Baltimore Commission on Sustainability
April 23, 2013 Meeting Report

Date: Tuesday, April 23, 2013 from 4-6 pm
Location: Department of Planning Boardroom, 417 E. Fayette St. 8th Floor

Subject: Commission on Sustainability April 2013 General Meeting

In Attendance: (*Commissioners*) – Ted Atwood, Miriam Avins, Davis Bookhart, Cheryl Casciani, John Ciekot, Peter Doo, Fran Flanigan, Lynn Heller, Earl Johnson, Ruth Ann Norton, Gerie Okwesa, Cindy Parker, John Quinn, Scot Spencer, Tom Stosur,

(*Staff*) - Alice Kennedy, Abby Cocke, Kristin Baja, Amy Gilder-Busatti, Mark Cameron

Meeting called to order: 6:00 pm

Topics addressed:

- Chair Report
  - Welcome
  - Thank everyone for coming
  - May – Green schools – meeting at 4:00 offsite and then the youth led Greenscape event

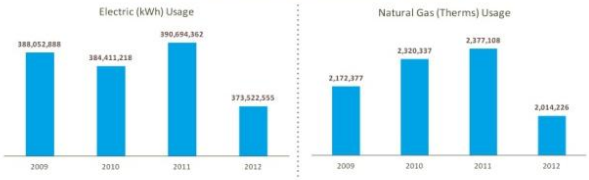
- Staff Report
  - None

- Agenda
  - NETWORKING
  - 6:30 – MEETING CALLED TO ORDER
  - Chair Report
  - 2012 Annual Report
    - Alice Introduction
    - Earl – Gather Baltimore
    - Miriam – Power In Dirt
    - Fran – 901 Arts
    - Cheryl – Customer Investment Fund
    - Lynn – Climate Action Plan
  - Climate and our City
    - Cindy L. Parker MD, MPH
      Assistant Professor, Environmental Health Sciences, Bloomberg
      Director, Global Environmental Change and Sustainability Major
      Associate Director, Johns Hopkins Environment, Energy, Sustainability, and Health Institute
      Co-Director, Program on Global Sustainability and Health
    - Kristin Baja
      Hazard Mitigation Planner, Office of Sustainability
    - Cindy L. Parker MD, MPH
  - Next Steps & Follow-Up

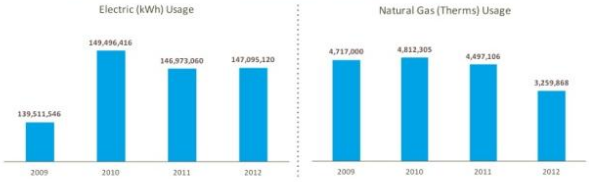
- 2012 Annual Report
  - Table of Contents
    - Executive Summary
    - Stories & Highlights
    - Data
    - Baltimore Neighborhood Indicator Alliance Vital Signs
    - Steps You Can Take
    - Partners
  - Success Stories
    - Hampden – Community Spotlight
    - Parks & People – Partner Spotlight
    - 901 Arts
    - Baltimore City Energy Office – Back River Solar
    - Baltimore Bike Party
    - Baltimore Farm Alliance
    - Baltimore Tool Bank
    - Chesapeake Compost
    - Customer Investment Fund
    - Climate Action Plan
    - Gather Baltimore
    - Housing Authority Baltimore City
    - Maryland Green Registry
    - Power In Dirt
  - Data

