

City of Plano

Sustainability Initiatives 2006-07 Progress Report

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 City of Plano Sustainability Program is the result of study and research conducted by the 2005 Management Preparation Program of Plano (MP3). MP3 is a comprehensive leadership development program which addresses the availability, proficiency, and sustainability of human resources, as indicated by its slogan, "Enhancement for today...empowerment for the future."

After spending several months researching environmental programs that could be implemented in Plano, the *Concept of Sustainability* Report was presented to the Plano City Council. This plan recommended the city be more intentional in endorsing sustainable environmental practices and conveying that endorsement in persuasive terms to the community.

In May 2006, the Plano City Council directed the City Manager to develop a Sustainability Program. The City Manager solicited proposals from city departments for developing and implementing a sustainability program within the existing organizational structure of the City. As a result of this process, the Department of Sustainability & Environmental Services was created

The Sustainability Department 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 a leadership team and four committees representing city departments critical to the success of this program. The four city committees ensure the city moves along parallel paths in expediting the identification and implementation of projects having the greatest potential for positive environmental impact, including how decisions affect energy use and how these decisions can be used to reduce carbon dioxide emissions and help mitigate global climate change.

The four committees include:

Education & Community Outreach Committee - will focus on identifying and prioritizing sustainability concepts and practices including energy-efficiency and reduction of greenhouse gases that will become the focus of education and

public awareness campaigns targeted at city departments, employees, the business community and the general public.

The committee includes representatives from Sustainability & Environmental Services, Health, Public Works, Organizational Development, Libraries, Parks, and Public Information

Green Builder Committee - will research and recommend revised policies, development codes, amendments, standards, and ordinances which incorporate energy efficiency and sustainable design features and methods into all new commercial and residential development, as well as all future remodel and re-development projects.

The committee includes representatives from Planning, Engineering, Building Inspections, Parks, Internal Audit, and Sustainability & Environmental Services.

Resource Conservation Committee - will research and recommend policies and practices that would increase energy efficiency of existing and future facilities and operations, reduce emissions, increase fuel efficiency for city equipment and the commuting public, and conserve water.

The committee includes representatives from Facilities, Equipment Services, Traffic Engineering, Parks, and Sustainability & Environmental Services.

Finance & Capital Appropriations Committee - will research and recommend means of incorporating sustainability and energy efficiency into city purchases, community improvement projects, and departmental operations.

The committee includes representatives from Purchasing, Finance, Legal, Budget, and Sustainability & Environmental Services.

The first three committees developed goals, objectives, action recommendations and program measures for evaluating success (see Attachment 4)

KEY PROJECT ACTIVITIES AND APPROACHES

The Sustainability Program includes an integrated, phased-in approach involving designated staff, market research, public education campaign, traveling exhibit and display, environmental expo, incentives and give-aways, rebate program, individual commitment program, builder's workshops, tours, energy audit workshops and toolkits, city energy action program, policy initiatives, and an employee based promotional program. Each element of the proposal is designed to reach diverse audiences. The initiatives are designed to advocate and drive changes in both individual and corporate behavior. In order to effect change in the entire Plano community, specific program efforts are tailored towards city operations, the residential community, and the business sector.

Market Research – A professional market research firm was hired to develop, conduct and analyze surveys aimed at assessing what consumers currently know about energy generation, energy-efficient practices and their connection to greenhouse gas emissions,

air quality, recycling, water conservation, stormwater pollution, composting and global warming. Barriers to consumer willingness to incorporate conservation practices into daily life and successful incentive measures inducing change were identified. The research will also be used to set a baseline for measuring success in growing recognition of the message and in changing attitudes and behaviors.

The results were incorporated into final design of messages and materials to ensure positive reception to message and materials for each intended audience – residential, commercial and municipal departments. Focus groups were utilized to test public education messages, delivery methods and strategies to ensure the proposed material will meet the project objectives.

Plano, a predominately highly educated community, has a population of 252,500 with an average income of \$99,600 (per 2000 census). The city is rapidly growing in cultural diversity with the greatest growth occurring in the Asian and Hispanic populations, with each group claiming about 10% of Plano's population. Plano conducts an annual International Festival, Asian Festival and Juneteenth Celebration in order for its diverse population groups to celebrate their unique heritages. Temperatures average 89.8° (June through September) in the summer and 55.3° (December through February) in the winter. The Dallas/Ft. Worth region is currently classified as a non-attainment area for ground-level ozone, a region identified by the federal government as an area below clean air standards for ozone.

Public Education Campaign: A professional PR firm was hired to develop a series of messages and determine educational tactics that will be developed and incorporated in a public education campaign focused on changing consumer behaviors related to the environment. The goal of the campaign is to help consumers make the connection between personal behaviors and the environment.

Beyond recycling, participants in the focus group had a difficult time describing a green lifestyle. The campaign objectives will be to:

- Define what it means to be Green
- Explain why living green is important
- Build awareness of the brand *Live Green in Plano*
- Promote attendance at the *Live Green in Plano* Expo
- Increase Web visits and participation in city programs classes

Live Green in Plano was chosen as the overarching identifier for all environmental programming and the first year public awareness campaign, which was kicked off by our Mayor in January 2007, was “**The Year of Living Green.**” The Mayor issued a bold challenge to make Plano a community leader for green practices throughout the State.

In the following weeks, each household received a *Live Green in Plano* starter packet, which included a letter from the Mayor, overview of the *Live Green in Plano* program, calendar of events, Expo promotional, listing of free water conservation items, and “Power to Choose” promotion. Targeted advertising, media relations and grass-root level community outreach tactics were used to continue the momentum of the campaign throughout the spring and leading up to the first *Live Green in Plano* Expo on May 5, 2007.

The City's education campaign also included educating Plano residents about making informed choices concerning their electricity supplier and the availability of electricity generated solely from wind and water in order to reduce harmful emissions. A Texas household with average monthly usage of 1,000 kWh can prevent more than 1,700 pounds of carbon dioxide pollution a year – as much as a car would produce in almost 2,000 miles of driving. This is a significant reduction in the average American household's share of CO2 emissions.

A renewed focus on environmental issues resulted in an increase in the city's overall recycling diversion rate from 26.4% to **28.5%** (residential reached **40%** diversion for the first time, a 2% rise and commercial increased from 20.3% to **22.4%**).

Web Site – www.livegreeninplano.com serves as a destination for residents and businesses looking for information and data necessary to improve decision-making about issues that impact the environment. The Web site links to helpful sites like the Department of Energy's Energy Efficiency & Renewable Energy and Home Energy Saver, Alliance to Save Energy Home Check-up and RMI Home Energy Briefs, EPA's Global Warming – Emissions, etc. The site also provides tools to help residents evaluate their current practices and learn about ways they can change. In addition, the Web site hosts the *Live Green in Plano* pledge, Change-a-Light pledge, Carbon Footprint calculator, and "Power to Choose."

