

## **Executive Summary**

The annual sustainability progress report is intended to provide a continuous evaluation of the city's efforts as it relates to its goal of educating the Plano community regarding sustainability and incorporating sustainable best practices into city government, local businesses, and the daily lives of its residents. It also reflects key resource conservation data.

There has definitely been improvement within the city organization as sustainable practices have become standard operating procedures for many departments. Examples include:

- Double-siding copies for most departments
- LED lighting for all traffic signals
- Cell phone and inkjet cartridge recycling at Libraries
- Standard trash and recycling containers in city facilities
- Standard ambient temperature settings for all city facilities
- No electric heaters
- Elimination of most desktop printers
- Recycling of paper, aluminum, cardboard and plastic containers (35% diversion)
- Organic recycling at Animal Shelter
- Electronic plan review in Building Inspections
- Recycling binders and use of online application for boards/commissions in City Secretary's Office
- Battery recycling program at Radio Shop
- Use of CDs for distribution of information from City Manager and City Secretary Offices
- Turning off monitors every evening
- Turning off lights when offices and shared rooms are not in use
- Use of Document Management System in Legal
- Quarterly management reports on energy consumption



The following report outlines **new or expanded** programs and activities implemented in the 2009-10 fiscal year as a result of the committee work and departmental leadership. The report focuses on:

- Conservation goals to reduce consumption of energy, fuel, and water
- Efforts to reduce harmful air emissions
- Environmental education and community outreach
- Advancements in green buildings
- Recognition and awards

### **Resource Conservation:**

The City continues to systematically upgrade equipment and operating systems designed to reduce energy consumption and make our buildings more sustainable. A grant funded the installation of a software system that will shut down or put PCs in sleep mode when not in use. Parks & Recreation also made numerous upgrades to lighting and implemented a new fee structure to incentivize more games to weekends and daylight use.

Fleet Services continued its thorough evaluation of the existing fleet and worked with departments to eliminate 12 vehicles from the fleet. Combined with operational improvements, the City was able to reduce fuel consumption by 4% and reduce CO<sub>2</sub>e by 178 metric tons.

Several departments took specific steps to reduce paper waste by implementing electronic processes.

The City's internal water conservation efforts involved completion of the central park irrigation control system migration to MOTOMESH wireless network in order to control the application of irrigation watering in the most efficient manner. In addition, native plant materials, drought-tolerant plants, decorative grasses, and/or the use of decomposed granite (instead of ground covers) were included in new or renovated landscape areas such as the Haggard Library and Fire Station #12, the Day Labor Center, Memorial Park, and also in new areas along U.S. 75 in an effort to reduce future water demands.

Plano Centre embraced several sustainability initiatives designed to reduce energy consumption and promote conservation of natural resources.

### **Environmental Education & Community Outreach:**

Efforts to educate the Plano community resulted in 872 presentations and 35 volunteer training workshops reaching 32,056 people. In addition, the Live Green in Plano Volunteer Program trained 52 new volunteers and over 3,967 volunteers donated 15,894 hours to the SES programming. The Live Green Expo attracted over 16,000 attendees last year. Media exposure and partnerships were expanded to include 24 television spots, 43 radio spots and 58 print articles.

The following two new incentive programs were created:

- ***Water Conservation Rebate Program:*** Launched the Water Conservation rebate program for High Efficiency Toilets (HET), rain barrels and rain/freeze sensors. Total rebates for the year were: 317 toilets; 131 rain barrels; 65 rain/freeze sensors.
- ***Energy Efficiency and Weatherization Grant Program*** was developed for residents utilizing economic stimulus money. Total grant allowed per home is \$1575. 371 residents have been pre-approved for the program and are currently scheduling their energy audits and selecting the energy efficiency improvements that will be implemented based on the audit results and recommendations.

The City's recycling diversion rate increased from 28.1% to 31.4%

### **Finance & Capital Appropriations:**

The Sustainability & Environmental Services (SES) Department was awarded \$3,026,890 in grant funding. In addition, this report highlights results of the City's Environmental Purchasing Policy captured from environmentally preferable questionnaire completed by vendors.



### **Green Building:**

The City obtained its first LEED Existing Building Certification at the Animal Shelter, achieving the Silver certification level. LEED certification documentation has been submitted for the Environmental Education Center with a goal of achieving Platinum level. Fire Station 13 is being constructed as a LEED Silver certification project.

