

PASADENA

GREEN CITY REPORT 2008



THINK GREEN



A GREEN AND SUSTAINABLE COMMUNITY

GREEN CITY REPORT 2008

Throughout the world, there has been a turning point in the public acceptance of climate change and its potential impacts on the environment. As one of the largest sources of greenhouse gas emissions, the U.S. is struggling with how to resolve this critical issue. The City of Pasadena has led the way among municipalities by ensuring that our projects, programs, buildings and open space reflect our strong sense of responsibility to future generations.

The Pasadena City Council set the tone several years ago by setting high environmental standards for local government and all sectors of the community. City staff from a number of departments have provided expert recommendations for moving forward with these efforts, and continue to work with the community to make certain these commitments are carried out with excellence and enthusiasm.

Pasadena's Green City Action Plan is the blueprint for addressing all issues of sustainability and climate change. Aggressive targets have been set for reducing citywide energy and water use, maximizing efficiency, planning intelligently for growth and championing emerging technologies.

In this, our third edition of the annual Green City Report, you will see documentation of our progress in achieving the goals of the United Nations Urban Environmental Accords. Along with this data, we continue the practice of citing notable accomplishments – from the City Hall green building acclaim by way of LEED Gold Certification to the Arroyo Seco natural streambed and cultural landscape designation on the National Register of Historic Places.

The City of Pasadena remains committed to sharing our sustainability successes and continues to encourage the acceleration of environmental progress on a regional, state and national level.

I am confident that these successes will continue to inspire everyone in Pasadena to work together toward a healthy, safe and prosperous future.

Please visit www.cityofpasadena.net/greencity to learn more.



Michael J. Beck
City Manager

A "GREEN STAR" CITY IN THE GOLDEN STATE

Motivated by a growing global concern about the imprint of the human population on climate change, the Pasadena City Council on September 18, 2006, endorsed the U.S. Conference of Mayors Climate Protection Agreement as well as the United Nations Green Cities Declaration and Urban Environmental Accords. The latter, adopted by communities around the world, lists 21 specific actions for cities to pursue in the areas of energy, water, waste reduction, environmental health, urban design, urban nature and transportation and provides the framework for Pasadena's forward thinking 2006 Green City Action Plan. In 2012, the United Nations will bestow on cities recognition in the form of a Green City Star award for progress made in implementing eight or more Accords.

Just two years after pledging a commitment to the Accords and with widespread support from the community, Pasadena celebrates its achievement in attaining the City's first Green City Star for completing its eighth Accord Action, Urban Environmental Accord Action 11 – Tree Canopy Inventory. Using Geographic Information System technology as well as aerial Near Infra Red wavelength photography, the City completed a tree canopy analysis to inventory more than 62,000 street trees, 125,000 park trees and more than 200,000 trees on private property. The resulting data, which can be used to estimate energy savings from shade trees, identified more than 4,200 acres of tree canopy coverage – or nearly a third of the City's total land acreage. It also allowed the City to confirm that over 50% of our parkways are planted with trees, an important stipulation of Action 11.

12 BY 2012

With eight Accord Actions accomplished, the next goal is to ensure the completion of at least 12 actions by 2012. The City is undertaking the following steps towards reaching four additional Accord Actions:

ACTION 4 – Zero Waste by 2040. Developing a Zero Waste Strategic Plan which will guide the City towards reducing waste that ends up in local landfills.

ACTION 5 – Manufacturer Waste Reduction. Considering an ordinance curtailing the use of plastic bags, a major component of waste and litter.

ACTION 14 – Clean Vehicles. Completing an inventory of all fleet vehicles, including an emissions analysis, to assess the smog-reducing potential.

ACTION 16 – Toxics Reduction. Completing an inventory of all chemicals used in its daily operations and identifying and using "green" substitutes where appropriate.

Pasadena looks forward to having the self-assessment of these accomplishments formally recognized by the United Nations in 2012.

LEADING THE WAY THROUGH COLLABORATION

It is through innovative partnerships and support from the "green stars" throughout the community – thousands of residents, business owners, community groups, institutions and volunteers – that sustainability can become a reality. This collaborative approach was evident throughout 2008.

GREEN SUMMIT

In June, more than 600 enthusiastic participants converged to engage in dialogue on sustainability and Pasadena's Green City Action Plan, during the Green Leadership Summit at the Pasadena Convention Center – the first event of its kind in Southern California.

GREEN TRAINING

A civic-minded constituency pledged their commitment to a greener Pasadena through the City's new Online Green Training Program. The dynamic site offers in-depth information about the City's environmental goals and dozens of resources for living and working green.

GREEN EXPERTS

A diverse team of experts continued to lead the way to a sustainable future with their dedicated service on Pasadena's Environmental Advisory Commission. Meeting monthly, this past year the volunteer group considered challenging issues such as the water crisis facing the City and state, developing a strategy for a clean energy future, instituting tougher green building standards, and banning the wasteful practice of single-use plastic bags.

GREEN CALIFORNIA

Committed to participating in the broader community, Pasadena became an inaugural member of Green Cities California in 2008, a group dedicated to accelerating local, regional, national and international efforts to achieve sustainability.

GREEN TEAM

Pasadena's Green Team – employees representing a broad cross section of City departments – continue to work diligently to build momentum and track progress for Pasadena's environmental goals. In 2008, the team identified over 170 sustainability indicators and gathered corresponding data to measure the progress the City is making in achieving specific targets identified in the action plan.

PASADENA

The accomplishments in this 2008 Green City Report are indices of the progress made towards implementing the 21 Actions of the Green City Action Plan, which follows the framework of the United Nations Urban Environmental Accords. Cities that have successfully implemented actions will be recognized by the United Nations as a Green City on World Environmental Day 2012, with a ranking determined by the number of actions completed.