Environmental Expo – The current rise in energy and fuel costs and the problems associated with global warming have captured the attention of individuals and businesses and provided motivation to reduce those costs. This setting created a significant opportunity to educate consumers on energy conservation, energy efficiency, alternative fuels, and the impact our daily decisions have on our environment.

The first Environmental Expo was held May 5, 2007 and was attended by approximately 7500, exceeding our attendance goal of 5,000. The Expo was funded through a combination of contributions, grant funds, exhibitor fees, and in-kind donations, which enabled us to plan a fun, family-focused event that attracted people to come and learn more about what it means to live green.

1. **Marketing Focus:** The Expo was marketed to residents throughout the North Texas region. The Expo was promoted as a fun, family-focused event to appeal to a large and diverse audience that might not otherwise attend an environmentally-focused presentation or check out a library book on energy efficiency. The Expo provided the opportunity to expose certain groups to information about energy efficient alternatives, global warming, greenhouse gas emissions, and air quality for the first time. Others were drawn to the event because of the emphasis placed on these issues and their desire to learn more.

2. **Features:**

Vendor Exhibits – information on and/or demonstration of energy-efficient lighting, fans, water heaters, Energy Star appliances and equipment, solar shade screens, solar energy, wind-generated energy, insulation and weather-stripping, radiant heat barriers, energy-efficient window treatments, geo-thermal, alternative fuels, hybrid vehicles, bicycles, mass transit, recycling, native and drought tolerant landscaping,

water conservation irrigation systems, rainwater harvesting, compact fluorescent light bulbs, green building techniques, safe household products, waste reduction, compost, and city services.

Presentations – 25 scheduled throughout the day covering a broad range of environmental topics in addition to live broadcasts of K-SKY 660 AM's "House Talk" with Chris Miles, "The Dirt Doctor" with Howard Garrett, and "The Super Handyman" with Al Carrell

Entertainment – the Expo included performances by The Energy Hog; Eddie Coker and Vocal Trash; "Windblown," a wind sculpture competition; a Bicycle Safety Rodeo, and children's activities

Demonstrations – a hybrid vehicle test drive, Clean 'N' Green Garage, wind turbine, compact fluorescent bulbs

Incentives – to compel attendees to take action to improve our environment:

Door-prize Drawings: Throughout the event, drawings were held and the winners received one of the following low-cost energy saving items: water heater insulation jackets, compact fluorescent light bulbs, programmable thermostats, and weather-stripping kits.

Commitment to reduce energy use: Attendees were encouraged to complete a *Live Green in Plano* pledge to reduce their energy use, reduce greenhouse gas emissions, recycle more, conserve water, use compost, etc. Residents were also able to sign up for renewable energy services. Every person that signed the pledge was eligible for the grand prize drawings consisting of Energy Star refrigerator, dishwasher and dryer, a \$500 Green Dream Package, hotel stays, camping trips, \$2000 Subaru certificate, MP3 player, and a mountain bike.

Partnerships – were essential to the success of the Expo. Green Mountain Energy, Inc. was the city's Presenting Sponsor. Earth Sponsors included Wal-Mart, Inc., Sam's Club, REI, KSKY, KTVT 11, TXA 21, and The Dirt Doctor. Other sponsors included DART, Allied Waste, Whole Foods, Adolfson & Peterson Construction, Elliott's Hardware, Intechra, and The Southfork Hotel.

Live Green in Plano Volunteer Program: With North Central Texas Council of Government grant funds, a position was hired to develop and implement this program. Volunteers receive 16 hours of training on a broad range of environmental topics to equip them to work in partnership with the staff of the Sustainability & Environmental Services Department and extend information throughout our community.

Live Green in Plano News: The Environmental News newsletter, which previously highlighted programs and information from the Environmental Waste Services Division, received a facelift and was expanded to incorporate a broader range of environmental issues.

Green Building Initiative: Under the business-as-usual case, Texas energy demand is predicted to grow by one-third by 2025 and double by mid-century. In the United States,

buildings account for 40-49% of total energy use, 25% of total water consumption, and are responsible for almost half (48%) of all greenhouse gas emissions. Without significant increases in energy efficiency, the conventional solutions to meeting this demand imply unacceptable economic, environmental and social costs.

In the last year, the City of Plano has taken the following steps to model green building programs and projects.

- A regional roundtable on green building practices was held in February 2007, which drew representatives from 15 cities. The keynote speaker Ed Mazria, author of the 2030 Challenge and international and national speaker on the impact buildings have on climate change.

The City of Plano adopted a policy for all city facilities that require them to be LEED (Leadership in Energy and Environmental Design) Certified at the highest level possible (see Attachment 1) to ensure its buildings are sustainable. This applies to new construction and major remodels. LEED Certification points will be prioritized based on their ability to provide future energy savings, water conservation, waste reduction, and improved indoor air quality. As a result of this policy, the following six city facilities will be LEED Certified: Fire Station 12, Fire Logistics Building, Emergency Operations Center, Oak Point Visitor Center, Oak Point Retreat/Conference Center, and the Environmental Education Center.

The Environmental Education Center is projected to be LEED Gold certified and will be located next to the city's Environmental Discovery Garden - an outdoor garden classroom and compost demonstration site adjacent to a local creek. The following statement describes the Center's philosophy, vision and purpose:

Caring for the environment requires environmentally smart choices in building design and everyday life. The Environmental Education Center is a place to educate and involve citizens, community and environmental leaders, building professionals, and educators in environmental responsibility and demonstrate sustainability concepts and practices.

The Environmental Education Center is being designed to incorporate as many energy-efficient sustainable features and practices as feasible, and will serve as a flagship facility and model for consumer energy education.

- ❖ Architectural site orientation and layout plan for maximum energy efficiency (roof overhangs, east-west orientation, shading)
- ❖ Demonstration of energy-efficient and renewable energy technologies (solar panels, natural lighting, photovoltaics, cool roof design, living roof, use of insulated concrete forms and structural insulated panels, heat recovery ventilation, lighting, energy system sensors to track the building's energy use and production from solar panels)
- ❖ Use of recycled/renewable/nontoxic materials (low VOC paint, recycled-content carpet and ceiling tiles, fly ash concrete, glass, Forest Stewardship Council (FSC) certified wood, recycled paint, non-PVC materials)
- ❖ Water conservation (rainwater harvesting, gray water recycling, low-flow water system, efficient irrigation) and stormwater management

- ❖ Utilization of site's natural features (creek habitat and environmental discovery gardens)

The building will also feature interpretive displays about the energy-efficient and sustainable design concepts used in the building; a computer kiosk with interactive programs related to the building design, waste management and ecosystem topics; "Green Building" workshops for the community and building industry; presentations and seminars on gardening, water conservation and recycling topics; and expanded educational programming for students and parents; environmental education workshops for teachers, PTA and youth leaders and other interested community members.

