City Operations Sustainability Plan

October 28, 2015

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Executive Summary

Pursuant to Council direction in May 2014, the City staff formed a City Operations Task Force to draft this framework for a City Operations Sustainability Plan. The purpose of the plan is to reduce the environmental impact of City operations, create a healthier work environment and improve the quality of life in the community, and position College Park as an innovative regional leader in sustainability. This plan will help coordinate sustainable practices across all City operations, conserve resources over the long-term, and reduce the carbon footprint and other negative impacts on the environment by City operations.

Representatives from each City department participated in the Task Force. The members created four committees focusing on Solid Waste and Recycling; Buildings and Public Areas; Citywide Policies and Events; and Fleet and Transportation. The committees' charge was to identify current practices, develop goals, and recommend strategies that would reduce the impact on the environment caused by municipal operations. The summary below highlights some of the goals and recommendations in the report.

1. Solid Waste and Recycling Highlights

Goal: Reduce solid waste per household by 25 percent and increase the recycling rate to 60 percent (approximately double the current rate) by July 1, 2018 (2015 baseline).
Recommended Strategies:

- Examine changes to the City Code which might provide the best impact on reducing tonnage and increasing recycling, such as prohibiting recyclable material in waste carts; providing larger or additional recycling carts; examining the fee for trash collection at rental properties; and charging for bulk collection after a certain number of pick-ups per year.
- Develop a marketing/educational campaign that provides information to residents on the environmental and financial savings of reducing solid waste.
- Reduce or remove food waste from the solid waste stream by promoting home food composting and explore the possibility of a pilot food waste collection program.

2. Buildings and Public Areas Highlights

Goal: Reduce electricity and natural gas use in City facilities by 15 percent per square foot by 2018 and by 25 percent by 2022 (2014 baseline year).
Recommended Strategies:

- Examine cost-benefit of efficiency improvement recommendations and prioritize highest energy savings with best payback.
- Develop a building operations and maintenance plan; emphasize low cost and no cost measures such as those recommendations in the Pepco Commercial & Industrial Energy Savings Program
- Prominently post monthly energy usage at each City facility, and hold competition for greatest reduction in usage and reward employees for savings.
- Create Green Office standard that includes practices regarding lighting and computer shut-down after working hours.

Goal: Generate 20 percent of electricity for City facilities using renewable sources by 2018 per Council Resolution13-R-27 (See Appendix 3).
Recommended Strategy:

- Evaluate DPW buildings, YFS building, and Parking Garage for best locations to install solar power and explore funding via a Maryland Energy Administration (MEA) grant or long-term lease arrangement.

3. Citywide Policies and Events Highlights

Goal: The FY17 budget will include funding for a consultant to lead the City's process to update or acquire software that improves workflow and works across relevant departments.
Recommended Strategy:

- Create a Workflow Task Force (an inter-departmental group) to conduct a needs assessment for workflow improvements. Based on the results, develop an RFP for a consultant who will develop strategies to improve and integrate workflow. This strategy is also included in the proposed 2015–2020 Strategic Plan.

Goal: Track all sustainability goals and outcomes on an annual basis, and track City operations greenhouse gas emissions on a triennial basis.
Recommended Strategies:

- Establish a Sustainability Committee that will provide an annual report on all sustainability metrics and a triennial report on greenhouse gas emissions to Council. These reports should also be posted on the City's website.
- Provide all employees the status of sustainability-related goals on a regular basis.
- Work with the University of Maryland to complete the greenhouse gas inventory using ICLEI (Local Governments for Sustainability) software.

4. Fleet and Transportation Highlights

Goal: By FY17 the City will achieve a 10 percent increase in the average vehicle miles per gallon for all on-road vehicles in the City's fleet (FY15 baseline).
Recommended Strategies:

- Develop and adopt policies and practices regarding efficient vehicle operations (idling, route optimization, using the correct vehicle for the task, etc.).
- Ensure all vehicles receive regular maintenance and fuel MPG is monitored.
- Develop a green fleet purchasing policy that considers efficiency and lifetime vehicle costs.

This report includes an Implementation Plan that identifies the responsible departments, timeline, and resources required to implement the actions. Members of the City Task Force believe that the success of the plan will require continued leadership and full commitment from Council and staff. Additional resources or the re-allocation of resources will be required to carry out many of the Recommended Strategies, and it will be critical to communicate the reasons for proposed changes to residents, Council, and staff. Some staff will require additional training in order to implement or monitor the strategies, and all staff must support the goals and practices recommended in the plan. The City Operations Sustainability Task Force (or a similar committee with membership from each department) should continue, but serve a monitoring and data collection function.

