Sustainability

The City of Raleigh is committed to becoming a leading sustainable city – economically, environmentally, and socially. In June 2008, the City Council adopted its Mission Statement, which included principles that articulated its commitment to sustainability. Further demonstrating its commitment, the city is making changes to its budgeting practices to reflect its goals for sustainability. The budget process is an integrated part of sustainability. Capital and operating expenses are to be managed and measured using principles tied to the city's sustainability objectives.

For example, the city has a fossil fuel reduction policy. In order to support this objective, the city is shifting from tracking expenditures for fuel to a budget based on gallons of fuel consumed. The result re-directs the focus from fluctuating fuel prices to managing overall consumption. Another example is use of 'total cost of ownership' and 'life cycle cost analyses' rather than solely using first time costs to evaluate the merit of investments over the life of the equipment, building, or other assets.

Budgeting policies can have a significant effect on environmental stewardship, economic strength, and social equity in our community. The decisions we make about the budget affect what we buy, how we build, and how we choose to operate. Our budget demonstrates how we value our employees, workforce, and our community.

One way to integrate sustainability principles into the budget process is developing and implementing a sustainability purchasing policy. City staff is drafting a policy that prioritizes multiple attributes including the total cost of ownership, water and energy efficiency, product performance and durability, waste disposal practices, and transportation impacts. A sustainability purchasing policy supports re-investing in the community and boosting local employment.

Additional information regarding the City of Raleigh Sustainability Program may be obtained by contacting Paula Thomas, Sustainability Manager, at (919) 996-3840 or via email to Paula.Thomas@ci.raleigh.nc.us.

Definition of Sustainability

Sustainability is a broad term that addresses three fundamental principles: economic strength, environmental stewardship, and social equity. We believe a sustainable community is a thriving community; one that provides opportunity for all residents, cares for the environment, and has long term vision for a prosperous future.

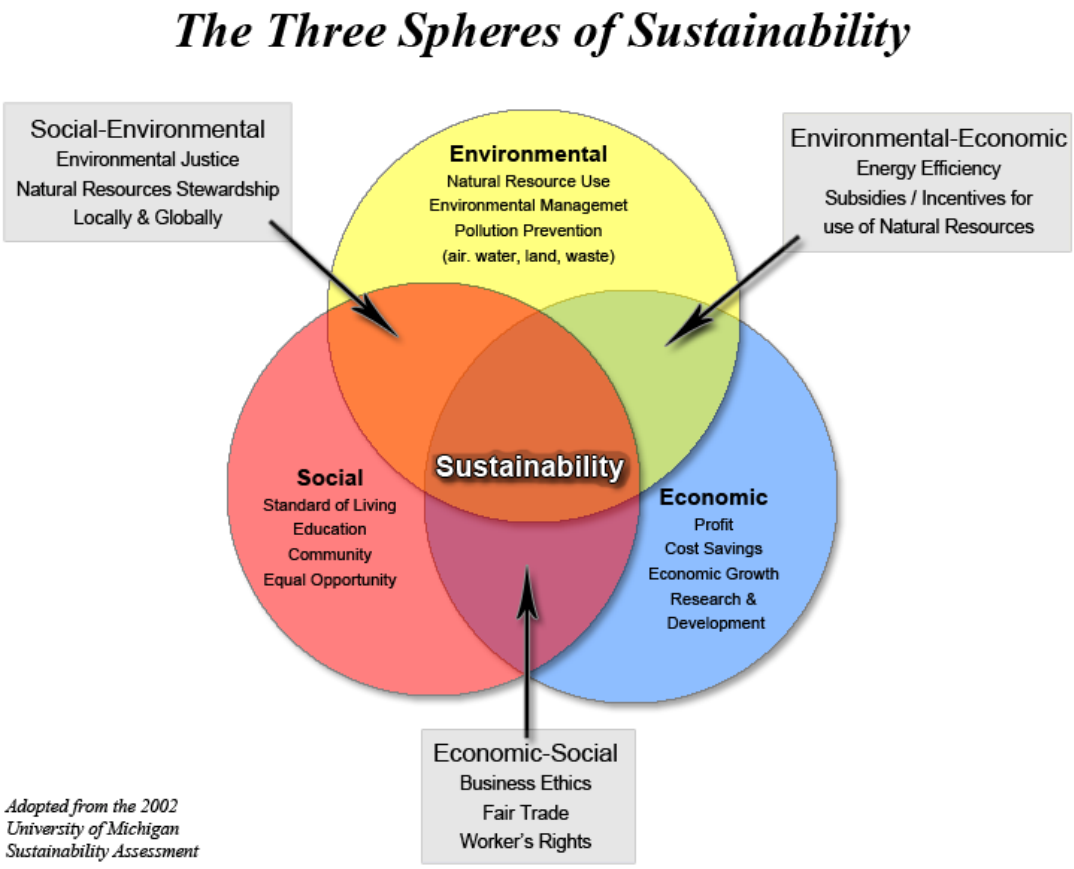
The City of Raleigh uses the following definition:

"Sustainable communities encourage people to work together to create healthy communities where natural and historic resources are preserved, jobs are available, sprawl is contained, neighborhoods are secure, education is lifelong, transportation and health care are accessible, and all citizens have opportunities to improve the quality of their lives."

The President's Council on Sustainable Development

Sustainable Raleigh Framework

Raleigh's commitment to sustainability is a cornerstone of its vision for the future. That vision is broad and comprehensive, focusing on the interdependent relationships of environmental stewardship, economic strength, and social integrity. These three fundamental elements of sustainability define the vision and will serve to guide the choices and decisions Raleigh will need to make as a 21st Century City of Innovation.



Consistent with this vision, the City of Raleigh has made great strides to move the community forward in its vision for economic, environmental and social prosperity. A few examples include:

- Created a citizens Environmental Advisory Board
- Established full time positions for Sustainability Initiatives Manager and Energy Manager
- Adopted a fossil fuel reduction goal
- Enacted a standard for energy efficiency using the US Green Building Council's LEED rating for all city-owned buildings
- Endorsed the U.S. Mayors Climate Protection Agreement to develop a greenhouse gas emissions reduction strategy for the city
- Became the first LED city in the nation
- Adopted tiered water rates designed to reward conservation
- One of three US cities selected to pilot Project Get Ready to prepare and promote electric vehicle infrastructure and use within the region

Sustainable Raleigh - Goals

Raleigh's sustainability program was created to provide guidance for policy development and goal setting for the City of Raleigh based on the three fundamental principles of environmental stewardship, economic strength, and social equity. We partner with our local business community, universities, civic, and non-profit organizations to build relationships, and work collaboratively with all departments in the City of Raleigh in our mission to become a leader in sustainability.

The goals of Sustainable Raleigh include:

- Develop a cohesive sustainability plan that coordinates all initiatives throughout the COR
- Provide guidance for policy statements and goal setting that will drive integration of sustainability principles into the City of Raleigh's decisions and investments
- Educate and train city employees on topics of sustainability that impact their jobs
- Communicate the City of Raleigh's sustainability initiatives and plan to residents, and be a resource for the community
- Measure, track, and report results from sustainability initiatives

Accomplishments

Each department in the City of Raleigh has prepared a list of current sustainability initiatives. Below is a the listing that demonstrates the breadth and diversity of the departments' commitment and how these activities can cross departmental lines and the spheres of sustainability to promote environmental stewardship, economic strength, and social equity.