PASADENA GREEN CITY REPORT CARD JANUARY 2009

URBAN ENVIRONMENTAL ACCORD ACTION	ACHIEVED	LIKELY	UNDETERMINED
ENERGY			
1. Renewable Energy	🍃		
2. Energy Efficiency			🍃
3. Climate Change			🍃
WASTE REDUCTION			
4. Zero Waste		🍃	
5. Manufacturer Waste		🍃	
6. Recycling	🍃		
URBAN DESIGN			
7. Green Building	🍃		
8. Urban Planning	🍃		
9. Environmental Jobs	🍃		
URBAN NATURE			
10. Green Space Access			🍃
11. Tree Canopy	🍃		
12. Habitat Protection	🍃		
TRANSPORTATION			
13. Public Transportation	🍃		
14. Clean Vehicles		🍃	
15. Traffic Congestion		🍃	
ENVIRONMENTAL HEALTH			
16. Toxics Reduction		🍃	
17. Organic Foods		🍃	
18. Air Quality			🍃
WATER			
19. Potable Water Conservation		🍃	
20. Water Source Protection		🍃	
21. Waste Water Reduction		🍃	
TOTALS	8	9	4

🍃 Achieved in 2008

19-21 ACTIONS 🍃🍃🍃 CITY
16-18 ACTIONS 🍃🍃🍃 CITY
12-15 ACTIONS 🍃🍃🍃 CITY
8-11 ACTIONS 🍃🍃 CITY



ENERGY

With inventive new programs, groundbreaking partnerships and a community-wide effort to draft a new 20-year power supply plan, Pasadena continues to advance toward a future of clean, efficient and reliable energy.

GREEN CITY ACTION GOALS

UEA 1 — Renewable Energy

Increase the use of renewable energy to meet 10% of the City's peak electric load by 2012.

UEA 2 — Energy Efficiency

Reduce the City's peak electric load by 10% by 2012.

UEA 3 — Climate Change

Reduce greenhouse gas emissions by 25% by 2030.



Achieved



Undetermined



Undetermined

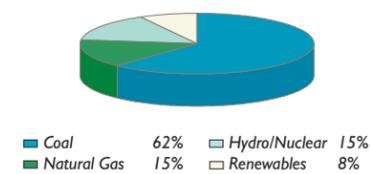
PROGRESS

UEA 1: The City increased its state-qualifying renewable energy resources from 2% in FY06 to 8% in FY08 and expects to reach 16% by FY12.

UEA 2: The average peak energy reduction rate from FY06-08 was 1.32 MW annually. At the current rate the City would reach a peak reduction of 9 MW (3%) by 2012 or 7% less than the goal.

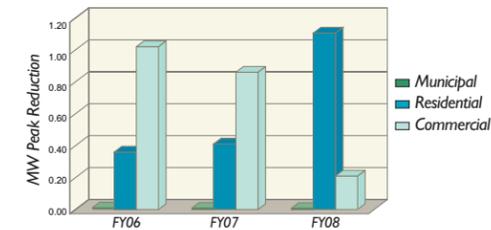
UEA 3: The 25% reduction goal in greenhouse gases equates to reducing emissions from utility supplied energy from 974,000 metric tons of CO2 to 717,000 tons of CO2 by 2030. The greenhouse gas inventories related to land use and transportation are being prepared.

Pasadena's Energy Resources - FY08



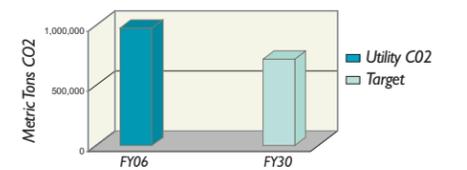
UEA 1

Peak Energy Reduction by Customer Class



UEA 2

PWP Supplied Energy - CO2 Emissions



UEA 3

ACCOMPLISHMENTS

In 2008 Pasadena

- Achieved LEED Gold certification for the historic City Hall, which is now 20% more energy efficient than state standards.
- Created a new Commercial Energy Efficiency Partnering Program, with rebates for any permanently installed energy-saving technology. The 2008 installations alone are expected to save over 7 MW of energy each year.
- Sparked a wave of solar installations with the new Pasadena Solar Initiative Program, advancing Pasadena ever-closer to its goal of 14 megawatts of solar power by 2017.
- Partnered with Caltech to secure the City's first large-scale solar power purchase agreement, providing the campus with 320,000 kilowatt-hours of clean power through a state-of-the-art rooftop solar system.
- Contracted a purchase of 30,000 MWh of power generated by methane gas emitted from the Skunk Creek Landfill. Online by 2010, the project will cut the City's annual greenhouse gas emissions by 16,500 tons per year and provide enough energy to power 5,000 homes.
- Invested \$57,000 to illuminate all City libraries with 100% green power, joining City Hall, Kaiser Permanente, Caltech Housing, Huntington Hospital and more than 1,500 customers citywide in purchasing renewable energy.
- Issued "The Power of 10 Challenge" with the delivery of free compact-fluorescent light bulbs (CFLs) citywide. The program encourages 53,000 Pasadena households to switch to 10 CFLs, with the citywide goal of eliminating 10,000 tons of greenhouse gas emissions annually.
- Partnered with Heritage Housing Partners in the design and construction of the Fair Oaks Court, an affordable homeownership development, that includes energy and water efficiency measures from top to bottom and Energy Star Certification.
- Launched a community effort to craft a new 20-year Integrated Resource Plan to ensure reliable and environmentally responsible electric service, competitive rates and energy independence.
- Achieved the status of Climate Action Leader by registering, measuring, certifying and reporting greenhouse gas emissions to the California Climate Action Registry.



WASTE REDUCTION

Zero waste by 2040! It's an ambitious goal and one which encompasses both recycling the waste we produce, and reducing the waste that is generated. Pasadena is addressing both with progressive recycling and waste reduction programs, policies and pledges.

GREEN CITY ACTION GOALS

UEA 4 — Zero Waste

Achieve zero waste to landfills and incinerators by 2040.



Likely

UEA 5 — Manufacturer Waste

Reduce the use of a disposable, toxic or non-renewable product category by at least 50% by 2012.



Likely

UEA 6 — Recycling

Implement "user-friendly" recycling and composting programs with the goal of reducing by 25% per capita solid waste disposal to landfills and incineration by 2012.

