

Town of University Park

Green Team Committee

January 12, 2017

7:00 p.m.

University Park Town Hall
6724 Baltimore Avenue
Conference Room

Text boxes throughout this PDF document contain the notes for the 1/12/17 Green Team meeting based on the agenda on this page. In attendance were Dave Brosch, Eric Erickson, Sarah Moseley, Tracey Toscano, and Joe Thompson (chair). Joe Thompson took notes.

Agenda

1. Andy Fellows - Discuss municipal collaboration efforts with the University of Maryland (See pages 2,3)
2. Discuss and edit University Park Sustainability Plan (see pages 4-39)
2A - Discussion of PG Zero Waste Plan (see page 40)
3. Old Business

4. New Business
5. Adjourn

NOTE: No "old business" was discussed. For "new business", Ms. Toscano suggested a Town Park walk with the tree committee and Green Team as a way to expand membership in these committees and gather ideas about how to manage the Town Park.

This meeting is open; the public is welcome to attend.

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this meeting is asked to advise the Town at least 72 hours before the meeting by contacting the Town office at 301-927-4262.

Review of the Prince George's County Zero Waste Plan was added as a new agenda item 2A. See page 40 of this PDF document for more information on the plan. The Green Team discussed the plan and unanimously approved the following recommendation:

"The Green Team recommends that the University Park Town Council consider a motion to authorize the mayor to draft a letter in favor of the goals of the Prince George's County Zero Waste Plan, emphasizing the need for local, decentralized food waste composting facilities."

Green Team members in attendance discussed with Andy Fellows the following list of possible UP/ University of Maryland collaborative efforts (see pages 2,3). Mr. Fellows said that he was in the process of matching students and faculty with potential projects and would have more details soon.

Campus Community Connection: University Park Projects Update

Area A – Stream/Watershed Management

~~1)~~ **Plan for the Park/Wells Run Park**

Reviewed inter-municipality agreement signed in December, 2010, and following up on the plans of that agreement. Overlapping projects with three, seven and nine below.

Discussed Wells Run with Jim Foster and other Anacostia Watershed Society staff.

Initial stream walks January 10 and 11; meetings at Hyattsville library with librarian John Krivak and other staff on history of Wells Run on January 10, with Reverend Nathan Hill and other University Christian Church staff on January 11. Reviewed Prince George's Plaza Metro Development plan proposed language for the Hyattsville portion of the site. Discussed with Dave Brosch.

Windshield survey of Riverdale Park Wells Run from Baltimore Avenue/Route One to the CSX tracks.

To meet with Green Team, John Tabori and potentially Tom Stickles to discuss past research and engagement.

Will review AWS plans for the watershed, including tree planting, included in CBT grant submitted January 12, 2017.

Propose to Green Team building off five current stations of Wells Run in UP Trail/part, consideration of principal Wells Run tributary and outfalls of UP streets for consideration for monitoring.

To discuss with Green Team a calendar of events for January – May for projects on Wells Run.

To meet with Hyattsville leaders to discuss Hyattsville portion of the watershed.

Engagement planning with Northwestern High School, Hyattsville Middle School, University Park Elementary School, University of Maryland, churches (beginning with University Christian).

~~2)~~ **Guilford Run collaboration with CP, CHE**

Began developing stakeholders group including residents of College Heights Estates, University Park, College Park, Hope Lutheran Church, City of College Park Public Works and the University of Maryland. Overlapping projects with seven and nine below.

Meeting with City of College Park Public Works to discuss property boundary issues on January 12, 2017.

~~3)~~ **Flooding Near 44th Avenue**

Incorporating into Wells Run planning project. Reviewing for tree planting potential for remediation.

Area B – Sustainable and Resilient Practices

~~4)~~ **Carbon Sequestration/Tree-Canopy (remote sensors)**

Contacting professor and University Park resident – providing support

University Park Projects Update (continued)

- ~~5)~~ **Mosquito Control** To meet with Dave Brosch and other University Park residents working on the mosquito control project, discussing current university engagement on the issue and providing additional support to that engagement.

~~6)~~ **Green Team Projects/STEP UP**

Meeting with Green Team on January 12, 2017 to identify interests on other nine projects, and missing projects to add to the University Park list

Area C – Multi-Modal Transit-Oriented Development

~~7)~~ **Complementary trails and bike system with University of Maryland/College Park**

Wells Run Trail (see projects 1 and 9)

Guilford Run trail network mapping, discussion with College Heights Estates residents (see project 9)

Discussion with Bike Infrastructure Implementation Committee at the University of Maryland

~~8)~~ **Circulator/local bus service**

Set up meeting with David Allen or appropriate UMD DOTs staff to discuss next steps.

~~9)~~ **Walkable/Bikeable University Park**

Wells Run trail (see Projects 1 and 7)

Guilford Run trail network (see project 7)

Identification of other potential trail networks, needed bike lanes (as part of complete street projects).

Meet with Maryland Milestones/Aaron Marcavitch to discuss fit with existing ATHA trails.

Meet with WMATA to discuss connections with Prince George's Plaza and College Park Metros, and adequate bike facilities.

~~10)~~ **Consideration of Transportation Demand Management District**

To meet with Hyattsville leaders to discuss

Additional Projects (including spin-offs, and potential replacements for original ten)

~~11)~~ **Composting – follow ups to early January meeting**



Town of University Park

Sustainability Action Plan

Sustainability and Environmental Management (SEM) Graduate Capstone Project
ENVR E-599a Consulting with Clients for Sustainability Solutions, Professor O'Brien

Author: Allison Harwick, Graduate Student at Harvard Extension School

Submitted to University Park May 2, 2016

Green Team members in attendance briefly discussed the draft sustainability action plan on pages 4-39 of this PDF. Attendees agreed to provide written comments by 1/21 for incorporation into a revised document. The revised document would be further edited at the 2/2/17 Green Team with the goal of sending a recommendation to the Town Council for approval at the 2/6 or 2/13 meetings depending upon schedule. Dave Brosch and Michelle Williams already provided detailed written comments to Joe Thompson.

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Introduction

The following Sustainability Action Plan (SAP) for University Park, Maryland was drafted as part of Professor William O'Brien's Graduate Capstone course, entitled ENVR E-599a Consulting with Clients for Sustainability Solutions, at Harvard Extension School. The objective of the SAP is to provide University Park a roadmap that prioritizes quick-win and high-return-on-investment measures that reduce the Town's operating costs and lower its environmental footprint.



The SAP is not comprehensive, and should be viewed as a living, ever-changing document. Initiatives are organized according to the following categories: (1) Fostering Sustainable Behavior of Leadership, (2) Buildings and Facilities, (3) Transportation, (4) Waste, and (5) Land

Management. The plan begins with a list of quick-win, no-cost and low-cost measures. Savings and revenue from these quick wins are then summed to form the Sustainability Capital Reserve. The plan proceeds with a recommended list of Future Initiatives, which require greater investment of time and resources, and are funded through the Sustainability Capital Reserve. Next, potential barriers to selected initiatives are listed, as well as corresponding strategies to overcome these barriers. Of course, measuring performance is paramount to a successful transition toward sustainability. Therefore, the plan provides University Park with a guide on how to measure success, with a list of key performance indicators. The University Park SAP concludes with a timeline sequentially listing specific actions to take in the short-term, near-term, and long-term. Completed initiatives are indicated with a checkmark symbol (☑).

To generate the following University Park SAP, financial, operational and natural resource data were gathered, interviews were conducted, and natural resources analysis/ cost-benefit analysis were performed. Through this process, the subsequent list of initiatives was developed.