City-Wide and Departmental Sustainability Initiatives

City-Wide

- Reduced paper use through double-sided printing and electronic communication utilizing the Internet and the COR Intranet and increased use of recycled paper.
- Established department-specific goals for reduction in fossil fuel usage.
- Launched plans to build all new facilities according to Silver LEED Certification principles with the goal of becoming certified.
- Began process of up-fitting current facilities to be more energy efficient and reflect other green building principles.
- Implemented practices to reduce energy use by educating all departments to turn off all unnecessary lights, installing LED lighting in existing and new facilities and motion sensor lighting where appropriate, and implementing schedule to replace all light bulbs with energy efficient bulbs.
- Executed replacement of fossil fuel vehicles with hybrid and right-sized vehicles following the vehicle replacement schedule.
- Encouraged departments to implement telework schedules and practices for appropriate personnel.

Administrative Services

- Hired the city's first Sustainability Initiatives Manager.
- Co-sponsored a inter-governmental workshop to train local municipalities how to finance their sustainability projects.
- Conducted monthly sustainability lunch and learns for all city employees.
- Established the City of Raleigh Supplemental Sustainability Fund to award grants internally for projects and programs that demonstrate and achieve the city's environmental, social, or economic sustainability goals.
- Eliminated printing of the budget manual and agendas of the Budget & Economic Development Committee and the Law & Public Safety Committee for departments, making it available online for their use.
- Conducted technical training in developing the life-cycle/total cost of ownership analysis.
- Sponsored the annual Raleigh Environmental Awards Program.
- Started the Green Ambassadors program.
- Initiated the development of the city's Sustainability Purchasing Plan.
- Conducted LEED training classes for 25 City of Raleigh staff.
- Established LEED Implementation Team with participation from multiple departments.
- Designed and implemented the conversion from tracking fuel expenditures to fuel consumption

Arts Office

- Created an extensive electronic database system in order to distribute arts-related information (announcements, reports, invitations, artist calls, applications, etc.).
- Worked with the city's Information Technology Department, to repurpose how information is supplied via **the website** to create a more efficient and accessible city arts information key resource.

- Examined moving towards digital formats for applications and other paper-intensive materials and embracing new technologies such as flicker and YouTube to support these initiatives.
- Met with various city personnel and agencies to discuss the **integration of sustainable art** into Raleigh's landscape and building projects.

City Council

- Authorized the creation of the Sustainability Initiatives Manager and Energy Manager positions.
- Adopted a mission statement that reinforces a commitment to sustainability.
- Enacted a standard for energy efficiency using the US Green Building Council's LEED rating for all city-owned buildings.
- Endorsed the US Mayor's Climate Protection Agreement to develop a greenhouse gas emissions reduction strategy for the city.

City Manager

- Continued to seek increases in the number of environment related gain sharing ideas city-wide by creating a new marketing strategy to remind employees of the gain sharing payouts.
- Continued to work to reduce fossil fuel consumption in the city's operations in accordance with the Environmental Advisory Board's recommendation.
- Continued to pursue energy-saving and maintenance-saving LED lighting projects through the LED City Initiative.

Community Development

- Required all three of its developers (Habitat for Humanity, St Augustine's College CDC and Evergreen Construction) to build the 17 house affordable home ownership project at the ongoing Cooke Street Housing Project to Energy Star standards. One of its builders (Habitat) goes a step further and builds homes which are certified System Vision and is planning to build one home which will be certified green by Healthy Built Homes.
- Required the developer (Builders of Hope) of the 25 lot State Street affordable housing project, to build to Energy Star standards with a further goal of meeting both the System Vision and Healthy Built Homes green standards.
- Applied for the COR's Sustainable Grant funding to provide LED street lighting for the project.

Community Services

- Decreased fossil fuel consumption by reducing the number of multiple trips for events and activities through better planning.

Convention Center

Convention Center Green Facts:

- Participated in all LEED Certification planning and training that will culminate in the commissioning of a Green Convention Center.
- Built using principles of Silver LEED Certification and expected to be a leader in Green Building Design compared with other N.C. municipal facilities.
- Reduced landscape irrigation by 50%.
- Participated in Green Cleaning Program.
- Participated in Waste Recycling Program including aluminum, glass, plastics, and cardboard.