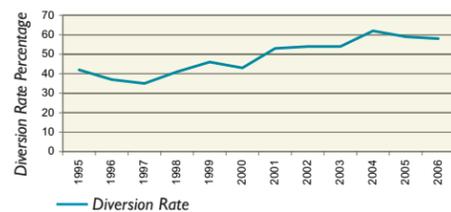


Achieved

PROGRESS

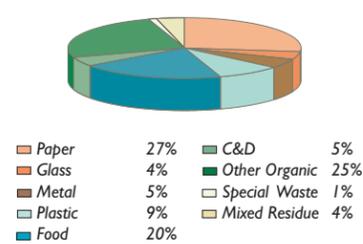
- UEA 4:** The calendar year (CY) 2004 California Integrated Waste Management Board (CIWMB) certified diversion rate for the City is 62%. The preliminary reports for CY05 and CY06 indicate diversion rates of 59% and 58%.
- UEA 5:** Available data from a 1999 statewide waste characterization study published by the CIWMB indicates that paper, food, plastic and other organic material (leaves and grass) make up the majority of the waste stream.
- UEA 6:** The City has over 12 "user-friendly" recycling and composting programs in place. Per capita solid waste disposal decreased from 1,634 pounds in FY06 to 1,498 pounds in FY08; a decrease of 136 pounds per capita (8%) over a three year period. An additional annual reduction of 272 pounds per capita is needed to reach the 25% reduction goal by 2012.

Annual Diversion Rate Trends



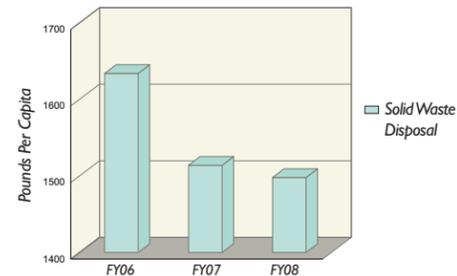
UEA 4

Composition of Disposed Materials for Residential Sector



UEA 5

Annual Per Capita Solid Waste Disposal



UEA 6

ACCOMPLISHMENTS

In 2008 Pasadena

- Diverted 12,000 pounds of trash for recycling during the 2008 Rose Bowl Game and collected and recycled 480,000 beverage containers during the 2008 UCLA football season.
- Increased the diversion rate requirements of licensed waste haulers.
- Installed recycling stations adjacent to the athletic fields at Memorial Park, Victory Park, Allendale Park and Brookside Park.
- Collected 207,273 pounds of household hazardous waste and 74,089 pounds of electronic waste during free collection events.
- Launched a program to provide free one-quart "sharp waste" containers for the safe disposal of needles and other medical supplies used at home by residents.
- Launched a community effort to draft a plastic bag reduction program.
- Introduced a new Battery and Compact Fluorescent Lamp recycling program, with 12 convenient collection points throughout the City for residents and business owners.
- Recycled 85% of all green waste collected by City crews; converting waste into mulch for ground cover in the City's natural areas, parkways and frontage roads.
- Joined Green Cities California in pledging to only purchase 100% post-consumer recycled copy paper, saving 8.6 million pounds of carbon dioxide emissions, 19.6 million gallons of water, 11.5 million kilowatt hours of electricity and 67,000 trees.

URBAN DESIGN

With careful forethought, innovation and community involvement, Pasadena is setting in writing its plans for a healthy and vibrant community. Sustainable urban design enhances quality of life through environmentally sound buildings, shorter commutes and less traffic, pedestrian and bike-friendly neighborhoods, cleaner air, accessible recreational amenities, affordable housing, and diverse job opportunities.

GREEN CITY ACTION GOALS

UEA 7 — Green Building

Mandate a green building rating system standard that applies to all new municipal buildings.



Achieved

UEA 8 — Urban Planning

Advance higher density, mixed use, walkable, bikeable and disabled accessible neighborhoods which coordinate land use and transportation with open space systems for recreation and ecological restoration.



Achieved

UEA 9 — Environmental Jobs

Create environmentally beneficial jobs in low-income neighborhoods.

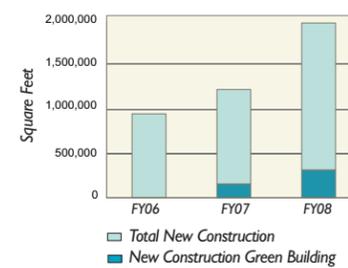


Achieved

PROGRESS

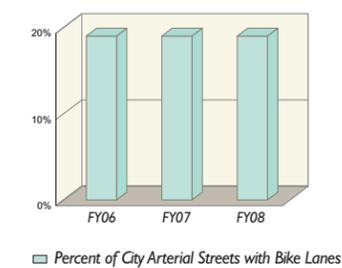
- UEA 7:** In FY05 the City Council approved the Green Building Practices Ordinance, and adopted by reference the internationally recognized LEED green building rating system for private sector and municipal buildings. To date five projects have received LEED certification and 23 projects are LEED registered.
- UEA 8:** From FY06 to FY08 the City maintained 60 miles of bike lanes; added 113 new curb ramps and retrofitted 351 ramps with detectable warning surfaces to improve accessibility.
- UEA 9:** The City's MASH training program provides opportunities for qualifying residents to gain skills and work habits necessary to obtain a permanent job. Training includes work experience with City waste reduction and recycling programs; water and energy efficiency programs; urban revitalization programs; and disaster response programs.

Green Building Growth



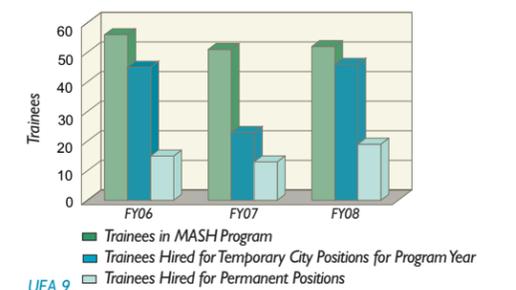
UEA 7

Bike Lane Development



UEA 8

MASH Program



UEA 9

ACCOMPLISHMENTS

In 2008 Pasadena

- Celebrated the completion of the Green Space, Recreation and Parks Element and Master Plan, the result of a three-year effort to update the City's vision for open space, parks, recreational facilities and programs. The plan calls for better connections between local and regional hiking and biking trails, more parks and open space in deficient neighborhoods, cooperation with Pasadena Unified School District for joint use of school campuses, and improved sports fields and recreational facilities for the community.
- Began the process of updating the Land Use and Mobility Elements of the General Plan which will incorporate sustainability measures.
- Raised the Green Building Ordinance performance level to LEED Silver for new municipal buildings and large commercial buildings.
- Launched a major update to the Open Space and Conservation Elements of the General Plan, naming a steering committee of local volunteers to supervise an aggressive community outreach campaign. Complementing the City's Green Space, Recreation and Parks Element & Master Plan, the updated document will assure quality stewardship of Pasadena's green spaces, recreation facilities and natural resources.
- Provided a variety of opportunities for the community to learn about the City's plans for a sustainable future such as at the City's first Green Leadership Summit; through an innovative on-line Green Training Program for City employees and the public; at outdoor education and vocational programs at City parks; and through outreach and giveaways at the City's annual Greening the Earth Day event.



