

Final Report: Financing a Resilient Prince George's County, Maryland

Part 1: Project Structure

In 2014, through CBPO support, the EFC was able to expand the role of the Stormwater Unit by offering direct technical assistance to localities in New York and Pennsylvania. For 2015, it was ultimately decided that the continued support of the Stormwater Unit would deliver technical assistance to the City of Annapolis and Prince George's County with a particular focus on how the financing of water resource management fits into a local government's larger goals of developing a sustainable and resilient community.

Project Objectives. The primary objective of this project was to better understand the opportunities to improve the connections between stormwater management financing and broader community sustainability and resilience efforts in the County. In addition, the objectives were to:

- Initiate a dialogue at the county-level to assess the enabling conditions for effectively addressing climate resiliency financing and identify opportunities to better develop these; and,
- Connect the County with new sustainability and resilience partners to better leverage in-state expertise, capacity, and existing networks in the process of enhancing the enabling conditions for resiliency finance.

Project Outputs and Tasks. The following specific project outputs and tasks were implemented over the past year:

- More than a dozen interviews were held with Prince George's agencies and departments that play key roles in the sustainability and resilience efforts of the County. These served as the basis for a series of agency-specific status assessments.
- More than a dozen additional interviews with University experts in the field of sustainability and climate resiliency, as well as key campus administrators associated with the sustainability initiatives of the University, were also conducted in order to build on the readily available knowledge base of the University and the solid outreach and technical assistance already underway with the County.
- Additional one-on-one dialogues were held with private sector representatives, specifically targeting a better understanding of the opportunities for linkages between sustainability and economic development and transit-oriented development.

- A series of agency-specific assessments that identify the current state of sustainability and resilience efforts in the County.
- A final report that outlines opportunities, both within agencies and existing initiatives as well as County-wide, to improve the efficiency of sustainability and resilience efforts in Prince George's, and to better develop the enabling conditions that would support the expansion of these efforts.

Desired Outcome. Ultimately our desired outcome is more environmentally and economically resilient communities across the Chesapeake Bay watershed. Though the current Bay restoration financing system is resulting in demonstrable changes to local water quality financing and implementation, we believe that long-term success will require a more comprehensive financing system that uses investment in resilience as a mechanism for economic development.

Part 2: Background

In 2016, Prince George's County is in its sixth year of sustainability efforts under County Executive Rushern Baker, who took office at the end of 2010. These half-dozen years have coincided with remarkable progress for the County's engagement in addressing sustainability needs at every level, in international, national, regional, state and local contexts. This Report describes the efforts of nine agencies of the County to make progress in improving local sustainability and resiliency. This introduction highlights a local contextual framework of the achievements of the nine Prince George's County agencies examined.

Protecting and Restoring Prince George's County Rivers and Streams: A New Era of Stormwater Management. President Barack Obama issued Executive Order 13508 on May 12, 2009, which essentially mandated the enforcement of the Clean Water Act, the landmark federal law which was intended to create and implement a restoration plan for the Chesapeake Bay Watershed and other waters of the United States after its 1972 enactment. A subsequent attempt by regulated and polluting industries to stop the implementation of this Executive Order were rejected by a federal judge in 2013, and by the United States Court of Appeals in Philadelphia in July of 2015. Though further appealed to the United States Supreme Court in November, the Executive Order and affirming court rulings have resulted in the creation of Watershed Implementation Plans (WIPs) in each of the Bay Watershed states. These WIPs have created momentum for additional state legislative and regulatory actions, and some of the Bay states have mandated local action. One such action was the 2012 Maryland Watershed Protection and Restoration Act, which required the ten US EPA designated "Phase I" jurisdictions (localities with populations of over 100,000) to enact a local funding mechanism to implement reduction of stormwater runoff, which carries pollutants from local paved surfaces to waterways.

Prince George's County enacted its local funding in an extremely innovative manner. The County staff in charge of developing the proposed legislation and supporting program was the Prince George's County Department of the Environment (DoE), a new County agency that had been created out of its predecessor agency the Department of Environmental Resources (PGDER). Their recommended approach, which began its full implementation in 2015, was innovative in at least four ways:

- a) The County responded to a vociferous concern on costs from the powerful faith-based community by developing an alternative compliance program that would enable participating religious institutions, as well as nonprofit organizations, to minimize the fee by participating in a program that would reduce runoff from their properties or educate and engage their constituents in promoting best practices.
- b) The County developed the Clean Water Partnership with Corvias Solutions that promised to leverage significant private sector engagement with resources to maximize the impact of the new stormwater fee for generating additional revenue that would be used to address the expensive problem facing the County – large swaths of heavily paved areas without financing to retrofit antiquated stormwater management design.

- c) The County marketed the proposed regulation to the County Council that needed to approve the program by promoting the jobs that would be supported through implementation of the program. The number of jobs that would go to local residents was politically appealing to the Council, and addressed a too-often neglected economic benefits aspect of reducing water pollution from stormwater runoff.
- d) The County created a brilliant tag for the public face of the program, “Rain Check”, which emphasized the funds that would now be available for citizens, municipalities and groups to get a check from the County to help fund their stormwater pollution reduction projects. Rain Check was an extremely effective counter to the amazingly popular term “Rain Tax,” coined by opponents of the local fees to misleadingly refer to the new fee as being a tax on precipitation, rather than a fee on pavement, a principal cause of the polluted runoff that flows from land to stormwater-impaired waterways.

These innovative approaches to stormwater management were spearheaded by the DoE, but involved the private sector, non-profit groups, the faith-based community, philanthropic funders, and local stakeholders such as the University of Maryland. Within Prince George’s County government, it involved at least the Departments of Permitting, Inspection and Enforcement (DPIE), Public Works and Transportation (DPWT), and the Prince George’s County Public Schools (PGCPS).

Climate Change and Resiliency. At the same time, the County worked to respond to a growing public awareness of changing weather patterns that had been predicted by models of climate change due to the warming of the planet. The national context included federal agency support as directed by President Obama. Although there was a failure to pass federal legislation mandating state and local action, “Snowmageddon” in 2010, the 2013 derecho, the polar vortex, and other annual severe storms provided an immediate context over time to support local measures that increase resiliency, encourage sustainable communities, and reduce the County’s carbon footprint. By doing so, the County was also responding to Maryland laws such as the Greenhouse Gas Emissions Reduction Act (GGERA) and the Renewable Portfolio Standard (RPS), which encouraged local measures of implementation. Efforts to increase energy efficiency also had the clear value of reducing costs of county operations, and saving money for ratepayers and taxpayers.

Many of these efforts were led by the Office of Central Services (OCS) and were directed across all County agencies to reduce energy budgets. DoE hosted a workshop that brought experts from the Federal Emergency Management Administration (FEMA) to work with property owners to raise awareness of flood risk, provide guidance on how to protect properties and reduce flood insurance costs. County Council members and Maryland National Capital Park and Planning Commission (MNCPPC) led “Smart Growth” planning efforts aimed at reducing vehicle miles traveled (VMT) and car emissions, which had the ancillary public health benefit of reduced air pollution, and the economic development benefits of transit-oriented development (TOD), especially at the fifteen Metro and seven MARC Stations in the County. There were also the noted health benefits of creating walkable and bikeable communities where Prince George’s residents could live, work and play in their neighborhoods with reduced dependency

on automobiles. Reducing the demand for parking had the additional potential benefit of reducing paved parking spaces, thus reducing paved surface stormwater runoff. By better consolidating development and redevelopment into priority growth tiers (also as promoted in State planning policy), the County worked towards concentrating growth to increase availability of green space in the form of both parkland and agricultural areas of the County.

