

Erie Existing Conditions Analysis Memo

TO: Town of Erie

FROM: Lotus Engineering & Sustainability, LLC

DATE: May 2025

SUBJECT: Erie Existing Conditions Analysis Memo for the Sustainability Plan Update

The Town of Erie (Erie) adopted their <u>Sustainability Master Plan</u> in 2019, which was a five-year plan that outlined a roadmap to advancing sustainability in the Town, serving as a guiding document to inform decision making for future sustainability planning and programming. This plan is currently undergoing an update to better capture the evolving sustainability landscape within Erie and across Colorado. With a planned adoption date of 2026, Lotus Engineering and Sustainability, LLC (Lotus) is leading the effort. Part of Lotus' process is to develop an Existing Conditions Analysis, which entails reviewing local, regional, and state plans and policies relevant to Erie's sustainability efforts and the development of this plan update. This memo aims to identify gaps, challenges, and opportunities for Erie to meet its sustainability goals and to gain a better understanding of the most applicable and effective strategies to include in the updated plan.

HOW TO READ THIS MEMO

This memo synthesizes the findings from the Existing Conditions Analysis and landscape review of relevant Town, regional, and statewide plans and policies. The plan is organized by first highlighting Erie's greenhouse gas emissions inventory, followed by sectororganized sections that outline any known gaps, challenges, and opportunities to advance sustainability and climate action within that sector. Each section ends with a set of key recommendations for each sector for moving sustainability forward.



All gaps, challenges, opportunities, and recommendations are discussed within the scope of the Existing Conditions Analysis research and findings. Other gaps, challenges, opportunities, and recommendations that have arisen from stakeholder input, staff discussions, or other outlets are not captured in this memo, but have been captured in a separate document and will be referenced when strategies are being developed. Descriptions of what each section captures are below:

- Gaps: Any strategies not completed from the 2019 Sustainability Master plan, or
 areas of focus that were not included in the 2019 plan. Gaps may also include glaring
 gaps in services, programs, and initiatives identified through research or any glaring
 misalignment or disconnection between Erie's efforts and state and regional work.
- **Challenges:** Any challenges identified through other plans that were reviewed during research, or potential challenges Erie may face in implementing certain programs, projects, or policies, based on Lotus experience and knowledge of Erie's local context.
- **Opportunities:** Any opportunities that may exist to fill the identified gaps or address identified challenges.
- Recommendations: Recommended strategies or efforts for Erie to include or undertake in the plan update or development of the plan, based on the identified gaps, challenges, and opportunities.
 - Note: This is not an exhaustive list, just a set of recommendations tied to the findings in this memo.
 - Note: For any strategies from the 2019 plan that were either not started, are in progress, or require ongoing maintenance and implementation, Lotus recommends including these in the plan update. This recommendation may not always be included in the sector-based recommendations below.

The last section of this document, "Erie Building Blocks for Strategy Implementation" includes existing State mandates and legislation, available funding sources, State and regional policy support resources, and more, that can accelerate Erie's efforts towards advancing sustainability and climate action through this plan update. Note that this list is not exhaustive, but includes the most relevant and impactful information given Lotus' experience and expertise.

Erie Greenhouse Gas Emissions Inventory

Erie conducted an update to its greenhouse gas inventory in 2023. In 2023, the Town of Erie's community-wide GHG emissions totaled 390,363 metric tons of carbon dioxide equivalents



(mt CO₂e). That's as many emissions as driving more than 91,000 gas powered cars for a year. These emissions can be broken down as follows:

- Solid waste (32%) primarily due to the Front Range Landfill (which is in Erie Town limits)
- Residential buildings (29%)
- Transportation (20%)
- Oil and gas (10%)
- Commercial and industrial buildings (7%)
- Transmission and distribution losses (1%)
- Industrial processes and Wastewater treatment (<1%)

Excluding the landfill, the largest source of emissions in Erie is building electricity use (22% of the total) followed by building natural gas use (15%). Other large sources of emissions include: Oil and Gas Wells (10%), transboundary aviation² (10%), and on-road transportation (10%).

Between 2021 (Erie's first GHG emissions inventory) and 2023, Erie's emissions increased by two percent. Significant emissions increases were seen from building natural gas use (10% increase), on-road transportation (59% increase), and commercial building refrigerant leakage (44% increase). Notable decreases include Oil and Gas Wells (38% decrease) and transit (52% decrease).

Landscape Review Analysis

POLICIES AND PLANS REVIEWED

Lotus reviewed local, regional, and state plans and policies that could help inform the update to this plan and to gain a deeper understanding of the current sustainability landscape in Erie and its surrounding area. All policies and plans reviewed can be found in the <u>Existing Conditions spreadsheet</u>. All data and findings described in this memo were found through researching all the documents in the spreadsheet, unless otherwise noted.

BUILDINGS AND ENERGY USE

¹ See: https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results.

² Transboundary aviation emissions are emissions from flights at Denver International Airport attributable to Erie residents.



