City of Laurel

Sustainability Plan

Our Voice, Our Future

January, 31 2025

Prepared for the City of Laurel by
Michael Baker International

Table of Contents

Vision for a Sustainable Laurel

"

I am deeply committed to fostering a sustainable future for our community. These focus groups represent our collective efforts to address environmental challenges and implement innovative solutions. Together, we will ensure that our City remains a vibrant, resilient, and eco-friendly place for generations to come.

KEITH R. SYDNOR, MAYOR

Acknowledgments

The Sustainability Plan was developed in collaboration with resident driven focus groups, the greater Laurel community, and City of Laurel Government. The City of Laurel would like to thank community members, stakeholders, and partners whose invaluable contributions and support have made this Sustainability Plan possible.

Focus Groups

PEOPLE

Joveth Sampson
Dave Everett
Laurel Cross
Muhammad Rashid
Tasha Dorsey
Melissa Holland
Althea Skeete
Ericka Ligon

PLANET

Alexis Williams
Dawn Turney
Jimmy Rogers
Frank Morgan
Pauline Apling
Mike Maxwell
Seyoum Michael
Michael Peden

PROSPERITY

Jock Haight
Jim Cross
Bill Wellford
Mike McLaughlin

PEACE & PARTNERSHIP

Cheryl Dyer
Ruth Walls
Kyana Washington
Danielle Wolfe
Laverne Debnam

Stakeholder Interest Groups

- Laurel Advocacy and Referral Services Laurel for the Patuxent
- Laurel Board of Trade
- Prince George's County Chapter of the Audubon Society
- Chesapeake Bay Trust
- First Baptist Church of Laurel
- The Church of Jesus Christ Latter-Day Saints
- University of Maryland Extension- MD Master Naturalist Program
- Side-By- Side Laurel
- Sierra Club

Youth Engagement

- Jhana Levin, Prince George's County Public Schools
- Laurel High School Green Team

City of Laurel Government

- City of Laurel Leadership and Elected Officials
- Department of Public Works Department of Parks and Recreation
- Department of Economic and Community Development Department of Information and Technology Department of Budget and Personnel Services
- Department of Community Resources and Emergency Management
- Department of Fire Marshal and Permit Services
- Laurel Police Department
- Department of Communications

Project Team

The Sustainability Plan was developed for the City of Laurel through the Metropolitan Washington Council of Governments by Micheal Baker International in collaboration with KLT Group, LLC, ICLEI International and Governance Alive.

Sustainability Manager
MICHELE BLAIR

Contract Manager
METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS

Project Team Lead
MICHEAL BAKER INTERNATIONAL

Focus Group Facilitation
GOVERNANCE ALIVE

Climate Change Modeling and Data Analysis
ICLEI

Community Engagement
KLT GROUP

Remarks from the MDE Secretary

"

As you all know, we (Maryland) have the most aggressive climate goals in the country. We are seeking to reduce greenhouse gas emissions by 60% by 2031. That is not easy to do. So, we're going to have to really rely on cities and counties and municipalities and everybody, all of us, to make it happen. Otherwise, it's not going to happen. So, when cities like yours (City of Laurel) step up and start thinking creatively and innovatively and using your ingenuity to come up with ways to make it happen, we are so grateful. Every little step matters. You all are setting the example for Maryland.

SERENA C. MCILWAIN, SECRETARY OF THE ENVIRONMENT, MDE

City of Laurel

Sustainable Government Organization Plan

Our Voice, Our Future

Table of Contents

Introduction

In an era where sustainability is paramount, the City of Laurel is committed to leading by example in adopting practices that ensure the well-being of our environment, economy, and society. This Sustainable Government Organization Plan is a comprehensive guide designed to enhance the sustainability of our governmental operations, ensuring that we meet the needs of the present without compromising the ability of future generations to meet their own needs.

The City of Laurel definition of Sustainability

The City of Laurel defines sustainability as meeting the environmental, social, and economic needs of the present generation without compromising the ability of future generations to meet their needs. The City of Laurel is committed to moving its operations and the community towards a more sustainable future that focuses on the following four foundational pillars:

PEOPLE
Embracing social equity, fairness, health, and wellness.

PLANET
Practicing responsible environmental management and conservation.

PROSPERITY
Supporting local businesses and local economic growth.

PEACE & PARTNERSHIP
Implementing joint environmental projects, social infrastructure, education among various groups, the City and interested citizens.

The City of Laurel, a proud participant in the Maryland Sustainable Communities Program administered by the Maryland Department of Housing and Community Development, has made significant strides in sustainability and community development. With the State of Maryland Sustainable Communities designation, the City has been recognized for completing a series of sustainability actions and initiatives that align with the Sustainable Communities Program and aim to improve the quality of life for residents. These achievements marked significant progress toward the actions in the Maryland Sustainable Communities Action Plan and are also rooted in the City of Laurel Master Plan.

In 2021, Laurel celebrated several milestones: it received the Sustainable Maryland recertification, joined the Maryland Green Registry, and created the Environmental Programs Office, which has since evolved into the Sustainability Division, led by the Sustainability Manager. Additionally, Laurel holds the distinction of being Prince George's County's first designated Main Street. The City boasts several federal designations, including a main street local historic district, an arts and entertainment district, and a brownfield revitalization and incentive zone. These achievements reflect Laurel's commitment to creating a vibrant, sustainable, and culturally rich community. In 2022, Laurel renewed its Sustainable Communities designation which included expanding City boundaries and received the Bee City USA designation.

SUSTAINABILITY MILESTONES

City of Laurel Sustainability Division

Sustainable Maryland Certified

Maryland Green Registry

Local Historic District

Arts and Entertainment District

Bee City USA

Thanks to the success of the Maryland Sustainable Communities Program in Laurel, the City gained recognition for its sustainability efforts and received assistance under a Memorandum of Understanding (MOU) from the Metropolitan Washington Council of Governments (MWCOG) to further plan a sustainable future. MWCOG assistance was divided into three distinct phases. The Phase 1 Sustainable Organization and Community Framework Memo (Appendix A) provided a baseline for the City to begin strategically planning for greenhouse gas (GHG) reduction and implementing sustainability measures. The City advanced their commitment to a sustainable community through Phase 2, funded by the Mayor and City Council through the Sustainability Division, and executed under MOU with MWCOG. Phase 2 focused on the development of the City of Laurel Sustainability Plan, which is comprised of two distinct but interrelated components: this Sustainable Community Framework and the Sustainable Government Organization Plan. The third phase includes the development and launch of the City of Laurel Organics Recycling Program campaign.

THE PLANS AND SUBSEQUENT ENVIRONMENTAL PROGRAMS WILL FOCUS ON:

✓ PROMOTING ENVIRONMENTAL AWARENESS WITH CITY EMPLOYEES AND AS A PART OF THE CITY'S CULTURE.

✓ COORDINATING THE IMPLEMENTATION OF APPROVED RECOMMENDATIONS RESULTING FROM ENVIRONMENTAL SURVEYS AND STUDIES.

✓ WORKING WITH MWCOG TO DEVELOP AN ENERGY EFFICIENCY, RESOURCE RESOURCE MANAGEMENT INVENTORY AND A CITY-WIDE GHG INVENTORY.

Laurel's sustainability principles, rooted in the City's Green Living Initiatives, emphasize robust community and stakeholder engagement to develop actionable strategies and track progress.

Green Living Initiatives

The City of Laurel maintains a central location for all Sustainability initiatives through the Green Living Website and Sustainable Laurel Facebook.

The Sustainable Organization Plan will guide the City in making balanced decisions that equally prioritize economic, environmental, social, and governance issues. The basis of the Plan will be grounded in a "Leading by Example" approach. To achieve this, the City has developed sustainability strategies and goals that align with local, regional, and statewide greenhouse gas reduction goals (Table 1).

Jurisdiction	Baseline Year	Reduction Goal
UNITED STATES	2005	50% by 2030, net-zero by 2050
STATE OF MARYLAND	2006	60% by 2031, net-zero by 2045
MWCOG	2005	50% by 2030, 80% by 2050
PRINCE GEORGE'S COUNTY	2005	50% by 2030, net-zero by 2050
CITY OF LAUREL	2019	75% by 2040

Table 1. Greenhouse gas reduction goals by jurisdiction.

The above table highlights how each level of government surrounding Laurel—from the national to the local level—aims to reduce emissions. These goals have slight variations, but they all aim to achieve significant emissions reductions in the coming years, setting the region on a clear path to a low-emission future. Laurel's goal uses 2019 as the baseline year, which is later than other jurisdictions due to the unavailability of earlier data. Despite this, emissions were reduced across all jurisdictions between 2005 and 2019. This makes Laurel's goal of a 75% reduction by 2040 more aggressive compared to the goals of a 50% reduction by 2030 and achieving net-zero by 2050, both from 2005 levels. Laurel's goal is currently set for 2040, which sets the City on a path to build momentum and continue to reduce emissions through 2050 and beyond. This momentum will grow through the commitments and actions made across all levels of government, and collaboration will be critical to meeting these objectives effectively.

Transportation

Programs and strategies that support a transition towards hybrid and electric vehicles across City operations and the broader community.

Building & Facilities

Programs and strategies that improve energy efficiency and/or reduce reliance on fossil fuels to generate heat and hot water in buildings and facilities.

Solid Waste

Programs and strategies that reduce waste and waste-related emissions.

Clean Electricity Generation

Programs and strategies that increase utilization of clean and renewable energy sources (e.g., wind and solar) to power City operations and the broader community.

Land Use

Programs and strategies that protect and enhance existing open spaces and encourage development patterns that promote alternative modes of transportation and help reduce greenhouse gas emissions.

Stakeholder Engagement

During the summer and fall of 2024, a dedicated team met with City staff to explore the feasibility of various sustainability strategies to help Laurel achieve its ambitious goals.

Each meeting began with a comprehensive background presentation, setting the stage for in-depth discussions. The primary objectives of these engagements were to:

- Engage with City of Laurel Department staff to understand their responsibilities, assets, and operations, as well as identify strengths and risks.
- Actively seek input on department and City operations planning efforts, including current sustainability strategies, policies, and practices.
- Discuss potential technological, political, resource, or financial barriers to sustainability efforts.

The overarching goal was to maximize opportunities to achieve sustainability through targeted approaches that considered funding, budget resources, and workforce planning. Based on the feedback from these discussions, strategies were adjusted and prioritized, considering cost-benefit analysis, feasibility, timeframe, and funding opportunities.

Engagement Timeline

6 Virtual Meetings

13 City Departments

22 City Staff

46 Initial strategies for discussion

2024   2025

OUTREACH   **STRATEGY ANALYSIS**   **PLAN DEVELOPMENT**

SUMMER   FALL   WINTER

The Project Team met with City Departments to discuss opportunities and barriers to potential sustainability strategies.

The Project Team prioritized strategies based on department feedback, cost, feasibility, timeline, and funding opportunities. Strategies were analyzed for GHG reduction potential.

The Project Team finalized sustainability strategies and drafted the plan.

Greenhouse Gas Inventory

Naturally occurring gases dispersed in the atmosphere determine the Earth's climate by trapping solar radiation. This phenomenon is known as the Greenhouse Effect (Figure 1). Overwhelming evidence shows that human activities are increasing the concentration of GHGs and changing the global climate. The most significant contributor is burning fossil fuels for transportation, electricity generation, and other purposes, introducing large amounts of carbon dioxide and other GHG into the atmosphere. Collectively, these gases intensify the natural greenhouse effect, causing the global average surface and lower atmospheric temperatures to rise and threatening the safety, quality of life, and economic prosperity of global communities.

Since local policies directly or indirectly control many of the significant sources of emissions, local governments have a strong role to play in reducing GHG emissions within their boundaries and operations. The City of Laurel recognizes that GHG emissions from human activity are catalyzing profound climate change and is committed to reducing emissions.

The Greenhouse Effect

Some solar radiation is reflected by the Earth and the atmosphere.

Some of the infrared radiation passes through the atmosphere. Some is absorbed and re-emitted in all directions by greenhouse gas molecules. The effect of this is to warm the Earth's surface and the lower atmosphere.

Most radiation is absorbed by the Earth's surface and warms it.

Atmosphere

Earth's surface

Infrared radiation is emitted by the Earth's surface.

Figure 1. The greenhouse gas effect (U.S. Environmental Protection Agency).

The first step toward achieving tangible GHG emission reductions requires identifying baseline emissions levels and sources and activities generating emissions in government operations. In 2019, MWCOG developed a baseline GHG inventory to account for emissions associated with the City's vehicle fleet, buildings, facilities, streetlights, solid waste, water consumption, and wastewater. This inventory includes three greenhouse gases: carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Many of the charts in this report represent emissions in "carbon dioxide equivalent" (CO_2e) values, calculated using the Global Warming Potentials (GWP) for methane and nitrous oxide from the Intergovernmental Panel on Climate Change (IPCC) 5th Assessment Report. This data provides a baseline against which the City can identify high-impact actions for reducing emissions, compare future performance, and demonstrate progress in reducing emissions. Results from this analysis are summarized below and more information on methodology and data sources can be found in Appendices B and C.

Industry

Transportation

Energy

Agriculture

Buildings
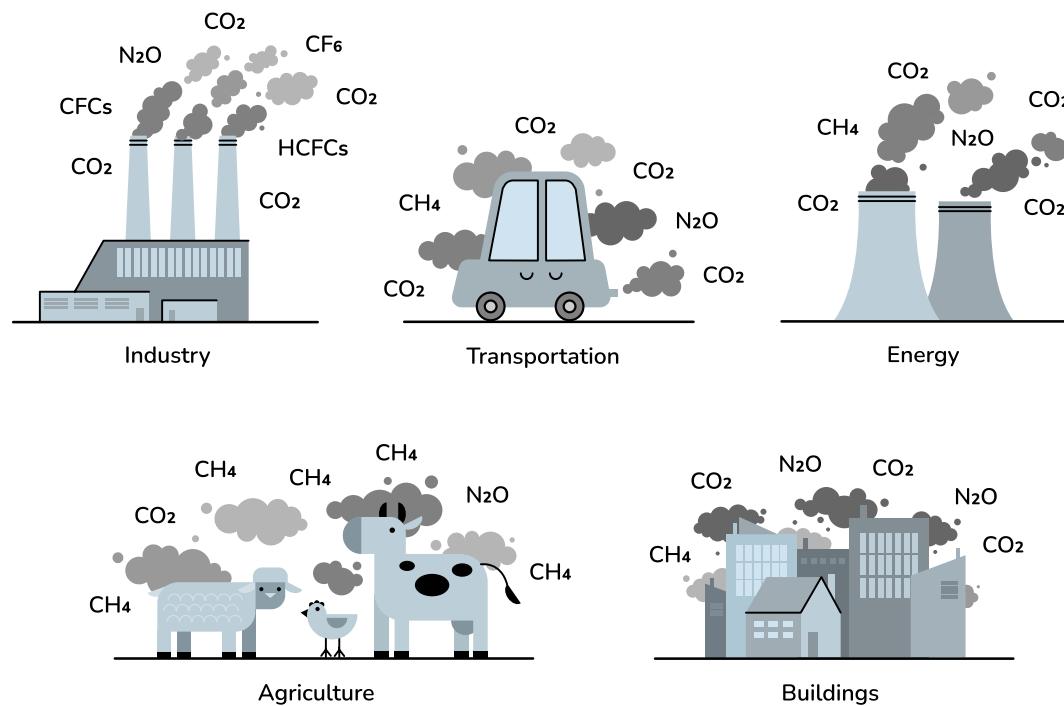
Key Findings

In 2019, activities within the City of Laurel's operations emitted approximately 2,483 metric tons of carbon dioxide equivalent (MT CO2e). Figure 2 shows government operation emissions by sector. The largest contributor is the vehicle fleet, which accounts for 45% of emissions. The next largest contributors are Buildings & Facilities (36%) and Streetlights & Signals (16%). Solid Waste and Water & Wastewater were responsible for the remaining (less than 4%) emissions. Emissions sources from within each sector include:

- Electricity, natural gas, and propane in buildings and facilities for heating, cooling, and power.
- Electricity to power streetlights and signals.
- Gasoline and diesel fuels for on- and off-road vehicles.
- Waste generation emissions from materials sent to landfills.
- Process emissions from wastewater treatment.