A Growing Network of Activism Supporting Local Food Sustainability. This planning work to concentrate growth coincided with a growing network of working farms with an educational component within the County, from traditional research acreage such as the Beltsville Agricultural Research Center and University of Maryland's Prince George's County Extension Farm (part of which is now known as Terp Farm), joined by the Chesapeake Bay Foundation's Claggett Farm, the Alice Ferguson Foundation's Hard Bargain Farm, the Accokeek Foundation's colonial farm and eco-farm, and two locations for Eco-City Farms. Those farms are also linked to community gardens in many municipalities, with plans for many more cropping up throughout the County. The growing interest in healthy farm produce with an educational link has resulted in many projects, including a recently funded student community garden at Parkdale High School which will develop Prince George's environmental health curriculum, as well as reduce polluted runoff into the nearby Briers Mill Run, a tributary of the Northeast Branch of the Anacostia River.

Farmers markets in the County have increased and expanded in recent years, with the municipality of College Park alone quadrupling from one farmers market in 2009 to four in 2015, including a student-run market on campus, one in the northern end of the City, and another at the City Hall parking lot site on Sundays, adding to the original Saturday site on the east end of the City). The University of Maryland's Dining Services has developed innovative links to local farms, and to the University's Terp Farm located off-campus in the County, providing learning opportunities for undergraduate students and developing new interest in farm careers among the student body, many of whom do not have an agricultural background. The development of the Food Equity Council and the increased interest among elected officials bodes well in a shift in planning decision-making that may increase the protection of an agricultural tier in the County, along with a significant infrastructure of urban farms dotting the more developed areas of the County.

The Prince George's Chamber of Commerce, the University of Maryland, the County government and many non-profits have also addressed the areas within the County where the access to healthy food is significantly limited. The interesting collaboration of for-profit, non-profit, governmental and individual residents in taking on food access issues may be helping to develop a model for County policy that might be applied statewide, and even nationally. As will be discussed in later sections of this report, food policy touches on all three pillars of sustainability.

Transportation and the Potential of Transit-Oriented Development. With fifteen Metro stations in the County, most of which are significantly under-developed, Prince George's County may have the greatest potential for increase in transit-oriented development in the Washington

Metropolitan Area, and possibly in the State of Maryland. The County has already made great effort to address inequitable development in the Washington area, but the inequity reflects longstanding growth patterns in the national capital region. Among the Metro stations in the County, New Carrollton is a shining example of a potentially powerful, multi-modal located at the intersection of the significant and historic east west highway Route 50 and the Capital Beltway (Interstate 495), as well as its eventual advantage as the link between the Orange and Purple Lines.

The University of Maryland Environmental Finance Center's Collaborative Approach with the County. Collectively, all of the above-referenced accomplishments are noteworthy, but they do not capture the true framework of sustainability practices that can be found throughout Prince George's County government. The bulk of this report considers nine County agencies, outside of the extensive work of the County's Department of the Environment. The nine County agencies addressed include: Maryland National Capital Park and Planning Commission; the Office of Central Services; the Department of Public Works and Transportation; the Department of Permits, Inspection and Enforcement; the Department of Housing and Community Development; the Redevelopment Authority; the Office of Homeland Security; the Department of Health; and the Prince George's County Public School System.

In all, dozens of interviews were conducted with designees of the nine agencies, accompanied by review of their websites. In the spirit of collaboration, the nine agencies were chosen with the input of the Prince George's County Government, in part in the interest of establishing helpful parameters to what otherwise could have been a significantly larger undertaking. The nine agencies' Directors were asked to be interviewed or assign interview designees by Prince George's County Chief Administrative Officer Nicholas Majett. The initial interviews were largely conducted over a four-month period from October 2015 to January 2016. The final initial interview with the Department of Housing and Community Development was conducted on February 22 with Director Eric Brown.

Part of the purpose of the initial interviews was to identify sustainability initiative highlights in each department or agency. After the initial interview, follow up conversations, emails and additional interviews were conducted with identified additional staff experts. Reviews and revisions of the initial agency write-ups were conducted over the months of March and April 2016 – with a great deal of input sought and received by Prince George's County staff. This report is broken into three pillars of sustainability – social, economic and environmental issues. It is in the nature of sustainability work that the categories of any of the pillars would span virtually any agency's work. For the purposes of this report, the nine agencies are described within the pillar in which they might best fit, but each of the departments were asked questions that related to all three of the pillars. One agency, the Maryland National Capital Park and Planning Commission, was split into three pillars, as the two divisions under closest scrutiny were easily divided by principal mission. The Planning Division fell mostly under the economic pillar of sustainability, Parks under the environment and Recreation under social well-being.

Each of the three pillars of sustainability sections of this report include a sidebar of exploration. The first, in the section on Social Well-Being, looks at the Transforming Neighborhood Initiative focus on six socio-economically challenged communities within the County. The second, in the section on Economic Vitality, is a quick review of the potential for expanded collaboration with the twenty-seven municipalities in the County, which are already prioritized in the County's growth planning. The third, in the Environmental Protection section, briefly examines the significant potential role of food and agriculture in Prince George's in the protection and restoration of natural resources. This report finds that these three areas of County-level, cross-agency policy engagement demonstrate an innovative and effective approach to create community-driven collaborations.

A final sidebar exploration appears in the concluding section. A goal of this report was to reflect on collaboration within the County with major stakeholders, of which there are many. The flagship campus of the University System of Maryland seemed worthy as final observation regarding the potential for a substantial scaling-up of the already dramatic rise in sustainability practices in Prince George's County.

Part 3: Social Well-Being

The UN Commission for Sustainable Development (UNCSD, 1996) describes five categories of “social” within this pillar of sustainability. These are: 1) combating poverty; 2) maintaining a sustainable demographics dynamic; 3) protecting human health; 4) promoting human settlement; and, 5) promoting education, public awareness and training. At the local level of government, in Prince George’s County and elsewhere, social sustainability has meant taking on the causes and symptoms of poverty, nurturing a healthy demographic mix, and working to make sure that there is access to quality, affordable health care, with an unspoken goal that all people can thrive while living in Prince George’s County. The County works to provide comprehensive education and training to raise awareness and engage the public in these efforts.

The Transforming Neighborhoods Initiative (TNI) is one instance of a County effort aimed at providing additional support to those who live in disadvantaged communities in unincorporated areas of the County. For this section, County agencies that focus on social well-being were interviewed to develop a sense of how Prince George’s County is addressing the social pillar of sustainability, and which clearly overlap with the pillars of economic and environmental stability.

The Office of Homeland Security: Two Potentially Catastrophic Water Infrastructure Failures.

On January 31, 2013, after heavy rain, the Washington Suburban Sanitary Commission (WSSC) released water from the T. Howard Duckett Dam on the Patuxent River, upstream of the City of Laurel in Prince George’s County. Both the City of Laurel and the Prince George’s County government provided emergency response for this event. The dam release resulted in an increase in river stage along the Patuxent River. During the course of this event, one person drowned, and residents and businesses experienced damages. WSSC’s deemed it a natural disaster; the heavy rainfall had required the water release from reservoir to protect the dam’s infrastructural integrity.

Extreme weather events that have impacts on the natural and built environment will continue to be an issue in Prince George’s County. The T. Howard Duckett is the largest dam in Prince George’s County, and its collapse would cause a disaster that would likely dwarf previous impacts of storms for loss of life and property and negative impact on County water resources. The dam, built from 1952 to 1955 following the earlier construction of Brighton Dam, its older upstream sibling facility on the Patuxent, was created as a source of drinking water that backed up the supply of the Potomac River to its south. The dam is 840 feet across and 131 feet high with seven floodgates. The Rocky Gorge Reservoir behind the dam is a nine-mile-long reservoir with storage capacity of six billion gallons and reaches depths of up to 125 feet. A July 2013 profile of WSSC staff in the *Baltimore Sun* noted that electing to open the floodgates is a difficult decision. The problem is not going away soon, as extreme rain events will be predictably more frequent as an effect of climate change.ⁱ

In an interview, then-Director Brian Moe of Prince George's County Office of Homeland Security (OHS) noted that the Patuxent dam release is one of two critical WSSC-related water infrastructure emergencies to which the County has responded in 2013.

