Delaware County Office of Sustainability (DCOS) 2022 Annual Sustainability Report

Presenters:

- Francine Locke, Chief Sustainability Officer
- Becca Yurkovich, Sustainability & Resilience Manager





December 7, 2022

Climate Change

"Climate change is the most pressing concern and threat to people's health." - The World Health Organization

Out of 653 Delaware County residents surveyed, 490 reported (75%) being greatly concerned about the impacts of climate change.



Climate Change Consequences/Impacts:

- Human health
- Economy
- Environmental justice and equity Climate change will not affect all Pennsylvanians equally
- Agriculture
- Recreation and tourism
- Energy and other economic activity
- Forests, ecosystems, and wildlife
- Built infrastructure



Source: Pennsylvania Climate Impacts Assessment 2021, ICF

Socioeconomic Costs of Climate Change in Pennsylvania

The deep recurring socioeconomic costs of Climate Change in Pennsylvania are from:

- public health stresses (healthcare)
- evacuations and closings (access to services)
- flooded, buckled, and washed-out roads and bridges (transportation)
- downed trees and power outages (electricity)
- large-scale cleanups
- destroyed homes, businesses, and harvests (food)
- Example: PEMA estimated 2018's severe weather to have caused approximately \$125
 million in damage to public infrastructure due to flooding and landslides. Nearly half
 of damages were not covered by federal disaster aid, imposing strain on local, county,
 and PA's budgets.



Source: Pennsylvania Climate Impacts Assessment 2021, ICF

Reducing GHGs can Change the Course

Delaware County is incorporating sustainability into the County's operations to reduce emissions from buildings, waste and vehicle sources, and increasing the amount of green space to absorb or offset carbon.



Local Climate Action Plan

Climate change is a <u>global</u> challenge that requires <u>local</u> solutions.



Delaware County's Local Climate Action Plan

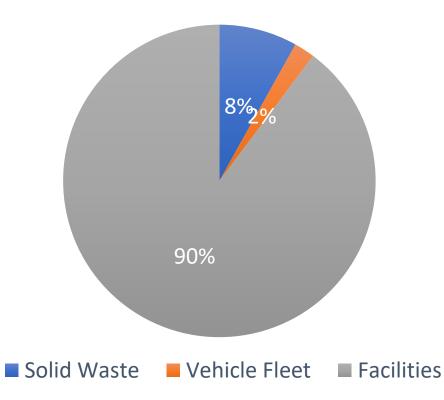
Submitted to PADEP by DCOS on August 31, 2022

Baseline Greenhouse Gas (GHG) Inventory County Operations

- Solid Waste 1,523 MtCO2/Yr
- Vehicle Fleet 40 MtCO2/Yr
- Facilities 16,878 MtCO2/Yr

90% of GHG from 70+ County Buildings

2020 CO2e County Operations Greenhouse Gas Emissions



Source: Delaware County Climate Action Plan, August 31, 2022, and FCNA

Delaware County GHG Reduction Plan

County Operations: Reduce Baseline GHG through Operations that County Controls

- Use energy conservation measures in County buildings.
- Procure renewable energy.
- Electrify County's vehicle fleet and build charging infrastructure.
- Increase walking/biking infrastructure.
- Zero waste in all County buildings.
- Increase green and open space.

County-wide: Define what County Controls, Influences and Provides Outreach and Education for to reduce GHGs

- Delaware County's Sustainability Plan will provide goals, targets and actions for County-wide GHG emission reduction.
- More on later slides.



Delaware County Sustainability Commission (DCSC)

- Formed in 2020 by Council Resolution No. 2020-4
- Comprised of eight members of County senior management and nine members of the public.
- Charged with providing reviews and recommendations to Delaware County Council and pertinent County departments regarding the preservation and protection of the natural and cultural environment of Delaware County.