- The Facilities Department has contracted with Johnson Controls to assist them in obtaining the city's first LEED Existing Building Certification for the Animal Shelter. The Community Improvement Program includes funding in 2007-09 to evaluate six additional facilities in preparation for LEED EB Certification.
- The Green Builder Committee initiated a Regional Collaborative Green Builder Roundtable incorporating **14 municipalities** working toward building support throughout the region for greening building ordinances and amendments.
- The Landscape Subcommittee of the Green Building Committee finalized its recommendations for amendments to Plano's landscape regulations for non-residential and multi-family development. The next step is to prepare the amendments in ordinance form for consideration by the Planning & Zoning Commission and City Council.

Green Team Program: The City implemented this program to educate and involve employees in achieving higher waste diversion and reducing energy, fuel and water consumption. The program includes an employee pledge, incentives, standardized recycling containers, and education. Plano's employee team has embraced the internal Green Team program. Of the 631 employees enrolled, 38.2 percent began turning off monitors and printers, 24.8 percent began turning off lights and 26.7 percent avoided purchasing Styrofoam products. Other positive actions include recycling cans and bottles, making double-sided copies, carpooling to meetings, and using recycling products and reusable mugs.

In nine months, the recycling diversion rate went from **23% to 35%**, saving the City approximately **\$900** every month. The city's energy consumption in municipal facilities was reduced **5.184%**, from **27,767,256 kWh to 26,327,790 kWh** (see Attachment 5 – Energy Use by Facility).

Funding: The department received and finalized grants totaling **\$184,977**, which enabled the city to (1) develop an effective public awareness kick-off campaign for Live Green in Plano, (2) market the expo, and (3) implement a Live Green in Plano volunteer program.

Departmental Initiatives: 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 and several departments

have had sustainable practices in place for a number of years. Following is a list of departmental initiatives:

Human Resources Department is the city's champion of a paperless system by converting the employee benefit enrollment and employment application processes to an online system. In just a few months, the department realized 13% savings in paper costs. In addition, policy and procedure handbooks are updated online without the need to print and distribute copies.

Purchasing Department implemented a city-wide policy to ban Styrofoam purchases and to force-sub all online office supply purchases with the more environmentally preferable product. A specification analyst position was also added to research and ensure specifications for product and services are sustainable. The Warehouse implemented a new recycling program and is diverting 50% from the waste stream.

Engineering Department

Facilities Management negotiated the custodial contract to require the use of green cleaning products and equipment and to ensure custodians are properly trained on the city's recycling program and energy conservation goals. In addition, this division continues to systematically upgrade equipment and operating systems designed to reduce energy consumption and make our buildings more sustainable. Key replacement projects completed in 06-07 included:

- 1) Replaced the roof on Stadium Pump Station with an energy star rated roof. The insulation was increased from an R=7 rating to an R=19 rating. The estimated electrical savings was 4,448 kwh. The project was completed in October 2007.
- 2) Replaced the roof on the old section of the Municipal Center and painted a white elastomeric coating on the new section of the roof. The insulation on the old section was changed from an R=9 value to an R=19 value. The estimated electrical savings was 8,633 kwh. The estimated gas savings was 94.3 million BTU. The project was completed in May 2007.
3. Installed an Energy Management System at the Animal Shelter. The estimated electrical savings was 13,784 kwh. The project was completed in December 2007.
4. Replaced a 3-ton and a 5-ton air-conditioning unit with same size units but a more energy efficient SEER rating of the unit. The rating increased from 9 to 13 SEER rating. The estimated electrical savings was 25,842 kwh. The project was completed in March 2007.

The Transportation Engineer staff reviews the traffic flow patterns at an intersection and optimizes the signal timing to reduce stopped vehicle delay, air pollutants, and excess fuel used. These timing plans are adjusted, where appropriate, to minimize side street traffic delay or in response to citizen complaints. The timing plan implemented emphasizes reducing vehicle stops on the primary arterial road.

The afternoon peak hour signal retiming was completed in the area east of US-75. The project reduced annual:

- Vehicle delay by 450,000 hours,
- Number of stops by 2.6M
- Fuel Consumption by 367,000 gallons
- CO Emissions by 28.31 tons
- NOX Emissions by 5.51 tons
- VOC emissions by 6.56 tons

Technology Services Department discontinued the auction of replaced computers and added a takeback recycling requirement to the city's bid to ensure all replaced computers are responsibly recycled. This action is a result of Council Resolution 2006-9-8 supporting Extended Producer Responsibility legislation, which was passed in the last legislative session.

Fire Department is constructing Plano Fire Station No. 12/EOC Complex as a LEED Silver Certification project. 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.

Planning Department developed www.planohomesmart.org as a resource for homeowners looking for information and money-saving tips on homeownership programs and home maintenance. This Plano HomeSmart Knowledgebase is a collection of Web links from local, state and federal organizations covering three areas: funding sources, energy efficiency, and recycling and sustainability.

The Neighborhood Services Division accomplished 15 full rehabilitations and 33 emergency repairs on affordable single-family homes. Highlighting a few critical improvements to the properties, the following sustainable improvements were made:

1. All doors replaced with new insulated, metal skin product and windows upgraded to utilize solar coefficient of less than 0.3 in 14 houses.
2. Roof decking removed and replaced to include radiant barrier in 3 houses.
3. Insulation supplemented, increasing R value to minimum of R-30 in ceiling in 15 houses.
4. HVAC upgraded to 13 SEER minimum in 27 houses.
5. Replace original fixtures with water saving fixtures (showers/sinks/toilets) in 35 houses.

Health Department continued its awareness program for Ozone Alert Days and raised awareness of air quality through the annual PISD Outdoor Air Quality Poster Contest. A steward of clean air initiatives and one of the first municipal departments to engage in telecommuting, the Health Department won a 2007 North Texas Clean Air Coalition award for *Best Workplace Practices – Clean Air Partner* recognizing its *Outdoor Air Quality Initiatives*.

The Animal Services Division started a recycling program that includes participation in the city's organic recycling program to divert animal waste to the composting facility. They are diverting 50% of the waste stream. The Animal Shelter is also currently undergoing the city's first LEED Existing Building Certification.

Parks and Recreation Department undertook a major sustainability initiative with the enrollment of the Pecan Hollow Golf Course in the Audubon Cooperative Sanctuary Program for golf courses. The program requires completion of six phases of environmental standards to achieve certification as a sanctuary, including environmental planning, wildlife and habitat management, chemical use reduction and safety, water quality and testing, water conservation, and outreach and education.