Reducing the impact of City operations on the environment will be challenging and require changes in how the City carries out many of its functions and services. With support from Council, commitment by staff, and excellent communications with residents, College Park will become a regional leader in sustainability.

I. Introduction

In late May 2014 the City Council authorized an inter-departmental task force to draft the framework for a City sustainability plan and to identify resources to assist the City in this effort, such as the University of Maryland's Partnership for Action Learning in Sustainability program (PALS). This authorization by Council builds upon the City's 2010-2015 Strategic Plan goal to "Lead the community in environmental conservation, protection, restoration, and energy efficiency," as well as the City's designation as a Sustainable Maryland Certified Community and a Maryland Smart Energy Community.

A City Operations Sustainability Task Force was created with representation from each City department. Task force members are: Bill Gardiner and Janeen Miller, Administration; Steve Groh, Finance; Teresa Way-Pezzuti, Human Resources; Steve Beavers and Angie Martinez, Planning, Community, and Economic Development; Sharon Fletcher, Public Services; Brenda Alexander and Bob Stumpff, Public Works; and Pat Henderson, Youth and Family Services. The task force limited its scope of work to City operations that impact the environment. The group researched and discussed best sustainability practices for municipal functions in all areas of City operations. It then developed goals and strategies the City can adopt to reduce the emissions and impact on the environment by City operations.

The following committees and focus areas were created:

a. Solid Waste and Recycling
This group focused on reducing the amount of material sent into the solid waste stream by increasing recycling and waste disposal options (such as increasing the visibility of re-use and compost options) by residents.
Members: Teresa Way-Pezzuti, Angie Martinez, Bob Stumpff, Bill Gardiner

b. Buildings and Public Areas (parks, streetscapes, parking lots, stormwater infrastructure, streetlights, and more)
This group focused on building efficiency standards, energy conservation, storm water infrastructure and the tree canopy.
Members: Brenda Alexander, Steve Beavers, Sharon Fletcher, Pat Henderson, and Steve Groh

c. Citywide Policies and Events
This group focused on activities that impact multiple departments and many employees. It includes policies on work flow, energy use and purchasing, procurement, employee incentives and practices, use of facilities, and monitoring/measuring plan results.
Members: All

d. Fleet and Transportation
This group focused on City-owned fleet procurement, use, and maintenance, including types of fuel for different categories of vehicles.
Members: Steve Beavers, Steve Groh, Sharon Fletcher, and Bob Stumpff

Section II of this report contains the Task Force's review of current City practices, proposed goals, and recommended strategies for each of the four focus areas. Commentary on the implementation,

timing, costs, and/or priority of the strategies is provided in *italic* font following the recommended strategies.

Section III of this report contains an implementation table organized by focus area, goals, and strategies. The table includes a brief explanation of the rationale behind each goal as well as the additional information, resources, and estimated cost associated with implementing it. A target date for starting and completing each strategy is also included. The implementation table is designed to give an estimate of City and/or department resources which are required to complete the task, but the estimate should be evaluated as departments move forward and obtain additional information about implementing the actions.

II. Current Practices, Proposed Goals, and Recommended Strategies

A. Solid Waste and Recycling

The purpose of the Solid Waste and Recycling category is to identify policies and actions that will significantly reduce solid waste tonnage and disposal costs, and significantly increase recycling rates in the City. The City provides solid waste and recycling collection for a total of 5,114 customers including single-family homes, single-family home rentals, City-owned facilities, as well as a handful of local businesses and churches.

Existing Conditions

The Department of Public Works (DPW) is responsible for waste, recycling and yard trim collection. Curbside trash is waste which is collected from the green refuse cart, while special trash constitutes large items (such as desks or mattresses) which do not fit in the refuse cart and are picked up by the City at no additional cost. Recycling constitutes single-steam recycling, electronic recycling, scrap metal and tires. Yard trim, brush and leaves are collected at various times throughout the year and composted on-site at the DPW facility. Tonnage is tracked on a monthly basis. Figure 1 (below) displays the breakdown of total collections by tonnage from the calendar year 2014.