Acknowledgments

I would like to thank my contacts, Public Works Director Michael Beall and Council Member Joseph Thompson, who provided crucial materials, data, and guidance, and responded to my endless list of questions. I thank Professor Will O'Brien for his mentorship, sustainability consulting expertise, and encouragement. I am also grateful for the Green Team of University Park, including Sarah Moseley, David Brosch, Beth Domingo, and Joseph Thompson, whose hard work and talent have not only led to impressive UP sustainability initiatives, but also have supported me in my project, through the provision of critical guidance, data and resources. Further, I thank Chuck Wilson and Lore Rosenthal for their invaluable contribution and knowledge of sustainability in the University Park area. I thank University Park Town Government and operations, including Mayor Carey, Town Council members Joe Thompson, James C. Gekas, Bradlee W. Hess, Linda Verrill, David Caskey, Michael Cron, and Roy Alvarez, Treasurer Daniel R. Baden, Town Clerk Tracey J. Toscano, Public Works Supervisor Kerry Hall, and Chief of Police Michael Wynnyk. I am grateful for the work of the UP Elementary School, University Park Church of the Brethren and Riverdale Presbyterian Church. I finally thank University Park residents who have shown dedication to their community's well being, at a local and global scale.

Background and Context

Located in the heart of the metropolitan area of Washington, D.C., the Town of University Park (UP), Maryland is a close-knit community of over 2,300 residents, with an elementary school, three community service organizations and three churches. Town residents and town government staff have a long history of dedicating themselves to service, stewardship, and community, to both the town and beyond. Mayor Len Carey, along with seven council members, were elected to lead the town's government operations. The town is equipped with police station with eight fulltime police officers, sanitation services, and a town park with recreational grounds.

Washington, D.C. is located two miles away from University Park, and the University of Maryland borders the southern town line. The Town was established as an incorporated town in 1935. University Park purchased the parkland in 1941 and initiated the police force in 1965. The Elementary School was built in 1978 (Town of University Park, 2016).



According to the University Park website, the Mayor Len Carey’s mission and goals include the following: “effective and responsive government, improved tree and park maintenance, strong local schools, and active engagement with neighboring communities to clean up the stream and shape development along the Route 1 corridor” (Town of University Park, 2016).

In keeping with the town’s value of stewardship, residents have expressed a commitment to environmental leadership. Impressive efforts for sustainability include, but are not limited to: the pioneering volunteer-based town-wide composting program, the solar panel installation on the UP Elementary School, and the official certification as a Maryland Sustainable town. Additionally, through the STEP-UP program, for two years the town even maintained an energy coach. This was a strategic move, as research suggests that energy coaches and other “one stop shop” services can act as major drivers for emissions reductions in buildings, especially multifamily homes (A Nochur & H Michaels, 2013; Town of University Park, 2016). These initiatives are admirable to say the least.

Also in keeping with the Town’s commitment to Sustainability, the Town recognized a major gap in their efforts. Specifically, the Town lacked a plan that collects environmental protection initiatives and systematically prioritizes them according to cost savings. Furthermore, the Town lacked a strong framework for ensuring consistent



sustainability leadership and planning long into the future, which would involve complex coordination of diverse stakeholders across sectors and departments, full integration of the Town's mission into its operations, and maximization of the Town's sustainability leadership potential. This Sustainability Action Plan seeks to fulfill these needs.

Client Requirements

The overall objective of University Park is to obtain a clear strategy, called the Sustainability Action Plan, which prioritizes local government sustainability initiatives, according to both financial and environmental costs and benefits. Initiatives would cover the areas of energy, greenhouse gases, water, waste, pollution, and managing the Town parkland. University Park's secondary objective is to maintain its status as a Maryland Sustainable town, and achieve additional points in the Maryland Sustainable scoring system.

To achieve these objectives, the client requires the following:

1. A baseline town-wide quantitative estimation of natural resource use and/or pollution for comparison, if possible. This would be disaggregated according to the public and private sector, if possible.
2. For each initiative, where possible, a quantitative estimation of natural resource savings or pollution abatement
3. For each initiative, where possible, a cost-benefit analysis. Specifically, this would involve quantifying savings of natural resources or pollution abatement and the associated costs and benefits over time, including up-front costs.
4. Identification of an ambitious yet feasible greenhouse gas reduction goal, or other pollution/ natural resource use reduction goal
5. Specific types of initiatives on which to focus are the following: revenue-generating and cost-lowering sustainability initiatives, low-cost sustainability initiatives, and high return-on-investment sustainability initiatives.

Opportunities & Risks

In University Park, there exist a variety of exciting opportunities to advance sustainability and lower operating costs. Examples include (1) increasing recycling and compost turnout, (2) energy efficiency and renewable energy in both public and private buildings, (3) increased Town access to public transit, (4) water conservation programs, and (5) consumer awareness, among many other areas.

Failing to advance University Park's sustainability leads to risks, including (1) missing opportunities for funding from upper levels of government, (2) forgoing a stronger reputation for environmental leadership, (3) relinquishing cost-savings associated with natural resource reduction, (4) failing to increase environmental and/or public health benefits of natural resource use reduction and pollution abatement, among other risks.

1. Fostering Sustainable Behavior of leadership, staff and the community in support of the initiatives

1.1 Vision of Sustainability

1.1.1: A vision statement is crucial in successful sustainability action planning. The

University Park Green Team has already established a its vision statement as the following:

“In order to sustain its small town character and quality of life, University Park will have to be increasingly vigilant to the consequences of poorly planned growth. It will require focused and sustained citizen action to help the town remain an oasis from the encroaching urban development. The goal is not to slow economic progress in the area, but to help mold this change to ensure communities are livable and sustainable.” (University Park Green Team, 2014b)

1.1.2: To fully realize the benefits of a vision statement, it is recommended that the Town incorporate their vision of sustainability into the town's overall vision statement.

1.2 Leadership's role and recommended actions to engage staff and residents

Cities and towns in general often hold a key position in environmental protection, given their operational and regulatory access to building code policies, land management, sanitation

services, transportation planning, and at times, energy services. Cities and towns are also exceptionally suited to sustainability planning owing to their extensive familiarity with local conditions (C40 Cities, 2016). University Park fortunately seems to understand this at least on some level, as they have taken ambitious actions for over a decade.

A successful transition to town-level sustainability requires thoughtful leadership at the mayoral level of government, as this facilitates the support for long-term planning and implementation. Further, champions will need to exist among residents, all levels of government, and operations staff.

This begs the question, how does effective change leadership occur? The change management strategies of John P. Kotter and Dr. Doug McKenzie-Mohr, both individually and together, provide excellent frameworks for instituting major change. Kotter establishes “8 Steps to Accelerate Change”: (1) Create a sense of urgency, (2) Build a guiding coalition, (3) Form a Strategic Vision and Initiatives, (4) Enlist a Volunteer Army, (5) Enable Action by Removing Barriers, (6) Generate Short-term wins, (7) Sustain acceleration, and (8) Institute change. McKenzie-Mohr presents an alternative framework, a 5-step process for advancing sustainable behavior: (1) Carefully select indivisible behaviors to be promoted (2) Identify internal and external barriers and benefits, (3) Produce a strategy that appropriately addresses barriers and benefits, (4) Pilot test the strategy, and if successful (5) Implement at a broad scale (John P. Kotter, 2012; Doug McKenzie-Mohr, 2008).

