Town of University Park

Sustainability Action Plan

Table of Contents

Introduction

The objective of this Sustainability Action Plan (SAP) is to provide University Park with 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 intended to help prioritize town sustainability investments during the budget process in conjunction with the Town's Strategic Plan. The SAP is a living, ever-changing document that should be periodically updated by the University Park Town Council and its committees in consultation with the public. Initiatives are organized according to the following categories: (1) Fostering Sustainable Leadership, (2) Buildings and Facilities, (3) Transportation, (4) Waste, and (5) Land Management. Completed initiatives are indicated with a checkmark symbol (☑).

Acknowledgments

This SAP is based on a May 2, 2016, draft plan prepared by Allison Harwick, Graduate Student at Harvard Extension School, for her Sustainability and Environmental Management (SEM) Graduate Capstone Project. The draft plan was taken up and edited by the University Park Green Team and subsequently approved by the University Park Town Council on June 5, 2017.

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 about 2,500 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, a public works department, 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 current elementary school building was built in 1978.

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 on the Church of the Brethren, and the official certification as a Maryland Sustainable town. Also, the town maintained an energy coach for two years through the STEP-UP program.

In keeping with the Town's commitment to Sustainability, the Town recognized a gap in our efforts. Specifically, the Town lacked a plan to collect and prioritize environmental protection initiatives. Further, the Town lacked a strong framework for ensuring consistent sustainability leadership and planning 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.

Objectives

The overall objective of this Sustainability Action Plan is to identify practical local government sustainability initiatives to discuss in the budget process and to implement in practice. The secondary objective is to maintain University Park's status as a Sustainable Maryland Certified municipality.

1. Fostering Sustainable Leadership

1.1 Vision of Sustainability

☑ 1.1.1: *The University Park Green Team vision statement*:

> "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."

1.2 Organizational Structure in Support of Sustainability

☑ ☐ 1.2.1: *Establish a Green Team*

- 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, and (4) managing diverse stakeholder needs. University Park has maintained a Green Team for many years, and the team meets about once per month 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, but will require the participation of more community residents to be effective going forward.

1.2.2: *Assign Green Team Members as Champions of SAP Implementation*

- The Green Team should take responsibility for overseeing the implementation of the Sustainability Action Plan and its consideration in the budget process, at least until the Town is able to hire a Sustainability Officer. This may require assigning roles and responsibilities for each Sustainability Initiative and tracking progress. One possibility is to create a Citizen Chief Sustainability Officer position to involve the public in Town decision making and implementation of the SAP.

1.2.3: *Green Team Can Better Coordinate Sustainability-Oriented Town Activities*

- In addition to serving as the advisory body for the Town on environmental issues, the Green Team can better coordinate sustainability-oriented activities with the Committee on Trees, Parks, and Environment and the Stream Committee. The Town should explore merging the Committee on Trees, Parks, and Environment with the Stream Committee because the goals, objectives, and projects of each are similar.

1.2.4: *Work with Other Municipalities to Hire a Sustainability Officer*

- University Park, in partnership with the University of Maryland and other municipalities, should hire a professional Sustainability Officer. 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. Further, 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. Importantly, a sustainability officer could start a phase 2 of STEP-UP in order to reach households that may not have had the opportunity to make their homes more energy efficient during the initial program. However, University Park is not large enough to support a Sustainability Officer on its own. Therefore, it makes sense to work with other municipalities and the University of Maryland to hire a sustainability officer, potentially through the new Campus Community Connection initiative at the University of Maryland.

1.3 Communication/Marketing – increase awareness, website, newsletter

1.3.1   *Communications and marketing strategy and execution*

- University Park at minimum should 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 solar panel array and the Town composting program.

1.3.2 *Recruiting, Training and Maintaining a Volunteer Base*

- Designate volunteer "sustainability ambassadors" for each ward, who can be a separate point of contact and personal resource for residents of each ward who have questions or want to get involved in sustainability activities.

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

1.4.1 *Host Events and Training Programs*

- Hold educational workshops and outreach events in coordination with the Civic association and local businesses and non-profits (Proteus, College Park Bicycles, Eco-City Farms, Anacostia Watershed Society, Community Forklift, Tanglewood Crafts, etc.)
- Encourage all Town events and Civic association events to move towards zero-waste (Azalea Classic, Chili Cook-off, holiday celebrations, and official town events).
- Support bike to work, rideshare days
- Set up a group field trip to Prince George's Recycling Facility
- Invite Maryland faculty and students as guest speakers
- Announce sustainability-oriented lectures arranged as part of the Second Saturday Lecture Series
- Volunteer at community events
- Engage students and faculty is sustainability lessons or activities at University Park Elementary School. This could include developing lesson plans and encouraging sustainability-related science fair projects. A key component of engaging University Park Elementary School would be coordinating with science teachers to reactivate the solar monitoring function within the school.

