

SUSTAINABLE INITIATIVES (1)

Memo for Task Force Meeting No. 2

DECEMBER 11, 2020

Sustainability has many meanings and different definitions, but within municipalities it often means using the best practices to create environmental, economic, societal and fiscal vitality as part of the municipalities overall mission. The Borough has already made great strides in terms of sustainability; however, sustainability is always changing with innovation, therefore, municipalities will have to look to continuously implement new sustainable initiatives, projects, policies and programs.

Below are some initial sustainable initiatives that have been either brought up in conversations with the Borough or have been seen implemented in other communities completing comprehensive plans. This is not a comprehensive list of all the sustainable initiatives, but rather a starting place to understand where the Borough currently is and what initiatives may be of interest.

BIKE FACILITIES

The Borough has installed a bike maintenance station on the Schuylkill River Trail and installed several bike racks throughout the Borough. The Chester County Planning Commission prepared a Multimodal Transportation Study for the Phoenixville Region that recommends improvements in five multimodal categories. Below are the three categories that are related to bike facilities.

- > Pedestrian Facilities
 - Crosswalks and pedestrian signals with countdown timers
 - ADA curb ramps
 - Sidewalks
- > Trail Facilities
 - Multi-use trails
 - Sidepaths
- > On-Road Bicycling Facilities
 - Shared Roadways
 - Sparrows
 - Resurfacing program

In addition, this study identified several projects within the Borough that will help increase multimodal connections within the Borough and Phoenixville Region. Additional information on recommendations and specifics about the identified projects can be accessed here:

<https://chesco.org/DocumentCenter/View/45765/Phoenixville-Region-Multimodal-Transportation-Study?bidId=>

VISION ZERO

Vision Zero policies have been implemented in several communities, and aspects of vision zero policies and practices could be incorporated into the Borough as they look to expand their multimodal and bike infrastructure.

Philadelphia has a vision zero program and the information can be accessed here:

<http://visionzerophl.com/>

and a Vision Zero Action Plan 2025:

<http://visionzerophl.com/uploads/attachments/ckhnt3jvf042cx4d6x9nperbc-visionzeroactionplan2025-2020-11-17-print-compressed.pdf>

Philadelphia's plan identifies the following areas / subcommittees:

- > Safe Speeds
 - Reduce speed to match the survivable design of street
 - Seek state approval to expand automated speed enforcement
 - Continue neighborhood slow zones program
- > Safe Streets
 - Invest in safety improvement on the vision zero capital plan locations
 - Engage with community members proactively on street safety improvements
 - Make cost-effective safety improvements systemically and rapidly on high injury streets
 - Incorporate safety improvements into upcoming projects in the streets right-of-way
- > Safe People
 - Prioritize Philadelphia youth in vision zero programs and conversations
 - Expand access to quality traffic safety education and co-design process that incorporates input from Philadelphians
 - Amplify vision zero communication to build a traffic safety culture and educate Philadelphians about safe behavior
 - Strategically and equitably expand automated enforcement to reduce the most dangerous behaviors
- > Safe Vehicles
 - Support transportation options that reduce driving
 - Pursue the latest safety features in all vision zero partner fleet purchases and upgrades
 - Support safety with new and emerging mobility technologies and targeted messaging about the City's vehicle fleet
- > Safety Data
 - Evaluate street safety treatments regularly and consistently and adjust treatments as prudent based on the results
 - Improve the quality and timeliness of relevant traffic safety data
 - Improve internal and public access to safety data
- > Transformative Policy
 - Pass the curb bill to allow safe street design
 - Adopt vision zero ordinance
 - Expand automated speed enforcement
 - Municipal speed limit setting

ELECTRIC FLEET VEHICLES

Municipalities have begun creating plans to change their fleet vehicles to electric where possible as part of their fleet management plan.

Within the Phoenixville Region - East Pikeland Township purchased a CNG SVU for their Police Department in 2013.

A recent Consumer Report report found “the lifetime ownership costs for the most popular EVs on the market under \$50,000 are typically \$6,000 to \$10,000 less than the best gas-powered vehicles in their class (defined by vehicle style, size, interior volume, and cargo space)”.

