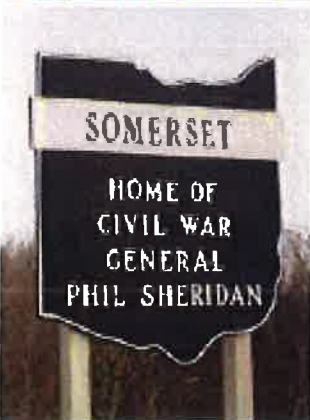




VILLAGE OF SOMERSET

SUSTAINABILITY ROADMAP



DECEMBER 2014



A unit of American Electric Power

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A Letter from AEP Ohio



AEP Ohio is proud to partner with the village of Somerset, Ohio, on the development of its Sustainability Roadmap, a document meant to serve as a framework for the village's ongoing commitment to energy efficiency and sustainability.

This roadmap was made possible because of Somerset's successful participation in AEP Ohio's Community Energy Savers pilot program and the significant existing sustainability efforts of the community.

In 2014, AEP Ohio launched the Community Energy Savers pilot program, linking its commitment to communities with ongoing efforts to bring the benefits of efficiency to more customers. Participating communities that take the lead in encouraging community members to participate in select AEP Ohio energy efficiency programs earn awards based on their participation. At 50 percent of goal, communities earn support in developing a Sustainability Roadmap.

At 100 percent of goal, communities receive a financial award toward one or more community-directed projects. AEP Ohio is testing the cost-effectiveness of this peer-to-peer community-based approach to increasing program participation as compared to conventional marketing strategies.

AEP Ohio delivers power to more than 1,000 communities located in 61 of the state's 88 counties. It is our passion and goal to help make these communities shine even brighter by helping residents and businesses become more energy efficient and sustainable through the advancement of a number of programs designed to help use less energy.

We are committed to strengthening the communities we serve by supporting local economic development activities that help create jobs and attract businesses to Ohio and by engaging in strategic community philanthropy.

That commitment includes our ongoing efforts to improve reliability and service through expanded technologies and advances in customer-sited metering, as well as to keep communities informed in the event of storms or other emergencies through our first responder partnerships. The benefits that AEP Ohio brings to its communities include those that result from energy efficiency.

On behalf of AEP Ohio and our 1,300 employees, I would like to congratulate the village of Somerset on its leadership and dedication in creating a more sustainable and engaged community.

Pablo Vegas

Pablo Vegas
AEP Ohio President and
Chief Operating Officer

Since 2009, AEP Ohio energy efficiency programs have delivered the following benefits:

- Saved customers over \$1 billion in lifetime energy savings
- Created more than 100 jobs
- Reduced emissions of carbon dioxide by 1.5 million tons, sulfur dioxide by more than 4,200 tons and mercury by more than 46 pounds

Sixteen different energy efficiency programs make it possible for every customer to participate and receive technical assistance and/or financial incentives or rebates to reduce barriers to implementing energy efficient practices and equipment in their home and business. Program details can be found at AEPOhio.com/WasteLess for residents or AEPOhio.com/Solutions for businesses.

Executive Summary

The village of Somerset's Sustainability Roadmap was led by Mayor Thomas Johnson and his team, with support from AEP Ohio's Community Energy Savers pilot program representatives. The roadmap leverages existing sustainability initiatives already adopted within the community that are either in the planning or completion phase. The end result is an actionable plan that targets five (5) priority areas to achieve Somerset's goal of creating a more sustainable and engaged community.

The priority areas of this Sustainability Roadmap present a set of initiatives to achieve the overall sustainability objectives. Additionally, the plan offers various tips for residents and businesses to reduce their energy consumption and adopt sustainable practices.

1. Energy Efficiency and Renewable Energy: Somerset is working on numerous initiatives to educate its residents and organizations about the environmental and economic benefits of energy conservation and energy efficiency, while actively seeking funds for implementation. Through these engagement initiatives and active community participation in energy efficiency programs, the village aims to contribute to the region's energy efficiency efforts.

2. Water and Wastewater: Somerset is committed to improving the efficiency and performance of the water and wastewater systems in the village. Through infrastructure upgrades and educational initiatives, the village of Somerset will instill the value of water conservation throughout the community so that these improvements are fully optimized.

3. Reduce, Reuse and Recycle: With the implementation of curbside recycling in Somerset, an increasing number of residents and local businesses are participating in waste reduction and recycling programs. Somerset will continue to promote this initiative by finding new ways to increase participation in recycling, waste reduction and composting opportunities.

4. Parks and Open Spaces: Over the past few years Somerset has doubled the size of parks and open spaces available for hiking, biking, eco-tourism and other recreational activities. The strong presence of parks and open spaces within a community can boost the local economy by attracting tourists and supporting outdoor recreational events.