Existing Buildings in Erie:

- Community-wide: About 36% of Erie's greenhouse gas emissions come from buildings in Erie, with residential buildings contributing 29% and commercial and industrial buildings contributing 7%. When looking at Erie's emissions by source, building electricity accounts for 22% of Erie's total emissions, and natural gas accounts for 15%. Erie's 2021 Energy Action Plan 2.0, created in partnership with Xcel Energy, found that energy programs offered through Xcel Energy are relatively underutilized in comparison to the number of customers in their service area. Commercial buildings utilized energy efficiency programs even less than residential customers. Xcel Energy also offers a variety of renewable energy programs to its customers, and the plan notes that in 2020, 1,315 premises participated in these programs.
- Municipal: Erie has conducted energy assessments on all existing municipally owned buildings and has started tracking municipal building energy use. The Town is exploring ways to expand benchmarking requirements to private commercial and multifamily properties. Erie is working towards supplying its municipal buildings with 100% renewable electricity through on-site installations. Over the last decade, the Lynn R. Morgan Water Treatment Facility implemented a variety of energy-efficiency projects to reduce its energy use. A hydro turbine was added, which generates electricity through incoming raw water at the plant, variable speed drives were added using energy rebates, and electrical use and costs are regularly tracked. With these upgrades, the electrical use at the Plant now uses less electricity than it did in 2011!

New Construction in Erie:

1. Community-wide: Erie has adopted the 2021 International Energy Conservation Code (IECC) with solar and electric vehicle (EV) -ready provisions, and just adopted its Beneficial Electrification Plan. Erie's zoning code incentivizes energy efficiency and renewable energy systems through expedited solar permitting (achieving SolSmart Bronze certification). Training and technical assistance are also offered to planners, developers, and inspectors to ensure maximum compliance and enforcement of the Erie's energy code. The Energy Action Plan 2.0 identifies Xcel's Energy Star New Homes program as the most utilized by residential customers for new home construction, with over 230 participating customers.



Municipal: Erie requires all new municipal buildings and major renovations to be ENERGY STAR certified.

Erie has been implementing the recommendations from its 2021 Energy Action Plan 2.0, which include conducting a renewable energy subscription campaign for Old Town residents, obtaining SolSmart Gold certification, expanding the Green Business program and recruiting homeowner associations (HOAs), doubling participation in energy programs, and more. Erie just recently adopted its Beneficial Electrification Plan, which sets a roadmap to achieve net zero emissions from Erie's buildings and transportation sector.

Erie's Comprehensive Plan estimates that between 2050 and 2055, 27,000 - 30,000 housing units will be created, and 5 million - 11 million square feet of commercial and industrial square footage could be built.

The following strategies from the 2019 plan have been completed and/or are ongoing:

- Adopt the most recent International Energy Conservation Code (IECC) every three
 years to incentivize green building, energy efficiency, and the use of renewable
 energy in new construction.
 - Note: Erie is currently on the 2021 IECC with EV and solar-ready provisions, and is compliant with State minimum requirements.
- Ensure ongoing education on updated energy codes for planners, plan reviewers, and building department staff to maximize enforcement and compliance.
- Incentivize and educate on renewable energy (such as solar-ready homes) for new construction.
- Promote existing energy efficiency programs for commercial and residential users.
- Encourage water-conserving landscaping practices and other measures to reduce outdoor water use.
- Promote weatherization and solar incentives for low-income residents.
- Educate on and incentivize commercial building retro-commissioning to ensure systems are maintained and running efficiently.
- Identify creative and innovative opportunities to fund energy efficiency and renewable energy projects and programs in commercial and residential sectors and consider other innovative technologies, as they become available, for reducing energy use and increasing the amount of renewable energy powering the community.



- Identify equitable programs to market and incentivize solar through cost savings and communication campaigns (e.g., bulk purchase programs, etc.).
- Perform energy assessments on all existing municipal buildings and, when feasible, implement assessment recommendations for energy efficiency soon after.
- Implement benchmarking for municipal buildings.
- Require that all new government buildings and major renovations be ENERGY STAR certified.

Gaps, Challenges, and Opportunities

GAPS

The following strategies from the 2019 plan have not yet been implemented or are in progress.

- Explore incentivizing energy benchmarking for large buildings and reporting on green building certification for all commercial properties and large residential properties.
- Explore requiring energy efficiency reporting at time-of-sale of owner-occupied housing.
- Educate on and incentivize dark sky compliant/LED outdoor lighting.
- Develop ongoing Town supported renewable energy projects that benefit the whole community (e.g., community solar, etc.).
- Supply municipal buildings with 100% renewable electricity (both through on-site installations and procurement decisions).

CHALLENGES

- Expanding benchmarking requirements to private commercial and multifamily properties requires heavy staff resourcing to administer the program, conduct outreach, train building owners/managers, and more.
- Energy programs offered by Xcel appear to be underutilized. Examples of some of Xcel's programs that are underutilized include:
 - Energy Savings Kit, home energy audit, insulation and air sealing, single-family weatherization, smart thermostat, etc.
- Examples of programs offered by Xcel that are underutilized by commercial and industrial customers include:
 - Business energy analysis, commercial refrigeration efficiency, energy design assistance, energy efficient buildings, lighting efficiency, and more.



OPPORTUNITIES

- Erie can expand outreach and education of available energy efficiency programs offered by Xcel to customers that are not utilizing them.
- Erie can explore BEAM as a software to support building benchmarking. Erie could pilot BEAM by tracking benchmarking data for municipal buildings, which could gleam insights into a future private benchmarking policy.