- Sponsor citizen walks with the Green Team and Committee on Trees, Parks, and the Environment through the town park to identify ways to improve management of the park.
- Participate in Earth Hour and Earth Day Events.

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*

- 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.

2.1.2 *Lighting:*

- 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. 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. Estimated simple payback period: about 1 year. Pepco offers [incentives for lighting controls](#).
- 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*

- 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. Hardware stores sell Master Controlled Power Strips for about $9 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.

- 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 internals communications materials by email.
- Track paper use and post results to encourage paper use reduction.
- 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 here.

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.
- Recommend installing occupancy sensors to ensure lights are off when the storage unit is not in use, and communicate this concern to the owner of the storage unit. 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*

- The television and cable box in the break room should be hooked up to a Master Controlled Power Strip. 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.

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

The primary focus of the STEP-UP Program was residential energy retrofits. In fact, about $600,000 went into energy auditing of 215 homes and the energy retrofits of 130 residences. It will take dedicated resources to improve the energy efficiency of the nearly 80 percent of the town that did not participate in Phase 1 of the STEP-UP program.

☑ ☐ 2.3.1 *Hire a Town Energy Coach*

- UP was awarded a U.S. Dept. of Energy grant to hire a University Park Town Energy Coach as part of the Small Town Energy Program for University Park (STEP-UP). 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. The Town no longer employs an energy coach, as the grant has expired.

2.3.2 *Make STEP UP Archive Accessible to the Public*

- Make the results of the STEP UP program accessible on the Town website so residents and surrounding communities can learn how to improve residential efficiency without "reinventing the wheel." Sharing the very comprehensive STEP-UP final report would allow other towns across the country to learn from our failures and successes and should be used as a guide to any future energy efficiency programs in University Park.

2.3.3 *Initiate STEP UP Phase 2*

- As funds allow, initiate Phase 2 of the STEP UP program to reach the 85% of the Town that did not participate in Phase 1. This effort will require, as discussed above, a town or multi-municipality sustainability officer. The value of the energy coach was one of the biggest takeaways from STEP-UP, emphasizing the need for a Sustainability Officer, as called for in 1.2.4.

☑☐ 2.3.4 *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. Many homes in University Park are shaded or otherwise not good candidates for solar energy. A new Maryland state law now allows community solar projects to be built where remote solar panel sites generate clean electricity. All PEPCO customers, including town residents will be able to buy or lease the solar panels with the solar electricity being credited to their utility bill.

☑☐ 2.3.5: *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. Revenues the town receives each year from school solar electricity generation

could be set aside in the town budget as a "green reserve" to be used for green or sustainable projects.

2.3.6 *LED Street Lights*

- Retrofit the town's street lights with LED lamps to reduce electric use, utility bills, and maintenance. If successful, the town should renegotiate maintenance fees paid to PEPCO to reflect lower maintenance costs for LED lighting.

2.3.7 *Mosquito Program*

- Build on the Town's Take Back Our Yards mosquito program and the parallel effort supported by the community to improve public education to remove breeding sites and to trap to count and reduce mosquito populations.

- Organize a block captain/sustainability ambassador network to reach all households in town.

2.3.8 *Water Use*

- Host events educating residents on water conservation

3. Transportation

University Park is well connected, both internally and with the Washington, D.C., metro system. 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, as do several Prince George's County TheBus stops.

3.1 Shuttle Program

☑ ☐ 3.1.1 Continue *Current Town Shuttle Bus Service*

- 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 to seniors and other residents during the day on weekdays, such as to the grocery store or to doctor's appointments.

3.1.2   Expand Shuttle Bus Service

- Consider—after appropriate public outreach and legal consultation—expanding Town shuttle program to local retail destinations and to better serve University Park's aging in place efforts.

3.1.3   Integrate Shuttle Bus Into Greater Network of Public Transportation Options

- Continue working with the University of Maryland and other municipalities to better integrate the Town shuttle service within the suite of other public transportation options and demand management efforts underway.

3.2 Other Publically Owned Vehicles

- To the extent feasible, replace existing police and public works vehicles with low-emissions vehicles.