DCSC 2022 Monthly Public Meetings



Next Meeting is this Friday, December 9th, from 2:00 - 4:00 PM

Schedules, Agendas and Meeting Minutes: https://www.delcopa.gov/sustainability/commission/schedule.html

Residents can email their public comment, suggestions and questions to SustainDelco@co.delaware.pa.us

Date	Day & Time	Registration	Agendas	Meeting Minutes	Recordings
January 13	Thursday, 6pm		N/A	Minutes	Video
February 11	Friday, 2pm		Agenda	Minutes	Video
March 10	Thursday, 6pm		Agenda	Minutes	Video
April 8	Friday, 2pm		Agenda	Minutes	Video
May 12	Thursday, 6pm		Agenda	Minutes	Video
June 10	Friday, 2pm		Agenda	Minutes	Video
July 14	Thursday, 6pm		Agenda	Minutes	Video
August 12	Friday, 2pm		Agenda	Minutes	Video
September 8	Thursday, 6pm		Agenda	Minutes	Video
October 14	Friday, 2pm		Agenda	Minutes	Video
November 10	Thursday, 6pm		Agenda	Minutes	Video
December 9	Friday, 2pm	Register	Agenda	Minutes	Video



Delaware County Office of Sustainability (DCOS)

Mission:

Make Delaware County and its operations more sustainable and resilient to the effects of climate change by:

- Examining government operations
- Engaging with the community
- Working with the new Sustainability Commission to develop a long-term Sustainability and Climate Action Plan.

Goals:

- Create and implement County's Sustainability Plan
- Operationalize sustainability in six County Departments:
 - Public Works
- Staina bi Planning
 - Facilities Mgmt
 - Fleet/Motor Vehicle Mgmt
 - Parks and Recreation
 - Conservation District



2022 Delaware County Office of Sustainability

Office of Sustainability Staff GIS, Julie DelMuto Public Works, Danielle Floyd, Director Planning, Gina Burritt, Director Parks and Recreation, Marc Manfre, Director Facilities Management, Ed Orner, Manager Fleet Management, Joe Ciavarelli, Interim Director Conservation District, Ed Magargee, Director



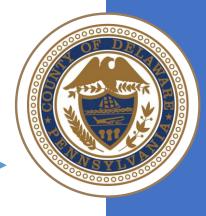
New Talent in 2022

Feb. 2022

Public Works Director, Danielle Floyd Sep. 2022

Public Works Architect, Nicole Ward, R.A. Nov. 2022

Planning Director, Gina Burritt



Sustainability
Sustai

July 2022

Community Engagement Specialist, Brittani Hales

Sep. 2022

Sustainability Plan Development



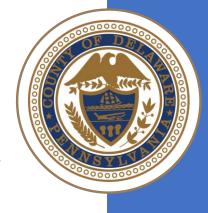
2020

In 2020, County Council formed a Natural Resources Transition Team with identified the need for a County-wide Sustainability Plan



2022

In 2022, Subcommittees were formed for each of the six focus areas serving to finalize high-level goals, brainstorm targets, and identify action items



In 2021, the Sustainability Commission, with survey feedback from the general public, identified six focus areas and four guiding principles to serve as the foundation for the Sustainability Plan

In 2023, drafting of the plan will be completed with review from the Sustainability commission, focus area subcommittees, and the general public before approval and release of the plan





2023

County Sustainability Priorities Identified

Guiding Principles

- Education
- Economic Sustainability
- Equity, Inclusion, and Justice
- Governance

Focus Areas

- Natural Resources
- Energy and Efficiencies
- Transportation
- Zero Waste
- Climate Resiliency
- Health and Wellness





Engagement by the Numbers

Community Prioritization Survey (December 2021)

- 653 Participants
- 40 of 49 Municipalities Represented
- Sustainability
 Priorities: Natural
 Resources, Climate
 Resiliency, and
 Waste Management

Subcommittee Engagement (August 2022 – Present)

- 74 Participants
- 41 Hours of Active Meetings
- 6 Focus Areas
- 11 Goals
- 19 Areas of Interest

Stakeholder Meetings (October 2022 – Present)

- 18 Meetings with Internal and External Stakeholders
- 8 County Departments
- 10 Community
 Organizations and
 Outside Entities



Sustainability Plan Next Steps

- Drafting of the Plan (December 2022 March 2023)
- Subcommittee Action Item Review (November 2022 February 2023)
- Public Engagement/Draft Review (January 2023 April 2023)
- Plan Amendments (April 2023)
- Sustainability Commission Review (March May 2023)
- Sustainability Commission Approval (May 2023)
- County Council Announcement (May June 2023)
- Unveil to Public at 2nd Annual Sustainability Conference (June 2023)