- Installed LED lighting in main entry, exit signs, outside area, and street lighting.

Performing Arts Center Green Facts:

- Implemented Green building principles in renovations and made planned for principles to be used in future renovations.
- Participated in Green Cleaning Program.
- Participated in Waste Recycling Program aluminum, plastics, glass, and cardboard.
- Replacement of fixtures and bulbs with more energy efficient florescent and LED wherever possible in Performing Arts Center.
- Trained Performing Arts Center staff to operate building using green principles when possible.
- Planned to utilize LEED principles during design and construction of upcoming roof and carpet replacement of the Performing Arts Center.

Development Services

- Implemented substantial changes to the city's residential plan review operations through joint development with Mecklenburg County of an electronic plan submittal program and reciprocity of approval review.

Emergency Communications Center

- Planned to move toward "virtualization" of servers, where possible, to eliminate devices, thereby reducing electrical usage and cooling demand.
- Worked with Police Department on identifying additional classes of calls that may be handled by phone, thereby eliminating the need for an officer to respond.
- Included a "green" discovery statement in upcoming bid specifications for new 9-1-1 logging recorder.
- Utilized Automatic Vehicle Location (AVL) technology for ambulance dispatch. While ambulances are not City of Raleigh vehicles, the reduction in miles driven helps reduce carbon based emissions locally.

Fire Department

- Began rain barrel installation project at stations/facilities – The project has just begun, with the installation complete at Fire Station #8. The collected water will be used for apparatus washing and maintenance. Other facilities are currently being studied for feasibility of such installations.
- Started designing solar energy collectors for use at fire stations to heat water. There will be a total of four (4) panels at each station. The total number of stations qualifying for this equipment has yet to be determined.
- Launched plan to utilize green/live roofs at several fire stations. Stormwater Management personnel are coordinating this research and participation will depend somewhat on results of grant funding.
- Launched plan to install cisterns at several stations. Fire stations are currently being examined to determine applicability of this type of technology.
- Planned upcoming construction of new fire station using Green Building principles.
- Offered existing fire station sites for potential installation of photovoltaic technology.

Information Technology

- Used video conferencing technology for meetings.
- Monitored energy consumption regularly and determined total energy consumption of IT Department, resulting in implementing metrics to reduce energy consumption.
- Obtained the most efficient hardware (computers, phones, faxes, PDAs).
- Implemented proper disposal of old equipment.
- Implemented “greening” of data center and optimized cooling requirements.
- Began implementation of server consolidation and server virtualization.

Inspections

- Engaged in practice of parking vehicles at satellite locations to reduce fuel costs.
- Created goals to monitor our fuel consumption, added gas electric vehicles to fleet, and participated in the telework program.
- Created goals to provide environmental information to designers to reduce energy usage.

Parks and Recreation

- Eliminated Unnecessary Travel by:
    - Reducing off-site meetings, utilizing conference calls, and carpooling to meetings.
    - Planning work and routes to eliminate unnecessary trips and utilizing multiple dispatch locations.
    - Conducting bulk order and warehouse inventory and limiting mail delivery from facilities to municipal building to once daily.
- Reduced Use of Gas/Diesel Equipment by:
    - Consolidating staff into as few vehicles as possible.
    - Turning off vehicles when appropriate, except when using required warning devices.
    - Establishing transitional buffer zones at Horseshoe Farm Park and implemented reduced mowing frequency for fuel conservation and enhanced wildlife habitat.
    - Encouraged Senior Clubs to schedule speakers, entertainment or other activities in the place of local outings and trips using departmental provided vehicles.
    - Limited the number of field trips for summer camp programs offered during each session.
- Adopted and enforced land-use policies that reduce sprawl, preserve open space, and promote sustainable transportation options by:
    - Preserving of greenways and other natural open areas.
    - Publicizing greenway trails as an alternate transportation option.
    - Using park gators (electric golf-cart-style transportation) in place of trucks.
- Continued ongoing sustainability initiatives making energy efficiency a priority through building code improvements, retrofitting city facilities with energy efficient lighting and urging employees to conserve energy and save money by:
    - Adding DDC during renovations and life cycle replacements.
    - Conducting rate analysis and negotiating with utility providers for an anticipated annual savings of $15,000 for citywide utility accounts.

