City of Indianapolis
Office of Sustainability

Kären Haley, Director
September 14, 2010
Office of Sustainability

- Driver behind “SustainIndy” initiative
- Created in October 2008
- 7 FTEs
- Works across City departments
- Create public-private partnerships
- www.sustainindy.org
"We are committed to making Indianapolis one of the most sustainable cities in the Midwest," said Mayor Greg Ballard.

“It is my sincere belief that environmental sustainability is a key strategy to make sure that Indianapolis continues to be competitive in a changing world,” said Mayor Ballard. “And; that our community remains vibrant and healthy for our children and grandchildren.”

“While we are headed in the right direction, my vision is for the City to work in close partnership with the community to move forward more aggressively with strategic, sustained action to make Indianapolis one of the most sustainable cities in the midwest,” said Mayor Ballard.

-All press release quotes from the Office of the Mayor
Office of Sustainability - Priorities

- Green Infrastructure
- Energy Efficiency
- Green Building
- Bike Lanes
- Expand Recycling Options
- Urban Gardens
- Public – Private Partnerships
Carbon Inventory – Methodology Used

Local Government Operations Protocol (LGOP)
May 2010, Version 1.1

- Developed in partnership and adopted by:
  California Air Resources Board
  California Climate Action Registry
  ICLEI - Local Governments for Sustainability
  The Climate Registry
City of Indianapolis Carbon Inventory

• Started in spring 2010
• Initial inventory completed in Dec. 2010
• Focusing on City owned buildings and operations
City of Indianapolis – Carbon Inventory

Covers City Departments and Vehicle Fleet

• Public Works
• Public Safety
• Parks and Recreation
• Administration
• Metropolitan Development
City of Indianapolis – Carbon Inventory

Includes:

- Years 2008 and 2009
- CO$_2$ Emissions from all electricity and natural gas usage (buildings, streetlights, signals, etc.)
- Fuel usage from vehicle fleet
- Refrigerant (vehicle and building) and fire suppression usage
Carbon Inventory Challenges

• Building the inventory for over 300 monthly electric and natural gas accounts
• No centralized source of information
• No structure for repeat reporting
• Numerous street lights and signals to inventory
• Future information management
• Refrigerant and fire suppression usage tracking for all city assets
Priority: Green Infrastructure

Goal

Increase the use of green stormwater infrastructure

Added Benefit

Cost savings, decrease emissions, increase green space and native plantings, decrease flooding, improve water quality
Green Infrastructure

- City Projects
- Long Term Control Plan for Combined Sewer Overflows
- Many types of green infrastructure
Fall Creek/College Avenue Green Infrastructure Pilot Project
Fall Creek Pilot

Diagram elements:
- street
- curb
- storm pipe
- stone filter
- distribution pipe
- monitoring structure
- porous stone
- monitoring structure
- perforated drain pipe
- outlet pipe
- Fall Creek
- native plants & trees
- existing forest filter
- ponding
- berm
DPW Lift Station 507 Green Roof
Priority: Energy Efficiency

Goal
Increase energy efficiency in city operations and buildings

Added Benefit
Cost savings, improve air quality and emissions, decrease environmental impact
Priority: Energy Efficiency

Recent Accomplishments
• Guaranteed Energy Savings Contract for 71 City buildings
• $10M Dept of Energy Retrofit Ramp-up Grant

Current Actions
– Energy Efficiency and Conservation Block Grant
– LED Traffic Signals
– Greening of City Fleet vehicles
City Energy Use - 2005

- Buildings: 29%
- CO2 Removal: 19%
- Vehicle Fleet: 5%
- Employee Commute: 5%
- AWTs: 23%
- Incineration: 13%
- Other: 6%

Source: sustainindy
Energy Efficient Buildings

- City buildings are 1/3 of emissions from operations

- Retrofitting 71 city owned buildings for energy efficiency upgrades

- Financed through Guaranteed Energy Savings Contract (GESC)

- 25 fire stations currently in progress

- Reduce energy use by 40%
Energy Efficient Fleet Vehicles

City Fleet
• ~3100 vehicles
• Anti-idling policy
• Dept of Energy – Clean Cities Grant

Diversify Fleet Fuel Sources
• Hybrid vehicles
• Propane conversion
• Flex-fuel
EECBG - $8,032,300

• **Bike Lanes**-funding of future segments of the SustainIndy BikeWays Plan

• **Building Retrofits**-energy retrofits of city-owned and operated facilities, including the City County Building

• **Renewable Energy Generation**- potential projects include installation of solar and wind powered street lights, wind turbines and solar panels at city facilities

• **Green Building Fund**-establishment of grant program for qualified green projects in the private sector, including non-profits.