Table 1: 2014 Annual College Park Refuse and Recycling Tonnage

2014 Refuse and Recycling Tonnages		
	Weight (tons)	**Percent of Total Collections**
Curbside Trash	4,185	43%
Special Trash	604	6%
Recycling without yard trim, brush and leaves	1,450	15%
Yard trim, brush and leaves	3,461	36%
Total Collections	**9,700**	**100%**

College Park has a unique population marked by a high percentage of renters (54 percent according to the 2010 Census), including approximately 1,000 single family rental properties. In general, DPW indicates that single-family homes used as rental properties generate higher volumes of waste

than their non-rental counterparts, particularly during tenant turnovers when large volumes of waste are collected.

Solid Waste and Recycling Rates

Solid waste and recycling rates were calculated without including yard trim, brush and leaves. In 2014 solid waste collections were 77 percent of the total materials taken to the landfill or to be recycled; 23 percent of the materials were recycled (including electronic recycling, scrap metal and tires).

Table 2: Solid Waste and Recycling Rates without Yard Trim, Brush or Leaves

2014 Refuse and Recycling Rates		
	Weight (tons)	**Percent of Total**
Trash	4,788.84	76.8%
Curbside Recycling*	1,449.78	23.2%
Total pick-up	**6,238.62**	**100%**
***Not including yard trim, brush and leaves.**		

It is difficult to obtain direct comparisons with other communities because different materials are included as part of collection and recycling. In addition, the material mixes have changed over time (bottles with less plastic and cans with less aluminum), making trend comparisons difficult. In 2012 Maryland recycled 45.4 percent of municipal waste, including yard trim (source: Zero Waste Maryland Report, April 2014).

In the 2014 Resident Satisfaction survey, "knowing what to recycle" was cited as a barrier to recycling. An analysis of the type of materials in the solid waste collected (percentage of materials recycled, solid waste, food waste, etc.) could help determine what strategies would be most effective (see Solid Waste, Goal 1).

This plan recommends a 25 percent reduction in solid waste and a doubling of recycling using FY 2015 tonnage data as a baseline (Solid Waste Goal 2). To meet these goals a comprehensive Existing Conditions Report (Solid Waste Goal 1) should be untaken to first understand how College Park statistics compare to neighboring communities, and to identify strategies to target waste reduction and engage residents to increase recycling.

Current practices:

- Electronics (computers, televisions, etc.) collection is available on an "on-call" basis or as a part of two annual "Cleanup Saturday" programs
- Appliances are collected and recycled on an "on-call" basis
- Residents can recycle used motor oil at the DPW facility 24 hours a day
- Yard Trim is collected weekly and composted at the DPW facility
- Leaves are collected during the fall and composted at the DPW facility
- Separate carts are provided for single stream recycling and solid waste
- Public Works coordinates *Donation Day* in the spring and fall which provides curb side pick-up for donation of furniture and other bulk goods in usable condition

- Unlimited special trash collections are provided at no extra cost
- Additional trash collection fee is assessed for single-family rental properties

Goals and Recommended Strategies

Goal 1: Solid Waste (SW 1).
By June 1, 2016, DPW will provide an Existing Conditions Report that identifies the following:

SW 1. A Composition of waste stream and quality of recycling collection (are residents recycling correctly or are residents mixing up recyclable and non-recyclable materials?).

SW 1. B Annual total tonnage and cost of each category of solid waste collected (normal household collection, scrap metal and electronics, bulk pick-up) and total cost of recycling collected (including separate total costs for leaf collection and yard trim collection)–allocated on a per household and per ton basis. Costs will include all labor costs and vehicle expenses.

SW 1. C College Park tonnage per household compared to two comparable (high number of student single-family rentals) communities and one community with very low household solid waste tonnage and very high recycling rates.

Goal 1 and the recommended strategies are "first step" items necessary to get baseline data and comparative data. A professional trash audit would require additional funding. The City could also review the 2013 trash audit in Montgomery County to see if that information and approach would be useful for College Park.

Goal 2: Solid Waste (SW 2).
Using the FY15 tonnage data, reduce solid waste per household by 25 percent and increase the recycling rate (total recycling materials collected divided by total solid waste collected) to 60 percent by July 1, 2018.

SW 2. A Examine costs and benefits of code changes, such as prohibiting recyclable material in waste carts; providing larger or additional recycling carts; increasing the fee for collecting trash at single-family rental properties, and charging for bulk pick-ups after a certain number of pick-ups per year.

