

City of Alexandria, Virginia

# Progress Report on Eco-City and Environmental Action Plan 2030

City Council Legislative Session  
April 14, 2015



**Eco-CITY**  **ALEXANDRIA**

# Eco-City Alexandria – Partnership Between the City, Alexandria Environmental Policy Commission, Virginia Tech and the Community



2007: Eco-City project started  
2008: Eco-City Charter  
2009: Environmental Action Plan 2030



# Environmental Indicators

ENVIRONMENTAL INDICATOR (EI)	CURRENT PERIOD		LAST YEAR FY2012 or CY2012	% CHANGE Latest vs. Last Year
	2014	2013		
Air Quality Days - number of days with code red/ orange	4	4	7	-42.9
Per capita energy use, MWh per person per year	NA	20.31	20.31	0
City government operations energy use, MWh per year	NA	120,697	116,608	+3.5
Per capita greenhouse gas emissions, metric tons of CO <sub>2</sub> per year	NA	11.4	12.3	-7.3
Percent of new developments committing to green building standard	99.9%	TBU	84%	+18.9
Percent tree canopy	34%	33%	33%	+3.0
Number of acres protected since approval of Open Space Master Plan in 2003	103	TBU	100.5	+2.5

# Environmental Indicators

ENVIRONMENTAL INDICATOR (EI)	CURRENT PERIOD		LAST YEAR FY2012 or CY2012	% CHANGE  Latest vs. Last Year
	2014	2013		
Percent solid waste recycling rate	NA	48.8%	48.7%	0
DASH Public transit ridership - number of mass transit commuters per year	4,238,784	TBU	3,882,022	+9.2
DASH Total passengers per mile / Total passenger per hour of service	2.77 / 22.0	TBU	2.6 / 24.6	+6.5 / -10.6
Per capita water use, gallons per person per year	37,900	TBU	36,718	+3.2
Per capita waste water treated, gallons per person per year	42,762	39,974	37,723	+13.4
Number of stormwater Best Management Practices (BMPs) in the City	449	TBU	376	+19.4
Number of respiratory health complaints received by the Alexandria Health Department	33	TBU	76	-56.6

# New Metroway Bus Service on Crystal City - Potomac Yard Transitway

- Opened in August, 2014
- Washington metropolitan area's first right-of-way dedicated to premium bus operations, designed to encourage transit use
- Already surpassed pre-launch projections, resulting in a 23% increase in ridership as compared to the previous bus route 9S, according to WMATA





# DASH & CAPITAL BIKESHARE

- In July, ATC started the new AT9 crosstown route using hybrid-electric buses
- In 2015, ATC will be taking delivery of 14 additional hybrid-electric buses which will bring its fleet of hybrid-electric buses to over 50% of total bus fleet.



- In August, the Capital Bikeshare system in Alexandria doubled in size with the addition of eight new stations in Carlyle and Del Ray areas

# City's Green Building and Energy Management Initiatives

- More than 19% of the City government's electricity use was offset or generated by renewable energy in 2014
- City completed LED lighting retrofits at the Beatley, Duncan and Burke Libraries, Chinquapin Recreation Center, Ramsay House, Black History Museum, and the Lyceum
- City substantially completed construction of the Eisenhower Fire Station 210 which is expected to be certified for LEED Gold in 2015
- 99.9% of square footage for new developments committed to green building standards



# Alexandria Participated in DOE Weatherization Innovation Pilot Program

- Brent Place Apartments, a 207-unit building, participates in DOE Weatherization Innovation Pilot Program
- An energy service company performs an investment grade audit to identify energy savings opportunities and recommends energy efficiency improvements
- City supported Brent Place's participation in this program by agreeing to subordinate payment on an existing City loan for 10 years
- The energy efficiency measures to be undertaken will result in 10-year savings of \$226,060.





# Solid Waste Management

- Solid waste recycling rate for 2013 increased fractionally to 48.8 %, a new record level
- City is aiming for 65% recycling rate by 2020



- Yard waste is now collected separately and composted at a regional facility
- Food waste recovery stations at four City Farmers' Markets collected a total of 35 tons of food waste to be composted

# City's Initiative on Removing Invasive Plants

- City reclaimed and restored 40 acres of City natural areas and parkland through removal of decades-old, pervasive non-native invasive plants
- Standout sites include the 3.5 acres of managed native meadow at the Telegraph Road and Duke Street interchange, INOVA Alexandria Hospital Scenic Easement, Rynex Natural Area, Fort Williams Park
- Several hundreds of volunteers participated in this effort



# Stormwater Retrofit

- City received \$1.75 million financial assistance from the VDEQ through the Stormwater Local Assistance Fund Grant
- This grant helps fund the \$3.5 million stormwater retrofit project to enhance the treatment efficiency of stormwater and improve aquatic habitat of the Ben Brenman Pond



# Updating the EAP and Green Building Policy

Staff plans to work with the Environmental Policy Commission to update the following policy documents aimed at furthering goals of the Eco-City Alexandria

- Environmental Action Plan 2030
- Green Building Policy



# Emerging Issues & Challenges

- Short and long term issues related to impacts of TMDLs (Total Maximum Daily Loads) and City's new stormwater and combined sewer permits
- Hunting Creek bacteria TMDL requires updating the City's Long Term Control Plan for the combined sewer system



- City's strategy to meet 5% reduction in TMLDs by 2018 required by stormwater permit includes installation of pond 19 and retrofit of Lake Cook using a \$1.2 million grant



# Emerging Issues & Challenges

- Implementation of the Energy and Climate Change Action Plan
  - Continue to reduce the City's and community's energy use
  - Monitor scientific information on sea level rise and adaptation strategies



**City of Alexandria**  
**Energy and Climate Change Action Plan**  
Local Actions to Save Energy,  
Reduce Greenhouse Gas Emissions, and  
Prepare for the Impacts of Climate Change  
2012 – 2020



June 2011



Office of Environmental Quality  
Department of Transportation and Environmental Services