The purpose of this eBook is to introduce you to the enhanced 8-Step Process

Fostering Sustainable Behavior
COMMUNITY-BASED SOCIAL MARKETING

HOME BOOK ARTICLES CASES STRATEGIES FORUMS MY ACCOUNT

Preface

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Figure: [Left] Graphic of John P. Kotter's 8-steps to Accelerate Change. [Right] Graphic of Dr. Doug McKenzie-Mohr's 5 Steps to Fostering Sustainable Behavior

1.2.1: Based on the Town's overall mission and purpose, the following customized change management framework was formulated for University Park, consisting of ten steps, using Kotter and McKenzie-Mohr's frameworks described above. These ten steps are iterative; previous steps should be re-evaluated and revised throughout the process, as information is gathered and circumstances change:

Step 1: **Identify the core purpose** for this change. Begin with the "why?" or "what for?"

Example: Reduce University Park's operational costs and environmental footprint.

Step 2: **Create a sense of urgency**, connecting with stakeholders' heads and hearts, and communicating the consequences of action and inaction

Step 3: **Build or maintain a guiding coalition** that flexibly exists inside and outside of the traditional organizational structure/hierarchy

Step 4: **Form a Strategic Vision and Initiatives**

Step 5: **Enlist a Volunteer Army**

Step 6: **Carefully select indivisible behaviors** to be promoted

Step 7: For each behavior, **identify internal and external barriers and benefits**

Step 8: For each behavior, **create a strategy that removes barriers and upholds benefits**

Step 9: For lower-risk initiatives, **generate short-term wins**. Collect, communicate and **celebrate these wins regularly**. Determine the behaviors contributing to leadership and success, and give praise. For higher-risk initiatives, first **pilot test**. Determine what worked and what did not, and why. Celebrate the process. **Determine the behaviors contributing to leadership and success, and give praise.**

Step 10: **Institute change at a broad scale.**

It is important to note that University Park has an impressive track record for sustainability leadership, and serves as a model for sustainability change management. For example, despite the fact that the Composting program is volunteer-run, it has been consistently successful at a 10-15% participation rate. Additionally, the town coordinated with diverse stakeholders to establish UP Community Solar LLC and to install the photovoltaic array at the

UP Elementary School. The Town has a relatively long history of sustainability leadership (University Park Green Team, 2014a).

1.2.2: Obtain Sustainability Certification from upper levels of government

- University Park has already achieved Sustainable Maryland Certification (University Park Green Team, 2014a).

1.3 Organizational structure in support of Sustainability

1.3.1: Hire a Sustainability Officer

- To ensure successful implementation, it is highly recommended that University Park hire a permanent University Park Sustainability Officer. As it stands, there are no sustainability professionals paid to serve University Park. While it is impressive that the Town possesses such a strong volunteer base, much more would be achieved with a consistent point-person to carry ideas into fruition. The Sustainability Officer would manage sustainability initiatives, assign roles and responsibilities, empower staff and residents, perform research, and coordinate with regional sustainability officers. For example, the officer may mobilize residents to retrofit their homes or install solar panels. Bundling a dozen or so interested parties would give them a competitive edge to solar companies. Additionally, policies and incentives at the utility, county, state and federal level change frequently, and it would take a dedicated professional to keep up-to-date and ensure accurate communication with the Town. One option is to recruit a professional already working part-time as a Sustainability Officer in a nearby town. The University of Maryland could post a Sustainability Officer job description (see Appendix), thus broadening the pool of qualified applicants.

1.3.2: Establish a Green Team

- The Green Team serves as the **guiding coalition** and foundation for the **volunteer army** described in the above customized change management framework. Recommended responsibilities of the Green Team include: (1) assigning roles and responsibilities to Green Team members, (2) recruiting, training, and maintaining

volunteers, (3) presenting initiatives to the Town Council, (4) managing diverse stakeholder needs, (5) monitoring key performance indicators (greenhouse gas emissions, costs, water use, pollution etc.) and (6) recording progress. University Park has maintained a Green Team for many years, and the team meets about once per month, sometimes less frequently, and posts the minutes for each meeting on the Town's website. The Green Team has played a central role in sustainability at University Park to date.

1.3.3: Assign Green Team members as champions of the SAP implementation

- It is recommended that the Green Team take responsibility for overseeing the implementation of the Sustainability Action Plan, at least until the Town is able to hire a permanent Sustainability Officer. This may require assigning roles and responsibilities for each Sustainability Initiative and tracking progress. The Green Team members' demonstrated skillfulness in sustainability change management makes them well prepared to oversee SAP implementation.

1.4 Communication/Marketing – increase awareness, website, newsletter

University Park's sustainability leaders have historically refrained from self-promotion. While the intention behind this – humility – is quite admirable, University Park is actually missing out on incredible opportunities. These include increased funding for future initiatives, interested homebuyers, and consequently, increased property values. Further, self-promotion as a sustainable town encourages other municipalities to join in, and contributes to a local culture of sustainability, making sustainability the norm.

1.4.1 Communications and marketing strategy and execution

- It is recommended that University Park at minimum showcase its accomplishments on its Town Website and newsletters. A link on the homepage could direct the user to a Sustainability page. For example, the page would display the greenhouse gas savings from the UP Elementary School and composting program. Showcasing University Park's efforts at community events is also strongly recommended.

1.5 Educational Programs – integrate into training, curriculum, workshops, etc. for both government staff and residents

1.5.1 Training programs in sustainable consumer habits

- Riverdale Park Farmer's market is close by, and residents can coordinate carpooling each weekend
- Promote local eating in general
 - University Park is a long-time supporter of ECO-City Farms (University Park Green Team, 2014a)

1.5.2 Host events

- Bike to work, rideshare days
- Host movie nights such as 'Just Eat It' and/or 'Waste Zero' films¹
- Set up a group field trip to Prince George's Recycling Facility²
- Invite students as guest speakers
- Volunteer at community events
- Provide lesson plan for solar at UP Elementary School³

Quick Wins: No Cost and Low Cost Measures

2. Buildings and Facilities

The Town of UP owns and operates one building, the Town Hall, and leases a large storage garage in a nearby town. The garage houses the Town maintenance equipment, such as snowplows, garbage collection vehicles, street clearing vehicles, lawn mowers, and other large pieces of equipment. Non-municipal buildings include the public school University Park Elementary, the Church of the Brethren, Riverdale Presbyterian Church, and residential areas.

2.1 Town Hall

2.1.1 *Weatherization/Ventilation Efforts*

¹ As suggested by University Park Green Team

² As suggested by University Park Green Team

³ As suggested by University Park Green Team

- In 2012, University Park underwent an extensive set of retrofits for the Town Hall building including: An upper attic/collar-beam retrofit, a 3rd floor conditioned space and 3rd Floor Attic retrofit, window blanks measures, a window surround at 2nd floor stair landing retrofit, air sealing package, and more (Edge Energy, 2012).

2.1.2 Lighting:

- I recommend upgrading 32W T-8 bulbs to 18W LED equivalents (and non-shunted sockets, if applicable). LED equivalents use about 44% less power than T-8 bulbs. See what LEDs and non-shunted sockets [Earth LED](#) has to offer. Simple payback period of 3 years, assuming 10 hours of lighting per day year-round, with the purchase of a \$8 LED bulb and a \$2 Non-shunted socket tombstone and 8.6 cents per kWh of electricity. Labor to install these bulbs would cost \$75 total, with a pay rate of \$25 per hour for three hours. This would mean \$4.43 of electricity savings per bulb annually. LED bulbs additionally last much longer than conventional bulbs. [Pepco](#) offers incentives for LED bulbs. Annual energy savings: about \$110, assuming 25 bulb replacements.
- Install light occupancy sensors in each room for an up-front cost of about \$20-30 each. [Home Depot](#) offers a variety of occupancy sensors. Estimated simple payback period: about 1 year. Pepco offers [incentives for lighting controls](#). Annual savings of about \$120. Assumptions: purchase of light occupancy sensors costing \$10 each using Pepco incentives, a savings of two hours of lighting per day per year using 32W T8 bulbs, and a total of 5 light occupancy installations in the Town Hall. Labor costs to install these sensors amount to 2.5 hours at \$25 per hour.
- Other recommended lighting measures: Task lighting, keeping lights off in low traffic areas, taking advantage of daylight

2.1.3 Equipment

- Install a 7-day plug-in timer, which shuts off equipment on weekends and at night.