Planning Department's Community Services Division accomplished 13 full rehabilitations and 25 emergency repairs on affordable single family homes, with an emphasis on energy efficiency improvements.

Construction and demolition recycling increased 26% in 2009-10.

### **Awards & Recognitions:**

The following departments were recognized for programs and services having a positive impact on the environment:

Parks & Recreation

Records Management

Sustainability & Environmental Services

In addition, individuals, schools, organizations and businesses were recognized at the Environmental Community Awards luncheon for their outstanding environmental leadership and achievement within the Plano community.

## **BACKGROUND**

Sustainability is an approach to decision-making that integrates environmental and social concerns into business and economic decisions; considering more than cost, performance and aesthetics. The core issues are long-term durability, energy efficiency, air quality, water conservation and waste reduction. Each member of our regional community, from private citizen to corporate organization to public entity, plays a vital role in protecting and preserving our environment.

The Sustainability Department was created five years ago and has been tasked with educating the Plano community regarding sustainability and incorporating sustainable best practices into city government, local businesses, and the daily lives of its residents.

In order to advance the work of sustainability throughout the City, the Sustainability Director works with three sustainability committees representing city departments critical to the success of this program. In addition, several departments have embraced the city's vision of a more sustainable organization and taken opportunity to adopt new environmental policies, programs and practices important to their operation.

One indicator of our success is that sustainable practices have become standard operating procedures for many departments. Examples include:

- Double-siding copies for most departments
- LED lighting for all traffic signals
- Cell phone and inkjet cartridge recycling at Libraries
- Standard trash and recycling containers in city facilities
- Standard ambient temperature settings for all city facilities
- No electric heaters
- Elimination of most desktop printers
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- Turning off lights when offices and shared rooms are not in use
- Use of Document Management System in Legal
- Quarterly management reports on energy consumption
- Reuse of books through Friends of the Library book sales (50-100,000 books annually)
- Live Green in Plano News mailed three times a year to highlight broad range of environmental information related to community sustainability efforts
- Review of traffic flow patterns at intersections to optimize signal timing to reduce stopped vehicle delay, air pollutants, and excess fuel used.
- Temporary signal timing adjustments at intersections to accommodate construction related lane closures.



The following information reflects the new or expanded programs and activities implemented in the 2009-10 fiscal year as a result of the committee work and departmental leadership.

## Resource Conservation

### Goal: Reduce Energy Consumption

*Facilities Services* continues to systematically upgrade equipment and operating systems designed to reduce energy consumption and make our buildings more sustainable. Key replacement projects completed:

**A SEER**  
(Seasonal Energy Efficiency Rating)  
is the rating and performance standards that have been developed by the U.S. government and equipment manufacturer's to produce an energy consumption rating that is easy to understand by consumers. Basically, the lower the SEER rating, the more energy (electricity) is required to produce the desired effect.

1. On December 2009, obtained USGBC LEED Silver Certification for the Animal Shelter through installing an Energy Management System, and replacing fluorescent lamps throughout the building with new energy efficient lamps. Estimated savings is 248,788 kWh annually.
2. Replaced 17 (400 watt) HID parking lot fixtures with energy saving 162 watt LED fixtures at Carpenter Park Recreation Center. Estimated savings annually is 9,156 kWh annually.
3. Installed power factor correction capacitor banks on the main switch gear of the building. Estimated savings is an estimated \$5,155 annually in power factor charges from electric utility provider.
4. Replaced two rooftop A/C units totaling 17.5 tons of air-conditioning at Municipal Center South building from a SEER-9 rating to a SEER-13.2 rating. The estimated electrical energy savings is 43,028 kWh annually.
5. Replaced two split system air-conditioning units at Custer Pump Station totaling 13 tons of air-conditioning from a SEER-9 rating to a SEER-16 rating. The estimated electrical energy savings is 34,866 kWh annually.
6. Replaced two split system air-conditioning units at the Radio Shop building totaling 7 tons of air-conditioning from a SEER-9 rating to a SEER-16 rating. The estimated electrical energy savings is 18,774 kWh annually.
7. Replaced one split system air-conditioning unit at Equipment Services building that is 7.5 tons of air-conditioning from a SEER-9 rating to a SEER-16 rating. The estimated electrical energy savings is 20,115 kWh annually.
8. Replaced one split system air-conditioning unit at Stadium Pump Station that is 5 tons of air-conditioning from a SEER-9 rating to a SEER-16 rating. The estimated electrical energy savings is 13,410 kWh annually.