SW 2. B Develop a marketing / educational campaign that provides information to residents on the environmental and cost savings of reducing solid waste. The campaign could include production of a Resident Guide to Sustainability that contains best-practices, solid waste and recycling regulations. It could also include marketing messages on City vehicles, stickers for carts, and regular messaging via normal City channels.

SW 2. C Create financial incentives for residents and explore the pros and cons of other policies that will change behavior, and consider pledging savings toward a new or popular community programs.

SW 2. D Reduce or remove food waste from the solid waste stream by promoting home food composting and explore the possibility of a pilot food waste collection program.

SW 2. E Suggest civic associations nominate a Sustainability Ambassador to answer questions and interface with residents and the City Operations Sustainability Taskforce.

SW 2. F Create waste reduction trainings for employees.

Goal 2 and the recommended strategies will require significant leadership from Council and staff to develop educational and outreach materials, investigate and possibly develop code changes, and possibly develop a food composting program. DPW and the City Manager's Office would be the lead parties. A multi-year plan and significant communication and outreach to residents would be required. Some staff time would have to be re-allocated and additional financial resources provided for marketing and educational materials.

B. Buildings and Public Areas

The purpose of the Buildings and Public Areas category is to identify reductions in building energy use and potential environmental improvements to our public areas (primarily in the areas of street lighting, storm water management and tree canopy). City-owned buildings are a major capital investment and require significant annual investment for operating expenses. Buildings are also a significant source of green house gas (GHG) emissions. The City owns 13 buildings that serve a wide range of uses. Two buildings (City Hall and the former Calvert Road school) may be demolished (City Hall) or completely renovated (Calvert Rd.) within the next 10 years, and two other small buildings (Duvall Field concession stand and the DPW staff facility) will be replaced with new modular buildings. This plan focuses on the following City buildings which are included in a Maryland Energy Administration program:

City Hall
Parking Garage
Public Services and Calvert Road School (one building on two meters)
Youth and Family Services
Davis Hall
DPW Staff Facility
Fleet Garage
Truck Garage and ancillary (Supply Garage, Landscape Garage, Animal Shelter, Salt Dome and Fuel Station; all structures on one meter)
Old Parish House

Lighting is another area of high cost and potential long-term savings. Approximately 50 percent of the City's electric bill is for street and pedestrian lighting (the total cost includes the charge from Pepco for electricity and for streetlight maintenance). Most of the streetlights are owned Pepco, but it may be worthwhile to analyze the costs and benefits of upgrading to more efficient lighting over time. The City owns approximately 135 pedestrian light fixtures and recently installed LED lights in

12 pedestrian fixtures as a pilot program on Berwyn Road. The City parking garage currently comprises approximately 20 percent of total City electricity use.

In City residential areas, most streets are lined with trees within the City's right-of-way. These trees not only contribute to the aesthetics of the neighborhoods, but also improve air quality and provide habitat for animals and shading for pedestrians and homes. In some neighborhoods, the City is losing large trees to age or a hostile environment (small tree box area, wrong tree given utility lines, etc.). Increasing the City's tree canopy along streets and in parks with the appropriate species can be a beneficial way to improve the environment.

Current Practices:

- The City is conducting energy audits at Davis Hall, the fleet garage, and Youth and Family Services which will include recommendations for energy savings from upgraded equipment and other improvements.
- Lighting controls are installed in appropriate locations
- Programmable thermostats are located in City Hall, Davis Hall, and Public Services
- Insulated bay doors installed on the fleet garage
- Utilizing the EmPower Pepco program to upgrade lighting in the Supply Building, Fleet Garage, Truck Garage, and Small Equipment Storage Building.
- City guide on native-stock trees and landscape plants that promote ecosystem health and resiliency.
- City-developed educational materials for residents about tree maintenance, requirements for conservation, and planting programs.
- City pursuing outside funding for stormwater management projects.

Goals and Recommended Strategies

Goal 1: Building and Public Areas (B&PA 1).
Reduce electricity and natural gas use by 15 percent per square foot by FY 2018 and by 25 percent by FY 2022 from the per square foot levels in 2014 baseline year (per Council Resolution 13-R-26)

BP&A 1. A	Complete energy audits for Davis Hall, the Fleet Garage, and the Youth and Family Services buildings in 2015 and complete a lighting analysis and upgrade for the Parking Garage in 2015.
BP&A 1. B	Conduct annual Energy Star Treasure Hunts in select buildings and educate staff on best practices.
BP&A 1. C	Examine the cost-benefit analyses from the energy audits and evaluate the recommendations for efficiency improvements.
BP&A 1. D	Develop a building operations and maintenance plan; emphasize low cost and no cost measures such as those recommendations in the Pepco Commercial & Industrial Energy Savings Program.

