Memorandum



DATE June 5, 2015

Honorable Members of the Quality of Life & Environment Committee:
 Dwaine Caraway (Chair), Sandy Greyson (Vice Chair), Rick Callahan, Carolyn Davis, Lee Kleinman, Adam Medrano

Subject Sustainability Plan Revisions 2015

On Monday, June 8, 2015, the Quality of Life & Environment Council Committee will be briefed on revisions to the City's Sustainability Plan.

The following materials are attached for your review:

- 1. Briefing Sustainability Plan Revisions 2015
- 2. Draft 2015 Sustainability Plan

If you have any questions or require additional information, please do not hesitate to contact me.

Jill A. Jordan, P.E.

Assistant City Manager

c: The Honorable Mayor and Members of the City Council

A.C. Gonzalez, City Manager

Warren M.S. Ernst, City Attorney

Rosa A. Rios, City Secretary

Daniel F. Solis, Administrative Judge

Craig D. Kinton, City Auditor

Ryan S. Evans, First Assistant City Manager

Eric D. Campbell, Assistant City Manager

Joey Zapata, Assistant City Manager

Mark McDaniel, Assistant City Manager

Jeanne Chipperfield, Chief Financial Officer

Sana Syed, Public Information Officer

Elsa Cantu, Assistant to the City Manager – Mayor and Council

Sustainability Plan Revisions 2015

Quality of Life and Environment Committee
June 8, 2015

Presented by the Office of Environmental Quality



Organization

•	Purpose	page 3
		1 0

- Goal page 4
- Format page 5
- Next Steps page 24

Purpose

- Present Sustainability Plan Revisions 2015
- Ask Quality of Life and Environment Committee for feedback
- Highlight next steps

Goal of the Sustainability Plan

- Present the City's environmental goals,
 Environmental Management System
 objectives and targets, and Strategic Plan work
 items related to sustainability
- Continue momentum and build on successes

Format of Sustainability Plan

- Goal description within each of these six categories
 - Air Quality: Improve Air Quality
 - Land Use: Promote Smart Growth and Development
 - Water Quality: Improve Water Quality
 - Materials Management: Better Materials Management
 - Energy Management: Reduce Non-Renewable Energy Use
 - Social Equity: A More Inclusive Dallas
- Individual objectives with strategies and targets for achieving categorical goals
- Additions for 2015 highlighted in bold
- Addition of Social Equity section

AIR QUALITY: IMPROVE AIR QUALITY

Al	AIR QUALITY GOAL: IMPROVE AIR QUALITY		
Ol	Objective 1: Increase alternative commute options.		
Str	rategy	Ta	rget
•	Continue <i>GreenRide</i> .	•	Reduction in single-rider vehicle miles travelled by 10% annually over previous year through 2015 (OEQ, EMS O&T 00992).
		•	Attain 60% participation rate for GreenRide reporting for TWM employees by September 2015 (TWM, EMS O&T 01132).
•	Expand street car service.	•	Begin construction of TIGER extension project (SDC, Strategic Plan EV 2.1).
	Promote bicycling.	•	Implement the City's bike share program (PBW, Strategic Plan EV 2.1).
•		•	Implement approximately 20 miles of planned bike facilities (PBW, Strategic Plan EV 2.1).
•	Facilitate high-speed rail.	•	Monitor and engage in the process of securing high speed rail (PBW, Strategic Plan EV 2.1).
	Implement Strategic Transportation Initiatives.	•	Recommend an alignment for Downtown Dallas Transit Improvements Study (D2) (SDC, Strategic Plan EV 2.1).
•		•	Work with TxDOT to advance multi-modal transit projects (SDC, Strategic Plan EV 2.1).
		•	Develop plan for Woodall Rodgers Bike and Pedestrian Path (SDC, Strategic Plan EV 2.1).
		•	Develop bike path from Katy Trail to Klyde Warren Park utilizing Harwood Street (SDC, Strategic Plan EV 2.1).

AIR QUALITY GOAL: IMPROVE AIR QUALITY			
Objective 2: Reduce emissions from vehicles.			
Str	Strategy Target		rget
		•	Decrease CO2e (CO2 equivalent) emissions from On-Road and Off-Road EBS maintained Vehicles 10% by September 2017 (EBS, EMS O&T 01114).
		•	Reduction in fuel use 1% from baseline by September 2015 (SAN, EMS O&T 01055).
	Increase fleet energy efficiency.	•	Replace transfer station diesel fleet with cleaner equipment 10% annually from baseline by September 2015 (SAN, EMS O&T 01058).
•		•	Increase Alternative Fueled Vehicle inventory from 38% to 40% (EBS, Strategic Plan CHE 3.3).
		•	Replace older vehicles as part of the replacement plan and conduct preventative maintenance on all vehicles (DFR, Strategic Plan CHE 3.3).
		•	Reduce "Strike Team" fuel use 5% through reduced traffic light waiting by FY16-17 (PKR, EMS O&T 01104).
•	Enforce and educate around the anti-idling ordinance.	•	Continue education efforts and messaging on social media. Offer anti-idling signs and educational materials to schools (OEQ).
•	Explore commercial and entertainment zone parking plan.	•	Complete Central Business District parking evaluation and develop action plan (ECO, Strategic Plan EV 2.3).

AIR QUALITY GOAL: IMPROVE AIR QUALITY		
Objective 3: Reduce emission	ons from non-vehicles.	
Strategy	Target	
Reduce air emissions through industrial process inspections.	 Inspection of 600 industrial sources of emissions annually (PBW, EMS O&T 01020). 	
Reduce emissions from mowing activities.	Maintain 10 day mowing cycle in parks (PKR, Strategic Plan CHE 3.1).	
Objective 4: Address heat island.		
Strategy	Target	
Increase tree canopy. Plant 750 trees per year through FY16-17 (PKR, EMS O&T 01107).		

LAND USE: PROMOTE SMART GROWTH AND DEVELOPMENT

LAND USE GOAL: PROMOTE SMART GROWTH AND DEVELOPMENT		
Objective I: Build "green" in Dallas.		
Strategy		
	 Reduce the environmental impacts, 10% less water and 20% less energy over 2011 baseline, for existing City buildings by completing energy and water retrofits by September 2015 (PBW, EMS O&T 01151). 	
 Reduce impact of construction in Dallas. 	 Reduce the environmental impacts of newly-constructed facilities, 20% less water and 20% less energy over 2011 baseline, by constructing LEED buildings (PBW, EMS O&T 01150). 	
	Replace Highland Hills Branch Library (PBW, Strategic Plan CARE 4.2).	
Objective 2: Increase open space.		
Strategy	Target	
 Procure land for new parks and open space. 	Achieve Park and Recreation 98% completion or underway status for 2006 Bond program (PKR, Strategic Plan CARE 4.2).	
 Beautify green spaces and parks. 	Enhance and re-establish 60 park flowerbeds with drought tolerant plants and water efficient features (PKR, Strategic Plan CHE 3.1).	
 Amend and update the Tree Ordinance. 	Revision of the Tree Preservation Ordinance to address increasing the urban tree canopy in Dallas (SDC).	
 Continue implementing Trinity Balanced Vision Plan. 	Open the Upper Chain of Wetlands, South Central/Joppa Gateway Park, Riverfront Boulevard Phase I, Cadiz (from Riverfront to Lamar), and Beckley/ Commerce (TWM, Strategic Plan EV 2.3).	

LAND USE GOAL: PROMOTE SMART GROWTH AND DEVELOPMENT			
Objective 3: Develop and re	Objective 3: Develop and redevelop sustainably.		
Strategy	Target		
Use MSD and economic tools to promote redevelopment.	Completion of internal processing of MSD applications within nine months, excluding applicant response time to City comments (OEQ).		
Implement Complete	Schedule Complete Streets Design Manual for adoption by Council resolution (SDC, Strategic Plan EV 2.1).		
Streets Initiative.	Process Thoroughfare Plan Amendments and Bike Plan to support Complete Streets (PBW, Strategic Plan EV 2.1).		
Develop open space strategy for redevelopment areas.	Develop tracking system for park/open space dedication requirements in the Valley View Planned Development District (SDC, Strategic Plan EV 2.3).		
Objective 4: Create sustainable food systems.			
Strategy	Target		
Develop policies that will guide urban gardens on City property.	Creation of land use policy governing urban gardens on City land (OEQ).		
 Explore changes to existing code to facilitate community gardens. 	Identification of changes to city code to allow for more community gardens (OEQ).		

WATER QUALITY: IMPROVE WATER QUALITY

WATER QUALITY GOAL: IMPROVE WATER QUALITY		
Objective 1: Trinity River preservation.		
Strategy		
Restore natural contour of Trinity River to allow for filtration.	Commencement of the Trinity River relocation in the Dallas Floodway to create a more natural channel (TWM, Balanced Vision Plan).	
	Continue removing and recycling tires from the Trinity River (TWM, Strategic Plan CHE 3.1).	
	Increase 15% from FY13-14 volunteer participation in Trinity River corridor cleaning and planting events (TWM, EMS O&T 01130 / Strategic Plan CHE 3.1).	
	Continue local and regional efforts to develop and update sustainable design standards (TWM, Strategic Plan CHE 3.4).	
Improve Trinity River water quality.	• Continue improvement of storm water management technologies and programs at the local, regional, state, and federal levels (TWM, Strategic Plan CHE 3.4).	
	Develop iSWM practices to be used citywide on City construction projects (PBW, EMS O&T 01152 / Strategic Plan CHE 3.4).	
	Add a quarter-mile buffer at two (2) Dallas parks to reduce the amount of floatables and sediment (PKR, EMS O&T 01108).	
	• Increase the number of storm drain inlets cleaned 5% by October 2015 (STS, EMS O&T 01137).	

WATER QUALITY: IMPROVE WATER QUALITY

W	WATER QUALITY GOAL: IMPROVE WATER QUALITY		
OŁ	Objective 2: Protect surface waters.		
Strategy Target		ırget	
•	Implement integrated pest management (IPM).	•	Development of IPM for City facilities by September 2014 to implement by spring 2015 (TWM, EMS O&T 01097).
•	Reduce bacterial loads.	•	Promote conversion from septic to sanitary sewers in developing areas to reduce bacteria (TWM, Strategic Plan CHE 3.4).
•	Inspect for compliance and enforce regulations that protect the Trinity River watershed.	•	Reduce pollutant load for total suspended solids (TSS) and iron (Fe) by 5% annually from baseline (SAN, EMS O&T 00986).
•	Enhance litter abatement activities.	•	Implement single-use carryout bag ordinance (OEQ, Strategic Plan CHE 3.1).

W	WATER QUALITY GOAL: IMPROVE WATER QUALITY			
0	Objective 3: Provide education and outreach.			
Stı	rategy	Та	rget	
•	Continue education and outreach, and associated line cleanings, to reduce sanitary sewer overflows.	•	Continuation of the Cease the Grease program and events with 100 school presentations and 150 public/other events (DWU, Strategic Plan CHE 3.1).	
•	Trottae education and	•	Delivery of 80 outreach presentations on reducing pollution by OEQ annually through September 2013 (OEQ, Strategic Plan CHE 3.1).	
	outreach to residents and businesses.	•	Offer classes to increase contractor awareness of EMS by October 2015 (STS, EMS O&T 01136).	
•	Implement a water quality demonstration project.	•	Plan implementation schedule for FY16 (TWM, Strategic Plan CHE 3.4).	

MATERIALS MANAGEMENT: BETTER MATERIALS MGMT

MATERIALS MANAGEMENT GOAL: BETTER MATERIALS MANAGEMENT		
Objective I: Increase recycli	ing.	
Strategy	Target	
Increase household recycling rates citywide.	Increase the residential recycling participation rate 2% annually from FY13-14 baseline by September 2015 (SAN, EMS O&T 01122).	
recycling rates citywide.	Collect 55,900 tons of recyclable materials (SAN, Strategic Plan CHE 3.1).	
Increase recycling rates on City property.	Increase recycling bins located in parks 30% through FY16-17 (PKR, EMS O&T 01105 / Strategic Plan CHE 3.1).	
Objective 2: Improve proces	ss waste management.	
Strategy Target		
	Optimize DWU recycling program. Increase scrap metal recycling 30% and inhouse recycling 10% over FY11-12 baselines by FY15-16 (DWU, EMS O&T 01027).	
	Improve recycling 5% above FY13-14 baseline at Love Field (AVI, EMS O&T 01120).	
Increase recycling rates	Increase shredded paper recycling by a combined 5% over baseline and decrease paper purchasing 5% by end of FY15-16 (DMO, EMS O&T 01118).	
for City operations.	 Increase in the single-stream recycling throughout DPD by 2% over the baseline year FY11 -12 through August 2015 (DPD, EMS O&T 01045). 	
	Increase the amount of recycled materials collected from Code Compliance Services standalone facilities 5% over FY13-14 baseline (CCS, EMS O&T 01134).	
	Increase in-house recycling 5% per year over FY13-14 by September 2016 through training (SAN, EMS O&T 01085).	