Roughly six and a half months after the 2013 flood following the Duckett Dam release, on the hot Monday night of July 15, the WSSC announced that a four and a half foot main drinking water distribution line was about to fail, and that they would need to shut off water to fix the problem. This line supplies over 100,000 people in much of the southern and western parts of Prince George's-

Due to the extremely hot weather conditions, emergency shelters were immediately identified and staffed. As a spokesperson for County Executive Baker put it at the time, the "economic impact of this event will be the equivalent of a natural disaster hitting the county."ⁱⁱ The restaurants and hotels at National Harbor and the surrounding area were required to reroute their guests and essentially shut down for days. The incident raised the profile of water as an essential resource – reminding the Washington area of something that many parts of the world are reminded of on a daily basis.

The underground pipe was nearly 50 years old, and a series of pipe breaks throughout the Washington Metropolitan Area are a local manifestation of the United States' aging national water infrastructure,¹ for which there is no immediately evident federal funding solution. The incident in southern Prince George's highlighted how as a resiliency and sustainability issue, water infrastructure has a high emergency potential, especially in times of stress on the system. Both incidents pointed to Homeland Security and Emergency Management importance planning for to the likely increase in "natural" disasters in the coming years.

The OHS has the primary responsibility and authority for directing county-wide activities pertaining to the preparedness, prevention of, and the protection from natural and terrorist threats and events. The work clearly relates to the environmental pillar of sustainability due to water pollution (e.g. emergency calls related to wastewater sewer breaks, sediment and erosion control and other stormwater pollution, including from construction sites during heavy rain events and flooding, and drinking water pipe breaks). The inherently untreated water infrastructure releases into local waters can cause harm to biohabitat (nitrogen and sediment from wastewater and stormwater, and chlorine from drinking water, among many possible contaminants). In addition, tree loss from high winds, heavy snowfall or flooding loses the values of carbon storage, reduced erosion, and aesthetic pleasure, are among the other costs. While OHS does not measure natural resource loss, it is a good metric of the quantity and severity of storm events, at least as they relate to call volume and calls for county services.

The relation of OHS to public health and the pillar of social well-being is the most clear as it directly involves trips to the hospital, and responses to storm events, accidents, overdoses,

¹ <http://www.infrastructurereportcard.org/>

criminal activity. The engagement of OHS in each of the six TNI communities offers potential examples of those measurements (see TNI sidebar).

Finally, but not least importantly, OHS coordination of emergency response relates to loss of property (wind, flooding, fire) and economic development (business costs due to wastewater backups and/or stormwater flooding, the loss of water due to shortage or distribution line breaks). Viewed holistically, a thorough planning exercise projecting three decades of climate-change modeling worst case scenarios could help gauge potential avoidance of future losses based on investments in the coming five years. Stronger building codes, water infrastructure needs assessment, analysis of job support potential for investments, and phased-in approaches to planning for revitalizing existing communities.

Part of this planning could also be related to zoning (avoiding building in flood prone areas being the most obvious example, while also including more stringent codes for zones that reflect existing community investment). The Department of Environment's hosting of a Federal Emergency Management Agency (FEMA) workshop in 2015 was an example of a low-cost measure currently being taken by the County. Using the metrics of OHS for responses related to resiliency and sustainability could make this agency an important facilitator of investments that will save lives, protect property, and improve the quality of life in Prince George's County.

The Department of Health. The declaration of a "Healthy Revolution" in Prince George's County was a messaging effort that implied a significant emphasis on personal responsibility in preventive health care. County policy supportive of individual action includes a number of programs which residents can take advantage of, many involving partnerships with agencies other than the Department of Health.

Data generated between 2005 and 2009 may serve to inform an assessment of public health in the County (at least at that time). The County population of just under 835,000 had a median income (\$70,753) a little better than the State's median income (\$69,475), and a lower percentage of residents living in poverty (7.2%) than the State's (8%). The County's racial mix is roughly the reverse of such mix for Maryland (23.3% "White" in Prince George's to the State's 60.9%; 63.8% "African American" to the State's 28.8%) with roughly twice as many "Hispanics" (12.2% in the County to 6.6% in the State). The average County resident's life expectancy at birth was a little less than the average life expectancy for a State resident in 2008 (77.4 years to 78.1 years).

On the whole, health metrics are an excellent indicator of sustainability, and can serve as a meaningful diagnostic tool to address issues of local concern. From pre-natal care to adulthood, access to health care information, healthy food and exercise, mental and family health resources (including substance abuse education, prevention and treatment) is part of a holistic health toolkit which the County strives to deliver. These local health care initiatives receive significant support from State and federally-funded programs.

Access to health care has been identified as a significant issue in the County, and the new hospital to be operated by the University of Maryland Medical System in the center of the County promises to enhance access to quality health care resources. The scheduled arrival of the hospital, as early as 2020, will give rise to new economic opportunities and expanded health care services for County residents. The hospital will provide jobs, associated economic development, and will further engage the University of Maryland in wellness throughout the County. This new hospital promises to position the County for a more sustainable future.²

Environmental Health and Food Systems. The Health Department may respond to, and track health indicators that may result from environmental health issues, and food system challenges. The State of Maryland has designated parts of Central Prince George's County as an Environmental Benefits District (EBD) and was moved to highlight efforts to remediate the number of brownfields sites and other indications of environmental hazards in an effort related to pollution prevention.³ The County response and role in providing equitable recreation space, land use, and economic development is primarily a role of the Prince George's County Planning Department within the Maryland National Capital Park and Planning Commission which is reviewed in the Economic Section of this report. However, the location of communities near facilities that are permitted to emit pollution poses a substantial challenge for policymakers attempting to achieve equity in local decision-making. For example, the Cedar Heights community along Sheriff Road has long expressed concerns to the Maryland Department of Environment about the poor air quality conditions, high volume of truck traffic and unsightly conditions at a neighboring industrial site. Without power over local zoning or State legislation allowing consideration of aggregated/cumulative impacts of adverse environmental and quality of life conditions, the end result of the facilitated community process remains unclear.⁴

The Health Department plays little if any role in regulating the health impacts of any permitted facilities. The nexus of environmental health and public health is a good example of the likely need for better coordinated federal, State and County regulatory protections.

The Health Department does play a role in licensing food establishments, in coordination with the Department of Permits, Inspections and Enforcement (DPIE), and can play a useful role in helping to facilitate the local production and distribution of healthy food. Particularly in coordination with Prince George's County Public Schools, the Health Department can expand

² <http://www.baltimoresun.com/health/bs-hs-laurel-regional-hospital-20151106-story.html>

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<http://www.mde.state.md.us/programs/Water/QualityFinancing/Documents/www.mde.state.md.us/EBD%20combined.pdf>

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http://www.mde.state.md.us/programs/CrossMedia/EnvironmentalJustice/EJImplementationinMaryland/Documents/www.mde.state.md.us/assets/document/environmental_justice/CEJSC_2009_2010_Annual_Report.pdf

upon its current efforts of working with school health officials to promote healthy nutrition and exercise.

Prince George’s County Public Schools: Environmental Literacy and Preparing a Sustainable Workforce. Within just the operations of Prince George’s County Public Schools (PGCPS), the County plays a critical role in providing opportunities for sustainable action, training and education. There are now seventy-one “Green Schools” in Prince George’s.⁵ As described by the Maryland Association for Environmental and Outdoor Education (MAEOE) website, the nationally recognized Maryland Green Schools Award Program (MDGS) “allows schools and their communities to evaluate their efforts in environmental sustainability. Participating schools empower youth to make changes to reduce environmental impact, encourage sustainability and foster environmental literacy.” The program provides a good measure of the level of sustainability in Prince George’s County, and will enable the County to track its efforts in future years. The program focuses on environmental instruction, behavior changes, water and energy conservation and pollution reduction, reduced emissions, and other actions that result in positive environmental changes in a learning environment.