City of Laurel Government Operations Greenhouse Gas Inventory

SOLID WASTE

73
MT CO2e

WATER/WASTEWATER

1
MT CO2e

BUILDINGS & FACILITIES

884
MT CO2e

TRANSPORTATION

1,127
MT CO2e

**STREETLIGHTS & SIGNALS**

398
MT CO2e
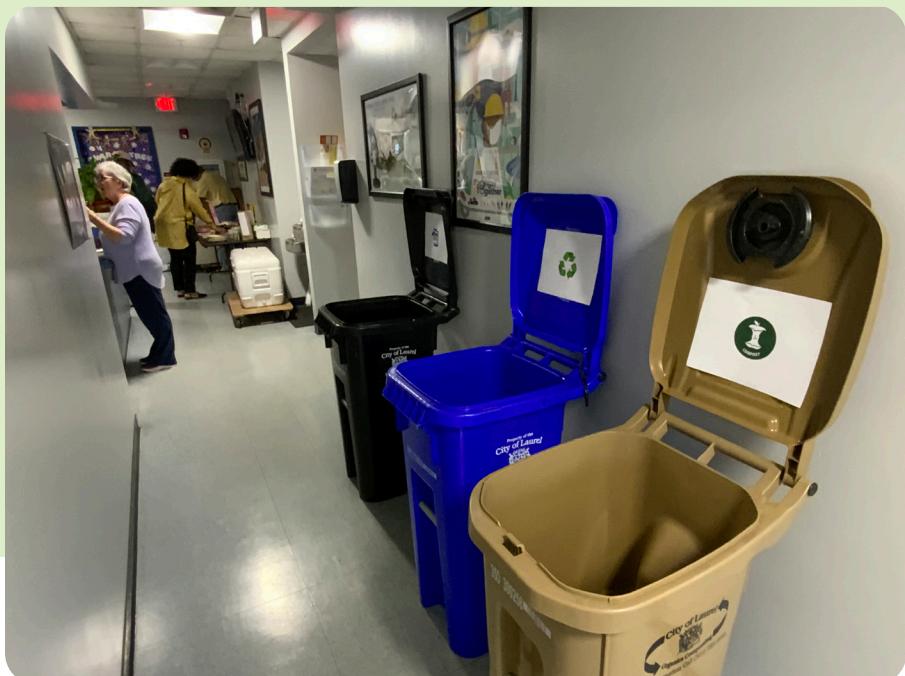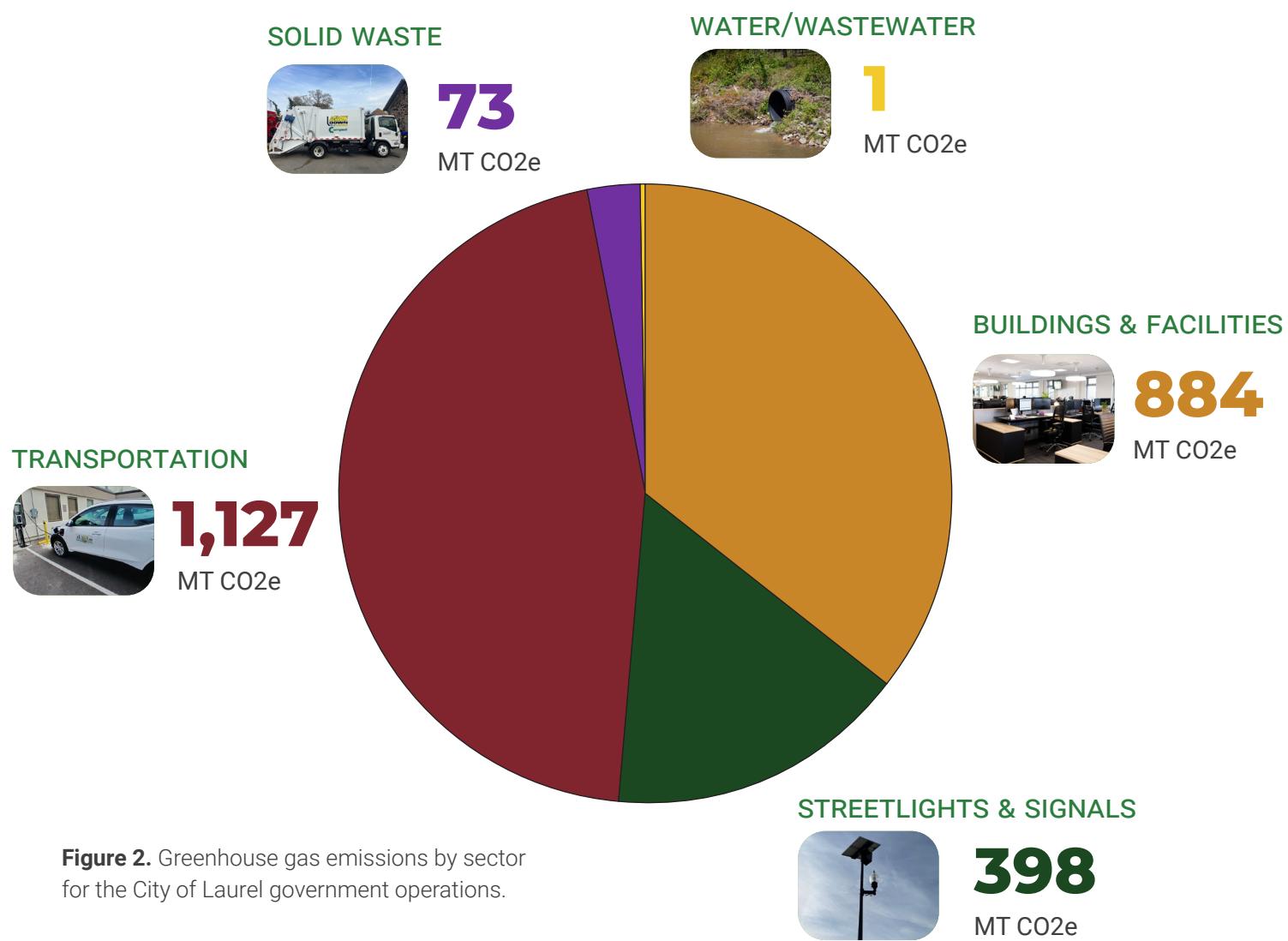
Figure 2. Greenhouse gas emissions by sector for the City of Laurel government operations.

Emission Forecasting and Strategy Modeling

After completing Laurel's 2019 GHG inventory, emissions were projected to 2040 under two scenarios. The first scenario, referred to as a "Business-as-Usual Forecast" (BAU forecast; (Figure 3)), estimates and demonstrates what the City's emissions will look like in the future under current state and federal policies if the City were not to take any additional action to reduce emissions. The second scenario (Figure 4, Emissions Reduction Actions Scenario) was developed by adding emissions reduction measures to the BAU forecast. Developing the second scenario allows the City to assess which actions it needs to take to achieve its goal of a 75% reduction in government operations emissions by 2040 from 2019 levels.

BAU Forecast Scenario

To develop the BAU forecast, a set of growth rates was applied to emissions in the 2019 inventory to project changes through 2040:

- City of Laurel population growth, as a proxy for growth in operations activities to support the change in the number of residents and local businesses.
- Changes in automotive fuel efficiency standards.
- Changes to the carbon intensity of grid electricity due to the Maryland Climate Solutions Now Act, which calls for 100% renewable energy-sourced electricity by 2045.

In addition to these growth rates, two reduction measures were applied to the BAU forecast to account for measures that the City implemented between 2019 and 2024:

- Switching all streetlights to LED light bulbs–a significantly more efficient type of light bulb than other options.
- Switching landscaping equipment to electric–a more efficient option with lower GHG emissions intensity than fuels.

## City of Laurel Government Operations BAU Forecast
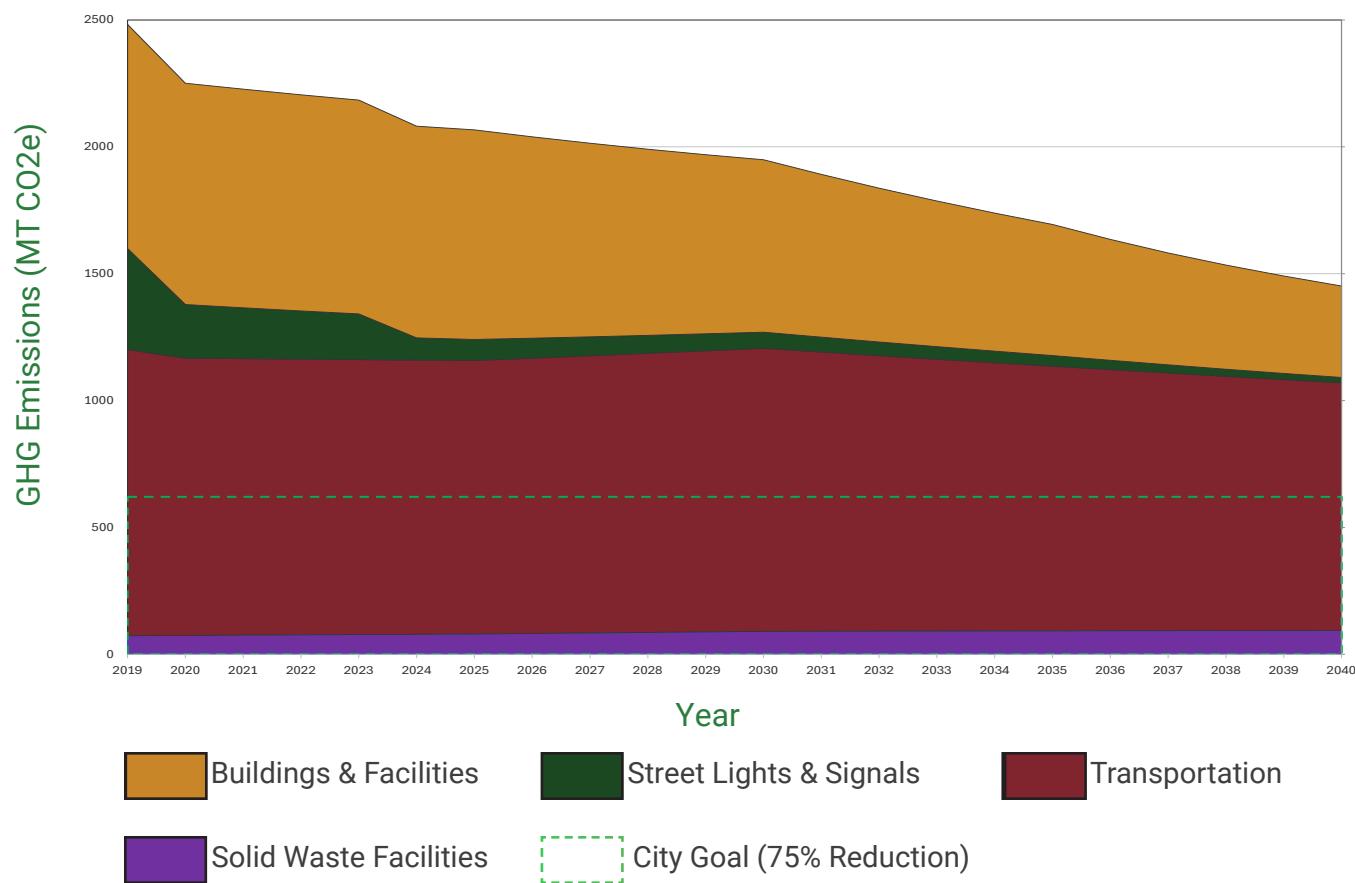
Figure 3. Greenhouse gas emissions by sector for the City of Laurel government operations.

Based on the above growth rates, Laurel's 2040 emissions will be approximately 1,017 MT CO2e, a 41.5% reduction from 2019 levels. Maryland's Climate Solutions Now Act, which calls for 100% clean electricity by 2045, is the primary driver causing a reduction in emissions. Impact from this Act can be seen in the above graph for the Buildings & Facilities and Streetlights & Signals sectors, where electricity is the primary source of emissions. Additional reductions occur in the Vehicle Fleet sector due to expected changes in automotive fuel efficiency standards. Laurel's action to swap light bulbs in streetlights with LEDs is estimated to reduce emissions by approximately 10%, and replacing landscaping equipment with electric options leads to a reduction of approximately 1.3%. Despite these significant reductions, the BAU forecast indicates that the City will need to implement more measures to reduce emissions by an additional 33.5% to reach its goal of a 75% reduction.

Emissions Reduction Actions Scenario Strategies

After completing the BAU forecast, measures to reduce emissions in City operations were applied to the forecast to develop the Emissions Reduction Actions Scenario. Results of the model and reduction measures applied include the following.

Building & Facilities

Converting all heating and cooling systems in buildings and facilities from natural gas and propane to electric (5 Buildings).

Building & Facilities

Adding lighting sensors to 20% of City-owned building square footage. Retiring 20 older and less efficient computers for new, more efficient options.

Building & Facilities

Installing 583 kilowatts of solar panels on City-owned rooftops and parking lots.

Solid Waste

Diverting 50% of solid waste from landfills to recycling or composting.

Transportation

Transition 5% of the City's internal combustion engine fleet to electric vehicles annually until 2040, achieving a total of 75% conversion; converting the remaining 15% of the fleet to electric vehicles in 2040.

Switching approximately 10% of gasoline consumption for the City's vehicle fleet by replacing internal combustion engine vehicles with hybrid vehicles.

The results of this model indicate that if the City implemented each of the emission reduction actions by 2040, the City could achieve its goal of reducing emissions by 75% from 2019 levels by 2040.

## Emissions Reduction Actions Scenario
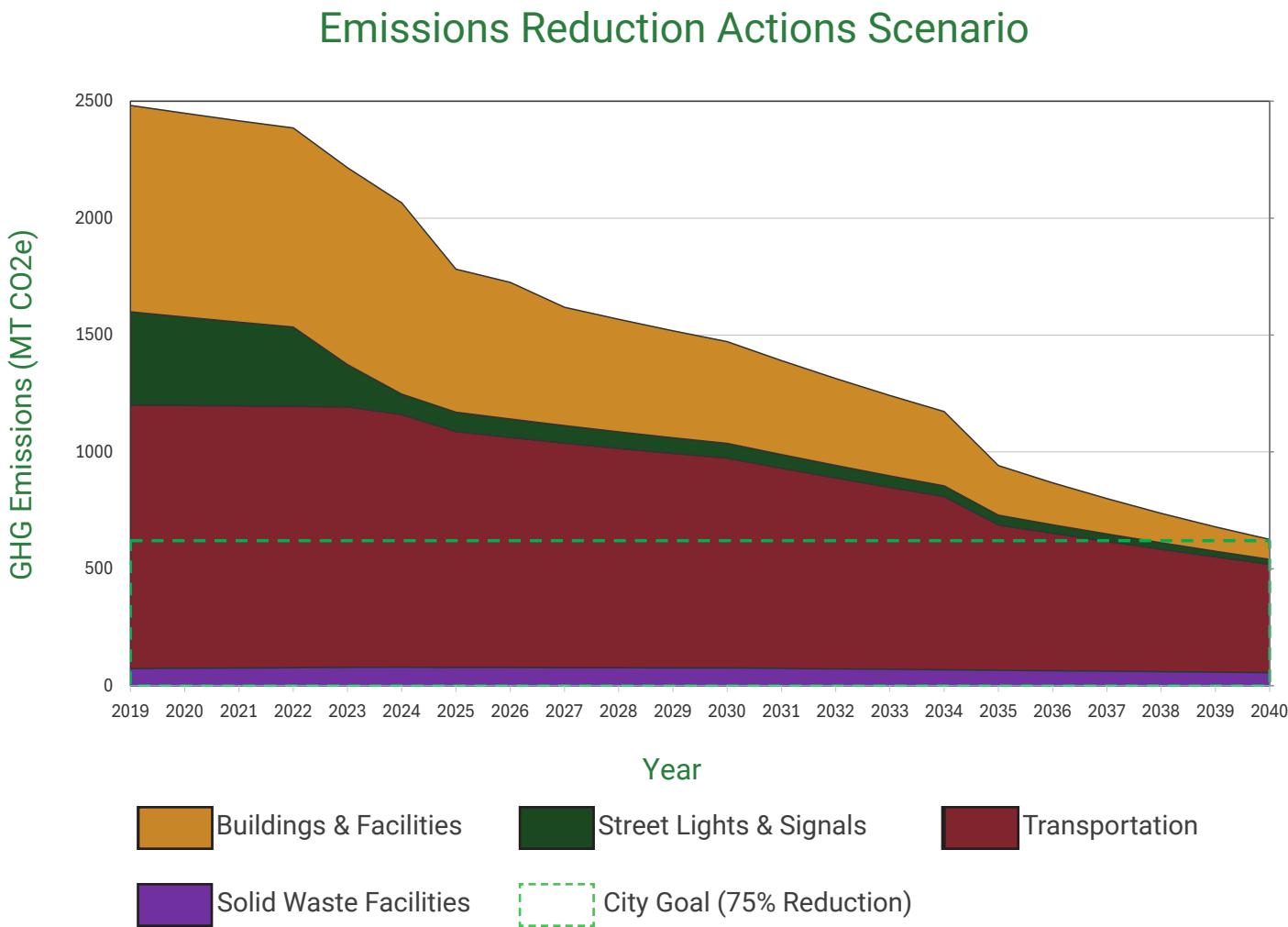
Figure 4. Emissions Reduction Actions Scenario for the City operations of Laurel to meet the 2040, 75% emission reduction goal.

Results of this analysis also show that switching gasoline-powered vehicles to electric vehicles (EVs) and converting all building and facility systems from natural gas and propane to electric will have the highest impact on emissions. These two actions achieve significant reductions as they build upon Maryland's Climate Solutions Now Act by taking advantage of the State having an electricity grid that is free of fossil fuel generation (and emissions) in the future. Switching gasoline-powered vehicles to EVs will also work in tandem with the State's adoption of the Advanced Clean Cars II Rule, which requires all sales of passenger cars and light trucks to be electric by model year 2035. By implementing actions that work with and for the State's climate efforts, the City can achieve its goal and be a leader in showing the region how to take actions that move the needle on achieving a sustainable, low emission future.

Strategy Guide

Co-Benefit Icons

Under each of the five Sustainability Strategy Categories (Buildings and Facilities, Clean Electricity Generation, Transportation, Waste, Land Use) goal's and/or action's there will be co-benefits of the listed goal/action.

Diversity, Equity, and Inclusion: The action ensures the benefits and burdens are distributed fairly among all employees.

Resilience: The action helps the community become better equipped to withstand and recover from extreme weather events and other environmental stresses.

Employee Comfort: The action has positive impacts on employees' work environments, making them more comfortable and healthier.

Natural Resource Protection: The action leads to the preservation of natural resources supporting a healthy ecosystem and viability for future generations.

Improved Public Health: The action improves environmental conditions to decrease negative impacts to human health.

Cost Savings: The action leads to direct cost savings of government dollars.

Improved Indoor Air Quality: The action improves the air quality inside buildings.

Partnerships & Collaboration: The action promotes working together across various departments and jurisdictions, stakeholder groups, and the community.

Emissions Savings: The action reduces the production of greenhouse gases of the City government.

Reduce Urban Heat Island: The action reduces heat that causes urban heat island effects.

Implementation Timeline

To read the timeline look for the arrow with the darkened outline indicating if the goal and/or action will occur in the near-, mid-, or long-term.

Near ⟩ Mid ⟩ Long

Buildings & Facilities

Convert all heating and cooling systems in buildings and facilities from natural gas and propane to electric by 2040.

A grant was awarded to replace six generators, converting them from diesel and propane to electric.

Modeled Action:

Convert fuel-powered systems in the Facility Maintenance Complex, Police Station Activity Center, Armory, Pool Complex, and Museum to electric by 2040.

Lead Department:

Department of Parks and Recreation

Possible Funding Resources:

 City of Laurel Budget and Capital Improvement Plan (CIP), Clean Energy for Local Governments FY25 Grant Program, Energy-Efficient Commercial Buildings Tax Deduction, Clean Energy for Local Governments FY25 Grant Program, Jane E. Lawton Conservation Loan Program, OPEN Energy Innovation Grant Program

Metric for Success:

Number of buildings or heating and cooling equipment converted to electric, total emissions reduced in the Buildings & Facilities sector.

Emissions Reduction Potential: 7%

Implementation Timeframe:

Near > Mid > Long

Buildings & Facilities

Increase Building Efficiency

Two City-owned facilities have building automation systems and the City is working to add automation to Joseph R. Robison Laurel Municipal Center now. Additionally, the City has been updating facilities with LED lighting, and adding motion sensor lights.