URBAN NATURE

Parks and meadows, trees and trails – Pasadena’s urban “wilderness” offers recreational opportunities for our residents and visitors, habitats for a thriving wildlife, a visual green buffer against our urban landscape and a link to surrounding nature conservancies. Pasadena continues to make great strides in restoring our City’s natural areas.

GREEN CITY ACTION GOALS

UEA 10 — Green Space Access

Ensure that there is an accessible public park or recreational open space within 1/2 kilometer of all residents by 2015.



UEA 11 — Tree Canopy

Conduct an inventory of existing canopy coverage in the City; and, then establish a goal to plant and maintain canopy coverage in not less than 50% of all available sidewalk planting sites.



UEA 12 — Habitat Protection

Protect critical habitat corridors and other key habitat characteristics from unsustainable development.



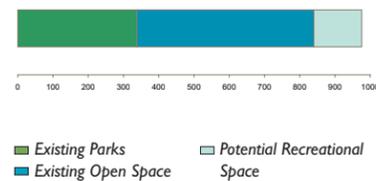
PROGRESS

UEA 10: As of FY08 there are 840 acres of dedicated parks and open space for recreational use, equivalent to 254 square feet per capita. An additional 136 acres of potential recreational space is available through the City’s joint use agreement with PUSD schools, which allows for schools to function as neighborhood parks. A pilot program at Madison Elementary School launched in 2006 provided 2.2 acres of recreational space for public use during non-school hours. An analysis of the percentage of residents within 1/2 kilometer of an accessible public park or recreational open space is pending.

UEA 11: As of FY08 the City inventoried 4,209 acres of canopy coverage, equivalent to 28.6% of the City’s total land acreage, and 95.4% of the City’s 62,000 sidewalk planting sites contained trees.

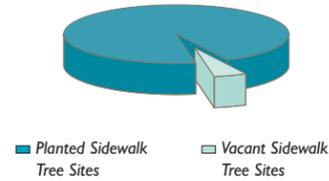
UEA 12: The City has adopted policies for guiding the preservation of existing critical wildlife habitat corridors and key habitat characteristics. 84% of the City’s habitat remains protected. From FY06-08 7.45 acres of habitat were restored and \$1,880,200 in funding was secured for habitat restoration.

Parks and Open Space - FY08



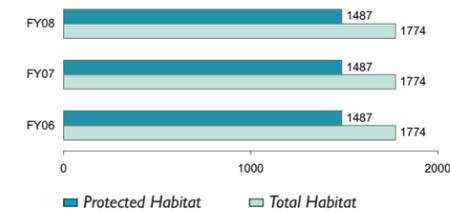
UEA 10

Sidewalk Tree Planting Sites - FY08



UEA 11

Habitat Protection



UEA 12

ACCOMPLISHMENTS

In 2008 Pasadena

- Celebrated the completion of a \$2.5 million stream restoration project to improve water quality and restore a 20-acre swath of the Central Arroyo.
- Created shelter and places for feeding and nesting for the reintroduction of 300 Arroyo Chub, a native fish species.
- Removed invasive species, planted native trees, repaired trails, created erosion control systems and installed 400 trash-capture devices in curbside storm drains to prevent debris from entering the Arroyo Seco waterway.
- Completed a comprehensive tree canopy coverage survey.

TRANSPORTATION

By walking, biking, riding the bus, carpooling and switching to clean-energy vehicles, Pasadena and its residents are cutting traffic and improving air quality. While solo driving remains a major source of air pollution and greenhouse gases, Pasadena is committed to expanding greener transit alternatives.

GREEN CITY ACTION GOALS

UEA 13 — Public Transportation

Expand affordable public transportation coverage to within 1/2 kilometer of all City residents by 2015.



UEA 14 — Clean Vehicles

Phase down sulfur levels in diesel and gasoline fuels, use advanced emission controls on all public fleets to reduce particulate matter and smog-forming emissions from those fleets by 50% by 2012.



UEA 15 — Traffic Congestion

Implement a policy to reduce the percentage of commute trips by single occupancy vehicles by 10% by 2012.



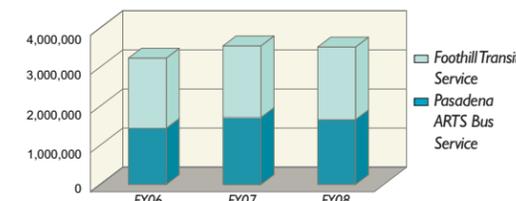
PROGRESS

UEA 13: 100% of all Pasadena residents and businesses are within 1/2 mile from a public transit stop. There are 29 public transit routes throughout the City and 710 bus stop locations. Ridership data for the Foothill Transit and Pasadena ARTS bus services shows an increase in combined annual ridership from 3,228,921 in FY06 to 3,511,701 in FY08. Bus services run a range from 80 to 120 directional miles daily.

UEA 14: In FY08 the City’s fleet consisted of 793 vehicles, 8% of which are powered by alternative fuel other than traditional diesel and unleaded fuel. 19% of all diesel fleet have been retrofitted with advanced emission controls, and remaining vehicles are on a schedule to be retrofitted with a goal of 100% completion by 2012. An emissions inventory is currently being developed to determine the baseline for the 50% reduction goal.