The University of Maryland in College Park Office of Sustainability has a K-12 partnership with Prince George’s County Public Schools that matches a Prince George’s public school with University students, faculty and staff to create a new “Green School.”

The expansion and success of the William S. Schmidt Center in spreading environmental literacy to schools in PGCPS is a direct result of the leadership and vision of the CEO, Dr. Kevin Maxwell. The Schmidt Center, also known as Camp Schmidt, provides students “with a meaningful outdoor education experience that enhances as well as reinforces skills learned in the classroom.” Dr. Maxwell has also been able to focus on other initiatives that will increase student achievement and position PGCPS as an educational leader in the state. The Schmidt Center also works to increase student appreciation and awareness of the outdoors and the environment, and to better inform them about decisions affecting natural resources.⁶

In 2011, Maryland became the first state in the nation to require local school systems to provide a preK-12 comprehensive, multi-disciplinary environmental education program. Curriculum in Prince George’s Schools and at the Schmidt Center include environmental literacy, a state graduation requirement of the Maryland State Department of Education.

With a significant number of free and reduced meal (FARM) recipients, the schools play an important role in providing for nutrition needs of the youth of the County. Budgets and health codes seem to be impediments to getting more locally grown healthy food to school lunchrooms, and persistent efforts by the Food Equity Council and others have a real possibility of improving school-based nutrition and health efforts.

⁵ <http://maeoe.org/complete-green-schools-list/#george>

⁶ <http://maeoe.org/green-centers-list/#george>

The school system's efforts for workplace development has included an Agricultural Conservation Corps at Gwynn Park and Oxon Hill High Schools with the Accokeek Foundation's Eco-Farm. Students learned animal husbandry, soil nutrient management, food preparation and other skills that could lead to future academic study and/or career paths. The program also teaches the historic contexts of the farms, and this interdisciplinary approach connects the students to a much greater framework of learning. Another integrated approach can be found at Parkdale High School, where a student project to create a garden has been designed to also reduce runoff to Brier's Mill Run, a nearby stream that flows into the Northeast Branch of the Anacostia River. Students are learning about food, agriculture, and water management, among other topics. Students across the stream in William Wirt Middle School are next to two gardens run by the University of Maryland Extension, one of which is used by immigrants from other countries.

Recreation Division, Prince George's Department of Parks and Recreation, MNCPPC. The Maryland National Capital Park and Planning Commission (MNCPPC) was created by the Maryland state legislature for the purpose of providing nature preservation and planning for Prince George's and Montgomery Counties. Prince George's County enjoys its own Department of Parks and Recreation, as well as Planning Department. The part of MNCPPC that most corresponds with social well-being is the Department of Parks and Recreation.

There is a resiliency aspect to the Department's indoor community centers, which can serve as shelter space in time of natural disaster. In general, the Department's community centers serve as Sustainable Space locations, providing health and recreation programming, education, as well as shelter in emergencies. Youth recreation is often seen as a deterrent to juvenile crime, and is closely linked to both education and public safety in after-school programming. The outdoor ball fields serve as green space for many Prince George's communities, and are often next to picnic facilities that provide a community space for celebrations, family reunions or other gatherings. Sports can provide a sense of community and purpose, as well as entertainment, and the growing immigrant population has resulted in an explosion in the use of soccer fields.

Other green space includes the larger parks such as Watkins Regional Park, Prince George's County's largest County park, and a large number of smaller parks in communities throughout the County. Some, like College Park's Lake Artemesia, serve as both a water management facility and a passive recreational park, enjoyed by cyclists, roller skaters, walkers and runners. Lake Artemesia's trail system is linked to the increasingly popular Anacostia Trail System, which will soon link the Northeast Branch tributaries of Paint Branch and Indian Creek to the Northwest Branch and Sligo Creek trails that follow creeks up into the northern half of Montgomery County. The system will also soon link to the District of Columbia trail system, enabling bicyclists, including commuters to travel by path to Capitol Hill and beyond. These maintained and landscaped natural resource protected areas, especially the trees of the forested parks, provide both clean air and water benefits, as well as amenities that add to property values in nearby communities, and therefore to economic development. Parks and

Recreation is an agency devoted to social well-being, but clearly related to environmental protection and economic vitality as well.

Leveraging Assets: The Transforming Neighborhoods Initiative in Prince George's. One of Prince George's County most innovative community initiatives under the leadership of Rushern Baker has been the creation of TNI communities. TNI stands for the Transforming Neighborhoods Initiative, launched in April, 2012 during the second year of the Baker Administration. The program grew out of an earlier public safety initiative focusing on areas with the highest incidents of violent crime. This effort evolved towards a more holistic preventive approach, focusing on health, education, economic development and public safety.

TNI took a sustainability approach by breaking out of a historical pattern of siloed responses to interlocking issues that explicitly involve both economic and social-being pillars, and implicitly embeds the environment and natural resources as they apply to the four named focuses. The four years since the launch has created the track record for the commitment of multiple agencies to working with the six communities towards safer and healthier communities, good schools and thriving economic development.

All of the communities are inside the Beltway (I-495), three (Langley Park, East Riverdale-Bladensburg and Kentland-Palmer Park) are in the northern half of Prince George's, and the other three (Suitland-Coral Hills, Hillcrest Heights-Marlow Heights, and Glassmanor-Oxon Hill) border the District of Columbia in the southern half of the County. Each TNI community has a team of County staff assigned to work with residents and local leaders in the development and implementation of Neighborhood Action Plans (NAPs), and each team was led by a different member of County Executive Baker's administration, creating a dynamic of ongoing engagement by the top level of County government.

The goals of improving key indicators in the targeted areas of violent crime, property crime, 3rd and 5th grade reading and math scores, school absentee rates, foreclosure rates, the concentration of Section 8 housing, income levels, pedestrian deaths and injuries, and residents on public assistance are refreshingly specific and measurable. The timeline for implementation of the NAPs and the use of CountyStat sessions to track success are less clear on the County's TNI web page. Through interviews with County staff, it is clear that agencies were aware of, engaged in, and proud of their involvement in the TNI community to which they were assigned. An unsurprising challenge of the program has been that the TNI did not include the hiring of additional staff because of ongoing budget challenges, and the engaged staff have fitted their TNI duties in to their ongoing work assignments. As the County's budget crisis eases, there is a potential to ramp up the implantation of the NAPs, track success, identify the causes of any lack of progress, and plan accordingly. If the TNI program proves to demonstrate continued success, it might be exported to other counties and serve as a model of engagement with socio-economically struggling communities, and as a more holistic methodology for local governments to build sustainable communities even for those with the least resources.

Part 4: Economic Vitality

Quality, affordable housing as a right for all would be a benchmark of a sustainable Prince George's County.

The economic pillar of sustainability can be thought of as the business of staying in business.⁷ For a local government such as Prince George's County, economic sustainability might be more broadly described as a measure of the ability to provide quality services with ample revenues to pay for them. The importance of generating tax revenue is clear to all who observe the decision-making process, a reality that is certainly not unique to Prince George's County.

This section will describe three agencies; the Prince George's County Department of Housing and Development, the Redevelopment Authority, and the Prince George's Planning Division of the Maryland National Capital Park and Planning Commission. The three agencies are engaged in all three pillars of sustainability, but can easily be seen as being primarily focused on economic development.

Department of Housing and Community Development. One of the key roles of the Department of Housing and Community Development is its operation of the Housing Authority of Prince George's County (HAPGC), charged with providing housing assistance in the County. The Housing Assistance Division (HAD) manages five public housing sites that consist of 376 units. The five sites are located at: 1) 1100 Owens Road; 2) Cottage City Towers; 3) Rollingcrest Village; 4) Marlborough Towne; and, 5) Kimberly Gardens.