Modeled Action:

- Increase the energy efficiency of City-owned buildings by adding lighting sensors to 20% of City-owned building square footage.
- Retire 20 older and less efficient computers for new, more efficient options.

Lead Department:

Department of Parks and Recreation and Department of Information and Technology

Possible Funding Resources:

CIP, Clean Energy for Local Governments FY25 Grant Program, Jane E. Lawton Conservation Loan Program, Energy-Efficient Commercial Buildings Tax Deduction, OPEN Energy Innovation Grant Program

Metric for Success:

kWh of electricity saved, dollars saved on electricity bills, number of efficiency actions taken.

Emissions Reduction Potential:

Lighting sensors – 0.01%; low power computing – 0.4%

Implementation Timeframe: Near Mid Long

Clean Electricity Generation

Install 583kw of solar panels on municipal facilities.

The City has been working to develop a feasibility assessment on City-owned facilities for solar panel installation.

Modeled Action:

For reference, this could include the following locations and approximate sizes:
- Rooftop of Maintenance Center (98 kW)
- Parking lot of Municipal Center (300 kW)
- Parking lot of DiPietro Community Center (185 kW)

Lead Department:

Department of Parks and Recreation, Division of Sustainability

Possible Funding Resources:

CIP and U.S. Department of Energy grant, FY25 Resilient Maryland Program- AOI 3: Resiliency Hubs, Public Facilities Solar FY25 Grant Program, Clean Energy for Local Governments FY25 Grant Program, Solar Technical Assistance Program, OPEN Energy Innovation Grant Program

Metric for Success:

kW of solar panels installed at municipal properties, kWh and dollars saved on electricity bills, total emissions reduced in the Buildings & Facilities sector.

Emissions Reduction Potential: 6%

Implementation Timeframe: Near › Mid › Long

Transportation

Replace gasoline vehicles with more efficient, hybrid vehicles to aid in the transition to electric vehicles (EV).

The City has installed EV charging infrastructure at 312 Main Street, the Joseph R. Robison Laurel Municipal Center, and the Robert J. DiPietro Community Center.

Modeled Action:

- Replace the equivalent of 90% of fleet gasoline fuel consumption from gasoline vehicles to electric vehicles and the 10% hybrid vehicles to electric by 2040.
  - Replace the equivalent of 10% of gasoline fueled City vehicle with hybrid vehicles.
  - Replace 5% of gasoline vehicles with electric vehicles annually (75% by 2040)
  - Replace the remaining 15% of gasoline vehicles with electric vehicles.

Lead Department:

Department of Public Works and Laurel Police Department

Possible Funding Resources:

CIP, Clean Energy for Local Governments FY25 Grant Program, Medium-Duty and Heavy-Duty Zero-Emission Vehicle Grant Program, Electric Vehicle Supply Equipment (EVSE) Rebate Program, Electric Vehicle Supply Equipment Equity Program, OPEN Energy Innovation Grant Program

Metric for Success:

Number of gasoline vehicles retired and replaced with hybrid electric vehicles, gallons of gasoline saved, total emissions reduced in the Vehicle Fleet sector.

Emissions Reduction Potential: 24%

Implementation Timeframe:

Near Mid Long

Solid Waste

Divert 50% of government generated solid waste from the landfill.

The City has started a curbside organics recycling program which is implemented at municipal buildings as wells as private residences.

Modeled Action:

Implement & monitor recycling and composting within operations (awareness through training and education, signage, placement of bins).

Lead Department:

Sustainability Division with Department of Public Works

Possible Funding Resources:

CIP and GOB, Solid Waste Infrastructure for Recycling Grants for Communities, Consumer Recycling Education and Outreach Grant Program, Composting and Food Waste Reduction (CFWR) Cooperative Agreements, Climate Pollution Implementation Grants

Metric for Success:

Percent or tonnage of solid waste diverted annually.

Emissions Reduction Potential: 1.6%

Implementation Timeframe: Near Mid Long

Sustainability Strategies

In addition to the strategies modeled for GHG reduction, the City of Laurel aims to enhance sustainability through additional initiatives outlined in this section. While some of these initiatives have the potential to reduce GHG emissions, they were not modeled due to incomplete data sets. As mentioned in the Implementation section of the Plan, the City intends to conduct a more comprehensive GHG Inventory as a next step.

The City invested in battery-electric lawn care equipment and added solar- powered LED lighting to the City parking lot on 312 Main Street.

Buildings & Facilities

Purchasing energy-efficient equipment and lighting.

Action:

- Use energy-efficient holiday/decorative lighting.
- Install energy efficient, electric appliances in City offices, kitchens, laundries, and cafeterias in municipal buildings.
- Purchase only ENERGY STAR equipment and appliances for City use (including computers, kitchen equipment, vending machines, etc.).

Lead Department:

Department of Parks and Recreation

Possible Funding Resources:

Clean Energy for Local Governments FY25 Grant Program, Jane E. Lawton Conservation Loan Program, OPEN Energy Innovation Grant Program

Metric for Success:

Number of energy star appliances in buildings, kWh of electricity saved, dollars saved on electricity bills.
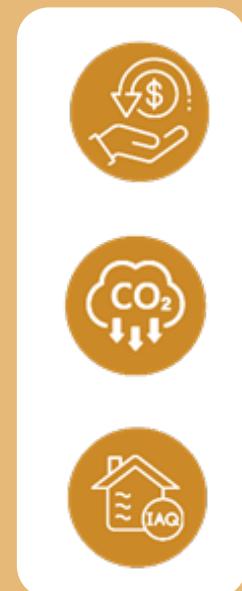
Implementation Timeframe: Near Mid Long

Buildings & Facilities

Improve Building Efficiency

In consultation with the Maryland Energy Administration, the City developed an energy audit for 11 municipal buildings. The City has also already retrofitted the roofs of some buildings in the last few years to white roofs.

Action:

- Implement an energy tracking and management system for municipal buildings.
- Develop green, reflective, or 'cool' roofs on municipal
- properties.
- Implement a weatherization program for municipal buildings.
- Install or improve building insulation (including double-glazed windows) in municipal properties.
- Conduct an energy audit of municipal facilities and develop an energy management plan.

Lead Department:

Department of Parks and Recreation

Possible Funding Resources:

Clean Energy for Local Governments FY25 Grant Program, Energy- Efficient Commercial Buildings Tax Deduction, Jane E. Lawton Conservation Loan Program, OPEN Energy Innovation Grant Program, Energy Efficiency and Conservation Block Grants (EECBG)
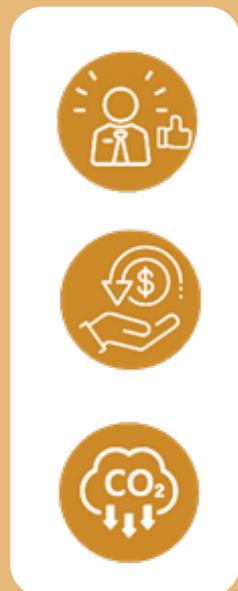
Metric for Success:

kWh of electricity saved, dollars saved on electricity bills, number of actions taken.

Implementation Timeframe: Near > Mid > Long

Buildings & Facilities

Create Green Purchasing and new development policies

Action:

- Adopt or encourage LEED building standards for municipal projects.
- Purchase environmentally friendly (low-VOC) paints.
- Use environmentally friendly, including low-carbon materials in construction projects.
- Implement a green concrete program.
- Develop a green building policy for all new municipal buildings and major renovations.
- Negotiate prices by purchasing in bulk where feasible.
- Implement recycling and environmentally friendly purchasing in municipal shop operations (e.g., oil reuse).

Lead Department:

Department of the Fire Marshal and Permit Services, Budget and Personnel Services Department, Sustainability Division

Possible Funding Resources:

Clean Energy for Local Governments FY25 Grant Program, Energy- Efficient Commercial Buildings Tax Deduction, Jane E. Lawton Conservation Loan Program, OPEN Energy Innovation Grant Program, Energy Efficiency and Conservation Block Grants (EECBG)
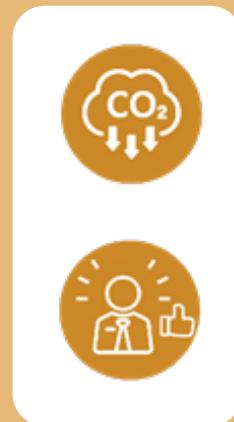
Metric for Success:

Number of new policies that directly impact new build energy standards, dollars spent on sustainable purchases.

Implementation Timeframe: Near Mid Long

Buildings & Facilities

Improve water efficiency

Action:

- Use grey water recycling technology in municipal buildings.
- Install low-flow toilets and faucets.
- Install automatic sensors on hand basins in municipal buildings.

Lead Department:

Department of Parks and Recreation

Possible Funding Resources:

CIP, Clean Water State Revolving Fund (CWSRF)

Metric for Success:

Gallons of water saved; dollars saved on water bills; number of sensors, low-flow toilets and faucets, and grey water systems installed.

Implementation Timeframe: Near   Mid   Long

Clean Electricity Generation

Action:

Purchase locally produced renewable energy sources.

Lead Department:

Department of Parks and Recreation

Possible Funding Resources:

OPEN Energy Innovation Grant Program

Metric for Success:

Percent or kWh of renewable electricity purchased annually.
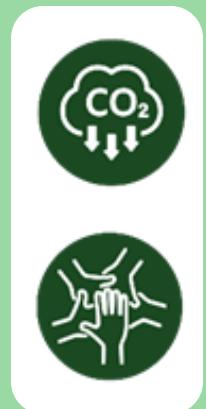
Implementation Timeframe: Near Mid Long

Clean Electricity Generation

Action:

Institute a "lights out at night" or "lights out when not in use" policy in municipal buildings.

Lead Department:

Offices of the Mayor and City Administrator

Possible Funding Resources:

Clean Energy for Local Governments FY25 Grant Program, Jane E. Lawton Conservation Loan Program, OPEN Energy Innovation Grant Program

Metric for Success:

kWh of electricity saved.

Implementation Timeframe: Near Mid Long

Clean Electricity Generation

Action:

Establish a Renewable Portfolio Standard for government energy use.

Lead Department:

Department of Parks and Recreation

Possible Funding Resources:

Clean Energy for Local Governments FY25 Grant Program, OPEN Energy Innovation Grant Program, Energy Efficiency and Conservation Block Grants (EECBG)

Metric for Success:

Establishment of an RPS, kWh of renewable energy consumed as a result of the RPS.

Implementation Timeframe: Near   Mid   Long

Clean Electricity Generation

Action:

Implement an employee awareness program to change habits regarding turning off computers and monitors when not in use.

Lead Department:

Department of Information Technology

Possible Funding Resources:

Clean Energy for Local Governments FY25 Grant Program, Jane E. Lawton Conservation Loan Program, OPEN Energy Innovation Grant Program, Energy Efficiency and Conservation Block Grants (EECBG)
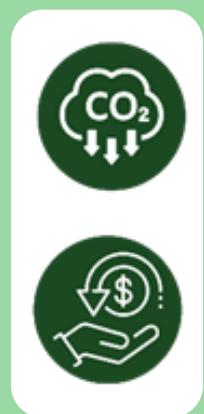
Metric for Success:

Average annual percentage of computers that are turned off daily.

Implementation Timeframe: Near Mid Long

Transportation

Action:

Install Diesel Particulate Filters on municipal fleet vehicles.

Lead Department:

Department of Public Works

Possible Funding Resources:

OPEN Energy Innovation Grant Program

Metric for Success:

Number of filters installed.

Implementation Timeframe: Near ▸ Mid ▸ Long

Transportation

The state of Maryland passed legislation (§21–1003.2) allowing municipalities to institute anti-Internal Combustion Engine (ICE) laws. Anti-ICEing laws penalize drivers of combustion engine vehicles for parking in electric vehicle only parking spaces.

Action:

Offer priority/free parking for ultra-low and zero- emissions vehicles.

Lead Department:

Office of the City Administrator

Possible Funding Resources:

OPEN Energy Innovation Grant Program

Metric for Success:

Number of spaces dedicated to ultra-low and zero- emissions vehicles.

Implementation Timeframe: Near ▸ Mid ▸ Long

Transportation

Action:

Improve and monitor Vehicle Maintenance Program (e.g., monitor tire pressure for fuel efficiency by placing stickers on vehicles and ensure vehicles receive regular oil changes).

Lead Department:

Department of Parks and Recreation, Department of Public Works, Laurel Police Department

Possible Funding Resources:

Clean Energy for Local Governments FY25 Grant Program, OPEN Energy Innovation

Metric for Success:

Number of vehicles with up-to-date compliance annually, average annual fuel economy of fleet vehicles.

Implementation Timeframe: Near Mid Long

Transportation

Action:

Retire old and underutilized fleet vehicles.

Lead Department:

Department of Public Works

Possible Funding Resources:

Clean Energy for Local Governments FY25 Grant Program, Medium-Duty and Heavy-Duty Zero-Emission Vehicle Grant Program, Electric Vehicle Supply Equipment (EVSE) Rebate Program, Electric Vehicle Supply Equipment Equity Program, OPEN Energy Innovation Grant Program, Energy Efficiency and Conservation Block Grants (EECBG)

Metric for Success:

Conduct a fleet replacement study, number of vehicles replaced with more efficient or electric options.

Implementation Timeframe: Near   Mid   Long

Solid Waste

Action:

Implement program to reuse asphalt millings.

Lead Department:

Department of Public Works

Possible Funding Resources:

Solid Waste Infrastructure for Recycling Grants for Communities

Metric for Success:

Tonnage of asphalt millings reused.

Implementation Timeframe: Near ➤ Mid ➤ Long

Land Use

The Department of Public Works organizes 2 tree plantings in the fall utilizing all native, non-invasive species approved by the State of Maryland.

Action:

Green government properties by planting shade trees and other vegetation in and around local government parking lots, buildings, and facilities.

Lead Department:

Department of Parks and Recreation

Possible Funding Resources:

Clean Water State Revolving Fund (CWSRF), Water and Environment Grant Program
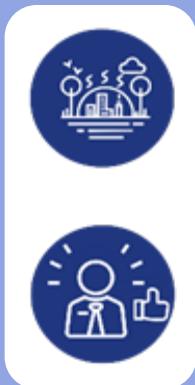
Metric for Success:

Number of trees planted; area of land planted with vegetation.

Implementation Timeframe: Near Mid Long

Land Use

In Spring 2024, the City hosted a pollinator garden planting event at Larry T. Smith Park.

Action:

Use natural landscaping, such as native grasses and pollinator gardens, to reduce emissions from lawnmowers and save water.

Lead Department:

Department of Parks and Recreation

Possible Funding Resources:

Clean Water State Revolving Fund (CWSRF), Water and Environment Grant Program

Metric for Success:

Square feet of native grasses or pollinator gardens.

Implementation Timeframe: Near > Mid > Long

Land Use

The City-owned parking lot at 312 Main Street has permeable pavement.

Action:

Use non-asphalt paving and other methods to increase permeable surfaces.

Lead Department:

Department of Parks and Recreation, Department of Public Works

Possible Funding Resources:

Clean Water State Revolving Fund (CWSRF), Water and Environment Grant Program

Metric for Success:

Square feet of impermeable surfaces converted to permeable surfaces.

Implementation Timeframe: Near > Mid > Long

Land Use

The City currently uses Foamstream, a sugar, high heat, and water treatment, instead of herbicides.

Action:

Eliminate use of artificial/chemical pesticides and fertilizers in parks.

Lead Department:

Department of Parks and Recreation

Possible Funding Resources:

Clean Water State Revolving Fund (CWSRF), Water and Environment Grant Program

Metric for Success:

Increased biodiversity at City parks and natural areas.

Implementation Timeframe: Near   Mid   Long

Next Steps

To ensure our environmental initiatives remain effective and aligned with regional goals, we intend to update our GHG inventory. This update will provide a more accurate reflection of our progress without altering our current approach. By aligning our efforts with the Metropolitan Washington Council of Governments (MWCOG) and their 2050 target, we can ensure consistency and collaboration across the region. This alignment will help us track our emissions reductions more effectively and identify areas where we can enhance our strategies to meet our long- term sustainability goals.

Municipal Building Energy Audit

The Maryland Energy Administration (MEA) conducted a comprehensive energy audit of 11 municipal buildings and facilities to identify areas for energy efficiency improvement opportunities. The City will refine its strategies to include follow up to the audit to improve energy efficiency in those 11 buildings. Additionally, coordinating the implementation of recommendations from the MEA report and working with MWCOG to develop an Energy Efficiency and Resource Management Inventory and a City-wide GHG inventory will strengthen our efforts.

Internal Progress Tracking

A project management spreadsheet in a matrix format will be created to track the progress of all sustainability initiatives, outlining tasks, responsible parties, deadlines, and status updates, ensuring accessibility to all team members and regular updates to reflect current progress.

Develop a Progress Dashboard

A public dashboard is under development to provide transparency on government operations related to sustainability, including key metrics such as energy usage, fleet performance, and progress on sustainability projects, with regular updates to keep the community informed and engaged. The first addition to the dashboard will be the City of Laurel Organics Recycling Program.

Regular meetings with key stakeholders will help us stay on track, address challenges, and seize opportunities for improvement. The energy audit conducted by MEA will guide our efforts to enhance energy efficiency in 11 municipal buildings, while the public dashboard will provide transparency and keep the community engaged with our progress.

Our project management spreadsheet will facilitate the tracking of all sustainability initiatives, ensuring accountability and collaboration among team members. Promoting environmental awareness among City employees and integrating it into our culture will further support our goals. Together, these actions will create a structured and transparent approach to achieving our sustainability goals, fostering a culture of collaboration and accountability, and ultimately contributing to a more sustainable future for our community.

City of Laurel

Sustainable Community Framework

Our Voice, Our Future

Table of Contents

Introduction

In today's rapidly changing world, the importance of sustainability has never been more critical. The City of Laurel community recognizes the need to adopt practices that ensure the well-being of our environment, economy, and society for current and future generations. The Sustainable Community Framework is a comprehensive roadmap designed to guide our efforts in creating a resilient, vibrant, and sustainable community.

The City of Laurel definition of Sustainability

The City of Laurel defines sustainability as meeting the environmental, social, and economic needs of the present generation without compromising the ability of future generations to meet their needs. The City of Laurel is committed to moving its operations and the community towards a more sustainable future that focuses on the following four foundational pillars:

PEOPLE	PLANET	PROSPERITY	PEACE & PARTNERSHIP
Embracing social equity, fairness, health, and wellness.	Practicing responsible environmental management and conservation.	Supporting local businesses and local economic growth.	Implementing joint environmental projects, social infrastructure, education among various groups, the City and interested citizens.