Recommendations

- Begin implementation of Erie's Beneficial Electrification Plan to further electrification of Erie's new and existing buildings and reduce emissions from Erie's building stock.
- Continue to roll out the recommendations from the Energy Action Plan 2.0.
- Include strategies in the plan update that promote energy efficiency advancements within the residential sector.
 - Highlight and educate residents on available financial support for home energy upgrades.
- Expand outreach to commercial and industrial building owners, and expand the promotion of underutilized programs offered by Xcel.
- Continue to implement Town supported renewable energy projects, such as community solar.
- Continue to aim for 100% renewable electricity for all municipal buildings.
- Identify peer communities who have implemented benchmarking for large buildings and explore a phased approach to adopting a communitywide benchmarking policy.

TRANSPORTATION AND MOBILITY

Transportation accounts for about 20% of Erie's emissions. Some of these emissions are likely attributed to Erie being a commuter town - per Erie's Transportation and Mobility Plan, many residents travel out and back to Erie for work daily, primarily using their single-occupancy vehicles.

EV adoption rates in the Town are growing, with EV registration doubling between 2021 and 2023. The Town has existing infrastructure to support the transition to EVs - it currently owns and operates 22 public charging stations and has a goal of reaching a total of 35 charging stations by the end of 2025. To expand EV services, the Town has an EV-ready building code for residential and commercial new construction, and incentives for retrofit projects.



Internally, Erie also adopted an EV procurement policy to transition the Town's fleet to EVs, with a goal to transition 50% of the Town's light duty fleet to EVs by 2030 and 100% by 2040.

Per Erie's Transportation and Mobility Plan, there is a high demand for alternative and additional transit services in Erie. The Town has an off-street trail network, but connections to key areas (schools, grocery stores, etc.) are missing. Erie, Boulder County, Colorado Department of Transportation (CDOT), and the Regional Transportation District (RTD) offer transit services, but ridership is low.

Erie continues to work to expand and improve transportation and mobility, and reduce emissions from existing transportation-related sources. The Town utilized grant funding to establish and operate a Flex Ride service, developed an anti-idling campaign, and mandated Transit Oriented Development (TOD).

The following strategies from the 2019 SAP have been completed and/or are ongoing:

- Collaborate with regional agencies to improve transit access.
- Ensure safe and well-maintained sidewalks, bike lanes, and walking paths.
- Require multi-modal connectivity and TOD in new commercial developments.
- Focus on sustainable economic development opportunities and assets that increase the number of employers and jobs in Erie.
- Develop a community-wide anti-idling campaign.
- Increase the number of EVs through equitable programs and improved infrastructure.
- Develop EV-ready building codes for residential and commercial new construction and incentivize during retrofit projects for existing residential and commercial buildings.
- Switch government fleet vehicles to electric vehicles or other high efficiency vehicles within the replacement cycle (or sooner) and when appropriate models are available.
- Support state and regional goals for EV adoption, and work with regional partners and neighboring communities to reach these goals.

Gaps, Challenges, and Opportunities

GAPS



The following strategies from the 2019 plan have not yet been implemented or are in progress:

- Develop multi-lingual wayfinding signage for trails, roads, and paths.
- There appear to be gaps in transit service and connections for getting around Erie.
 Connections to key destinations like schools, grocery stores, and bus stops are missing.
- Both Erie and the Regional Transportation District (RTD) offer transit services, but ridership is low.

CHALLENGES

- Per the Transportation and Mobility Plan, there is insufficient charging infrastructure and bicycle facilities in Erie.
- The vast majority of Erie residents commute by single occupancy vehicle.
 - Most people who live in Erie work outside of Erie, and most people who work in Erie live outside of Erie.
- Limited electric grid capacity could be a barrier to large-scale EV adoption.
- Erie's rate of growth will likely cause strains on traffic congestion.

OPPORTUNITIES

- Erie's high rate of growth presents an opportunity to mitigate traffic congestion and promote alternate transportation. This can be addressed through Erie's Unified Development Code (development code).
- Erie can focus multimodal strategies on employers and their employees, as well as regional transit connections, due to the high rate of commuters coming in and out of Erie.
- Erie can also focus efforts on provision of bicycle facilities and EV chargers around
 Erie.

Recommendations

- Explore strategies to reduce single occupancy vehicles for work commuting, such as free or discounted transit passes, pre-tax assistance with vanpool programs, and prioritized parking for carpools.
- Revisit the development code to ensure sufficient EV charging is provided as Erie grows and redevelops.



- Continue to build out and promote the Flex Ride service.
- Pilot a bike share program in the community to address the insufficient bike facilities and to incentivize people to get out of their cars.
- Ensure key connection gaps (grocery stores, schools) are priority as Erie continues to build out its parks and trails system, and transit services.

WASTE AND MATERIALS DIVERSION

Erie has low rates of recycling and composting compared to its regional neighbors. The Town adopted Ordinance 15-2020 in March of 2020 which requires waste haulers to institute a Pay-as-You-Throw pricing system for residential customers, and provide unlimited curbside recycling and organics/compost collection. However, this has not yet been enforced by the Town. Currently, all waste collection services are provided by private haulers, but Erie does have a recycling center that accepts single stream recycling, cardboard, yard waste, and food scraps. Additionally, Erie hosts clean up events throughout the year that help residents dispose of unwanted household items.