HAPGC also issues Housing Choice Vouchers (HCV), and in October, 2015, received applications from 39,260 households to be chosen through a lottery to be placed on a waitlist of 5,000 for vouchers. The applications were printed in 60 languages, which gives a sense of the scope of diversity within communities within the County. Tenants with a voucher can use the assistance to live where they choose, but must make up the difference if they choose to rent a unit that costs more than a standard set amount.

The County is experiencing the twin and somewhat paradoxical challenges that combine a disproportionate regional proportion of affordable housing with the inability to serve all those in need of housing assistance. A greater amount of affordable housing in neighboring jurisdictions would clearly benefit Prince George's. Equally clear is that in the current situation where over 34,000 households will not be able to receive vouchers, there is a need to either find more assistance or identify job opportunities and better paying jobs so that the population no longer requires such aid. For many of the residents who need housing assistance, job training and the availability of jobs that are lower skilled and/or that do not require higher education must be identified. The ideal workforce development in the County for a sustainable and resilient economy will require a wide spectrum of job skills. Quality, affordable housing as a right for all would be a benchmark of a sustainable Prince George's County.

⁷ http://isites.harvard.edu/fs/docs/icb.topic140232.files/RD_economic_sustain.pdf

There is also a clear relationship to the availability of federal and state resources, as the money for the Housing Authority comes from federal Housing and Urban Development funding. This dependence on federal funding is likely common among local jurisdictions throughout the United States, but raises the question of whether there could be a more efficient economic model where Prince George's County provided its own housing assistance.

The relationship between low-income communities and a greater vulnerability to storm events and disaster results in a reduction in overall resiliency due to a lack of resources or community capacity. Wealthier communities may enjoy individual generators during a power outage, or may have the ability to temporarily leave town to avoid a pending big storm. The vulnerability concerns of low-income communities becomes also immediately apparent in storm events due to the lack of transportation options (e.g. impassible streets) and greater health care needs. The six Transforming Neighborhood Initiative (TNI) communities are exploring innovative approaches to bringing resources that build resiliency and capacity to a greater percentage of the County's most vulnerable communities, such as focusing in on specific public safety issues that can be addressed through preventive police and fire practices rather than purely reactive responses during emergency situations.

The Redevelopment Authority of Prince George's County. The Prince George's Department of Housing and Community Development also contains the Redevelopment Authority of Prince George's County (RDA). As its name implies, the RDA targets support to redevelopment, displaying the County's priority to support existing communities in efforts that enhance overall economic growth. The RDA's current Executive Director Howard Ways was previously the Sustainability Director of the University of the District Columbia, and the Authority's recent work has shown an emphasis on green redevelopment.

Net Zero Energy House at 3413 Glenn Drive in Suitland was selected as part of the 2015 GREENBUILD International Conference and Expo offsite educational tour on November 20. The 100 year-old home was redesigned to produce as much energy as it consumes in a year, meet Energy Star and LEED Platinum Standards, and provide superior energy savings, water efficiency and a healthy living environment. The home has a utility bill that is virtually zero.

The RDA held a groundbreaking ceremony in the municipality of Mount Rainier during November at a second Net Zero House. The two events showcased the opportunity for green revitalization while renewing the County's older and existing communities and housing stock. Smart growth principles stress the wisdom of concentrating economic growth in existing communities as a means of more efficiently utilizing already-built transportation, water and energy infrastructure, as well as minimizing vehicle miles traveled and therefore energy consumption and mobile sources of emissions of pollution.

The RDA has built relationships with municipalities in the County, with financial institutions and with developers, promoting collaborative approaches that illustrate the power of public, private and intergovernmental partnership. The locations and partnerships of RDA projects are

illustrating a County sustainability best practice for achieving environmental goals that create healthy living environments and build community while strengthening economic development.

Prince George's Planning Department (MNCPPC). The tasks of providing the analysis and recommendations for decisions on transportation and land use fall to the Prince George's Planning Department of the Maryland National Capital Park and Planning Commission (MNCPPC). The final decisions are typically made by the Planning Board, though appeals are sent to the District Council, with the Prince George's County Council sitting as the final deciding body. The County adopted PLAN Prince George's 2035 in May, 2014. As its name suggests, the Plan guides decision-making on zoning and development for the next two decades, and is an update of the previous 2002 approved plan. Staff is currently working on an extensive Zoning Rewrite. The new plan expanded from 27 centers for growth to 34, many of which are transit-oriented.

The Planning Division is also currently working on a Resource Conservation Plan which further underscores the effort to protect green space in the County, especially in strategic areas that benefit water resources, rural legacy and viewsheds such as the Potomac River. In a sustainable Prince George's, efforts will need to be expanded to zone to protect or restore wetlands, and stream and river buffers.

The value of environmental protection through transportation and land use planning is found in the common sense experience that it is less expensive to prevent pollution than it is to clean it up. Though airsheds carry pollutants from emissions generated hundreds of miles away, local air is affected by mobile sources of emissions generated locally. Prince George's has Interstate 95, the major north-south vehicle transportation corridor of the eastern portion of the United States, traversing the county from the northern border with Howard County to the Potomac River southern border. I-95 is bisected by Route 50, one of the country's older but still well-traveled east-west routes across the United States, from the eastern border with Anne Arundel County on the Patuxent River to the western border at the District of Columbia. In addition to being well-traveled national, interstate routes, they carry much local traffic as well.

The move to transit-oriented development in Prince George's County is partly driven by the public demand to reduce traffic congestion, which will be improved if the County discourages or prohibits new growth in areas far from transit centers or existing communities and create density at Prince George's County Metro Stations. The County is the 208th wealthiest by per capita income in the United States,⁸ but is close to wealthier jurisdictions with better-performing and better-funded school districts,⁹ a vivid example of the entwined nature of the pillars of social well-being and economic vitality.

⁸ [*"SELECTED ECONOMIC CHARACTERISTICS 2009-2013 American Community Survey 5-Year Estimates"*](#). U.S. Census Bureau. Retrieved 2015-01-12.

⁹ <http://www.brookings.edu/research/reports/1999/07/washington-dc>

The Planning Division strives to achieve triple-bottom-line sustainability goals through work encompassing environmental protection, historic preservation, viewsheds, and public health through recreational spaces, as well as seeks to reach an appropriate rural, suburban and urban balance. Fulfillment of these sector, master or general plans are hampered by market forces, which the Planning Division works to address through an emphasis on creating place and density at transit centers, and by promoting a relationship of a healthy food system, green space, and economic development. Through the creation of the Food Equity Council and persistent work by MNCPPC staff, there is a growing public demand for healthy local produce, farmers markets, community garden, permaculture, educational farms, agricultural-related curriculum and addressing healthy food access inequities.

Leveraging Assets: The Municipalities of Prince George's. Of the 157 municipalities in Maryland, 27 are located in Prince George's County, the most of any county in the State. Their range of history, population and demographics demonstrates the diversity of the County, but all have been exposed to issues of resiliency and all have in some way responded via the three pillars of sustainability. Coordinating these localized responses and building synergy within County government efforts stand as another example of an opportunity for action found in research of the past year.

Sustainable Maryland (SM), a program of the Environmental Finance Center, has reached out to every municipality in Prince George's County, and has held leadership trainings for Green Teams created by participating towns and cities. At the March, 2016 "Green Team Summit", representatives of seventeen towns and two unincorporated communities were joined by Environmental Finance Center staff and Prince George's County Department of the Environment personnel, including its director Adam Ortiz. The 2016 Summit featured discussion of ways that the municipalities might work together and learn from each other's efforts, and the presence of County staff bolstered the level of engagement by the County with municipal actions.

The communities of Laurel, Bowie, Upper Marlboro and Eagle Harbor are municipalities that regularly experience Patuxent River flooding of various kinds during rain events, and thus have a special self-interest in adaptive management of flood events. Local emergency responses are already coordinated with the County (and during especially significant events, with state and national measures), but could be strengthened by a more coordinated effort founded in the fabric of the SM program.