2.1.4 Space Heating

- Fireplace general consideration: It is often recommended to keep the flue closed while the fireplace is not in use.

2.1.5 *Cooling*

- Consider using fans and opening windows during warmer months before using the air conditioner.

2.1.6 *Water use*

- Install a low-flow showerhead in basement.

2.1.7 *Green office*⁴

- Include instructional signage for recycling odd items.
- Provide reusable dishware.
- Computer power settings: no screen saver, turn down monitor brightness, set to “sleep” after a few minutes.
- Sell, donate, [free-cycle](#) items like old books, magazines, furniture.
- Use rechargeable batteries.
- Use a Master Controlled Power Strip for each workspace that has peripheral devices like monitors, printers, speakers, scanners, etc. For those workspaces with a laptop that is moved often, use a Masterless Power Strip. \$200 per year is wasted in vampire loads for the average home (NREL, 2013). [Home Depot](#) sells Master Controlled Power Strips for \$8.88 each, which would mean a simple payback period of less than one year. Annual savings of \$100-200. Simple payback of less than one year.
- Re-useable coffee pods, such as those sold at [Wal-Mart](#) (4-pack for \$6.22).
- Set default print settings to double-sided.
- 100% Post-consumer waste FSC certified paper (list of FSC certified brands [here](#))
- Avoid printing emails - save digitally. Include in signature line a phrase such as "Please consider the environment before printing this email".
- Share internal communications materials by email
- Track paper use and post results to encourage paper use reduction.

⁴ I thank Anna Stanilewicz and Sarah Marek for their extensive list of Green Office recommendations, from their American Council on Renewable Energy Sustainability Action Plan, 2012

- Reduce junk mail by visiting <https://www.catalogchoice.org/> and <https://www.dmachoice.org/dma/member/home.action>
- Go to myfax.com instead of printing and faxing
- Use scrap paper

2.1.8 *Green purchasing*

2.1.8.1: Instate green purchasing policy

- The UP Green Purchasing Policy can be found in [here](#).

2.1.8.2: Engage suppliers in a conversation about sustainability

2.2 Town Garage/Storage Facility

2.2.1 *Lighting:*

- Most of the fixtures in the storage unit are T-12 bulbs, while T-8 bulbs illuminate the break room. Upgrading to LED equivalents, or in the very least upgrading T-12 bulbs to T-8, is suggested. Pepco offers incentives for LED bulbs. Pepco also offers [T-12 to T-8 upgrade incentives](#) (up to \$35 per fixture). The T-12 to T-8 upgrade typically reduces energy costs by 40% and decreases cost of maintenance (Pepco C&I Energy Savings Program, n.d.). Annual savings would be \$200-300, with a 2 year simple payback period. Assumptions: Upgrade thirty-five 40W T12 bulbs to LED equivalent bulb (\$8 each) using a non-shunted socket tombstone (\$2 each). Electricity rates of 8.6 cents per kWh, and 10 hours of lighting per day. Labor costs amount to \$180, which equals 7 hours at a \$25/hour pay rate.
- Kerry Hall, Public Works Supervisor, explained that despite his efforts to keep the lights off when the storage unit is not in use, this remains an issue. Therefore, installing occupancy sensors, and communicating this concern to the owner of the storage unit, are recommended. Annual estimated savings: \$300, simple payback of less than 1 year. Assumptions: Purchase of ten sensors at a cost of \$20 each, a resulting savings of seven hours of lighting per day per year, using thirty-five 40W T12 bulbs. Labor costs amount to \$100, which equals 4 hours at \$25/hour.

2.2.2 *Equipment*

- Install a 7-day plug-in timer, which shuts off equipment on weekends and at night.

2.2.3 *Other Electricity Loads*

- There is a television and cable box also in the break room. Using a Master Controlled Power Strip such as those sold at the [Home Depot](#) is recommended. Annual savings would be approximately \$50. Assumptions: this constitutes roughly a quarter of average household vampire loads. \$200 per year is wasted in vampire loads for the average home (NREL, 2013).

2.2.4 *Space Heating*

- Thermostat general consideration: Set the thermostat to 68 degrees during the winter.

2.2.5 *Water heating*

- Washing machine general consideration: To save on water heating, it is recommended to keep the temperature set to ‘cold’ where possible. Annual savings of \$50, assuming a 64-cent savings per load and 80 loads per year.

2.2.6 *Water Use*

- Install 2 faucet aerators - one for the break room sink and one for an upstairs bathroom sink.

2.3 Residential Area, UP Elementary, UP Churches and Service Organizations

2.3.1 Hire an energy coach for the Town

- UP was awarded a U.S. Dept. of Energy grant to hire a University Park Town Energy Coach. The program ended recently with highly successful results. A quarter of the town’s residents signed up for a Home Energy Assessment, and of those households, almost two-thirds proceeded with retrofits (Suzanne Parmet & Chuck Wilson, 2013).

2.3.2 Renewable Power Program

- Community Solar Program: University Park created the UP Community Solar LLC, a for-profit organization that financed and managed one of the first community solar projects in the country. The solar array was installed at the

University Park Church of the Brethren, and UP Solar LLC sells electricity to the church at a charge discounted from normal utility rates (University Park Green Team, 2014a).

2.3.3: Solar panels installed on UP Elementary

- From the sale of electricity and renewable energy tax credits, the Town of UP and Prince George's County Public Schools together receive \$18,000 annually (University Park Green Team, 2014a). Since the UP Elementary Solar Panels were installed, the Town does not need to pay any electricity bills. More specifically, the Town Hall and street lighting bills that the Town normally pays for is no longer an issue.

2.3.3 Water Use

- Host events educating residents on water conservation

3. Transportation

University Park is rather well connected, both internally and with the Washington, D.C. metro system. Sidewalks line all of the streets of the Town. There are two metro stops within walking distance for most of the UP Residents: the Prince George's Plaza Metro Station near the southwest border and the College Park University of MD Metro Station near the northeast border. It takes about 20 minutes to walk from the town center to either of these metro stops. The Town provides a free shuttle service to and from Prince George's Plaza Metro stop on weekdays. A few WMATA (Washington Metropolitan Area Transit Authority) bus stops border the town. According to one UP resident, most people travel by metro during the week and by car on the weekend.

3.1 *Shuttle Program*

- The town shuttle service contributes to the Town's sustainability by encouraging the use of public transit over private vehicles; the shuttle service supplies greater access to the WMATA. UP provides free Monday-Friday shuttle service for residents, delivered by a 2015 Chevy 3500 and 2006 Ford Econoline. Only one shuttle runs at a time. During the week, the shuttle brings residents back and forth from the Prince George's Plaza metro stop, in the morning between 6am and

9:17am, and in the evening between 4:05pm and 7:35pm. The shuttle also gives rides as needed during the day on weekdays, such as to the grocery store or to doctor's appointments.