5. Economic Development: Somerset is committed to using sustainability as a platform to fuel economic development by expanding its local food, transportation, educational and eco-tourism initiatives that will allow Somerset to retain community members while attracting new residents, businesses and visitors.



STRATEGIES FOR IMPLEMENTATION

The village of Somerset will engage in the activities identified in the roadmap through the following strategies:

- Develop lasting partnerships with local and regional organizations that are committed to promoting energy efficiency and sustainability
- Maintain the strong working relationship between Somerset and AEP Ohio
- Create a channel of communication to increase participation and knowledge about energy efficiency practices and programs among residents and businesses in the community

Introduction



This Sustainability Roadmap is an actionable plan that targets five priority areas to achieve Somerset's goal of creating a more sustainable and engaged community.

The village of Somerset, located in Perry County, Ohio, was established in 1810 by settlers from Somerset, Pennsylvania. Because of its location between the cities of Lancaster and Zanesville, Somerset was once known as Middletown.

In 1817, Somerset became Perry County's seat of government until the start of the American Civil War. In 1846, Somerset had a population of nearly 1,400 residents and included four churches, three newspapers, sixteen stores, an iron foundry and a tobacco warehouse. The town also claimed a Catholic nunnery and St. Mary's Seminary, a school for young women. Two miles south of Somerset is St. Joseph's Church, the first documented Catholic Church in Ohio.

During the nineteenth and the first portion of the twentieth centuries, Somerset's population remained stable at approximately 1,200 residents. Many residents earned their livings in the surrounding iron

and coal mines. As iron and coal deposits began to decline, residents began to find employment in other industries principally in the nearby cities of Lancaster and Zanesville. As of 2010 census, the village has a population of 1,481 people. Civil War General Philip Sheridan spent much of his youth in Somerset. Although not open to the public, his home remains standing today.

As Somerset moves forward, sustainability has increasingly become an area of focus for many members of the community. Over the past few years, the village and other local institutions have engaged in several sustainability projects such as energy efficiency in municipal buildings, recycling initiatives and water infrastructure improvements. Many of the local residents, businesses and institutions also have started to work on making their own properties and organizations more sustainable.

The village of Somerset is committed to do its part in the global effort of reducing energy consumption and greenhouse gas emissions. To further this effort, Mayor Tom Johnson signed the U.S. Mayors Climate Protection Agreement with the consent of the Somerset Village Council. The village joined Columbus, Cleveland, Zanesville and 28 other cities and villages in Ohio in committing to actions that will meet the objective of reducing carbon emissions in their towns to below 1990 levels. In looking for meaningful ways that a small rural Appalachian community of 1,500 with a 51percent low and moderate income household with a median income of \$29,000 can contribute, Somerset has adopted various initiatives, such as preserving open spaces, promoting energy efficiency measures and recycling, and adopting a shade tree program.





Each time a local resident or business participated in one of the seven AEP Ohio programs – Online Energy Checkup, In-Home Energy, Multifamily Direct Install, Appliance Rebates, Appliance Recycling, Express and Prescriptive programs – the village of Somerset received points toward its aggressive goal of 144 participations during a three-month period.

AEP OHIO ENERGY SAVERS PROGRAM

Somerset participated in the AEP Ohio Community Energy Savers pilot to help promote energy efficiency activities among residents and businesses while earning funds to assist with the installation of energy efficiency lights at the Girls Softball Park.

Through the Energy Savers Program, AEP Ohio provided tools, training and resources to Somerset to assist them in educating the community in energy efficiency and sustainability while also engaging community residents and businesses to participate in AEP Ohio's energy efficiency programs. To support Somerset in accumulating participation points, AEP Ohio offered a menu of services including marketing, operations and technical assistance.

Each time a local resident or business participated in one of the seven pre-selected programs (Online Energy Checkup, In-Home Energy, Multifamily Direct Install, Appliance Rebates, Appliance Recycling, Express, and Prescriptive programs) Somerset received points toward its goal of 144 participations. Somerset has approximately 600 households within the village limits.

After the three-month participation period, more than 20 percent of those eligible took advantage of AEP Ohio's programs and incentives.



SUSTAINABILITY ROADMAP

Somerset Community Energy Savers exceeded its goal in advance of its deadline. Having achieved 166 points, the village became eligible to receive service and financial awards from AEP Ohio. One of these awards was the development of a Sustainability Roadmap.

Sustainability planning is a growing trend around the globe, the nation and in the Midwest. Numerous cities and towns in Ohio have created sustainability plans and roadmaps, including Akron, Athens/Ohio University, Cincinnati, Cleveland, Columbus and Dayton.