Municipalities have already worked together on sustainability projects informally, and through more formally structured relationships such as the Port Towns (Bladensburg, Colmar Manor, Cottage City and Edmonston) or Four Cities (Berwyn Heights, College Park, Greenbelt and New Carrollton) efforts, and building upon such networked relationships provides promise, particularly as it relates to economic development, transportation, watersheds and other cross-jurisdictional challenges and opportunities. The Port Towns share geographic proximity and historical ties to the river port at the confluence of the Northwest and Northeast Branches of the Anacostia River. The Four Cities communities have jointly purchased a street sweeper to

increase the affordability of reduction of trash and other contaminated runoff from town streets.

The Prince George's County Municipal Association (PGCMA) is the County chapter of the Maryland Municipal League, and could be engaged as an umbrella conduit towards more coordinated municipal activity. Each jurisdiction has its unique history and conditions, and this may have been a barrier to previous coordinated engagement, but the common concerns provide an opportunity to explore better coordinated planning towards sustainability and resiliency.

Building upon the work of recent Sustainable Maryland, PGCMA and/or County effort is likely the most efficient way of advancing a strategy of enhanced sustainability and resiliency effort in Prince George's County. Increasing connectivity between communities, both literally (e.g. hiker/biker trails, better mass transit) and figuratively (e.g. coordinated procurement, joint activities) will strengthen the sense of shared community in Prince George's, build efficiencies across County processes and activities and save money for investments in and the financing of sustainability and resiliency in the County.

Part 5: Environmental Protection

Though a truly integrated approach would consider each pillar equally, sustainability and resilience are most often siloed within the environmental pillar. Life is unsustainable without clean air and water, biohabitat and protected natural resources. Social well-being and economic vitality are essential to achieving environmental goals with the maximum co-benefit and efficiency. For example, economic distress or a health epidemic will quickly cause communities to lose interest in investments in natural resources, and will understandably focus public demand to use public resources for immediate relief. This environmental section of this report considers the Prince George's County Office of Central Services (OCS), the Department of Public Works and Transportation (DPWT), the Department of Permitting, Inspection and Enforcement (DPIE), and the Parks Division of the Prince George's Department of Parks and Recreation under the Maryland National Capital Park and Planning Commission. To a greater extent than previous sections, this report will describe co-benefits and efficiencies gained through the sustainable practices of Prince George's County's government.

Office of Central Services: Sustainable Energy Program. The plans, policies and laws that direct the work of the Sustainable Energy Program within the Office of Central Services originated from a mixture of national, state and local governmental initiatives. In December 2009, the County developed and adopted an Energy Efficiency and Conservation Strategy to define the mission and process for achieving greater energy-efficiency and carbon reduction throughout the County.

In 2013, the County Council approved the Clean Renewable Energy Technology in Public Buildings Law ([Clean Renewable Energy Technology in Public Buildings law](#)) and the Smart Energy Communities Policy and Petroleum Reduction and Renewable Energy Action Plan ([Smart Energy Communities Policy and Petroleum Reduction and Renewable Energy Action Plan](#).) The Public Buildings legislation made Prince George's County the first jurisdiction in the State of Maryland to mandate clean energy systems in newly constructed government buildings and major renovations of government buildings, requiring the incorporation of clean renewable energy technology, such as solar PV or thermal, wind, and geothermal applications.

The Smart Energy Communities policy and action was the County's declaration that it intended to be a leader in Maryland in reducing County government transportation petroleum consumption and increasing renewable energy generation by partnering with the Maryland Energy Administration (MEA) and enrolling as a Smart Energy Community.

Finally, the Energy Policy for Government Operations seeks to reduce overall energy consumption and increase energy savings in County-owned buildings and its fleet. It includes a combination of mandatory procedures and optional conservation measures, assigning specific responsibilities to senior management and other staff.

Prince George's County participation as a Smart Energy Community specifically resulted in \$649,000 in State grant funding to perform the following:

- Purchase of 6 plug-in hybrid electric vehicles and installation of 3 dual-head electric vehicle charging stations at 9400 Peppercorn Drive;
- Installation of a solar photovoltaic (PV) system at the Animal Shelter; and,
- Installation of 11 energy-efficient HVAC systems at Rollingcrest Village, a senior citizen public housing complex.

Working with the United States Department of Energy and the Metropolitan Washington Council of Governments, the Sustainable Energy Program received a “rooftop solar challenge” grant with which it developed “The Solar Road Map,” a tool to reduce “soft costs” for increasing solar energy generation in Prince George’s. Soft costs include: a) permitting and interconnection processes; b) financing options; c) planning and zoning; and, d) net metering and interconnection standard.

The Facilities, Operations and Management (FOM) team replaced approximately 80 High Pressure Sodium (HPS) fixtures with energy-efficient LED fixtures in certain County facilities. The LED conversion project will save the County government approximately 121, 000 kWh and \$13,000 in energy/operation costs annually. The County also received rebates from Pepco's Lighting Rebate Program to offset capital and installation costs.

The solar projects have resulted in Prince George’s County leading Maryland and the jurisdictions of the Washington Metropolitan area in generation of solar energy. Prince George’s remarkable emergence as the State and regional clean renewable energy leader is notable.

Department of Public Works and Transportation. The weather impact on transportation infrastructure is evident to the public in many ways. Snow, rain, ice and flooding cause traffic tie-ups, accidents, and death. Freezing temperatures, snow and ice can cause potholes, which damage vehicles, cause accidents and are costly to repair. Heavy snow can shut down mass transit and roadways. Severe weather events predicted by climate change, and already experienced in recent years, lead to increased operation and maintenance costs for the County. It may be a good practice of economic resiliency planning for Prince George’s County’s Department of Public Works and Transportation (DPWT) to do long-range planning for budgets that factor in climate-change modeling, to anticipate and begin to plan for increased costs.

DPWT has been engaged in the planning and implementation of “complete” and “green” streets, highlighting the potential for transportation planning at the County level to save money by combining walkable, bikeable streets with reduced contaminated runoff through appropriate landscaping and energy-efficient lighting. Improving stormwater management is a function of the Prince George’s County Department of Environment (DOE), but DPWT is a critical partner, and transportation funding is an important part of achieving restored water quality in the County.

Along with partnering with DOE on the implementation of street design, DPWT is a significant player in the sustainable economic development of the County, as public transportation

investments and transit-oriented development can lead to reduced dependence on automobiles, and in turn, reduced air polluting greenhouse gas emissions. With fifteen Metro stations in the County, Prince George's is poised to be a leader in new development and redevelopment near Metro stations, which can save the County by spending transportation dollars on repairs and upgrades, including improved water management, that maintain the systems and help avoid costly emergency repairs, rather than on new County roads to new communities. These are decisions made by the Planning Board and District Council but have a significant impact on DPWT budgeting.

Department of Permitting, Inspections and Enforcement. Allowing businesses or individuals to pollute has long been codified through Clean Water Act and Clean Air Act permit regulations. The issuance of permits for air and water pollution is typically state level regulation, and not enforced by local government. The standards of building codes, permitting, enforcement and inspection is typically more linked to safety and aesthetic standards, but stormwater and health permits at the local level are related to sustainability and resilience.

The creation of the Department of Permitting, Inspections and Enforcement (DPIE) in the first term of the Baker Administration was designed to position "Prince George's County as a national leader in fostering economic development consistent with environmental stewardship. The enduring legacy of DPIE will be the lasting economic benefits to County residents and businesses resulting from a streamlined regulatory framework that ensures safe and sustainable development in the County."¹⁰ The agency was created by centralizing County personnel having permitting, inspections and enforcement functions in one agency. Personnel came from agencies such as the Department of Environmental Resources, the Washington Suburban Sanitary Commission, the Department of Public Works and Transportation, and the Department of Health.