BALTIMORE CITY ENERGY USAGE

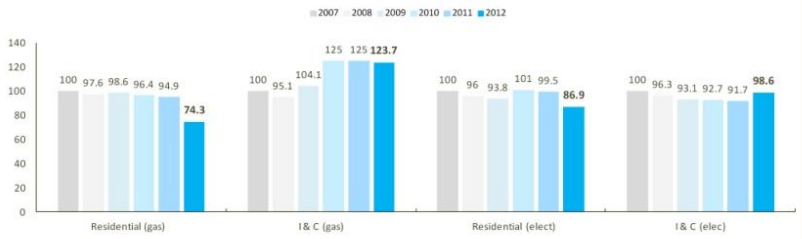
CITY GOVERNMENT ENERGY USAGE



BALTIMORE CITY PUBLIC SCHOOLS ENERGY USAGE



ENERGY USE RELATIVE TO 2007 BASELINE

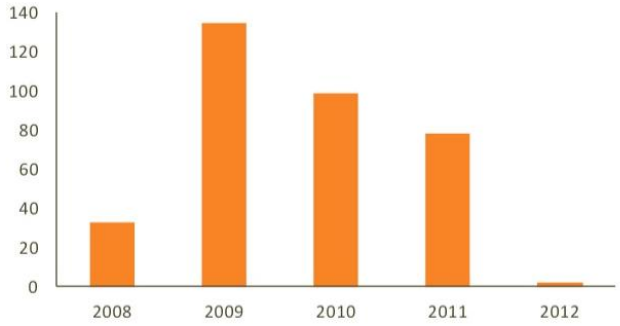


TREE CANOPY: NET GAINS AND LOSSES

	Number of Trees			
	2009	2010	2011	2012
Residential Plantings (1)	3,391	2,780	2,575	2,950
School, Park & Community Plantings (2) (3)	852	2225	2,864	3,386
City Street Tree Plantings (4)	1,800	900	485	1,285
Road Reconstruction Plantings (5)	500	500	500	500
Trees Lost to Storms & Poor Health (6)	-2,750	-3,094	-4,259	-3,195
Net Increase or Decrease (7)	3,793	3,311	2,165	4,926
Running Total (8)	128,793	132,104	134,269	139,195
Canopy Coverage (9)	27%	--	--	--

BICYCLING IN BALTIMORE

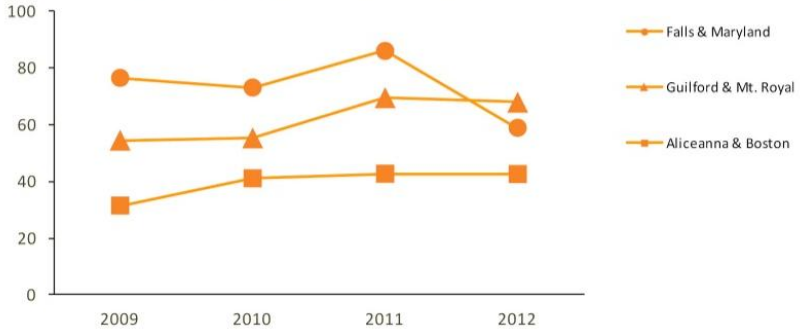
NUMBER OF BIKE RACKS INSTALLED



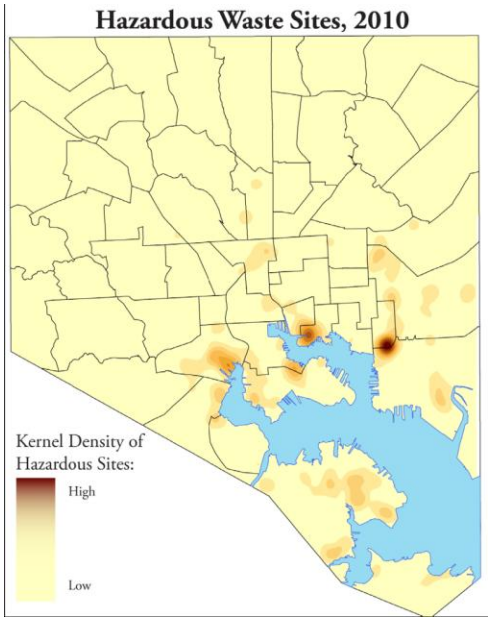
LANE MILES OF NEW ON-STREET BIKE FACILITIES

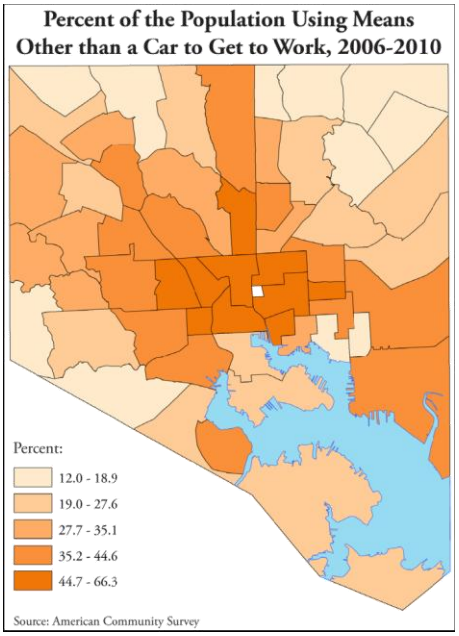
Year	> 2006	2006	2007	2008	2009	2010	2011	2012	TOTAL
Bike Lane	1.7	0.6	8.4	4.5	6.1	16.9	3.2	7.1	**41.2**
Contraflow	-	-	-	-	-	0.5	-	-	**0.5**
Shared Bike/ Bus Lane	-	-	-	-	1.5	0.5	-	-	**2**
Sharrow	0.6	-	7.1	13.4	0.9	21.2	-	2.7	**45.9**
Sidepath	-	-	-	0.3	-	0.1	-	-	**0.4**
Signed Route	2.7	-	14.2	-	-	6	1.6	-	**24.5**
Bike Boulevard	-	-	-	-	-	-	-	3.4	**3.4**
TOTAL	**5**	**0.6**	**29.7**	**18.2**	**8.5**	**45**	**4.8**	**13.2**	**125**