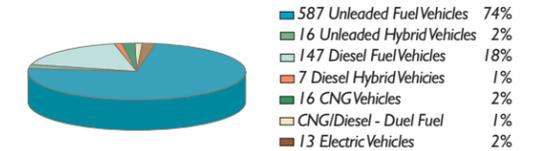
UEA 15: The City has implemented a policy to reduce the percentage of commute trips by single occupancy vehicles. The Mobility Element objectives support the goal of this Action by increasing the availability and use of transit, promoting bicycle and pedestrian travel, enforcing stricter parking requirements for new developments in transit-oriented zones, and managing traffic on multi-modal corridors.

Annual Bus Ridership



UEA 13

Fleet Composition - FY08



UEA 14

ACCOMPLISHMENTS

In 2008 Pasadena

- Maintained 60 lane-miles of bikeways and on-street parking for 1,000 bikes.
- Added bike racks to each of the 24 of the Pasadena Area Rapid Transit System (ARTS) buses.
- Transported over one million passengers on the ARTS bus system.
- Encouraged Metro to continue bus service on two lines — Line 177 and Line 256 - that were scheduled to be eliminated, and to create a Bus Rapid Transit service along Fair Oaks Avenue, Line 762, a well-traveled and popular commuter route.
- Installed four solar-powered traffic-calming awareness signs. The dynamic, electronic boards alert drivers to their speed.
- Improved Metro Gold Line train service with a new operating schedule that provides service every 7.5 minutes during peak hours.
- Built a safe and secure bike storage area adjacent to the Allen Avenue Gold Line Station.
- Exceeded its ridesharing goals set by the South Coast Air Quality Management District — once again! The Average Vehicle Ridership (AVR) for this reporting period was 1.72, exceeding the 1.50 AVR goal by 15%.



ENVIRONMENTAL HEALTH

Investing in a green and sustainable community will pay dividends to human health and well being. This is achievable by controlling pollution and contaminants in our environment, replacing toxic products in favor of safer alternatives, and supporting the purchase of locally grown and organic foods.

GREEN CITY ACTION GOALS

UEA 16 — Toxics Reduction

Every year identify one product, chemical or compound that is used within the City that represents the greatest risk to human health and reduce or eliminate its use by the municipal government.



UEA 17 — Organic Foods

Support the public health and environmental benefits of locally grown organic foods. Ensure that 20% of all City facilities (including schools) serve locally grown and organic food by 2012.



UEA 18 — Air Quality

Establish an Air Quality Index (AQI) to measure the level of air pollution and set the goal of reducing by 10% by 2012 the number of days categorized by 10% by 2012 the number of days categorized in the AQI range as “unhealthy” or “hazardous”.



PROGRESS

UEA 16: In FY08 the City began conducting an inventory of toxic products, identifying the type, quantity and location of chemicals at City worksites and viable “green” alternatives.

UEA 17: It has not been determined whether individual schools are serving locally grown and organic food.

UEA 18: The Southern California Air Quality Management District provides air quality reports for the West San Gabriel Valley. In the CY03 baseline year, 50 days were categorized as “unhealthy”. Data indicates a reduction to 24 days in FY06 and to 21 days in FY07 in which the state ozone standard was exceeded. The number of samples testing above allowable federal standards for fine particulate matter increased from one in FY06 to three in FY08.

Green Cleaning Requirements

USE OF GREEN SEAL CERTIFIED PRODUCTS
✓ Nontoxic
✓ Biodegradable
✓ No Solvents
✓ Chlorine Free
✓ Phosphate-Free
✓ Non-Petroleum Based

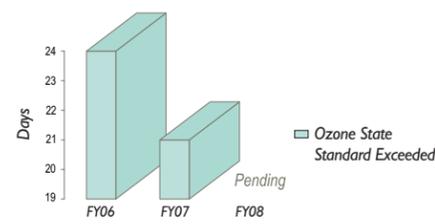
UEA 16

Organic Food Indicator

ORGANIC FOOD INDICATOR	FY06	FY07	FY08
Locally grown, organic produce served at City sponsored events	TBD	TBD	TBD
Locally grown, organic produce served at City-owned and operated facilities	TBD	TBD	TBD
Locally grown, organic produce served at PUSD schools	TBD	TBD	TBD
Pasadena restaurants that serve locally grown, organic food	<1%	<1%	<1%

UEA 17

Air Quality - Ozone Standard



UEA 18

ACCOMPLISHMENTS

In 2008 Pasadena

- Adopted no-smoking policies in certain outdoor locations to protect the public from secondhand smoke.
- Continued an aggressive lead inspection program that includes checking for high lead blood levels in children and taking appropriate medical action when necessary, as well as identifying problem properties and mitigating lead contamination with property owners.
- Included green cleaning program guidelines in the citywide housekeeping contract, requiring the use of certified Green Seal standard products for the cleaning of all City facilities.
- Participated in the American Public Health Association’s National Public Health Week, April 7-13, 2008. With the theme “Climate Change: Our Health in the Balance,” the weeklong observance helped individuals and families recognize that mitigating climate change is critical not only for the health of our planet, but for the health of humans around the globe.
- Conducted surveys of Pasadena restaurants, including an assessment of organic food options available.

WATER

Faced with drastic water supply predictions due to an ongoing drought, Pasadena redoubled its efforts in 2008 to urge all water customers to conserve. While about 40% of Pasadena’s water is pumped from local wells, the remainder is purchased from the Metropolitan Water District, which is relying on dwindling sources in northern California and along the Colorado River. MWD is widely expected to cut its allotments to local cities in 2009.

GREEN CITY ACTION GOALS

UEA 19 — Potable Water Conservation

Reduce per capita water consumption by 10% by 2015.



UEA 20 — Water Source Protection

Protect the ecological integrity of the City’s primary drinking water sources.



UEA 21 — Wastewater Reduction

Adopt municipal wastewater management guidelines; reduce the volume of untreated wastewater discharges by 10% by 2012.