There are many benefits to developing a sustainability plan or roadmap. A sustainability plan:

- Develops priorities in an efficient manner
- Fosters accountability – what gets measured gets managed
- Galvanizes the entire community around common goals
- Signals to prospective residents and businesses that it is a dynamic community, while engaging and retaining existing members

THE WORKSHOP

The project began with a workshop with Mayor Johnson and his team to identify specific goals and activities that would become part of its Sustainability Roadmap.

The workshop was a facilitated discussion in which the group brainstormed about Somerset's ongoing and planned priority areas and initiatives. This actionable plan builds upon work that the village has already accomplished or is planning to achieve.

AEP Ohio would like to thank Mayor Johnson, his team and partners for participating in the Community Energy Savers Program and for their contribution in the development of this roadmap.

Sustainability Defined

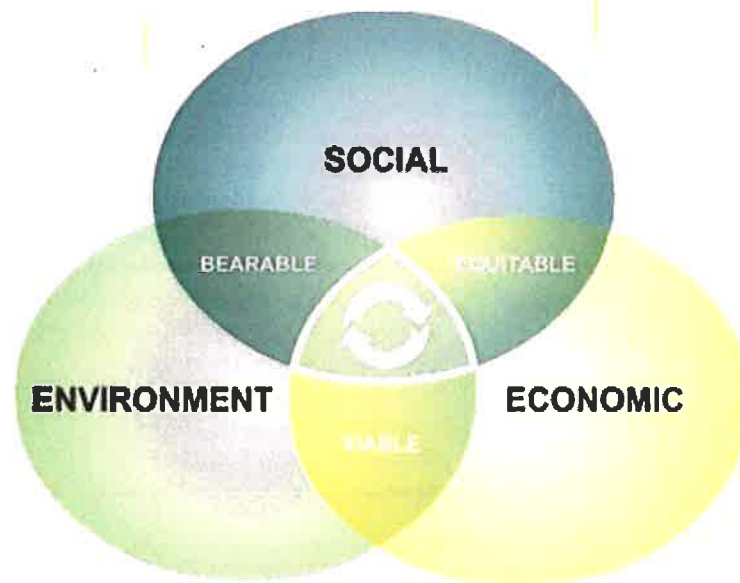
Sustainable development can be defined as an evolving process that improves the economy, the environment and society for the benefit of current and future generations. A sustainable community adopts a strategic plan that is built on the interactions of three pillars: environmental, social and economic.

The environmental pillar covers issues such as air and water quality, green engineering and chemistry, ecosystem services and resource integrity (reduce waste, increase recycling, proper waste management, etc.). The human health, education, resource security and sustainable communities are part of the social aspect, while jobs, incentives, supply and demand, costs, and workforce development are issues addressed in the economic pillar. Making sure that the adopted activities

positively affect all three pillars is critical for a sustainable community.

Somerset is committed to continue and expand its initiatives and efforts that will impact the community members and businesses in a positive matter, while attracting new residents and businesses. The following sections provide an overview of Somerset's planned and ongoing initiatives, combined with additional recommendations for an even more sustainable community.

With the right combination of effective governance, innovation and public/private collaborations, many of the economic, environmental and social challenges can be minimized and overcome.



Energy Efficiency and Renewable Energy



Energy conservation and energy efficiency are fundamental to a sustainable economy. With the support of committed leaders, cities around the country are working to make their communities more energy efficient. Somerset is working on numerous initiatives to educate its residents and organizations about the environmental and economic benefits of energy conservation and energy efficiency, while actively seeking funds for implementation. Through these engagement initiatives and active community participation in energy efficiency programs, the village aims to contribute to the region's energy efficiency efforts.

AEP OHIO CAN HELP

Online Energy Checkup, In-Home Energy and Express Programs

Residential customers of AEP Ohio can conduct a free, online energy assessment and receive energy efficient items. Customers also may schedule a \$25 assessment or \$50 energy audit for all electric homes to identify other efficiency improvements and rebates and receive free installation of efficient compact fluorescent light (CFL) bulbs.

Owners or managers of multifamily properties may be eligible for free energy efficiency measures for their tenants whose residences are individually metered by AEP Ohio. Call 877-856- 2454 for more information.

Business customers that use less than 200,000 kilowatt hours (kWh) annually can schedule a free audit by calling 855-546-3644.

Details for these and all AEP Ohio energy efficiency programs may be found at AEPOhio.com/WasteLess for residents or AEPOhio.com/Solutions for businesses.

Please note that offerings and requirements are subject to change.