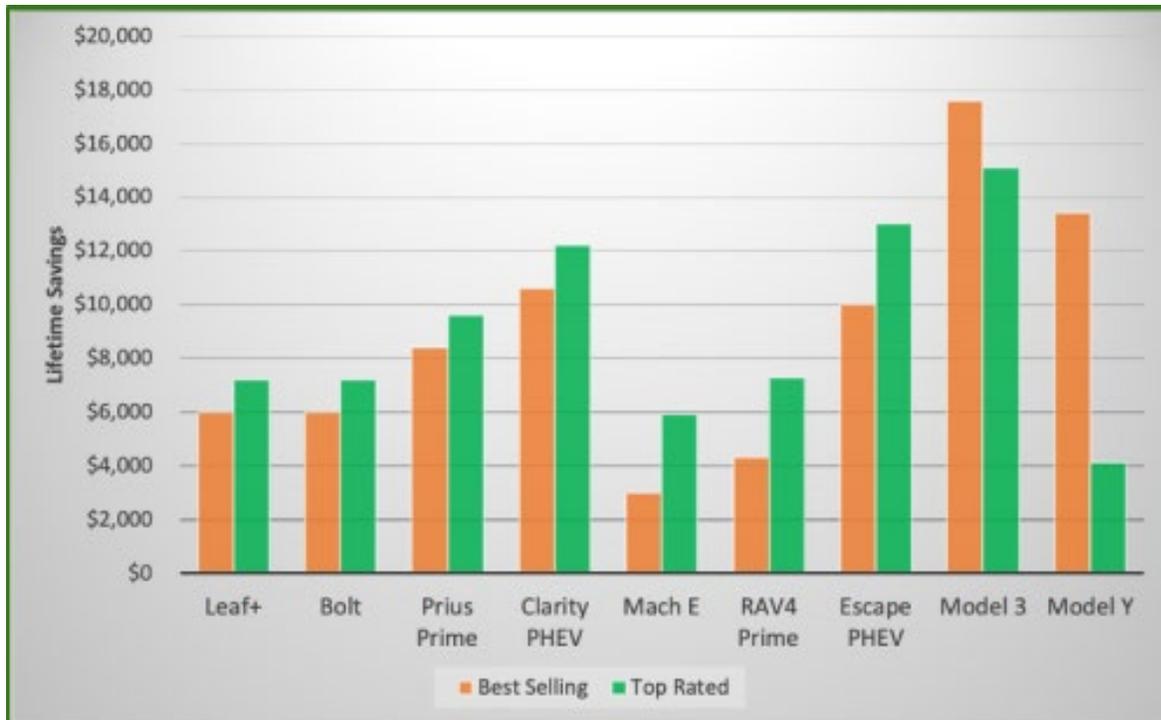


Table: Lifetime savings of EVs versus comparable gasoline-powered vehicles

The report can be accessed here: <https://advocacy.consumerreports.org/wp-content/uploads/2020/10/EV-Ownership-Cost-Final-Report-1.pdf>

WALKABILITY / CONNECTIVITY / STREETSCAPES

Complete Streets

Complete Streets are streets that are designed for everyone, that prioritize safety, comfort and access to destinations. Complete Streets also help to improve the quality of life for everyone in communities especially those living with disabilities, elderly, and those that do not have access to a car, as well as increasing active transportation infrastructure.

For additional information:

<https://smartgrowthamerica.org/program/national-complete-streets-coalition/>

Slow Streets

Slow Streets programs took off quickly in many communities as a response to the COVID-19 pandemic, although they had been around prior to the pandemic. The goal of slow street

programs is to increase the amount of public space that is available to the community. Slow Streets are roads that are closed to local traffic only and have soft barriers so residents can use the space as they would any other public space, to walk, jog, play, etc.

National Association of City Transportation Officials website on Slow Streets:
<https://nacto.org/publication/streets-for-pandemic-response-recovery/emerging-street-strategies/slow-streets/>

TREE REPLACEMENT INITIATIVE / REGULATED TREES

Tree Advisory Commission (TAC)

This commission is a group of volunteers that, in conjunction with the Director of Public Works, help to maximize the ecosystem services that come from the Regulated Trees in the Borough. The Borough has about 2,400 related trees that provide shade and security, capture rainwater, filter pollution and add to the character of the Borough. In addition Phoenixville's urban forest offers over \$350,000 a year benefits. The TAC also conducts four plantings every year, two in the spring and two in the fall.