The City of Laurel, a proud participant in the Maryland Sustainable Communities Program administered by the Maryland Department of Housing and Community Development, has made significant strides in sustainability and community development. With the State of Maryland Sustainable Communities designation, the City has been recognized for completing a series of sustainability actions and initiatives that align with the Sustainable Communities Program and aim to improve the quality of life for residents. These achievements marked significant progress toward the actions in the Maryland Sustainable Communities Action Plan and are also rooted in the City of Laurel Master Plan.

In 2021, Laurel celebrated several milestones: it received the Sustainable Maryland recertification, joined the Maryland Green Registry, and created the Environmental Programs Office, which has since evolved into the Sustainability Division, led by the Sustainability Manager. Additionally, Laurel holds the distinction of being Prince George's County's first designated Main Street. The City boasts several federal designations, including a main street local historic district, an arts and entertainment district, and a brownfield revitalization and incentive zone. These achievements reflect Laurel's commitment to creating a vibrant, sustainable, and culturally rich community. In 2022, Laurel renewed it's Sustainable Communities designation which included expanding City boundaries and received the Bee City USA designation.

SUSTAINABILITY MILESTONES

City of Laurel Sustainability Division

Sustainable Maryland Certified

Maryland Green Registry

Local Historic District

Arts and Entertainment District

Bee City USA

Thanks to the success of the Maryland Sustainable Communities Program in Laurel, the City gained recognition for its sustainability efforts and received assistance under a Memorandum of Understanding (MOU) from the Metropolitan Washington Council of Governments (MWCOG) to further plan a sustainable future. MWCOG assistance was divided into three distinct phases. The Phase 1 Sustainable Organization and Community Framework Memo (Appendix A) provided a baseline for the City to begin strategically planning for greenhouse gas (GHG) reduction and implementing sustainability measures. The City advanced their commitment to a sustainable community through Phase 2, funded by the Mayor and City Council through the Sustainability Division, and executed under MOU with MWCOG. Phase 2 focused on the development of the City of Laurel Sustainability Plan, which is comprised of two distinct but interrelated components: this Sustainable Community Framework and the Sustainable Government Organization Plan. The third phase includes the development and launch of the City of Laurel Organics Recycling Program campaign.

Laurel's sustainability principles, rooted in the City's Green Living Initiatives, emphasize robust community and stakeholder engagement to develop actionable strategies and track progress. The Framework was developed by and for the Laurel community, and in this spirit, will rely on community participation to realize progress. By fostering collaboration among residents, businesses, and local government, we can create a sustainable future for all.

Green Living Initiatives

The City of Laurel maintains a central location for all Sustainability initiatives through the Green Living Website and Sustainable Laurel Facebook.

57

Building on the substantial efforts our City has already made towards becoming a sustainable community, this Framework formalizes the community's commitment to a sustainable future. With the City's guidance, the community aims to inspire other communities to follow suit. The Framework will evolve with the needs and aspirations of our community, amplifying the voices of our residents, ensuring that everyone has a role in shaping our sustainable future.

This Framework will focus on strategies that meet the vision of the City. Strategies will be categorized under four foundational pillars that are derived from the United Nations Sustainable Development Goals.

Climate Change in Laurel

Naturally occurring gases dispersed in the atmosphere determine the Earth's climate by trapping solar radiation. This phenomenon is known as the Greenhouse Effect (Figure 1). Overwhelming evidence shows that human activities are increasing the concentration of GHGs and changing the global climate. The most significant contributor is burning fossil fuels for transportation, electricity generation, and other purposes, introducing large amounts of carbon dioxide and other GHG into the atmosphere. Collectively, these gases intensify the natural greenhouse effect, causing the global average surface and lower atmospheric temperatures to rise and threatening the safety, quality of life, and economic prosperity of global communities.

Since local policies directly or indirectly control many of the significant sources of emissions, local governments have a strong role to play in reducing GHG emissions within their boundaries and operations. The City of Laurel recognizes that GHG emissions from human activity are catalyzing profound climate change and is committed to reducing emissions.

Figure 1. The greenhouse gas effect (U.S. Environmental Protection Agency).

This Framework adopts a comprehensive approach to sustainability planning, focusing on community-driven recommendations and strategies that emphasize sustainability including but not limited to GHG reduction strategies. To address GHG reduction in the community, the City conducted a GHG inventory to assess its current standing in terms of GHG reduction needs. This inventory incorporates energy efficiency, renewable energy sources, and sustainable transportation options.

The first step toward achieving tangible GHG emission reductions across a city requires assessing emissions levels, sources, and activities generating emissions within the community. MWCOG developed a 2018 GHG inventory to account for emissions occurring within the boundaries of Laurel associated with residential energy consumption, commercial energy consumption, transportation and mobiles sources, solid waste, water and wastewater, and process and fugitive emissions from refrigerant use and natural gas distribution. Results showed that total community-wide emissions for the City of Laurel in 2018 were approximately 290,050 metric tons of carbon dioxide equivalent (MTCO2e) (Figure 2).
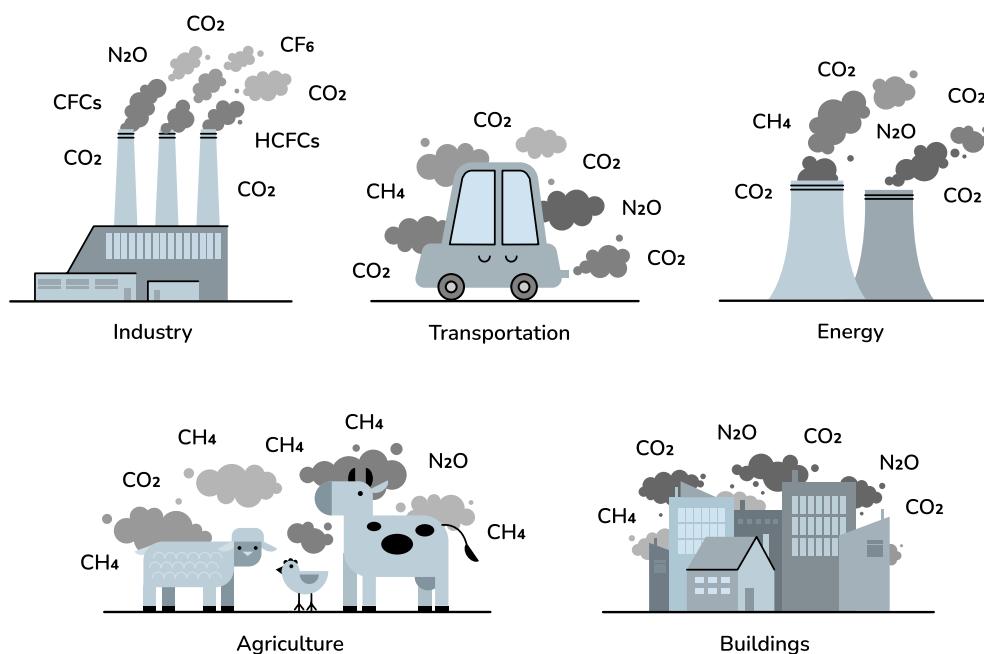
City of Laurel Community-Wide Greenhouse Gas Inventory

RESIDENTIAL ENERGY CONSUMPTION

53,000
MT CO2e

COMMERCIAL ENERGY CONSUMPTION

97,000
MT CO2e

TRANSPORTATION & MOBILE SOURCES

122,000
MT CO2e

SOLID WASTE

<1,000
MT CO2e

PROCESS AND FUGITIVE EMISSIONS

14,000
MT CO2e
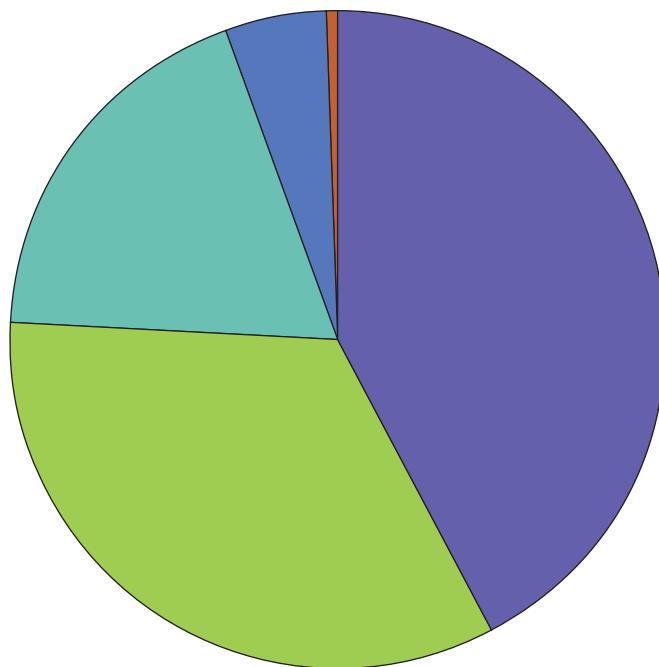
Figure 2. Shows community-wide emissions by sector. The largest contributor is Transportation & Mobile Sources, followed by Commercial Energy and Residential Energy. Process & Fugitive Emissions, Solid Waste, and Water & Wastewater were responsible for the remaining (less than 6%) emissions.

This inventory shows that the following high-impact actions will be critical to reducing emissions across the Laurel community:

RESIDENTIAL & COMMERCIAL ENERGY:

- Improve the energy efficiency of new and existing residential and commercial buildings.
- Switch fossil-fuel powered equipment, including cooling and heating systems, stoves, and water heaters, to electric in new and existing buildings.
- Install and invest in local renewable energy sources, such as solar panels, to reduce the carbon emissions intensity of the electricity grid.

TRANSPORTATION & MOBILE SOURCES:

- Reduce community-wide vehicle miles traveled through increased biking, walking, and public transit use.
- Replace gasoline, diesel, and other fossil fuel-powered vehicles with electric.

Reducing fossil fuel use in the community through these actions can have many benefits in addition to reducing GHG emissions. More efficient use of energy decreases utility and transportation costs for residents and businesses. Additionally, when residents save on energy costs, they are more likely to spend at local businesses and add to the local economy. Retrofitting homes and businesses to be more energy efficient creates local jobs. Reducing fossil fuel use improves air quality and increasing opportunities for walking and bicycling improves residents' health. For all these reasons, the City of Laurel is committed to supporting the community in reducing its carbon footprint and working together toward a low-carbon emission future.

Community Engagement

The City of Laurel conducted both internal and external outreach efforts to develop its Sustainable Community Framework, engaging a diverse range of stakeholders from across the community. This multi-faceted approach ensured that all residents' voices shaped the Framework.

Strategies to engage the Laurel community and stakeholders included a combination of grassroots outreach, community canvassing, and traditional but intentional outreach to residents, Homeowners Associations (HOAs), faith-based institutions, businesses, elected officials, and Stakeholder Interest Groups and Organizations. Several strategies to engage the community were implemented and refined throughout the engagement process as feedback was provided from the Focus Groups and community.

Stakeholders

- **Laurel Residents**
- **City Administration**
- **Elected Officials**
- **Public Schools (Youth)**
- **Higher Education**
- **Local Businesses**
- **Social/Community Service Organizations**
- **Churches/Faith-Based Institutions**
- **Stakeholder Interest Groups and Organizations**

Language Access

**REUNIÓN INTRODUCTORIA
DEL GRUPO DE ENFOQUE**

BIENVENIDOS

To increase the reach and engagement vital materials were translated into Spanish language such as print and digital notices, and presentations. Additionally, Spanish Language interpretation services were hired for engagement events and meetings.

Outreach Materials

Nuestra Voz, Nuestro Futuro
Ayúdenos a Planificar una Ciudad de Laurel Sostenible

¡Ud. está invitado!

**¡Fiesta de Lanzamiento del
Plan de Sostenibilidad!**

Bi-lingual Digital and Print Flyers, Social Media Advertisement, Informational Door Hangers, Presentations, and Poster Boards were utilized throughout the Framework development process to inform and engage the community at various milestones.

Media Communications

The City utilized multiple communication styles and platforms including Press Releases, City of Laurel Website and social media (Sustainable Laurel Facebook, Laurel Market on Main) and publication in the Laurel Independent.

Grassroots Outreach

The City focused on building relationships and connecting with community members who have strong ties within the community. Outreach efforts included direct phone calls, emails, and in-person meetings. These methods helped engage active community members, who then extended the City's reach through their networks and encouraged further participation via word-of-mouth. Additionally, these interactions provided valuable insights on how to engage the broader community. In addition to active community members, leaders and representatives of various stakeholder groups and organizations were contacted.

Community-Wide Survey

A community-wide survey was distributed to allow community members who could not participate in Focus Groups or attend engagement events to share their input.

Attendance at Community Events

The Laurel Farmer's Market provided several opportunities to share information about sustainability initiatives and engage community members in the Framework development process. Attendees were encouraged to join Focus Groups or complete the Community-Wide Survey. Focus Group representatives played an active role in promoting the survey and Open Houses at events such as the Laurel Main Street Festival on May 11, 2024.

Facilitated Meetings

A facilitated meeting was held at the Laurel Armory- Anderson Murphy Community Center, with a Laurel organization supporting the Hispanic population. A Spanish Speaking Interpreter helped facilitate dialogue for community members and project team members. Additionally Focus Group representatives reconvened with facilitators and the City Sustainability Manager to discuss individual group recommendations.

In-person and Online Engagement

A variety of engagement methods were employed, including in-person Focus Group kick-off meetings and Public Open Houses held at the Joseph R. Robison Municipal Center, a transit- accessible and ADA-compliant facility. Additionally, virtual listening sessions were organized for stakeholder interest groups and organizations to ensure broader participation.

Engagement Timeline

The City of Laurel conducted both internal and external outreach efforts to develop its Sustainable Community Framework, engaging a diverse range of stakeholders from across the community. This multi-faceted approach ensured that all residents' voices shaped the Framework.

2023

KICK-OFF	OUTREACH	FOCUS GROUPS
SUMMER	FALL	WINTER
The City of Laurel kicked off its Sustainability Planning project in July. This process involved collaborating and seeking input of internal City of Laurel Departments and with members of the Laurel community.	Grassroots outreach was conducted throughout the community to inform and promote upcoming engagement opportunities, including resident driven Focus Groups.	A Focus Group Kickoff meeting was held January 18th where residents could find out more about the sustainability planning process and join pillar-based Focus Groups.
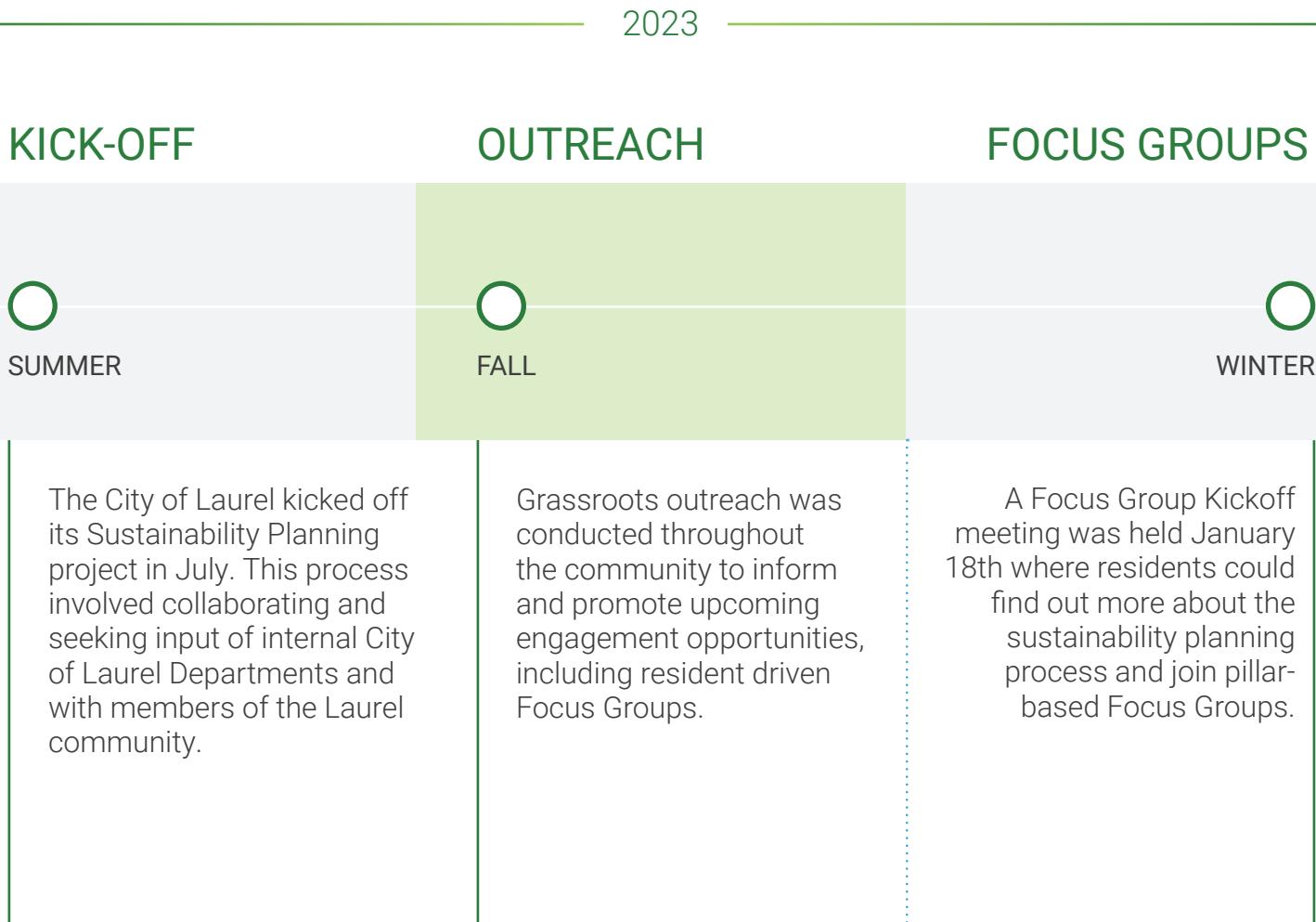
2024

STRATEGY DEVELOPMENT

PLAN DEVELOPMENT

SPRING

SUMMER

FALL

WINTER

Focus Groups were formed, supported by trained facilitators, and met independently of the City to develop strategies that aligned with the four sustainability pillars. Listening sessions were held for stakeholder interest groups.