An emphasis has been placed on developing athletic fields for daylight use only (Archgate Park, Preston Meadow Park, two ball fields at Harrington Park).

Supervisory Control and Data Acquisition (SCADA) sports field lighting controls were introduced in 2007 during site renovations at Enfield Park's eight ball fields, which allow staff to remotely control and monitor field lights. SCADA lighting controls have been adopted as a standard for future or renovated athletic lighting systems due to the efficiencies that have been realized at Enfield Park and other athletic-oriented park sites.

Low voltage LED scoreboards were donated in 2007 to the City of Plano and installed by Plano Sports Authority at two ball fields at High Point Park rather than less expensive incandescent-bulbed scoreboards that consume more electricity and cost more to maintain. All future and renovated scoreboards will be required to be low voltage LED units.

Sports organizations that utilize the City's sports fields continue to be required to schedule activity during daylight hours prior to accessing field lighting. When possible, the City provides fields in a quantity to lessen the need for lighting and subsequent electrical use.

Solar lighting for security purposes has been installed at a maintenance yard at Enfield Park. If proven to be effective and reliable, the use of solar lighting may be utilized elsewhere in the park system.

Variable speed irrigation pumps continue to be installed at new and renovated park sites. These units draw only the amount of electricity required to meet the pumping demand for water. A new VSP was installed at Enfield Park in 2007.

The Tom Muehlenbeck Center was budgeted as a conventional construction project; however, the following sustainable features were incorporated: preserving the wetlands, native plant selection, gray water trap primers, pool heating from the pool dehumidification units, indirect lighting, master light control system, and day lighting.

The Oak Point Park and Nature Preserve buildings include a Visitor's Center and Retreat Center, which are being designed to meet the LEED Gold Certification Level. Sustainable features include energy-efficient HVAC systems, use of recycled materials, maximum use of native and local vegetation requiring the minimum amount of irrigation from potable water sources, low or zero VOC paints and coatings, low flow plumbing fixtures a rainwater collection system. The orientation of the buildings takes advantage

of the views of the lake while allowing for the potential future installation of roof mounted solar panels. Large quantities of windows, with their views out into the landscape and park setting, also contribute to the natural, day lighting strategy of green building, reducing the need for general lighting inside the building.

The Plano Centre and Senior Recreation Center started recycling programs and are diverting 20% and 33% respectively. In addition, the Parks East Maintenance Facility increased its diversion from 31% to 50% and the Parks West Maintenance Facility increased its diversion from 10% to 33%.

Through the VIP Program, over 3,550 volunteers donated 10,864 hours to Sustainability & Environmental Services programming through Adopt-A-Highway and citywide cleanups, maintenance of the Environmental Discovery Center and Community Gardens and facilitation of a broad range of environmental education programming.

Creative Arts, in partnership with Sustainability & Environmental Services, organized the 2007 *Live Green in Plano Film/Concert Series*.

Public Works Department continued its water conservation education program by making available to Plano residents free water conservation items and hosting Texas SmartScape Seminars. The department participated in the development of the model water conservation plan for the North Texas Municipal Water District Member Cities and Customers. Conversion to LED lighting on all traffic signals has resulted in a 148% decrease in energy consumption since 2004. In addition, the installation of power capacitor banks on three pump stations in 2006 has resulted in a 7.46% increase in energy efficiency.

Equipment Services was a major contributor in the development of the city's Mobile Source Pollution Reduction Policy that establishes a uniform idle-reduction, fuel conservation and mobile source pollution reduction program. Eleven hybrids were added to the city fleet.

Customer & Utility Services Department was the first department in the city to have 100% of its employees take the Green Team Pledge. The department also completed implementing remote automated meter reading (AMR) which reduces the amount of fuel and emissions generated from this function.

City Manager's Office was the first to eliminate Styrofoam from their offices. A dishwasher was purchased so that reusable cups and glasses could be offered to visitors.

Library Department initiated a sustainability section of the Municipal Reference Library. Recycled grocery and retail bags are used at each library location to protect borrowed books from inclement weather and to aid in bundling. Patrons are also encouraged to bring bags to the libraries for this purpose. The libraries reduced their energy consumption more than any other department with a **9.8%** reduction from the previous year.

The Library continues to promote the reuse of books through the Friends of the Library book sale that brings in 50-100,000 books and magazines annually. Items not purchased are recycled.

Public Information's Emmy-award winning Plano Television Network created several hours of *Live Green in Plano* marketing videos for the city's new Sustainability Department, also creating a series of Storm Water Management public service announcements for the Health Department not only used by the City of Plano but purchased and aired by other cities. www.planocitynews.com featured over 50 news articles relating to water conservation, air quality, recycling and sustainability education.

The Print Shop utilizes only recycled paper for municipal letterhead and business cards, encouraging recycled paper use for all departmental print jobs. Outdated letterhead and other usable papers are made into scratch pads with all waste paper recycled. Records storage boxes at the municipal Warehouse are recycled for use after expired retention documents have been shredded by a service provider who supplies a paper bailer for manufacturing recycled paper.

Public Safety Communications utilizes solar power for over half the city's outdoor warning sirens, eliminating the need for electricity, saving money in monthly power fees and preventing the discharge of additional carbon into the atmosphere. The Radio Shop has instituted a battery-recycling program whereby radio system users can dispose of old ni-cad batteries in an environmentally safe method, eliminating pounds of toxic materials from entering our landfill.

Property Standards Department has phased in the use of hybrid vehicles as the chosen mode of transportation to conduct property maintenance inspections providing fuel efficiency, reducing noise levels and lowering vehicle emissions. Recycling opportunities were initiated as an alternative to landfill disposal of 568 unclaimed, abandoned shopping carts removed from Plano's right-of-ways since the city's adoption of an Abandoned Shopping Cart Ordinance in 2005.

Municipal Court integrated their case management system with a software application for imaging and workflow. The Clerks Office, Judges, City Prosecutors and Police personnel can now access case and court documents from their respective offices. Going paperless has eliminated lengthy manual retrieval of documents and reduced the risk of lost paper documentation. Online access enabled a satellite court location to be opened at the municipal Joint Use Facility serving far west Plano.

Police Department installed a new bullet trap design (*Total Containment System*) for the firing range that catches lead projectiles in the trap, depositing slugs in a special bucket, affording less fragmentation and eliminating manual handling of the lead material. Projectiles are disposed of through a qualified hazardous waste material company licensed to handle the lead for environmentally-safe disposal.