M	MATERIALS MANAGEMENT GOAL: BETTER MATERIALS MANAGEMENT		
0	Objective 2: Improve process waste management. (continued)		
Stı	rategy	Tar	get
•	Increase paperless processes.		Explore areas where paperless option is preferred and implement (TWM, Strategic Plan CHE 3.1).
	Implement programs for difficult-to-recycle materials.		Establish recycling program for specialized materials used in firefighting activities by end of 2015 (DFR, EMS O&T 01109).
		•	Promote electronics recycling through TCEQ grant (OEQ).
			Increase the amount of scrap tires delivered to the landfill for proper disposal (CCS, EMS O&T 01135).
	Increase composting of organic materials.		Reduce amount of tree and brush sent to the landfill through the Dallas Zoo Browse Program (PKR, EMS O&T 01124).
			Continue exploring ways to reduce amount of waste sent by the Dallas Zoo to the landfill: goal of 25% over baseline (PKR—DZM, EMS O&T 01146).
Objective 3: Improve hazardous waste management.			
Strategy		Tar	get
•	Reduce hazardous waste impacts to the environment.		Increase public participation in batteries, oil, paint, and anti-freeze (BOPA) collection 10% in FY14-15 (SAN, EMS O&T 01117).

MATERIALS MANAGEMENT GOAL: BETTER MATERIALS MANAGEMENT		
Objective 4: Conserve water.		
Strategy	Target	
	Completion of 45 audits and issuance of incentives for DWU customers under the industrial, commercial and institutional incentive program (DWU).	
	Promote Water Conservation Programs to reduce GPCD 1.5% over FY10-11 by September 2015 (DWU, EMS O&T 01028 / Strategic Plan CHE 3.1).	
Reduce average	Submit Long Range Water Supply Plan recommended strategies to Region C Planning Group January 2015 (DWU, Strategic Plan EV 2.3).	
consumption.	• Establish a program to conserve water at Dallas Zoo (PKR—DMZ, EMS O&T 01144).	
	Reduce dependency on potable water sources for plant irrigation at Dallas Zoo (PKR—DMZ, EMS O&T 01145).	
	Reduce KBHCC facility wide water consumption by 3% annually over 2014 baseline (CES, EMS O&T 01121).	
Reduce water waste through inspection of mains.	Inspection of 3,100 miles of water main line annually for leaks (DWU, EMS O&T 00537).	
Rehabilitate water/ wastewater mains.	Rehabilitate and/or replace 1.5% of water and wastewater mains annually (DWU, Strategic Plan EV 2.3).	

MATERIALS MANAGEMENT GOAL: BETTER MATERIALS MANAGEMENT		
Objective 5: Green purchasing.		
Strategy	Target	
	Increase the number of green products used and/or replaced product by 2% by September 2017 (EBS, EMS O&T 01113).	
Buy green to minimize	Reduce gas and diesel fuels consumption 10% over FY13-14 baseline by 2017 (EBS, EMS O&T 01128 / Strategic Plan CHE 3.3).	
resource impacts.	Implement a Product Substitution Program to reduce toxic chemicals by 25% annually by September 2016 (CIS, EMS O&T 01100).	
	Continue to identify options for additional "green" supplies and materials (e.g. fluorescent to LED bulbs) (EBS, Strategic Plan CHE 3.3).	

ENERGY MANAGEMENT: REDUCE NON-RENEWABLE ENERGY USE

ENERGY MANAGEMENT GOAL: REDUCE NON-RENEWABLE ENERGY USE, EXPAND RENEWABLE			
Objective 1: Purchase green energy.			
Strategy	Target		
Continue purchasing renewable energy.	• Implement second year of 50 % renewable energy purchase (PBW, Strategic Plan CHE 3.3).		
Objective 2: Conserve energ	gy.		
Strategy	Target		
	Reduce electrical use at Southside Waste Water Treatment Plant 3% from FY12-13 baseline by FY16-17 (DWU, EMS O&T 01143).		
 Maintain EMS conservation efforts to achieve a 5% reduction in City usage annually. 	 Reduce monthly electrical demand and peak hour charges of ERCOT load during 4-CP (4- Coincident Peaks) months (June-September) by September 2015 (DWU, EMS O&T 01068). 		
	 Replace traffic light bulbs with energy efficient LED lights by December 2014 (STS, EMS O&T 01091). 		
Develop traffic signal replacement program.	Develop a pro-active replacement plan to replace all signals within 25 years (STS, Strategic Plan EV 2.2).		
Benchmark and increase building	Continue replacement of equipment with energy efficient equipment (EBS, Strategic Plan CHE 3.3).		
energy efficiency.	Decrease energy consumption at facilities where energy efficiency upgrades have been conducted (PBW, Strategic Plan CHE 3.3).		

ENERGY MANAGEMENT: REDUCE NON-RENEWABLE ENERGY USE (continued)

ENERGY MANAGEMENT GOAL: REDUCE NON-RENEWABLE ENERGY USE, EXPAND RENEWABLE		
Objective 3: Produce energy on-site.		
Strategy	Target	
 Conduct feasibility research and develop a plan to generate energy at City facilities. 	Development of an on-site energy production plan by summer 2016 (PBW).	
Explore the construction of solar installations.	Continue to pursue solar opportunities (PBW, Strategic Plan CHE 3.3).	

SOCIAL EQUITY: A MORE INCLUSIVE DALLAS

SC	SOCIAL EQUITY GOAL: A MORE INCLUSIVE DALLAS (NEW)		
0	Objective I: Increase access.		
Strategy		Ta	rget
•	Continue growSouth strategies.	•	Implement Downtown Growth, West Dallas, Lancaster Corridor, Jefferson Avenue, Education Corridor projects (ECO, Strategic Plan EV 2.3).
•	Execute Downtown 360 Plan.	•	Promote mixed income housing development (ECO, Strategic Plan EV 2.3).
•	Create housing plan.	•	Complete first draft of Neighborhood Plus Plan with full plan adoption by spring 2015 (SDC, Strategic Plan EV 2.6).
•	 Review and update plans to address gaps in services. 	•	Develop community cultural plan with updated strategies and implement policies (OCA, Strategic Plan CARE 4.2).
		•	Restore Community Artists Program funding to present 500 neighborhood based cultural services to approximately 100,000 people (OCA, Strategic Plan CARE 4.2).

SOCIAL EQUITY GOAL: A MORE INCLUSIVE DALLAS (NEW)		
Objective 2: Increase opportunity.		
Strategy Target		
• Expand M/WBE program.	• Increase Minority and Women Business Enterprise spend by 1% (POM, Strategic Plan EGov 5.1).	
Enhance workforce readiness.	Provide job training for 130 disabled adults and 60 seniors (HOU, Strategic Plan EV 2.3).	
• Explore housing/sweat -equity jobs program.	Present results of housing research (HOU, Strategic Plan EV 2.5).	
 Secure manufacturing facilities in Southern Dallas. 	Secure 100,000 sq. ft. manufacturing facility per year in Southern Dallas (ECO, Strategic Plan EV 2.5).	
Promote small businesses.	Expand DEN/SourceLink Small Business Initiatives to develop Entrepreneur Village (ECO, Strategic Plan EV 2.5).	
	Increase community awareness on the state of literacy in Dallas through partnerships with literacy organizations (LIB, Strategic Plan CARE 4.1).	
• Improve literacy.	Align Dallas Public Library early childhood parent education efforts with school district pre-K initiatives (LIB, Strategic Plan CARE 4.1).	
	Explore opportunities to expand and enhance pre-K services (LIB, Strategic Plan CARE 4.1).	

SOCIAL EQUITY GOAL: A MORE INCLUSIVE DALLAS (NEW)			
Objective 3: Improve co	mmunity.		
Strategy	Target		
Stimulate and strengthen neighborhood associations.	Present "how-to-organize" materials to interested neighborhoods (PNV, Strategic Plan EV 2.4).		
Secure environmental justice.	Improve living conditions by increasing enforcement of environmental offenses by 5% (CDS, Strategic Plan CHE 3.1).		
Expand graffiti abatement.	Work with agencies to abate graffiti and add more free walls (CCS, Strategic Plan CHE 3.1).		
	Work with cultural partners and centers to expand services in neighborhoods (OCA, Strategic Plan CARE 4.2).		
	Expand "Hecho en Dallas/Made in Dallas" exhibition to three cultural centers (OCA, Strategic Plan CARE 4.2).		
• Expand Culture, Arts, Recreation, and Education services.	Provide cultural services contracts to local arts organizations that present or produce local art (OCA, Strategic Plan CARE 4.2).		
	Identify, promote, and present local based artists and creative activities (OCA, Strategic Plan CARE 4.2).		
	Apply for a grant from Dallas Foundation to implement the Inspired Aging program at select branch libraries (LIB, Strategic Plan CARE 4.2).		

SC	SOCIAL EQUITY GOAL: A MORE INCLUSIVE DALLAS (NEW)		
0	Objective 4: Improve infrastructure.		
Strategy		Ta	rget
		•	Continue the 50/50 cost sharing replacement program (PBW, Strategic Plan EV 2.1).
•	Continue sidewalk upgrade programs.	•	Continue Fast Fix self-pay replacement program (PBW, Strategic Plan EV 2.1).
	upgrade programs.	•	Provide neighborhood bond petition program (PBW, Strategic Plan EV 2.1).
		•	Continue installing barrier free pedestrian ramps (PBW, Strategic Plan EV 2.1).
•	Upgrade street signs.	•	Implement proactive plan after city-wide survey completed (STS, Strategic Plan EV 2.2).
•	Review and update plans to address gaps in services.	•	Seek funding for a 3-year Strategic Plan to complement the Library Master Plan (LIB, Strategic Plan CARE 4.2).
•	Improve technology	•	Use technology to connect residents with cultural opportunities and services (OCA, Strategic Plan CARE 4.2).
	infrastructure.	•	Position the City on the leading edge of innovation and techniques for engaging citizens (CIS, Strategic Plan EGov 5.1).
•	Reduce hazardous discharge to sanitary system.	•	Implement a Mercury Amalgam Program to enroll 400 dental facilities to use Best Management Practices and/or install amalgam separators, by end of FY15-16 (DWU, EMS O&T 01141).
•	Reduce vectors.	•	Explore natural alternatives to control pest insects (PKR, EMS O&T 01106).

Next Steps

Office of Environmental Quality to provide

- Sustainability Plan Progress Report 2015
 - Late fall 2015

- Sustainability Plan Revisions 2016
 - Spring 2016

Questions





n: living today to be sure there is enough for tomorrow

REVISIONS 2015

May 26, 2015

DALLAS SUSTAINABILITY PLAN

Contents

INTRODUCTION	I
AIR QUALITY	4
GOAL	5
LAND USE	9
GOAL	10
WATER QUALITY	14
GOAL	15
MATERIALS MANAGEMENT	19
GOAL	20
ENERGY MANAGEMENT	26
GOAL	27
SOCIAL EQUITY	31
GOAL	32
CONCLUSION	37
APPENDICES	38



Dallas City Council

standing (I-r): Scott Griggs, I; Sandy Greyson, I2; Lee M. Kleinman, II; Rick Callahan, 5; Jennifer Staubach Gates, I3; Sheffie

Kadane, 9; Philip T. Kingston, 14; Dwaine R. Caraway, 4

seated (I-r): Vonciel Jones Hill, 3; Jerry R. Allen, 10; Deputy Mayor Pro Tem, Monica R. Alonzo, 6; Mayor Mike Rawlings;

Mayor Pro Tem, Tennell Atkins, 8; Adam Medrano, 2; Carolyn R. Davis, 7







Introduction

The City of Dallas recognizes that to promote a vibrant, healthy future, it must actively balance economic needs, environmental stewardship and social equity. Dallas needs a robust and thriving economy to ensure families are self-sufficient, and it must protect the cultural and social identities that are the fabric of community. But to do this, Dallas must protect the environment to ensure that all can enjoy the prosperity and access the resources shared today for generations to come. To be successful protecting the environment, a multi-faceted approach is required: reduce the impact from what is used, use only what is needed, and replenish resources faster than they are used.