Focus Group members partnered with the City to promote the Sustainability Survey at local events. Two public meetings were held June 6, and outreach was conducted at the Laurel Famer's Market to increase awareness and participation in the survey.

The draft Sustainability Plan was presented to the Mayor, City Council, and the community during a launch party in January 2025.

Focus Groups

Community led focus groups played a key role in developing the final strategies and actions in the plan.

Stage 1

Stage 2

4 FOCUS GROUPS

26 COMMUNITY MEMBERS

Independent, resident-led Focus Groups (FGs) played a crucial role in gathering input from Laurel's diverse community while empowering residents to take ownership of the process and its outcomes, which were incorporated into the community-driven Framework. Each FG was supported by trained facilitators from Governance Alive who guided discussions impartially, ensuring participants could freely express their thoughts without the presence of City staff.

Participants selected the pillar they wished to concentrate on when joining a FG and collectively decided on their preferred meeting format (in-person or virtual) and location. At the conclusion of their work, each FG independently appointed a representative to present their recommended strategies and actions to City officials, ensuring their voices were directly represented in the planning process.

Stage 4

The City has maintained ongoing engagement with FG members, providing updates on the framework's development and various sustainability initiatives. This includes their involvement in the Sustainability Plan Launch Celebration and participation in the City's new Organics Recycling Campaign.

Stage 3

100+ SUSTAINABILITY STRATEGIES

The outcomes of the FGs and discussions between group representatives and the Sustainability Manager contributed to several key improvements. The FG's emphasized they want partnership and improved communications including multicultural considerations. Recommendations included enhancements to the City's Green Living website, better communication with community members— such as hosting a meeting with a local organization representing and supporting the Hispanic community—and identifying opportunities for partnership throughout the engagement process, such as participation in the Open Houses.

Stakeholder Interest Groups

Engagement was conducted by the Project Team with various organizations and groups that have an interest in the City of Laurel's current efforts towards sustainability.

Throughout the engagement process, the project team facilitated discussions around their definition of sustainability and respective sustainability efforts, as well as discussing the City's four pillars of sustainability. Input received, coupled with feedback from FG, will support the project team's efforts to identify and document actionable strategies in the Framework.

Two virtual listening sessions were conducted with Stakeholder Interest Groups and Organizations (SIG) that participated in the kick-off meeting. While the FG focused on resident engagement, these sessions aimed to understand the perspectives of organizations and groups operating in or supporting the Laurel community.

Discussions during the listening sessions explored how organizations define sustainability and addressed topics such as education and collaboration, grant funding, housing, poverty and income, conservation/environmental stewardship, community engagement, and each organization/group's priorities and concerns, and ongoing initiatives.

Stakeholder Interest Groups Represented

- **Commerce Organizations**

- **Higher Education Institutions**

- **Environmental Organizations**

- **Faith-Based/ Religious Institutions**

- **Social Services Organizations**

Sustainability Pillar Feedback

Feedback obtained through FG and SIG was summarized by Sustainability Plan Pillar.

Feedback gathered from FGs, the general community, and SIGs served as a crucial foundation for shaping actionable sustainability strategies. This collaborative input provided valuable insights into community priorities, challenges, and opportunities, ensuring that the strategies reflect diverse perspectives and ideas related to sustainability.

The following sections highlight key themes and recommendations drawn from this feedback, illustrating the collective vision for a sustainable future:

- Improve and create collaborative communication channels.
- Increase collaboration and partnership between residents and the City.
- Increase multilingual outreach to residents.

People

Acknowledge multicultural diversity within the City, raise awareness and develop campaigns about available public programs for grants and provide education and support to residents, enhance social support services, foster collaboration for resource sharing, diversify communication methods, build partnerships with community organizations, promote accessibility, and eliminate socio-economic, cultural, and financial barriers.

Planet

Enhance and promote partnerships, promote environmental education, and outreach programs focused on native plants, wildlife conservations, etc., address developmental pressures on habitat and greenspace, equitable sustainability, evaluate and expand grant funding for sustainability including opportunities benefiting underserved communities.

Prosperity

Learn from successful initiatives such as Boston's Economic Mobility Pathways (EMPATH), foster collaborative partnerships between the City and local services providers to tackle poverty, housing affordability, and income disparity.

Peace & Partnership

Partner with organizations to host community events and seminars, such as job fairs, food drives, and parenting workshops, to support residents' diverse needs, strengthen community partnership collaborative initiatives like bio-blitzes or the City Nature Challenge, encouraging active participation and environmental stewardship.

Strategy Development

Through focus group outreach, the City gathered over 100 strategy suggestions, which were then evaluated and refined into actionable strategies for implementation by the City, Community, or a City-Community partnership. A community-wide survey was then conducted to identify the top sustainability priorities of the greater Laurel community to ensure all voices were heard (Figure 3). The Framework presents the top three areas deemed most important by the community, along with actions to address these priorities.

Each Pillar is designated by a specific color. All strategies contain defined actions of what "The Community," "The City Government," and we "Together" can do.

COMMUNITY

Residents, community, and businesses who live, work, and recreate in the City of Laurel.

TOGETHER

The Community and City Government working in partnership.

CITY GOVERNMENT

The City Government and Elected Officials.

Community-Wide Survey

PEOPLE

PLANET

PROSPERITY

PEACE & PARTNERSHIP
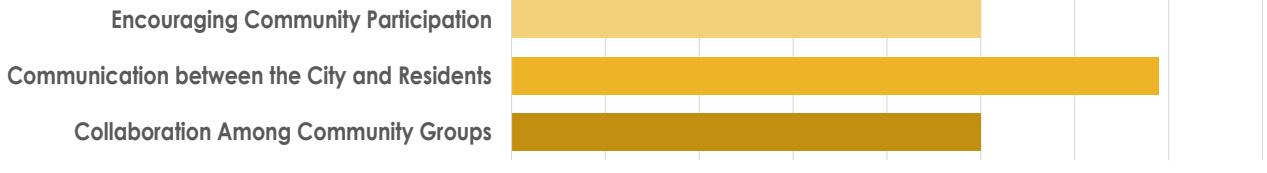
Figure 3. The top three selected strategies by Pillar from the community-wide survey.

73

PEOPLE

Embracing social equity,
fairness, health and wellness.

Foster Youth Engagement in Community Sustainability Initiatives

What the Community Can Do

- Utilize existing youth programs such as Laurel High School Green Team, composting champions, and the Laurel Boys and Girls Club.

What the City Government Can Do

- Collaborate with Laurel High School guidance counselors and green team mentors to enhance the visibility and participation in City-led youth programs by developing promotional materials, organizing information sessions, leveraging school communication channels, and involving student ambassadors (Green Team).

What We Can Do Together

What We are Already Doing

- Organize volunteer activities that connect youth with seniors.

  - Community members, specifically the Laurel High School Green Team, can participate in surveys, volunteer, promote the activities, and provide feedback to help shape and improve the volunteer programs.

  - The City can facilitate partnerships, develop and distribute marketing materials, organize and schedule volunteer events, offer training and support, and monitor and evaluate the activities to ensure their success.

- The Mayor and City Council host quarterly breakfast meetings with local principals to discuss youth opportunities.

- To further this effort the City is collaborating with school counselors to help engage and facilitate youth leadership in sustainability in the school and City.

PEOPLE

Embracing social equity,
fairness, health and wellness.

Enhance Health and Well-Being of City Residents

What the Community Can Do

- Replace gasoline-powered lawn equipment with battery-powered equipment.
- Choose to walk or bike to your destination.

What the City Government Can Do

- Promote rebates on the Green Living website for sustainable practices –e.g., solar, rain barrel and battery-powered rebates for lawn equipment.
- Provide better cycling and pedestrian information (e.g., maps and signage).
- Introduce or expand public bike sharing or rental facilities.

What We Can Do Together

What We are Already Doing

- Expand existing skateboard park and explore opportunities for an additional skateboard park.

- Community members can provide input on design plans, participate in fundraising efforts, and engage local skaters to ensure the park meets their needs.

- The City can facilitate expansion by securing necessary permits, allocating budget resources, coordinating with contractors, and conducting feasibility studies for additional parks.

- Create more hiking and walking trails by utilizing partnerships.

- Community members can participate in identifying potential trail locations, volunteer for trail maintenance, and advocate for the creation of new trails through local organizations and events.

- The City can facilitate the creation of hiking and walking trails by securing funding, coordinating with landowners and local organizations, obtaining necessary permits, and overseeing the construction and maintenance of the trails.

- The second Health Fair was held on January 27, 2019, at the Laurel Anderson Murphy Community Center. Over 50 vendors attended to provide free services and resources to participants. The Health Fair returned to Laurel on January 18, 2025, at the Craig A. Moe Multiservice Center.

PEOPLE

Embracing social equity,
fairness, health and wellness.

Improve Access to Healthy Food

What the Community Can Do

- Plant gardens at schools; these could be vegetable, pollinator, and/or native species gardens.

- Hang flyers for the Laurel Farmer's Market, community gardens, and food pantries in schools, places of worship, and at community events.

- Advocate for a healthy school lunch program that prioritizes locally sourced food.

What the City Government Can Do

- Advertise for the Laurel Farmer's Market, community gardens, and food pantries using multiple languages and methods for communication.

- Develop and expand bike lanes and pedestrian pathways connecting residential areas to local grocery stores and the Laurel Farmer's Market by assessing current infrastructure, engaging community stakeholders, and allocating funding to design and construct dedicated paths that connect residential areas to essential food sources.

- Educate the community about available public/government public assistance grants by developing outreach materials, posting on social networks, and utilizing existing partnerships to advertise for funding opportunities.

What We Can Do Together

- Start a gleaning program to collect food that would otherwise go to waste (from local farms, market vendors, restaurants, grocery stores, etc.) and donate rescued food to food pantries or other community-based organizations.

  - The Community can volunteer for gleaning activities, coordinate with local farms, market vendors, restaurants, and grocery stores, and launch awareness campaigns to highlight the program's benefits and encourage participation and donations.

  - The City can implement policies to facilitate the collection and redistribution of surplus food, provide logistical support such as transportation and storage, and allocate funds and resources for educational materials and volunteer training on safe food handling practices.

- Create pollinator areas for bats, bees, and birds throughout the City.

  - The City can identify suitable City-owned properties for conversion into pollinator gardens and provide education and resources to the community to promote the use of native plants.

  - The Community can identify community owned property (i.e., businesses, residential) that can be converted into pollinator gardens and be sure to use native pollinator plants when gardening.

- Create a new community garden in Ward 2

  - The Community can help identify potential suitable locations and recruit volunteers to create and maintain the garden.

  - The City can coordinate with the community in securing a suitable location and provide subsidies and supplies for water and the garden.

What We are Already Doing

City of Laurel Farmer's Market

In March 2021, the City's Economic and Community Development Department secured a $50,000 grant from Maryland's FY21 Community Legacy Program for the "Farmer's Market Lot Improvement" project. This initiative included regrading the lot, adding ADA compliant picnic tables, a shed, and a permanent shade structure. The City continued the improvements by adding Bigbelly solar-powered refuse and recycling containers and electrifying the lot.

Every Thursday from 3 p.m. to 7 p.m. starting in early May through October the "lot" at 378 Main Street transforms into a vibrant hub. Local produce, food, arts vendors, and entertainment create a lively atmosphere.

The City actively promotes the market as a community space through multiple platforms including the City's website, the Green Living web page, Sustainable Laurel Facebook, Laurel Market On Main Facebook, and our local newspaper, the Laurel Independent.

PLANET

Practicing responsible environmental management and conservation.

Tree conservation and preservation

What the Community Can Do

- Plant native species in your home garden.
- Replace trees that are removed with native species to promote local biodiversity and ecosystem health.
- Volunteer with the Department of Parks and Recreation at a bi-annual tree planting event.
- Attend a Laurel Historic District Commission meeting.

What the City Government Can Do

- Identify opportunities to restore wildlife and bird habitat by assessing local ecosystems for degraded areas and collaborating with conservation experts to develop and implement restoration plans.
- Establish goals for active and passive parkland. Active parkland referring to area within parks that are designed for recreational activities such as sports fields and passive parkland referring to areas maintained for less structured, low impact activities such as hiking.
- Educate residents about free tree resources and native plants by organizing events, workshops, social media campaigns, working with the Laurel High school Green Team, partnering with businesses, and distributing community guides and newsletters.
- Enforce tree replacement in the historic district.

What We Can Do Together

- Protect existing forested areas, reforest abandoned lots, and remove invasive plants from the river to enhance urban green spaces, biodiversity, and waterway health.

- Organize community tree-planting, native planting, and maintenance events by working with the Laurel High School Green Team, providing volunteer opportunities, and partnering with businesses.

    - The Community can volunteer for tree plantings and invasive removal events.

    - The City can partner with local organizations to host tree plantings and invasive species removal events and promote opportunities for volunteering on social networks, through the media, and on the website.

What We are Already Doing

- In Spring 2024, the City hosted a pollinator garden planting event at Larry T. Smith Park.

- In 2023 the City hosted a Native Plant Gardening and Design Webinar with author and businessperson Benjamin Vogt to discuss creating a sustainable, natural habitat using native plants.

- The Department of Parks and Recreation hosted a Foam Stream demonstration, a 100% organic weed control.

PLANET

Practicing responsible environmental management and conservation.

Sustainable Land Use Planning

What the Community Can Do

- Attend City public hearings and meetings including the Community Redevelopment Authority Committee meetings and Planning Commission meetings.

What the City Government Can Do

- Explore ways to reduce clear-cutting for new development by collaborating with developers to identify and implement sustainable land-use practices that minimize clear-cutting for new development.

- Evaluate current zoning and development standards for sustainability, engage stakeholders, research best practices, and provide sustainability training for City staff.

- Review City grant funding history and future opportunities for sustainability initiatives within the City, by developing a grant tracking database or document that identifies funding available for specific projects.

PLANET

Practicing responsible environmental management and conservation.

Waste Reduction

What the Community Can Do

- Participate in the City-wide composting program prior to the mandate of July 2025.
- Utilize recycling bins and trash cans available in parks and public areas.
- Use the City Recycle Coach App to properly recycle.
- Become a composting ambassador and spread awareness about the benefits of composting to friends and neighbors.

What the City Government Can Do

- Promote the Recycle Coach App on social networks and through outreach initiatives to guide residents through recycling best practices in the City and provide quick-reference stickers for recycling bins and composting bins.
- Provide more trash cans and recycle bins in parks and public areas.
- Implement penalties for non-compliance with recycling and composting programs.
- Run appliance trade-in and repair sessions for the community.
- Implement free household electronic/hazardous waste disposal program.

What We Can Do Together

- Have a City-sponsored showing of the "Racing to Zero – In Pursuit of Zero Waste" video.

- Organize community clean sweep sessions of illegal dumping sites and street litter.

  - The Community can volunteer for litter cleanup events.

  - The City can coordinate with local volunteers and organizations to schedule regular clean-up events, provide necessary supplies, and promote participation through community outreach and awareness campaigns.

- Educate/update neighbors and residents about recycling, composting, and sustainability best practices.

What We are Already Doing

- The City has completed an ambitious stream restoration project on Dorset Road and will be working on a new restoration project this year! This exciting initiative aims to rejuvenate the local environment and provide a beautiful, natural space for the community to enjoy.

- The City hosts electronics recycling events throughout the year! Check out the City of Laurel Municipal Calendar to find out when!

What We are Already Doing

City of Laurel Organics Recycling Program

The City of Laurel recently launched an organics recycling program to reduce food waste and create valuable compost. This compost decreases the need for harmful chemical fertilizers, enriches soil, retains moisture, suppresses plant diseases and pests, and reduces methane emissions from landfills, thereby lowering our carbon footprint.

After one year, the program, supported by 200 residents, diverted 51,540 pounds of food scraps from landfills, saving the equivalent of 47,618 pounds of CO_2 annually. Stay up to date on the community progress on the Composting Dashboard!

COMPOSTING CARTS ARE COMING TO YOU!

SCAN TO LEARN MORE ABOUT OUR ROLL OUT!

SCAN ME

Compost

CITY OF LAUREL
ORGANICS RECYCLING (COMPOSTING)

greenliving@laurel.md.us
http://www.cityoflaurel.org/composting

PROSPERITY

Supporting local businesses and local economic growth.

Sustainable Investments

What the Community Can Do

- Convert light bulbs and/or fixtures to LED.
- Talk with your HOA about implementing sustainable practices (e.g., rain barrels, clotheslines, permeable surfaces, conservation landscaping, home composting, and front-yard vegetable gardens etc.) in your neighborhood.

What the City Government Can Do

- Apply for sustainability grants on behalf of the City of Laurel.
- Assist City of Laurel businesses in finding relevant grants by developing a comprehensive database of funding opportunities tailored for small businesses.
- Explore opportunities to install solar at existing parking lots by conducting feasibility studies, engaging stakeholders, forming partnerships, designing, and planning installations, and launching public awareness campaigns.
- Provide residential energy audits by partnering with local utility companies to offer free or subsidized audits and launching public awareness campaigns to educate residents about the benefits and availability of these services.
- Incentivize building insulation and energy-efficient/electric appliances in commercial and residential properties by offering rebates, tax credits, and grants to property owners who make these upgrades.

What We Can Do Together

- Promote energy conservation at local businesses and residences by providing educational resources and workshops and launching public awareness campaigns to highlight the benefits of reducing energy consumption.

What We are Already Doing

- In January 2021, the City proudly earned a prestigious gold designation for leading in solar adoption, making it faster, easier, and more affordable!

  - Key efforts included launching a transparent online permitting checklist, updating zoning codes to permit solar installations by-right in all zones, and cross-training inspection and permitting staff on solar PV systems. This achievement highlights the City's commitment to a sustainable future and innovative solutions.

  - Created the Thrive Small Business Grant Program to grow, expand, hire ,and develop companies in the City of Laurel.

PROSPERITY

Supporting local businesses and local economic growth.

Accessible Transportation

What the Community Can Do

- Utilize public transit when available.
- Buy a hybrid-electric or electric vehicle (EV).
- Utilize the City's walking trails and bike lanes for local travel.

What the City Government Can Do

- Improve public transportation in Laurel by collaborating with the Maryland Transit Administration and Regional Transit Authority to increase bus frequency to multi-family dwellings and downtown areas, supporting residents' access to work and other essential services.
- Provide publicly accessible electric vehicle charging stations by opening current stations to the public and applying for grants for new stations.
- Offer priority/free parking for Ultra Low Emissions vehicles (plug-in hybrids and EVs) at municipal parking lots and buildings.
- Restrict idling at public facilities.
- Improve traffic signal synchronization by implementing adaptive traffic signal control systems that adjust signal timing based on real-time traffic conditions to optimize flow and reduce congestion.