In part, the agency was established to create a more friendly and efficient interaction with the public, both those who develop and potentially seek to bring tax base to the county as well as businesses and residents who seek permits for various purposes.

The development review is typically led by MNCPPC, but permit issuance is dependent on meeting certain criteria, sometimes related to natural resource protection. The balance between this goal and economic development is an ongoing tension, with developers and individuals typically seeking the least expensive way of achieving goals (such as building a house, a driveway, a fence, cutting down trees, serving food at restaurants, etc.)

Creating a resilient built environment is in part dependent upon the creation of new standards of building, both to withstand severe storm impacts, including high wind and flooding, and to incorporate healthy non-toxic building material and healthy construction practices.

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<http://www.princegeorgescountymd.gov/sites/DPIE/About/Organization%20History/Pages/default.aspx>

Parks Division of the Prince George's Department of Parks and Recreation (MNCPPC). The relationship of green space, park space and access to open space and water can be quite significant to a community's quality of life, and therefore relates to demand for such communities and the enhanced property values that result. The Parks Division of the Prince George's Department of Parks and Recreation of the Maryland National Capital Park and Planning Commission has a mission that happily relates to maintaining and promoting public space that celebrate natural resources.

The location of parks has an important function in relation to water bodies, as the trees in portions of parks can serve as buffers providing protection to those waters. As parks are part of a planning strategy, the location of these parks is not typically internally determined. Maintenance and functionality of the parks, and how well they are run, however, can determine levels of pollution, create good will for natural resource protection, and be an important part of local government strategy for sustainability and resilience.

Locating parks along waterways can provide a significant opportunity to address resource protection and restoration, and there are many examples of this practice in Prince George's County. Creating hiking and biking trail systems encourages those activities, therefore promoting public health through exercise, and potentially decreasing dependence on automobiles.

Prince George's County has had an award winning Parks and Recreation division during the past several years, and is proud of the Park System in the County.

Leveraging Assets: Sustainable Agriculture and Food Systems in Prince George's. Many counties in the state of Maryland have a challenge in preserving agricultural lands from rezoning and development for use as new residential, associated mixed-use or commercial development, or for use as industrial zoning for facilities that are unpopular to densely inhabited areas. As a County immediately adjacent to the nation's capital, the demand for suburban development that served a commuting population has been a planning consideration since the decades immediately following World War 2.

In addition, Prince George's agricultural tradition was tobacco and State legislative health considerations have resulted in the buyout of tobacco farms in the County. The combination of development demands and the decline of tobacco has led to a possible underestimation of the value of agriculture as a part of the County's future economic development. Fortunately, the combined goals of academic research, urban farming, smart growth advocacy (including support of dense, transit-oriented development and rural preservation and the consequential opposition to proposed sprawl), and demand for healthy produce at farmer's markets, in public schools and in stores and restaurants have resulted in demand for a robust sustainable agriculture and food systems support network.

The principal organizational manifestation of this coalition of agricultural support is the Food Equity Council, which grew out of a 2013 community task force in the Port Towns (Bladensburg, Edmonston, Colmar Manor and Cottage City) that looked at strategies for supporting healthy living. The decline of tobacco has provided an opportunity for farmers to consider new crops, and the abundance of research-oriented farms (including the University of Maryland's Terp Farm, the Chesapeake Bay Foundation's Claggett Farm, the Alice Ferguson Foundation's Hard Bargain Farm, the Accokeek Foundation's Ecosystem Farm and National Colonial Farm, and the vast Beltsville Agricultural Research Center of the United States Department of Agriculture) has created a laboratory-like opportunity to develop best practices for healthy food production and distribution that plays a significant role in the economic, environmental and social well-being pillars of sustainability.

The growing popularity of farmers markets may partly result in a place-making value in the creation of a sustainable town or city. Coupled with the increasing interest in community gardens, there is a sense of community embracement of agricultural food production and distribution that has not been seen since the growth of the suburbs in the middle of the last century. It is not an increasingly rural way of life, but a stronger connection between the farms, suburbs and urban areas of the County that can build a strong sense of shared community with a greater sense of networked interdependence.

Providing local markets for agriculture, preserving appropriate amounts of rural zoning, supporting urban farming, and providing robust nutritional education that builds knowledge of the multiple benefits of healthy eating are just a few of the many ways that Prince George's County can continue to develop a model of County-level policy support for sustainable agriculture production and distribution. The result will be a healthier, and more economically robust, countywide community.

Part 6: Opportunities and Recommendations

The recommendations of this report often include a need for additional funding, and this may be an inevitable result of interviews and follow-up that encouraged participating agencies to provide “wish lists,” and other aspirational thinking. Prince George’s County deserves great credit for doing as much as it has in a period where the County budget has been severely constrained.

Where possible, the following recommendations are an attempt at balancing realism with recognizing the needs. Interviews beyond the nine agencies of focus revealed an interest in considering the Prince George’s County Revenue Authority as a means of generating bonds for the upfront costs of sustainability investments, with the obvious caveat that there being a dedicated means of paying off the bond.

This investigation clearly confirms that Prince George's County is doing an extensive amount of sustainability-related work, and that there are opportunities within each participating agency to improve and expand these efforts. In addition to the agency-specific opportunities identified below, there is an overarching recommendation that the County may want to consider -- establishing a Sustainability Coordinator as a permanent, full time staff position. This would be a position that serves as the lead person responsible for building a more sustainable, resilient County and coordinates the County activities that support this. The primary focus of the Sustainability Coordinator's efforts would be to manage the complexities associated with the many agencies, organizations, stakeholders, timeline and lines of communication involved in the implementation of activities that advance sustainability efforts. This individual can also serve as the point person for looking holistically at all County efforts with a sustainability lens, identifying opportunities to leverage activities in a way that can address multiple sustainability goals, creating efficiencies that likely result in cost savings.

Finally, the University of Maryland in College Park is a particularly noteworthy stakeholder asset among many that should be prominently considered in the development of a sustainability and resiliency plan, and this report concludes with brief suggestions on that consideration. The following recommendations are also found in the Agency Write-ups that accompany this Report:

Office of Central Services (OCS)

- Additional staffing would make it easier to promote the accomplishments of the Sustainable Energy Program, and to accelerate the generation of clean energy in Prince George’s County.
- Reinvesting savings realized from energy savings into additional energy efficiency and renewable energy investments could speed the County to even greater achievements.
- Procurement policies that generate business for County vendors will keep County dollars at home and inspire the continued reinvestment of dollars inside the jurisdiction

- Continually improving the efficiency and resiliency of County Facilities will save the jurisdiction money; reducing costs over time while reducing energy consumption, water consumption and other metrics of sustainability.

Prince George's County Public Schools (PGCPS)

- Expanding this program could identify additional opportunities to teach environmental literacy, and to create increasingly green operations that are green in the school system. The recommendation is to seek expansion of the program as funding allows.
- The 2015 effort to dramatically increase the funding of the Prince George's County Public Schools failed to gain traction with the County Council. A property tax cap that has been in place since the 1980s limits the money that most other counties use to fund schools. In 2015, the public opposition pointed to an audit that may have identified potential savings.
- It seems clear that the Baker Administration will continue to work to identify ways of increase funding for the school system, and a report on responsive actions to the audit with a renewed push for funding may be more successful in coming years. The success of the schools is closely identified with the success of the county, and public demand for improved educational opportunities may finally lead to increased funding.
- The completion of clean renewable energy and other sustainable operations of green schools can save significant amounts of money. The County has already made a significant commitment to green schools, and ramping up these efforts as funds are available will save even more money in operational costs in the future.
- A number of the County's schools have found lead in their drinking water at least at certain faucets. A systemic inspection of water systems would be useful to develop a capital improvement plan that insures that the County's youth have access to clean drinking water, and not just through the clearly unsustainable means of providing bottled water. Cost savings could be realized through systemic evaluation, partnership with WSSC and COG, as this is not just a problem for Prince George's.