Building Inspections Department initiated an electronic plan review program that reduced the number of paper blueprint sets from four sets to one set of blueprints and a CD-ROM. This cuts down on a tremendous amount of paper (thousands of full size pages - as large as 36"x48") per project submitted for code review. In 2005, an electronic document control system was implemented to scan documents for sharing plans and documents with other departments to eliminate printing and routing paper versions.

Legal Department recycles books as they are updated, utilizes on-line subscriptions and electronic documents when possible, replaced old carpet with 100% recycled material,

carpool to office functions and off-site meetings when possible, and actively support the city's green team efforts by turning off lights, recycling, and using reusable cups.

Attachment 1

LEED Certification Policy

I. Purpose

The purpose of a Citywide policy on sustainable building is to demonstrate the City's commitment to environmental, economic, and social stewardship, to yield cost savings to the City taxpayers through reduced operating costs, to provide healthy work environments for staff and visitors, and to contribute to the City's goals of protecting, conserving, and enhancing the region's environmental resources. Additionally, the City helps to establish a community standard of sustainable building.

II. Policy

It shall be the policy of the City of Plano to finance, plan, design, construct, manage, renovate, and maintain its facilities and buildings to be sustainable. This applies to new construction and major remodels. The City will use the U.S. Green Building Council's LEED (Leadership in Energy and Environmental Design) rating system to determine what constitutes sustainable building by national standards. The City of Plano will require the highest level of LEED Certification possible for all city facilities.

LEED Certification points will be prioritized based on their ability to provide future energy savings, water conservation, waste reduction, and improved indoor air quality. Key factors to incorporate into the design include:

1. Use of passive solar energy
2. Natural lighting (day lighting) and adjustable lighting systems
3. Highly reflective roof and building exterior
4. Indoor Air Quality (low VOC materials and ventilation)
5. HVAC energy performance and efficiency
6. Use of on-site renewable energy
7. Waste minimization (recycling, reducing, reusing)
8. Water reclamation and conservation (rainwater harvesting, use of gray water, soil amendment, native or adapted landscape material, efficient irrigation system)

Return on investment will be considered when determining feasibility of implementing the above features.

While pursuing the highest level of LEED certification (certified, silver, gold or platinum) possible, the level will be determined by the points gained in incorporating the prioritized list of features into the design of the building. Decisions will not be based on including features just to gain additional LEED points.

III. Definitions

Sustainable Building - Sustainable building integrates building materials and methods that promote environmental quality, economic vitality, and social benefit through the design, construction and operation of the built environment. Sustainable building merges sound, environmentally responsible practices into one discipline that looks at the environmental, economic and social effects of a building or built project as a whole. Sustainable design encompasses the following broad topics: efficient management of energy and water resources, management of material resources and waste, protection of environmental quality, protection of health and indoor environmental quality, reinforcement of natural systems, and integrating the design approach.

LEED Rating System - LEED stands for Leadership in Energy and Environmental Design, and is a voluntary, consensus-based, market-driven green building rating system. It is based on accepted energy and environmental principles and strikes a balance between established practices and emerging concepts; while evaluating environmental performance from a “whole-building perspective. LEED is a self-certifying system designed for rating new and existing commercial, institutional, and multi-family residential buildings. It contains prerequisites and credits in five categories: Sustainable Site Planning, Improving Energy Efficiency, Conserving Materials and Resources, Embracing Indoor Environmental Quality, and Safeguarding Water. There are four rating levels: Bronze, Silver, Gold, and Platinum.

IV. Procedures

A. Responsibility

1. The Facilities Division Manager whose responsibilities include planning, designing, constructing or renovating City-owned facilities shall be responsible for ensuring that facilities and buildings comply with this policy. Directors of departments will be responsible for supporting this policy as they develop their facility needs.
2. The Facilities Management Division of the City’s Engineering Department shall be responsible for oversight of the construction and reporting to the Green Builder Committee how well applicable City construction projects meet the goal of sustainability.

B. Coordination

1. The City’s Green Builder Committee, under the Department of Sustainability & Environmental Services, shall serve as a resource for acceptable LEED practices and assist in the process of selecting and prioritizing sustainable features and their impact on the building costs.
2. The City will encourage appropriate departmental staff become LEED Accredited Professionals to help provide technical expertise on specific sustainable building issues.

Attachment 2

Mobile Pollution Reduction Program

Mobile Source Pollution Reduction Policy

I. Purpose

The purpose of this policy is to establish a uniform idle-reduction, fuel conservation and mobile source pollution reduction program.

The Environmental Protection Agency (EPA) has designated the North Central Texas region as a non-attainment area for the pollutant ozone. Vehicle emissions are a major contributor to ozone formation due to the presence of two key “precursors,” or ingredients, to ozone formation in automobile emissions: nitrous oxides (NOx) and volatile organic compounds (VOCs). Controlling emissions from mobile sources such as cars, light- and heavy-duty trucks, buses, motorcycles, and other vehicles is critical to the success of the region.

II. Policy

The City of Plano Mobile Source Pollution Reduction Policy, while acting in accordance with the principles of sustainability, addresses major contributing factors to mobile emissions such as, vehicle cold starts, vehicle idling, hard accelerations, high emitting vehicles, and diesel engines. Implementation of the policy will reduce fuel and repair related costs and mitigate the environmental impact of operating City of Plano vehicles.

III. Definitions

Mobile Source – Referring to City owned and/or operated rolling stock as point of origin for pollutants and fuel consumption.

Rolling Stock - Any various readily movable transportation equipment such as automobiles, locomotives, railroad cars, trucks, tractors, mowing equipment, and loaders.

IV. Procedures

A. Appropriate Vehicle and Rolling Stock Utilization

1. City of Plano fleet vehicles will not be parked with the engine operating (idling) for more than three minutes unless it is essential for performance of work or else stipulated.
2. If the vehicle is going to be stopped for more than three minutes except in traffic, turn off your engine. A vehicle at idle for longer than three minutes uses more fuel than it would take to restart the vehicle.

3. Employees should reduce the initial “warm up” idling. Start driving after no more than 30 seconds of idling, assuming all precautionary safety, mechanical, and other work related checks have been accomplished.
4. Re-fueling of non emergency vehicles during Ozone alert day is recommended to be after 10:00 am.
5. Employees should reduce hard acceleration which highly increases the introduction of Hydro Carbons (HC), the un-burnt fuel particles that are a contributing factor of Mobile Source Pollution.
6. It will be the practice of the City of Plano to replace high pollution emitting vehicles when their repairs to emission reduction components exceed the current value of the vehicle.
7. Vehicles and equipment with diesel fuel powered engines shall be replaced with 2007 or newer low emission engines.
8. Ozone Alert Days: Between May and October, the Texas Commission on Environmental Quality will notify the city of a potential air quality warning. On Ozone Alert Days with Red or Purple levels, the city’s refueling facility will be closed until 10:00 a.m. except in a public safety emergency and Department Heads will be responsible for ensuring the following steps are taken:
 - a. Encourage employees to use alternative means of transportation, if possible, such as ride sharing, mass transit, etc. and to minimize driving as much as possible prior to 10:00 a.m.
 - b. Reschedule meetings that require travel to after 10:00 a.m., when possible.
 - c. Postpone mail runs, pickups and deliveries between city facilities until after 10:00 a.m. In addition, all employees should minimize driving as much as possible prior to 10:00 a.m.