The Front Range Landfill is located within the Town limits and produces around 30% of the greenhouse gas emissions in Erie. Boulder County adopted the Re-TRAC policy to track waste diversion and provide recycling to unincorporated Boulder County residents, and the Erie Board of Trustees consented to the applicability of the policy within the Town of Erie. A zero-waste policy is in place for all Town events and meetings, and a Sustainable Purchasing Best Management Practices Guide has been implemented.

Erie also offers a variety of waste diversion rebates such as composting and recycling pick up, and hard to recycle item disposal for both residential and commercial customers, and rebates for reusable bags, compostable silverware, reusable to go items, and more for commercial customers.

Community surveys and engagement findings suggest there is community interest in exploring curbside organics recycling services, but residents do not want to pay more than they are already paying for waste collection.

Erie has conducted research around utilizing Erie's reuse center to help divert construction and demolition waste, and has partnered with Resource Central, who offers pick up of certain demolition and construction materials like appliances, lighting fixtures, ceiling fans, and other building materials.



In addition to the efforts above, the following strategies from the 2019 SAP have been completed and/or are ongoing:

- Relocate and make improvements to the Erie Recycling Center and explore opportunities to add a yard waste collection facility that provides mulch and/or compost to residents and businesses.
- Adopt the standards of the Re-TRAC policy that ensures that waste diversion is tracked, and recycling is provided to all residents and businesses of Erie at a minimal cost.
- Work with regional organizations to expand easy and local access to materials reuse and hard-to-recycle services and events.
- Explore the opportunity to bring a materials reuse center to Erie that will provide a location for diverting reusable construction and demolition materials and create local jobs.
- Expand zero-waste policies for all Town events and meetings.
- Enhance the recycling infrastructure at Town facilities and in public locations, such as downtown and in outdoor commercial and community gathering spaces.
- Develop Town-wide green purchasing policies where cost-benefit is shown.

Gaps, Challenges, and Opportunities

GAPS

Strategies from the 2019 plan that have not yet been implemented or are in progress:

- Implement a phased approach to a Universal Zero Waste Ordinance.
- In a phased approach, reward waste diversion on construction and demolition and public works projects.
- Explore a phased approach to ensure that curbside composting is available within the community to anyone who chooses to use it.

CHALLENGES

- Communitywide composting and recycling services do not exist rather, it is up to residents to pay for these services with private haulers. This could result in lower diversion rates due to higher costs to residents.
- The landfill is located within the Town limits and largely contributes to the Town's emissions, which could be a barrier to Erie meeting its climate goals.



 Requiring diversion of construction and demolition (C&D) waste can be challenging if the market does not exist, and it can be costly to the building industry.

OPPORTUNITIES

Erie can continue its focus on expanding composting across the community, as well
as educating the community on the benefits of recycling, to increase diversion rates.

Recommendations

- Pilot a curbside organics recycling program at the neighborhood scale to gauge interest and impacts on waste diversion.
- Adopt a phased approach to construction and demolition waste diversion by first requiring Public Works projects to follow construction and demolition diversion practices.
- Continue to provide education and outreach to residents and communities about how to properly recycle and compost.
- Implement a phased approach to a Universal Zero Waste Ordinance.
- Conduct a waste audit for Town facilities to baseline Erie's waste management and help track progress towards waste diversion goals.

NATURE-BASED SOLUTIONS: LOCAL ECOSYSTEMS, WATERSHEDS, AND AGRICULTURE

Per Erie's Comprehensive Plan, undeveloped land is mostly occupied by agricultural activity, open space, and rural preservation, which are strictly protected through land use regulations and are deeply valued by the community. Erie received its "Tree City USA" designation bestowed by the Arbor Day Foundation for its forestry programs and successful management of public tree resources.

According to the Comprehensive Plan, over 3,800 acres of developable land in Erie falls within a designated 100-year floodplain. Within Erie's Planning Area, both Coal Creek and Boulder Creek are considered impaired for aquatic life, recreational use, and water supply use, and fully support only agricultural uses. Boulder County offers funding to protect the region's natural environment. Examples include an Environmental Sustainability Matching Grant, which provides opportunities for municipalities to undertake environmental sustainability priorities within their communities and supports a coordinated countywide approach to



environmental sustainability, and the Climate Innovation Fund, which supports local projects focused on carbon dioxide removal (CDR) and landscape resilience and restoration.

The Town of Erie manages approximately 285 acres of agricultural lands on designated open spaces that are leased to qualified operators. According to Erie's Economic Market Analysis, agriculture, forestry, and fishing and hunting employment dropped about 20% between 2013 and 2022. Boulder County offers a variety of resources for the agricultural community such as Restore Colorado, which aims to foster a more circular and resilient food system in the region, and sustainable food and agriculture grants that fund regenerative agriculture, farmer and producer education, farm infrastructure, sustainable crop production, and more.

Erie is vulnerable to droughts, and experienced one in 2002. Erie adopted the Drought and Water Supply Shortage Plan in 2021, which provides a framework to help Erie respond to water shortages and prepare for droughts.

Gaps, Challenges, and Opportunities

GAPS

 Neither nature-based solutions, local watersheds, nor agriculture were an area of focus in Erie's 2019 Sustainability Plan.

