Sustainability

Shaping the now; preserving the future.

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Why Sustainability?

• In short, sustainability planning takes into account economic, environmental, and equity issues into each decision that is made to ensure none suffer for the benefit of one.

  – Promote economic prosperity, healthy communities and environmental improvements
  – Addresses vulnerabilities – drought, heat, aging infrastructure
  – Builds community pride – eyes on the block
  – Empowers citizens – acknowledges contributions, obtains input
  – Provides essential services – meets needs, anticipates changes
Sustainable Dallas

- Energy
- Air Quality
- City Fleet
- Green Building
- Water Conservation and Reuse
- Community Gardens
- Recycling
- Waste To Energy
- Trinity River Corridor Project
- Social Equity
Energy

• 50% of the City’s power comes from renewable energy
  – Renewable energy comes primarily from wind power
  – Projected reductions: 270,000 tons CO2e per year

• Consistently meeting energy efficiency goals primarily through performance contracting

• Lighting retrofits in City facilities

• Waste-to-energy and solar at City facilities

• On-site production increases independence

• What else?
Air Quality

- Greenhouse Gas (GHG) emissions inventory
- Ozone and carbon reduction strategies
- Emissions reduction target: 39% over 1990 levels by 2017

- Leading cause: transportation impacts

- Why? What’s next?
- What happens if we don’t address air quality?
City Fleet

• 38% of the City’s fleet is now alternative-fueled or hybrid
• Early user of Texas Low Emission Diesel (TxLED) and biodiesel
• Developed and currently operates two public access compressed natural gas (CNG) vehicle fueling facilities
• Electric vehicle charging stations at City Hall and other City facilities
• Hybrids purchased for Sanitation Fleet

• Does this help?
Green Building

• As of February 2014, 29 City facilities are LEED certified and 20 other projects are registered.
• City Manager authorized to reconvene Green Building Task Force in 2015.

• Why build green? What is the benefit?
  – Platinum 14
  – Gold 55
  – Silver 125
  – Certified 345
  – Registered 273
  (as of November 2014)

_DPD South Central Police Station
Built to LEED Gold Standards_
Water Conservation and Reuse

- Billions of gallons saved since 2001 through public education, audits/inspections, retrofits and replacements, and water restrictions
  - Toilet rebate program “New Throne for your Home”
  - 5 year gallons per capita day average: 199
    - FY12-13 gpcd: 187
    - FY13-14 gpcd: 182
- Beneficial reuse
  - Cedar Crest, Stevens Park golf course
  - FY10-11: 84.7M gal
  - FY11-12: 60.2M gal
  - FY12-13: 55.6M gal
  - FY13-14: 36.2M gal

- When will it rain?
Community Gardens

- Provide food independence
- Beneficial repurposing of the land
- Overcome food desert pressures
- Restore community cohesion
- Reduce crime rates through increased visibility

- Sustainable Food Systems planning

- How far away is your food?
Recycling

• Residential recycling at 75.1% participation
• Tons recycled
  – 45,152 tons in FY09-10
  – 48,983 tons in FY10-11
  – 51,300 tons in FY11-12
  – 53,280 tons in FY12-13
  – 53,638 tons in FY13-14
• Beneficial reuse of asphalt, concrete, glass, and sawdust at McCommas Bluff Landfill
  – 20,563 tons in FY11-12
  – 34,944 tons in FY12-13
  – 61,686 tons in FY13-14 (no sawdust)
• What more can we do?
Waste to Energy

- Enhanced Leachate Recirculation at McCommas Bluff
  - Projected to:
    - Extend life of landfill by increasing breakdown of organic matter
    - Release methane for recapture to power and heat homes

- Cogeneration Facility at Southside Waste Water Treatment Plant
  - Projected to:
    - Reduce carbon dioxide more than 71%
    - Eliminate mercury emissions
    - Reduce grid burden by 30,000,000 kWh per year
    - Save $900,000 per year
    - Generate 30,000 RECs
    - Reduce DWU electric bill by 7%, COD by 4%
Trinity River Corridor Project

• A flood protection solution with opportunities for community revitalization, economic development and creation of a world-class greenway

• 10,000 acre project
  – New York City’s Central Park has 843 acres of which only 136 are wooded acres

• LEED Platinum Trinity River Audubon Center is the flagship Center for Audubon’s education and conservation initiatives in Texas
Social Equity

• Preserve cultural identity
• Increase opportunity naturally
• Provide better access
• Promote equitable development
• Strengthens entire city
• Empowers all
What Can We Do?

- Live today to have enough tomorrow
- Civic engagement
- Contact lawmakers
- Volunteer
- Evaluate decisions
- Balance