OBJECTIVES

1 Determine the baseline energy consumption and greenhouse gas emissions for the village. Whether it is a single building or the entire community, the first step in tracking energy performance over time is identifying an energy consumption and greenhouse gas emissions baseline that will be used for comparison over time. The baseline shall include energy consumption (electricity, natural gas, etc.) for at least a 12-month period. The village plans to gather information for the last five years to better understand trends and plan for the future. Three years of electricity and water consumption has already been provided by AEP Ohio. In addition, water, natural gas and other utility consumption will be obtained. This analysis will also support in identifying the community's greenhouse gas emissions. For greenhouse gas emissions accounting, the village may identify an appropriate tool and responsible party to lead this effort. For example, ICLEI's (International Council for Local Environmental Initiatives) offers [Clean Air Climate Protection \(CACP\) Software 2009](#) to municipalities to help them inventory their greenhouse gas emissions. Free training is available for government entities.

Champion: Mayor Johnson

Timeline: 2015

2 Benchmark municipal buildings and facilities using U.S. Environmental Protection Agency (EPA)'s online Tool, ENERGY STAR® Portfolio Manager (ESPM). Tracking the energy consumption of local municipal buildings and facilities, such as courthouse, police department, water and sewer facilities, etc. will provide insight on the energy performance of the buildings and will help identify underperforming facilities. Through benchmarking, the village will be able to evaluate energy consumption of its facilities relative to buildings of similar size and use. The results of this comparison are expressed through a numerical score between 1 and 100, where the higher the score, the better the building is performing. A minimum score of 75 is required to achieve ENERGY STAR® recognition.

Champion: Mayor Johnson

Timeline: 2016

3 Implement an employee awareness program to reduce energy consumption at municipal buildings. The village aims to implement an employee

awareness program that will incentivize employees for their efforts in reducing energy consumption in municipal buildings. The village will explore the feasibility of setting goals for energy use and reward employees that meet or exceed these energy reduction goals through year-end bonuses or other incentives.

Champion: Mayor Johnson and Jane Foulk, Assistant to the Mayor

Timeline: 2016

4. **Identify available funding and grants/incentives for upgrading the remaining street lights with higher efficiency lighting technology.** Approximately 70 lighting fixtures illuminate the streets of Somerset. The village has obtained Ohio Department of Transportation (ODOT) Transportation Enhancement Program, Community Development Block Grant (CDBG) Program and Appalachian Regional Commission (ARC) funding for the historic district streetscape project. In May 2015 the village will replace 30 of the existing street lights with more energy efficient lights in the project area. The remaining street lights will be upgraded in the next few years as funds and incentives are identified. As a next step to this process, the village will work on identifying additional replacement needs.

Champion: Village of Somerset

Timeline: 2017

5. **Incorporate Leadership in Energy and Environmental Design (LEED®) elements in the Townhall (Courthouse) Renovation Project.** Developed by the U.S. Green Building Council (USGBC), LEED aims to help building owners and operators use resources more efficiently. The Old Perry County Courthouse is the oldest continuously used government building in the Midwest. It was built in 1829 and is now listed on the National Register of Historic Places. Currently serving as Somerset's village hall, the building will be renovated in the next few years. The renovation plan includes energy efficiency upgrades and LEED elements that will make the Courthouse a more sustainable building, while preserving its status as a national landmark.

Champion: Village of Somerset

Timeline: 2017

6. **Install a geo-thermal system as part of the Townhall Renovation project.** Geo-thermal energy is clean and sustainable. A geo-thermal heat pump or ground source heat pump (GSHP) uses the earth as a heat source (in the winter) or a heat sink (in the summer), taking advantage of the ground temperatures to boost efficiency and reduce the operational costs of heating and cooling systems. Beneath the upper 20 feet of the Earth's surface, the ground temperatures are steady throughout the year, between 50-60°F. Through installation of such a system, the courthouse can maintain or improve its current ambient temperature settings at a significantly lower cost.

Champion: Village of Somerset

Timeline: 2017

7. **Explore options for installation of solar panels on municipal buildings.** The benefits of renewable energy include reduction of utility costs, peak-shaving and increased reliability. The village will be exploring the opportunity of installing solar panels on the roof of the water and wastewater plants, as well as other locations. This opportunity will continue to be explored and prioritized based on availability of funds and incentives, payback period and needs for backup generation.