*Technology Services* installed the Verdiem software which shuts down the computer screens when not in use. This is the first phase of the project and is complete. The second phase of the project is to shut down or put the PC's in sleep mode when not in use. This is being tested at this time and will be put into production later this first quarter. The software will allow us to save 968,118 kWh per year and 1,281,788 lbs. of greenhouse gas emissions a year. The end result our energy cost will be reduced because, we will

be using less electricity and the environment will be improved because of putting out less greenhouse gases.

**Parks and Recreation** implemented a new fee structure which charges sports organizations for sports field lighting use during league play. This should serve as an incentive to shift more games to weekends and daylight use, resulting in reduced electrical consumption. Security lighting at several park shelters/pavilions were converted to LED light fixtures, significantly reducing power consumption. Conversion of additional facilities and other area lighting systems are in-progress. Tennis court lighting was also updated to a more efficient metal halide system at the Plano Senior High courts which are used by the general public after school hours. Mechanical light timers are being replaced with digital timers that will allow better management of lighting systems. Two old pool pump motors were replaced with higher efficiency units.

**Legal** installed motion detectors in the copy room and two offices.

**Customer and Utility Services** is participating with Oncor on an LED Streetlight Pilot Program to evaluate reliability, cost effectiveness, and environmental benefits.

### **Goal: Reduce fuel consumption and harmful air emissions**

300,000 less miles driven  
resulted in 4% reduction in fuel;  
178 metric tons of CO<sub>2</sub>e.

**Fleet Services** reviewed the Under-utilized vehicles in the fleet which resulted in an additional 12 vehicles turned in as Fleet Reductions for a total of 28 for the last two years. Fleet Services also stepped up its review of vehicle and equipment purchases to ensure right-sizing for type of jobs performed. They also reviewed all equipment scheduled for replacement and determined whether the equipment was truly in need of replacement or whether it could be postponed. This review resulted in the elimination of postponement of five vehicles last year, saving approximately \$120,000.00 in the ERF fund.

**Fleet Services/Public Works** successful in receiving NCTCOG funds to convert two Ford Escape Hybrid units to full electric and one electric charging station.

**Environmental Waste Services** evaluated a Labrie "Helping Hand" collection truck, equipped with automated arms on each side of the unit, allowing collecting carts along both sides of an alley in a single pass.

**SES Compost Operations & Marketing Division** made the following operational improvements:

- Purchased a low profile trailer which saves approximately 1 mile per gallon on fuel costs
- Reduced Trommel screens from 2 to 1 reducing fuel consumption 50% as screened output is 2-3 times greater with the new screen and reducing emissions by 50%
- Eliminated contamination in organics product loads – reducing fuel consumption and emissions from additional processing that was required to removed plastics



**Fire Department** reduced its fleet by two vehicles.

**Customer & Utility Services** expanded the remote automated meter reading (AMR) project by approximately 15,000 commercial and residential meters bringing our total to approximately 32,000 meters changed. That represents 40% of our total system. The expansion reduced fuel consumption by 439 miles a month for a total of 5,268 miles for the fiscal year through the implementation of our fixed network meter reading system.

**Transportation Engineering** is currently developing a long range plan for updating the city's Traffic Management Center (TMC). The initial portion of the upgrade involves replacing traffic surveillance cameras with hardware that allows authorized users from anywhere in the city to view and utilize the video streams. The planning document will be complete in the spring of 2011, and the initial video camera/video wall upgrade project will begin in early 2011. Longer range plans include establishing center to center communications with the TxDOT, DART, and stakeholder cities along the US 75 corridor. These changes will allow participating agencies to work more efficiently in the area of freeway incident management, and will result in significant cost savings to the public during freeway incidents through quicker response to congestion caused by accidents, lane closures, etc.

Approximately 50 signals were retimed last year in response to construction project phasing and citizen requests. No post evaluation performance data is available for these modifications.

**Parks and Recreation** recently extended the Bluebonnet hike and bike trail from Alma Drive to US 75. Additional trail and construction of important new connections provide increased opportunities for bicycle commuting and purposeful trips that help reduce traffic congestion and emissions, and promote walkable communities. Parks also eliminated the use of on-call take home (city) vehicles which are not as fuel efficient as most personal vehicles used by employees.