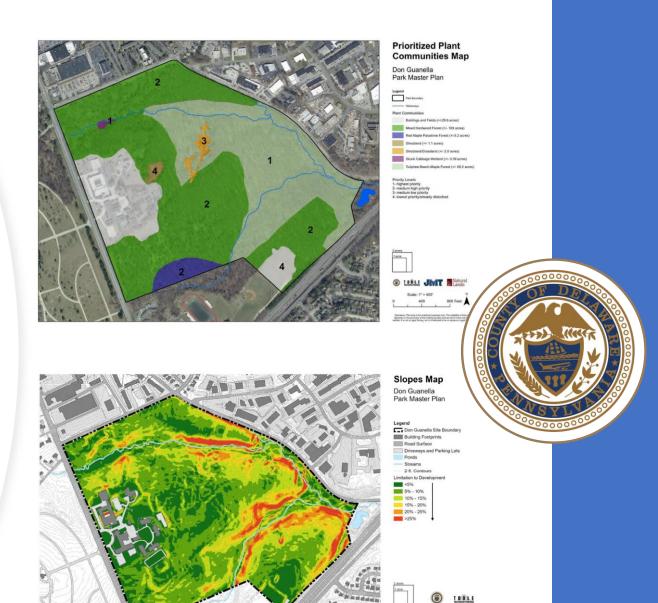
GIS 2022 Highlights

- Mapping Community Resources
 - Municipal Dashboard (Census Data)
 - Share Food Pantry Locations
 - Delaware County Libraries
 - Veteran's Discount Program
 - Broadband Access Dashboard
- Improving Efficiency in County Functions through Mapping
 - County Parks and Recreation Facilities
 - County Rental Assistance Program Applicants
 - County Bridge Data and Conditions
 - Delco Greenways Grant Applications
 - Election Day Collections



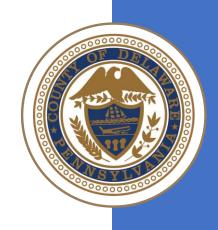
GIS 2022 Highlights

- Analyzing information for Strategic Action
 - Former Don Guanella Site Analysis
 - Analyzing the greatest need areas for local hospitals
 - Evaluating communities with high incidence of lead poisoning
 - Mapping incidences of illegal dumping in Chester City
 - Vaccine Disbursement to Homebound Residents
 - Opioid Incidents



Public Works 2022 Highlights

- Council approved largest Capital Improvement Program (CIP) \$75 Million 2022-2023
- CIP was Informed by Steering Committee & Driven by Facility Condition and Needs Assessment (FCNA) Data
- Briefings with all County Department Directors on results of FCNA for their respective buildings
- Designing Delaware County Health Department Headquarters - County's first building designed to achieve LEED-Existing Building (EB) certification!



Director: Danielle Floyd

Significant Capital Investment in Parks and Open Space

- \$1,429,513 for Rose Tree County Park Playground Project
- 2. \$1,134,755 for Little Flower
 Open Space Park
 Development
- 3. \$1,443,775 for Upland
 County Park Playground
 Redevelopment and
 Athletic Field Project

Collaboration between Planning, Parks & Recreation and Public Works Departments



Director: Danielle Floyd

Planning Department 2022 Highlights

- Green Ways Grant Round III!
- Countywide Stormwater Management Planning (Act 167) –
 Model Ordinance focus on GSI and low impact development
- EPA Air Quality Environmental Justice Grant Awarded in collaboration with Johns Hopkins University and DEP
- Vision Zero Plan in Development
- Route 291 Road Diet Feasibility Study Funded
- Former Don Guanella Site Master Plan Development
- America250PADelco Planning Team



Director: Gina Burritt

2022 Return on Environment Report

Goal: To quantify the economic value of protected open space specific to Delaware County.