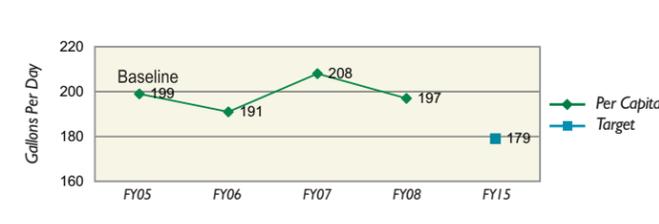
PROGRESS

UEA 19: From FY05 to FY08 the City has intermittently achieved both a per capita water reduction and a per capita water increase of 4%. The City is developing a comprehensive Water Conservation Plan which targets an overall community reduction of water use by levels of 10% and 20%.

UEA 20: In FY08 Pasadena received 68% of its water supply from the Metropolitan Water District and 32% from local groundwater. On average, 55% of Pasadena’s well capacity was closed from FY06-FY08 due to contamination. To improve the reliability of water supply the City is developing and constructing groundwater perchlorate and volatile organic compound treatment facilities beginning in FY09, to be fully operational by FY11.

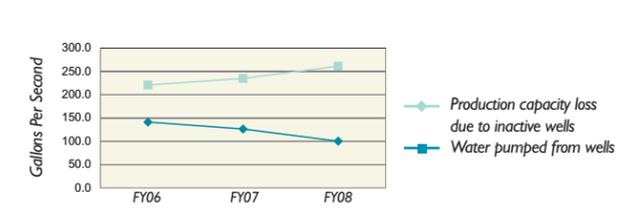
UEA 21: Data indicates that wastewater discharges from broken sewer lines from FY06-08 totaled less than 1000 gallons out of a flow rate of 13.8 million gallons. A baseline amount for wastewater discharges has not been determined, and an analysis of whether a 10% reduction has been reached is pending.

Daily Per Capita Water Consumption



UEA 19

Well Pumping Production



UEA 20

ACCOMPLISHMENTS

In 2008 Pasadena

- Implemented Water Shortage Plan I, urging Pasadena residents and businesses to follow specific, voluntary water-saving measures with the goal of conserving 10%, or about 1.1 billion gallons annually.
- Posted eye-catching, humorous bus shelter ads citywide providing consumers with water-saving tips.
- Established a water shortage hotline and web page for residents to report water waste.
- Amended the Green Building Ordinance to require green building projects to achieve a minimum water use reduction of 20% under baseline.
- Trained more than 350 home gardeners in the techniques of water-wise landscaping through a series of free City-sponsored courses.
- Secured a grant from the U.S. Department of the Interior’s Bureau of Reclamation to merge water use data and satellite photos onto an electronic map of the City to more accurately predict water consumption.
- Offered an extensive list of City rebates on water-saving fixtures. Commercial projects alone in 2008, including more than 500 new high-efficiency toilets in multi-family complexes and commercial buildings, will save over 110 acre feet, or nearly 36 million gallons of water annually.
- Installed low flow water drip tubing that eliminates water runoff and overspray for landscaping design at street medians.
- Improved storm water runoff in the Central Arroyo through the creation of ten new vegetated islands and the installation of permeable pavers in 30 parking spaces at Rose Bowl Parking Lot I.



AWARDS & OUTREACH

AWARDS

- Pasadena City Hall received LEED Gold certification, the second-highest level awarded by the U.S. Green Building Council. The landmark was also honored at the 5th Annual Historic Preservation Awards.
- The Southern California Association of Governments awarded the Central District Specific Plan with the Presidents Award for Visionary Planning for Mobility, Livability, Prosperity, and Sustainability.
- Awarded for “Sustainability and Green Practices”, Pasadena was one of 12 cities in the nation to be recognized for Best Practices in Municipal Government by the International Association of City Managers.
- The Arroyo Seco Natural Streambed received designation on the National Register of Historic Places as a cultural landscape.
- The Online Green Training Program was included in the National League of Cities’ (NLC) City Practices database, joining more than 6,000 proven city solutions that NLC provides to its 18,000 members.
- The Pasadena Public Health Department was awarded a grant by the Public Health Trust to develop outreach strategies to consumers and retailers about the health hazards of lead poisoning, and reducing the consumption of contaminated candy.
- The California Public Officials for Water and Environmental Reform Council honored the Arroyo Seco Foundation, the City of Pasadena, and design/construction partner Camp

Dresser & McKee, Inc. with its 2008 POWER Award for the Central Arroyo Stream Restoration Program, citing its innovation as a successful urban stream project which used a design/build collaboration model and re-introduced native fish into an urban waterway.

- PWP celebrated its sixth straight national Tree Line USA Award. Presented by the National Arbor Day Foundation and the National Association of State Foresters, the award recognizes public and private utilities that serve as models in protecting and enhancing America’s “urban forests”.
- The Green Building Program was one of 25 in the entire nation to be recognized in a report by the Environmental Law Institute for leadership to ensure environmentally sound buildings.

OUTREACH

- The City attracted thousands of participants and more than 80 exhibitors to its “Greening the Earth Day 2008” event, promoting green building and sustainable design, recycling and waste reduction, green power, clean vehicles, composting, wildlife conservation and art.
- PWP hosted a series of free solar workshops and expanded incentives and reimbursement of permit fees through the new Pasadena Solar Initiative.
- Armory Center for the Arts, Patagonia Pasadena and Conscientious Projector joined the City in presenting a free “Into Action” lecture series exploring global warming, energy and water conservation, green living practices, and urban impacts on marine life.

- Pasadena joined 350 cities worldwide to celebrate Earth Hour 2008, an international campaign designed to raise energy awareness by having participants refrain from using electricity for one hour.
- Conscientious individuals and organizations were honored for their environmental efforts through the City’s 2008 Outstanding Recycler awards.
- PWP hosted its first-ever Water & Energy Efficiency Expo in March, featuring free seminars on efficiency, technology and cost savings that drew a throng of participants.
- Public Works and the Southern California Air Quality Management District (SCAQMD) hosted a lawnmower exchange where attendees replaced their old gas lawnmowers for cleaner electric models. Switching from a gas to electric mower is the equivalent of taking 43 cars off the road for one year.
- The City teamed with SCAQMD to exchange loud, polluting leafblowers for cleaner, quieter models at reduced cost, resulting in over 500 trade-ins.
- PWP promoted the importance of water conservation with free California Friendly Landscape workshops, children’s activities, a water-saving demonstration project at Paseo Colorado, extensive fixture rebates, free landscaping audits, and an aggressive campaign of community group meetings, public service announcements, ads and articles.
- The City’s Department of Transportation continued to entice solo commuters with cleaner options through Bike Week Pasadena/Bike to Work Day, Rideshare Month events, a “Try Transit” program allowing commuters to try Pasadena ARTS buses free for a month, and more.