  - Adjusting night and weekend thermostat to reduce energy consumption within Downtown facilities.
  - Conducting an internal facility audit and analysis of system efficiencies.
  - Implementing utility account management to include analysis and ensure of proper payment.
  - Working with multiple city departments to increase awareness of consumption and provide reports to Directors and key management staff detailing consumption for each utility account.
  - Encouraging use of environmentally friendly products among service contractors.
  - Using infrared detection technology to locate and correct hot spots and trouble areas that increase energy use and shorten life expectancy of equipment (Thermal Imaging).
- Increased recycling rates in city operations and in the community by:
  - Partnering with Solid Waste Services in establishing public recycling locations in city parks.
  - Generating vegetative debris from operation recycled at city yard waste facility and reused in the form of compost and mulch.
  - Selling logs from trees are to milling operations to be recycled; generating funding to plant more trees under the NeighborWoods Program.
  - Encouraging employees to recycle by placing collection bins in city facilities.
- Maintained healthy urban forests; promoted tree planting to increase shading and to absorb CO2 by
  - Maintaining tree health along public rights-of-way, in city parks and open spaces and along riparian greenways by Urban Forestry Division.
  - Planted 5,000 trees in residential areas under the Neighborwoods Program.
  - Planted 7,000 trees in parks/public rights-of-way through partnership with Trees Across Raleigh.
  - Utilized volunteer groups to plant additional trees in city parks, greenways and open spaces.
  - Replaced 120 trees throughout downtown and on public rights-of-way annually.
- Received recycle recognition award for One Exchange Plaza for being one of the first facilities to recycle in the Downtown District.
- Allocated funding to begin installation of lavatory aerators, low flow and no flow urinals, reduced flow shower heads, and flush valve kits in facilities throughout the parks and downtown.
- Installed climate control telemetry system in the Police Training Center for increased energy efficiency and cost reduction.
- Converted traditional irrigation beltline system into drip irrigation system for improved water efficiency.
- Water Conservation: Additional funding may be required to purchase drought tolerant plants and trees to replace those lost due to prolonged drought conditions and to renovate existing landscapes with high water requirements. Conversion of existing irrigation systems to drip systems or “certified irrigation system” will also require funding, along with expanded mulching of trees and landscapes with commercially available, quality mulch product. Installed rain barrels at several facilities to capture roof runoff for use in irrigating landscapes.
- Anticipated that the grey water system will be extended and irrigation systems will be renovated to accept this product.

Personnel

- Maintained recycling efforts in office and at training events.
- Conserved fuel by carpooling to meetings, conferences, etc.

Planning

- Participated in LEED for Neighborhood Development for staff (includes Boston conference or equivalent).
- Launched planning for wind turbines with other city departments and Progress Energy.
- Launched planning for electric vehicle infrastructure with other city departments, Progress Energy, Advanced Energy and potentially the Rocky Mountain Institute.
- Helped plan the Raleigh Earth Day Celebration planning with Burt's Bees and the Natural Science Museum.
- Held Health City – Healthy People: Design Solutions Conference, February 21, 2009 in collaboration with NC State University College of Design. Conference also includes 'the value of Design in Affordable Housing (tenets of sustainability; Growing in Place (creating a livable city for Children); Urban Life: Design for Change).
- Continued efforts to develop Randleigh Farm as a model of sustainable development.
- Created Green Streets downtown concepts
- Initiated Streetscape standards to promote biking and walking as well as the use of sustainable materials in construction of the streets and sidewalks.
- Created citywide bike plan and pedestrian plan to be implemented if department received NCDOT grant.
- Worked with Stormwater to create Best Management Practices (BMPs) and remediation in and around downtown.
- Supported the implementation of sustainability policies in the Comprehensive Plan.