CHALLENGES

- Erie's water sources appear to be in poor condition and fully support only agricultural uses.
- As Erie continues to grow, pressures for green field development could increase, which could direct new development to land that falls within a floodplain or impaired water quality.
- Erie's agriculture and forestry/fishing industry employment is dropping, and is forecasted to stay the same through 2050.

OPPORTUNITIES

- Boulder County offers a variety of programs and funding that Erie could leverage to support its natural environment and agricultural lands such as the Climate Innovation Fund and Restore Colorado.
- Erie's Water and Drought Plan should be the main driver for water conservation work in the Town.



Recommendations

- Incentivize smart growth and development to protect Erie's natural resources, agricultural industry, and the environment as Erie grows.
- Incorporate nature-based solutions into the development code and land use regulations to improve water quality, mitigate flood risk, and protect Erie's natural environment.
- If applicable (per HB24-1362), Allow and incentivize installation of greywater treatment systems in new construction projects to conserve potable water use as Erie grows.
- Refer and adhere to the Town's Water and Drought Plan.
- Partner with Boulder County to identify resources that would support Erie's agricultural industry and natural resources, and work to connect the community to these resources.

LAND USE AND BUILT ENVIRONMENT

According to Erie's Comprehensive Plan, 19% of the Town is zoned for residential and 2% is zoned commercial or office space, with much of Erie designated as agriculture and parks and open space. In examining Erie's Future Land Use Map, the primary uses are Agriculture; Parks, Open Space, and Protected Land; and Rural and Low Density Residential.

Within Erie's Planning Boundary, which extends beyond its jurisdictional borders, about 20% is considered developable land. About 30% of the land within Erie's Town Boundary (jurisdictional borders) is considered developable land.

Office and retail space in Erie is experiencing rapid growth, with most of this growth happening in the Downtown and Town Center areas. Downtown Erie utilizes smaller, more historic spaces, while the Town Center is more modern with larger spaces.

As mentioned above, Erie's Comprehensive Plan estimates that between 2050 and 2055, 27,000 - 30,000 housing units will be created, and 5 million - 11 million square feet of commercial and industrial square footage could be built.

There are existing physical limitations and land management factors influencing how Erie has and can be developed. These include floodplains of the two major creeks running through town, past and present extractive land uses, lands preserved by conservation easements, and existing and closed landfills. An estimated 97 wells are producing within the Town's Planning Area, while 61 are shut-in (meaning it is still capable of producing, but are not currently), and one is temporarily abandoned. There are 37 drilling wells in the

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Town's Planning Area, none of which are within the Town's boundary, and located in Weld County.

Gaps, Challenges, and Opportunities

GAPS

Land use and the built environment were not areas of focus in the 2019 Sustainability
 Master Plan.

CHALLENGES

There are existing physical limitations and land management factors influencing
how Erie has and can be developed. These include floodplains, extractive land uses,
lands preserved by conservation easements, and existing and closed landfills. Erie's
rapid rate of growth could increase pressure to develop Erie's undevelopable land or
in areas with physical limitations or natural and environmental hazards.

OPPORTUNITIES

- About 20% of Erie's Planning Area is yet to be developed. This undeveloped land
 presents an opportunity for Erie to implement sustainable and smart growth
 development practices to protect Erie's natural resources and increase resilience to
 floods and other potential climate risks.
- There is an opportunity for Erie to push for sustainable and decarbonization policies for all new construction to ensure future development does not contribute to Erie's GHG emissions or harm Erie's sensitive lands.
- The work done through this plan will need to consider the presence of oil and gas, and potential implications on public and environmental health, and recommend strategies to mitigate any negative impacts associated with this industry. Understanding Erie's extractive history will be important in identifying key strategies that could help restore any impacted lands and protect the health and well-being of the workers involved in this industry.

Recommendations

- Promote smart growth and sustainable development (native landscaping, green infrastructure, higher density, avoid development in floodplains, etc.) through Erie's development code and building and energy codes.
- Encourage redevelopment over greenfield development.



 When developing policies and programs to decarbonize existing buildings in Erie, understanding the varying building stock across the Town will be important as different buildings may require different interventions.

PARKS AND OPEN SPACE

Much of Erie consists of parks and open space, including significant tree canopy, trails, pocket parks, pollinator gardens, and more. Erie's open space serves many purposes, including directing growth and redevelopment to urban areas and preserving Erie's historic charm.

The largest land use within Erie's Planning Area is Parks, Open Space, and Conservation Easements, at 35%; These same land uses account for 23% of the land within Erie's Town boundaries. The land used for parks and recreation purposes accounts for more than 1,500 acres, from which Erie maintains 70+ miles of trails. According to Erie's 2016 PROST (Parks, Recreation, Open Space, Trails) Playbook, about 99% of Erie residents have adequate access to parks, trails, and open space, with the exception of the northeastern part of Town. Erie also tracks the amount of irrigation applied to Town parks and facilities on a routine basis.

Erie also uses Integrated Pest Management principles when conducting maintenance to Town parks, public facilities, and open spaces, which is an environmentally sensitive approach to pest management. Erie's Parks and Open Space department continues to utilize best management practices and prioritizes the most effective and eco-friendly products.