**SES Commercial Recycling Division** gave up the truck coordinators used for appointments and use the pool hybrid vehicle.

## Goal: Reduce Waste

**Public Works Utility Operations Division** developed specifications for the procurement of plastic meter box lids which required the product be made from 100% recycled HDPE plastic (also recyclable) and the recycle symbol be permanently stamped on the lid. The vendor is also required to pick up and recycle discarded lids at no additional cost to the City and provide documentation the lids were recycled.

Internal recycling diversion rate was maintained at **35%** last year, saving the city **\$29,580** in waste collection and disposal cost.

The Division also took steps to improve recycling by placing recycling containers in the bay area and to encourage participation by all employees. They also recycle copper and brass from water meters and valves and concrete from construction projects.

**Human Resources** expanded its electronic processes by delivering the Open Enrollment Workbook electronically for the first time, reducing printing cost and staff time in development. With this format, no paper was used during the 2010 Open Enrollment process. All employee information was placed on-line. Also, all health plan enrollment, including retirees, is completed on-line.

**City Manager's Office** added a scanner to their networked copier, enabling employees to scan documents and email copies instead of distributing hard copies. Scanning documents to electronic files is also a cost saver regarding physical file space.

**City Secretary's Office** provides Council agendas and packets fully paperless. Council Members utilize laptops during meetings for review of agenda items. Ordinances and resolutions are scanned and available electronically for research purposes rather than hard copies.

**Property Standards** began efforts to incorporate Laserfiche document solutions in the department's day-to-day operations with the anticipation of streamlining current record management processes. Imaging of case documents and departmental records is expected to eliminate archaic record filing

systems, reduce paper use, decrease storage requirements, and reduce reproduction costs associated with records management.

**Parks and Recreation** has diverted 100% of its landscape waste materials (including leaf removal) to the compost facility. They also began a recycling program at High Point Tennis Center.

**Fire Department** instituted a policy to print most documents double-sided and reduced number of desk printers.

**Health** initiated electronic review of blueprint plans submitted for review of food facilities, began scanning employee performance evaluation/planning documents for Human Resources, and developed an on-line food manager preparation course for food industry managers and staff.

**Plano Centre** has taken initiatives designed to strengthen its commitment to sustainability by reducing energy consumption and promoting conservation of natural resources. Elements of their green program include:

1. Installation of drought tolerant plants;
2. Installation of an intelligent irrigation system that conserves water by daily monitoring of each irrigation zone;
3. Creation of a vegetable and herb garden that is fertilized by the green waste generated in the kitchen through a worm composting (vermicomposting) system; produce grown is then used in food prepared by catering division.
4. Elimination of use of Styrofoam in Catering Department, which has been replaced with bulk purchase of eco-friendly products;
5. Added a line of yogurts from a local farm (and neighbor) as well as other locally grown or organic based items when requested;
6. Implementation of an Integrated Pest Management Program to manage pest damage to the landscaping economically and with the least possible hazard to people, property, and the environment;
7. Implementation of an on-site composting program for yard trimmings;
8. Calibration of lighting system by area to avoid any unnecessary energy consumption. The heating and cooling system can be controlled room by room as well, to conserve energy in unused rooms.
9. Conversion from the older variety of toilets and urinal flush valves to newer low flow valves saves us thousands of gallons of water per year;
10. Use of 100% recycled paper products in restrooms;
11. Placement of water stations throughout the facility to reduce the use of bottled water;
12. Recycling stations for paper, plastic, and aluminum cans;
13. Use of environmentally friendly and biodegradable cleaning products to improve indoor air quality;
14. Offering a plated service to eliminate any waste generated from an event and offering a green option for clients not interested in the plated service. This green option varies from recyclable plastics to fully compostable plates and utensils.
15. Donating food overages to the Plano Senior Center to avoid excess waste while meeting community need.



**Department of Emergency Management** began using scrap paper and turning into memo or scratch pads.

**Police** use lead-free and less lead ammunition whenever possible at the police gun range. This action was implemented to insure that officers are not exposed to high levels of lead. However, this is also beneficial for the environment. Specifically, this prevents the accumulation of lead in and around the gun range preventing the need for future lead rehab work and reducing the amount of lead waste that would be sent for disposal with a reclamation company.

**Sustainability & Environmental Services** scanned employee performance evaluations and created electronic "time off" requests.