3.1.1: Consider upgrading to low-emissions vehicle when possible

3.2 *Other Publically Owned Vehicles*

3.2.1: Years ago, the town police force exchanged two Ford Crown Victorias (12 – 14 mpg) for two Ford Escape Hybrids (35 mpg) (University Park Green Team, 2014a).

3.2.2: Consider exchanging the remainder of the police fleet with low-emissions vehicles

3.4 *Walkability/Bikeability*

- Encourage residents to bike by holding educational events, distributing bike routes and maps, informational sessions on bicycle repair, finding bikes at a low price, etc. Anyone can easily request installation of bike racks at busy areas and subways stations by visiting this [website](#).⁵

3.5 Private vehicles

- Encourage green transport in private sector: WMATA offers discounted monthly passes for the bus and metro. More information can be found [here](#). D.C. employers with 30 or more employees are required to provide SmartBenefits to their employees – sometimes all an employee needs to do is ask.

4. Waste

The town collects trash twice per week, recycling once per week, and for most of the year, yard waste once per week. The town has a volunteer-run food scraps collection once per week. David Brosch, a UP resident and leader of this program, said that there is a ~10-15% participation rate. The food scraps may not contain meat or dairy, and they are carried by truck to Western Branch Composting. Leaves are taken to College Park, a neighboring town, for composting.

4.1 Solid Waste

⁵ I thank Anna Stanilewicz and Sarah Marek for this bike rack request information, from their American Council on Renewable Energy Sustainability Action Plan, 2012

4.1.1 Initiate composting program

4.1.2: Instead of two weekly trash pickups, which residents have noted is unnecessary, one weekly trash-pickup to and one weekly food-scrap pick-up would be a recommended option. This would likely incur no cost and would reduce tipping fees.

- *Alternative:* Reduce the number of trash pickups from twice per week to once per week. This would free up time for town beautification or composting. The estimated cost savings per year is \$2,609 in fuel savings, and possible additional savings through maintenance and tipping fees. If there were a 5% reduction in trash to landfill under FY15 levels, this would result in an additional costs savings of \$2,086 in tipping fees.

4.1.3: Pay as you throw (PAYT)⁶

- Require residents to dispose of trash in University Park-specific garbage bags, which the Town sells to residents through local retailers such as CVS, Target, Giant, etc. Consider reducing property taxes to offset the cost of these trash bags. There is potentially a huge reduction of trash to landfill with this program. In Massachusetts, PAYT in 143 municipalities reduced waste to landfill by 25-50% (MA Dept. of Environmental Protection, 2015). This could mean \$10,000-\$20,000 savings in tipping fees for University Park. On average, in 2015, UP households produced 1,546 lbs. of trash to landfill. Similarly, in 2013, Massachusetts municipalities without PAYT programs produced on average 1,754 lbs. However, in 2013 Massachusetts municipalities with PAYT programs produced an average of only 1,106 lbs. per household, 37% less than non-PAYT municipalities. This suggests that University Park has a large potential for trash reduction (MA Dept. of Environmental Protection, 2015). If we assume that University Park can reduce its per-household trash to 1,106 lbs, this would save \$11,876 annually in tipping fees. Alternatively, if we assume that University Park can reduce its trash by 37% just like Massachusetts's municipalities have through PAYT, the Town would save \$15,416 annually in tipping fees. Review case studies listed [here](#) for tips on implementation.

⁶ PAYT is an idea discussed at the Green Team meeting in March, specifically by Sarah Moseley

☑ 4.1.4: Collaborate with nearby municipalities for food-scrap pick up, and change location of composting facility to one that is more local – to a farm north of University Park.

- Members of the green team are investigating the option of collaborating with neighboring towns to collect food scraps and deliver them to a farm north of University Park, with the reasoning that the distance is shorter and therefore fewer emissions from vehicles released.
- UP holds an annual Free E-Cycling Day in the spring. At one event, 7,256 lbs. of electronics were collected (University Park Green Team, 2014a).

4.2 Waste Water

- Have town operations and residents work with the Washington Suburban Sanitary Commission's Water audit program to reduce wastewater (Chuck Wilson, 2016).

5. Land Management

UP is tree-lined, and one-half square mile in area. About 1.5 miles of Wells Run, a tributary to the Anacostia River, runs through the center of the town. Route 410 lies as its southern border, Adelphi Road as its western border, Baltimore Avenue as its eastern border and Wells Parkway/Pineway as its northern border. The Town has a Town Park, soccer field, tennis courts, and two playgrounds accessible to residents. Residents care for their lawns and gardens; private landscaping is generally very well kept (Town of University Park, 2016)(Personal observation).

5.1 Wells Run/Storm water Management

5.1.1: Chesapeake Bay Trust Grants

- Keep an eye out in the next few months for upcoming RFPs from [Chesapeake Bay Trust](#), which funds surface water protection projects in Maryland's Chesapeake Bay area. Because many of the Wells Run stream's issues come from upstream, UP collaboration with surrounding towns on this restoration project is highly recommended (Chuck Wilson, 2016). You can find information on grant eligibility and proposal requirements [here](#).
- The EPA provides [tips](#) on how individuals can collectively reduce storm water runoff. Increased permeable surfaces, rain gardens, rain barrels, and green roofs are all measures to significantly reduce storm water runoff (Minnesota Pollution Control Agency, n.d.).

5.1.2: Clean Water Act Fee and Rebates

- Educate residents of the Clean Water Act Fee and rebates, The Clean Water Act Fee is part of the property tax of major MD counties and Baltimore. The revenue from this fee funds the storm water management program in the area. Those residents whose property is retrofitted with permeable surfaces, rain barrels, and other storm water runoff measures should apply for the rebate (More information [here](#)).

5.1.3: Stream Clean-UP

- UP holds an annual “Stream Clean-UP”. At one event, 54 volunteers removed about 800 pounds of garbage from the Town streams (University Park Green Team, 2014a).

5.2 *Town Park Land*

5.2.1: Consider no-mow low maintenance lawn seed such as [this one](#).

5.3 *Route 1 Corridor*

- Route 1 Corridor construction is taking place at the border of University Park. The scale of the project is rather large compared to the size of UP itself with a noticeable presence, and so the Town has a vested interest in shaping its development. These considerations should be accounted for in the implementation of the other SAP initiatives.

5.4 *Residential Landscaping*

- UP residents maintain attractive lawns and gardens. This landscaping care seems to be a way of displaying residents’ commitment to the Town’s sense of community and connection with nature. Installing or continue to use native plants with minimal watering required, as well as rain barrels, permeable driveways, and low-maintenance grasses, are recommended.