Gaps, Challenges, and Opportunities

GAPS

- Parks and Open Space were not an area of focus in the 2019 Sustainability Master Plan.
- According to the 2016 PROST Playbook, the northeastern part of Erie has little to no access to recreation.

CHALLENGES

 Potential future drought impacts and vulnerabilities could mean an increased cost to maintain the health of Erie's parks and open space.



OPPORTUNITIES

- Erie could expand its water conservation practices on its parks and open space lands through setting water reduction targets or exploring other water saving practices.
- Erie can utilize its parks and open space as educational opportunities around water conservation and water quality, the importance of outdoor recreation, and more.
- If and when Erie's northeast edge of town is developed, access to recreation should be required.

Recommendations

- Regularly reference the PROST plan to ensure the Sustainability Division is involved during relevant implementation projects and future updates.
- Implement WaterWise and xeriscaping practices to minimize water use and improve resiliency at parks.

Community Health, Equity, and Resilience

The findings from Erie's Equity Analysis indicate that Erie is a relatively white, affluent community, with the median household income over \$160,000 and a 3% poverty rate. Just over 2% of Erie residents speak a language other than English and do not speak English proficiently.

The Equity Analysis found that Erie is located in a designated non-attainment area per the Environmental Protection Agency (EPA), meaning the air quality does not meet federal minimum standards, putting residents at risk of poor air quality which could lead to negative health effects. The Town faces significant environmental and health risks, including exposure to air toxics, fine particle pollution, proximity to oil and gas operations, floodplains, and high risk of ozone, wildfires, and drought.

Both Boulder and Weld County experience the climate related stressors of extreme heat and wildfire smoke. Weld County has a higher percentage of highly burdened areas compared to Boulder County and state/national levels. Although none of these environmental burdens fall directly within Erie's town boundary, they are still important to note as environmental burdens can transcend jurisdictional borders. No census tracts in Erie are designated as "disproportionately impacted;" however, manufactured home communities do exist within



Erie, which can increase vulnerability to extreme weather events, financing opportunities, and more.

Erie's Town Council declared a Climate Emergency due to the significant threat that climate disruption will have on Erie residents. In response to the Climate Emergency Declaration, The Town created a Climate Emergency Proclamation which calls for the reduction of GHG emissions through resilience strategies.

Erie's Town website has resources and information around fire resilience and what homeowners can do to increase their resilience to wildfires.

GAPS, CHALLENGES, AND OPPORTUNITIES

GAPS

- No data has been found on Erie's manufactured home community.
- Although no census tracts in Erie are considered disproportionately impacted, this
 does not mean that there are not disproportionately impacted households in Erie.

CHALLENGES

- Non-attainment designation by the EPA raises equity concerns around Erie's air quality and public health.
- The work done through this plan will need to consider the presence of oil and gas, and potential implications on public and environmental health, and recommend strategies to mitigate any negative impacts associated with this industry.
- It may be difficult to find adequate representation from low-income households and households who do not speak English proficiently.
- Erie's semi-arid climate increases the risks of wildfires and severe drought.

OPPORTUNITIES

- Wildfire preparedness and other hazard mitigation and resilience efforts could be expanded in Erie.
- Strategic outreach to low income households and households who do not speak
 English proficiently will need to be explored as the plan update is developed.
- Erie's Equity Tool can inform equitable strategy development and implementation of the plan.



Recommendations

- Ensure that community leaders or organizations who represent historically marginalized communities in Erie are involved in the plan development process.
- Ensure that strategies in the plan are targeted to low-income household and households that may be disproportionately impacted by the impacts of climate change.
- Develop an education and outreach campaign for homeowners around fire resilience and other climate preparedness topics like drought, air quality, and floods.
- Develop fire resilience strategies and explore available resources to minimize wildfire impacts on the community.
- Focus on strategies that support alternative transportation as a means to improve air quality in Erie since this plan will not focus on oil and gas regulations.

EDUCATION AND OUTREACH

Erie provides a number of educational opportunities and resources for its residents around a variety of topics such as waste management, energy efficiency, and more. Current initiatives include environmental education at Earth Day celebrations, educational resources on the Town website around fire preparedness, proper waste management, and available programs and funding opportunities for home and business energy upgrades.

The following strategies from the 2019 plan have been completed and/or are ongoing:

- Hire dedicated sustainability staff members that will coordinate and implement internal and communitywide sustainability projects and programs and build partnerships with local and regional organizations to collaborate on sustainability efforts.
- Host creative and innovative events that engage all residents and businesses in resources for sustainability.
- Ensure that all community events and functions include elements of sustainability in their implementation and messaging.
- Perform a community-wide greenhouse gas emissions inventory to understand the Town's and overall community's environmental impact and where there are opportunities to reduce that impact.
- Work with the schools in Erie to develop sustainability clubs that will engage youth and empower them to work with the Town on sustainability issues.



- Establish a resource center for sustainability that provides information and resources for energy efficiency, renewable energy, etc., and also increases community awareness of sustainability efforts.
- Ensure that the Town actively takes advantage of regional and state sustainability initiatives, funding, and programs to ensure Erie residents are benefiting from these resources.
- Ensure that all Town plans include sustainability (i.e. transportation master plans, water plan, etc.).
- Develop a coordinated and branded marketing and communications campaign that is multilingual, multicultural, equitable, and inclusive.
- Be active members in statewide organizations that are working on our behalf to combat climate change, such as Colorado Communities for Climate Action.
- Support enhancement of the Erie Green Business Program.
- Create, communicate, and share best practices to manage municipal natural areas, parks, right of ways, and other properties to maximize ecological health and biological diversity.