B. Exceptions to the Idling Policy

1. Emergency vehicles, such as fire apparatus and ambulances while engaged in operational activities.
2. Vehicles that are required to idle in order to power ancillary equipment mounted on the vehicle without risking damage to the battery, i.e. warning devices, sampler hoists, lift gates, hydraulic equipment or lights.
3. Police vehicles performing traffic control operations, which must be operating for the warning devices to function.
4. Vehicles equipped with temperature sensitive equipment.
5. Vehicles that must be kept at an appropriate temperature for the health and safety of animals, such as City of Plano Police Department K-9s, being transported.
6. An emergency or law enforcement motor vehicle, particularly when transporting patients, prisoners, victims, or witnesses, or when performing traffic control.

7. The primary propulsion engine of a motor vehicle providing a power source necessary for mechanical operation, not including propulsion, and/or passenger compartment heating, or air conditioning.
8. A motor vehicle forced to remain motionless because of traffic conditions over which the operator has no control.
9. The primary propulsion engine of a motor vehicle being operated for maintenance or diagnostic purposes.
10. For diesel powered vehicles tasked with making numerous and frequent stops and starts, such as may be required for garbage/recycling pickup or repairing potholes, unless the vehicle is going to idle for more than 15 minutes.
11. When the use of vehicle heater or air conditioning, at the discretion of the appropriate Department Head, is necessitated by outside temperature, weather or other climatic condition.

C. Compliance with the Policy

1. Reports of violations should be made directly to Equipment Services Manager.
2. It is the responsibility of each Department Head to ensure compliance with policy guidelines.

Start Date: February 2007

Completion Date: On-going

Clean Fleet Vehicle Program

The City of Plano adopted Clean Fleet Vehicle Policy Resolution 2006-5-22(R) on May 22, 2006.

Plano is committed to replacing 14 diesel refuse trucks with cleaner engines by December 2008 to reduce total emissions for our non-attainment area. NOx reductions range from 1.13 to 2.01 lbs. per day.

Start Date: February 7, 2007

Completion Date: December 2008

Attachment 3

City of Plano Employee Green Team Program

Green Team Goal

To create a culture within our organization that values resource conservation and incorporates sustainable practices into all city operations and programs

Green Team Program

In order to gain support and raise environmental awareness among city employees, the Green Team program has been developed. The Green Team provides City employees with an opportunity to make a personal commitment to sustainable business practices.

Purpose

- Increase participation/awareness among employees with respect to environmental stewardship
- Communicate sustainable practices to employees
- Identify wasteful habits and good habits
- Provide timely feedback/suggestions for program improvement
- Reduce waste generated from each facility
- Improve recycling participation in order to meet waste reduction goal for each facility
- Recognize and reward employees who demonstrate through action their commitment to the Green Team program

Green Team Pledge

By signing the pledge an employee agrees to do the following:

- Recycle
- Double side printing when possible
- Use reusable mug or glass while at work
- Avoid purchasing Styrofoam products
- Turn off lights when not in use for ten minutes
- Turn off printers and monitors when not in use
- Request purchase of green products if applicable
- Carpool to meetings when possible
- Brown bag or walk to lunch as often as possible

Pledge Sample

I, _____, pledge to join the Green Team by following the above guidelines. I commit myself to creating a culture within our organization that values

resource conservation and incorporates sustainable practices into all city operations and programs.

Electronic Signature

Date

Incentives

Drawings for gift cards and prizes will be held twice a month during the first month and once a month thereafter. Only persons who have taken the Green Team Pledge will be eligible to participate in the incentive program.

Incentive Program Details

- Two weeks into the program – Five \$25 winners and one \$100 winner will be chosen at random from the pledge list
- Monthly – Four \$25 gift card winners drawn from eligible pool
- Yearly – Buildings/departments who have met their waste reduction goal will be rewarded.

Guidelines and Accountability

The Green Team program strives to combine accountability with education and fun. The spirit of the accountability program is to educate people in a light-hearted manner, not to punish individuals for making mistakes. While we recognize that old habits are hard to break, this accountability program has been developed to help us stay focused on our commitment. If an employee who has pledged continually fails to follow the program's expectations as expressed in the pledge, they can be removed from drawing eligibility.

Green Team members are responsible for communicating to the Green Team leader when any individual is not living up to his or her pledge on a regular basis. The Green Team leader will notify the Green Team In-House Coordinator of an individual who repeatedly violates the Green Team pledge. The pledge member will be contacted by the coordinator in an effort to regain employee's support for the program. If the pledge member continues to be in violation, he or she will be removed from the pledge list at the discretion of the Green Team In-House Coordinator.

If a Green Team member notices an individual violating his or her pledge, the Green Team member should place a busted sticker at the person's desk stating the "offense". This is a great tool to educate and provide a fun competition within the office. Busted stickers will be distributed to all pledge members to aid in education and increase awareness of sustainability issues.

Waste Reduction Goals

An evaluation of all city facility waste streams was conducted to determine the city's overall recycling rate. The information was used to establish benchmarks for each facility and to target improvements. Each Green Team leader is responsible for using the Waste Audit Field Sheet (Appendix A) to collect data that will be used to determine

the facility's progress toward the recycling rate goal. Waste audit training will be provided.

This facility is currently recycling _____%. Based on recent waste audits this facility's target recycling rate is _____%. By achieving your goal your building/department will have done its part in supporting a citywide 40% recycling rate.

Green Team Leader Responsibilities

1. Educate coworkers on sustainable practices. Promote these practices by providing a positive example.
2. Promote the Green Pledge and participation by employees.
 - a. Provide positive verbal feedback.
 - b. Engage staff with "busted" sticker response to negative behaviors.
 - c. Hold employees accountable to their pledge through cooperation with Green Team In-House Coordinator.
3. Participate in Green Team meetings and activities. Provide timely feedback and program improvement. Schedule training as needed.
4. Perform waste audits and report weekly progress on field audit sheet.
5. Regularly check the intranet Green Team Web site for updates and pertinent program information.

