renewable energy systems across the state.	Continue to support strategic partners like the Local Government Coalition to advocate for state-wide policies that advance renewable energy.
Financing Mechanisms			
Support solar programs for rental markets; and other innovative financing mechanisms.	Work with city departments, CPUC, PG&E, and CEC to implement solar programs for multi-family and low-income residents; develop integrated financing offerings for the community.	Continue to monitor, review, and participate as needed in the cap-and-trade program. *Status*: Monitored state's auction proceedings and looked for opportunities to receive funding. Governor directed cap-and-trade funds to High Speed Rail and other transit projects.	Continue to support strategic partners that advance financing mechanisms for renewable energy.
Pursue implementation of clean energy municipal financing for the community.	Participate in regional efforts and examine development of City-wide clean energy financing.	Rollout of three existing JPA PACE programs; City's Finance Department will lead procurement process to identify a third-party PACE Administrator and complete exemplar agreement for the procurement process for a third-party PACE program administrator by Summer 2014. *Status:* In JPA Administrators formally launched PACE in May. In September, Finance Department issued an RFP for a third-party PACE provider. RFP for supplementary PACE program administrator was released in Fall 2014.	Finance Department will present its recommendation for a third-party PACE provider to Council in spring 2015.

Goal 4: Green Building

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Lead by Example			
Implement private sector policy for new construction.	Evaluate policy effectiveness by monitoring the number of projects obtaining green building certification. Policy modifications or Deposit increase may be necessary to increase levels of Green Building.	Track state AB 1103 and specific requirements for energy benchmarking and disclosure to facilitate energy upgrades to existing commercial buildings. Discussion of AB 1103 is tracked under Goal 2. *Status*: Due to limited staff resources, staff could not track AB 1103 requirements.	Continue to evaluate the implementation of the private sector green building policy and investigate the need to revise the policy.
Certify existing City facilities using LEED Existing Building (EB) Rating System.	Participate in USGBC Portfolio Program (now known as the Volume Program).	Complete protocol pre-certification. Identify/ pursue new funding sources that are aligned with program objectives. *Status*: Due to limited resources, staff could not advance existing building stock into the Volume Program.	Depending on capacity and funding, revisit opportunity for LEED-EB certification of existing municipal facilities.
Communications and Engagement			
Promote green building for private sector new construction through staff interactions with the public.	Develop outreach materials to support private sector green building policy for new construction and showcase municipal facilities.	Conduct additional outreach and education for staff and development community. Status: Ongoing; however, Due to limited staff resources, staff could not expand this program.	Continue outreach and education for staff and development community and explore opportunities to support 2030 district through ProspectSV partnership.

Goal 5: Zero Waste & Waste to Energy

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Lead by Example			
Readjustments for Commercial Sector.	Administer contracts with Republic Services and ZWED that offer a range of services to San José businesses while complying with state-mandated diversion and furthering Green Vision and other City policies.	Continue working with Republic and ZWED to maximize material recovery, increase business training and support, and maximize diversion. *Status*: ZWED's AD facility began operation. Staff worked with Republic and ZWED to refine material processing and recovery to maximize diversion. Diversion increased to nearly 80 percent.	Continue working with Republic and ZWED to create energy from waste and maximize recovery of materials, focusing on system refinements, and increased training and support for businesses to recover more challenging materials, such as glass, in order to reach 80 percent diversion in 2015.
Construction and Demolition Waste Diversion.	Develop new program/reporting requirements for construction and demolition (C&D) facilities.	Collaborate with PBCE to ensure new CALGreen requirements are integrated into AMANDA database and permitting process. Revise and update outreach materials and online resources to reflect statewide regulations and internal, programmatic changes. Explore internal and external opportunities to enhance programmatic benefits to customers and facilities, while maximizing C&D diversion. Actively participate in region-wide discussions on implementing a collaborative third-party certification program for future years. *Status*: Continued collaboration with regional	Analyze program requirements ensuring alignment with state building code. Encourage facilities to improve operations and develop capabilities to increase diversion. Continue to seek additional C&D facilities to certify. Explore region wide partnerships to implement a collaborative third-party certification program for future years. Continue to utilize enforcement to encourage more non-exclusive haulers to dispose and recycle their collected cleanout and C&D waste appropriately.