Gaps, Challenges, and Opportunities

GAPS

Strategies from the 2019 plan that have not yet been implemented or are in progress:

- Host neighborhood sustainability competitions or challenges.
- Support the expansion of access to local food by supporting the development of new community gardens and the creation of a standard community garden plan that can be used to engage and educate the community.

CHALLENGES

- Some residents and households may be hard to reach through current outreach
 efforts, particularly those who do not speak English as a first language, or are
 housing burdened.
- As mentioned in the Buildings and Energy section, many energy efficiency programs offered through Xcel Energy are underutilized by customers. This could likely be due to lack of knowledge of these programs' existence.

OPPORTUNITIES



 Community education and outreach around all sustainability and climate issues should be a continuous and ongoing effort. As Erie continues to roll out and complete initiatives, programs, and resources, educating residents about them and ensuring they are utilizing them to their full potential will foster strength, resilience, and sustainability-centered behavior change across Erie.

Recommendations

- Explore creative ways to educate the community such as neighborhood sustainability competitions or challenges.
- Utilize completed sustainability projects such as Erie's pollinator garden or Town renewable energy systems to educate the community on their benefits.
- Implement the education and outreach strategies from Erie's Energy Action Plan 2.0.

Erie's Building Blocks for Strategy Implementation

The following sections include existing State mandates and legislation, available funding sources, State and regional policy support resources, and more, that can accelerate Erie's efforts towards advancing sustainability and climate action through this plan update. Note that this is not exhaustive, but includes the most relevant and impactful information given Lotus' experience and expertise.

BUILDINGS AND ENERGY USE

Grants and Funding Opportunities

- Denver Regional Council of Governments (DRCOG) <u>Building Policy Collaborative (BPC)</u>
 - Through the DRCOG BPC project, Erie can receive up to \$600,000 in grant funding to support things like staffing, training and certifications, community engagement, coordination and system support, and technical assistance for policy adoption and implementation of building decarbonization programs.
 - Applications close in August 2025.
 - Leverage the results of the cost studies and other localized research that will be conducted through the DRCOG BPC to obtain community and Council buy-in of any relevant building decarbonization policies outlined in this plan.
- Colorado Energy Office: Energy Code Adoption and Enforcement Grant



- Eligible activities include: costs of technical consultants; staff time; outreach and engagement activities; training and workforce development; compliance planning, review, and verification; improvements to the code enforcement process; and deployment of innovative enforcement and compliance tools
- Runs through FY27
- Fy 26 first round deadline August 29, 2025
- FY 26 second round deadline November 28, 2025
- Colorado Energy Office: Local IMPACT Accelerator
 - \$50 million for policies and projects in Buildings, Land Use, Transportation, and
 Waste sectors

Training, Resources, and Financial Support

- Commercial Property Assessed Clean Energy (C-PACE): Enables owners of eligible commercial and industrial buildings to finance up to 100% of energy efficiency, renewable energy, and water conservation improvements.
- <u>Colorado Energy Office (CEO)</u>: Heat pump tax credits, community solar for low-income residents (under development), home electrification and appliance rebates, home energy efficiency rebates.
- <u>Energy Smart Colorado</u>: Home energy assessments, energy efficiency improvements, electrification, solar installation.
- Colorado Department of Public Health and Environment (CDPHE): Small Business
 Assistance Program provides free support, education, outreach, and advocacy to
 help small businesses comply with environmental regulations.
- <u>Colorado Green Business Network (CBGN)</u>: Free and voluntary program that encourages, supports, and rewards organizations that push toward operational sustainability.
- Xcel Energy: Home and business rebate programs, free energy assessments, etc.
- <u>United Power</u>: smart thermostat incentives, heat pump rebates, electrification wiring rebates, etc.

Regional Efforts

The Metro Regional Building Policy Collaborative code amendments package are final.
 These amendments will get Erie above the 2024 IECC and Low Energy and Carbon Code, both of which will be required to be adopted in July 2026, unless a more stringent code is adopted.

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 The BPC Peer Network can be a great resource for building decarbonization policies and can offer free assistance around developing building decarbonization policies, legal risk analysis, implementation support, stakeholder outreach, community education, and more.

TRANSPORTATION AND MOBILITY

Grants and Funding Opportunities

- Colorado Energy Office: Local IMPACT Accelerator
 - \$50 million for policies and projects in Buildings, Land Use, Transportation, and
 Waste sectors
- State funding opportunities Erie might qualify for to accelerate vehicle electrification:
 - o <u>CEO Fleet-ZERO EV Charging Grant</u>: offered twice per year in Spring and Fall.
 - <u>CEO Charge Ahead Grant</u>: EV charging infrastructure application rounds annually in January, May, and September.
- SB24-230 Oil andGas Production Fees this legislation establishes a new fee on oil and gas production, directing funds to increase transit service.