## Goal: Conserve Water and Improve Storm Water Quality

**Parks and Recreation** completed the migration of the communication technology for the central park irrigation control system from the city radio system to the MOTOMESH wireless network that has been established throughout the city. This represents further progress in the controlling the application of irrigation watering in the most efficient manner. Native plant materials, drought-tolerant plants, decorative grasses, and/or the use of decomposed granite (instead of ground covers) were included in new or renovated landscape areas such as the Haggard Library and Fire Station #12, the Day Labor Center, Memorial Park, and also in new areas along U.S. 75 in an effort to reduce future water demands. Conservation Buffer Zones (CBZ) were fully established in areas of parks and along creek corridors to improve storm water runoff quality, lower emissions by reduced maintenance, provide wildlife habitat, and demonstrate sustainability efforts on public land. CBZ's have been widely accepted by the public. An additional 51 acre community park was acquired further preserving open space in central Plano. Additional trees were planted at Oak Point Park and Nature Preserve as a part of the Arbor Day celebration. New trees were planted at the entrance to the Heritage Yards softball facility in conjunction with the NFL and Super Bowl 45 outreach program. Open space and tree plantings provide a greener "footprint" within the city

**Customer & Utility Services** created a new format for their website where customers can view real time meter reads up to four times per day. This real time data allows customers to more closely monitor water use and adapt their behavior to conserve water. Residents are also provided comparison information of water use for residents in their zip code as well as all residents citywide.

## Environmental Education & Community Outreach

- **Energy Efficiency and Weatherization Grant Program** was developed for residents utilizing economic stimulus money. Total grant allowed per home is \$1575. 371 residents have been pre-approved for the program and are currently scheduling their energy audits and selecting the energy efficiency improvements that will be implemented based on the audit results and recommendations.
- **Online learning modules for Food Waste composting** were developed and posted to our livegreeninplano.com web site in June. The learning program was featured at a national gardening conference in July. The learning modules are being used to train PISD 7<sup>th</sup> grade teachers for this new required component of their curriculum.
- **Website Redesigned** and launched in March. The new look was adopted as the format for all City web pages.
- **Online registration system** for all education and outreach programs was developed and will launch in 2011.
- **Live Green Expo** was held in April with over 16,000 participants in attendance from around the region. New features included Keynote Speaker Joel Salatin, Fair Trade

35 volunteer  
training workshops;  
872 presentations;  
32,056 people reached;  
16,000+ attendees at  
Live Green Expo;  
City-wide recycling  
diversion rate increased  
from 28.1% to 31.4%

Market, Conversation Café, Green Biz Quiz, and Rain-barrel making workshops. Over 675 volunteers helped execute the event. Richardson was our regional partner.

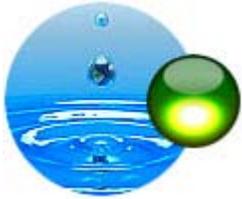
- **Live Green in Plano Volunteer Program:** Trained 52 new LGIP volunteers. Over 3,967 volunteers donated 15,894 hours to Sustainability & Environmental Services programming.
- **Plano Community Garden:** Added greenhouse, fencing for individual plots to keep rabbits out, and harvesting table. Classes were developed and held for the public and volunteers.
- **“Green Your Apartment” series** was developed for apartment dwellers. 2 presentations were given with 52 participants.
- **Faith Based Green Team Training** was developed and implemented. 2 presentations were given and 51 people were reached.
  - **Water Conservation Rebate Program:** Launched the Water Conservation rebate program for High Efficiency Toilets (HET), rain barrels and rain/freeze sensors. Total rebates for the year were: 317 toilets; 131 rain barrels; 65 rain/freeze sensors.
  - **Zero Waste Management Guidelines** along with signage to help integrate the zero waste philosophy were developed for public event venues including the International Festival, Live Green Expo, Arbor Day Run and other privately sponsored community events.
- **Eco Teens** volunteer training corps was developed through a grant from the North Central Texas Council of Governments. Twenty high school students were involved in a nine month training and service oriented program focused on sustainability and environmental concepts. Students are now carrying out individual environmental projects benefitting the Plano Community.
- **Plastic Bag Reduction Campaign** was funded by a grant from UPS and Keep America Beautiful. Twelve local grocery retailers participated in surveys of their shoppers and installation of reminder signs in their store parking lots prompting shoppers to bring and use their reusable bags.
- **Rain Barrel Making Workshops** were offered to 250 participants
- Added an additional **Texas SmartScape Workshop**
- Developed and implemented a second **“Live Green to Learn Green” series**
- Coordinated 117 **community cleanup events**
- **Media exposure and partnerships** were expanded to include 24 television spots, 43 radio spots, and 58 print articles.
- The **Nurtured World Workshop** was given to 36 employees and SES staff conducted sustainability orientation for approximately 125 new employees
- Other Environmental Education & Community Outreach Initiatives:

**Library** partnered with Sustainability & Environmental Services Department for the second “Learn Green to Live Green” series.

## Finance & Capital Appropriations

**Purchasing Department** conducted an environmentally preferable questionnaire with all vendor submittal documents to capture details of the City’s Environmental Purchasing Policy. Results included the following:

- Contract for window cleaning required all products utilized in work performed conform to Green Seal GS-37 standards for low toxicity.
- Purchase of reusable tote bags constructed from recycled non-woven polypropylene material. The material represents both a use of recycled material and a production process that utilizes less energy.



- Products included in the improvements to the Police Evidence Room used recycled plastics and metals. The equipment installed was more energy efficient and designed to reduce greenhouse gas emissions.
- Vendor chosen for mowing and landscape services in various floodway drainage easements and around various water storage facilities utilizes recycling program for all plastic flower and plant flats, selects low emission based equipment, replaces equipment every two years and does not bag clippings.
- Generators installed at Plano Centre and Ridgeview Pump Station were certified as EPA Tier III and resulted in greater energy efficiency and reduced emissions.
- Indoor plant maintenance contract requires all pesticides, fertilizers, and cleaning materials used in the course of work performed be of low toxicity and meet sustainability guidelines.
- Tables purchased for the new Environmental Education Center were manufactured from both recycled and sustainable materials.
- Contract for pest control service requires the service provider be knowledgeable and experienced with “green” pest control techniques consisting of Integrated Pest Management (IPM) to reduce the reliance on chemical pesticides and that any and all cleaning products meet the Green Seal GS37 environmental standard.

**Funding:** The Sustainability & Environmental Services (SES) Department was awarded \$3,026,890 in grant funding, which included:

- Five grants from NCTCOG totaling \$299,058 for waste reduction and educational programming;
- \$123,512 in NCTCOG TERP funds to replace older diesel trucks;
- \$58,920 in NCTCOG ARRA funds to convert two hybrid trucks into plug-in electric vehicles and build a charging station; and
- \$2,545,400 in ARRA Energy Efficiency Conservation Block Grants for various municipal and residential energy-efficiency activities. The following projects are in various stages of implementation.

PROJECTS	BUDGET
PC Shutdown Software	52,000
LED Parking Lot Lighting	100,000
Residential Energy Loan Fund	750,000
Residential Energy Efficiency Grants	625,000
Solar Water Heater – Fire Station 11	8,000
Solar Refrigeration – Community Garden	7,400
La Brie Recycling Truck	250,000
Energy Efficiency Code Training	30,000
Replace Chillers - Haggard Library & Sr. Center	240,000
Electric Charging Stations - Fleet	33,000
Solar Projects – Facilities	200,000
Waste-to-Fuel Feasibility Study	250,000
<b>TOTALS</b>	<b>2,545,400</b>

- In addition, Supplemental Environmental Project funding resulted in the exchange of 87 lawnmowers for electric mowers.

**Sustainable Revenues:** Recycling revenues improved over the record lows in the previous year, bringing in \$535,693. The compost revenue reached \$2,024,947, a 12% increase from the previous year. The Sustainability & Environmental Services Fund continues to be healthy, ending the year with a \$1,676,610 balance and no residential rate increase for 2010-11.

## Green Building

**Engineering Department** obtained the City's first LEED Existing Building Certification for the Animal Shelter achieving Silver certification level.

**Sustainability & Environmental Services** completed the Environmental Education Building, and submitted LEED Certification documents aim to achieve a Platinum certification level.