Dallas is the largest component of the Dallas-Fort Worth-Arlington metropolitan statistical area (MSA), which is currently the fourth largest MSA in the United States. The Dallas region continues to grow as more people move here to take advantage of the many opportunities North Texas has to offer. With that growth, more demands will be made of the natural environment. In an effort to be proactive and to preserve Dallas, our Dallas, this sustainability plan is offered to educate and inform on the steps the City as an organization and the city as a community can take to help create a prosperous future for all.

Sustainability Priorities

To begin, six areas where activities have an impact have been identified: air quality, land use, water quality, materials management, energy management, and new this year social equity. City leaders, since the 1950s, have, in one form or another, put in place measures or plans to address these six areas. As in those previous plans, this plan will showcase what is intended to be accomplished through environmental stewardship efforts and the policies in place that will help reach those goals.

Sustainability, the Strategic Plan and Environmental Management

The City Council's FY15-17 Strategic Plan was driven by the five Key Focus Areas (KFAs) the City Council has identified as the roadmaps to creating a successful city. Every year, Council meets to affirm the priorities of each KFA and to identify the programs they feel best move the city toward fulfilling those priorities. From there, the City's Strategic Plan is updated to reflect the Council's goals and the great work begins.

Enhancing the vitality and quality of life for everyone in Dallas is the ultimate goal of this sustainability plan. Reflecting on the Strategic Plan and the vision of a *City That Works: Diverse, Vibrant, Progressive*, the sustainability plan espouses the City's Core Values of accountability, commitment, customer service, environmental stewardship, innovation, integrity, leadership, sensitivity and teamwork in order to achieve the objectives framed within.



The core value of Environmental Stewardship establishes the foundations by which the City of Dallas builds a Clean, Healthy Environment.

As one of the five Key Focus Areas which govern City activities and budget allocations, the concept of a Clean, Healthy Environment is critical to the future success of the City of Dallas. Although the other Key Focus Areas of Public Safety; Economic Vibrancy; Culture, Arts, Recreation & Education; and, E-Gov are equally important, this plan will focus on the

cornerstone of it all - a Clean, Healthy Environment.

DALLAS CITY COUNCIL FY15-17 KEY FOCUS AREAS

- **TOTAL STREET OF THE CONTROL OF THE**
- CULTURE, ARTS, RECREATION & EDUCATION
- **ECONOMIC VIBRANCY**
- **E-GOV**
- PUBLIC SAFETY

A Clean, Healthy Environment in Dallas will be accomplished through Municipal Leadership, Regional Collaboration, Environmental Initiatives, and Community Enhancement. The strategy map shown in *Figure 1* highlights the major strategies and activities that the City of Dallas uses to promote a "culture of health and cleanliness."



organization to protecting the environment, the City has implemented an Environmental Management System (EMS) to guide internal operations. The EMS is a system based on a continual cycle of "Plan, Do, Check, Act" as shown in Figure 2 that requires us to minimize negative environmental impacts. "Planning", one identifies activities that will have an environmental impact and then comes up with alternative methods to accomplish those activities but with a lessened or altogether eliminated environmental impact. By "Doing", one implements the alternative methods and trains others on the process to ensure consistency. Regular "Checking" ensures the

To demonstrate its commitment as

effectiveness of the alternative methods at accomplishing those activities with a minimized or eliminated environmental impact. And "Acting" allows for continual improvements to be made through further planning.



Fourteen City departments participate in the EMS and work closely with the City's Office of



Environmental Quality to keep the system running optimally. In January of 2005, the City Council approved an Environmental Policy, found in Appendix D, which empowers every employee, not just those in the EMS, to minimize their environmental footprint in every aspect of their jobs and to go above and beyond to protect the environment, making Earth Day Every Day in Dallas.

This sustainability plan is the culmination of years of commitment and dedication to the environment within the City of Dallas as an organization through the work of City

departments and the Environmental Management System paired with elements of the Strategic Plan to expand sustainability into daily decision making processes to build a stronger community for today and tomorrow.

This plan is designed to inform the reader of the steps already taken and the direction in which to proceed as well as serving as a road map for those wishing to green their lives and ensure a bright and prosperous future for years to come.

Plan Outline

The City of Dallas' sustainability plan is divided into six categories that address a range of issues relating to sustainability: Air Quality, Land Use, Water Quality, Materials Management, Energy Management, and Social Equity. Each section of the plan includes an introduction to the topic, including the guiding principles and goal, and information on how the City of Dallas will take action to address the issue through programmatic objectives. Added or modified items are highlighted in **bold** font in the tables at the end of each category.

Four appendices are included that contain a listing of City of Dallas Programs, Tips & Tools, Selected City Council Ordinances, Resolutions and Authorizations and Administrative Directives, and the City's Environmental Policy.







Air Quality

Air quality impacts everyone every day. As pollution is released from human activities the world over, its impact can be seen on health and climate.

Today, children and the elderly spend much of their time indoors because of daily warnings about poor air quality. According to the Centers for Disease Control (CDC), roughly one in twelve Americans suffer from asthma!. Children are most prone to asthma, and respiratory ailments remain the number one reason youth under the age of eighteen visit emergency rooms in the United States. It is estimated that asthma cost the United States \$56 billion in 2007, up from \$53 billion in 2002, due to medical costs, lost school and work days, and early deaths!

While the public debate around the impact human activities have on the climate continues, gases greenhouse build more atmosphere. As a result, less solar radiation is able to escape back into space, and the atmosphere, like a pot with a lid, consequently warms. With a warmer climate come changes in weather patterns including fluctuations from normal temperatures and precipitation levels. It also causes coral blanching, warmer seas, oceanic acidification, and shorter cold weather seasons that leave pest populations intact leading to economic and health costs associated with lost crops and the spread of insect borne diseases like West Nile virus and Chikungunya.

¹http://www.cdc.gov/VitalSigns/Asthma/index.html

Everyone is familiar with "the haze" that can be seen over Dallas. The haze is the byproduct of internal combustion and sunlight. Emissions from the combustion of fossil fuels mix with volatile organic compounds in the presence of sunlight to produce ground-level ozone which then becomes trapped in place by weather patterns. In the stratosphere, ozone protects the planet from ultraviolet radiation; at the surface, it is an eyesore and a dangerous irritant to lung tissue.

The Dallas-Fort Worth-Arlington area has over six million individuals making an impact, positively or negatively to air quality, as a result of everyday actions.

Emissions are local, but their impact is regional. As air quality standards become more stringent, this region may face financial sanctions from governing authorities if steps are not taken to help improve air quality and bring the region into full attainment with the National Ambient Air Quality Standards of the Clean Air Act.

The City of Dallas will continue to implement programs aimed to help reduce the amount of emissions that are associated with City operations to help further reduce air quality impacts.

The City continues to encourage and partner with surrounding communities and businesses in the region to do what they can to help reduce their own impact to air quality to build a better, healthier future for us all.

Goal

The City of Dallas is working to improve air quality.

Objective I

Improve air quality: the City is promoting the use of alternative commutes - including mass transit, carpooling, biking and walking - to reduce emissions and minimize single-rider vehicle trips.

Strategy:

Utilize GreenRide to assist staff to find carpool or biking buddies to reduce single-rider trips. GreenRide allows staff to track their alternative commutes, records emissions reductions and calculates reductions in vehicle miles travelled (VMT) and emission reductions of CO₂ and other greenhouse gases (GHG) based on the type of vehicle and distances travelled.

Expand the street car system service.

Promote bicycling.

Facilitate high-speed rail.

Implement strategic transportation initiatives.

Target:

Reduction in single-rider vehicle miles travelled by 10% annually over previous year through 2015 (OEQ, EMS O&T 00992).

Attain *GreenRide* 60% participation rate for Trinity employees by September 2015 (TWM, EMS O&T 01132).

Begin construction of TIGER extension project (SDC, Strategic Plan EV 2.1).

Implement City's bike share program (PBW, Strategic Plan EV 2.1).

Implement approximately 20 miles of planned bike facilities (PBW, Strategic Plan EV 2.1).

Monitor and engage in the process of securing high-speed rail (PBW, Strategic Plan EV 2.1).

Recommend an alignment for Downtown Dallas Transit Improvements Study (D2) (SDC, Strategic Plan EV 2.1).

Work with TxDOT to advance multi-modal transit projects (SDC, Strategic Plan EV 2.1).

Develop plan for Woodall Rodgers Bike and Pedestrian Path (SDC, Strategic Plan EV 2.1).

Develop bike path from Katy Trail to Klyde Warren Park utilizing Harwood Street (SDC, Strategic Plan EV 2.1).

Objective 2

Improve air quality: the City is reducing emissions from vehicles.

Strategy:

Increase fleet energy efficiency.

Enforce and educate around the anti-idling ordinance.

Explore commercial and entertainment zone parking plan.

Target:

Decrease CO2e (CO2 equivalent) emissions from On-Road and Off-Road EBS maintained Vehicles 10% by September 2017 (EBS, EMS O&T 01114).

Reduction in fuel use 1% from baseline by September 2015 (SAN, EMS O&T 01055).

Replace transfer station diesel fleet with cleaner equipment 10% annually from baseline by September 2015 (SAN, EMS O&T 01058).

Increase Alternative Fueled Vehicle inventory from 38% to 40% (EBS, Strategic Plan CHE 3.3).

Replace older vehicles as part of the replacement plan and conduct preventative maintenance on all vehicles (DFR, Strategic Plan CHE 3.3).

Reduce "Strike Team" fuel use 5% through reduced traffic light waiting by FY16-17 (PKR, EMS O&T 01104).

Continue education efforts and messaging on social media. Offer anti-idling signs and educational materials to schools (OEQ).

Complete CBD parking evaluation and develop action plan (ECO, Strategic Plan EV 2.3).

Objective 3

Improve air quality: the City promotes reducing emissions from non-vehicle sources.

Strategy:

Reduce air emissions through industrial process inspections.

Reduce emissions from mowing activities.

Target:

Inspection of 600 industrial sources of emissions annually (PBW, EMS O&T 01020).

Maintain 10 day mowing cycle in parks (PKR, Strategic Plan CHE 3.1).

Objective 4

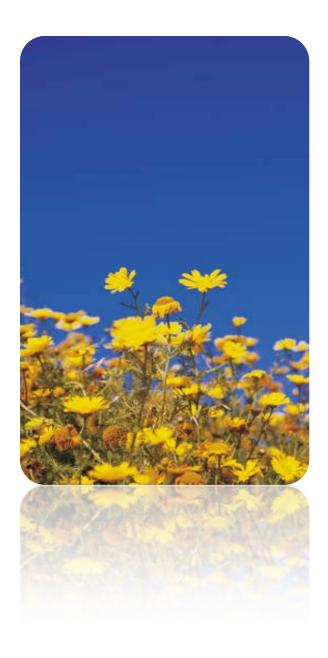
Improve air quality: the City will address the heat island phenomenon.

Strategy:

Increase tree canopy in Dallas.

Target:

Plant 750 trees per year through FY16-17 (PKR, EMS O&T 01107).



AIR QUALITY SUMMARY OF OBJECTIVES

AIR QUALITY GOAL	AIR QUALITY GOAL: IMPROVE AIR QUALITY		
Objective 1: Increase alternative commute options.			
Strategy	Target		
 Continue GreenRide. 	 Reduction in single-rider vehicle miles travelled by 10% annually over previous year through 2015 (OEQ, EMS O&T 00992). 		
Continue Greenkide.	 Attain 60% participation rate for GreenRide reporting for TWM employees by September 2015 (TWM, EMS O&T 01132). 		
 Expand street car service. 	Begin construction of TIGER extension project (SDC, Strategic Plan EV 2.1).		
	Implement the City's bike share program (PBW, Strategic Plan EV 2.1).		
 Promote bicycling. 	 Implement approximately 20 miles of planned bike facilities (PBW, Strategic Plan EV 2.1). 		
 Facilitate high- speed rail. 	 Monitor and engage in the process of securing high speed rail (PBW, Strategic Plan EV 2.1). 		
	 Recommend an alignment for Downtown Dallas Transit Improvements Study (D2) (SDC, Strategic Plan EV 2.1). 		
ImplementStrategic	 Work with TxDOT to advance multi-modal transit projects (SDC, Strategic Plan EV 2.1). 		
Transportation Initiatives.	 Develop plan for Woodall Rodgers Bike and Pedestrian Path (SDC, Strategic Plan EV 2.1). 		
	Develop bike path from Katy Trail to Klyde Warren Park utilizing Harwood Street (SDC, Strategic Plan EV 2.1).		
Objective 2: Reduce emis	ssions from vehicles.		
Strategy	trategy Target		
	Decrease CO2e (CO2 equivalent) emissions from On-Road and Off-Road EBS maintained Vehicles 10% by September 2017 (EBS, EMS O&T 01114).		
 Increase fleet energy efficiency. 	Reduction in fuel use 1% from baseline by September 2015 (SAN, EMS O&T 01055).		
,	 Replace transfer station diesel fleet with cleaner equipment 10% annually from baseline by September 2015 (SAN, EMS O&T 01058). 		