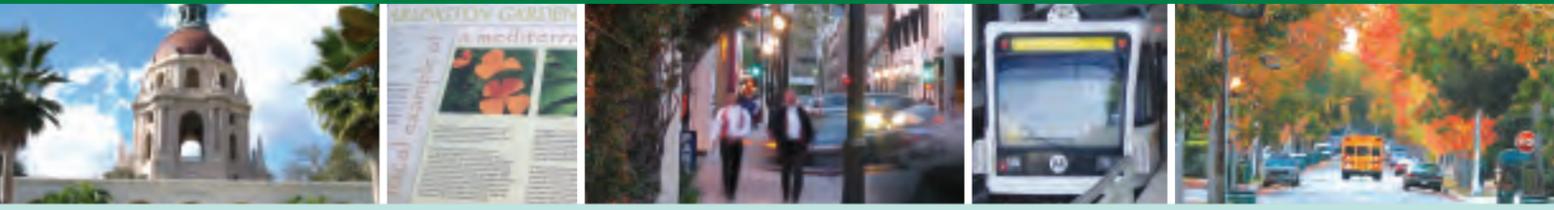
- PWP sponsored a team from John Muir High School in the 6th Annual Solar Cup Competition; a seven-month program that promotes conservation as students build and race solar-powered boats.
- Nearly 25,000 visitors logged on to the Green City page of the City’s website

PASADENA SHARED ITS SUSTAINABILITY SUCCESSES WITH THE FOLLOWING ENTITIES:

Municipalities: Oxnard; Burbank; San Diego; South Pasadena; Ontario; Artesia; Los Angeles; Glendale; Beverly Hills; Irvine; Torrance; Santa Monica; Claremont; South Gate; Huntington Beach; Palm Desert; Rancho Cucamonga; Culver City; Monrovia; Jersey City, New Jersey; Village of Schaumburg, Illinois; Chicago, Illinois; Vancouver B.C; Flagstaff, Arizona; Tucson, Arizona; Beijing, China; Los Angeles County; Alameda County.

Institutions: Cal Poly Pomona, Cal Poly SLO, USC UC Santa Barbara, Arizona State University, Sequoyah School, John Muir High School, St. Philip’s School, JPL Green Club.

Agencies: California Governor’s Office, League of California Cities, MTA, San Gabriel Valley Council of Governments, Environmental Law Institute, LA City and County Engineers Association, Municipal Green Building, South Bay COG, SCAQMD, Foothill Transit, LADOT, Breathe LA.



GREEN PROGRAM RESOURCES

Energy & Water

Energy and Water Efficiency Incentives and Rebate Programs
 Solar Power
 Green Power
 Energy Evaluations
 "California Friendly™ Landscape" Workshops
 Connecting with the Business Community
 626-744-6970
 www.PWPweb.com

Environmental Health

Environmental Health Services
 Health & News Topics
 (626) 744-6005
 www.cityofpasadena.net/publichealth
 Pasadena Farmers' Markets
 www.pasadenafarmersmarket.org

Urban Nature

City Park Map
 Urban Forestry Program
 Pasadena's Tree Protection Ordinance
 The Arroyo Seco
 Parks & Natural Resources News & Events
 Neighborhood Tree Plantings
 www.cityofpasadena.net/publicworks/PNR

ENVIRONMENTAL ADVISORY COMMISSION AGENDAS

Sign-up to receive the Environmental Advisory Commission agendas, including the subcommittee agendas, to stay informed on "green" developments in the City.
 Visit: www.ci.pasadena.ca.us/planning/meetings/notices.asp

Urban Design

Green Building Program
 Green City Programs
 Green Events Calendar
 Online Green Training Program
 626-744-7546
 www.cityofpasadena.net/greencity

Transportation

Commuter Options
 Pasadena ARTS/Dial-A-Ride
 Bicycle Master Plan/Bike Maps
 Metro Gold Line
 Available Transportation Planning and Reports
 Traffic Reduction Strategies
 (626) 744-4055
 www.cityofpasadena.net/trans

Waste Reduction

Waste Reduction and Recycling Programs
 Backyard Composting Program
 Household Hazardous Waste Collection Program
 Used Oil Collection Program
 SHARPS Needle Collection Program
 CFL & Battery Collection Program
 (626) 744-4721
 www.cityofpasadena.net/publicworks/SMIWMII
 Email: recycle@cityofpasadena.net

URBAN ENVIRONMENTAL ACCORDS

GREEN CITIES DECLARATION

Signed on the occasion of United Nations Environmental Programs World Environment Day June 5th, 2005 in San Francisco, California

RECOGNIZING for the first time in history the majority of the planet's population now lives in cities and that continued urbanization will result in one million people moving to cities each week, thus creating a new set of environmental challenges and opportunities; and

BELIEVING that as Mayors of cities around the globe, we have a unique opportunity to provide leadership to develop truly sustainable urban centers based on culturally and economically appropriate local actions; and

RECALLING that in 1945 the leaders of 50 nations gathered in San Francisco to develop and sign the Charter of the United Nations; and

ACKNOWLEDGING the importance of the obligation and spirit of the 1972 Stockholm Conference on the Human Environment, the 1992 Rio Earth Summit (UNCED), the 1996 Istanbul Conference on Human Settlements, the 2000 Millennium Development Goals, and the 2002 Johannesburg World Summit on Sustainable Development, we see the Urban Environmental Accords described below as a synergistic extension of the efforts to advance sustainability, foster vibrant economies, promote social equity, and protect the planet's natural systems.

THEREFORE, BE IT RESOLVED, today on World Environment Day 2005 in San Francisco, we the signatory Mayors have come together to write a new chapter in the history of global cooperation. We commit to promote this collaborative platform and to build an ecologically sustainable, economically dynamic, and socially equitable future for our urban citizens; and

BE IT FURTHER RESOLVED that we call to action our fellow Mayors around the world to sign the Urban Environmental Accords and collaborate with us to implement the Accords; and

BE IT FURTHER RESOLVED that by signing these Urban Environmental Accords, we commit to encourage our City governments to adopt these Accords and commit our best efforts to achieve the Actions stated within. By implementing the Urban Environmental Accords, we aim to realize the right to a clean, healthy, and safe environment for all members our society.