Police

- Purchased only flex-fuel or hybrid vehicles in FY09.
- Purchased three Segways for patrol use in downtown area.
- Deployed two squads of bicycle officers in various areas of the city and assigned five officers to walking beats.
- Created plans to purchase 18 bicycles for SEU, GSU, and other Special Operations personnel to enhance community policing, which will result in decreased fuel consumption.
- Continued process of downsizing detective, administrative, and animal control vehicles.

Public Affairs

- Provided external support for city sustainability initiatives.
- Removed and surplused old inefficient lighting instruments.
- Reduced to a minimum the number of instruments used for each studio production.
- Increased the temperature of the air conditioning in occupied facilities.
- Used biodegradable color gels on studio lights.
- Re-formatted other programs so as to eliminate or reduce energy and other costs while maintaining program integrity.
- Initiated transition from recording on tape to recording on a hard drive; process decreases use of petroleum products and worn out tape disposal costs.

- Combined two workshops and thereby eliminated duplication of some printed material.
- Provided workshop material in reusable binders rather than making new copies for each workshop.

Public Utilities Department

- Utilized low sulfur diesel (LSD) fuel for plant and river generator operations significantly decreased the emission of particulate by-products and smog forming nitrogen oxides; plans are underway to switch to Ultra Low Sulfur Diesel (ULSD), which can reduce emissions by 90 percent.
- Partnered with NC State who completed research on introducing the use of biofuels in transportation practices in the department.
- Initiated plans to complete the expansion of the Zebulon service area reclaimed water distribution system and the Southeast Raleigh reclaimed water distribution project thereby providing an environmentally responsible alternative to the utilization of potable water for non-potable uses.
- Participated in the Upper Neuse River Basin Association, an organization whose mission is to preserve the water quality of the Upper Neuse River Basin through innovative and cost-effective pollution reduction strategies; this association is also a forum for municipalities, counties and local soil and water conservation districts to cooperate on water quality protection and water resource management within the 770 square mile watershed.
- Continued annual three-day festival, WaterFest, for school children kindergarten through eighth grades; this festival is held in conjunction with the National Drinking Water Week and is a fun-filled, hands-on event focusing on environmental education and includes a focus on water conservation.
- Participated in the Triangle Area Source Water Monitoring Program (TASWMP), a collaborative local government program working to examine long-term trends in source water quality. Phase VI will include new laboratory techniques for quantifying mercury contamination in local drinking water supply reservoirs.
- Encouraged interdepartmental sustainability practices such as reducing energy by using motion sensors, facility recycling system, carpooling to meetings or using webcast meetings to reduce fuel usage. The wastewater facility uses reuse water supply reservoirs.
- Launched plans to install solar tubes in South and East Raleigh Warehouse to reduce energy usage.
- Initiated strategy to reuse biosolids and wastewater effluent including biosolids land application on both public and privately owned land, the beneficial reuse of wastewater by land irrigation, and close monitoring of product constituents and environmental conditions; monitoring includes product quality (nutrients, odor and color), environmental impacts (groundwater, surface water and vegetation), and health impacts (metals, bacteria, and toxicity).

Public Works

- Provided ongoing liaison to the Environmental Advisory Board; actively sought Energy Efficient, sustainable and GREEN design training and education; increased focus on Energy Efficient, sustainable and GREEN building design on all facility projects.
- Utilized hybrid electric buses for service in the Downtown Central Business District and began plans to replace fourteen (14) buses with low floor bus models that are equipped with particulate traps and are compatible with B-20 bio-diesel fuel.
- Purchasing Diesel Oxidation Catalyst Mufflers to replace the current mufflers on 48 heavy duty vehicles. The Diesel Oxidation Catalyst is designed to reduce harmful emissions by 15% to 30% from in-use diesel engines as well as reduce hydrocarbon emissions. They are extremely reliable, cost-effective, maintenance-free, and provide substantial benefits in improving air quality in Wake County.