Strategy	Target
	 Increase Alternative Fueled Vehicle inventory from 38% to 40% (EBS, Strateg Plan CHE 3.3).
 Increase fleet energy efficiency. 	• Replace older vehicles as part of the replacement plan and conduct preventative maintenance on all vehicles (DFR, Strategic Plan CHE 3.3).
	• Reduce "Strike Team" fuel use 5% through reduced traffic light waiting by FY16-17 (PKR, EMS O&T 01104).
 Enforce and educate around the anti-idling ordinance. 	 Continue education efforts and messaging on social media. Offer anti-idling signs and educational materials to schools (OEQ).
 Explore commercial and entertainment zone parking plan. 	 Complete Central Business District parking evaluation and develop action plan (ECO, Strategic Plan EV 2.3).
Objective 3: Reduce emis	sions from non-vehicles.
Strategy	Target
 Reduce air emissions through industrial process inspections. 	 Inspection of 600 industrial sources of emissions annually through October 2014 (PBW, EMS O&T 01020).
 Reduce emissions from mowing activities. 	Maintain 10 day mowing cycle in parks (PKR, Strategic Plan CHE 3.1).
Objective 4: Address hea	t island.
Strategy	Target
• Increase tree canopy.	Plant 750 trees per year through FY16-17 (PKR, EMS O&T 01107).







Land Use

Land use, in the scope of sustainability, is much more than the development of real estate. Land provides a place to live, grow food, nurture family, and create community. Land is the foundation upon which to build and shape community and cultural identity.

In Dallas, people value the features that create a community's identity. One can easily identify the parts of Dallas that are named after their environmental features: Oak Cliff, White Rock, Lakewood, Forest Hills, Oak Lawn, Cedars, Lake West, Pleasant Grove, Bluffview, Elderwoods, Turtle Creek, Oak Highlands, Walnut Hill, to name a few. Effort is made to protect these areas and their identities through civic action and, in some regulations. The White cases. Rock Escarpment, one of Dallas's signature geological formations, is protected under Article V of the city code from any development or site alteration to protect it always.

It is important to protect the land to ensure its proper use and the use of the resources it provides – not just growth for the sake of growth but growth for a substantial and sustainable purpose. For the most part, Dallas is landlocked and has matured to understand the importance of finding a balance between preserving what has defined and shaped the contextual makeup of the community and the need for future growth.

forwardDallas! was adopted to help guide that balance and ensure Dallas continues to remain economically vibrant while connected to its

heritage. Article X of the city code was passed to protect the trees that shade Dallas, provide natural habitat, and help clean the air. By adopting long range plans and passing ordinances to protect natural resources, Dallas will arrive at its future while preserving its past.

As more people move to Dallas, they will need more places to live and work. Over time, city leaders will be afforded the opportunity to demonstrate their commitment to preserving natural resources by embracing the land use principles that will ensure smart growth and keep the city economically strong while maintaining and protecting the features that make it unique.

Such opportunities will include the continued promotion of transit-oriented design (TOD) in Dallas and the promotion of mixed-use developments that allow for the creation of urban centers where individuals can live, work and play. So important is this effort to Dallas' sustainable future, financial incentives toward this goal were considered for inclusion in the 2012 bond issue. Leaders may also wish to explore ways to preserve neighborhood identity around those areas perhaps through the use of a neighborhood stabilization overlay (NSO) for all properties within a predetermined distance of any City-assisted development project. The City could also develop a strategy to promote the restoration of historically designated structures to green standards to prevent demolition by neglect.

When approving land use, city leaders have to balance the needs of the entire community against the needs of those who seek to make Dallas home. Whether it is new homes or a new retail center, leaders must weigh all the benefits and drawbacks to each proposed use so as to get the most from each parcel for the community economically while protecting the very qualities that made the parcel desirable to the community.



Goal

The City of Dallas promotes smart growth and development.

Objective I

Promote smart growth and development: the City promotes the use of green building practices to minimize a building's construction and use impacts on the environment, City infrastructure, and the surrounding community.

Strategy:

Reduce impact of construction in Dallas.

Target:

Reduce the environmental impacts, 10% less water and 20% less energy over 2011 baseline, for existing City buildings by completing energy and water retrofits by September 2015 (PBW, EMS O&T 01151).

Reduce the environmental impacts of newlyconstructed facilities, 20% less water and 20% less energy over 2011 baseline, by constructing LEED buildings (PBW, EMS O&T 01150).

Replace Highland Hills Branch Library (PBW, Strategic Plan CARE 4.2).

Objective 2

Promote smart growth and development: the City will work to secure and preserve in perpetuity open and green spaces.

Strategy:

Procure land for new parks and future projects, including neighborhood parks and open spaces.

Beautify green spaces and parks.

Amend and update the Tree Ordinance.

Continue implementing Trinity Balanced Vision Plan.

Target:

Achieve Park and Recreation 98% completion or underway status for 2006 Bond program (PKR, Strategic Plan CARE 4.2).

Enhance and re-establish 60 park flowerbeds with drought tolerant plants and water efficient features (PKR, Strategic Plan CHE 3.1).

Revision of the Tree Preservation Ordinance to address increasing the urban tree canopy in Dallas (SDC).

Open the Upper Chain of Wetlands, South Central/Joppa Gateway Park, Riverfront Boulevard Phase I, Cadiz (from Riverfront to Lamar), and Beckley/Commerce (TWM, Strategic Plan EV 2.3).

Objective 3

Promote smart growth and development: the City encourages sustainable development and redevelopment.

Strategy:

Use municipal setting designation (MSD) and economic tools to promote redevelopment and/or brownfield reclamation.

Implement Complete Streets Initiative.

Develop open space strategy for redevelopment areas.

Target:

Completion of internal processing of MSD applications within nine months, excluding applicant response time to City comments (OEQ).

Schedule Complete Streets Design Manual for adoption by Council resolution (SDC, Strategic Plan EV 2.1).

Process Thoroughfare Plan Amendments and Bike Plan to support Complete Streets (PBW, Strategic Plan EV 2.1).

Develop tracking system for park/open space dedication requirements in the Valley View Planned Development District (SDC, Strategic Plan EV 2.3).

Objective 4

Promote smart growth and development: promote sustainable food systems.

Strategy:

Develop land use policies that will guide placement and operation of urban gardens on City property.

Explore changes to existing code to facilitate construction of community gardens.

Target:

Development of land use policy governing urban gardens on City land (OEQ).

Identification of changes to city code to allow for more community gardens (OEQ).



LAND USE SUMMARY OF OBJECTIVES

LAND USE GOAL: PROMOTE SMART GROWTH AND DEVELOPMENT		
Objective 1: Build "green	Objective 1: Build "green" in Dallas.	
Strategy	Target	
	 Reduce the environmental impacts, 10% less water and 20% less energy over 2011 baseline, for existing City buildings by completing energy and water retrofits by September 2015 (PBW, EMS O&T 01151). 	
 Reduce impact of construction in Dallas. 	 Reduce the environmental impacts of newly-constructed facilities, 20% less water and 20% less energy over 2011 baseline, by constructing LEED buildings (PBW, EMS O&T 01150). 	
	Replace Highland Hills Branch Library (PBW, Strategic Plan CARE 4.2).	
Objective 2: Increase ope	en space.	
Strategy	Target	
 Procure land for new parks and open space. 	Achieve Park and Recreation 98% completion or underway status for 2006 Bond program (PKR, Strategic Plan CARE 4.2).	
Beautify green spaces and parks.	Enhance and re-establish 60 park flowerbeds with drought tolerant plants and water efficient features (PKR, Strategic Plan CHE 3.1).	
Amend and update the Tree Ordinance.	Revision of the Tree Preservation Ordinance to address increasing the urban tree canopy in Dallas (SDC).	
 Continue implementing Trinity Balanced Vision Plan. 	 Open the Upper Chain of Wetlands, South Central/Joppa Gateway Park, Riverfront Boulevard Phase I, Cadiz (from Riverfront to Lamar), and Beckley/Commerce (TWM, Strategic Plan EV 2.3). 	

Objective 3: Develop and redevelop sustainably.	
Strategy	Target
 Use MSD and economic tools to promote redevelopment. 	 Completion of internal processing of MSD applications within nine months, excluding applicant response time to City comments (OEQ).
Implement Complete Streets	 Schedule Complete Streets Design Manual for adoption by Council resolution (SDC, Strategic Plan EV 2.1).
Initiative.	 Process Thoroughfare Plan Amendments and Bike Plan to support Complete Streets (PBW, Strategic Plan EV 2.1).
 Develop open space strategy for redevelopment areas. 	 Develop tracking system for park/open space dedication requirements in the Valley View Planned Development District (SDC, Strategic Plan EV 2.3).
Objective 4: Create susta	ainable food systems.
Strategy	Target
 Develop policies that will guide urban gardens on City property. 	Creation of land use policy governing urban gardens on City land (OEQ).
 Explore changes to existing code to facilitate community gardens. 	• Identification of changes to city code to allow for more community gardens (OEQ).







Water Quality

Until the Clean Water Act (CWA) started regulating discharges to American waters, rivers, streams and lakes were used as disposal sites to move industrial and commercial waste away from communities. History is replete with incidences where this practice resulted in undesirable side-effects that prompted the federal government to act to protect water and ensure its availability. Even with regulations now in place, many bodies of water in the United States remain threatened or "impaired" under the Clean Water Act either from decades old contamination that is persistent and accumulative, or from non-point sources that exist today.

Improving water quality requires understanding how it is impacted.

According to the Texas Commission on Environmental Quality, bacteria and chemical concentrations can become elevated in portions of the Upper Trinity River that flows through Dallas. When this occurs, it places the River in an "impaired" state for activities identified as "contact recreation" in the state's standards.

Chemicals and bacteria loads are not the only issues facing the Trinity River; litter threatens the water quality as well. Participation in the regional Reverse Litter campaign and other efforts helps the City identify threats to the Trinity River from drifting litter or deliberate illegal dumping. Education campaigns and inspections by staff emphasize the importance

of protecting the Trinity throughout the watershed.

Dallas uses surface water reservoirs for its water supply, so the protection of these water bodies, including the Trinity River and its watershed, is imperative and a long-standing priority to City leaders and residents. Water conservation is discussed in the Materials Management section of this sustainability plan but the quality of the water in the watershed depends on the quantity of water in the watershed.

Between 1998 and 2010, Dallas averaged 37.6" of rain, close to the total received by Seattle, Washington of 37.7". The difference becomes pronounced when comparing the frequency of rainfall days. Dallas averages 81 rainfall days annually while Seattle averages 149 rainfall Precipitation, while comparable by days². amount to other "green" cities, comes infrequently to Dallas so when it falls it tends to occur suddenly and in heavy amounts. Due to the drier climate, the summer heat, and the geological formations upon which Dallas rests. soils here tend to become harder and less absorbent during the dry seasons of the year. As a result, flash-flooding from heavy rains running off hard clay soils are diverted to the storm sewer system bringing with it whatever contaminants it may contact in the 1,000 square mile watershed.

² http://www.currentresults.com/Weather/US/average-annual-precipitation-by-city.php

14

Dallas also sits atop natural springs that make their way to surface waters. City leaders have made it a priority to protect these spring and their groundwater sources so as to use them wisely and keep them clean and clear.

To protect the quality of all water sources, the City has implemented several education and outreach programs.

One such program aims to protect City infrastructure and works to protect surface waters from sanitary sewer overflows (SSOs) caused by fats, oils and greases improperly disposed of through the sanitary sewer. When an SSO occurs, it damages the city infrastructure and resources are diverted from other projects to repair the damage they cause. More importantly, SSOs threaten the watershed when they erupt to the surface and impact the municipal separate storm sewer system (MS4) or, more commonly, the storm sewer system.

The City is also working through comprehensive plans, like the integrated stormwater management plan (iSWM) that encourages the application of best practices for site design to redirect rainfall and runoff to planting areas, swales and on-site detention or retention ponds; and cooperative agreements with regional partners aimed to educate everyone living in the watershed about the hidden threats facing surface waters.