BP&A 1. E	Use Portfolio Manager (www.energystar.gov) to calculate and prominently post monthly energy usage on all buildings, and hold competition for greatest reduction in usage.
BPA 1. F	Create Green Office standard that includes practices regarding lighting and computer shut-down (see UMD example).
BP&A 1. G	Create employee rewards program based on energy savings.
BP&A 1. H	Adopt LEED or NGBS (or equivalent) for new City buildings and major renovations.
BP&A 1. I	Adopt a policy to install LED (or more efficient) lighting for all new and replacement pedestrian lights.

The energy audits are necessary to obtain baseline data and identify the most cost-efficient improvements. Most of the initial work has been funded via a grant and additional grant funding should be explored. Posting energy usage, creating a green office standard, and creating an employee rewards program are low-cost items that can be implemented within 1-2 years. Conversion of lighting or heating systems would require detailed cost-benefit analyses prior to investing funds. Initial analysis indicates that upgrading the parking garage lighting would significantly reduce electrical demand and could provide an advantageous return on the investment. Adoption of a LEED or NGBS standard (or equivalent) would require outside consultants when the City plans new construction.

Goal 2: Building and Public Areas (B&PA 2).
Generate 20 percent of electricity for City facilities using renewable sources by 2018 (per Council Resolution 13-R-27; see Appendix 3).

BP&A 2. A	Evaluate DPW buildings, YFS building, and Parking Garage for best locations to install solar power and explore funding via a Maryland Energy Administration (MEA) grant or long-term lease arrangement.
BP&A 2. B	Evaluate feasibility of geo-thermal for major renovations and new City facilities.

These strategies will require capital funds and outside consultants to advise the City on the best options (type of system, location, lease or purchase, etc.). Implementation of solar power, if feasible, will require two years. The City has committed to meeting this goal (College Park Resolution 13-R-27 Renewable Energy Production Policy) and should prioritize the evaluations of best locations and options.

Goal 3: Building and Public Areas (B&PA 3).
Maintain or increase the City's tree canopy by planting in appropriate street and park locations and investigate incentivizing additional plantings on private property in order to compensate for the removal of large trees.

BP&A 3. A Support the Tree & Landscape Board to update the City's Tree Inventory (last updated in 2013) by providing resources to maintain a GIS database of trees maintained by the City, City right of way boundaries, and location of underground and above ground utilities, and other information that should be considered in identifying appropriate tree locations.

BP&A 3. B Utilize data from the Tree Inventory update to develop a five-year plan to increase the number of new street trees in appropriate locations.

BP&A 3. C Develop an incentive plan to encourage residents to plant new trees and/or a policy protecting significant trees on private property (examine Tree City USA requirements and see tree ordinances in surrounding communities).

DPW would have primary responsibility for this goal and the strategies could be implemented over one to two years with the appropriate resources. The Tree and Landscape Board could provide some technical assistance. The City could also partner with the University's Sustainability Minor to sponsor unpaid internships for these strategies between September 2015 through June 2016. Funding would be required for incentives, trees, or related equipment and marketing.

Goal 4: Building and Public Areas (B&PA 4).
Work with State, County and University resources to improve City stormwater quality and reduce the occurrence and impact of flooding events.

BP&A 4. A Educate residents and businesses about existing subsidies to reduce stormwater runoff from private property, thereby reducing volume in the public stormwater infrastructure.

BP&A 4. B Partner with schools or environmental groups to conduct annual water quality testing of main streams in the City.

BP&A 4. C Identify existing stormwater facilities within the City that are in need of maintenance and work with the owners (usually the County) to resolve issues. Consider use of Green Street infrastructure to improve infiltration and water quality.

BP&A 5. D Identify specific areas in the Paint Branch and Indian Creek watersheds that need stormwater improvements and seek funding partners to implement them.

Strategies A and B could be initiated immediately with additional staff time or use of interns. Strategies C and D will require some capital funding, grant funding, and multi-year development plans.