PERCENT CHANGE IN BIKE RIDERSHIP

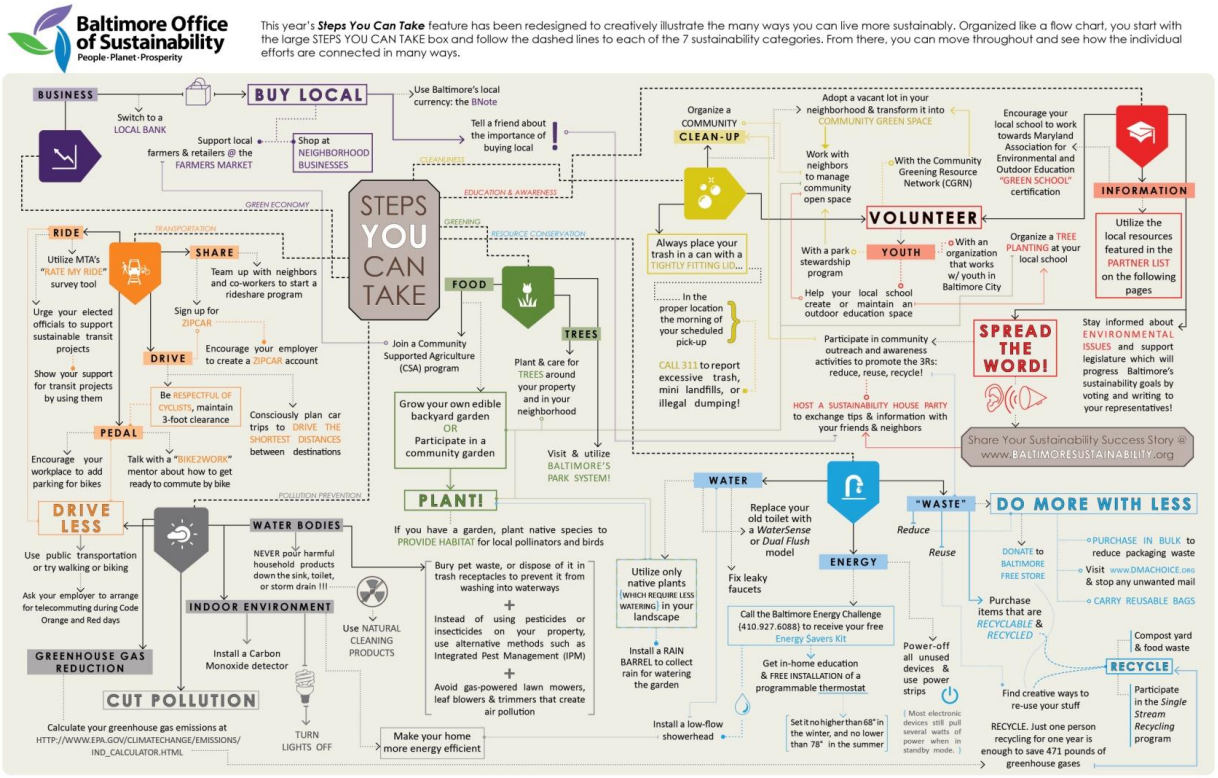


- Baltimore Neighborhood Indicator Alliance





- Steps You Can Take



- Climate and our City – Cindy Parker
    - The Greenhouse Effect
        - Atmospheric greenhouse gases from natural sources and human activity
        - Greenhouse gases trap heat
        - Earth radiates heat back into space
        - Burning of fossil fuels releases carbon dioxide
        - Earth absorbs solar radiation
        - Deforestation reduces absorption of carbon dioxide
        - Vehicles emit carbon dioxide and nitrogen oxide
        - Agriculture produces methane and nitrogen oxide emissions
    - Latest Projections for what we can expect if we do not drastically reduce greenhouse gas emissions.
        - Higher temperatures: 4°F to 11.5°F rise in
        - global *average* surface temperature by 2100
        - Increase in weather extremes
        - Rising sea-levels: 3 to 6 feet higher by 2100
    - Small Increases in Average Global Temperature Can Make a Big Impact:
        - Only 9°F difference since last ice age
    - 2012: Hottest Year on Record for U.S
    - Heat Stress: Some Populations Are Particularly Vulnerable
        - Babies and children
        - Seniors
        - Anyone with a pre-existing medical condition
        - Urban populations
        - Poor people
        - Biggest risk factor for dying in a heat wave: Anyone who is socially isolated
    - Infectious Disease
        - Diseases carried by insects are most worrisome
        - Insects are sensitive to their surroundings
        - Warmer temperatures cause insects to mature faster, bite more, and lay more eggs
        - More rain, especially heavy rains, leave more standing water breeding sites
        - Warmer temperatures allow tropical diseases to move north
    - Health Effects of Ground-level Ozone
        - Increased risk of hospital admissions and ER visits for people with asthma
        - 3X greater risk of DEVELOPING asthma
    - At Least 3 Feet (1 meter) of Sea Level Rise Expected by 2100
    - Health Effects of Sea-Level Rise
        - Inundation of living areas; expansion of flood plains, inability to get insurance
        - Erosion and loss of coastal land
        - Worsening protection against future storm surge
        - Contamination of fresh water
        - Coastal wells tend to be shallow
        - Population displacement
        - Mental health effects
        - Loss of critical infrastructure
    - Indirect Health Effects of a Big Storm for Baltimore Residents
        - Flooding and damage → businesses close
        - Loss of jobs → loss of insurance → no more care for chronic medical problems
        - Loss or damage of housing, possessions

        - Much more stress, depression, anxiety
        - Fire and police are busy, overwhelmed
        - Hospitals, healthcare facilities damaged, closed
        - Schools damaged, closed
    - How Does Climate Change Affect Water and Food Supplies?
        - More precipitation expected to fall as rain instead of snow