Health

- There is powerful potential for the Health Department's metrics to track success in sustainability. The diagnoses for which the County has a higher than statewide average may have many possible causes, but setting goals for attaining improved health for the County's residents can relate to developing policies that are multi-agency and addressing health access disparities. Cardiovascular and respiratory disorders can stem from environmental health exposures, nutrition, exercise or stress causation. Developing a multi-faceted and comprehensive strategy, which may be best achieved through the Wrap-Around Population Health Fund, or some combination of elements of the Department's Wish List, for achieving better health outcomes will have great

benefits to County residents. The County Department of Health is already doing this to some degree, but the multi-track strategy to improve health outcomes can be improved.

- The Health Department has already responded to the lack of access to health services and health disparities within the County, but the plan to build a new hospital in the Central County should not slow the efforts to improve access for all. Particularly important opportunities may be in strengthened strategic partnerships (including but not exclusively with public schools), and in the areas of nutrition, exercise and stress reduction. This is another area in which the County is already acting, and the proposed Wrap-Around Population Health Fund is clearly aimed at addressing those most in need. It is an important area of potential improvement, as success in prevention will reduce the costs of treating those without adequate financial resources.

Housing and Community Development

- Developing a model Inclusionary Zoning Ordinance would likely come from Park and Planning, but the creation of one would create the means of having a mixture of incomes in new development and redevelopment. This would be an important path towards the creation of a sustainable county housing policy, with the need for a special emphasis in the redeveloping communities in or near the Purple Line corridor and the transit-oriented development near Metro Stations.
- Implementing as many of the Department's wish list above as possible:
 - a) Redevelop and reposition the existing 5 affordable housing complexes the County Housing Authority own and manages.
 - b) Creation of Net-Zero housing within Eco-Districts, like Suitland's first net-zero house (more information here: <http://news.maryland.gov/dhcd/2015/07/09/net-zero-suitland-home-is-100-years-old-but-state-of-the-art-when-it-comes-to-energy-efficiency/>)
 - c) Increase redevelopment generally across the County
 - d) More staff!
 - e) Capitalize the Housing Trust Fund
 - f) Develop an implementable Comprehensive Housing Strategy

Maryland National Capital Park and Planning Commission

- The fact that Prince George's County Planning and Parks and Recreation are divisions of the Maryland National Capital Park and Planning Commission means that actions of these entities are not strictly the decision of the County. To the extent that Prince George's and Montgomery County feel well-served by the status quo, this may not pose a need for change, but if there is an opportunity to examine how the Commission is serving the two counties, it might provide leverage to duplicate what is working, or reform what isn't, with the current bi-county governance structure created by the State of Maryland.

- The potential expansion of staff, park space and associated recreation could be an integral part of addressing health issues identified by the Health Department, and be part of a comprehensive strategy to improve outcomes.
- Even if the governance structure of Planning stays in place, it is recommended that Planning staff engage even further in getting input related to sustainability and resiliency. For example, the value in preserving agricultural space in the County is recognized, and the increasing interest in urban farming has been noted, but improved food systems potentially linked to economic development and improved health in the county may require an even greater multi-agency approach. The work of the Planning Division in achieving a focus on food and agriculture is notable, but an even greater effort may be required on sustainability issues.

Office of Homeland Security

- The Department of Environment is already hosting FEMA workshops to assist residents with information regarding flood-prone areas, and ways of reducing vulnerability. These workshops could expand into an even more comprehensive resiliency planning effort for zoning, building codes, and public information to work towards preventive planning. This may not be principally the responsibility of Homeland Security, but the agency should play a key role in the planning efforts.
- The water infrastructure challenges of the County will likely worsen during the coming years, and close planning with WSSC will be important in reducing the financial, health and environmental impacts of pipe breaks, and dam-related flooding. These are not easily solved at the local level, but Prince George's County should play a regional leadership role in seeking investments to minimize sanitary and drinking water pipe breaks and leaks, a Patuxent River strategy that addresses dam vulnerabilities, and stormwater infrastructure that reduces channelization, and associated negative downstream impacts, while addressing the flood issues that inspired the channel projects decades ago. Solutions to these issues will likely require better integration of the management of water resources.

Department of Permittings, Inspections and Enforcement

- Prepare the Department for Enterprise Status – Evolving to an Enterprise Fund will make it self-financing, relieve the current need to take \$16 million from the Department of the Environment's waste management and stormwater funding, and help with the following recommendations.
- Adjusting this Department's fees towards eventual financially self-sufficiency would reduce externalized costs and reduce or eliminate taxpayer subsidy of regulated entities within the County.
- Increase the accountability and clarity of the DPIE budget and revenues would increase transparency in government and build public support for fee adjustments.

- a) Provide the necessary staff resources and building space to effectively serve DPIE's customers
- b) Relocate inspections division back to the DPIE building
- c) Adopt enterprise-wide automated system for permitting and licensing
- d) Streamline entitlement process
- e) Streamline hearing process to expedite the adjudication process involving disputed property standards violations and fines
- f) Need to increase dramatically the amount of resources devoted to staff training
- g) Need to increase dramatically the amount of resources devoted to staff licensure and certification
- h) Need to provide opportunities for staff advancement, salary increases and performance-based recognition which have been curtailed for over 4 years

Part 7: An Opportunity to Accelerate the University of Maryland and Prince George's County Engagement

The flagship campus of the University System of Maryland is located in Prince George's County, and the school has been a local economic asset since its 19th Century origins as the Maryland Agriculture College. The presence of staff, faculty, and students throughout the year bring a large number of residents, taxpayers and customers of Prince George's businesses. Since the arrival of President Wallace Loh, there has been a growing acknowledgment of the importance of University engagement in the creation of an exemplary college town community that will attract faculty, staff and students to work, live, and spend time near the campus.

The University Maryland Extension (UME) helps fulfill the land grant mission of the school throughout the State, including Prince George's County, supporting the local agricultural economy and advocating for health food systems. Also within the College of Agriculture and Natural Resources, the faculty and students of Plant Science and Landscape Architecture have helped in designing and implementing dozens of rain gardens and other greenscape projects that reduce polluted runoff from streets and parking lots while beautifying communities.

The College of Education has placed hundreds of student teachers and volunteers over the years in County schools, and recently provided a leadership role in the creation of a charter school that serves students from throughout Prince George's, and has already boasted high test scores in its first years of existence. That effort has been part of an engagement in the College Park City University Partnership, which has developed a plan to improve education, public safety, housing and development, transportation and sustainability for the greater university community.

The University also staffs an Office of Community Engagement that plays a critical role in improving relations off-campus, and looks for opportunities for the University to strategically support community efforts. The School of Public Health at the University has engaged its faculty and students in support of the reduction of health disparities, and continues to explore methods of improving health outcomes in the County.

These efforts and many more are both a way for the University to be an engaged stakeholder in the County (and in the municipality of College Park and other neighboring communities), but it is also a step of implementing the vision of a world class college town. In order to achieve that vision, the University community that boasts well-recognized successful public schools, safe streets, interesting places to eat and drink, new business start-ups, a vibrant night life, and a diverse range of housing options will attract more faculty, more staff and more graduate students to live near the campus.

Prince George's County is working with University official to enhance and strengthen their relationship, and the coming of the Purple Line, The Hotel at Maryland, MilkBoy+ArtHouse, and Terrapin Row are among the first fruits of the enhanced ongoing engagement. Additional plans

are under way to more fully realize the mutually beneficial potential for Prince George's County and the University of Maryland, College Park.

ⁱ <https://www.climate.gov/news-features/featured-images/heavy-downpours-more-intense-frequent-warmer-world>

ⁱⁱ https://www.washingtonpost.com/local/prince-georges-residents-brace-for-water-shut-off/2013/07/16/abdaa72c-ee05-11e2-9008-61e94a7ea20d_story.html