Yard chemicals, lawn clippings, trash, pet pesticides, industrial pollution, wastes, automobile fluids, detergents, sediment, loose other debris result in and can contaminations that harm the ecological balance of the waterways and impair the water quality. In larger quantities, accumulated across the 1,000 square miles of watershed and draining into the Trinity River, obstructions can form and cause back-ups and floods that can damage or destroy nearby homes, neighborhoods and businesses.

When that happens, City resources are then diverted for avoidable damage repairs that

could have otherwise been used to strengthen Dallas.

By protecting water quality in the Trinity River watershed from debris and contamination, the City can focus attention on building better communities and reducing environmental impacts to this vital resource.

Goal

The City of Dallas is working to improve water quality.

Objective I

Improve water quality: the City is taking steps to preserve the Trinity River.

Strategy:

Restore natural contour of Trinity River to allow for filtration.

Improve Trinity River water quality.

Target:

Commencement of the Trinity River relocation in the Dallas Floodway to create a more natural channel (TWM, Balanced Vision Plan).

Continue removing and recycling tires from the Trinity River (TWM, Strategic Plan CHE 3.1).

Increase 15% from FY13-14 volunteer participation in Trinity River corridor cleaning and planting events TWM, EMS O&T 01130 / Strategic Plan CHE 3.1).

Continue local and regional efforts to develop and update sustainable design standards (TWM, Strategic Plan CHE 3.4).

Continue improvement of storm water management technologies and programs at the local, regional, state, and federal levels (TWM, Strategic Plan CHE 3.4).

Develop iSWM practices to be used citywide on City construction projects (PBW, EMS O&T 01152 / Strategic Plan CHE 3.4).

Add a quarter-mile buffer at two (2) Dallas parks to reduce the amount of floatables and sediment (PKR, EMS O&T 01108).

Increase the number of storm drain inlets cleaned 5% by October 2015 (STS, EMS O&T 01137).

Objective 2

Improve water quality: utilize strategies and policies to protect surface waters.

Strategy:

Implement integrated pest management (IPM).

Reduce bacterial loads.

Inspect for compliance and enforce regulations that protect the Trinity River watershed.

Enhance litter abatement activities.

Target:

Development of IPM for City facilities by September 2014 to implement by spring 2015 (TWM, EMS O&T 01097).

Promote conversion from septic to sanitary sewers in developing areas to reduce bacteria (TWM, Strategic Plan CHE 3.4).

Reduce pollutant load for total suspended solids (TSS) and iron (Fe) by 5% annually from baseline (SAN, EMS O&T 00986).

Implement single-use carryout bag ordinance (OEQ, Strategic Plan CHE 3.1).

Objective 3

Improve water quality: minimize threats to the watershed through outreach and education programs to inform and engage the public in local and regional efforts.



Strategy:

Continue education and outreach, and associated line cleanings, to reduce sanitary sewer overflows.

Provide education and outreach to residents and businesses.

Implement a water quality demonstration project.

Target:

Continuation of the Cease the Grease program and events with 100 school presentations and 150 public/other events (DWU, Strategic Plan CHE 3.1).

Delivery of 80 outreach presentations on reducing pollution by OEQ annually through September 2013 (OEQ, Strategic Plan CHE 3.1).

Offer classes to increase contractor awareness of EMS by October 2015 (STS, EMS O&T 01136).

Plan implementation schedule for FY16 (TWM, Strategic Plan CHE 3.4).

WATER QUALITY SUMMARY OF OBJECTIVES

WATER QUALITY GOAL: IMPROVE WATER QUALITY		
Objective 1: Trinity River preservation.		
Strategy	Target	
 Restore natural contour of Trinity River to allow for filtration. 	 Commencement of the Trinity River relocation in the Dallas Floodway to create a more natural channel (TWM, Balanced Vision Plan). 	
	Continue removing and recycling tires from the Trinity River (TWM, Strategic Plan CHE 3.1).	
	• Increase 15% from FY13-14 volunteer participation in Trinity River corridor cleaning and planting events (TWM, EMS O&T 01130 / Strategic Plan CHE 3.1).	
	 Continue local and regional efforts to develop and update sustainable design standards (TWM, Strategic Plan CHE 3.4). 	
• Improve Trinity River water quality.	 Continue improvement of storm water management technologies and programs at the local, regional, state, and federal levels (TWM, Strategic Plan CHE 3.4). 	
	Develop iSWM practices to be used citywide on City construction projects (PBW, EMS O&T 01152 / Strategic Plan CHE 3.4).	
	Add a quarter-mile buffer at two (2) Dallas parks to reduce the amount of floatables and sediment (PKR, EMS O&T 01108).	
	• Increase the number of storm drain inlets cleaned 5% by October 2015 (STS, EMS O&T 01137).	
Objective 2: Protect surface waters.		
Strategy	Target	
 Implement integrated pest management (IPM). 	 Development of IPM for City facilities by September 2014 to implement by spring 2015 (TWM, EMS O&T 01097). 	
Reduce bacterial loads.	 Promote conversion from septic to sanitary sewers in developing areas to reduce bacteria (TWM, Strategic Plan CHE 3.4). 	

Strategy	Target
 Inspect for compliance and enforce regulations that protect the Trinity River watershed. 	 Reduce pollutant load for total suspended solids (TSS) and iron (Fe) by 5% annually from baseline (SAN, EMS O&T 00986).
 Enhance litter abatement activities. 	• Implement single-use carryout bag ordinance (OEQ, Strategic Plan CHE 3.1).
Objective 3: Provide educ	ation and outreach.
Strategy	Target
Continue education and outreach, and associated line cleanings, to reduce sanitary sewer overflows.	 Continuation of the Cease the Grease program and events with 100 school presentations and 150 public/other events (DWU, Strategic Plan CHE 3.1).
 Provide education and outreach to residents and businesses. 	 Delivery of 80 outreach presentations on reducing pollution by OEQ annually throug September 2013 (OEQ, Strategic Plan CHE 3.1).
	Offer classes to increase contractor awareness of EMS by October 2015 (STS, EMS O&T 01136).
 Implement a water quality demonstration project. 	Plan implementation schedule for FY16 (TWM, Strategic Plan CHE 3.4).







Materials Management

Waste happens. Yet, much of what is no longer valued can easily be reused, repurposed or recycled; individuals simply need to overcome the natural tendency to discard what is no longer needed (or wanted) and participate in the proper management of wastes, regardless of their source or nature, to reduce the impacts associated with waste.

At the same time, the creation of new items from virgin materials comes at a cost difficult to truly realize. What is more valuable: a mountain view or the ore contained therein? The lumber of a forest or the air it purifies? A lush. grassy lawn or drinking Consumers should also consider how much of the virgin material went into the product versus the amount that was trimmed away and disposed, and how much material was used just for packaging the items.

Since the dawn of the industrial revolution, the industrialized nations have evolved from the sustainable locality-based sustenance economy model to an unsustainable linear market economy model that relies on the wants and choices of the individual to drive economies. As a result, people now "shop 'til they drop" and fill their homes, garages and self-storage units with items that eventually end up in the trash or storage indefinitely. The supply of materials from which these goods are fashioned is finite. The space in which these goods are stored is finite. The disposal site to which these goods are relegated at the end of their lives is finite. This model is unsustainable. Fortunately, the market economy responds to individual

choices. As consumers, individuals can drive the market toward items that are more environmentally friendly to produce, transport, use and dispose.

The City is already working to reduce its through **EMS** impacts commitments: collaborations with the Texas Product Stewardship Council and the North Texas Corporate Recycling Association: reduction strategies and policies: investigating long-range waste management to reduce materials going to landfill. strategies aim to complement other efforts in place in the City to help guide consumers and provide them with more options to reduce their environmental footprint.

Another material resource to consider is water. Water is vital for life. The City has multiple plans in place to explore, procure and develop future sources of water. As mentioned in the Water Quality section of this plan, the City uses surface waters for drinking water supplies. It is also the same source for the water applied to lawns, to flush wastes, and as a resource in industrial applications.

The City is reducing the amount of water it uses at City facilities. As part of the effort to build green, new facilities have water saving measures in place like low-flow toilets, rainwater harvesting, and drip irrigation. As part of the EMS, City departments commit to reducing overall water usage by 5% annually; City golf courses are being watered with highly treated wastewater effluent to save billions of gallons of water annually; and, Dallas Water

Utilities has a dedicated team to provide outreach and education on the importance of water conservation privately and commercially to ensure everyone living in Dallas has access to clean, clear sustaining water.

As with all things, there are multiple considerations which influence decisions people make. Strengthening the environmentally preferred or green purchasing policy to cover all City functions and all City staff from City Council to third-party contractors will help further reduce the City's footprint.

While it is important to work toward the protection of the environment through materials management, it is also important to not allow perfect to become the enemy of good. In other words, if the technology or practice available today is better than what was available yesterday but not as good as what will be available tomorrow, one should not dismiss the improvement or depreciate its value and remain steadfastly locked in the past or married to old technology while waiting for the next "next best thing".

Goal

The City of Dallas is working to protect natural resources through better materials management.

Objective I

Better materials management: increase recycling, which aids in moving items away from the waste stream and back into the production cycle.

Strategy:

Increase household recycling rates citywide.

Increase recycling rates on City property.

Target:

Increase the residential recycling participation rate 2% annually from FY13-14 baseline by September 2015 (SAN, EMS O&T 01122).

Collect 55,900 tons of recyclable materials (SAN, Strategic Plan CHE 3.1).

Increase recycling bins located in parks 30% through FY16-17 (PKR, EMS O&T 01105 / Strategic Plan CHE 3.1).

Objective 2

Better materials management: improved process waste management to divert these materials from landfilling.

Strategy:

Increase recycling rates for City operations.

Increase paperless processes.

Implement programs for difficult-to-recycle materials.

Increase composting of organic materials.

Target:

Optimize DWU recycling program. Increase scrap metal recycling 30% and in-house recycling 10% over FY11-12 baselines by FY15-16 (DWU, EMS O&T 01027).

Improve recycling 5% above FY13-14 baseline at Love Field (AVI, EMS O&T 01120).

Increase shredded paper recycling by a combined 5% over baseline and decrease paper purchasing 5% by end of FY15-16 (DMO, EMS O&T 01118).

Increase in the single-stream recycling throughout DPD by 2% over the baseline year FYII-I2 through August 2015 (DPD, EMS O&T 01045).

Increase the amount of recycled materials collected from Code Compliance Services standalone facilities 5% over FY13-14 baseline (CCS, EMS O&T 01134).

Increase in-house recycling 5% per year over FY13-14 by September 2016 through training (SAN, EMS O&T 01085).

Explore areas where paperless option is preferred and implement (TWM, Strategic Plan CHE 3.1).

Establish recycling program for specialized materials used in firefighting activities by end of 2015 (DFR, EMS O&T 01109).

Promote electronics recycling through TCEQ grant (OEQ).

Increase the amount of scrap tires delivered to the landfill for proper disposal (CCS, EMS O&T 01135).

Reduce amount of tree and brush sent to the landfill through the Dallas Zoo Browse Program (PKR, EMS O&T 01124).

Continue exploring ways to reduce amount of waste sent by the Dallas Zoo to the landfill: goal of 25% over baseline (PKR-DMZ, EMS O&T 01146).

Objective 3

Better materials management: reduce the impacts of hazardous materials on the ecosystem through collection events.

Strategy:

Reduce hazardous waste impacts to the environment.

Target:

Increase public participation in batteries, oil, paint, and anti-freeze (BOPA) collection 10% in FY14-15 (SAN, EMS O&T 01117).

Objective 4

Better materials management: saving water through conservation programs and infrastructure maintenance.

Strategy:

Reduce average consumption.

Reduce water waste through inspection of mains.

Rehabilitate water/wastewater mains.

Target:

Completion of 45 audits and issuance of incentives for DWU customers under the industrial, commercial and institutional incentive program (DWU).

Promote Water Conservation Programs to reduce GPCD 1.5% over FY10-11 by September 2015 (DWU, EMS O&T 01028 / Strategic Plan CHE 3.1).

Submit Long Range Water Supply Plan recommended strategies to Region C Planning Group January 2015 (DWU, Strategic Plan EV 2.3).

Establish a program to conserve water at Dallas Zoo (PKR, EMS O&T 01144).

Reduce dependency on potable water sources for plant irrigation at Dallas Zoo (PKR—DMZ, EMS O&T 01145).

Reduce KBHCC facility wide water consumption by 3% annually over 2014 baseline (CES, EMS O&T 01121).