3.3 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.
- Encourage the Town's recent efforts—paid for with a grant from the State of Maryland—to join the University of Maryland's bike share program. Monitor this effort, and encourage a review and potential expansion of the program when the grant expires and new opportunities arise.
- 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 Smart Benefits 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 food scraps collection once per week. The food scraps may not contain meat or dairy, and are carried by truck to Western Branch Composting. Leaves are taken to College Park for composting.

4.1 Solid Waste

4.1.1 *Expand Composting Program*

- Expand the food-scrap pilot program to a town-wide program with once a week pickup. This would likely incur no cost and would reduce tipping fees.

4.1.2: *Change Trash Pickup to Once a Week from Twice a Week*

- Reduce the number of trash pickups from twice per week to once per week. This would result in cost savings through reduced maintenance, vehicle miles traveled, and tipping fees, and would free up time for other priorities such as beautification of the Town Park.

4.1.3: *Identify and Use Local Food Waste Composting Facility*

- The Town should work with the County and neighboring municipalities to identify and develop appropriate local decentralized food waste composting facilities. Such local facilities will reduce current food waste disposal costs by reducing the miles traveled to dispose of such waste.

☑ ☐ 4.1.4: *Continue Electronics Recycling*

- Encourage Continued Electronics Recycling. UP holds an annual Free E-Cycling Day in the spring. At one event, 7,256 lbs. of electronics were collected.

4.2 Waste Water

- Have town operations and residents work with the Washington Suburban Sanitary Commission's Water audit program to reduce wastewater.

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.

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. 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.

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: *Continue 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.
- Take advantage of opportunities to plug in to larger cleanup efforts. For example, Project Clean Stream, a Bay-wide annual event, and the Alice Ferguson Foundation for the Potomac watershed. Both offer resources and materials.
- Track the ongoing Nine Ponds study, which was to provide a plan for storm water management of Wells Run. Push for proper storm water management in the watershed above our town to improve the quality of our town stream.

5.2 Town Park Land

5.2.1 *Develop a Town Park Plan*

- Focus on the right use for the right place, so recreational facilities, native plants, shade trees, art sculptures, walking paths, memorials, etc. are located to maximize utility while minimizing long-term operations, maintenance, and repair costs.
- A properly developed park plan will also give University Park access to grants to beautify the park while providing clarity to Town committees, residents, and civic groups about what uses are appropriate for sections of the park.
- The Town Park Plan should include a comprehensive long-term invasive plant management plan
- The Town Park Plan should be developed with heavy citizen involvement and the key participation of the Committee on Trees, Parks, and the Environment and the Stream Committee.

5.2.2 Administer a Survey of Resident Preferences for Park Uses.

- Hire Landscape Architect to beautify parks, making them more functional for a variety of purposes (tree pilot, play area, etc.). These efforts would feed into the Town Park Plan.

5.2.3 *Increase the Number of Pet Waste Stations*

- With funding from the "Mutt Strut," a local dog-walking event, the Town established a pet waste station in the Town Park. Further efforts to manage pet waste should be encouraged because of aesthetic and water quality issues.

5.2.4 *Maintain and Expand Shade Tree Canopy*

- Encourage continued collaboration between the Committee on Trees, Parks, and the Environment and local volunteers, including recent efforts to use remote sensing technologies to better target shade tree planting efforts.
- Make open woodland areas around recreation areas more robust by planting native understory trees and thereby cutting down on mowing to allow natural (managed) forest to emerge;
- Replace dying trees with heat-tolerant, drought resistant, and storm resilient native species in acknowledgement of effect of climate change in our region.
- These efforts should be part of the Town Park Plan but merit separate mention because trees on private land account for much of the shade tree population in Town.

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 is a way of displaying residents' commitment to the Town's sense of community and connection with nature. The Town should encourage the use of native plants with minimal watering requirements, rain barrels, permeable paving materials, "green" lawn and yard maintenance equipment and techniques, and low-maintenance

grasses. The April 2, 2017 Town Sustainability Fair and subsequent events are way to encourage these activities.

- Develop a town plan for both public and private properties to reduce pesticide and herbicide use to protect pollinators, pets, humans, the local watershed, and the environment generally.

6. Future Modifications to this Plan

- When approving this Sustainability Action Plan on June 5, 2017, the University Park Town Council noted several areas for future attention, specifically (1) the addition of a section on air pollution and particulate matter, (2) an increased emphasis on walkability, and (3) further focus on developing public involvement to hold the town accountable for progress toward the plan's goals. As this SAP is a living, ever-changing document, the first periodic update by the University Park Town Council and its committees in consultation with the public should address these issues amongst other enhancements requested by the community.