Sustainability Capital Reserve

As you can see from the table below, many of the initiatives carry a low upfront cost (in red), with significant annual savings thereafter (in black). Specifically, there is a total initial upfront

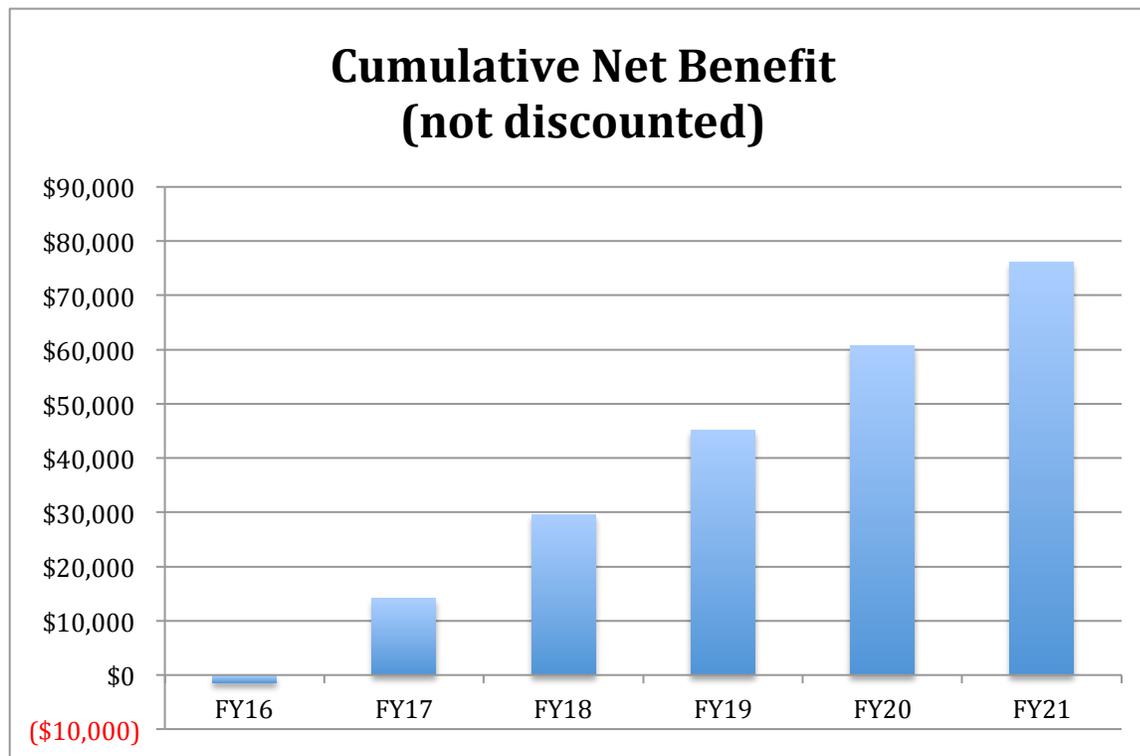
cost of \$1,406. But by the end of FY21, there is a (non-discounted) cumulative net benefit of \$76,169. Please note that in this scheme, it is highly recommended that University Park implement all cost-saving and revenue-generating initiatives by the end of FY16.

Estimated Cost Savings Summary

Below are the estimated cost savings for the recommended initiatives.

By the end of (fiscal year)	Cumulative Net Benefit (not discounted)	Breakdown by Initiative	Corresponding Initiative
FY16	(\$1,406)	(\$325)	2.1.2: Upgrade T-8 bulbs to LED - Town Hall
		(\$180)	2.1.2: Install light occ. sensors - Town Hall
		(\$72)	2.1.7: Use Master Ctrl'd Pwerstrps - Town Hall
		(\$520)	2.2.1: Upgrade T8/T12 bulbs to LED - garage
		(\$300)	2.2.1: Install occupancy sensors - garage
		(\$9)	2.2.3: Use Master Ctrl'd Pwerstrp garage
		\$0	2.2.5: Turn washer to cold - garage
		\$0	4.1.2: Reduce trash pickups to once/week
		~\$0	4.1.3: Implement Pay-as-you-throw
FY17	\$14,109	\$110	2.1.2: LED upgrade from T8 - Town Hall
		\$120	2.1.2: Light occ. Sensors – Town Hall
		\$150	2.1.7: Master Ctrl'd Pwerstrps - Town Hall
		\$250	2.2.1: LED upgrade from T8/T12 - garage
		\$300	2.2.1: Occupancy sensors - garage
		\$50	2.2.3: Master Ctrl'd Pwerstrp - garage
		\$50	2.2.5: Washer on cold - garage
		\$2,609	4.1.2: Trash pickups once/week
\$11,876	4.1.3: Pay-as-you-throw		
FY18	\$29,624	\$110	2.1.2: LED upgrade from T8 - Town Hall
		\$120	2.1.2: Light occ. Sensors – Town Hall
		\$150	2.1.7: Master Ctrl'd Pwerstrps - Town Hall
		\$250	2.2.1: LED upgrade from T8/T12 - garage
		\$300	2.2.1: Occupancy sensors - garage
		\$50	2.2.3: Master Ctrl'd Pwerstrp - garage
		\$50	2.2.5: Washer on cold - garage
		\$2,609	4.1.2: Trash pickups once/week
		\$11,876	4.1.3: Pay-as-you-throw
		\$110	2.1.2: LED upgrade from T8 - Town Hall
		\$120	2.1.2: Light occ. Sensors – Town Hall
		\$150	2.1.7: Master Ctrl'd Pwerstrps - Town Hall

FY19	\$45,139	\$250	2.2.1: LED upgrade from T8/T12 - garage
		\$300	2.2.1: Occupancy sensors - garage
		\$50	2.2.3: Master Ctrl'd Pwerstrp - garage
		\$50	2.2.5: Washer on cold - garage
		\$2,609	4.1.2: Trash pickups once/week
		\$11,876	4.1.3: Pay-as-you-throw
FY20	\$60,654	\$110	2.1.2: LED upgrade from T8 - Town Hall
		\$120	2.1.2: Light occ. Sensors – Town Hall
		\$150	2.1.7: Master Ctrl'd Pwerstrps - Town Hall
		\$250	2.2.1: LED upgrade from T8/T12 - garage
		\$300	2.2.1: Occupancy sensors - garage
		\$50	2.2.3: Master Ctrl'd Pwerstrp - garage
		\$50	2.2.5: Washer on cold - garage
		\$2,609	4.1.2: Trash pickups once/week
		\$11,876	4.1.3: Pay-as-you-throw
FY21	\$76,169	\$110	2.1.2: LED upgrade from T8 - Town Hall
		\$120	2.1.2: Light occ. Sensors – Town Hall
		\$150	2.1.7: Master Ctrl'd Pwerstrps - Town Hall
		\$250	2.2.1: LED upgrade from T8/T12 - garage
		\$300	2.2.1: Occupancy sensors - garage
		\$50	2.2.3: Master Ctrl'd Pwerstrp - garage
		\$50	2.2.5: Washer on cold - garage
		\$2,609	4.1.2: Trash pickups once/week
		\$11,876	4.1.3: Pay-as-you-throw



Future Initiatives (FI): Require greater investment of time and resources

1. Fostering Sustainable Behavior of leadership, staff and the community in support of the initiatives

FI 1.3.1: Hire a Sustainability Officer

- As discussed, it is highly recommended that University Park hire a permanent University Park Sustainability Officer. The Sustainability Officer would manage sustainability initiatives, assign roles and responsibilities, empower staff and residents, perform research, and coordinate with regional sustainability officers. Additionally, policies and incentives at the utility, county, state and federal level change frequently, and it would take a dedicated professional to keep up-to-date and ensure accurate communication with the Town. One option is to recruit a

professional already working part-time as a Sustainability Officer in a nearby town. The University of Maryland could post a Sustainability Officer job description, thus broadening the pool of qualified applicants. The Sustainability Capital Reserve would supply funding for one part-time Sustainability Officer (about 12-15 hours per week).

2. Buildings and Facilities

FI 2.1 Town Hall

FI 2.1.3 Equipment

- Choose energy-star certified for new equipment
- Pepco Incentives: Check in with [Pepco's Commercial/Industrial/Governmental Energy Efficiency](#) program in June 2016 to find out whether there are available rebates for equipment

FI 2.2 Town Garage/Storage Facility

FI 2.2.2 Equipment

- Choose energy-star certified for new equipment
- Pepco Incentives: Check in with [Pepco's Commercial/Industrial/Governmental Energy Efficiency](#) program in June 2016 to find out whether there are available rebates for equipment

FI 2.1.4 Space Heating

- Consider insulating eaves in the attic, as long as this does not interfere with ventilation or cause moisture issues

FI 2.1.5 Cooling

- Consider installing ceiling fan or using fans as primary cooling device.