Inspection of 3,100 miles of water main line annually for leaks (DWU, EMS O&T 00537).

Rehabilitate and/or replace 1.5% of water and wastewater mains annually (DWU, Strategic Plan EV 2.3).



Objective 5

Better materials management: greener purchasing reduces environmental footprints.

Strategy:

Buy green to minimize resource impacts.

Target:

Increase the number of green products used and/or replaced product by 2% by September 2017 (EBS, EMS O&T 01113).

Reduce gas and diesel fuels consumption 10% over FY13-14 baseline by 2017 (EBS, EMS O&T 01128 / Strategic Plan CHE 3.3).

Implement a Product Substitution Program to reduce toxic chemicals by 25% annually by September 2016 (CIS, EMS O&T 01100).

Continue to identify options for additional "green" supplies and materials (e.g. fluorescent to LED bulbs) (EBS, Strategic Plan CHE 3.3).



MATERIALS MANAGEMENT SUMMARY OF OBJECTIVES

MATERIALS MANAGEMENT GOAL: BETTER MATERIALS MANAGEMENT	
Objective 1: Increase rec	ycling.
Strategy	Target
 Increase household recycling rates 	Increase the residential recycling participation rate 2% annually from FY13-14 baseline by September 2015 (SAN, EMS O&T 01122).
citywide.	Collect 55,900 tons of recyclable materials (SAN, Strategic Plan CHE 3.1).
 Increase recycling rates on City property. 	Increase recycling bins located in parks 30% through FY16-17 (PKR, EMS O&T 01105 / Strategic Plan CHE 3.1).
Objective 2: Improve pro	ocess waste management.
Strategy	Target
	Optimize DWU recycling program. Increase scrap metal recycling 30% and in-house recycling 10% over FY11-12 baselines by FY15-16 (DWU, EMS O&T 01027).
	Improve recycling 5% above FY13-14 baseline at Love Field (AVI, EMS O&T 01120).
 Increase recycling 	Increase shredded paper recycling by a combined 5% over baseline and decrease paper purchasing 5% by end of FY15-16 (DMO, EMS O&T 01118).
rates for City operations.	 Increase in the single-stream recycling throughout DPD by 2% over the baseline year FYII-I2 through August 2015 (DPD, EMS O&T 01045).
	Increase the amount of recycled materials collected from Code Compliance Services standalone facilities 5% over FY13-14 baseline (CCS, EMS O&T 01134).
	Increase in-house recycling 5% per year over FY13-14 by September 2016 through training (SAN, EMS O&T 01085).
• Increase paperless processes.	Explore areas where paperless option is preferred and implement (TWM, Strategic Plan CHE 3.1).
 Implement programs for difficult-to-recycle materials. 	Establish recycling program for specialized materials used in firefighting activities by end of 2015 (DFR, EMS O&T 01109).

Objective 2: Improve pro	ocess waste management. (continued)
Strategy	Target
Implement	Promote electronics recycling through TCEQ grant (OEQ).
programs for difficult-to-recycle materials.	 Increase the amount of scrap tires delivered to the landfill for proper disposal (CCS, EMS O&T 01135).
Increase composting of	Reduce amount of tree and brush sent to the landfill through the Dallas Zoo Browse Program (PKR, EMS O&T 01124).
organic materials.	 Continue exploring ways to reduce amount of waste sent by the Dallas Zoo to the landfill: goal of 25% over baseline (PKR-DMZ, EMS O&T 01146).
Objective 3: Improve haz	ardous waste management.
Strategy	Target
Reduce hazardous waste impacts to the environment.	 Increase public participation in batteries, oil, paint, and anti-freeze (BOPA) collection 10% in FY14-15 (SAN, EMS O&T 01117).
Objective 4: Conserve w	ater.
Strategy	Target
	 Completion of 45 audits and issuance of incentives for DWU customers under the industrial, commercial and institutional incentive program (DWU).
	 Promote Water Conservation Programs to reduce GPCD 1.5% over FY10- II by September 2015 (DWU, EMS O&T 01028 / Strategic Plan CHE 3.1).
Reduce average	Submit Long Range Water Supply Plan recommended strategies to Region C Planning Group January 2015 (DWU, Strategic Plan EV 2.3).
consumption.	• Establish a program to conserve water at Dallas Zoo (PKR-DMZ, EMS O&T 01144).
	Reduce dependency on potable water sources for plant irrigation at Dallas Zoo (PKR—DMZ, EMS O&T 01145).
	Reduce KBHCC facility wide water consumption by 3% annually over 2014 baseline (CES, EMS O&T 01121).
 Reduce water waste through inspection of mains. 	 Inspection of 3,100 miles of water main line annually for leaks (DWU, EMS O&T 00537).

Objective 4: Conserve w	ater. (continued)
Strategy	Target
Rehabilitate water/wastewater mains.	 Rehabilitate and/or replace 1.5% of water and wastewater mains annually (DWU, Strategic Plan EV 2.3).
Objective 5: Green purchasing.	
Strategy	Target
Buy green to minimize resource impacts.	 Increase the number of green products used and/or replaced product by 2% by September 2017 (EBS, EMS O&T 01113).
	 Reduce gas and diesel fuels consumption 10% over FY13-14 baseline by 2017 (EBS, EMS O&T 01128 / Strategic Plan CHE 3.3).
	 Implement a Product Substitution Program to reduce toxic chemicals by 25% annually by September 2016 (CIS, EMS O&T 01100).
	• Continue to identify options for additional "green" supplies and materials (e.g. fluorescent to LED bulbs) (EBS, Strategic Plan CHE 3.3).









Energy Management

Dallas, once an oil-boom town, has long been associated with energy and today stands ready to explore and embrace new energy technologies to decrease consumption of carbon-based fuels and grid dependence.

As anyone living in North Texas can attest, Dallas is blessed with an abundance of sunlight. The advancement and incorporation of solar energy production into the infrastructure and on buildings in Dallas is logical, progressive and frees up financial resources for use on other infrastructure and social needs. While the Dallas-Fort Worth region does not fall into the ideal wind-generating zone, Texas, remains firmly the largest producer of wind energy in the United States³. Large scale applications may currently be unattainable in Dallas, but small scale, individual unit applications are being realized and placed throughout the city.

But power generation is only one component of freeing Dallas and all of North Texas from the shackles of carbon-based energy. The region continues to grow more populated meaning an increase in demand, cost fluctuations, and resource competition. To shield consumers from the volatility of the energy markets, conservation measures reduce what is obtained from conventional sources until such a time when local solar and wind based production methods exceed consumption.

While Dallas stands to benefit from cheap, local energy from solar and wind technologies over the coming years, the separation from carbon-based fuels will reduce grid load and the associated environmental impacts by reducing the amount of air polluting emissions released from conventional coal or gas powered electric plants.

Dallas is on the leading edge of cities in America buying and producing renewable energy. These commitments keep Dallas eligible for federal and state dollars offered to cities moving toward energy independence and a more sustainable way of life.



3

http://apps2.eere.energy.gov/wind/windexchange/wind_installed _capacity.asp

Goal

The City of Dallas is working to reduce the consumption of energy from nonrenewable sources and expand the availability of renewable energy.

Objective I

Reduce non-renewable energy use, expand availability of renewable: purchasing alternative energy removes the environmental impacts to air associated with energy production and safeguards against market volatility.

Strategy:

Continue purchasing renewable energy.

Target:

Implement second year of 50% renewable energy purchase (PBW, Strategic Plan CHE 3.3).

Objective 2

Reduce non-renewable energy use, expand availability of renewable: reduce consumption to minimize the impacts from traditional energy production methods.

Strategy:

Maintain EMS conservation efforts to achieve a 5% reduction in City usage annually.

Develop traffic signal replacement program.

Benchmark and increase building energy efficiency.

Target:

Reduce electrical use at Southside Waste Water Treatment Plant 3% from FY12-13 baseline by FY16-17 (DWU, EMS O&T 01143).

Reduce monthly electrical demand and peak hour charges of ERCOT load during 4-CP (4-Coincident Peaks) months (June-September) by September 2015 (DWU, EMS O&T 01068).

Replace traffic light bulbs with energy efficient LED lights by December 2014 (STS, EMS O&T 01091).

Develop a pro-active replacement plan to replace all signals within 25 years (STS, Strategic Plan EV 2.2).

Continue replacement of equipment with energy efficient equipment (EBS, Strategic Plan CHE 3.3).

Decrease energy consumption at facilities where energy efficiency upgrades have been conducted (PBW, Strategic Plan CHE 3.3).

Objective 3

Reduce non-renewable energy use, expand availability of renewable: explore and pursue the installation of alternative energy power sources at City facilities on a case by case basis.

Strategy:

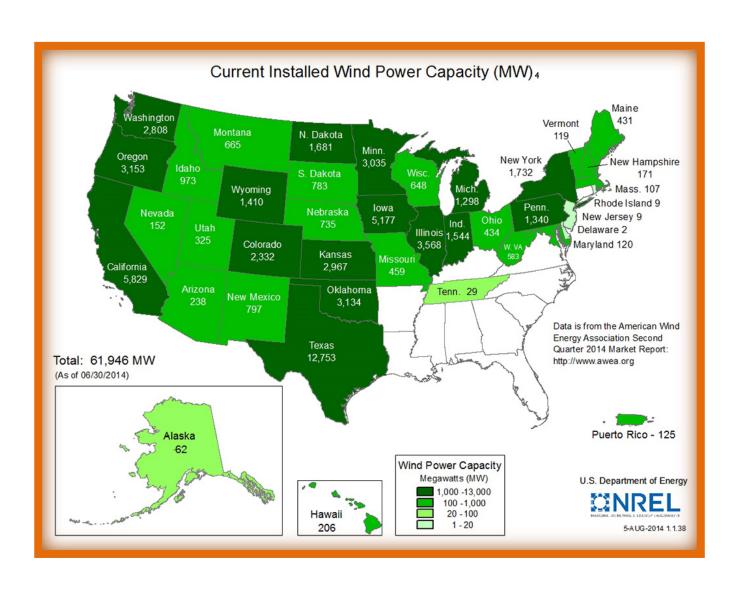
Conduct feasibility research and develop a plan to generate energy at City facilities.

Explore the construction of solar installations.

Target:

Development of an on-site energy production plan by summer 2016 (PBW).

Continue to pursue solar opportunities (PBW, Strategic Plan CHE 3.3).



 $^{^{4}\} http://apps2.eere.energy.gov/wind/windexchange/wind_installed_capacity.asp$

ENERGY MANAGEMENT SUMMARY OF OBJECTIVES

ENERGY MANAGEMENT GOAL: REDUCE NON-RENEWABLE ENERGY USE, EXPAND RENEWABLE		
Objective 1: Purchase gro	Objective 1: Purchase green energy.	
Strategy	Target	
 Continue purchasing renewable energy. 	 Implement second year of 50% renewable energy purchase (PBW, Strategic Plan CHE 3.3). 	
Objective 2: Conserve er	nergy.	
Strategy	Target	
Maintain EMS	 Reduce electrical use at Southside Waste Water Treatment Plant 3% from FY12-13 baseline by FY16-17 (DWU, EMS O&T 01143). 	
conservation efforts to achieve a 5% reduction in City	 Reduce monthly electrical demand and peak hour charges of ERCOT load during 4-CP (4-Coincident Peaks) months (June-September) by September 2015 (DWU, EMS O&T 01068). 	
usage annually.	 Replace traffic light bulbs with energy efficient LED lights by December 2014 (STS, EMS O&T 01091). 	
 Develop traffic signal replacement program. 	Develop a pro-active replacement plan to replace all signals within 25 years (STS, Strategic Plan EV 2.2).	
 Benchmark and increase building 	Continue replacement of equipment with energy efficient equipment (EBS, Strategic Plan CHE 3.3).	
energy efficiency.	 Decrease energy consumption at facilities where energy efficiency upgrades have been conducted (PBW, Strategic Plan CHE 3.3). 	
Objective 3: Produce energy on-site.		
Strategy	Target	
 Conduct feasibility research and develop a plan to generate 	Development of an on-site energy production plan by summer 2016 (PBW).	

energy at City facilities.	
 Explore the construction of solar installations. 	Continue to pursue solar opportunities (PBW, Strategic Plan CHE 3.3).







Social Equity

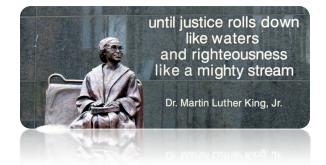
Sustainability is more than the advancement of environmental initiatives; it also supports economic strength and ensures social equity.