Champion: Village of Somerset

Timeline: 2017

8. **Provide local businesses with information regarding energy efficiency, renewable energy options and available grants.** In its effort to improve upon the community's overall energy efficiency and resiliency plan, the village will promote the use of renewable energy among agricultural and small businesses within the region. This information will be provided using the local social media account (Facebook) and other media outlets, such as newsletters and local newspaper. Currently, the [Rural Energy for America Program \(REAP\)](#) provides financial assistance to agricultural producers and rural small businesses in rural America to Purchase, install, and construct renewable energy systems

- Make energy efficiency improvements to non-residential buildings and facilities
- Use renewable technologies that reduce energy consumption
- Participate in energy audits and renewable energy development assistance

As opportunities are made available to the residents and businesses in Somerset, the village will make an effort to communicate this information.

Champion: Mayor Johnson

Timeline: 2015-2017

- 9 **Partner with the Ohio Home Weatherization Assistance Program (HWAP) offered by Hocking-Athens-Perry Community Action.** The HWAP is a no-cost energy assistance program available to homeowners and renters with a household income at or below 200 percent of the federal poverty guidelines. The program is designed to reduce energy costs and improve participants' health and safety. The village shall determine the benefits of such partnership and assist the program representatives to engage in participation eligible residents and businesses.

Champion: Mayor Johnson

Timeline: 2015-2017

Additional Opportunities

- 10 Participate and promote the Earth Hour initiative using local media outlets, such as Facebook, local newspaper and newsletters. Next Earth Hour is March 28, 2015 at 8:30 p.m.

Champion: Mayor Johnson

Timeline: 2015-2017

- 11 Invite your energy utilities (electricity, natural gas, water) to Somerset during Earth Day or other environmental events to help promote energy efficiency and conservation.

Champion: Mayor Johnson

Timeline: 2015-2017

AEP OHIO CAN HELP

Prescriptive and Custom Programs

The Prescriptive Program offers businesses set financial incentives for the implementation of energy-efficient improvements and technologies that reduce energy consumption. The program is a simple and easy-to-use way to receive funding for common energy efficiency projects.

All business (non-residential) customers in AEP Ohio's service territory in the state of Ohio are eligible to apply, and can choose from a predefined incentive menu based on a fixed-cost per unit installed in these categories:

- Heating and Cooling (HVAC)
- Lighting
- Motors and Drives
- Refrigeration
- Miscellaneous Food Preparation & Storage Equipment

For more information on the prescriptive program, call 330-308-6142. Call 330-438-7825 for more information on the Custom Program.

Please note that offering and requirements are subject to change.

Tips to Save Energy

Oftentimes people associate energy efficiency with discomfort. Many energy efficiency and energy conservation measures provide residents and business owners the opportunity to save on their utility bills without compromising the comfort of their homes or employees. Small behavioral and operational changes can have a significant impact on the overall performance of a home or building.

At Home

- Unplug electronics and unused appliances to reduce 'vampire energy'
- Use your appliances wisely
- Take advantage of your computer's energy-saving features
- Replace incandescent light bulbs with ENERGY STAR® certified CFLs or LEDs. Get special discounts on CFL bulbs through AEPOhio.com/WasteLess
- Install programmable thermostats
- Turn off lights when not in use
- Weatherize your home
- Change filters on your furnace and air conditioning regularly
- Install low-flow plumbing fixtures

At Work

- Conduct an energy audit/assessment
- Calculate a baseline for energy usage
- Adjust lighting levels for different uses and times of day
- Install lighting controls such as dimmers, timers, motion sensors and photocells
- Install LED exit signs
- Use LED lighting for outdoor security and decoration

AEP OHIO CAN HELP

Express Program

Small businesses can cut the hassle and cost of energy efficiency upgrades with the Express Program. A representative will survey your facility for FREE to identify energy saving opportunities and propose recommended improvements. Customers will be eligible for incentives up to 80 percent of total project cost. Participation is limited to non-residential customers with annual consumption of 200,000 kWh or less.

Call 855-546-3644 to schedule your free assessment.

Please note that offering and requirements are subject to change.

Water and Wastewater



Somerset is committed to improving the efficiency and performance of the water and wastewater systems in the village. The village is currently in the planning phase of a major sewage system improvement project that will reduce the quantity of water inflow. A \$1.2 million budget is available for this project, scheduled to start in 2015. This project is a part of a long term plan to improve Somerset's overall environmental infrastructure, focusing particularly on sewage and water. Through these initiatives, the village of Somerset will instill the value of water conservation throughout the community so that these improvements are fully optimized.