**Fire Department** is currently constructing Fire Station 13 at the corner of Corporate Drive and Tennyson Parkway on 2.3 acres in far NW Plano as a LEED Silver Certification project. When completed, it will be an 11,500 square foot facility and will cost approximately \$3.2 million under the 2005 Bond Program. Features include light-colored, reflective roofs and parking paving, dark-sky lighting, gray water system for showers and sinks, daylight-harvesting solar tube skylights, and roof overhangs and screens on southern and western building facades. More than 40% of all construction materials are locally manufactured and building materials contain more than 20% recycled content. Current estimates have the station opening mid to late summer of 2011.



13 LEED Certified Buildings in Plano (6 Gold, 5 Silver, 2 Certified);

18 LEED Certification Projects Registered in Plano;

3 presentations given (reaching 147 professionals)

**Planning Department's Community Services Division** accomplished 13 full rehabilitations and 25 emergency repairs on affordable single family homes. Highlighting a few critical improvements to the properties, the following sustainable improvements were made:

1. Doors replaced with new insulated, metal skin product and windows upgraded to utilize a solar coefficient of less than 0.3 on 10 homes (26.3% of the projects).
2. Provided attic insulation increasing the R value to a minimum of R-30 in ceiling of 11 homes (28.9% of the projects).
3. HVAC upgraded at least to SEER 13 minimum in 17 homes (44.7% of the projects).
4. Replaced original fixtures with water saving fixtures (showers/sinks/toilets) in 19 homes (50% of the projects).
5. Completed other miscellaneous sustainability improvements in 4 homes (10.5% of the projects).

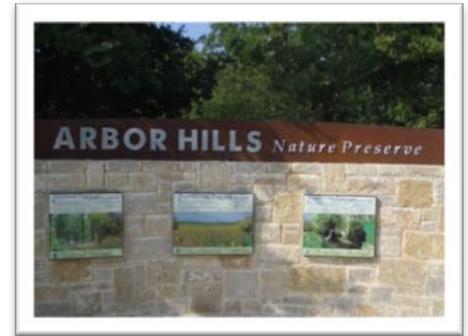
Additionally, the Housing Rehabilitation Program contracted for services of professional energy auditors in 2010. The auditors are now completing a Texas HERO Standardized Whole House audit to measure the energy efficiency of each house prior to and post rehabilitation improvements. Based on this new data,

we hope to report specific energy efficiency improvements in 2011 of Plano houses that participate in the rehabilitation program.

**SES Commercial Recycling Division** promoted the C&D Recycling Incentive Program developed in the previous year. As a result, 98% of eligible C&D projects received a refund. C&D recycling increased 26% in 2009-10.

## RECOGNITION & AWARDS

**Parks and Recreation Department** began the certification process to enroll Arbor Hills Nature Preserve in the Audubon Cooperative Sanctuary Program in effort to provide public education and outreach about how the nature preserve enhances and protects the environment. One phase of the certification process has been completed. Additional signage at the nature preserves and in various parks also provides public education and promotes sustainable practices.



By shredding and recycling over 1,400 cubic feet of paper records, we save 14 trees, 323 gallons of oil, 5,950 gallons of water and 3 cubic yards of landfill.

**Records Management** received an Environmental Award from Cintas Document Management for "Excellence in Preservation of the Environment and Document Security." Old boxes are re-distributed and used by departments for a savings of approximately \$1,350.00 each year. Through the use of our Laserfiche (imaging system) we are able to answer more open record requests to citizens electronically rather than using staff time and paper to make copies.

**Sustainability & Environmental Services** received the Solid Waste Association of North American Silver Award in Public Education/ Communication for the planning and implementation of the *Live Green Expo*.

Environmental Community Awards are designed to recognize outstanding environmental leadership and achievement within the Plano community.

2010 Winners include:

- Community Involvement School Awards
  - Outstanding Elementary Environmental Awareness Group & Clean Campus Award – Mitchell Elementary
  - Outstanding Secondary Environmental Awareness Group & Outstanding Campus Beautification Award – Robinson Middle School
- Environmental Star of Excellence
  - Environmental Community Partnership – Junior League of Plano/Plano Community Garden
  - Individual – Mark Meaders
  - Neighborhood Group/HOA – Westbrook at Ridgeview Condominium Association
  - Non-Profit: Faith-Based Organization – Christ United Methodist Church
  - Educational Institution – The Grove School of Plano
  - Multi-Family Community – Sheridan Park
  - Green Building – Frito Lay North America
  - Organic – Dell
  - Single-Stream – Maid Brigade
  - Small Business – JES Services
  - Outstanding Environmental Commitment - JCPenney