Per the Dallas City Charter, one of the roles of the City is to protect the peace, lives, health, and property of Dallas residents. Toward that goal, the Sustainability Plan 2015 Revision has added the element of Social Equity to present those efforts underway at the City to strengthen the community through equal opportunity and access for all who live in Dallas to build a more robust community.

The Great Recession has expanded the racial and ethnic wealth divide in the United States. The typical white family held a net worth ten times that of the typical black family in 2007; by 2013, that difference had grown to thirteen times with white families rebounding from the economic downturn while black families continue to struggle. The gap between whites and Hispanic families has also widened from eight times pre-recession to ten times today.⁵

In the Letter from Birmingham Jail, Dr. Martin Luther King, Jr., wrote, "injustice anywhere is a threat to justice everywhere". Echoing his words, anyone who lives in Dallas can never be considered an outsider anywhere within its bounds. In other words, the disparities and inequities that challenge any one in Dallas must be addressed by all in Dallas.

Dallas has evolved into a city of inclusion; a city of opportunity; a city of vision. But there is no time to rest upon laurels. New challenges are ever present. With them, new leaders emerge with new ideas and the impacts of past decisions are, and continue to be, addressed. Dallas must continue to grow, to strengthen, and to remake itself into a model community that keeps in mind that core role: protect the peace, lives, health, and property of Dallas residents. History will record what is done to that end. Providence will remember.



⁵ http://www.pewresearch.org/fact-tank/2014/12/12/racial-wealth-gaps-great-recession/

Goal

The City of Dallas is working to create a more inclusive and equitable community with equal opportunity and access for all.

Objective I

A more inclusive Dallas: increase access.

Strategy:

Continue growSouth strategies.

Execute Downtown 360 Plan.

Create housing plan.

Review and update plans to address gaps in services.

Target:

Implement Downtown Growth, West Dallas, Lancaster Corridor, Jefferson Avenue, Education Corridor projects (ECO, Strategic Plan EV 2.3).

Promote mixed income housing development (ECO, Strategic Plan EV 2.3).

Complete first draft of Neighborhood Plus Plan with full plan adoption by spring 2015 (SDC, Strategic Plan EV 2.6).

Develop community cultural plan with updated strategies and implement policies (OCA, Strategic Plan CARE 4.2).

Restore Community Artists Program funding to present 500 neighborhood based cultural services to approximately 100,000 people (OCA, Strategic Plan CARE 4.2).

Objective 2

A more inclusive Dallas: increase opportunity.

Strategy:

Expand M/WBE (Minority and Women Business Enterprise) program.

Enhance workforce readiness.

Explore housing/sweat-equity jobs program.

Secure manufacturing facilities in Southern Dallas.

Promote small businesses.

Improve literacy.

Target:

Increase M/WBE spend by 1% (POM, Strategic Plan EGov 5.1).

Provide job training for 130 disabled adults and 60 seniors (HOU, Strategic Plan EV 2.3).

Present results of housing research (HOU, Strategic Plan EV 2.5).

Secure 100,000 sq. ft. manufacturing facility per year in Southern Dallas (ECO, Strategic Plan EV 2.5).

Expand DEN/SourceLink Small Business Initiatives to develop Entrepreneur Village (ECO, Strategic Plan EV 2.5).

Increase community awareness on the state of literacy in Dallas through partnerships with literacy organizations (LIB, Strategic Plan CARE 4.1).

Align Dallas Public Library early childhood parent education efforts with school district pre-K initiatives (LIB, Strategic Plan CARE 4.1).

Explore opportunities to expand and enhance pre-K services (LIB, Strategic Plan CARE 4.1).



Objective 3

A more inclusive Dallas: improve community.

Strategy:

Stimulate and strengthen neighborhood associations.

Secure environmental justice.

Expand graffiti abatement.

Expand Culture, Arts, Recreation, and Education services.

Target:

Present "how-to-organize" materials to interested neighborhoods (PNV, Strategic Plan EV 2.4).

Improve living conditions by increasing enforcement of environmental offenses by 5% (CDS, Strategic Plan CHE 3.1).

Work with agencies to abate graffiti and add more free walls (CCS, Strategic Plan CHE 3.1).

Work with cultural partners and centers to expand services in neighborhoods (OCA, Strategic Plan CARE 4.2).

Expand "Hecho en Dallas/Made in Dallas" exhibition to three cultural centers (OCA, Strategic Plan CARE 4.2).

Provide cultural services contracts to local arts organizations that present or produce local art (OCA, Strategic Plan CARE 4.2).

Identify, promote, and present local based artists and creative activities (OCA, Strategic Plan CARE 4.2).

Apply for a grant from Dallas Foundation to implement the Inspired Aging program at select branch libraries (LIB, Strategic Plan CARE 4.2).

Objective 4

A more inclusive Dallas: improve infrastructure.

Strategy:

Continue sidewalk upgrade programs.

Upgrade street signs.

Review and update plans to address gaps in services.

Improve technology infrastructure.

Reduce hazardous discharge to sanitary system.

Reduce vectors.

Target:

Continue the 50/50 cost sharing replacement program (PBW, Strategic Plan EV 2.1).

Continue Fast Fix self-pay replacement program (PBW, Strategic Plan EV 2.1).

Provide neighborhood bond petition program (PBW, Strategic Plan EV 2.1).

Continue installing barrier free pedestrian ramps (PBW, Strategic Plan EV 2.1).

Implement proactive plan after city-wide survey completed (STS, Strategic Plan EV 2.2).

Seek funding for a 3-year Strategic Plan to complement the Library Master Plan (LIB, Strategic Plan CARE 4.2).

Use technology to connect residents with cultural opportunities and services (OCA, Strategic Plan CARE 4.2).

Position the City on the leading edge of innovation and techniques for engaging citizens (CIS, Strategic Plan EGov 5.1).

Implement a Mercury Amalgam Program to enroll 400 dental facilities to use Best Management Practices and/or install amalgam separators, by end of FY15-16 (DWU, EMS O&T 01141).

Explore natural alternatives to control pest insects (PKR, EMS O&T 01106).

SOCIAL EQUITY SUMMARY OF OBJECTIVES

SOCIAL EQUITY GO	SOCIAL EQUITY GOAL: A MORE INCLUSIVE DALLAS (NEW)	
Objective I: Increase	Objective I: Increase access.	
Strategy	Target	
Continue growSouth strategies.	Implement Downtown Growth, West Dallas, Lancaster Corridor, Jefferson Avenue, Education Corridor projects (ECO, Strategic Plan EV 2.3).	
• Execute Downtown 360 Plan.	Promote mixed income housing development (ECO, Strategic Plan EV 2.3).	
Create housing plan.	Complete first draft of Neighborhood Plus Plan with full plan adoption by spring 2015 (SDC, Strategic Plan EV 2.6).	
Review and update	Develop community cultural plan with updated strategies and implement policies (OCA, Strategic Plan CARE 4.2).	
plans to address gaps in services.	Restore Community Artists Program funding to present 500 neighborhood based cultural services to approximately 100,000 people (OCA, Strategic Plan CARE 4.2).	
Objective 2: Increase	opportunity.	
Strategy	Target	
 Expand MWBE program. 	Increase M/WBE spend by 1% (POM, Strategic Plan EGov 5.1).	
Enhance workforce readiness.	 Provide job training for 130 disabled adults and 60 seniors (HOU, Strategic Plan EV 2.3). 	
 Explore housing/sweat- equity jobs program. 	Present results of housing research (HOU, Strategic Plan EV 2.5).	
Secure manufacturing facilities in Southern Dallas.	Secure 100,000 sq. ft. manufacturing facility per year in Southern Dallas (ECO, Strategic Plan EV 2.5).	
Promote small businesses.	Expand DEN/SourceLink Small Business Initiatives to develop Entrepreneur Village (ECO, Strategic Plan EV 2.5).	

Objective 2: Increase opportunity. (continued)	
Strategy	Target
• Improve literacy.	Increase community awareness on the state of literacy in Dallas through partnerships with literacy organizations (LIB, Strategic Plan CARE 4.1).
	Align Dallas Public Library early childhood parent education efforts with school district pre-K initiatives (LIB, Strategic Plan CARE 4.1).
	Explore opportunities to expand and enhance pre-K services (LIB, Strategic Plan CARE 4.1).
Objective 3: Improve	community.
Strategy	Target
• Stimulate and strengthen neighborhood associations.	Present "how-to-organize" materials to interested neighborhoods (PNV, Strategic Plan EV 2.4).
• Secure environmental justice.	Improve living conditions by increasing enforcement of environmental offenses by 5% (CDS, Strategic Plan CHE 3.1).
Expand graffiti abatement.	Work with agencies to abate graffiti and add more free walls (CCS, Strategi Plan CHE 3.1).
• Expand Culture, Arts, Recreation, and Education services.	Work with cultural partners and centers to expand services in neighborhoods (OCA, Strategic Plan CARE 4.2).
	Expand "Hecho en Dallas/Made in Dallas" exhibition to three cultural centers (OCA, Strategic Plan CARE 4.2).
	Provide cultural services contracts to local arts organizations that present or produce local art (OCA, Strategic Plan CARE 4.2).
	Identify, promote, and present local based artists and creative activities (OCA, Strategic Plan CARE 4.2).
	Apply for a grant from Dallas Foundation to implement the Inspired Aging program at select branch libraries (LIB, Strategic Plan CARE 4.2).

Objective 4: Improve infrastructure.	
Strategy	Target
 Continue sidewalk upgrade programs. 	 Continue the 50/50 cost sharing replacement program (PBW, Strategic Plan EV 2.1).
	• Continue Fast Fix self-pay replacement program (PBW, Strategic Plan EV 2.1).
	• Provide neighborhood bond petition program (PBW, Strategic Plan EV 2.1).
	Continue installing barrier free pedestrian ramps (PBW, Strategic Plan EV 2.1).
Upgrade street signs.	 Implement proactive plan after city-wide survey completed (STS, Strategic Plan EV 2.2).
 Review and update plans to address gaps in services. 	 Seek funding for a 3-year Strategic Plan to complement the Library Master Plan (LIB, Strategic Plan CARE 4.2).
Improve technology infrastructure.	 Use technology to connect residents with cultural opportunities and services (OCA, Strategic Plan CARE 4.2).
	 Position the City on the leading edge of innovation and techniques for engaging citizens (CIS, Strategic Plan EGov 5.1).
Reduce hazardous discharge to sanitary system.	 Implement a Mercury Amalgam Program to enroll 400 dental facilities to use Best Management Practices and/or install amalgam separators, by end of FY15-16 (DWU, EMS O&T 01141).
Reduce vectors.	• Explore natural alternatives to control pest insects (PKR, EMS O&T 01106).

Conclusion

Sustainability is an important priority in the City's plans for the present and the future. Dallas has acted to support sustainability for some time. These actions are condensed in this sustainability plan in six broad goals:

- Improve air quality;
- Promote smart growth and development;
- Improve water quality;
- Better materials management;
- Reduce non-renewable energy use; and,
- Create a more inclusive Dallas.

As support for these goals, the City has in place twenty-three objectives built upon sixty-eight strategies for achievement. Finally, the strategies are actualized as the City progresses toward achieving one-hundred-eighteen specific performance targets. Successful completion of the tasks in this sustainability plan is reflective of the City Council's determination to grow the City while preserving the environment and social equity.

Over time, this plan will continue to evolve. With each achievement, the plan will build on those successes. Each time, the City will need to redefine performance targets by determining not only what will be done but also by when and to what extent. Over the life of the plan, the Office of Environmental Quality will provide annual revisions and progress reports to the City Council and the public.

Each version will be a fresh starting point, a means and not an end, for advancing sustainability. There will be new inspiration and action incorporated into this plan as Dallas grows and learns. And, the journey

continues...

Appendices

Green Your Life: City of Dallas Programs

The City of Dallas supports multiple programs to help residents and businesses protect the environment and save money.

More information on these programs can be found online or through GreenDallas.net.

AirCheck Texas Drive a Clean Machine Program

A state funded program operated by the North Central Texas Council of Governments for persons living in the nine-county DFW region. The City of Dallas supports this program by advertising and helping to answer questions about application requirements. For more information, visit www.DriveACleanMachine.org or call 214-670-3887.

Cease the Grease

Did you know that pouring fats, oils, or grease (FOG) down your kitchen sink drain can clog your pipes, or even the sanitary sewer lines? Prevent this by storing fats, oils, or grease in a container, then dropping it off at one of the many locations around Dallas. This not only keeps your drains clear, but the City of Dallas can convert FOG's to energy. Visit www.CeaseTheGrease.org for more information.