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
		partners to develop third-party certification program.	
Maximize use of Recycle Plus Residential solid waste services by residents	Develop strategies to enable residents to divert additional materials safely and conveniently.	Evaluate backend processing of garbage from single-family homes to divert recyclables and organics from the landfill and significantly increase diversion rate for Collection District B. Implement Recycle Right campaign to raise residents' awareness on recycling best practices by providing education and enforcement. Complete EIC construction and prepare for HHW facility, opening in Spring 2014. Utilize HHW outreach campaign to increase use of new facility by San José residents. *Status*: Initiated backend processing in District B. Added EPS collection and recycling to NCU events. Raised residents' recycling awareness with 800 outreach letters, daily inspections. Opened EIC and HHW facility.	Continue to work with residential haulers on activities to address recycling correctly. Scope opportunities to expand backend processing of garbage to additional SFD customers. Collaborate with nonprofit recyclers such as Goodwill, Salvation Army, and Hope Services to provide more opportunities for residents to recycle textiles, mattresses, and other hard-to-recycle material. Expand the NCU program through partnerships with Code Enforcement and the Santa Clara County HHW staff to include collection of batteries and medical sharps. Increase use of on-call large item pickup services by single and multi-family customers. Continue to effectively coordinate resources with Police and PBCE to provide services to minimize blight-related activities. Utilize outreach, education, and enforcement as methods.
Eliminate litter to achieve Zero Waste and decrease blight.	Reduce use of disposable, single-use items that contribute to litter, including carryout bags, water bottles, and expanded polystyrene (EPS) takeout food packaging.	Staff will implement the provisions of the recently passed EPS phase-out set to take effect on January 1, 2014 and January 1, 2015. Collaborate with Parks, Recreation & Neighborhood Services (PRNS); Public Works (DPW) and Mineta San José International Airport (SJC) to increase the number of public water bottle filling stations and reduce the usage of disposable plastic water bottles as opportunities allow.	Staff will continue to implement the provisions of the recently passed EPS phase-out effective on January 1, 2014 and January 1, 2015. Incorporate waste reduction and litter prevention messages in outreach at large venues. Continue collaboration with key public venues to add more public water bottle filling stations. Initiate a pilot program to ensure right level of solid waste service for customers to prevent blight and litter.

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
		Status: Implemented EPS provisions. Collaborated with PRNS, DPW, and SJC to install water bottle filling stations at five parks.	
Drive large San José events and venues toward Zero Waste.	Provide education and assistance to event organizers and food vendors to increase waste diversion. Work with public events and venues to educate visitors about sustainability.	Use stakeholder focus group results to implement a new streamlined program including a stronger role for partner organizations, effective technology use, including an online map tool, increased public education of department wide messages, and efficient resource utilization. Work with the San José Convention Center and other flagship public venues to develop messaging and displays that educate visitors about various green features of the facility and its operations and encourage similar actions at home or work. Work with the Earthquakes to create permanent green messaging and displays as the new stadium *Status*: Successfully implemented streamlined Zero Waste events pilot and worked with the San José Convention Center, Earthquakes, and public venues to develop and promote green vision messages.	Evaluate pilot for permanent program implementation. Begin the scope of a new diversion services contract for FY 2016-17. Continue to partner with SJSU Spartan Athletics on public education and zero waste tailgating during home football games in 2015. Work with the San José Convention Center and other flagship public venues to develop messaging and displays that educate visitors about various green features of the facility and its operations and encourage similar actions at home or work. Work with the Earthquakes to create permanent green messaging and displays at the new stadium.
Strategic Partnerships			
Develop waste-to-energy technology infrastructure at the City's Regional Wastewater Facility (RWF).	Collaborating with regional and state public partners as well as private planners and investors will provide the most efficient solution for waste diversion and energy production.	Implement demonstration unit at RWF for one year gasification pilot using wood waste and biosolids as feedstock Evaluate opportunities for fats, oil, and grease (FOG) collection and processing with private sector partners to determine feasibility of design and construct pilot FOG receiving station at the Plant.	In collaboration with private entities, construct and operate demonstration gasification unit to assess conversion of wood waste and biosolids into a synthesis gas. Berkeley Lawrence Berkeley National Laboratory, in partnership with the City and ZWED, will administer a $4.3 million CEC EPIC grant and will recommend actions to enable further deployment of AD for solid waste-to-energy.