OBJECTIVES

- 1 Install RadioRead® water meters in Somerset.** *The village will work to obtain funding to install RadioRead water meters that will give Somerset real time water usage data for the entire village. This initiative will enable the water department staff to identify leaks promptly.*
Champion: Village of Somerset
Timeline: 2016
- 2 Minimize the cost of water treatment by educating farmers on the consequences of applying chemicals on the land.** *During the water purification process, undesirable chemicals, biological contaminants and suspended solids and gases from the watershed are removed. The water reservoir that serves Somerset is surrounded by land used for agricultural purposes. When chemicals are applied on the land, water becomes contaminated and the treatment process becomes significantly more expensive. Somerset is committed to educating farmers about the watershed and will work with them to control the contaminants that flow into it.*
Champion: Village of Somerset
Timeline: 2016
- 3 Explore the feasibility of acquiring the agricultural land surrounding the watershed to eliminate chemical infiltration in the reservoir.** *Along with educating the farmers about the consequences of chemicals infiltration in the water reservoir, the village will explore the possibility of acquiring some of these lands to gain better control over eliminating water contamination.*
CHAMPION: Village of Somerset
TIMELINE: 2015 – 2017
- 4 Evaluate interest in water delivery to Somerset's surrounding rural areas.** *The village's water plant is oversized for its current customer base. To increase the number of customers and therefore, revenue for the village, the water lines may be extended in the future to the rural areas outside Somerset that currently don't have water service. However, installing water lines is an expensive project to undertake, and without customer commitment, the project may not be beneficial from an economical point of view. To better understand interest and prioritize areas for expansion, the village will start by surveying the households around the village and map out needs for water service.*
Champion: Somerset Water & Wastewater District
Timeline: 2015
- 5 Install a coin-operated bulk water vending machine.** *Currently, the households around Somerset that do not have water service must purchase water from the surrounding villages. Interested customers can purchase water in Somerset between the hours of 6:00 a.m. and 2:00 p.m., during the regular staff working hours. This limited schedule causes many*

potential customers to drive further and purchase bulk water in places where a coin-operated machine is available or the schedule is extended after regular work hours. A coin-operated system will allow customers to purchase water at their own convenience and will significantly increase the income from water sold, revenue that can be used for further system improvements.

Champion: Somerset Water & Wastewater District

Timeline: 2015

- 6 **Partner with the AmeriCorps volunteers of the Soil and Water Conservation District to implement a watershed emergency plan.** The village aims to create an emergency plan to address potential hazards caused by floods, fires, windstorms, highway spills and other natural disasters and incidents. The plan should address first response procedures, as well as how to mitigate damage to the environment, property and human life. Upon completion of the plan, the village will create educational material for distribution to the public.

Champion: Mayor Tom Johnson

Timeline: 2017

- 7 **Improve the energy efficiency of the water distribution and wastewater systems.** As part of the village's plan to decrease their energy usage, the water distribution and wastewater systems have been upgraded with high efficiency pumps. As funds become available in the next few years, additional upgrades will include pumps, controls and the installation of variable frequency drives (VFDs) to reduce pumping electricity consumption.

Champion: Mitch Altier, the IBI Group

Timeline: 2017

- 8 **Eliminate two pumping stations by redesigning the wastewater system.** Currently, the village of Somerset has five pumping stations that serve the wastewater system. It was determined that two of the pumping stations could be eliminated by converting the infrastructure into a gravity system. Although this is not an inexpensive project to undertake, using gravity instead of pumps to move wastewater to the treatment plant will result in significant energy savings and reduced operation and maintenance costs.

Champion: Mitch Altier, the IBI Group

Timeline: 2017

- 9 **Install ultra-violet (UV) water treatment technology to reduce the use of chemicals.** UV provides a safe, simple and cost-effective disinfection technology for wastewater reuse. UV is able to inactivate pathogens such as giardia and cryptosporidium, which are chlorine-resistant. UV has a significantly lower carbon footprint versus chlorine and other typical chemicals used in the disinfection process, as well as a smaller physical footprint due to shorter contact time. No disinfection by-products are generated with UV, and it is a safer option for the operator and the community. In addition, UV is typically less expensive over time than chemical treatment, since chlorine and other chemicals' pricing are highly variable.

Champion: Somerset Water & Wastewater District

Timeline: 2015 - 2017

Additional Opportunities

- 10 **Establish a baseline for current water consumption for village buildings and facilities.**

Champion: Mayor Johnson

Timeline: 2016

- 11 **Educate residents and businesses on water conservation topic through social media and other communication channels.**

Champion: Mayor Johnson

Timeline: 2015 - 2017

- 12 **Partner with AEP Ohio to explore the idea of a Smart Meter implementation pilot program.**

Champion: Mayor Johnson

Timeline: 2017

Tips to Conserve Water

The average American household uses 320 gallons of water per day, about 30 percent of which is devoted to outdoor uses. More than half of that water is used for watering lawns and gardens. When it comes to conserving irrigation water, small adjustments can have a significant impact. Here are some ideas on how to use water in the house and at work more efficiently:

At Home

- When hand washing dishes fill one sink with wash water instead of letting water run
- Purchase ENERGY STAR® certified dish washers
- Wash fruits and vegetables in a container filled with water instead of letting water run
- Don't use running water to thaw food. Defrost food in refrigerator or in a container with lukewarm water
- Use a reusable water bottle for your daily drinking needs
- Don't water your lawn during summer peak hours or on windy days when most of the water would evaporate or be blown away
- Use drip irrigation for shrubs and trees to apply water directly to the roots
- Monitor your bill for unusually high water use to detect leaks
- Test your toilet for leaks at least once a year by adding food coloring or a colored toilet cleaner in the tank to see if it seeps into the bowl
- Use rain barrels to harvest rainwater from gutters and watering gardens and landscapes

At Work

- If not already present, install water meters and sub-meters to measure water consumption
- Assess your water use to identify opportunities for savings and track results
- Check regularly for leaks and, when found, repair them promptly
- Consider and compare water use when purchasing ice makers, dishwashers, coolers and cleaning equipment
- Install WaterSense® labeled showerheads, toilets and flushing urinals
- Use sprinklers that deliver big drops of water closer to the ground. Smaller drops and mist will often evaporate before hitting the ground
- Water lawn and wash other outdoor surfaces only when necessary
- Plant native landscaping and lawns that thrive with less water
- For extended lawn areas needing irrigation, install control devices such as moisture sensors to match the water needs of the landscaping

Reduce, Reuse and Recycle



Reducing waste and increasing recycling participation work hand-in-hand with protecting natural resources while saving residents money. An increasing number of residents and businesses are participating in waste reduction and recycling programs. Somerset will continue to promote this initiative by finding new ways to increase participation in recycling, waste reduction and composting opportunities.

OBJECTIVES

- 1 Work with Perry County Refuse & Recycling Program to promote recycling.** *The village plans on working with the Perry County Refuse & recycling Program to include information on recyclable materials and available drop-off locations in available media channels, including social media, local newspaper, newsletter and events. The village will take advantage of any opportunities to dispense this information further to community members to increase participation in the curbside recycling program.*
Champion: Village of Somerset
Timeline: 2015 - 2017
- 2 Promote appliance recycling.** *Through the AEP Ohio Recycling Program (freezers and refrigerators), customers can get paid for protecting the environment while saving money and energy. This opportunity will continue to be promoted using communication channels such as Facebook, e-mails, newsletters or articles in the local newspaper.*
Champion: Mayor Johnson
Timeline: 2015 - 2017
- 3 Identify additional needs for residential recycling dumpsters.** *The village has negotiated with Waste Management free curb side recycling as part of the standard trash rate of \$12.09 per month. Residents can now take advantage of this service; however, many residents may still be in need of designated dumpsters for recycling*
Champion: Village of Somerset
Timeline: 2015
- 4 Explore the possibility of youth education around recycling and landfill use.** *Partner with local schools and other organizations such as Refuse and Recycling Program, Waste Management, etc., to educate students, parents and teachers on the economic and environmental benefits of recycling and composting. Additionally, landfill educational programs need to be a focus as well to make the community aware of the consequences of landfill waste on our environment.*
Champion: Jane Foulk-Assistant to the Mayor
Timeline: 2015
- 5 Improve waste processes in the recycling drop-off locations.** *Currently, residents and businesses in Somerset have access to two drop-off recycling sites. However, due to the existing technology and recycling processes at these locations, the number of recyclable materials is limited. In order to increase the amount of recycled material, these locations must be upgraded with appropriate equipment and processes. Recycling aluminum, plastic, glass and paper have significant economic and environmental benefits.*

- 6 **Educate the community on the issues concerning the waste in Perry County that comes from New Jersey, Pennsylvania and other states.** Perry County landfills receive fracking waste from Pennsylvania and other waste materials from New Jersey. Somerset intends to work with the other communities in the area to obtain transparency from the local Solid Waste Management District on the amount and type of waste materials imported in the county's landfills. Additionally, the village and other affected communities intend to investigate the opportunity to obtain mitigation funding from EPA.
Champion: Mayor Johnson
Timeline: 2015 - 2017

Additional Opportunities

- 7 **Organize annual cleanup days.** This initiative can be made possible with the help of volunteers in the village, and coordination can be done using the village's newsletter, social media and word-of-mouth.
Champion: Village of Somerset
Timeline: 2016
- 8 **Adopt green procurement policy or guidelines to minimize the environmental impact of procured materials within the village government.**
Champion: Village of Somerset
Timeline: 2017