IMPLEMENTATION & RECOGNITION

THE 21 ACTIONS that comprise the Urban Environmental Accords are organized by urban themes. They are proven first steps toward environmental sustainability. However, to achieve long-term sustainability, cities will have to progressively improve performance in all thematic areas.

Implementing the Urban Environmental Accords will require an open, transparent, and participatory dialogue between government, community groups, businesses, academic institutions, and other key partners. Accords implementation will benefit where decisions are made on the basis of a careful assessment of available alternatives using the best available science.

The call to action set forth in the Accords will most often result in cost savings as a result of diminished resource consumption and improvements in the health and general well-being of city residents. Implementation of the Accords can leverage each city's purchasing power to promote and even require responsible environmental, labor and human rights practices from vendors.

Between now and the World Environment Day 2012, cities shall work to implement as many of the 21 Actions as possible. The ability of cities to enact local environmental laws and policies differs greatly. However, the success of the Accords will ultimately be judged on the basis of actions taken. Therefore, the Accords can be implemented through programs and activities even where cities lack the requisite legislative authority to adopt laws.

The goal is for cities to pick three actions to adopt each year. In order to recognize the progress of cities to implement the Accords, a City Green Star Program shall be created.

At the end of the seven years the city that has implemented:

19-21	ACTIONS		CITY
16-18	ACTIONS		CITY
12-15	ACTIONS		CITY
8-11	ACTIONS		CITY

ENERGY

Renewable Energy • Energy Efficiency • Climate Change

ACTION 1 Adopt and implement a policy to increase the use of renewable energy to meet ten percent of the city's peak electric load within seven years.

ACTION 2 Adopt and implement a policy to reduce the city's peak electric load by ten percent within seven years through energy efficiency, shifting the timing of energy demands and conservation measures.

ACTION 3 Adopt a citywide greenhouse gas reduction plan that reduces the jurisdiction's emissions by twenty-five percent by 2030, and which includes a system for accounting and auditing greenhouse gas emissions.

WASTE REDUCTION

Zero Waste • Manufacturer Responsibility • Consumer Responsibility

ACTION 4 Establish a policy to achieve zero waste to landfills and incinerators by 2040.

ACTION 5 Adopt a citywide law that reduces the use of a disposable, toxic, or non-renewable product category by at least fifty percent in seven years.

ACTION 6 Implement "user-friendly" recycling and composting programs, with the goal of reducing by twenty percent per capita solid waste disposal to landfill and incineration in seven years.

URBAN DESIGN

Green Building • Urban Planning • Slums

ACTION 7 Adopt a policy that mandates a green building rating system standard that applies to all new municipal buildings.

ACTION 8 Adopt urban planning principles and practices that advance higher density, mixed use, walkable, bikeable and disabled accessible neighborhoods which coordinate land use and transportation with open space systems for recreation and ecological restoration.

ACTION 9 Adopt a policy or implement a program that creates environmentally beneficial jobs in slums and/or low-income neighborhoods.

URBAN NATURE

Parks • Habitat Restoration • Wildlife

ACTION 10 Ensure that there is an accessible public park or recreational open space within half-a-kilometer of every city resident by 2015.

ACTION 11 Conduct an inventory of existing canopy coverage in the city; and, then establish a goal based on ecological and community considerations to plant and maintain canopy coverage in not less than fifty per cent of all available sidewalk planting sites.

ACTION 12 Pass legislation that protects critical habitat corridors and other key habitat characteristics (e.g. water features, food-bearing plants, shelter for wildlife, use of native species, etc.) from unsustainable development.

TRANSPORTATION

Public Transportation • Clean Vehicles • Reducing Congestion

ACTION 13 Develop and implement a policy which expands affordable public transportation coverage to within half-a-kilometer of all city residents in ten years.

ACTION 14 Pass a law or implement a program that eliminates leaded gasoline (where it is still used); phases down sulfur levels in diesel and gasoline fuels, concurrent with using advanced emission controls on all buses, taxis, and public fleets to reduce particulate matter and smog-forming emissions from those fleets by fifty percent in seven years.

ACTION 15 Implement a policy to reduce the percentage of commute trips by single occupancy vehicles by ten percent in seven years.

ENVIRONMENTAL HEALTH

Toxics Reduction • Healthy Food Systems • Clean Air

ACTION 16 Every year, identify one product, chemical or compound that is used within the city that represents the greatest risk to human health and adopt a law and provide incentives to reduce or eliminate its use by the municipal government.

ACTION 17 Promote the public health and environmental benefits of supporting locally grown organic foods. Ensure that twenty percent of all city facilities (including schools) serve locally grown and organic food within seven years.

ACTION 18 Establish an Air Quality Index (AQI) to measure the level of air pollution and set the goal of reducing by ten per cent in seven years the number of days categorized in the AQI range as "unhealthy" or "hazardous."

WATER

Water Access & Efficiency • Source Water Conservation • Waste Water Reduction

ACTION 19 Develop policies to increase adequate access to safe drinking water, aiming at access for all by 2015. For cities with potable water consumption greater than 100 liters per capita per day, adopt and implement policies to reduce consumption by ten per cent by 2015.

ACTION 20 Protect the ecological integrity of the city's primary drinking water sources (i.e., aquifers, rivers, lakes, wetlands and associated ecosystems).

ACTION 21 Adopt municipal wastewater management guidelines and reduce the volume of untreated wastewater discharges by ten percent in seven years through the expanded use of recycled water and the implementation of a sustainable urban watershed planning process that includes participants of all affected communities and is based on sound economic, social and environmental principles.

Visit the [Green City Website](http://www.cityofpasadena.net/greencity) for additional information on the City's Green Programs and Resources
www.cityofpasadena.net/greencity



PASADENA
PLANNING & DEVELOPMENT
DEPARTMENT

www.cityofpasadena.net/greencity

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