• **Green Roofs**-installation of green roofs at City facilities

• **LED Traffic Signals**-conversion of the City's remaining conventional traffic signals to energy efficient LED technology.
Energy Efficiency - LEDs

- By end of 2010 all city maintained intersections will be LEDs
- Expect 60% decrease in energy consumption
- Of first 5,000 lights changed: 313,012 tons CO₂ (2.5 lbs CO₂ per kWh) = 26 cars off road
Neighborhood Energy Efficiency

• **1 of 25 Cities** selected for competitive Energy Efficient and Conservation Block

• **$10M grant** for neighborhood scale energy efficiency projects

• **Project Components:**
  • Near Eastside Direct Grant Program for residential, commercial and not-for-profit facilities
  
  • Residential loan program available to Marion County residents; target population is low to moderate income residents
  
  • Sub-grant to City of Lafayette

• Program to begin first quarter of 2011
Priority: Green/LEED Buildings

Goal
Increase Number of LEED and Green buildings in Indianapolis; create an environment that encourages green building techniques

Added Benefit
Improved water quality, improved air quality, lower utility bills for owner/occupants, increased employee productivity, decreased carbon emissions from buildings
Priority: Green Building

Recent Accomplishments
• Sustainable Infrastructure Initiative – Green Supplemental Document
• Reduced Permit Fees for Green Buildings

Current Actions:
• Greening of the City County Building
• The Nature Conservancy – LEED Platinum
• 12 LEED certified, 24 Energy Star Buildings
Priority: Green Building

Greening of the City County Building
• Reduce energy use by 40%
• Upgrade water fixtures
• Employee survey and education
• Renewable energy application
  – Solar powered hot water heater
  – Solar panels
  – Wind and solar powered public lighting
  – Geothermal heat recovery system
Priority: Bike Lanes

Goal

Significantly increase the number of bike lanes on City streets

Added Benefit

Improved public health, improved air quality, alternative transportation option, less traffic congestion
Priority: Bike Lanes

Recent Accomplishments
• Bicycle Friendly City Designation – League of American Bicyclists
• Named top 50 Bicycle Friendly City’s by Bicycle Magazine
• 24 miles of bike lanes on City streets by end of 2009 (over 10% of 200 mile goal in first year)
• 54 Bike Racks installed in downtown mile square
• Bike To Work Day
• Mayor’s Bike Ride
• Biketown USA

Current Actions:
• Bike Lanes currently in design – Illinois/Capitol, Shelby St. to County Line Road, Lafayette Road
• By end of 2012, over 60 miles of on-street bike lanes
• Bike safety and enforcement campaign
Priority: Bike Lanes

Bike to Work Day 2010
Priority: Bike Lanes

Mayor’s Bike Ride 2010
Priority: Bike Lanes

Indianapolis Cultural Trail

• 8 mile bicycle and pedestrian trail connecting 5 downtown cultural districts
• Connects to Monon Trail, White River Greenway & bike lanes
• Received $20.5 Million in federal funding – TIGER Grant

Greenways

• Over 40 miles of greenway trails
• Connecting on-street bike lanes and Indy Parks
Priority: Recycling

Goal
Enhance and expand recycling options

Added Benefit
Increase in the amount of recyclable material collected, less waste generated, public good
Priority: Recycling

Recent Accomplishments

• Pedestrian Recycling Bins – Mass Ave and Broad Ripple

• Post Holiday Recycling Event 2010– 15,000 trees, 194,000 tons of electronics, 5 tons of cardboard, also collected Styrofoam for first time

Current Actions:

• Negotiations for countywide curbside

• Implementing recycling at all city-county facilities
Urban Gardens

Purpose
• Turn abandoned property into positive use areas that benefit the community
• Job training, inter-generational dialogue
• Provide healthy, locally grown food

Current Actions:
• Indy Urban Farming Forum
• Indy Urban Garden Program
Priority: Partnerships

Goal

Establish partnerships to assist in funding for and creation of sustainable projects

Current Actions

• SustainIndy Fund in CICF
• Indianapolis Chamber of Commerce – Green Business Program
• AIA SDAT Award for Smart Growth
• EPA Designated Sustainable Community
• McKinney Family Foundation Green Initiative Fund
• IndyConnect
Year 1 Highlights

• City’s First Sustainability Report

• Indianapolis Sustainability Awards

• www.sustainindy.org
Thank You!

www.SustainIndy.org