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
		Status: Gasification pilot feasibility study was published by the City in April 2014, and recommended proceeding with a demonstration project. The FOG pilot initiative was deferred by staff in FY2013-14 due to capital planning and construction efforts underway at the RWF and is currently estimated to start in 2019.	Continue monitoring ZWED AD system performance. Work with the state and other funding agencies to create opportunities to fund WTE demonstration and commercial projects in San José.
Work in partnership with public and private organizations to support San José's Green Vision goals.	Collaborate with a variety of regional public and private organizations.	Develop campaign with the San José Earthquakes to promote waste and litter reduction. Work to expand the state Bottle Bill as part of a regional and/or statewide program to provide resources to reduce litter. *Status*: Promoted waste and litter reduction at five San Jose Earthquakes home games and five World Cup special events.	Expand fan outreach at Earthquakes games. Partner with Stanford University's Sustainable Cities class to identify strategies that will increase residential HHW appointments. Develop communication plan that pools resources from the EIC's tenants to promote and educate the public on available waste diversion programs. Collaborate with SCVWD, County of Santa Clara, and CPSC, to purchase and locate medication disposal bins in the RWF tributary area, and outreach proper use. City staff on the state Mattress Advisory Committee will provide technical input on the design and implementation of the Used Mattress Recovery and Recycling Act Program. Work to expand the state Bottle Bill as part of a regional and/or statewide effort to provide resources to reduce litter. Work to guide legislation that supports, including funding, the City's Green Vision Plan, zero waste and waste-to-energy priorities.
Communications and Engagement			

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Promote San José programs while reducing reliance on traditional marketing campaigns.	Engage the public using creative partnerships and new technologies.	Increase social media presence. Promote the use of smart phone applications for programs at local and regional conferences instead of printed materials. Collaborate with the Earthquakes to promote environmental programs though television and radio ads and in-person outreach opportunities. *Status:* Posted environmental messages through ESD, Earthquakes and other partners' social media outlets, such as the Silicon Valley Bike Party.	Continue and expand outreach campaign with San José Earthquakes to promote large item recycling, litter, HHW, and used motor oil programs via stadium events and multimedia advertisements. Explore mobile applications and mobile advertising as part of the Earthquakes campaign.

Goal 6: Recycled Water

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Lead by Example			
Determine the most effective and efficient options to expand production and uses of recycled water.	Identify program opportunities as part of the strategic planning process	Complete the master planning process in collaboration with SCVWD. *Status*: Master Plan completion December 2014.	Develop strategic implementation plan in collaboration with SCVWD for Master Plan goals.
Financing Mechanisms			
Determine funding options for recycled water infrastructure, operations and maintenance, and expansion.	Identify options as part of the strategic planning process.	Continue to work with USBR to maximize funding opportunities in support of increasing SBWR return on investment and system reliability. *Status*: Staff working to maximize grant funding opportunities for future capital	Continue to evaluate funding opportunities for strategic plan implementation, including large scale Prop 1 and Prop 84 opportunities.