Hospitality Industry Program

Over the next several years, City of Dallas Water Utilities (DWU) will partner with Dallas hotels/motels and restaurants to encourage them to continue, and in some cases, expand their efforts to conserve water. The program will be voluntary and will not be regulated by the City of Dallas. The initiative is supported by the Hotel Association of North Texas, the Greater Dallas Restaurant Association, Downtown Dallas Inc., the Dallas Convention and Visitors Bureau, Tarrant Regional Water District and North Texas Municipal Water District. For more information on the Hospitality Industry Program, please visit www.SaveDallasWater.com or call Terry Lowery at 214-670-4685.

Irrigation Check-ups

Dallas Water Utilities conducts free automatic irrigation system check-ups to make sure that your system is operating properly and that watering schedules are appropriate for your yard's needs. To sign up for an appointment or get more information, got to www.SaveDallasWater.com.

Minor Plumbing Repair Program

This program offers assistance with minor plumbing problems and fixtures that may cause water waste and higher water bills. Click here to apply or visit www.SaveDallasWater.com for more information.

New Throne for Your Home Toilet Voucher

Dallas Water Utilities offers up to \$90 per toilet to replace existing high-flow toilets (generally those installed before 1992) with low-flow or high-efficiency toilet models. A newer model could save more than 60 percent of water per flush, and save you money. For more information visit www.SaveDallasWater.com. To apply for a rebate, click here (purchase already made). To apply for a voucher, click here (for future purchase).

Texas Emissions Reduction Plan (TERP) Grant Program

The State of Texas is providing financial assistance to those who own/operate heavy-duty diesel vehicles or equipment, i.e. semi-trucks, construction equipment, in order to improve air quality. Funding opportunities are offered once or twice each year. The City of Dallas is available to assist you through the application process. For more information about TERP visit www.TerpGrants.org or call 214-670-3887.

Green Your Life: Tips & Tools

There are many ways you can reduce your environmental footprint at home or work. When you do, you're not only saving natural resources by using less, you're also reducing emissions that impact our air quality and our water quality.

Below, we list some of the more popular suggestions. For a more in depth look, visit GreenDallas.net or email us at GreenDallas@dallascityhall.com.

Save Energy

- Unplug it! Appliances and equipment that are plugged in are still sucking power even though they're off (think cell phone chargers, toasters, lamps). Turn off power strips when not in use to reduce "Vampire Power".
- Install a programmable thermostat! In the summer, keep your thermostat at least 78 degrees while you are at home and at least 85 degrees when gone; in the winter, try 68 when you're home and 60 when gone. Watch your energy bills drop!
- Replace your air filter! Just like you, the air conditioner needs to be able to move air to work best. Change your filter at least every 3 months because a blocked filter will make your system run longer causing higher energy costs and it could overwork and damage your system.
- Seal it up! Stop leaks and avoid intruding air. Replace weather stripping. Seal around window and door jambs. Add extra insulation in attics and in walls.
- Turn your hot water heater down! Adjust your heater to 110° in summer and 115° in winter. The water will still be hot but your energy bill will be much lower. And when you run the water to get it warm, capture that cool water and use it on plants outdoors in summer or save it in the washing machine for the cool water wash year round.

Save Water

- Turn it off! Turn off water when brushing teeth.
- Take shorter showers! You'll save water and the energy used to heat it. Extra payoff: By taking shorter showers, you'll prevent 350 pounds of CO₂ and keep about \$100 in your pocket each year.
- Install a low flow shower head! There are many types of designs that put out less than 3 gallons per minute. They still have great pressure and conserve gallons of water from each shower.
- Install an efficient toilet! New toilets use around 1.6 gallons per flush older models can use up to 6 gallons! That's a lot of water. Find out if you qualify for a voucher from the City of Dallas that helps homeowners and apartment managers/owners purchase water-saving low-flow toilets.
- Wait until it's full! Run the washing machine and dishwasher only when they're full. Depending on the age and performance level of your dishwasher, you may need to pre-rinse to remove food items that can be stuck on or are not filtered out prior to the rinse cycle to keep from having to rewash the same dish twice which costs more than a quick rinse before loading. If your dishwasher is a high performance model, the extra pay off by skipping pre-rinse is that you can reduce carbon dioxide from being released and save money each year.

Clear the Air

- Tune-ups and tires! Keep your vehicle in tune, keep it inspected, and check the air pressure in your tires. An under-inflated tire will cause your vehicle to get poor gas mileage and wear down your tires faster. You'll increase the life of your vehicle, get better gas mileage, and reduce emissions by as much as half at the same time.
- Report smoking vehicles! Report smoking vehicles. Dial #SMOKE from your cell phone to anonymously report smoking vehicles.
- Don't idle! Idling your vehicle wastes fuel, creates emissions, and can be harmful to little lungs. Parents should shut down their engines while waiting for the school bell to release their little learners at the end of the day. Check out GreenDallas.net to order a no-idling sign for your child's school. Call I-877-NTX-IDLE to report vehicles idling for more than 5 minutes.
- Share! Carpool or use public transportation. Fewer vehicles on the roads mean fewer emissions. You'll save a few bucks each day in gasoline and you will not have to search for a parking space. Remember, you're not stuck in traffic, you are traffic.
- Don't top off! Topping off the tank releases gas vapors into the atmosphere which contribute to the formation of smog.
- Wait until the evening! Do not fuel your vehicle or mow your lawn during morning hours. Emissions released in the morning hours contribute to the formation of smog.

Green Your Home

- **RECYCLE!** Recycle your cardboard, metal cans, plastics, and paper products. By recycling you help reduce the amount of waste going into the landfill.
- Change a light bulb! The Energy Independence and Security Act of 2007 established new lighting standards that require light bulbs to use 25% less energy by 2014. Three major types of bulbs meet these requirements and are available to consumers: halogen incandescent, compact fluorescent, and light emitting diode. Halogen incandescent bulbs meet the energy savings requirements by using one-fourth the energy. Compact fluorescent light, or CFL, bulbs use one-third the energy and last up to 10 times longer than incandescent bulbs. Light emitting diode, or LED, bulbs use one-fifth the energy and last up to 25 times longer than incandescent bulbs! So, replace the bulbs in the 5 most used light in your house with CFLs or LEDs and save money. Plus, the bulbs burn cooler so you will not have to overcome their heat in the summer. The payoff: With new EISA standards, U.S. households could save nearly \$6 billion dollars in 2015 alone.
- Buy energy-efficient appliances! Let's say your old fridge gives out. There is a bright side! Replace it with an Energy Star™ appliance and you'll use at least 15 percent less energy and water in your home. It might be a little pricier to buy up front, but you'll be saving money on your utility bills each month. And you'll be helping the environment. The payoff: If we all installed one Energy Star™ appliance, it would be like planting 1.7 million acres of new trees.
- Reduce litter! Instead of contributing to the countless single-use bags that become loose in the environment and
 pollute our waterways and our communities, grab a reusable bag when you go shopping and properly recycle any
 single-use bags. The payoff: You're reducing pollution and helping improve the aesthetics of our city.
- Cancel unsolicited mail! Many of us have a steady flow of unwanted and unsolicited junk mail, catalogs, and magazines. Call 888-5-OPTOUT to get off the list. Also, make sure to recycle what you do receive. The payoff:

 Less energy is spent on creating paper (which kills trees we need) and less trash is created when we can reuse products. The immediate return? Less clutter at home! Long term? A cleaner planet!

Green Your Lawn

- Compost! Green your garden with a compost pile. You'll save space in the landfill and in the process you'll create free, healthy fertilizer for your garden. A good compost pile consists of a balance of carbon and nitrogen materials. Carbon materials include leaves, shredded cardboard, shredded newspaper, straw, pine needles. Nitrogen materials include fresh grass clippings, kitchen scraps, manure (no cat or dog feces), coffee grounds and tea leaves. Check out www.mastercomposter.com for more compost ingredients and more. The payoff:
- Leave it there! Instead of bagging your lawn clippings leave them on the lawn. The clippings will naturally fertilize your yard.
- Go Native Texan! Use native plants for landscaping. They require less water and are more tolerant to our climate.
- Plant a tree! The shade it provides can lower your cooling bills if it shades your roof or walls. A single tree can absorb one ton (2,000 pounds) of carbon dioxide over its lifetime. One acre of tree cover can compensate for automobile fuel use equivalent to driving a car between 7,200 and 8,700 miles.
- Water wise! Only water your lawn when it needs it which is about 1 inch every 7 to 10 days. Watch for signs of stress between watering. Bermuda will turn a bluish color or leave imprints when you step on it. St. Augustine blades will begin to roll. Call 214-670-3155 or visit https://savedallaswater.com/rebates-and-incentives/irrigation-check-ups/ to schedule a free sprinkler system inspection and find out how some Dallas residents have already saved over 29,000 gallons of water a week!

Know Your Impact

- Find out your "carbon footprint" aka your environmental impact on the planet. We all contribute to climate change when we do things like heat and cool our homes, drive our cars, and fly on airplanes.
- Find out how to begin decreasing the energy you use each day, and offset the rest of your carbon-emitting energy use
 through this easy-to-use carbon calculator. Once you do, tell the planet (or at least a few friends).
- Calculate your carbon footprint: <u>EPA Personal Emissions Calculator</u>

Selected City Council Ordinances, Resolutions and Authorizations

Tree Resolution, 90-1496

Ozone Action Plan, Council Resolution 94-2201

Tree Preservation Ordinance, Council Resolution 94-1988, Ordinance 22053

Conservation Easement Ordinance, Ordinance 25155, 24843

Water Conservation Ordinance, Council Resolution 01-2840, Ordinance 24745

Green Building Program, Council Resolution 03-0367

Office of Environmental Quality Ordinance, Council Resolution 04-0810, Ordinance 25517

Environmentally-Preferred Procurement Green Purchasing, Council Resolution 04-1722

EMS Policy, Council Resolution 05-0362

Clean Fleet Vehicle Policy 01/25/06, Resolution 06-0323

"Too Good to Throw Away", 10/11/2006 Consent Agenda

TCEQ Sanitary Sewer Outreach Agreement, Council Resolution 07-0279

Integrated Stormwater Management, Council Resolution 08-0421

Green Building Ordinance, Phase I, Council Resolution 08-1070, Ordinance 27131

Green Building Ordinance, Phase II, Council Resolution 12-2428, Ordinance 28813

Great Trinity Forest Management Plan, Council Resolution 08-2779

Creation of Trinity Watershed Management, Council Resolution 09-2383, Ordinance 27697

Compressed Natural Gas Taxicab Ordinance, Council Resolution 10-0729, Ordinance 27831

Community Gardens Ordinance, Council Resolution 11-0434, Ordinance 28125

Green Cement Purchasing Policy, Council Resolution 11-0657

Idling Ordinance, Council Resolution 11-2976, Ordinance 28456

Neighborhood Farmers Markets, Council Resolution 10-2781, Ordinance 28046

Carryout Bag Ordinance, Council Resolution 14-0564, Ordinance 29307

City of Dallas Policies

AD 2-49, "Environmental Management Systems"

AD 3-73, "Environmental Management Program"

AD 6-2, "Fleet and Equipment Utilization"

Ozone Action Plan

AD 6-15, "Inspection of City Vehicles"

City Environmental Policy



Environmental Policy

The City of Dallas is committed to a clean, safe, and healthy environment. As such, we will exercise environmental stewardship in our dealings with employees, other governments, citizens, City contractors, business and others in the community for our world today as well as for future generations. Caring for the environment is one of our core values, and this is demonstrated by ensuring our activities are in harmony with the natural world around us.

This commitment is embodied by the following actions:

- Implementation of programs and procedures with an intent to meet or exceed all applicable environmental laws and regulations.
- Continual improvement of our environmental performance through proactive environmental management and self-assessments and/or third-party assessments.
- Prevention of pollution at its source through implementation of best management practices and resource conservation measures to reuse, reclaim, and recycle materials we generate.
- Utilization of Environmental Management Systems, as appropriate for our operations, to provide a framework for systematically reviewing and reducing our environmental footprint.
- Employees will abide by all environmental regulations and demonstrate environmental compliance in their daily work practices.
- Educate City employees on Dallas' environmental policies and motivate and encourage employees to practice environmental stewardship by raising awareness and sensitivity to environmental issues through City policies, regulations, training, and interactive dialogue.
- Outreach to the citizens and businesses of our community by communication of this Policy and education on the importance of environmental stewardship for clean air and water and sustainable development for the City of Dallas.

Approved by Dallas City Council January 26, 2005.

Signed

May K. Suhn City Manager