Director: Gina Burritt



ECONOMIC ACTIVITY IMPACT

\$52M

annual economic impact associated with protected open space

590 Jobs

supported from open space-related upkeep and open space tourism

\$20M

in annual salaries



ENVIRONMENTAL SERVICES BENEFITS

\$14.1M

annually through the provision of six environmental services \$39.0M

lifetime cost savings from carbon storage in trees \$6.2M

avoided annual stormwater system maintenance \$74.4M

avoided an stormwate removal co



DIRECT USE BENEFITS

\$142.6M

annual recreation benefits to residents \$153.4M

medical costs avoided annually

\$134.5M

lost productivity costs avoided annually



HOME AND PROPERTY VALUE IMPACT

\$689M

added to the value of housing stock located within a ½ mile from protected open space \$4,500

average increase of the value of homes located within a ½ mile from protected open space

\$160M

annual additional property tax revenues generated from homes within a ½ mile of open space

Parks & Recreation 2022 Highlights

- 65 Events Organized by Parks and Recreation in 2022
- 30,000+ Attendees at Events
- Successful Delaware County Senior Games
- Converting to Electric Groundskeeping Equipment
- Strong Collaboration with Penn State Extension and Pennsylvania Resources Council



Director: Marc Manfre

Summer Concert Series Goes Zero Waste!

> **Estimated Grand Total** Waste Diverted:

> > 2,058 lbs







BE A ZERO WASTE GOALIE AT ROSE TREE PARK!









Director: Marc Manfre

Parks Partnership with Pennsylvania Resources Council (PRC)



Grand Total: 29,660 lbs.







Facilities Management 2022 Highlights

- Worked closely with Public Works on developing CIP for building improvements based upon FCNA and Work Order data
- Enhanced County Work Order System with Intranet Site
- Instituted Preventative Maintenance Program
- Solar Array on Government Center:
 - Generated 250,116.3 kW/h
 - Produced 5.1% of Energy,
 - Saved \$37,517.45 in electricity costs

1st County Campaign Sign Recycling Event

- 2,280 pounds of metal to scrap yard!
- Received payment of \$164 for metal.
- Over 2,000 pounds of plastic was taken to recycling facility.



Zero Waste

Delaware County embarked on a planning process to update its Municipal Waste Management Plan in 2021 to coincide with the development of the Sustainability and Climate Action Plan and to comply with Pennsylvania's Municipal Waste Planning, Recycling and Waste Reduction Act (Act 101 of 1988).

- 20 Listening Sessions with over 140 participants
- 3 Public Workshops with nearly 200 participants In person, with a concurrent meeting online via Zoom covering the same material.
- 4 Solid Waste Advisory Committee Meetings



Plan to be finalized in early 2023!

In Person June 30, 2022, Meeting in Chester

- Close to 100 residents participated
- Held at the Chester City Hall Community Room.
- Reviewed the Guiding Principles, Initiatives, and draft implementation plan.
- Guest speaker was Marvin Hayes, a Fellow at the Open Society Initiative and runs the Baltimore Compost Collective.
- Marvin gave an inspiring talk about the importance of composting to Zero Waste and how communities can use compost to educate youth and provide nutrients to grow food locally.

Zero Waste Plan Workshop June 30 • 6 PM

CHESTER CITY HALL
COMMUNITY ROOM
1 FOURTH STREET
CHESTER, PA 19013

GUEST SPEAKER • MARVIN HAYES
COME SHARE YOUR INPUT AND
GUIDE DEVELOPMENT OF THE PLAN
LIGHT REFRESHMENTS

SPACE IS LIMITED . PLEASE REGISTER

DELAWARE COUNTY IS

UPDATING ITS

10-YEAR MUNICIPAL WASTE
MANAGEMENT PLAN USING
ZERO WASTE PRINCIPLES

JOIN US FOR THE WORKSHOP EITHER IN PERSON OR ONLINE VIA ZOOM



GUEST SPEAKER • MARVIN HAYES • BALTIMORE COMPOST COLLECTIVE



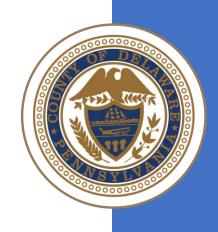
FOR MORE INFORMATION, OR TO REGISTER FOR THE WORKSHOP, VISIT THE PROJECT WEBSITE AT delcopa.gov/workshops