What We Can Do Together

What We are Already Doing

- Increase awareness of the benefits of electrification and using public infrastructure.

  - The City can launch targeted educational campaigns, host community ride and drive events, advertise state incentives for adopting electric vehicles, and promote the use of Laurel public charging stations through social media and local events.

  - The Community can form an advocacy group to promote EV benefits and leverage social media to share success stories of driving electric.

- Promote and participate in 'Spare the Air' days (voluntary curtailment of high emission activities) by choosing emission reducing travel methods.

- To increase accessibility, the City of Laurel Department of Parks and Recreation provides Senior Recreational Transportation Services. Visit the Seniors Services Division webpage for more information.

- The City teamed up with Blink, a leader in EV infrastructure, to bring more charging stations to our community. You can find them at 312 Main Street, the Joseph R. Robison Laurel Municipal Center, and the Robert J. DiPietro Community Center. Each site boasts four charging stations.

PROSPERITY

Supporting local businesses and local economic growth.

Affordable Housing and Housing Security

What the Community Can Do

- Review the cities [Affordable Housing Program](#).
- Volunteer at the new [Craig A. Moe Laurel Multiservice Center.](#)

What the City Government Can Do

- Provide more health inspections at rental properties by hiring additional inspectors, leveraging technology to streamline scheduling and reporting, and increasing funding for public health initiatives.

- Develop a city emergency preparedness and resiliency plan by conducting a risk assessment, inventorying resources, and establishing partnerships.

- Prepare for extreme heat events by identifying suitable locations to open 'cooling centers', ensuring they are equipped with air conditioning and necessary amenities, and promoting their availability through public awareness campaigns.

What We Can Do Together

- Provide more assistance to unhoused members of the population.

  - The City can increase funding/apply for grants for additional support services, and partner with community organizations to offer comprehensive care and resources.

  - The Community can organize local events to distribute essential supplies, volunteer at shelters, soup kitchens, and the Multiservice Center, and form support networks to offer ongoing aid and resources.

- Establish collaborative partnerships between the City and local service providers/organizations to address poverty, housing affordability, and income disparity through joint initiatives and resource sharing.

The City's Affordable Housing Program seeks to support young adults, moderate-income public sector employees, and retirees with fixed or reduced incomes who wish to live in the City. See the Unified Development Code for program details and requirements.

Currently, there are three apartment developments that are part of the Affordable Housing Program:
- Duvall Westside
- Avalon Laurel
- Evolution at Towne Centre.

What We are Already Doing

Craig A. Moe Multiservice Center

In 2020, the City of Laurel purchased 204 Fort Meade Road for $2.4 million to develop a Multiservice Center aimed at providing a range of human services and short-term housing for residents in transition. Managed by the Department of Human Services along with the Department of Parks and Recreation, the Center collaborates with various local agencies to streamline operations and deliver services recommended by the City of Laurel Homelessness and Community Task Force.

The Center underwent phased renovations, starting with converting the gymnasium and multipurpose rooms, replacing the roof, and installing a new HVAC and sprinkler system. The second phase focused on the resource center and short-term housing. The goal is to offer equitable services, support for the homeless, emergency sheltering, medical and mental health care, and assistance in transitioning to long-term housing.

Strategically located to serve Prince George's, Anne Arundel, and Howard counties, the Center is easily accessible by public transportation, making it a vital resource for the community.

PEACE & PARTNERSHIP

Implementing joint environmental projects, social infrastructure, education among various groups, the City and interested citizens.

Improve communication between the City and Community

What the Community Can Do

- Utilize the City's website, social media, Recycle Coach app, local newspaper – The Laurel Independent, Municipal Calendar, and Laurel TV to stay up to date on City events and initiatives.

- Talk to your neighbors and friends about City events and opportunities to gather, volunteer, and recreate.

- The City of Laurel Planning Commission holds public hearings on all matters relating to development and zoning. The community is encouraged to attend.

What the City Government Can Do

- Improve communication pathways with residents by:

  - Creating a more accessible website- removing duplicate pages, updating navigation and indexes, and monitoring the website performance.

  - Providing a printed Municipal Calendar annually to residents so they can plan and participate in annual events.

- Utilizing all of Laurels diverse communication methods (social media, print, Laurel TV, website).

- Providing multi-lingual communication.

- Disclose essential details, including tax implications and environmental impact of new projects prior to voting.

What We Can Do Together

What We are Already Doing

- Identify community partners and establish a list of groups and organizations to work together with the City government to help overcome communication barriers.

- Promote and utilize the annual use of free bulletin boards within the City.

- Utilize parks and City pavilion space for more events, such as music/art showcases and River Fest.

  - To utilize a City park pavilion space, please visit the Department of Parks and Recreation Facility & Pavilion Rentals website.

- Stay connected and informed with the MyLaurel app! In 2018, over 2,100 residents used the app to access information and send in service requests. Don't miss out—follow the City on social media, visit the City of Laurel website, watch Laurel TV, sign up for our newsletters, and keep your City calendar handy.

PEACE & PARTNERSHIP

Implementing joint environmental projects, social infrastructure, education among various groups, the City and interested citizens.

Collaboration Among Community Groups

What the Community Can Do

- Stay informed and actively seek partnerships with each other for collaborative efforts.

What the City Government Can Do

- Create a role of City Sustainability Ombudsman (or just City Ombudsman) to provide central coordination/referral of services.
- Consolidate City Action Committees (CAC) that have complementary goals into one committee: Sustainability Citizen Action Committee.

What We Can Do Together

What We are Already Doing

- Include more Places of Faith in the [Sacred Grounds Project](#) which is organized by the National Wildlife Federation.

  - The Community can gather a team dedicated to planting a native garden at their place of worship and designate it as Sacred Ground.

  - The City can provide guidance to the faith-based team on selecting native plants for the garden.

- The City recently developed the new position of Sustainability Manager. Reach out via email at GreenLiving@laurel.md.us.

PEACE & PARTNERSHIP

Implementing joint environmental projects, social infrastructure, education among various groups, the City and interested citizens.

Increase Community Participation

What the Community Can Do

What the City Government Can Do

- Encourage participation of your community and congregation at City events.
- Be an active member of your community and participate in City-sponsored events.

- Provide more information about events, volunteer opportunities, and recreational activities on multiple outreach platforms.

What We are Already Doing

What We Can Do Together

- Encourage neighborhoods & HOAs to have block parties to connect with neighbors.

  - The City can help by closing the road for block parties and reviewing any [Special Event / Parade and Public Assembly Permit Request Applications.](#)

Completed in 2019, the pool mosaic was a collaborative effort involving Pallotti High School, the Laurel Arts Council (LAC), and the Department of Parks and Recreation. The Department of Parks and Recreation secured a $2,000 grant from the Prince George's County Special Appropriations Grant to fund the project. A talented student from Pallotti High School won a national award for her design, which was brought to life by five students from the Pallotti Advanced Art class under the guidance of LAC member Cheryl Dyer.

Next Steps

The City, in partnership with the community, will work to ensure the sustainability Framework remains a dynamic, working document that can be updated as new information and feedback are received. This will include regular review and revision of the plan to reflect ongoing progress and emerging sustainability opportunities. To create a more consistent and easy to update process, the following next steps are recommended:

Assign Pillars to City Action Committees (CACs)

- Designate different pillars of the Sustainability Framework to specific CACs.

- Communicate these assignments to the community so the public knows which committee to approach for updates and discussions on each pillar.

- Utilize the Sustainability Framework to guide CACs in establishing clear, actionable ways they can address each strategy of their assigned pillar.

- Ensure each committee understands their role and the specific objectives they need to achieve.
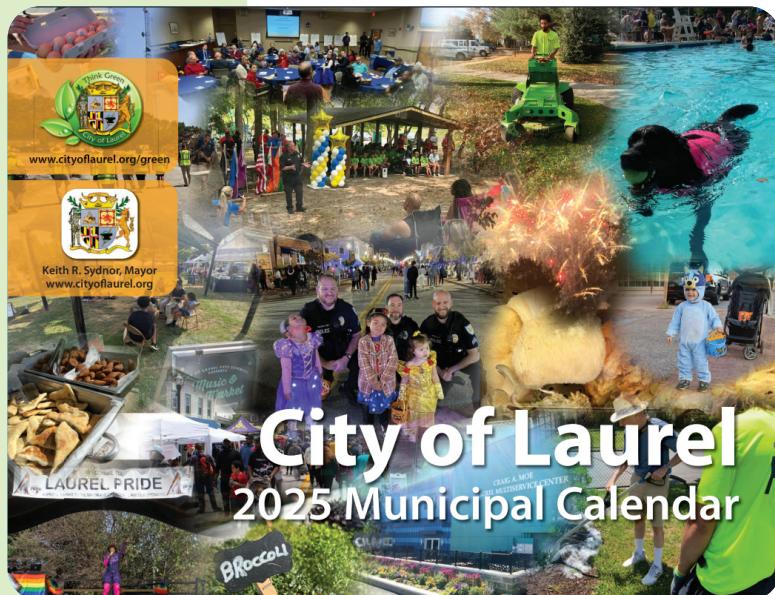
Develop a Progress Dashboard

- Create an interactive dashboard to track and display progress on various sustainability efforts, such as tree plantings and composting.

- Make the dashboard accessible to the public to maintain transparency and encourage community engagement.

Review Progress with Focus Groups

- In 18 months, review strategies with the FGs to understand the progress made and identify areas needing adjustments. This evaluation will help refine sustainability approaches and address areas for improvement.

As we move forward, the community of Laurel remains steadfast in its commitment to sustainability, guided by the principles and strategies outlined in this Framework. By embracing social equity, environmental stewardship, economic growth, and collaborative partnerships, we aim to create a thriving community for all. This Framework is not just a document but a living, evolving roadmap that will adapt to the needs and aspirations of our community. Together, through active participation and shared responsibility, we can achieve a sustainable future that benefits current and future generations. Let us continue to lead by example, inspire others, and work collectively towards a resilient and vibrant Laurel.

CADMUS

Memorandum

To:	Michele Blair, Environment Programs Manager; City of Laurel
From:	Liz Hanson, Megan Lynch, Henry Locke; Cadmus
Subject:	Task 3: Sustainable Organization and Community Framework Memo
Date:	September 15th, 2021

Introduction and Approach

The City of Laurel is committed to moving its operations, as well as the broader community, towards a more sustainable future. As part of this effort, in 2020, the City established the Environmental Programs Office within the Office of the City Administrator to streamline and enhance the environmental initiatives of the Administration.

To support the Environmental Programs Manager in solidifying and advancing the City's sustainability efforts, the City of Laurel and the Metropolitan Washington Council of Governments (MWCOG) hired Cadmus to identify a set of sustainability strategies that will set the Program up for future success. Cadmus' approach to identifying these strategies is summarized below:

Figure 1: Summary of Cadmus Process

Task 1: Sustainability Gap Analysis & Strategy Identification	**Task 2: Sustainability Strategy Implementation Analysis**	**Task 3: Sustainable Organization Plan & Community Framework Memo**

Task 4: Meetings & Presentations

1. **Sustainability Gap Analysis & Strategy Identification:** At this outset of this Task, Cadmus held check-in calls with the Environmental Programs Manager to better understand Laurel's overall sustainability vision and progress to-date. Following these check-ins, Cadmus conducted a review of relevant documentation provided by the Environmental Programs Manager to better understand Laurel's sustainability landscape. Following this review, Cadmus identified gaps in Laurel's existing sustainability efforts and identified a set of five targeted strategies that build upon Laurel's existing efforts and guide the City as it develops a full sustainability plan. Cadmus outlined these five strategies in a memo (i.e., Task 1 Memo) that was shared with the Environmental Programs Manager in May 2021.

2. **Sustainability Strategy Implementation Analysis:** Upon receiving feedback from the Environmental Programs Manger on the five sustainability strategies, Cadmus utilized desk research, past project experience with similar cities, and input from Laurel senior staff to provide additional information on and recommended next steps for each of the five strategies. Cadmus summarized this information in a memo (i.e., Task 2 Memo) that was shared with the Environmental Programs Manager in July 2021.

3100 Clarendon Boulevard, Suite 400, Arlington, VA 22201 Tel 703.247.6000   Fax 703.247.6001
HEADQUARTERS 100 5th Avenue, Suite 100, Waltham, MA 02451 Tel 617.673.7000   Fax 617.673.7001

cadmusgroup.com

1

CADMUS

3. **Sustainable Organization & Community Framework Plan:** Following the completion of Tasks 1 and 2, as well as the stakeholder engagement conducted in Task 4, Cadmus built upon the information included within the Task 2 Memo to develop this third and final memo (i.e., Task 3 memo) that summarizes the full project process and deliverables to-date. Beyond the strategy implementation information developed for the Task 2 memo, this Task 3 memo also includes a summary of Cadmus' approach, an overview of Laurel's sustainability context, a summary of stakeholder engagement efforts and related feedback identified as part of this process, and key next steps. With the inclusion of these components, it provides a comprehensive overview of the process to date.

4. **Meetings & Presentations:** Several key meetings and presentations occurred throughout the course of this work. At the outset of the project, Cadmus held a kickoff call with the Environmental Programs Manager and MWCOG to ensure alignment on project goals and processes. Throughout the course of the project, Cadmus led or supported presentations to Laurel senior staff, local environmental groups, and City Council to provide an overview of the project and solicit initial feedback. Key feedback from these groups can be found in the Summary of Stakeholder Feedback section.

3100 Clarendon Boulevard, Suite 400, Arlington, VA 22201 Tel 703.247.6000   Fax 703.247.6001
HEADQUARTERS 100 5th Avenue, Suite 100, Waltham, MA 02451 Tel 617.673.7000   Fax 617.673.7001

cadmusgroup.com

2

CADMUS

Laurel's Sustainability Landscape

At the outset of the Task 1: Sustainability Strategy Identification and Gap Analysis, Cadmus conducted a review of relevant documentation provided by the Environmental Programs Manager and identified through desk research to better understand Laurel's current sustainability landscape to inform strategy identification.

Relevant documentation included an overview of the Environmental Program, a summary of existing department initiatives, select city plans, as well as Laurel's communitywide and government operations greenhouse gas (GHG) inventories. This information was supplemented by additional context provided verbally by the Environmental Programs Manager during check-in calls. Key findings from this review are detailed below:

Laurel's Current Greenhouse Gas Emissions

To better understand Laurel's past progress on emissions reductions and current emissions sources, Cadmus conducted a review of Laurel's communitywide and city operation GHG inventories, developed by MWCOG. Key takeaways from this review are summarized below:

Laurel Community Greenhouse Gas (GHG) Inventory Takeaways

Overall, Laurel's communitywide GHG emissions have decreased 14%, or 49,467 MtCO2e since 2005, from 351,543 MtCO2e to 302,076 MtCO2e in 2018 (the latest inventory year available). This decrease in emissions can primarily be attributed to a shift from electricity and fuel oil to natural gas consumption, as well as a reduction in passenger air travel, off-road vehicle usage, and landfill waste generation. As of 2018, the largest source of GHG emissions was transportation and mobile sources (44%), followed by commercial energy (32%), residential energy (18%), process and fugitive emissions (5%), and waste/wastewater (<1%).

Figure 2: Laurel Communitywide GHG Inventory Results and Trends.

3100 Clarendon Boulevard, Suite 400, Arlington, VA 22201 Tel 703.247.6000   Fax 703.247.6001
HEADQUARTERS 100 5th Avenue, Suite 100, Waltham, MA 02451 Tel 617.673.7000   Fax 617.673.7001

cadmusgroup.com

3

CADMUS
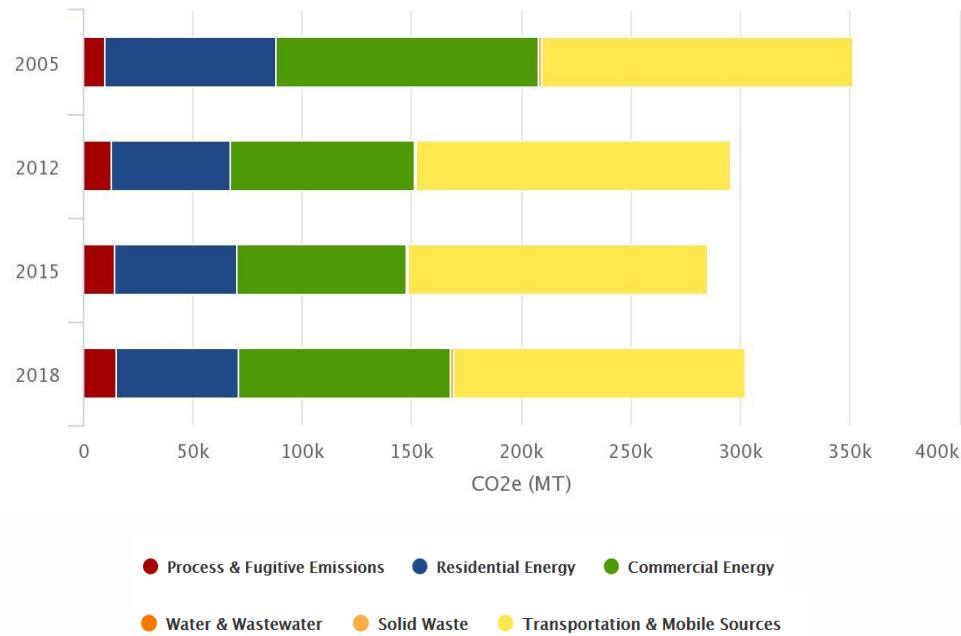
Laurel Government Operations GHG Inventory Takeaways

Overall, GHG emissions derived from government operations make up approximately 1% of total Laurel communitywide GHG emissions and 0.004% of total Metropolitan Washington GHG emissions. The majority of GHG emissions come from the vehicle fleet (49%), with most of the fleet emissions coming from gasoline consumption of the police department. The second largest source of emissions is buildings and facilities (31%), with most of these emissions coming from building electricity use. The remaining sources of emissions include streetlights (17%), solid waste facilities (3%), followed by waste and wastewater treatment (<1%).