- Developing an education program for Low Impact Development (LID) including a brochure, power point presentation, and the development of an educational water bill insert. A city staff working group was formed to study the hurdles to low impact development and report back to City Council. Council approved recommendations to further allow storm water for reuse purposes. The staff working group continues to work on other hurdles to LID.
- Partnering with the Parks and Recreation Department to install cisterns at Sanderford Road and Green Road parks to conserve water and provide education to the public on LID techniques.
- Partnering with the Fire Department and Wake County on a grant submittal to the Clean Water Management Trust Fund to install LID techniques including cisterns at several fire stations and an EMS facility.
- Thirteen (13) stormwater projects under design to improve water quality to preserving existing lakes, creating wetlands and restoring streams with an estimated total cost of $21,000,000.
- Receipt of grant funding up to $1.4 million dollars from the Clean Water Management Trust Fund for the Fred Fletcher Park wetland project construction and the design of the Upper Longview Stream and Lake Restoration project.
- Receipt of grant funding up to $34,000 for the stormwater bioretention areas at Vehicle Fleet Services and the Street Maintenance facilities on West Street.
- Incorporating stormwater and erosion control measures and best management environmental protection practices in all projects.
- Use of Field Mobility combined with electronic archiving allows inspectors additional time spent in the field providing real time inspection results and access to plans, details, and other pertinent documents through the city's network without having to travel back to the office. Minimizing fuel consumption and reduction of paper copies are benefits achieved.
- Coordinating the city's efforts to provide LED-based street lighting for public streets. Pilot projects in the works include improvements to Hillsborough Street and installations around the new Convention Center.
- Recycling aluminum street signs.
- Purchasing new solar powered variable message boards.
- Pursuing opportunities to use alternative or recycled materials when they are economically feasible and safe to the public to reduce the use of natural materials and reduce waste. Examples include the use of streetscape and paving materials made from recycled products, along with non-potable/re-use water for irrigation and construction uses wherever feasible.
- Continue the installation of energy saving LED lighting products in traffic signal installations.

Public Works – Vehicle Fleet Services

- Tested other Bio products such as; penetrating fluids, lubrication fluids, and automotive grease to evaluate if these products meet requirements.
- Recycled commonly used recyclable items such as waste oil, waste anti-freeze, metal, aluminum cans, plastic bottles, and paper products to reduce waste.

Solid Waste Services

- Purchase and implementation of AVL and Route Start software system to improve collection efficiency and optimize routes. Goal is to reduce the number of trucks needed daily to perform task, reduce the number of miles driven daily, and cut fossil fuel consumption and carbon emissions.
- Sold methane gas from Wilders Grove Landfill which reduces the city's carbon footprint .

Public Works – Transit

- Began plans to utilize hybrid electric buses for service in the Downtown Central Business District.
- Requested twenty-four (24) replacement / expansion low floor buses that are equipped with particulate traps and are compatible with B-20 bio-diesel fuel.
- Anticipated that all future buses purchased by CAT will be B-20 bio-diesel compatible.
- Initiated process to utilize recycled plastics or recycled materials when compatible for passenger amenities.