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
		expenditures. In FY 2013-2014, SBWR received $4million in grant reimbursements.	
Strategic Partnerships			
Develop the SCVWD and other agency partnerships to further the objectives of SBWR.	Take advantage of strategic partnering opportunities to leverage SBWR resources effectively.	Review coordination opportunities with SCVWD through the Master Plan Governance Analysis. Status: Engage RWF tributary agencies, retailers, SCVWD, and other potential partners in implementation of strategic plan recommendations.	Continue collaborative efforts with stakeholders to leverage regional resources in the implementation of Master Plan goals.
Support the state's goals for additional use of recycled water which leverage state and regional resources to meeting SBWR objectives.	Participate in regional and state recycled water efforts and forums which further SBWR objectives.	Continue to support and develop efficient and consistent regulated uses of recycled water in the region and state. *Status*: SBWR staff participating in state and regional efforts to support water recycling.	Continue to support efficient and consistent regulated uses of recycled water in the region and state.
Communications and Engagement			
Effectively engage potential customers and other stakeholders on the benefits of recycled water	Increase recycled water customers and partners.	Continue to effectively collaborate with nonprofit, academic, and private sector partners to increase use of recycled water for customers along existing SBWR pipelines. *Status*: Suspended while system upgrades are being implemented.	Identify the needs for customer engagement during the transition from increased recycled water use to a period of increased potable water production from recycled water.

Goal 7: Sustainable Development

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Lead by Example			
General Plan Update.	Complete Envision San José 2040 General Plan (adopted 11/01/11).	Continue work on Urban Village Plans. Begin the development of Housing Element under the Plan Bay Area (RHNA). The City held the 2014 Annual Review to consider amendments to the Envision San Jose 2040 General Plan in fall 2014. Approvals included three General Plan text amendments, twelve amendments to the land use diagram, and adoption of the Diridon Station Area Urban Village Plan.	Continue work on Urban Village Plans. Certify the Housing Element under the Plan Bay Area (RHNA). The City will hold the 2015 Annual Review to consider amendments to the Envision San Jose 2040 General Plan in fall 2015. These amendments are considered only once a year. The City will also hold the first four-year major review of the Envision San Jose 2040 General Plan.
Advocating Policies			
Monitor and advocate for legislation that enables the implementation of the General Plan.	Review proposed legislation and implementation of existing laws related to sustainable land use planning.	Ongoing review and analysis as needed. *Status*: Interdepartmental team has been formed to review proposed cap-and-trade program.	Continue to monitor, review, and participate as needed in the cap-and-trade program, AB 1103, and Plan Bay Area
Financing Mechanisms			
Leverage grants.	Seek outside funding sources for sustainability planning activity and implementation of the General Plan.	Continue applying for grants that support development of Urban Village Plans and other General Plan implementation actions.	Continue to apply for planning grants in order to support development of Urban Village Plans and other General Plan implementation actions.

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
		Status: Received grant to develop an Urban Village Master Plan for East Santa Clara Street corridor between City Hall and Coyote Creek. Also received grants to develop Urban Village Plans for the Santana Row/Valley Fair, Winchester, and Stevens Creek Village Plan Areas.	
Strategic Partnerships			
Strengthen advocacy; broaden partnerships.	Increase role as an advocate in state/regional planning and grow partnerships with nonprofits.	Continue participating in regional planning initiatives (e.g., Sustainable Communities Strategy). *Status*: Ongoing.	Continue participating in regional planning initiatives (e.g., Sustainable Communities Strategy).
Communications and Engagement			
Publicize Envision San José 2040 General Plan policies	Focused civic engagement with identified stakeholders and community organizations, First Horizon village area residents.	Engage community in Envision General Plan Implementation elements, such as zoning ordinance amendments and Urban Village plans, through community meetings, website information, and other modes; engage Planning Commission in creation of Urban Village zoning districts; and engage developers to catalyze new development in focus areas. *Status*: Held more than a dozen urban Village workshops in 2014.	Continue to engage the community in Urban Village planning workshops.