Goal 5: Develop a plan for removal of invasive plants from certain public areas (B&PA 5).

BP&A 5. A Request the Tree and Landscape Board and/or the Committee for a Better Environment to identify a public area for a pilot invasive plant removal project, and

develop a plan to clear the area of invasive plants.

C. Citywide Policies and Events

The purpose of the Events category is to ensure that sustainable practices are integrated into all aspects of City operations including workflow and technology. While specific sustainability goals and strategies may be tailored per department, broad policies and practices should be implemented across all City operations.

Current Practices:

- City departments purchase recycled paper and paper products.
- HR uses electronic application software to minimize paper use.
- Electronics are e-cycled, printer cartridges are sent to a recycling center.
- Rechargeable batteries are used in portable two-way radios and small hand tools Batteries in the emergency floodlights are also charged by the building electricity supply and last 2-3 years.
- City provides incentives for employees to take public transportation.
- Less toxic herbicide products are selected where appropriate to reduce the exposure for people and the landscape.
- Native plant species are selected and used where suitable for Citywide plantings.

Goals and Recommended Strategies

Goal 1: Citywide Policies and Events (CP&E 1).
The FY17 budget will include funding for a consultant to lead the City's process to update or acquire software that improves workflow and works across relevant departments.

CP&E 1. A — Create a Workflow Task Force (an inter-departmental group) to conduct a needs assessment for workflow improvements. This recommendation is also included in the proposed 2015–2020 Strategic Plan.

CP&E 1. B — Based on the results of the needs assessment, develop an RFP for a consultant who will develop strategies to improve and integrate workflow.

This goal is a high-priority, high-complexity item. The strategies require leadership and commitment from every department and will likely require coordination and advice from a consulting firm. The process should start in FY2016 and be led by the City Manager's office. Significant staff time and/or consultant time will be required. If commitment and quality are lacking, little will change and much staff time will have been wasted. If the process is done well, the results could significantly improve City processes and reduce resource use.

Goal 2: Citywide Policies and Events (CP&E 2).
By July 1, 2016 obtain higher recycling rates at all City-sponsored or approved events, and purchase a significant percentage of certified "green" office and cleaning products.

CP&E 2. A — Develop a policy requiring recycling containers at all City events and provide clear labels on the recycling containers that indicate what should be recycled.

CP&E 2. B — Create a recycling vision statement and a requirement to recycle, and add these to facility rental contracts and permits for street closings for block parties.

CP&E 2. C — Adopt a "green preferred" purchasing policy that includes a goal to reduce consumption and establishes standards for "green" products, such as recycled content, appliance efficiency, toxicity, and other criteria. (See Appendix 5, UMD procurement policy). Identify a standard to adopt (i.e. Green Seal, www.greenseal.org/gs37.aspx), and provide statement to vendors regarding the City policy and standards.

CP&E 2. D — Develop a list that identifies suppliers for green products, particularly the most frequently purchased items (paper, printer toner, cleaning supplies).

CP&E 2. E — Develop and adopt Green Meeting Guidelines.

The strategies recommended to achieve this goal are relatively low-cost and can be implemented within one year. Staff will need to research various "green seal" standards and vendors to determine what standard should be adopted and identify the appropriate vendors. The products may cost more than products which do not meet the standard. Implementation will require work from Administration, Finance, Public Works, and Public Services.

Goal 3: Citywide Policies and Events (CP&E 3).
By July 1, 2016 employees will be able to identify specific employee benefits and actions employees can take to help meet the City's sustainability goals.

CP&E 3. A — Develop standard policies for all buildings regarding: signage on conserving energy; motion sensors for lights; low-flow devices; signage on office shut down actions; posting energy consumption for prior month and year-to-year comparisons.

CP&E 3. B — Create a database of employee suggestions to improve sustainability and recognize innovative proposals. Add sustainability suggestions to awards program.

CP&E 3. C — Identify gaps in the existing transportation benefits program (does not address biking, walking, etc.) so that more employees use it. Consider providing carpool matching, guaranteed ride home or other commuter services to employees. (COG provides this information at www.communterconnections.org). Consider developing a telework policy.

CP&E 3. D — Include sustainability information as part of new employee orientations.

CP&E 3. E Host brown-bag conversations/ guest lecturers in sustainability for employees (on-going education).