A map of Phoenixville's Urban Forest:

<https://usfs.maps.arcgis.com/apps/MapJournal/index.html?appid=97a60bdb38a84048a2c75395a0b23ffe>

Tree Replacement Plan

In 2017 the Borough started their Tree Replacement Plan, which divides the Brough into twelve sectors which provide removal of a certain number of aged, dying or damaged regulated trees. These trees are replaced, which helps to ensure that each sector of the Borough remains sensitive to ecological and economic benefits and sustain a healthy regulated tree canopy. Borough Website on the Tree Replacement Plan:

<https://phoenixville.org/2602/Tree-Replacement-Program>

The Tree Replacement Plan Map:

<https://www.phoenixville.org/DocumentCenter/View/396/Tree-Replacement-Plan---2018-Map-PDF>

CLEAN ENERGY

From the Borough's Sustainability page on their website:

"In a 7 to 0 unanimous decision passed by our Borough Council on Tuesday, September 12, 2017, Phoenixville became the 44th municipality in the USA, and the first in PA to commit to a transition to 100% clean and renewable energy. Our goal is to complete the transition to clean energy by the year 2035."

SoMax Project

The Borough of Phoenixville has partnered with SoMax BioEnergy to roll out the first of its kind in North America biomass conversion process at the Borough's Wastewater Treatment Plant. Hydrothermal carbonization, or HTC for short, converts biomass and organic wastes into value added products. The first phase of the project will focus on converting sewage sludge into the base solid product known as hydrochar, which meets Class A Biosolids requirements. Hydrochar has similar characteristics to biochar and mid-grade coal. The conversion process will greatly increase the solids processing capacity at the wastewater treatment plant, resulting in higher revenues from tip fees, and the potential to sell the hydrochar, eliminating disposal costs altogether.

The second phase of the project introduces food waste into the HTC process. Including food waste as a feedstock has both economic and environmental benefits. The Borough is unique in that they collect and haul their own waste, so diverting food waste to the HTC process will save the Borough tip fees at the landfill. The Borough WWTP can also generate revenue by charging a tip fee for food waste from outside the Borough. Food waste based hydrochar has a higher energy density than sewage sludge based hydrochar. This higher energy density and lower ash content food waste based hydrochar creates a better opportunity for energy generation. Gasification of the hydrochar generated from the Borough's WWTP can create enough energy to run the WWTP, the HTC process, and still put electricity back on to the grid. Energy generation from hydrochar is a key step in meeting the Borough's goal of being 100% renewable energy by the year 2035.

Solar & Wind

Solar and wind energy systems are allowed in all zoning districts (wind is permitted as a conditional use). Both wind and solar must conform with the zoning in terms of setbacks and height regulations. There are additional regulations within the zoning ordinance that help to maintain safety in terms of both types of energy systems such as additional setbacks for wind turbines, noise levels that are permitted. Zoning that pertains to both solar energy systems and wind energy facilities can be found in § 27-608 Miscellaneous Provisions.

AT HOME SUSTAINABLE INITIATIVES

One way to help create a more sustainable community is through continued education of what people can do at home, or other small changes that they can implement into their everyday life. Some changes can be small, such as using a reusable water bottle rather than single use water bottles, and some are larger such as installing solar panels or a rain barrel. However, all changes no matter how big or small they may be can create a more sustainable community.

The Borough could look to provide more information or partner with an organization to provide tips on living more sustainable life, which can be then put on their sustainability page.

These efforts can include:

- > Dual Flush Toilets
- > Tips on conserving water
- > Reusable grocery bags & produce bags
- > Rain barrels, rain gardens and other storm water management practices
- > LED lighting, etc.

SUSTAINABLE PENNSYLVANIA COMMUNITY CERTIFICATION

The Sustainable Pennsylvania Community Certification “is a voluntary performance recognition program to help municipalities achieve their sustainability goals, save money, conserve resources and encourage innovation”. It helps to bring recognition to municipalities in PA that are applying policy and practices that are sustainable and advance community prosperity.

Program Website: <https://www.sustainablepacommunitycertification.org/>

Certification is based on 131 policies across 9 topic areas (Governance and Community Engagement; Healthy Communities; Diversity, Equity and Inclusion; Education; Energy Use,

Conservation and Green Building; Environmental Stewardship; Housing; Land Use and Transportation; Local Economy) and practices that are worth 1-4 points each. Based on the points, a community qualifies for one of the five levels or certification:

- > Associate 1-34 points
- > Bronze 35-79 points
- > Silver 80-135 points
- > Gold 136-202 points
- > Platinum 203-300 points

Certification Criteria:

https://www.sustainablepacommunitycertification.org/pdfs/Criteria_Sus_Comm_PA_Cert.pdf

There is no fee associated with a community pursuing certification and can provide benefits to a municipality, therefore this could be something for Phoenixville to consider pursuing.

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