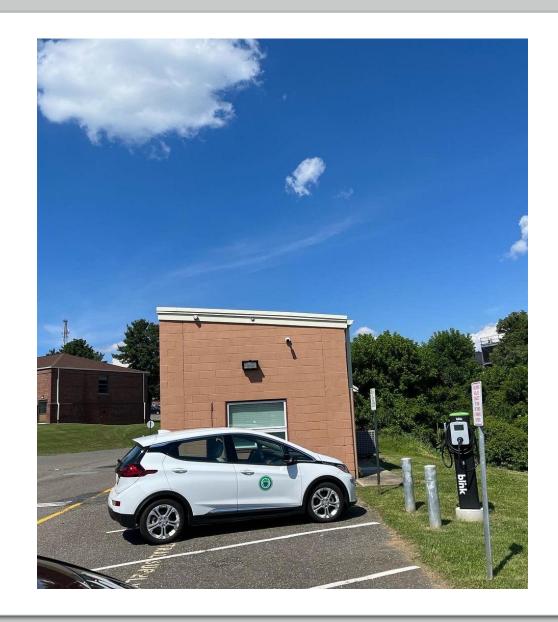
Fleet/Motor Vehicle Management 2022 Highlights

- In 2021, the County received an Alternative Fuels Incentive Grant (AFIG) award from the PADEP used to buy 15 electric vehicles and \$35,740 to install six dual charging stations.
- 29 EV being delivered now.
- The EVs will be dedicated to the County's new health department.
- Supported November 2022 Elections with EVs



2022 Largest PA DEP Grant EV Project Award

- \$600,000 grant awarded by the Pennsylvania Department of Environmental Protection (DEP)
- Used to purchase 69 new electric vehicles and add 22 new charging stations
- Will displace 33,253 gallons of gasoline use per year and reprojected to reduce greenhouse gas emissions by 178 tons per year.



Interim Director: Joe Ciavarelli

Conservation District 2022 Highlights

- Stormwater basin naturalization project at Fair Acres Campus
- Live Stakes planting at Glen Providence Park
- Rain Garden installed at Kent Park at Dog Park
- Installed down spout planter at Rose Tree Park and Smedley Park
- Compliance that protects the environment:
 - 149 Inspections Performed
 - 189 Erosion & Sediment Control Plans Reviewed
 - 48 Permits Issued
 - 37 Sediment Pollution Complaints Investigated



Partnership with Penn State Extension to Create a Multifunctional Riparian Buffer at Smedley Park

October 8, 2022

- Grant Funded Project
- Six species of shrubs planted
- Live stake nursery to improve stream bank stabilization
- 25 Volunteers



2022 Recognition



April 21, 2022, Inaugural Delaware County Sustainability Conference

200 attendees>20 speakers20 Expo Tables























April 26, 2022 2022 Pennsylvania Governor's Award for Environmental Excellence



2022 Sustainability Symposium



18+ SESSIONS, 4 TOURS, EXPO FLOOR + HAPPY HOUR!

MAY 6, 2022 8:00 AM - 7:00 PM March 24, 2022, Presentation for the League of Women Voters – New Develops in Sustainability and Environmental Health

May 6, 2022, Presentation at GBU Symposium – Public Works Re-Imagined.

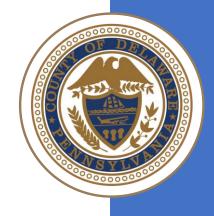
August 31, 2022, Presentation at EP-ACT annual event — The Start-up of a County Sustainable Fleet Management Program

December 19, 2022, Presentation for the Delaware County Sierra Club Ready for 100 – Planning for a Sustainable Delco

November 22, 2022 Delaware County Receives Alternative Fuel Leadership Award



This award is given to an organization that has proven over time that it is committed to deploying, developing or installing alternatively fuel technologies. Leadership organizations have consistently taken risks on new technologies and remain committed to finding new ways to deploy and introduce AFV technologies.



"In Delaware County, the future is sustainability"



Goals for 2023

- Publish 1st Sustainability Plan and Begin Implementation
- Hold 2nd Annual Delaware County Sustainability Conference
- Publish County-wide Zero Waste Plan and Implement Pilot Program
- Expand Vehicle Electrification Program
- Develop County Public Works Design Standards for CIP
- Continue to invest in Parks, Open Space and Trails
- Continue working towards renewable energy through RPPA and PJM CCC