CP&E 3. F Continue the Sustainability Task Force to promote sustainability practices within departments and offices and to periodically review the progress of the goals and strategies in this report.

This goal is primarily about changing the culture so that sustainability becomes a normal standard and criteria for employees when they carry out their responsibilities. The employee training and the signage / marketing will help develop and reinforce the adoption of these practices. The costs are low, but it requires buy-in from everyone in the City. The Human Resources Department could take the lead, with support from Administration.

Goal 4: Citywide Policies and Events (CP&E 4).
Track all sustainability goals and outcomes on an annual basis, and track City operations greenhouse gas emissions on a triennial basis.

CP&E 4. A The Sustainability Task Force (or similar entity) will provide an annual report on all sustainability metrics and a triennial report on greenhouse gas emissions to Council. These reports should also be posted on the City's website.

CP&E 4. B Provide information regularly to all employees the status of sustainability-related goals, energy-saving tips, and other information.

CP&E 4. C Work with the University of Maryland to complete the greenhouse gas inventories using ICLEI (Local Governments for Sustainability) software to update the City's GHG emissions inventory every three years in June, and to develop attainable GHG emission reduction goals.

The coordination of reports would need to be assigned to a staff person, or become the collective responsibility of an on-going Sustainability Committee or department coordinators for sustainability issues. Ideally the annual report would be incorporated into other annual reports or data on City operations that staff already provide. The City Manager's office would either take the lead or assign the responsibility.

D. Fleet and Transportation

Current Practices:

- Three hybrid vehicles in fleet and one more will be purchased.
- Evaluating the purchase of an electric vehicle
- Plan to purchase more efficient and cleaner diesel-powered City trash trucks over next three years.

Goals and Recommended Strategies

Goal 1: Fleet and Transportation (FT 1).
By FY17, the City will achieve a 10 percent increase in the average vehicle miles per gallon for all on-road vehicles in the City's fleet (FY15 baseline).

FT 1. A Develop policies and practices regarding efficient vehicle operations (idling, route optimization, using the correct vehicle for the task, etc.).

FT 1. B Ensure all vehicles receive regular maintenance and fuel MPG is monitored.

FT 1. C Develop a green fleet purchasing policy that addresses fuel and energy efficiency as well as lifetime vehicle costs. Recognize that initial costs could be higher than current vehicle purchasing.

Goal 2: Fleet and Transportation (FT 2)
By July 2016, DPW will recommend the fuel type for heavy-duty vehicles.

FT 2. A Provide a cost-benefit analysis of switching existing diesel vehicles to bio-diesel.

FT 2. B Evaluate cost-benefit of purchasing heavy-duty vehicles that use natural gas or other non-petroleum fuels.

Goal 3: Fleet and Transportation (FT 3)
By July 2016, DPW will provide the first annual report on the total cost to operate each vehicle in order to optimize the strategic replacement of the City's fleet (including equipment).The report will include annual mileage and/or operating hours, preventive maintenance performed, and vehicle downtime.

FT 3. A Clean up existing data files and formats used to track vehicle maintenance and create report templates with the relevant categories for all vehicles.

III. Implementation

This sustainability plan was developed to coordinate sustainable practices across City operations; reduce carbon emissions and other unhealthy impacts of City operations; conserve financial and capital resources; and improve the quality of life for residents, businesses, and visitors. The recommendations outlined in the preceding pages identify specific actions the City can take to fulfill the plan's purpose.

The following Implementation Table summarizes the plan's goals and strategies, and identifies the rationale, a cost estimate, additional information and resources needed, the department responsible, and the target start and completion dates for each item. The cost section was designed to give an estimate of City and/or department resources which are expected to complete the task. The cost estimates use the following parameters:

a) Low cost: strategy can be managed within the existing staff time and with existing resources and/or additional resources of less than $5,000.
b) Medium cost: requires a reallocation of existing staff time and/or requires additional resources in excess of $5,000 but less than $20,000 to complete the task.
c) High Cost: requires significant reallocation of staff time, to the point which additional staff may be needed and/or requires additional resources in excess of $20,000 to complete or implement the task.

The Implementation Table is intended to help staff see the overall plan and timeline for actions and to facilitate creating status updates on action items. The City Manager may wish to designate one staff person to be responsible for overseeing the implementation of each goal and strategy, and for documenting and reporting progress. The Sustainability Task Force recommends that it or a similar internal committee continue and assist with the implementation and monitoring.