Green Team In-House Coordinator Responsibilities

1. Solicit Green Team members and manage the Green Team and all related activities;
 - a. Organize meetings – Target facilities for improvement and hold quarterly meetings with appropriate Green Team Leaders.
 - b. Provide Training (Refer to Appendix D).
 - c. Work with individual departments to address special needs.
 - d. Establish departmental/facility goals – Communicate waste reduction goals to each facility.
 - e. Resolve issues with collection
2. Work with Facility Services to resolve department complaints
3. Work with waste collection hauler (Allied) to resolve issues with service
4. Manage the Green Team section of the Web site (intranet)
 - a. Post weekly tips and update calendar as needed
 - b. Provide feedback in a timely manner
 - c. Update pledge list as needed
 - d. Remove persons in non-compliance
5. Collect Data
 - a. Use waste audit recording process to establish or adjust targeted recycling rate. Service level/recycling rate and financial impact from adjustment will be primary data used to include in the impact of the program. Total volume data will also be recorded and tracked for later use.
 - b. Provide quarterly reports to Sustainability & Environmental Services department management
6. Communicate progress and highlight successes.
7. Re-calculate recycling rate

Training

1. New employee orientation
2. Departmental (recycling program)
3. Policies
4. Custodial Contract Requirements

Environmental Awareness & Communication

1. Email tips
2. Environmental News distribution
3. Signage
4. Annual Report (highlight departmental initiatives, progress toward goals/targets)
5. Feedback (surveys, suggestion box)

Attachment 4

Sustainability Committee Objectives 2007-2009

Resource Conservation Committee

GOAL: To create a culture within our organization that values resource conservation and incorporates sustainable practices into all city operations and programs.

Objective Reduce Energy Consumption in city buildings

Action Recommendations:

Develop internal policy regarding LEED (Leadership in Energy & Environmental Design) Certification for City facilities.

Perform energy assessment of city facilities to determine Energy Star rating for each facility. Based on ratings, make appropriate adjustments to energy management system, identify energy improvement conservation practices or projects, and identify buildings for which to pursue LEED Existing Buildings Certification.

Develop a city policy that supports sustainable practices dealing with lighting, printers, computers, and space heaters, ambient office temperature, and office supply and equipment purchases.

Incorporate energy conservation component into custodial contract.

Complete Senate Bill 5 Facility Improvement Initiatives as identified in the 2006-07 Capital Reserve Program.

Submit application to Texas LoanStar Program for funding energy-efficient equipment purchases and building upgrades.

Objective Reduce waste

Action Recommendations:

Perform waste audits and establish benchmarks and waste reduction targets for each building.

Develop employee orientation and departmental training program.

Establish a Green Team to assist in tracking improvements and communications to each department.

Develop and implement an employee incentive program.

Standardize trash and recycling containers by size and color in all desk side, training room and conference room environments. Place consistent signage/marketing materials at all waste/recycling collection areas.

Incorporate recycling component into custodial contract.

Develop standard operating procedures for custodial contractor and implement training program for contractor employees.

Increase recycling efforts in parks.

Develop a city policy for recycling.

Objective Reduce fuel consumption and air emissions

Action Recommendations:

Develop and implement a Mobile Source Pollution Reduction Policy and provide training on the new policy to all city vehicle operators.

Place signage in vehicles to remind vehicle operators of idling policy.

Purchase hybrid vehicles.

Evaluate take home vehicle policy and make recommendations.

As equipment is replaced, evaluate equipment purchases to ensure the city is purchasing the right equipment for the intended use.

Conduct greenhouse gas emissions inventory and develop action recommendations.

Explore employee car/van pool opportunities and make recommendation.

Brief major employers on Transportation Demand Management opportunities

Participate in the regional task force to develop a coordinated, efficient and accessible Senior Transportation Service.

Objective: Conserve water and improve stormwater quality

Action Recommendations:

Review water usage of city facilities and identify opportunities for reducing water usage in city buildings. Review plumbing equipment and develop plumbing replacement recommendations for future funding.

Improve park/city facility irrigation systems and apply water more efficiently.

Develop landscape recovery plan for city parks and facilities to include drought tolerant plant material.

Implement "demonstration area" at a park site that includes elements of sustainability.

Objective: Work with the Education and Community Outreach Committee to assist in meeting identified goals

Action Recommendations:

Make assignments to Sustainability Communications Coordinator regarding various internal programs and progress for inclusion in city publications.

Provide ECO Committee with information to be used in developing e-mail tips, postings to intranet and www.livegreeninplano.com Web site, and news releases. Examples include quizzes, policies, monthly energy use/waste tracker for city facilities, Oak Point Park and Nature Preserve sustainability efforts, sustainability park demonstration efforts, city fleet purchases, and other sustainability initiatives.

Performance Measures:

- % of fuel consumption reduction
- % of energy consumption reduction
- % of waste reduction
- % of recycling diversion increase

Activity Measures:

- # policies developed
- # trainings held
- # hybrid vehicles purchased
- # programs implemented
- # LEED existing building certifications
- # departmental initiatives

Green Building Committee

GOAL: To create a culture within our organization that advances sustainable building practices into city, commercial and residential development, as well as future remodel and re-development projects.

Objective: Increase the number of LEED Accredited Professionals (APs) throughout city staff members in the Building Inspection, Engineering, Planning, Facilities, Sustainability & Environmental Services, Parks and Public Works Departments.

Action Recommendations:

Promote available LEED educational seminar, workshop and exam study group opportunities to interested staff members.

Coordinate internal LEED exam study groups for interested staff members.

Identify and provide opportunities for educational seminars, training, conferences, and certification.

Objective Advance the general acceptance towards sustainable building practices throughout the Plano commercial development community.

Action Recommendations:

Coordinate joint meetings and build collaborative partnerships with identified municipalities that have an established Green Building Program or have an interest in developing a Green Building program.

Develop a LEED incentive program to encourage future commercial projects to incorporate LEED certification into the project.

Promote LEED Certification through the development review meetings.

Promote City's internal sustainable building practices, projects and program.

Coordinate quarterly "brown bag luncheon" Green Building practices seminars for internal and external parties.

Provide educational kiosks at various city facilities promoting Green practices.

Objective Develop and implement Plano's Green Builder Program for new and redevelopment of commercial and residential projects.

Action Recommendations:

Research, review and identify established Green Builder Program to use as Plano's guiding document for both commercial and residential development.

Establish an external Green Builders Advisory Panel comprised of various City staff and Economic Development Board members, architects, civil engineers, property management groups/owners, landscape architects, general contractors and citizens to advise on proposed Green Builder Program.

Recommend sustainable practices to be incorporated into the Residential Building and Development Codes.

Develop sub-committees to address various components of the Green Builder Program and recommend ordinance revisions at the completion of their review.