Existing Plans, Initiatives, and Programs

- Erie's Transportation Mobility Plan, the Regional Transportation Electrification Plan, and the Northwest Regional Bike Share Feasibility Study highlight powerful recommendations for improving and expanding alternative transportation in Erie and the surrounding region.
- The Northwest Regional Bike Share Feasibility Study includes recommendations for bike sharing programs that this plan can align with.
- The Regional Transportation Electrification Plan for Boulder County Communities can be leveraged to support Erie's transportation and mobility efforts.
- <u>DRCOG Way-to-Go</u> can support the implementation of Transportation Demand Management (TDM) strategies across Northwest Colorado and the Denver metro area.

Resources

 The DRCOG Complete Streets Toolkit could be a useful resource for Erie as it works towards promoting walkability and alternative transportation.



Key Partners

- The Regional Transportation District (RTD) is a key partner that can help educate and incentivize the use of regional transit options across Erie.
- Boulder County is a leader in the transportation and multimodal space so Erie could work collaboratively with them to ensure the benefits from their efforts are felt in Erie.

WASTE AND MATERIALS DIVERSION

Grants and Funding Opportunities

- Colorado Energy Office: Local IMPACT Accelerator
 - \$50 million for policies and projects in Buildings, Land Use, Transportation, and
 Waste sectors

Training, Resources, and Financial Support

- <u>CO Circular Communities:</u> Statewide program that provides financial and technical assistance to enhance circularity across the state and help organizations achieve their waste aversion and diversion goals.
- <u>CBGN:</u> Provides free sustainability assessments and follow-up support to improve energy efficiency, water conservation, and waste.

Key Partners

- Erie can look to leading facilities like Boulder County's biomass burner at the jail as educational opportunities and case studies to advance waste diversion efforts.
- Erie can explore technical assistance and funding support for waste diversion through Boulder County.

NATURE-BASED SOLUTIONS, LAND USE, AND BUILT ENVIRONMENT

Grants and Funding Opportunities

- Colorado Energy Office: Local IMPACT Accelerator
 - \$50 million for policies and projects in Buildings, Land Use, Transportation, and
 Waste sectors
- <u>C-PACE</u> offers rebates and incentives for hang washing sink aerators, kitchen sink aerators, pre-rinse spray valves, outdoor irrigation evaluations, and more.

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- <u>Climate Innovation Fund</u> supports local projects focused on carbon dioxide removal (CDR) and landscape resilience and restoration.
- <u>Boulder County</u> offers a variety of programs that support agriculture, water, ecosystems, and more.

Training and Resources

 Keep It Clean Partnership (KICP), Partners for a Clean Environment (PACE), and ReSource Central offer education and programming for residents, businesses, and other stakeholders around water (KICP), energy, waste, and transportation.

State Legislation and Codes

- The Model Green Code has a focus on indoor and outdoor water use efficiency.
- Senate Bill 5 this bill is designed to reduce water used for landscaping in new development projects by prohibiting the installation of nonfunctional turf in commercial, institutional, industrial, or common interest community property, street rights-of-way, parking lots, medians, or transportation corridors after Jan. 1, 2026.
- HB24-1362 Authorizes the installation of greywater treatment in new construction projects.
- HB24-1152 Requires local governments to update their codes with accessory dwelling unit (ADU) best practices and provide financial assistance for affordable ADUs.
- HB24-1313, the Transit-Oriented Communities bill aims to increase multifamily and
 affordable housing opportunities along transit corridors by requiring certain Front
 Range communities (including Erie) to meet residential zoning capacity targets near
 frequent bus and rail routes, and also creates a \$35 million infrastructure grant
 program to enable development near transit.
- HB24-1304 allows communities to remove minimum parking mandates.

PARKS AND OPEN SPACE

Funding Opportunities

Colorado Parks and Wildlife (CPW) just launched the <u>Colorado Wildlife Habitat</u>
 <u>Program (CWHP) 2025 Request for Proposals (RFP)</u>. The CWHP is a statewide program that offers funding opportunities to landowners who wish to protect wildlife habitat on their property and/or provide wildlife-related recreational public access.



- The CWHP is an incentive-based program that funds conservation easements, public access easements, and fee title to accomplish strategic wildlife conservation and public access goals.
- Funding for the 2025 cycle is \$11 million.
- Funding priorities:
 - Acquiring significant public access for hunting, fishing, wildlife viewing
 - Protecting big game winter range and migration corridors
 - Protecting habitat for species of concern (specifically those Species of Greatest Conservation Need, as identified in CPW's State Wildlife Action Plan)
 - Protecting riparian areas and wetlands
 - Landscape-scale parcels
 - Parcels that provide connectivity to other conserved lands

COMMUNITY HEALTH, EQUITY, AND RESILIENCE

Grants, Funding Opportunities, and Resources

- <u>Colorado Resiliency Office (CRO)</u> provides a list of State funding sources for things like watershed restoration, affordable housing, agricultural emergency drought response, and more.
- Both <u>EnergySmart</u> and <u>PACE</u> programs are currently centering their work on climate justice to reach historically marginalized populations that face the most climate risk.
- <u>Boulder County</u> has several programs in place that support the agriculture industry, seniors, low-income populations, and more.
- <u>Boulder County Wildfire Partners</u> is a great resource for Boulder County residents to prepare for wildfires.