Goal 8: Clean Fleets

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Lead by Example			
Reduce fuel consumption and GHG emissions.	Use higher fuel efficiency vehicles in public safety fleet.	Explore grant opportunities for procurement of hybrid aerial trucks for the City's traffic signal maintenance program. *Status*: Hybrid aerial trucks were ordered in FY 2013-14. Grant opportunities were not available for the class of vehicle needed.	Complete B20 biodiesel infrastructure upgrades to achieve higher fuel efficiency vehicles in public safety fleet.
Financing Mechanisms			
Reduce GHG emissions from fleet.	Utilize annual fleet replacement funding to replace fleet in accordance with the Green Fleet Policy; pursue grant funding.	Continue to pursue grant opportunities. Work with departments with vehicle needs that are supported by special or fee-supported programs in replacing vehicles with alternative fueled vehicles. *Status*: Acquired 24 hybrids and extended the lease on 27 i-Mievs plug-in EVs for two additional years and purchased two i-Mievs.	Continue to pursue grant opportunities from both the federal and state levels.
Strategic Partnerships			
Expand alternative fuel infrastructure.	Collaborate with other jurisdictions for regional compatibility.	Work with private firms to evaluate the potential of installing a fast charger in one of the downtown parking garages. Consider extending the Car Share Parking Pilot program for two years and allow new participants to apply for the pilot – while retaining the 40-space limit. Status: The City installed another three EV chargers at the Environmental Innovation	Identify grant opportunities to expand the supply of EV chargers where demand is or will soon exceed supply and to provide opportunities for more employees to charge personal vehicles and purchase and charge more City vehicles. Strategically increase electrical capacity at key sites to support that expansion and future growth.

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
		Center, increasing the total number of publically accessible chargers to 53. The City elected not to install a fast charger as it could not come to agreement with a private provider on terms acceptable to the City. In February 2014, Council voted to extend the car share parking pilot program for two years, until March 2016.	

Goal 9: Trees and Streetlights

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Lead by Example			
Reduce Citywide streetlight energy consumption.	Use federal grant funds to convert LPS streetlights to LED with adaptive controls.	Implement LED streetlight conversions through Energy Service Contract with Chevron; Chevron plans to convert approximately 18,000 streetlights in 2014. *Status*: OpTerra began to convert 18,000 streetlights in December 2014. The remainder of the lights will be installed in early 2015. The City also converted 630 lights through development projects and federal grants.	Convert 16,497 streetlights through an Energy Service Contract with OpTerra; convert a minimum of 1,850 streetlights through federal grants and City Capital Improvement Program funds.
Advocating Policies			
Change state regulation to allow cost effective metering of individual lights.	Advocate CPUC regulatory changes.	Reach resolution with PG&E on an extension of the tariff pilot to summer 2014. Towards end of the pilot, begin discussion of potential longer-term billing solutions, such as	Reopen conversation with PG&E on a permanent dimmable streetlight rate in late 2015- early 2016, when PG&E's 2017 General Rate Case is filed with the CPUC.