Education & Community Outreach Committee

Goal: To manage an educational program for employees and our community resulting in positive behavioral changes which support *Live Green in Plano*.

Objective 1: Educate Employees

1.1. Determine current level of employee awareness, knowledge and behaviors related to green living concepts.

Action Recommendations:

Create and administer a survey that measures knowledge of sustainability terminology, participation in workplace recycling, carpooling, energy, water and resource conserving practices, and awareness of the *Live Green in Plano* campaign.

1.2. Based on survey results, develop training program focused on behaviors and actions targeted for improvement.

Action Recommendations:

Identify best delivery method for training implementation, i.e. reproducible electronic presentation, DVD, train-the-trainer, etc.

Develop sustainability curriculum for internal training and schedule for roll-out.

- a. Incorporate components of each committee's objectives in internal training.

Develop and deliver both instructor led and online seminars for employees.

Develop a Sustainability Certificate program for employees.

Administer training program to Green Team leaders, Supervisors and Management teams by target date.

1.3. Establish employee Web page dedicated to green living education/in-house information.

Action Recommendations:

Establish employee intranet page/sections to provide on-going employee information and provide central location for dissemination of information.

1.4. Introduce Sustainability staff/their goals/purpose to committees.

Action Recommendations:

Hold meeting of all committees, introducing Sustainability staff, their goals and current/planned programs to facilitate strong communication and interaction between staff and committees.

Objective 2: Educate Community

2.1. Determine current level of community awareness, knowledge and behaviors related to green living concepts.

Action Recommendations:

Develop postage paid or online survey to assess community awareness.

2.2. Provide content to compliment *Live Green in Plano* campaign information based on areas of deficiency identified in survey results.

Action Recommendations:

Develop tips for assigned months of “*Year of Living Green*” calendar for city Web site.

2.3. Re-vamp Environmental News quarterly newsletter to citizens.

Action Recommendations:

Re-examine scope of *Environmental News*, i.e. changing name and informational content to cover broader range of green living education.

Objective 3: Promote educational programs that support *Live Green in Plano* efforts.

3.1. Use city media and outreach resources (PTN, Plano City News, and Training department) to promote *Live Green in Plano* programs.

Action Recommendations:

Work with PTN and Plano City News to develop a program or article featuring a different aspect of green living each month.

Provide topics and content for weekly article or program.

Provide content for citywide email tips.

Suggest ideas, schedule and host a Brown Bag lunch series on Green Living.

Plan, provide content and work with Publishing department to produce direct mail calendar highlighting city’s green services and programs.

Objective 4: Support education needs of other Sustainability committees

4.1. Determine specific programs which require an educational component through regular communication with other committees

Action Recommendations:

Establish systematic communication method to gather information.

- a. Email updates of all committee meeting minutes
- b. Schedule occasional large meetings with members of all committees represented.

Make assignments to Sustainability Communications Coordinator regarding various internal programs and progress for inclusion in city publications.

Post information, quizzes, policies or monthly energy use/waste tracker for buildings on City Web site.

Promote and market Oak Point Park and Nature Preserve sustainability efforts.

Performance Measures:

- % knowledge/awareness increase about sustainability concepts
- % awareness increase about sustainability programs
- % return on calendar survey cards
- % satisfaction rating on calendar survey cards

Activity Measures:

- # news releases
- # news releases published
- # PTN programs produced
- # calendars distributed
- # trainings held
- # employees trained
- # employees receiving sustainability certification
- # hits and postings to intranet site
- # attending scheduled programs

Attachment 5

ENERGY USE BY FACILITY

	Energy Consumption (kWH)		% Reduction
	2006	2007	
FIRE STATIONS			
#7 and Police Substation	328,670	319,478	-2.8%
#3	160,500	162,900	1.5%
#2	172,478	175,270	1.6%
#5	142,848	150,534	5.4%
#6	125,514	122,838	-2.1%
#4	42,174	39,060	-7.4%
#1 and Administration	673,983	645,495	-4.2%
#8	144,408	130,530	-9.6%
#10	168,240	164,880	-2.0%
#9	165,800	157,280	-5.1%
Totals	2,124,615	2,068,265	-2.7%
LIBRARY FACILITIES			
Haggard	1,534,984	1,309,558	-14.7%
Harrington	776,268	742,464	-4.4%
Schimelpfenig	734,895	659,391	-10.3%
Parr	848,985	801,660	-5.6%
Total	3,895,132	3,513,073	-9.8%
PARK FACILITIES			
Municipal Center South	318,891	300,875	-5.6%
Interurban Museum	62,202	66,702	7.2%
Douglass Daycare/Plano Housing	114,804	75,255	-34.4%
Douglass Recreation Center	349,668	364,146	4.1%
Parks Maintenance - R Avenue	55,200	57,840	4.8%
Highpoint Tennis Center	272,491	239,545	-12.1%

Oak Point Recreation Center	3,079,611	2,964,233	-3.7%
Carpenter Recreation Center	1,444,163	1,353,656	-6.3%
Courtyard Theatre	731,040	637,380	-12.8%
Liberty Park Recreation Center	586,602	573,371	-2.3%
Parks Maintenance - Parkway	147,105	169,983	15.6%
Plano Senior Center	627,521	523,840	-16.5%
Plano Centre	2,829,789	2,861,362	1.1%
Plano Centre Marquis Sign	34,686	33,639	-3.0%
Transit Village Community Room	19,479	22,788	17.0%
Total	10,673,252	10,244,615	-4.0%
POLICE FACILITIES			
Police Auxiliary Storage	1,122	350	-68.8%
Police Substation & Fire Station 7	328,670	319,478	-2.8%
Police Storage	2,450	11,530	370.6%
Justice Center/Police Department	3,117,233	3,124,631	0.2%
Police Storefront	36,684	37,248	1.5%
Joint Use Center	1,299,538	1,229,136	-5.4%
Plano/Richardson Police Academy	429,781	435,896	1.4%
Total	5,215,478	5,158,269	-1.1%
PARKWAY FACILITIES			
Equipment & Fleet Services	691,871	755,561	9.2%
Animal Shelter	288,129	276,621	-4.0%
Parkway Operations	681,048	733,707	7.7%
Warehouse	138,555	145,890	5.3%
MUNICIPAL CENTER	4,538,437	4,433,257	-2.3%
FACILITY SERVICES, 14TH STREET	127,100	121,495	-4.4%

DAY LABOR JOB REFERRAL CENTER	23,415	25,200	7.6%
RADIO FACILITIES			
Tower - Plano Parkway Site	96,891	101,715	5.0%
Tower – Carrollton	92,680	94,010	1.4%
Radio Maintenance Building	42,804	39,996	-6.6%