Figure 3: Laurel Government Operations GHG Inventory Results

Legend:
- Vehicle Fleet
- Buildings & Facilities
- Streetlights & Traffic Signals
- Solid Waste Facilities
- Water & Wastewater Treatment
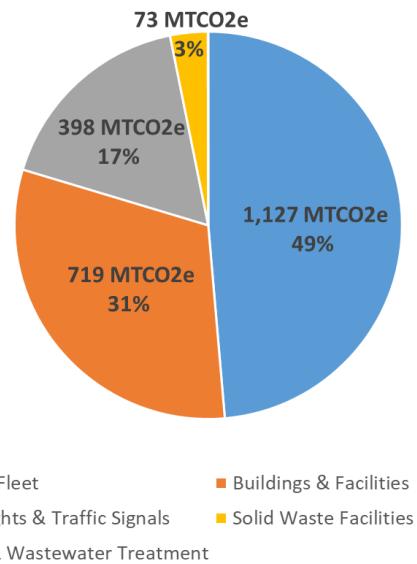
Laurel's Sustainability Progress To-Date

In addition to reviewing Laurel's progress related to GHG emissions, Cadmus conducted a review of existing programs and initiatives to better understand Laurel's overall sustainability progress to date. The achievements included in the table below highlight the ways in which Laurel has already started making progress towards its goal of increasing the sustainability if its operations and community. Some key accomplishments are highlighted in the table below:

Table 1: Select Laurel Sustainability Achievements To-Date

Select Laurel Sustainability Achievements To-Date	
• Established the Environmental Program to streamline environmental initiatives	• Committed to the Paris Climate Agreement
• Designated a Sustainable Community by the State of Maryland	• Conducted research on developing EV charging stations.
• Surveyed residents on their sustainability priorities	• Established a weekly curbside organics and recycling collection.
• Achieved SolSmart Designation to foster local solar development	• Ongoing efforts to increase access to green space.
• Converted all City facilities to LEDs.	• Ongoing efforts to create natural walkable paths along the Bear Branch tributary

3100 Clarendon Boulevard, Suite 400, Arlington, VA 22201 Tel 703.247.6000 Fax 703.247.6001
HEADQUARTERS 100 5th Avenue, Suite 100, Waltham, MA 02451 Tel 617.673.7000 Fax 617.673.7001

cadmusgroup.com

4

CADMUS

Proposed Sustainability Strategies

The newly formed Environmental Programs Office is in the early stages of defining and implementing Laurel's sustainability goals. As such, Cadmus focused on identifying strategies that would support the Environmental Programs Manager in establishing the Program's structure, processes, and goals, ensuring it has a solid foundation that will set it up for future success.

The five proposed sustainability strategies, summarized in the graphic below and detailed further in the following section, are to (1) Develop a sustainability framework in Laurel, (2) Establish processes for engaging city departments & community members, (3) Establish program baselines, (4) Develop programs to achieve goals, and (5) Track and disclose sustainability metrics.

For each of the five proposed strategies, the following section provides: (1) a strategy overview, (2) targeted information to support Laurel in taking near-term action on each proposed strategy, and (3) suggested next steps for Laurel to consider as it wraps up Phase 1 (April-August 2021) and moves forward into Phase 2 (September 2021-June 2022) of its work.

Figure 4: Proposed Sustainability Strategies

1. Develop a Sustainbility Framework in Laurel

2. Establish Processes for Engaging City Departments & Community Members

3. Establish Program Baselines

4. Develop Programs to Achieve Goals

5. Track and Disclose Sustainability Metrics

3100 Clarendon Boulevard, Suite 400, Arlington, VA 22201 Tel 703.247.6000   Fax 703.247.6001
HEADQUARTERS 100 5th Avenue, Suite 100, Waltham, MA 02451 Tel 617.673.7000   Fax 617.673.7001

cadmusgroup.com

5

CADMUS

1. Develop a Sustainability Framework in Laurel

Strategy Overview

The City of Laurel has a significant number of activities occurring across departments. To develop an actionable sustainability program, it will be important to develop a shared vision of sustainability in Laurel that the Environmental Programs Manager can use to engage departments and the community in a collaborative and comprehensive manner. As such, the City of Laurel should consider adopting a clear definition of sustainability and establishing an associated sustainability framework (i.e. key topic areas of focus) to guide the development of forthcoming plans and initiatives.

Strategy 1 Additional Information

To support the City of Laurel in adopting a definition of sustainability and establishing an associated framework, Cadmus provided sample definition language in Memo 1. The Mayor and Program Manager utilized this input to draft a definition for Laurel that was workshopped with staff last month. To support next steps, Cadmus has summarized this input and proposed an updated definition and associated topic areas for Laurel to consider.

Sustainability Definition

Initial Definition and Staff Feedback

As a first step in establishing a definition of sustainability, the Environmental Programs Manager and the Mayor developed an initial draft definition, outlined below.

> *"Create, maintain and enhance programs that support the ability of the City to meet the needs of the current residents without compromising the ability of future generations to meet their own needs. The plan will focus on three components: the natural environment or natural resources of our community, the social connectedness among people in the community, including the education, skills and health of the population, and lastly the economic and financial prosperity of the community."*
>
> - *Planet - practicing responsible environmental management and conservation.*
> - *People - embracing social equity, fairness, health, and wellness.*
> - *Prosperity - supporting local economies and community resources.*

This definition was presented to Laurel senior staff at a listening session facilitated by Cadmus. Staff provided feedback on the definition, as well as other components of the project. The full list of staff who participated in this listening session can be found in Appendix A. Key feedback related to the sustainability definition is summarized in the bullets below:

- Several staff emphasized the need for a simpler definition that is more tailored to the Laurel context. They noted that the current definition may be too vague, making it difficult to understand the impact of sustainability in Laurel. They added that simplifying the definition will be critical to getting community buy-in, as community members will want to clearly understand both the definition and how it applies to them.

- Several staff also raised that sustainability means something different to everyone and can encompass broad topics, including physical, social, and mental wellbeing. Given this, staff suggested folding topics related to taking care of oneself and the community into the definition of sustainability.

3100 Clarendon Boulevard, Suite 400, Arlington, VA 22201 Tel 703.247.6000   Fax 703.247.6001
HEADQUARTERS 100 5th Avenue, Suite 100, Waltham, MA 02451 Tel 617.673.7000   Fax 617.673.7001

cadmusgroup.com

6

- One staff member noted that, to him and the community members he has spoken with, sustainability means "modifying our behavior to reduce the negative impact on the environment and community" or meeting needs without doing harm.

- One staff member added that sustainability should also encompass economic stability and growth, and that local businesses should be considered within this definition.

- Two staff members pointed out that improving sustainability within City operations will also require an upgrade to infrastructure and essential electronic equipment. This work will improve energy efficiency and IT's ability to support other departments.

- Lastly, most staff emphasized the general sentiment that they want to focus on actions within their jurisdiction that they can work on in the near-term.

Sample Definition Language

Based on the original definition developed by the Mayor and Environmental Programs Manager, feedback received by Laurel senior staff, and definitions developed by similar communities,[1] Cadmus has provided the following sample language. This language can be considered as Laurel works to finalize its definition of sustainability internally. It should be noted that this language is not intended to serve as the final definition and should be further tailored with the input of key Laurel staff.

> *The City of Laurel defines sustainability as meeting the environmental, social, and economic needs of the present generation without compromising the ability of future generations to meet their needs.*
>
> *As such, the City of Laurel is committed to moving its operations and community towards a more sustainable future that considers the following:*
>
> - *Planet - practicing responsible environmental management and conservation.*
> - *People - embracing social equity, fairness, health, and wellness.*
> - *Prosperity - supporting local businesses and local economic growth*

Potential Topic Areas of Focus

In addition to developing and adopting a clear definition of sustainability, Cadmus suggests the City of Laurel establish a framework, or set of topics, to guide the development of forthcoming plans and initiatives. This will be particularly important to ensuring the definition ties with tangible next steps that City staff and community members understand and can participate in, as suggested by staff members. Potential topics Laurel could include within that framework are outlined below.

It should be noted that this is an initial set of topic areas for Laurel to consider based on conversations with the Environmental Programs Manager and that these topics are largely focused on the environmental aspects of sustainability. Laurel may wish to ~~may~~ make adjustments that incorporate other elements from the final sustainability definition before determining the final set of strategies and associated implementation steps.

---

[1] Sample definition language was informed by definitions established by Thompkins County, NY, and Rockville, MD.

3100 Clarendon Boulevard, Suite 400, Arlington, VA 22201 Tel 703.247.6000   Fax 703.247.6001
HEADQUARTERS 100 5th Avenue, Suite 100, Waltham, MA 02451 Tel 617.673.7000   Fax 617.673.7001

cadmusgroup.com

7

CADMUS

Lastly, for more specific strategies that would fit within each of these topic areas, please see Strategy 4: Develop Programs to Achieve Goals.

Potential Topic Area of Focus	Description	Potential Co-Benefits	Examples of Laurel Progress-To-Date
Clean Electricity Generation	This topic area includes programs and strategies that increase utilization of clean and renewable energy sources (e.g., wind and solar) to power city operations and the broader community.	• Reduced air pollution • Workforce Development Opportunities	• Achieved SolSmart Designation to foster local solar development.
Buildings & Facilities	This topic area includes programs and strategies that improve energy efficiency and/or reduce reliance on fossil fuels to generate heat and hot water in buildings and facilities.	• Increased occupancy comfort • Lower utility bills	• Consolidated servers to improve energy efficiency • Converted all City facilities to LEDs.
Transportation	This topic area includes programs and strategies that support a transition towards hybrid and electric vehicles across city operations and the broader community.	• Reduced air pollution • Decreased vehicle maintenance costs	• Conducted research on developing EV charging stations.
Waste	This topic area includes programs and strategies that reduce waste and waste-related emissions.	• Reduced air and noise pollution	• Established a weekly curbside organics and recycling collection. • Electronics recycling
Land Use	This topic area includes programs and strategies that protect and enhance existing open spaces and encourage development patterns that promote alternative modes of transportation and help reduce greenhouse gas emissions.	• Walkable communities • Increased ecological diversity • Increased access to nature	• Ongoing efforts to increase access to green space. • Ongoing efforts to create natural walkable paths along the Bear Branch tributary

Suggested Next Steps

As a next step, Cadmus suggests that the Environmental Programs Manager share the sample definition language and proposed topic areas of focus outlined above with key city staff members (e.g., the Mayor, department heads) to solicit feedback and make adjustments before finalizing. As noted above, given that these categories are more focused on the environmental aspects of sustainability, Laurel may wish to add categories related to the other components of sustainability definition drafted above, such as health and wellness or local economies.

3100 Clarendon Boulevard, Suite 400, Arlington, VA 22201 Tel 703.247.6000   Fax 703.247.6001
HEADQUARTERS 100 5th Avenue, Suite 100, Waltham, MA 02451 Tel 617.673.7000   Fax 617.673.7001

cadmusgroup.com

8

2. Establish Processes for Engaging City Departments and Community Members

Strategy Overview

Sustainability programs rely on engagement with departments across City government to advance key initiatives. It can be helpful to establish strong working relationships with department staff that are experts in their content areas at the outset of a sustainability program. This enables staff to work together to achieve core missions in an increasingly sustainable manner. As such, we recommend the Laurel Environment Program Manager identify key points of contact in the departments that are likely to be responsible for implementing sustainability initiatives and establish clear and transparent processes for regularly engaging with these individuals.

Strategy 2 Additional Information

To support Laurel in implementing this strategy, Cadmus has provided a summary of key departments that are likely to be responsible for implementing sustainability initiatives and sample best practices for engaging with these departments below.

Key Departments/Points of Contact

Based on conversations with the Environmental Programs Manager and feedback from Laurel staff, the following departments are expected to play a key role in sustainability initiatives:

Key Departments/Points of Contact	Potential Role in the Sustainability Program
Mayor's Office	Set program priorities. Work with City Council to pass ordinances that improve the City's ability to address sustainability.
Department of Public Works	Manage waste and recycling collection, maintain and repair streets and sidewalks, and oversee the maintenance of the City's automotive fleet.
Department of Parks and Recreation	Implement land management initiatives that increase tree canopy, reduce the impact of pesticide use, and improve public access to green space.
Department of Economic and Community Development	Oversee the economic development and zoning compliance of sustainability initiatives.
Environmental Affairs Committee	Coordinate the implementation of sustainability initiatives and advise the Mayor and City Council on environmental issues.
Communications	Leverage the Green Landing page and Laurel's social media presence to highlight initiatives that are already underway and those (like the revitalization of the Quill Lot for the Farmers Market) that residents will start seeing before the end of the year.
IT	Provide the structure for the Green Living landing page.
Council Office	Provide support in getting the word out to our residents.
City Council	Enact legislation that will support Laurel's ability to improve sustainability and reduce emissions.

Ongoing Engagement with City Departments

After identifying the departments and staff members who are likely to be involved in implementing sustainability initiatives, the Laurel Environmental Programs Manager could consider the following approaches for engaging with these individuals:

3100 Clarendon Boulevard, Suite 400, Arlington, VA 22201 Tel 703.247.6000   Fax 703.247.6001
HEADQUARTERS 100 5th Avenue, Suite 100, Waltham, MA 02451 Tel 617.673.7000   Fax 617.673.7001

cadmusgroup.com

9

- Establishing one-on-one standing check-ins (e.g., monthly) with department heads and relevant staff from each the key departments outlined above to provide them with updates, as well as discuss progress on current initiatives and/or consider the future initiatives of each specific department.

- Establishing a regular (e.g., quarterly) sustainability senior staff meeting with department heads or relevant staff members from all the departments outlined above to provide them with updates on the overall progress and direction of the Sustainability Program, and ensure staff have the opportunity to learn from and engage on initiatives occurring in other departments.

- Providing regular updates on the initiatives and progress of the Sustainability Program to all City staff and City Council, including those not directly involved in sustainability initiatives. These updates could potentially be provided through an internal newsletter or staff could be directed to the Green Living Page on the City's website.

Any engagement approach should be tailored to the needs of Laurel staff members. Expectations of their ongoing involvement in the Environment Program should be developed at the outset and, ideally, integrated into their job descriptions and responsibilities.

Suggested Next Steps
After establishing a process for ongoing engagement with city departments and internal points of contact, we recommend the City develop a process for engaging with community members. This can help ensure they are knowledgeable about the City's approach to sustainability, as well as build support for ongoing efforts. Methods of engagement could include:

- Hosting webinars or community meetings to share the sustainability definition and framework, engage residents of Laurel during the development of policies and programs to promote sustainability and quality of life, and engage local businesses and nonprofits to determine shared priorities and collaborate on implementing sustainable actions.

- Conducting 1-2 online surveys to gauge the community's interests in specific programs/strategies/goals. Consider engaging with an expert to inform the design and distribution of the survey.

- Maintaining and consistently updating the "Green Living" page on the City's website and implementing a communications strategy that celebrates community successes and acknowledges collaborators.

3100 Clarendon Boulevard, Suite 400, Arlington, VA 22201 Tel 703.247.6000   Fax 703.247.6001
HEADQUARTERS 100 5th Avenue, Suite 100, Waltham, MA 02451 Tel 617.673.7000   Fax 617.673.7001

cadmusgroup.com

10

CADMUS

3. Establish Program Baselines

Strategy Overview

Successful sustainability programs start with a shared understanding what the community wants to achieve through their sustainability program as well as the city's status, or baseline, towards achieving those goals. Greenhouse gas inventories are a common tool used to establish a baseline related to community- or city-wide greenhouse gas emissions and Cadmus strongly recommends that the City of Laurel use the City and Community inventories developed by the Metropolitan Washington Council of Governments as a key component of designing next steps. That said, it is also important to develop other metrics that will enable Laurel to measure progress in other key topic areas. As such, Cadmus suggests that the City of Laurel identify and establish baselines for key metrics for each of the topics in Laurel's sustainability framework.

Strategy 3 Additional Information

To support Laurel in identifying a set of metrics that will enable them to track progress against their goals, Cadmus has provided sample metrics for each proposed topic area of focus identified in Strategy 1. It should be noted that this is an initial set of metrics that should be adjusted, as needed, to be sure they reflect the final definition, framework, and goals Laurel adopts.

Topic Area of Focus	Potential Metric(s)
All	• Greenhouse gas emissions by sector
Clean Electricity Generation	• Megawatts of renewable energy installed or procured • Total Scope 2 emissions at City owned and operated buildings
Buildings & Facilities	• Total electricity consumption, fuel/gas usage, and energy intensity (kWh/sq ft) at City owned and operated buildings
Transportation	• Number of electric/hybrid vehicles within City fleet • Fuel utilization associated with City fleet • Total vehicle miles travelled among City employees • Number of bicycles in bike sharing program
Waste	• Total organic waste composted and diverted from landfill (lbs.) • Total plastic and other recyclable waste diverted from landfill (lbs.) • Total reduction in methane emissions attributed to waste composted and diverted from landfill
Land Use	• Total area of public green space (sq ft) • Total number of street trees

Suggested Next Steps

As the definition and framework are finalized, Cadmus suggests the Environmental Programs Manager further refine this list to ensure the metrics are aligned with those components. Once a more refined list has been developed, we recommend sharing it with key city staff members (i.e., the departments and staff identified in Strategy 2) and integrating their feedback.

3100 Clarendon Boulevard, Suite 400, Arlington, VA 22201 Tel 703.247.6000   Fax 703.247.6001
HEADQUARTERS 100 5th Avenue, Suite 100, Waltham, MA 02451 Tel 617.673.7000   Fax 617.673.7001

cadmusgroup.com

11

CADMUS

4. Develop Programs to Achieve Goals

Strategy Overview

There is plenty of progress that can be made on sustainability while the foundations of the Sustainability Program are still being established. Cadmus suggests that Laurel consider first-step actions they can take as they are finalizing Strategies 1-3 that will help set the Program up for future success.

Strategy 4 Additional Information

To support Laurel in identifying actions that will enable them to make progress on sustainability in this foundational phase, Cadmus has provided 2-3 potential first-step actions for each of the topic areas of focus identified in Strategy 1. Based on conversations with the Environmental Programs Manager about the City's priorities, Cadmus has highlighted actions that are within the City's control and are visible to the community.

It should be noted that this is an initial set of programs and strategies and that Laurel may wish to consider others as the definition, framework, and metrics are finalized to ensure all of these components are aligned.