FI 2.3 Residential Area, UP Elementary, UP Churches and Service Organizations

FI 2.3.1 Energy Efficiency Program

- Hire an intern, student or Sustainability Officer to educate residents who have yet to complete an energy assessment or follow through with retrofits. Pepco now provides a variety of [exciting home energy efficiency programs](#). For example, Pepco offers an energy coach to walk consumers through the process of retrofitting their home and finding the right state and utility incentives. Quick

home energy checkups are free and involve a tour of the home, and they come with free low-cost measures like smart power strips, low-flow showerheads and aerators, energy-efficient bulbs, and more. While quick home energy checkups do not come with testing, such as thermographic scans, blower-door tests, energy audits do. Energy audits cost \$100. The canvasser would develop marketing materials for energy audits.

- To learn how an Energy Coach can help you maximize home performance and savings, call 443-718-4860 or email PepcoEnergyCoach@icfi.com (Pepco, 2016).
- To get started, find a specially trained [Participating Contractor](#) in the UP area.
- Smart meters program and Energy Wise Reward Program: Homes get points/savings for lowering utility usage when asked. Phone contact: 301-519-5383 and 513-618-7931, respectively (Pepco Energy Efficiency Programs, 2016).

FI 2.3.2 Renewable Power Program

- Hire summer intern, student or Sustainability Officer to educate residents about solar incentives⁷, community solar, and buying 100% wind energy at cost-competitive prices. Bundling homeowners' interests (about a dozen or more households) to propose discounted pricing to solar companies would be a preferable option. Have residents sign waiver explaining that transactions are exclusively with the solar company. This sustainability change agent would convene town meetings to walk residents through solar options and encourage people to sign up. The agent may also coordinate a Solar Fair, where solar companies can each compete (Lore Rosenthal, 2016; Chuck Wilson, 2016).

4. Waste

FI 4.1 Solid Waste

- *Alternative to previously mentioned waste management strategies:* Purchase small 20-32 gallon trash bins for landfill waste, re-assign former trash bin for yard

⁷ Note that solar incentives end in 2017.

waste. This would hypothetically increase composting participation. According to two UP residents, programs like these take place in San Jose and Las Altos, California.⁸

5. Land Management

FI 5.1 Take survey of town preferences for park uses. Hire Landscape Architect to beautify parks, making them more functional for a variety of purposes (tree pilot, play area, etc.)

Potential Barriers and Strategies

Initiative	Potential barrier(s)	Strategy
FI 1.3.1: Hire a Sustainability Officer (SO)	<ul style="list-style-type: none"> Concerns with paying salary Accountability concerns Concerns with ensuring a qualified candidate 	<ul style="list-style-type: none"> Hire a graduate student part-time using Sustainability Capital Reserve Post job description at UMD for large pool of qualified candidates Hire someone already working part-time as a Sustainability Coordinator locally Carry out regular performance reviews Make sure that the SO is measuring net benefits and environmental impact
1.4.1: Communications: Showcase progress on Town Website and newsletters	<ul style="list-style-type: none"> Fears that the Town will appear to be boasting 	<ul style="list-style-type: none"> Make sure that participants understand that celebration is a key part of sustaining efforts well into the future, as well as attracting funders and encouraging a sustainability culture
2.1 and 2.2: Town Hall and Garage Weatherization and Green Office	<ul style="list-style-type: none"> Possible uncertainty or discomfort with assigning these responsibilities to 	<ul style="list-style-type: none"> Do a pilot test for about a month for each type of measure (LED bulbs, occ. Sensors, etc.) Attach a sense of

⁸ An idea discussed by the University Park Green Team

<p>4.1.2: Convert one trash pick-up to food-scrap pick-up (per week)</p>	<p>UP staff</p>	<p>importance to these tasks</p> <ul style="list-style-type: none"> • Assign specific people to complete each task
<p>4.1.3: Pay-as-you-throw for trash</p>	<ul style="list-style-type: none"> • Fear of change 	<ul style="list-style-type: none"> • Make sure that residents know exactly what it will look like, and what their expectations are
<p>4.1.3: Pay-as-you-throw for trash</p>	<ul style="list-style-type: none"> • Concerns about paying extra to dispose of garbage 	<ul style="list-style-type: none"> • Explain that this is expected to reduce tipping fees significantly, which could be re-appropriated for other purposes • UP-labeled garbage bags need not be expensive to incentivize waste reduction/diversion from landfill • If necessary, reduce property taxes to offset added cost
<p>5.1.1: Apply for storm water management grants</p>	<ul style="list-style-type: none"> • Fear of long process with perception of low success rate 	<ul style="list-style-type: none"> • Grant writing may seem daunting, but this is merely a perception. • Reconnect with the core purpose and value that the Wells Run brings to UP, surrounding towns, Anacostia, and Potomac Rivers • Remember that grants are often the only conduit through which these types of restoration projects can occur • Regularly celebrate completion of each grant proposal section and make the process fun and social

<p><i>FI 2.3: Residential Energy Efficiency and Renewable Energy Outreach Program</i></p>	<ul style="list-style-type: none"> • Fear of “disturbing” residents through door-to-door education 	<ul style="list-style-type: none"> • UP is known for its sense of community and connectedness. This is just one more way for UP to live these values • Remind yourself that this is education and you are bringing significant financial benefits to UP residents through energy savings • This project may facilitate a greater sense of community
<p><i>FI 5.1: Survey for park uses and hire landscape architect</i></p>	<ul style="list-style-type: none"> • Fear that residents will request significant changes even after project completion 	<ul style="list-style-type: none"> • Communicate to Town that this project plan will not change for a few years, and therefore please refrain from expecting major changes after project completion • Encourage residents to participate NOW in the planning process before it is too late • Maintain a strict planning schedule and set a due date for requests • Set up a town survey • Clearly communicate the plan (including a map) to residents • Implement approved plan

Performance Metrics & Reporting

Initiative	Measurement method	KPI
<p><i>FI 1.3.1: Hire a Sustainability Officer (SO)</i></p>	<ul style="list-style-type: none"> • Carry out regular performance reviews • Make sure that the SO is measuring net 	<ul style="list-style-type: none"> • Net benefits • Environmental impact: CO2, water use, pollution

	benefits and environmental impact	
2.1 and 2.2: Town Hall and Garage Weatherization and Green Office	<ul style="list-style-type: none"> • Collect utility bills from past two years 	<ul style="list-style-type: none"> • Compare energy and water use before and after retrofits
2.1.7: Paper reduction initiatives	<ul style="list-style-type: none"> • Observe paper purchasing trends to measure paper usage from previous 2 years as well as post-implementation 	<ul style="list-style-type: none"> • Number of paper reams used each week or month
<i>FI</i> 2.3: Residential Energy Efficiency and Renewable Energy Outreach Program	<ul style="list-style-type: none"> • Monitor number of households electing to receive Quick Home Energy Assessment and Energy Audit • Of those, monitor who proceeds with retrofits • Evaluate utility bills 	<ul style="list-style-type: none"> • Number of households electing to receive Quick Home Energy Assessment and Energy Audit • Of those, number who proceeds with retrofits • Compare energy and water use before and after retrofits
3.4: Education programs for increased non-motor vehicle transportation	<ul style="list-style-type: none"> • Observe presence/absence of education programs, such as bicycle use trainings • Survey residents for how often they choose non-motorized transport 	<ul style="list-style-type: none"> • Number of residents choosing non-motorized transport
3.2.2: Consider exchanging the remainder of the police fleet with low-emissions vehicles	<ul style="list-style-type: none"> • Observe mileage each year on the odometer 	<ul style="list-style-type: none"> • Assuming that the manufacturer's quoted mpg is indeed correct, use this value and mileage value to determine quantity of gas burned. Compare with previous years.
4.1.2: Reduce trash pick up to once per week	<ul style="list-style-type: none"> • Monitor expenditures from activities taking the 	<ul style="list-style-type: none"> • Residents' willingness-to-pay for Town