Appendix C – Summary of the Sustainability Roadmap

Energy efficiency and Renewable Energy		2015	2016	2017
Objectives	1 Determine the baseline energy consumption and greenhouse gas emissions for the village			
	2 Benchmark municipal buildings and facilities using U.S. Environmental Protection Agency (EPA)'s online tool, ENERGY STAR® Portfolio Manager (ESPM)			
	3 Implement an employee awareness program to reduce energy consumption in municipal buildings			
	4 Identify available funding and grants/incentives for upgrading the remaining street lights with more efficient lighting technologies			
	5 Incorporate Leadership in Energy and Environmental Design (LEED®) elements in the Townhall (Courthouse) Renovation Project			
	6 Install a geo-thermal system as part of the Townhall Renovation project			
	7 Explore options for installation of solar panels on municipal buildings			
	8 Provide local businesses with information regarding energy efficiency, renewable energy options and available grants			
	9 Partner with the Ohio Home Weatherization Assistance Program (HWAP) offered by Hocking-Athens-Perry Community Action			
	10 Promote and participate in the Earth Hour initiative using local media outlets, such as Facebook, local newspaper and newsletters			
	11 Invite energy utilities (electricity, natural gas, water) to Somerset during Earth Day or other environmental events to help promote energy efficiency and conservation			
Water and Wastewater		2015	2016	2017
Objectives	1 Install RadioRead® water meters in Somerset			
	2 Minimize the cost of water treatment by educating farmers on the consequences of applying chemicals on the land			
	3 Explore the feasibility of acquiring the agricultural land surrounding the watershed to eliminate chemical infiltration in the reservoir			
	4 Evaluate interest in water delivery to Somerset's rural surrounding areas			
	5 Install a coin operated bulk water vending machine			
	6 Partner with the AmeriCorps volunteers of the Soil and Water Conservation District to implement a watershed emergency plan			
	7 Improve the energy efficiency of the water distribution and wastewater infrastructure			
	8 Eliminate two pumping station by redesigning the wastewater system			
	9 Install ultra-violet (UV) water treatment technology to reduce the use of chemicals			
	10 Establish a baseline for current water consumption for village buildings and facilities			
	11 Educate residents and businesses on water conservation topic through social media and other communication channels			
	12 Partner with AEP Ohio to explore the idea of a Smart Meter implementation pilot program			

Reduce, Reuse and Recycle		2015	2016	2017
Objectives	1	Work with Perry County Refuse & Recycling Program to promote recycling		
	2	Promote appliance recycling		
	3	Identify additional needs for residential recycling dumpsters		
	4	Explore the possibility of youth education around recycling and landfill use		
	5	Improve waste processes in the recycling drop-off locations		
	6	Educate the community on the issues concerning the waste in Perry County that comes from New Jersey, Pennsylvania and other states		
	7	Organize annual clean-up days		
	8	Adopt green procurement policy or guidelines to minimize the environmental impact of procured materials within the village government		
Parks and Open Spaces		2015	2016	2017
Objectives	1	Create a multi-use paved trail to connect the parks throughout Somerset		
	2	Explore the possibility of expanding the community garden and/or events around it		
	3	Purchase a heritage farm in Somerset to use for ecotourism purposes		
	4	Revive beehive cultures in Somerset		
	5	Diversify the tree inventory in Somerset		
	6	Implement a 'shade tree' program		
	7	Identify at-risk and sick trees for removal and replacement		
	8	Work with Perry County to obtain EPA funding for brownfield remediation in Somerset		
	9	Incorporate kayaking and canoe activities on both rivers that run through Somerset		
Economic Development		2015	2016	2017
Objectives	1	Partner with GoBus to include Somerset in the public transit system to Columbus		
	2	Create a Bike Share Program in Somerset		
	3	Increase the fuel efficiency of the municipal fleet		
	4	Identify routes for bike lanes		
	5	Promote the farmers' market and other local events		
	6	Increase Eco-Tourism in Somerset		
	7	Open a commercial kitchen to help residents and businesses with food preparation initiatives (catering, local food-focused small businesses) and needs		
	8	Revitalize downtown Somerset by expanding the business types within the community		

9	Make Somerset a more pedestrian friendly community			
10	Increase the availability of healthcare services for Somerset residents			
11	Create a community website			
12	Partner with the Somerset Police Department to implement an educational program for schools in Somerset focusing on drug abuse			
13	Explore the possibility and cost of installing underground free broadband (fiber-optic cables) for the entire village			
14	The local library is constructing a \$2 million building as an addition to the existing library facility. The village will explore the possibility of expanding the existing project to attract students from Zane State College			



Village of Somerset