Topic Area of Focus	Potential Near-term Action
Clean Electricity Generation	• Conduct a solar feasibility assessment for City buildings and facilities • Facilitate community and staff meetings to gauge interest of participation in potential community solar programs
Buildings & Facilities	• Conduct an energy assessment of City buildings and facilities • Conduct research on existing incentives (e.g., from local utility) that can be utilized to improve energy efficiency in City buildings and facilities • Plan City employee educational campaigns to promote energy efficient behavior
Transportation	• Take stock of current vehicle fleet • Implement a survey to better understand City employee's transportation behavior and trends • Implement electric vehicle-ready infrastructure upgrades or install electric vehicle supply equipment (EVSE, charging stations) in City buildings and facilities
Waste	• Develop a more efficient route system to support One and Done program • Introduce composting bins to refuse areas in City buildings and facilities
Land Use	• Promote planting of local/native plants and trees

Suggested Next Steps

As a next step, Cadmus suggests that the Environmental Programs Manager share the near-term actions outlined above with key city staff members from relevant departments to solicit feedback and adjust accordingly. Once Strategies 1-3 have been finalized and Laurel has tailored this list to ensure it is aligned with those strategies, the Environmental Programs Manager can continue to work with city staff to begin planning for implementation.

3100 Clarendon Boulevard, Suite 400, Arlington, VA 22201 Tel 703.247.6000   Fax 703.247.6001
HEADQUARTERS 100 5th Avenue, Suite 100, Waltham, MA 02451 Tel 617.673.7000   Fax 617.673.7001

cadmusgroup.com

12

CADMUS

5. Track and Disclose Sustainability Metrics

Strategy Overview

To ensure that Laurel is making progress on its goals, it will be important to track and disclose progress towards the metrics established in Strategy 3: Establish Program Baselines. It can be helpful to begin by focusing on metrics that the City is already positioned to track while developing processes for metrics the City wants to track but needs data sources to begin. As such, Cadmus suggests the Environmental Programs Manager collaborate with key staff to identify which of the Strategy 3 metrics the City is already capable of tracking against and designing a way to disclose progress against each of these metrics to the broader Laurel organization and community.

Strategy 5 Additional Information

To support Laurel in establishing a process to track and disclose progress against its sustainability metrics, Cadmus has provided a examples of sustainability dashboards and other tracking processes that cities across the U.S. have developed to ensure transparency and share progress with the broader community. These examples are summarized in the table below.

Example Dashboard	High-Level Description
Vaughan, CA	This fairly basic webpage provides a list of Vaughan's 24 sustainability indicators, which are organized into 15 categories. Each indicator is linked to a high-level chart that summarizes the City's year-over-year progress related to each indicator.
Montgomery County, MD	This webpage outlines each of Montgomery County's key goals per sustainability category and provides a visual summary of the County's current progress towards each goal.
Cambridge, MA	The Cambridge Sustainability 2.0 dashboard is a detailed and interactive summary of the City of Cambridge's progress towards its goals in different categories.

Suggested Next Steps

Cadmus recommends the Environmental Programs Manager work with key staff to identify outstanding data needs for tracking metrics, as well as with the IT department to establish the infrastructure for disclosing progress, leveraging the above examples to support the discussion.

3100 Clarendon Boulevard, Suite 400, Arlington, VA 22201 Tel 703.247.6000   Fax 703.247.6001
HEADQUARTERS 100 5th Avenue, Suite 100, Waltham, MA 02451 Tel 617.673.7000   Fax 617.673.7001

cadmusgroup.com

13

CADMUS

Summary of Stakeholder Feedback

Throughout the course of the project, Cadmus supported the Environmental Programs Manager in engaging with key stakeholders. Early in the process, Cadmus facilitated a discussion with Laurel senior staff around defining sustainability for their community. An overview of this engagement and the feedback related to the draft definition has already been summarized in the Strategy 1 section above. Following development of Task 2 Memo Cadmus supported two additional meeting to provide an overview of the five identified strategies and solicit feedback to inform the Program's next steps. A list of participants for each engagement can be found in Appendix A and feedback is summarized below.

Meeting with Local Environmental Groups

On July 29th, 2021, Cadmus supported the Environmental Programs Manager and MWCOG in hosting a meeting with Laurel's local environmental groups. The purpose of this meeting was to provide these groups with a summary of Laurel's sustainability context and an overview of Cadmus' process, as well as to solicit feedback to inform the direction of the Program. Key points have been summarized below:

- Participants emphasized the importance of community engagement in determining the priorities of the Program. They noted that it is important to conduct education and outreach to ensure the community is knowledgeable on the topic and can provide informed opinions during this process.
- Participants raised concerns about the previous survey efforts, including concerns with the ZenCity platform and concerns that the responses were not fully representative of Laurel's demographics. Participants suggested that future survey efforts should be designed by an expert to ensure responses are representative of Laurel's population.
- One participant highlighted the need to align the City Code with the priorities of the Program, noting that the Program is interested in increasing native plantings, but people in the ~~County~~ City have received citations for native gardens since these plants can look like weeds to some.

Meeting with City Council

On August 16th, Cadmus supported the Environmental Programs Manager and MWCOG in hosting a meeting with Laurel City Council. This meeting was also open to City staff and the general public. The purpose of this meeting was to provide a summary of Laurel's sustainability context and an overview of Cadmus' initial findings, solicit feedback, and ensure City Council is supportive of the next steps of the Environmental Program. Key points have been summarized below:

- One participant asked for clarification on the meaning of "resiliency" and "resiliency planning".
- One participant expressed interest in the potential of installing solar canopies in municipal parking lots.

A recording of the meeting was made available on various City channels, meaning additional feedback may be shared directly with the Environmental Programs Manager as members of the City Council, staff, and residents review its content.

CADMUS

Conclusion & Next Steps

The City of Laurel has demonstrated an ongoing commitment to move its operations and the broader community to a more sustainable future. While the City has achieved a variety of sustainability-related accomplishments to-date, the Environmental Program is still in the early stages of defining and implementing a comprehensive approach to sustainability.

As such, Cadmus suggests the Environmental Programs Manager leverage the information provided in this memo to advance the next steps outlined for each of the five strategies, summarized in the table below.

Table 2: Summary of Suggested Next Steps

Strategy	Suggested Next Steps
1. Develop a Sustainability Framework in Laurel	• Share the sample definition language and proposed topic areas of focus outlined above with key city staff members (e.g., the Mayor, department heads) to solicit feedback and adjust before finalizing.
2. Establish Processes for Engaging City Departments and Community Members	• Establish processes for regularly engaging with department heads and relevant staff on sustainability initiatives. • Develop process for engaging with community members and integrate it into Strategies 3-5.
3. Establish Program Baselines	• As the definition and framework are finalized, further refine the list of potential metrics provided in the Strategy 3 section to ensure they are aligned with the sustainability program's goals. • Once the list is refined, share it with key staff members and integrate their feedback to establish a baseline for tracking future progress
4. Develop Programs to Achieve Goals	• Share near-term actions outlined in the Strategy 4 section with key city staff members from relevant departments to solicit feedback and adjust accordingly. • Once Strategies 1-3 have been finalized and Laurel has tailored this list to ensure it is aligned with those strategies, continue to work with staff to begin planning for implementation.
5. Track and Disclose Sustainability Metrics	• Work with key staff to identify outstanding data needs for tracking metrics, as well as with the IT department to establish the infrastructure for disclosing progress, leveraging the examples provided in the Strategy 5 section to support the discussion.

3100 Clarendon Boulevard, Suite 400, Arlington, VA 22201 Tel 703.247.6000   Fax 703.247.6001
HEADQUARTERS 100 5th Avenue, Suite 100, Waltham, MA 02451 Tel 617.673.7000   Fax 617.673.7001

cadmusgroup.com

15

CADMUS

Appendix A: Stakeholder Engagement Participants

Laurel Senior Staff Meeting Participants:

Name	Title/Organization
Stephen Allen	Director of Department of the Fire Marshal and Permit Services
Audrey Barnes	Director of Communications
Joanne Hall Barr	Director of Parks and Recreation
Michele Blair	Environmental Programs Manager
Christina Cornwell	Emergency Manager
James Cornwell-Shiel	Deputy Director of IT
Lou Ann Crook	City Administrator
Kevin Frost	CIO
Sara Green	Chief of Staff
Russ Hammil	Chief of Police
Liz Hanson	Project Director (Cadmus)
Brian Lee	Director of Public Works
Robert Love	Director of Economic and Community Development
Megan Lynch	Project Manager (Cadmus)
Craig Moe	Mayor
Mark Plazinski	Deputy Chief of Police
Kim Rau	Clerk to the City Council
Lisa Woods	Deputy Director for Department of Budget & Personnel Services

Meeting with Local Environmental Groups

Name	Title/Organization
Stephen Allen	Director for Department of the Fire Marshal and Permit Services
Bill Bailey	Assistant Director for Department of Parks and Recreation
Joanne Barr	Director of Parks and Recreation
Michele Blair	Environmental Programs Manager
Laura Christoplos	Admin Assistant II – CA's Office
Christina Cornwell	Emergency Manager
James Cornwell-Shiel	Deputy Director of IT
Brian Coyle	Co-chair, Laurel for the Patuxent
Lou Ann Crook	City Administrator
Maia Davis	Senior Environmental Planner (MWCOG)
Kevin Frost	CIO
Russ Hamill	Chief of Police
Liz Hanson	Project Director (Cadmus)
Marilyn Johnson	Resident
Cheryl Keys	Resident
Jeffrey King	Director of Climate, Energy and Air Programs (MWCOG)
James Kole	Resident
Brian Lee	Director of Public Works
Jhanna Levin	Resident
Robert Love	Director of Economic and Community Development
Megan Lynch	Project Manager (Cadmus)

Craig Moe	Mayor
Christian Pulley	Deputy City Administrator
Barbara Robinson	Resident
Ganiyat Rufai	Resident
Jamie Wiesner	Intern for Environmental Programs
Kate Wright	Administrative Assistant for Department of Public Works

Meeting with City Council Participants:

Name	Title/Organization
Michele Blair	Environmental Programs Manager
Laura Christoplos	Admin Assistant II – CA's Office
Lou Ann Crook	City Administrator
Althea*	Resident
Maia Davis	Senior Environmental Planner (MWCOG)
Sara Green	Chief of Staff
Liz Hanson	Project Director (Cadmus)
Stephen Jackson	Resident
Jeffrey King	Director of Climate, Energy and Air Programs (MWCOG)
Megan Lynch	Project Manager (Cadmus)
Henry Locke	Project Analyst (Cadmus)
Craig Moe	Mayor
Christian Pulley	Deputy City Administrator

*Last name is unknown

Understanding a Greenhouse Gas Emissions Inventory

The first step toward achieving tangible greenhouse gas emission reductions for government operations requires identifying baseline emissions levels and sources and activities generating emissions. Laurel's 2019 government operations GHG inventory uses the approach and methods provided by the Local Government Operations Protocol for Accounting and Reporting Greenhouse Gas Emissions (**LGO Protocol**), which is described below.

Three greenhouse gases are included in this inventory: carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Many of the charts in this report represent emissions in "carbon dioxide equivalent" (CO_2e) values, calculated using the Global Warming Potentials (GWP) for methane and nitrous oxide from the IPCC 4th Assessment Report:

Table 1. Global Warming Potential Values (**IPCC, 2007**)

Greenhouse Gas	Global Warming Potential
Carbon Dioxide (CO_2)	1
Methane (CH_4)	25
Nitrous Oxide (N_2O)	298

Local Government Operations (LGO) Protocol

In 2010, ICLEI, the California Air Resources Board (CARB), and the California Climate Action Registry (CCAR) released Version 1.1 of the LGO Protocol. The LGO Protocol serves as the national standard for quantifying and reporting greenhouse emissions from local government operations. The purpose of the LGO Protocol is to provide the principles, approach, methodology, and procedures needed to develop a local government operations greenhouse gas emissions inventory.

The following activities are included in the LGO inventory:

- Electricity, propane, and natural gas consumption from buildings & facilities
- On-road fuel consumption from vehicle fleet
- Electricity consumption for streetlights and traffic signals

- Off-road fuel consumption from landscaping equipment
- Waste sent to landfill.
- Wastewater treatment processes

Quantifying Greenhouse Gas Emissions

Base Year

The inventory process requires the selection of a base year with which to compare current emissions. Laurel's LGO greenhouse gas emissions inventory utilizes 2019 as its baseline year, for which the necessary data are available.

Quantification Methods

Greenhouse gas emissions can be quantified in two ways:

- Measurement-based methodologies refer to the direct measurement of greenhouse gas emissions (from a monitoring system) emitted from a flue of a power plant, wastewater treatment plant, landfill, or industrial facility.
- Calculation-based methodologies calculate emissions using activity data and emission factors. To calculate emissions accordingly, the basic equation below is used:

Activity Data x Emission Factor = Emissions

Most emissions sources in this inventory are quantified using calculation-based methodologies. Activity data refers to the relevant measurement of energy use or other greenhouse gas-generating processes, such as fuel consumption by fuel type, metered annual electricity consumption, and annual vehicle miles traveled. Known emission factors are used to convert energy usage or other activity data into associated quantities of emissions. Emissions factors are usually expressed in terms of emissions per unit of activity data (e.g., lbs. CO_2/kWh of electricity). For this inventory, calculations were made using ICLEI's **ClearPath Climate Planner tool**.

Moderate GHG Reduction Emissions Modeling

After completing the BAU forecast, and in addition to the Emissions Reduction Action Scenario described above, a second scenario was developed for comparison to help in decision-making processes. This model focused on analyzing which actions and to what extent each would need to be implemented to achieve an emissions reduction goal of 60% by 2040 from 2019 levels. Results of the second model and reduction measures applied include:

- Converting fuel-based systems, such as heating and cooling equipment, from natural gas to electric in the Maintenance Complex and Police/Activity Center. (2.75%)
- Converting all propane use in Buildings & Facilities to electric. (2.25%)
- Installing 365 kilowatts of solar panels on City-owned rooftops and parking lots. (5%)
- Adding lighting sensors to 20% of City-owned building square footage (0.01%)
- Retiring 20 older and less efficient computers for new, more efficient options (0.4%)
- Switching 35% of gasoline consumption for the City's vehicle fleet by replacing gasoline-powered vehicles with electric vehicles. (5.7%)
- Switching 25% of gasoline consumption for the City's vehicle fleet by replacing gasoline-powered internal combustion engine vehicles with hybrid vehicles. (2.3%)
- Diverting 25% of solid waste from landfills to recycling or composting. (0.8%)

The results of this model indicate that if the City implemented each of the above emissions reduction actions by 2040, the City could achieve a less moderate goal of reducing emissions by 60% from 2019 levels by 2040 (Figure 1).

Moderate Emissions Reduction Action Scenario Projected GHG Emissions
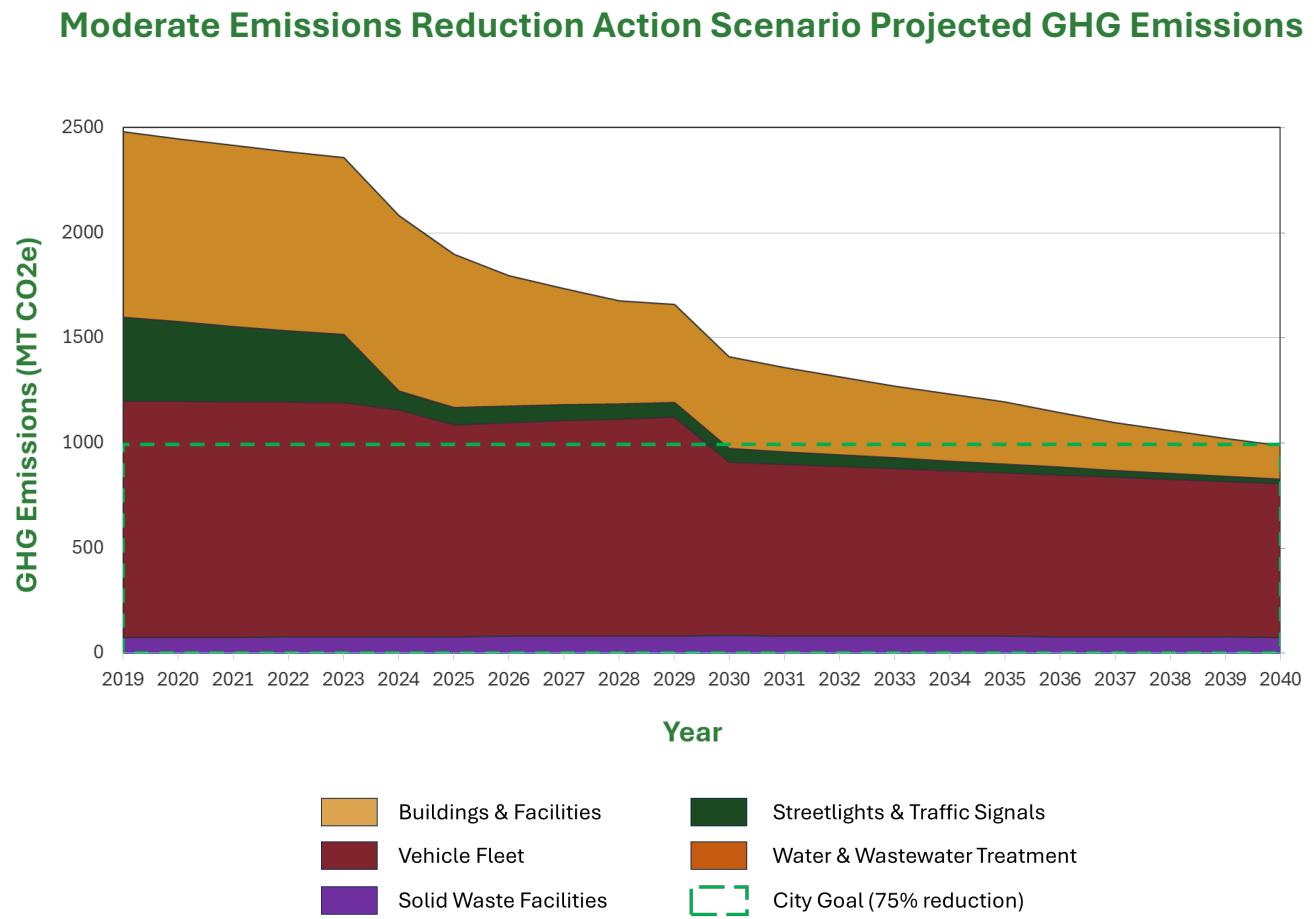
Figure 1. Emissions Reduction Scenario for the City operations of Laurel to meet a 2040 60% emission reduction goal.

City of Laurel
Office of the City Administrator
Joseph R. Robison -- Laurel Municipal Center
8103 Sandy Spring Road, Laurel Maryland 20707
Office: 301-725-5300 ext. 2203
GreenLiving@Laurel.md.us
www.cityoflaurel.org