4.1.3: Pay-as-you-throw for trash

1.4.1: Communications: Showcase progress on Town Website and newsletters

1.5: Education and Training Programs/ Events

<ul style="list-style-type: none"> place of the trash pick-up day (ex. Beautification) Survey residents to identify willingness-to-pay for Town beautification services and composting services 	<ul style="list-style-type: none"> beautification services and composting services (or willingness-to-accept payment for absence of services) Change in landfill tipping fees as a result of replacing trash pickup with food scrap pickup
<ul style="list-style-type: none"> Continue to track trash, recycling and compost amounts and associated tipping fees 	<ul style="list-style-type: none"> Compare total tipping fees before and after PAYT Profit from UP-specific trash bags
<ul style="list-style-type: none"> Foot traffic on webpage Surveys at events Social media metrics 	<ul style="list-style-type: none"> Number of visits Number of comments Number of Facebook shares
<ul style="list-style-type: none"> Take attendance Evaluate participant engagement and action planning 	<ul style="list-style-type: none"> Number of participants Number of volunteer sign-ups

Roadmap

June-July
2016

- 2.1.2: Install light occ. sensors - Town Hall
- 2.1.2 Upgrade T-8 bulbs to LED - Town Hall
- 2.1.7 Use Master Ctrl'd Pwerstrps - Town Hall
- 2.2.1 Upgrade T-8/T-12 bulbs to LED - garage
- 2.2.1 Occupancy sensors - garage
- 2.2.3 Use Master Ctrl'd Pwerstrp garage
- 2.2.5 Set washer to cold- garage
- 4.1: Reduce trash pickups to once/week
- Install other energy efficiency measures: Task lighting, keep lights off in low traffic areas, take advantage of daylight, low-flow shower head, 7-day plug-in timer, etc.
- 1.4: Communications: Showcase efforts and progress on Town Website
- Begin to build buy-in for PAYT from Council members and residents
- Distribute and collect surveys on parkland uses to all residents
- Place parkland planning sessions on Town Hall meeting agendas

Aug.-
Sept.
2016

- 4.1: Issue Pay-as-you-throw program
- 1.5: Green Team manages and delegates the steps of designing and implementing Sustainability Education and Training Initiatives
- Green Team manages and delegates tasks for Chesapeake Bay Trust grant proposal
- Communications: Maintain Town website and monitor engagement
- Analyze park use surveys and submit to landscape architect for initial recommendations

Oct.-
Nov.
2016

- Draft University Park sustainability newsletter
- Elicit applications for Sustainability Officer by submitting job description to UMD, posting opening on website, and posting signage
- Continue planning for park land revitalization

Dec 2016
-Jan 2017

- 1.1 Hire a part-time Sustainability Officer
- Train SO in town operations
- Begin planning for Residential Energy Efficiency and Renewable Energy Outreach Program
- Have SO develop communications materials

Going
forward

- Install energy-star equipment
- Upgrade to low-emissions vehicles
- Monitor natural resource use and pollution
- Evaluate results of initiatives and make necessary changes
- Continually update University Park Sustainability Action Plan

Conclusion

It has been an honor to work with University Park to develop its Sustainability Action Plan. I sincerely hope that it fulfills the needs of the Town. I also hope that the Town continues to update the Plan and evaluate its progress.

The largest source of savings and potential revenue for the Town is the Pay As You Throw waste reduction program, which could save, as a conservative estimate, \$11,876 or more in tipping fees. Additionally, the Town could receive revenue through the selling of University Park labeled garbage bags. The second-largest form of savings is to reduce the number of weekly trash pick-ups from two to one. The free day could be used to collect food scraps for composting or for Town beautification, and would save about \$2,609 annually in fuel costs, assuming 2015 gas prices into the future. The low-cost and no-cost energy efficiency measures would collectively save the Town at least \$1,000 annually.

Going forward, it is highly recommended that the Town hire a part-time Sustainability Officer. This ensures that the hard work of the Green Team and other residents does not go wasted; the Officer would make sure that projects are carried out responsibly and completely.

The Town of University Park should be proud of its impressive efforts, and therefore a robust communications and self-promotion program is strongly recommended. The Town is truly a model for leadership in sustainability and community stewardship. In the coming months, I look forward to what else University Park offers its operations, residents, and greater community.

Appendix

Sustainability Officer Position Description:

Background: The Town of University Park has a long history of leadership in the area of sustainability. The Town maintains Sustainable Maryland certification status as an early adopter, upholds a dedicated Green Team, provides weekly food scraps and yard waste pick-up services for composting, and uses clean hybrid vehicles as a significant portion of its police fleet and operations vehicles. Through net-metering, the Town's Elementary School's solar panels not

only supply 100% of the electricity needs to the school itself, but also 100% of the electricity needs of the Town Hall and Town street lighting.

Summary: The Town of University Park Sustainability Officer is tasked with initiating and overseeing municipal sustainability projects, writing and proposing policies, building and maintaining key partnerships, and generally representing the Town to achieve its sustainability and development goals. The Sustainability Officer is a self-starter, able to quickly identify and pursue opportunities for the Town to reduce its environmental impact and operational costs.

Responsibilities:

- Quickly identify and prioritize opportunities for lowering environmental footprint according to the Town's financial needs.
- Serve as an adept collaborator and team player with the Town's government and operations.
- Cultivate partnerships with the Town's neighboring municipalities, clean technology companies, utilities, Prince George's County, the State of Maryland, and state/federal agencies.
- Monitor and continually communicate changes to environmental policies relevant to the Town, such as energy efficiency and clean energy programs and incentives, grants for storm water management projects, etc.
- Organize and facilitate sustainability-related meetings and events, such as educational trainings and meetings that connect residents with sustainability programs and services.

Required Qualifications:

- Bachelor's degree with major coursework in Public Administration, Environmental Management, Environmental Science, Environmental Engineering, Urban Planning, Business Administration, or Architecture
- Two years of experience in sustainability management, preferably in a municipal setting, or large nonprofit or corporate setting
- Two years experience in budget and financial management
- Excellent interpersonal skills and interest in working collaboratively in a team-environment

Preferred Qualifications:

- Master's degree in any of the following areas: Public Administration, Environmental Management, Environmental Science, Environmental Engineering, Urban Planning, Business Administration, or Architecture
- Skills and experience in developing and implementing communications strategy

Salary:

[University Park offers a competitive salary corresponding to the candidate's experience, as well as a comprehensive benefits package.]

How to apply: Interested, qualified applicants should email [insert email here] with a cover letter and resume.

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Zero Waste Strategic Plan for Prince George's County, Maryland



NOTE:

For more information on the
County's zero waste plan, see
<http://>

www.princegeorgescountymd.gov/2651/Zero-Waste-Draft-Plan

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