Stormwater

- Formed a city staff working group to study the hurdles of low impact development in response to City Council's approved of an education program for Low Impact Development (LID).
- Partnered with the Parks and Recreation Department to install cisterns at Sanderford Road and Green Road parks to conserve water and provide education to the public on LID techniques.
- Partnered with the Fire Department, Wake County, and NCSU on cistern and bio retention projects grant application to the Clean Water Management Trust Fund.
- Partnered with the Fire Department and Construction Management for a green roof project at Fire Station Nine.
- Started process of investigating the possibility of a green roof on the municipal building.
- Initiated design of thirteen stormwater projects to improve water quality to preserving existing lakes, creating wetlands and restoring streams with an estimated total cost of $21,000,000.
- Received receipt of grant funding up to $1.4 million dollars from the Clean Water Management Trust Fund for the Fred Fletcher Park wetland project construction and the design of the Upper Longview Stream and Lake Restoration project.
- Began process to develop an education program for Low Impact Development (LID) including a brochure, power point presentation, and the development of an educational water bill insert. A city staff working group was formed to study the hurdles to low impact development and report back to City Council. Council approved recommendations to further allow storm water for reuse purposes. The staff working group continues to work on other hurdles to LID.
- Partnered with the Fire Department and Wake County on a grant submittal to the Clean Water Management Trust Fund to install LID techniques including cisterns at several fire stations and an EMS facility.
- Incorporated stormwater and erosion control measures and best management environmental protection practices in all projects.

Sustainability Polices & Action Items in the Proposed Comprehensive Plan Update

Sustainability Policies and Action Items

Vision: Raleigh will be a city that values and fosters development that provides economic prosperity, housing opportunity, and equity for all Raleigh residents. Raleigh will embody environmental conservation, energy efficiency, and sustainable development. Raleigh will be a great place to live with distinctive and attractive neighborhoods, plentiful parks and green spaces, quality schools and educational opportunities, and a vibrant downtown.

Following are sustainability highlights specific to each of the 13 Comp Plan elements:

Land Use

- Encourage compact land use patterns
- Improve the performance of transportation networks
- Reduce the negative impacts of low intensity and non-contiguous development.
- Create more walkable, transit supportive pedestrian and bicycle facilities, or multi-use paths and help facilitate walking and reduce driving
- Manage watershed supply areas to minimize impervious surface cover and protect the quality of the water supply
- Protect natural resources and promote the conservation of contiguous open spaces
- Reduce the growth of vehicle miles traveled (VMT).
- Promote the development of mixed-use activity centers with multi-modal transportation connections to provide convenient and accessible residential and employment areas
- Establish bus stop facilities within mixed use centers
- Design new residential development with common and usable open space that preserves the natural landscape

Transportation

- Create a well-connected, multi-modal transportation network that meets the needs of residents and visitors of all ages, incomes, and abilities
- Expand bikeable greenway trails and bikeways, and bike lanes
- Promote pedestrian connections in new and existing development
- Invest in enhanced transit services at the local and regional level
- Improve roadway connectivity to increase road system capacity and resiliency
- Coordinate land use and transportation to reduce the need for trip-making, provide choices for shorter trips, and encourage walking, bicycling, and transit use

Environmental Protection

- Promote sustainability throughout the City's facilities and operations
- Protect floodplains and riparian buffers to improve water quality and mitigate flood damage
- Champion the recovery of the Neuse River
- Enhance air quality
- Promote energy security and climate change preparedness

- Protect wildlife habitats and sensitive natural areas from development

Economic Development

- Maintain Raleigh's competitive edge in attracting and nurturing key industries that provide economic security and good jobs with good wages
- Increase financial resources of Raleigh residents, particularly low- and moderate-wealth households
- Target public investment to areas experiencing disinvestment and higher poverty and unemployment

Housing

- Provide a range of housing types throughout Raleigh and provide housing opportunities for all segments of the City's population
- Create diverse and affordable housing near transit and employment centers

Parks, Recreation and Open Space

- Maintain existing passive and active parks and facilities
- Acquire new park land to maintain a high level of service and accessibility for all residents
- Provide better interconnectivity between the parks, greenways, and open space system locally and regionally
- Integrate parks and recreation system into a broader context of green infrastructure to maximize ecosystem conservation
- Encourage sustainable design and green building facilities design