        - More heavy rainfall events; longer droughts in between
        - Droughts in Midwest and California affect food prices and food availability all over the country
        - Transportation routes disrupted
    - What Can YOU Do?
        - Trees: plant them and <u>care for them</u>
        - Reduce urban heat island effect
        - Shade homes in summer, let in light/heat in winter
        - Absorb CO_2 and some other air pollutants
        - Neighborhood energy challenge
        - Community involvement in preparation before a big weather event, and response during an event
        - Organize!
        - Get to know your neighbors
        - Share resources

- Climate and our City – Kristin Baja
    - Disaster Preparedness and Planning Project
        - Preparedness + Planning = Resilience
        - Process
            - Impacts Assessment
            - Vulnerability Assessment
            - Risk Assessment
            - Plan Development
        - Advisory Committee
            - Key stakeholders
            - 11 City Agencies, 11 community representatives, 4 State Agencies, NGO's, Private sector, and Federal government.
            - Meet five times as a full committee and six times in subcommittees
        - Subcommittees
            - Infrastructure
            - Buildings
            - Natural Systems
            - Public Health and Human Services
        - Infrastructure
            - Energy Systems
            - Transportation Systems
            - Communication Systems
            - Water and Wastewater Systems
            - Stormwater Systems
            - Solid Waste System
        - Buildings
            - City Codes
            - Non-Structural

        - Structural
        - Design
    - Natural Systems
        - Land Use
        - Greening
        - Maintenance and Operations
        - Water Supply
        - Stormwater Management
    - Public Health and Human Services
        - Organized by Hazard instead of Category
            - All Hazards, Heat, Flooding, Extreme Storms, Sea Level, Air Quality
        - Identified whether actions were Mitigation Measures, Preparedness, Response, Recovery and/or Policy
        - Began process of identifying Education/Outreach Measures and Communication Measures associated with each action/recommendation.
    - List of Recommendations
        - Extensive list of recommendations generated by the subcommittees
        - Currently working to place all recommendations into the goals and strategies identified
        - Final list in a couple weeks
    - Next Steps
        - Finalize goals, strategies and recommendations
        - Complete vulnerability and risk assessments
        - Identify overlap with other plans and opportunities for integration
        - Draft by June 20, 2013

- Showing of Climate Action Plan Video
    - https://vimeo.com/54541735

- Meeting adjourned: 8:07 pm

Upcoming Events:

- Next Commission on Sustainability Meeting: Tuesday, May 28, 2013, 4 PM at Baltimore Polytechnic High School,