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
		development of a permanent tariff for adaptable streetlights. *Status*: PG&E, the California City/County Street Lighting Association (CAL-SLA) and the City reached consensus on revisions to PG&E's dimmable streetlight pilot program in August 2014. The revised tariff was submitted to the CPUC for approval.	
Financing Mechanisms			
Increase the care of the community forest and meet the Green Vision planting goal.	Prepare long range plans for an alternative funding mechanism for street tree maintenance and planting.	Finish the street tree inventory, which then can be used to evaluate funding mechanisms, planting and maintenance strategies in the formulation of a possible Community Forest Master Plan for San José. Coordinate City's community forestry programs with OCF to optimize scarce resources and advance San José's tree planting programs.	Begin review and analysis of street tree inventory data and the development of a Community Forest Management Plan Coordinate City's community forestry programs with OCF to optimize scarce resources and advance San José's tree planting programs.
Identify funds to upgrade to smart, energy-efficient streetlights.	Require energy-efficient lighting for new development; identify federal and city funding sources; investigate potential for pooled purchase to improve purchase price and financing options.	Continue to seek financing and grant opportunities to fund conversions. *Status*: OpTerra's 18,000 streetlight conversion project began in December 2014. Work is expected to be completed in March 2015.	Continue to seek grants and other opportunities to fund conversions, within or outside of an ESCO agreement.
Strategic Partnerships			
Expand, maintain, and track new community forest tree plantings	Continue to build upon and enhance Our City Forest partnership through	Complete street tree inventory. Continue working with OCF to leverage resources, promoting the Community	Continue to seek opportunities through grants, development projects, and OCF partnership to create complete streets with LED lights, trees and bike lanes.

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
through partnerships with residents and community groups.	collaborative initiatives. Jointly pursue other partnerships that might advance City's tree goals.	Nursery, and relocate OCF offices. Continue to build OCF partnership through collaborative initiatives. Jointly pursue other partnerships that might advance City's tree goals. Seek opportunities through grants, development projects, and OCF partnership to create complete streets with LED lights, trees and bike lanes. *Status:* Inventory complete. City entered into a fee-for-service contract with OCF to plant trees on selected bikeways.	

Goal 10: Trails

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
Lead by Example			
Expand City's trail network.	Identify priority areas to expand the interconnected trail network.	Commence construction of Guadalupe River Tasman Under-Crossing (500 ft) *Status:* Open to the public in November 2014. Commence construction on Lower Silver Creek (0.3 mile) *Status:* Open to the public in May 2014. Developer constructing Coyote Creek, Old Oakland Road to UPRR tracks (0.3 mile)	Submit budget proposal to expand trail network Secure necessary permits for construction of Coyote Creek Trail from Story Road to Selma Olinder Park, and have project prepared for construction in Summer 2015 Secure necessary permits for construction of Coyote Creek Trail from Highway 237 to Tasman Drive, and have project prepared for construction in Summer 2015. Accept Developer-built (0.8 miles) Coyote Creek Trail improvements (Old Oakland Road to UPRR, and Berryessa Road to Chessington Drive)

Strategic Focus	Proposed Strategy	2014 Work Plan	2015 Work Plan
		Status: Under construction. Developer constructing Coyote Creek, Berryessa Road to Chessington Drive (0.5 mile) *Status:* Under construction.	
Expand City's bike network.	Implement "Bike Plan 2020," the Council-approved citywide bike plan.	Install 20 miles of onstreet bikeways including color and separation enhancements. *Status*: Completed 19 miles of onstreet bikeways. Installed 200 public bike parking spaces.	Install 50 miles of onstreet bikeways. Install 500 public bike parking spaces.
Financing Mechanisms			
Fund expansion of trail network.	Work with regional, state, federal, and private entities to secure funding and sponsorship.	Pursue 5 competitive grants (minimum). *Status:* Pursued funds as noted in report.	Pursue up to 3 competitive grants (minimum).
Fund expansion of onstreet bikeway network.	Seek grants to help expand and improve onstreet bikeway network.	Seek grants that match *Bike Plan 2020* goals *Status:* Obtained seven grants totaling $9.3 million.	Seek grants that match *Bike Plan 2020* goals including the annual Transportation Development Act.
Strategic Partnerships			
Expand and maintain trail network through partnerships.	Establish partnerships with nonprofits and private entities.	Investigate partnership with health care organization to promote usage of trail network for health and fitness. Conduct Trail Count with community partners. *Status*: Unsuccessful in identifying a partnership with the heath care industry. Completed seventh annual Trail Count.	Investigate additional opportunities for partnerships with local nonprofits or regional transportation agencies.